SUMMARY OF PAVEMENT SMOOTHNESS SPECIFICATIONS IN CANADA AND AROUND THE WORLD

In April 1999, the Transportation Association of Canada (TAC) held its annual Spring Technical Meetings in Toronto, Ontario. During the TAC Pavements Standing Committee (PSC) meeting, provincial transportation agency representatives presented their respective provinces smoothness specifications for newly constructed roads and highways. Technical Brief # 16 was prepared from those presentations. Since April, changes have been made to the smoothness specifications in some provinces. This addendum briefly outlines some of these changes.

British Columbia

In 1997 and 1998, the BC smoothness specifications were modelled after the Alberta specifications, utilizing Profile Index (PI) and a Bump specification as reported in Technical Brief # 16. For 1999, BC has switched to a specification based on International Roughness Index (IRI), similar to the specification used in Québec, but modified for BC conditions. This new specification is currently under review and will be updated based on experience gained during its first year in operation. The equipment adopted by BC Ministry of Transportation and Highways to measure IRI is the CSC Profilite 300, a Class 1 rolling profiler. The Ministry currently owns 3 such units.

Manitoba

The specifications reported for Manitoba are largely the same, with the following changes:

i) Manitoba now uses a Cox Profilograph for smoothness measurement on both asphalt concrete (AC) and Portland cement concrete (PCC), not the HI-LO Beam and straight edge as reported;

ii) The AC smoothness specification is an incentive program with no net penalty. Therefore, the contractor does not incur penalty if the AC smoothness specification is not met. However, the PCC smoothness specification is mandatory and the contractor can pay penalty.

iii) With regard to the time of smoothness testing, AC pavements may be tested within one month of construction, however, PCC pavements must be tested as soon as the equipment can be safely placed on the new concrete.

Please Contact Steve Goodman at the TAC Secretariat for more information regarding smoothness specifications in Canada.