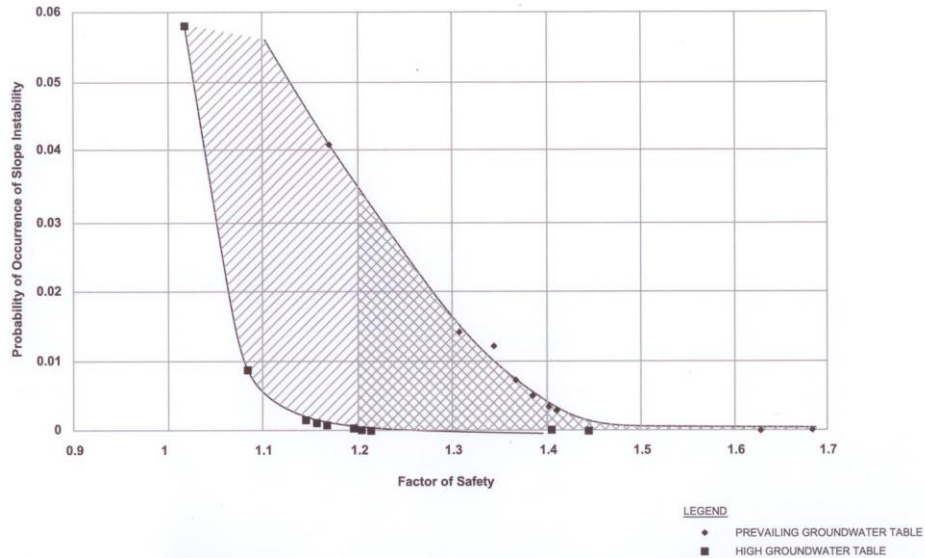




Client Focused
Worldwide Experience
Innovative, Value Added
Practical Solutions

Probabilistic Risk Assessment, Bear Creek Village Condominiums for Remai Properties Ltd.



GES` president was retained as Arbitrator to provide opinion between disputing parties which included City of Grande Prairie and a developer. The dispute resolution process confirmed the existence of pre-existing shear surfaces. This led to re-evaluating the slope stability and long-term performance of the development area.

Later GES provided probabilistic risk methodologies to evaluate the risk of slope instability as a function of Factor of Safety for slope stability. Results indicated very similar risk ratings, expressed as 'probability of occurrence', associated with factors of safety between 1.3 and 1.5, thus suggesting that a factor of safety of 1.3 would be just as acceptable as 1.5 for slope stability.

Accordingly, GES designed a shear key to intercept the pre-existing shear surfaces thus increasing the factor of safety for slope stability to greater than 1.3.

GEOTECHNICAL SERVICES

- Expert Testimony & Arbitration
- Probabilistic Risk Assessment of Slopes
- Detailed Design of Shear Key
- Specifications & Drawings
- Geotechnical Contract Administration
- Construction Field Reviews

WHERE WE ADDED VALUE

- Evaluated risk of slope instability using probabilistic approach, versus the conventional factor of safety approach
- Avoided expropriation of existing buildings

