# Roadway Visibility Direction 2008 Update Pavement Marking Guidelines

### These guidelines supercede EGP Section 620 – revised 2/29/08

#### **General Guidelines**

# Marking Widths

### Major Roads

- Six inches all white long line markings, includes lane lines, edgelines and storage lines. All yellow edgelines
- Four inches yellow markings used as centerlines.
- Twelve inches gore markings

#### Minor Roads

- Four inches standard width for all long line markings.
- Eight inches gore markings.

#### Materials

## Major Roads

- Second generation paint with type P beads in rumble strips
  - Note: 2<sup>nd</sup> generation paint will be referred to as Standard Acrylic Waterborne Pavement Marking Paint to distinguish it from High Build Acrylic Waterborne Pavement Marking Paint.
- High Build paint with wet reflective bead system on flat lines
- Type 2 tape to be installed inside the edgelines on major divided highways by statewide contract with 3M
  - o All tape to be wet reflective.
  - o Contrast tape used on concrete surfaces.

#### Minor Roads

• Standard paint with type P beads.

#### **Special Considerations**

#### **Major Roads**

- Rumble strips to be used in accordance with EPG section 626.
- Contrast type markings to be used on the skips on concrete surfaces. For short sections of concrete pavement, such as less than 1000 feet, or bridge decks, contrast marking is not required.

## **Impacts**

## **Existing Projects**

• No changes will be made to projects currently let or awarded.

# Project in the Design Process

- Need to change bid items and quantities to reflect change to Standard paint for minor roads
- Wet reflective lines on major roads not in a rumble.
- Standard paint in rumble strips

- Contrast markings on concrete surfaces. For short sections of concrete pavement, such as less than 1000 feet, or bridge decks, contrast marking is not required.
- 3M tape installation contract on major road skips remain in place.
- Do not mix paints on the same job. Use engineering judgment to determine what type of line predominates and make all of the lines the same paint. It is OK to use high build paint in a rumble strip if the predominating striping on the job is flat lines. Use high build without wet reflective beads in the rumbles if this is the case. It is also OK to use Standard paint with type P beads on a flat line if the majority of the striping is rumble strip.

The following is the proposed wording for the EPG section 620 on pavement marking selection.

	Divided Highways		Undivided Highways
	Lane Lines	All Other Markings	All Markings
IIVIAIUL KUAUC	Type 2 Tape - Installed by 3M Contract	Standard Paint on rumble strips	Standard Paint on rumble strips
		Wet reflective paint on "flat" lines	Wet reflective paint on "flat" lines. Contrast markings for skips on concrete.
Minor Roads	Standard Paint	Standard Paint	Standard Paint
MoDOT Forces	Standard Paint	Standard Paint	Standard Paint
Intersection Markings	Type 2 Tape - All Locations		

**Support.** Contract work consists of furnishing and installing Type 2 preformed marking tape, acrylic copolymer paint, high build waterborne paint, standard waterborne paint pavement marking.

**Standard.** On the final lift of resurfacing projects and on all new pavements, all pavement marking will be provided by contract. On surface treatment projects, all pavement marking will be provided by MoDOT.

**Standard.** All permanent marking materials shall be installed in accordance with the manufacture's recommendations.

**Support.** There should be only one type of long line pavement marking on a project.

**Guidance.** For road segments with different pavement types less than 1000 feet long, such as a concrete bridge deck surrounded by asphalt, the pavement marking type for the surrounding pavement should be continued through the segment and contrast marking would not be required on the bridge deck.

**Guidance.** On projects where there is a mix of flat lines and rumble strips, high build paint may be used on the rumble strips. This will allow the contractor to use only one material on the project.

## **Issues**

# **Specifications**

- Standard paint no longer in the standard specs. Will use a JSP until it can be put back in to 620 and 1048.
- Wet Reflective JSP
- Contrast JSP
- Standard paint JSP
- Restored and new bid items
  - o 4 inch white paint
  - o 4 inch yellow paint
  - o 6 inch white wet reflective
  - o 6 inch yellow wet reflective
  - o 4 inch yellow wet reflective
  - o contrast strip
  - o 6 inch white paint
  - o 6 inch yellow paint

#### **MoDOT Forces**

# Materials

# Major Roads

- Standard paint, up to 20 mil
- Type L beads
- Rumble strips may be striped with type PM beads

#### Minor Roads

- Standard paint, 15 mil
- Type PM beads

Note: type P beads are installed by contractors, type PM beads are used by MoDOT forces.

#### Time Line

# Major Roads

- Major roads that need to be striped, will be completed by Memorial Day.
- Districts may need to relocate stripers to help neighbors meet deadline.
- There will be conference calls on Monday mornings to coordinate efforts.

#### Minor Roads

• Will be striped after Memorial Day as needed.