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March 21,2005

Federal Highway Administration Office of Transportation Operations 400 Seventh Street, SW, HOTO Washington, DC 20590

SUBJECT: Request for Interpretation - MUTCD Section 3B.17 Crosswalk Markings

To whom it may concern:

Pursuant to the Manual on Uniform Traffic Control Devices section IA.10, the City of Bellevue is requesting an interpretation governing crosswalk markings. The City of Bellevue, located in Washington state, is considering the use of special street prints to compliment more typical markings used to establish crosswalks. Attached is the request for interpretation consistent with the outline described in section 1 A.10 of the Manual.

Depending on the outcome of this interpretation, Bellevue may extensively use special pavement marking treatments over time, but in the immediate future would treat relatively few crossings (perhaps 1 or 2) to observe pedestrian and driver behavior relative to these treatments.

Bellevue does not intend to use these street prints until such time as the FHW A has provided written confirmation that these treatments are consistent with the Manual. If found to be inconsistent with the Manual, Bellevue will proceed with preparing a request for permission to experiment and submit it to FHW A.

Should there be questions regarding this matter, I can be reached at 425-452-6020 or email klatt@ci.bellevue.wa.us.

Sincerely,

Kurt Latt, P .E., PTOE Senior Transportation Engineer Bellevue Traffic Engineering Division

Attachment: Request for Interpretation with Appendix A depicting applicable photos of treatments

cc: Hillary Stibbard- Terrell, Traffic Engineering Manager Karen Gonzalez, Neighborhood Services Programs Manager

City of Bellevue Request for Interpretation of MUTCD Section 3B.17 Crosswalk Markings

A. Statement of interpretation being sought:

Section 3B.17 describes allowable crosswalk markings as "solid white lines" and "not less than 6" nor greater than 24" in width." This section also presents allowable variations to these most typical of crosswalk markings. However, it is not clear to what extent allowable variations in pavement markings can be used.

Recent advances in coloring concrete, and ability to stamp patterns in concrete, as well as provide special treatments such as a "StreetPrint DuraTherm" product, which imprints patterns in the roadway surface, have raised the question as to allowable variations in marking crosswalks.

The specific interpretation being sought is whether special print patterns, either white in color or otherwise, can be used separately or in conjunction with the more typical pavement markings for crosswalks described in Section 3B.17. Examples of possible crosswalk marking treatments are included herein.

B. Description of condition provoking interpretation:

The City of Bellevue, in working with the community, has had many requests to supplement typical crosswalk markings with more noticeable and attractive markings that include special imprints in the roadway surface. New products allow for stamping existing asphalt pavement with various patterns that can be placed between the existing crosswalk lines establishing the crosswalk. In cases currently being considered, these special imprints, whether in concrete or asphalt would be supplemental to established crosswalk lines in the MUTCD. However, some jurisdictions apparently have used special street prints which are intended to serve as crosswalk markings without having the specific crosswalk solid white lines or other crosswalk markings specifically called out in Section 3B.17. The City of Bellevue is requesting clarification as to whether street prints or other roadway surface treatments can be used, either in conjunction or on their own, to establish legal crosswalks consistent with the MUTCD.

C. Illustration supporting request:

Appendix A provides a series of color photos depicting various street print treatments that are intended to establish a legal crosswalk. In many of these cases, they do not appear to meet the description of having solid white lines or similar treatment to establish a legal crosswalk. Although, some of these markings are located at intersections and according to at least Washington State Law a legal crosswalk is established at an intersection regardless of having pavement markings. Since many of these crosswalks are shown at intersections it may not be necessary to use the solid white lines and would only be a redundant action not necessary from a legal perspective. However, at midblock locations, which some of these appear to be, it would seem necessary to have solid white lines establishing the crossing as a legal crosswalk.

D. Supporting research data pertinent to area of interpretation:

Special imprinted treatments for crosswalks is new to the City of Bellevue. We have no specific data or studies unique to Bellevue. However, many cities across the nation, some of which are depicted in the attached photos, are using variations in markings for crosswalks. We have found no studies of the safety implications of using street prints and/or markings not specifically identified in the MUTCD.

Depending on the outcome of this request and the FHW A's interpretation of these treatments relative to crosswalk markings, the City of Bellevue could if necessary prepare a request for "Permission to Experiment." We will await FHW A's findings before proceeding with any permission to experiment as it may be found to be unnecessary and these treatments are compatible with the intent of Section 38.17.

APPENDIX A Crosswalk Marking Treatments Using StreetPrint DuraTherm Product Series of color photographs Chicago, Illinois, United States of America



Picture Details

Picture ID: 579

Location: Chicago, Illinois, United States of America

Application(s): Government -> Crosswalks Government -> Route to School Enhancement

Products Used: StreetPrint DuraThermTM

Patterns Used: DuraThermTM

Honeycomb

Colors Used: DuraTherm[™] White DuraTherm[™] Yellow

Providence, Rhode Island, United States of America



Picture Details

Picture 10: 613

Location: Crosswalks, Providence, Rhode Island, United States of America

Application(s): Government -> Crosswalks Products Used: StreetPrint DuraThermTM



Picture ID: 552

Location: Boston, Massachusetts, United States of America Application(s): Government -> Crosswalks Products Used: StreetPrint DuraThermTM

3/3/2005



Picture ID: 609

Location: Manassas, Virginia, United States of America Application(s): Government -> Crosswalks Products Used: StreetPrint DuraThermTM

3/3/2005



Picture ID: 603

Location: Tennesee DOT, Nashville, Tennessee, United States of America Application(s): Government -> Crosswalks Products Used: StreetPrint DuraThermTM



Picture 10: 615

Location: Crosswalks, Queens, New York, United States of America Application(s): Government -> Crosswalks Products Used: StreetPrint DuraThermTM

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