

# Slope Stability Study

## Terms of Reference

### 1. Description

The general intent of a Slope Stability Study is to assess whether or not a slope is considered to be stable and, if not, to provide a safe set-back distance from the slope crest behind which structures and other facilities can be constructed. Unstable slopes and the land located between the unstable slope and the set-back line are called hazard lands.

### 2. When Required

Where the potential for Hazard Lands exists on a site, the City requires that slope stability assessment reports be provided before approval can be given for:

- Site Plans
- Draft Plan of Subdivision
- Severances
- Condominiums
- Building permits

However, depending upon the order of magnitude of concern with respect to slope stability, the City may also require that a slope stability assessment be carried out earlier in the development process, such as in advance of:

- An Official Plan Amendment (OPA)
- A re-zoning application, or establishment of a zoning

### 3. Contents

Refer to the City's Slope Stability Study Guidelines for Development Applications in the City of Ottawa, for a copy, as per the location of the proposed development, contact:

- Central (Wards 12, 13, 14, 15, 17) - [DRCentral/EPACentre@ottawa.ca](mailto:DRCentral/EPACentre@ottawa.ca)
- East (Wards 1, 2, 11, urban part of 1, 19 and 20) - [DREast/EPAEst@ottawa.ca](mailto:DREast/EPAEst@ottawa.ca)
- West (Wards 4, 6, 7, 8, 9, 23) - [DRWest/EPAOuest@ottawa.ca](mailto:DRWest/EPAOuest@ottawa.ca)
- South (Wards 3, 10, 16, 18, 22, 24) - [DRSouth/EPASud@ottawa.ca](mailto:DRSouth/EPASud@ottawa.ca)



- Rural (Wards 5, rural part of 1, 19, 20 and 21) - DRRural/EPARural@ottawa.ca.

The purpose of this document is to:

- a) Provide some fundamental background information needed for City staff to understand and interpret engineering reports on the stability of natural slopes;
- b) Provide a general guideline on the local (minimum) state-of-practice for completing those assessments of the stability of natural slopes.

In areas with sensitive marine clays, where there are deep valleys or embankments, there is a risk of large-scale retrogressive landslides. Development proponents may be required to undertake an assessment of the risk of retrogressive landslides as part of the development review and approvals process to delineate the extent of these natural hazards as part of the slope stability assessment.

#### **4. Evaluation Criteria**

The Slope Stability Study report will be evaluated based on the Slope Stability Guidelines for Development Applications in the City of Ottawa. Where required the report may be peer reviewed.

#### **5. Roles and Responsibilities / Qualifications**

The Slope Stability Study report is prepared by a geotechnical engineer, licensed to practise with the Association of Professional Engineers of Ontario, and must be qualified, based on experience in the profession, to provide geotechnical engineering services.

#### **6. Submission Requirements**

- Electronic copies of all required studies and plans must be supplied in Adobe .PDF format and are to be unlocked and flattened.
- Supporting Georeferenced Digital CAD/BIM/GIS files (in accordance with existing City submission standards) for draft and/or final plans may be requested.

#### **7. Resources / Background**

[Landslides \(nrcan.gc.ca\)](http://nrcan.gc.ca)

[Potential Retrogressive Landslides | South Nation Conservation Authority](#)



Slope Stability Guidelines for Development Applications in the City of Ottawa & Minimum Requirements for Slope Stability Assessment Reports checklist, for copies, as per the location of the proposed development, contact:

- Central (Wards 12, 13, 14, 15, 17) - [DRCentral/EPACentre@ottawa.ca](mailto:DRCentral/EPACentre@ottawa.ca)
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