

9711000 TRAFFIC MARKING MATERIALS  
COMMENTS FROM INDUSTRY REVIEW

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352-955-6649  
Date: Tuesday, July 08, 2008  
Time: 03:04:46 PM

Comments:

- 1) Why is luminance (cap Y) only being evaluated for preformed materials. There is debate upon technical experts in the field as to whether this parameter is valuable. If valuable, then it should be measured on other materials as well... Also, Cap Y is addressed under 971-2.4 = Color. Cap Y is not color and is therefore the title of the subarticle is inappropriate. Color is addressed generally for all materials earlier in the spec. I suggest removing this subarticle all together. If cap Y is to be kept then rename the subarticle to luminance (capY). If cap Y is to be kept then the way it is measured also needs to be defined. Either retain language such as measured per D 6628 or measured at 2 degree observation angle using a D65 illuminant is needed.
- 2) Since there are no requirements for the amount of yellow pigment, I recommend removing it from the table in 971-10.2

Response:

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Comments:

**From:** Alan Lafferty [mailto:[gulf7@embarqmail.com](mailto:gulf7@embarqmail.com)]  
**Sent:** Wednesday, July 09, 2008 4:19 PM  
**To:** Powell, Jr., Rudy  
**Cc:** Dana Burney; Quin Boylan; Wayne Burger  
**Subject:** Comment Review for FDOT Specification Revision 9711000 Traffic Marking Material and 7010000-Audible and Vibratory Pavement Markings

Mr. Powell; thank you for the opportunity to comment on the subject specification revision. This revision appears to be a result of **Roadway Design Bulletin 08-07** **Estimates Bulletin 08-05**. This bulletin states “crash data for lane departure crashes indicates the serious injury and fatality rate on Rural (Urban 1) and Urban 2 & # flush shoulder roadways is twice the rate of those on limited access facilities. Rumble strips are a proven cost-effective countermeasure to lane departure crashes brought on by driver drowsiness, distraction, and/or inattention.”

“Effective with the January 2009 letting, audible and vibratory pavement markings shall be installed on all rural construction projects excluding limited access facilities.”

Current requirements for section **971-5 Thermoplastic Materials for Traffic Stripes** requires white and yellow pavement markings meet an initial retroreflectance of not less than 450 mcd/lx·m<sup>2</sup> and not less than 350 mcd/lx·m<sup>2</sup>, respectively. Proposed requirements for section **971-10 Thermoplastic Material for Audible and Vibratory Traffic Stripes** would require white and yellow pavement markings meet an initial retroreflectance of not less than 300 mcd/lx·m<sup>2</sup> and not less than 250 mcd/lx·m<sup>2</sup>, respectively.

**Reflectivity (sight) should not be of less importance than audibility (noise).**

**Question:** Why is the retroreflectivity for an audible and vibratory traffic stripe less than a thermoplastic or other durable traffic stripe?

The same comment and question applies to section 7010000.

Audible wet weather pavement marking systems have been documented by FDOT to provide an initial retroreflectance of not less than 450 mcd/lx·m<sup>2</sup> and not less than 350 mcd/lx·m<sup>2</sup>, respectively dry and an initial wet retroreflectance of not less than 150 mcd/lx·m<sup>2</sup>. This may well reduce the injury fatality rate on rural and urban roadways since limited access facilities have rumble strips incorporated with higher performance pavement marking systems.

**Comment:** Utilize data obtained from the FDOT “Rain Stripe Test” conducted by third parties, and incorporate in a standard specification for audible wet weather systems where Districts conclude audible and vibratory pavement markings alone are not adequate.

**Response:**

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**Comments:**

## **MEMORANDUM**

**DATE:** July 10, 2008

**TO:** Duane F. Brautigam, P.E., State Specifications Engineer, MS 75

**FROM:** Larry F. Kelley, P.E., District Secretary

**COPIES:** See Distribution List

**SUBJECT: Proposed Specification Change: 9711000.D01**

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We have retrieved the referenced document from the [State Specifications Office's Industry Review intranet website](#). Pursuant to request, we have reviewed the document, entitled "Traffic Marking Materials," and offer the following comments for your consideration.

Section 971-10.4.1, Set to Bear Traffic Time, states "The thermoplastic shall set to bear traffic in not more than 10 minutes at ambient air temperatures of 80°F or less and in not more than 15 minutes for ambient air temperatures exceeding 80°F." We have concerns about the drying time if this line is going to be used as an edge line/center line for rural roadways as per the guide lines that we have seen. The contractor may have to "shut down" a road section if they put the audible line down for long distances. These drying times may not be a problem on new construction but will cause maintenance a problem with MOT if we have to refurbish the lines for any reason.

Section 971-10.4.2, Retroreflectivity, states "The white and yellow pavement markings shall attain an initial retroreflectance of not less than 300 mcd/lx-m2 and not less than 250 mcd/lx-m2, respectively. The retroreflectance of the white and yellow pavement markings at the end of the three year service life shall not be less than 150 mcd/lx-m2." Normal retroreflectivity requirements for standard thermo are higher than these requirements. Is this the best that these lines can perform?

Thank you for the opportunity to provide input. If you have any questions or need additional information, please do not hesitate to contact me at (850) 415-9200.

**Response:**

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