

From: [Nordholm, Gail \[DOT\]](#)
To: [Nordholm, Gail \[DOT\]](#)
Subject: Pavement Marking Paint Shortage
Date: Tuesday, June 15, 2010 3:26:00 PM

TO: County Engineers, City Representatives, and Consultants

CC: District Local Systems Engineers, Service Bureau,
and Office of Local Systems

FROM: Office of Local Systems

SUBJECT: Pavement Marking Paint Shortage

DATE: June 15, 2010

The Iowa DOT has been notified of a nationwide shortage of certain raw materials used in painted pavement markings.

These shortfalls have caused most pavement marking manufacturers to limit the amount of product that will be supplied to their customers. For additional information concerning the shortage, please refer to the following DOT press release:

<http://www.news.iowadot.gov/newsandinfo/2010/06/iowa-affected-by-shortage-of-pavement-marking-paint.html>

In order to help stretch the availability of pavement marking materials, effective with the July 2010 letting, we will add the following proposal note to all contracts let through the Iowa DOT:

http://www.iowadot.gov/local_systems/mailing/2010/june/proposal_note.pdf

This proposal note makes modifications to the Iowa DOT Standard Specification requirements for pavement markings, especially temporary markings. This proposal note will be applied to future lettings until further notice. After the shortage subsides, we will return to the normal specification requirements, hopefully later this year.

For projects in the July and August 2010 lettings:

The Office of Contracts is reviewing projects and will issue addendums to ensure that projects are biddable. Addendums will be issued as follows:

1. If the road is closed during construction:
 - It is assumed that temporary markings are not required.
 - An addendum will be issued to delete permanent painted pavement marking items.

2. If the traffic is maintained during construction:
 - It is assumed that temporary markings will be required.
 - The proposal note (see above) will be added to allow alternatives for temporary pavement markings.
 - An addendum will be issued to delete permanent painted pavement marking items.

If you have a project in the July 2010 letting your designer should contact the Office of Contracts by June 25, 2010 to confirm the type (permanent and / or temporary) and quantity of pavement markings on your project. If you have a project in the August letting, contact the Office of Contracts by July 5, 2010. You may also request to change to marking tape or other acceptable mitigation for permanent markings, as allowed by the MUTCD. Designers should contact either Krandel Jack (515-239-1546, Krandel.Jack@dot.iowa.gov) or Scott Hanson (515-239-1274, Scott.Hanson@dot.iowa.gov). If neither is available, ask for the estimator assigned to your project.

For projects in the September 2010 letting and beyond:

In light of these shortages, you may wish to review the Manual on Uniform Traffic Control Devices (MUTCD) requirements for pavement markings (see examples below). If not required by the MUTCD, you may want to modify your project plans to exclude permanent pavement markings. If pavement markings are required, you may want to consider installing the permanent pavement markings by some other means, such as with your own forces, or if practical, as part of a separate county or city-wide pavement marking contract.

The currently adopted MUTCD (2003 Edition, with Revision No. 1 dated November 2004) does not require permanent pavement markings in all

cases. For example:

- As per Section 3B.01, yellow centerline markings are required only for paved urban arterials and collectors that have a traveled way of 20 ft or more in width and an ADT of 6,000 vehicles per day or greater, and for paved two-way streets or highways that have three or more lanes for moving motor vehicle traffic.
- As per Section 3B.07, white edge line markings are required only for freeways, expressways, and rural arterials with a traveled way of 20 ft or more in width and an ADT of 6,000 vehicles per day or greater.
- As per Chapter 5E, neither center line nor edge line markings are required for roads with traffic volumes less than 400 ADT.

However this situation is addressed, construction projects should not be opened to traffic without the appropriate pavement markings and / or signing, as required by the MUTCD. Where pavement markings are not required but were previously used, you should install the appropriate warning signs in advance of the unmarked section of roadway. Where pavement markings are required, you must either delay opening the project to traffic or install the appropriate warning signs until the permanent pavement markings can be installed.

If you have any questions, **please do not reply to this note**. Instead you may contact me as shown below.

Sincerely,

M.J. "Charlie" Purcell
Director, Office of Local Systems
Iowa Department of Transportation
515-239-1532 charlie.purcell@dot.iowa.gov

Some of the documents referenced above are in Adobe Acrobat's Portable Document Format (PDF). If you do not have the Adobe Acrobat Reader software, you can download it free of charge at:

<http://www.adobe.com/products/acrobat/readstep.html>.

Mailings are available at the Local Systems Weekly Mailing web address

http://www.iowadot.gov/local_systems/mailing/main_mailing.htm

005.0011 .

For purposes of resolving discrepancies in the contract documents, the changes listed below shall be considered as information provided in the Proposal Form with regards to Article 1105.04 of the Standard Specifications.

*** REVISIONS TO THE STANDARD SPECIFICATIONS ***

To Section 2527, Pavement Marking, the following Waterborne Pavement Marking Shortfall Mitigation Measures shall apply:

1. Design Mitigation Measures:

. A. For lane lines and centerlines on lower lifts of HMA, the use of
. FHWA MUTCD acceptable temporary markings in a 2 foot dash, 38
. foot skip pattern will be allowed for painted lines. This still
. keeps a normal 40 feet skip/dash spacing overall.

. B. Edge lines on all roadways are not required on lower lifts of
. HMA; except for curves with a radius of 1000 feet or less and
. within 300 feet of bridges or other shoulder obstacles that
. create less than normal shoulder widths.

. C. For lower lifts of HMA, DO NOT PASS (R4-1) and PASS WITH CARE
. (R4-2) signs may be used instead of no passing lines for up to 3
. calendar days.

. NOTE: All pavement markings placed on the final surface of HMA and
. PCC pavements shall be placed according to the original design
. plans. Temporary pavement marking measures are allowed to be in
. place no more than 2 weeks on a final surface per Part 6F.72 of the
. MUTCD.

2. Pavement Marking Material Mitigation Measures:

. A. For center line or lane line painted dashes; 3 raised pavement
. markers (RPMs) per specification article 2527.02.D.5 or temporary
. raised pavement markers (TRPMs) evenly spaced at 5 feet centers
. may be substituted for the 10 foot dash. 2 raised pavement
. markers or temporary raised pavement markers spaced on 2 feet
. centers may be used to substitute for the 2 dash lane stated in
. 1.A above.

. RPMs or TRPMs shall not be used for pavement markings placed on
. final surfaces of HMA and PCC pavement as a permanent marking.
. RPMs or TRPMs shall be removed on lower lifts before additional
. upper lifts are placed.

. TRPMs are currently not included in the Iowa DOT specifications.
. Specifications for these and an approved materials list can be
. found at the end of this proposal note.

. B. For no passing lines or other longitudinal lines, RPMs or TRPMs
. spaced at 10 feet centers may be substituted on lower lifts of
. HMA pavements. RPMs or TRPMs shall be removed on lower lifts
. before additional upper lifts are placed. RPMs or TRPMs shall
. not be used for pavement markings placed on final surfaces of HMA
. and PCC pavement as a permanent marking.

. C. Removable marking tape per specification Article 2527.02.D.1 may
. be substituted for any pavement markings on lower lifts of HMA
. pavements, but shall not be used for pavement markings on final

. surfaces of HMA or PCC pavements as a permanent marking. The use
. of removable marking tape is currently allowed in the Standard
. Specifications for these instances and is required for all
. temporary pavement markings which extend diagonally across a
. final traffic lane.

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. D. The use of other State or Federal Governmental Agency approved
. waterborne pavement marking formations is acceptable as an
. alternate for both temporary and permanent pavement markings as
. long as adequate documentation on their approval is provided.

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. E. The use of solvent based VOC compliant pavement markings (both
. Iowa and other State or Federal Governmental Agency approved) is
. acceptable as an alternate for both temporary and permanent
. pavement markings as long as adequate documentation on their
. approval is provided.

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. F. METHOD OF MEASUREMENT, replace Article 2527.04,B with the
. following:

. The Engineer will measure the number of stations (meters),
. based on a single 4-inch (100 mm) width, of painted, taped,
. and/or removed line. The use of RPMs and TRPMs according to
. 2.A. and 2.B. above will be considered to be painted pavement
. markings. The length of each type of markings will be
. determined using beginning and ending points, and adjusting for
. breaks at side roads, median crossings, station equations, or
. other locations shown in the contract documents. No passing
. line locations signed according to 1.C. above will be
. considered as having painted pavement markings applied and will
. be measured. No additional measurement will be done in the
. signed no passing line locations even if the Contractor also
. voluntarily or is required to apply painted pavement markings
. (or RPMs or TRPMs applied according to 2.B. above).

.
. The measurement for dashed and dotted lines will be adjusted to
. exclude skips, with the following exception:

. Temporary markings for lane lines and centerlines on lower
. lifts of HMA utilizing the 2 foot dash, 38 foot skip pattern
. (40 feet skip/dash) according to 1.A. above will be measured
. as a 10 foot dash, 30 foot skip pattern (40 feet skip/dash).

. Note: The net results are the normal 0.25 quantity factor.

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. Measurement of lines wider than 4 1/2 inches (115 mm) will be
. adjusted by the quantity factor to a 4 inch (100 mm) line.

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Temporary Raised Pavement Markers (TRPM)

Markers shall consist of an L-shaped flexible polymer body with
prismatic reflective tape on both faces of the vertical section. The
prismatic reflective faces shall be a minimum of 0.38 square inches
(0.0002 m²) for each face. The marker base shall have affixed a
pressure-sensitive adhesive, protected by a release paper, for
application to the pavement surface. Temporary raised pavement
markers shall be removed on lower lifts before additional upper lifts
are placed.

Approved Products:
Company Product Name/Number

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Apex Universal
11033 Forest Place
Santa Fe Springs, CA 90670

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Type 932
Yellow or White

Pexco (Davidson Plastics)
3110 70th Avenue East
Tacoma, WA 98424

Temporary Overlay Markers (TOM)
Yellow or White

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