



NOTTAWASAGA VALLEY CONSERVATION AUTHORITY

JOB DESCRIPTION

Position: Water Resources Engineer

Position Purpose:

Engineering review for applications submitted under the *Planning Act* and the Authority's Regulations.

Engineering studies and special projects.

Date of Last Revision: March 2021

Position Reports To: Senior Engineer

Position Mandate for: Water Resources Engineer

Management/Leadership

- Ensures compliance of policies and procedures related to Engineering review and submits recommendations to their Manager/Director regarding corrective/remedial action and new/revised policies.
- Monitors the performance of works being done by self and subordinates to ensure safety and the use of protective devices, in accordance with NVCA policy and the *Occupational Health and Safety Act*.

Technical

- Monitors and implements Water Resource projects according to established terms of reference and timetables; initiates corrective action as required; submits progress and final reports to the Senior Engineer covering project progress/completion.
- Provision of engineering plan review of applications under the *Planning Act*, Authority Regulations and other applications including development and implementation of Authority Engineering Standards and provision of evidence at hearings and tribunals.
- Assists with the identification and tracking of best practices and advances in storm water management, erosion and sediment control, flood forecasting for application in the CA and to position the Department on the leading edge or knowledge including development, maintenance and dissemination of watershed data.
- Apply sound science and engineering to effectively and efficiently assess complex situations, define alternatives, problem solve and generate solutions for a multi-stakeholder environment when reviewing environmental assessments, planning and permit applications and watershed planning documents to ensure that the Authority's goals and objectives are achieved.
- Contribute to the preparation and delivery of expert opinion on behalf of NVCA, and its stakeholders at Ontario Municipal Board (OMB), NVCA Board and Ontario Mining and Lands hearings on matters of Authority interest. This could include acting as an expert witness
- Act as project manager and sit on steering committees for consultant and internal studies such as watershed plans, master drainage plans, hydraulic and hydrologic studies or other water related studies as required.
- Provides review of engineering studies and special projects and assists with the preparation of terms of reference.
- On-going investigation and tracking of grants, awards, subsidies and sponsorships covering current and potential funding for Water Resource technology from the public and private sectors.
- Establishment of quality assurance programs covering the delivery of services, monitoring of feedback, initiation of corrective action, and compliance with applicable federal and provincial regulations/legislation and against industry established procedures.
- Provides technical advice and problem-solving assistance and initiatives to Authority staff.

Communications/Representation

- Acts as spokesperson to municipalities, professionals, landowners, community groups, associations, developers and special interest groups.
- If required, provides evidence and testimony at court hearings, tribunals and the Ontario Municipal Board.
- Develops and maintains a professional contact network with counterparts in other Conservation Authorities and member municipalities.
- Assist with the monitoring of hydrometeorological events and responds with appropriate decisions and communications as per current Provincial and local service delivery standards.
- Participates in committees/task forces as assigned by the Senior Engineer.
- Liaison with regulatory officials/agencies at the federal, provincial and municipal levels.
- Participation in Committees and Task Forces assigned by the Senior Engineer.

Knowledge/Skills Requirements

<i>Knowledge and Skills</i>	<i>Basic Competency</i>	<i>Int. Competency</i>	<i>Adv. Competency</i>
1.0 Technical Knowledge and Skills			
1.1 Education: Honours Degree in Water Resources, Environmental or Civil Engineering	✓		
1.2 Experience: 4 years directly related	✓		
1.3 Affiliation: Member of the Associations of Professional Engineers of Ontario (P.Eng)	✓		
1.4 TECHNICAL KNOWLEDGE IN SPECIFIC DISCIPLINES/AREAS INCLUDING:			
- Content details, Conservation Authority Business Plan, Own Program Area			✓
- Content details, Plan Review (hydrology, hydraulics, floodplain management, flood proofing, natural hazards, riparian rights, legislation and regulations, storm water management, erosion and sediment control, hydrogeology) Conservation Authorities Act, related federal and provincial regulations/legislations and applicable by-laws of member municipalities			✓
- Up-to-date techniques and practices, water resource technology, environmental assessments, master environmental servicing reports, storm water management reports, site plans and applications under the Regulations of the <i>Conservation Authorities Act</i> , hydrologic and hydraulic computer models, flood damage assessment, weather analysis, etc.			✓
- Content details of procedures and case precedents re: evidence and testimony at hearings, tribunals and the Ontario Municipal Board		✓	
-			✓
- Content details, operating procedures, work methods and standards for Engineering Review of the Engineering and Technical Services Department			✓
- Content details, available grants/subsidies from government and non-government organizations, agencies and associations		✓	
- Funding sources for water resource programs and models/frameworks as applied to the private sector (i.e. partnership, sponsorship, cooperatives, etc.)		✓	
1.5 Knowledge of sources of information for each of the above disciplines; ability to research information from appropriate sources			✓

Knowledge and Skills	Basic Competency	Int. Competency	Adv. Competency
1.6 Ability to develop and maintain technical/professional contacts with counterparts in Conservation Authorities and the municipal field as well as provincial and federal government representatives, community groups/associations, special interest groups and public/private sector sponsors			✓
2.0 Knowledge of Conservation Authority Operations and Administration			
2.1 Familiarization with the technical terms, functions, activities and key contacts for each of the Departments/Functions in the Conservation Authority:			
- Office of the CAO & Communications		✓	
- Land, Education & Stewardship Services		✓	
- Watershed Management (Planning, Monitoring and Engineering)			✓
- Corporate Services (Finance, Administration, Human Resources)		✓	
- Corporate Services (GIS/IT)		✓	
3.0 Public and Customer Contact Skills			
3.1 General knowledge of the services offered/provided to customers/clients and stakeholders by the various departments in the Authority		✓	
3.2 Familiarization, "key players" (e.g., representatives of community associations, special interest groups, etc.)			✓
3.3 Customer contact skills (e.g., telephone answering, public and private sponsors, "customer-centered" problem-solving, etc.)			✓
3.4 Full appreciation of "how the Conservation Authority works" (i.e., key functions/sub-functions, work process/flow within and between Depts., Board/Authority Staff interaction, important players and their roles, financial implications/sensitivities, public education and awareness efforts, etc.)		✓	
4.0 Management Skills			
4.1 Ability to evaluate specific work situations and to decide appropriate action based upon decision-making principles and sound judgment (i.e., distinguishing between facts and perceptions, anticipating consequences, maintaining overall corporate perspective, etc.)			✓
4.2 Task management skills (planning, organizing, controlling) as applied to own work, the work of subordinates and outsourced professionals/technicians		✓	

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4.3 People management skills (work direction and follow-up, coaching/counseling, performance appraisal, etc.)		✓	
4.4 Coordinating skills, i.e., obtaining inputs/participation of other Depts. and counterparts in other municipalities while making effective use of their time and resources			✓
4.5 Project management capability, including knowledge of relevant techniques (e.g., Project Evaluation & Review Techniques, Critical Path Methodology, etc.)		✓	
4.6 Working knowledge of strategic planning processes and techniques including goal setting, work planning, integrated budgeting, monitoring performance against Strategic Plan, etc.		✓	
4.7 Leadership skills in motivating/directing the work of others (subordinates, co-workers, contractors/suppliers), e.g., leading by example and/or technical competence		✓	
4.8 Working knowledge of effective training techniques and the ability to apply them in training/developing subordinates, co-workers		✓	
4.9 Change management skills (e.g., understanding of the need for change, consideration of various change strategies/approaches, selection of the optimum change approach, anticipation of changes, effective response to changes, etc.)			✓
4.10 Motivated to learn or advance own expertise, demonstrating flexibility in continuous learning and identifying and acting on opportunities to increase the value of own role			✓
5.0 Support Skills			
5.1 Effective in written communications (concise, to the point, well organized, etc.):			
- correspondence, letters, memo, short reports			✓
- medium-size to major reports, based on thorough staff work			✓
5.2 Effective in oral communications (concise, articulate, persuasive, etc.):			
- one-on-one, small group settings			✓
- large group presentation settings			✓
5.3 Ability to grasp problem essentials quickly and to identify cause-effect relationships; ability to anticipate/identify problems and propose solution alternatives			✓
5.4 Interpersonal skills and the ability to apply them in contacts with subordinates, co-workers, suppliers/contractors, and Full Authority:			
- Empathetic listening			✓

Knowledge and Skills	Basic Competency	Int. Competency	Adv. Competency
- Realization of impact of own behaviours or others			✓
- Objective rather than judgmental feedback			✓
5.5 Ability to represent the Authority effectively in contacts with government officials, community associations, special interest groups, developers, suppliers, contractors, general public, the media, etc.			✓
5.6 Negotiating skills (i.e., ability to evaluate trade-offs and reach agreements reflecting a win-win situation for the Authority and the parties concerned; and, if applicable, ability to clearly identify pertinent contract terms and conditions)			✓
5.7 Conflict management/resolution skills (i.e., ability to arbitrate/mediate differences of opinion among senior managers, staff, various stakeholders, etc.)			✓
5.8 Ability to handle/cope with on-the-job stress (i.e., simultaneous handling of "hot files", ambiguities/"grey" areas, conflicting views among senior Authority Staff and/or Board Members, changing priorities, after-hours work, etc.)			✓
5.9 Ability to handle confidential information; familiarity with procedures to secure such information in the file/data system of the Conservation Authority			✓
5.10 Computer literacy (i.e., working knowledge of PCs, internet, other office automation including hardware, software and networking)			✓

Factors in the Work Environment

Degree of interaction definitions: High = >70% of the time; Medium = >50% of the time; Fair = <50% of the time

- The position has a HIGH degree of impact of errors.
- The position has a HIGH amount of interaction with staff and FAIR amount of interaction with the public.
- Regular hours of employment are 8:30 a.m. to 4:30 p.m.; however, work outside of these hours may be required.
- Position is based in the John Hix Administration Building.

Physical Demands

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

- While performing the duties of this job, the employee is regularly required to sit, talk and hear, and stand, walk and reach with hands and arms.
- The employee occasionally is required to use hands for manual dexterity.
- The employee is occasionally required to climb or balance and stoop, kneel and crouch.
- The employee must be able to occasionally lift and/or move up to 50 pounds.
- Specific vision abilities required by this job include close vision & concentration, depth perception, and ability to adjust focus for most of the day.

Work Environment

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

- The employee is frequently exposed to outside weather conditions.
- The noise level in the work environment is usually moderate.
- Travel is frequently required.