

The Canadian Society for Civil Engineering La Société Canadienne de Génie Civil

AND

The Geotechnical Society of Edmonton



La Société Géotechnique d'Edmonton

March 16, 2006 CSCE-GSE JOINT DINNER MEETING

"Update on the Little Smoky Landslide"

Presented by: **Mr. Roger Skirrow, Director**, Geotechnical and Materials Section, Technical Standard Branch of Alberta Infrastructure and Transportation.

Abstract:

This presentation provides an update Little Smokey Landslide, which is on the west valley slope of the Little Smoky River about 48 km north of Valleyview, Alberta on Highway 49. The presentation will provide details on landslide conditions; drilling, instrumentation and investigation results; an InSAR satellite based ground movement monitoring study; mitigative measures used to date and mitigation options under consideration. The InSAR study, which identified patterns of movement over a wide area of both valley slopes and was used to evaluate realignment options. Movements of the east valley slope and consequences of these movements are discussed in addition to the west valley slope movements. The slide continues to affect the west abutment of a major bridge structure and the highway approach on both sides of the valley leading to the bridge. Monitoring results indicate a slip plane at 40 to 50 m depth. Due to the limited feasibility and significant economic costs of active slide stabilization methods, a passive mitigation strategy was undertaken in order to accommodate the valley slope movements.

Speaker Biography:

Mr. Skirrow oversees the department's geohazard risk management program, which monitors and prioritizes mitigation work for approximately 150 landslides, erosion and other geohazard problem sites. The Hwy 49 crossing of the Little Smoky River valley is one such geohazard site. Mr. Skirrow received a B.Sc. in Civil Engineering in 1982 and a M.Sc. in Geotechnical Engineering in 1996, both from the U of A. He has split his professional career between the public sector, and private consulting, and has been at his present position with AIT since 1999. His other interests include mountaineering, including a climb on Mt. Aconcagua in Argentina this February, and Mt Kilimanjaro in Tanzania last year.

DINNER MEETING DETAILS

DATE: LOCATION: Thursday, March 16, 2006 University of Alberta Faculty Club

Cocktails & Registration - 5:30 Dinner - 6:30 Presentation - 7:30 Closing Remarks - 8:30 Student Members - \$10.00 Student Non-members- \$15.00 CSCE & GSE Members - \$20.00 Non-members - \$30.00

Please assist us in forecasting attendance by via our voice mail at 405-4757 or e-mail at <u>info@csceedmonton.org</u> at least two days prior to the meeting.

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