



Position Title: Senior Project Engineer (Industrial Control Systems)

Position Status: Full-Time Regular

Department: Water Services

Employee Group: Exempt

Location: 4515 Central Boulevard, Burnaby

Salary Range/ Wage Rate: Professional / Technical, Level P3A (\$123,587.51 - \$145,395.95 annually)

Our Water Services Department is seeking a Senior Project Engineer who will lead Industrial Control System (ICS) projects within Metro Vancouver's Water Treatment and Transmission facilities, including Reservoirs and Dams. Strong knowledge and experience related to ICS implementation including Supervisory Control and Data Acquisition (SCADA), Distributed Control Systems (DCS) and Programmable Logic Controllers (PLC).

You are: a well-rounded Automation & Controls Professional Engineer with solid technical design and field experience within industrial process facilities. You have a proven track record in leading controls and automation projects and have PLC programming experience.

The Senior Project Engineer reports to the Program Manager, Operational Technology.

This role:

- Performs complex and varied engineering and project management work that may involve project design and management for large projects. Applies principles and practices of profession to ensure results are achieved in a sound and practical manner.
- Responsible for Industrial Control System support including SCADA, DCS and Remote Station PLCs. Responsible for programming PLCs, and Human Machine Interfaces (HMI) and performs the testing required to safely implement optimization initiatives within Water Services Transmission & Treatment facilities, including Reservoirs and Dams. Leads obsolescence planning, technology migration, upgrades and improvement projects.
- Analyzes and assesses requirements and recommends optimal methods for achieving objectives.
- Responsible for overall project budgets and monitors and controls costs ensuring the effective and efficient expenditure of allocated funds. Participates in short and long range planning.
- Makes decisions and provides recommendations on a variety of issues with broad policies and mandates as guidelines. Uses ingenuity to devise original, practical and economical solutions.

- Prepares and reviews project designs, technical reports and contract specifications for consulting services, equipment and construction. Acts as Metro Vancouver's appointed representative in assigned matters of project and contract obligations including project initiatives, site inspections, and determination of regulatory requirements. May be required to negotiate significant technical or financial interest on behalf of Metro Vancouver.
- Directs the actions of consultants recommending changes to scope and negotiating new terms as required. Deals with full range of project dimensions that may include legal, property, public contact, and liaising with various levels of government, and other regulatory bodies.
- Explains difficult concepts and persuades others to adopt a point of view, supports position with evidence, research or experience gained in similar situations. Typically acts as a project leader and actively works to encourage teamwork, collaboration and efficiency.
- May supervise professional engineers and/or technical staff engaged in complex technical work. Peer reviews the work of colleagues and provides guidance to consulting engineers and technical staff. Acts as a resource to staff members for advice and guidance on potential approaches and problem situations. May be a resource for presentations and questions to the Metro Vancouver board, committees and municipal councils.
- May work as a technical/specialist resource, collaborating with senior engineers, management and/or government officials in the development of regulatory or government policy initiatives affecting Metro Vancouver.
- Participates in the design, preparation and approval of engineering standards in area of specialty.
- Performs other related duties as required.

To be successful, you have:

- A Bachelor of Applied Science degree in a relevant engineering discipline. 4-6 years recent related experience following professional registration; or an equivalent combination of training and experience focused on industrial control systems including SCADA, DCS and with an emphasis on PLC programming and related HMIs. Experience in applying advanced process control theory to physical processes as well as other relevant engineering.
- Membership or eligibility for immediate membership as a registered Professional Engineer (P.Eng.) with the Engineers and Geoscientists of British Columbia (EGBC).
- Supervisory experience is an asset.
- An understanding of the requirements for the Professional Governance Act of BC as well as the obligations of the EGBC registrants to meet the requirements of the act.
- Sound technical knowledge and understanding of engineering principles and their application in relevant discipline. Ability to act as a resource to staff and provide sound and practical guidance for unusual or problem situations. PLC programming experience along with experience and knowledge of motor control centres, variable frequency drives, instrumentation, actuators, hydraulic systems and generators is preferred.
- Ability to interpret and apply engineering and technical guidelines and principles related to area of specialization such as technical manuals, codes and regulations, contracting policies, safety regulations and corporate and board policies. Ability to adapt or adjust guidelines and procedures for unique or difficult situations. Sound knowledge of the Canadian Electrical Code and cyber security best practices.
- Proven contract administration and project management skills. Demonstrated ability to organize and prioritize a complex series of project components for large complex projects to meet multiple time based deliverables requiring a high level of detail and accuracy. Ability to resolve problems within established guidelines and procedures; ability to use judgment to determine which methods are applicable in any given situation.

- Excellent written and oral communications skills. Ability to communicate effectively both verbally and in writing including letter, report writing and presentation skills. Ability to explain difficult concepts and persuades others to adopt a point of view or way of doing things.
- Strong interpersonal skills and the ability to build and maintain respectful working relationships with internal and external contacts under circumstances that are considerably complex and time sensitive. Skill in dealing openly, tactfully and sensitively in a variety of situations including dealings with the public, member municipalities, government agencies and contractors. Demonstrated ability to work in a team oriented work environment and deal effectively with disagreements and prevent the escalation of conflict.
- Ability to work under broad direction and use significant independent judgment to problem solve when more than one option is possible. Ability to identify opportunities to address emerging needs. Proven ability to take initiative, work with minimal supervision and effectively manage multiple projects and deadlines. Ability to meet timelines and objectives requiring persistence to overcome obstacles.
- Demonstrates understanding of the organizational culture, processes and mechanisms necessary to attain work objectives; upholds Metro Vancouver's reputation through positive and forthright dealings with other organizations and members of the public.
- Ability to supervise, coach and guide others while enhancing individual and team effectiveness. Ability to mentor and foster the development junior engineer, technical staff and direct reports as required.
- Proficiency using Microsoft office programs, including Word, Excel, Outlook, and Project.
- Valid BC Class 5 Driver's license.
- Willingness and ability to participate in a standby rotation.

Our Vision:

Metro Vancouver embraces collaboration and innovation in providing sustainable regional services that contribute to a livable and resilient region and a healthy natural environment for current and future generations.

At Metro Vancouver, we are committed to cultivating a diverse, safe, equitable, and inclusive work environment for all. We strive to attract and retain a talented, diverse workforce that is reflective of the region we serve. If an accommodation is required during the recruitment and selection process, please contact careers@metrovancover.org for support. Learn more about our commitments to diversity, equity, and inclusion [here](#).

Please follow this link <https://metrovancover.org/about-us/careers> to our Careers page where you can submit your application by April 11, 2024.