# RIDEAU VALLEY CONSERVATION AUTHORITY

# **JOB DESCRIPTION**

Position Title: Water Resources Engineer, Natural Hazards	
Department:	Supervisor's Position Title:
Science and Engineering	Director, Science and Engineering
Classification: Band 6	Date of Issue: September 9, 2024

### **JOB SUMMARY**

Under general direction, the *Water Resources Engineer, Natural Hazards* manages the Authority's hazardous lands and erosion hazards program and services; provides related professional review services for municipal partners; and otherwise supervises the Authority's involvement in all geotechnical and geomorphological projects.

## **RESPONSIBILITIES**

- Manages, enhances and implements all aspects of the Authority's hazardous lands and erosion hazards program in accordance with the *Conservation Authorities Act*, related provincial regulations and guidance, and internal plans, policies, strategies, and procedures.
- 2. Leads the standardized delineation and full documentation of the Authority's related hazard limit mapping.
- Responsible for all related field, data management and reporting activities for hazardous lands and erosion hazards program (includes related GIS and other data procurement and management)
- 4. Supervises staff involvement in the hazardous lands and erosion hazards program, including technical training, quality assurance of products and services, and health and safety (including regular site inspection).
- 5. Secures and manages related external consulting services by producing Requests for Qualifications, Proposals, Quotation or Tender, establishing evaluation processes, and managing contracts.
- 6. Undertakes technical reviews of various reports in the geotechnical and geomorphic fields.
- 7. Routinely provides professional advice in accordance with the Authority's legislation, municipal agreements (or as requested), and professional PEO and current industry standards; this advice directly supports the Authority's regulatory decisions and Authority and municipal priorities and is often produced in collaboration with internal interdisciplinary experts and other stakeholders
- 8. Periodically provides expert testimony at the Authority's executive committee hearings, municipal tribunals and provincial court.
- 9. Identifies annual program priorities within the context of departmental priorities and produces annual program work plans, reports and budgets to address program priorities
- 10. Produces and revises related Authority policies and procedures and identifies related gaps and solutions

- 11. Reports to the Authority's Board of Directors, partners and public and represents the Authority at public meetings and in social-media and press communiques
- 12. Participates in related inter-agency working-groups, professional associations etc. to the mutual benefit of the Authority and these organizations.
- 13. Uses standard principles of project management for each program project and service, including full project documentation and budget tracking.
- 14. Other related duties as assigned.

#### **EFFORT**

- Approximately 80% office work including long periods of sitting
- 20% field work including physically navigating difficult terrain
- Long periods of concentration and looking at a computer screen including data entry and use of computer programs
- Long periods of driving throughout the watershed using an RVCA vehicle

# **WORKING CONDITIONS**

- 80% of work performed in a normal office environment
- 20% of work performed outdoors occasionally including inclement weather
- Frequent interaction with stakeholders outside the organization
- Regular office hours with occasional evening and weekend work
- Exposed to potentially confrontational situations

## REQUIRED KNOWLEDGE AND SKILLS

- Degree in environmental / civil / geological engineering with a concentration in geotechnical, geomorphological assessment
- Licensed with the Professional Engineers Ontario (PEO)
- Five years professional experience with related watershed engineering projects and services
- Knowledge of marine clay, organic soil and karst site characterization.
- Knowledge of fluvial geomorphological and geotechnical slope stability site characterization
- Knowledge of natural channel and bioengineering practices.
- Knowledge and experience of GIS products and databases
- Experience in reading and interpreting engineering drawings, maps, technical guidelines and infrastructure drawings.
- Experience in preparing and reviewing various geotechnical and inspection reports, geotechnical instrumentation and monitoring plans and designs.
- Proven project management skills including business plan development, project charters, milestone reports, work planning, scheduling and tracking, budgeting, invoicing, managing stakeholder relations, retaining and managing subcontractors, and preparing technical reports/presentations.
- Proven communication skills including business writing, presentations, effective reporting to management and Boards, and willingness to present to other stakeholders (municipalities, residents, other conservation authorities)
- Ability and willingness to learn, champion and excel at natural hazard management.

- Proficient with current geotechnical software applications including GeoStudio and Rocscience (Slope/W, Slide2D, etc.)
- Proficient in common workplace computer applications (e.g. MS-Word and Excel)
- Ability and willingness to work in an interdisciplinary context and with multiple stakeholders
- Ability and willingness to work occasional overtime and weekends
- Excellent written and verbal communication skills in English, French considered an asset
- Valid full G Class Ontario's Driver's License or equivalent and ability to provide a satisfactory driving record

# **HEALTH AND SAFETY REQUIREMENTS**

To meet health and safety standards and regulations, the incumbent must be trained and/or evaluated.

- First Day Orientation
- Annual Orientation
- WHMIS
- RVCA Driver's Test
- Works around water (Pleasure Craft Operators License may be required)