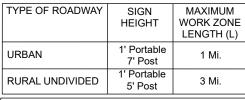
616.8.31a (TA-31a) Lane Closure	on Alternate Passing	∣Lanes - MT
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SPEED	SIGN SP	ACING (ft.)	TAPER LENGTH (ft.)		OPTIONAL	CHANNELIZER SPACING (ft.)			
Permanent	Undivided	Divided	Shoulder (1)	Lane (2)	BUFFER	Tapers	Buffer/		
Posted	(S)	(S)	(T1) `´	(T2)	LENGTH (ft.)	-	Work Areas		
(mph)		, ,	, ,		(B)				
0-35	200	-	70	245	280	35	40		
40-45	350	-	150	540	400	40	80		
50-55	500	-	185	660	560	50	80		
60-70	1000	-	235	840	840	60	120		
_									

1 Shoulder taper length based on 10 ft. (standard shoulder width) offset. 2. Lane taper length based on 12 ft. (standard lane width) offset.



AWRS

Channelizer

Protective Vehicle With Truck or Trailer Mounted Attenuator (TMA)



Truck or Trailer Mounted Arrow Panel



Work Space



(Advanced Warning Rail System) For Long Term Operations

A protective vehicle shall be used while work is in progress.

The protective vehicle shall be equipped with a TMA and shall have a flashing arrow panel and positioned at least 150 ft. in advance of the work space, if possible.

The work vehicle may be used as the protective vehicle if all the following conditions are met:

The roadway is posted at 45 mph or below,

The work vehicle is positioned in advance of the work space,

The work vehicle has a flashing arrow panel, and

The work vehicle uses activated rotating lights or strobe lights.

Additional warning signs shall be erected at each intersection with another state highway within the work zone. Upon the discretion of the supervisor, additional warning signs may be erected at other intersections within the work zone.

For short duration operations, signs, and channelizers may be reduced or eliminated.

For mobile operations where workers are on foot and move with the operation, channelizers may be reduced or eliminated.

For one or two-lane mobile operations, refer to EPG 616.8.17 (TA-17) Mobile Operation on Two-Lane Highways to determine if a protective vehicle is required. When used, the protective vehicle shall be used when work is in progress. The protective vehicle shall be equipped with a vehicle mounted sign and shall be equipped with a TMA and flashing arrow panel.

For nighttime operations, review EPG 616.6.83 WARNING LIGHTS for use of sequential lights.

If rumble strips are used, review EPG 616.6.87 RUMBLE STRIPS.

(1) For long-term operations, refer to EPG 616.6.2.2 Flags and Advance Warning Rail System.

SEE EPG 616.12 WORK ZONE SPEED LIMITS FOR SPEED LIMIT GUIDELINES.

