# INDEX OF SHEETS

SHEET NO.

2-3

DESCRIPTION

**GENERAL** 

Title Sheet General Notes

E & Q Sheet -- Nolan

# RS-TCP-05

# TCP-AblCableBarrier

TxDOT Standards

## STATE OF TEXAS DEPARTMENT OF TRANSPORTATION

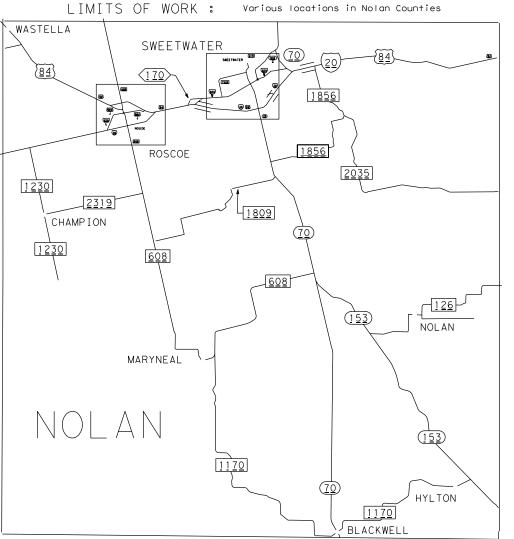
## PLANS OF PROPOSED HIGHWAY ROUTINE MAINTENANCE CONTRACT

## TYPE OF WORK:

MOWING HIGHWAY RIGHT OF WAY

PROJECT NO. : RMC 6380-04-001

HIGHWAY: IH 20, ETC.



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MAINTENANCE PROJECT NO. Title-MNT.dgn RMC 6380-04-001 STATE STATE TEXAS 08 NOLAN CONT. SECT. JOB HIGHWAY NO. 6380 04 001 IH20, ETC.

FINAL PLANS:

Date Contractor Began Work: Date Work was Completed: Date Work Accepted: Final Contract Cost: \$

CERTIFICATION FOR FINAL PLANS:

Project was built according to the plans and specifications. These final plans reflect the work done and the quantities shown thereon and on the final estimate are final quantities.

Area Engineer

TEXAS DEPARTMENT OF TRANSPORTATION

SUBMITTED FOR LETTING:

Daniel P. Richardson, P.E.

3/18/2021

Daniel P. Richardson , P.E. Director of Operations

Thomas G. Allbritton, P.E.

Date

District Engineer

3/19/2021

Date

SPECIFICATIONS ADOPTED BY THE TEXAS DEPARTMENT OF TRANSPORTATION NOVEMBER 1, 2014 AND SPECIAL SPECIFICATION ITEMS INCLUDED IN THE CONTRACT SHALL GOVERN ON THIS PROJECT.

Project Number: RMC 638004001

County: Nolan Highway: IH 20, etc. Control: 6380-04-001

## **GENERAL NOTES**

## General

- This is a CALLOUT CONTRACT. ITEM 730 and ITEM 734 will be performed on a CALLOUT BASIS at locations identified by each CALLOUT/WORK ORDER. Plan Quantity Measurement does not apply.
- This is a Non-Site-Specific Contract. The LOCATIONS (TRACTS) and QUANTITIES shown on the ESTIMATE/QUANTITY SHEET in the Plans are for Contractor's information only.
- TRACTS, QUANTITIES, FULL-WIDTH OR STRIP MOW and LITTER will be identified by each CALLOUT/WORK ORDER.
- Report to the PROJECT MANAGER/INSPECTOR prior to beginning work each day.

### **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 or all contracts at the same time.

## **Item 2 Instructions to Bidders**

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

Neil Welch, P.E.: Neil.Welch@txdot.gov Ryan Sayles, P.E.: Ryan.Sayles@txdot.gov

(Big Spring Area Office)

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 TxDOT's Public FTP at the following Address:

https://ftp.dot.state.tx.us/pub/txdot-info/Pre-Letting Responses/

All questions submitted that generate a response will be posted through this site. The site is organized by District, Project Type (Construction or Maintenance), Letting Date, CCSJ/Project Name.

## **Item 7 Legal Relations and Responsibilities:**

No significant traffic generator events identified.

## Item 502 Barricades, Signs, and Traffic Handling

Additional signs, barricades and traffic handling may be necessary to complete the work shown herein and will be provided by the contractor as required and will be considered subsidiary to the bid items.

pg. A

Project Number: RMC 638004001

County: Nolan Highway: IH 20, etc. Control: 6380-04-001

## **GENERAL NOTES**

Traffic control shall be incompliance with the "Texas Manual on Uniform Traffic Control Devices", the TCP standards included in the plans, and the "Compliant Work Zone Traffic Control Device" list.

### Item 730 Roadside Mowing

Slopes will be mowed with no damage to the established vegetation.

Other construction and/or maintenance contracts may be underway on roadsides to be mowed in this contract. Mowing will not be required in these areas.

Spot Mowing may be designated by the Engineer to address safety concerns. The contractor will have 72 hours to begin mowing any designated area from the time of notification. Any Spot Mowing that is performed will also include Litter Removal. A one-time fee for a Callout Mobilization will be paid for Spot Mowing.

The Engineer will determine the sequence of tracts to be mowed. Refer to the Estimate and Quantity Sheet in the plans for width to be mowed on each tract.

For each cycle required, the Engineer shall send the contractor a work order containing the following information:

- Tract numbers and total number of acres to be mowed
- Working days allowed to complete the cycle
- Date when time charges for the cycle will begin

Working days allowed to complete a cycle of mowing and litter removal will be determined by dividing the total number of acres to be mowed by the production rate of 115 acres each working day. A fraction of a day shall be rounded up to the nearest whole number. If the total number of working days is not used during the completion of the work required within one cycle, the working days will not be carried forward to any cycle period.

Perform hand trimming on guardrail in non-mow areas, outer separations on controlled access highways, restricted access areas and between main lanes and frontage roads located within 10 yards of the travel way or adjacent to paved shoulders. Hand trim 5 ft. behind guardrail or as directed by the Engineer.

Hand trim around all dead animal or other large debris that cannot be mowed over or moved in the same manner as any other fixed object. It is also acceptable to move the object to the right of way line prior to mowing.

### Definitions:

Full Width Mow – Mow entire width of right of way. Strip Mow – Mow 15 feet from edge of pavement or unpaved shoulder.

Always mow the entire width of medians and outer separations (areas between main lanes, ramps, and frontage road) except for non-mow areas.

pg. B

Department of Transportation

		CONT	SECT	JOB		HIGHWAY		
		6380	04	001	ΙH	IH2O,ETC.		
CENERAL	NOTEC	DIST		COUNTY		SHEET NO.		
GENERAL	NOIES	ABL NOLAN				02		

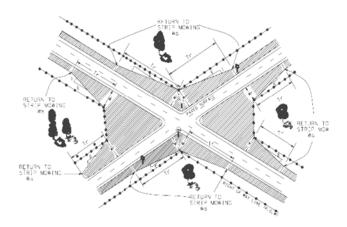
Project Number: RMC 638004001

County: Nolan Highway: IH 20, etc.

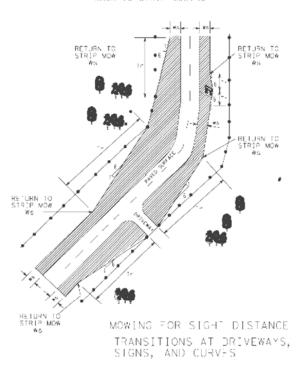
Control: 6380-04-001

## **GENERAL NOTES**

Strip mow as shown below at intersections and curves for sight distance. Transition Length (Tr) will be no less than 200'.



MOWING FOR SIGHT DISTANCE WITH TRANSITION FROM INTERSECTION BACK TO STRIP MOWING



Project Number: RMC 638004001

County: Nolan Highway: IH 20, etc. Control: 6380-04-001

## **GENERAL NOTES**

## **Item 734 Litter Removal**

Litter removal will be performed no more than 2 working days prior to the mowing cycle.

Pick up any litter remaining after mowing operation.

Only one cycle of litter removal will be paid per mowing cycle.

It is the intent of this item that TxDOT's right-of-way be mowed and litter-free after the contractor's mowing operation.

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

It is expected that when the contractor is mowing the narrow side of the cable median barrier that work will be continuous until completed.

Truck mounted attenuators shall be utilized in accordance with TCP-Abl Cable Barrier-Traffic Control Mobile Operations Adjacent to Cable Barrier when mowing the short side of cable median barrier right of way.

Provide to the Engineer a letter certifying that all truck-mounted attenuators (TMA) used on the project have proven to be crashworthy using the criteria outlined in the *National Cooperative Highway Research Program (NCHRP) Report 350*.

pg. C

pg. D

CONT	SECT	JOB		HIGHWAY				
6380	04	001	ΙH	H20,ETC.				
DIST		COUNTY		SHEET NO.				
ABL		NOLAN		03				

## NOLAN COUNTY 2021 MOWING LOCATION AND ITEM QUANTITY SUMMARY

				EM 500-60 ATION (CA		ITEM 730-6001 STRIP MOWING		ITEM 730-6002 FULL-WIDTH MOWING		ITEM 730-6003 SPOT MOWING			ITEM 734-6001 LITTER REMOVAL			ITEM 6185-6005 TMA MOBILE OPERATIO				
TRACT	HWY	LIMITS	CYCLES	EACH	TOTAL EACH	CYCLES	ACRES	TOTAL ACRES	CYCLES	ACRES	TOTAL ACRES	CYCLES	ACRES	TOTAL ACRES	CYCLES	ACRES	TOTAL ACRES	TMA'S PER DAY	TOTAL DAYS	TOTAL TMA DAYS
1	IH 20	FROM MITCHELL CO/L TO TAYLOR CO/L			0	1	742	742	2	802	1604			0	3	802	2406	2	3	6
2	US 84	FROM MITCHELL CO/L TO IH 20			0	1	150	150	2	441	882			0			0			0
*3	<sup>1</sup> SH 70	FROM FISHER CO/L TO COKE CO/L			0	1	96	96	2	269	538			0			0			0
4	SH 153	FROM SH 70 TO TAYLOR CO/L			0	1	67	67	2	186	372			0			0			0
5	FM 608	FROM FISHER CO/L TO SH 70			0	1	117	117	2	263	526			0			0			0
6	FM 126	FROM TAYLOR CO/L TO SH 153			0	1	48	48	2	70	140			0			0			0
7	FM 1856	FROM IH 20 TO SH 70			0	1	37	37	2	80	160			0			0			0
8	FM 2035	FROM FM 1856 TO TAYLOR CO/L			0	1	49	49	2	132	264			0			0			0
9	FM 1170	FROM MARYNEAL TO TO SH 153			0	1	98	98	2	251	502			0			0			0
10	FM 1230	FROM IH 20 TO 8 MILES SOUTH			0	1	29	29	2	59	118			0			0			0
11	FM 2319	FROM MITCHELL CO/L TO FM 608			0	1	32	32	2	81	162			0			0			0
12	FM 1809	FROM SH 70 TO 2.7 MILES WEST			0	1	10	10	2	19	38			0			0			0
13	FM 419	FROM FISHER CO/L TO SWEETWATER NORTH C/L			0	1	10	10	2	19	38			0			0			0
14		FROM US 84 WEST TO US 84 EAST			0	1	5	5	2	9	18			0			0			0
15		FROM IH 20 TO BU 84-J			0	1	4	4	2	8	16			0			0			0
16	FM 1982	FROM US 84 TO MITCHELL CO/L			0	1	4	4	2	10	20			0			0			0
*TBD	<sup>2</sup> TBD	TBD	1	1	1						0	1	100	100	1	100	100			0
				TOTALS	1			1498			5398			100			2506			6

FHWA DIVISION	PF	GHWAY NO.			
6	SEE	20,ETC.			
STATE		SHEET NO.			
TEXAS					
DISTRICT	CONTROL	SECTION	JOI	3	4
ABL	6380	04	00	1	



<sup>\*</sup>Notes:

1. Tract 3...SH 70 - Non-mow area from Sweetwater North City Limit to the South City Limit.

<sup>2.</sup> TBD...Tracts and highways for Spot Mowing to be determined by Area Engineer

WORK

Floor as required by Engineer or as shown on plans

approved

substrate  $\Delta$ 

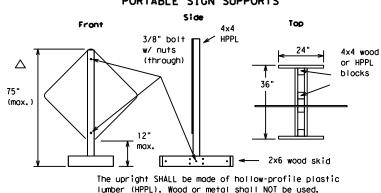
#### See the CWZTCD for the type of sign substrate that can be used for each approved sign support.

12" min.

24" max.

## EXAMPLES OF SIGN SUPPORTS

## SHORT TERM DURATION. DAYTIME USE ONLY PORTABLE SIGN SUPPORTS



1 Foot Mounting Height

48" X 48'

ROAD

WORK

48" X 48"

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 will NOT be allowed.

CW21-9 \*CW21-SPECIAL CW20-1B CW20-1D. MOWERS WORKERS

SIGN IN ACCORDANCE WITH THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND

MOWERS AHEAD SIGNS ARE USED FOR MOWING OPERATIONS.

LITTER PICKUP AHEAD, ROAD WORK AHEAD AND WORKER AHEAD SIGNS ARE USED AS DIRECTED FOR OTHER MAINTENANCE OPERATIONS WHEN ALL WORK OCCURS OFF OF THE PAVED HIGHWAY SURFACE.

## ROLL-UP SIGNS CONFORMING TO DMS-8310 AND THE CWZTCD ALLOWED

48" X 48"

AHEAD

Letter dimensions and spacing for "CW21-SPECIAL" is the same as C20-1D>

## ROAD WORK CROSSING HIGHWAY SIGN PLACED AT CROSSING HIGHWAYS AS DIRECTED ROAD WORK AHEAD

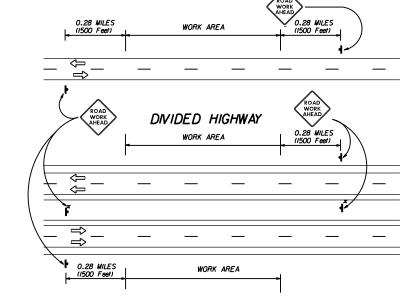
#### TYPICAL LOCATION OF SIGNS AT HIGHWAY CROSSING

WORK AREA IS A MAXIMUM OF 2.0 MILES UNLESS OTHERWISE DIRECTED. SIGNS MAY REMAIN IN PLACE ONLY DURING DAYLIGHT HOURS. SIGNS ARE TO BE PLACED 6'TO 12' OFF OF THE PAVED SURFACE UNLESS

ROAD WORK AHEAD SIGNS SHOWN AS EXAMPLES, ONE OF THE FOUR TYPE SIGNS WILL BE USED AS DIRECTED.

\* SIGNS IN THE MEDIAN ARE REQUIRED WHEN WORK OCCURS IN MEDIAN

## UNDIVIDED HIGHWAY OR FRONTAGE ROAD



TRAFFIC CONTROL PLAN FOR WORK OFF OF THE PAVED SURFACE.

#### 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.
- Wooden sign posts shall be painted white.
- Barricades shall NOT be used as sign supports.
- Nails shall NOT be used to attach signs to any support.
- All signs shall be installed in accordance with the plans or as directed by the Engineer. Signs shall be used to regulate, warn, and quide the traveling public safely through the work zone.
- 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 IMUTCD 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. The additional signs requested by the Engineer/Inspector shall not be subsidiary.
- The Controctor shall furnish sign supports listed in the "Compliant Work Zone Traffic Control Device List" (CWZTCD). 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 that the Engineer can verify the correct procedures are being followed.
- The Contractor is responsible for sign installations and replacing signs with damaged or cracked substrates and/or damaged or marred reflective sheeting as directed by the Engineer/Inspector.
- 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".
- 10. 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 VI)

- 1. The Contractor is responsible for ensuring the sign support and substrate meets crashworthiness. For mowing operation all signs and supportS are Short-term Duration for daytime work.
- 2. The Contractor shall furnish the sign sizes shown on this sheet or as directed by the Engineer.

#### SIGN SUBSTRATES

- The Contractor shall ensure that the sign substrate is allowed 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.
- "Mesh" type materials are NOT an approved sign substrate.
- 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 faces.

#### REFLECTIVE SHEETING

- Reflectorized signs shall be constructed of sheeting meeting the color and retro-reflectivity requirements of DMS-8300 or DMS-8310. The DMS specifications can be accessed from the following web address:
- http://manuals.dot.state.tx.us:80/dynaweb/colmates/@Generic\_\_CollectionView:cs=default:ts=default
- 2. White sheeting, meeting the requirements of DMS-8300 Type C (High Specific Intensity), shall be used for signs with white background and channelizing devices.
- Orange sheeting, meeting the requirements of DMS-8300 Type E (Fluorescent Prismatic), shall be used for 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

- Signs should be removed or completely covered when not mowing.
- 2. Duct tape or other adhesive material shall NOT be affixed to a sign face.
- 3. Signs and supports shall be removed by the end of the day.

- Where sign supports require the use of weights to keep from turning over, the use of sandbags with dry cohesionless sand is recommended.
- 2. The sandbags will be tied shut to keep the sand from spilling and to maintain a constant weight.
- Rock, concrete, iron, steel or other solid objects will not be permitted for use as sign support weights.
  - 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.
  - Rubber ballasts (such as those used with cones or edgeline channelizers) shall NOT be used as sign support weights.
- 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 supports.
- Sandbags shall NOT be placed under the skid and shall not be used to level sign supports placed on slopes.

## CONTRACTOR REQUIREMENTS FOR MAINTAINING PERMANENT SIGNS WITHIN THE PROJECT LIMITS

Any sign, sign support or traffic control device that is struck or damaged by the Contractor or his/her construction equipment shall be replaced or repaired as soon as possible by the Contractor at the Contractor's expense.

Only pre-qualified products shall be used. A copy of the "Compliant Work Zone Traffic Control Devices List" (CWZTCD) describes pre-auglified products and their sources and may be obtained by contacting:

Standards Engineer Traffic Operations Division - TE Texas Department of Transportation 125 East 11th Street Austin, Texas 78701-2483 Phone (512) 416-3120 Fox (512) 416-3299

Instructions to locate the "CWZTCD" on TxDOT website area

Start at website - www.dot.state.tx.us Click on "About TxDOT". Click on "Organizational Chart". Click on Traffic Operations Box Click on "Compliant Work Zone Traffic Control Devices".



## ★ Texas Department of Transportation

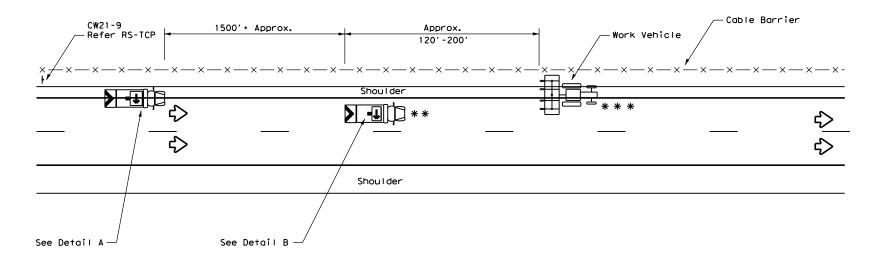
Maintenance Division Standard Plans

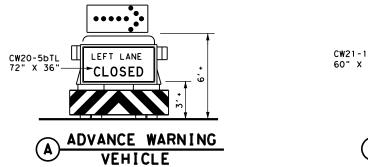
ROADSIDE TRAFFIC CONTROL PLAN

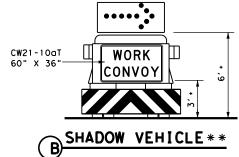
RS-TCP-05 NOT TO SCALE SHEET 1 OF 1 DN: LJB CK: JG DW:-RSTCP05.DGN NEG NO.: C TXDOT FEBRUARY 2005 STATE FEDERAL REGION FEDERAL AID PROJECT SHEET 08 N/A N/A 5 CONTROL SECTION JOB HIGHWAY NOI AN 6380 04 001 IH20, ETC

Click on "View PDF".

This site is printable.







LEFT LANE CLOSURE ADJACENT TO CABLE BARRIER

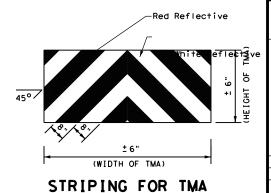
not required in accordance with 137.33.m of the Texas Engineering Act and Board

LEGEND									
*	Trail Vehicle		ARROW BOARD DISPLAY						
* *	Shadow Vehicle		ARROW BOARD DISPLAT						
* * *	Work Vehicle RIGHT Directional								
	Heavy Work Vehicle	4	LEFT Directional						
	Truck Mounted Attenuator (TMA)		Double Arrow						
Ç	Traffic Flow	0	CAUTION (Alternating Diamond or 4 Corner Flash)						

TYPICAL USAGE												
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY								
4												

#### GENERAL NOTES

- ADVANCE WARNING 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. A TRAIL VEHICLE is not required.
- 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 and SHADOW vehicles are required.
- 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.
- When work convoys must change lanes, the ADVANCE WARNING VEHICLE should change lanes first to shadow the other convoy vehicles.
- Vehicle spacing between the ADVANCED WARNING VEHICLE and the SHADOW VEHICLE will vary depending on sight distance restrictions. Motorists approaching the work convoy should be able to see the ADVANCE WARNING VEHICLE in time to slow down and/or change lanes as they approach the ADVANCED WARNING VEHICLE. Vehicle spacing between the WORK VEHICLE and SHADOW VEHICLE may vary according to terrain, work activity and other
- 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 Advance Warning Vehicle may straddle the edgeline when shoulder width makes it necessary.





## Division Standard TRAFFIC CONTROL PLAN MOBILE OPERATIONS ADJACENT TO CABLE BARRIER

Traffic Operations

## TCP-AblCableBarrier

E:TCP-AbICableBarrier.dgn	DN: TxDOT		CK: TxDOT DW:		TxD01	ГС	k: TxDOT	
TxDOT February 2017	CONT SECT		JOB		HWY			
REVISIONS	6380	04	04 001			IH20,etc.		
	DIST	DIST COUNTY			SHEET NO			
	08	NOLAN 6					6	