



## **IDENTIFICATION**

Department	Position Title	
Infrastructure	Project Manager	
Position Number	Community	Division/Region
33-17100	Yellowknife	Transportation

## **PURPOSE OF THE POSITION**

The Project Manager manages major capital and Operation and Maintenance (O&M) projects involving highways, bridges, culverts and other transportation structures for the Department of Infrastructure (INF). The incumbent leads a team of Project Engineers/Officers to ensure these structures are evaluated, maintained, rehabilitated and reconstructed to be capable of withstanding the demands of ever increasing and heavier traffic loads while meeting environmental regulations. The incumbent also provides engineering advice to other members of the Division and monitors current trends in highways, bridges and culverts design, engineering, construction, and safety, as needed.

## **SCOPE**

Located in Yellowknife, the position reports to the Manager, Surface Design and Construction section, which is part of the Transportation division.

INF is highly decentralized in the delivery of its programs and services and is responsible for territory-wide government programs such as the operation and maintenance of public buildings and transportation infrastructure and systems, project management, facilities planning, design and technical support services, environmental assessment and remediation, property management, procurement shared services, information technology, information management, disposal of surplus property and goods motor vehicle and mechanical/electrical regulatory services and fleet management.

The Department is also responsible for programming aimed at increasing the use of domestic energy resources and reducing energy costs in the Northwest Territories (NWT), delivering renewable energy solutions, providing energy supply services to non-market communities, and leading efforts in energy conservation and efficiency.



On behalf of the Government of the Northwest Territories (GNWT), INF also carries the responsibility for strategic planning for the GNWT's (long term investment in the development of public transportation and energy production and distribution systems for the NWT, as well as the continuity of marine transportation services for the provision of fuel and dry goods to northern destinations.

The incumbent leads project teams in the design, maintenance, rehabilitation and construction of highways, bridges and culverts, as well as other transportation structures.

The incumbent leads various teams assembled to meet the needs of specific highway, bridge and culvert maintenance, rehabilitation and construction projects. Teams may be comprised of personnel from within the section, division or the Department, territorial and federal regulatory agency staff, consulting engineers, fabricators, material suppliers and construction contractors. Departmental staff may include civil engineers, civil engineering technologists/technicians and construction superintendents.

The Project Manager works with client departments, community officials, council members, contractors, professional engineers, technicians and the general public. The projects are managed in accordance with geometric design standards, TAC Pavement Management guide, Canadian Road & Street Design guide, highway engineering design standards and all standard government financial regulations.

The incumbent directly manages up to five staff and has authority to initiate contracts up to \$100,000 in value and to approve contract performance up to \$250,000 while managing the delivery of Capital and O&M projects with a total value of up to \$60,000,000.

The results and products of this position will directly affect the safety of the public using the territory's highway infrastructure and the environment. Decisions and recommendations will govern the safety, operational efficiency, cost effectiveness, and quality of highways, bridges and culverts in the territory.

## **RESPONSIBILITIES**

### **1. Manages project development stage for design and construction projects:**

- Prepares Terms of Reference documents for new projects as directed by the Manager, Surface Design and Construction.
- Coordinates and assigns pre-engineering work (surveys, geotechnical investigations, hydro-technical investigations, hydraulic studies, specialized engineering studies, material testing, environmental studies, archaeological investigations and traditional knowledge considerations) to project team staff and/or consulting engineering firms.
- Reviews requests for proposals, tender documents and project terms of reference for engineering services prepared by project team staff and selects and manages engineering services contracts.



- Oversees the preparation of detailed design and drawings by Surface Design and Construction personnel and/or consulting engineering firms.
- Guides project team in identifying and obtaining client, community, technical and regulatory approvals and permits, as appropriate, throughout the design stage.
- Solicits comments and input on project documentation and drawings from outside agencies and applicable regulatory bodies and incorporating into design.
- Reviews cost/benefit analyses and detailed project cost estimates.
- Develops, in collaboration with communities and local development corporations, plans to help maximize local/northern involvement, training and business development opportunities associated with projects.
- Manages pre-construction activities including pre-construction meetings, verification of project scope, budget and schedule, and addresses outstanding technical and regulatory issues.

## **2. Manages project construction stage:**

- Approves payments (within authorities) as recommended by site inspector, resolves technical and financial issues, and justifies change orders.
- Leads meetings with contractors and affected, territorial, regional and local organizations, and individuals.
- Interprets contracts, plans, and specifications.
- Attends interim and final inspections with project team staff and Site Inspector to ensure project is in compliance with the contract, the work is of acceptable quality and has progressed in accordance with the plans and specifications.
- Investigates and resolves technical difficulties encountered during construction; negotiates and/or assists project staff with change orders and recommends approval to supervisor.
- Notifies the contractor in writing of unsatisfactory work or conditions and facilitates resolution.
- Reviews monthly claims submitted by contractor after certification by project team staff or consulting engineering firm that work being claimed has been completed, and recommends payment of claim.
- Verifies work in progress to ensure that adequate consideration and attention is given to the safety and convenience of the public.
- Ensures work is in compliance with all environmental standards.
- Reviews interim and final certificates of completion certifying work has been completed in accordance with the terms of the contract as prepared by the project team staff and makes recommendation for payment.
- Attends warranty inspections with project staff and ensures contractor corrects any identified deficiencies.



**3. Manages project compliance with governing authorities:**

- Identifies opportunities to achieve GNWT policy objectives throughout all stages of project planning and implementation and directs project staff of actions to achieve policy objectives.
- Ensures consultant and contractor compliance with all the applicable and governing codes, permits, directives, regulations, and GNWT technical standards and guidelines, and takes action when in default.

**4. Performs associated project management tasks:**

- Provides advice to manager, project team, colleagues or clients about alternative solutions for highway design, bridge and culvert, construction or maintenance problems.
- Performs, or participates in, special projects (e.g. revisions to technical standards and guidelines, or policy).

**5. Performs other duties such as:**

- Developing standard specifications, geometric design, pavement design and design criteria for highway structures in the NWT.
- Completing monthly capital management reports indicating physical and financial status of projects.
- Representing the government in court cases involving projects within employee's area of responsibility, acting as resource person to government counsel.
- Investigating emergencies involving highway structures (flood or accidental damage/destruction) and making recommendations on remedial action.
- Certifying and affixing stamps to designs and drawings for work.

**WORKING CONDITIONS**

**Physical Demands**

Some moderate physical effort occasionally required at work sites. No unusual demands.

**Environmental Conditions**

The incumbent is exposed to weather while inspecting sites. Sometimes travel to sites requires travel by small single engine aircraft and watercraft.

**Sensory Demands**

No unusual demands.



## **Mental Demands**

The incumbent will travel up to six weeks during the construction season. During other times of the year, the incumbent will be required to travel at least one week per month for inspections, project review, planning and meeting with consultants and contractors.

## **KNOWLEDGE, SKILLS AND ABILITIES**

### **Knowledge**

- Design and construction management of heavy civil works and structural projects such as highways, bridges, culverts and other transportation structures through all stages of development (planning to completion).
- Working knowledge of related engineering areas including materials, fabrication, construction, corrosion, hydro-technical, geotechnical, highway functional requirements, roadside safety, geometrics and environmental issues.
- Proven knowledge and understanding of real-life behavior of a wide range of highway, culvert and bridge types.
- Northern anomalies with regard to project management such as logistical requirements, construction practices considering the presence of permafrost, environment, soil conditions, and the cross-cultural and political environment.
- Environmental guidelines, regulations and laws.
- Contract administration procedures.
- Safe work practices and Workers' Safety and Compensation Commission) rules and regulations.

### **Skills**

- Managerial, leadership and supervisory skills.
- Proven interpersonal and communication skills to make convincing and persuasive arguments when dealing with project engineers, consultants, regional staff, contractors and fabricators.
- Project management skills including estimating and financial skills to develop and control budgets for capital and O&M projects.
- Proven analytical, consulting, problem solving skills, combined with common sense and creativity.
- Planning and organizational skills to meet work schedules and critical milestone dates, and to co-ordinate and organize own work activities with competing priorities in a multi-task work environment.
- Working knowledge of computer systems and software applications such as: Project Scheduling, MS Office, Highway geometric design software, Project Management Systems, and Financial Management Systems.
- Auditing, evaluation and analysis.
- Record keeping and documentation.

- Ability to lead public meetings and technical meetings.
- Risk management.
- Research, evaluate, gather and compile information.

### **Abilities**

- Ability to make the right call on critical decisions requiring balance between cost and benefits, sometimes involving safety issues.
- Remain calm under pressure while working in a high stress environment with tight deadlines.
- Deal with individuals where there is a high degree of tact and diplomacy required.
- Work collaboratively in a team setting in a cross-cultural environment.
- Work within budget constraints.
- Think critically and use good judgment.
- Demonstrate initiative.
- Be safety conscious and to work and travel safely in northern winter conditions.
- Ability to commit to actively upholding and consistently practicing personal diversity, inclusion and cultural awareness, as well as safety and sensitivity approaches in the workplace.

### **Typically, the above qualifications would be attained by:**

A Bachelor's Degree in Civil Engineering with a minimum of 5 years of relevant experience.  
Equivalent combinations of education and experience will be considered.

### **ADDITIONAL REQUIREMENTS**

Eligibility for professional registration with NAPEG.

A valid Class 5 Driver's License.

### **Position Security (check one)**

- ☐ No criminal records check required
- ☒ Position of Trust – criminal records check required
- ☐ Highly sensitive position – requires verification of identity and a criminal records check

### **French language (check one if applicable)**

- ☐ French required (must identify required level below)  
Level required for this Designated Position is:  
ORAL EXPRESSION AND COMPREHENSION  
Basic (B) ☐ Intermediate (I) ☐ Advanced (A) ☐  
READING COMPREHENSION:



Basic (B) ☐ Intermediate (I) ☐ Advanced (A) ☐

**WRITING SKILLS:**

Basic (B) ☐ Intermediate (I) ☐ Advanced (A) ☐

☐ French preferred

**Indigenous language:** Select language

☐ Required

☐ Preferred