



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

## West Sunnyside Hill Slopes, for City of Calgary, Alberta



Completed a site reconnaissance to record vegetation type, slope angle, erosional features, and previous slumping. Also completed in-situ soil suction measurements, and monitored existing piezometers. Assessed water chemistry at select locations on the slope and from manholes and City tap water to evaluate source of seepage on the slope.

Evaluated risk of slope instability from a comparison of current and previous in-situ soil suctions. Correlations were derived between in-situ soil suctions and precipitation records. Target in-situ soil suctions and precipitation amounts were established for assessing future slope stability.

Regular annual monitoring of slopes was recommended together with annual maintenance of the sub-drain system on the slopes.



### **WHERE WE ADDED VALUE**

- Established an innovative, yet simple system for predicting shallow slope instability.
- Determined target in-situ soil suctions.

### **GEOTECHNICAL SERVICES**

- Qualitative Risk Assessment
- Hydro-geochemical Assessment