

New Bridge Load Evaluation Manual

Summary

This Bulletin is issued to inform Consultants and industry that the department has adopted the Bridge Load Evaluation Manual (Manual). This will apply to all bridge load evaluations prepared by Consultants for bridges under the management of Alberta Transportation, including those prepared by Consultants for third parties for the purpose of overweight vehicle permit applications.

The Manual is intended to clarify the department's requirements and to bring consistency to bridge load evaluations. The Manual provides:

- Specific inspection and engineering requirements for completing load evaluations;
- Specific reporting requirements;
- Exceptions and interpretations of CSA S6-14; and
- Historical information regarding Alberta Transportation bridges, truck loading and load evaluation processes.

The Manual is available at: www.transportation.alberta.ca/4824.htm

Key Issues

A few key highlights of the Manual include:

- New requirement that Consultants carrying out load evaluations of bridges under the management of Alberta Transportation must be prequalified by AT in the category for the "Design for Major Bridge Structures";
- New detailed inspection requirements for load evaluations;
- New requirements for load evaluations to be independently checked;
- New load evaluation reporting requirements;
- New guidance on historical bridge material properties;
- New requirements to report on Serviceability Limit State stresses;
- New short span live load factors for non-permit trucks;
- New guidance for determining the resistance of members not meeting the requirements of CSA S6-14;
- New guidance for determining the resistance of strengthened and damaged/deteriorated bridge members;
- New lane loading requirements for permit trucks;
- New method for determining Lateral Distribution of Live Load Between Shear-Connected Girders; and
- New method for determining Prestress Losses in Precast Prestressed Concrete Girders.

Implementation

The requirements set forth in the Manual shall apply as outlined below.

- For overweight vehicle permit applications being prepared by a third party, the Manual shall apply for all future vehicles moves, unless the bridge load evaluation report was submitted to Alberta Transportation Transport Engineering Section prior June 2015.
- For Consultants working on projects for Alberta Transportation, the Manual shall apply:
 - Whenever it is specifically referred to in a “Request for Proposals - Terms of Reference”;
 - For all Consultant agreements dated August 01, 2015 or later; or
 - For any Consultant agreement dated earlier than August 01, 2015 but where the bridge load evaluation report was not submitted until after January 01, 2016.

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