

July 8, 2010

Project No. 07-1181-0009

Sowel Kang, M.E.S. - Environmental Planner  
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## **SECONDARY SOURCE GROUNDWATER INVESTIGATION 407 TRANSITWAY FROM EAST OF HIGHWAY 400 TO KENNEDY ROAD – 2010 UPDATE**

Dear Sowel Kang:

As requested we have reviewed our Secondary Source Groundwater Investigation (SSGI) report (Secondary Source Groundwater Investigation 407 Transitway from East of Highway 400 to Kennedy Road, October 2007) to determine if any updates are required based on the preferred route(s) and station sites identified in the 30% Preliminary Design Package submitted to the MTO.

Information reviewed as part of this update includes:

- 407 Transitway –GWP 252-96-00 Preliminary Design 30% Review Plan and Profile – Segment A through F (Figures 1 to 7); and,
- 407 Transitway West of Hwy 400 to Kennedy Road - Structure Locations Preliminary Planning Appendix 'A'.

The SSGI study area included a 1 km wide corridor centred on the existing Highway 407. With the exception of two areas, (i) south of Highway 407 at Highway 400 and (ii) north of Highway 407 at Yonge Street, the proposed 407 Transitway alignment falls within the study area boundary of the original SSGI study. The deviation of the proposed alignment in these two areas is minor and therefore the findings of the original SSGI remain unchanged. Our SSGI report dated October, 2007 should be referred to for a detailed discussion of findings. (Note: This report was updated in July 2010 for non-technical edits to provide consistency in project terminology).

Sensitive ground water features within the study corridor are associated with generally north-south trending valley features. A significant number of private wells identified in the SSGI are not expected to remain in use in the immediate (i.e. greater than 1 km) vicinity of the corridor study area. Given the orientation and location of sensitive groundwater features and information collected to date for this study, any proposed east-west alignments within the Transitway study corridor represent an equal level of risk of potential groundwater impacts or



constraints during construction. Once final designs are selected, the potential impact of the proposed construction works should be reassessed and further investigation and monitoring carried out as necessary based on the final design.

We trust that this update meets your requirements. Should you have any questions please contact the undersigned.

Yours truly,

**GOLDER ASSOCIATES LTD.**



Mike Fairbanks, P.Geo.  
Hydrogeologist

MRF/SDL/plc



Shawn Lytle, P.Geo.  
Managing Principal

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