WisDOT Division of Transportation System Development Bureau of Project Development 4822 Madison Yards Way P.O. Box 7916 Madison, WI 53707-7916

Governor Tony Evers Secretary Kristina Boardman

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February 7, 2025

VIA ELECTRONIC MAIL ONLY

RE: Temporary Precast Barrier

WisDOT Region Offices and Wisconsin Transportation Roadbuilder,

The department was made aware of Non-Conforming *Temporary Precast Barrier* currently installed on a WisDOT roadway project in NE-Region. In early December 2024, temporary precast barrier wall, adjacent to crash cushion, was struck. The temporary precast barrier was pinned to the pavement. The "pin pocket" of the temporary precast barrier was damaged, and it was evident that reinforcing steel was not present as required *by WisDOT Standard Detail Drawing ("SDD")* 14B07.

Upon identification of the non-conforming temporary precast barrier wall that was struck in NE-Region, the Region ordered the removal and replacement of all Temporary Precast Barrier that did not meet the requirements of WisDOT **Standard Specifications for Highway and Structure Construction ("Standard Spec")** 603.2 (4), *Manufacture precast barrier in a plant listed under the precast concrete fabricators on the* (Approved Products List) "APL". NE-Region informed the WisDOT Bureau of Project Development ("BPD") of the non-conforming temporary precast barrier. BPD requested all WisDOT Region Offices investigate active projects with current installations of temporary precast barrier to determine if the installed barrier met the requirements of the Standard Spec and the SDD.

The transportation roadbuilding industry ("Industry") requested a meeting with BPD and the Bureau of Technical Services ("BTS") to discuss the non-conforming temporary precast barrier and to discuss concerns Industry had related to the APL for the bid item Temporary Precast Barrier. WisDOT BPD and BTS met with Industry on December 20, 2024. At the meeting on December 20, 2024, Industry expressed concern that the APL does not address Temporary Precast Barrier cast prior to 2012. Industry stated they are in possession of several hundred thousand feet of temporary barrier cast prior to 2012, and Industry states this barrier meets the requirements of SDD 14B07. Industry committed to providing the department with both non-destructive and destructive tests of temporary precast barriers that both pre-dated the APL and were on the APL. Deliverables provided to the department:

- Report of Non-Destructive Testing of Temporary Precast Barrier using Ground Penetrating Radar
- Photo Documentation of Destructive Testing of Temporary Precast Barrier

WisDOT BPD and BTS reviewed the information provided by industry and the project information initially provided by the NE-Region. Based on the information provided, the temporary precast barrier investigated by industry appears to meet the requirements of SDD 14B07. WisDOT BPD and BTS support acceptance of temporary precast barrier manufactured prior to 2012 provided it meets Standard Spec 603.3.2 and Construction and Materials Manual ("CMM") 145.12.

WisDOT BPD and BTS recommend the following:

- Active construction projects LET prior to this guidance shall require non-destructive (i.e. GPR) testing on not less
 than 10% of temporary precast barrier that is currently installed and pre-dates the 2012 APL list of approved
 manufacturers. Any temporary precast barrier deemed non-conforming following the non-destructive testing shall
 be removed and replaced (at no cost to the department). As an alternative to non-destructive testing, Industry may
 remove and replace (at no cost to the department) all temporary barrier currently installed on projects that was
 manufactured prior to 2012.
- Beginning with the February 2025 Letting:
 - Prior to use, Industry shall provide a certificate of compliance to the engineer certifying any Temporary Precast Barrier manufactured prior to 2012 meets the requirements of SDD 14B07 and Standard Spec 603.2 and 603.3.2. Industry shall follow guidance in CMM <u>845.3.2.2.1</u> for completion of an acceptable certificate of compliance.
 - WisDOT shall update the APL to provide clear guidance to department and Industry the process to approve Temporary Precast Barrier manufactured prior to 2012.

Questions related to this guidance should be directed to either Brandon Lamers (<u>brandon.lamers@dot.wi.gov</u>) or Barry Paye (<u>barry.paye@dot.wi.gov</u>). Questions related to contract administration should be directed to Brian Boothby (<u>brian.boothby@dot.wi.gov</u>) in the Bureau of Project Development in DTSD.

Sincerely,

Brandon Lamers

Brandon J. Lamers, PE

Deputy Director Bureau of Project Development Wisconsin Department of Transportation Barry Paye

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Director

Bureau of Technical Services

Wisconsin Department of Transportation

Cc:

Matt Grove – Wisconsin Transportation Builders Association (WTBA)

Nick Perna – FHWA WI-Division Program and Project Delivery Team Lead, Senior Engineer

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WisDOT DTSD Administrators Office

WisDOT DTSD Bureau of Project Development

WisDOT DTSD Bureau of Technical Services

WisDOT Region Project Development Section Chiefs