



*Client Focused*  
*Worldwide Experience*  
*Innovative, Value Added*  
*Practical Solutions*

## McHugh Bluffs, for City of Calgary, Alberta



GES was commissioned by the City of Calgary to provide remedial measures along a section of McHugh Bluffs in northwest Calgary. Based on a review of the results of the investigation, laboratory tests and slope stability analyses, GES recommended that the slopes at McHugh Bluffs would benefit from the lowering of groundwater through the installation of a series of horizontal drains.



The stability of McHugh Bluffs slopes is primarily controlled by perched water table conditions within the lacustrine deposits. GES completed a detailed design of the horizontal drains to intercept and thus lower the perched water table to design elevations. Detailed design and specifications also included manholes and a header pipe system.

### **WHERE WE ADDED VALUE**

- Achieved cost-effective solution for stabilising slopes.
- Connected into existing slope drainage system on slopes beyond study area.

### **GEOTECHNICAL SERVICES**

- Slope Analysis & Risk Assessment
- Horizontal Drain Design & Specifications
- Contract Administration & Construction Supervision of Remedial Works