To: ALL BRIDGE DESIGNERS

22.6

From: Jayme F. Schiff

Subject: IDOT Seismic Manual Update — Plan Detail Requirements

Date: October 7, 2022

This memorandum introduces the Plan Detail Requirements section to the Seismic Manual. The details herein shall be applicable to all structures being designed using a displacement-based design approach.

One goal of the Seismic Manual is to house details required for a displacement-based design approach in a separate document from those required for a force-based design approach. The details herein have been derived from the Guide Specifications for LRFD Bridge Seismic Design, are specific to a displacement-based approach, and therefore should not be used for bridges designed using a force-based approach without prior approval from the Bureau of Bridges and Structures. Examples of details that would be approved include support length requirements and abutment backfill details, as these details are not specific to one design paradigm.

The Department intends to incorporate displacement-based seismic design on bridges with Type, Size, and Location plans approved September 1, 2023, and later. Due to the amount and complexity of required design changes, and the effects these changes may have on preliminary design, this date may be extended on a project-by-project basis.

The Seismic Manual is found in the "Design" tab, under Specific Scope of Services on the primary IDOT-Bureau of Bridges and Structures website at https://idot.illinois.gov/doing-business/procurements/engineering-architectural-professional-services/Consultants-Resources/index#Bridges.

The policy and details herein are subject to review. The Seismic Manual is intended to provide direction and documentation for all forthcoming seismic policy. Bridge designers are encouraged to review the forthcoming policy and forward any questions or comments to Mark Shaffer, Policy, Standards, and Final Plan Control Unit Chief, by telephone at (217) 785-2914 or email at mark.shaffer@illinois.gov. Incorporation of comments will occur when future sections are added.

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