FHWA TEXAS DIVISION	STATE PROJECT NO.		SHEET NO.
	C 905-00-117		001
STATE	DISTRICT	COUNTY	
TEXAS	LBB	LUBBOCK, ETC.	
CONTROL	SECTION	JOB	HIGHWAY NO.
0905	00	117	VAR

DESIGN SPEED = VARIES
ADT = VARIES
FUNCTIONAL CLASS = VARIES

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1. GENERAL	
001	TITLE SHEET
002	PROJECT INDEX

SPECIFICATIONS ADOPTED BY THE TEXAS DEPARTMENT OF TRANSPORTATION, NOVEMBER 1, 2014 AND SPECIFICATION ITEMS LISTED AND DATED AS FOLLOWS. SHALL GOVERN ON THIS PROJECT: REQUIRED SPECIAL LABOR PROVISIONS FOR ALL STATE PROJECTS (000-008)

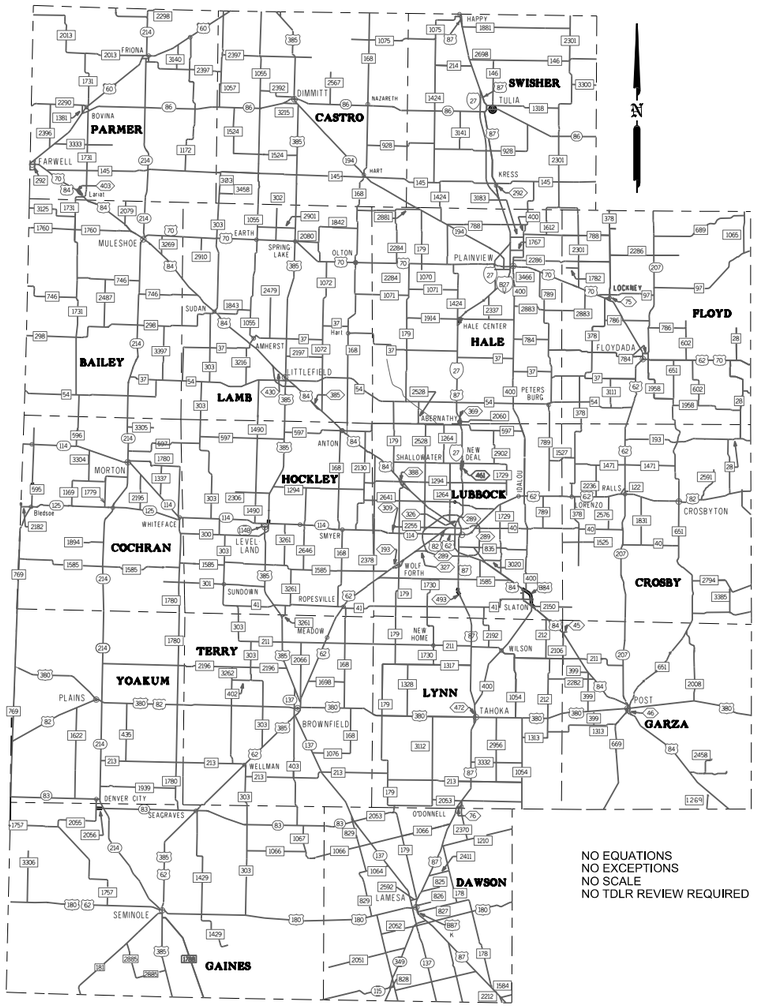
STATE OF TEXAS
DEPARTMENT OF TRANSPORTATION

PLANS OF PROPOSED
STATE HIGHWAY IMPROVEMENT

STATE PROJECT
VARIOUS HIGHWAYS
LUBBOCK, ETC.

PROJECT NO. C 905-00-117
NET LENGTH OF PROJECT =0.001 MI
LIMITS: VARIOUS LOCATIONS IN THE LUBBOCK DISTRICT

FOR THE CONSTRUCTION OF:
TRAFFIC CONTROL DEVICES-
PREFABRICATION MARKINGS



NO EQUATIONS
NO EXCEPTIONS
NO SCALE
NO TDLR REVIEW REQUIRED

16 RAILROAD CROSSINGS:

BNSF- 014849L, 017257L, 017264W, 017280F, 017271G, 276582V, 017334J, 014891K, 014870S, 015001B, 017385U, 017383F

PLSX- 014982R, 014973S, 014987A

L&WR- 017757J

STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED PROFESSIONAL ENGINEER

SUBMITTED FOR LETTING: 1/5/2023
DocuSigned by: Jeremy T. Dearing, P.E.
AB1484D2F6DA4F6...
DISTRICT DIRECTOR OF TRANSPORTATION OPERATIONS

RECOMMENDED FOR LETTING: 1/5/2023
DocuSigned by: Shelley C. Harris P.E.
F99841089313 47C...
DISTRICT DESIGN ENGINEER

APPROVED FOR LETTING: 1/5/2023
DocuSigned by: Stacy P. Warren P.E.
642C665E4DDD46A...
DISTRICT ENGINEER

FILE: t:\lbbtraff\projects (current)\0905-00-117 2023 specialty markings\1. title\001 TITLE.dgn
DATE: 1/4/2023 1:50:46 PM

INDEX OF SHEETS

STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED
PROFESSIONAL ENGINEER

Jeremy T. Dearing, P.E.

01/05/2023

THE STANDARD SHEETS SPECIFICALLY IDENTIFIED ABOVE BY A ✓ HAVE BEEN ISSUED BY ME AND ARE APPLICABLE TO THIS PROJECT.

PROJECT INDEX

FED.RD. DIV.NO.			SHEET NO.
6			002
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023

GENERAL NOTES:

General Requirements and Covenants - Items 1 thru 9

Contractor questions on this project are to be addressed to the following individual(s):

Jeremy.Dearing@txdot.gov (806)-748-4564
JD.Aaniz@txdot.gov (806)-748-4307

Contractor questions will be accepted through email, phone, and in person by the above individuals.

All contractor questions will be reviewed by the Engineer. Once a response is developed, it will be posted to https://tableau.txdot.gov/views/ProjectInformationDashboard/NoticetoContractors. Use the dashboard to navigate to the project you are interested in by scrolling or filtering the dashboard using the controls on the left. Hover over the blue hyperlink for the project you want to view the Q&A for and click on the link in the window that pops up.

Item 1 – Abbreviations and Definitions

Contract Prosecution – Each contract awarded by the Department stands on its own and as such, is separate from other contracts. A contractor awarded multiple contracts, must be capable and sufficiently staffed to concurrently process any and all contracts at the same time.

Item 2 – Instructions to Bidders

The construction time determination schedule will be posted on the Contractor Q&A FTP site.

View the plans on-line or download from the web at:
http://www.dot.state.tx.us/business/plansonline/agreement.htm
Choose "I Agree" then, "Click here", then "State-Let-Construction", pick the letting month, then "Plans" and then choose the plans set.

Order plans from any of the plan reproduction companies shown on the web at:
http://www.dot.state.tx.us/business/contractors_consultants/repro_companies.htm

By signing this proposal, a bidder acknowledges that he/she has a copy of the "Standard Specifications for Construction and Maintenance of Highways, Streets and Bridges", adopted by the Texas Department of Transportation, November 1, 2014. This specification book may be purchased from the Department or downloaded at:
http://www.txdot.gov/business/resources/txdot-specifications.html

Utilities

Overhead and underground utility installations exist within the project limits.

County: LUBBOCK, ETC **Control: 0905-00-117**

Highway: VARIOUS **Sheet 003**

Item 5 – Control of the Work

Perform construction surveying in accordance with Article 5.9.3, "Method C."

Replace all damaged ROW and USGS monuments at the contractor's expense.

When deviation from the plans is requested by the Contractor, but not required for installation, the Contractor will bear any additional costs associated with the deviation.

The construction, operation, and maintenance of the proposed project will be consistent with the state implementation plan as prepared by the Texas Commission on Environmental Quality.

At the end of each day remove from the ROW, inside or outside the project limits, any excess material and debris resulting from construction.

Correct any deficiencies identified during the final inspection including required paperwork.

Submit all required paperwork within 60 days of project acceptance.

Item 6 – Control of Materials

Use materials from pre-qualified producers. A list of material producers pre-qualified by the Construction Division (CST) of the Texas Department of Transportation (TxDOT) can be found at the following website:
http://www.txdot.gov/business/resources/producer-list.html

In addition to the requirements of the plans and specifications, make all material and equipment furnished, installed, modified, tested, or otherwise used on this contract, and becoming the property of TxDOT, fully functional within the manufacturer normal specifications, warranties, and guarantees. Make any additional functions of the material and equipment normally supplied by the manufacturer, but not specified by TxDOT, completely functional.

Article 6.6

Store material off TxDOT property or Right of Way unless approved by the project supervisor.

Article 6.11

Repair damage to the Right of Way to the satisfaction of the project supervisor.

Item 7 – Legal Relations and Responsibilities

Coordinate street closures with the local fire, police, and other emergency personnel.

Maintain access to adjacent property at all times.

Notify, in writing, each residence and business 10 days prior to beginning construction of the phase/phases that are expected to affect their ingress and egress. This notice may be hand delivered or mailed.

When applicable, comply with all requirements of the Environmental Permits Issues and Commitments (EPIC) sheets.

Project actions would be avoided during the lekking season (March 15th-July 15th) between the hours 3 AM to 9 AM without prior approval from the District Environmental Staff. Heavy equipment cannot be operated during this time to avoid noise impacts to the LPC (Lesser Prairie Chicken).
Project actions in the following counties will not occur during lekking season (March 15th-July 15th): Bailey, Cochran, and Yoakum.

> TXDOT will provide an informational packet to project contractors, including information on LPC habitat that may occur outside of the Right of Way and requirements to avoid effects to the LPC or its habitat.

PSL locations planned within TXDOT Right of Way must receive approval from the District Environmental staff prior to installation/use.

Dispose of all waste materials in compliance with local, state, and federal regulations. Submit a list of all approved waste sites to the Engineer for review.

All vehicles in the work zone shall use flashing amber strobe lights visible 360 degrees.

No significant traffic generator events identified.

Item 8 - Prosecution and Progress

This project is to be completed in NINETY (90) WORKING DAYS and SIX (6) MONTHS of barricades in accordance with the contract documents.

Work must begin by May 15, 2023.

Monthly schedule updates are a very important aspect of managing the progress of this project. The Engineer may withhold the monthly estimate if the schedule update has not been received.

A bar chart will be required on this project.

Do not begin work before sunrise or end work after sunset unless authorized by the Engineer, and remove all equipment from the roadway before sundown.

County: LUBBOCK, ETC **Control: 0905-00-117**

Highway: VARIOUS **Sheet 003A**

Working days will be computed and charged in accordance with Article 8.3.1.4 Standard Workweek.

Work hours will be restricted inside Lubbock City Limits only to off-peak hours as defined in the following table:

Peak Hours		Off-Peak Hours	
7 to 9 AM Monday through Friday	4 to 6 PM Monday through Friday	9AM to 4PM and 6 PM to 7 AM Monday through Friday	All day Saturday and Sunday

Work is allowed to be performed during the nighttime, with Engineer's approval.

Work that interferes with traffic is required to be performed during off-peak hours, 6 pm until 7 am.

Shut down operations the working day before the following major traffic generating holidays: January 1st (New Year's); Last Monday in May (Memorial Day); July 4th (Independence Day); First Monday in September (Labor Day); Fourth Thursday in November (Thanksgiving); and December 24th (Christmas Eve).

Payment for final 3% mobilization will be made once all project signage has been removed and all other items according to Article 500.3. Timeliness for submittal of required paperwork and correction of deficiencies is a consideration in developing the final contractor evaluation score.

Item 9 - Measurement and Payment

Submit material-on-hand payment requests by the monthly estimate cutoff date.

Item 502 - Barricades, Signs And Traffic Handling

Prior to beginning construction, the Engineer shall approve the routing of traffic and sequence of work.

Additional signs and barricades as directed by the Engineer shall be considered subsidiary to Item 502.

Provide flashing portable arrow panels for all lane closures.

Wash the channelizing devices and barricades following each rainfall or snowfall event and at times deemed necessary by the Engineer.

To ensure the safety and convenience of traffic, flaggers may be required when construction machinery is being operated along, across, or adjacent to lanes carrying traffic. If considered necessary by the Engineer, supplemental signs and barricades may be required.

Fill any holes left by barricade or sign supports and restore the area to its original condition.

Traffic switches will not be permitted on Fridays or any working day preceding a holiday unless authorized by the Engineer.

Cones or chevrons may be used in lieu of vertical panels at the discretion of the Engineer. Cones cannot be used to separate opposing traffic.

The Contractor shall bid the traffic control plan shown in the plans. Any proposed alterations to the TCP (combining work areas / phasing / etc.) shall be submitted to the Engineer at least 10 days prior to anticipated changes.

Square tubing sign supports may be used for temporary construction signs. Aluminum and wood signs may be mounted if the vertical supports are embedded into the ground. Square tubing supports on skids which are typically held in place with sand bags can only support signs made of light weight flutted plastic.

The Contractor Force Account “Safety Contingency” that has been established for this project is intended to be utilized for work zone enhancements, to improve the effectiveness of the Traffic Control Plan, that could not be foreseen in the project planning and design stage. These enhancements will be mutually agreed upon by the Engineer and the Contractor’s Responsible Person based on weekly or more frequent traffic management reviews on the project. The Engineer may choose to use existing bid items if it does not slow the implementation of enhancement.

Correct all noted deficiencies within 7 calendar days, otherwise, cease all operations until the noted deficiencies are corrected.

Stockpiles that meet the barricade requirements as shown on the BC(10) Standard are required to be erected at the time of material delivery in the Right-of-Way and maintained as long as the stockpile exists. Payment for Material-on-Hand will be withheld from the estimate for inadequate barricades or the failure to maintain barricades on a per stockpile basis as determined by the Engineer.

Like new traffic control devices will be required at the initial setup for all projects or as approved by the Engineer.

Provide flags and a CW8-15P “MOTORCYCLE WARNING” plaque on all CW20-1D “ROAD WORK AHEAD” signs except on side roads.

County: LUBBOCK, ETC **Control: 0905-00-117**

Highway: VARIOUS **Sheet 003B**

Use only the work zone speed limit and TCP signs that are relevant to the active work area and as directed. Reset signs for subsequent work phases as work progresses and approved by the Engineer. Reset normal speed limit signs at the ends of work zones.

All bid items and work requiring traffic control is the responsibility of the contractor, even when not explicitly detailed in the plans. Consider this work subsidiary to Item 502.

TMAs and Portable Changeable Message Boards will not be used as Arrow Boards.

Item 506 - Temporary Erosion, Sedimentation, and Environmental Controls

No SW3P is required for this project, but should it be determined a plan is needed, it will be developed by the State and implemented by the Contractor.

No N.O.I. is required for this project.

The soil area disturbed by this project, including all disturbed areas within the limits of this project as described in the Contract and at Contractor project specific locations (PSLs) within one mile of the project limits, contributes to the establishment of the Texas Commission on Environmental Quality (TCEQ) Construction General Permit (CGP) requirements for storm water discharges. The Department will obtain an authorization from the TCEQ to discharge storm water for construction activities shown on the plans. The Contractor shall obtain the required authorization from the TCEQ for Contractor project specific locations (PSLs) for construction support activities off the right-of-way. As directed by the Engineer, the Contractor shall obtain any required authorization from the TCEQ for on-site PSLs. When the total area disturbed within the project limits and at PSLs within one mile of the project limits exceeds five acres, the Contractor shall provide a copy of the Contractor’s Notice of Intent (NOI) submission and Construction General Permit for PSLs on the right-of-way to the Engineer (and submit a copy of NOIs to appropriate MS4 operators).

Sediments removed from BMPs shall be paid for by force account. The Contractor shall submit an invoice for the work.

Item 666 - Reflectorized Pavement Markings

Reference the existing striping in order to stripe the roadway as it was prior to construction.

Mark the location of standard pavement markings, including barrier lines, no passing zones, gores, and transitions adjusting to meet latest standards or as directed by the Engineer.

The yellow or white long-line striping for re-striping operations will not lag one another by more than four (4) working days. The performance period for a roadway will not begin for a section of roadway or a project until all required striping for that section or project has been completed.

Provide a schedule and notify the District Traffic Office a minimum of 3 days prior to any striping operation. Contact via email at LBB-TRFOPS@TxDOT.GOV. If not notified, the time frame for testing and meeting the Retroreflectivity requirements in article 4.4 will start the day the department is made aware of that the markings have been applied.

Item 668 - Prefabricated Pavement Markings

Reference the "Standard Highway Sign Designs for Texas" manual for dimensions to words and symbols.

Manufacturer's sealer is subsidiary to this item. Surface preparation will be paid for separately under Item 678.

Item 677 - Eliminating Existing Pavement Markings and Markers

Eliminate existing longitudinal pavement markings by water blasting only and for transverse markings use mechanical method.

Eliminate existing pavement markings on concrete surfaces by the Water Blasting Method.

Item 678 - Pavement Surface Preparation for Markings

The Contractor must wait 24 hours after water blasting before installing pavement markings.

Restriping of eliminated stripes shall be complete within three (3) calendar days after elimination. Should the three (3) days pass, and the stripe is not restored, all work shall cease until restriping is caught up.

Item 6038 - Multipolymer Pavement Markings (MPM)

Provide modified urethane or modified polyacrylate for all multipolymer pavement markings.

Provide a schedule and notify the District Traffic Office a minimum of 3 days prior to any striping operation. Contact via email at LBB-TRFOPS@TxDOT.GOV. If not notified, the time frame for testing and meeting the Retroreflectivity requirements in article 4.2 will start the day the department is made aware of that the markings have been applied.

Item 6185 – Truck Mounted Attenuator (TMA) and Trailer Attenuator (TA)

Provide shadow vehicles equipped with Truck Mounted Attenuators (TMA) as shown on Traffic Control Plan (TCP) standards.

Provide 2 TMAs per crew for mobile use and 3 mobile TMAs for freeways. Mobile TMAs will be used for moving operations such as striping. Payment will be made by the day for each TMA used in mobile operations.

County: LUBBOCK, ETC **Control: 0905-00-117**

Highway: VARIOUS **Sheet 003C**

Estimate & Quantity Sheet

CONTROLLING PROJECT ID 0905-00-117 **DISTRICT** Lubbock **COUNTY** Lubbock
HIGHWAY Various

		CONTROL SECTION JOB		**0905-00-117**		TOTAL EST.	TOTAL FINAL
		PROJECT ID		**A00131100**			
		COUNTY		**Lubbock**			
		HIGHWAY		**Various**			
ALT	**BID CODE**	**DESCRIPTION**	**UNIT**	EST.	FINAL		
	500-6001	MOBILIZATION	LS	1.000		1.000	
	502-6001	BARRICADES, SIGNS AND TRAFFIC HANDLING	MO	6.000		6.000	
	668-6006	PREFAB PAV MRK TY B (W)(6")(BRK)	LF	1,040.000		1,040.000	
	668-6007	PREFAB PAV MRK TY B (W)(6")(SLD)	LF	2,970.000		2,970.000	
	668-6010	PREFAB PAV MRK TY B (W)(6")(BRK)CNTST	LF	3,430.000		3,430.000	
	668-6012	PREFAB PAV MRK TY B (W)(8")(DOT)	LF	192.000		192.000	
	668-6013	PREFAB PAV MRK TY B (W)(8")(LNDP)	LF	87.000		87.000	
	668-6014	PREFAB PAV MRK TY B (W)(8")(SLD)	LF	9,600.000		9,600.000	
	668-6016	PREFAB PAV MRK TY B (W)(12")(SLD)	LF	612.000		612.000	
	668-6017	PREFAB PAV MRK TY B (W)(18")(SLD)	LF	156.000		156.000	
	668-6018	PREFAB PAV MRK TY B (W)(24")(SLD)	LF	5,986.000		5,986.000	
	668-6034	PREFAB PAV MRK TY B (W)(36")(YLD TRI)	EA	49.000		49.000	
	668-6045	PREFAB PAV MRK TY B (Y)(6")(BRK)	LF	630.000		630.000	
	668-6047	PREFAB PAV MRK TY B (Y)(6")(SLD)	LF	17,072.000		17,072.000	
	668-6050	PREFAB PAV MRK TY B (Y)(12")(SLD)	LF	390.000		390.000	
	668-6059	PREFAB PAV MRK TY B (MULTI)(SHIELD)	EA	4.000		4.000	
	668-6074	PREFAB PAV MRK TY C (W) (12") (SLD)	LF	400.000		400.000	
	668-6075	PREFAB PAV MRK TY C (W) (18") (SLD)	LF	750.000		750.000	
	668-6076	PREFAB PAV MRK TY C (W) (24") (SLD)	LF	7,470.000		7,470.000	
	668-6077	PREFAB PAV MRK TY C (W) (ARROW)	EA	183.000		183.000	
	668-6078	PREFAB PAV MRK TY C (W) (DBL ARROW)	EA	25.000		25.000	
	668-6083	PREFAB PAV MRK TY C (W) (LNDP ARROW)	EA	6.000		6.000	
	668-6089	PREFAB PAV MRK TY C (W) (RR XING)	EA	26.000		26.000	
	668-6092	PREFAB PAV MRK TY C (W) (36")(YLD TRI)	EA	191.000		191.000	
	668-6106	PREFAB PAV MRK TY C (Y) (12") (SLD)	LF	980.000		980.000	
	668-6115	PREFAB PAV MRK TY C (MULTI) (SHIELD)	EA	1.000		1.000	
	668-6121	PREFAB PAV MRK TY B (W)(WORD)CNTST	EA	7.000		7.000	
	668-6122	PREFAB PAV MRK TY B (W)(ARROW)CNTST	EA	115.000		115.000	
	668-6123	PREFAB PAV MRK TY B(W)(LNDP ARRW)CNTST	EA	6.000		6.000	
	668-6129	PREFAB PAV MRK TY B (W)(DBL ARRW)CNTST	EA	20.000		20.000	
	668-6130	PREFAB PAVMRK TY B(W)(UTURN ARROW) CNTST	EA	4.000		4.000	
	677-6001	ELIM EXT PAV MRK & MRKS (4")	LF	58,272.000		58,272.000	
	677-6002	ELIM EXT PAV MRK & MRKS (6")	LF	7,840.000		7,840.000	
	677-6003	ELIM EXT PAV MRK & MRKS (8")	LF	11,635.000		11,635.000	
	677-6005	ELIM EXT PAV MRK & MRKS (12")	LF	12,582.000		12,582.000	
	677-6006	ELIM EXT PAV MRK & MRKS (18")	LF	794.000		794.000	
	677-6007	ELIM EXT PAV MRK & MRKS (24")	LF	8,213.000		8,213.000	

Estimate & Quantity Sheet

CONTROLLING PROJECT ID 0905-00-117 **DISTRICT** Lubbock **COUNTY** Lubbock
HIGHWAY Various

		CONTROL SECTION JOB		**0905-00-117**		TOTAL EST.	TOTAL FINAL
		PROJECT ID		**A00131100**			
		COUNTY		**Lubbock**			
		HIGHWAY		**Various**			
ALT	**BID CODE**	**DESCRIPTION**	**UNIT**	EST.	FINAL		
	677-6008	ELIM EXT PAV MRK & MRKS (ARROW)	EA	299.000		299.000	
	677-6009	ELIM EXT PAV MRK & MRKS (DBL ARROW)	EA	43.000		43.000	
	677-6012	ELIM EXT PAV MRK & MRKS (WORD)	EA	3.000		3.000	
	677-6016	ELIM EXT PAV MRK & MRKS (RR XING)	EA	23.000		23.000	
	677-6018	ELIM EXT PAV MRK & MRKS (18")(YLD TRI)	EA	45.000		45.000	
	677-6019	ELIM EXT PAV MRK & MRKS (36")(YLD TRI)	EA	124.000		124.000	
	677-6020	ELIM EXT PAV MRK & MRKS (MED NOSE)	EA	5.000		5.000	
	677-6036	ELIM EXT PAV MRK & MRKS (UTURN ARROW)	EA	4.000		4.000	
	6020-6028	MLTPLY PV MK (Y) (MED NOSE)	EA	5.000		5.000	
	6038-6004	MULTIPOLYMER PAV MRK (W)(6")(SLD)	LF	16,940.000		16,940.000	
	6038-6005	MULTIPOLYMER PAV MRK (W)(6")(BRK)	LF	7,540.000		7,540.000	
	6038-6007	MULTIPOLYMER PAV MRK (W)(8")(SLD)	LF	1,690.000		1,690.000	
	6038-6011	MULTIPOLYMER PAV MRK (W)(12")(SLD)	LF	1,582.000		1,582.000	
	6038-6012	MULTIPOLYMER PAV MRK (W)(12")(LNDP)	LF	982.000		982.000	
	6038-6017	MULTIPOLYMER PAV MRK (Y)(6")(SLD)	LF	18,420.000		18,420.000	
	6185-6005	TMA (MOBILE OPERATION)	DAY	540.000		540.000	
	08	CONTRACTOR FORCE ACCOUNT EROSION CONTROL MAINTENANCE (NON-PARTICIPATING)	LS	1.000		1.000	
		CONTRACTOR FORCE ACCOUNT SAFETY CONTINGENCY (NON-PARTICIPATING)	LS	1.000		1.000	

CONSTRUCTION SEQUENCE

1. PROJECT TIME WAS DETERMINED USING 3 CREWS TO WORK ON VARIOUS BID ITEMS SUCH AS MULTIPOLYMER, TYPE B & TYPE C.

2. DEVISE A SCHEDULE TO INCLUDE THE EASTERN COUNTIES FIRST & WORK TOWARDS THE WEST.

3. THE SCHEDULE SHOULD INCLUDE TYPE B FIRST AND MULTIPOLYMER THEN WORK ON TYPE C.

Jeremy T. Dearing, P.E.

01/05/2023

CONSTRUCTION SEQUENCE

FED.RD. DIV.NO.			SHEET NO.
6			005
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023

County	6"WS	6"WB	6" WB CNTST	8" W(DOT)	8"W(LNDP)	8"WS	12"WS	18"WS	24"WS	36" W(YLD TRI)	6"YB	6"YS	12"YS
	Item 668	Item 668	Item 668	Item 668	Item 668	Item 668	Item 668	Item 668	Item 668	Item 668	Item 668	Item 668	Item 668
1. Bailey	360	70	0	0	0	160	120	0	30	0	0	580	0
2. Castro	0	0	0	0	0	0	0	0	0	0	0	0	0
3. Cochran	0	0	0	0	0	0	0	0	0	0	0	0	0
4. Crosby	0	0	0	0	0	0	0	0	0	0	0	0	0
5. Dawson	0	0	0	0	0	0	0	0	0	0	0	0	0
6. Floyd	990	0	350	0	57	810	220	0	72	14	80	2,060	240
7. Gaines	0	100	0	0	0	200	0	0	300	0	0	400	0
8. Garza	0	0	0	0	0	0	0	0	0	0	0	0	0
9. Hale	820	0	0	0	0	0	0	0	60	0	0	840	0
10. Hockley	0	0	0	0	0	0	0	0	0	0	0	0	0
11. Lamb	0	0	0	0	0	0	0	0	0	0	0	0	0
12. Lubbock	700	0	2,560	192	30	7,097	202	0	3,100	20	150	7,010	150
13. Lynn	100	300	0	0	0	0	0	0	334	0	0	1,060	0
14. Parmer	0	570	0	0	0	0	0	156	696	8	280	2,450	0
15. Swisher	0	0	0	0	0	0	0	0	0	0	0	0	0
16. Terry	0	0	520	0	0	1,333	70	0	1,394	7	120	2,672	0
17. Yoakum	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	**2,970**	**1,040**	**3,430**	**192**	**87**	**9,600**	**612**	**156**	**5,986**	**49**	**630**	**17,072**	**390**

County	Multishield (US)	Word	Arrow (Left) (CNTST)	Arrow (Right) (CNTST)	Arrow (Straight) (CNTST)	Arrow (DBL) (Straight-Right) (CNTST)	Arrow (DBL) (Straight-Left) (CNTST)	Arrow (Uturn) (CNTST)	(Y) (MED NOSE) (MULTIPOLY)	Arrow (LNDP) (CNTST)
	Item 668	Item 668	Item 668	Item 668	Item 668	Item 668	Item 668	Item 668	Item 668	Item 668
1. Bailey	0	0	2	2	0	0	0	0	0	0
2. Castro	0	0	0	0	0	0	0	0	0	0
3. Cochran	0	0	0	0	0	0	0	0	0	0
4. Crosby	0	0	0	0	0	0	0	0	0	0
5. Dawson	0	0	0	0	0	0	0	0	0	0
6. Floyd	4	4	0	0	0	0	0	0	0	0
7. Gaines	0	0	4	0	0	0	0	0	0	0
8. Garza	0	0	0	0	0	0	0	0	0	0
9. Hale	0	0	0	0	0	0	0	0	0	0
10. Hockley	0	0	0	0	0	0	0	0	0	0
11. Lamb	0	0	0	0	0	0	0	0	0	0
12. Lubbock	0	3	48	30	6	8	7	4	5	6
13. Lynn	0	0	0	0	0	0	0	0	0	0
14. Parmer	0	0	0	0	0	0	0	0	0	0
15. Swisher	0	0	0	0	0	0	0	0	0	0
16. Terry	0	0	21	2	0	3	2	0	0	0
17. Yoakum	0	0	0	0	0	0	0	0	0	0
Total	**4**	**7**	**75**	**34**	**6**	**11**	**9**	**4**	**5**	**6**

WORD SUMMARY

DESCRIPTION	QUANTITY
ONLY	3
TOTAL	**3**

SHIELD SUMMARY

SHIELD	QUANTITY	DESCRIPTION
US	0	70
TOTAL	**0**	

PROJECT SUMMARY
PREFAB TY B
SHEET 1 OF 2

FED.RD. DIV.NO.		SHEET NO.
6		006

STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023

County	4" ELIM	6" ELIM	8" ELIM	12" ELIM	18" ELIM	24" ELIM	Arrow (L) ELIM	Arrow (R) ELIM	Arrow (S)ELIM	Arrow (DBL) (Straight-Right) ELIM	Arrow (DBL) (Straight-Left) ELIM	Word ELIM	36" W(YLD TRI) ELIM	(Y) (MED NOSE) ELIM	Arrow (Uturn) ELIM	Arrow (LNDP) ELIM
	Item 677	Item 677	Item 677	Item 677	Item 677	Item 677	Item 677	Item 677	Item 677	Item 677	Item 677	Item 677	Item 677	Item 677	Item 677	Item 677
1. Bailey	1,010	0	160	0	0	30	0	0	0	0	0	0	0	0	0	0
2. Castro	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3. Cochran	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4. Crosby	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5. Dawson	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6. Floyd	3,670	0	810	860	0	72	0	0	0	0	0	0	0	0	0	0
7. Gaines	500	0	200	256	0	144	4	0	0	0	0	0	0	0	0	0
8. Garza	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9. Hale	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10. Hockley	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11. Lamb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12. Lubbock	10,320	0	7,442	3,194	0	1,552	46	29	6	8	7	3	0	5	4	3
13. Lynn	1,160	300	0	500	0	52	0	0	0	0	0	0	0	0	0	0
14. Parmer	3,300	0	0	0	156	0	0	0	0	0	0	0	8	0	0	0
15. Swisher	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16. Terry	2,952	0	1,333	1,530	0	446	20	2	0	2	2	0	7	0	0	0
17. Yoakum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	**22,912**	**300**	**9,945**	**6,340**	**156**	**2,296**	**70**	**31**	**6**	**10**	**9**	**3**	**15**	**5**	**4**	**3**

WORD SUMMARY

DESCRIPTION	QUANTITY
ONLY	3
TOTAL	**3**

PROJECT SUMMARY
PREFAB TY B
ELIMINATION
SHEET 2 OF 2

FED.RD. DIV.NO.			SHEET NO.
6			007
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023

TY C

County	12"WS	18"WS	24"WS	Arrow (Left)	Arrow (Right)	Arrow (Straight)	Arrow (DBL) (Straight-Right)	Arrow (DBL) (Straight-Left)	Arrow (LNDP)	RR XING	36"W (YLD TRI)	12"YS	Multishield (US)
	Item 668	Item 668	Item 668	Item 668	Item 668	Item 668	Item 668	Item 668	Item 668	Item 668	Item 668	Item 668	Item 668
1. Bailey	0	110	290	0	0	0	0	0	0	2	0	0	0
2. Castro	0	0	186	0	0	0	0	0	0	0	0	0	0
3. Cochran	0	0	146	0	0	0	0	0	0	0	0	0	0
4. Crosby	0	0	358	0	0	0	0	0	0	0	4	0	0
5. Dawson	0	0	118	0	4	0	0	0	0	0	0	0	0
6. Floyd	400	0	222	0	0	0	0	0	0	0	0	0	0
7. Gaines	0	128	222	0	2	0	0	2	0	0	0	0	0
8. Garza	0	0	60	0	0	0	0	0	0	0	0	0	0
9. Hale	0	124	1,096	0	0	0	0	0	0	12	55	0	0
10. Hockley	0	60	250	0	0	0	0	0	0	0	0	0	0
11. Lamb	0	0	758	8	0	0	0	0	0	3	22	0	0
12. Lubbock	0	96	1,836	13	14	4	10	11	6	6	18	980	1
13. Lynn	0	232	560	0	0	0	0	0	0	0	76	0	0
14. Parmer	0	0	110	136	0	0	0	0	0	0	11	0	0
15. Swisher	0	0	562	0	0	0	0	0	0	2	0	0	0
16. Terry	0	0	670	2	0	0	2	0	0	1	5	0	0
17. Yoakum	0	0	26	0	0	0	0	0	0	0	0	0	0
Total	**400**	**750**	**7,470**	**159**	**20**	**4**	**12**	**13**	**6**	**26**	**191**	**980**	**1**

ELIMINATION

County	12" ELIM	18" ELIM	24" ELIM	Arrow (L) ELIM	Arrow (R) ELIM	Arrow (S) ELIM	Arrow (DBL) (Straight-Right) ELIM	Arrow (DBL) (Striaght-Left) ELIM	Arrow (LNDP) ELIM	RR XING ELIM	18"YLD TRI ELIM	36"YLD TRI ELIM
	Item 677	Item 677	Item 677	Item 677	Item 677	Item 677	Item 677	Item 677	Item 677	Item 677	Item 677	Item 677
1. Bailey	330	110	110	0	0	0	0	0	0	2	0	0
2. Castro	0	0	174	0	0	0	0	0	0	0	0	0
3. Cochran	0	0	146	0	0	0	0	0	0	0	0	0
4. Crosby	124	0	286	0	0	0	0	0	0	0	0	0
5. Dawson	0	0	118	0	4	0	0	0	0	0	0	0
6. Floyd	400	0	222	0	0	0	0	0	0	0	0	0
7. Gaines	250	128	77	0	2	0	0	2	0	0	0	0
8. Garza	0	0	60	0	0	0	0	0	0	0	0	0
9. Hale	136	124	1,168	0	0	0	0	0	0	13	45	0
10. Hockley	60	60	214	0	0	0	0	0	0	0	0	0
11. Lamb	152	0	620	8	0	0	0	0	0	3	0	22
12. Lubbock	1,394	96	1,470	13	14	4	9	11	6	1	0	11
13. Lynn	196	120	278	0	0	0	0	0	0	0	0	76
14. Parmer	0	0	110	136	0	0	0	0	0	0	0	0
15. Swisher	0	0	540	0	0	0	0	0	0	4	0	0
16. Terry	636	0	298	2	0	0	2	0	0	0	0	0
17. Yoakum	0	0	26	0	0	0	0	0	0	0	0	0
Total	**3,678**	**638**	**5,917**	**159**	**20**	**4**	**11**	**13**	**6**	**23**	**45**	**109**

PROJECT SUMMARY
PREFAB TY C
&
ELIMINATION

FED.RD. DIV.NO.			SHEET NO.
6			008
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023

MULTIPOLYMER

County	6"WS	6"WB	8"WS	12"WS	12"W(LNDP)	6"YS
	Item 6038	Item 6038	Item 6038	Item 6038	Item 6038	Item 6038
1. Bailey	0	0	0	0	0	0
2. Castro	0	0	0	0	0	0
3. Cochran	0	0	0	0	0	0
4. Crosby	0	0	0	0	0	0
5. Dawson	0	0	0	0	0	0
6. Floyd	0	0	0	0	0	0
7. Gaines	0	0	0	0	0	0
8. Garza	0	0	0	0	0	0
9. Hale	0	0	0	0	0	0
10. Hockley	0	0	0	0	0	0
11. Lamb	0	0	0	0	0	0
12. Lubbock	16,940	7,540	1,690	1,582	982	18,420
13. Lynn	0	0	0	0	0	0
14. Parmer	0	0	0	0	0	0
15. Swlsher	0	0	0	0	0	0
16. Terry	0	0	0	0	0	0
17. Yoakum	0	0	0	0	0	0
Total	**16,940**	**7,540**	**1,690**	**1,582**	**982**	**18,420**

ELIMINATION

County	4' ELIM	6" ELIM	8" ELIM	12" ELIM
	Item 677	Item 677	Item 677	Item 677
1. Bailey	0	0	0	0
2. Castro	0	0	0	0
3. Cochran	0	0	0	0
4. Crosby	0	0	0	0
5. Dawson	0	0	0	0
6. Floyd	0	0	0	0
7. Gaines	0	0	0	0
8. Garza	0	0	0	0
9. Hale	0	0	0	0
10. Hockley	0	0	0	0
11. Lamb	0	0	0	0
12. Lubbock	35,360	7,540	1,690	2,564
13. Lynn	0	0	0	0
14. Parmer	0	0	0	0
15. Swisher	0	0	0	0
16. Terry	0	0	0	0
17. Yoakum	0	0	0	0
Total	**35,360**	**7,540**	**1,690**	**2,564**

PROJECT SUMMARY MULTIPOLYMER & ELIMINATION

FED.RD. DIV.NO.			SHEET NO.
6			009
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023

DATE:
FILE:

BARRICADE AND CONSTRUCTION (BC) STANDARD SHEETS GENERAL NOTES:

1. The Barricade and Construction Standard Sheets (BC sheets) are intended to show typical examples for placement of temporary traffic control devices, construction pavement markings, and typical work zone signs. The information contained in these sheets meet or exceed the requirements shown in the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD).

2. The development and design of the Traffic Control Plan (TCP)is the responsibility of the Engineer.

3. The Contractor may propose changes to the TCP that are signed and sealed by a licensed professional engineer for approval. The Engineer may develop, sign and seal Contractor proposed changes.

4. The Contractor is responsible for installing and maintaining the traffic control devices as shown in the plans. The Contractor may not move or change the approximate location of any device without the approval of the Engineer.

5. Geometric design of lane shifts and detours should, when possible, meet the applicable design criteria contained in manuals such as the American Association of State Highway and Transportation Officials (AASHTO), "A Policy on Geometric Design of Highways and Streets," the TxDOT "Roadway Design Manual" or engineering judgment.

6. When projects abut, the Engineer(s) may omit the END ROAD WORK, TRAFFIC FINES DOUBLE, and other advance warning signs if the signing would be redundant and the work areas appear continuous to the motorists. If the adjacent project is completed first, the Contractor shall erect the necessary warning signs as shown on these sheets, the TCP sheets or as directed by the Engineer. The BEGIN ROAD WORK NEXT X MILES sign shall be revised to show appropriate work zone distance.

7. The Engineer may require duplicate warning signs on the median side of divided highways where median width will permit and traffic volumes justify the signing.

8. All signs shall be constructed in accordance with the details found in the "Standard Highway Sign Designs for Texas," latest edition. Sign details not shown in this manual shall be shown in the plans or the Engineer shall provide a detail to the Contractor before the sign is manufactured.

9. The temporary traffic control devices shown in the illustrations of the BC sheets are examples. As necessary, the Engineer will determine the most appropriate traffic control devices to be used.

10. Where highway construction or maintenance work is being undertaken, other than mobile operations as defined by the Texas Manual on Uniform Traffic Control Devices, CSJ limit signs are required. CSJ limit signs are shown on BC(2). The OBEY WARNING SIGNS STATE LAW sign, STAY ALERT TALK OR TEXT LATER and the WORK ZONE TRAFFIC FINES DOUBLE sign with plaque shall be erected in advance of the CSJ limits. The BEGIN ROAD WORK NEXT X MILES, CONTRACTOR and END ROAD WORK signs shall be erected at or near the CSJ limits. For mobile operations, CSJ limit signs are not required.

11. Traffic control devices should be in place only while work is actually in progress or a definite need exists.

12. The Engineer has the final decision on the location of all traffic control devices.

13. Inactive equipment and work vehicles, including workers' private vehicles must be parked away from travel lanes. They should be as close to the right-of-way line as possible, or located behind a barrier or guardrail, or as approved by the Engineer.

WORKER SAFETY NOTES:

1. Workers on foot who are exposed to traffic or to construction equipment within the right-of-way shall wear high-visibility safety apparel meeting the requirements of ISEA "American National Standard for High-Visibility Apparel," or equivalent revisions, and labeled as ANSI 107-2004 standard performance for Class 2 or 3 risk exposure. Class 3 garments should be considered for high traffic volume work areas or night time work.

2. Except in emergency situations, flagger stations shall be illuminated when flagging is used at night.

COMPLIANT WORKZONE TRAFFIC CONTROL DEVICES

1. Only pre-qualified products shall be used. The "Compliant Work Zone Traffic Control Devices List" (CWZTCD) describes pre-qualified products and their sources.

2. Work zone traffic control devices shall be compliant with the Manual for Assessing safety Hardware (MASH).

THE DOCUMENTS BELOW CAN BE FOUND ON-LINE AT http://www.txdot.gov
COMPLIANT WORK ZONE TRAFFIC CONTROL DEVICES LIST (CWZTCD)
DEPARTMENTAL MATERIAL SPECIFICATIONS (DMS)
MATERIAL PRODUCER LIST (MPL)
ROADWAY DESIGN MANUAL - SEE "MANUALS (ONLINE MANUALS)"
STANDARD HIGHWAY SIGN DESIGNS FOR TEXAS (SHSD)
TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD)
TRAFFIC ENGINEERING STANDARD SHEETS

SHEET 1 OF 12

Texas Department of Transportation

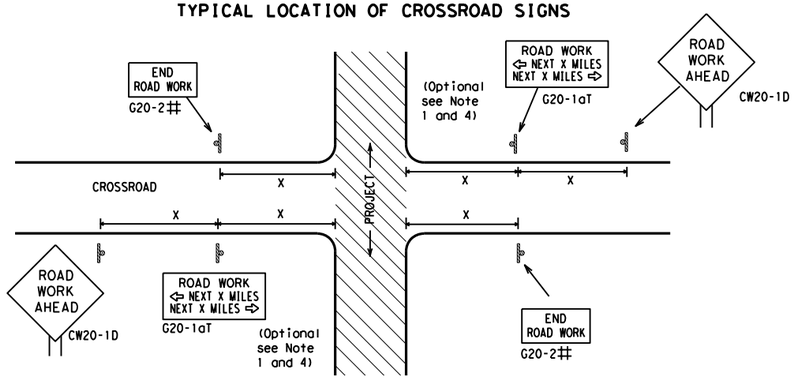
Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION GENERAL NOTES AND REQUIREMENTS

BC(1)-21

FILE: bc-21.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
© TxDOT November 2002	CONT	SECT	JOB	HIGHWAY
REVISIONS 4-03 7-13 9-07 8-14 5-10 5-21	0905	00	117	VAR
	DIST	COUNTY		SHEET NO.
	LBB	LUBBOCK,ETC.		010

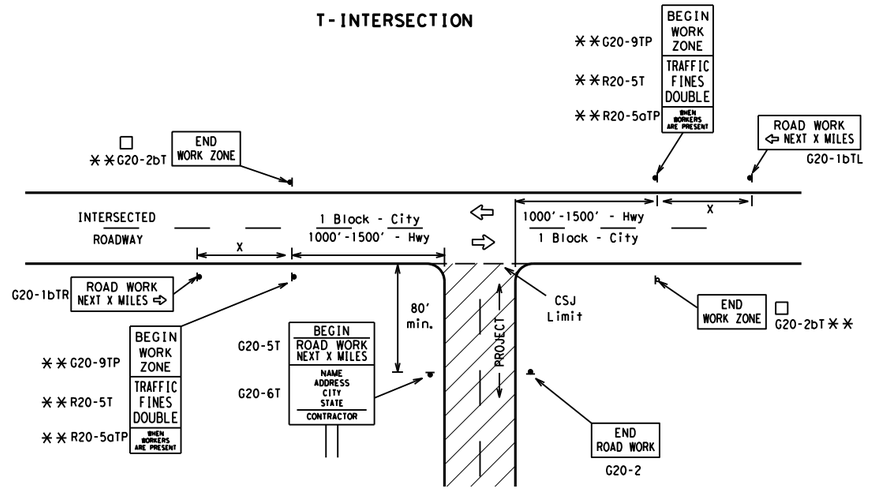
TYPICAL LOCATION OF CROSSROAD SIGNS



May be mounted on back of "ROAD WORK AHEAD"(CW20-1D) sign with approval of Engineer. (See note 2 below)

1. The typical minimum signing on a crossroad approach should be a "ROAD WORK AHEAD" (CW20-1D)sign and a (G20-2) "END ROAD WORK" sign, unless noted otherwise in plans.
2. The Engineer may use the reduced size 36" x 36" ROAD WORK AHEAD (CW20-1D) sign mounted back to back with the reduced size 36" x 18" "END ROAD WORK"(G20-2) sign on low volume crossroads (see Note 4 under "Typical Construction Warning Sign Size and Spacing"). See the "Standard Highway Sign Designs for Texas" manual for sign details. The Engineer may omit the advance warning signs on low volume crossroads. The Engineer will determine whether a road is low volume as per TMUTCD Part 5. This information shall be shown in the plans.
3. Based on existing field conditions, the Engineer/Inspector may require additional signs such as FLAGGER AHEAD, LOOSE GRAVEL, or other appropriate signs. When additional signs are required, these signs will be considered part of the minimum requirements. The Engineer/Inspector will determine the proper location and spacing of any sign not shown on the BC sheets, Traffic Control Plan sheets or the Work Zone Standard Sheets.
4. The "ROAD WORK NEXT X MILES"(G20-1aT)sign shall be required at high volume crossroads to advise motorists of the length of construction in either direction from the intersection. The Engineer will determine whether a roadway is considered high volume.
5. Additional traffic control devices may be shown elsewhere in the plans for higher volume crossroads.
6. When work occurs in the intersection area, appropriate traffic control devices, as shown elsewhere in the plans or as determined by the Engineer/Inspector, shall be in place.

T-INTERSECTION



CSJ LIMITS AT T-INTERSECTION

1. The Engineer will determine the types and location of any additional traffic control devices, such as a flagger and accompanying signs, or other signs, that should be used when work is being performed at or near an intersection.
2. If construction closes the road at a T-intersection, the Contractor shall place the "CONTRACTOR NAME"(G20-6T) sign behind the Type 3 Barricades for the road closure (see BC(10) also). The "ROAD WORK NEXT X MILES" left arrow(G20-1bTL) and "ROAD WORK NEXT X MILES" right arrow (G20-1bTR)" signs shall be replaced by the detour signing called for in the plans.

TYPICAL CONSTRUCTION WARNING SIGN SIZE AND SPACING[1,5,6]

SIZE

Sign Number or Series	Conventional Road	Expressway/ Freeway
CW20[4] CW21 CW22 CW23 CW25	48" x 48"	48" x 48"
CW1, CW2, CW7, CW8, CW9, CW11, CW14	36" x 36"	48" x 48"
CW3, CW4, CW5, CW6, CW8-3, CW10, CW12	48" x 48"	48" x 48"

SPACING

Posted Speed	Sign △ Spacing "X"
MPH	Feet (Apprx.)
30	120
35	160
40	240
45	320
50	400
55	500[2]
60	600[2]
65	700[2]
70	800[2]
75	900[2]
80	1000[2]
*	*[3]

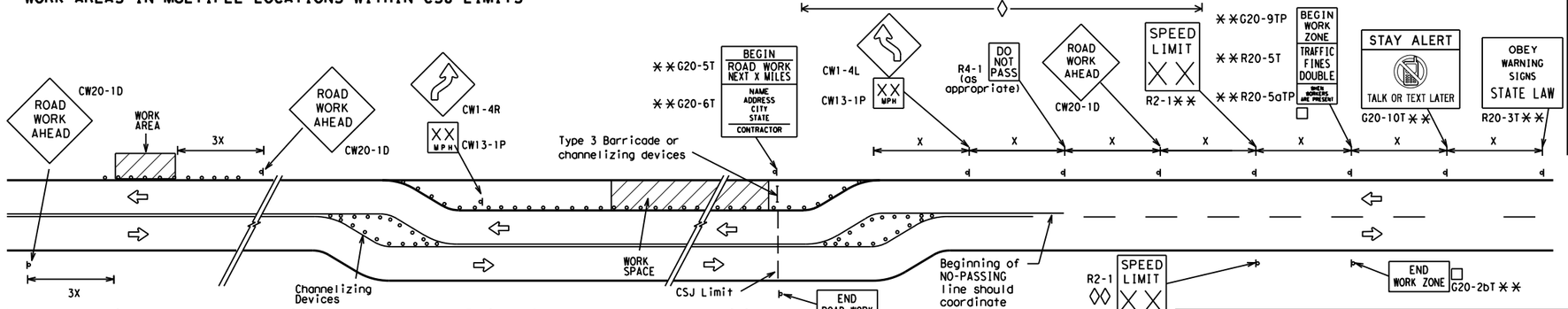
* For typical sign spacings on divided highways, expressways and freeways, see Part 6 of the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD) typical application diagrams or TCP Standard Sheets.

△ Minimum distance from work area to first Advance Warning sign nearest the work area and/or distance between each additional sign.

GENERAL NOTES

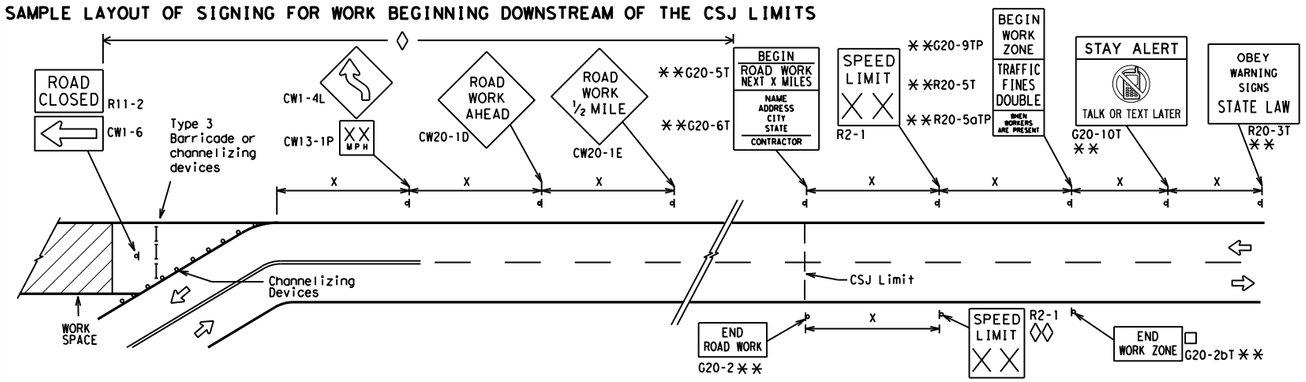
1. Special or larger size signs may be used as necessary.
2. Distance between signs should be increased as required to have 1500 feet advance warning.
3. Distance between signs should be increased as required to have 1/2 mile or more advance warning.
4. 36" x 36" "ROAD WORK AHEAD" (CW20-1D)signs may be used on low volume crossroads at the discretion of the Engineer as per TMUTCD Part 5. See Note 2 under "Typical Location of Crossroad Signs".
5. Only diamond shaped warning sign sizes are indicated.
6. See sign size listing in "TMUTCD", Sign Appendix or the "Standard Highway Sign Designs for Texas" manual for complete list of available sign design sizes.

WORK AREAS IN MULTIPLE LOCATIONS WITHIN CSJ LIMITS



When extended distances occur between minimal work spaces, the Engineer/Inspector should ensure additional "ROAD WORK AHEAD"(CW20-1D)signs are placed in advance of these work areas to remind drivers they are still within the project limits. See the applicable TCP sheets for exact location and spacing of signs and channelizing devices.

SAMPLE LAYOUT OF SIGNING FOR WORK BEGINNING DOWNSTREAM OF THE CSJ LIMITS



SAMPLE LAYOUT OF SIGNING FOR WORK BEGINNING AT THE CSJ LIMITS

NOTES

The Contractor shall determine the appropriate distance to be placed on the G20-1 series signs and "BEGIN ROAD WORK NEXT X MILES"(G20-5T)sign for each specific project. This distance shall replace the "X" and shall be rounded to the nearest whole mile with the approval of the Engineer. No decimals shall be used.

□ The "BEGIN WORK ZONE"(G20-9TP) and "END WORK ZONE" (G20-2bT) shall be used as shown on the sample layout when advance signs are required outside the CSJ Limits. They inform the motorist of entering or leaving a part of the work zone lying outside the CSJ Limits where traffic fines may double if workers are present.

** CSJ limit signing is required for highway construction and maintenance work, with the exception of mobile operations.

◊ Area for placement of "ROAD WORK AHEAD" (CW20-1D)sign and other signs or devices as called for on the Traffic Control Plan.

◊◊ Contractor will install a regulatory speed limit sign at the end of the work zone.

LEGEND

⊢⊣	Type 3 Barricade
○ ○ ○	Channelizing Devices
▬	Sign
X	See Typical Construction Warning Sign Size and Spacing chart or the TMUTCD for sign spacing requirements.

SHEET 2 OF 12

Texas Department of Transportation

Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION PROJECT LIMIT

BC(2)-21

FILE: bc-21.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
© TxDOT November 2002	CONT	SECT	JOB	HIGHWAY
REVISIONS	0905	00	117	VAR
9-07 8-14	DIST	COUNTY		SHEET NO.
7-13 5-21	LBB	LUBBOCK,ETC.		011

DATE:
FILE:

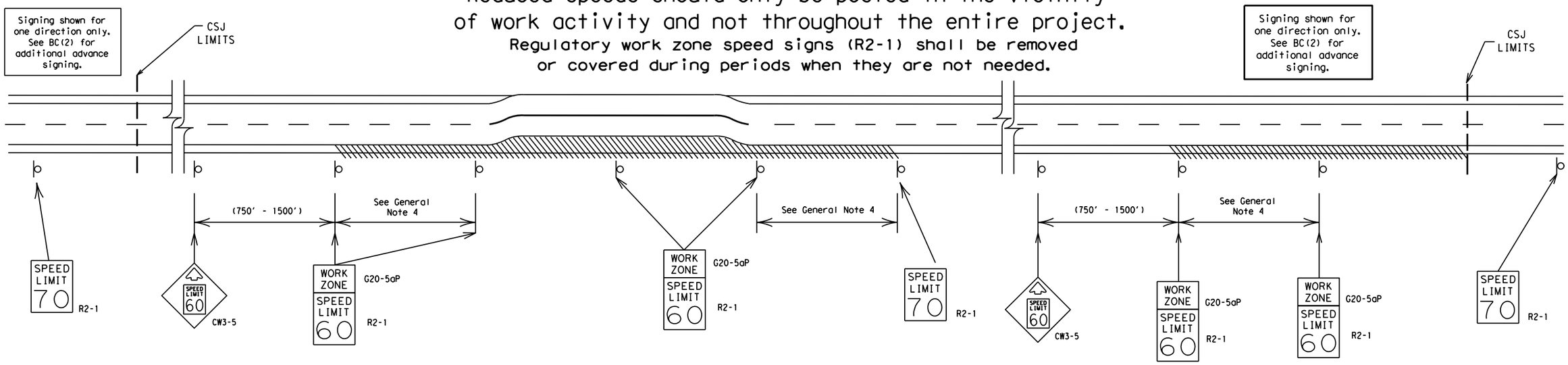
DATE:
FILE:

TYPICAL APPLICATION OF WORK ZONE SPEED LIMIT SIGNS

Work zone speed limits shall be regulatory, established in accordance with the "Procedures for Establishing Speed Zones," and approved by the Texas Transportation Commission, or by City Ordinance when within Incorporated City Limits.

Reduced speeds should only be posted in the vicinity of work activity and not throughout the entire project.

Regulatory work zone speed signs (R2-1) shall be removed or covered during periods when they are not needed.



GUIDANCE FOR USE:

LONG/INTERMEDIATE TERM WORK ZONE SPEED LIMITS

This type of work zone speed limit should be included on the design of the traffic control plans when restricted geometrics with a lower design speed are present in the work zone and modification of the geometrics to a higher design speed is not feasible.

Long/Intermediate Term Work Zone Speed Limit signs, when approved as described above, should be posted and visible to the motorist when work activity is present. Work activity may also be defined as a change in the roadway that requires a reduced speed for motorists to safely negotiate the work area, including:

a) rough road or damaged pavement surface
b) substantial alteration of roadway geometrics (diversions)
c) construction detours
d) grade
e) width
f) other conditions readily apparent to the driver

As long as any of these conditions exist, the work zone speed limit signs should remain in place.

SHORT TERM WORK ZONE SPEED LIMITS

This type of work zone speed limit may be included on the design of the traffic control plans when workers or equipment are not behind concrete barrier, when work activity is within 10 feet of the traveled way or actually in the traveled way.

Short Term Work Zone Speed Limit signs should be posted and visible to the motorists only when work activity is present. When work activity is not present, signs shall be removed or covered.
(See Removing or Covering on BC(4)).

GENERAL NOTES

1. Regulatory work zone speed limits should be used only for sections of construction projects where speed control is of major importance.
2. Regulatory work zone speed limit signs shall be placed on supports at a 7 foot minimum mounting height.
3. Speed zone signs are illustrated for one direction of travel and are normally posted for each direction of travel.
4. Frequency of work zone speed limit signs should be:
   40 mph and greater 0.2 to 2 miles
   35 mph and less 0.2 to 1 mile
5. Regulatory speed limit signs shall have black legend and border on a white reflective background (See "Reflective Sheeting" on BC(4)).
6. Fabrication, erection and maintenance of the"ADVANCE SPEED LIMIT"(CW3-5)sign, "WORK ZONE"(G20-5aP) plaque and the "SPEED LIMIT"(R2-1)signs shall not be paid for directly, but shall be considered subsidiary to Item 502.
7. Turning signs from view, laying signs over or down will not be allowed, unless as otherwise noted under "REMOVING OR COVERING" on BC(4).
8. Techniques that may help reduce traffic speeds include but are not limited to:
   A. Law enforcement.
   B. Flagger stationed next to sign.
   C. Portable changeable message sign (PCMS).
   D. Low-power (drone) radar transmitter.
   E. Speed monitor trailers or signs.
9. Speeds shown on details above are for illustration only. Work Zone Speed Limits should only be posted as approved for each project.
10. For more specific guidance concerning the type of work, work zone conditions and factors impacting allowable regulatory construction speed zone reduction see TxDOT form #1204 in the TxDOT e-form system.

Texas Department of Transportation

Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION WORK ZONE SPEED LIMIT

BC(3)-21

FILE: bc-21.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT November 2002	CONT	SECT	JOB	HIGHWAY
REVISIONS	0905	00	117	VAR
9-07 8-14	DIST	COUNTY		SHEET NO.
7-13 5-21	LBB	LUBBOCK,ETC.		012

DATE:
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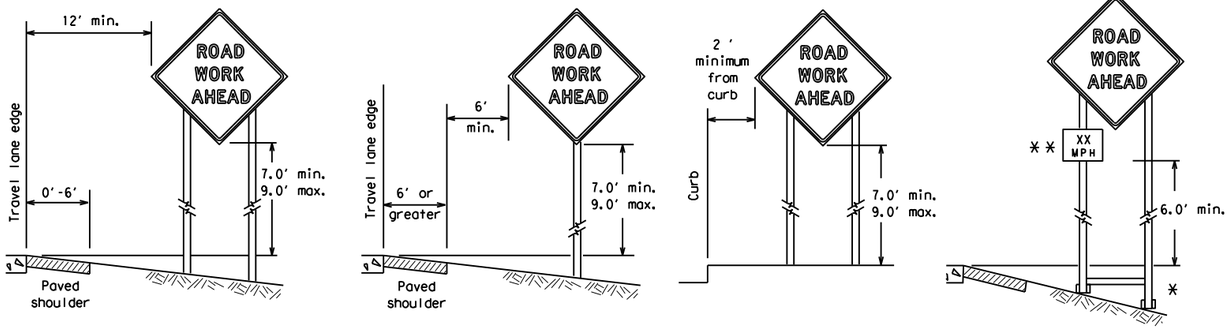
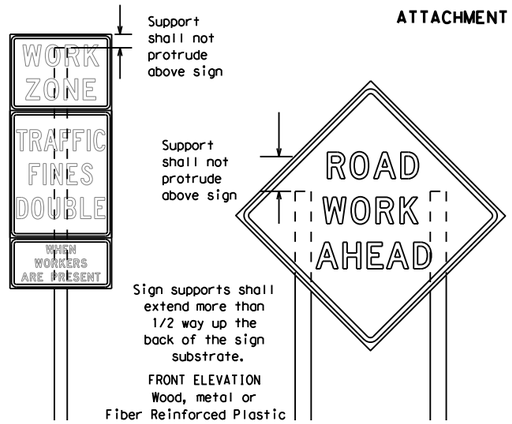
TYPICAL MINIMUM CLEARANCES FOR LONG TERM AND INTERMEDIATE TERM SIGNS

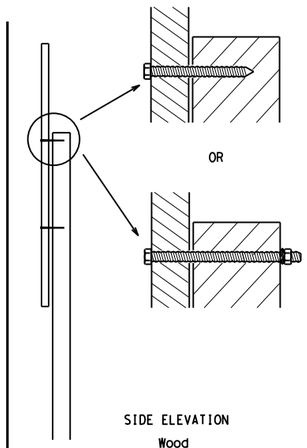


* When placing skid supports on unlevel ground, the leg post lengths must be adjusted so the sign appears straight and plumb. Objects shall NOT be placed under skids as a means of leveling.

** When plaques are placed on dual-leg supports, they should be attached to the upright nearest the travel lane. Supplemental plaques (advisory or distance) should not cover the surface of the parent sign.

ATTACHMENT FOR SIGN SUPPORTS





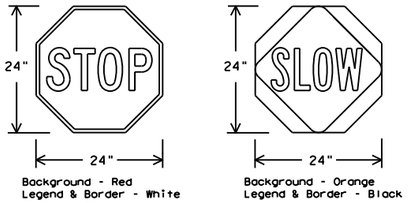
Attachment to wooden supports will be by bolts and nuts or screws. Use TxDOT's or manufacturer's recommended procedures for attaching sign substrates to other types of sign supports

Nails shall NOT be allowed. Each sign shall be attached directly to the sign support. Multiple signs shall not be joined or spliced by any means. Wood supports shall not be extended or repaired by splicing or other means.

Splicing embedded perforated square metal tubing in order to extend post height will only be allowed when the splice is made using four bolts, two above and two below the spice point. Splice must be located entirely behind the sign substrate, not near the base of the support. Splice insert lengths should be at least 5 times nominal post size, centered on the splice and of at least the same gauge material.

STOP/SLOW PADDLES

1. STOP/SLOW paddles are the primary method to control traffic by flaggers. The STOP/SLOW paddle size should be 24" x 24".
2. STOP/SLOW paddles shall be retroreflectorized when used at night.
3. STOP/SLOW paddles may be attached to a staff with a minimum length of 6' to the bottom of the sign.
4. Any lights incorporated into the STOP or SLOW paddle faces shall only be as specifically described in Section 6E.03 Hand Signaling Devices in the TMUTCD.



SHEETING REQUIREMENTS (WHEN USED AT NIGHT)		
USAGE	COLOR	SIGN FACE MATERIAL
BACKGROUND	RED	TYPE B OR C SHEETING
BACKGROUND	ORANGE	TYPE B_{FL} OR C_{FL} SHEETING
LEGEND & BORDER	WHITE	TYPE B OR C SHEETING
LEGEND & BORDER	BLACK	ACRYLIC NON-REFLECTIVE FILM

CONTRACTOR REQUIREMENTS FOR MAINTAINING PERMANENT SIGNS WITHIN THE PROJECT LIMITS

1. Permanent signs are used to give notice of traffic laws or regulations, call attention to conditions that are potentially hazardous to traffic operations, show route designations, destinations, directions, distances, services, points of interest, and other geographical, recreational, specific service (LOGO), or cultural information. Drivers proceeding through a work zone need the same, if not better route guidance as normally installed on a roadway without construction.
2. When permanent regulatory or warning signs conflict with work zone conditions, remove or cover the permanent signs until the permanent sign message matches the roadway condition. For details for covering large guide signs see the TS-CD standard.
3. When existing permanent signs are moved and relocated due to construction purposes, they shall be visible to motorists at all times.
4. If existing signs are to be relocated on their original supports, they shall be installed on crashworthy bases as shown on the SMD Standard sheets. The signs shall meet the required mounting heights shown on the BC Sheets or the SMD Standards. This work should be paid for under the appropriate pay item for relocating existing signs.
5. If permanent signs are to be removed and relocated using temporary supports, the Contractor shall use crashworthy supports as shown on the BC standard sheets, TLRS standard sheets or the CWZTCD list. The signs shall meet the required mounting heights shown on the BC, or the SMD standard sheets during construction. This work should be paid for under the appropriate pay item for relocating existing signs.
6. Any sign or traffic control device that is struck or damaged by the Contractor or his/her construction equipment shall be replaced as soon as possible by the Contractor to ensure proper guidance for the motorists. This will be subsidiary to Item 502.

GENERAL NOTES FOR WORK ZONE SIGNS

1. Contractor shall install and maintain signs in a straight and plumb condition and/or as directed by the Engineer.
2. Wooden sign posts shall be painted white.
3. Barricades shall NOT be used as sign supports.
4. All signs shall be installed in accordance with the plans or as directed by the Engineer. Signs shall be used to regulate, warn, and guide the traveling public safely through the work zone.
5. The Contractor may furnish either the sign design shown in the plans or in the "Standard Highway Sign Designs for Texas" (SHSD). The Engineer/Inspector may require the Contractor to furnish other work zone signs that are shown in the TMUTCD but may have been omitted from the plans. Any variation in the plans shall be documented by written agreement between the Engineer and the Contractor's Responsible Person. All changes must be documented in writing before being implemented. This can include documenting the changes in the Inspector's TxDOT diary and having both the Inspector and Contractor initial and date the agreed upon changes.
6. The Contractor shall furnish sign supports listed in the "Compliant Work Zone Traffic Control Device List" (CWZTCD) for small roadside signs. Supports for temporary large roadside signs shall meet the requirements detailed on the Temporary Large Roadside Signs (TLRS) standard sheets. The Contractor shall install the sign support in accordance with the manufacturer's recommendations. If there is a question regarding installation procedures, the Contractor shall furnish the Engineer a copy of the manufacturer's installation recommendations so the Engineer can verify the correct procedures are being followed.
7. The Contractor is responsible for installing signs on approved supports and replacing signs with damaged or cracked substrates and/or damaged or marred reflective sheeting as directed by the Engineer/Inspector.
8. Identification markings may be shown only on the back of the sign substrate. The maximum height of letters and/or company logos used for identification shall be 1 inch.
9. The Contractor shall replace damaged wood posts. New or damaged wood sign posts shall not be spliced.

DURATION OF WORK (as defined by the "Texas Manual on Uniform Traffic Control Devices" Part 6)

1. The types of sign supports, sign mounting height, the size of signs, and the type of sign substrates can vary based on the type of work being performed. The Engineer is responsible for selecting the appropriate size sign for the type of work being performed. The Contractor is responsible for ensuring the sign support, sign mounting height and substrate meets manufacturer's recommendations in regard to crashworthiness and duration of work requirements.
   a. Long-term stationary - work that occupies a location more than 3 days.
   b. Intermediate-term stationary - work that occupies a location more than one daylight period up to 3 days, or nighttime work lasting more than one hour.
   c. Short-term stationary - daytime work that occupies a location for more than 1 hour in a single daylight period.
   d. Short, duration - work that occupies a location up to 1 hour.
   e. Mobile - work that moves continuously or intermittently (stopping for up to approximately 15 minutes.)

SIGN MOUNTING HEIGHT

1. The bottom of Long-term/Intermediate-term signs shall be at least 7 feet, but not more than 9 feet, above the paved surface, except as shown for supplemental plaques mounted below other signs.
2. The bottom of Short-term/Short Duration signs shall be a minimum of 1 foot above the pavement surface but no more than 2 feet above the ground.
3. Long-term/Intermediate-term Signs may be used in lieu of Short-term/Short Duration signing.
4. Short-term/Short Duration signs shall be used only during daylight and shall be removed at the end of the workday or raised to appropriate Long-term/Intermediate sign height.
5. Regulatory signs shall be mounted at least 7 feet, but not more than 9 feet, above the paved surface regardless of work duration.

SIZE OF SIGNS

1. The Contractor shall furnish the sign sizes shown on BC (2) unless otherwise shown in the plans or as directed by the Engineer.

SIGN SUBSTRATES

1. The Contractor shall ensure the sign substrate is installed in accordance with the manufacturer's recommendations for the type of sign support that is being used. The CWZTCD lists each substrate that can be used on the different types and models of sign supports.
2. "Mesh" type materials are NOT an approved sign substrate, regardless of the tightness of the weave.
3. All wooden individual sign panels fabricated from 2 or more pieces shall have one or more plywood cleat, 1/2" thick by 6" wide, fastened to the back of the sign and extending fully across the sign. The cleat shall be attached to the back of the sign using wood screws that do not penetrate the face of the sign panel. The screws shall be placed on both sides of the splice and spaced at 6" centers. The Engineer may approve other methods of splicing the sign face.

REFLECTIVE SHEETING

1. All signs shall be retroreflective and constructed of sheeting meeting the color and retro-reflectivity requirements of DMS-8300 for rigid signs or DMS-8310 for roll-up signs. The web address for DMS specifications is shown on BC(1).
2. White sheeting, meeting the requirements of DMS-8300 Type A, shall be used for signs with a white background.
3. Orange sheeting, meeting the requirements of DMS-8300 Type B_{FL} or Type C_{FL}, shall be used for rigid signs with orange backgrounds.

SIGN LETTERS

1. All sign letters and numbers shall be clear, and open rounded type uppercase alphabet letters as approved by the Federal Highway Administration (FHWA) and as published in the "Standard Highway Sign Design for Texas" manual. Signs, letters and numbers shall be of first class workmanship in accordance with Department Standards and Specifications.

REMOVING OR COVERING

1. When sign messages may be confusing or do not apply, the signs shall be removed or completely covered.
2. Long-term stationary or intermediate stationary signs installed on square metal tubing may be turned away from traffic 90 degrees when the sign message is not applicable. This technique may not be used for signs installed in the median of divided highways or near any intersections where the sign may be seen from approaching traffic.
3. Signs installed on wooden skids shall not be turned at 90 degree angles to the roadway. These signs should be removed or completely covered when not required.
4. When signs are covered, the material used shall be opaque, such as heavy mil black plastic, or other materials which will cover the entire sign face and maintain their opaque properties under automobile headlights at night, without damaging the sign sheeting.
5. Burlap shall NOT be used to cover signs.
6. Duct tape or other adhesive material shall NOT be affixed to a sign face.
7. Signs and anchor stubs shall be removed and holes backfilled upon completion of work.

SIGN SUPPORT WEIGHTS

1. Where sign supports require the use of weights to keep from turning over, the use of sandbags with dry, cohesionless sand should be used.
2. The sandbags will be tied shut to keep the sand from spilling and to maintain a constant weight.
3. Rock, concrete, iron, steel or other solid objects shall not be permitted for use as sign support weights.
4. Sandbags should weigh a minimum of 35 lbs and a maximum of 50 lbs.
5. Sandbags shall be made of a durable material that tears upon vehicular impact. Rubber (such as tire inner tubes) shall NOT be used.
6. Rubber ballasts designed for channelizing devices should not be used for ballast on portable sign supports. Sign supports designed and manufactured with rubber bases may be used when shown on the CWZTCD list.
7. Sandbags shall only be placed along or laid over the base supports of the traffic control device and shall not be suspended above ground level or hung with rope, wire, chains or other fasteners. Sandbags shall be placed along the length of the skids to weigh down the sign support.
8. Sandbags shall NOT be placed under the skid and shall not be used to level sign supports placed on slopes.

FLAGS ON SIGNS

1. Flags may be used to draw attention to warning signs. When used, the flag shall be 16 inches square or larger and shall be orange or fluorescent red-orange in color. Flags shall not be allowed to cover any portion of the sign face.

Texas Department of Transportation

Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION TEMPORARY SIGN NOTES

BC(4)-21

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REVISIONS	0905	00	117	VAR
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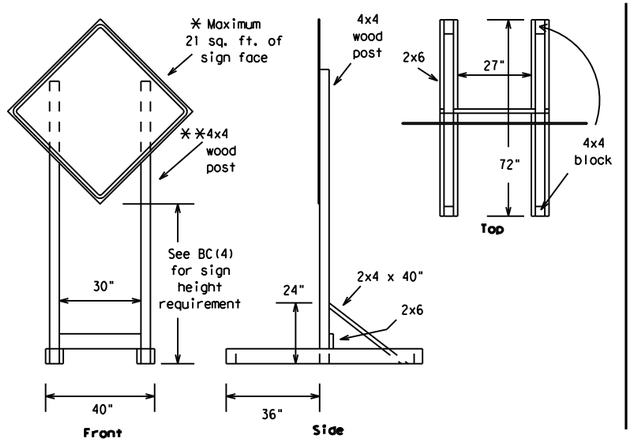
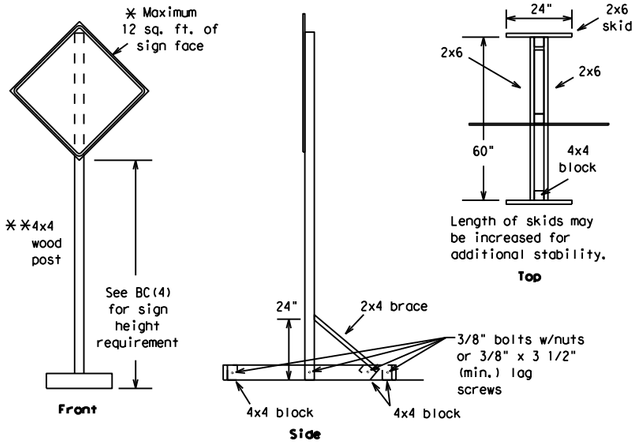
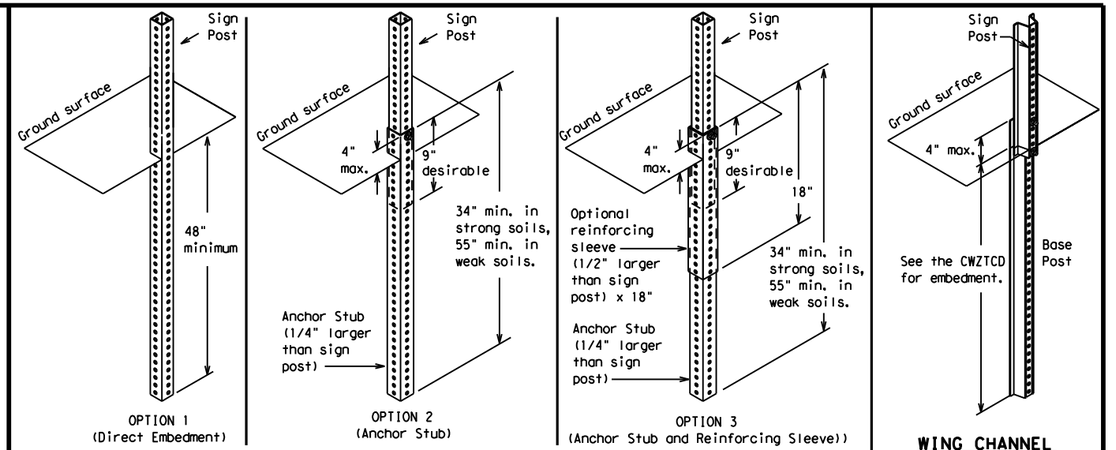




SKID MOUNTED WOOD SIGN SUPPORTS

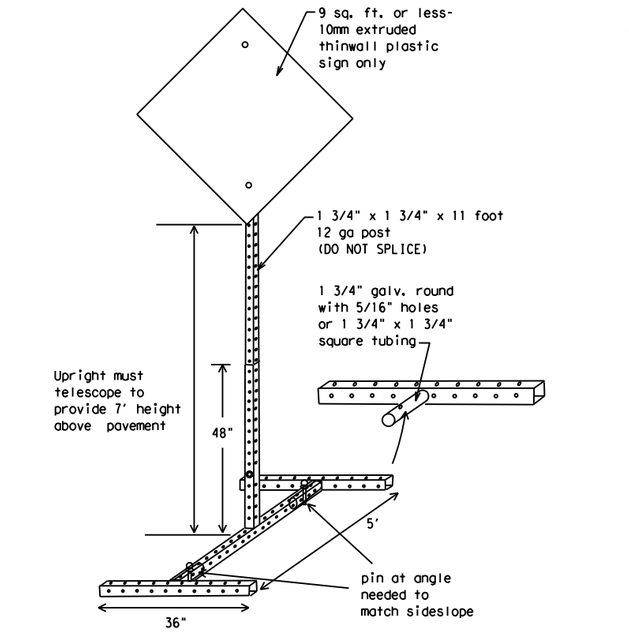
* LONG/INTERMEDIATE TERM STATIONARY - PORTABLE SKID MOUNTED SIGN SUPPORTS

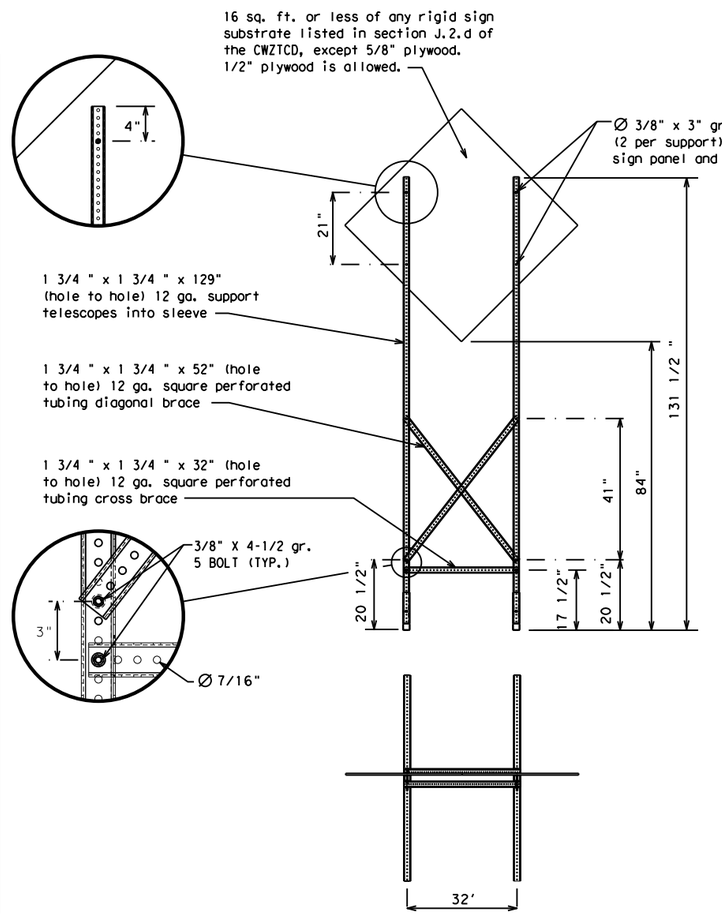


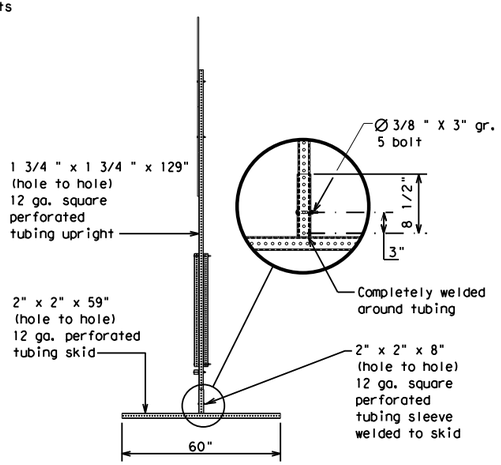
PERFORATED SQUARE METAL TUBING

GROUND MOUNTED SIGN SUPPORTS

Refer to the CWZTCD and the manufacturer's installation procedure for each type sign support.
The maximum sign square footage shall adhere to the manufacturer's recommendation.
Two post installations can be used for larger signs.







SKID MOUNTED PERFORATED SQUARE STEEL TUBING SIGN SUPPORTS

* LONG/INTERMEDIATE TERM STATIONARY - PORTABLE SKID MOUNTED SIGN SUPPORTS

WEDGE ANCHORS

Both steel and plastic Wedge Anchor Systems as shown on the SMD Standard Sheets may be used as temporary sign supports for signs up to 10 square feet of sign face. They may be set in concrete or in sturdy soils if approved by the Engineer. (See web address for "Traffic Engineering Standard Sheets" on BC(1)).

OTHER DESIGNS

MORE DETAILS OF APPROVED LONG/INTERMEDIATE AND SHORT TERM SUPPORTS CAN BE FOUND ON THE CWZTCD LIST. SEE BC(1) FOR WEBSITE LOCATION.

GENERAL NOTES

1. Nails may be used in the assembly of wooden sign supports, but 3/8" bolts with nuts or 3/8" x 3 1/2" lag screws must be used on every joint for final connection.
2. No more than 2 sign posts shall be placed within a 7 ft. circle, except for specific materials noted on the CWZTCD List.
3. When project is completed, all sign supports and foundations shall be removed from the project site. This will be considered subsidiary to Item 502.

* See BC(4) for definition of "Work Duration."

** Wood sign posts MUST be one piece. Splicing will NOT be allowed. Posts shall be painted white.

☐ See the CWZTCD for the type of sign substrate that can be used for each approved sign support.

Texas Department of Transportation | Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION TYPICAL SIGN SUPPORT

BC(5)-21

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WHEN NOT IN USE, REMOVE THE PCMS FROM THE RIGHT-OF-WAY OR PLACE THE PCMS BEHIND BARRIER OR GUARDRAIL WITH SIGN PANEL TURNED PARALLEL TO TRAFFIC

PORTABLE CHANGEABLE MESSAGE SIGNS

1. The Engineer/Inspector shall approve all messages used on portable changeable message signs (PCMS).
2. Messages on PCMS should contain no more than 8 words (about four to eight characters per word), not including simple words such as "TO," "FOR," "AT," etc.
3. Messages should consist of a single phase, or two phases that alternate. Three-phase messages are not allowed. Each phase of the message should convey a single thought, and must be understood by itself.
4. Use the word "EXIT" to refer to an exit ramp on a freeway; i.e., "EXIT CLOSED." Do not use the term "RAMP."
5. Always use the route or interstate designation (IH, US, SH, FM) along with the number when referring to a roadway.
6. When in use, the bottom of a stationary PCMS message panel should be a minimum 7 feet above the roadway, where possible.
7. The message term "WEEKEND" should be used only if the work is to start on Saturday morning and end by Sunday evening at midnight. Actual days and hours of work should be displayed on the PCMS if work is to begin on Friday evening and/or continue into Monday morning.
8. The Engineer/Inspector may select one of two options which are available for displaying a two-phase message on a PCMS. Each phase may be displayed for either four seconds each or for three seconds each.
9. Do not "flash" messages or words included in a message. The message should be steady burn or continuous while displayed.
10. Do not present redundant information on a two-phase message; i.e., keeping two lines of the message the same and changing the third line.
11. Do not use the word "Danger" in message.
12. Do not display the message "LANES SHIFT LEFT" or "LANES SHIFT RIGHT" on a PCMS. Drivers do not understand the message.
13. Do not display messages that scroll horizontally or vertically across the face of the sign.
14. The following table lists abbreviated words and two-word phrases that are acceptable for use on a PCMS. Both words in a phrase must be displayed together. Words or phrases not on this list should not be abbreviated, unless shown in the TMUTCD.
15. PCMS character height should be at least 18 inches for trailer mounted units. They should be visible from at least 1/2 (.5) mile and the text should be legible from at least 600 feet at night and 800 feet in daylight. Truck mounted units must have a character height of 10 inches and must be legible from at least 400 feet.
16. Each line of text should be centered on the message board rather than left or right justified.
17. If disabled, the PCMS should default to an illegible display that will not alarm motorists and will only be used to alert workers that the PCMS has malfunctioned. A pattern such as a series of horizontal solid bars is appropriate.

WORD OR PHRASE	ABBREVIATION
Access Road	ACCS RD
Alternate	ALT
Avenue	AVE
Best Route	BEST RTE
Boulevard	BLVD
Bridge	BRDG
Cannot	CANT
Center	CTR
Construction Ahead	CONST AHD
CROSSING	XING
Detour Route	DETOUR RTE
Do Not	DONT
East	E
Eastbound	(route) E
Emergency	EMER
Emergency Vehicle	EMER VEH
Entrance, Enter	ENT
Express Lane	EXP LN
Expressway	EXPWY
XXXX Feet	XXXX FT
Fog Ahead	FOG AHD
Freeway	FRWY, FWY
Freeway Blocked	FWY BLKD
Friday	FRI
Hazardous Driving	HAZ DRIVING
Hazardous Material	HAZMAT
High-Occupancy	HOV
Vehicle Highway	HWY
Hour(s)	HR, HRS
Information	INFO
It Is	ITS
Junction	JCT
Left	LFT
Left Lane	LFT LN
Lane Closed	LN CLOSED
Lower Level	LWR LEVEL
Maintenance	MAINT

WORD OR PHRASE	ABBREVIATION
Major	MAJ
Miles	MI
Miles Per Hour	MPH
Minor	MNR
Monday	MON
Normal	NORM
North	N
Northbound	(route) N
Parking	PKING
Road	RD
Right Lane	RT LN
Saturday	SAT
Service Road	SERV RD
Shoulder	SHLDR
Slippery	SLIP
South	S
Southbound	(route) S
Speed	SPD
Street	ST
Sunday	SUN
Telephone	PHONE
Temporary	TEMP
Thursday	THURS
To Downtown	TO DWNTN
Traffic	TRAF
Travelers	TRVLRS
Tuesday	TUES
Time Minutes	TIME MIN
Upper Level	UPR LEVEL
Vehicles (s)	VEH, VEHS
Warning	WARN
Wednesday	WED
Weight Limit	WT LIMIT
West	W
Westbound	(route) W
Wet Pavement	WET PVMT
Will Not	WONT

Roadway designation * IH-number, US-number, SH-number, FM-number

RECOMMENDED PHASES AND FORMATS FOR PCMS MESSAGES DURING ROADWORK ACTIVITIES

(The Engineer may approve other messages not specifically covered here.)

Phase 1: Condition Lists

Road/Lane/Ramp Closure List

- FREEWAY CLOSED X MILE
- FRONTAGE ROAD CLOSED
- ROAD CLOSED AT SH XXX
- SHOULDER CLOSED XXX FT
- ROAD CLSD AT FM XXXX
- RIGHT LN CLOSED XXX FT
- RIGHT X LANES CLOSED
- RIGHT X LANES OPEN
- CENTER LANE CLOSED
- DAYTIME LANE CLOSURES
- NIGHT LANE CLOSURES
- I-XX SOUTH EXIT CLOSED
- VARIOUS LANES CLOSED
- EXIT XXX CLOSED X MILE
- EXIT CLOSED
- RIGHT LN TO BE CLOSED
- MALL DRIVEWAY CLOSED
- X LANES CLOSED TUE - FRI
- XXXXXXXX BLVD CLOSED

Other Condition List

- ROADWORK XXX FT
- ROAD REPAIRS XXXX FT
- FLAGGER XXXX FT
- LANE NARROWS XXXX FT
- RIGHT LN NARROWS XXXX FT
- TWO-WAY TRAFFIC XX MILE
- MERGING TRAFFIC XXXX FT
- CONST TRAFFIC XXX FT
- LOOSE GRAVEL XXXX FT
- UNEVEN LANES XXXX FT
- DETOUR X MILE
- ROUGH ROAD XXXX FT
- ROADWORK PAST SH XXXX
- ROADWORK NEXT FRI-SUN
- BUMP XXXX FT
- US XXX EXIT X MILES
- TRAFFIC SIGNAL XXXX FT
- LANES SHIFT *

* LANES SHIFT in Phase 1 must be used with STAY IN LANE in Phase 2.

Phase 2: Possible Component Lists

Action to Take/Effect on Travel List

- MERGE RIGHT
- FORM X LINES RIGHT
- DETOUR NEXT X EXITS
- USE XXXXX RD EXIT
- USE EXIT XXX
- USE EXIT I-XX NORTH
- STAY ON US XXX SOUTH
- USE I-XX E TO I-XX N
- TRUCKS USE US XXX N
- WATCH FOR TRUCKS
- WATCH FOR TRUCKS
- EXPECT DELAYS
- EXPECT DELAYS
- PREPARE TO STOP
- REDUCE SPEED XXX FT
- END SHOULDER USE
- USE OTHER ROUTES
- WATCH FOR WORKERS
- STAY IN LANE *

Location List

- AT FM XXXX
- BEFORE RAILROAD CROSSING
- NEXT X MILES
- PAST US XXX EXIT
- XXXXXXX TO XXXXXXX
- US XXX TO FM XXXX

Warning List

- SPEED LIMIT XX MPH
- MAXIMUM SPEED XX MPH
- MINIMUM SPEED XX MPH
- ADVISORY SPEED XX MPH
- RIGHT LANE EXIT
- USE CAUTION
- DRIVE SAFELY
- DRIVE WITH CARE

** Advance Notice List

- TUE-FRI XX AM- X PM
- APR XX-XX X PM-X AM
- BEGINS MONDAY
- BEGINS MAY XX
- MAY X-X XX PM - XX AM
- NEXT FRI-SUN
- XX AM TO XX PM
- NEXT TUE AUG XX
- TONIGHT XX PM- XX AM

** See Application Guidelines Note 6.

APPLICATION GUIDELINES

1. Only 1 or 2 phases are to be used on a PCMS.
2. The 1st phase (or both) should be selected from the "Road/Lane/Ramp Closure List" and the "Other Condition List".
3. A 2nd phase can be selected from the "Action to Take/Effect on Travel, Location, General Warning, or Advance Notice Phase Lists".
4. A Location Phase is necessary only if a distance or location is not included in the first phase selected.
5. If two PCMS are used in sequence, they must be separated by a minimum of 1000 ft. Each PCMS shall be limited to two phases, and should be understandable by themselves.
6. For advance notice, when the current date is within seven days of the actual work date, calendar days should be replaced with days of the week. Advance notification should typically be for no more than one week prior to the work.

WORDING ALTERNATIVES

1. The words RIGHT, LEFT and ALL can be interchanged as appropriate.
2. Roadway designations IH, US, SH, FM and LP can be interchanged as appropriate.
3. EAST, WEST, NORTH and SOUTH (or abbreviations E, W, N and S) can be interchanged as appropriate.
4. Highway names and numbers replaced as appropriate.
5. ROAD, HIGHWAY and FREEWAY can be interchanged as needed.
6. AHEAD may be used instead of distances if necessary.
7. FT and MI, MILE and MILES interchanged as appropriate.
8. AT, BEFORE and PAST interchanged as needed.
9. Distances or AHEAD can be eliminated from the message if a location phase is used.

PCMS SIGNS WITHIN THE R.O.W. SHALL BE BEHIND GUARDRAIL OR CONCRETE BARRIER OR SHALL HAVE A MINIMUM OF FOUR (4) PLASTIC DRUMS PLACED PERPENDICULAR TO TRAFFIC ON THE UPSTREAM SIDE OF THE PCMS, WHEN EXPOSED TO ONE DIRECTION OF TRAFFIC. WHEN EXPOSED TO TWO WAY TRAFFIC, THE FOUR DRUMS SHOULD BE PLACED WITH ONE DRUM AT EACH OF THE FOUR CORNERS OF THE UNIT.

FULL MATRIX PCMS SIGNS

1. When Full Matrix PCMS signs are used, the character height and legibility/visibility requirements shall be maintained as listed in Note 15 under "PORTABLE CHANGEABLE MESSAGE SIGNS" above.
2. When symbol signs, such as the "Flagger Symbol"(CW20-7) are represented graphically on the Full Matrix PCMS sign and, with the approval of the Engineer, it shall maintain the legibility/visibility requirement listed above.
3. When symbol signs are represented graphically on the Full Matrix PCMS, they shall only supplement the use of the static sign represented, and shall not substitute for, or replace that sign.
4. A full matrix PCMS may be used to simulate a flashing arrow board provided it meets the visibility, flash rate and dimming requirements on BC(7), for the same size arrow.

Texas Department of Transportation

Traffic Safety Division Standard

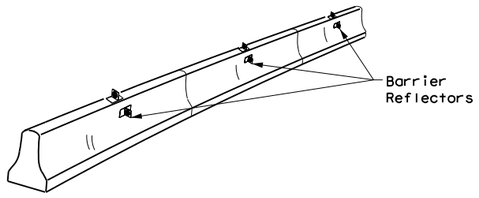
BARRICADE AND CONSTRUCTION PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)

BC(6)-21

FILE:	bc-21.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
© TxDOT	November 2002	CONT	SECT	JOB	HIGHWAY
REVISIONS		0905	00	117	VAR
9-07 8-14		DIST	COUNTY		SHEET NO.
7-13 5-21		LBB	LUBBOCK,ETC.		015

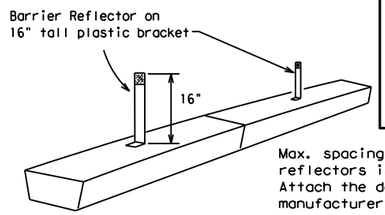
100

1. Barrier Reflectors shall be pre-qualified, and conform to the color and reflectivity requirements of DMS-8600. A list of prequalified Barrier Reflectors can be found at the Material Producer List web address shown on BC(1).
2. Color of Barrier Reflectors shall be as specified in the TMUTCD. The cost of the reflectors shall be considered subsidiary to Item 512.



CONCRETE TRAFFIC BARRIER (CTB)

3. Where traffic is on one side of the CTB, two (2) Barrier Reflectors shall be mounted in approximately the midsection of each section of CTB. An alternate mounting location is uniformly spaced at one end of each CTB. This will allow for attachment of a barrier grapple without damaging the reflector. The Barrier Reflector mounted on the side of the CTB shall be located directly below the reflector mounted on top of the barrier, as shown in the detail above.
4. Where CTB separates two-way traffic, three barrier reflectors shall be mounted on each section of CTB. The reflector unit on top shall have two yellow reflective faces (Bi-Directional)while the reflectors on each side of the barrier shall have one yellow reflective face, as shown in the detail above.
5. When CTB separates traffic traveling in the same direction, no barrier reflectors will be required on top of the CTB.
6. Barrier Reflector units shall be yellow or white in color to match the edgeline being supplemented.
7. Maximum spacing of Barrier Reflectors is forty (40) feet.
8. Pavement markers or temporary flexible-reflective roadway marker tabs shall NOT be used as CTB delineation.
9. Attachment of Barrier Reflectors to CTB shall be per manufacturer's recommendations.
10. Missing or damaged Barrier Reflectors shall be replaced as directed by the Engineer.
11. Single slope barriers shall be delineated as shown on the above detail.

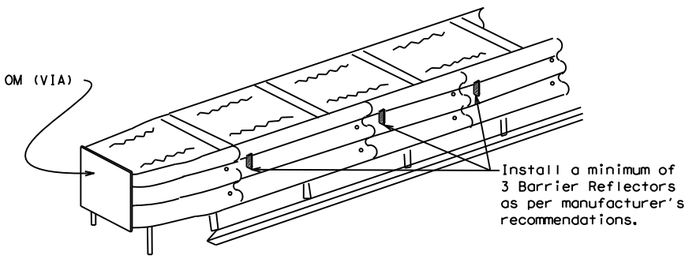


Max. spacing of barrier reflectors is 20 feet. Attach the delineators as per manufacturer's recommendations.

LOW PROFILE CONCRETE BARRIER (LPCB) USED IN WORK ZONES

LPCB is approved for use in work zone locations, where the posted speed is 45mph, or less. See Roadway Standard Sheet LPCB.

LOW PROFILE CONCRETE BARRIER (LPCB)

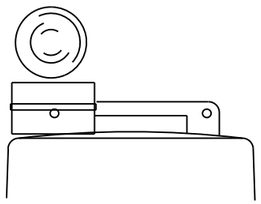


DELINEATION OF END TREATMENTS

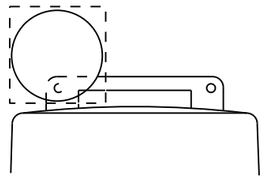
END TREATMENTS FOR CTB'S USED IN WORK ZONES

End treatments used on CTB's in work zones shall meet the apppropriate crashworthy standards as defined in the Manual for Assessing Safety Hardware (MASH). Refer to the CWZTCD List for approved end treatments and manufacturers.

BARRIER REFLECTORS FOR CONCRETE TRAFFIC BARRIER AND ATTENUATORS



Type C Warning Light or approved substitute mounted on a drum adjacent to the travel way.



Warning reflector may be round or square.Must have a yellow reflective surface area of at least 30 square inches

WARNING LIGHTS

1. Warning lights shall meet the requirements of the TMUTCD.
2. Warning lights shall NOT be installed on barricades.
3. Type A-Low Intensity Flashing Warning Lights are commonly used with drums. They are intended to warn of or mark a potentially hazardous area. Their use shall be as indicated on this sheet and/or other sheets of the plans by the designation "FL". The Type A Warning Lights shall not be used with signs manufactured with Type B_{FL} or C_{FL} Sheeting meeting the requirements of Departmental Material Specification DMS-8300.
4. Type-C and Type D 360 degree Steady Burn Lights are intended to be used in a series for delineation to supplement other traffic control devices. Their use shall be as indicated on this sheet and/or other sheets of the plans by the designation "SB".
5. The Engineer/Inspector or the plans shall specify the location and type of warning lights to be installed on the traffic control devices.
6. When required by the Engineer, the Contractor shall furnish a copy of the warning lights certification. The warning light manufacturer will certify the warning lights meet the requirements of the latest ITE Purchase Specifications for Flashing and Steady-Burn Warning Lights.
7. When used to delineate curves, Type-C and Type D Steady Burn Lights should only be placed on the outside of the curve, not the inside.
8. The location of warning lights and warning reflectors on drums shall be as shown elsewhere in the plans.

WARNING LIGHTS MOUNTED ON PLASTIC DRUMS

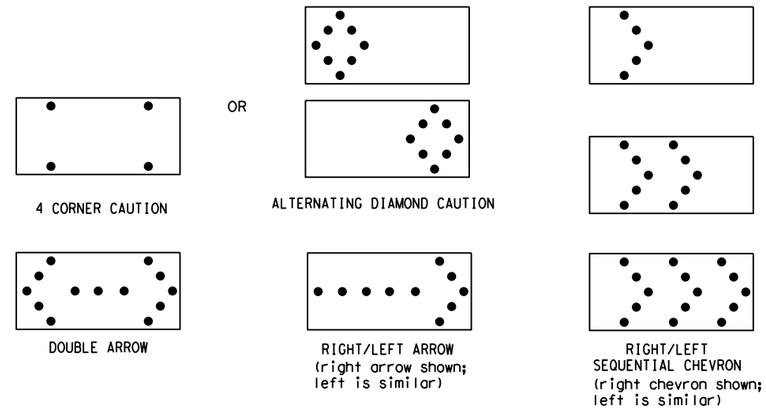
1. Type A flashing warning lights are intended to warn drivers that they are approaching or are in a potentially hazardous area.
2. Type A random flashing warning lights are not intended for delineation and shall not be used in a series.
3. A series of sequential flashing warning lights placed on channelizing devices to form a merging taper may be used for delineation. If used, the successive flashing of the sequential warning lights should occur from the beginning of the taper to the end of the merging taper in order to identify the desired vehicle path. The rate of flashing for each light shall be 65 flashes per minute, plus or minus 10 flashes.
4. Type C and D steady-burn warning lights are intended to be used in a series to delineate the edge of the travel lane on detours, on lane changes, on lane closures, and on other similar conditions.
5. Type A, Type C and Type D warning lights shall be installed at locations as detailed on other sheets in the plans.
6. Warning lights shall not be installed on a drum that has a sign, chevron or vertical panel.
7. The maximum spacing for warning lights on drums should be identical to the channelizing device spacing.

WARNING REFLECTORS MOUNTED ON PLASTIC DRUMS AS A SUBSTITUTE FOR TYPE C (STEADY BURN) WARNING LIGHTS

1. A warning reflector or approved substitute may be mounted on a plastic drum as a substitute for a Type C, steady burn warning light at the discretion of the Contractor unless otherwise noted in the plans.
2. The warning reflector shall be yellow in color and shall be manufactured using a sign substrate approved for use with plastic drums listed on the CWZTCD.
3. The warning reflector shall have a minimum retroreflective surface area (one-side) of 30 square inches.
4. Round reflectors shall be fully reflectorized, including the area where attached to the drum.
5. Square substrates must have a minimum of 30 square inches of reflectorized sheeting. They do not have to be reflectorized where it attaches to the drum.
6. The side of the warning reflector facing approaching traffic shall have sheeting meeting the color and retroreflectivity requirements for DMS 8300-Type B or Type C.
7. When used near two-way traffic, both sides of the warning reflector shall be reflectorized.
8. The warning reflector should be mounted on the side of the handle nearest approaching traffic.
9. The maximum spacing for warning reflectors should be identical to the channelizing device spacing requirements.

Arrow Boards may be located behind channelizing devices in place for a shoulder taper or merging taper, otherwise they shall be delineated with four (4) channelizing devices placed perpendicular to traffic on the upstream side of traffic.

1. The Flashing Arrow Board should be used for all lane closures on multi-lane roadways, or slow moving maintenance or construction activities on the travel lanes.
2. Flashing Arrow Boards should not be used on two-lane, two-way roadways, detours, diversions or work on shoulders unless the "CAUTION" display (see detail below) is used.
3. The Engineer/Inspector shall choose all appropriate signs, barricades and/or other traffic control devices that should be used in conjunction with the Flashing Arrow Board.
4. The Flashing Arrow Board should be able to display the following symbols:



5. The "CAUTION" display consists of four corner lamps flashing simultaneously, or the Alternating Diamond Caution mode as shown.
6. The straight line caution display is NOT ALLOWED.
7. The Flashing Arrow Board shall be capable of minimum 50 percent dimming from rated lamp voltage. The flashing rate of the lamps shall not be less than 25 nor more than 40 flashes per minute.
8. Minimum lamp "on time" shall be approximately 50 percent for the flashing arrow and equal intervals of 25 percent for each sequential phase of the flashing chevron.
9. The sequential arrow display is NOT ALLOWED.
10. The flashing arrow display is the TxDOT standard; however, the sequential chevron display may be used during daylight operations.
11. The Flashing Arrow Board shall be mounted on a vehicle, trailer or other suitable support.
12. A Flashing Arrow Board SHALL NOT BE USED to laterally shift traffic.
13. A full matrix PCMS may be used to simulate a Flashing Arrow Board provided it meets visibility, flash rate and dimming requirements on this sheet for the same size arrow.
14. Minimum mounting height of trailer mounted Arrow Boards should be 7 feet from roadway to bottom of panel.

REQUIREMENTS			
TYPE	MINIMUM SIZE	MINIMUM NUMBER OF PANEL LAMPS	MINIMUM VISIBILITY DISTANCE
B	30 x 60	13	3/4 mile
C	48 x 96	15	1 mile

ATTENTION

Flashing Arrow Boards shall be equipped with automatic dimming devices.

WHEN NOT IN USE, REMOVE THE ARROW BOARD FROM THE RIGHT-OF-WAY OR PLACE THE ARROW BOARD BEHIND CONCRETE TRAFFIC BARRIER OR GUARDRAIL.

FLASHING ARROW BOARDS

TRUCK-MOUNTED ATTENUATORS

1. Truck-mounted attenuators (TMA) used on TxDOT facilities must meet the requirements outlined in the Manual for Assessing Safety Hardware (MASH).
2. Refer to the CWZTCD for the requirements of Level 2 or Level 3 TMAs.
3. Refer to the CWZTCD for a list of approved TMAs.
4. TMAs are required on freeways unless otherwise noted in the plans.
5. A TMA should be used anytime that it can be positioned 30 to 100 feet in advance of the area of crew exposure without adversely affecting the work performance.
6. The only reason a TMA should not be required is when a work area is spread down the roadway and the work crew is an extended distance from the TMA.

Texas Department of Transportation — Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION ARROW PANEL, REFLECTORS, WARNING LIGHTS & ATTENUATOR

BC(7)-21

FILE: bc-21.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
© TxDOT November 2002	CONT	SECT	JOB	HIGHWAY
REVISIONS	0905	00	117	VAR
9-07 8-14	DIST	COUNTY		SHEET NO.
7-13 5-21	LBB	LUBBOCK,ETC.		016

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GENERAL NOTES

1. For long term stationary work zones on freeways, drums shall be used as the primary channelizing device.
2. For intermediate term stationary work zones on freeways, drums should be used as the primary channelizing device but may be replaced in tangent sections by vertical panels, or 42" two-piece cones. In tangent sections, one-piece cones may be used with the approval of the Engineer but only if personnel are present on the project at all times to maintain the cones in proper position and location.
3. For short term stationary work zones on freeways, drums are the preferred channelizing device but may be replaced in tapers, transitions and tangent sections by vertical panels, two-piece cones or one-piece cones as approved by the Engineer.
4. Drums and all related items shall comply with the requirements of the current version of the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD) and the "Compliant Work Zone Traffic Control Devices List" (CWZTCD).
5. Drums, bases, and related materials shall exhibit good workmanship and shall be free from objectionable marks or defects that would adversely affect their appearance or serviceability.
6. The Contractor shall have a maximum of 24 hours to replace any plastic drums identified for replacement by the Engineer/Inspector. The replacement device must be an approved device.

GENERAL DESIGN REQUIREMENTS

Pre-qualified plastic drums shall meet the following requirements:

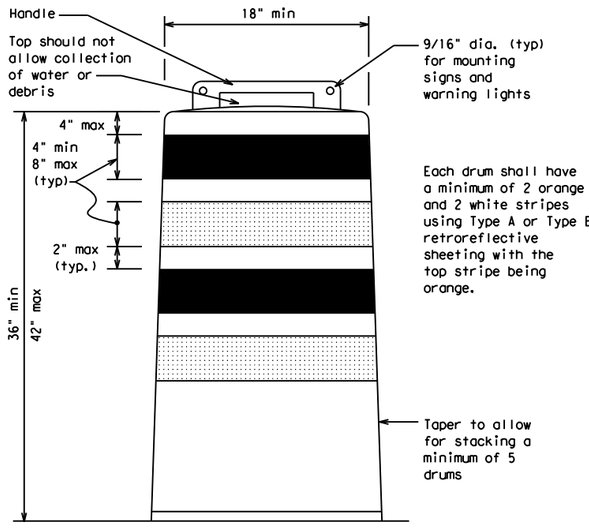
1. Plastic drums shall be a two-piece design; the "body" of the drum shall be the top portion and the "base" shall be the bottom.
2. The body and base shall lock together in such a manner that the body separates from the base when impacted by a vehicle traveling at a speed of 20 MPH or greater but prevents accidental separation due to normal handling and/or air turbulence created by passing vehicles.
3. Plastic drums shall be constructed of lightweight flexible, and deformable materials. The Contractor shall NOT use metal drums or single piece plastic drums as channelization devices or sign supports.
4. Drums shall present a profile that is a minimum of 18 inches in width at the 36 inch height when viewed from any direction. The height of drum unit (body installed on base) shall be a minimum of 36 inches and a maximum of 42 inches.
5. The top of the drum shall have a built-in handle for easy pickup and shall be designed to drain water and not collect debris. The handle shall have a minimum of two widely spaced 9/16 inch diameter holes to allow attachment of a warning light, warning reflector unit or approved compliant sign.
6. The exterior of the drum body shall have a minimum of four alternating orange and white retroreflective circumferential stripes not less than 4 inches nor greater than 8 inches in width. Any non-reflectorized space between any two adjacent stripes shall not exceed 2 inches in width.
7. Bases shall have a maximum width of 36 inches, a maximum height of 4 inches, and a minimum of two footholds of sufficient size to allow base to be held down while separating the drum body from the base.
8. Plastic drums shall be constructed of ultra-violet stabilized, orange, high-density polyethylene (HDPE) or other approved material.
9. Drum body shall have a maximum unballasted weight of 11 lbs.
10. Drum and base shall be marked with manufacturer's name and model number.

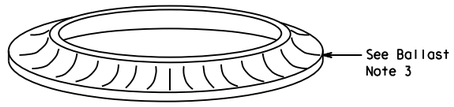
RETROREFLECTIVE SHEETING

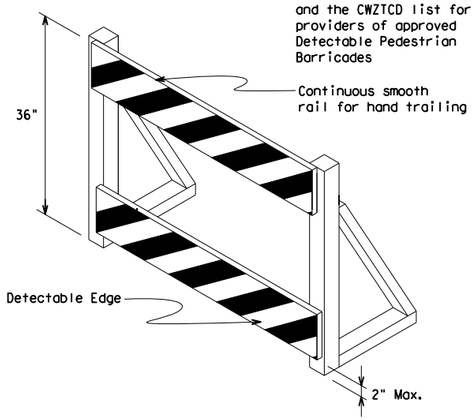
1. The stripes used on drums shall be constructed of sheeting meeting the color and retroreflectivity requirements of Departmental Materials Specification DMS-8300, "Sign Face Materials," Type A or Type B reflective sheeting shall be supplied unless otherwise specified in the plans.
2. The sheeting shall be suitable for use on and shall adhere to the drum surface such that, upon vehicular impact, the sheeting shall remain adhered in-place and exhibit no delaminating, cracking, or loss of retroreflectivity other than that loss due to abrasion of the sheeting surface.

BALLAST

1. Unballasted bases shall be large enough to hold up to 50 lbs. of sand. This base, when filled with the ballast material, should weigh between 35 lbs (minimum) and 50 lbs (maximum). The ballast may be sand in one to three sandbags separate from the base, sand in a sand-filled plastic base, or other ballasting devices as approved by the Engineer. Stacking of sandbags will be allowed, however height of sandbags above pavement surface may not exceed 12 inches.
2. Bases with built-in ballast shall weigh between 40 lbs. and 50 lbs. Built-in ballast can be constructed of an integral crumb rubber base or a solid rubber base.
3. Recycled truck tire sidewalls may be used for ballast on drums approved for this type of ballast on the CWZTCD list.
4. The ballast shall not be heavy objects, water, or any material that would become hazardous to motorists, pedestrians, or workers when the drum is struck by a vehicle.
5. When used in regions susceptible to freezing, drums shall have drainage holes in the bottoms so that water will not collect and freeze becoming a hazard when struck by a vehicle.
6. Ballast shall not be placed on top of drums.
7. Adhesives may be used to secure base of drums to pavement.

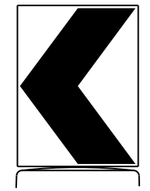




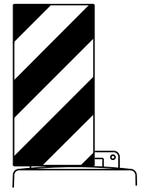


DETECTABLE PEDESTRIAN BARRICADES

1. When existing pedestrian facilities are disrupted, closed, or relocated in a TTC zone, the temporary facilities shall be detectable and include accessibility features consistent with the features present in the existing pedestrian facility. Refer to WZ(BTS-2) for Pedestrian Control requirements for Sidewalk Diversions, Sidewalk Detours and Crosswalk Closures.
2. Where pedestrians with visual disabilities normally use the closed sidewalk, a Detectable Pedestrian Barricade shall be placed across the full width of the closed sidewalk instead of a Type 3 Barricade.
3. Detectable pedestrian barricades similar to the one pictured above, longitudinal channelizing devices, some concrete barriers, and wood or chain link fencing with a continuous detectable edging can satisfactorily delineate a pedestrian path.
4. Tape, rope, or plastic chain strung between devices are not detectable, do not comply with the design standards in the "Americans with Disabilities Act Accessibility Guidelines (ADAAG)" and should not be used as a control for pedestrian movements.
5. Warning lights shall not be attached to detectable pedestrian barricades.
6. Detectable pedestrian barricades should use 8" nominal barricade rails as shown on BC(10) provided that the top rail provides a smooth continuous rail suitable for hand trailing with no splinters, burrs, or sharp edges.



18" x 24" Sign
(Maximum Sign Dimension)
Chevron CW1-8, Opposing Traffic Lane Divider, Driveway sign D70a, Keep Right R4 series or other signs as approved by Engineer



12" x 24"
Vertical Panel
mount with diagonals sloping down towards travel way

Plywood, Aluminum or Metal sign substrates shall NOT be used on plastic drums

SIGNS, CHEVRONS, AND VERTICAL PANELS MOUNTED ON PLASTIC DRUMS

1. Signs used on plastic drums shall be manufactured using substrates listed on the CWZTCD.
2. Chevrons and other work zone signs with an orange background shall be manufactured with Type B_{FL} or Type C_{FL} Orange sheeting meeting the color and retroreflectivity requirements of DMS-8300, "Sign Face Material," unless otherwise specified in the plans.
3. Vertical Panels shall be manufactured with orange and white sheeting meeting the requirements of DMS-8300 Type A or Type B. Diagonal stripes on Vertical Panels shall slope down toward the intended traveled lane.
4. Other sign messages (text or symbolic) may be used as approved by the Engineer. Sign dimensions shall not exceed 18 inches in width or 24 inches in height, except for the R9 series signs discussed in note 8 below.
5. Signs shall be installed using a 1/2 inch bolt (nominal) and nut, two washers, and one locking washer for each connection.
6. Mounting bolts and nuts shall be fully engaged and adequately torqued. Bolts should not extend more than 1/2 inch beyond nuts.
7. Chevrons may be placed on drums on the outside of curves, on merging tapers or on shifting tapers. When used in these locations, they may be placed on every drum or spaced not more than on every third drum. A minimum of three (3) should be used at each location called for in the plans.
8. R9-9, R9-10, R9-11 and R9-11a Sidewalk Closed signs which are 24 inches wide may be mounted on plastic drums, with approval of the Engineer.

Texas Department of Transportation | Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION CHANNELIZING DEVICES

BC(8)-21

FILE: bc-21.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT November 2002	CONT	SECT	JOB	HIGHWAY
REVISIONS	0905	00	117	VAR
4-03 8-14	DIST	COUNTY		SHEET NO.
9-07 5-21	LBB	LUBBOCK,ETC.		017
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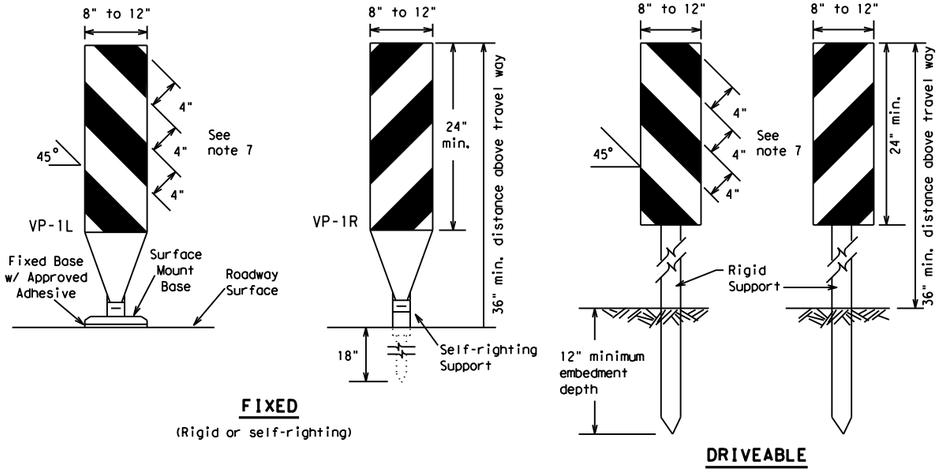
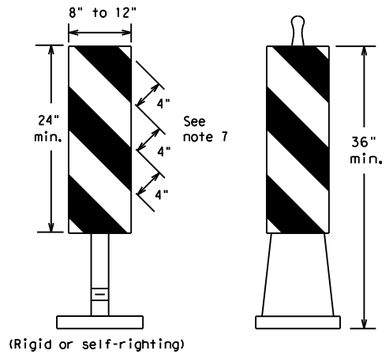


FIXED
(Rigid or self-righting)

DRIVEABLE

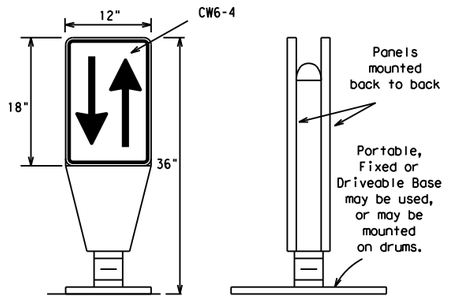


(Rigid or self-righting)

PORTABLE

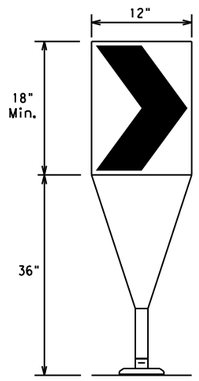
VERTICAL PANELS (VPs)

1. Vertical Panels (VP's) are normally used to channelize traffic or divide opposing lanes of traffic.
2. VP's may be used in daytime or nighttime situations. They may be used at the edge of shoulder drop-offs and other areas such as lane transitions where positive daytime and nighttime delineation is required. The Engineer/Inspector shall refer to the Roadway Design Manual for additional requirements on the use VP's for drop-offs.
3. VP's should be mounted back to back if used at the edge of cuts adjacent to two-way two lane roadways. Stripes are to be reflective orange and reflective white and should always slope downward toward the travel lane.
4. VP's used on expressways and freeways or other high speed roadways, may have more than 270 square inches of retroreflective area facing traffic.
5. Self-righting supports are available with portable base. See "Compliant Work Zone Traffic Control Devices List" (CWZTCD).
6. Sheeting for the VP's shall be retroreflective Type A or Type B conforming to Departmental Material Specification DMS-8300, unless noted otherwise.
7. Where the height of reflective material on the vertical panel is 36 inches or greater, a panel stripe of 6 inches shall be used.



1. Opposing Traffic Lane Dividers (OTLD) are delineation devices designed to convert a normal one-way roadway section to two-way operation. OTLD's are used on temporary centerlines. The upward and downward arrows on the sign's face indicate the direction of traffic on either side of the divider. The base is secured to the pavement with an adhesive or rubber weight to minimize movement caused by a vehicle impact or wind gust.
2. The OTLD may be used in combination with 42" cones or VPs.
3. Spacing between the OTLD shall not exceed 500 feet. 42" cones or VPs placed between the OTLD's should not exceed 100 foot spacing.
4. The OTLD shall be orange with a black non-reflective legend. Sheeting for the OTLD shall be retroreflective Type B_{FL} or Type C_{FL} conforming to Departmental Material Specification DMS-8300, unless noted otherwise. The legend shall meet the requirements of DMS-8300.

OPPOSING TRAFFIC LANE DIVIDERS (OTLD)



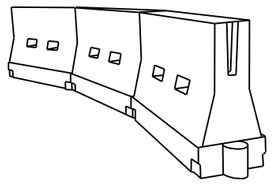
Fixed Base w/ Approved Adhesive (Driveable Base, or Flexible Support can be used)

1. The chevron shall be a vertical rectangle with a minimum size of 12 by 18 inches.
2. Chevrons are intended to give notice of a sharp change of alignment with the direction of travel and provide additional emphasis and guidance for vehicle operators with regard to changes in horizontal alignment of the roadway.
3. Chevrons, when used, shall be erected on the outside of a sharp curve or turn, or on the far side of an intersection. They shall be in line with and at right angles to approaching traffic. Spacing should be such that the motorist always has three in view, until the change in alignment eliminates its need.
4. To be effective, the chevron should be visible for at least 500 feet.
5. Chevrons shall be orange with a black nonreflective legend. Sheeting for the chevron shall be retroreflective Type B_{FL} or Type C_{FL} conforming to Departmental Material Specification DMS-8300, unless noted otherwise. The legend shall meet the requirements of DMS-8300.
6. For Long Term Stationary use on tapers or transitions on freeways and divided highways, self-righting chevrons may be used to supplement plastic drums but not to replace plastic drums.

CHEVRONS

GENERAL NOTES

1. Work Zone channelizing devices illustrated on this sheet may be installed in close proximity to traffic and are suitable for use on high or low speed roadways. The Engineer/Inspector shall ensure that spacing and placement is uniform and in accordance with the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD).
2. Channelizing devices shown on this sheet may have a driveable, fixed or portable base. The requirement for self-righting channelizing devices must be specified in the General Notes or other plan sheets.
3. Channelizing devices on self-righting supports should be used in work zone areas where channelizing devices are frequently impacted by errant vehicles or vehicle related wind gusts making alignment of the channelizing devices difficult to maintain. Locations of these devices shall be detailed elsewhere in the plans. These devices shall conform to the TMUTCD and the "Compliant Work Zone Traffic Control Devices List" (CWZTCD).
4. The Contractor shall maintain devices in a clean condition and replace damaged, nonreflective, faded, or broken devices and bases as required by the Engineer/Inspector. The Contractor shall be required to maintain proper device spacing and alignment.
5. Portable bases shall be fabricated from virgin and/or recycled rubber. The portable bases shall weigh a minimum of 30 lbs.
6. Pavement surfaces shall be prepared in a manner that ensures proper bonding between the adhesives, the fixed mount bases and the pavement surface. Adhesives shall be prepared and applied according to the manufacturer's recommendations.
7. The installation and removal of channelizing devices shall not cause detrimental effects to the final pavement surfaces, including pavement surface discoloration or surface integrity. Driveable bases shall not be permitted on final pavement surfaces. The Engineer/Inspector shall approve all application and removal procedures of fixed bases.



LONGITUDINAL CHANNELIZING DEVICES (LCD)

1. LCDs are crashworthy, lightweight, deformable devices that are highly visible, have good target value and can be connected together. They are not designed to contain or redirect a vehicle on impact.
2. LCDs may be used instead of a line of cones or drums.
3. LCDs shall be placed in accordance to application and installation requirements specific to the device, and used only when shown on the CWZTCD list.
4. LCDs should not be used to provide positive protection for obstacles, pedestrians or workers.
5. LCDs shall be supplemented with retroreflective delineation as required for temporary barriers on BC(7) when placed roughly parallel to the travel lanes.
6. LCDs used as barricades placed perpendicular to traffic should have at least one row of reflective sheeting meeting the requirements for barricade rails as shown on BC(10). Place reflective sheeting near the top of the LCD along the full length of the device.

WATER BALLASTED SYSTEMS USED AS BARRIERS

1. Water ballasted systems used as barriers shall not be used solely to channelize road users, but also to protect the work space per the appropriate Manual for Assessing Safety Hardware (MASH) crashworthiness requirements based on roadway speed and barrier application.
2. Water ballasted systems used to channelize vehicular traffic shall be supplemented with retroreflective delineation or channelizing devices to improve daytime/nighttime visibility. They may also be supplemented with pavement markings.
3. Water ballasted systems used as barriers shall be placed in accordance to application and installation requirements specific to the device, and used only when shown on the CWZTCD list.
4. Water ballasted systems used as barriers should not be used for a merging taper except in low speed (less than 45 MPH) urban areas. When used on a taper in a low speed urban area, the taper shall be delineated and the taper length should be designed to optimize road user operations considering the available geometric conditions.
5. When water ballasted systems used as barriers have blunt ends exposed to traffic, they should be attenuated as per manufacturer recommendations or flared to a point outside the clear zone.

If used to channelize pedestrians, longitudinal channelizing devices or water ballasted systems must have a continuous detectable bottom for users of long canes and the top of the unit shall not be less than 32 inches in height.

HOLLOW OR WATER BALLASTED SYSTEMS USED AS LONGITUDINAL CHANNELIZING DEVICES OR BARRIERS

Posted Speed	Formula	Minimum Desirable Taper Lengths ** 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Channelizing Devices On a Taper	On a Tangent
30	$L = \frac{WS^2}{60}$	150′	165′	180′	30′	60′
35		205′	225′	245′	35′	70′
40		265′	295′	320′	40′	80′
45	L = WS	450′	495′	540′	45′	90′
50		500′	550′	600′	50′	100′
55		550′	605′	660′	55′	110′
60		600′	660′	720′	60′	120′
65		650′	715′	780′	65′	130′
70		700′	770′	840′	70′	140′
75		750′	825′	900′	75′	150′
80		800′	880′	960′	80′	160′

** Taper lengths have been rounded off.
L=Length of Taper (FT.) W=Width of Offset (FT.)
S=Posted Speed (MPH)

SUGGESTED MAXIMUM SPACING OF CHANNELIZING DEVICES AND MINIMUM DESIRABLE TAPER LENGTHS

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BARRICADE AND CONSTRUCTION CHANNELIZING DEVICES

BC(9)-21

FILE: bc-21.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
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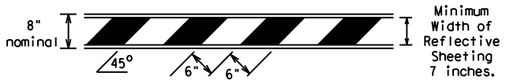
7-13 5-21	LBB	LUBBOCK,ETC.		018

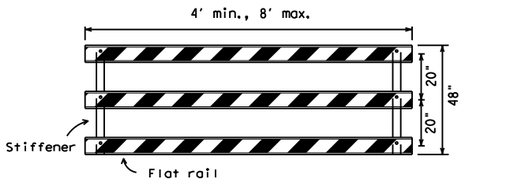
TYPE 3 BARRICADES

1. Refer to the Compliant Work Zone Traffic Control Devices List (CWZTCD) for details of the Type 3 Barricades and a list of all materials used in the construction of Type 3 Barricades.
2. Type 3 Barricades shall be used at each end of construction projects closed to all traffic.
3. Barricades extending across a roadway should have stripes that slope downward in the direction toward which traffic must turn in detouring. When both right and left turns are provided, the chevron striping may slope downward in both directions from the center of the barricade. Where no turns are provided at a closed road, striping should slope downward in both directions toward the center of roadway.
4. Striping of rails, for the right side of the roadway, should slope downward to the left. For the left side of the roadway, striping should slope downward to the right.
5. Identification markings may be shown only on the back of the barricade rails. The maximum height of letters and/or company logos used for identification shall be 1".
6. Barricades shall not be placed parallel to traffic unless an adequate clear zone is provided.
7. Warning lights shall NOT be installed on barricades.
8. Where barricades require the use of weights to keep from turning over, the use of sandbags with dry, cohesionless sand is recommended. The sandbags will be tied shut to keep the sand from spilling and to maintain a constant weight. Sand bags shall not be stacked in a manner that covers any portion of a barricade rails reflective sheeting. Rock, concrete, iron, steel or other solid objects will NOT be permitted. Sandbags should weigh a minimum of 35 lbs and a maximum of 50 lbs. Sandbags shall be made of a durable material that tears upon vehicular impact. Rubber (such as tire inner tubes) shall not be used for sandbags. Sandbags shall only be placed along or upon the base supports of the device and shall not be suspended above ground level or hung with rope, wire, chains or other fasteners.
9. Sheeting for barricades shall be retroreflective Type A or Type B conforming to Departmental Material Specification DMS-8300 unless otherwise noted.

Barricades shall NOT be used as a sign support.



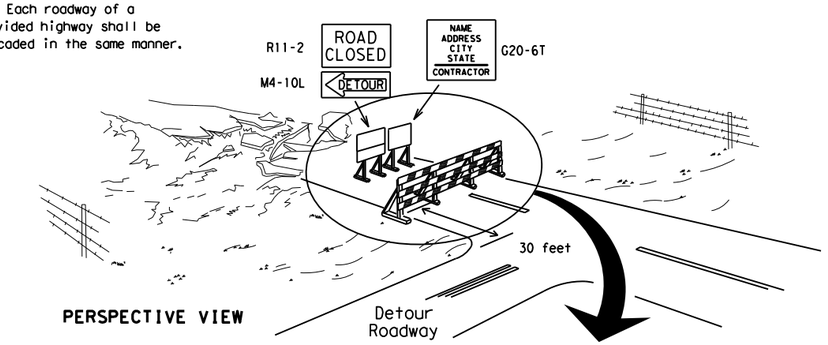
TYPICAL STRIPING DETAIL FOR BARRICADE RAIL



Stiffener may be inside or outside of support, but no more than 2 stiffeners shall be allowed on one barricade.

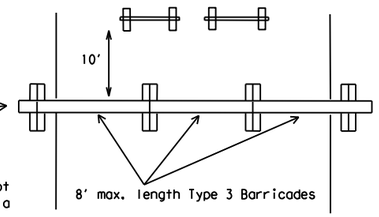
TYPICAL PANEL DETAIL FOR SKID OR POST TYPE BARRICADES

Each roadway of a divided highway shall be barricaded in the same manner.



PERSPECTIVE VIEW

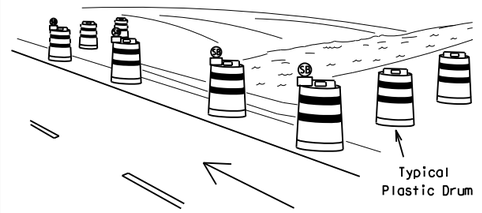
The three rails on Type 3 barricades shall be reflectorized orange and reflective white stripes on one side facing one-way traffic and both sides for two-way traffic.
Barricade striping should slant downward in the direction of detour.



PLAN VIEW

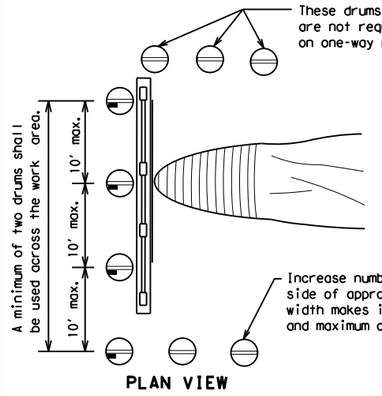
1. Signs should be mounted on independent supports at a 7 foot mounting height in center of roadway. The signs should be a minimum of 10 feet behind Type 3 Barricades.
2. Advance signing shall be as specified elsewhere in the plans.

TYPE 3 BARRICADE (POST AND SKID) TYPICAL APPLICATION



PERSPECTIVE VIEW

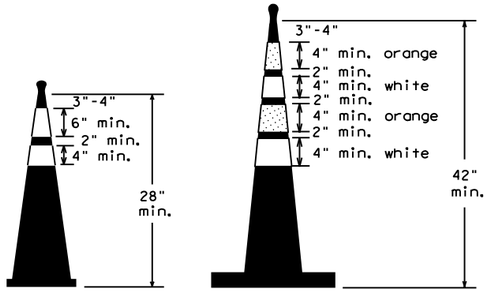
1. Where positive redirectional capability is provided, drums may be omitted.
2. Plastic construction fencing may be used with drums for safety as required in the plans.
3. Vertical Panels on flexible support may be substituted for drums when the shoulder width is less than 4 feet.
4. When the shoulder width is greater than 12 feet, steady-burn lights may be omitted if drums are used.
5. Drums must extend the length of the culvert widening.



LEGEND	
	Plastic drum
	Plastic drum with steady burn light or yellow warning reflector
SB	Steady burn warning light or yellow warning reflector

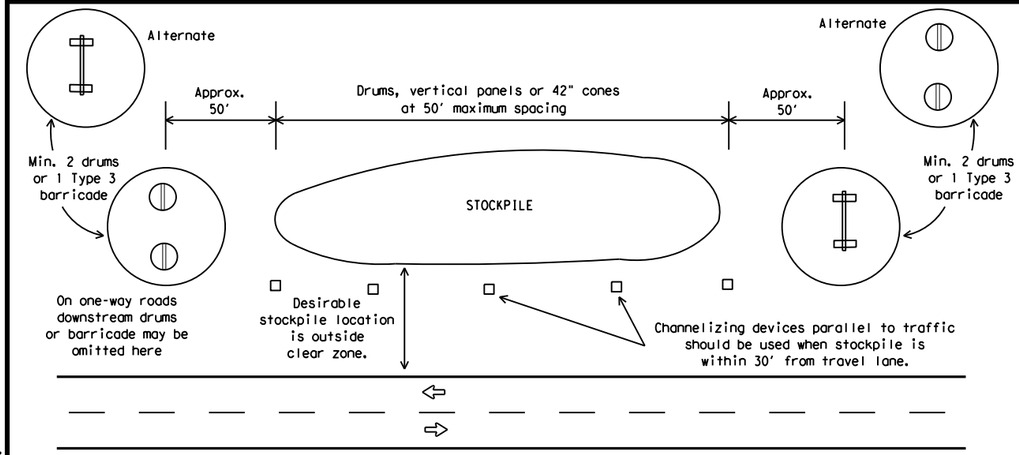
PLAN VIEW

CULVERT WIDENING OR OTHER ISOLATED WORK WITHIN THE PROJECT LIMITS



28" Cones shall have a minimum weight of 9 1/2 lbs.
42" 2-piece cones shall have a minimum weight of 30 lbs. including base.

1. Traffic cones and tubular markers shall be predominantly orange, and meet the height and weight requirements shown above.
2. One-piece cones have the body and base of the cone molded in one consolidated unit. Two-piece cones have a cone shaped body and a separate rubber base, or ballast, that is added to keep the device upright and in place.
3. Two-piece cones may have a handle or loop extending up to 8" above the minimum height shown, in order to aid in retrieving the device.
4. Cones or tubular markers shall have white or white and orange reflective bands as shown above. The reflective bands shall have a smooth, sealed outer surface and meet the requirements of Departmental Material Specification DMS-8300 Type A or Type B.
5. 28" cones and tubular markers are generally suitable for short duration and short-term stationary work as defined on BC(4). These should not be used for intermediate-term or long-term stationary work unless personnel is on-site to maintain them in their proper upright position.
6. 42" two-piece cones, vertical panels or drums are suitable for all work zone durations.
7. Cones or tubular markers used on each project should be of the same size and shape.



TRAFFIC CONTROL FOR MATERIAL STOCKPILES

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Texas Department of Transportation

Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION CHANNELIZING DEVICES

BC(10)-21

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WORK ZONE PAVEMENT MARKINGS

GENERAL

1. The Contractor shall be responsible for maintaining work zone and existing pavement markings, in accordance with the standard specifications and special provisions, on all roadways open to traffic within the CSJ limits unless otherwise stated in the plans.
2. Color, patterns and dimensions shall be in conformance with the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD).
3. Additional supplemental pavement marking details may be found in the plans or specifications.
4. Pavement markings shall be installed in accordance with the TMUTCD and as shown on the plans.
5. When short term markings are required on the plans, short term markings shall conform with the TMUTCD, the plans and details as shown on the Standard Plan Sheet WZ(STPM).
6. When standard pavement markings are not in place and the roadway is opened to traffic, DO NOT PASS signs shall be erected to mark the beginning of the sections where passing is prohibited and PASS WITH CARE signs at the beginning of sections where passing is permitted.
7. All work zone pavement markings shall be installed in accordance with Item 662, "Work Zone Pavement Markings."

RAISED PAVEMENT MARKERS

1. Raised pavement markers are to be placed according to the patterns on BC(12).
2. All raised pavement markers used for work zone markings shall meet the requirements of Item 672, "RAISED PAVEMENT MARKERS" and Departmental Material Specification DMS-4200 or DMS-4300.

PREFABRICATED PAVEMENT MARKINGS

1. Removable prefabricated pavement markings shall meet the requirements of DMS-8241.
2. Non-removable prefabricated pavement markings (foil back) shall meet the requirements of DMS-8240.

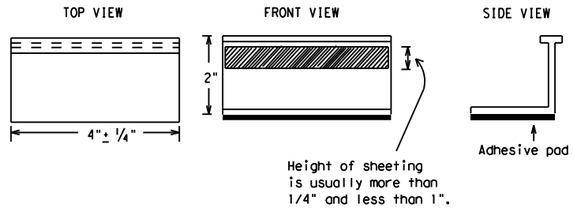
MAINTAINING WORK ZONE PAVEMENT MARKINGS

1. The Contractor will be responsible for maintaining work zone pavement markings within the work limits.
2. Work zone pavement markings shall be inspected in accordance with the frequency and reporting requirements of work zone traffic control device inspections as required by Form 599.
3. The markings should provide a visible reference for a minimum distance of 300 feet during normal daylight hours and 160 feet when illuminated by automobile low-beam headlights at night, unless sight distance is restricted by roadway geometrics.
4. Markings failing to meet this criteria within the first 30 days after placement shall be replaced at the expense of the Contractor as per Specification Item 662.

REMOVAL OF PAVEMENT MARKINGS

1. Pavement markings that are no longer applicable, could create confusion or direct a motorist toward or into the closed portion of the roadway shall be removed or obliterated before the roadway is opened to traffic.
2. The above shall not apply to detours in place for less than three days, where flaggers and/or sufficient channelizing devices are used in lieu of markings to outline the detour route.
3. Pavement markings shall be removed to the fullest extent possible, so as not to leave a discernable marking. This shall be by any method approved by TxDOT Specification Item 677 for "Eliminating Existing Pavement Markings and Markers".
4. The removal of pavement markings may require resurfacing or seal coating portions of the roadway as described in Item 677.
5. Subject to the approval of the Engineer, any method that proves to be successful on a particular type pavement may be used.
6. Blast cleaning may be used but will not be required unless specifically shown in the plans.
7. Over-painting of the markings SHALL NOT BE permitted.
8. Removal of raised pavement markers shall be as directed by the Engineer.
9. Removal of existing pavement markings and markers will be paid for directly in accordance with Item 677, "ELIMINATING EXISTING PAVEMENT MARKINGS AND MARKERS," unless otherwise stated in the plans.
10. Black-out marking tape may be used to cover conflicting existing markings for periods less than two weeks when approved by the Engineer.

Temporary Flexible-Reflective Roadway Marker Tabs



STAPLES OR NAILS SHALL NOT BE USED TO SECURE TEMPORARY FLEXIBLE-REFLECTIVE ROADWAY MARKER TABS TO THE PAVEMENT SURFACE

1. Temporary flexible-reflective roadway marker tabs used as guidemarks shall meet the requirements of DMS-8242.
2. Tabs detailed on this sheet are to be inspected and accepted by the Engineer or designated representative. Sampling and testing is not normally required, however at the option of the Engineer, either "A" or "B" below may be imposed to assure quality before placement on the roadway.
   A. Select five (5) or more tabs at random from each lot or shipment and submit to the Construction Division, Materials and Pavement Section to determine specification compliance.
   B. Select five (5) tabs and perform the following test. Affix five (5) tabs at 24 inch intervals on an asphaltic pavement in a straight line. Using a medium size passenger vehicle or pickup, run over the markers with the front and rear tires at a speed of 35 to 40 miles per hour, four (4) times in each direction. No more than one (1) out of the five (5) reflective surfaces shall be lost or displaced as a result of this test.
3. Small design variances may be noted between tab manufacturers.
4. See Standard Sheet WZ(STPM) for tab placement on new pavements. See Standard Sheet TCP(7-1) for tab placement on seal coat work.

RAISED PAVEMENT MARKERS USED AS GUIDEMARKS

1. Raised pavement markers used as guidemarks shall be from the approved product list, and meet the requirements of DMS-4200.
2. All temporary construction raised pavement markers provided on a project shall be of the same manufacturer.
3. Adhesive for guidemarks shall be bituminous material hot applied or butyl rubber pad for all surfaces, or thermoplastic for concrete surfaces.

Guidemarks shall be designated as:
YELLOW - (two amber reflective surfaces with yellow body).
WHITE - (one silver reflective surface with white body).

DEPARTMENTAL MATERIAL SPECIFICATIONS	
PAVEMENT MARKERS (REFLECTORIZED)	DMS-4200
TRAFFIC BUTTONS	DMS-4300
EPOXY AND ADHESIVES	DMS-6100
BITUMINOUS ADHESIVE FOR PAVEMENT MARKERS	DMS-6130
PERMANENT PREFABRICATED PAVEMENT MARKINGS	DMS-8240
TEMPORARY REMOVABLE, PREFABRICATED PAVEMENT MARKINGS	DMS-8241
TEMPORARY FLEXIBLE, REFLECTIVE ROADWAY MARKER TABS	DMS-8242

A list of prequalified reflective raised pavement markers, non-reflective traffic buttons, roadway marker tabs and other pavement markings can be found at the Material Producer List web address shown on BC(1).

Texas Department of Transportation

Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION PAVEMENT MARKINGS

BC(11)-21

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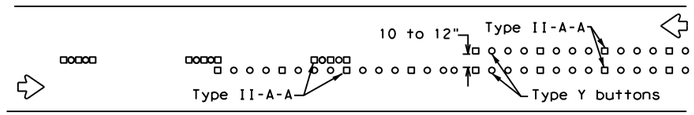
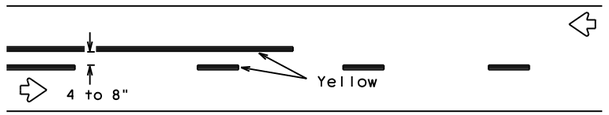
PAVEMENT MARKING PATTERNS

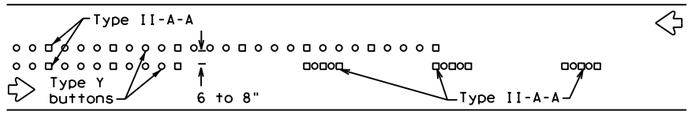
REFLECTORIZED PAVEMENT MARKINGS - PATTERN A



RAISED PAVEMENT MARKERS - PATTERN A



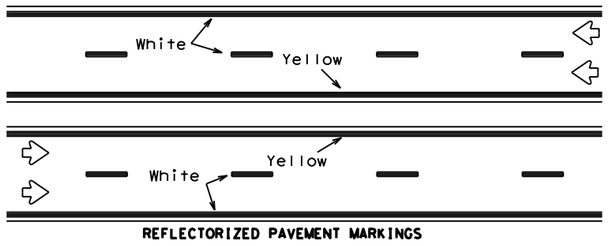
REFLECTORIZED PAVEMENT MARKINGS - PATTERN B



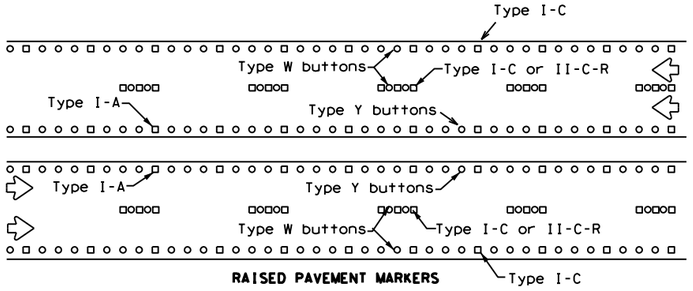
RAISED PAVEMENT MARKERS - PATTERN B

Pattern A is the TXDOT Standard, however Pattern B may be used if approved by the Engineer.
Prefabricated markings may be substituted for reflectorized pavement markings.

CENTER LINE & NO-PASSING ZONE BARRIER LINES FOR TWO-LANE, TWO-WAY HIGHWAYS



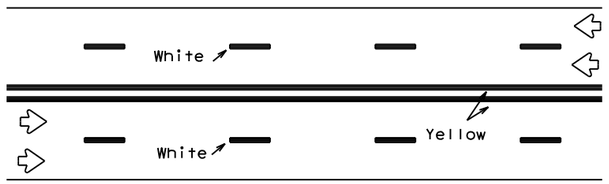
REFLECTORIZED PAVEMENT MARKINGS



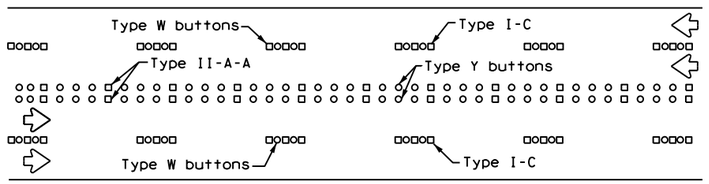
RAISED PAVEMENT MARKERS

Prefabricated markings may be substituted for reflectorized pavement markings.

EDGE & LANE LINES FOR DIVIDED HIGHWAY



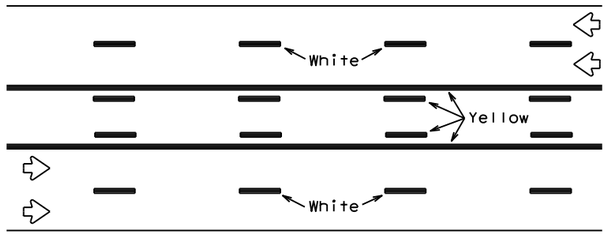
REFLECTORIZED PAVEMENT MARKINGS



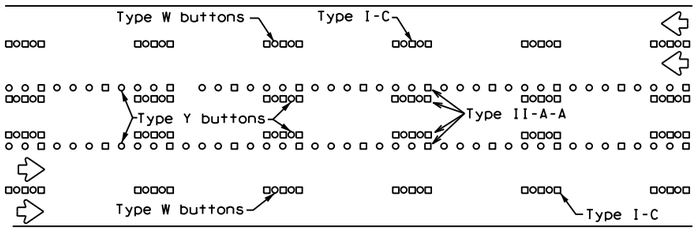
RAISED PAVEMENT MARKERS

Prefabricated markings may be substituted for reflectorized pavement markings.

LANE & CENTER LINES FOR MULTILANE UNDIVIDED HIGHWAYS



REFLECTORIZED PAVEMENT MARKINGS



RAISED PAVEMENT MARKERS

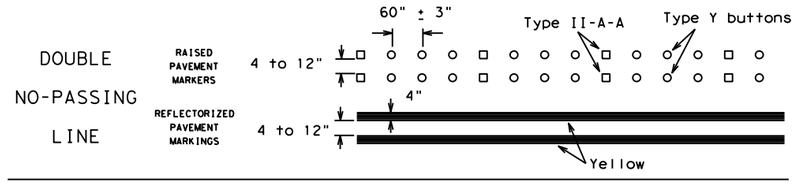
Prefabricated markings may be substituted for reflectorized pavement markings.

TWO-WAY LEFT TURN LANE

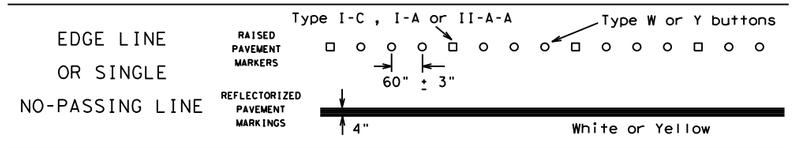
STANDARD WORK ZONE PAVEMENT MARKINGS DETAILS

SOLID LINES

DOUBLE NO-PASSING LINE

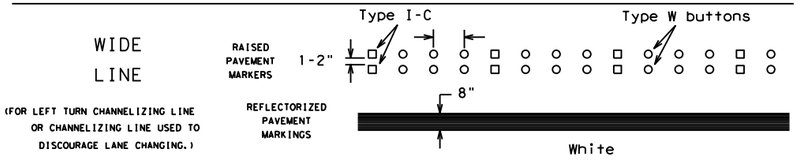


EDGE LINE OR SINGLE NO-PASSING LINE



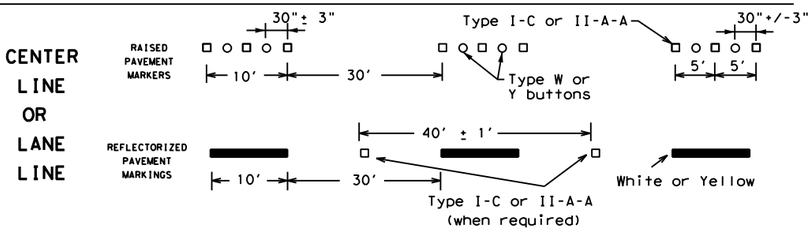
WIDE LINE

(FOR LEFT TURN CHANNELIZING LINE OR CHANNELIZING LINE USED TO DISCOURAGE LANE CHANGING.)

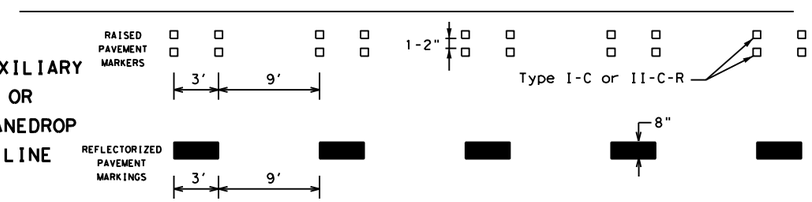


BROKEN LINES

CENTER LINE OR LANE LINE

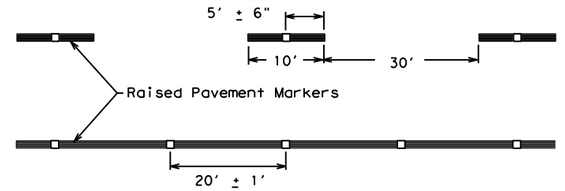


AUXILIARY OR LANEDROP LINE



REMOVABLE MARKINGS WITH RAISED PAVEMENT MARKERS

If raised pavement markers are used to supplement REMOVABLE markings, the markers shall be applied to the top of the tape at the approximate mid length of tape used for broken lines or at 20 foot spacing for solid lines. This allows an easier removal of raised pavement markers and tape.



Centerline only - not to be used on edge lines

Raised pavement markers used as standard pavement markings shall be from the approved products list and meet the requirements of Item 672 "RAISED PAVEMENT MARKERS."

Texas Department of Transportation

Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION PAVEMENT MARKING PATTERNS

BC(12)-21

FILE: bc-21.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
© TxDOT February 1998	CONT	SECT	JOB	HIGHWAY
REVISIONS 1-97 9-07 5-21 2-98 7-13 11-02 8-14	0905	00	117	VAR
	DIST	COUNTY		SHEET NO.
	LBB	LUBBOCK,ETC.		021

106

DATE: 1/5/2023 1:35:52 PM
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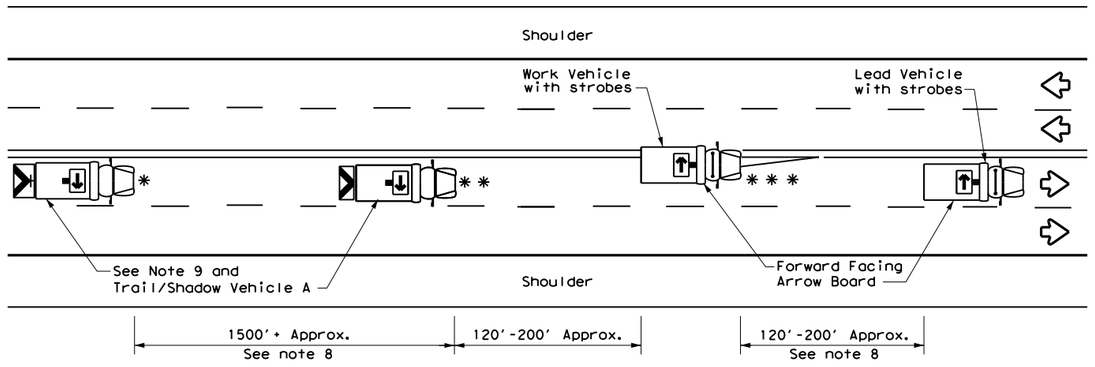
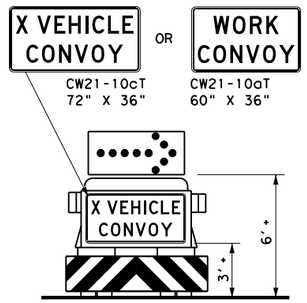


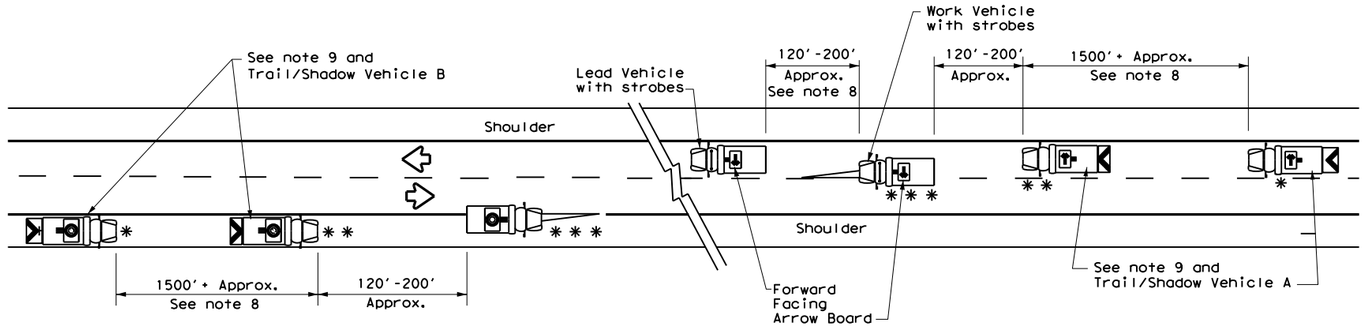
TCP (3-1a)

UNDIVIDED MULTILANE ROADWAY



TRAIL/SHADOW VEHICLE A

with RIGHT Directional display Flashing Arrow Board

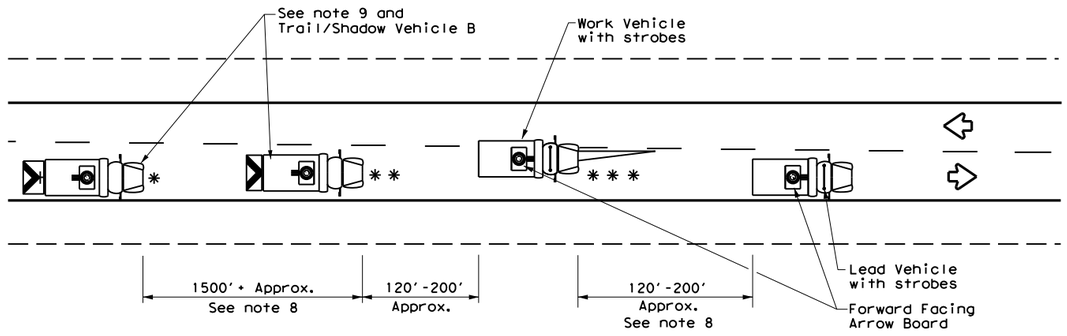


WORK ON SHOULDER

WORK ON TRAVEL LANE

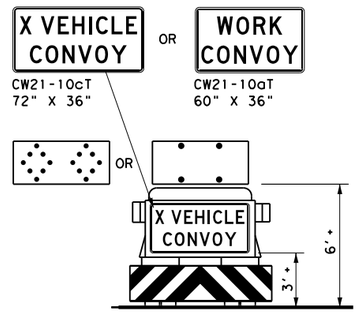
TCP (3-1b)

TWO-WAY ROADWAY WITH PAVED SHOULDERS



TCP (3-1c)

TWO-WAY ROADWAY WITHOUT PAVED SHOULDERS



TRAIL/SHADOW VEHICLE B

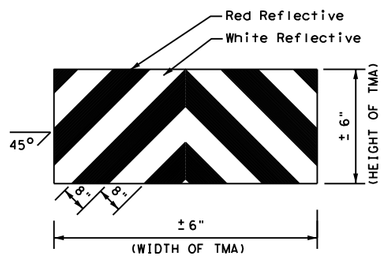
with Flashing Arrow Board in CAUTION display

LEGEND			
*	Trail Vehicle	ARROW BOARD DISPLAY	
**	Shadow Vehicle		
***	Work Vehicle		RIGHT Directional
	Heavy Work Vehicle		LEFT Directional
	Truck Mounted Attenuator (TMA)		Double Arrow
	Traffic Flow		CAUTION (Alternating Diamond or 4 Corner Flash)

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
✓				

GENERAL NOTES

1. TRAIL, SHADOW, and LEAD vehicles shall be equipped with arrow boards as illustrated. When a LEAD vehicle is not used the WORK vehicle must be equipped with an arrow board. The Engineer will determine if the LEAD VEHICLE and/or TRAIL VEHICLE are required based on prevailing roadway conditions, traffic volume, and sight distance restrictions.
2. The use of amber high intensity rotating, flashing, oscillating, or strobe lights on vehicles are required. Blue high intensity rotating, flashing, oscillating or strobe lights when mounted on the driver's side of the vehicle may be operated simultaneously with the amber beacons or strobe lights.
3. The use of truck mounted attenuators (TMA) on the SHADOW VEHICLE and TRAIL VEHICLE are required.
4. Reflective sheeting on the rear of the TMA shall meet or exceed the reflectivity and color requirements of DEPARTMENTAL MATERIAL SPECIFICATION DMS 8300, Type A.
5. Flashing arrow boards shall be Type B or Type C as per the Barricade and Construction (BC) standards. The board shall be controlled from inside the vehicle.
6. Each vehicle shall have two-way radio communication capability.
7. When work convoys must change lanes, the TRAIL VEHICLE should change lanes first to shadow the other convoy vehicles.
8. Vehicle spacing between the TRAIL VEHICLE and the SHADOW VEHICLE will vary depending on sight distance restrictions. Motorists approaching the work convoy should be able to see the TRAIL VEHICLE in time to slow down and/or change lanes as they approach the TRAIL VEHICLE. Vehicle spacing between the WORK VEHICLE and SHADOW VEHICLE and vehicle spacing between WORK VEHICLE and LEAD VEHICLE may vary according to terrain, work activity and other factors.
9. "X VEHICLE CONVOY" (CW21-10cT) or "WORK CONVOY" (CW21-10aT) signs shall be used on TRAIL VEHICLES and SHADOW VEHICLES as shown. As an option 48" X 48" diamond shaped "WORK CONVOY"(CW21-10T) or "X VEHICLE CONVOY" (CW21-10bT) signs may be used where adequate mounting space exists. When used, the X VEHICLE CONVOY sign shall have the number of the convoy vehicles displayed on the sign in the number designation "X" location. The "X VEHICLE CONVOY" sign shall not be used on the SHADOW VEHICLE if a TRAIL VEHICLE is used.
10. On two-lane two-way roadways, the work and protection vehicles should pull over periodically to allow motor vehicle traffic to pass. If motorists are not allowed to pass the work convoy, a "DO NOT PASS" (R4-1) sign should be placed on the back of the rearmost protection vehicle.



STRIPING FOR TMA

Texas Department of Transportation

Traffic Operations Division Standard

TRAFFIC CONTROL PLAN MOBILE OPERATIONS UNDIVIDED HIGHWAYS

TCP(3-1)-13

FILE: tcp3-1.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
© TxDOT December 1985	CONT	SECT	JOB	HIGHWAY
REVISIONS 2-94 4-98 8-95 7-13 1-97	0905	00	117	VAR
	DIST	COUNTY		SHEET NO.
	LBB	LUBBOCK, ETC.		022

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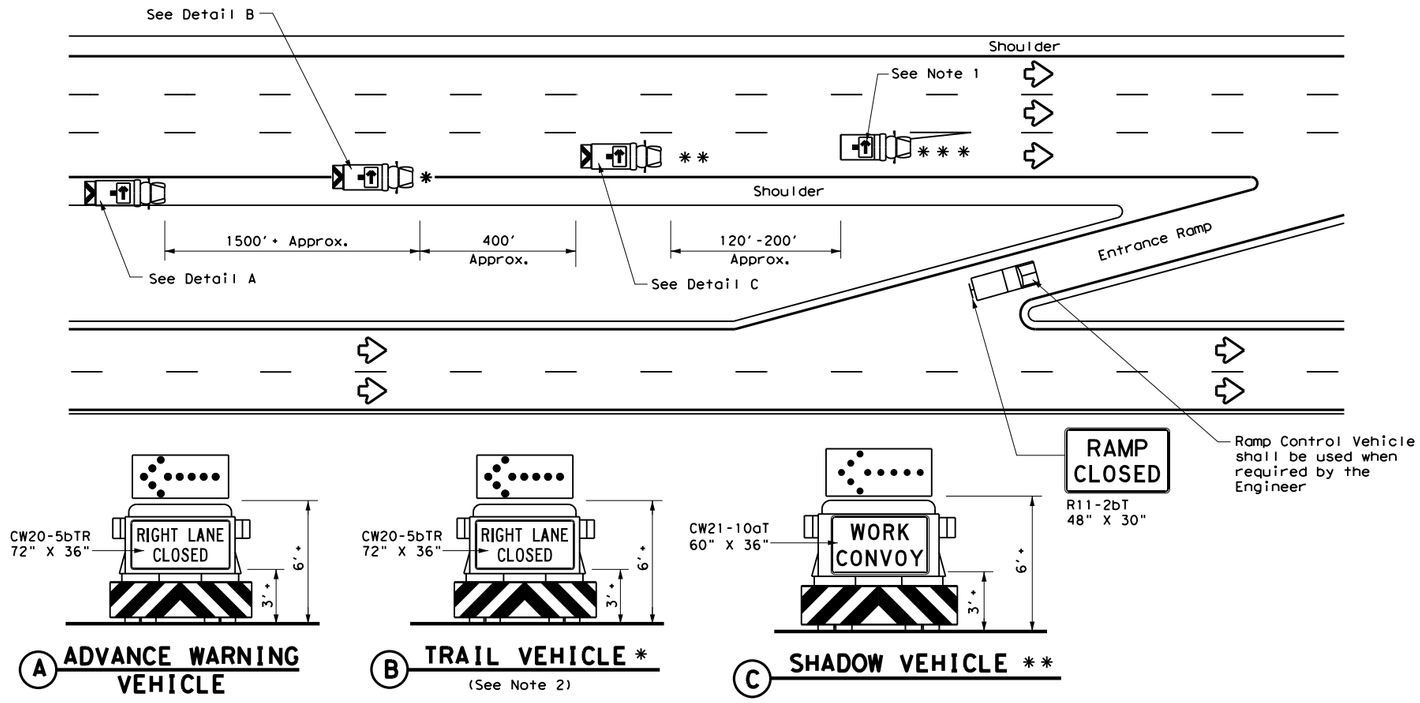
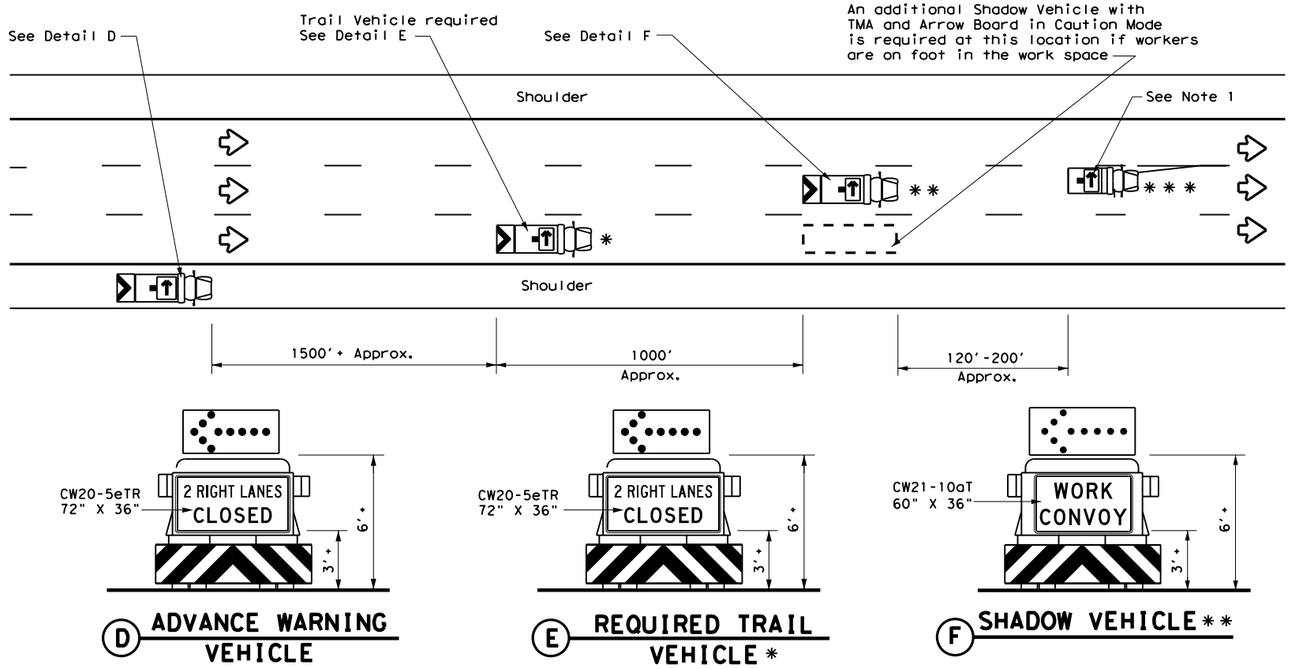


RIGHT LANE CLOSURE ON DIVIDED HIGHWAY - TCP(3-2a)



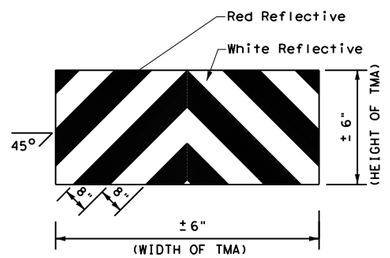
INTERIOR LANE CLOSURE ON MULTI-LANE DIVIDED HIGHWAY - TCP(3-2b)

LEGEND			
*	Trail Vehicle	ARROW BOARD DISPLAY	
**	Shadow Vehicle		
***	Work Vehicle		RIGHT Directional
	Heavy Work Vehicle		LEFT Directional
	Truck Mounted Attenuator (TMA)		Double Arrow
	Traffic Flow		CAUTION (Alternating Diamond or 4 Corner Flash)

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
✓				

GENERAL NOTES

1. ADVANCE WARNING, TRAIL and SHADOW vehicles shall be equipped with Type B or Type C flashing arrow boards as per the Barricade and Construction (BC) standards. Arrow boards on WORK vehicles will be optional based on the type of work being performed. The arrow boards shall be operated from inside the vehicle.
2. For TCP(3-2a) the Engineer will determine if the TRAIL VEHICLE is required based on prevailing roadway conditions, traffic volume, and sight distance restrictions. All other vehicles shown for both TCP(3-2a) and TCP(3-2b) are required.
3. The use of amber high intensity rotating, flashing, oscillating, or strobe lights on vehicles are required. Blue high intensity rotating, flashing, oscillating or strobe lights when mounted on the driver's side of the vehicle may be operated simultaneously with the amber beacons or strobe lights.
4. The use of truck mounted attenuators (TMA) on the ADVANCE WARNING, SHADOW, and TRAIL vehicles are required.
5. Reflective sheeting on the rear of the TMA shall meet or exceed the reflectivity and color requirements of DMS 8300, Type A.
6. Each vehicle shall have two-way radio communication capability.
7. When work convoys must change lanes, the TRAIL VEHICLE should change lanes first to shadow the other convoy vehicles.
8. Vehicle spacing between the TRAIL VEHICLE and the SHADOW VEHICLE will vary depending on sight distance restrictions. Motorists approaching the work convoy should be able to see the TRAIL VEHICLE in time to slow down and/or change lanes as they approach the TRAIL VEHICLE. Vehicle spacing between the WORK VEHICLE and SHADOW VEHICLE may vary according to terrain, work activity and other factors.
9. Standard 48" X 48" diamond shaped warning signs with the same message as those shown may be used where adequate mounting space exists.
10. The signs shown should be used on the Advance Warning Vehicle. As an option, a portable changeable message sign (PCMS) or a truck mounted changeable message sign (TMCMS) with a minimum character height of 12", and displaying the same legend may be substituted for these signs. An appropriate directional arrow display, simulating the size and legibility of the flashing arrow board, must be used in the second phase of the PCMS/TMCMS message. When this is done, the arrow board will not be required on the Advance Warning Vehicle.
11. Standard diamond shape versions of the CW20-5 series signs may be used as an option if the rectangular signs shown are not available.
12. The principles on this sheet may be used to close lanes from the left side of the roadway considering the number of lanes, shoulder width, sight distance, and ramp frequency.
13. Signs and flashing arrow board modes shall be appropriately altered when implementing left lane closures or interior closures which close the left lanes.
14. The Advance Warning Vehicle may straddle the edgeline when shoulder width makes it necessary.



STRIPING FOR TMA

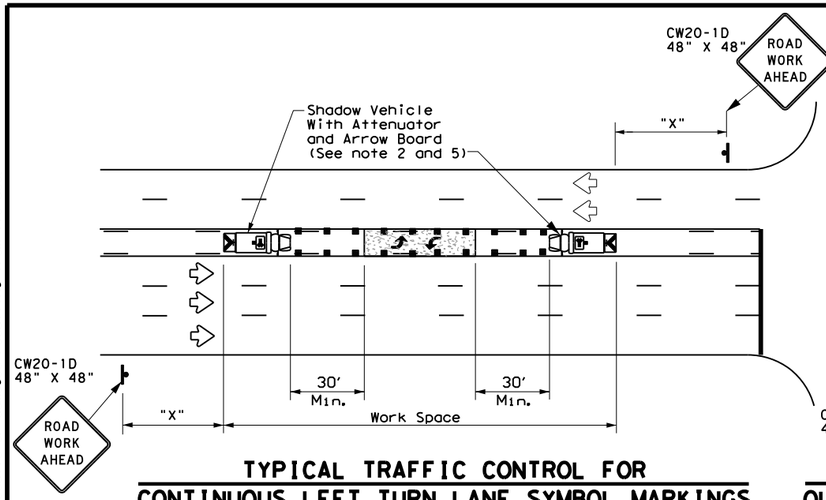
Texas Department of Transportation

Traffic Operations Division Standard

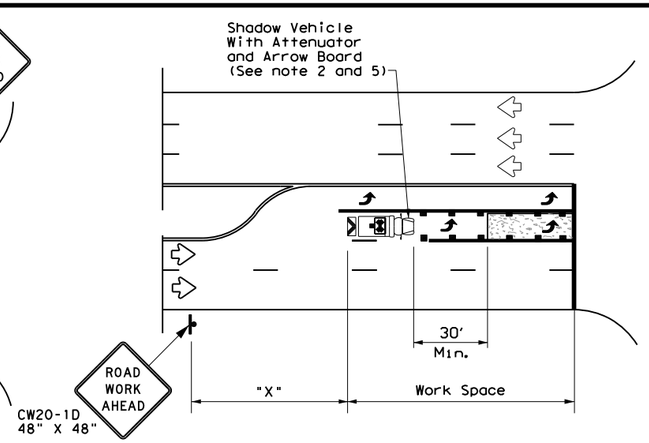
TRAFFIC CONTROL PLAN MOBILE OPERATIONS DIVIDED HIGHWAYS

TCP(3-2)-13

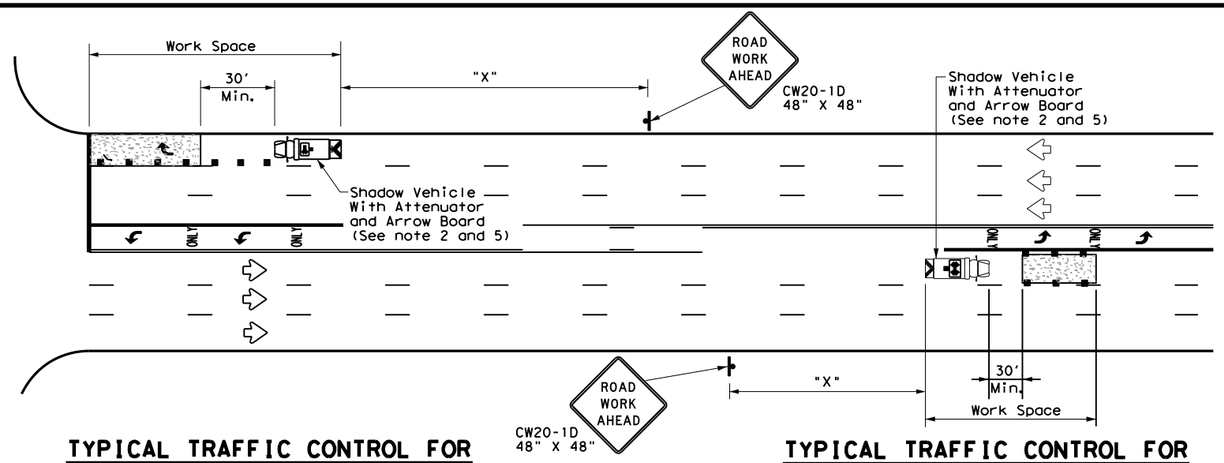
FILE: tcp3-2.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
© TxDOT December 1985	CONT	SECT	JOB	HIGHWAY
REVISIONS	0905	00	117	VAR
2-94 4-98	DIST	COUNTY		SHEET NO.
8-95 7-13	LBB	LUBBOCK, ETC.		023
1-97				



TYPICAL TRAFFIC CONTROL FOR CONTINUOUS LEFT TURN LANE SYMBOL MARKINGS

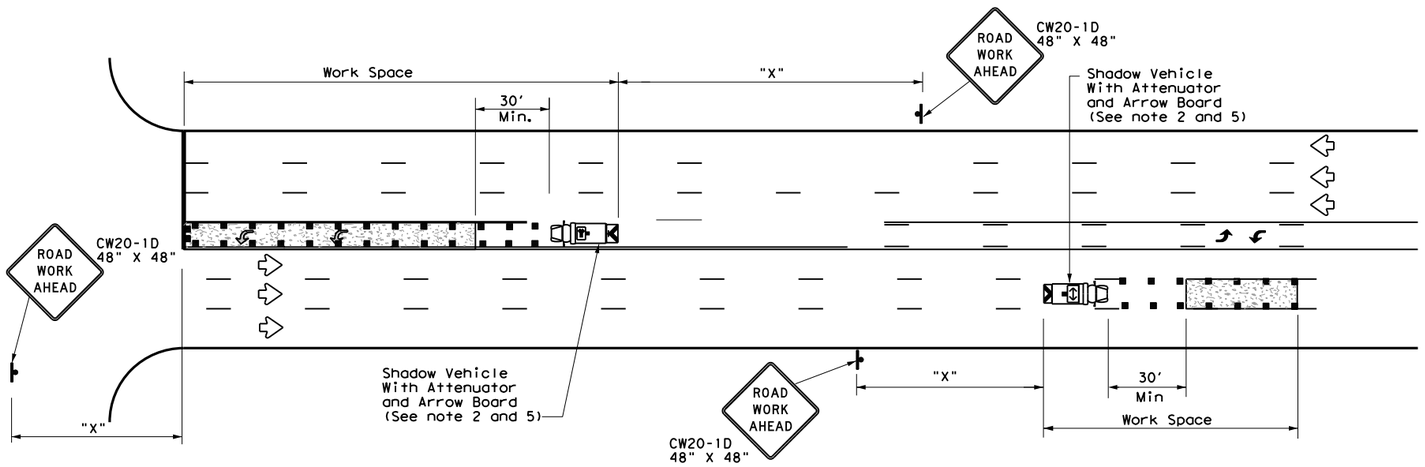


TYPICAL TRAFFIC CONTROL FOR OUTSIDE DUAL LEFT TURN LANE SYMBOL MARKINGS



TYPICAL TRAFFIC CONTROL FOR OUTSIDE LANE MARKINGS

TYPICAL TRAFFIC CONTROL FOR INSIDE LANE MARKINGS



TYPICAL TRAFFIC CONTROL FOR LEFT TURN LANE MARKINGS

TYPICAL TRAFFIC CONTROL FOR CENTER LANE MARKINGS

DATE:
FILE:

LEGEND

*	Trail Vehicle	ARROW BOARD DISPLAY	
**	Shadow Vehicle		
***	Work Vehicle		RIGHT Directional
	Heavy Work Vehicle		LEFT Directional
	Truck Mounted Attenuator (TMA)		Double Arrow
	Traffic Flow	■ ■ ■	Channelizing Devices

Posted Speed *	Formula	Minimum Desirable Taper Lengths ** 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Channelizing Devices: On a Taper	On a Tangent	Minimum Sign Spacing "X" Distance	Suggested Longitudinal Buffer Space "B"
30	$L=\frac{WS^2}{60}$	150'	165'	180'	30'	60'	120'	90'
35		205'	225'	245'	35'	70'	160'	120'
40		265'	295'	320'	40'	80'	240'	155'
45	L=WS	450'	495'	540'	45'	90'	320'	195'
50		500'	550'	600'	50'	100'	400'	240'
55		550'	605'	660'	55'	110'	500'	295'
60		600'	660'	720'	60'	120'	600'	350'
65		650'	715'	780'	65'	130'	700'	410'
70		700'	770'	840'	70'	140'	800'	475'
75		750'	825'	900'	75'	150'	900'	540'

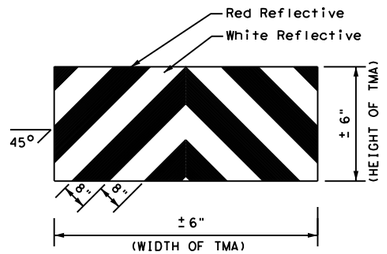
* Conventional Roads Only

** Taper lengths have been rounded off.
L=Length of Taper(FT) W=Width of Offset(FT) S=Posted Speed(MPH)

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
✓				

GENERAL NOTES

1. This traffic control plan is for use on conventional roads posted at 45 mph or less and is intended for mobile operations that move continuously or intermittently (stopping up to approximately 15 minutes) such as short-line striping and in-lane rumble strips. When activities are anticipated to take longer amounts of time or traffic conditions warrant, a short duration or short-term stationary traffic control plan should be used.
2. A Truck Mounted Attenuator shall be used on Shadow Vehicle. Striping on the back panel of all truck mounted attenuators shall be 8" red and white reflective sheeting placed in an inverted "V" design. Reflective sheeting shall meet or exceed the reflectivity and color requirements of departmental material specification DMS-8300, Type A.
3. All traffic control devices shall be in accordance with the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD), latest edition.
4. The use of yellow rotating beacons or strobe lights on vehicles are required. Blue high intensity rotating, flashing, oscillating or strobe lights when mounted on the drivers side of the vehicle may be operated simultaneously with the amber beacons or strobe lights.
5. Flashing arrow board shall be used on Shadow Vehicle. Flashing arrow board shall be Type B or Type C as per BC Standards. The arrow board operation shall be controlled from inside the truck.



STRIPING FOR TMA

Texas Department of Transportation

Traffic Operations Division Standard

TRAFFIC CONTROL PLAN MOBILE OPERATIONS FOR ISOLATED WORK AREAS UNDIVIDED HIGHWAYS

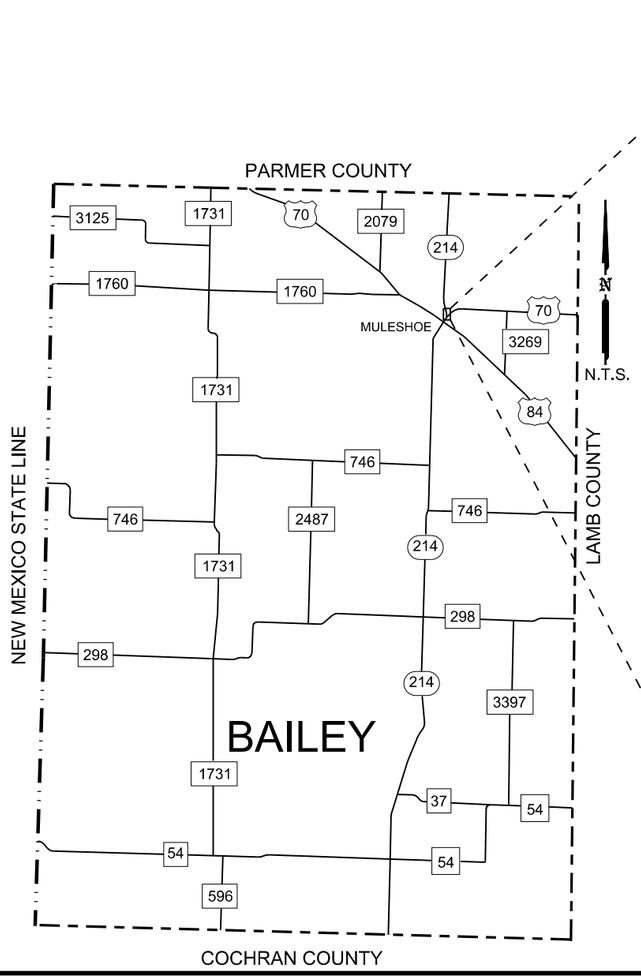
TCP(3-4)-13

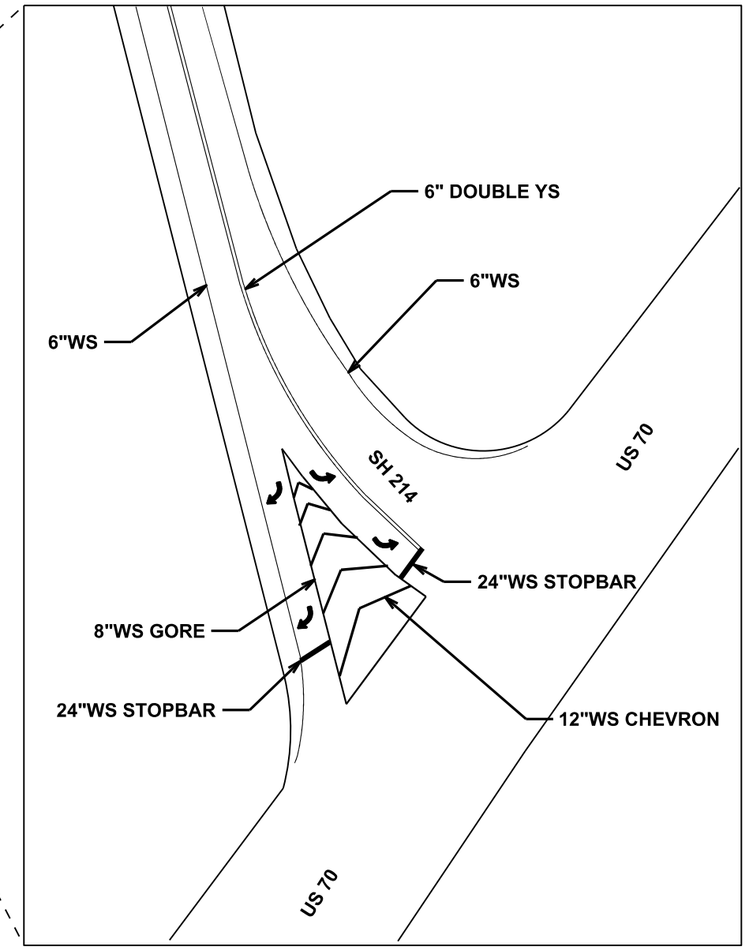
FILE: tcp3-4.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
© TxDOT July, 2013	CONT	SECT	JOB	HIGHWAY
REVISIONS	0905	00	117	VAR
	DIST	COUNTY		SHEET NO.
	LBB	LUBBOCK, ETC.		024

County 1: Bailey	Hwy	Rdwy	Description	Cont	Sect	Begin TRM (MI)	End TRM (MI)	6"WS	6"WB	8"WS	12"WS	24"WS	6"YS	NOTES
1-1B	US	70	AT SH 214	145	01	250-0.076	250-0.076	360	70	160	120	30	580	CONCRETE SECTION ON SH 214 THAT INTERSECTS WITH US 70 (2 STOPBARS, 2 LEFT ARROWS, 2 RIGHT ARROWS, CHEVRON MARKINGS)
						TOTAL		**360**	**70**	**160**	**120**	**30**	**580**	

County 1: Bailey	Hwy	Rdwy	Description	Cont	Sect	Begin TRM (MI)	End TRM (MI)	Arrow (Left)	Arrow (Right)	NOTES
1-1B	US	70	AT SH 214	145	01	250-0.076	250-0.076	2	2	CONCRETE SECTION ON SH 214 THAT INTERSECTS WITH US 70 (2 STOPBARS, 2 LEFT ARROWS, 2 RIGHT ARROWS, CHEVRON MARKINGS)
						TOTAL		**2**	**2**	

County 1: Bailey	Hwy	Rdwy	Description	Cont	Sect	Begin TRM (MI)	End TRM (MI)	4" ELIM	8" ELIM	24" ELIM	NOTES
1-1B	US	70	AT SH 214	145	01	250-0.076	250-0.076	1,010	160	30	CONCRETE SECTION ON SH 214 THAT INTERSECTS WITH US 70 (2 STOPBARS, 2 LEFT ARROWS, 2 RIGHT ARROWS, CHEVRON MARKINGS)
						TOTAL		**1,010**	**160**	**30**	





STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED PROFESSIONAL ENGINEER

Jeremy T. Dearing, P.E.

01/05/2023

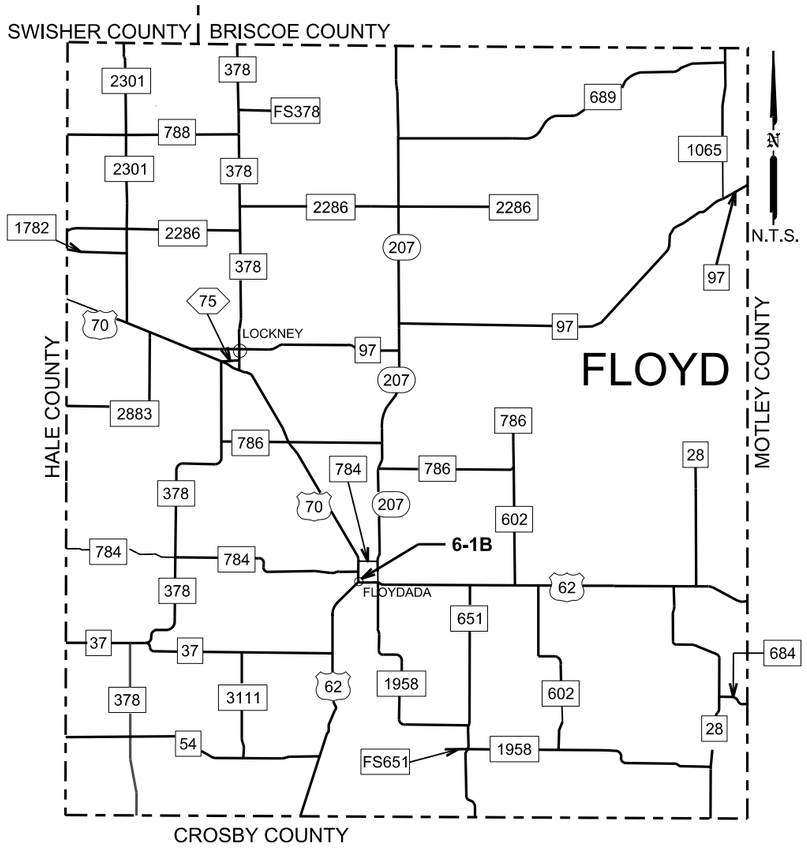
BAILEY COUNTY PREFAB TY B

FED.RD. DIV.NO.			SHEET NO.
6			025
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023

County 6: Floyd	Hwy	Rdwy	Description	Cont	Sect	Begin TRM (MI)	End TRM (MI)	6"WS	6" WB CNTST	8"W(LNDP)	8"WS	12"WS	24"WS	36" W(YLD TRI)	6"YB	6"YS	12"YS	NOTES
6-1B	US	62	AT US 70 INTERSECTION IN FLOYDADA	453	01	382+0.259	382+0.259	990	350	57	810	220	72	14	80	2,060	240	SEE LAYOUT SHEET 027, 4- SHIELDS (US 70), 4 WORDS (2-WEST, 2-EAST)
						TOTAL		**990**	**350**	**57**	**810**	**220**	**72**	**14**	**80**	**2,060**	**240**	

County 6: Floyd	Hwy	Rdwy	Description	Cont	Sect	Begin TRM (MI)	End TRM (MI)	Multishield (US)	Word	NOTES
6-1B	US	62	AT US 70 INTERSECTION IN FLOYDADA	453	01	382+0.259	382+0.259	4	4	SEE SHEET 027, 4- SHIELDS (US 70), 4 WORDS (2-WEST, 2-EAST)
						TOTAL		**4**	**4**	

County 6: Floyd	Hwy	Rdwy	Description	Cont	Sect	Begin TRM (MI)	End TRM (MI)	4" ELIM	8" ELIM	12" ELIM	24" ELIM	NOTES
6-1B	US	62	AT US 70 INTERSECTION IN FLOYDADA	453	01	382+0.259	382+0.259	3,670	810	860	72	SEE SHEET 027, 4- SHIELDS (US 70), 4 WORDS (2-WEST, 2-EAST)
						TOTAL		**3,670**	**810**	**860**	**72**	



STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED
PROFESSIONAL ENGINEER

Jeremy T. Dearing, P.E.

01/05/2023

FLOYD COUNTY
PREFAB TY B

FED.RD. DIV.NO.			SHEET NO.
6			026
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023

SHEET TOTALS

INSTALL TY B:

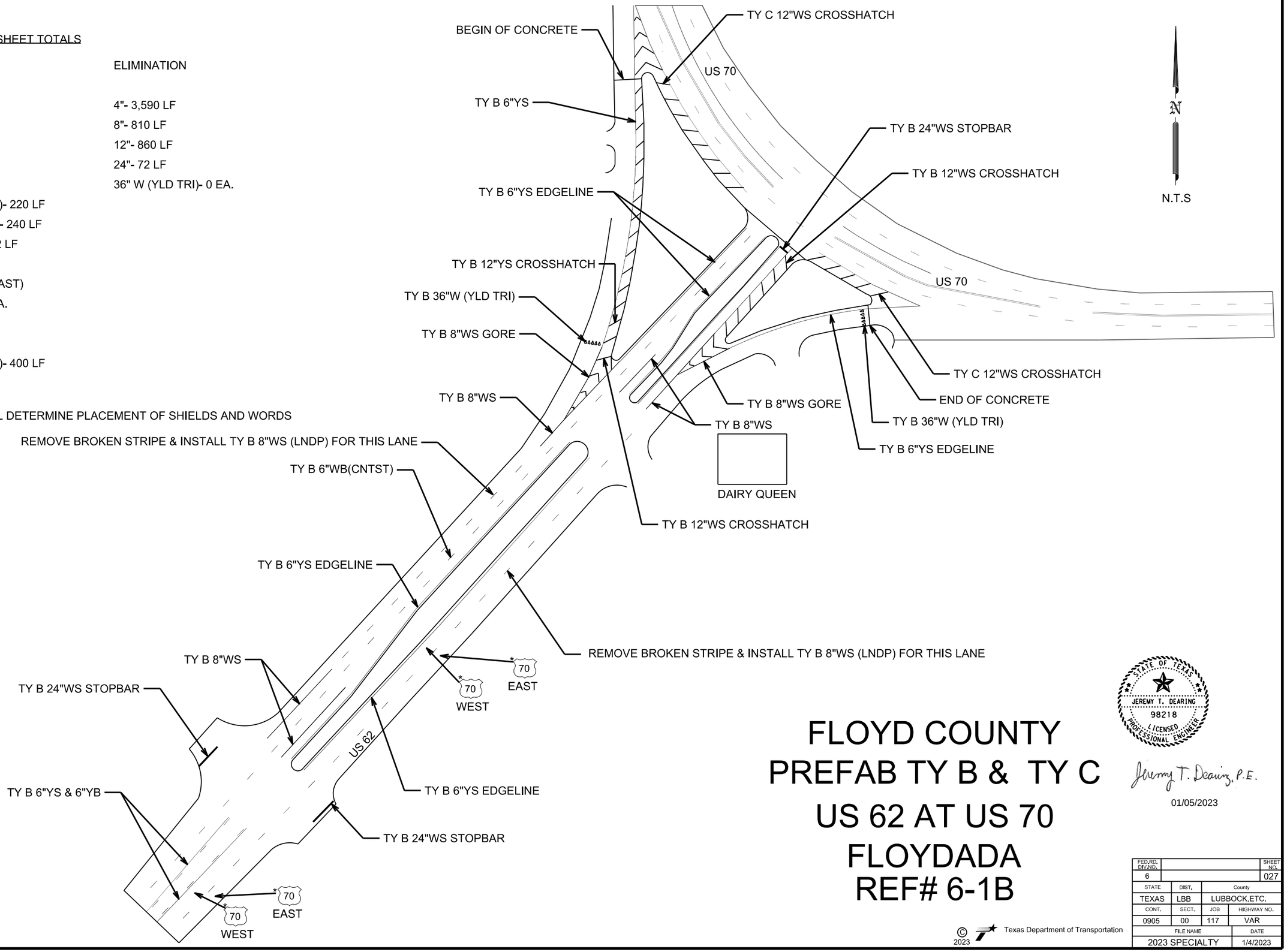
6"WB (CNTST)- 350 LF
6"WS- 990 LF
6"YS- 2,060 LF
8"WS- 810 LF
8"W(LNDP)- 57 LF
12"WS (CROSS HATCH)- 220 LF
12"YS (CROSS HATCH)- 240 LF
24"WS (STOPBARS)- 72 LF
36"W (YLD TRI)- 14 EA.
WORD- 4 (2-WEST, 2-EAST)
US SHIELD- 4- US 70 EA.

INSTALL TY C:
12"WS (CROSS HATCH)- 400 LF

ELIMINATION

4"- 3,590 LF
8"- 810 LF
12"- 860 LF
24"- 72 LF
36" W (YLD TRI)- 0 EA.

*NOTE: ENGINEER WILL DETERMINE PLACEMENT OF SHIELDS AND WORDS



FLOYD COUNTY
PREFAB TY B & TY C
US 62 AT US 70
FLOYDADA
REF# 6-1B

STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED PROFESSIONAL ENGINEER

Jeremy T. Dearing, P.E.

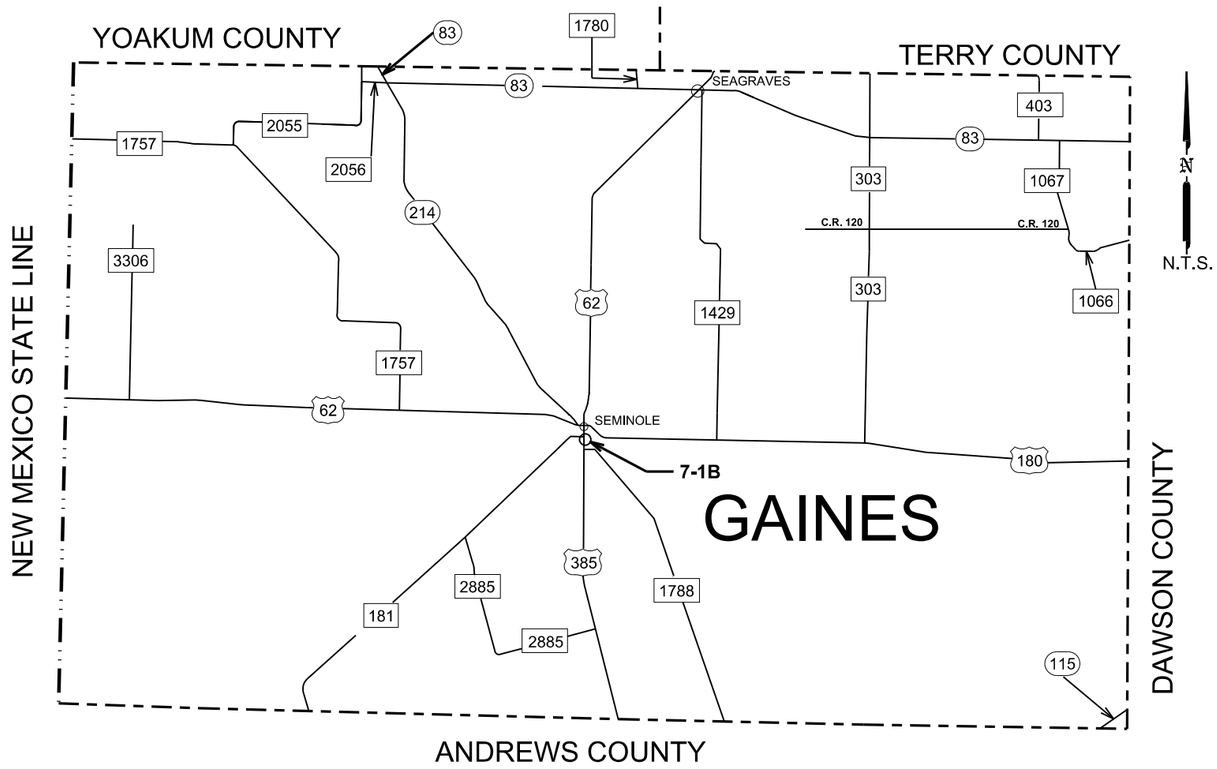
01/05/2023

FED.RD. DIV.NO.			SHEET NO.
6			027
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023

County 7: Gaines	Hwy	Rdwy	Description	Cont	Sect	Begin TRM (MI)	End TRM (MI)	6"WB	8"WS	24"WS	6"YS	NOTES
7-1B	US	385	AT FM 181	228	03	292-0.28	292-0.28	100	200	300	400	IN SEMINOLE (SEE SHEET 029)
						TOTAL		**100**	**200**	**300**	**400**	

County 7: Gaines	Hwy	Rdwy	Description	Cont	Sect	Begin TRM (MI)	End TRM (MI)	Arrow (Left)	NOTES
7-1B	US	385	AT FM 181	228	03	292-0.28	292-0.28	4	IN SEMINOLE (SEE SHEET 029)
						TOTAL		**4**	

County 7: Gaines	Hwy	Rdwy	Description	Cont	Sect	Begin TRM (MI)	End TRM (MI)	4" ELIM	8" ELIM	12" ELIM	24" ELIM	Arrow (L) ELIM	NOTES
7-1B	US	385	AT FM 181	228	03	292-0.28	292-0.28	500	200	256	144	4	IN SEMINOLE (SEE SHEET 029)
						TOTAL		**500**	**200**	**256**	**144**	**4**	



STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED
PROFESSIONAL ENGINEER

Jeremy T. Dearing, P.E.

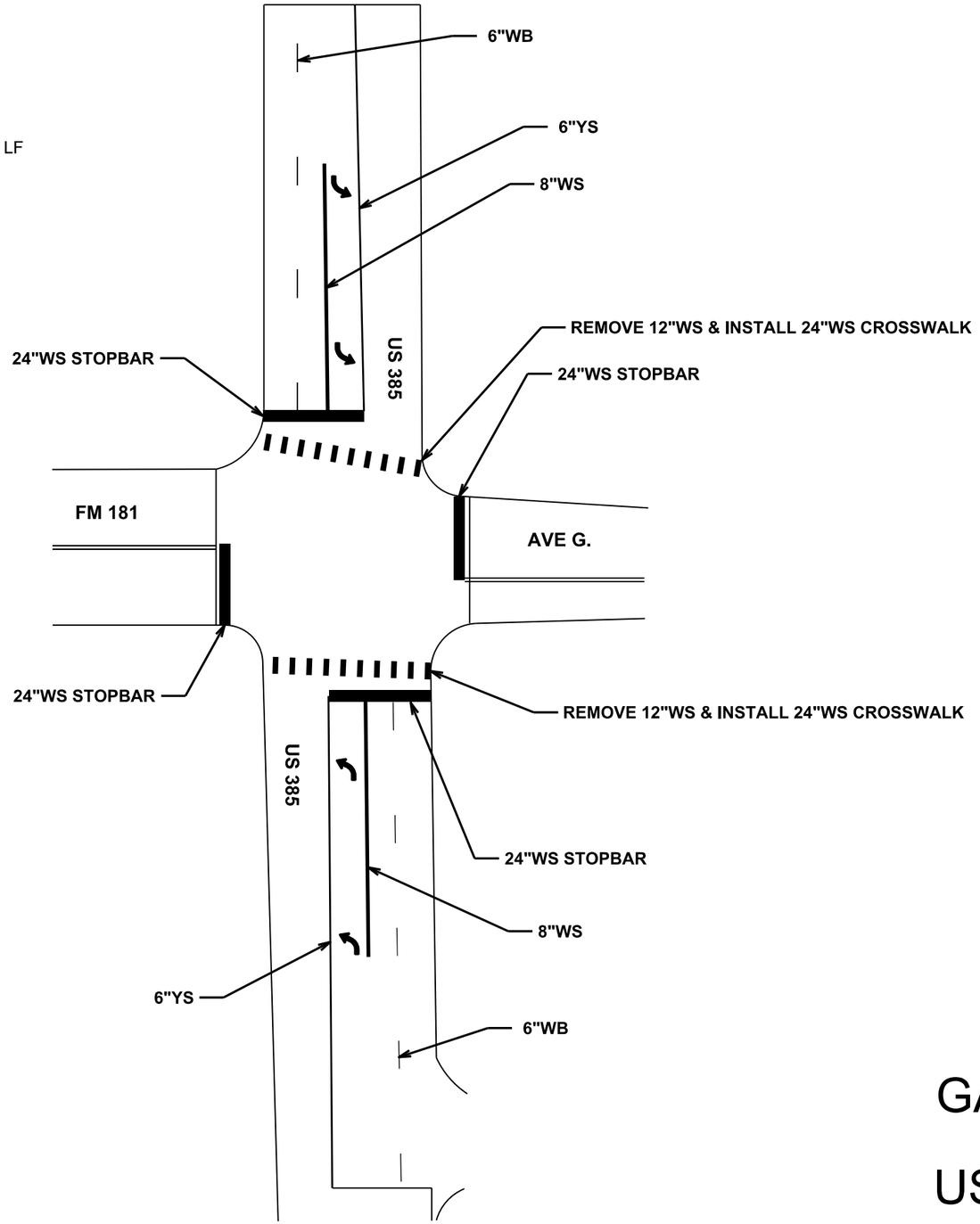
01/05/2023

GAINES COUNTY
PREFAB TY B

FED.RD. DIV.NO.			SHEET NO.
6			028
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023

SHEET TOTALS

INSTALL:	ELIMINATION:
6"YS - 400 LF	4"- 500 LF
6"WB- 100 LF	8"- 200 LF
8"WS- 200 LF	12" CROSSWALKS - 256 LF
24"WS STOPBAR- 144 LF	24" STOPBARS- 144 LF
24"WS CROSSWALKS- 156 LF	LEFT ARROWS- 4 EA
LEFT ARROWS- 4 EA	



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STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED
PROFESSIONAL ENGINEER

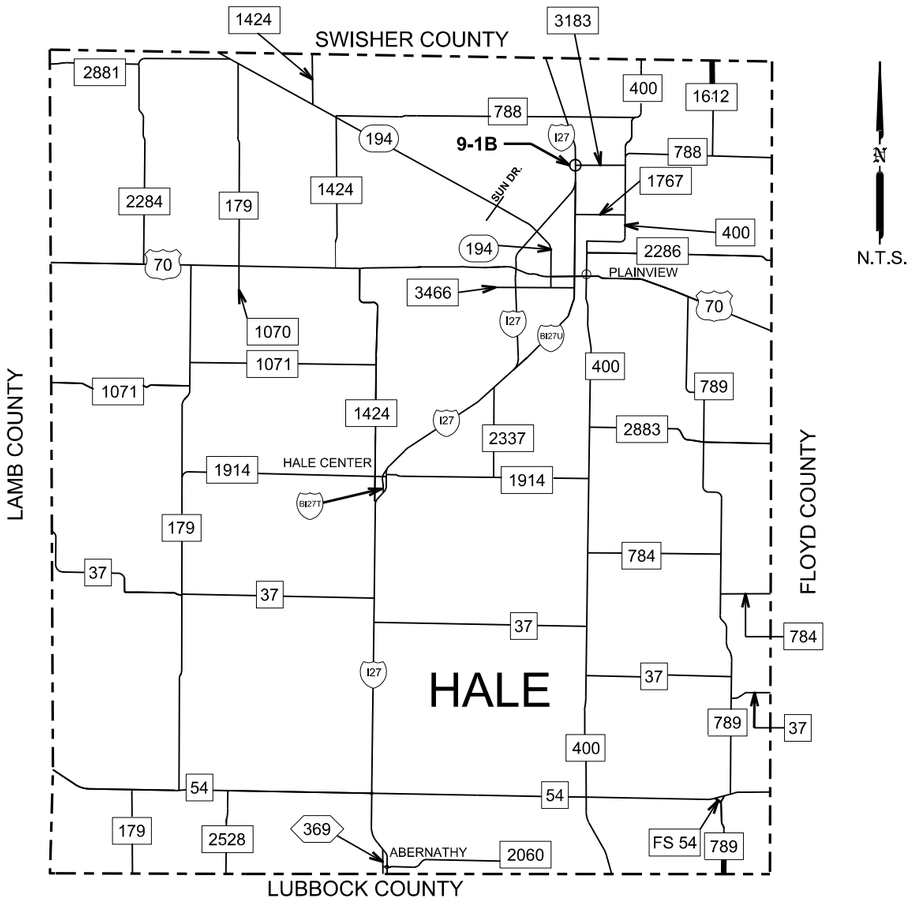
Jeremy T. Dearing, P.E.

01/05/2023

GAINES COUNTY
PREFAB TY B
US 385 AT FM 181
SEMINOLE

FED.RD. DIV.NO.			SHEET NO.
6			029
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023

County 9: Hale	Hwy	Rdwy	Description	Cont	Sect	Begin TRM (MI)	End TRM (MI)	6"WS	24"WS	6"YS	NOTES
9-1B	IH	27	AT FM 3183	67	04	54+0.16	54+0.16	820	60	840	SEE SHEET 062 (NO EXISTING MARKINGS)
						TOTAL		**820**	**60**	**840**	

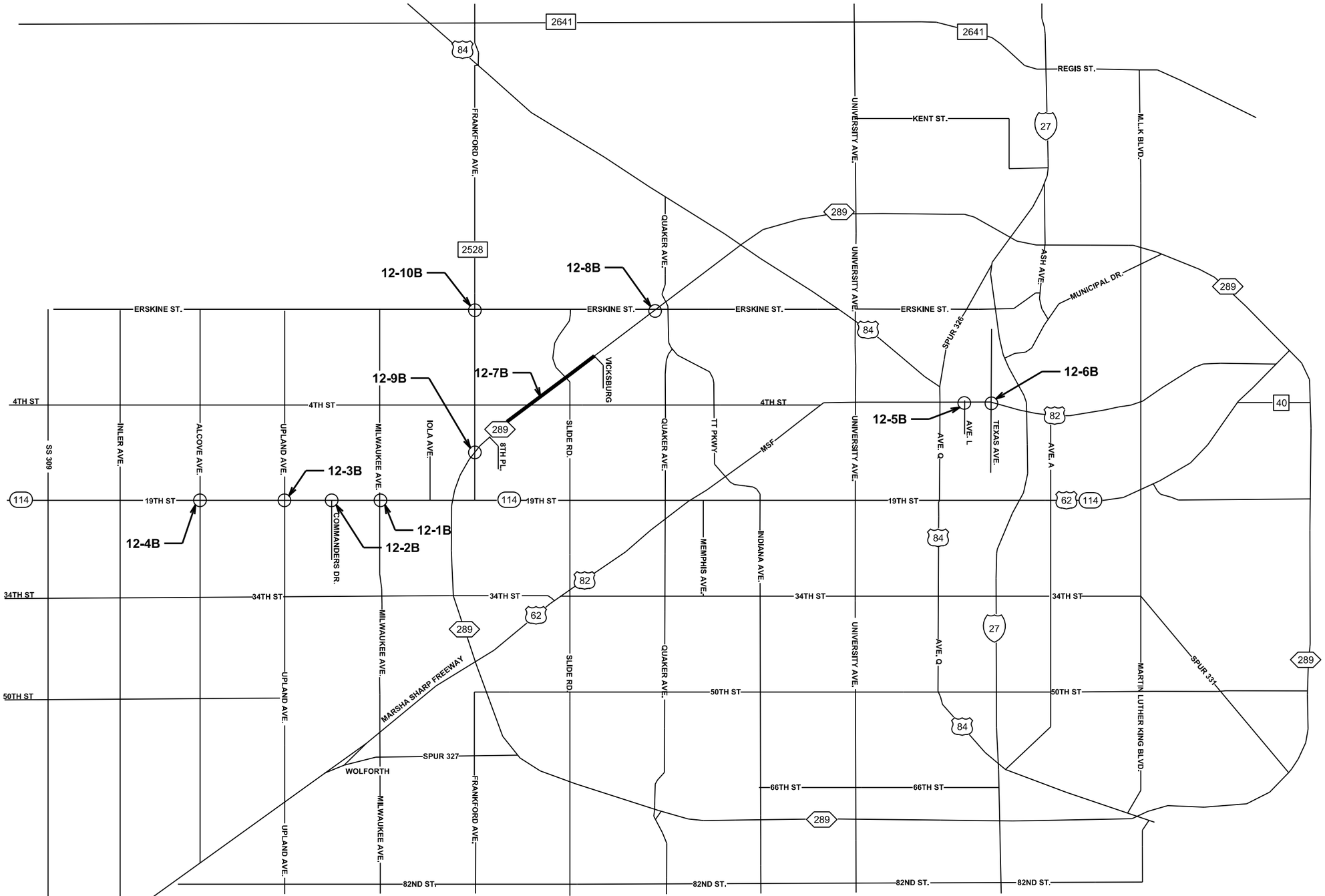


Jeremy T. Dearing, P.E.

01/05/2023

HALE COUNTY PREFAB TY B

FED.RD. DIV.NO.			SHEET NO.
6			030
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023



LUBBOCK COUNTY PREFAB TY B MAP

Jeremy T. Dearing, P.E.

01/05/2023

FED.RD. DIV.NO.			SHEET NO.
6			031
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023

County 12: Lubbock	Hwy	Rdwy	Description	Cont	Sect	Begin TRM (MI)	End TRM (MI)	6"WS	6" WB CNTST	8" W(DOT)	8"W(LNDP)	8"WS	12"WS	24"WS	36" W(YLD TRI)	6"YB	6"YS	12"YS	NOTES
12-1B	SH	114	19TH ST AT MILWAUKEE AVE.	130	05	294-0.829	294-0.829	0	550	0	0	1,615	0	786	0	0	1,520	0	SEE SHEET 033
12-2B	SH	114	19TH ST AT COMMANDERS PALACE	130	05	292+0.776	292+0.776	0	150	0	0	555	0	180	0	0	500	0	SEE SHEET 034
12-3B	SH	114	19TH ST AT UPLAND AVE.	130	05	292+0.188	292+0.188	0	120	0	0	720	0	282	0	0	760	0	SEE SHEET 035
12-4B	SH	114	19TH ST AT ALCOVE AVE.	130	05	292-0.81	292-0.81	0	130	0	0	800	0	0	0	0	710	0	SEE SHEET 036
12-5B	US	82	MSF AT AVE L	53	01	310+0.266	310+0.266	0	330	30	0	255	56	304	0	0	0	0	SEE SHEET 037
12-6B	US	82	MSF AT TEXAS AVE.	53	01	310+0.529	310+0.529	0	500	112	30	815	0	368	0	0	740	0	SEE SHEET 038
12-7B	WEST SL	289 M.L.	8TH PLACE TO VICKSBURG	783	02	291+0.293	292+0.093	0	0	0	0	0	0	0	0	0	0	0	
12-8B	NORTH SL	289 M.L.	ERSKINE BRIDGE	783	02	293-0.046	293-0.046	0	0	0	0	0	0	0	0	0	0	0	(WORDS & ARROWS) ON EASTBOUND LANE (WORD: "ONLY")
12-9B	WEST SL	289	AT FRANKFORD AVE.	783	02	291-0.144	291-0.144	520	400	50	0	1,482	0	554	20	0	1,200	150	SEE SHEET 039
12-10B	FM	2528	FRANKFORD AVE AT ERSKINE AVE.	2501	01	212+0.124	212+0.124	180	380	0	0	855	146	626	0	150	1,580	0	SEE SHEET 040
						TOTAL		**700**	**2,560**	**192**	**30**	**7,097**	**202**	**3,100**	**20**	**150**	**7,010**	**150**	

County 12: Lubbock	Hwy	Rdwy	Description	Cont	Sect	Begin TRM (MI)	End TRM (MI)	Word	Arrow (Left)	Arrow (Right)	Arrow (Straight)	Arrow (DBL) (Straight-Right)	Arrow (DBL) (Straight-Left)	Arrow (Uturn)	(Y) (MED NOSE)	Arrow (LNDP)	NOTES
12-1B	SH	114	19TH ST AT MILWAUKEE AVE.	130	05	294-0.829	294-0.829	0	8	6	0	1	0	0	0	0	SEE SHEET 033
12-2B	SH	114	19TH ST AT COMMANDERS PALACE	130	05	292+0.776	292+0.776	0	6	3	0	0	0	0	0	0	SEE SHEET 034
12-3B	SH	114	19TH ST AT UPLAND AVE.	130	05	292+0.188	292+0.188	0	6	3	0	0	0	0	0	0	SEE SHEET 035
12-4B	SH	114	19TH ST AT ALCOVE AVE.	130	05	292-0.81	292-0.81	0	6	6	0	0	0	0	0	0	SEE SHEET 036
12-5B	US	82	MSF AT AVE L	53	01	310+0.266	310+0.266	0	2	1	2	2	0	0	3	0	SEE SHEET 037
12-6B	US	82	MSF AT TEXAS AVE.	53	01	310+0.529	310+0.529	0	8	4	2	3	3	0	2	0	SEE SHEET 038
12-7B	WEST SL	289 M.L.	8TH PLACE TO VICSBURGE	783	02	291+0.293	292+0.093	0	0	0	0	0	0	0	0	3	
12-8B	NORTH SL	289 M.L.	ERSKINE BRIDGE	783	02	293-0.046	293-0.046	3	0	0	0	0	0	0	0	3	(WORDS & ARROWS) ON EASTBOUND LANE (WORD: "ONLY")
12-9B	WEST SL	289	AT FRANKFORD AVE.	783	02	291-0.144	291-0.144	0	6	2	2	2	4	4	0	0	SEE SHEET 039
12-10B	FM	2528	FRANKFORD AVE AT ERSKINE AVE.	2501	01	212+0.124	212+0.124	0	6	5	0	0	0	0	0	0	SEE SHEET 040
						TOTAL		**3**	**48**	**30**	**6**	**8**	**7**	**4**	**5**	**6**	

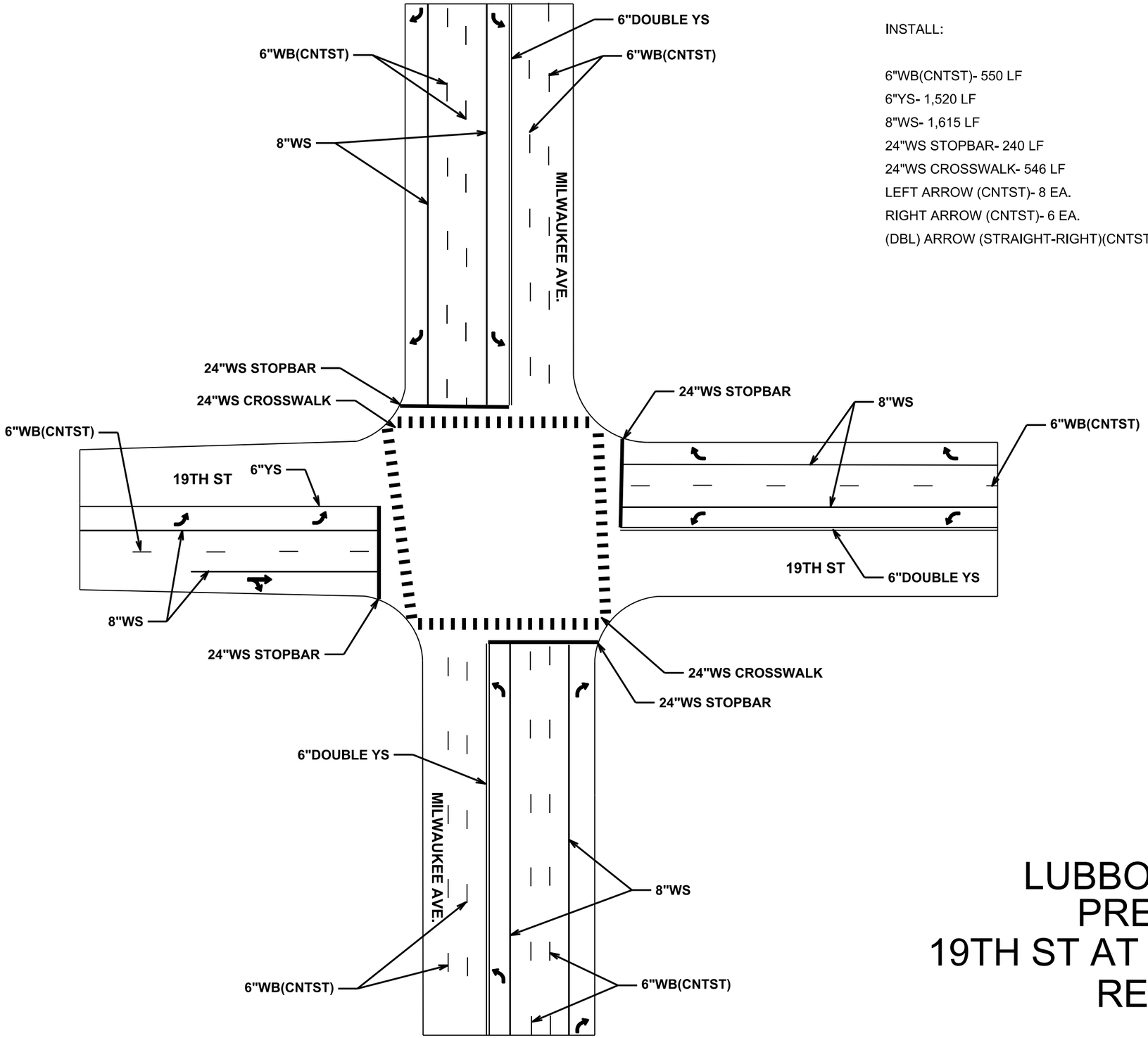
County 12: Lubbock	Hwy	Rdwy	Description	Cont	Sect	Begin TRM (MI)	End TRM (MI)	4" ELIM	8" ELIM	12" ELIM	24" ELIM	Arrow (L) ELIM	Arrow (R) ELIM	Arrow (S) ELIM	Arrow (DBL) (Straight-Right) ELIM	Arrow (DBL) (Straight-Left) ELIM	Word ELIM	(Y) (MED NOSE) ELIM	Arrow (Uturn) ELIM	ARROW(LNDP) ELIM	NOTES
12-1B	SH	114	19TH ST AT MILWAUKEE AVE.	130	05	294-0.829	294-0.829	2,070	1,615	706	0	8	6	0	1	0	0	0	0	0	SEE SHEET 033
12-2B	SH	114	19TH ST AT COMMANDERS PALACE	130	05	292+0.776	292+0.776	650	555	144	90	6	3	0	0	0	0	0	0	0	SEE SHEET 034
12-3B	SH	114	19TH ST AT UPLAND AVE.	130	05	292+0.188	292+0.188	880	720	320	90	6	3	0	0	0	0	0	0	0	SEE SHEET 035
12-4B	SH	114	19TH ST AT ALCOVE AVE.	130	05	292-0.81	292-0.81	840	800	0	0	6	6	0	0	0	0	0	0	0	SEE SHEET 036
12-5B	US	82	MSF AT AVE L	53	01	310+0.266	310+0.266	330	255	366	100	2	1	2	2	0	0	3	0	0	SEE SHEET 037
12-6B	US	82	MSF AT TEXAS AVE.	53	01	310+0.529	310+0.529	1,240	957	1,072	368	8	0	2	3	3	0	2	0	3	SEE SHEET 038
12-7B	WEST SL	289 M.L.	8TH PLACE TO VICSBURGE	783	02	291+0.293	292+0.093	0	0	0	0	0	0	0	0	0	0	0	0	0	
12-8B	NORTH SL	289 M.L.	ERSKINE BRIDGE	783	02	293-0.046	293-0.046	0	0	0	0	0	3	0	0	0	3	0	0	0	(WORDS & ARROWS) ON EASTBOUND LANE (WORD: "ONLY")
12-9B	WEST SL	289	AT FRANKFORD AVE.	783	02	291-0.144	291-0.144	2,120	1,532	440	278	6	2	0	2	4	0	0	4	0	SEE SHEET 039
12-10B	FM	2528	FRANKFORD AVE AT ERSKINE AVE.	2501	01	212+0.124	212+0.124	2,190	1,008	146	626	4	5	2	0	0	0	0	0	0	SEE SHEET 040
						TOTAL		**10,320**	**7,442**	**3,194**	**1,552**	**46**	**29**	**6**	**8**	**7**	**3**	**5**	**4**	**3**	

Jeremy T. Dearing, P.E.

01/05/2023

LUBBOCK COUNTY PREFAB TY B INSTALL & ELIMINATION

FED.RD. DIV.NO.	FEDERAL PROJECT NO.		SHEET NO.
6			032
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2022 SPECIALTY			1/4/2023



SHEET TOTALS

INSTALL:

6"WB(CNTST)- 550 LF
6"YS- 1,520 LF
8"WS- 1,615 LF
24"WS STOPBAR- 240 LF
24"WS CROSSWALK- 546 LF
LEFT ARROW (CNTST)- 8 EA.
RIGHT ARROW (CNTST)- 6 EA.
(DBL) ARROW (STRAIGHT-RIGHT)(CNTST)- 1 EA.

ELIMINATION:

4"- 2,070 LF
8"- 1,615 LF
12"- 706 LF
24"WS STOPBAR- 240 LF
LEFT ARROW- 8 EA.
RIGHT ARROW- 6 EA.
(DBL) ARROW (STRAIGHT-RIGHT)- 1 EA.

N

N.T.S.

STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED
PROFESSIONAL ENGINEER

Jeremy T. Dearing, P.E.

01/05/2023

LUBBOCK COUNTY
PREFAB TY B
19TH ST AT MILWAUKEE AVE.
REF# 12-1B

FED.RD. DIV.NO.			SHEET NO.
6			033
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023

SHEET TOTALS

INSTALL:

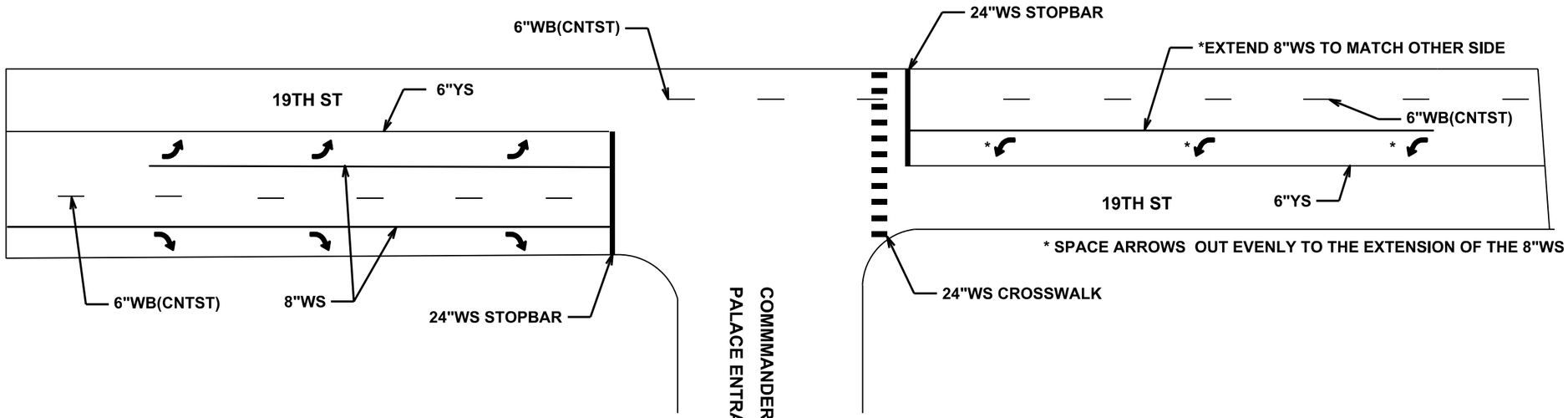
6"WB(CNTST)- 150 LF
6"YS- 500 LF
8"WS- 555 LF
24"WS STOPBAR- 90 LF
24"WS CROSSWALK- 90 LF
LEFT ARROW (CNTST)- 6 EA.
RIGHT ARROW (CNTST)- 3 EA.

ELIMINATION:

4"- 650
8"- 555 LF
12"- 144 LF
24"WS STOPBAR- 90 LF
LEFT ARROW- 6 EA.
RIGHT ARROW- 3 EA.

N

N.T.S.



STATE OF TEXAS
JEREMY T. DEARING
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Jeremy T. Dearing, P.E.

01/05/2023

LUBBOCK COUNTY
PREFAB TY B
19TH ST AT COMMANDERS PALACE
REF# 12-2B

FED.RD. DIV.NO.			SHEET NO.
6			034
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023

SHEET TOTALS

INSTALL:

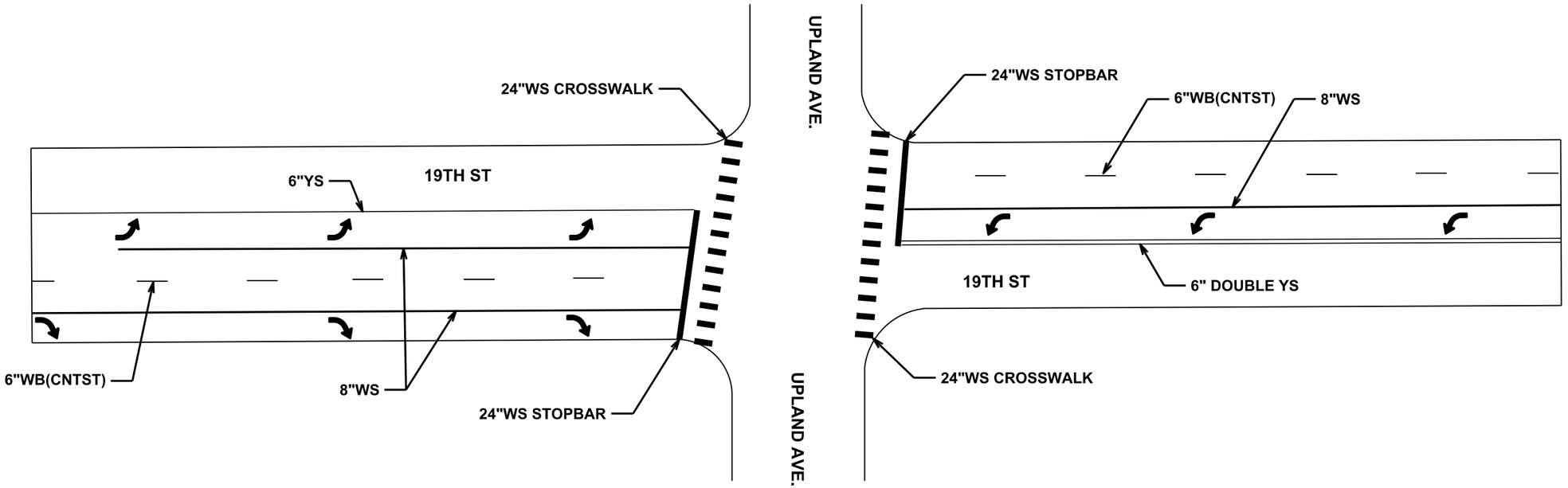
6"WB(CNTST)- 120 LF
6"YS- 760 LF
8"WS- 720 LF
24"WS STOPBAR- 90 LF
24"WS CROSSWALK- 192 LF
LEFT ARROW (CNTST)- 6 EA.
RIGHT ARROW (CNTST)- 3 EA.

ELIMINATION:

4"- 760
8"- 720 LF
12"- 320 LF
24"WS STOPBAR- 90 LF
LEFT ARROW- 6 EA.
RIGHT ARROW- 3 EA.

N

N.T.S.



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98218
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Jeremy T. Dearing, P.E.

01/05/2023

LUBBOCK COUNTY
PREFAB TY B
19TH ST AT UPLAND AVE.
REF# 12-3B

FED.RD. DIV.NO.			SHEET NO.
6			035
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023

SHEET TOTALS

INSTALL:

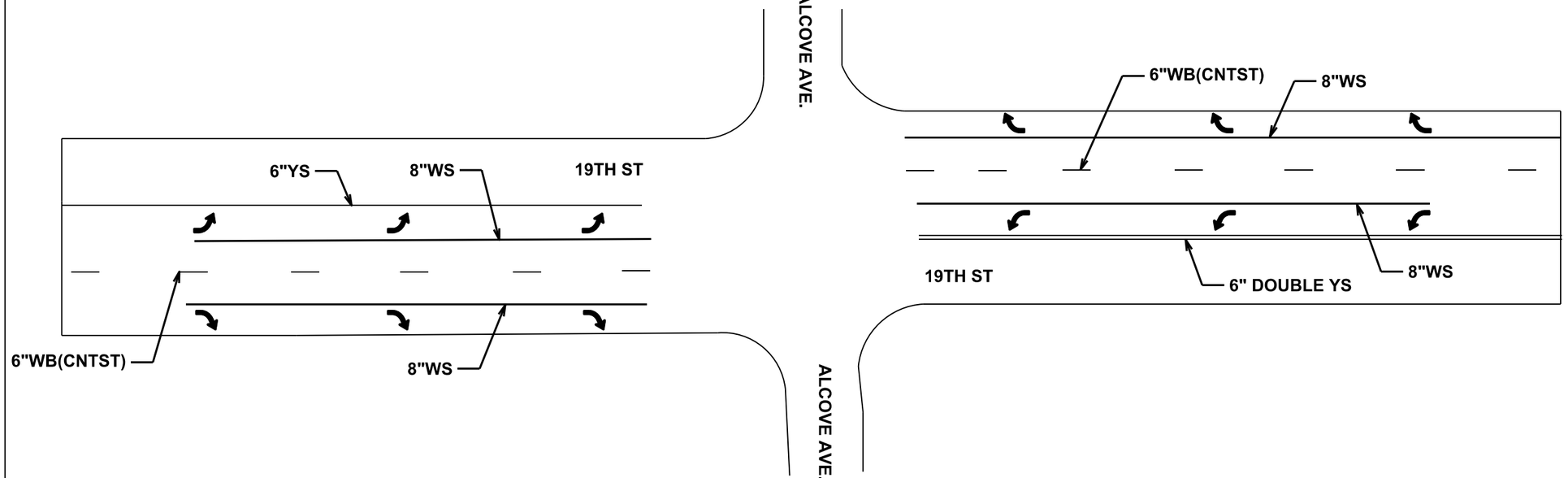
6"WB(CNTST)- 130 LF
6"YS- 710 LF
8"WS- 800 LF
LEFT ARROW (CNTST)- 6 EA.
RIGHT ARROW (CNTST)- 6 EA.

ELIMINATION:

4"- 840
8"- 800 LF
LEFT ARROW- 6 EA.
RIGHT ARROW- 6 EA.

N

N.T.S.



STATE OF TEXAS
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Jeremy T. Dearing, P.E.

01/05/2023

LUBBOCK COUNTY
PREFAB TY B
19TH ST AT ALCOVE AVE.
REF# 12-4B

FED.RD. DIV.NO.			SHEET NO.
6			036
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023

SHEET TOTALS

INSTALL B :

6"WB(CNTST)- 330 LF
8"WS- 255 LF
8"W(DOT)- 30 LF
12"WS (CROSS HATCH)- 56
24"WS STOPBAR- 100 LF
24"WS CROSSWALK- 204 LF
LEFT ARROW (CNTST)- 2 EA.
RIGHT ARROW (CNTST)- 1 EA.
STRAIGHT ARROW (CNTST)- 2 EA.
(DBL) ARROW (STRAIGHT-RIGHT)(CNTST)- 2 EA.
Y(MEDIAN NOSE)(MULTIPOLY)- 3 EA.

ELIMINATION:

4"- 330 LF
8"- 255 LF
12"- 366 LF
24"WS STOPBAR- 100 LF
LEFT ARROW- 2 EA.
RIGHT ARROW- 2 EA.
STRAIGHT ARROW- 2 EA.
(DBL) ARROW (STRAIGHT-RIGHT)- 2 EA.
Y(MEDIAN NOSE)- 3 EA.

INSTALL C :

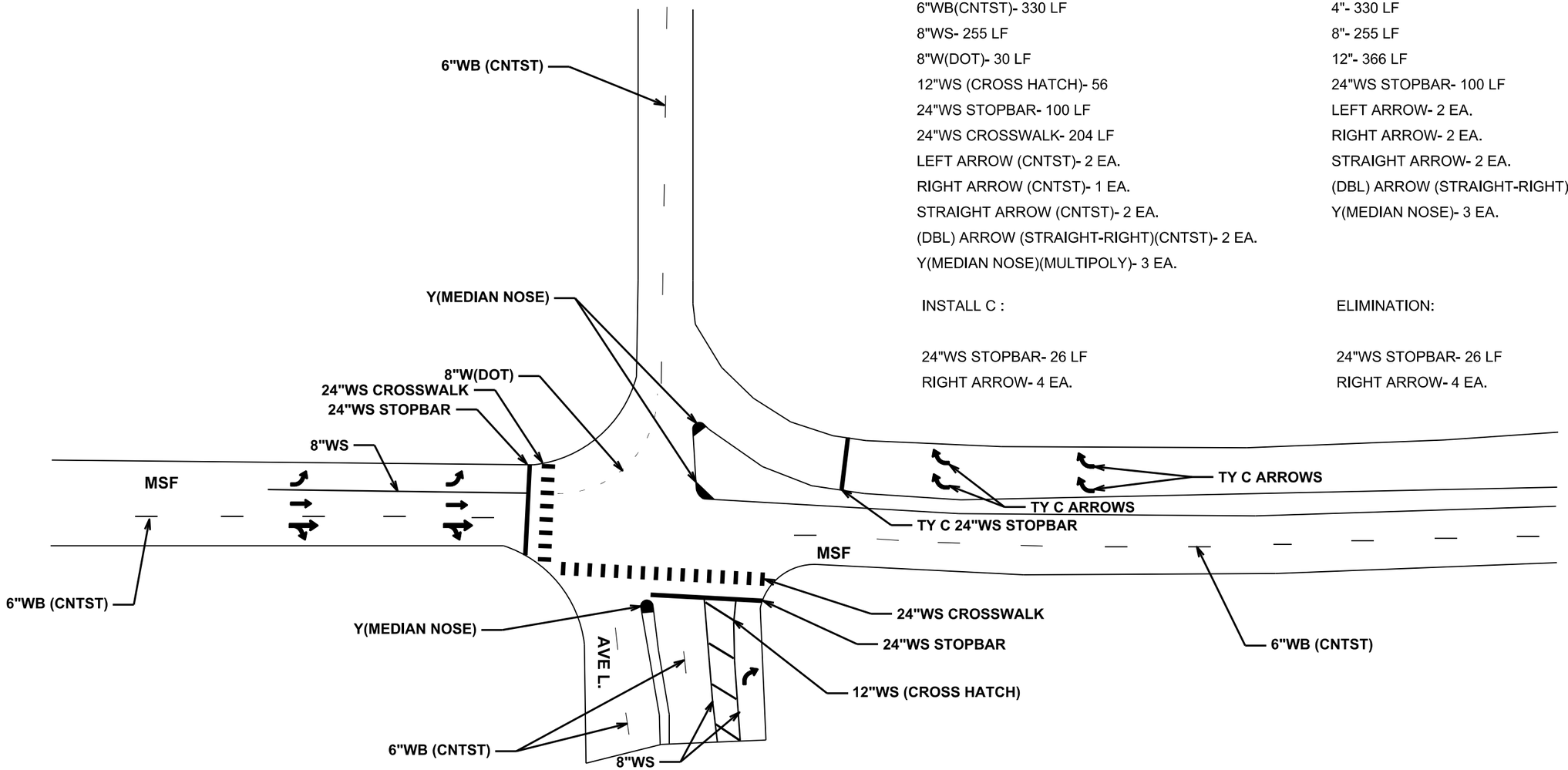
24"WS STOPBAR- 26 LF
RIGHT ARROW- 4 EA.

ELIMINATION:

24"WS STOPBAR- 26 LF
RIGHT ARROW- 4 EA.

N

N.T.S.



STATE OF TEXAS
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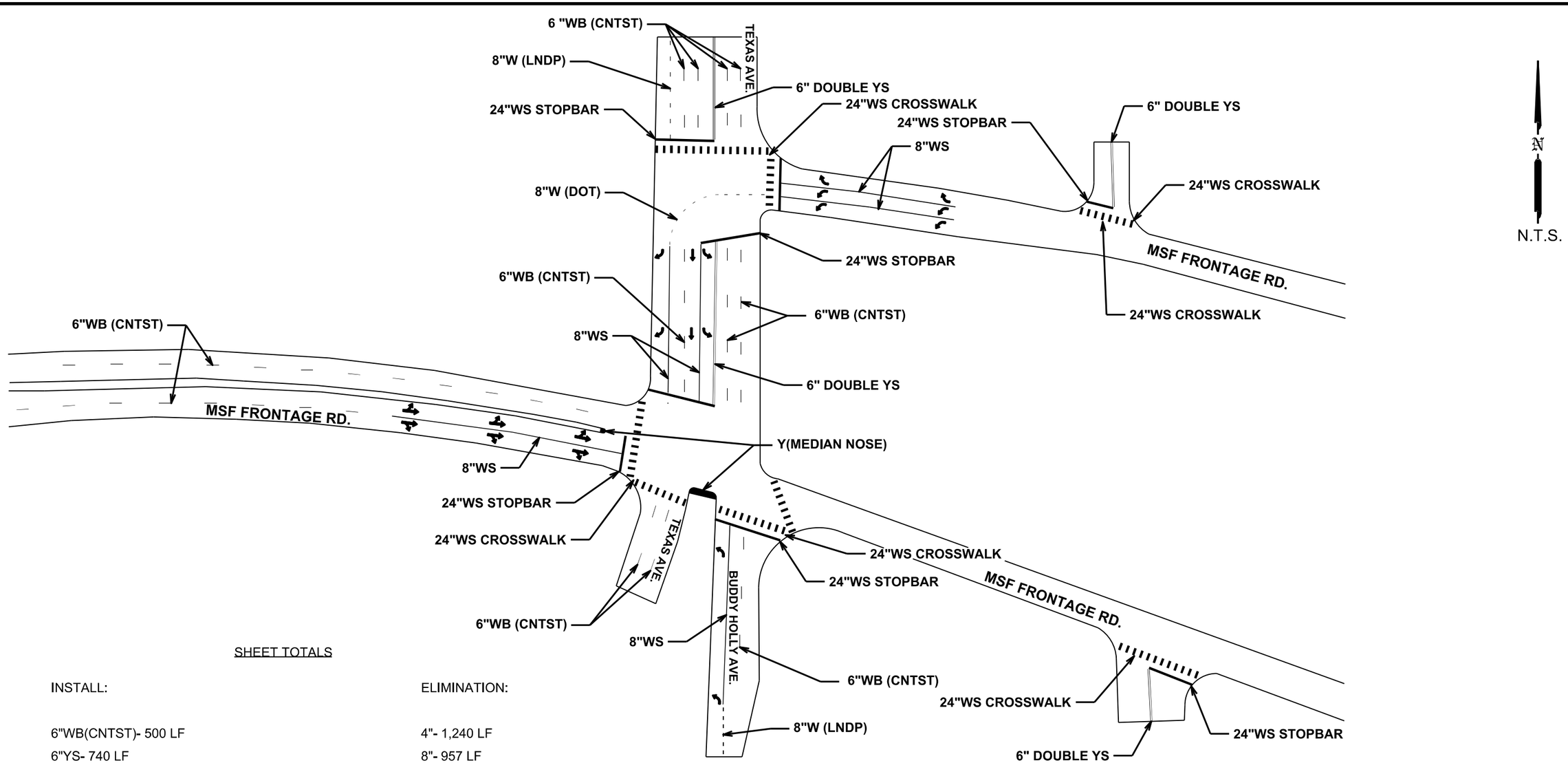
Jeremy T. Dearing, P.E.

01/05/2023

LUBBOCK COUNTY
PREFAB TY B
MSF AT AVE L.
REF# 12-5B

FED.RD. DIV.NO.			SHEET NO.
6			037
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023



SHEET TOTALS

INSTALL:

6"WB(CNTST)- 500 LF
6"YS- 740 LF
8"WS- 815 LF
8"W(DOT)- 112 LF
8"W(LNDP)- 30 LF
24"WS STOPBAR- 368 LF
24"WS CROSSWALK- 636 LF
LEFT ARROW (CNTST)- 8 EA.
RIGHT ARROW (CNTST)- 4 EA.
STRAIGHT ARROW (CNTST)- 2 EA.
(DBL) ARROW (STRAIGHT-RIGHT)(CNTST)- 3 EA.
(DBL) ARROW (STRAIGHT-LEFT)(CNTST)- 3 EA.
Y(MEDIAN NOSE)- 2 EA.

ELIMINATION:

4"- 1,240 LF
8"- 957 LF
12"- 1,072 LF
24"WS STOPBAR- 368 LF
LEFT ARROW- 8 EA.
RIGHT ARROW- 4 EA.
STRAIGHT ARROW- 2 EA.
(DBL) ARROW (STRAIGHT-RIGHT)- 3 EA.
(DBL) ARROW (STRAIGHT-LEFT)- 3 EA.
Y(MEDIAN NOSE)- 2 EA.

STATE OF TEXAS
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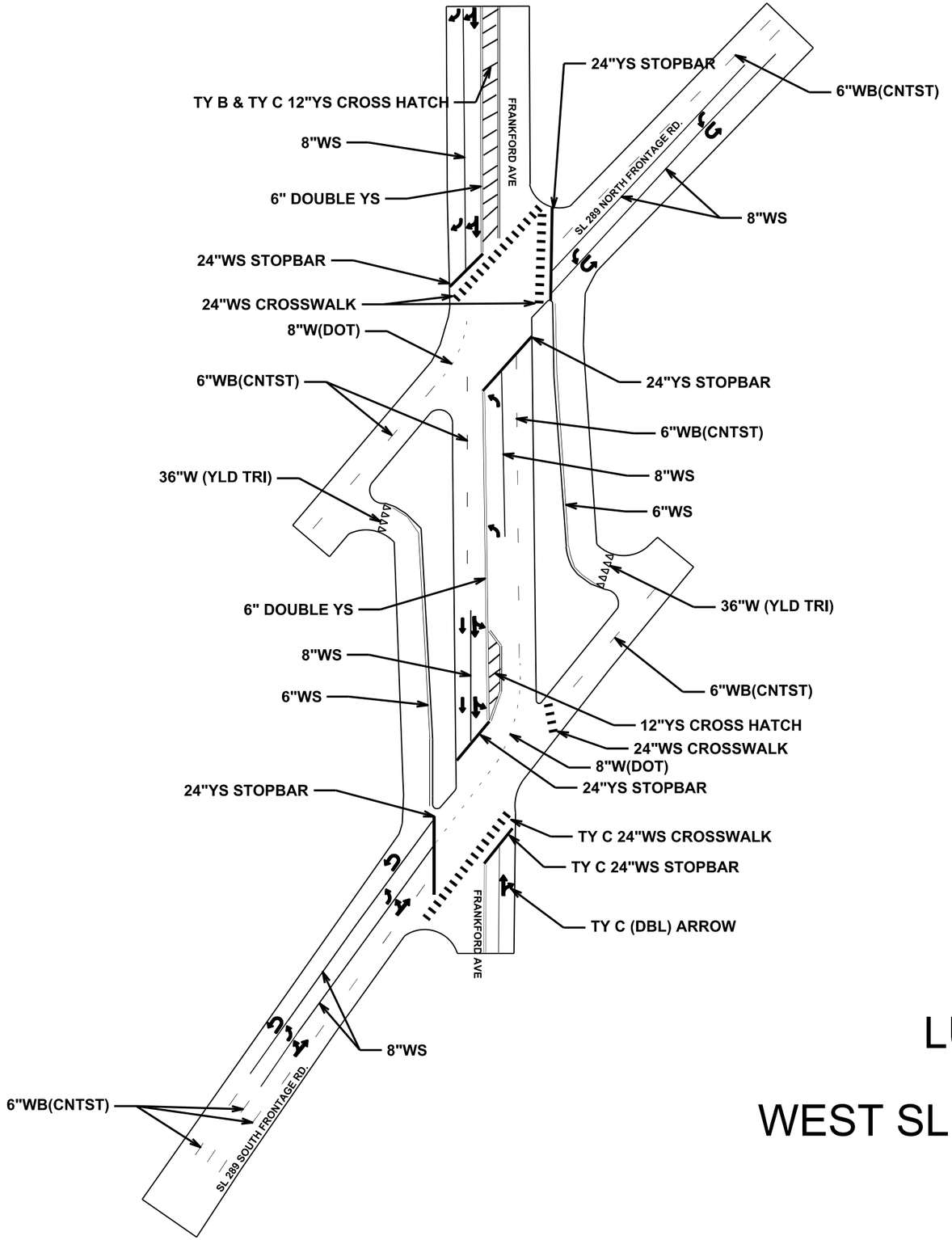
Jeremy T. Dearing, P.E.
01/05/2023

LUBBOCK COUNTY
PREFAB TY B
MSF AT TEXAS AVE.
REF# 12-6B

FED.RD. DIV.NO.			SHEET NO.
6			038
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023



SHEET TOTALS

INSTALL TY B:

6"WB(CNTST)- 400 LF
6"WS- 520 LF
6"YS- 1,200 LF
8"WS- 1,482 LF
8"W(DOT)- 50 LF
12"YS (CROSS HATCH) (ADDED)- 150 LF
24"WS STOPBAR- 278 LF
24"WS CROSSWALK- 276 LF
LEFT ARROW (CNTST)- 6 EA.
RIGHT ARROW (CNTST)- 2 EA.
STRAIGHT ARROW (CNTST)- 2 EA. (ADDED)
UTURN ARROW (CNTST)- 4 EA.
(DBL) ARROW (STRAIGHT-LEFT)(CNTST)- 4 EA.
(DBL) ARROW (STRAIGHT-RIGHT)(CNTST)- 2 EA.
36"W(YLD TRI)- 20 EA.

ELIMINATION:

4"- 2,120 LF
8"- 1,532 LF
12"- 440 LF
24"WS STOPBAR- 278 LF
LEFT ARROW- 6 EA.
RIGHT ARROW- 2 EA.
UTURN ARROW- 4 EA.
(DBL) ARROW (STRAIGHT-LEFT)- 4 EA.
(DBL) ARROW (STRAIGHT-RIGHT)- 2 EA.
36"W(YLD TRI)- 0 EA.

N

N.T.S.

INSTALL TY C:

12"YS CROSS HATCH (ADDED)- 160 LF
24"WS STOPBAR- 34 LF
24"WS CROSSWALK- 132 LF
(DBL) ARROW (STRAIGHT-RIGHT)- 1 EA.

ELIMINATION:

12"- 200 LF
24"- 34 LF
(DBL) ARROW (STRAIGHT-RIGHT)- 1 EA.

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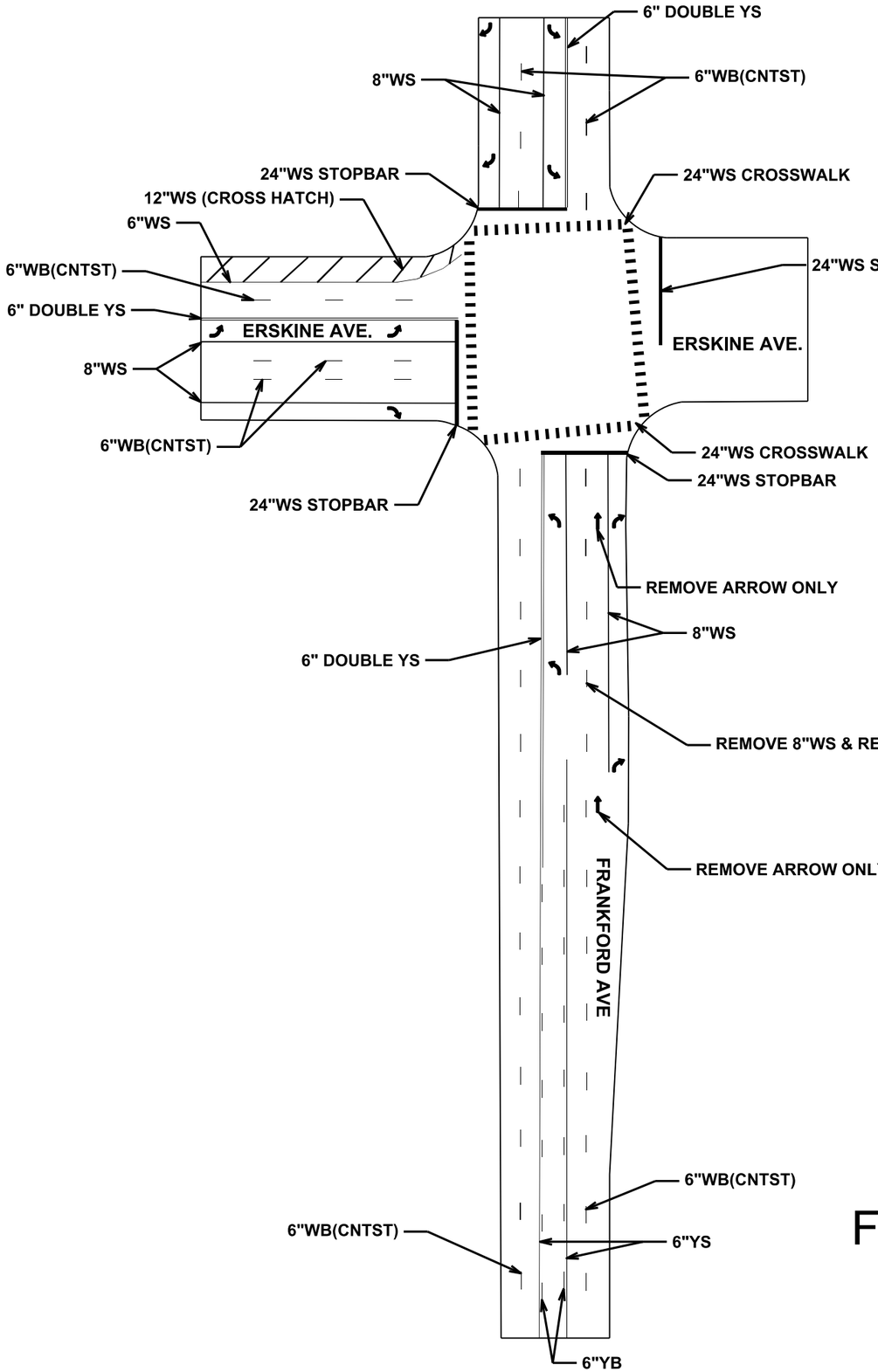
Jeremy T. Dearing, P.E.

01/05/2023

LUBBOCK COUNTY
PREFAB TY B
WEST SL 289 AT FRANKFORD AVE.
REF# 12-9B

FED.RD. DIV.NO.			SHEET NO.
6			039
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023



SHEET TOTALS

INSTALL:

6"WB(CNTST)- 380 LF
6"WS- 180 LF
6 "YB- 150 LF
6"YS- 1,580 LF
8"WS- 855 LF
12"WS (CROSS HATCH)- 146 LF
24"WS STOPBAR- 236 LF
24"WS CROSSWALK- 390 LF
LEFT ARROW (CNTST)- 6 EA.
RIGHT ARROW (CNTST)- 5 EA.

ELIMINATION:

4"- 2,190 LF
8"- 1,008 LF
12"- 146 LF
24"WS STOPBAR- 240 LF
24"WS CROSSWALK- 390 LF
LEFT ARROW- 4 EA.
RIGHT ARROW- 5 EA.
STRAIGHT ARROW- 2 EA.

N

N.T.S.

STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED
PROFESSIONAL ENGINEER

Jeremy T. Dearing, P.E.

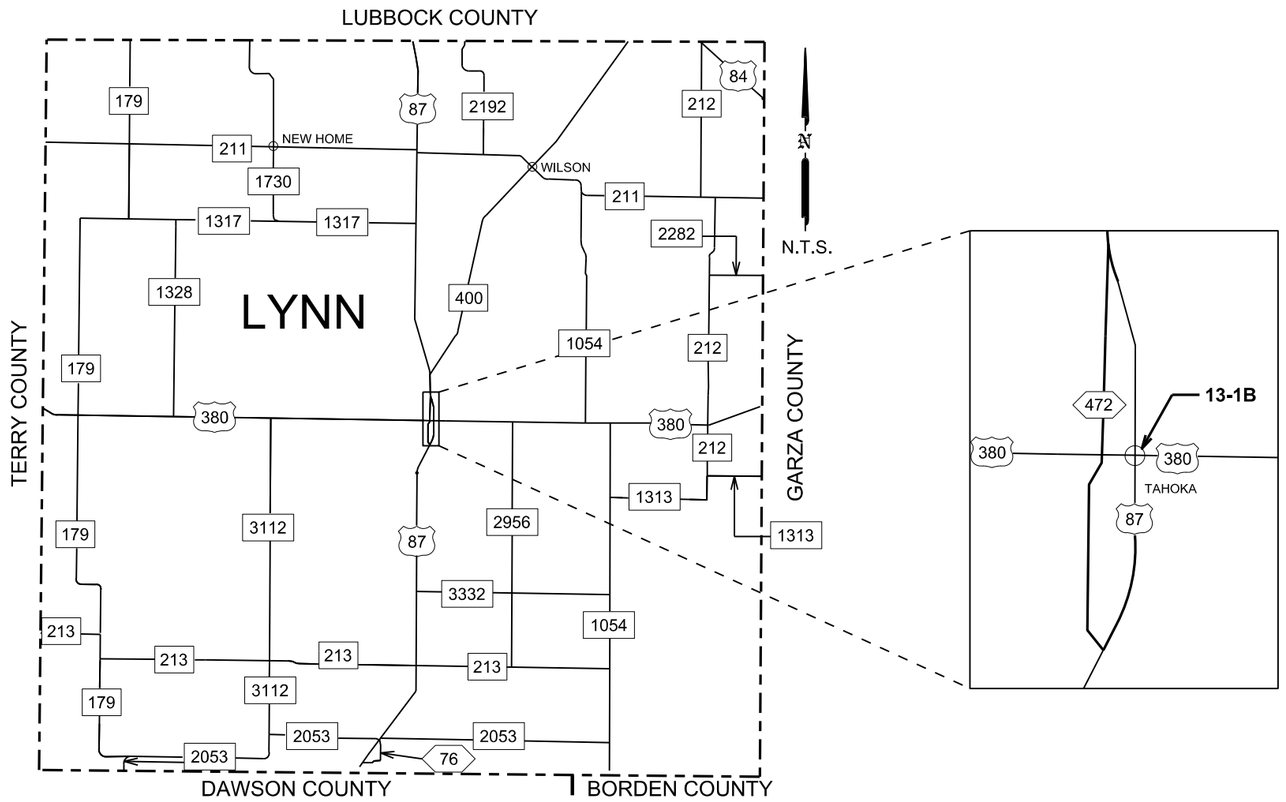
01/05/2023

LUBBOCK COUNTY
PREFAB TY B
FRANKFORD AVE AT ERSKINE AVE.
REF# 12-10B

FED.RD. DIV.NO.			SHEET NO.
6			040
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023

County 13: Lynn	Hwy	Rdwy	Description	Cont	Sect	Begin TRM (MI)	End TRM (MI)	6"WS	6"WB	24"WS	6"YS	NOTES
13-1B	US	87	AT US 380 (TAHOKA)	297	06	302-0..476	302-0.476	100	300	334	1,060	SEE SHEET 042
						TOTAL		**100**	**300**	**334**	**1,060**	

County 13: Lynn	Hwy	Rdwy	Description	Cont	Sect	Begin TRM (MI)	End TRM (MI)	4" ELIM	6" ELIM	12" ELIM	24" ELIM	NOTES
13-1B	US	87	AT US 380 (TAHOKA)	297	06	302-0..476	302-0.476	1,160	300	500	52	SEE SHEET 042
						TOTAL		**1,160**	**300**	**500**	**52**	



STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED
PROFESSIONAL ENGINEER

Jeremy T. Dearing, P.E.

01/05/2023

LYNN COUNTY
PREFAB TY B

FED.RD. DIV.NO.			SHEET NO.
6			041
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023

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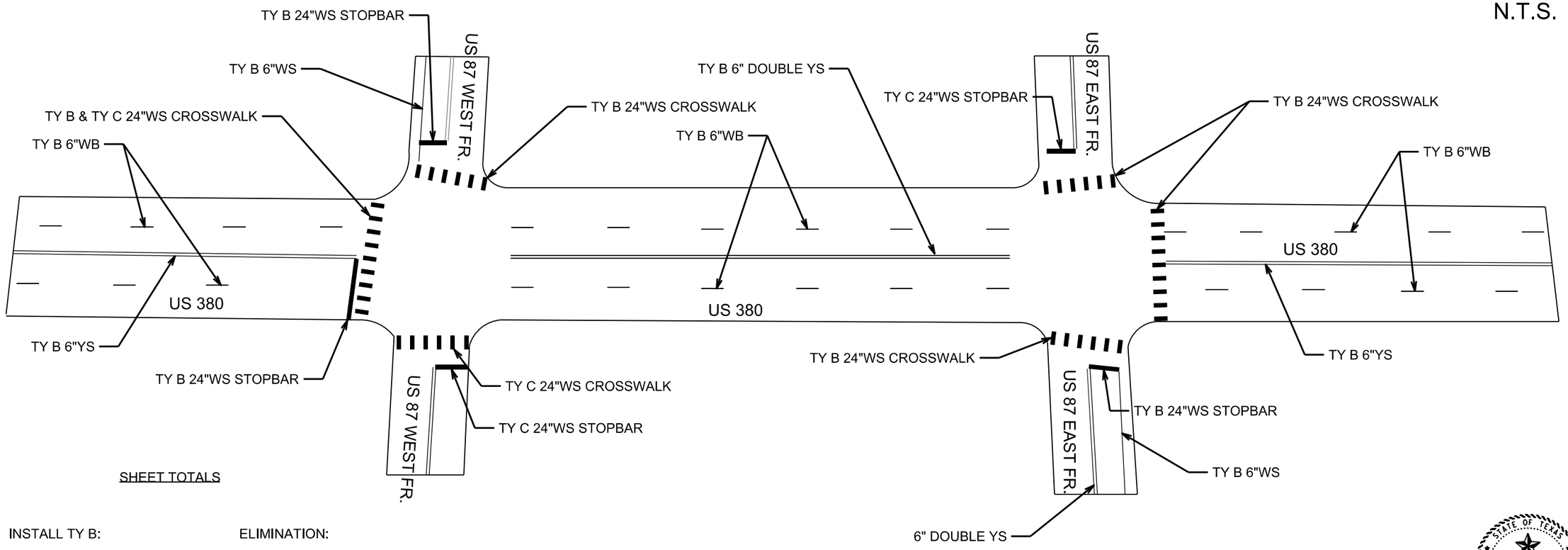


SHEET TOTALS

INSTALL TY B:

6"WS- 300 LF
6"WS- 100 LF
6"YS- 1,060
24"WS STOPBAR- 52 LF
24"WS CROSSWALK- 282 LF

ELIMINATION:

4"- 1,160 LF
6"- 300 LF
12"- 584 LF
24"- 76 LF

INSTALL TY C:

24"WS STOPBAR- 24 LF
24"WS CROSSWALK- 54 LF

STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED PROFESSIONAL ENGINEER

Jeremy T. Dearing, P.E.
01/05/2023

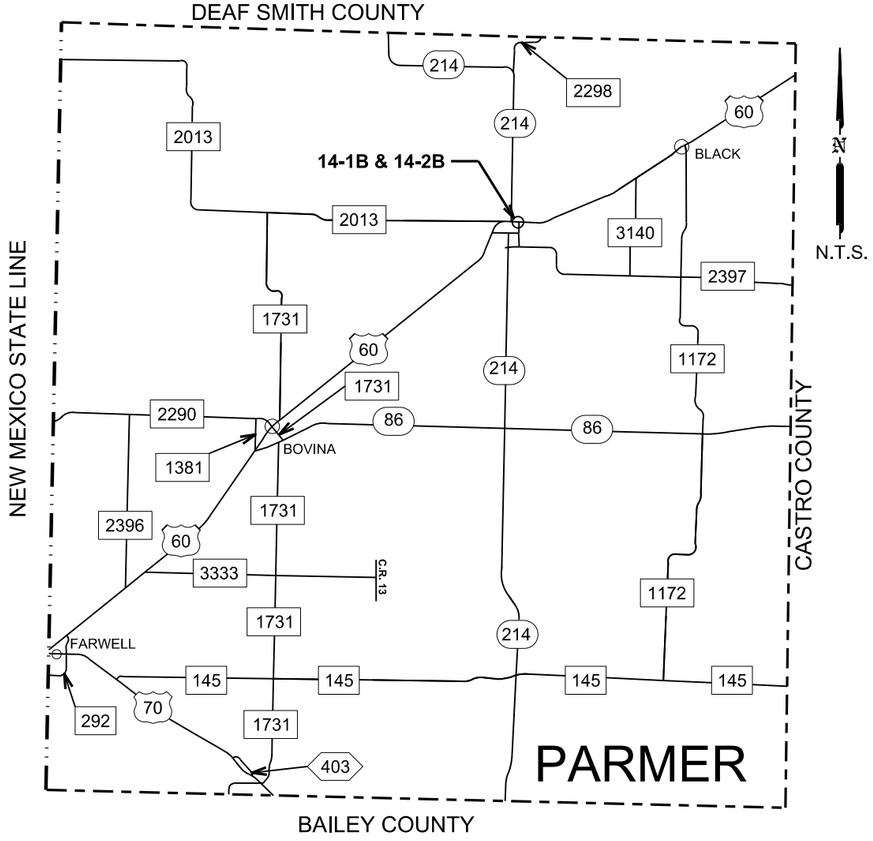
LYNN COUNTY
PREFAB TY B & TY C
US 87 AT US 380
TAHOKA

FED.RD. DIV.NO.			SHEET NO.
6			042
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023

County 14: Parmer	Hwy	Rdwy	Description	Cont	Sect	Begin TRM (MI)	End TRM (MI)	6"WB	18"WS	24"WS	36" W(YLD TRI)	6"YB	6"YS	NOTES
14-1B	US	60	AT CLEVELLAND ST IN FRIONA	168	03	252-0.387	252-0.387	280	78	284	0	130	1,170	SEE SHEET 044
14-2B	US	60	AT MAIN ST IN FRIONA	168	03	252-0.235	252-0.235	290	78	412	8	150	1,280	SEE SHEET 045
						TOTAL		**570**	**156**	**696**	**8**	**280**	**2,450**	

County 14: Parmer	Hwy	Rdwy	Description	Cont	Sect	Begin TRM (MI)	End TRM (MI)	4" ELIM	18" ELIM	36" W(YLD TRI) ELIM	NOTES
14-1B	US	6 0	AT CLEVELLAND ST IN FRIONA	168	03	252-0.387	252-0.387	1,580	78	0	SEE SHEET 044
14-2B	US	60	AT MAIN ST IN FRIONA	168	03	252-0.235	252-0.235	1,720	78	8	SEE SHEET 045
						TOTAL		**3,300**	**156**	**8**	

NOTE: THE REFERENCED INTERSECTIONS ARE ON SIGNAL PROJECT 2023 0905-00-112
WHICH HAVE ARROWS, CROSSWALKS, & 8"WS PAVEMENT MARKINGS



STATE OF TEXAS
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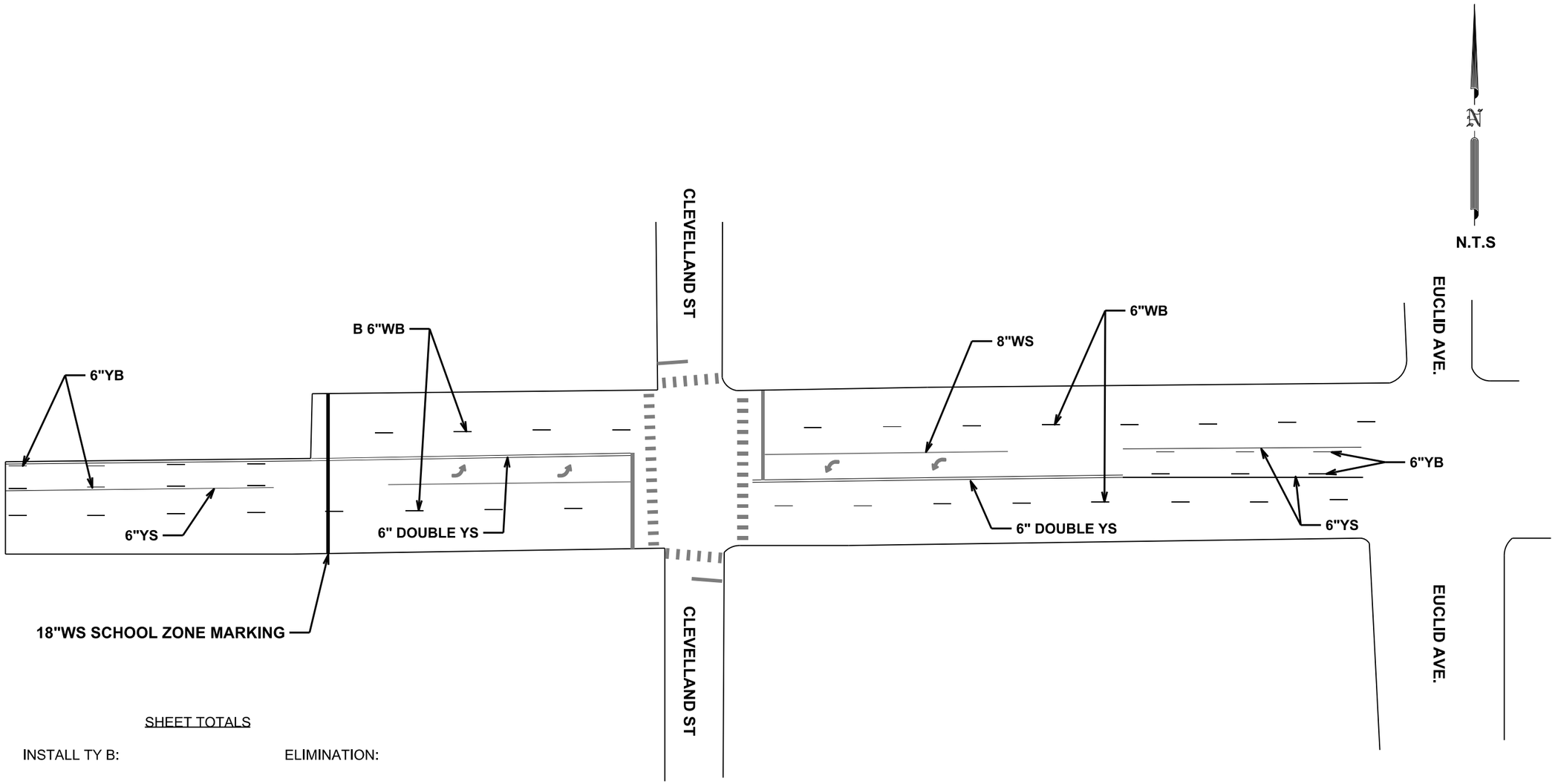
Jeremy T. Dearing, P.E.

01/05/2023

PARMER COUNTY PREFAB TY B

FED.RD. DIV.NO.			SHEET NO.
6			043
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023



SHEET TOTALS

INSTALL TY B:	ELIMINATION:
6"WB- 280 LF	4"- 1,580 LF
6"YS- 1,170 LF	18"- 78 LF
6"YB- 130 LF	
18"WS - 78 LF	

NOTE: THIS INTERSECTION IS ON SIGNAL PROJECT 2023 0905-00-112
WHICH HAVE ARROWS, CROSSWALKS, & 8"WS PAVEMENT MARKINGS

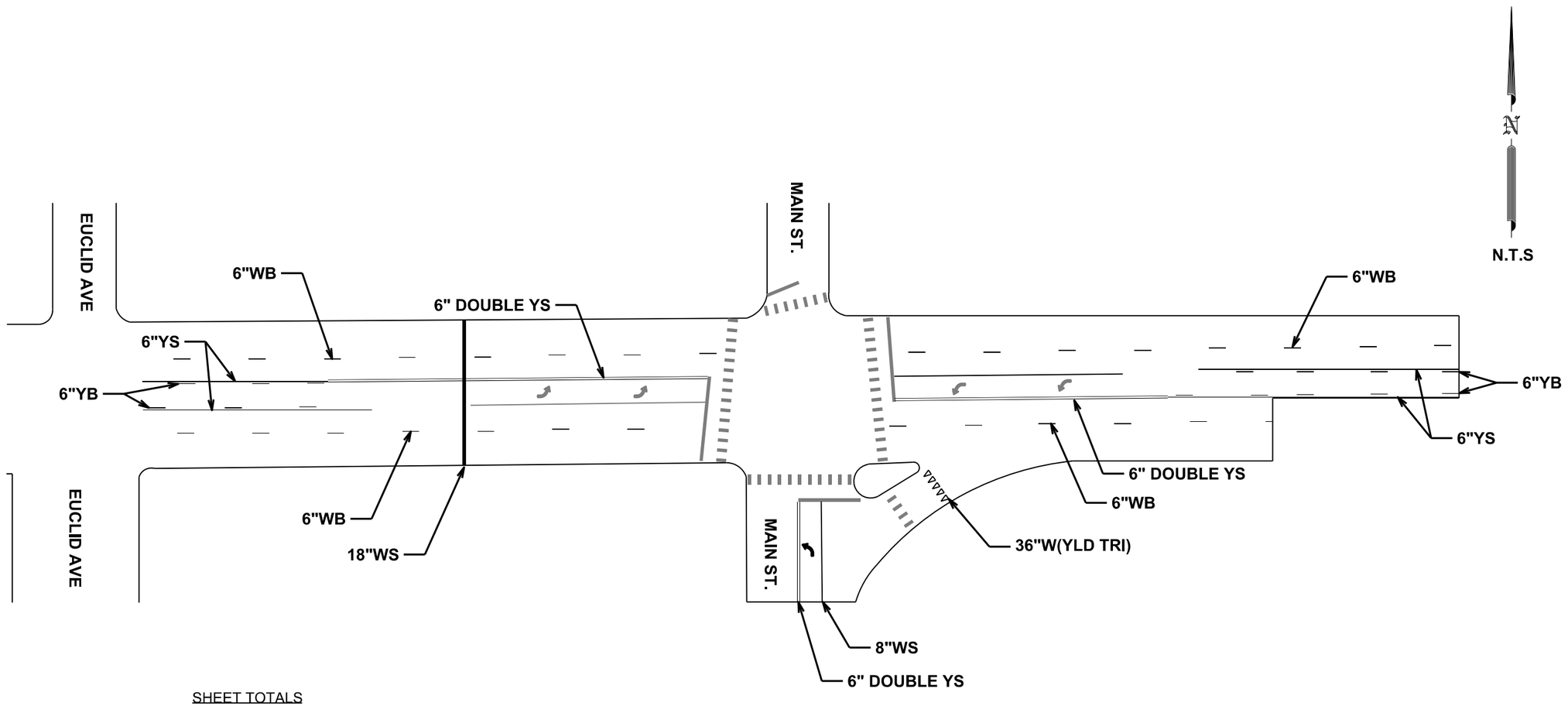
STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED
PROFESSIONAL ENGINEER

Jeremy T. Dearing, P.E.

01/05/2023

PARMER COUNTY
PREFAB TY B
US 60 AT CLEVELLAND ST
FRIONA
REF# 14-1B

FED.RD. DIV.NO.			SHEET NO.
6			044
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023



SHEET TOTALS

INSTALL TY B:

6"WB- 290 LF
6"YS- 1,280 LF
6"YB- 150 LF
18"WS - 78 LF
36"W (YLD TRI)- 8 EA.

ELIMINATION:

4"- 1,720 LF
18"- 78 LF
36"W(YLD TRI)- 8 EA.

NOTE: THIS INTERSECTION IS ON SIGNAL PROJECT 2023 0905-00-112
WHICH HAVE ARROWS, CROSSWALKS, & 8"WS PAVEMENT MARKINGS

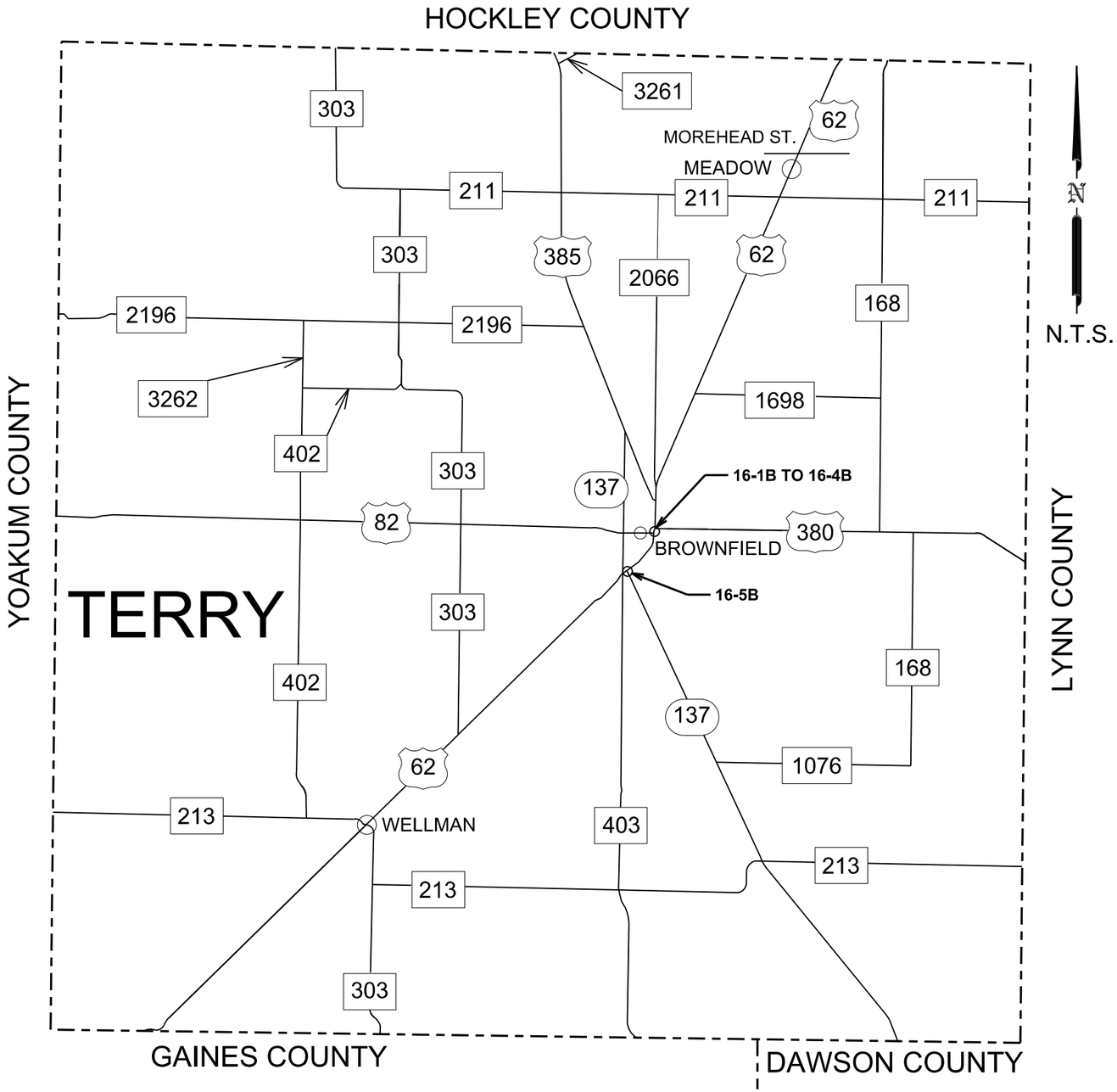
PARMER COUNTY
PREFAB TY B
US 60 AT MAIN ST
FRIONA
REF# 14-2B

STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED
PROFESSIONAL ENGINEER

Jeremy T. Dearing, P.E.

01/05/2023

FED.RD. DIV.NO.			SHEET NO.
6			045
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023



STATE OF TEXAS
JEREMY T. DEARING
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PROFESSIONAL ENGINEER

Jeremy T. Dearing, P.E.

01/05/2023

TERRY COUNTY
PREFAB TY B
SHEET 1 OF 2

FED.RD. DIV.NO.			SHEET NO.
6			046
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023

County 16: Terry	Hwy	Rdwy	Description	Cont	Sect	Begin TRM (MI)	End TRM (MI)	6" WB CNTST	8"WS	12"WS	24"WS	36" W(YLD TRI)	6"YB	6"YS	NOTES
16-1B	US	62	AT MAIN ST IN BROWNFIELD	227	07	286+0.841	286+0.841	180	362	0	364	0	60	855	SEE SHEET 048
16-2B	US	62	AT US 380 IN BROWNFIELD	227	07	288-0.908	288-0.908	220	528	40	410	7	60	912	SEE SHEET 049
16-3B	US	62	AT TATE ST. IN BROWNFIELD	228	01	286+0.691	286+0.691	40	185	0	216	0	0	185	SEE SHEET 050
16-4B	US	62	AT BUCKLEY ST IN BROWNFIELD	228	01	286+0.55	286+0.55	80	258	30	284	0	0	360	SEE SHEET 051
16-5B	US	62	AT SH 137 IN BROWNFIELD	228	01	286-0.586	286-0.586	0	0	0	120	0	0	360	1 STOPBAR, 1 NEW CROSSWALK, 6"DOUBLE YELLOW SOLID CENTERLINE (NO EXISTING PAVEMENT MARKINGS)
						TOTAL		**520**	**1,333**	**70**	**1,394**	**7**	**120**	**2,672**	

County 16: Terry	Hwy	Rdwy	Description	Cont	Sect	Begin TRM (MI)	End TRM (MI)	Arrow (Left)	Arrow (Right)	Arrow (DBL) (Straight-Right)	Arrow (DBL) (Straight-Left)	NOTES
16-1B	US	62	AT MAIN ST IN BROWNFIELD	227	07	286+0.841	286+0.841	7	0	3	0	SEE SHEET 048
16-2B	US	62	AT US 380 IN BROWNFIELD	227	07	288-0.908	288-0.908	6	2	0	2	SEE SHEET 049
16-3B	US	62	AT TATE ST. IN BROWNFIELD	228	01	286+0.691	286+0.691	4	0	0	0	SEE SHEET 050
16-4B	US	62	AT BUCKLEY ST IN BROWNFIELD	228	01	286+0.55	286+0.55	4	0	0	0	SEE SHEET 051
						TOTAL		**21**	**2**	**3**	**2**	

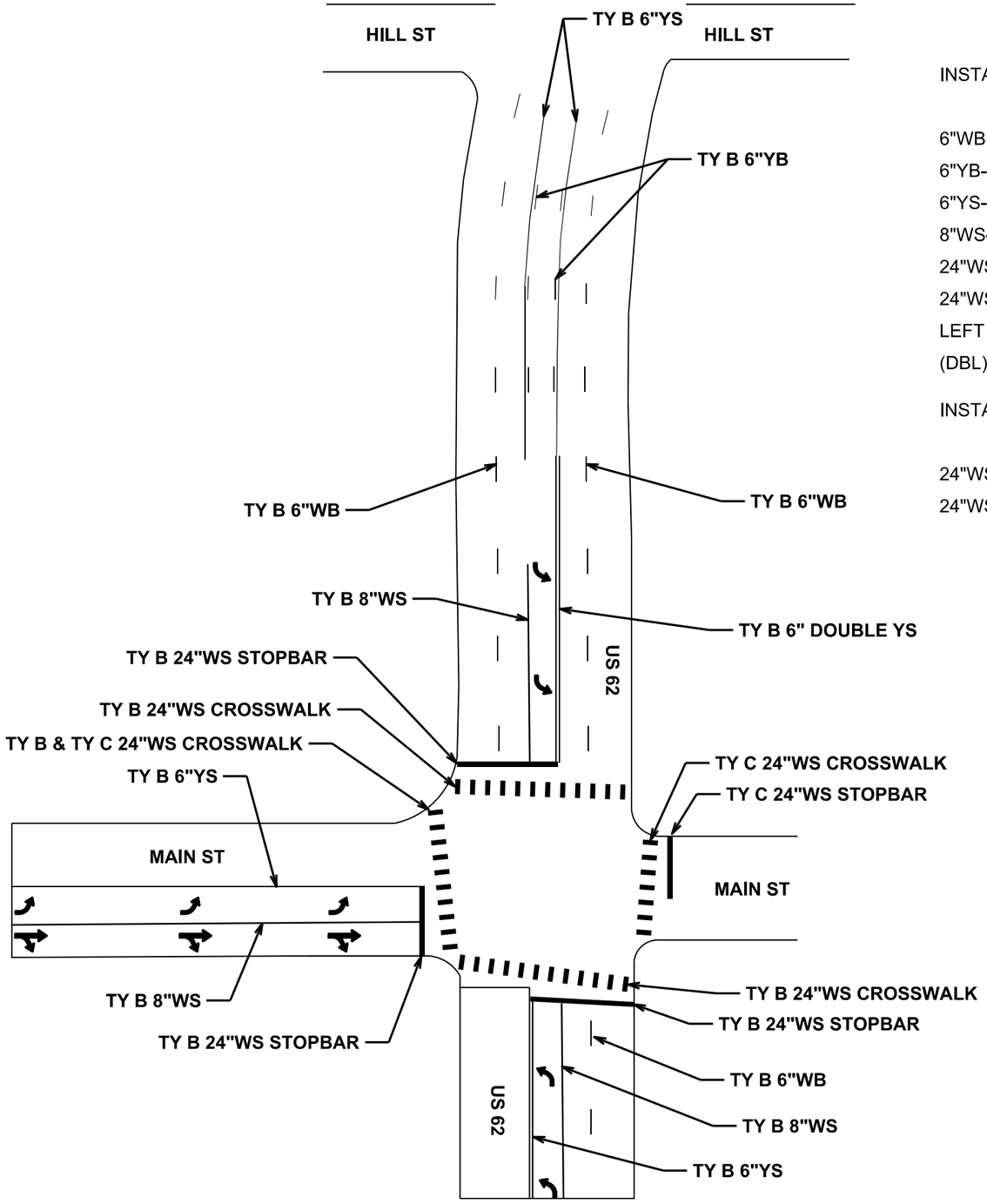
County 16: Terry	Hwy	Rdwy	Description	Cont	Sect	Begin TRM (MI)	End TRM (MI)	4" ELIM	8" ELIM	12" ELIM	24" ELIM	Arrow (L) ELIM	Arrow (R) ELIM	Arrow (DBL) (Stralght-Rlght) ELIM	Arrow (DBL) (Stralght-Left) ELIM	36" W(YLD TRI) ELIM	NOTES
16-1B	US	62	AT MAIN ST IN BROWNFIELD	227	07	286+0.841	286+0.841	1,095	362	392	124	6	0	2	0	0	SEE SHEET 048
16-2B	US	62	AT US 380 IN BROWNFIELD	227	07	288-0.908	288-0.908	1,192	528	476	134	6	2	0	2	7	SEE SHEET 049
16-3B	US	62	AT TATE ST. IN BROWNFIELD	228	01	286+0.691	286+0.691	225	185	312	96	4	0	0	0	0	SEE SHEET 050
16-4B	US	62	AT BUCKLEY ST IN BROWNFIELD	228	01	286+0.55	286+0.55	440	258	350	92	4	0	0	0	0	SEE SHEET 051
						TOTAL		**2,952**	**1,333**	**1,530**	**446**	**20**	**2**	**2**	**2**	**7**	

Jeremy T. Dearing, P.E.

01/05/2023

TERRY COUNTY PREFAB TY B SHEET 2 OF 2

FED.RD. DIV.NO.			SHEET NO.
6			047
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023



SHEET TOTALS

INSTALL TY B:

6"WB (CNTST)- 180 LF
6"YB- 60 LF
6"YS- 855 LF
8"WS- 362 LF
24"WS STOPBAR- 124 LF
24"WS CROSSWALK- 240 LF
LEFT ARROW (CNTST)- 7 EA.
(DBL) ARROW (STRAIGHT-RIGHT) - 3 EA.

ELIMINATION:

4"- 1,095 LF
8"- 362 LF
12"- 392 LF
24"- 124 LF
LEFT ARROW (CNTST)- 6 EA.
(DBL) ARROW (STRAIGHT-RIGHT) - 2 EA.

INSTALL TY C:

24"WS STOPBAR- 30 LF
24"WS CROSSWALK- 96 LF

ELIMINATION:

12"- 176 LF
24"- 30 LF

N

N.T.S.

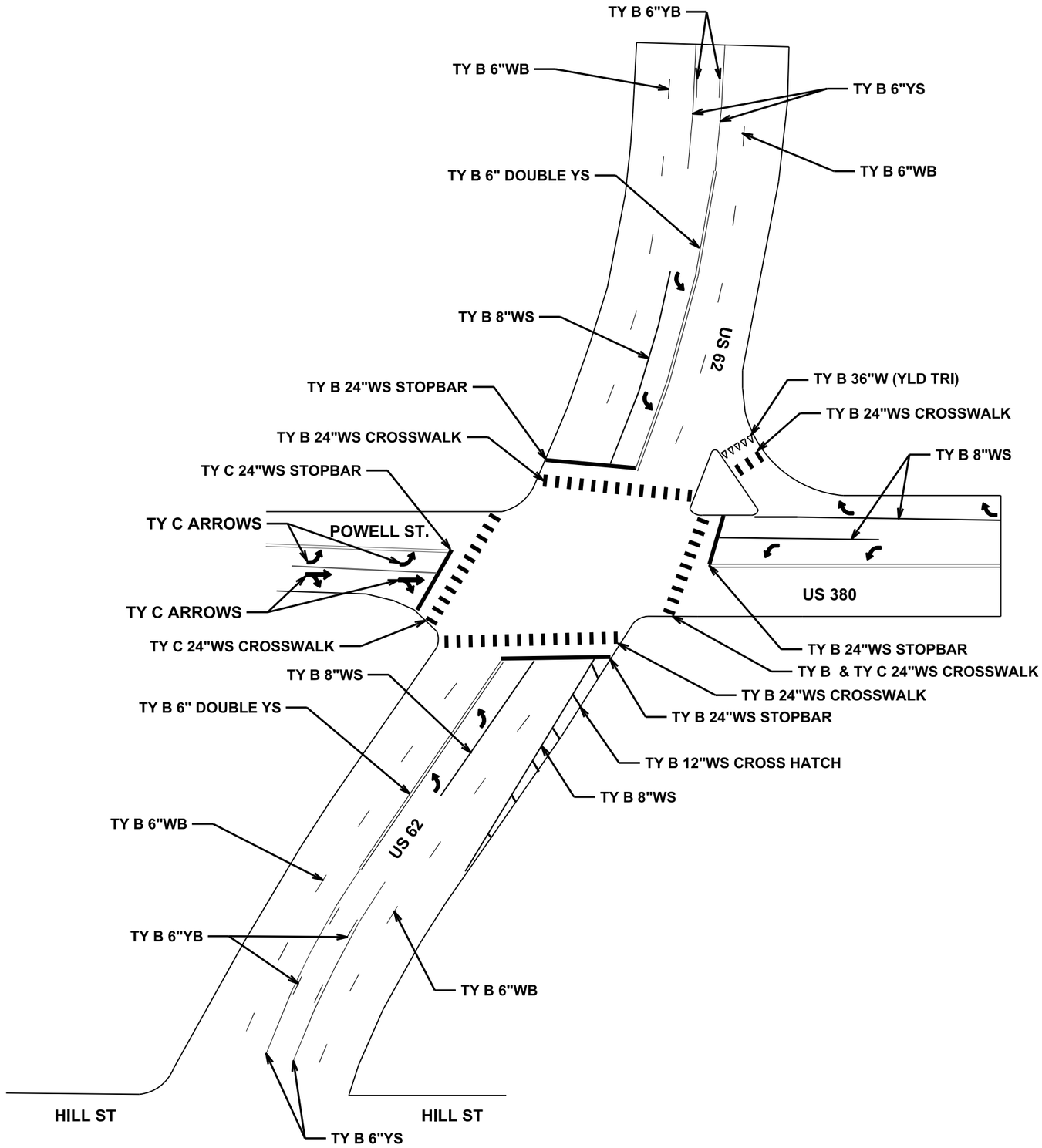
TERRY COUNTY
PREFAB TY B & TY C
US 62 AT MAIN ST
BROWNFIELD
REF# 16-1B

STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED
PROFESSIONAL ENGINEER

Jeremy T. Dearing, P.E.

01/05/2023

FED.RD. DIV.NO.			SHEET NO.
6			048
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023



SHEET TOTALS

INSTALL TY B:

6"WB (CNTST)- 220 LF
6"YB- 60 LF
6"YS- 912 LF
8"WS- 528 LF
12"WS (CROSS HATCH)- 40 LF
24"WS STOPBAR- 134 LF
24"WS CROSSWALK- 276 LF
LEFT ARROW (CNTST)- 6 EA.
RIGHT ARROW (CNTST)- 2 EA.
(DBL) ARROW (STRAIGHT-LEFT) - 2 EA.
36"W (YLD TRI)- 7 EA.

ELIMINATION:

4"- 1,192 LF
8"- 528 LF
12"- 476 LF
24"- 134 LF
LEFT ARROW- 6 EA.
RIGHT ARROW- 2 EA.
(DBL) ARROW (STRAIGHT-LEFT) - 2 EA.
36"W (YLD TRI) - 7 EA.

INSTALL TY C:

24"WS STOPBAR- 38 LF
24"WS CROSSWALK- 108 LF
LEFT ARROW- 2 EA.
(DBL) ARROW (STRAIGHT-RIGHT)- 2 EA.

ELIMINATION:

12"- 180 LF
24"- 38 LF
LEFT ARROW- 2 EA.
(DBL) ARROW (STRAIGHT-RIGHT)- 2 EA.

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N.T.S.

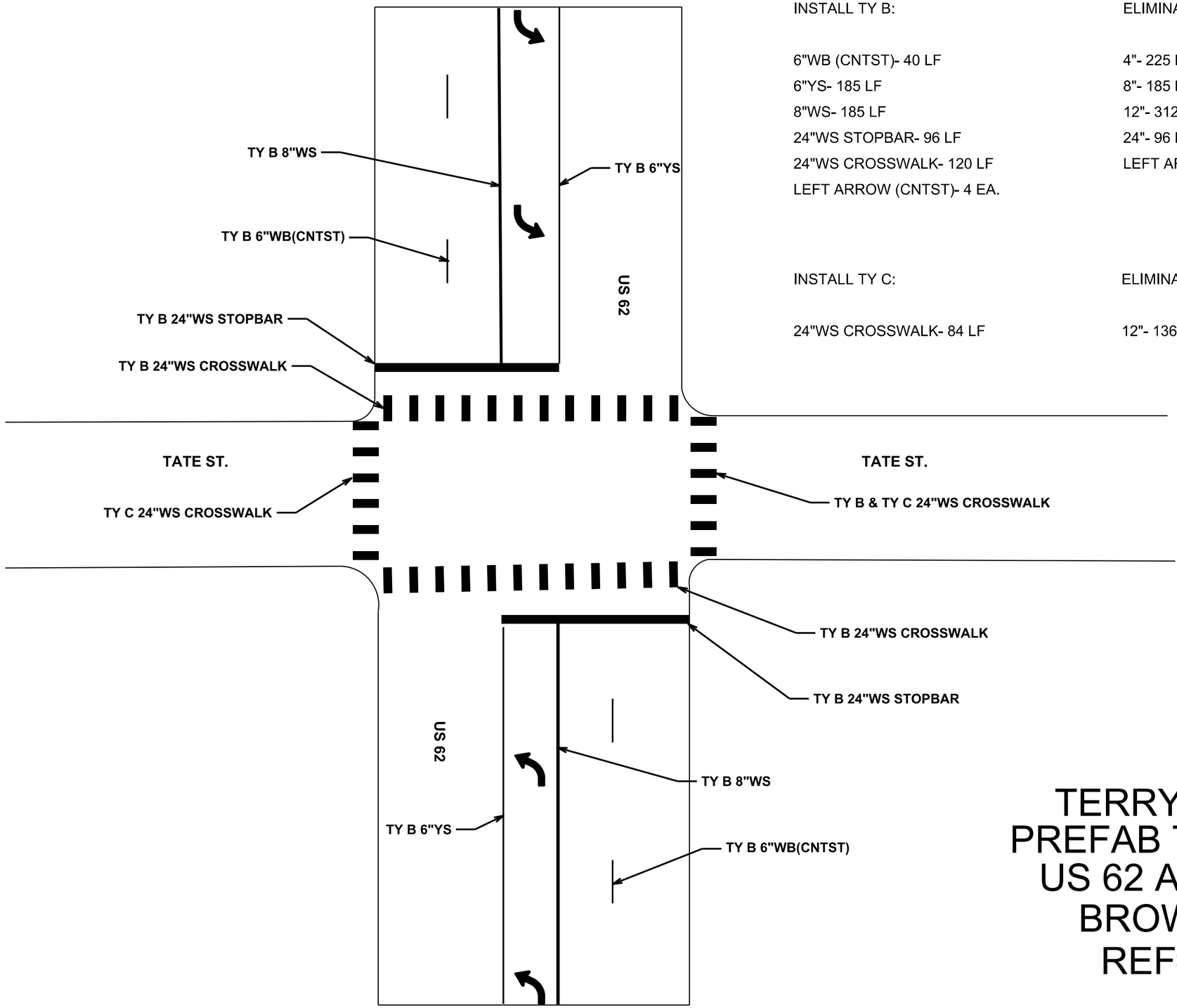
STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED
PROFESSIONAL ENGINEER

Jeremy T. Dearing, P.E.

01/05/2023

TERRY COUNTY
PREFAB TY B & TY C
US 62 AT US 380
BROWNFIELD
REF# 16-2B

FED.RD. DIV.NO.			SHEET NO.
6			049
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023



SHEET TOTALS

INSTALL TY B:

6"WB (CNTST)- 40 LF
6"YS- 185 LF
8"WS- 185 LF
24"WS STOPBAR- 96 LF
24"WS CROSSWALK- 120 LF
LEFT ARROW (CNTST)- 4 EA.

ELIMINATION:

4"- 225 LF
8"- 185 LF
12"- 312 LF
24"- 96 LF
LEFT ARROW- 4 EA.

INSTALL TY C:

24"WS CROSSWALK- 84 LF

ELIMINATION:

12"- 136 LF

N

N.T.S.

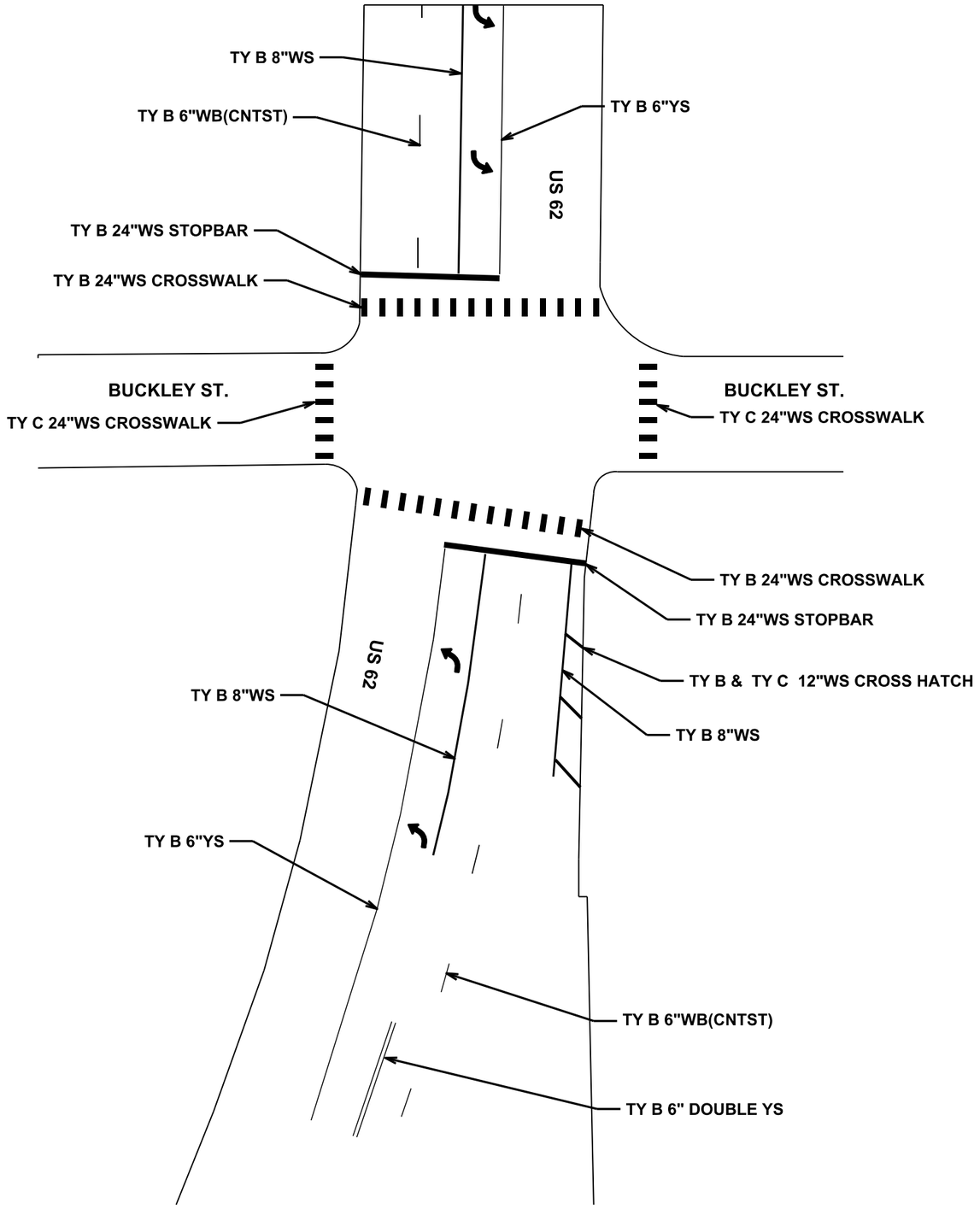
TERRY COUNTY
PREFAB TY B & TY C
US 62 AT TATE ST
BROWNFIELD
REF# 16-3B

STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED
PROFESSIONAL ENGINEER

Jeremy T. Dearing, P.E.

01/05/2023

FED.RD. DIV.NO.			SHEET NO.
6			050
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023



SHEET TOTALS

INSTALL TY B:

6"WB (CNTST)- 80 LF
6"YS- 360 LF
8"WS- 258 LF
12"WS CROSS HATCH- 30 LF
24"WS STOPBAR- 92 LF
24"WS CROSSWALK- 192 LF
LEFT ARROW (CNTST)- 4 EA.

ELIMINATION:

4"- 440 LF
8"- 258 LF
12"- 350 LF
24"- 92 LF
LEFT ARROW- 4 EA.

INSTALL TY C:

24"WS CROSSWALK- 84 LF

ELIMINATION:

12"- 144 LF

N

N.T.S.

TERRY COUNTY
PREFAB TY B & TY C
US 62 AT BUCKLEY ST
BROWNFIELD
REF# 16-4B

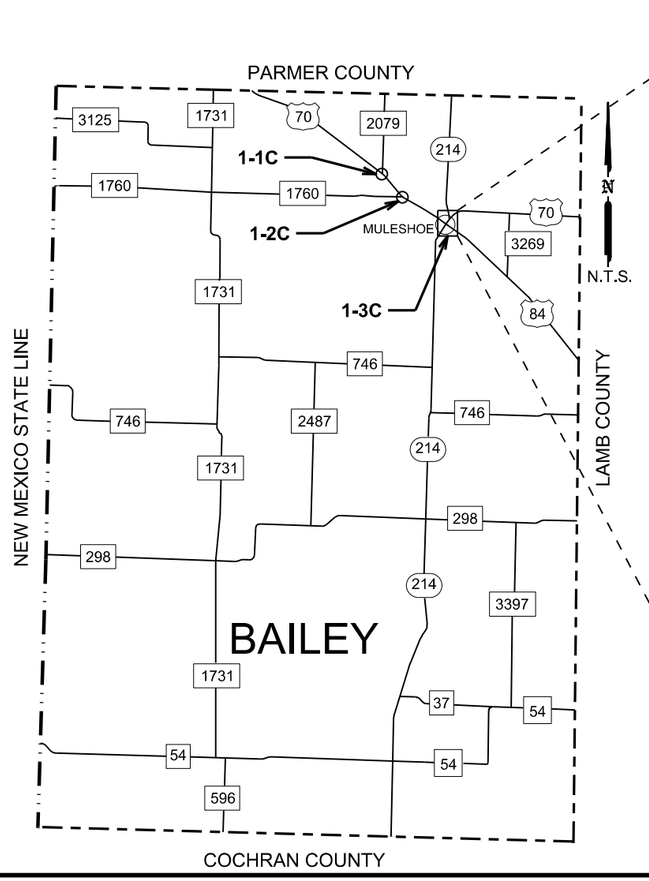
STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED
PROFESSIONAL ENGINEER

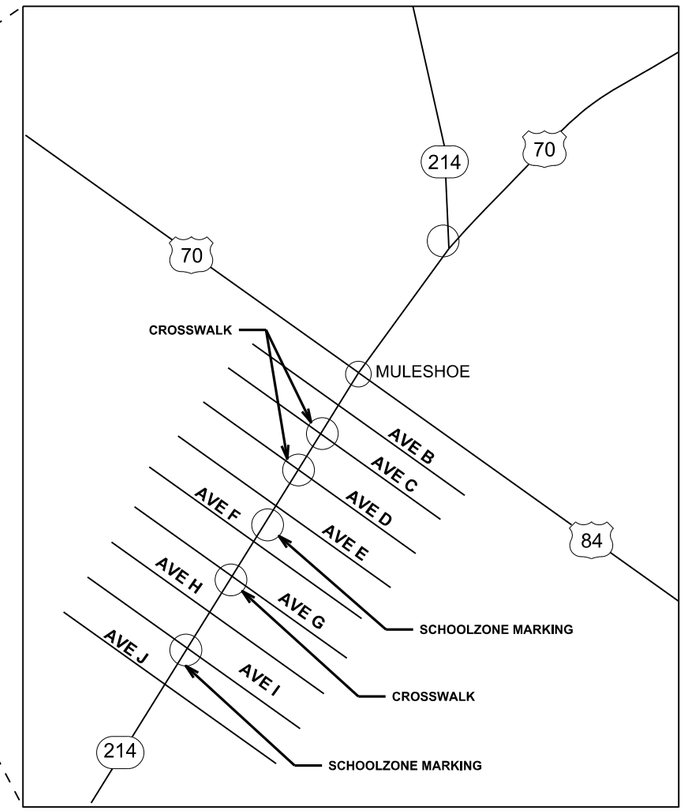
Jeremy T. Dearing, P.E.

01/05/2023

FED.RD. DIV.NO.			SHEET NO.
6			051
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023

County 1: Bailey	Hwy	Rdwy	Intersection	Cont	Sect	Begin TRM (MI)	End TRM (MI)	18"WS	24"WS	RR XING	12" ELIM	18" ELIM	24" ELIM	RR XING ELIM	NOTES
1-1C	US	70	AT FM 2079	52	02	246-0.258	246-0.258	0	90	2	0	0	90	2	1 STOPBAR, 2 RR CROSSING MARKINGS, 5 RR STOPBARS ON FM 2079
1-2C	US	70	AT FM 1760	52	02	248-0.821	248-0.0821	0	20	0	0	0	20	0	1 STOPBAR ON FM 1760(SOUTHBOUND DIRECTION)
1-3C	SH	214	BETWEEN AVE B AND AVE J IN MULESHOE	461	01	184-1.897	184-1.321	110	180	0	330	110	0	0	3-CROSSWALKS, 2-SCHOOLZONE MARKINGS IN MULESHOE (REMOVE 12"WS CROSSWALK & INSTALL 24"WS CROSSWALK)
						TOTAL		110	290	2	330	110	110	2	





STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED
PROFESSIONAL ENGINEER

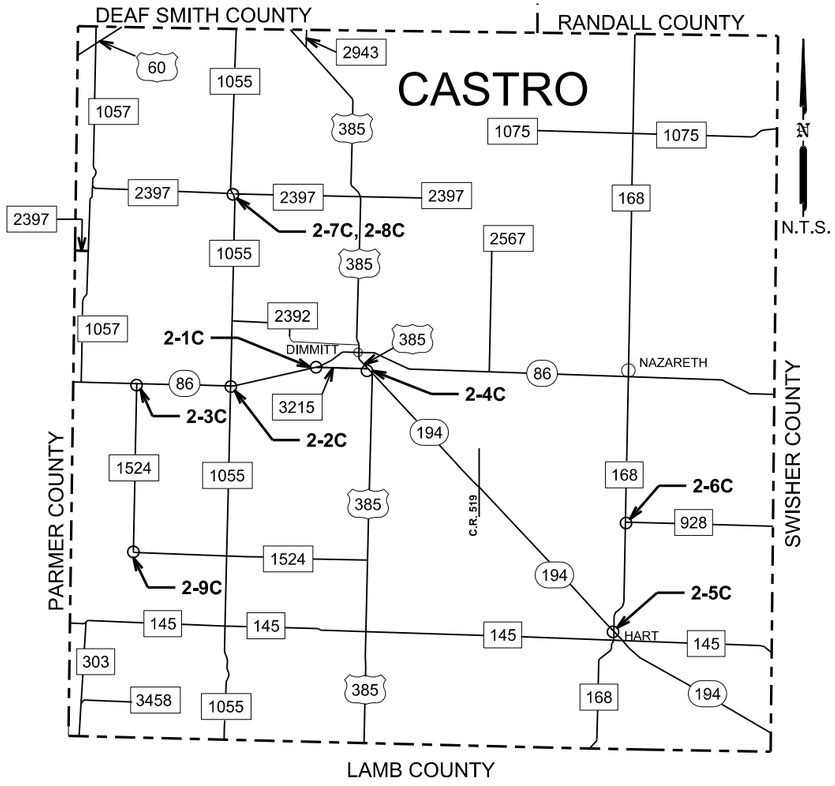
Jeremy T. Dearing, P.E.

01/05/2023

BAILEY COUNTY
PREFAB TY C

FED.RD. DIV.NO.			SHEET NO.
6			052
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023

County 2: Castro	Hwy	Rdwy	Intersection	Cont	Sect	Begin TRM (MI)	End TRM (MI)	24"WS	24" ELIM	NOTES
2-1C	SH	86	AT FM 3215	302	02	266+0.506	266+0.506	20	20	1 STOPBAR ON FM 3215
2-2C	SH	86	AT FM 1055	302	02	262+0.754	262+0.754	26	26	1 STOPBAR ON FM 1055 (SOUTHBOUND DIRECTION ONLY)
2-3C	SH	86	AT FM 1524	302	02	258-0.042	258-0.042	20	20	1 STOPBAR ON FM 1524
2-4C	US	385	AT FM 3215	439	01	148+0.320	148+0.320	30	30	1 STOPBAR ON FM 3215
2-5C	SH	194	AT FM 168	439	02	286-0.414	286-0.414	30	30	2 STOPBAR ON SH 194 (EASTBOUND & WESTBOUND DIRECTIONS)
2-6C	FM	168	AT FM 928	874	01	154+0.488	154+0.488	18	18	1 STOPBAR ON FM 928 (WESTBOUND DIRECTION)
2-7C	FM	1055	AT FM 2397	1291	01	136+0.994	136+0.994	15	15	1 STOPBAR ON FM 1055 (NORTHBOUND DIRECTION)
2-8C	FM	1055	AT FM 2397	1291	08	136+0.981	136+0.981	15	15	1 STOPBAR ON FM 1055 (SOUTHBOUND DIRECTION)
2-9C	FM	1524	AT FM 1524	1891	02	264+1.114	264+1.114	12	0	1 NEW STOPBAR ON FM 1524 (SOUTHBOUND DIRECTION) (NO ELIMINATION)
						TOTAL		186	174	



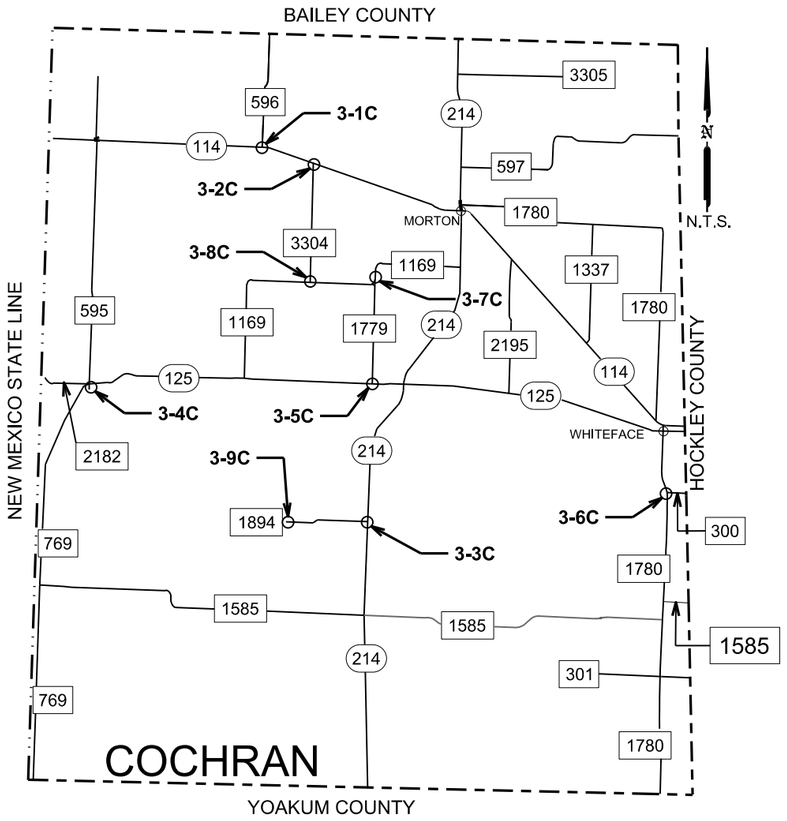
Jeremy T. Dearing, P.E.

01/05/2023

CASTRO COUNTY PREFAB TY C

FED.RD. DIV.NO.			SHEET NO.
6			053
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023

County 3: Cochran	Hwy	Rdwy	Intersection	Cont	Sect	Begin TRM (MI)	End TRM (MI)	24"WS	24" ELIM	NOTES
3-1C	SH	114	AT FM 596	130	01	232+0.354	232+0.354	24	24	1 STOPBAR ON FM 596
3-2C	SH	114	AT FM 3304	130	01	234+0.503	234+0.503	18	18	1 STOPBAR ON FM 3304
3-3C	SH	214	AT FM 1894	461	04	232+0.305	232+0.305	12	12	1 STOPBAR ON FM 1894
3-4C	SH	125	AT FM 595	967	02	228+0.279	228+0.279	12	12	1 STOPBAR ON FM 595 (NORTHBOUND DIRECTION)
3-5C	SH	125	AT FM 1779	967	02	240-0.375	240-0.375	10	10	1 STOPBAR ON FM 1779
3-6C	FM	300	AT FM 1780	1341	01	250-0.045	250-0.045	14	14	1 STOPBAR ON FM 300
3-7C	FM	1169	AT FM 1779	1481	01	242-0.573	242-0.573	24	24	1 STOPBAR ON FM 1779 (NORTHBOUND DIRECTION ONLY)
3-8C	FM	1169	AT FM 3304	1481	01	238+0.813	238+0.813	20	20	1 STOPBAR ON FM 3304
3-9C	FM	1894	AT COUNTY RD. 97	1894	01	234-0.047	234-0.047	12	12	1 STOPBAR ON FM 1894 (WESTBOUND DIRECTION)
						TOTAL		**146**	**146**	



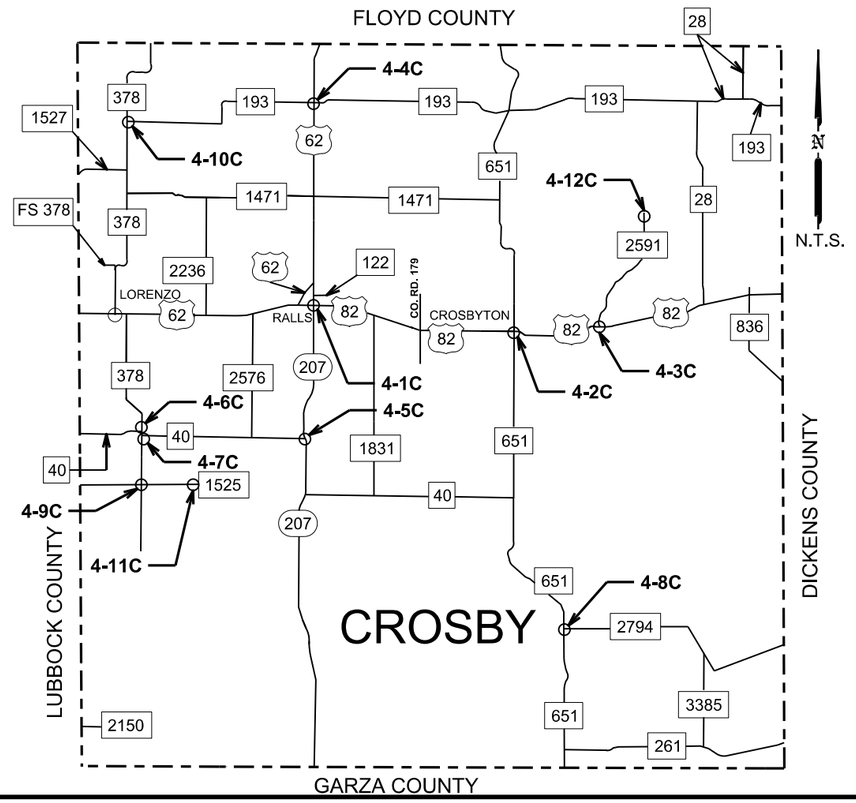
Jeremy T. Dearing, P.E.

01/05/2023

COCHRAN COUNTY
PREFAB TY C

FED.RD. DIV.NO.			SHEET NO.
6			054
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023

County 4: Crosby	Hwy	Rdwy	Intersection	Cont	Sect	Begin TRM (MI)	End TRM (MI)	24"WS	36"W (YLD TRI)	12" ELIM	24" ELIM	NOTES
4-1C	US	82	AT SH 207	131	03	338+0.105	338+0.105	60	0	0	60	2 STOPBARS ON SH 207 (NORTHBOUND & SOUTHBOUN DIRECTION)
4-2C	US	82	AT FM 651	131	04	346+0.764	346+0.764	134	0	124	62	1 STOPBAR ON FM 651 SOUTHBOUND, 1 CROSSWALK SOUTHBOUND (REMOVE 12"WS & INSTALL CROSSWALK WITH 24"WS)
4-3C	US	82	AT FM 2591	131	04	350+0.471	350+0.471	26	0	0	26	1 STOPBAR ON FM 2591
4-4C	US	62	AT FM 193	453	02	368-0.556	368-0.556	28	0	0	28	1 STOPBAR ON FM 193 (EASTBOUND DIRECTION ONLY)
4-5C	SH	207	AT FM 40 (WEST)	453	04	236+0.814	236+0.814	12	0	0	12	1 STOPBAR ON FM 40
4-6C	FM	40 (EAST)	AT FM 378	644	03	314-1.122	314-1.122	14	0	0	14	1 STOPBAR ON FM 40 (WESTBOUND DIRECTION)
4-7C	FM	40 (WEST)	AT FM 378	644	03	310+0.023	310+0.023	14	0	0	14	1 STOPBAR ON FM 40 (EASTBOUND DIRECTION)
4-8C	FM	651	AT FM 2794	806	03	222+0.930	222+0.930	12	0	0	12	1 STOPBAR ON FM 2794
4-9C	FM	378	AT FM 1525	800	04	222+0.276	222+0.276	24	0	0	24	2 STOPBARS ON FM 1525 (BOTH SIDES OF INTERSECTION
4-10C	FM	193	AT FM 378	1254	01	320+0.810	320+0.810	18	0	0	18	1 STOPBAR ON FM 193 (WESTBOUND DIRECTION ONLY)
4-11C	FM	1525	AT END OF STATE MAINTENANCE	1461	02	314+1.626	314+1.626	16	0	0	16	1 STOPBAR ON FM 1525 AT COUNTY RD. 131
4-12C	FM	2591	AT END OF STATE MAINTENANCE	2616	01	208+1.513	208+1.513	0	4	0	0	NEW YIELD TRIANGLES(NO EXISTING)
						TOTAL		**358**	**4**	**124**	**286**	



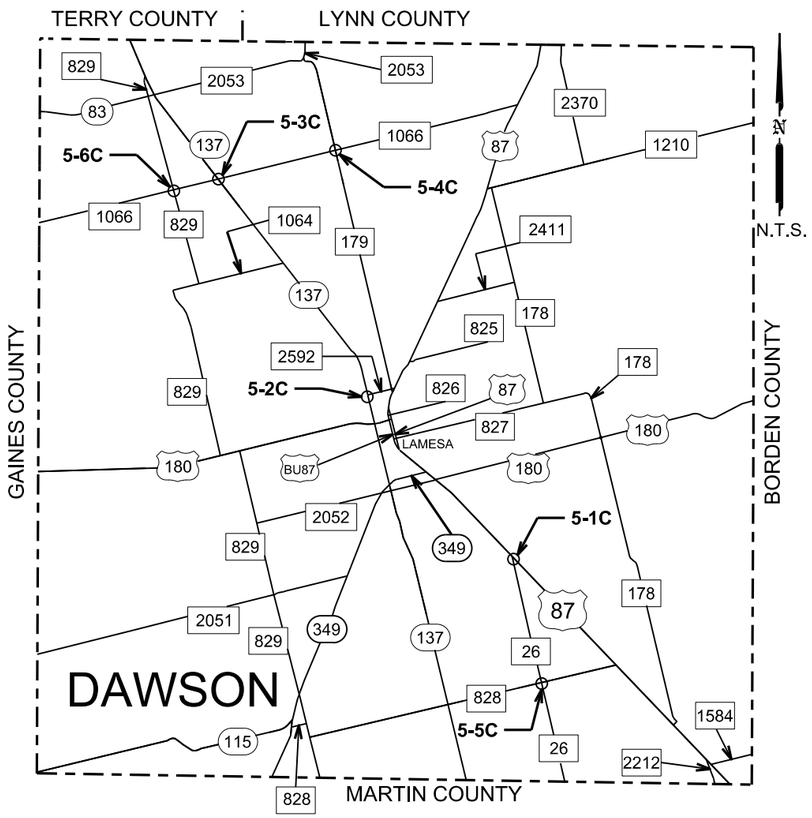
Jeremy T. Dearing, P.E.

01/05/2023

CROSBY COUNTY PREFAB TY C

FED.RD. DIV.NO.			SHEET NO.
6			055
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023

County 5: Dawson	Hwy	Rdwy	Intersection	Cont	Sect	Begin TRM (MI)	End TRM (MI)	24"WS	Arrow (Right)	24" ELIM	Arrow (R) ELIM	NOTES
5-1C	US	87	AT FM 26	68	05	276-0.067	276-0.067	20	0	20	0	1 STOPBAR ON FM 26
5-2C	SH	137	AT FM 2592	380	05	274+0.587	274+0.587	0	4	0	4	4 RIGHT ARROWS IN THE TURN LANE FOR FM 2592
5-3C	SH	137	AT FM 1066	380	05	264+0.162	264+0.162	32	0	32	0	2 STOPBARS ON FM 1066 (EASTBOUND & WESTBOUND DIRECTION)
5-4C	FM	179	AT FM 1066	494	05	286+0.945	286+0.945	20	0	20	0	1 STOPBAR ON FM 1066(EASTBOUND DIRECTION ONLY)
5-5C	FM	26	AT FM 828	637	01	282-0.592	282-0.592	26	0	26	0	2 STOPBARS ON FM 26 (NORTHBOUND & SOUTHBOUND DIRECTIONS ONLY)
5-6C	FM	829	AT FM 1066	1962	02	280-0.262	280-0.262	20	0	20	0	1 STOPBAR ON FM 1066 (WESTBOUND DIRECTION ONLY)
						TOTAL		**118**	**4**	**118**	**4**	



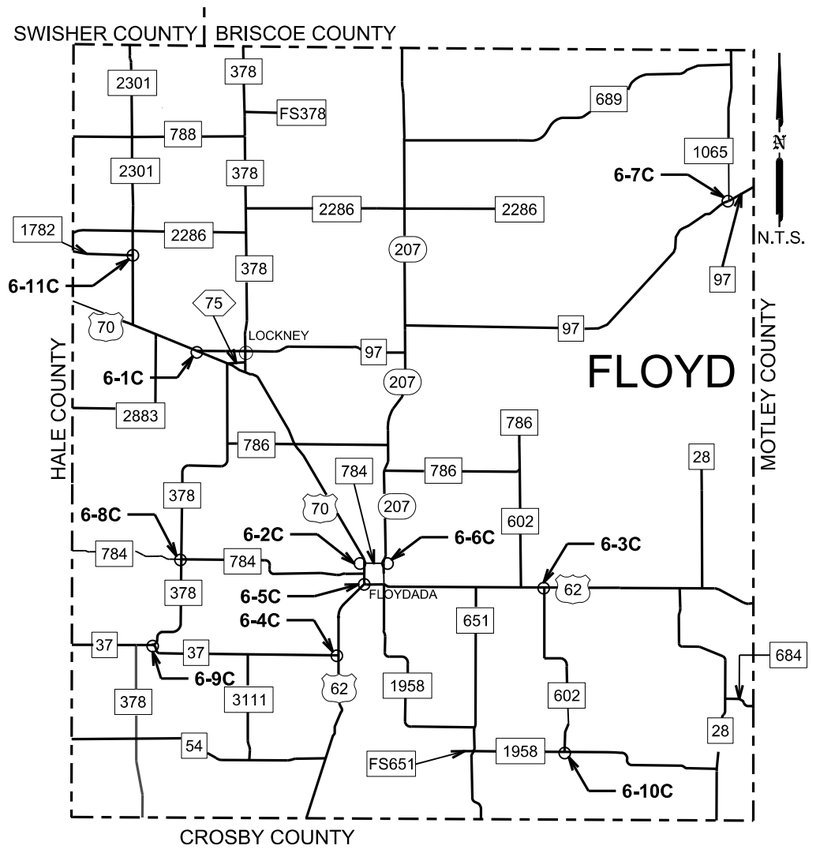
Jeremy T. Dearing, P.E.

01/05/2023

DAWSON COUNTY PREFAB TY C

FED.RD. DIV.NO.			SHEET NO.
6			056
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023

County 6: Floyd	Hwy	Rdwy	Intersection	Cont	Sect	Begin TRM (MI)	End TRM (MI)	12"WS	24"WS	12" ELIM	24" ELIM	NOTES
6-1C	US	70	AT FM 97	145	06	326-0.803	326-0.803	0	24	0	24	1 STOPBAR ON FM 97 (WESTBOUND DIRECTION)
6-2C	US	70	AT FM 784	145	06	338-0.01	338-0.01	0	40	0	22	1 STOPBAR ON FM 784
6-3C	US	62	AT FM 602	145	07	390+0.735	380+0.735	0	22	0	22	1 STOPBAR ON FM 602
6-4C	US	62	AT FM 37	453	01	380-0.355	380-0.355	0	24	0	24	1 STOPBAR ON FM 37
6-5C	US	62	AT US 70	453	01	384-0.741	384-0.894	400	0	400	0	HASH MARKS ON US 70 IN FLOYDADA (SEE SHEET 027)
6-6C	SH	207	AT FM 784	453	08	206+0.426	206+0.426	0	22	0	40	1 STOPBAR ON FM 784
6-7C	FM	97	AT FM 1065	707	03	344+0.865	344+0.865	0	22	0	22	2 STOPBARS ON FM 1065("Y"INTERSECTION)
6-8C	FM	378	AT FM 784 (WEST)	800	01	188+0.785	188+0.785	0	20	0	20	1 STOPBAR ON FM 784 (EASTBOUND DIRECTION ONLY)
6-9C	FM	37	AT FM 378	800	02	332-0.311	332-0.311	0	12	0	12	1 STOPBAR ON FM 37
6-10C	FM	602	AT FM 1958	1628	02	196+0.082	196+0.082	0	18	0	18	1 STOPBAR ON FM 602
6-11C	FM	1782	AT FM 2301	2698	02	314+0.061	314+0.061	0	18	0	18	1 STOPBAR ON FM 1782
						TOTAL		**400**	**222**	**400**	**222**	



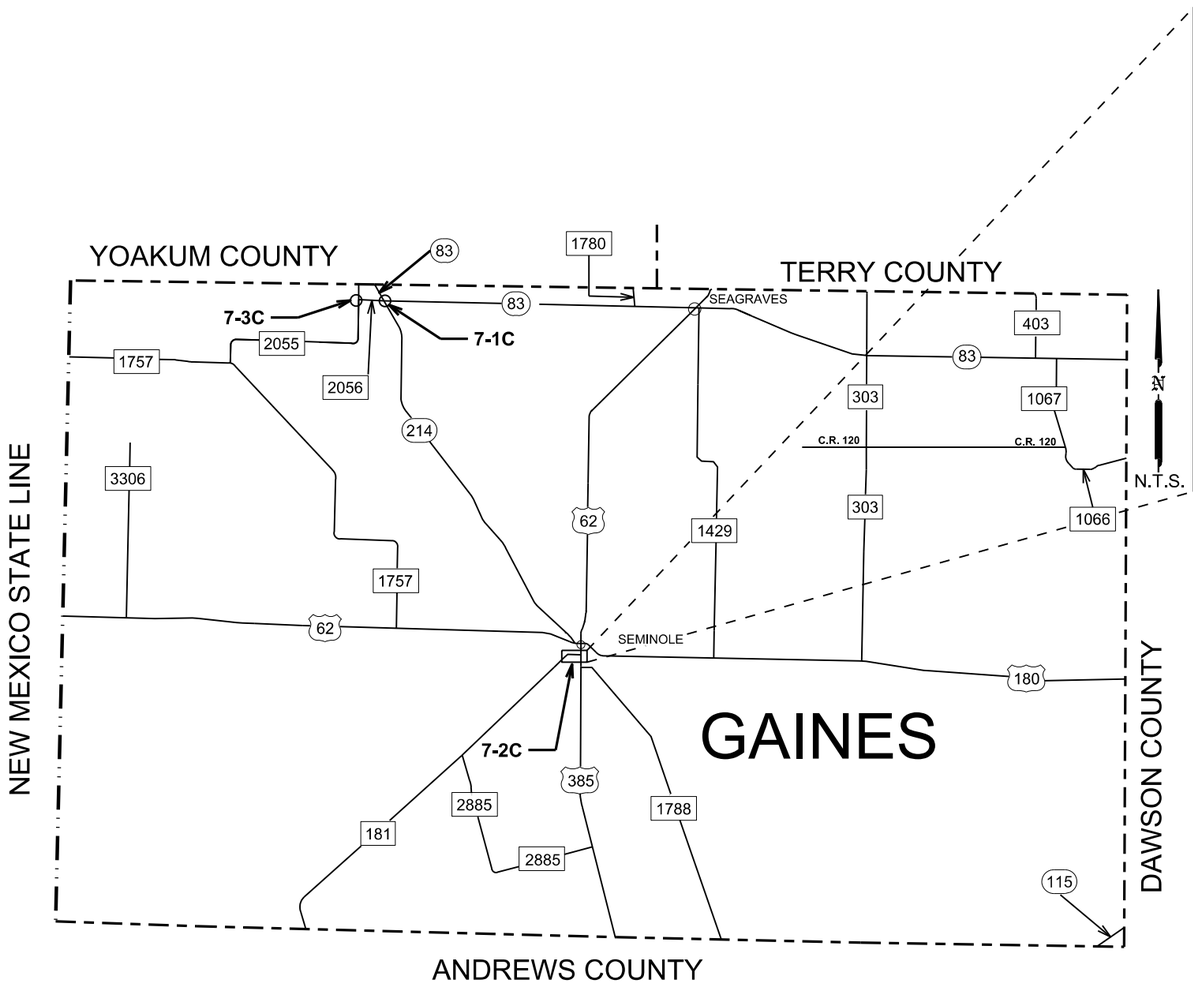
Jeremy T. Dearing, P.E.

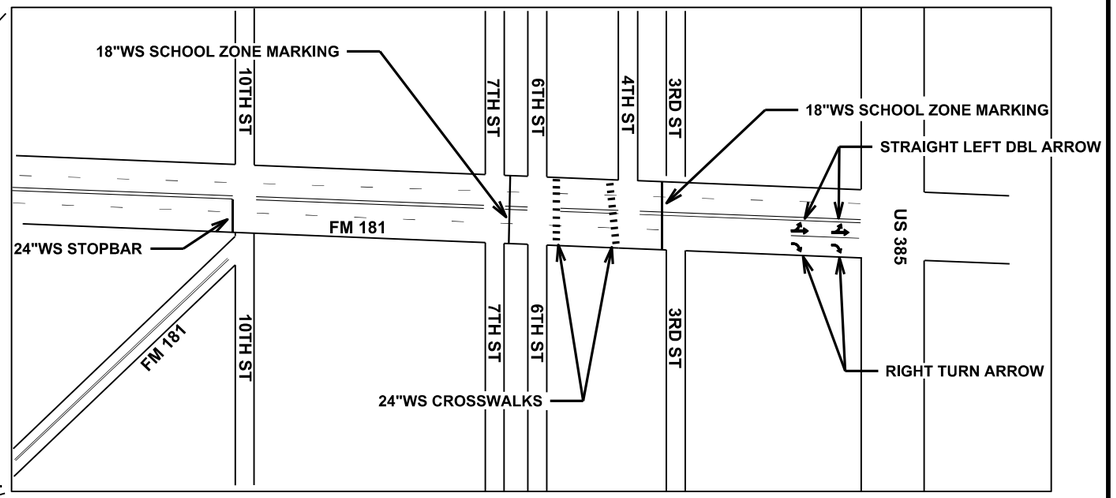
01/05/2023

FLOYD COUNTY
PREFAB TY C

FED.RD. DIV.NO.			SHEET NO.
6			057
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023

County 7: Gaines	Hwy	Rdwy	Intersection	Cont	Sect	Begin TRM (MI)	End TRM (MI)	18"WS	24"WS	Arrow (Right)	Arrow (DBL) (Straight-Left)	12" ELIM	18" ELIM	24" ELIM	Arrow (R) ELIM	Arrow (DBL) (Striaght-Left) ELIM	NOTES
7-1C	SH	214	AT FM 2056	461	09	276-0.835	276-0.835	0	15	0	0	0	0	15	0	0	1 STOPBAR ON FM 2056
7-2C	FM	181	10TH ST INTERSECTION TO US 385 INTERSECTION	961	01	272+0.60	272-0.042	128	175	2	2	250	128	30	2	2	IN SEMINOLE (2 CROSSWALKS, 2 SCHOOL ZONE MARKINGS, 1 STOPBAR, 2-RIGHT ARROWS, 2-STRAIGHT-LEFT ARROWS)
7-3C	FM	2055	AT FM 2056	1865	02	258-0.744	258-0.744	0	32	0	0	0	0	32			1 STOPBAR ON FM 2056
						TOTAL		**128**	**222**	**2**	**2**	**250**	**128**	**77**	**2**	**2**	





STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED
PROFESSIONAL ENGINEER

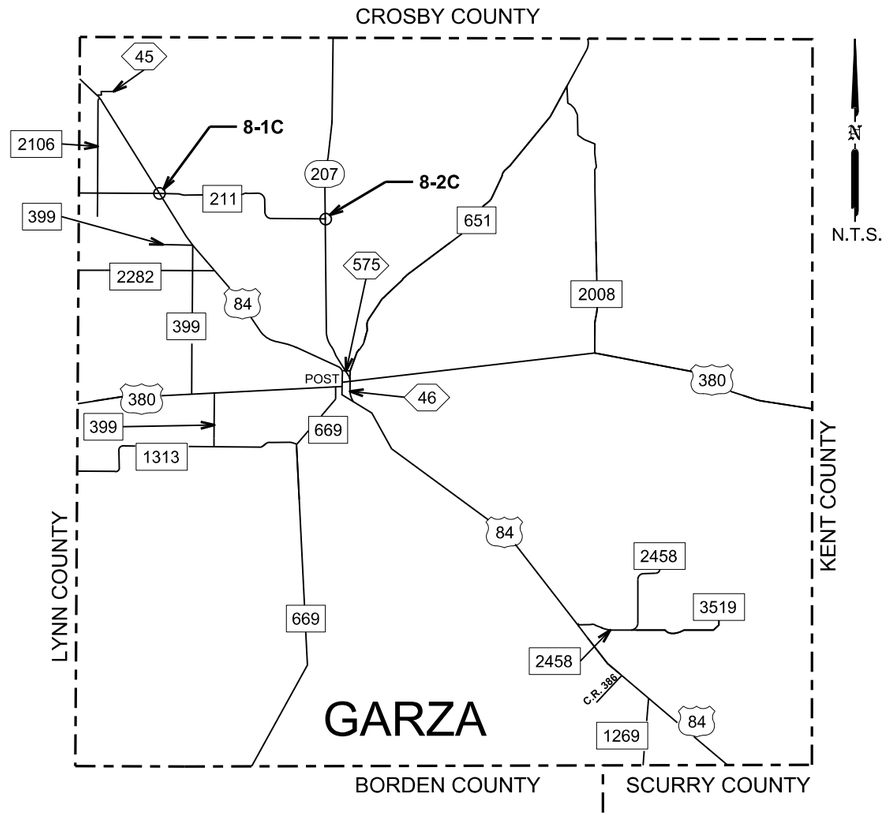
Jeremy T. Dearing, P.E.

01/05/2023

GAINES COUNTY PREFAB TY C

FED.RD. DIV.NO.			SHEET NO.
6			058
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023

County 8: Garza	Hwy	Rdwy	Intersection	Cont	Sect	Begin TRM (MI)	End TRM (MI)	24"WS	24" ELIM	NOTES
8-1C	US	84	AT FM 211	53	04	348+0.046	348+0.046	40	40	2 STOPBARS ON FM 211
8-2C	SH	207	AT FM 211	453	05	260-0.302	260-0302	20	20	1 STOPBAR ON FM 211
						TOTAL		**60**	**60**	



STATE OF TEXAS
JEREMY T. DEARING
98218
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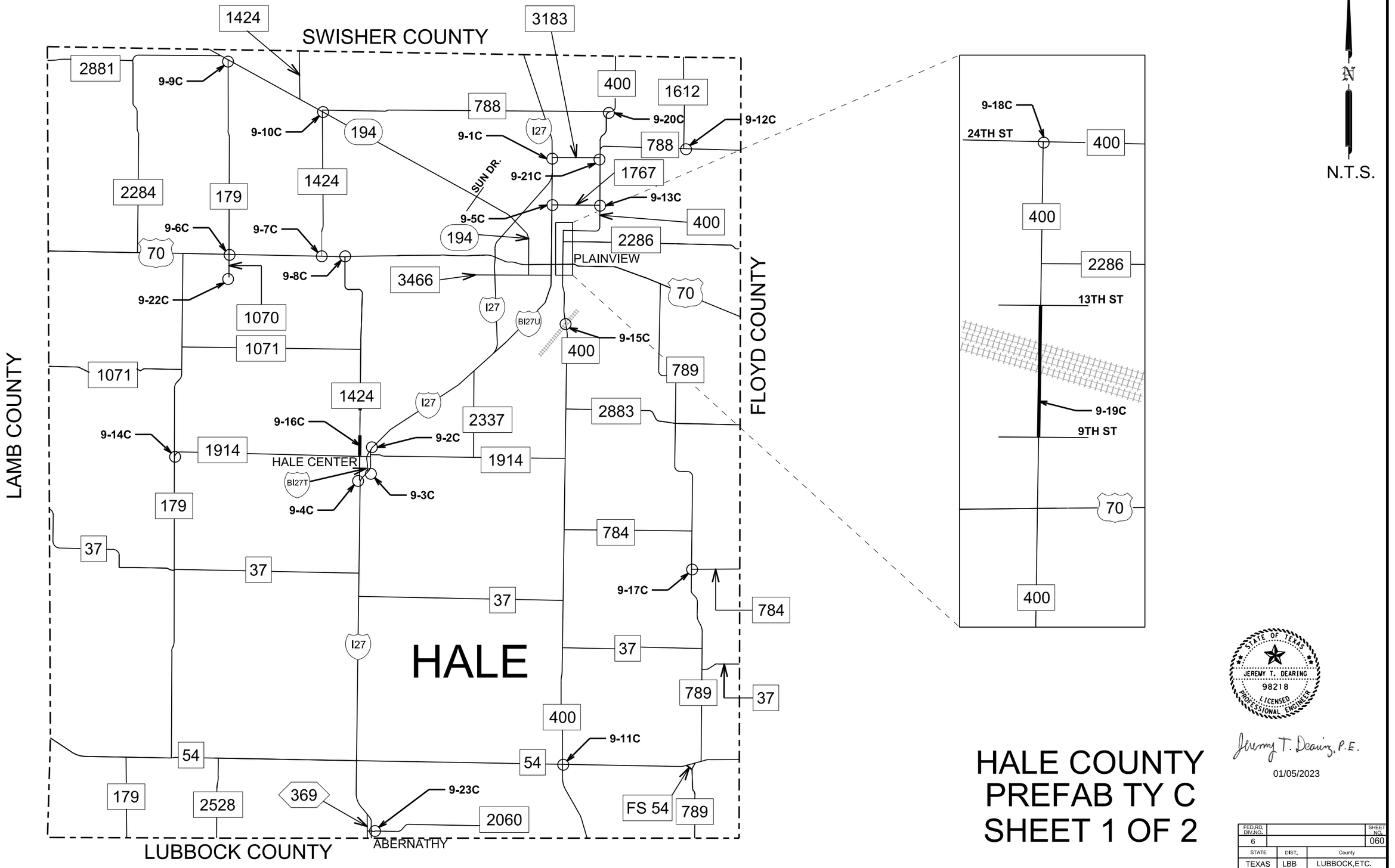
Jeremy T. Dearing, P.E.

01/05/2023

GARZA COUNTY PREFAB TY C

FED.RD. DIV.NO.			SHEET NO.
6			059
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023



STATE OF TEXAS
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01/05/2023

HALE COUNTY
PREFAB TY C
SHEET 1 OF 2

FED.RD. DIV.NO.			SHEET NO.
6			060
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023

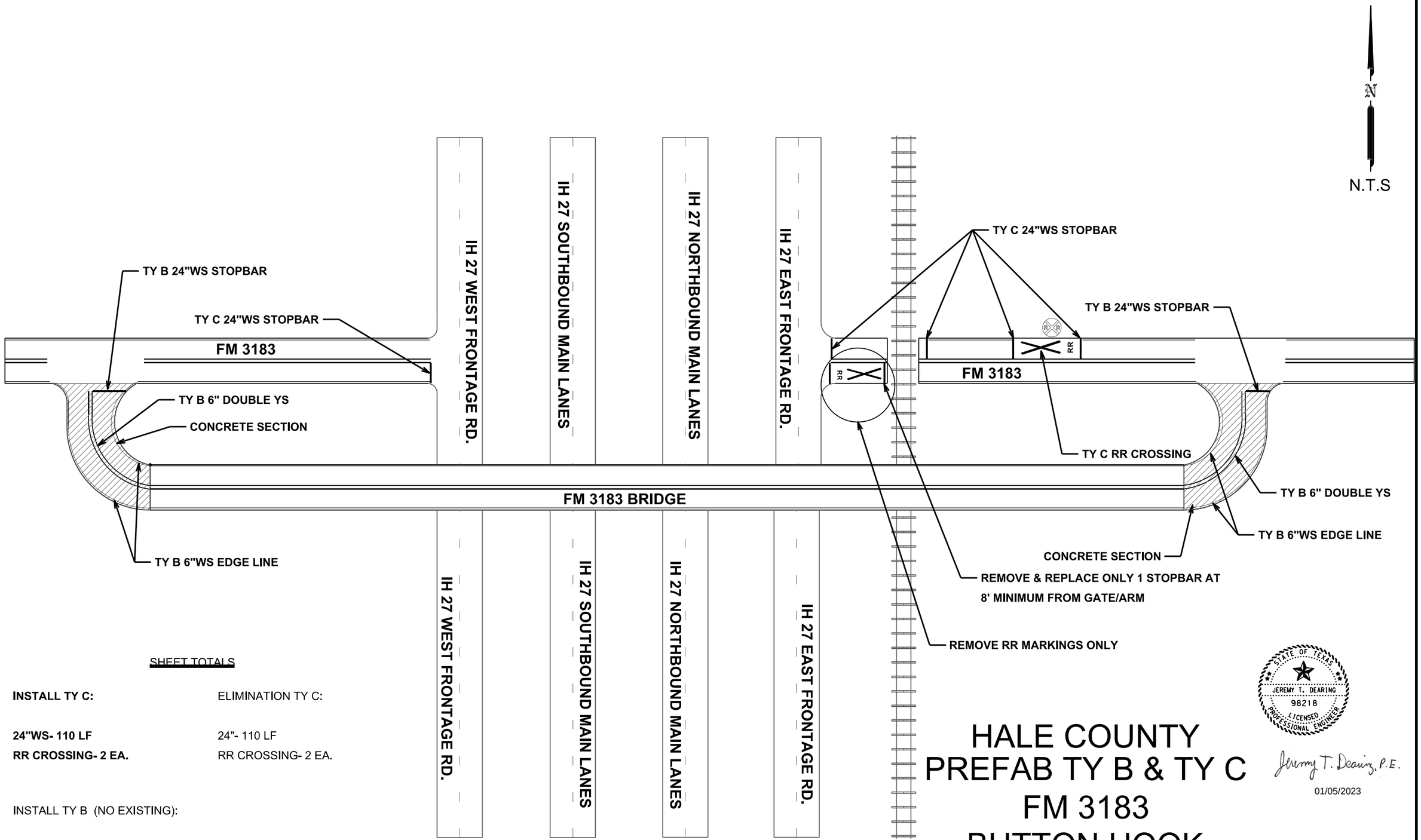
County 9: Hale	Hwy	Rdwy	Intersection	Cont	Sect	BegIn TRM (MI)	End TRM (MI)	18"WS	24"WS	Arrow (Left)	RR XING	36"W (YLD TRI)	12" ELIM	18" ELIM	24" ELIM	Arrow (L) ELIM	RR XING ELIM	18"YLD TRI ELIM	NOTES
9-1C	IH	27	AT FM 3183	67	04	54+0.16	54+0.16	0	110	0	1	0	0	0	110	0	2	0	SEE SHEET 062
9-2C	IH	27	AT BI27T (NORTHEND)	67	05	39-0.027	39-0.027	0	102	0	0	7	0	0	102	0	0	7	AT/UNDER BRIDGE OF IH 27 (4 STOP BARS, 1 YIELD LOCATION)
9-3C	IH	27	AT BI27T (SOUTHEND)	67	05	38-0.019	38-0.019	0	24	0	0	14	0	0	24	0	0	20	AT/UNDER BRIDGE OF IH 27 (2 STOP BARS, 2 YIELD LOCATIONS)
9-4C	IH	27	AT FM 1424	67	06	37+0.267	37+0.267	0	24	0	0	0	0	0	24	0	0	0	2 STOPBAR ON FM 1424 UNDER IH 27 BRIDGE
9-5C	BI	27U	AT FM 1767	67	09	170-0.593	170-0.593	0	80	0	2	0	0	0	80	0	2	0	1 STOPBAR AT BI 27U, 4 RR BARS ON FM 1767
9-6C	US	70	AT FM 179 & AT FM 1070	145	04	296-0.604	296-0.604	0	38	0	0	0	0	0	38	0	0	0	1 STOPBAR ON FM 179 SOUTHBOUND, 1 STOPBAR ON FM 1070 NORTHBOUND
9-7C	US	70	AT FM 1424 (NORTH)	145	04	300-0.77	300-0.77	0	18	0	0	0	0	0	18	0	0	0	1 STOPBAR ON FM 1424
9-8C	US	70	AT FM 1424 (SOUTH)	145	04	300+0.299	300+0.299	0	16	0	0	0	0	0	16	0	0	0	1 STOPBAR ON FM 1424
9-9C	SH	194	AT FM 179	439	04	298-0.981	298-0.981	0	24	0	0	0	0	0	24	0	0	0	1 STOPBAR ON FM 179
9-10C	SH	194	AT FM 1424	439	04	302-0.60	302-0.60	0	41	0	0	0	0	0	41	0	0	0	3 STOPBARS ON FM 1424
9-11C	FM	54	AT FM 400	563	06	306+0.788	306+0.788	0	36	0	0	0	0	0	36	0	0	0	2 STOPBARS ON FM 54 (EASTBOUND & WESTBOUND DIRECTIONS ONLY)
9-12C	FM	788	AT FM 1612	800	05	312+0.182	312+0.182	0	11	0	0	0	0	0	11	0	0	0	1 STOPBAR ON FM 1612
9-13C	FM	400	AT FM 1767	800	05	170+0.623	170+0.623	0	16	0	0	0	0	0	16	0	0	0	1 STOPBAR ON FM 1767
9-14C	FM	179	AT FM 1914	880	01	180+0.72	180+0.72	0	16	0	0	8	0	0	16	0	0	0	1 STOPBAR ON FM 1914, 2 YIELD LOCATIONS (NO EXISTING YIELD TRIANGLES)
9-15C	FM	400	AT OAK ST IN PLAINVIEW	1041	01	176-0.622	076-0.622	rr	120	0	3	0	0	0	120	0	3	0	3 RR CROSSING, 6 RR STOPBARS ON FM 400
9-16C	FM	1424	13TH ST TO FM 1914 IN HALE CENTER	1629	04	184+0.792	186-0.758	124	60	0	0	0	124	124	60	0	0	0	2 SCHOOL ZONE MARKINGS, 1 CROSSWALK AT 11TH ST, 2 STOPBAR AT FM 1914
9-17C	FM	784	AT FM 789	1750	04	312-0.808	312-0.808	0	0	0	0	12	0	0		0	0	0	3 YIELD LOCATIONS ON FM 784 (Y INTERSECTION) (NO EXISTING MARKINGS)
9-18C	FM	400	AT 24TH ST IN PLAINVIEW	1907	02	172+1.032	172+1.032	0	42	0	0	14	0	0	42	0	0	18	2 STOPBAR LOCATION, 2 YIELD LOCATIONS
9-19C	FM	400	13TH ST TO 9TH ST IN PLAINVIEW	1907	02	174-0.452	174-0.111	0	156	0	4	0	12	0	228	0	4	0	4 RR CROSSING, 8 RR STOPBARS, 1 CROSSWALK AT 9TH ST (INSTALL 24'WS CROSSWALK)
9-20C	FM	400	AT FM 788	1907	02	166+0.644	166+0.644	0	10	0	0	0	0	0	10	0	0	0	1 STOPBAR ON FM 400
9-21C	FM	400	AT FM 3183	1907	02	168+0.601	168+0.601	0	22	0	0	0	0	0	22	0	0	0	1 STOPBAR ON FM 3183
9-22C	FM	1070	AT COUNTY RD. 100	2445	01	170+0.914	170+0.914	0	10	0	0	0	0	0	10	0	0	0	1 STOPBAR AT COUNTY RD. 100
9-23C	FM	2060	IH 27 EAST FR. TO EAST ST	2500	01	296-0.049	296-0.049	0	120	0	2	0	0	0	120	0	2	0	1 STOPBAR ON FM 2060, 6 RR STOPBARS
						TOTAL		**124**	**1,096**	**0**	**12**	**55**	**136**	**124**	**1,168**	**0**	**13**	**45**	

Jeremy T. Dearing, P.E.

01/05/2023

HALE COUNTY
PREFAB TY C
SHEET 2 OF 2

FED.RD. DIV.NO.			SHEET NO.
6			061
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023



SHEET TOTALS

INSTALL TY C:	ELIMINATION TY C:
24"WS- 110 LF	24"- 110 LF
RR CROSSING- 2 EA.	RR CROSSING- 2 EA.

INSTALL TY B (NO EXISTING):

6" WS- 820 LF
6" YS- 840 LF
24"WS STOPBAR- 60 LF

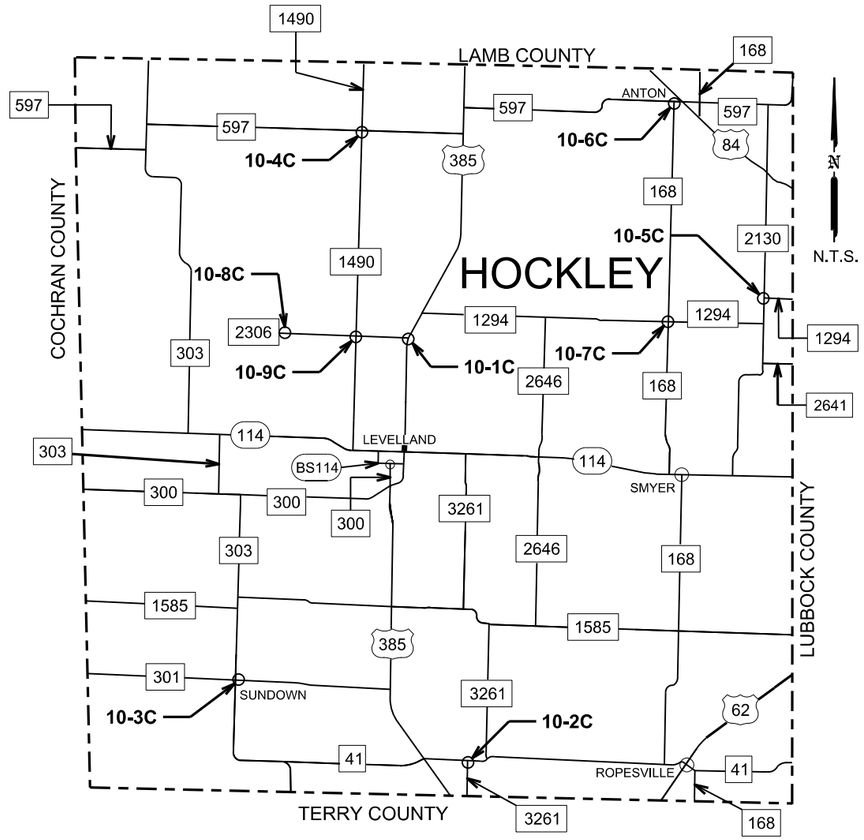
STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED
PROFESSIONAL ENGINEER

Jeremy T. Dearing, P.E.
01/05/2023

HALE COUNTY
PREFAB TY B & TY C
FM 3183
BUTTON HOOK
REF# 9-1C

FED.RD. DIV.NO.			SHEET NO.
6			062
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 LONGLINE			1/4/2023

County 10: Hockley	Hwy	Rdwy	Intersection	Cont	Sect	Begin TRM (MI)	End TRM (MI)	18"WS	24"WS	12" ELIM	18" ELIM	24" ELIM	NOTES
10-1C	US	385	AT FM 2306	227	05	212-0.453	212-0.453	0	20	0	0	20	1 STOPBAR ON FM 2306
10-2C	FM	41	AT FM 3261	645	05	262-0.147	262-0.147	0	18	0	0	18	1 STOPBAR ON FM 3261 (SOUTH)
10-3C	FM	301	AT FM 303, VEAL AVE, SCHOOL AVE, CITY LIMIT RD.	885	02	256+0.242	256+0.733	60	54	60	60	18	1 STOPBAR, 2 SCHOOL ZON E MARKINGS, 1 CROSSWALK ON FM 301 IN SUNDOWN (INSTALL 24"WS CROSSWALK)
10-4C	FM	597	AT FM 1490	969	02	266-0.791	266-0.791	0	18	0	0	18	1 STOPBAR ON FM 1490 (SOUTHBOUND ONLY)
10-5C	FM	1294	AT FM 2130	1866	02	282-0.507	282-0.507	0	16	0	0	16	1 STOPBAR ON FM 1294
10-6C	FM	168	AT FM 597	2334	01	206-1.073	206-1.073	0	22	0	0	22	1 STOPBAR ON FM 168
10-7C	FM	168	AT FM 1294	2334	01	214+0.028	214+0.028	0	42	0	0	42	3 STOPBARS ON FM 168 (NORTH SIDE OF FM 1294)
10-8C	FM	1490	AT HARTFORD RD	2421	02	258-0.047	262+1.525	0	16	0	0	16	1 STOPBAR ON FM 2306
10-9C	FM	1490	AT FM 2306	2904	01	262-0.598	262-0.598	0	44	0	0	44	2 STOPBARS ON FM 1490
						TOTAL		**60**	**250**	**60**	**60**	**214**	

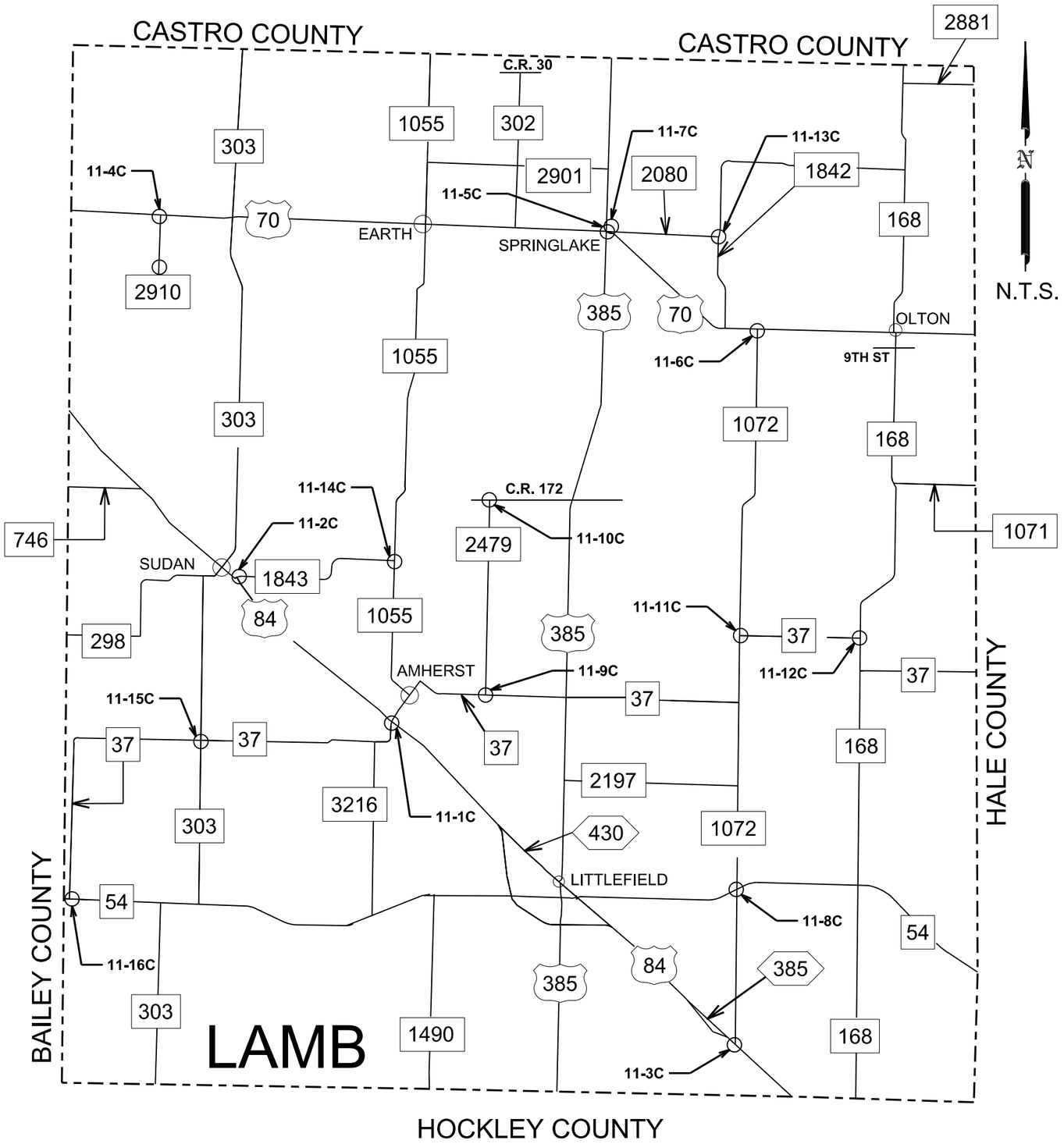


Jeremy T. Dearing, P.E.

01/05/2023

HOCKLEY COUNTY PREFAB TY C

FED.RD. DIV.NO.			SHEET NO.
6			063
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023



STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED
PROFESSIONAL ENGINEER

Jeremy T. Dearing, P.E.

01/05/2023

LAMB COUNTY
PREFAB TY C
SHEET 1 OF 2

FED.RD. DIV.NO.			SHEET NO.
6			064
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023

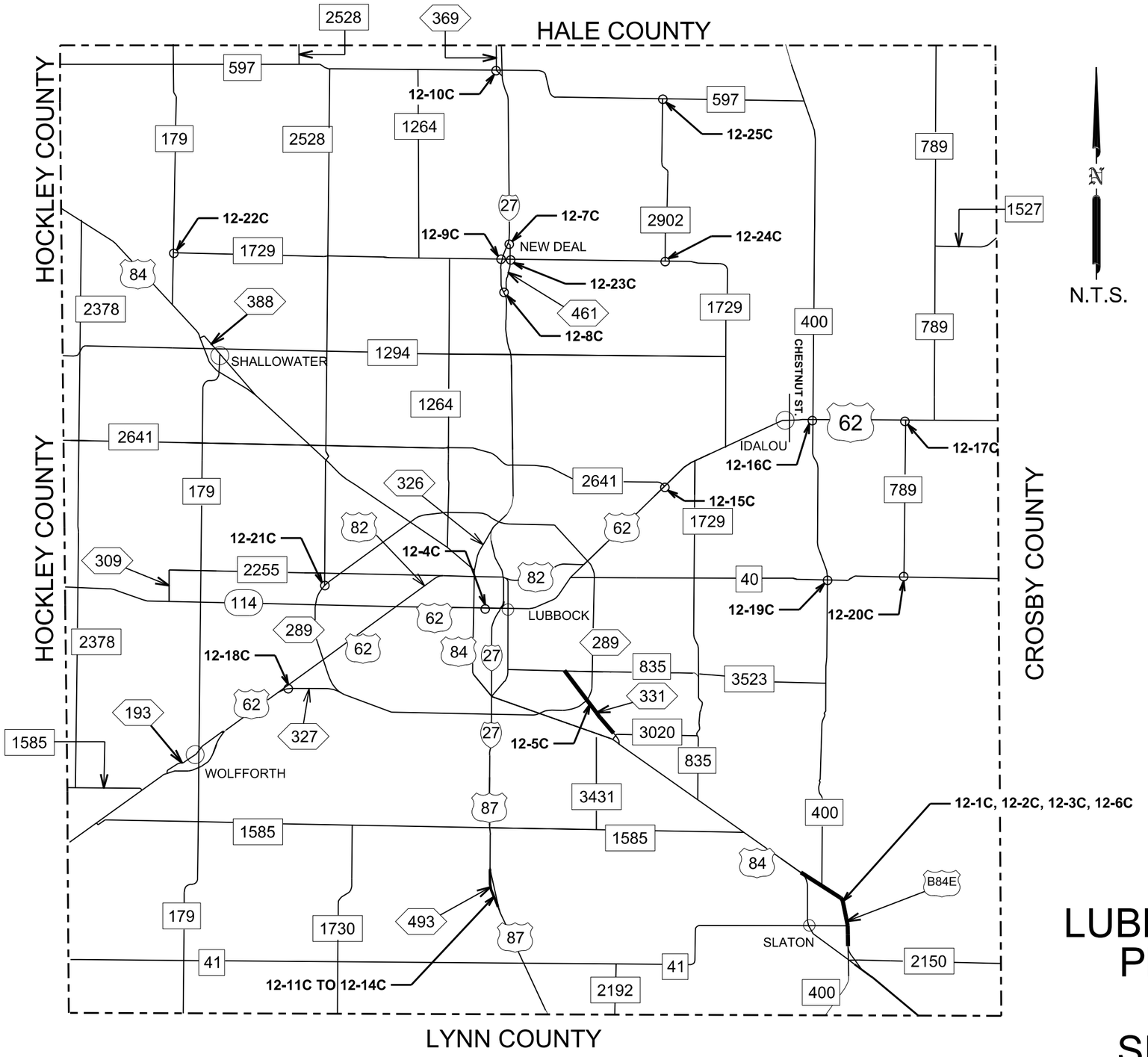
County 11: Lamb	Hwy	Rdwy	Intersection	Cont	Sect	Begin TRM (MI)	End TRM (MI)	24"WS	Arrow (Left)	RR XING	36"W (YLD TRI)	12" ELIM	24" ELIM	Arrow (L) ELIM	RR XING ELIM	36"YLD TRI ELIM	NOTES
11-1C	US	84	AT FM 37 (SOUTH)	52	04	272+0.464	272+0.464	22	0	0	0	0	22	0	0	0	1 STOPBAR ON FM 37 (NORTHBOUND DIRECTION ONLY)
11-2C	US	84	AT FM 1843	52	04	266-0.404	266-0.404	118	0	2	0	0	118	0	2	0	1 STOPBAR, 6 RR BARS ON FM 1843
11-3C	US	84	AT FM 1072	52	05	288+0.843	288+0.843	100	0	1	22	0	100	0	1	22	1 STOPBAR, 4 RR STOPBARS ON FM 1072 (REMOVE & REPLACE YIELD TRIANGLES IN CROSSOVER)
11-4C	US	70	AT FM 2910	145	02	260-0.811	260-0.811	22	0	0	0	0	22	0	0	0	1 STOPBAR ON FM 2910
11-5C	US	70	AT 385	145	03	272+1.692	272+1.692	298	8	0	0	152	160	8	0	0	4 STOPBAR, 8 LEFT ARROWS, 1 CROSSWALKS (ALL DIRECTIONS)(REMOVE 12"WS CROSSWALK & INSTALL 24"WS CROSSWALK)
11-6C	US	70	AT FM 1072	145	03	280-0.125	280-0.125	18	0	0	0	0	18	0	0	0	1 STOPBAR ON FM 1072
11-7C	US	385	AT FM 2080	227	02	274-0.349	274-0.349	12	0	0	0	0	12	0	0	0	1 STOPBAR ON FM 2080
11-8C	FM	54	AT FM 1072	563	04	274+0.738	274+0.738	30	0	0	0	0	30	0	0	0	2 STOPBAR ON FM 1072
11-9C	FM	37	AT FM 2479	884	04	270+0.989	270+0.989	16	0	0	0	0	16	0	0	0	1 STOPBAR ON FM 2479
11-10C	FM	2479	AT CR. 172	886	02	176-0.014	176-0.014	12	0	0	0	0	12	0	0	0	1 STOPBAR ON FM 2479
11-11C	FM	37	AT FM 1072	1252	01	282-0.691	282-0.691	18	0	0	0	0	18	0	0	0	1 STOPBAR ON FM 37
11-12C	FM	37	AT FM 168	1252	01	284+1.331	284+1.331	22	0	0	0	0	22	0	0	0	1 STOPBAR ON FM 37
11-13C	FM	1842	AT FM 2080	1252	02	276-0.587	276-0.587	20	0	0	0	0	20	0	0	0	1 STOPBAR ON FM 2080
11-14C	FM	1055	AT FM 1843	1291	02	176+0.92	176+0.92	14	0	0	0	0	14	0	0	0	1 STOPBAR ON FM 1843
11-15C	FM	37	AT FM 303	1631	01	260+0.193	260+0.193	24	0	0	0	0	24	0	0	0	2 STOPBAR ON FM 37
11-16C	FM	37	AT FM 54	1631	01	252-1.733	252-1.733	12	0	0	0	0	12	0	0	0	1 STOPBAR ON FM 37
						TOTAL		**758**	**8**	**3**	**22**	**152**	**620**	**8**	**3**	**22**	

Jeremy T. Dearing, P.E.

01/05/2023

LAMB COUNTY
PREFAB TY C
SHEET 2 OF 2

FED.RD. DIV.NO.			SHEET NO.
6			065
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023



LUBBOCK COUNTY PREFAB TY C MAP SHEET 1 OF 3

STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED PROFESSIONAL ENGINEER

Jeremy T. Dearing, P.E.

01/05/2023

FED.RD. DIV.NO.			SHEET NO.
6			066
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023

County 12: Lubbock	Hwy	Rdwy	Intersection	Cont	Sect	Begin TRM (MI)	End TRM (MI)	18"WS	24"WS	Arrow (Left)	Arrow (Right)	Arrow (Straight)	Arrow (DBL) (Straight-Right)	Arrow (DBL) (Straight-Left)	Arrow (LNDP)	RR XING	36"W (YLD TRI)	12"YS	Multishield (US)	NOTES
12-1C	US	84E	AT FM 41	52	19	336+0.41	336+0.41	0	318	1	5	0	0	0	0	0	0	0	0	DO ALL OF INTERSECTION ON BU 84 E (4 CROSSWALKS, 4 STOPBARS) (INSTALL 24"WS CROSSWALKS)
12-2C	US	84E	AT GENEVA ST, POWERS ST, JEAN ST, & 9TH ST IN SLATON	52	19	336+0.644	336+0.711	96	82	0	0	0	0	0	0	0	7	0	0	2 SCHOOL ZONE MARKINGS, 1 CROSSWALK, 1 STOPBAR, 1 YIELD LOCATION (INSTALL 24"WS CROSSWALK)
12-3C	US	84E	AT US 84 (NORTH END)	52	19	334-0.109	334-0.109	0	0	0	0	0	0	0	0	0	0	390	0	HASH MARKS ON US 84 E MERGING ONTO US 84 (NO EXISTING MARKINGS)
12-4C	US	82	MSF AT AVE L	53	01	310+0.266	310+0.266	0	26	0	4	0	0	0	0	0	0	0	0	SEE SHEET 037
12-5C	SS	331	50TH ST INTERSECTION TO NEAR FM 3020	53	01	216-0.008	218+0.931	0	192	3	0	0	0	0	0	5	0	0	1	US 84 SHIELD AT FM 3020, 3 ARROWS AT SL 289, 5 RR MARKINGS
12-6C	US	84E	AT FM 400	53	01	334+0.399	334+0.399	0	78	0	0	0	0	0	0	1	0	0	0	1 STOPBAR, 4 RR STOPBARS ON FM 400
12-7C	IH	27	AT FM 461 (NORTH END)	67	07	16-0.230	16-0.23	0	114	2	0	0	0	0	0	0	4	0	0	3 STOPBARS, 2 ARROWS, 1 YIELD LOCATION ON SL 461
12-8C	IH	27	AT FM 461 (SOUTH END)	67	07	14+0.115	14+0.115	0	106	2	0	0	0	0	0	0	7	0	0	3 STOPBARS, 2 ARROWS, 1 YIELD LOCATION ON SL 461
12-9C	IH	27	AT FM 1729	67	07	15+0.164	15+0.164	0	0	2	0	0	0	0	0	0	0	0	0	2 LEFT ARROWS UNDER IH 27 BRIDGE
12-10C	SL	369	AT FM 597	67	14	196+0.20	196+0.20	0	24	0	0	0	0	0	0	0	0	0	0	1 STOPBAR ON FM 597 (EASTBOUND DIRECTION ONLY)
12-11C	US	87	AT SL 493 (NORTH END)	68	01	278+0.562	278+0.562	0	12	0	0	0	0	0	0	0	0	0	0	1 STOPBAR ON SL 493
12-12C	US	87	AT WOODROW RD	68	01	280+0.766	280+0.766	0	186	1	2	4	5	6	0	0	0	0	0	SEE SHEET LAYOUT 069
12-13C	US	87	AT SL 493 (SOUTH END)	68	07	280-0.403	280-0.403	0	14	0	0	0	0	0	0	0	0	0	0	1 STOPBAR ON SL 493
12-14C	SL	493	AT WOODROW RD	68	14	222+0.566	222+0.566	0	255	2	3	0	4	5	0	0	0	0	0	SEE SHEET LAYOUT 070
12-15C	US	62	AT FM 2641	131	01	338-0.979	338-0.979	0	12	0	0	0	0	0	0	0	0	0	0	1 STOPBAR ON FM 2641
12-16C	US	62	AT FM 400	131	02	342+0.332	342+0.332	0	48	0	0	0	0	0	0	0	0	0	0	2 STOPBARS ON FM 400 (NORTHBOUND & SOUTHBOUND DIRECTION)
12-17C	US	62	AT FM 789 (SOUTH)	131	02	346-0.937	346-0.937	0	22	0	0	0	0	0	0	0	0	0	0	1 STOPBAR ON FM 789 (SOUTH)
12-18C	SS	327 F.R.	NEAR MILWAUKEE AVE.	380	15	286+0.741	286-0.031	0	0	0	0	0	0	0	6	0	0	430	0	YELLOW HASH MARKS ON NORTH FRONTAGE RD. EAST SIDE OF MILWUAKEE AVE, ARROWS WEST OF MILWAUKEE ON FRONTAGE RD. AND BRIDGE
12-19C	FM	40	AT FM 400	644	01	304+0.325	304+0.325	0	88	0	0	0	0	0	0	0	0	0	0	4 STOPBARS ON ALL DIRECTIONS
12-20C	FM	40	AT FM 789	644	01	306+0.868	308+0.868	0	22	0	0	0	0	0	0	0	0	0	0	1 STOPBAR ON FM 789
12-21C	SL	289	WEST SL 289 AT FRANKFORD AVE	783	02	291-0.144	291-0.144	0	166	0	0	0	1	0	0	0	0	160	0	SEE SHEET 039
12-22C	FM	179	AT FM 1729	880	03	206+0.045	206+0.045	0	13	0	0	0	0	0	0	0	0	0	0	1 STOPBAR ON FM FM 1729
12-23C	SL	461	AT FM 1729	1632	01	296+0.296	296+0.296	0	16	0	0	0	0	0	0	0	0	0	0	1 STOPBAR ON FM 1729 (EASTBOUND DIRECTION ONLY)
12-24C	FM	1729	AT FM 2902	1632	02	302-0.706	302-0.706	0	22	0	0	0	0	0	0	0	0	0	0	1 STOPBAR ON FM 2902
12-25C	FM	597	AT FM 2902	2047	02	306+0.004	306+0.004	0	20	0	0	0	0	0	0	0	0	0	0	1 STOPBAR ON FM 2902
						TOTAL		**96**	**1,836**	**13**	**14**	**4**	**10**	**11**	**6**	**6**	**18**	**980**	**1**	

STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED
PROFESSIONAL ENGINEER

Jeremy T. Dearing, P.E.

01/05/2023

LUBBOCK COUNTY
PREFAB TY C
SHEET 2 OF 3

FED.RD. DIV.NO.		SHEET NO.
6		067
STATE	DIST.	County
TEXAS	LBB	LUBBOCK,ETC.
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME		DATE
2023 SPECIALTY		1/4/2023

County 12: Lubbock	Hwy	Rdwy	Intersection	Cont	Sect	Begin TRM (MI)	End TRM (MI)	12" ELIM	18" ELIM	24" ELIM	Arrow (L) ELIM	Arrow (R) ELIM	Arrow (S) ELIM	Arrow (DBL) (Straight-Right) ELIM	Arrow (DBL) (Striaght-Left) ELIM	Arrow (LNDP) ELIM	RR XING ELIM	36"YLD TRI ELIM	NOTES
12-1C	US	84E	AT FM 41	52	19	336+0.41	336+0.41	376	0	318	1	5	0	0	0	0	0	0	DO ALL OF INTERSECTION ON BU 84 E (4 CROSSWALKS, 4 STOPBARS) (INSTALL 24"WS CROSSWALKS)
12-2C	US	84E	AT GENEVA ST, POWERS ST, JEAN ST, & 9TH ST IN SLATON	52	19	336+0.644	336+0.711	96	96	28	0	0	0	0	0	0	0	0	2 SCHOOL ZONE MARKINGS, 1 CROSSWALK, 1 STOPBAR, 1 YIELD LOCATION (INSTALL 24"WS CROSSWALK)
12-3C	US	84E	AT US 84 (NORTH END)	52	19	334-0.109	334-0.109	0	0	0	0	0	0	0	0	0	0	0	HASH MARKS ON US 84 E MERGING ONTO US 84 (NO EXISTING MARKINGS)
12-4C	US	82	MSF AT AVE L	53	01	310+0.266	310+0.266	0	0	26	0	4	0	0	0	0	0	0	SEE SHEET 037
12-5C	SS	331	50TH ST INTERSECTION TO NEAR FM 3020	53	01	216-0.008	218+0.931	0	0	192	3	0	0	0	0	0	0	0	US 84 SHIELD AT FM 3020, 3 ARROWS AT SL 289, 5 RR MARKINGS
12-6C	US	84E	AT FM 400	53	01	334+0.399	334+0.399	0	0	78	0	0	0	0	0	0	1	0	1 STOPBAR, 4 RR STOPBARS ON FM 400
12-7C	IH	27	AT FM 461 (NORTH END)	67	07	16-0.230	16-0.23	0	0	114	2	0	0	0	0	0	0	4	3 STOPBARS, 2 ARROWS, 1 YIELD LOCATION ON SL 461
12-8C	IH	27	AT FM 461 (SOUTH END)	67	07	14+0.115	14+0.115	0	0	106	2	0	0	0	0	0	0	7	3 STOPBARS, 2 ARROWS, 1 YIELD LOCATION ON SL 461
12-9C	IH	27	AT FM 1729	67	07	15+0.164	15+0.164	0	0	0	2	0	0	0	0	0	0	0	2 LEFT ARROWS UNDER IH 27 BRIDGE
12-10C	SL	369	AT FM 597	67	14	196+0.20	196+0.20	0	0	24	0	0	0	0	0	0	0	0	1 STOPBAR ON FM 597 (EASTBOUND DIRECTION ONLY)
12-11C	US	87	AT SL 493 (NORTH END)	68	01	278+0.562	278+0.562	0	0	12	0	0	0	0	0	0	0	0	1 STOPBAR ON SL 493
12-12C	US	87	AT WOODROW RD	68	01	280+0.766	280+0.766	0	0	186	1	2	4	5	6	0	0	0	SEE SHEET LAYOUT 069
12-13C	US	87	AT SL 493 (SOUTH END)	68	07	280-0.403	280-0.403	0	0	14	0	0	0	0	0	0	0	0	1 STOPBAR ON SL 493
12-14C	SL	493	AT WOODROW RD	68	14	222+0.566	222+0.566	292	0	75	2	3	0	4	5	0	0	0	SEE SHEET LAYOUT 070
12-15C	US	62	AT FM 2641	131	01	338-0.979	338-0.979	0	0	12	0	0	0	0	0	0	0	0	1 STOPBAR ON FM 2641
12-16C	US	62	AT FM 400	131	02	342+0.332	342+0.332	0	0	48	0	0	0	0	0	0	0	0	2 STOPBARS ON FM 400 (NORTHBOUND & SOUTHBOUND DIRECTION)
12-17C	US	62	AT FM 789 (SOUTH)	131	02	346-0.937	346-0.937	0	0	22	0	0	0	0	0	0	0	0	1 STOPBAR ON FM 789 (SOUTH)
12-18C	SS	327 F.R.	NEAR MILWAUKEE AVE.	380	15	286+0.741	286-0.031	430	0	0	0	0	0	0	0	6	0	0	YELLOW HASH MARKS ON NORTH FRONTAGE RD. EAST SIDE OF MILWUAKEE AVE, ARROWS WEST OF MILWAUKEE ON FRONTAGE RD. AND BRIDGE
12-19C	FM	40	AT FM 400	644	01	304+0.325	304+0.325	0	0	88	0	0	0	0	0	0	0	0	4 STOPBARS ON ALL DIRECTIONS
12-20C	FM	40	AT FM 789	644	01	306+0.868	308+0.868	0	0	22	0	0	0	0	0	0	0	0	1 STOPBAR ON FM 789
12-21C	SL	289	WEST SL 289 AT FRANKFORD AVE	783	02	291-0.144	291-0.144	200	0	34	0	0	0	0	0	0	0	0	SEE SHEET 039
12-22C	FM	179	AT FM 1729	880	03	206+0.045	206+0.045	0	0	13	0	0	0	0	0	0	0	0	1 STOPBAR ON FM FM 1729
12-23C	SL	461	AT FM 1729	1632	01	296+0.296	296+0.296	0	0	16	0	0	0	0	0	0	0	0	1 STOPBAR ON FM 1729 (EASTBOUND DIRECTION ONLY)
12-24C	FM	1729	AT FM 2902	1632	02	302-0.706	302-0.706	0	0	22	0	0	0	0	0	0	0	0	1 STOPBAR ON FM 2902
12-25C	FM	597	AT FM 2902	2047	02	306+0.004	306+0.004	0	0	20	0	0	0	0	0	0	0	0	1 STOPBAR ON FM 2902
						TOTAL		**1,394**	**96**	**1,470**	**13**	**14**	**4**	**9**	**11**	**6**	**1**	**11**	

STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED
PROFESSIONAL ENGINEER

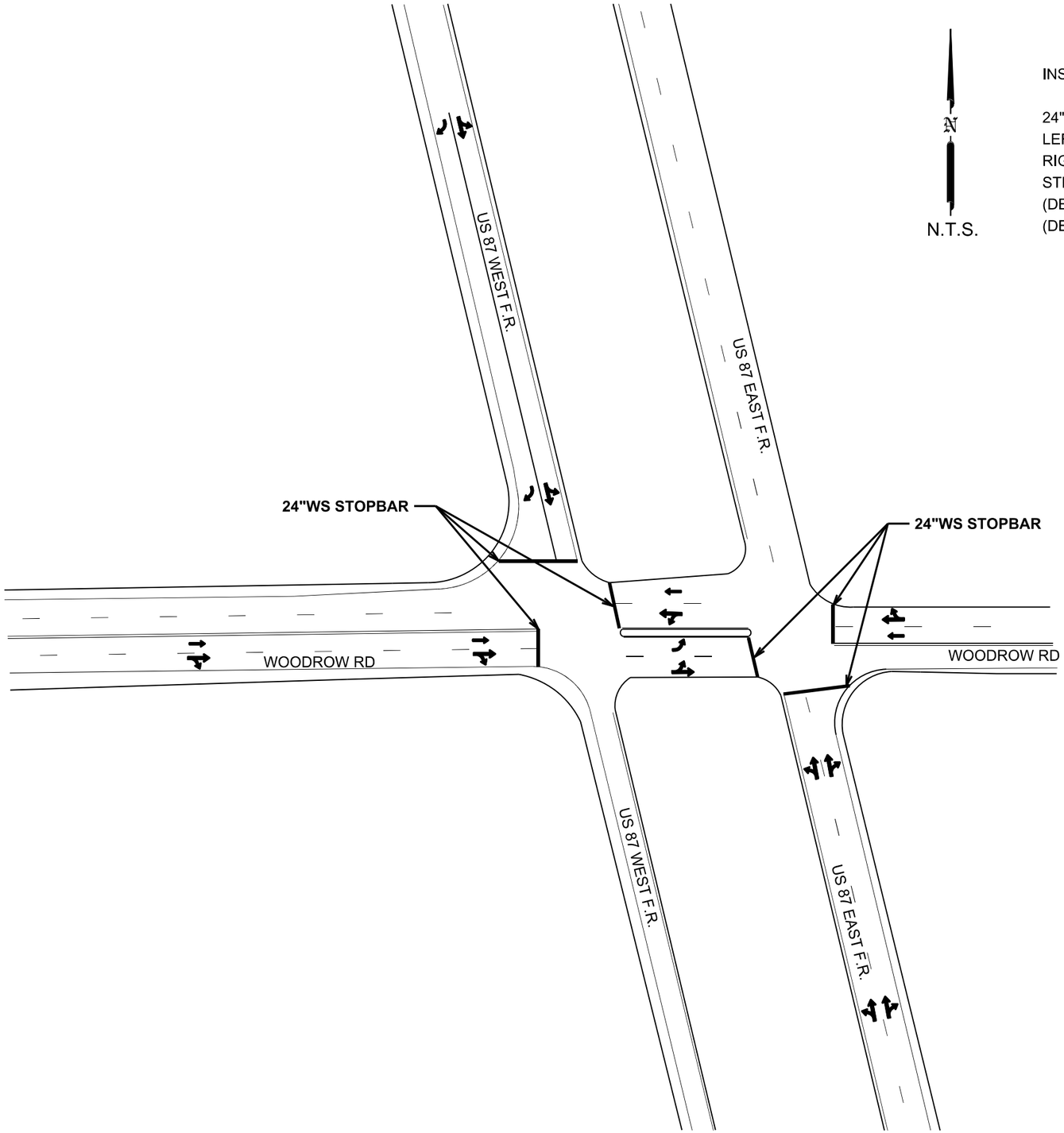
Jeremy T. Dearing, P.E.

01/05/2023

LUBBOCK COUNTY
PREFAB TY C
SHEET 3 OF 3

FED.RD. DIV.NO.		SHEET NO.
6		068

STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023



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N.T.S.

SHEET TOTALS

INSTALL:	ELIMINATION:
24"WS STOPBAR - 186 LF	24"WS STOPBAR - 186 LF
LEFT ARROW- 1 EA.	LEFT ARROW- 1 EA.
RIGHT ARROW- 2 EA.	RIGHT ARROW- 2 EA.
STRAIGHT ARROW- 4 EA.	STRAIGHT ARROW- 4 EA.
(DBL) ARROW (STRAIGHT-RIGHT) - 5 EA.	(DBL) ARROW (STRAIGHT-RIGHT) - 5 EA.
(DBL) ARROW (STRAIGHT-LEFT) - 6 EA.	(DBL) ARROW (STRAIGHT-LEFT) - 6 EA.

LUBBOCK COUNTY
PREFAB TY C
US 87 F.R.
AT
WOODROW RD.
REF# 12-12C

STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED
PROFESSIONAL ENGINEER

Jeremy T. Dearing, P.E.

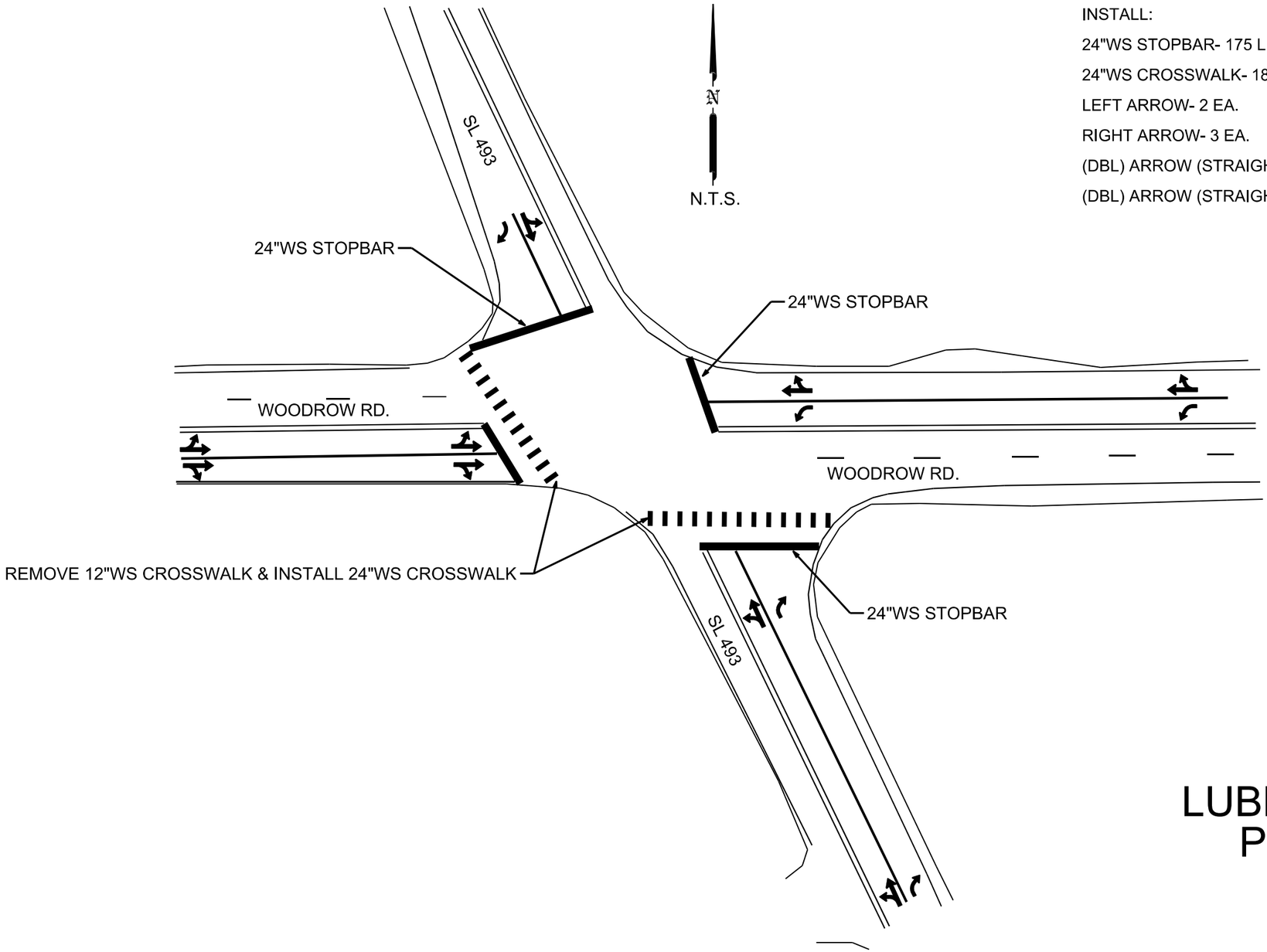
01/05/2023

FED.RD. DIV.NO.			SHEET NO.
6			069
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023

SHEET TOTALS

INSTALL:
24"WS STOPBAR- 175 LF
24"WS CROSSWALK- 180 LF
LEFT ARROW- 2 EA.
RIGHT ARROW- 3 EA.
(DBL) ARROW (STRAIGHT-RIGHT)- 4 EA.
(DBL) ARROW (STRAIGHT-LEFT) 5 EA.

ELIMINATION:
12"WS CROSSWALK- 292 LF
24"WS STOPBAR- 175 LF
LEFT ARROW- 2 EA.
RIGHT ARROW- 3 EA.
(DBL) ARROW (STRAIGHT-RIGHT)- 4 EA.
(DBL) ARROW (STRAIGHT-LEFT) 5 EA.



LUBBOCK COUNTY
PREFAB TY C
SL 493
AT
WOODROW RD.
REF# 12-14C

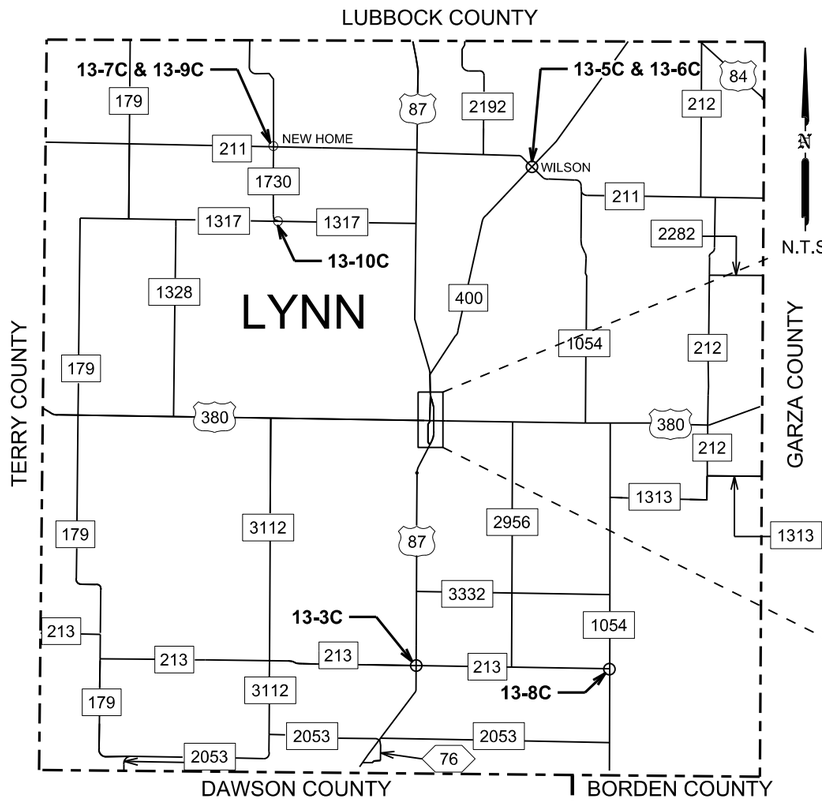
STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED
PROFESSIONAL ENGINEER

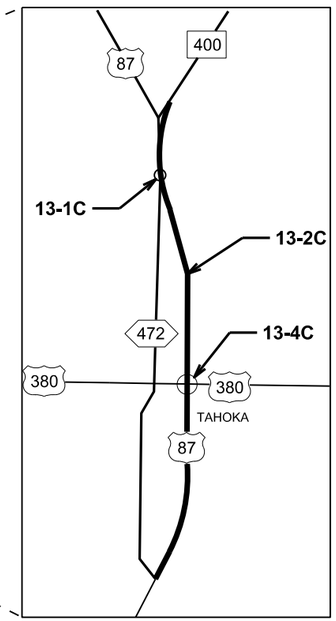
Jeremy T. Dearing, P.E.

01/05/2023

FED.RD. DIV.NO.			SHEET NO.
6			070
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023

County 13: Lynn	Hwy	Rdwy	Intersection	Cont	Sect	Begin TRM (MI)	End TRM (MI)	18"WS	24"WS	36"W (YLD TRI)	12" ELIM	18" ELIM	24" ELIM	36"YLD TRI ELIM	NOTES
13-1C	US	87	AT SL 472 (NORTH END)	68	02	300+0.604	300+0.604	0	106	4	0	0	106	4	3 STOPBARS, 1 YIELD LOCATION ON SL 472 IN TAHOKA
13-2C	US	87 F.R.	FM 400 INTERSECTION TO SL 472 (SOUTHEND) INTERSECTION	68	02	300+0.604	300+0.847	0	12	68	0	0	0	68	1 STOPBAR AT SL 472 (SOUTH END), ALL YIELD LOCATIONS STARTING FROM FM 400 TO SL 472 ON FRONTAGE RDS NORTHBOUND & SOUTHBOUND
13-3C	US	87	AT FM 213	68	03	312+0.2977	312+0.297	0	26	0	0	0	26	0	1 STOPBAR ON FM 213 (WESTBOUND DIRECTION ONLY)
13-4C	US	87	AT US 380 (TAHOKA)	297	06	302-0.476	302-0.476	0	78	0	84	0	24	0	SEE SHEET 042
13-5C	FM	211	AT FM 400	721	05	302-0.320	302-0.32	0	46	0	0	0	46	0	2 STOPBARS ON FM 211
13-6C	FM	211	AT 13TH ST, 14TH ST,15TH ST,16TH ST IN WILSON	721	05	300+0.278	300+0.495	120	144	0	0	120	0	0	2 SCHOOL ZONE MARKINGS, 2 CROSSWALKS(REMOVE 12"WS CROSSWALK & INSTALL 24"WS CROSSWALK)
13-7C	FM	211	AT FM 1730	721	04	290-0.47	290-0.47	0	34	0	0	0	34	0	2 STOPBARS ON FM 1730 (NORTHBOUND & SOUTHBOUND
13-8C	FM	213	AT FM 1054	879	05	310+0.738	310-0.738	0	18	0	0	0	18	0	1 STOPBAR ON FM 213
13-9C	FM	1730	BETWEEN 1ST INTERSECTION & 4TH ST INTERSECTION IN NEW HOME	1344	01	232+0.949	234-0.921	112	72	0	112	0	0	0	2 SCHOOL ZONE MARKINGS, 1 CROSSWALK (REMOVE 12"WS & INSTALL 24"WS CROSSWALK)
13-10C	FM	1317	AT FM 1730	1344	01	292+0.142	292+0.142	0	24	4	0	0	24	4	2 STOPBARS ON FM 1730 & 1 YIELD LOCATION
							TOTAL	**232**	**560**	**76**	**196**	**120**	**278**	**76**	





STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED
PROFESSIONAL ENGINEER

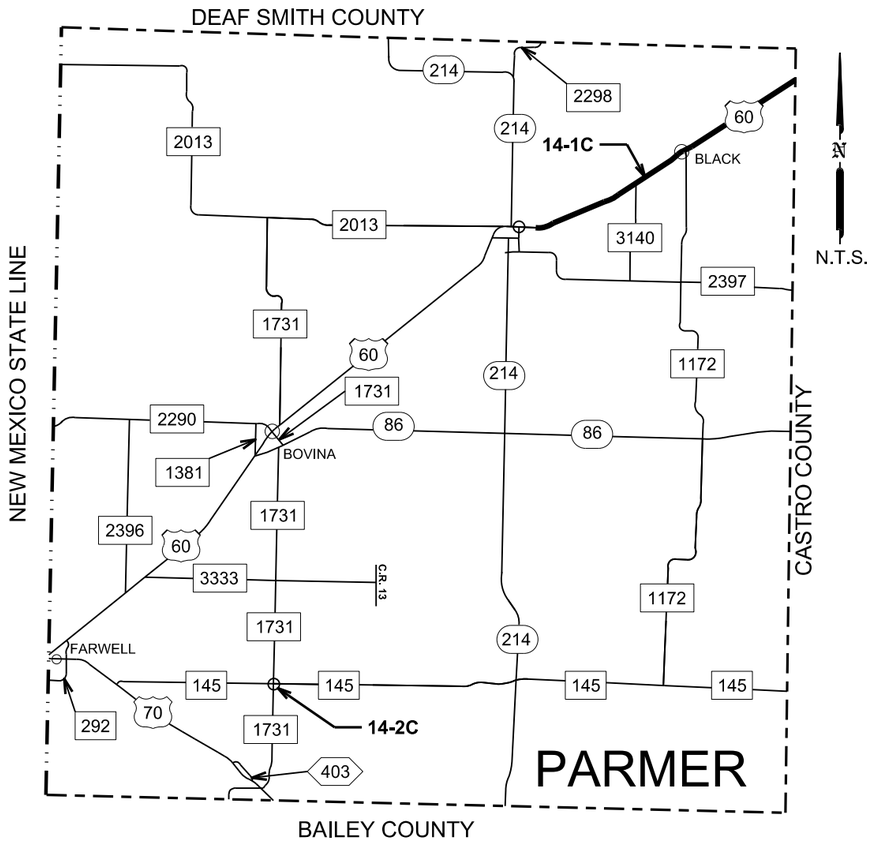
Jeremy T. Dearing, P.E.

01/05/2023

LYNN COUNTY PREFAB TY C

FED.RD. DIV.NO.			SHEET NO.
6			071
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023

County 14: Parmer	Hwy	Rdwy	Intersection	Cont	Sect	Begin TRM (MI)	End TRM (MI)	24"WS	Arrow (Left)	36"W (YLD TRI)	24" ELIM	Arrow (L) ELIM	NOTES
14-1C	US	60	AT EACH CROSSOVER FROM FRIONA TO CASTRO CO. LINE	168	03	240-0.492	266+0.017	94	136	11	94	136	INCLUDE 4 STOPBARS, 1 YIELD LOCATION IN BLACK NEAR FM 1731
14-2C	FM	145	AT FM 1731	754	01	236+0.375	236+0.375	16	0	0	16	0	1 STOPBAR ON FM 145 (EASBOUND DIRECTION ONLY)
						TOTAL		**110**	**136**	**11**	**110**	**136**	



STATE OF TEXAS
JEREMY T. DEARING
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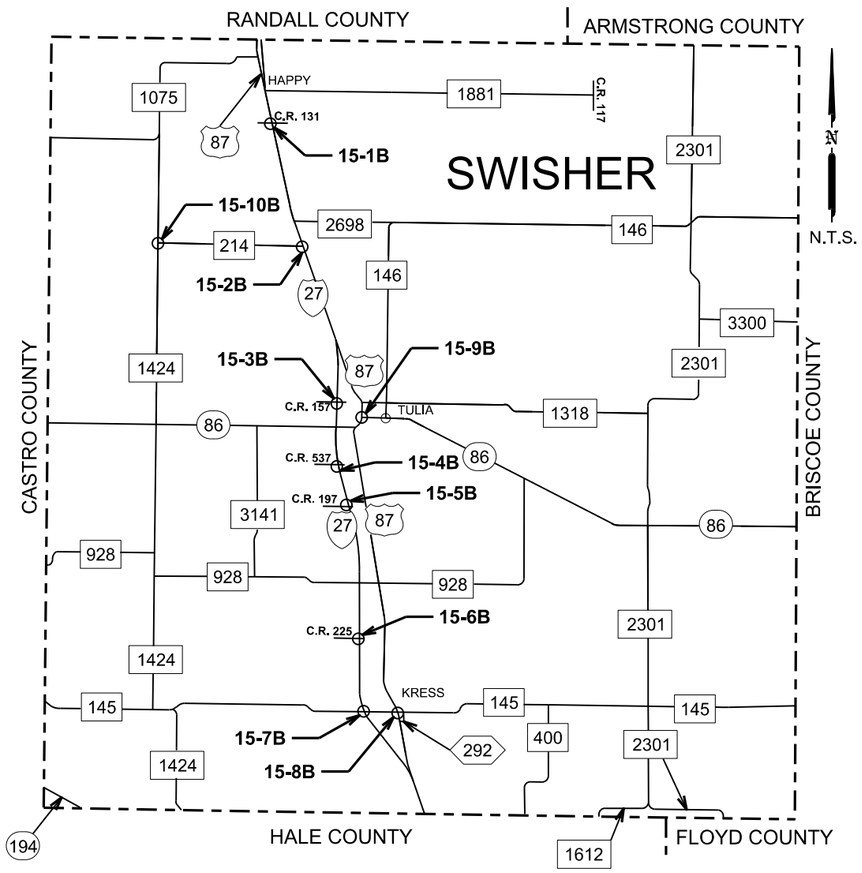
Jeremy T. Dearing, P.E.

01/05/2023

PARMER COUNTY PREFAB TY C

FED.RD. DIV.NO.			SHEET NO.
6			072
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023

County 15: Swisher	Hwy	Rdwy	Intersection	Cont	Sect	Begin TRM (MI)	End TRM (MI)	24"WS	RR XING	12" ELIM	24" ELIM	RR XING ELIM	NOTES
15-1B	IH	27	AT COUNTY RD 131	67	02	86+0.404	86+0.404	114	1	0	114	2	SEE SHEET 074
15-2B	IH	27	AT FM 214	67	02	82+0.158	82+0.158	84	1	0	84	2	SEE SHEET 075
15-3B	IH	27	AT COUNTY RD 157	67	03	76-0.231	76-0.231	70	0	0	70	0	SEE SHEET 076
15-4B	IH	27	AT COUNTY RD 537	67	03	74-0.334	74-0.334	56	0	0	56	0	SEE SHEET 077
15-5B	IH	27	AT COUNTY RD 197	67	03	70+0.441	70+0.441	60	0	0	60	0	SEE SHEET 078
15-6B	IH	27	AT COUNTY RD. 225	67	03	66+0.331	66+0.331	64	0	0	64	0	SEE SHEET 079
15-7B	IH	27	AT FM 145	67	03	63+0.155	63+0.155	66	0	0	66	0	SEE SHEET 080
15-8B	US	87	AT FM 145	67	18	208-0.766	208-0.766	14	0	0	14	0	1 STOPBAR ON FM 145 (EASTBOUND DIRECTION ONLY)
15-9B	US	87	AT SH 86 IN TULIA	67	18	196-0.67	196-0.67	22	0	0	0	0	1 STOPBAR ON SH 86 (WESTBOUND DIRECTION)
15-10B	FM	214	AT FM 1424	755	04	292-0.045	292-0.045	12	0	0	12	0	1 STOPBAR ON FM 214
						TOTAL		**562**	**2**	**0**	**540**	**4**	



Jeremy T. Dearing, P.E.

01/05/2023

SWISHER COUNTY PREFAB TY C

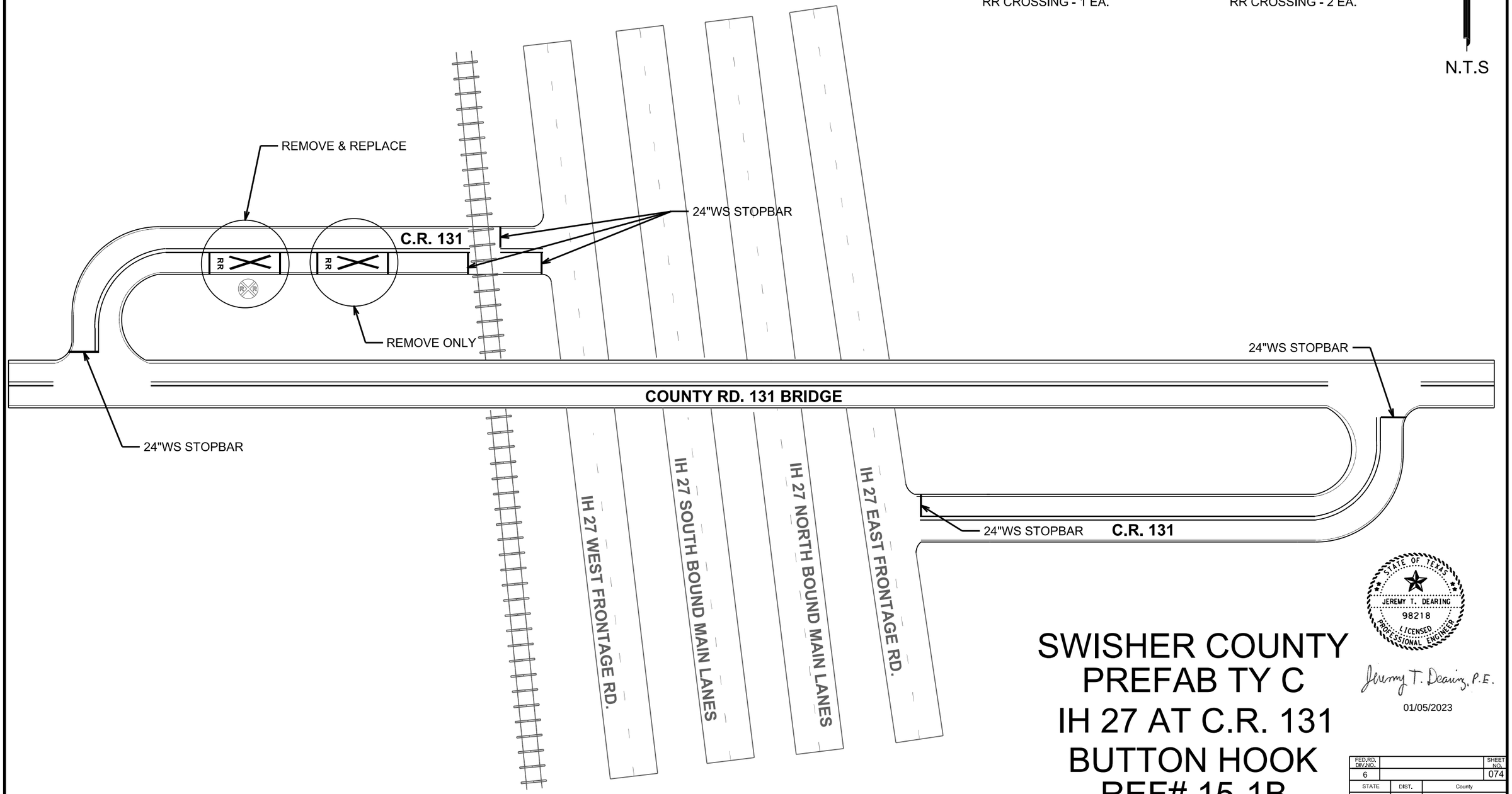
FED.RD. DIV.NO.			SHEET NO.
6			073
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023

SHEET TOTALS

INSTALL:	ELIMINATION:
24"WS STOPBAR- 114 LF	24"WS STOPBAR- 114 LF
RR CROSSING - 1 EA.	RR CROSSING - 2 EA.

N

N.T.S



STATE OF TEXAS
JEREMY T. DEARING
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Jeremy T. Dearing, P.E.

01/05/2023

SWISHER COUNTY
PREFAB TY C
IH 27 AT C.R. 131
BUTTON HOOK
REF# 15-1B

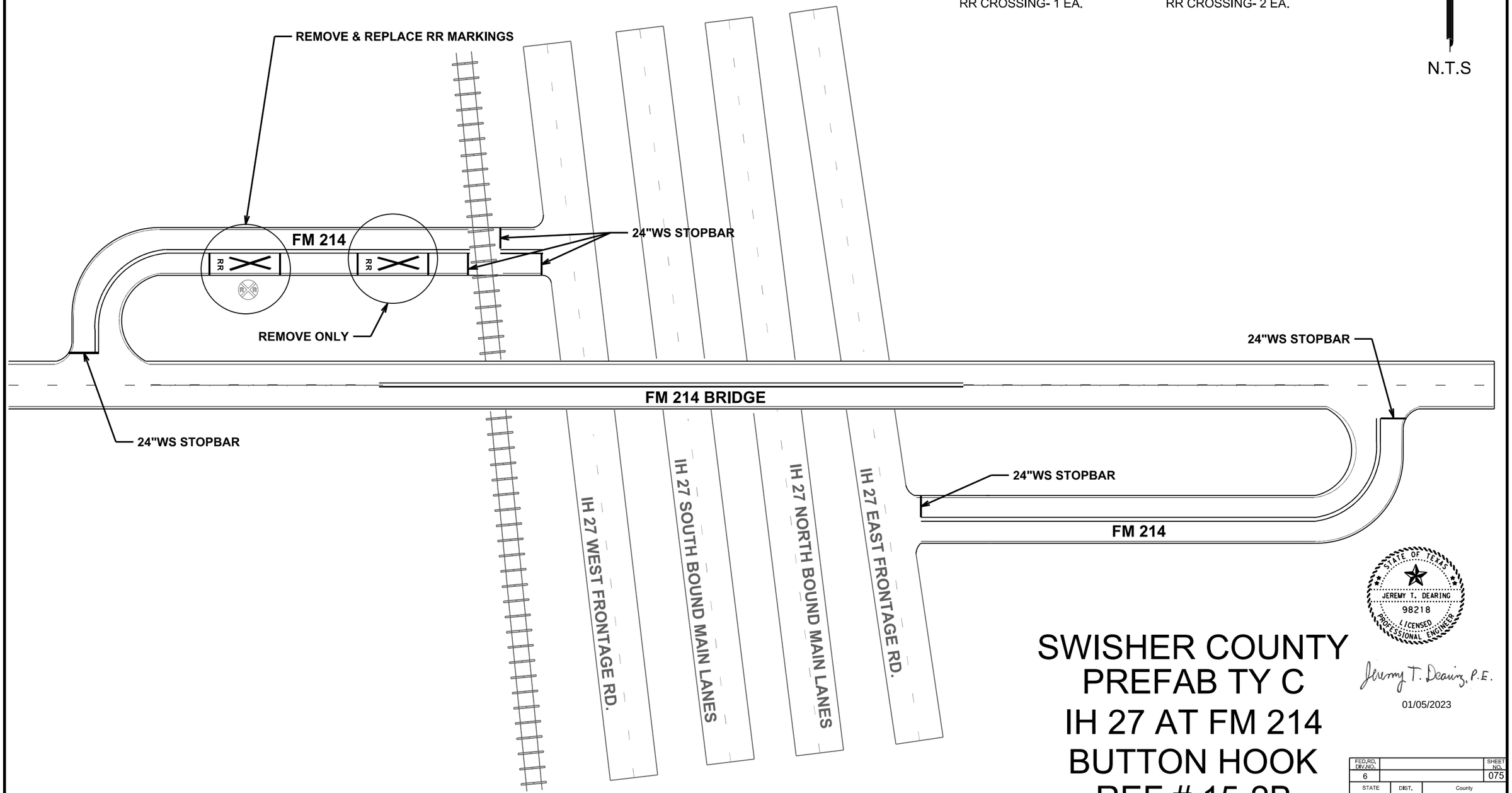
FED.RD. DIV.NO.			SHEET NO.
6			074
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023

SHEET TOTALS

INSTALL:	ELIMINATION:
24"WS STOPBAR- 84 LF	24"WS STOPBAR- 84 LF
RR CROSSING- 1 EA.	RR CROSSING- 2 EA.

N

N.T.S



STATE OF TEXAS
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Jeremy T. Dearing, P.E.

01/05/2023

SWISHER COUNTY
PREFAB TY C
IH 27 AT FM 214
BUTTON HOOK
REF # 15-2B

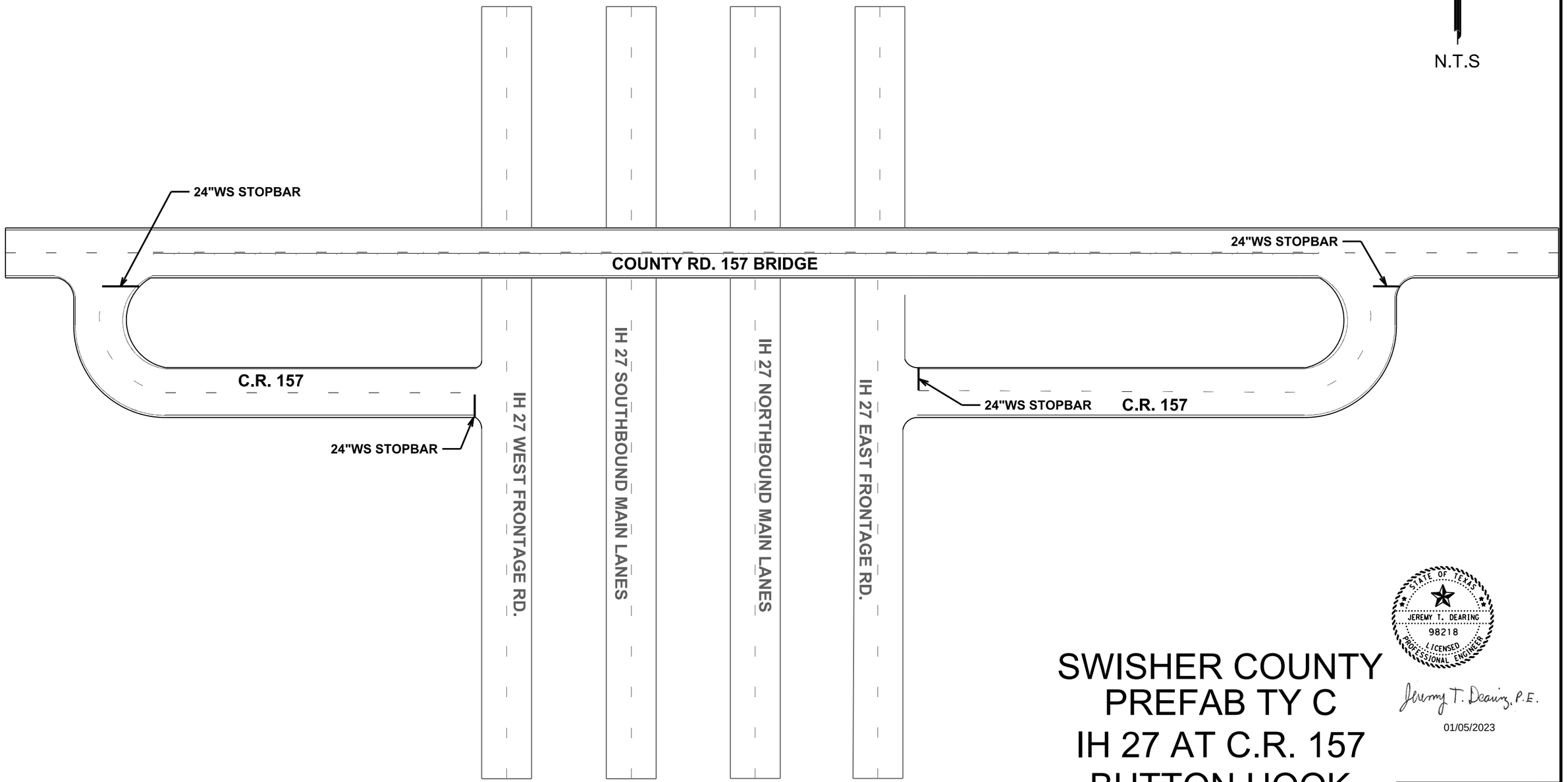
FED.RD. DIV.NO.			SHEET NO.
6			075
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023

SHEET TOTALS

INSTALL:	ELIMINATION:
24"WS STOPBAR- 70 LF	24"WS STOPBAR- 70 LF

N

N.T.S



SWISHER COUNTY
PREFAB TY C
IH 27 AT C.R. 157
BUTTON HOOK
REF # 15-3B

STATE OF TEXAS
JEREMY T. DEARING
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01/05/2023

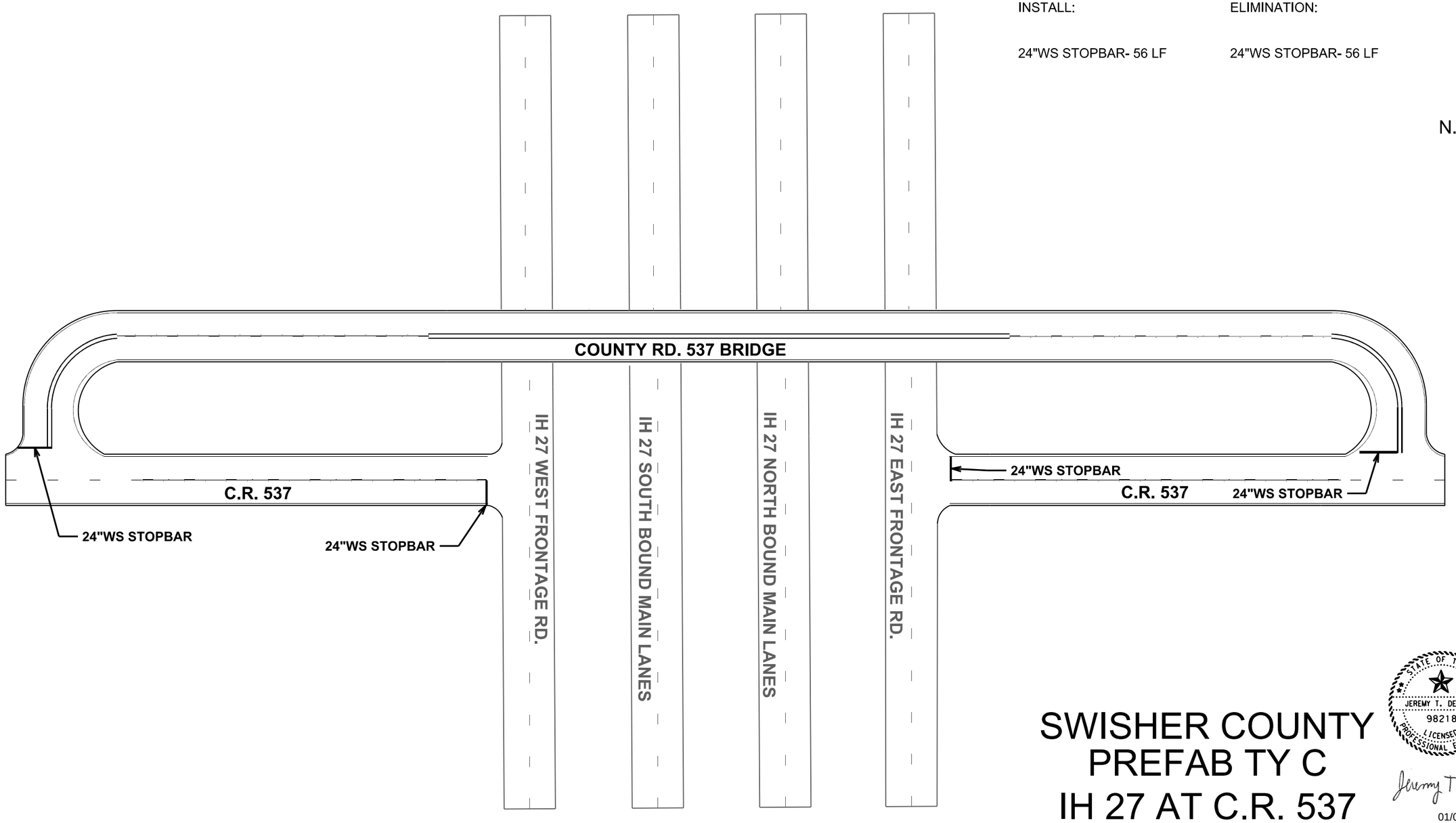
FED.RD. DIV.NO.			SHEET NO.
6			076
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023

SHEET TOTALS

INSTALL:	ELIMINATION:
24"WS STOPBAR- 56 LF	24"WS STOPBAR- 56 LF

N

N.T.S



SWISHER COUNTY
PREFAB TY C
IH 27 AT C.R. 537
BUTTON HOOK
REF # 15-4B

STATE OF TEXAS
JEREMY T. DEARING
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Jeremy T. Dearing, P.E.

01/05/2023

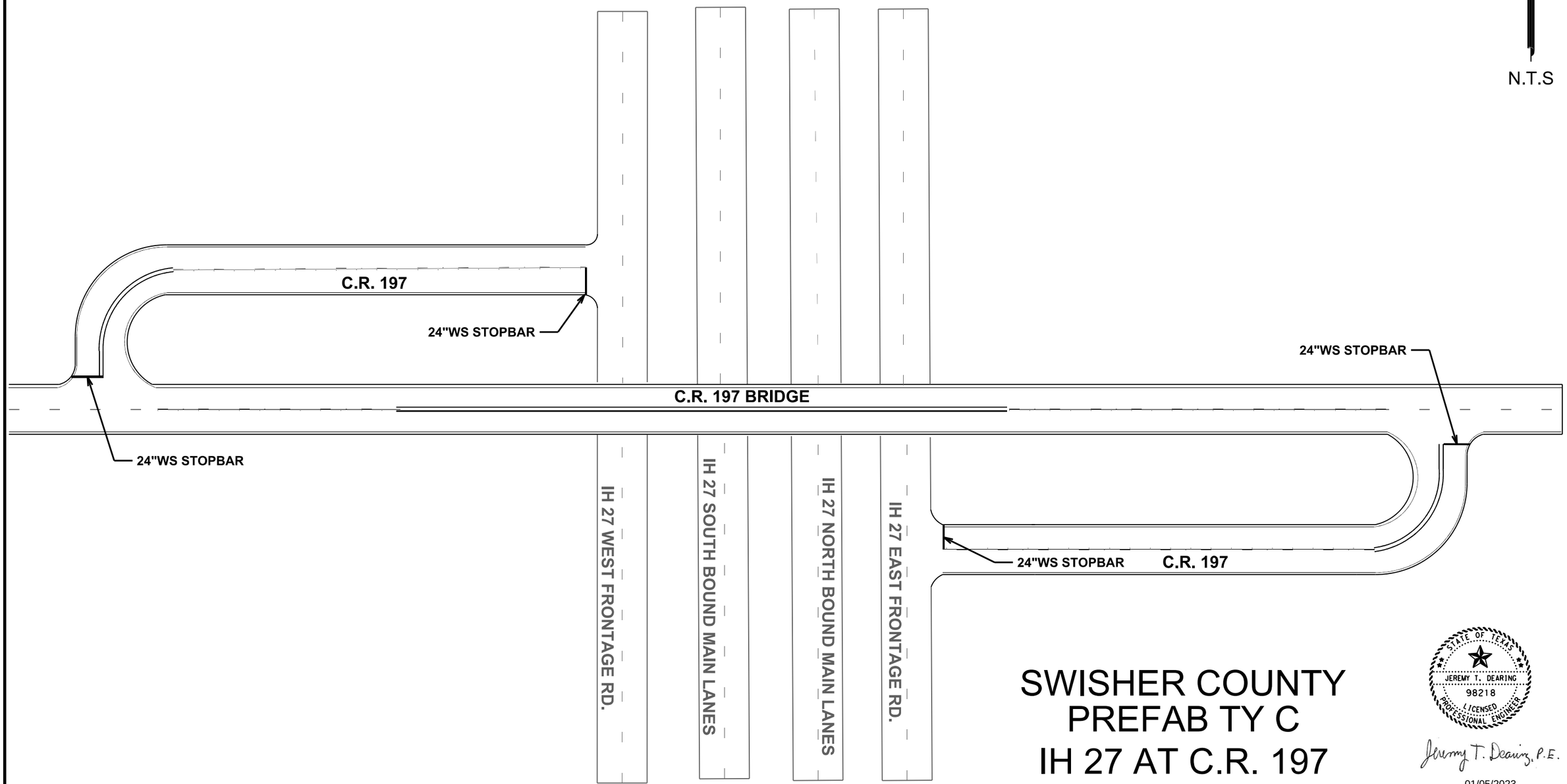
FED.RD. DIV.NO.			SHEET NO.
6			077
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023

SHEET TOTALS

INSTALL:	ELIMINATION:
24"WS STOPBAR- 60 LF	24"WS STOPBAR- 60 LF

N

N.T.S



SWISHER COUNTY
PREFAB TY C
IH 27 AT C.R. 197
BUTTON HOOK
REF # 15-5B

STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED
PROFESSIONAL ENGINEER

Jeremy T. Dearing, P.E.

01/05/2023

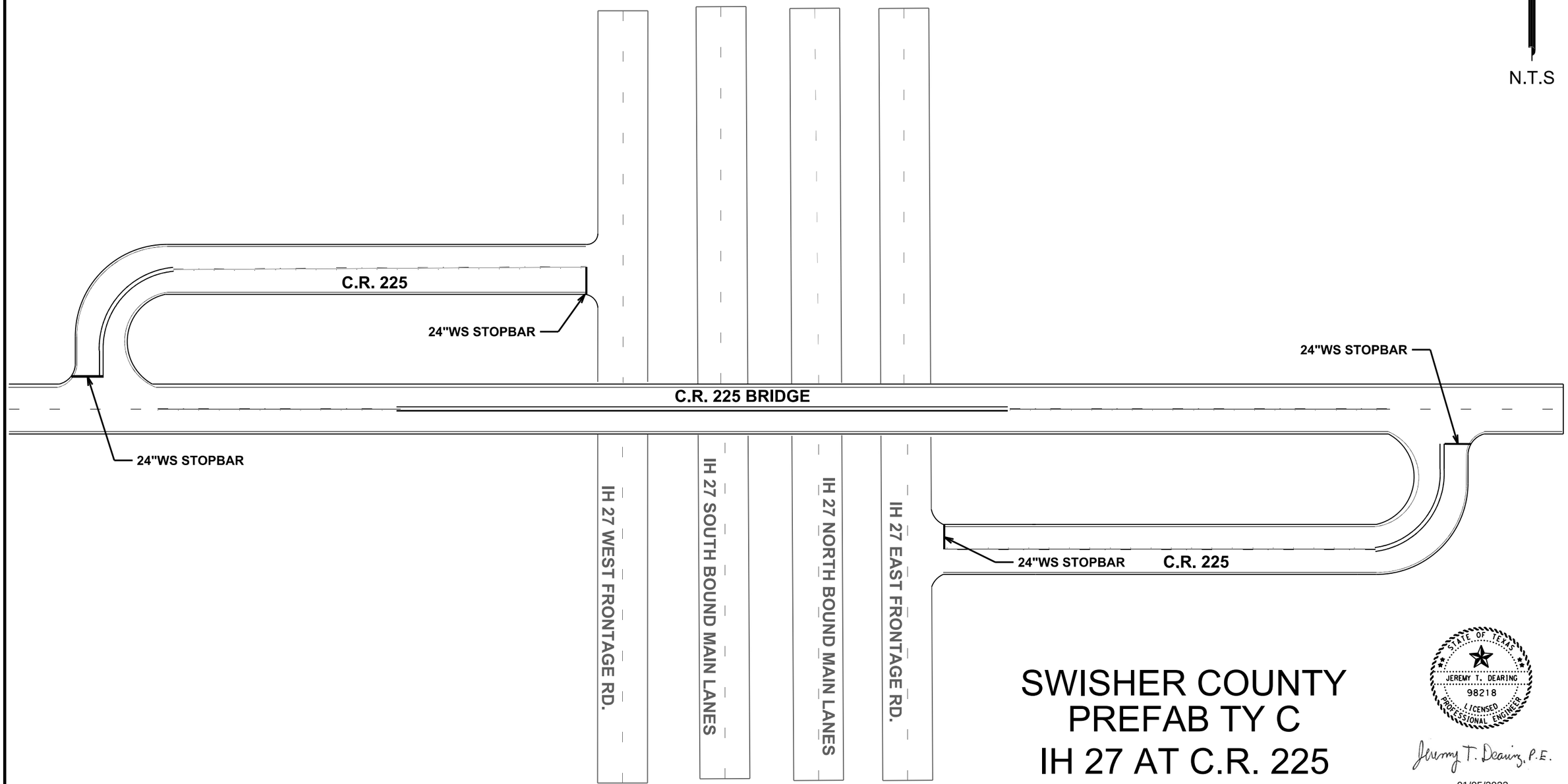
FED.RD. DIV.NO.			SHEET NO.
6			078
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023

SHEET TOTALS

INSTALL:	ELIMINATION:
24"WS STOPBAR- 64 LF	24"WS STOPBAR- 64 LF

N

N.T.S



SWISHER COUNTY
PREFAB TY C
IH 27 AT C.R. 225
BUTTON HOOK
REF # 15-6B

STATE OF TEXAS
JEREMY T. DEARING
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PROFESSIONAL ENGINEER

Jeremy T. Dearing, P.E.

01/05/2023

FED.RD. DIV.NO.			SHEET NO.
6			079
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023

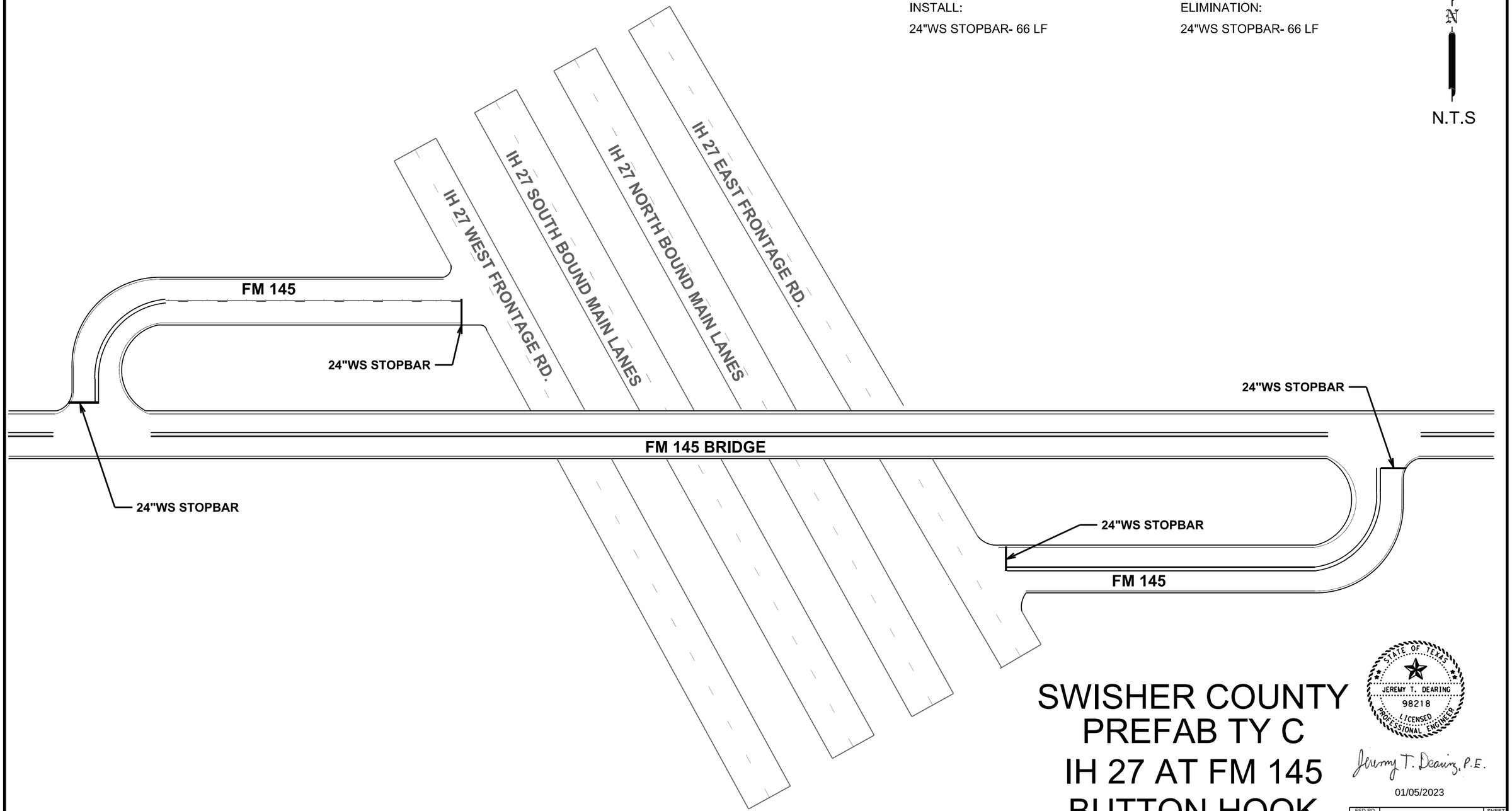
SHEET TOTALS

INSTALL:
24"WS STOPBAR- 66 LF

ELIMINATION:
24"WS STOPBAR- 66 LF

N

N.T.S



SWISHER COUNTY
PREFAB TY C
IH 27 AT FM 145
BUTTON HOOK
REF # 15-7B

STATE OF TEXAS
JEREMY T. DEARING
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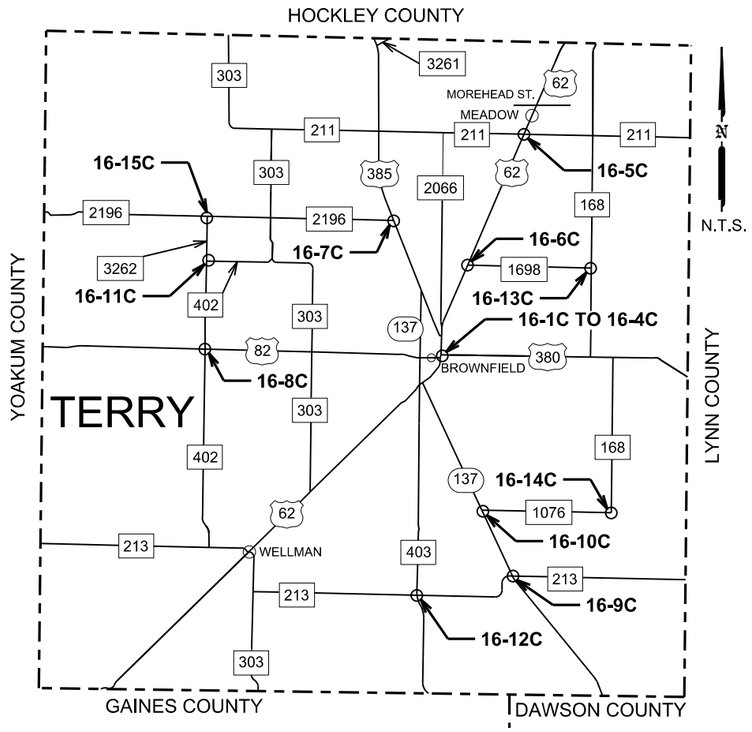
LICENSED
PROFESSIONAL ENGINEER

Jeremy T. Dearing, P.E.

01/05/2023

FED.RD. DIV.NO.			SHEET NO.
6			080
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023

County 16: Terry	Hwy	Rdwy	Intersection	Cont	Sect	Begin TRM (MI)	End TRM (MI)	24"WS	Arrow (Left)	Arrow (DBL) (Straight-Right)	RR XING	36"W (YLD TRI)	12" ELIM	24" ELIM	Arrow (L) ELIM	Arrow (DBL) (Straight-Right) ELIM	NOTES
16-1C	US	62	AT MAIN ST IN BROWNFIELD	227	07	286+0.841	286+0.841	126	0	0	0	0	176	30	0	0	SEE SHEET 048
16-2C	US	62	AT US 380 IN BROWNFIELD	227	07	288-0.908	288-0.908	146	2	2	0	0	180	38	2	2	SEE SHEET 049
16-3C	US	62	AT TATE ST. IN BROWNFIELD	228	01	286+0.691	286+0.691	84	0	0	0	0	136	0	0	0	SEE SHEET 050
16-4C	US	62	AT BUCKLEY ST IN BROWNFIELD	228	01	286+0.55	286+0.55	84	0	0	0	0	144	0	0	0	SEE SHEET 051
16-5C	US	62	AT FM 211	227	07	298+0.546	298+0.546	38	0	0	1	0	0	38	0	0	1 STOPBAR ON FM 211, 1 RR CROSSING (WESTBOUND DIRECTION ONLY)
16-6C	US	62	AT FM 1698	227	07	292-0.366	292-0.366	16	0	0	0	0	0	16	0	0	1 STOPBAR ON FM 1698 (WESTBOUND DIRECTION ONLY)
16-7C	US	385	AT FM 2196	227	09	240+0.514	240+0.514	20	0	0	0	0	0	20	0	0	1 STOPBAR ON FM 2196
16-8C	US	82	AT FM 402	297	03	260-0.321	260-0.321	16	0	0	0	0	0	16	0	0	1 STOPBAR ON FM 402 (SOUTHBOUND DIRECTION ONLY)
16-9C	SH	137	AT FM 213	380	04	250+0.335	250+0.335	12	0	0	0	0	0	12	0	0	1 STOPBAR ON FM 213 (EASTBOUND DIRECTION ONLY)
16-10C	SH	137	AT FM 1076	380	04	248-1.038	248-1.038	16	0	0	0	0	0	16	0	0	1 STOPBAR ON FM 1076 (WESTBOUND DIRECTION)
16-11C	FM	402	AT FM 3262	820	05	236+0.819	236+0.819	24	0	0	0	5	0	24	0	0	2 STOPBARS, 1 YIELD LOCATION ON FM 402
16-12C	FM	213	AT FM 403	879	03	272-0.684	272-0.684	26	0	0	0	0	0	26	0	0	1 STOPBAR ON FM 213 (WESTBOUND DIRECTION ONLY)
16-13C	FM	168	AT FM 1698	1630	04	244+0.309	244+0.309	16	0	0	0	0	0	16	0	0	1 STOPBAR ON FM 1698
16-14C	FM	168	AT FM 1076	1630	05	256+0.31	256+0.31	16	0	0	0	0	0	16	0	0	1 STOPBAR ON FM 1076
16-15C	FM	2196	AT FM 3262	3473	01	253-0.318	253-0.318	30	0	0	0	0	0	30	0	0	1 STOPBAR ON FM 3262
						TOTAL		**670**	**2**	**2**	**1**	**5**	**636**	**298**	**2**	**2**	



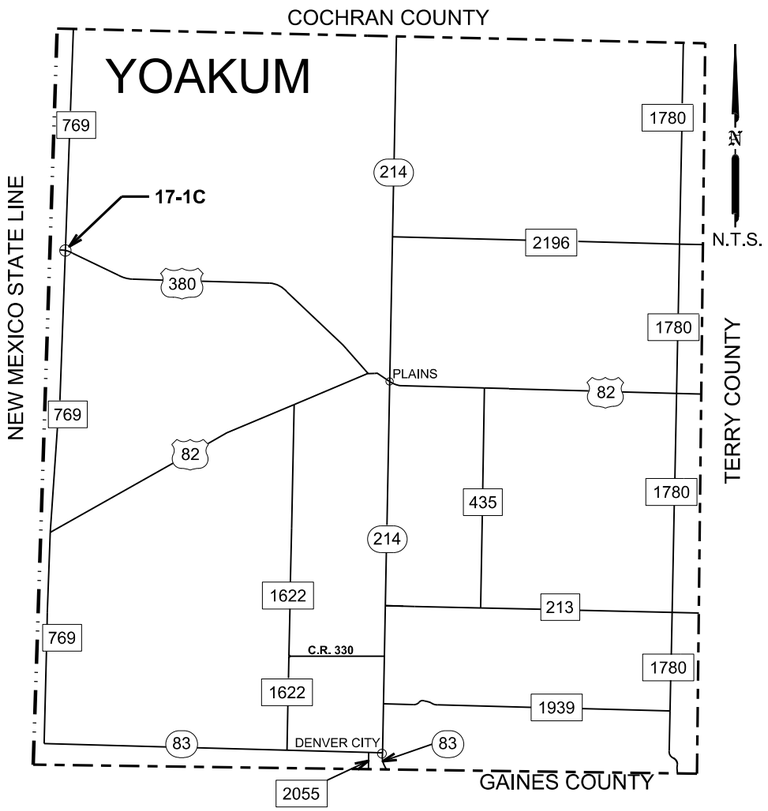
Jeremy T. Dearing, P.E.

01/05/2023

TERRY COUNTY PREFAB TY C

FED.RD. DIV.NO.			SHEET NO.
6			081
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023

County 17: Yoakum	Hwy	Rdwy	Intersection	Cont	Sect	Begin TRM (MI)	End TRM (MI)	24"WS	24" ELIM	NOTES
17-1C	US	380	AT FM 769	297	01	224+0.013	224+0.013	26	26	1 STOPBAR ON FM 769 (SOUTHBOUND DIRECTION ONLY)
						TOTAL		**26**	**26**	



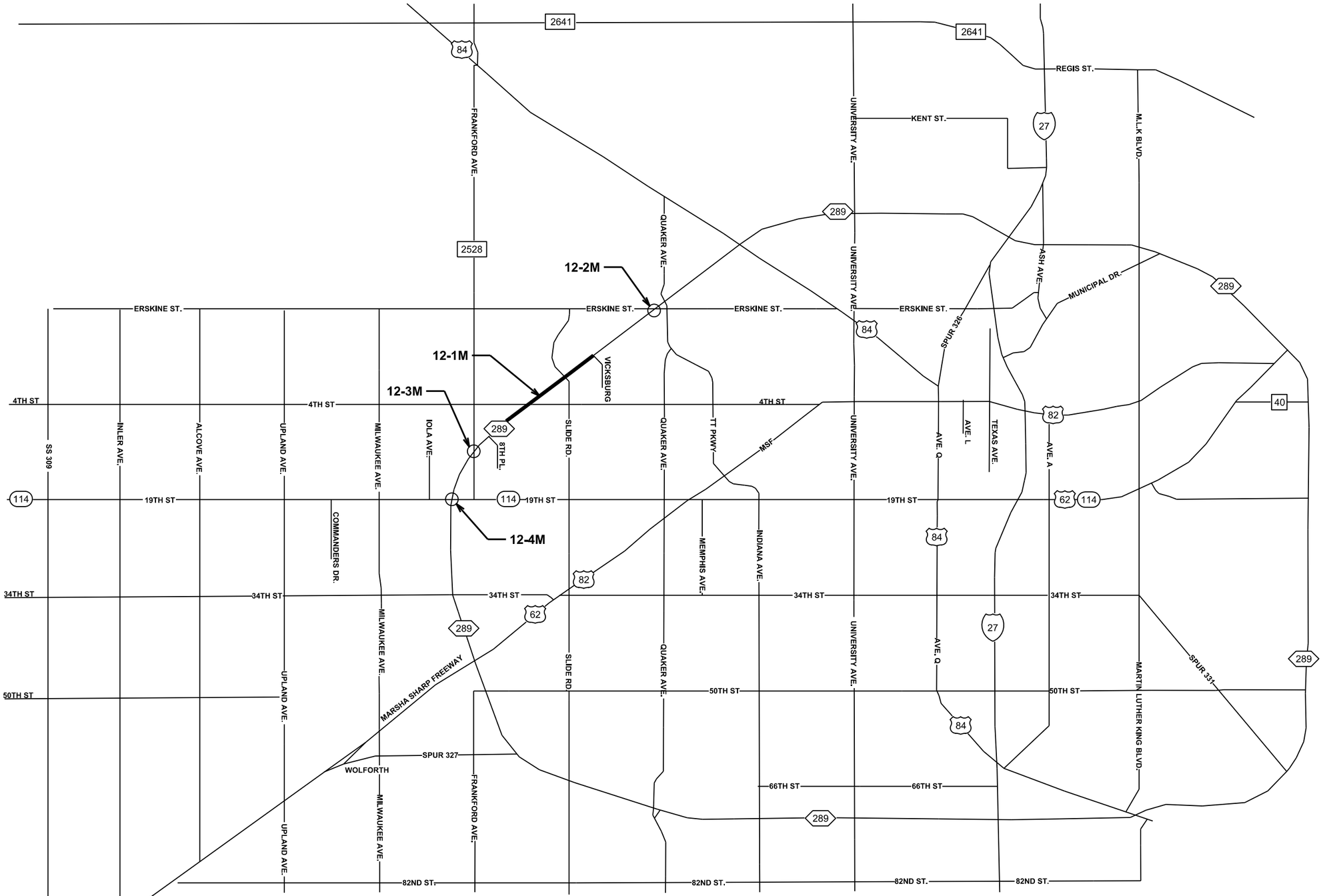
STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED
PROFESSIONAL ENGINEER

Jeremy T. Dearing, P.E.

01/05/2023

YOAKUM COUNTY PREFAB TY C

FED.RD. DIV.NO.			SHEET NO.
6			082
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023



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N.T.S.

STATE OF TEXAS
JEREMY T. DEARING
98218
LICENSED
PROFESSIONAL ENGINEER

Jeremy T. Dearing, P.E.

01/05/2023

LUBBOCK COUNTY MULTIPOLYMER MAP

FED.RD. DIV.NO.			SHEET NO.
6			083
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2023 SPECIALTY			1/4/2023

County 12: Lubbock	Hwy	Rdwy	Description	Cont	Sect	Begin TRM (MI)	End TRM (MI)	6"WS	6"WB	8"WS	12"WS	12"W(LNDP)	6"YS	4' ELIM	6" ELIM	8" ELIM	12" ELIM
12-1M	WEST SL	289 M.L.	8TH PLACE TO VICKSBURG	783	02	291+0.293	292+0.093	13,300	6,020	1,690	1,500	730	14,780	28,080	6,020	1,690	2,230
12-2M	NORTH SL	289 M.L.	ERSKINE BRIDGE	783	02	293-0.046	293-0.046	2,130	780	0	82	180	2,130	4,260	780	0	262
12-3M	WEST SL	289 M.L.	FRANKFORD BRIDGE	783	02	291-0.128	291-0.128	800	380	0	0	0	800	1,600	380	0	0
12-4M	WEST SL	289 M.L.	19TH ST BRIDGE	783	02	294-0.063	294-0.063	710	360	0	0	72	710	1,420	360	0	72
						TOTAL		**16,940**	**7,540**	**1,690**	**1,582**	**982**	**18,420**	**35,360**	**7,540**	**1,690**	**2,564**

STATE OF TEXAS
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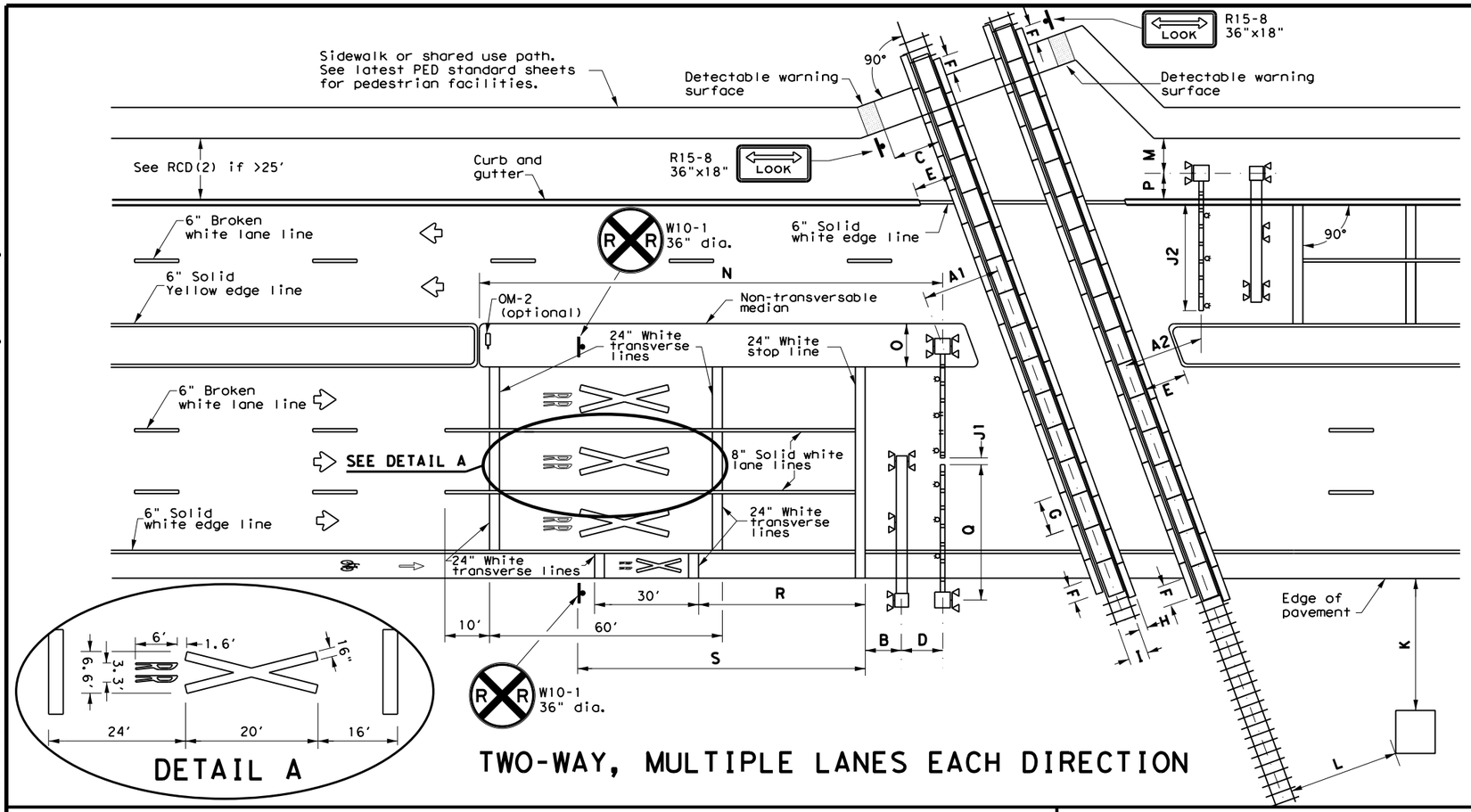
LICENSED
PROFESSIONAL ENGINEER

LUBBOCK COUNTY MULTIPOLYMER INSTALL & ELIMINATE

Jeremy T. Dearing, P.E.

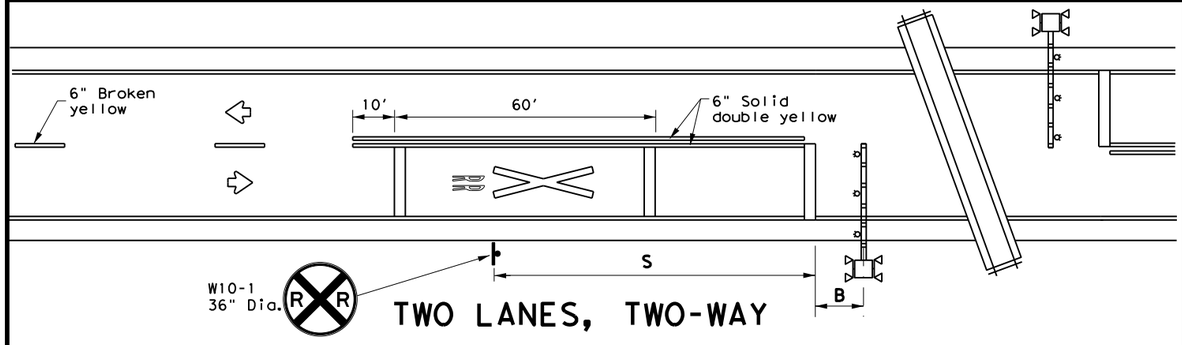
01/05/2023

FED.RD. DIV.NO.			SHEET NO.
6			084
STATE	DIST.	County	
TEXAS	LBB	LUBBOCK,ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
0905	00	117	VAR
FILE NAME			DATE
2021 SPECIALTY			1/4/2023

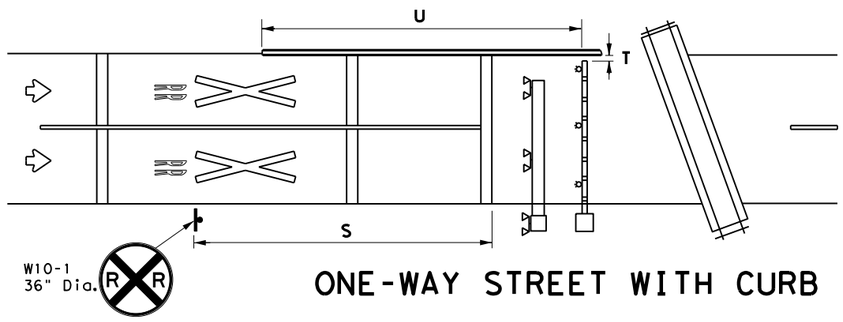


DETAIL A

TWO-WAY, MULTIPLE LANES EACH DIRECTION



TWO LANES, TWO-WAY



ONE-WAY STREET WITH CURB

NOTES

T: Tip of gate to edge of curb: 1' maximum for Quiet Zone SSM, 90% of traveled way covered by gates for all other locations.

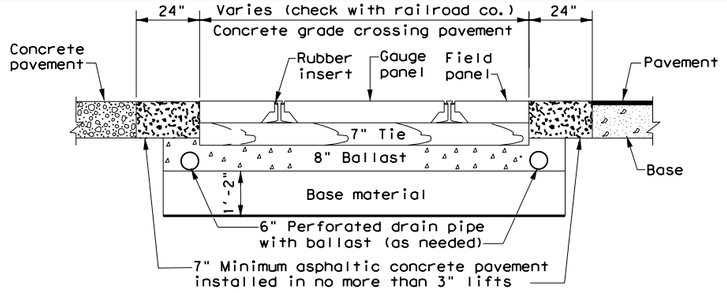
U: Non-traversable curb length from gate: 100' minimum for a Quiet Zone SSM, 10' minimum for all other locations.

TABLE 1	
Approach Speed (mph)	Desirable Placement (feet)
20	100
25	100
30	100
35	100
40	125
45	175
50	250
55	325
60	400
65	475
70	550
75	650

LEGEND	
	Sign
	Object Marker
	Traffic Flow
	Cantilever
	Gate Assembly
	Mast Flasher Pair

GENERAL NOTES

1. Medians and curbs must be non-traversable to qualify as a Quiet Zone Supplementary Safety Measure (SSM). Non-traversable curbs in Quiet Zones are 6" tall minimum and used on roadways where speed does not exceed 40 mph.
2. Raised pavement markers may be used to supplement striping. See PM(2) and PM(3) standard sheets.
3. Medians preferred whenever possible to prevent vehicles from driving around gates.
4. Longitudinal edge striping may be continued thru crossing as needed. Illumination may also be considered for nighttime visibility.
5. See SMD standard sheets for sign mounting details.
6. See the Standard Highway Sign Design for Texas (SHSD) manual for sign and pavement marking details.



CROSSING SURFACE CROSS SECTION

NOTES

A1: Center of RR mast to center of rail: 12' minimum, 15' typical.

A2: Tip of gate to center of rail: 12' minimum, 15' typical.

B: Center of mast (cantilever, gate, or mast flasher) of nearest active traffic control device to stop line: 8' (NOTE: Stop line may be moved as needed, but should be at least 8' back from gates, if present).

C: Near edge of detectable warning surface to nearest rail: 12' minimum.

D: Center of gate mast to center of cantilever mast: 6' typical. NOTE: Cantilever may be located in front or behind gates.

E: Edge of median or curb to nearest rail: 10' typical. NOTE: Design median edge to be parallel with rail.

F: Edge of planking panel from edge of pavement or sidewalk: 3' minimum. NOTE: Field panels need not be in line with gauge panels.

G: Length of panels along rail: 8' typical.

H: Width of field panel: 2' typical (check with railroad company).

I: Distance between rails: 4'- 8'1/2".

J1: Tip of gate to tip of gate: 2' maximum.

J2: 90% of traveled roadway to be covered by gate.

K: Nearest edge of RR cabinet from edge of pavement: 30' typical. NOTE: Cabinet not required to be parallel to edge of pavement.

L: Nearest edge of RR cabinet from nearest rail: 25' typical.

M: Center of RR mast to edge of sidewalk: 6' minimum.

N: Center of gate mast to leading edge of non-traversable median: 100' minimum to qualify as a Quiet Zone SSM. NOTE: 60'will suffice if there is a street intersection within the 100' and all street intersections within 60' are closed.

O: Width of median for RR gate assembly: 8'-6" minimum, 10' typical when using median gates. NOTE: Center of gate mast minimum 4'-3" from face of curb.

P: Center of RR mast to face of curb: 5'-3" minimum. Center of RR mast to edge of pavement (with shoulder): 7' minimum. Center of RR mast to edge of pavement (no shoulder): 9'-3" minimum. NOTE: Final location determined by the railroad company.

Q: Gate length: 28' or less typical, but railroad company may allow up to 32' under special circumstances.

R: Stop line to first RR Crossing transverse line (bike lane): 50' typical.

S: Stop line to GRADE CROSSING ADVANCE WARNING (W10-1) sign and adjacent RR Crossing pavement markings. See Table 1. See RCD(2) for other signs.

Texas Department of Transportation

Traffic Safety Division Standard

RAILROAD CROSSING DETAILS SIGNING, STRIPING, AND DEVICE PLACEMENT RCD(1)-22

FILE:	rcd1-22.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
© TxDOT	November 2022	CONT	SECT	JOB	HIGHWAY
REVISIONS		0905	00	117	VAR
2-16		DIST	COUNTY		SHEET NO.
11-22		LBB	LUBBOCK,ETC.		085

DATE:
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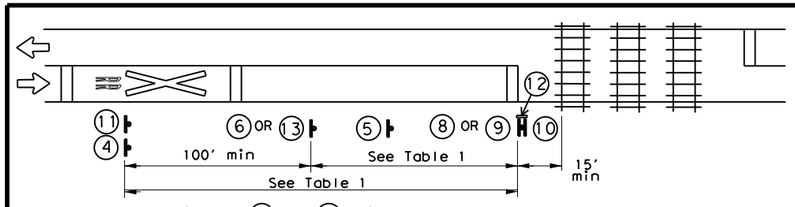
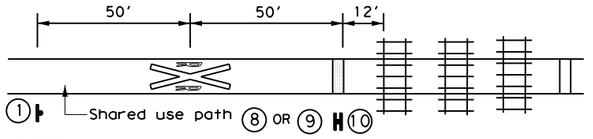


(if no (6) or (13) sign used)

PASSIVE CROSSING

NOTES

1. STOP or YIELD sign may also be installed to the left of the crossbuck sign, rather than below it.
2. A 2" white retroreflective strip shall be installed on front and back of crossbuck sign post.
3. See the Crossbuck Assemblies with YIELD or STOP Signs at Passive Grade Crossings section of the TMUTCD for further details about sign mounting arrangements.



NOTES

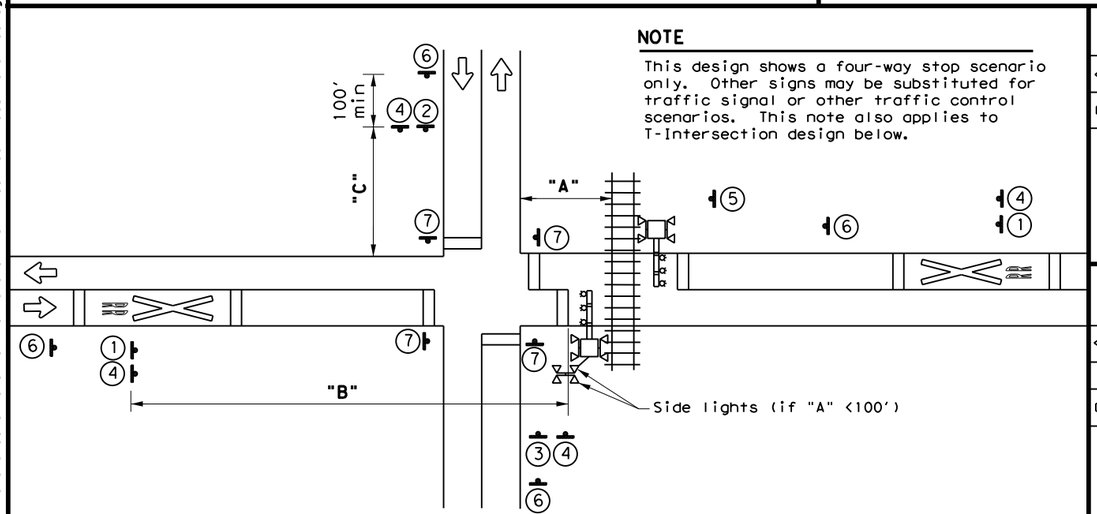
1. A shared use path is considered a separate pathway crossing when more than 25' from traveled way of adjacent roadway.
2. Detectable warning used at stop bar.
3. Smaller signs preferred. See the Design of Bicycle Signs section within the TMUTCD for sizing details.

PATHWAY CROSSING

TABLE 1	
Approach Speed (mph)	Desirable Placement (feet)
20	100
25	100
30	100
35	100
40	125
45	175
50	250
55	325
60	400
65	475
70	550
75	650

GENERAL NOTES

1. Railroad company to provide active traffic control devices, CROSSBUCK (R15-1), NUMBER OF TRACKS (R15-2P) plaque (if more than 1 track), and EMERGENCY NOTIFICATION (I-13) signs.
2. LOW GROUND CLEARANCE (W10-5) signs may be relocated further upstream of crossing to provide advance warning of alternate route.
3. GRADE CROSSING AND INTERSECTION ADVANCE WARNING (W10-2) signs may be modified as needed to fit roadway geometry.
4. Table 1 placement distances may vary per the Placement of Warning Signs section of the TMUTCD.
5. See Table 1 to determine placement of STOP AHEAD (W3-1) and YIELD AHEAD (W3-2) signs unless shown otherwise.
6. DO NOT STOP ON TRACKS (R8-8) signs installed when potential for vehicles stopping on tracks is significant as determined by sealing engineer. Install so sign does not block view of RR mast.
7. See the Standard Highway Sign Design for Texas (SHSD) manual for sign and pavement marking details.

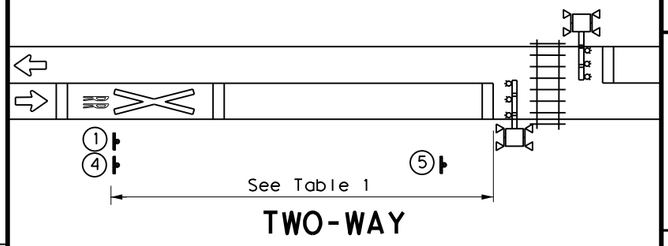


NOTE

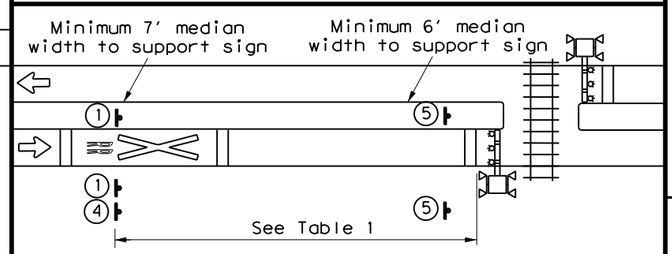
This design shows a four-way stop scenario only. Other signs may be substituted for traffic signal or other traffic control scenarios. This note also applies to T-Intersection design below.

	"A" <100'	"A" ≥100'
"B"	See Table 1. Place pavement markings and signs on opposite side of intersection from rail if spacing from Table 1 would put markings within intersection.	See Table 1. Place pavement markings and signs between rail and intersection if spacing from Table 1 would put markings within intersection.
"C"	See Table 1.	GRADE CROSSING AND INTERSECTION ADVANCE WARNING (W10-2, W10-3, W10-4) signs should only be installed if W10-1 sign is not between intersection and railroad crossing. If needed, see Table 1.

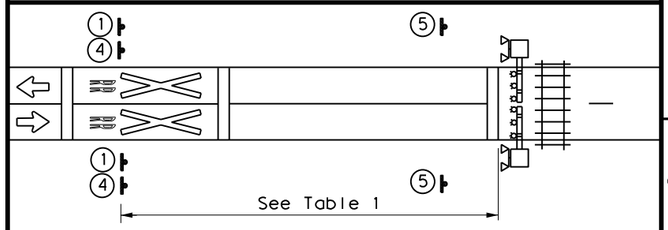
GRADE CROSSING NEAR A PARALLEL STREET



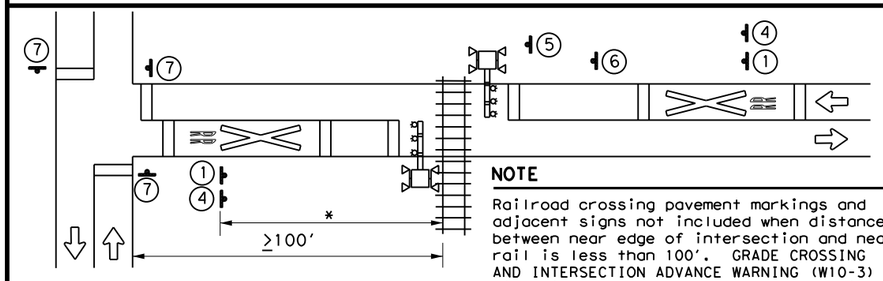
TWO-WAY



TWO-WAY WITH MEDIAN



ONE-WAY

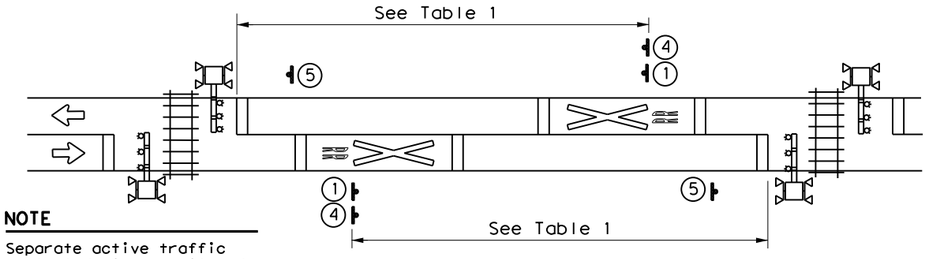


*Use Table 1 if sufficient space exists.

NOTE

Railroad crossing pavement markings and adjacent signs not included when distance between near edge of intersection and near rail is less than 100'. GRADE CROSSING AND INTERSECTION ADVANCE WARNING (W10-3) signs installed on roadway parallel with rail in this case.

T-INTERSECTION

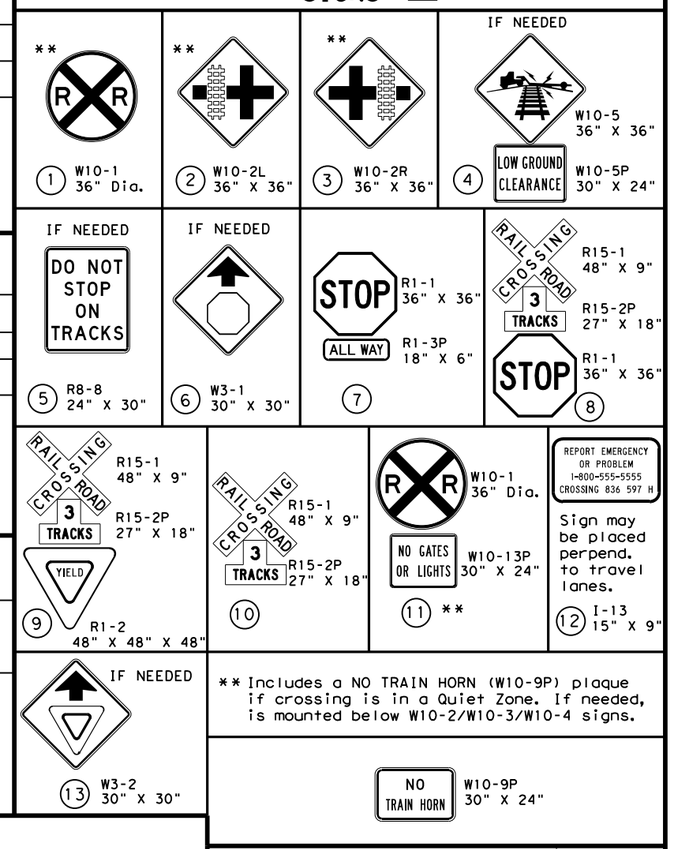


NOTE

Separate active traffic control devices, railroad crossing pavement markings, and adjacent signs required when tracks are more than 100' apart.

TWO ADJACENT CROSSINGS

SIGNS



** Includes a NO TRAIN HORN (W10-9P) plaque if crossing is in a Quiet Zone. If needed, is mounted below W10-2/W10-3/W10-4 signs.

NO TRAIN HORN W10-9P 30" X 24"

Texas Department of Transportation

Traffic Safety Division Standard

RAILROAD CROSSING DETAILS SIGNING & STRIPING

RCD(2)-22

FILE: rcd2-22.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT November 2022	CONT	SECT	JOB	HIGHWAY
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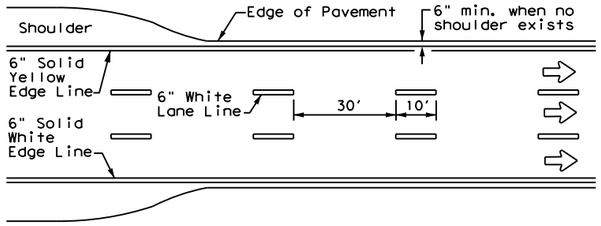
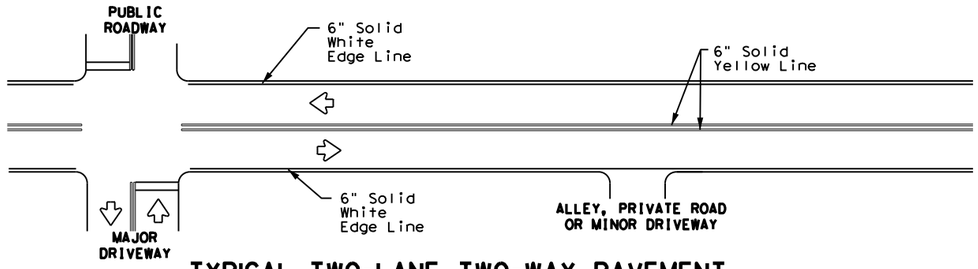
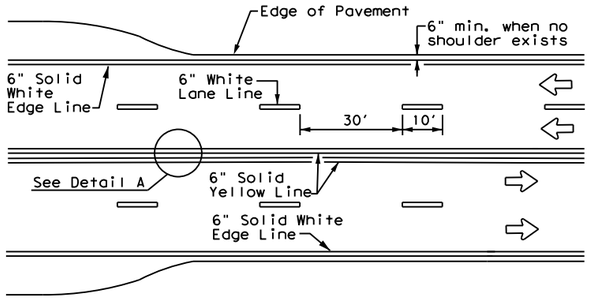
	LBB	LUBBOCK,ETC.		086

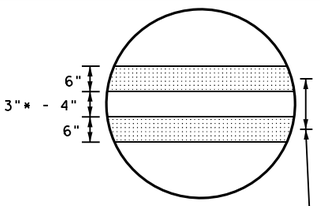


EDGE LINE AND LANE LINES ONE-WAY ROADWAY WITH OR WITHOUT SHOULDERS



TYPICAL TWO-LANE, TWO-WAY PAVEMENT MARKINGS THROUGH INTERSECTIONS

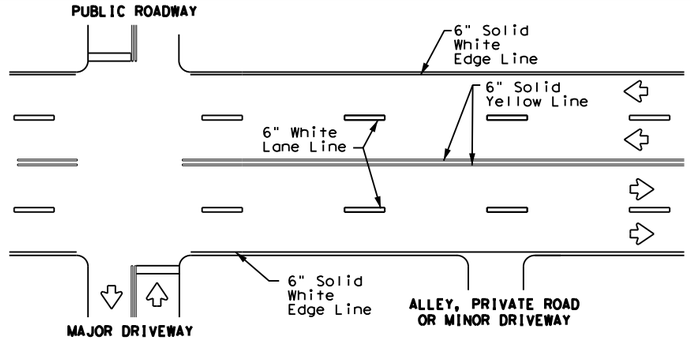




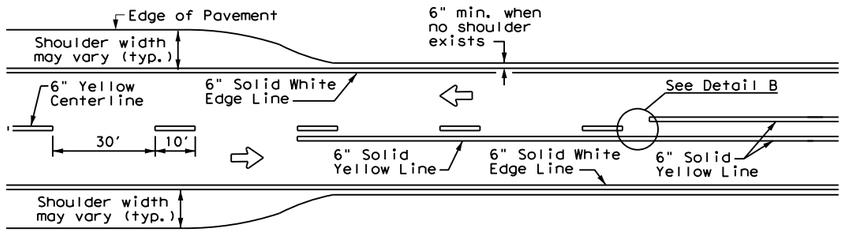
CENTERLINE AND LANE LINES FOUR LANE TWO-WAY ROADWAY WITH OR WITHOUT SHOULDERS

* 2" minimum for restripe projects when approved by the Engineer.

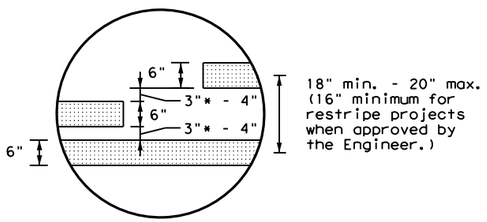
** 8" minimum for restripe projects when approved by the Engineer.



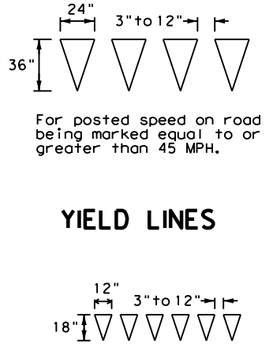
TYPICAL MULTI-LANE, TWO-WAY PAVEMENT MARKINGS THROUGH INTERSECTIONS

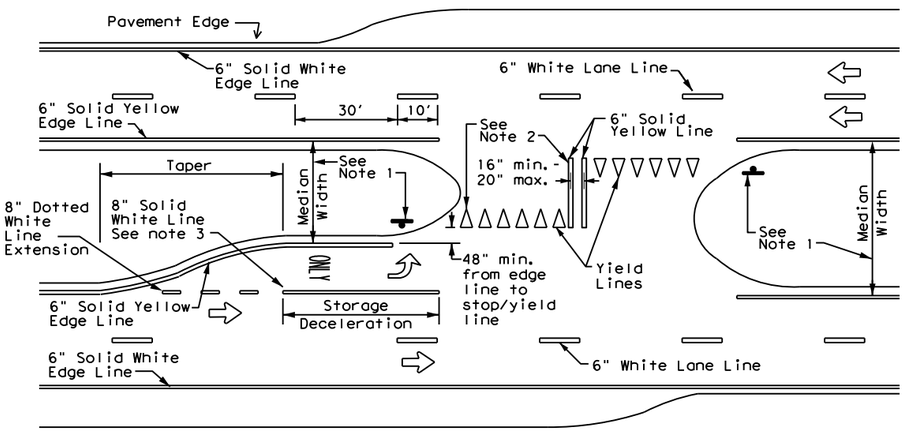


TWO LANE TWO-WAY ROADWAY WITH OR WITHOUT SHOULDERS



* 2" minimum for restripe projects when approved by the Engineer.





FOUR LANE DIVIDED ROADWAY CROSSOVERS

NOTES

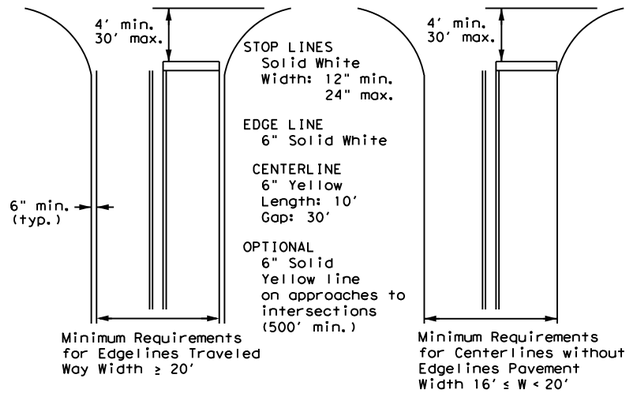
1. Where divided highways are separated by median widths at the median opening itself of 30 feet or more, median openings shall be signed as two separate intersections.
   Each median opening has two width measurements, with one measurement for each approach. The narrow median width will be the controlling width to determine if signs are required. Yield signs are the typical intersection control. Stop signs and stop bars are optional as determined by the Engineer.
2. Install median striping (double yellow centerlines and stop lines/yield lines) when a 50' or greater median centerline can be placed. Stop lines shall only be used with stop signs. Yield lines shall only be used with yield signs.
3. Length of turn bays, including taper, deceleration, and storage lengths shall be as shown on the plans or as directed by the Engineer.

GENERAL NOTES

1. Edge line striping shall be as shown in the plans or as directed by the Engineer. The edge line should not be placed less than 6 inches from the edge of pavement. This distance may vary due to pavement raveling or other conditions. Edge lines are not required in curb and gutter sections of roadways.
2. The traveled way includes only that portion of the roadway used for vehicular travel. It does not include the parking lanes, sidewalks, berms and shoulders. The traveled ways shall be measured from the center of edge line to the center of edge line of a two lane roadway.

MATERIAL SPECIFICATIONS	
PAVEMENT MARKERS (REFLECTORIZED)	DMS-4200
EPOXY AND ADHESIVES	DMS-6100
BITUMINOUS ADHESIVE FOR PAVEMENT MARKERS	DMS-6130
TRAFFIC PAINT	DMS-8200
HOT APPLIED THERMOPLASTIC	DMS-8220
PERMANENT PREFABRICATED PAVEMENT MARKINGS	DMS-8240

All pavement marking materials shall meet the required Departmental Material Specifications as specified by the plans.



NOTE: Traveled way is exclusive of shoulder widths. Refer to General Note 2 for additional details.

GUIDE FOR PLACEMENT OF STOP LINES, EDGE LINE & CENTERLINE

Based on Traveled Way and Pavement Widths for Undivided Roadways

Texas Department of Transportation

Traffic Safety Division Standard

TYPICAL STANDARD PAVEMENT MARKINGS

PM(1)-22

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© TxDOT December 2022	CONT	SECT	JOB	HIGHWAY
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8-95 3-03 12-22	LBB	LUBBOCK,ETC.		087
5-00 2-12				

22A

DATE:
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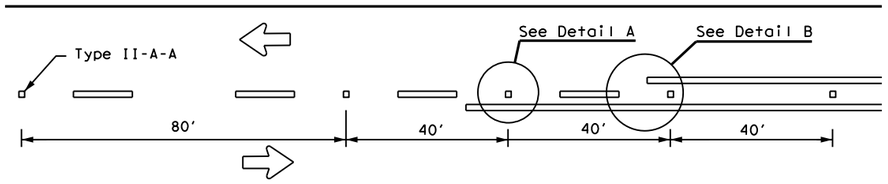
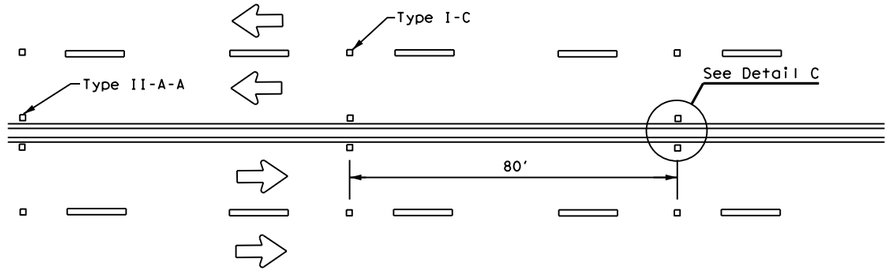
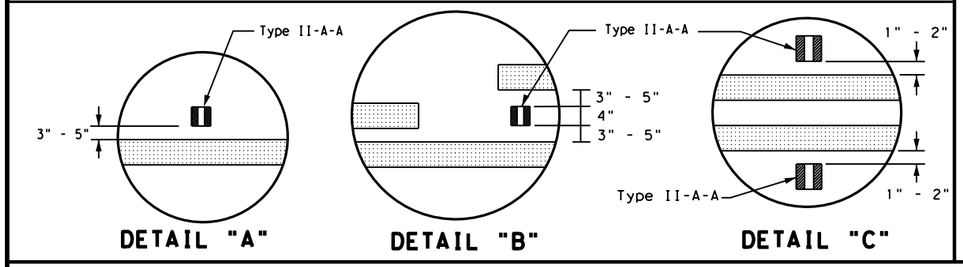
REFLECTIVE RAISED PAVEMENT MARKERS FOR VEHICLE POSITIONING GUIDANCE

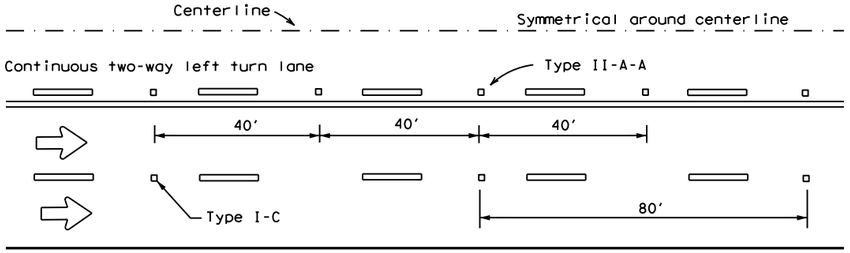


CENTERLINE FOR ALL TWO LANE TWO-WAY ROADWAYS

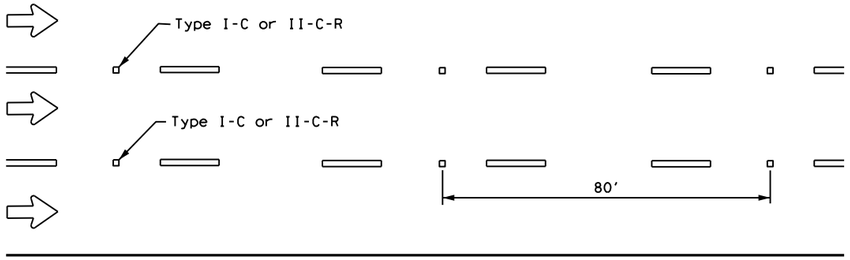


CENTERLINE & LANE LINES FOR FOUR LANE TWO-WAY ROADWAYS





CENTERLINE AND LANE LINES FOR TWO-WAY LEFT TURN LANE



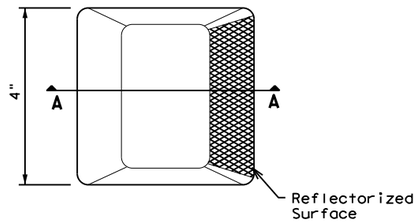
LANE LINES FOR ONE-WAY ROADWAY (NON-FREEWAY FACILITIES)

Raised pavement markers Type II-C-R shall have clear face toward normal traffic and red face toward wrong-way traffic.

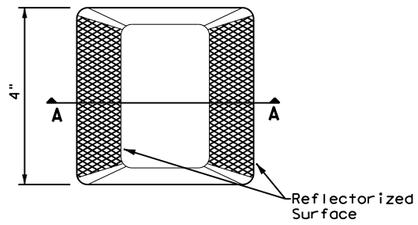
See Note 3.

MATERIAL SPECIFICATIONS	
PAVEMENT MARKERS (REFLECTORIZED)	DMS-4200
EPOXY AND ADHESIVES	DMS-6100
BITUMINOUS ADHESIVE FOR PAVEMENT MARKERS	DMS-6130
TRAFFIC PAINT	DMS-8200
HOT APPLIED THERMOPLASTIC	DMS-8220
PERMANENT PREFABRICATED PAVEMENT MARKINGS	DMS-8240

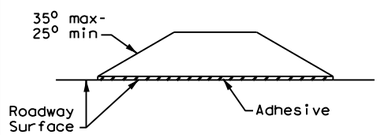
All pavement marking materials shall meet the required Departmental Material Specifications as specified by the plans.



Type I (Top View)

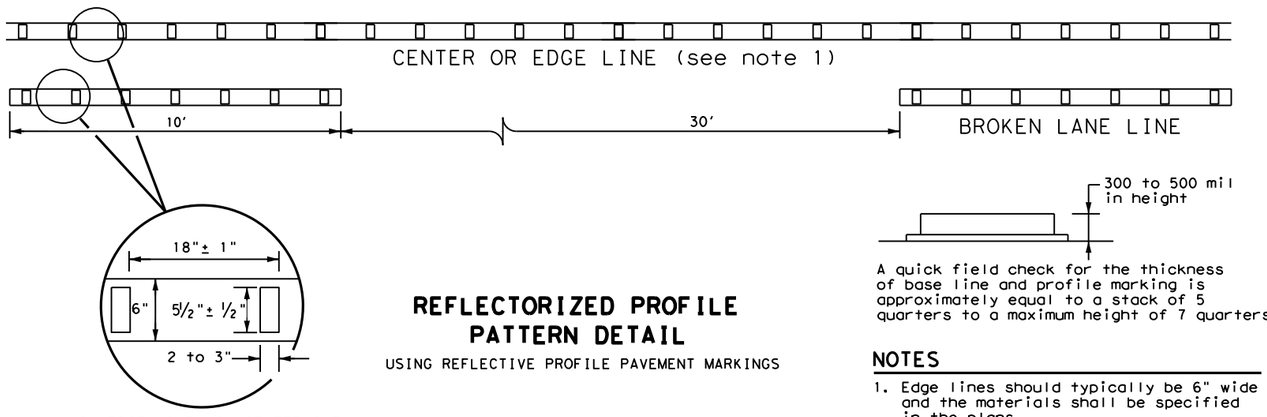


Type II (Top View)



SECTION A

RAISED PAVEMENT MARKERS



6" EDGE LINE, 6" CENTERLINE OR 6" LANE LINE

REFLECTORIZED PROFILE PATTERN DETAIL

USING REFLECTIVE PROFILE PAVEMENT MARKINGS

A quick field check for the thickness of base line and profile marking is approximately equal to a stack of 5 quarters to a maximum height of 7 quarters.

NOTES

1. Edge lines should typically be 6" wide and the materials shall be specified in the plans.
2. Profile markings shall not be placed on roadways with a posted speed limit of 45 MPH or less.

GENERAL NOTES

1. All raised pavement markers placed along broken lines shall be placed in line with and midway between the stripes.
2. On concrete pavements the raised pavement markers should be placed to one side of the longitudinal joints.
3. Use raised pavement marker Type I-C with undivided roadways, flush medians and two way left turn lanes. Use raised pavement marker Type II-C-R with divided highways and raised medians.

Texas Department of Transportation

Traffic Safety Division Standard

POSITION GUIDANCE USING RAISED MARKERS RELECTORIZED PROFILE MARKINGS PM(2)-22

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©TxDOT December 2022	CONT	SECT	JOB	HIGHWAY
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	DIST	COUNTY		SHEET NO.
	LBB	LUBBOCK,ETC.		088

22B

DATE:
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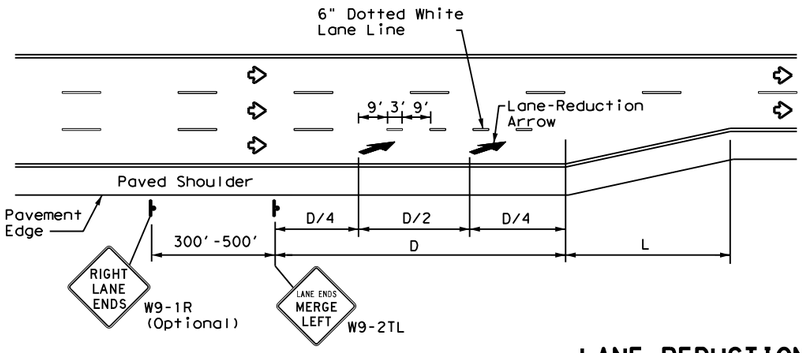


LANE REDUCTION

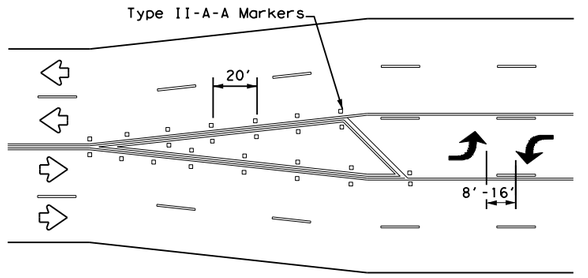
NOTES

1. Lane reduction pavement markings are used where the number of through lanes is reduced because of narrowing of the roadway or because of a section of on-street parking in what would otherwise be a through lane. For Texas Super 2 Passing Lanes, see TS2(PL) standard sheets.
2. On divided highways, an additional RIGHT LANE ENDS (W9-1R) sign may be installed in the median aligned with the W9-1R sign on the right side of the highway.
3. Lane reduction arrows are required for speeds of 45 mph or greater. An optional third lane reduction arrow may be added based on engineering judgement. If used, the optional third lane reduction arrow should be centered between the first and last lane reduction arrows.
4. For lane reductions on Freeways and Expressways, signing shall conform to the TxDOT Freeway Signing Handbook.

ADVANCED WARNING SIGN DISTANCE (D)		
Posted Speed	D (ft)	L (ft)
30 MPH	460	$L=\frac{WS^2}{60}$
35 MPH	565	
40 MPH	670	
45 MPH	775	L=WS
50 MPH	885	
55 MPH	990	
60 MPH	1,100	
65 MPH	1,200	
70 MPH	1,250	
75 MPH	1,350	

GENERAL NOTES

1. Lane use word and arrow markings shall be used where through lanes approaching an intersection become mandatory turn lanes. Lane use word and arrow markings should be used in auxiliary lanes of substantial length. Lane use arrow markings or word and arrow markings may be used in other lanes and turn bays for emphasis. Details for words and arrows are as shown in the Standard Highway Sign Designs for Texas.
2. When lane-use words and arrow markings are used, two sets of arrows should be used if the length of the bay is greater than 180 feet. When a single lane use arrow or word and arrow marking is used for a short turn lane, it should be located at or near the upstream end of the full-width turn lane.
3. Use raised pavement marker Type I-C with undivided highways, flush medians and two way left turn lanes. Use raised pavement marker Type II-C-R with divided highways and raised medians.
4. Length of turn bays, including taper, deceleration, and storage lengths shall be as shown on the plans or as directed by the Engineer. See Chapter 3 of the Roadway Design Manual for additional information on turning lanes or storage lengths.

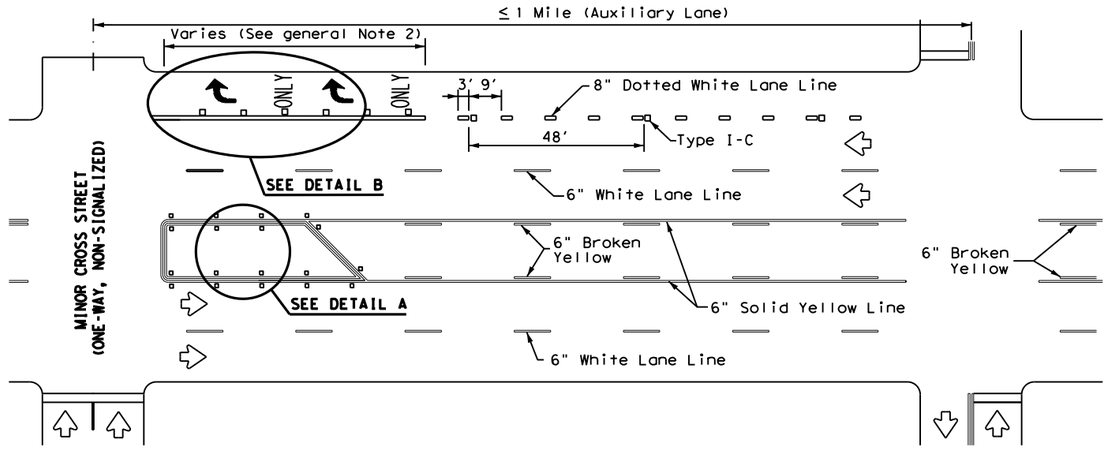


A two-way left-turn (TWLT) lane-use arrow pavement marking should be used at or just downstream from the beginning of a two-way left-turn lane within a corridor. Repeating the marking after each intersection or dedicated turn bay is not required unless stated elsewhere in the plans.

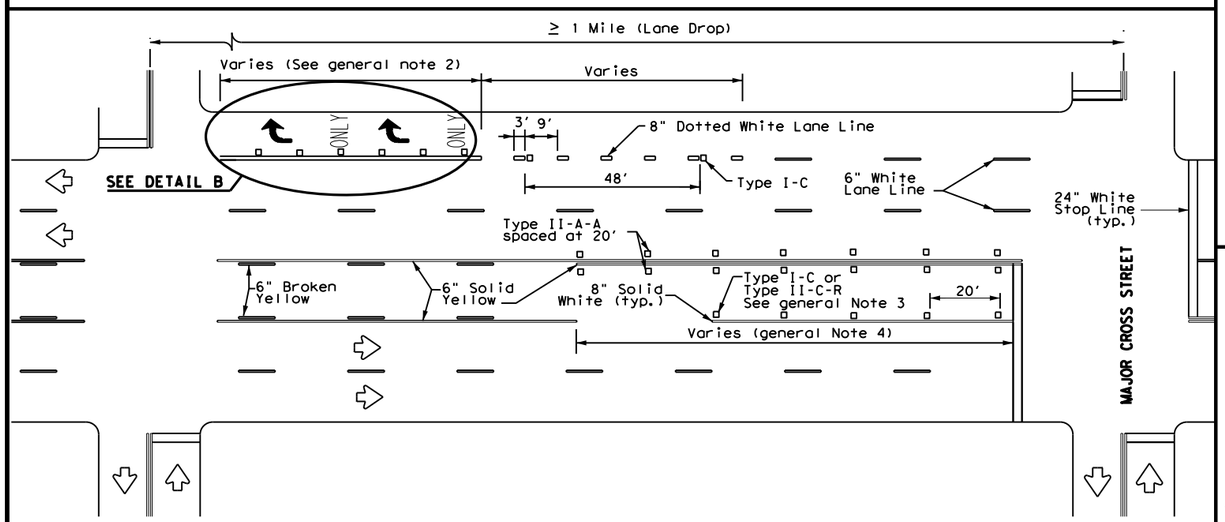
TYPICAL TRANSITION FOR TWLTL AND DIVIDED HIGHWAY

MATERIAL SPECIFICATIONS	
PAVEMENT MARKERS (REFLECTORIZED)	DMS-4200
EPOXY AND ADHESIVES	DMS-6100
BITUMINOUS ADHESIVE FOR PAVEMENT MARKERS	DMS-6130
TRAFFIC PAINT	DMS-8200
HOT APPLIED THERMOPLASTIC	DMS-8220
PERMANENT PREFABRICATED PAVEMENT MARKINGS	DMS-8240

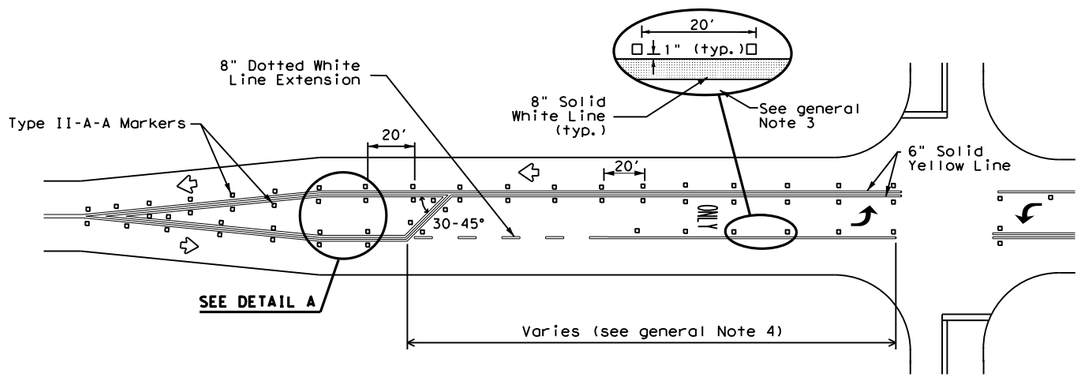
All pavement marking materials shall meet the required Departmental Material Specifications as specified by the plans.



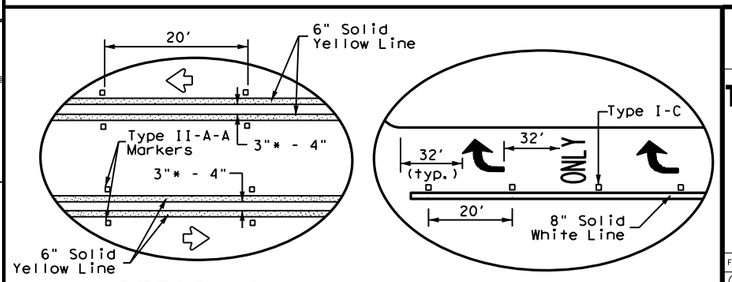
TYPICAL TWLTL AT ONE-WAY STREET AND RIGHT TURN AUXILIARY LANE



TYPICAL TWLTL AT TWO-WAY CROSS STREET AND RIGHT TURN LANE DROP



TYPICAL TWO-LANE ROADWAY INTERSECTION WITH LEFT TURN BAYS



* 2" minimum allowed for restripe projects when approved by the Engineer.

Texas Department of Transportation

Traffic Safety Division Standard

TWO-WAY LEFT TURN LANES, RURAL LEFT TURN BAYS, AND LANE REDUCTION PAVEMENT MARKINGS

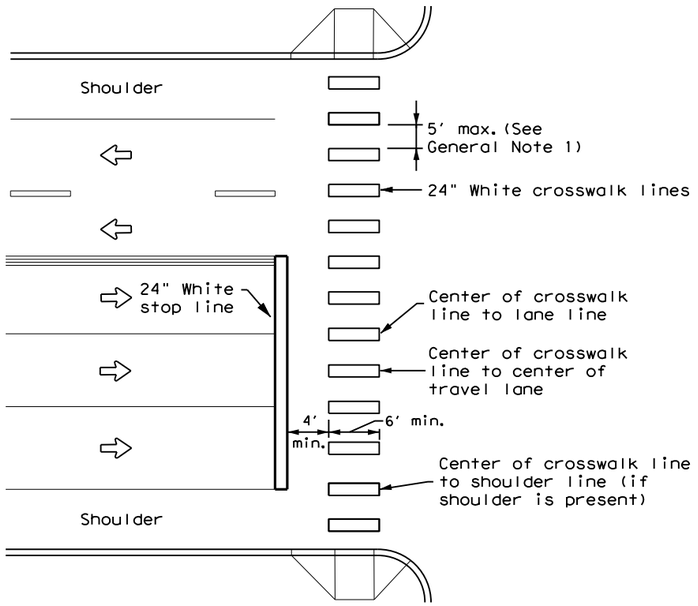
PM(3)-22

FILE: pm3-22.dgn	DN:	CK:	DW:	CK:
©TxDOT December 2022	CONT	SECT	JOB	HIGHWAY
REVISIONS 4-98 3-03 6-20 5-00 2-10 12-22 8-00 2-12	0905	00	117	VAR
	DIST	COUNTY		SHEET NO.
	LBB	LUBBOCK,ETC.		089

22C

DATE:
FILE:

DATE:
FILE:



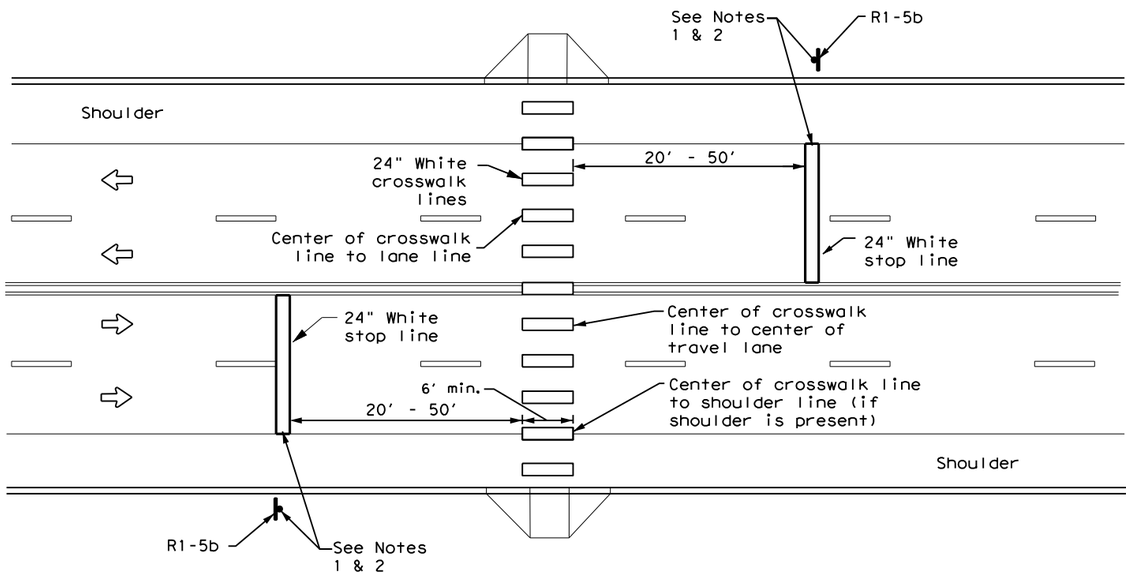
HIGH-VISIBILITY LONGITUDINAL CROSSWALK AT CONTROLLED APPROACH

GENERAL NOTES

1. Longitudinal crosswalk lines should not be placed in the wheel path of vehicles. Center the crosswalk lines on travel lanes, lane lines, and shoulder lines (if present).
2. A minimum 6" clear distance shall be provided to the curb face. If the last crosswalk line falls into this distance it must be omitted.
3. For divided roadways, adjustments in spacing of the crosswalk lines should be made in the median so that the crosswalk lines are maintained in their proper location across the travel portion of the roadway.
4. At skewed crosswalks, the crosswalk lines are to remain parallel to the lane lines.
5. Each crosswalk shall be a minimum of 6' wide.
6. The High-Visibility Longitudinal Crosswalk is the preferred crosswalk pattern on State Highways. Other crosswalk patterns as shown in the "Texas Manual on Uniform Traffic Control Devices" may be used. All crosswalk designs and dimension shall comply with the "Texas Manual on Uniform Traffic Control Devices."
7. Final placement of Stop Bar and Crosswalk shall be approved by the Engineer in the field.

MATERIAL SPECIFICATIONS	
PAVEMENT MARKERS (REFLECTORIZED)	DMS-4200
EPOXY AND ADHESIVES	DMS-6100
BITUMINOUS ADHESIVE FOR PAVEMENT MARKERS	DMS-6130
TRAFFIC PAINT	DMS-8200
HOT APPLIED THERMOPLASTIC	DMS-8220
PERMANENT PREFABRICATED PAVEMENT MARKINGS	DMS-8240

All pavement marking materials shall meet the required Departmental Material Specifications as specified by the plans.



UNSIGNALIZED MIDBLOCK HIGH-VISIBILITY LONGITUDINAL CROSSWALK

NOTES:

1. Use stop bars with Stop Here For Pedestrians (R1-5b) signs at unsignalized midblock cross walks.
2. Use stop bars with STOP HERE ON RED (R10-6 or R10-6a) signs at mid block crosswalks controlled by traffic signals or pedestrian hybrid beacons.

Texas Department of Transportation

Traffic Safety Division Standard

CROSSWALK PAVEMENT MARKINGS

PM(4)-22A

FILE: pm4-22a.dgn	DN:	CK:	DW:	CK:
© TxDOT December 2022	CONT	SECT	JOB	HIGHWAY
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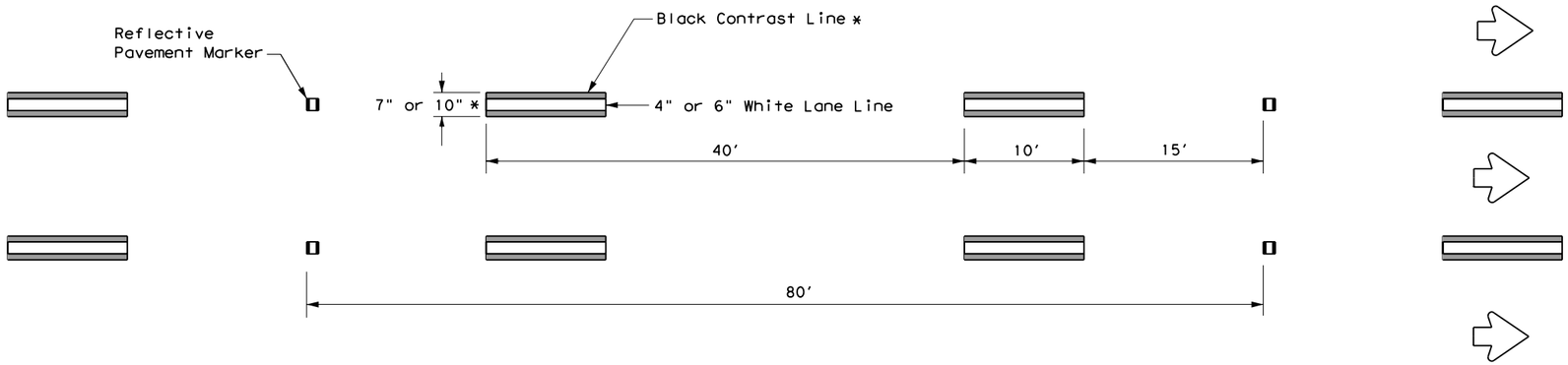
6-22	LBB	LUBBOCK,ETC.		090
12-22				

22D



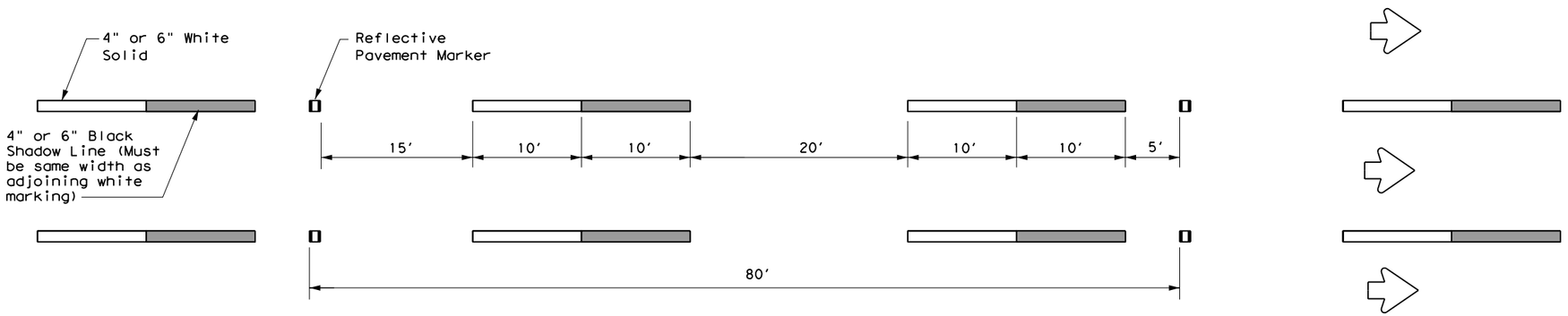
* See contrast line dimensions table for width of black line.

CONTRAST LANE LINE DESIGN

CONTRAST LINE DIMENSIONS		
White	Black (per side)	Total Width
4"	1.5"	7"
6"	2"	10"

GENERAL NOTES

1. Contrast and Shadow markings may only be used on concrete pavements.
2. Contrast and Shadow markings shall not be used on edge lines.
3. Contrast lane lines shall be permanent prefabricated pavement markings meeting DMS 8240.
4. Shadow lane line designs shall be a liquid markings system approved by TxDOT.
5. All raised reflective pavement markers placed in broken lines shall be placed in line with and midway between the white stripes.
6. See PM(2) for raised reflective pavement markings installation details.



SHADOW LANE LINE DESIGN

MATERIAL SPECIFICATIONS	
PAVEMENT MARKERS (REFLECTORIZED)	DMS-4200
EPOXY AND ADHESIVES	DMS-6100
BITUMINOUS ADHESIVE FOR PAVEMENT MARKERS	DMS-6130
TRAFFIC PAINT	DMS-8200
HOT APPLIED THERMOPLASTIC	DMS-8220
PERMANENT PREFABRICATED PAVEMENT MARKINGS	DMS-8240

All pavement marking materials shall meet the required Departmental Material Specifications as specified by the plans.

Texas Department of Transportation

Traffic Operations Division Standard

CONTRAST AND SHADOW PAVEMENT MARKINGS

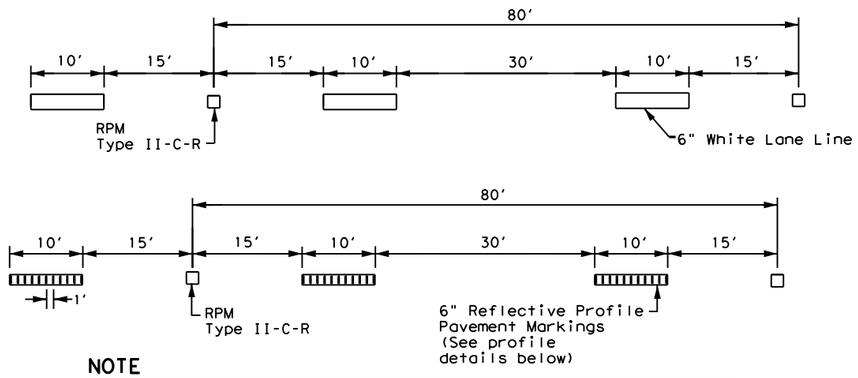
CPM(1)-14

FILE: CPM(1)14.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
© TxDOT May 2014	CONT	SECT	JOB	HIGHWAY
REVISIONS	0905	00	117	VAR
	DIST	COUNTY		SHEET NO.
	LBB	LUBBOCK,ETC.		091

22N

DATE:
FILE:

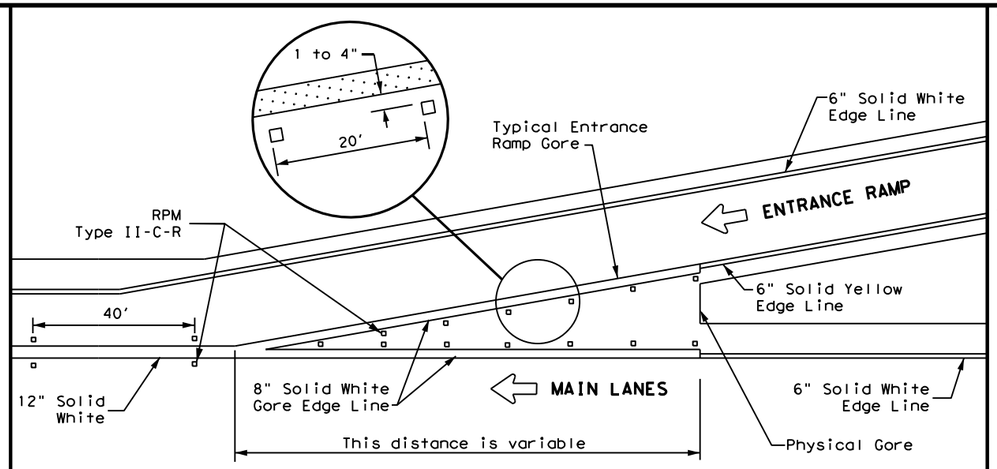
DATE:
FILE:



NOTE

Reflectorized raised pavement markers Type II-C-R shall be spaced on 80' centers with the clear face toward normal traffic and the red face toward wrong way traffic. All raised pavement markers placed along broken lines shall be placed in line with and midway between the stripes.

TRAFFIC LANE LINES PAVEMENT MARKING



TYPICAL ENTRANCE RAMP GORE MARKING

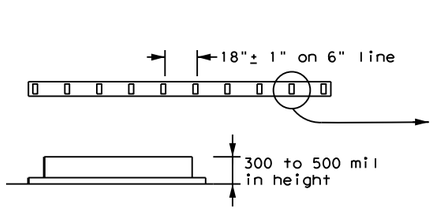
MATERIAL SPECIFICATIONS	
PAVEMENT MARKERS (REFLECTORIZED)	DMS-4200
EPOXY AND ADHESIVES	DMS-6100
BITUMINOUS ADHESIVE FOR PAVEMENT MARKERS	DMS-6130
TRAFFIC PAINT	DMS-8200
HOT APPLIED THERMOPLASTIC	DMS-8220
PERMANENT PREFABRICATED PAVEMENT MARKINGS	DMS-8240

All pavement marking materials shall meet the required Departmental Material Specifications as specified by the plans.

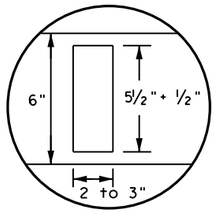
LEGEND	
⇦	Traffic flow
↱	Pavement marking arrows (white)
▫	Reflectorized Raised Markers (RPM) Type II-C-R

GENERAL NOTE

On concrete pavements the raised pavement markers shall be placed to one side of the longitudinal joints.



Reflective Profile Pavement Markings

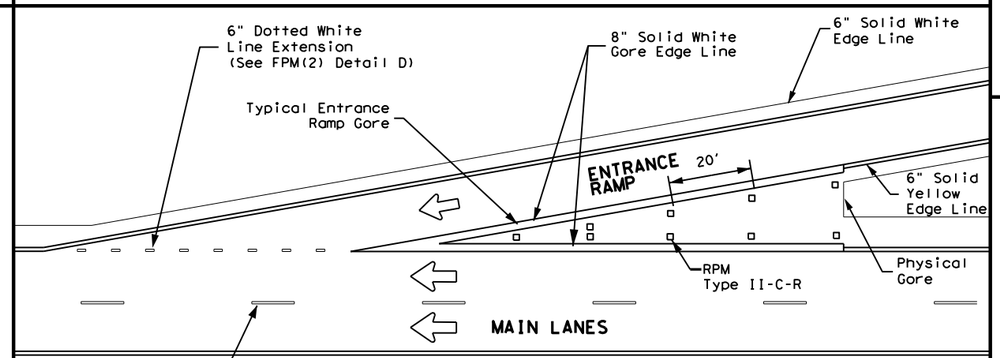


Standard 6" Profile Detail

NOTE

Edge lines should typically be 6" wide and the materials shall be as specified in the plans. See details above if reflective profile pavement markings are to be used.

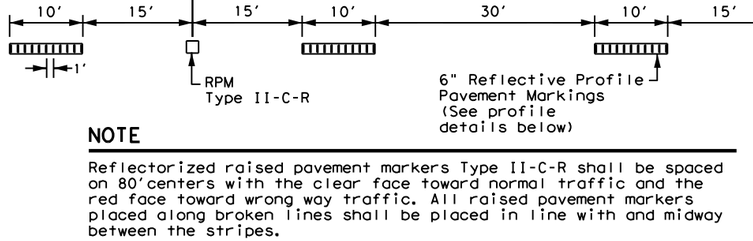
EDGE LINE PAVEMENT MARKINGS



NOTE

See the Roadway Design Manual Chapter 3 to determine if a tapered acceleration lane may be used.

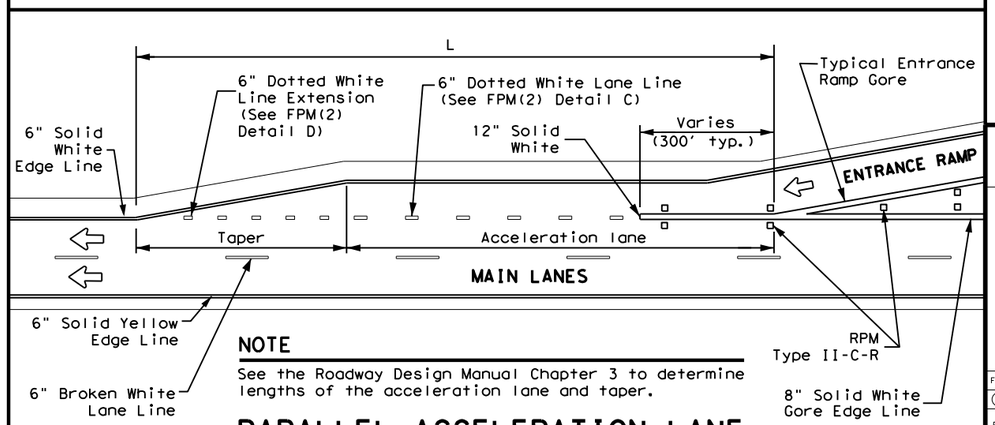
TAPERED ACCELERATION LANE



NOTES

1. Reflectorized raised pavement markers Type-II-C-R in the wrong way arrow shall have the clear face toward normal traffic and the red face toward the wrong way traffic.
2. Red reflectorized wrong way arrows, not to exceed two, may be placed on exit ramps. Locations of the arrows shall be as shown in the plans or as directed by the engineer.

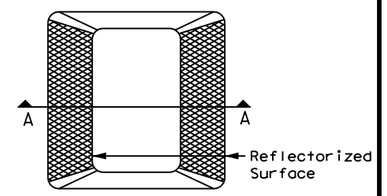
WRONG WAY ARROW



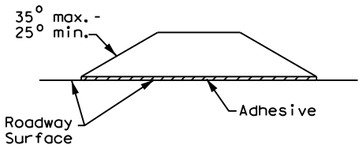
NOTE

See the Roadway Design Manual Chapter 3 to determine lengths of the acceleration lane and taper.

PARALLEL ACCELERATION LANE



Type II (Top View)



SECTION A

REFLECTORIZED RAISED PAVEMENT MARKER (RPM)

Texas Department of Transportation

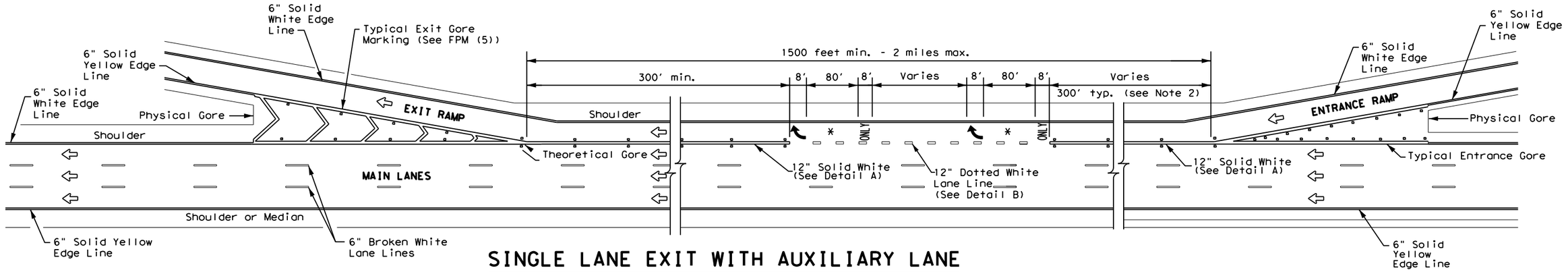
Traffic Safety Division Standard

TYPICAL STANDARD FREEWAY PAVEMENT MARKINGS WITH RAISED PAVEMENT MARKERS

FPM(1)-22

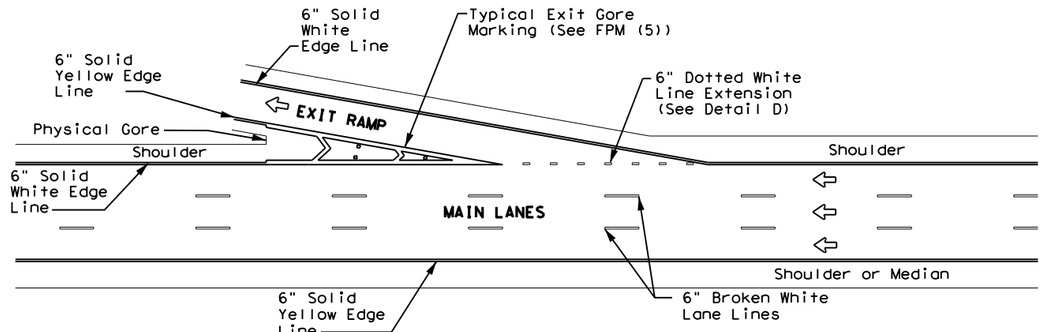
FILE: fpm(1)-22.dgn	DN:	CK:	DW:	CK:
© TxDOT October 2022	CONT	SECT	JOB	HIGHWAY
REVISIONS	0905	00	117	VAR
5-74 8-00 2-12	DIST	COUNTY		SHEET NO.
4-92 2-08 10-22	LBB	LUBBOCK,ETC.		092
5-00 2-10				

23A



SINGLE LANE EXIT WITH AUXILIARY LANE

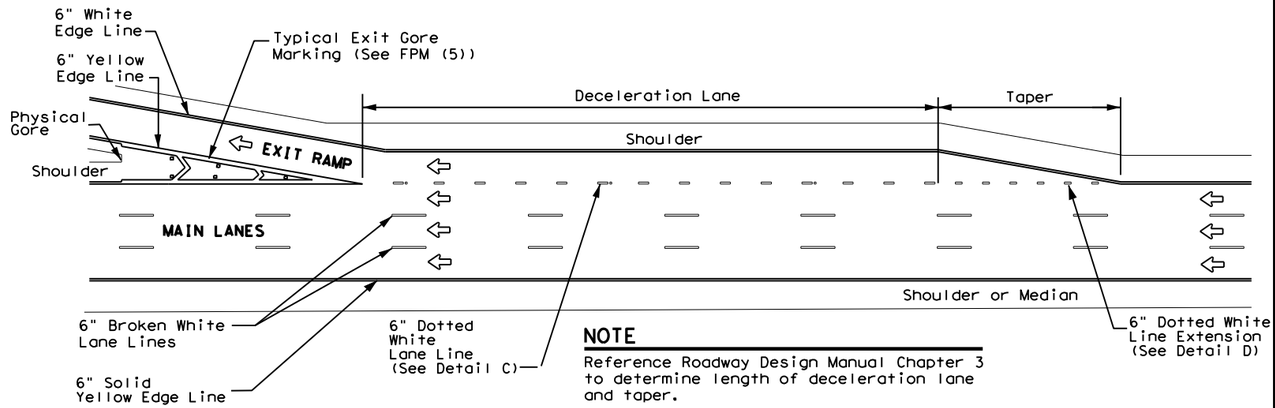
(See Note 2)



NOTE

Reference Roadway Design Manual Chapter 3 to determine if tapered deceleration lane may be used.

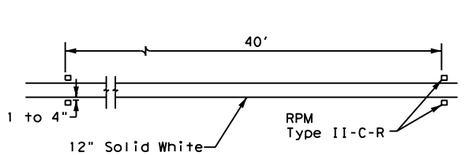
TAPERED DECELERATION LANE



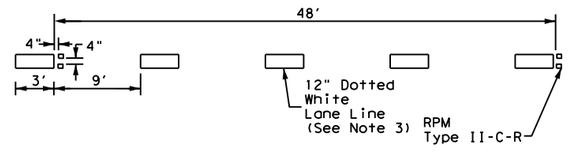
NOTE

Reference Roadway Design Manual Chapter 3 to determine length of deceleration lane and taper.

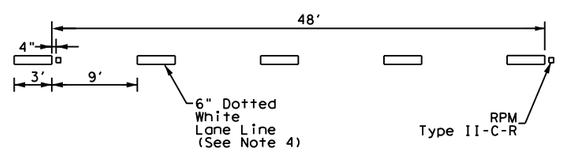
PARALLEL DECELERATION LANE



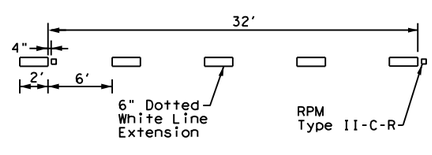
DETAIL A



DETAIL B



DETAIL C



DETAIL D

GENERAL NOTES

1. Pavement markings shall be white except as otherwise noted.
2. Length of 12" white line may vary depending on location.
3. Wide (12") dotted lane line (see Detail B) is used to separate a through lane that continues beyond the interchange from an adjacent mandatory exit lane.
4. Normal (6") dotted lane line (see Detail C) is used at parallel acceleration and deceleration lanes.
5. See FPM(1) for traffic lane line pavement marking details.

LEGEND	
⇦	Traffic flow
↱	Pavement marking arrows (white)
▫	Reflectorized Raised Markers (RPM) Type II-C-R
✳	Arrow markings are optional, however "ONLY" is required if arrow is used

MATERIAL SPECIFICATIONS	
PAVEMENT MARKERS (REFLECTORIZED)	DMS-4200
EPOXY AND ADHESIVES	DMS-6100
BITUMINOUS ADHESIVE FOR PAVEMENT MARKERS	DMS-6130
TRAFFIC PAINT	DMS-8200
HOT APPLIED THERMOPLASTIC	DMS-8220
PERMANENT PREFABRICATED PAVEMENT MARKINGS	DMS-8240

All pavement marking materials shall meet the required Departmental Material Specifications as specified by the plans.

Texas Department of Transportation

Traffic Safety Division Standard

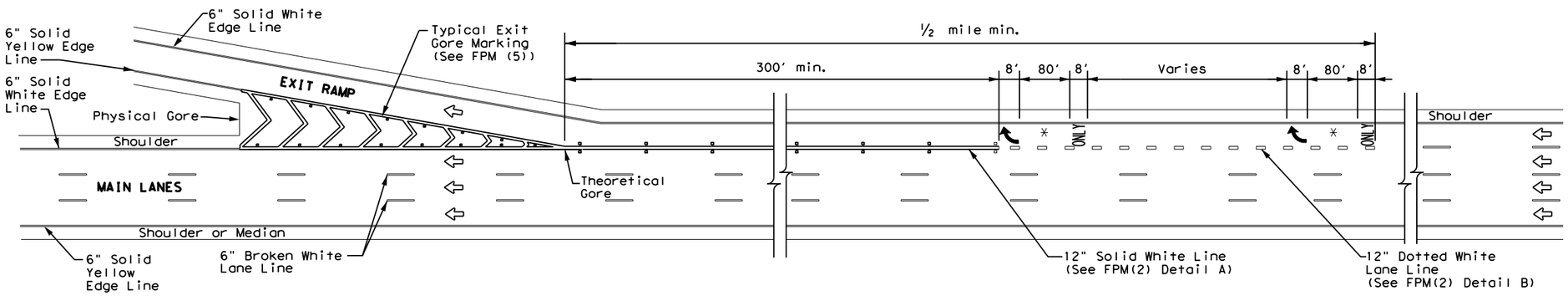
TYPICAL STANDARD FREEWAY PAVEMENT MARKINGS ENTRANCE AND EXIT RAMPS

FPM(2)-22

FILE: fpm(2)-22.dgn	DN:	CK:	DW:	CK:
©TxDOT October 2022	CONT	SECT	JOB	HIGHWAY
REVISIONS 2-77 5-00 2-12 4-92 8-00 10-22 8-95 2-10	0905	00	117	VAR
	DIST	COUNTY		SHEET NO.
	LBB	LUBBOCK,ETC.		093

23B

DATE:
FILE:

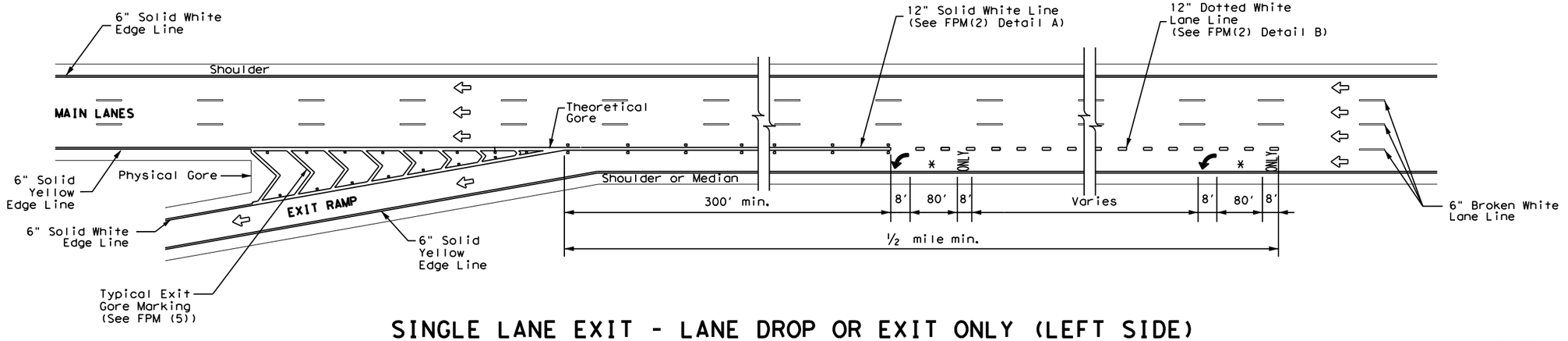


SINGLE LANE EXIT - LANE DROP OR EXIT ONLY

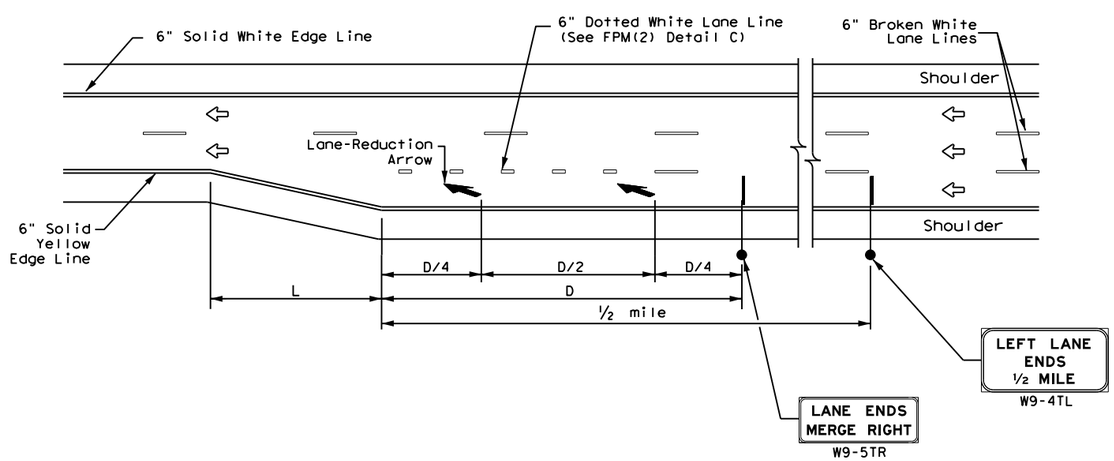
MATERIAL SPECIFICATIONS	
PAVEMENT MARKERS (REFLECTORIZED)	DMS-4200
EPOXY AND ADHESIVES	DMS-6100
BITUMINOUS ADHESIVE FOR PAVEMENT MARKERS	DMS-6130
TRAFFIC PAINT	DMS-8200
HOT APPLIED THERMOPLASTIC	DMS-8220
PERMANENT PREFABRICATED PAVEMENT MARKINGS	DMS-8240

All pavement marking materials shall meet the required Departmental Material Specifications as specified by the plans.

LEGEND	
⇦	Traffic flow
↱	Pavement marking arrows (white)
▫	Reflectorized Raised Markers (RPM) Type II-C-R
⚹	Arrow markings are optional, however "ONLY" is required if arrow is used



SINGLE LANE EXIT - LANE DROP OR EXIT ONLY (LEFT SIDE)



FREEWAY LANE REDUCTION

NOTES

1. Large Guide signs shall conform to the TxDOT Freeway Signing Handbook.
2. An optional third lane reduction arrow may be added based on engineering judgement. If used, the optional third lane reduction arrow should be centered between the first and last lane reduction arrows.
3. Arrows and sign details can be found in the Standard Highway Sign Designs for Texas (SHSD) at http://www.txdot.gov.
4. These guidelines may also be applied to the design of a right side lane reduction. Use LANE ENDS MERGE LEFT (W9-5TL) and RIGHT LANE ENDS 1/2 MILE (W9-4TR) signs in lieu of what is shown on drawing.

ADVANCED WARNING SIGN DISTANCE (D)		
Posted Speed	D (ft)	L (ft)
45 MPH	775	L=WS
50 MPH	885	
55 MPH	990	
60 MPH	1,100	
65 MPH	1,200	
70 MPH	1,250	
75 MPH	1,350	
80 MPH	1,500	
85 MPH	1,625	

GENERAL NOTES

1. Pavement markings shall be white except as otherwise noted.
2. Length of 12" white line may vary depending on location.
3. Wide (12") dotted lane line (see FPM(2) Detail B) is used to separate a through lane that continues beyond the interchange from an adjacent mandatory exit lane.
4. Edge lines are not required in curb and gutter sections of frontage roads.
5. See FPM(1) for traffic lane line pavement marking details.

Texas Department of Transportation

Traffic Safety Division Standard

TYPICAL STANDARD FREEWAY PAVEMENT MARKINGS SINGLE LANE DROP (EXIT ONLY) AND LANE REDUCTION DETAILS

FPM(3)-22

FILE: fpm(3)-22.dgn	DN:	CK:	DW:	CK:
© TxDOT October 2022	CONT	SECT	JOB	HIGHWAY
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5-00 2-12	LBB	LUBBOCK,ETC.		094
8-00 10-22				

DATE:
FILE:

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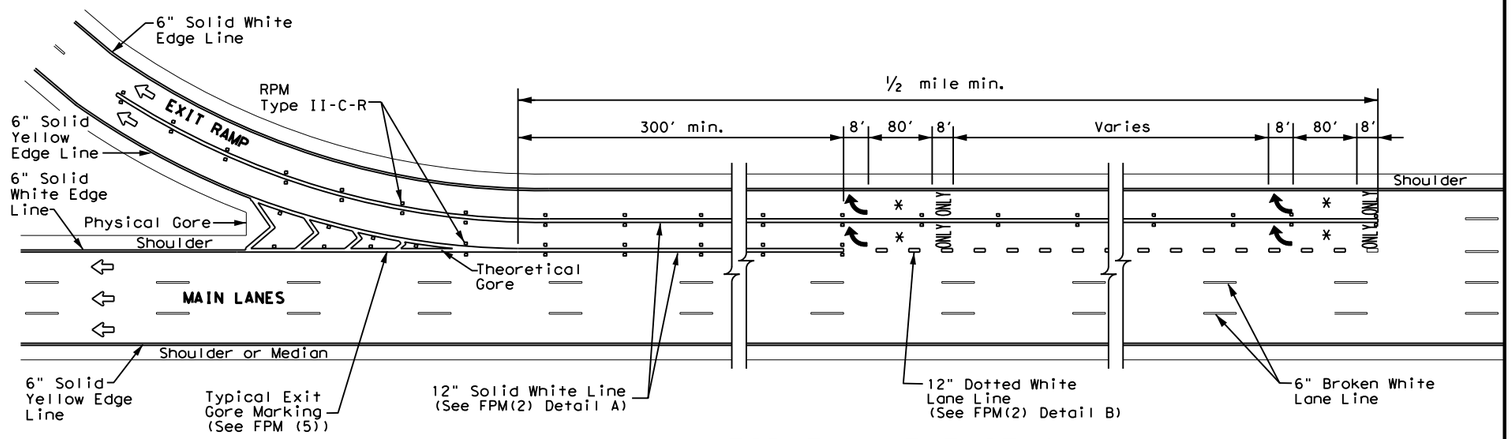


MULTIPLE LANE EXIT ONLY

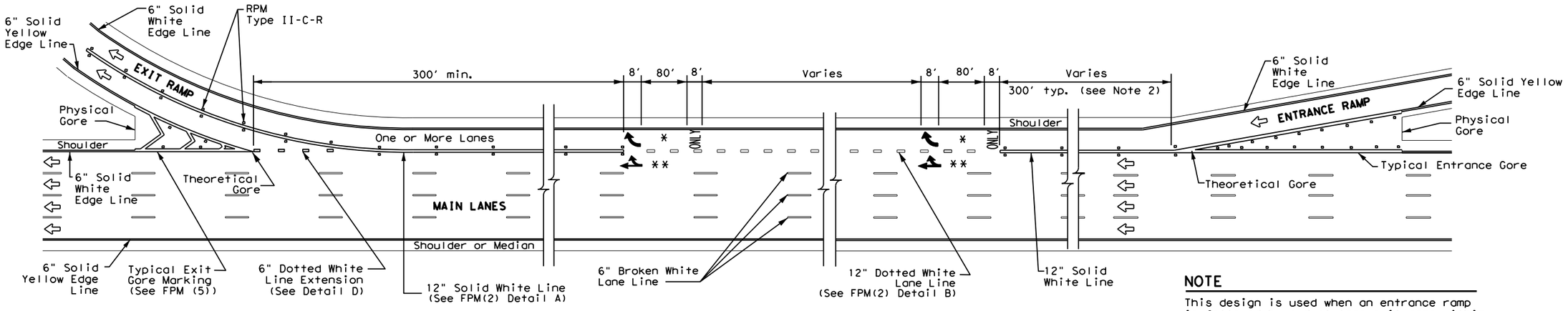
LEGEND	
⇦	Traffic Flow
▫	Reflectorized Raised Markers (RPM) Type II-C-R
↱	Pavement marking arrow (white)
*	Arrow markings are optional, however "ONLY" is required if arrow is used
**	Arrow markings are optional

MATERIAL SPECIFICATIONS	
PAVEMENT MARKERS (REFLECTORIZED)	DMS-4200
EPOXY AND ADHESIVES	DMS-6100
BITUMINOUS ADHESIVE FOR PAVEMENT MARKERS	DMS-6130
TRAFFIC PAINT	DMS-8200
HOT APPLIED THERMOPLASTIC	DMS-8220
PERMANENT PREFABRICATED PAVEMENT MARKINGS	DMS-8240

All pavement marking materials shall meet the required Departmental Material Specifications as specified by the plans.

GENERAL NOTES

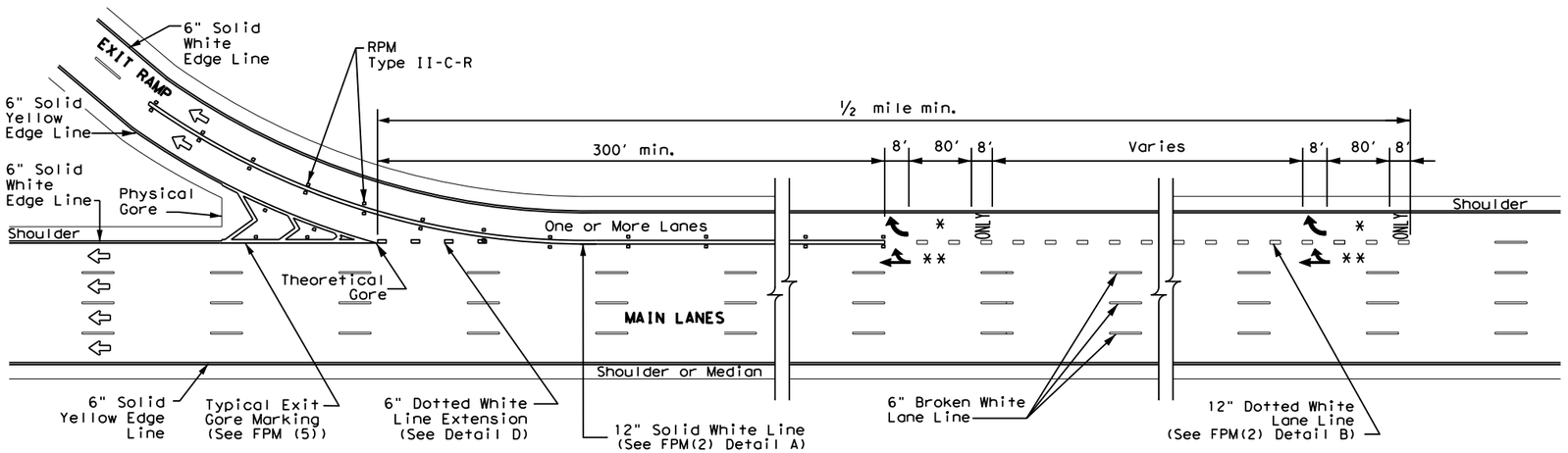
1. Pavement markings shall be white except as otherwise noted.
2. Length of 12" white line may vary depending on location.
3. Wide (12") dotted lane line (see FPM(2) Detail B) is used to separate a through lane that continues beyond the interchange from an adjacent mandatory exit lane.
4. Edge lines are not required in curb and gutter sections of frontage roads.
5. See FPM(1) for traffic lane line pavement marking details.



SINGLE LANE ENTRANCE WITH MULTIPLE LANE EXIT - EXIT ONLY WITH OPTION LANE

NOTE

This design is used when an entrance ramp is followed by a dual lane exit ramp within 2400' downstream (theoretical gore to theoretical gore).



MULTIPLE LANE EXIT - EXIT ONLY WITH OPTION LANE

DATE:
FILE:

Texas Department of Transportation

Traffic Safety Division Standard

TYPICAL STANDARD FREEWAY PAVEMENT MARKINGS MULTIPLE LANE DROP (EXIT) DETAILS

FPM(4)-22

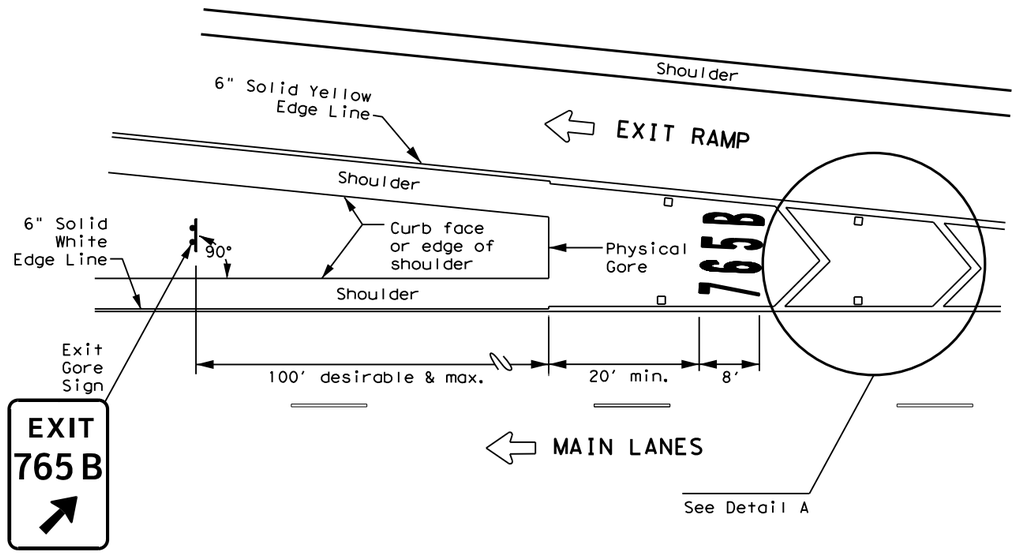
FILE: fpm(4)-22.dgn	DN:	CK:	DW:	CK:
©TxDOT October 2022	CONT	SECT	JOB	HIGHWAY
REVISIONS	0905	00	117	VAR
2-77 2-10	DIST	COUNTY		SHEET NO.
5-00 2-12	LBB	LUBBOCK,ETC.		095
8-00 10-22				

230

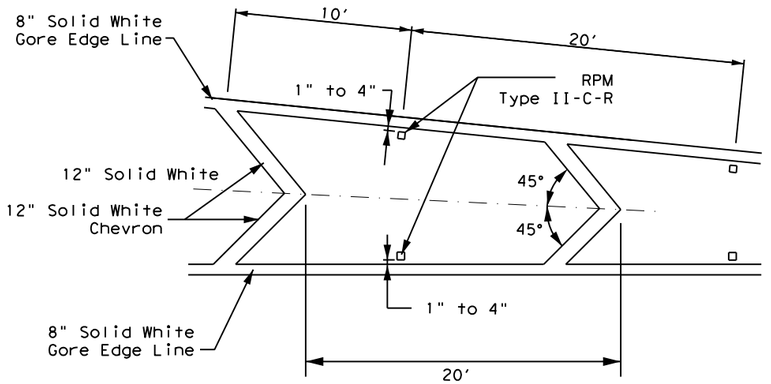
DATE:
FILE:

EXIT NUMBER PAVEMENT MARKING NOTES

1. Minimum 8 foot white exit number pavement markings should be used, unless otherwise noted.
2. Spacing between letters and numbers should be approximately 4 inches.
3. Pavement markings are to be located as specified elsewhere in the plans.
4. Numbers and Letters details can be found in the Standard Highway Design for Texas (SHSD) Section 12 at http://www.txdot.gov



MARKINGS WITH EXIT NUMBER



NOTES

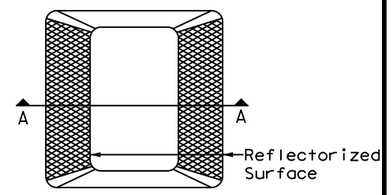
1. Raised pavement markers shall be centered between each chevron or neutral area line.
2. For more information, see Reflectorized Raised Pavement Marker Detail.

DETAIL A

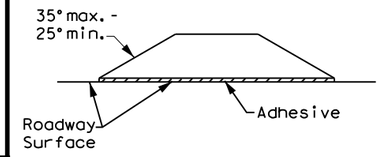
MATERIAL SPECIFICATIONS	
PAVEMENT MARKERS (REFLECTORIZED)	DMS-4200
EPOXY AND ADHESIVES	DMS-6100
BITUMINOUS ADHESIVE FOR PAVEMENT MARKERS	DMS-6130
TRAFFIC PAINT	DMS-8200
HOT APPLIED THERMOPLASTIC	DMS-8220
PERMANENT PREFABRICATED PAVEMENT MARKINGS	DMS-8240

All pavement marking materials shall meet the required Departmental Material Specifications as specified by the plans.

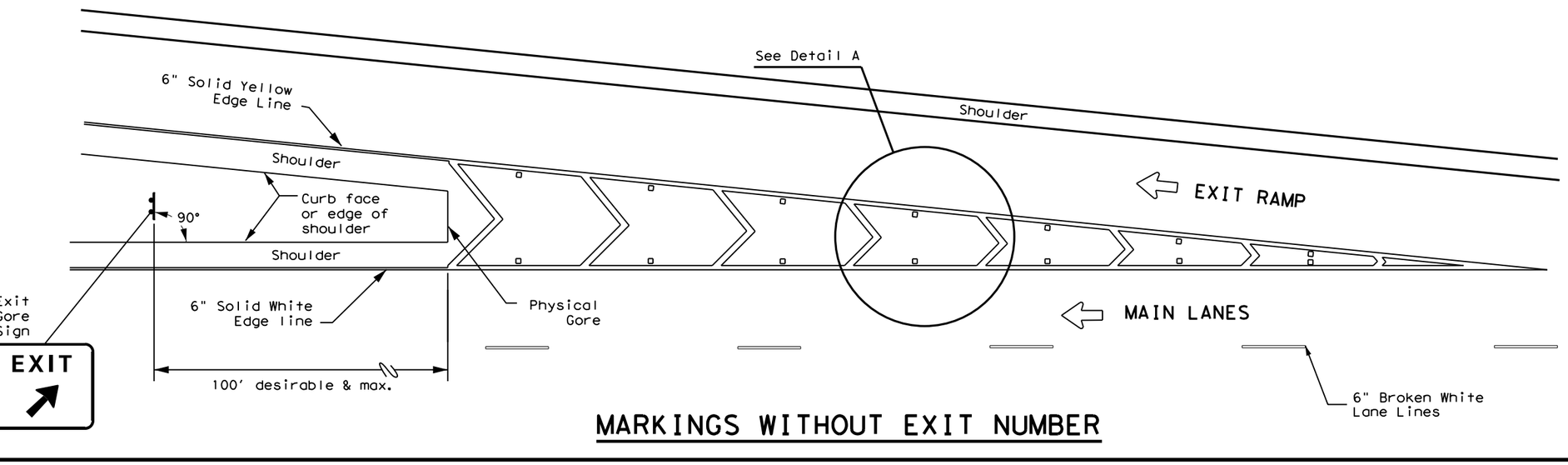
LEGEND	
⇦	Traffic flow
▫	Reflectorized Raised Markers (RPM) Type II-C-R



Type II (Top View)



SECTION A



MARKINGS WITHOUT EXIT NUMBER

REFLECTORIZED RAISED PAVEMENT MARKER (RPM)

Texas Department of Transportation

Traffic Safety Division Standard

EXIT GORE PAVEMENT MARKINGS

FPM(5)-22

FILE: fpm(5)-22.dgn	DN:	CK:	DW:	CK:
© TxDOT October 2022	CONT	SECT	JOB	HIGHWAY
REVISIONS 9-19 10-22	0905	00	117	VAR
	DIST	COUNTY		SHEET NO.
	LBB	LUBBOCK,ETC.		096

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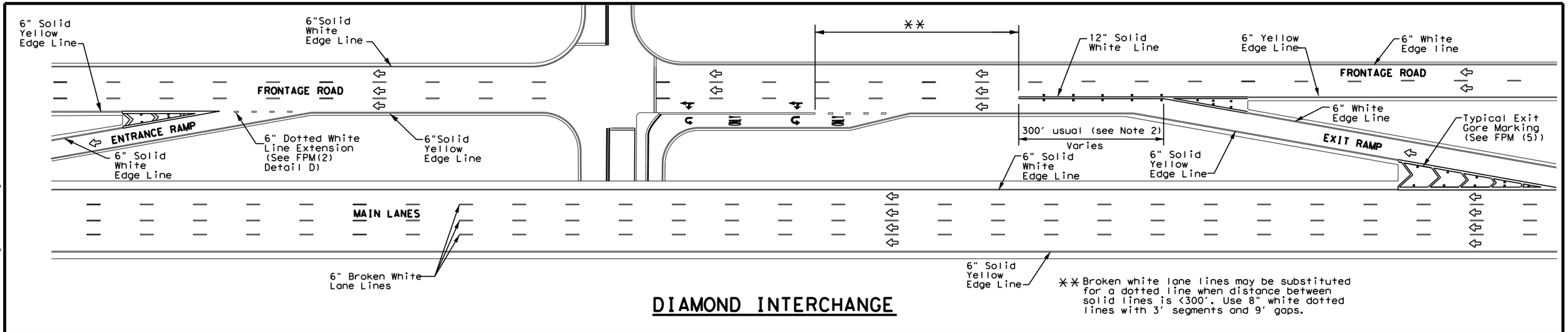
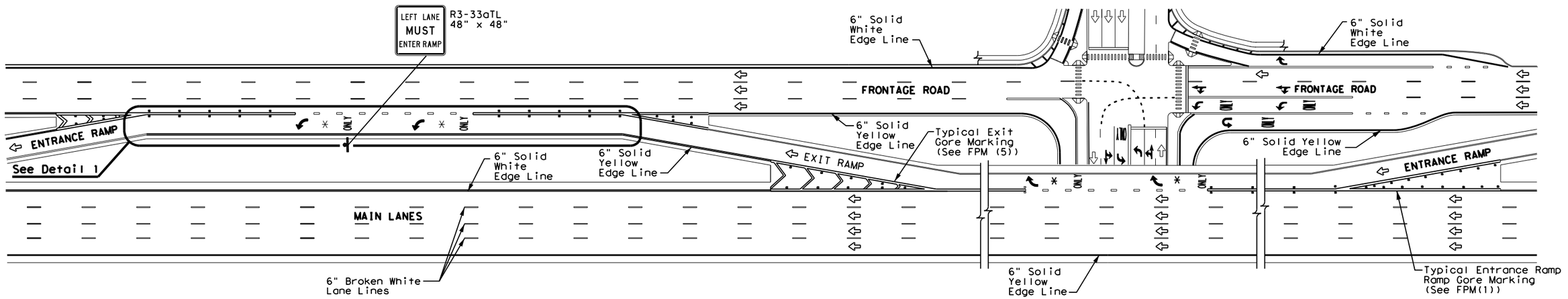
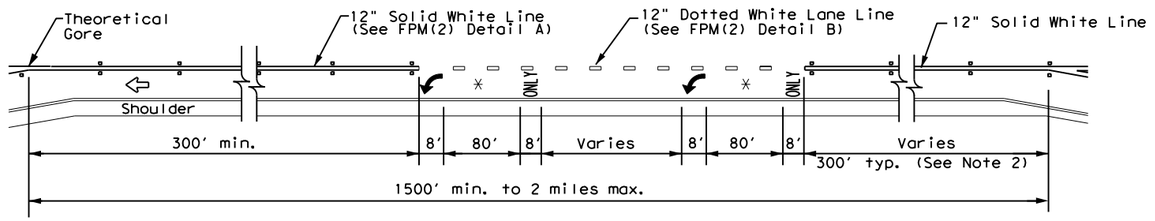


DIAMOND INTERCHANGE



URBAN X-RAMP WITH FRONTAGE ROAD AUXILIARY LANE



DETAIL 1

(Frontage Road Auxiliary Lane for X-Ramps)

MATERIAL SPECIFICATIONS	
PAVEMENT MARKERS (REFLECTORIZED)	DMS-4200
EPOXY AND ADHESIVES	DMS-6100
BITUMINOUS ADHESIVE FOR PAVEMENT MARKERS	DMS-6130
TRAFFIC PAINT	DMS-8200
HOT APPLIED THERMOPLASTIC	DMS-8220
PERMANENT PREFABRICATED PAVEMENT MARKINGS	DMS-8240

All pavement marking materials shall meet the required Departmental Material Specifications as specified by the plans.

GENERAL NOTES

1. Pavement markings shall be white except as otherwise noted.
2. Length of 12" white line may vary depending on location.
3. Wide (12") dotted lane line (see FPM(2) Detail B) is used to separate a through lane that continues beyond the interchange from an adjacent mandatory exit lane.
4. Edge lines are not required in curb and gutter sections of frontage roads.
5. See FPM(1) for traffic lane line pavement marking details.

LEGEND	
⇦	Traffic flow
↱	Pavement marking arrows (white)
▫	Reflectorized Raised Markers (RPM) Type II-C-R
✳	Arrow markings are optional, however "ONLY" is required if arrow is used

Texas Department of Transportation

Traffic Safety Division Standard

TYPICAL STANDARD FREEWAY AND FRONTAGE ROAD PAVEMENT MARKINGS

FPM(6)-22

FILE: fpm(6)-22.dgn	DN:	CK:	DW:	CK:
©TxDOT October 2022	CONT	SECT	JOB	HIGHWAY
REVISIONS 10-22	0905	00	117	VAR
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	LBB	LUBBOCK,ETC.		097

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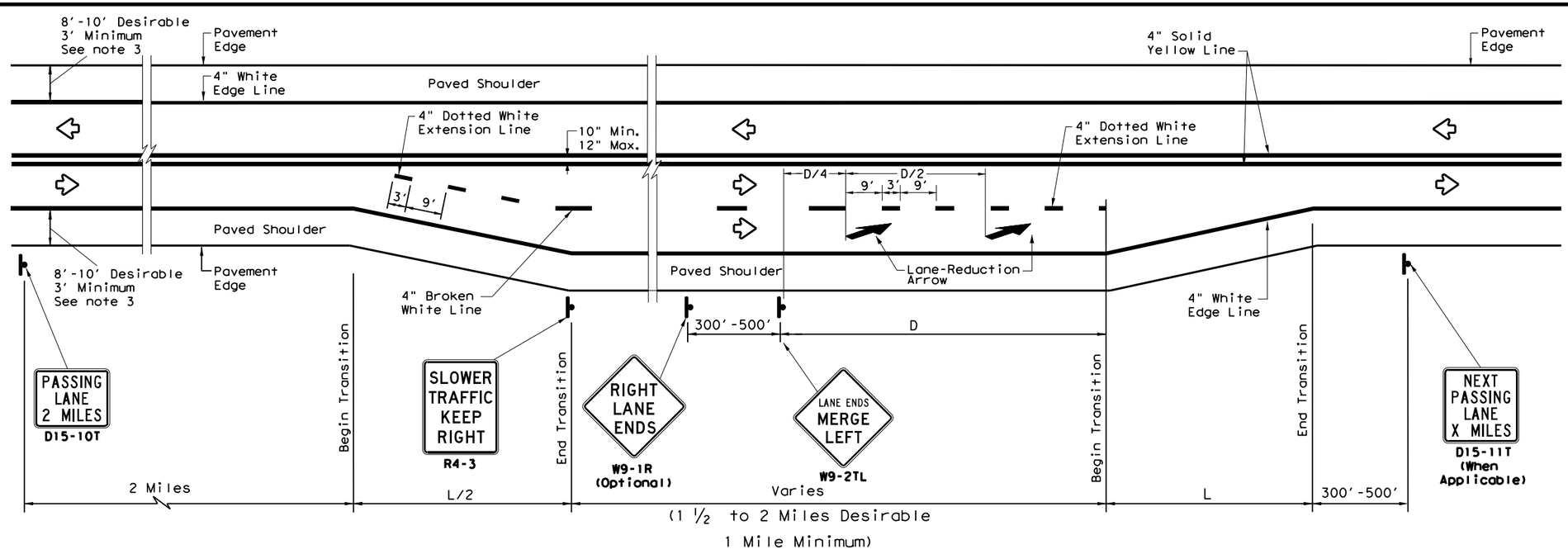
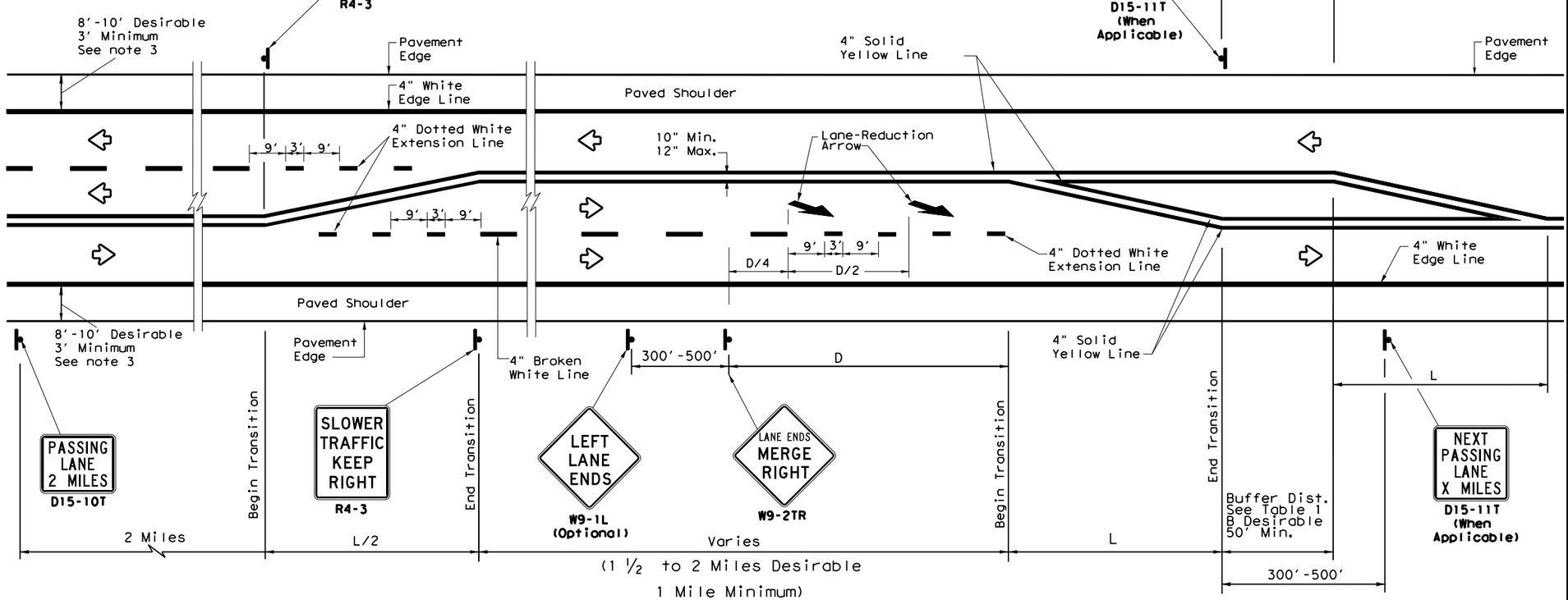


SEPARATED



ALTERNATING

LEGEND	
	Sign
	Traffic Flow

TYPICAL TAPER LENGTH (L)

Formula *	L = WS

* Transition length should be rounded up to nearest 5 foot increment.

L=Length of Transition (FT)
W=Width of Offset (FT)
S=Posted Speed (MPH)

EXAMPLE

A 12 foot lane is added on a 70 mph roadway. The length of the transition should be:

L=12x70=840 ft

TABLE 1
ADVANCE WARNING SIGN DISTANCE (D) AND BUFFER DISTANCE (B)

Posted Speed	D (FT)	B (FT)
40	670	305
45	775	360
50	885	425
55	990	495
60	1100	570
65	1200	645
70	1250	730
75	1350	820

GENERAL NOTES

1. For minimum and desirable design details, see the Roadway Design Manual, Chapter 4, Section 6, Super 2 Highways.
2. For Raised Pavement Markers(RPM)details, see Pavement Markings Standard sheet, PM(2). Note that RPMs are not recommended on the 4" dotted white extension lines.
3. For rumble strip options available for the designed shoulder width, see rumble strip standard sheet RS(4).

Texas Department of Transportation

Traffic Operations Division Standard

TEXAS SUPER 2 PASSING LANES

TS2(PL-1)-18

FILE: ts2-1-18.dgn	DN:	CK:	DW:	CK:
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REVISIONS	0905	00	117	VAR
2-12	DIST	COUNTY		SHEET NO.
3-12	LBB	LUBBOCK, ETC.		098
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DATE:
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PART 1 - GENERAL

1.01 DESCRIPTION

This project includes construction work within the right of way and/or properties of the Railroad and adjacent to its tracks, wire lines and other facilities. These sheets describe the minimum special requirements for coordination with the Railroad when working upon, over or under Railroad Right of Way or when impacting current or future Railroad operations. Coordinate with the Railroad while performing the work outlined herein, and afford the same cooperation with the Railroad as with TxDOT. Complete all submittals and work in accordance with TxDOT Standard Specifications, Railroad Guidelines and AREMA recommendations as modified by these minimum special requirements or as directed in writing by the Railroad Designated Representative.

For purposes of this project, the Railroad Designated Representative is the person or persons designated by the Railroad Manager of Industry and Public Projects to handle specific tasks related to the project.

1.02 REQUEST FOR INFORMATION / CLARIFICATION

Submit Requests for Information ("RFI") involving work within any Railroad Right of Way to the TxDOT Engineer. The TxDOT Engineer will submit the RFI to the Railroad Designated Representative for review and approval for RFI's corresponding to work within Railroad Right of Way. Allow six (6) weeks total time for review and approval, which includes four (4) weeks for review and approval by the Railroad.

1.03 PLANS / SPECIFICATIONS

TxDOT has received written Railroad approval of the plans and specifications for this project. Any revisions or changes in the plans after award of the Contract must have the approval of TxDOT and the Railroad.

PART 2 - UTILITIES AND FIBER OPTIC

Construct all utility installations in accordance with current AREMA recommendations, Railroad, TxDOT and owning utility specifications and requirements. Railroad general guidelines can be found on the Railroad website or by contacting the Railroad Designated Representative.

PART 3 - CONSTRUCTION

3.01 GENERAL

A. Perform all work in compliance with all applicable Railroad, Federal Railroad Administration (FRA), and TxDOT rules and regulations. Arrange and conduct work in a manner that does not endanger or interfere with the safe operation of the tracks and property of the Railroad and the traffic moving on such tracks, or the wires, signals and other property of the Railroad, its tenants or licensees, at or in the vicinity of the Work. The safe operation of railroad train movements takes precedence over any work to be performed by the Contractor. The Contractor is responsible for train delay cost and lost revenue claims due to any delays or interruption of train operations resulting from Contractor's construction or other activities.

B. Construction activities within 15 feet of the operational tracks will only be allowed if absolutely necessary and the Railroad's Designated Representative grants approval. Construction activities within 15 feet of the operational track(s) preferably allow the tracks to stay operational. In such cases, coordination and approval by the Railroad Track Manager is required with regard to schedule, flagging, and slow orders. See Sections 3.07 and 3.08 for additional information.

C. Provide track protection for all work equipment (including rubber tired equipment) operating within 25 feet from nearest rail. When not in use, keep Contractor machinery and materials at least 50 feet from the Railroad's nearest track.

D. Vehicular crossings of railroad track are allowed only at existing crossings, or haul road crossings developed with Railroad approval.

E. The Contractor is also advised that new railroad facilities within the project may be built by the Railroad. If applicable, these facilities are delineated in the plans. Be aware of the limits of responsibilities and coordinate efforts with the Railroad and TxDOT.

F. Railroad requirements do not allow work within 50 feet of track centers when a train passes the work site and all personnel must clear the area within 50 feet of the track centerline and secure all equipment. Additional allowances may be pursued as outlined in 3.02 and 3.03.

G. All permanent clearances shall be verified before project closing.

3.02 RAILROAD OPERATIONS

A. Trains and/or equipment are expected on any track, at any time, in either direction. Become familiar with the train schedules in this location and structure bid assuming intermittent track windows in this period, as defined in Paragraph B that follows.

B. All railroad tracks within and adjacent to the contract site are active, and rail traffic over these facilities shall be maintained throughout the Project. Activities may include both through moves and switching moves to local customers. railroad traffic and operations will occur continuously throughout the day and night on these tracks and shall be maintained at all times as defined herein. Coordinate and schedule the work so that construction activities do not interfere with railroad operations.

C. Coordinate work windows with TxDOT and the Railroad's Designated Representative. Types of work windows include Conditional Work Windows and Absolute Work Windows, as defined below:

1. Conditional Work Window: A Conditional Work Window is a period of time that railroad operations have priority over construction activities. When construction activities may occur on and/or adjacent to the railroad tracks within 25 feet of the nearest track, a railroad flag person will be required. At the direction of the railroad flag person, upon approach of a train, and when trains are present on the tracks, the tracks must be cleared (i.e., no construction equipment, materials or personnel within 25 feet, or as directed by the Railroad Designated Representative, from the tracks). Conditional Work Windows are available for the Project.

2. Absolute Work Window: An Absolute Work Window is a period of time that construction activities are given priority over railroad operations. During this time frame, the designated railroad track(s) will be inactive for train movements and may be fouled by the Contractor. At the end of an Absolute Work Window, the railroad tracks and/or signals must be completely operational for train operations and all Railroad, Public Utilities Commission (PUC) and FRA requirements, codes and regulations for operational tracks must be satisfied. In the situation where the operating tracks and/or signals have been affected, the Railroad will perform inspections of the work prior to placing that track back into service. Railroad flag persons will be required for construction activities requiring an Absolute Work Window. Absolute Work Windows will not generally be granted. Any request will require a detailed explanation for Railroad review.

3.03 RIGHT OF ENTRY, ADVANCE NOTICE AND WORK STOPPAGES

A. Do not perform any work within Railroad Right of Way without a valid executed Right of Entry Agreement if required on this project.

B. Give advance notice to the Railroad as required in the "Contractor's Right of Entry Agreement" before commencing work in connection with construction upon or over Railroad Right of Way and observe the Railroad's rules and regulations with respect thereto.

C. Perform all work upon Railroad Right of Way in a manner to avoid interference with or endanger the operations of the Railroad. Whenever work may affect the operations or safety of trains, submit the work method to the Railroad Designated Representative for approval. Approval does not relieve the Contractor from liability. Do not commence any work which requires flagging service or inspection service until the flagging protection required by the Railroad is available at the job site. See Section 3.15 for railroad flagging requirements.

D. Make requests in writing for both Absolute and Conditional Work Windows, at least 30 days in advance of any work. Include in the written request:
1. Exactly what the work entails.
2. The days and hours that work will be performed.
3. The exact location of work, and proximity to the tracks.
4. The type of window requested and the amount of time requested.
5. The designated contact person.

Provide a written confirmation notice to the Railroad at least 48 hours before commencing work in connection with approved work windows when work is within 25 feet of nearest rail. Perform all work in accordance with previously approved work plans.

E. Make provisions to protect operations and property of the Railroad should a condition arising from, or in connection with the work, require immediate and unusual action. If in the judgment of the Railroad Designated Representative such provisions are insufficient, the Railroad Designated Representative may require or provide such provisions as deemed necessary. In any event, such provisions shall be at the Contractor's expense and without cost to the Railroad or TxDOT. The Railroad or TxDOT shall have the right to order the Contractor to temporarily cease operations in the event of an emergency or, if in the opinion of the Railroad Designated Representative, the Contractor's operations could endanger railroad operations. In the event of such an order, immediately notify TxDOT of the order.

3.04 INSURANCE

Do not begin work upon or over Railroad Right of Way until furnishing the Railroad with the insurance policies, binders, certificates and endorsements required by the "Contractor's Right of Entry Agreement", and until the Railroad Designated Representative has advised TxDOT that such insurance is in accordance with the Agreement.

3.05 RAILROAD SAFETY ORIENTATION

A. Complete the railroad course "Orientation for Contractor's Safety", and maintain current registration prior to working on railroad property. This course is required to be completed annually by Contractor and Subcontractor personnel working on site.

"UPRR, BNSF, KCS/TEXMEX will not accept on-track safety training certificates from other railroads. Refer to Railroad specific contractor right of entry for training information."

B. Know and follow the "Contractor's Right of Entry Agreement" EXHIBIT D, MINIMUM SAFETY REQUIREMENTS regarding clothing, personal protective equipment, and general safety requirements.

3.06 COOPERATION

The Railroad will cooperate with Contractor so that work may be conducted in an efficient manner, and will cooperate with Contractor in enabling use of Railroad Right of Way in performing the work.

3.07 MINIMUM CONSTRUCTION CLEARANCES FOR FALSEWORK AND OTHER TEMPORARY STRUCTURES

Abide by the following minimum temporary clearances during the course of construction:
A. 15' - 0" (BNSF)(UPRR)and 14'-0" (KCS) horizontal from centerline of track
B. 22' (KCS) and 21' - 6" (UPRR & BNSF) vertically above top of rail.

For construction clearance less than listed above, obtain local Railroad Operating Unit review and approval.

3.08 APPROVAL OF REDUCED CLEARANCES

A. Maintain minimum track clearances during construction as specified in Section 3.07.

B. Submit any proposed infringement on the specified minimum clearances to the Railroad Designated Representative through TxDOT at least 30 days in advance of the work. Do not proceed with such infringement without written approval by the Railroad Designated Representative.

C. Do not commence work involving an approved infringement without receiving written assurance from the Railroad Designated Representative that arrangements have been made for any necessary flagging service.

Texas Department of Transportation | Rail Division

RAILROAD REQUIREMENTS FOR NON-BRIDGE CONSTRUCTION PROJECTS

FILE:	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
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REVISIONS March 2020	0905	00	117	VAR
	DIST	COUNTY		SHEET NO.
	LBB	LUBBOCK,ETC.		099

DATE:
FILE:

3.09 MAINTENANCE OF RAILROAD FACILITIES

A. Maintain all ditches and drainage structures free of silt or other obstructions resulting from Contractor's operations. Repair eroded areas and any other damage within Railroad Right of Way and repair any other damage to the property of the Railroad, or its tenants.

B. Perform all such maintenance and repair of damages due to the Contractors's operations at Contractor's expense.

C. Submit a proposed method of erosion control for review by the Railroad prior to beginning any grading on the project site. Comply with all applicable local, state and federal regulations when developing and implementing such erosion control.

3.10 SITE INSPECTIONS BY RAILROAD's DESIGNATED REPRESENTATIVE

A. In addition to the office reviews of construction submittals, site inspections may be performed by the Railroad Designated Representative at significant points during construction, including the following if applicable:
   1. Pre-construction meetings.
   2. Pile driving/drilling of caissons or drilled shafts.
   3. Reinforcement and concrete placement for railroad bridge substructure and/or superstructure.
   4. Erection of precast concrete or steel bridge superstructure.
   5. Placement of waterproofing (prior to placing ballast on bridge deck).
   6. Completion of the bridge structure.

B. Site inspection is not limited to the milestone events listed above. Site visits to check progress of the work may be performed at any time throughout the construction as deemed necessary by the Railroad.

C. Provide a detailed construction schedule, including the proposed temporary horizontal and vertical clearances and construction sequence for all work to TxDOT for submittal to the Railroad Designated Representative for review prior to commencement of work. Include the anticipated dates when the above listed events will occur. Update this schedule for the above listed events as necessary and each month at a minimum to allow the Railroad to schedule site inspections.

3.11 RAILROAD REPRESENTATIVES

Railroad representatives, conductors, flag person or watch person will be provided by the Railroad at expense of TxDOT to protect Railroad facilities, property and movements of its trains or engines. In general, the Railroad will furnish such personnel or other protective services as follows:

A. When any part of any equipment is standing or being operated within 25 feet, measured horizontally, from nearest rail of any track on which trains may operate, or when any object is off the ground and any dimension thereof could extend inside the 25 foot limit, or when any erection or construction activities are in progress within such limits, regardless of elevation above or below track.

B. For any excavation below elevation of track subgrade if, in the opinion of the Railroad Designated Representative, track or other railroad facilities may be subject to settlement or movement.

C. During any clearing, grubbing, excavation or grading in proximity to railroad facilities, which, in the opinion of the Railroad Designated Representative, may endanger railroad facilities or operations.

D. During any Contractor's operations when, in the opinion of the Railroad Designated Representative, railroad facilities, including, but not limited to, tracks, buildings, signals, wire lines, or pipe lines, may be endangered.

E. Arrange with the Railroad Designated Representative to provide the adequate number of flag persons to accomplish the work.

3.12 COMMUNICATIONS AND SIGNAL LINES

If required, the Railroad will rearrange its communications and signal lines, its grade crossing warning devices, train signals and tracks, and facilities that are in use and maintained by the Railroad's forces in connection with its operation at expense of TxDOT. This work by the Railroad will be done by its own forces and it is not a part of the Work under this Contract.

3.13 TRAFFIC CONTROL

Coordinate any operations that control traffic across or around railroad facilities with the Railroad Designated Representative.

3.14 CONSTRUCTION EXCAVATIONS AND BORING ACTIVITIES UNDER TRACK

A. Take special precaution and care in connection with excavating and shoring. Excavations for construction of footings, piers, columns, walls or other facilities that require shoring shall comply with requirements of TxDOT, OSHA, AREMA and Railroad "Guidelines for Temporary Shoring".

B. The project plans indicate whether there are fiber optic lines or other such telecommunications systems that require consideration. Regardless, contact the necessary call center to determine if such cable systems are present:

   UPRR 1-800-336-9193
   7:00 AM to 9:00 PM CST Monday-Friday except holidays,
   staffed 24 hrs/day for emergencies
   48 hrs notice required

   BNSF 1-800-533-2891
   24 hour number
   5 working days notice required

   KCS 1-800-344-8377
   Texas One Call, a 24 hour number
   48 hrs notice required, excluding weekends and holidays

   If a telecommunications system is buried anywhere on or near railroad property, coordinate with TxDOT, the Railroad and the Telecommunication Company(ies) to arrange for relocation or protective measures prior to beginning work on or near railroad property. Refer to the project General Notes for additional information.

C. Projects involving a boring or jack and bore operation under track such as drainage pipes or culverts and utilities require an installation plan reviewed and approved by the Railroad and TxDOT prior to proceeding with such construction. A railroad inspector and contractor assisted monitoring of ground and track movement is required to maintain safe passage of rail traffic. Stop installation and do not allow passage of trains if movements in excess of 1/4 inch vertical or horizontal is detected in the tracks. Immediately repair the damage to the satisfaction of TxDOT and the Railroad before proceeding.

3.15 RAILROAD FLAGGING

Per the Right of Entry Agreement for flagging, notify the Railroad Representative at least 10 working days in advance of Contractor's work and at least 30 working days in advance of any Contractor's work in which any person or equipment will be within 25 feet of nearest rail or as specified in the Contractor Right of Entry (CROE).

3.16 CLEANING OF RIGHT-OF-WAY

When work is complete, remove all tools, implements, and other materials brought into Railroad Right of Way and leave the right of Way in a clean and presentable condition to the satisfaction of TxDOT and the Railroad.

Texas Department of Transportation | Rail Division

RAILROAD REQUIREMENTS FOR NON-BRIDGE CONSTRUCTION PROJECTS

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REVISIONS March 2020	0905	00	117	VAR
	DIST	COUNTY		SHEET NO.
	LBB	LUBBOCK,ETC.		100

DATE:
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I. WORK AT CROSSING LOCATIONS (AT GRADE, HIGHWAY OVERPASS, HIGHWAY UNDERPASS, PEDESTRIAN, OR CLOSED/ABANDONED)

DOT #: SEE ATTACHMENT
Crossing Type: ** SEE ATTACHMENT
RR Company Owning Track at Crossing: SEE ATTACHMENT
Operating RR Company at Track: SEE ATTACHMENT
RR MP: SEE ATTACHMENT
RR Subdivision: SEE ATTACHMENT
City: SEE ATTACHMENT
County: SEE ATTACHMENT
CSJ at this Crossing: SEE ATTACHMENT
Highway/Roadway name crossing the railroad: SEE ATTACHMENT
# of regularly scheduled trains per day at this crossing: SEE ATTACHMENT
# of switching movements per day at this crossing: SEE ATTACHMENT
% of estimated contract cost of work within railroad ROW: SEE ATTACHMENT

Scope of Work at this Crossing to Be Performed by State Contractor:
REPLACEMENT OF PAVEMENT MARKINGS

Scope of Work at this Crossing to Be Performed by Railroad Company:
N/A

** Choose: Highway Overpass, Highway Underpass, At Grade, Pedestrian, or Closed/Abandoned

II. OTHER PROJECT WORK WITHIN RAILROAD RIGHTS-OF-WAY (ROW)

III. FLAGGING & INSPECTION

of Days of Railroad Flagging Expected: 10

On this project, night or weekend flagging is:

☐ Expected
☒ Not Expected

Flagging services will be provided by:

☒ Railroad Company: TxDOT will pay flagging invoices
☐ Outside Party: Contractor will pay flagging invoices, to be reimbursed by TxDOT

Contractor must incorporate flaggers into anticipated construction schedule. The Railroad requires a 30 day notice if their flaggers are to be utilized. If Contractor falls behind schedule due to their own negligence and is not ready for scheduled flaggers, any flagging charges will be paid by Contractor.

Contact Information for Flagging:

☐ UPRR - UP.info@railpros.com
Call Center 877-315-0513, Select #1 for flagging
- UP.request@nrssinc.net
Call Center 877-984-6777

☒ BNSF - BNSF.info@railpros.com
Call Center 877-315-0513, Select #1 for flagging

☐ KCS - KCS.info@railpros.com
Call Center 877-315-0513, Select #1 for flagging
- Bottom Line On-Track Safety Services
bottomline076@aol.com, 903-767-7630

☐ OTHERS

Contractor must incorporate Construction Inspection into anticipated construction schedule.

☒ Not Required

☐ Required: Contact Information for Construction Inspection:

IV. CONSTRUCTION WORK TO BE PERFORMED BY THE RAILROAD

On this project, construction work to be performed by a railroad company is:

☐ Required
☒ Not Required

Coordinate with TxDOT for any work to be performed by the Railroad Company. TxDOT must issue a work order for any work done by the Railroad Company prior to the work being performed.

V. RAILROAD INSURANCE REQUIREMENTS

Railroad reference number shall be provided by TxDOT CST or DO.

The Contractor shall confirm the insurance requirements with the Railroad as the insurance limits are subject to change without notice.

Insurance policies must be issued for and on behalf of the Railroad. Where more than one Railroad Company is operating on the same right of way or where several Railroad Companies are involved and operate on their own separate rights of way, provide separate insurance policies in the name of each Railroad Company.

No direct compensation will be made to the Contractor for providing the insurance coverages shown below or any deductibles. These costs are incidental to the various bid items.

Type of Insurance	Amount of Coverage (Minimum)
Workers Compensation	$500,000 / $500,000 / $500,000
Commercial General Liability	$2,000,000 / $4,000,000
Business Automobile	$2,000,000 combined single limit

Railroad Protective Liability		
☐	Not Required	
☒	Non - Bridge Projects	$2,000,000 / $6,000,000
☐	Bridge Projects	$5,000,000 / $10,000,000
☐	Other	

VI. CONTRACTOR'S RIGHT OF ENTRY (ROE) AGREEMENT

On this project, an ROE agreement is:

☒ Not Required

☐ Required: TxDOT CST to assist in obtaining with the UPRR (see Item 5, Article 8.3)

☐ Required: UPRR Maintenance Consent Letter. TxDOT CST to assist.

☐ Required: Contractor to obtain (see Item 5, Article 8.4)
With the following railroad companies: _____

To view previously approved ROE Agreement templates agreed upon between the State and Railroad, see:

http://www.txdot.gov/inside-txdot/division/rail/samples.html

Approved ROE Agreement templates are not to be modified by the Contractor.

Contractor shall not operate within Railroad Right of Way without an executed Construction & Maintenance Agreement between the State and the Railroad and an executed ROE agreement between the Contractor and the Railroad if required on project.

VII. RAILROAD COORDINATION MEETING

On this project, a Railroad Coordination Meeting is:

☒ Not Required
☐ Required

See Item 5, Article 8.1 for more details.

VIII. SUBCONTRACTORS

Contractor shall not subcontract work without written consent of TxDOT. Subcontractors are required to maintain the same insurance coverage as required of the Contractor.

IX. EMERGENCY NOTIFICATION

In Case of Railroad Emergency
Call BNSF Emergency Line
Railroad Emergency Line at 800-832-5452
Location: DOT VAR.
RR Milepost VAR.
Subdivision VAR.

Texas Department of Transportation | Rail Division

RAILROAD SCOPE OF WORK
PROJECT SPECIFIC DETAILS

FILE: RR Scope of Work.dgn	DN: TxDOT	CK:	DW:	CK:
© TxDOT June 2014	CONT	SECT	JOB	HIGHWAY
REVISIONS	0905	00	117	VARIOUS
9/2021	DIST	COUNTY		SHEET NO.
	LBB	LUBBOCK, ETC.		101

DOT#	CROSSING TYPE	TRACK OWNER	TRACK OPERATOR	RR MP	SUBDIVISION	CITY	COUNTY	HWY/RDWY AT CROSSING	CSJ	TRAINS PER DAY	SWITCHING MOVEMENTS	% OF WORK
014849L	PUBLIC	BNSF	BNSF	18.47	SLATON	MULESHOE	BAILEY	FM 2079	90500117	18	0	
017257L	PUBLIC	BNSF	BNSF	623.73	PLAINVIEW	PLAINVIEW	HALE	FM 3183	90500117	10	0	
017264W	PUBLIC	BNSF	BNSF	625.74	PLAINVIEW	PLAINVIEW	HALE	FM 1767	90500117	10	0	
017280F	PUBLIC	BNSF	BNSF	629.87	PLAINVIEW	PLAINVIEW	HALE	FM 400	90500117	12	0	
017271G	PUBLIC	BNSF	BNSF	627.94	PLAINVIEW	PLAINVIEW	HALE	FM 400	90500117	12	0	
276582V	PUBLIC	BNSF	BNSF	324.06	DIMMITT SPUR	PLAINVIEW	HALE	FM 400	90500117	6	4	
017334J	PUBLIC	BNSF	BNSF	657.04	PLAINVIEW	ABERNATHY	HALE	FM 2060	90500117	6	0	
014891K	PUBLIC	BNSF	BNSF	60.88	SLATON	ANTON	LAMB	FM 1072	90500117	16	0	
014870S	PUBLIC	BNSF	BNSF	38.58	SLATON	SUDAN	LAMB	FM 1843	90500117	16	0	
015001B	PUBLIC	BNSF	BNSF	688.66	SLATON	SLATON	LUBBOCK	FM 400	90500117	20	0	
017385U	PUBLIC	BNSF	BNSF	596.35	PLAINVIEW	TULIA	SWISHER	FM 214	90500117	8	0	
017383F	PUBLIC	BNSF	BNSF	592.14	PLAINVIEW	HAPPY	SWISHER	CR E/ IH 27	90500117	8	0	

DATE:
FILE:

Texas Department of Transportation

Rail Division

RAILROAD SCOPE OF WORK

PROJECT SPECIFIC DETAILS

FILE: RR Scope of Work.dgn	DN: TxDOT	CK:	DW:	CK:		
	CONT	SECT	JOB	HIGHWAY		
REVISIONS	0905	00	117	VARIOUS		
9/2021	DIST	COUNTY		SHEET NO.		
	LBB	LUBBOCK, ETC.		102		

DATE:
FILE:

I. WORK AT CROSSING LOCATIONS (AT GRADE, HIGHWAY OVERPASS, HIGHWAY UNDERPASS, PEDESTRIAN, OR CLOSED/ABANDONED)

DOT #: SEE ATTACHMENT
Crossing Type: ** SEE ATTACHMENT
RR Company Owning Track at Crossing: SEE ATTACHMENT
Operating RR Company at Track: SEE ATTACHMENT
RR MP: SEE ATTACHMENT
RR Subdivision: SEE ATTACHMENT
City: SEE ATTACHMENT
County: SEE ATTACHMENT
CSJ at this Crossing: SEE ATTACHMENT
Highway/Roadway name crossing the railroad: SEE ATTACHMENT
# of regularly scheduled trains per day at this crossing: SEE ATTACHMENT
# of switching movements per day at this crossing: SEE ATTACHMENT
% of estimated contract cost of work within railroad ROW: SEE ATTACHMENT

Scope of Work at this Crossing to Be Performed by State Contractor:
REPLACEMENT OF PAVEMENT MARKINGS

Scope of Work at this Crossing to Be Performed by Railroad Company:
N/A

** Choose: Highway Overpass, Highway Underpass, At Grade, Pedestrian, or Closed/Abandoned

II. OTHER PROJECT WORK WITHIN RAILROAD RIGHTS-OF-WAY (ROW)

III. FLAGGING & INSPECTION

of Days of Railroad Flagging Expected: 1

On this project, night or weekend flagging is:

☐ Expected
☒ Not Expected

Flagging services will be provided by:

☒ Railroad Company: TxDOT will pay flagging invoices
☐ Outside Party: Contractor will pay flagging invoices, to be reimbursed by TxDOT

Contractor must incorporate flaggers into anticipated construction schedule. The Railroad requires a 30 day notice if their flaggers are to be utilized. If Contractor falls behind schedule due to their own negligence and is not ready for scheduled flaggers, any flagging charges will be paid by Contractor.

Contact Information for Flagging:

☐ UPRR - UP.info@railpros.com
Call Center 877-315-0513, Select #1 for flagging
- UP.request@nrssinc.net
Call Center 877-984-6777

☐ BNSF - BNSF.info@railpros.com
Call Center 877-315-0513, Select #1 for flagging

☐ KCS - KCS.info@railpros.com
Call Center 877-315-0513, Select #1 for flagging
- Bottom Line On-Track Safety Services
bottomline076@aol.com, 903-767-7630

☒ OTHERS Robby Rodriguez, L&WR
608-787-0658
robby.rodriguez@watco.com

Contractor must incorporate Construction Inspection into anticipated construction schedule.

☒ Not Required

☐ Required: Contact Information for Construction Inspection:

IV. CONSTRUCTION WORK TO BE PERFORMED BY THE RAILROAD

On this project, construction work to be performed by a railroad company is:

☐ Required
☒ Not Required

Coordinate with TxDOT for any work to be performed by the Railroad Company. TxDOT must issue a work order for any work done by the Railroad Company prior to the work being performed.

V. RAILROAD INSURANCE REQUIREMENTS

Railroad reference number shall be provided by TxDOT CST or DO.

The Contractor shall confirm the insurance requirements with the Railroad as the insurance limits are subject to change without notice.

Insurance policies must be issued for and on behalf of the Railroad. Where more than one Railroad Company is operating on the same right of way or where several Railroad Companies are involved and operate on their own separate rights of way, provide separate insurance policies in the name of each Railroad Company.

No direct compensation will be made to the Contractor for providing the insurance coverages shown below or any deductibles. These costs are incidental to the various bid items.

Type of Insurance	Amount of Coverage (Minimum)
Workers Compensation	$500,000 / $500,000 / $500,000
Commercial General Liability	$2,000,000 / $4,000,000
Business Automobile	$2,000,000 combined single limit

Railroad Protective Liability		
☐	Not Required	
☒	Non - Bridge Projects	$2,000,000 / $6,000,000
☐	Bridge Projects	$5,000,000 / $10,000,000
☐	Other	

VI. CONTRACTOR'S RIGHT OF ENTRY (ROE) AGREEMENT

On this project, an ROE agreement is:

☐ Not Required

☐ Required: TxDOT CST to assist in obtaining with the UPRR (see Item 5, Article 8.3)

☐ Required: UPRR Maintenance Consent Letter. TxDOT CST to assist.

☒ Required: Contractor to obtain (see Item 5, Article 8.4)
With the following railroad companies: L&WR

To view previously approved ROE Agreement templates agreed upon between the State and Railroad, see:

http://www.txdot.gov/inside-txdot/division/rail/samples.html

Approved ROE Agreement templates are not to be modified by the Contractor.

Contractor shall not operate within Railroad Right of Way without an executed Construction & Maintenance Agreement between the State and the Railroad and an executed ROE agreement between the Contractor and the Railroad if required on project.

VII. RAILROAD COORDINATION MEETING

On this project, a Railroad Coordination Meeting is:

☒ Not Required
☐ Required

See Item 5, Article 8.1 for more details.

VIII. SUBCONTRACTORS

Contractor shall not subcontract work without written consent of TxDOT. Subcontractors are required to maintain the same insurance coverage as required of the Contractor.

IX. EMERGENCY NOTIFICATION

In Case of Railroad Emergency
Call L&WR Emergency Line
Railroad Emergency Line at 888-783-4316
Location: DOT VAR.
RR Milepost VAR.
Subdivision VAR.

Texas Department of Transportation | Rail Division

RAILROAD SCOPE OF WORK
PROJECT SPECIFIC DETAILS

FILE: RR Scope of Work.dgn	DN: TxDOT	CK:	DW:	CK:
© TxDOT June 2014	CONT	SECT	JOB	HIGHWAY
REVISIONS	0905	00	117	VARIOUS
9/2021	DIST	COUNTY		SHEET NO.
	LBB	LUBBOCK, ETC.		103

DISCLAIMER:
The use of this standard is governed by the "Texas Engineering Practice Act". No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.

DATE:
FILE:

DOT#	CROSSING TYPE	TRACK OWNER	TRACK OPERATOR	RR MP	SUBDIVISION	CITY	COUNTY	HWY/RDWY AT CROSSING	CSJ	TRAINS PER DAY	SWITCHING MOVEMENTS	% OF WORK
017757J	PUBLIC	WATCO	LWR	28.78	SEAGRAVES	MEADOW	TERRY	FM 211	90500117	2	0	

Texas Department of Transportation

Rail Division

RAILROAD SCOPE OF WORK

PROJECT SPECIFIC DETAILS

FILE: RR Scope of Work.dgn	DN: TxDOT	CK:	DW:	CK:
© TxDOT June 2014	CONT	SECT	JOB	HIGHWAY
REVISIONS	0905	00	117	VARIOUS
3/2020	DIST	COUNTY		SHEET NO.
	LBB	LUBBOCK, ETC.		104

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DATE:
FILE:

I. WORK AT CROSSING LOCATIONS (AT GRADE, HIGHWAY OVERPASS, HIGHWAY UNDERPASS, PEDESTRIAN, OR CLOSED/ABANDONED)

DOT #: SEE ATTACHMENT
Crossing Type: ** SEE ATTACHMENT
RR Company Owning Track at Crossing: SEE ATTACHMENT
Operating RR Company at Track: SEE ATTACHMENT
RR MP: SEE ATTACHMENT
RR Subdivision: SEE ATTACHMENT
City: SEE ATTACHMENT
County: SEE ATTACHMENT
CSJ at this Crossing: SEE ATTACHMENT
Highway/Roadway name crossing the railroad: SEE ATTACHMENT
# of regularly scheduled trains per day at this crossing: SEE ATTACHMENT
# of switching movements per day at this crossing: SEE ATTACHMENT
% of estimated contract cost of work within railroad ROW: SEE ATTACHMENT

Scope of Work at this Crossing to Be Performed by State Contractor:
REPLACEMENT OF PAVEMENT MARKINGS

Scope of Work at this Crossing to Be Performed by Railroad Company:
N/A

** Choose: Highway Overpass, Highway Underpass, At Grade, Pedestrian, or Closed/Abandoned

II. OTHER PROJECT WORK WITHIN RAILROAD RIGHTS-OF-WAY (ROW)

III. FLAGGING & INSPECTION

* of Days of Railroad Flagging Expected: 1

On this project, night or weekend flagging is:

☐ Expected

☒ Not Expected

Flagging services will be provided by:

☒ Railroad Company: TxDOT will pay flagging invoices

☐ Outside Party: Contractor will pay flagging invoices, to be reimbursed by TxDOT

Contractor must incorporate flaggers into anticipated construction schedule. The Railroad requires a 30 day notice if their flaggers are to be utilized. If Contractor falls behind schedule due to their own negligence and is not ready for scheduled flaggers, any flagging charges will be paid by Contractor.

Contact Information for Flagging:

☐ UPRR - UP.info@railpros.com
Call Center 877-315-0513, Select #1 for flagging
- UP.request@nrssinc.net
Call Center 877-984-6777

☐ BNSF - BNSF.info@railpros.com
Call Center 877-315-0513, Select #1 for flagging

☐ KCS - KCS.info@railpros.com
Call Center 877-315-0513, Select #1 for flagging
- Bottom Line On-Track Safety Services
bottomline076@aol.com, 903-767-7630

☒ OTHERS Michael B. Simmons, PLSX
806-632-8650
msimmons@plainsmanswitching.com

Contractor must incorporate Construction Inspection into anticipated construction schedule.

☒ Not Required

☐ Required: Contact Information for Construction Inspection:

IV. CONSTRUCTION WORK TO BE PERFORMED BY THE RAILROAD

On this project, construction work to be performed by a railroad company is:

☐ Required

☒ Not Required

Coordinate with TxDOT for any work to be performed by the Railroad Company. TxDOT must issue a work order for any work done by the Railroad Company prior to the work being performed.

V. RAILROAD INSURANCE REQUIREMENTS

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No direct compensation will be made to the Contractor for providing the insurance coverages shown below or any deductibles. These costs are incidental to the various bid items.

Type of Insurance	Amount of Coverage (Minimum)
Workers Compensation	$500,000 / $500,000 / $500,000
Commercial General Liability	$2,000,000 / $4,000,000
Business Automobile	$2,000,000 combined single limit

Railroad Protective Liability		
☐	Not Required	
☒	Non - Bridge Projects	$2,000,000 / $6,000,000
☐	Bridge Projects	$5,000,000 / $10,000,000
☐	Other	

VI. CONTRACTOR'S RIGHT OF ENTRY (ROE) AGREEMENT

On this project, an ROE agreement is:

☒ Not Required

☐ Required: TxDOT CST to assist in obtaining with the UPRR (see Item 5, Article 8.3)

☐ Required: UPRR Maintenance Consent Letter. TxDOT CST to assist.

☐ Required: Contractor to obtain (see Item 5, Article 8.4)
With the following railroad companies: _____

To view previously approved ROE Agreement templates agreed upon between the State and Railroad, see:

http://www.txdot.gov/inside-txdot/division/rail/samples.html

Approved ROE Agreement templates are not to be modified by the Contractor.

Contractor shall not operate within Railroad Right of Way without an executed Construction & Maintenance Agreement between the State and the Railroad and an executed ROE agreement between the Contractor and the Railroad if required on project.

VII. RAILROAD COORDINATION MEETING

On this project, a Railroad Coordination Meeting is:

☒ Not Required

☐ Required

See Item 5, Article 8.1 for more details.

VIII. SUBCONTRACTORS

Contractor shall not subcontract work without written consent of TxDOT. Subcontractors are required to maintain the same insurance coverage as required of the Contractor.

IX. EMERGENCY NOTIFICATION

In Case of Railroad Emergency
Call PLSX Emergency Line
Railroad Emergency Line at 800-952-7494
Location: DOT VAR.
RR Milepost VAR.
Subdivision VAR.

Texas Department of Transportation | Rail Division

RAILROAD SCOPE OF WORK

PROJECT SPECIFIC DETAILS

FILE: RR Scope of Work.dgn	DN: TxDOT	CK:	DW:	CK:	
© TxDOT June 2014	CONT	SECT	JOB	HIGHWAY	
REVISIONS	0905	00	117	VARIOUS	
9/2021	DIST	COUNTY		SHEET NO.	
	LBB	LUBBOCK, ETC.		105	

DOT#	CROSSING TYPE	TRACK OWNER	TRACK OPERATOR	RR MP	SUBDIVISION	CITY	COUNTY	HWY/RDWY AT CROSSING	CSJ	TRAINS PER DAY	SWITCHING MOVEMENTS	% OF WORK
014982R	PUBLIC	PLSX	PLSX	0.06	LUBBOCK YARD	LUBBOCK	LUBBOCK	SS 331	90500117	1	1	
014973S	PUBLIC	PLSX	PLSX	0.5	LUBBOCK YARD	LUBBOCK	LUBBOCK	SS 331	90500117	1	1	
014987A	PUBLIC	PLSX	BNSF	680.44	SLATON	LUBBOCK	LUBBOCK	SS 331	90500117	1	1	

DATE:
FILE:

Texas Department of Transportation

Rail Division

RAILROAD SCOPE OF WORK

PROJECT SPECIFIC DETAILS

FILE: RR Scope of Work.dgn	DN: TxDOT	CK:	DW:	CK:
	CONT	SECT	JOB	HIGHWAY
REVISIONS	0905	00	117	VARIOUS
3/2020	DIST	COUNTY		SHEET NO.
	LBB	LUBBOCK, ETC.		106

DATE:
FILE:

I. STORMWATER POLLUTION PREVENTION-CLEAN WATER ACT SECTION 402

TPDES TXR 150000: Stormwater Discharge Permit or Construction General Permit required for projects with 1 or more acres disturbed soil. Projects with any disturbed soil must protect for erosion and sedimentation in accordance with Item 506.

List MS4 Operator(s) that may receive discharges from this project. They may need to be notified prior to construction activities.

☒ No Action Required ☐ Required Action

Action No.

1. Prevent stormwater pollution by controlling erosion and sedimentation in accordance with TPDES Permit TXR 150000

2. This project disturbs less than one acre of surface area. The contractor is responsible for any PSL's as defined in the Standar Specifications for Construction and Maintenance of Highways, Streets, and Bridges (2014 Edition, Item 7, Section 7.7, Page 43) The total disturbed acreage is the combined acreage to be disturbed on the project and any contractor PSL's. This EPIC must be updated if the disturbed area increases to one or more acres during the course of construction. It may become necessary to post a site notice and/or NOI for project and/or PSL's.

II. WORK IN OR NEAR STREAMS, WATERBODIES AND WETLANDS CLEAN WATER ACT SECTIONS 401 AND 404

USACE Permit required for filling, dredging, excavating or other work in any water bodies, rivers, creeks, streams, wetlands or wet areas.

The Contractor must adhere to all of the terms and conditions associated with the following permit(s):

☒ No Permit Required

☐ Nationwide Permit 14 - PCN not Required (less than 1/10th acre waters or wetlands affected)

☐ Nationwide Permit 14 - PCN Required (1/10 to <1/2 acre, 1/3 in tidal waters)

☐ Individual 404 Permit Required

☐ Other Nationwide Permit Required: NWP# _____

Required Actions: List waters of the US permit applies to, location in project and check Best Management Practices planned to control erosion, sedimentation and post-project TSS.

1. None

The elevation of the ordinary high water marks of any areas requiring work to be performed in the waters of the US requiring the use of a nationwide permit can be found on the Bridge Layouts.

Best Management Practices:

Erosion	Sedimentation	Post-Construction TSS
☐ Temporary Vegetation	☐ Silt Fence	☐ Vegetative Filter Strips
☐ Blankets/Matting	☐ Rock Berm	☐ Retention/Irrigation Systems
☐ Mulch	☐ Triangular Filter Dike	☐ Extended Detention Basin
☐ Sodding	☐ Sand Bag Berm	☐ Constructed Wetlands
☐ Interceptor Swale	☐ Straw Bale Dike	☐ Wet Basin
☐ Diversion Dike	☐ Brush Berms	☐ Erosion Control Compost
☐ Erosion Control Compost	☐ Erosion Control Compost	☐ Mulch Filter Berm and Socks
☐ Mulch Filter Berm and Socks	☐ Mulch Filter Berm and Socks	☐ Compost Filter Berm and Socks
☐ Compost Filter Berm and Socks	☐ Compost Filter Berm and Socks	☐ Vegetation Lined Ditches
	☐ Stone Outlet Sediment Traps	☐ Sand Filter Systems
	☐ Sediment Basins	☐ Grassy Swales

III. CULTURAL RESOURCES

Refer to TxDOT Standard Specifications in the event historical issues or archeological artifacts are found during construction. Upon discovery of archeological artifacts (bones, burnt rock, flint, pottery, etc.) cease work in the immediate area and contact the Engineer immediately.

☒ No Action Required ☐ Required Action

IV. VEGETATION RESOURCES

Preserve native vegetation to the extent practical.
Contractor must adhere to Construction Specification Requirements Specs 162, 164, 192, 193, 506, 730, 751, 752 in order to comply with requirements for invasive species, beneficial landscaping, and tree/brush removal commitments.

☐ No Action Required ☒ Required Action

Action No.

1. Comply with Executive Order 13112 on Invastion Plant Species.

2. Comply with TxDOT Executive Memorandum on beneficial landscaping.

3. Comply with temporary and permanent vegetation stabilization protocols of the SW3P.

V. FEDERAL LISTED, PROPOSED THREATENED, ENDANGERED SPECIES, CRITICAL HABITAT, STATE LISTED SPECIES, CANDIDATE SPECIES AND MIGRATORY BIRDS.

☐ No Action Required ☒ Required Action

Action No.

1. Do not handle or harm Texas horned lizards, prairie dogs, barn swallows or burrowing owls.
2. No prairie dog towns can be damaged or crossed with equipment without approval of the Engineer.
3. No nests of burrowing owls (in prairie dog holes) can be disturbed or damaged. (See General Notes)
4. No nests of barn swallows (likely on structures such as bridges) can be disturbed or damaged. (See General Notes)
5. Project actions would be avoided during the lekking season (March 15th-July 15th) between the hours of 3 AM and 9 AM without prior approval from the District Environmental Staff. Heavy equipment cannot be operated during this time to avoid noise impacts to the LPC.
6. Project actions in the following counties will not occurr during lekking season (March 15th - July 15th): Bailey, Cochran, and Yoakum.
7. Obey the Bald and Golden Eagle Protect act. Do not handle, harm, capture, disturb, or kill the species, do not handle, harm, or take nests, eggs feathers, bones or eagles.
8. Obey the Migratory Bird Treaty Act of 1916, of which details there cannot be any handling or harming of migratory bird species, including their eggs, nest, or feathers.
9. If any of the listed species are observed, cease work in the immediate area, do not disturb species or habitat and contact the Engineer immediately. The work may not remove active nests from bridges and other structures during nesting season of the birds associated with the nests. If caves or sinkholes are discovered, cease work in the immediate area, and contact the Engineer immediately.

VI. HAZARDOUS MATERIALS OR CONTAMINATION ISSUES

General (applies to all projects):

Comply with the Hazard Communication Act (the Act) for personnel who will be working with hazardous materials by conducting safety meetings prior to beginning construction and making workers aware of potential hazards in the workplace. Ensure that all workers are provided with personal protective equipment appropiate for any hazardous materials used.

Obtain and keep on-site Material Safety Data Sheets (MSDS) for all hazardous products used on the project, which may include, but are not limited to the following categories: Paints, acids, solvents, asphalt products, chemical additives, fuels and concrete curing compounds or additives. Provide protected storage, off bare ground and covered, for products which may be hazardous. Maintain product labelling as required by the Act.

Maintain an adequate supply of on-site spill response materials, as indicated in the MSDS. In the event of a spill, take actions to mitigate the spill as indicated in the MSDS, in accordance with safe work practices, and contact the District Spill Coordinator immediately. The Contractor shall be responsible for the proper containment and cleanup of all product spills.

LIST OF ABBREVIATIONS

BMP:	Best Management Practice	SPCC:	Spill Prevention Control and Countermeasure
CGP:	Construction General Permit	SW3P:	Storm Water Pollution Prevention Plan
DSHS:	Texas Department of State Health Services	PCN:	Pre-Construction Notification
FHWA:	Federal Highway Administration	PSL:	Project Specific Location
MOA:	Memorandum of Agreement	TCEQ:	Texas Commission on Environmental Quality
MOU:	Memorandum of Understanding	TPDES:	Texas Pollutant Discharge Elimination System
MS4:	Municipal Separate Stormwater Sewer System	TPWD:	Texas Parks and Wildlife Department
MBTA:	Migratory Bird Treaty Act	TxDOT:	Texas Department of Transportation
NOT:	Notice of Termination	T&E:	Threatened and Endangered Species
NWP:	Nationwide Permit	USACE:	U.S. Army Corps of Engineers
NOI:	Notice of Intent	USFWS:	U.S. Fish and Wildlife Service

VI. HAZARDOUS MATERIALS OR CONTAMINATION ISSUES

General (applies to all projects):

Contact the Engineer if any of the following are detected:

* Dead or distressed vegetation (not identified as normal)
* Trash piles, drums, canister, barrels, etc.
* Undesirable smells or odors
* Evidence of leaching or seepage of substances

Does the project involve any bridge class structure rehabilitation or replacements (bridge class structures not including box culverts)?

☐ Yes ☒ No

If "No", then no further action is required.
If "Yes", then TxDOT is responsible for completing asbestos assessment/inspection.

Are the results of the asbestos inspection positive (is asbestos present)?

☐ Yes ☐ No

If "Yes", then TxDOT must retain a DSHS licensed asbestos consultant to assist with the notification, develop abatement/mitigation procedures, and perform management activities as necessary. The notification form to DSHS must be postmarked at least 15 working days prior to scheduled demolition.

If "No", then TxDOT is still required to notify DSHS 15 working days prior to any scheduled demolition.

In either case, the Contractor is responsible for providing the date(s) for abatement activities and/or demolition with careful coordination between the Engineer and asbestos consultant in order to minimize construction delays and subsequent claims.

Any other evidence indicating possible hazardous materials or contamination discovered on site. Hazardous Materials or Contamination Issues Specific to this Project:

☒ No Action Required ☐ Required Action

VII. OTHER ENVIRONMENTAL ISSUES

(includes regional issues such as Edwards Aquifer District, etc.)

☐ No Action Required ☒ Required Action

Action No.

1. Maintain equipment muffler systems and work hour restrictions to reduce traffic noise.
2. No PSL's may be located in the prairie dog towns, playa lakes (wet or dry) or stream beds (wet or dry).
3. No dumping of construction material in playa lakes or stream beds regardless of property owner requests.
4. Contractor must obtain historical and archaeological clearances for off-site PSL's.
5. Contractor is responsible for air quality permits for concrete and asphalt batch and similar plants.
6. Contractor is responsible for water appropriation or impoundment TCEQ permits.
7. Contractor will protect environmentally sensitive areas with fencing, work sequencing or scheduling as directed.
8. PSL's beyond the project right-of-way have "individual operator" status under the TPDES Construction General Permit and the Contractor is responsible for the SW3P and any TCEQ permits.
9. No waste material of any type may be placed at any location where it could be washed into a water of the U.S. or a surface water of Texas.
10. Flood elevations will not be increased to a level that would violate flood plain regulations or ordinances.
11. TxDOT will provide an informational packet to project contractors, including information on LPC habitat that may occur outside of the ROW and requirements to avoid effects to the LPC or its habitat.
12. PSL locations planned within TxDOT ROW must receive approval from the District Environmental staff prior to installation.
13. Contractor shall remove all construction debris daily from the waterway by close of business, where applicable.
14. The SWP3, including best management practices, must be in-place prior to disturbing soil.

Texas Department of Transportation

Design Division Standard

ENVIRONMENTAL PERMITS, ISSUES AND COMMITMENTS

EPIC

FILE: epic.dgn	DN: TxDOT	CK: RG	DW: VP	CK: AR
©TxDOT: February 2015	CONT	SECT	JOB	HIGHWAY
REVISIONS	0905	00	117	VAR
12-12-2011 (DS)	DIST	COUNTY		SHEET NO.
05-07-14 ADDED NOTE SECTION IV.	LBB	LUBBOCK,ETC.		107
01-23-2015 SECTION I (CHANGED ITEM 1122 TO ITEM 506, ADDED GRASSY SWALES.				