



JOB DESCRIPTION

TITLE: WATER RESOURCES SPECIALIST

DEPARTMENT: Public Works

LEVEL: 13

Position Last Evaluated: Dec 2014
Job Desc. Last Updated: May 2015

JOB SUMMARY

Under the general direction of the Manager, Water Resources, the incumbent manages design and construction projects related to the improvement of water supply infrastructure and the City's network of dams. Work includes pre-designs, designs, budgets, technical reports, tender preparation, contract administration, project cost control, and project management for large capital projects to ensure that the water supply system is expanded, maintained, and operated in a sustainable manner.

TYPICAL DUTIES AND RESPONSIBILITIES

1. Project management of new construction and upgrading of water supply infrastructure, by preparing design drawings, technical specifications, cost estimates, tender documents, administering the tenders, and managing construction and design contracts.
2. Develops and manages the City's Dam Safety Management Program, including policy and procedure development, and organization and direction of specialized consultants, construction contractors, and operational staff, to ensure compliance with regulations.
3. In consultation with the Manager, determines the need for specialized consultants and for work on the water supply infrastructure and City network of dams. Prepares requests for proposals/terms of reference for studies, designs, and inspections. Organizes and oversees the work of consultants and approves payment of invoices. Ensures recommendations arising are implemented in long range capital planning. Ensures various manuals and emergency plans are kept current, distributed, and practiced.

TYPICAL DUTIES AND RESPONSIBILITIES cont.

4. Prepares construction tenders for major projects, administers tendering process, evaluates tenders and recommends award. Conducts contract administration and project management of major water infrastructure construction projects and maintains responsibility for project budgets.
5. Coordinates the commissioning and start-up of major infrastructure projects, including integration within the water supply system, operator training, and hand-over to the Operations group.
6. Supports the Manager by researching and preparing detailed engineering reports and recommendations relating to long range capital planning, estimating economic and technical benefits of projects, evaluating alternatives and priorities of projects, undertaking preliminary design, and assisting in preparation of long-range capital, five year plans, and annual operating budgets.
7. Develops and maintains systems for collecting, compiling, and organizing large volumes of technical data used in monitoring quantity and quality of water supply, and operation of the system components. Directs the work of staff or contractors to install such systems.
8. Prepares detailed technical reports to demonstrate that the City's water supply and components meet regulations and recommends changes to operations processes to ensure compliance. Analyses technical data to monitor trends and ensure that the City's water supply system will be sustainable for the future.
9. Researches and evaluates materials, equipment, and systems proposed for water supply infrastructure, and prepares and administers tenders and contracts for procurement of same for special projects.
10. Develops standards and specifications, and updates revisions to Manuals and Engineering Standards and Specifications.
11. Maintains records and plans for completed studies, designs, and manuals by reviewing completed studies and reports and summarizing recommendations, tracking study recommendations and documenting when they are implemented and keeping accurate records of current studies and designs, and preparing information for staff and public use on water resources.
12. Performs other duties as required.

REQUIRED KNOWLEDGE, SKILLS, AND ABILITIES

Thorough knowledge of standards, civil engineering and construction practices, methods, techniques, and equipment used in analysis, planning, design, construction, inspection, and operation of a water supply system.

Thorough knowledge of budgeting, estimating, and costing procedures for municipal construction.

Extensive knowledge of project management principles.

Considerable knowledge of Federal and Provincial statutes, regulations, guidelines, and policies relating to water delivery systems and dam safety.

Considerable understanding of civil engineering principles including the ability to read, interpret, and synthesize design drawings/plans and in-depth technical reports and apply same to the daily work.

Knowledge of and ability to use current computer applications related to office, engineering, and modeling software with emphasis on the municipal field of design, including Microsoft Office.

Ability to manage projects from inception through construction to commissioning and operation.

Ability to establish priorities and meet deadlines.

Ability to efficiently and cost effectively organize and direct the work of staff, outside consultants, and contractors.

Ability to prepare detailed technical designs, reports, studies, letters, memos, and records.

Ability to work independently with only general supervision.

Ability to research, synthesize, and evaluate trends in technical data and reports.

Excellent organizational skills.

Excellent verbal and written communication skills, with the ability to establish and maintain effective working relationships with the public, contractors, engineers, and work crews in the field.

Training and experience in managing and supervising contractors.

MINIMUM TRAINING AND EXPERIENCE REQUIRED

Diploma in technology from a recognized College or Technical Institute in civil or mechanical engineering with additional specialty training in major capital infrastructure and project management.

Minimum of 5 years' related experience in the planning, design, project management, and construction of municipal water supply systems, including at least 2 years' project management experience.

Or an equivalent combination of education and experience.

Membership or eligibility for membership in the Applied Science Technologist and Technicians of British Columbia (ASTTBC), as an Applied Science Technologist (AScT).

Possession of a valid Class 5 British Columbia Driver's Licence.

GENERAL STANDARDS

All employees shall take reasonable care to protect their health and safety, and the health and safety of other persons by becoming familiar with the Occupational Health & Safety (OH&S) Program, following established safe work procedures, using protective equipment, and asking for training if unfamiliar with work requested to perform.

Contributes to maintaining a respectful, safe, and supportive work environment that embraces diversity and where everyone is treated with courtesy, dignity, and fairness.

Adheres to City policies and objectives.