

**Title: Hwy 40:32 - Proposed Horizontal Alignment**

Memorandum (or Approval) Date: August 20, 2012

Design Exception Request Date: August 14, 2012

Region: Peace

Approval Status: Approved

Project Location					
Highway	Control Section	At km	From km	To km	Existing AADT
40	32	33.3	33+000	34+000	1090

Project Type (Mark all that apply with an X)			
Functional Planning:	New Construction:	Reconstruction: <b>X</b>	Paving/Surfacing:
Bridge:	Operations:	Geotechnical:	Environmental:
Other:	Construction <b>X</b>		

Summary
<p>The following design exception request is for the following:  Shift proposed centreline R600 m horizontal curve (Curve #7) back to existing R576 m due to groundwater and geotechnical conditions encountered during construction. Based the ATHGDG, Chapter B.3 - Horizontal Alignment, for a design speed of 110 km/h, the minimum horizontal curve is R600 m.</p>

Rationale for Approval/Rejection
<ul style="list-style-type: none"> <li>Collision history for the five year period from 2006 to 2010. Safety performance is considered good. Two PDO collisions both involving single vehicle run off the road were reported. Icy road condition was reported for one of the collisions (Dec. 2007). No details of the road condition were provided for the other collision (Feb. 2008).</li> <li>The stopping sight distance of 432m for the south approach exceeds the SSD of 235 m for design speed 110 km/h.</li> <li>ISD of +500m in both directions are adequate for an existing utility access located in the vicinity of the R576m horizontal curve.</li> </ul>

Additional Mitigation Required
Longitudinal barriers with crashworthy end treatments will be installed as required.

Key Words
Horizontal alignment, horizontal curve, minimum radius, superelevation, stopping sight distance.

[illegible]

