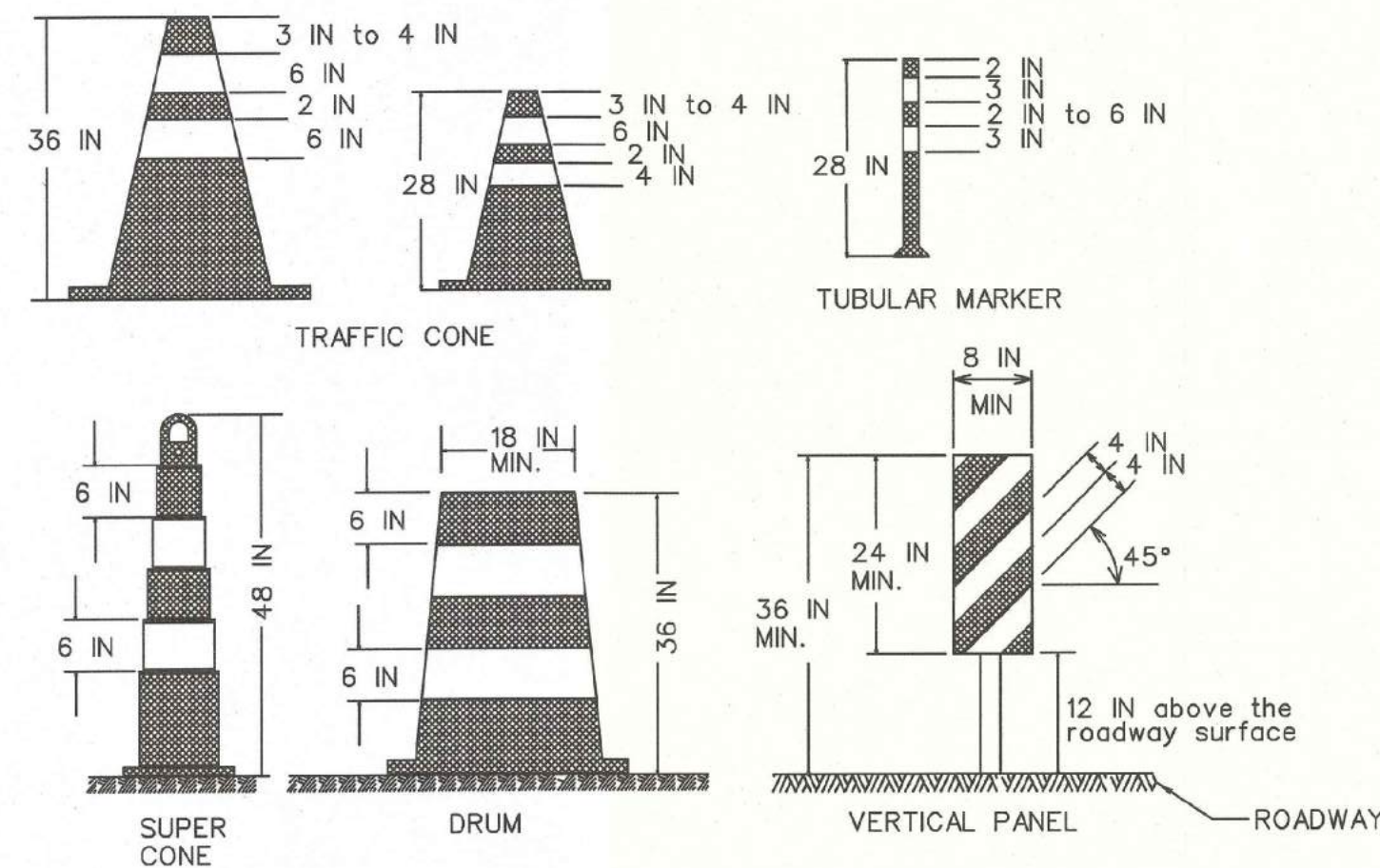


CHANNELIZING DEVICES

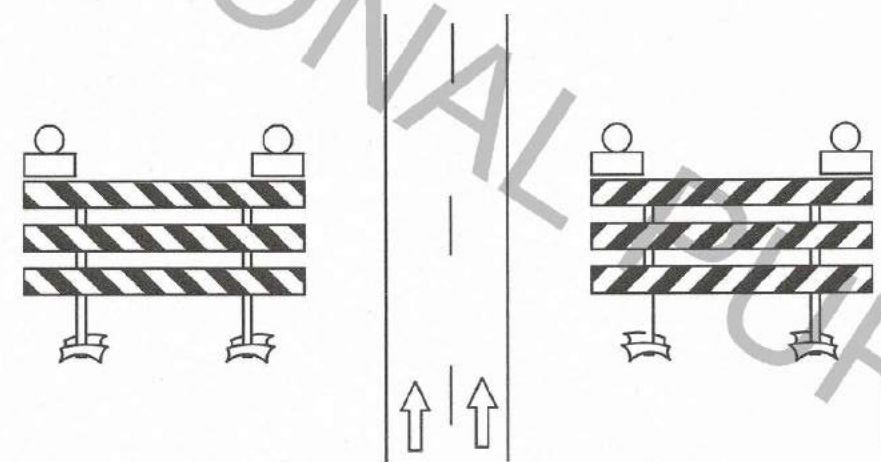
- The following devices may be used as channelizing devices: Tubular Markers, Vertical Panels, Cones, Drums and Super Cones.
- 28 inch traffic cones are not allowed on:
  - Interstates
  - Highways with speeds greater than 40 mph.
- During nighttime operations, 28 inch and 36 inch cones are not allowed.
- Retroreflective material pattern used on super cones shall match that used on drums.
- Tangent Areas:
  - Standard Spacing:** See Standard Device Spacing and Buffer Space table.
  - Daylight Operations:** Drums and super cones are spaced at standard spacing. All other devices are at 1/2 standard spacing.
  - Nighttime Operations:** Drums and supercones at standard spacing are the only devices allowed.
- Taper Areas:
  - Standard Spacing:** See Standard Device Spacing and Buffer Space table.
  - Daylight Operations:** Drums are spaced at standard spacing. All other devices are 1/2 standard spacing.
  - Nighttime Operations:** Drums (at standard spacing) are the only devices allowed.
- Type C steady burn lights shall be used on all channelizing devices in the taper as well as the first two devices in the tangent at night, (see the AML).
- Typical channelizing device lateral placement (do not include when it is used as a divider for opposing directions of traffic) shall be 2 feet off the lane line in the closed lane or shoulder.
- Devices may be adjusted laterally to accommodate ongoing work in the immediate vicinity but must be returned to the closed lane after the work activity has moved.
- Channelizing devices on the lane line shall be of the same type.
- Channelizing devices in each taper shall be of the same type.



ALL TTC STANDARDS SHOW MINIMUM CONSTRUCTION SIGNING. ALL SITUATIONS SHALL BE REVIEWED AND/OR DESIGNED BY THE ENGINEER. CONTRACTORS ARE RESPONSIBLE FOR COMPLYING WITH ALL TTC STANDARDS.

TYPE III BARRICADES

- Only Type III Barricades shall be used.
- All barricades shall use Type 3 High Intensity Sheeting on both sides of the barricade.
- All barricades shall be a minimum of 8 feet in length and must meet NCHRP Report 350 or MASH requirements.
- When used for overnight closures, two Type B High Intensity Lights shall supplement all barricades that are placed in a closed lane or that extend across a highway. Two Type A Low Intensity Lights may be used in urban areas if approved by the Engineer (See AML).
- When signs and lights are to be mounted to a barricade, they must meet NCHRP Report 350 or MASH requirements.
- A truck with a TMA may be substituted for a barricade when workers are present.
- Barricades shall be placed:
  - at the beginning of a closed lane or shoulder and at 1,000 foot intervals where no active work is ongoing and the lane must remain closed. A minimum of 2 barricades shall be placed if the lane or shoulder closure is less than 2,000 feet. (One barricade shall be placed at the beginning of the lane closure after the buffer space and one shall be placed in the middle of the lane closure.)
  - before each or group of unfilled holes or holes filled with temporary material.
  - before uncured concrete.
  - in the closed lane on each side of every intersection and crossover. (Do not block sight distance.)
  - in front of piles of material (dirt, aggregate, broken concrete), culverts and equipment which is near the work zone.



TTC for DROP-OFFS

NON-INTERSTATE		
Average Drop-off	Current Posted Speed (Prior to Construction)	
	> 45 MPH	≤ 45 MPH
≤ 3 IN	Low Shoulder Sign (Optional)	Low Shoulder Sign (Optional)
> 3 IN	Shoulder Drop Off Sign & Edge Lines or Shoulder Drop Off Sign & Channelizing Device	Shoulder Drop Off Sign
> 6 IN	No Shoulder Sign, Edge Lines & Vertical Panel	No Shoulder Sign & Channelizing Device
≤ 10 IN		
> 10 IN	Concrete Barrier (if drop off is < 12 FT from edge of travel lane) & Edge Lines	No Shoulder Sign & Vertical Panel

INTERSTATE		
Average Drop-off	Current Posted Speed (Prior to Construction)	
	> 45 MPH	≤ 45 MPH
≤ 2 IN	Low Shoulder Sign (Optional)	Low Shoulder Sign (Optional)
> 2 IN	Shoulder Drop Off Sign & Edge Lines or Shoulder Drop Off Sign & Channelizing Device	Shoulder Drop Off Sign
≤ 6 IN		
> 6 IN	Concrete Barrier (if drop off is < 12 FT from edge of travel lane), Shoulder Drop Off Sign, & Edge Lines	No Shoulder Sign & Vertical Panel

- If a portable concrete barrier will be required then the deflection shall be considered in the design.
- For Interstate ramps, refer to non-Interstate drop offs.

STANDARD DEVICE SPACING AND BUFFER SPACE

SPEED LIMIT (prior to construction) MPH	MERGING TAPER LENGTH (L)				STANDARD DEVICE SPACING IN FEET		BUFFER SPACE FT
	Lane Width (FT)				Along Taper	Along Tangent	
	9	10	11	12			
25	94	105	115	125	20	40	155
30	135	150	165	180	30	60	200
35	184	205	225	245	35	70	250
40	240	267	294	320	40	80	305
45	405	450	495	540	40	80	360
50	450	500	550	600	40	80	425
55	495	550	605	660	40	80	495
60	540	600	660	720	40	80	570
65	585	650	715	780	40	80	645
70	630	700	770	840	40	80	730
75	675	750	825	900	40	80	820

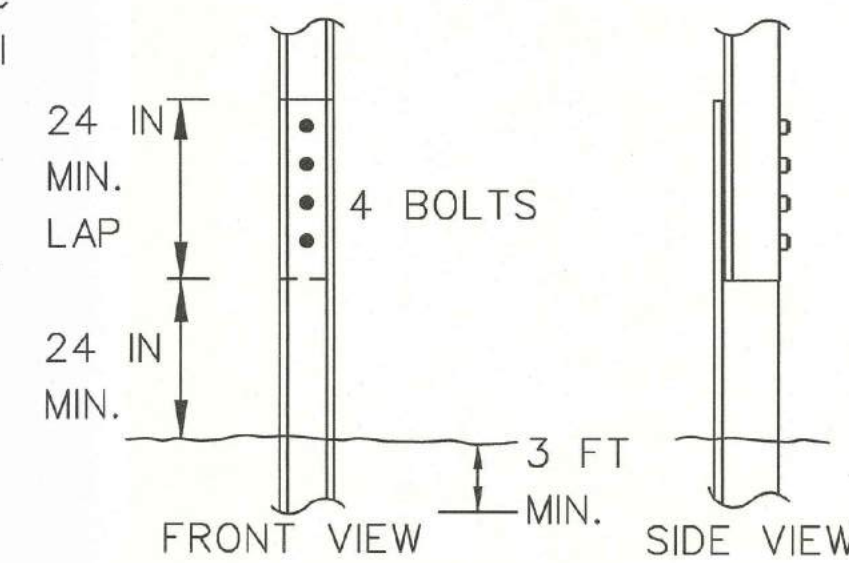
SPEED LIMIT (prior to construction) MPH	SHIFTING TAPER LENGTH (1/2)L						STANDARD DEVICE SPACING IN FEET		BUFFER SPACE FT
	Lane Shift (FT)						Along Taper	Along Tangent	
	2	4	6	8	10	12			
25	11	21	32	42	52	63	20	40	155
30	15	30	45	60	75	90	30	60	200
35	21	41	62	82	102	123	35	70	250
40	27	54	80	107	134	160	40	80	305
45	45	90	135	180	225	270	40	80	360
50	50	100	150	200	250	300	40	80	425
55	55	110	165	220	275	330	40	80	495
60	60	120	180	240	300	360	40	80	570
65	65	130	195	260	325	390	40	80	645
70	70	140	210	280	350	420	40	80	730
75	75	150	225	300	375	450	40	80	820

SPEED LIMIT (prior to construction) MPH	SHOULDER TAPER LENGTH (1/3)L						STANDARD DEVICE SPACING IN FEET		BUFFER SPACE FT
	Shoulder Width (FT)						Along Taper	Along Tangent	
	2	4	6	8	10	12			
25	7	14	21	28	35	42	20	40	155
30	10	20	30	40	50	60	30	60	200
35	14	28	41	55	68	82	35	70	250
40	18	36	54	72	89	107	40	80	305
45	30	60	90	120	150	180	40	80	360
50	34	67	100	134	167	200	40	80	425
55	37	74	110	147	184	220	40	80	495
60	40	80	120	160	200	240	40	80	570
65	44	87	130	174	217	260	40	80	645
70	47	94	140	187	234	280	40	80	730
75	50	100	150	200	250	300	40	80	820

- All termination and flagger tapers are 100 feet. (MIN. 6 channelizing devices per lane equally spaced 20 feet apart.)
- See TTC Standards for flagger taper.
- See MUTCD for taper formulas.

ALLOWABLE LAP SPLICE FOR U-CHANNEL POST

U-Channel posts may be spliced where long lengths are required. The upper section shall overlap the lower section by at least 24 inches. The bottom edge of the upper section of the splice shall be a minimum of 24 inches above the ground. The spliced sections shall be secured with at least four 5/16 inch diameter hex bolts spaced equally along the splice.



TEMPORARY TRAFFIC CONTROL GENERAL NOTES SHEET TTC-00 (C)

DOTD ENGINEERING

STATE OF LOUISIANA

DESIGNED BY: G. LEBLANC  
CHECKED BY: J. COLVIN  
DATE: 7/2/18

PARISH: ASCENSION  
CONTROL SECTION: -----  
PROJECT: T.O. 2021-HEI-001

DESIGNED BY: DBC  
CHECKED BY: JBM  
DATE: NOV. 2022  
SERIES NO.: 9 OF 13

REVISION OR CHANGE ORDER DESCRIPTION: BY DATE

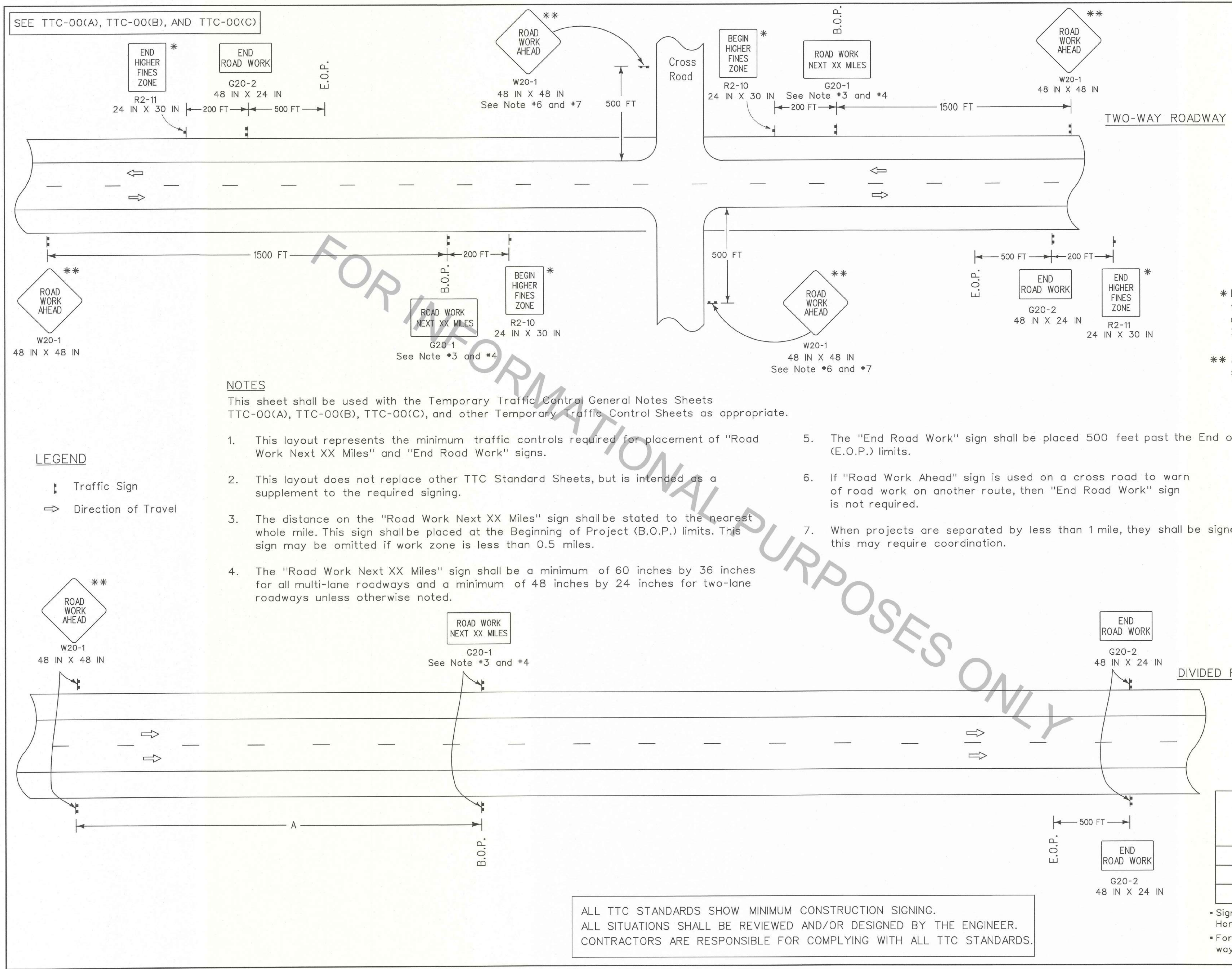
SHEET NUMBER 309

DOTD STANDARD PLANS: TTC-00 (C)

CHANNEL IMPROVEMENTS

HEI Hartman Engineering, Inc. Consulting Engineers





SEE TTC-00(A), TTC-00(B), AND TTC-00(C)

NOTES

This sheet shall be used with the Temporary Traffic Control General Notes Sheets TTC-00(A), TTC-00(B), TTC-00(C), and other Temporary Traffic Control Sheets as appropriate.

LEGEND

- Traffic Sign
- Direction of Travel

- This layout represents the minimum traffic controls required for placement of "Road Work Next XX Miles" and "End Road Work" signs.
- This layout does not replace other TTC Standard Sheets, but is intended as a supplement to the required signing.
- The distance on the "Road Work Next XX Miles" sign shall be stated to the nearest whole mile. This sign shall be placed at the Beginning of Project (B.O.P.) limits. This sign may be omitted if work zone is less than 0.5 miles.
- The "Road Work Next XX Miles" sign shall be a minimum of 60 inches by 36 inches for all multi-lane roadways and a minimum of 48 inches by 24 inches for two-lane roadways unless otherwise noted.
- The "End Road Work" sign shall be placed 500 feet past the End of Project (E.O.P.) limits.
- If "Road Work Ahead" sign is used on a cross road to warn of road work on another route, then "End Road Work" sign is not required.
- When projects are separated by less than 1 mile, they shall be signed as one project; this may require coordination.

ALL TTC STANDARDS SHOW MINIMUM CONSTRUCTION SIGNING. ALL SITUATIONS SHALL BE REVIEWED AND/OR DESIGNED BY THE ENGINEER. CONTRACTORS ARE RESPONSIBLE FOR COMPLYING WITH ALL TTC STANDARDS.

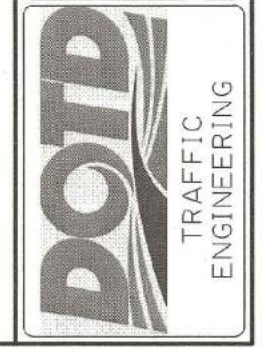
\* For divided roadways with speeds ≥ 50 mph use larger sign, 36 IN X 48 IN.

\*\* Any sign of the W20-1 series may be used.



DESIGNED G. LEBLANC	PARISH	STATE
CHECKED J. COLVIN	CONTROL SECTION	PROJECT
REVISION OR CHANGE ORDER DESCRIPTION	NO.	DATE
BY	DATE	DATE
APPROVED BY	DATE	DATE
CHIEF ENGINEER	DATE	DATE

TEMPORARY TRAFFIC CONTROL LAYOUT FOR PLACEMENT OF ROAD WORK NEXT XX MILES AND END ROAD WORK SIGNS



SHEET NUMBER	310
ASCENSION	-----
PARISH	-----
CONTROL SECTION	-----
PROJECT	T.O. 2021-HEI-001
DESIGNED	DBC
CHECKED	JBM
RETAILED	SFU
CHECKED	DBC
DATE	NOV. 2022
SERIES NO.	10 OF 13
REVISION OR CHANGE ORDER DESCRIPTION	BY
NO.	DATE
DATE	DATE

DOTD STANDARD PLANS: TTC-00 (D)

CHANNEL IMPROVEMENTS

HEI Hartman Engineering, Inc. Consulting Engineers