

6" Pavement Marking Policy Changes and Cold Weather Marking

Jeannie Silver, P.E.
State Pavement Marking Engineer

Traffic Teck Talk

May 24, 2023

4" to 6" Longline Conversion

A. Normal width line 4 to 6 inches wide. 6 inches wide for freeways, expressways, and ramps; 6 inches for all other roadways with speed limits > 40 mph, 4 to 6 inches for all other roadways.

- More Detectable
- 17.5% Reduction in all crashes
- 36.5% Reduction in fatal and injury crashes on rural two-lane highways
- November 2024 LETs

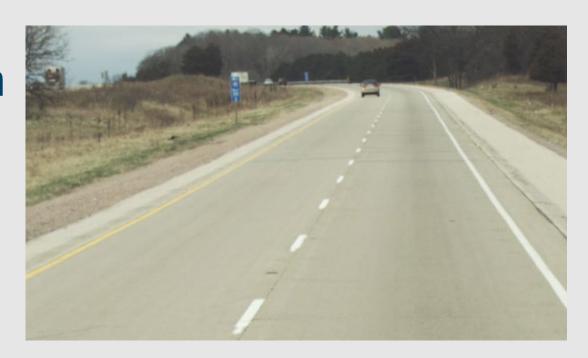






4 Inch Longlines

- All 4" Longlines will move to 6" on new installs
 - Centerlines
 - Edgelines
 - Lanelines
 - Temporary Markings













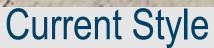






Lane Line Changes







New Style







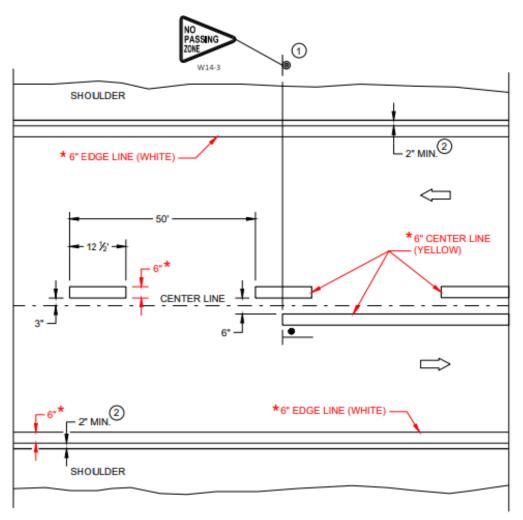


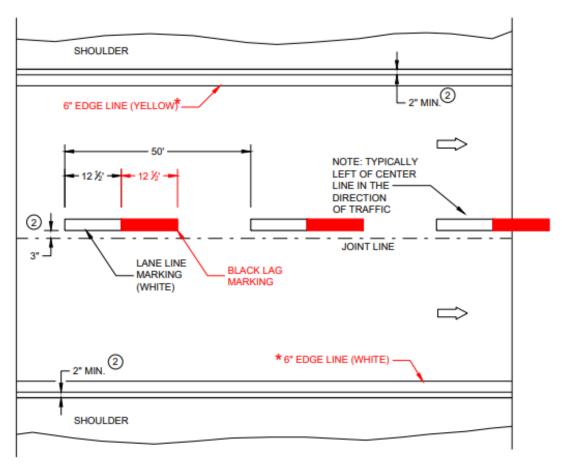






SDD 15C8





TWO WAY TRAFFIC

ONE WAY TRAFFIC

















8 inch Longline

- All 8" Lines become 10"
 - Gores
 - Turn lanes
 - Mini Dashes
- Contrast is removed

















ASP 6 in the works Groove Depth Increase

▲ 646.3.2.3.1 General

(1) Provide a groove depth as follows:

PRODUCT

Grooved Wet Reflective Epoxy

Grooved Tape

GROOVED DEPTH

90 +/- 10 mils

175 +/- 10 mils

- (2) Groove a maximum of 4 inches from both ends and 1 inch wider than the width of the marking segment. Achieve straight alignment with the grooving equipment, not to exceed a 3/8 inch variation in any 40-foot section of travelled way. Use a high-pressure air blower to clean the groove.
- (3) For grooving concrete, if water is used in the grooving process, allow the groove to dry a minimum of 24 hours before cleaning. Before applying the marking, ensure that the groove surface is clean and dry.
- (4) For grooving asphalt, wait 48 hours or longer after paving. Notify the engineer immediately if the structural integrity of the asphalt pavement is inadequate to support grooving operations.

















40 mph Question

A. Normal width line 4 to 6 inches wide. 6 inches wide for freeways, expressways, and ramps; 6 inches for all other roadways with speed limits > 40 mph, 4 to 6 inches for all other roadways.

- All state maintained roadways will be 6 inch
- Locals under 40 mphs may use 4 inch
 - Connecting Highways
 - County Highways
 - City Streets





Bid Items

Bid Item Number	Bid Item Description	Unit
643.3165	Temporary Marking Line Paint 6-Inch	LF
643.3170	Temporary Marking Line Epoxy 6-Inch	LF
643.3175	Temporary Marking Line Black Epoxy 6-Inch	LF
643.3180	Temporary Marking Line Removable Tape 6-Inch	LF
643.3185	Temporary Marking Line Removable Contrast Tape 6-Inch	LF
643.3265	Temporary Marking Line Paint 10-Inch	LF
643.3270	43.3270 Temporary Marking Line Epoxy 10-Inch	
643.3275	Temporary Marking Line Black Epoxy 10-Inch	LF
643.3280	Temporary Marking Line Removable Tape 10-Inch	LF
643.3285	643.3285 Temporary Marking Line Removable Contrast Tape 10-Inch	
643.3305	Temporary Marking Crosswalk Paint 6-inch	LF
643.3320	643.3320 Temporary Marking Crosswalk Epoxy 6-inch	
643.3350	Temporary Marking Crosswalk Removable Tape 6-inch	LF
643.3980	Temporary Marking Removable Mask Out Tape 8-Inch	LF
643.3990	643.3990 Temporary Marking Removable Mask Out Tape 12-Inch	



Bid Item Number	Bid Item Description	Unit				
646.2005	Marking Line Paint 6-Inch	LF				
646.2020	Marking Line Epoxy 6-Inch					
646.2025	Marking Line Grooved Black Epoxy 6-Inch	LF				
646.2040	Marking Line Grooved Wet Ref Epoxy 6-Inch	LF	Ric			
646.2050	Marking Line Grooved Permanent Tape 6-Inch	LF				
646.4005	Marking Line Paint 10-Inch	LF				
646.4020	Marking Line Epoxy 10-Inch	LF				
646.4025	Marking Line Grooved Black Epoxy 10-Inch	I F				
646.4040	Marking Line Grooved Wet Ref Epoxy 10-Inch	646.4705	Marking Line Same Day Paint 6-Inch			
646.4050	Marking Line Grooved Permanent Tape 10-Inch	646.4720	Marking Line Same Day Epoxy 6-Inch			
		646.4805	Marking Line Same Day Paint 10-Inch			
		646.4820	Marking Line S	Same Day Epoxy 10-Inch		
		646 6466	Cold Weather	Marking Enoug 6 Inch		

Bid Items



















No Passing Zone Bid Items

- Does not need to be included unless there is horizontal or vertical alignment changes.
- Verify with regional marking engineer if there is another reason to include the no passing zone bid item.





Work Zones

- Optional 2 Vehicle Convoy for Single Lane Conventional
- PCMS DO NOT use these words
 - CAUTION
 - HAZARD
 - DANGER



CONES MUST

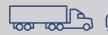
















Longline Reports

- Keep track of Paint Dates
- Send DT forms to DOTBTOMarking@dot.wi.gov

	DT2130 PAVEMENT MARKING DAILY REPORT - LONG LINE WISCONSIN DEPARTMENT OF TRANSPORTATION									
Date Proje		Proje		Contractor	Foreman		We	ather	Temperature	
	Hwy		Location	County	From		То			
te 1	Material	Line Width	Length	Paint Application	Bead App (Type I)	Bead App (Double Drop)				
Route		~	Painted Total LF	gals	lbs			Select Bead	Package	
			Removed Total LF	gals/mi	lbs/gal	M	lbs/gal	Comments:		
	Hwy		Location	County	From			Т	o	
2										
Route	Material	Line Width	Length	Paint Application	Bead App (Type I)	Beac	App (Do	ouble Drop)		
Ro			Painted Total LF	gals	lbs		lbs	Select Bead	Package	
			Removed Total LF	gals/mi	lhs/gal		lbs/gal	Comments:	_	















Cold Weather Markings Designers

- Cold Weather Marking Epoxy, 4-Inch Item 646.6464. and 8-Inch Item 646.6468
- Ambient or pavement temperature is less than 50°F
- Typically after October 1





F

Cold Weather Markings Construction

Standard spec 646.3.1.3 restricts placement of permanent pavement marking at low temperatures

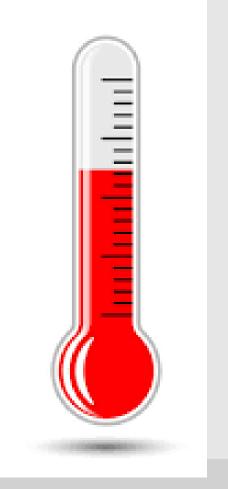
35 F for epoxy

50 F for tape.

Place cold weather marking over the winter.

Remove and Replace in Spring

A higher failure rate of 25 percent is allowed for cold weather pavement marking.





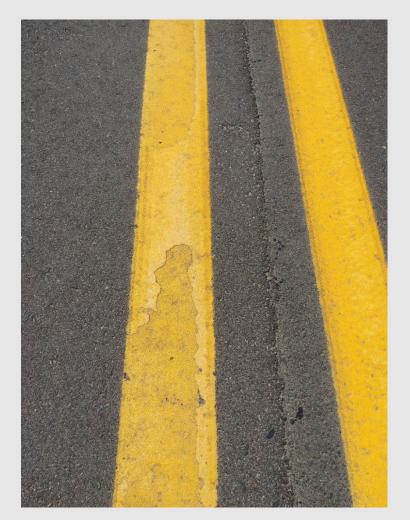


Cold Weather Not in Contract

- 646.5.2 Cold Weather Marking
- If the associated Cold Weather Marking bid item is not in the contract, the department will pay for the initial marking, maintenance, and removal as extra work.







Spring Review



















Sign Details for Fixed Message Signs

- DOTBTOSignDetails@dot.wi.gov
- All Signs Permanent and Temporary need details



