



## IDENTIFICATION

Department	Position Title	
Infrastructure	Senior Project Officer	
Position Number	Community	Division/Region
33-14668	Yellowknife	Design and Technical Services, Air and Transportation

## PURPOSE OF THE POSITION

The Senior Project Officer is responsible for the concept, estimate and design of a variety of major Capital projects and major Operation & Maintenance (O&M) projects for the Department including highways, structures, marine facilities and other related transportation infrastructure to ensure successful completion of all assigned projects.

## SCOPE

Located in Yellowknife and reporting to the Manager, Design & Technical Services – Air & Transportation, the Senior Project Officer will be a member of various project management teams assembled to meet the needs of specific programs. The incumbent is a key member of a project management team for the delivery of Capital and O&M projects generally with a total value of up to \$700 million. The incumbent will be required to oversee contractors and project staff.

The incumbent works with client departments, community officials, council members, contractors, professional engineers, technicians and the general public. The incumbent may be called upon to represent the government in court cases involving projects within an employee's area of responsibility. These projects are managed in accordance with Geometric design standards, RTAC (Roads and Transportation Association of Canada) Pavement Management guide, Canadian Road & Street Design guide, Highway Engineering design standards and all standard government financial regulations.

The incumbent must also be familiar with all federal and territorial regulations concerning the safe and effective delivery of engineering projects in the NWT (Northwest Territories) to include WSCC (Workers' Safety and Compensation Commission), quarry safety and the TAC (Transport Accident Commission) guidelines for safety at work zones.



## **RESPONSIBILITIES**

- 1. Loads all preliminary engineering and community data and provides technical advice to Project Managers and clients in the development of project plans to establish the scope of the project.**
  - Reviews proposed project with Project Manager and client division to identify nature of project required.
  - Analyzes any studies commissioned and assesses project feasibility.
  - Identifies preliminary engineering data and conducts the necessary research required to confirm scope of projects.
  - Assigns work to Technicians and Technical Services.
  - Reviews and analyzes data on the community, the proposed construction site and any data available for similar projects.
  - Meets with municipal and regional officials, regulatory agencies and public utility representatives to discuss project and obtain relevant data.
  - Reviews and analyzes data collected from field surveys to identify rock, conditions, and availability of construction materials.
  - Develops detailed specifications for projects outlining program plan and schedule.
  - Develops preliminary cost estimates based on scope of work and specifications involved.
- 2. Develops preliminary designs, specifications and cost estimates in accordance with project requirements.**
  - Identifies projects requiring services of consultants or in-house specialist staff.
  - Researches and identifies consultants to be invited to submit proposals and reviews as part of committee making selection.
  - Analyzes field data and laboratory data and reports on soils and construction materials prepared by in-house specialist staff or consultants.
  - Prepares preliminary designs for review with Project Manager and other staff.
  - Prepares cross-sections and profiles or reviews those prepared by Technicians.
  - Calculates quantities of materials required to undertake projects.
  - Reviews alternative designs and cost estimates with Project Manager and client and recommends optimum design to the Project Manager.
  - Identifies any special requirements to be incorporated into standard specifications and forwards complete documentation to Project Manager for approval.
  - Analyzes work drawings prepared by Drafting Technician for conformance to governing codes and standards and forwards to Project Manager for approval.
  - Obtains land and water or other environmental permits as required.
  - Completes requests for the purchase of construction materials.



**3. Administers the preliminary engineering contracts to ensure all work is completed on schedule and in accordance with approved plans and specifications.**

- Takes the lead through the tender process, initiating tender, responding to inquiries from potential contractors, reviewing/assessing tender bids (specifications, schedule, etc.) and recommends award contract within budget.
- Explains contract terms and conditions and all applicable Department regulations and procedures to successful contractor at preconstruction meeting.
- Identifies labour and equipment requirements to adequately survey and inspect construction progress assigning work to Technicians.
- Arranges for accommodation, vehicles, equipment and supplies for inspection crew, setting up camps if required.
- Conducts inspections of projects to ensure work is of acceptable quality and is progressing in accordance with plans and specifications.
- Prepares and certifies progress certificates throughout the process ensuring completion according to terms of the contract.
- Negotiates and prepares contract change orders and recommends approvals to Project Manager.
- Records all commitments and charges against project and recommends payment to Project Manager.
- Complete monthly year-end capital management reports indicating financial and physical status of project including final project technical reports and completion certificates.
- Prepares contractor and consultant performance evaluations.

**4. Liaises with Department sections to provide preliminary engineering support by:**

- Assisting with contract processing by preparing and reviewing proposals, generating contracts, and collecting post implementation data.
- Assisting with budget distribution.
- Assisting with budget distribution.
- Providing other pre and post implementation support as required.
- Analyzing, developing and approving road bans – providing technical review of weights/measures.

**WORKING CONDITIONS**

**Physical Demands**

No unusual physical demands.

**Environmental Conditions**

May be exposed to adverse weather conditions while on-site, which may be up to six weeks in length during the construction period.



### **Sensory Demands**

No unusual demands.

### **Mental Demands**

Field posting may involve up to six weeks' travel and living in construction camps during the construction season. During the 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**

- Ability to develop and analyze short- and long-term construction projects.
- Ability to manage construction projects throughout all stages of development.
- Problem-solving ability to deal with project design issues.
- Ability to work independently.
- Knowledge of northern soil conditions, environment, project planning issues in dealing with the North and northern construction practices.
- Skills in estimating costs.
- Ability to work in a high stress multi-tasking environment with tight deadlines.
- Work in a cross-cultural environment to deal with a diverse group of clients and staff.
- Communication skills both oral and written.
- Negotiation skills to deal with contractors.
- Knowledge of MS Operating systems, MS Office, and Computer Aided Design programs.
- 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 or related discipline, with five (5) years of experience in the design, construction and management of projects.

Equivalent combinations of education and experience will be considered.

**ADDITIONAL REQUIREMENTS**

A Valid Class 5 Drivers Licence

Registration with the Northwest Territories and Nunavut Association for Professional Engineers and Geoscientists (NAPEG) within 90 days of hire is required, with flexibility for international registrants.

**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