



IDENTIFICATION

Department	Position Title	
Infrastructure	Highway Maintenance Engineer	
Position Number	Community	Division/Region
33-7329	Hay River	Transportation

PURPOSE OF THE POSITION

The Highway Maintenance Engineer provides professional and technical expertise in planning, applications development, and technical services in support of the Department's highway operation and maintenance program.

SCOPE

Located in Hay River, the Highway Maintenance Engineer (Engineer) reports to the Manager, Surface Design and Construction.

The Department of Infrastructure 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 NWT (Northwest Territories), delivering renewable energy solutions, providing energy supply services to non-market communities, and leading efforts in energy conservation and efficiency.

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

RESPONSIBILITIES

- 1. Provides professional/technical expertise in the development of strategic plans for highway maintenance by:**
 - Assessing current condition and service levels in the highway system;
 - Identifying long term trends in condition and service levels;
 - Identifying resource levels required to meet approved service standards in the medium and long term;
 - Preparing medium and long term maintenance strategies and ensuring that they are compatible with plans for reconstruction;
 - Preparing medium term plans for acquiring and positioning equipment, staff and financial resources to address future needs;
 - Assisting in the preparation of the Division's O&M (Operations and Maintenance) and Capital plans.
- 2. Provides professional/technical expertise in the development of new technologies and procedures for highway maintenance by:**
 - Analyzing and resolving technical problems experienced by field staff;
 - Researching, developing and applying new highway maintenance technology and procedures;
 - Identifying opportunities for improved efficiency or cost effectiveness of highway maintenance activities;
 - Responding to requests for technical information from senior management and the Minister;
 - Commissioning technical studies and surveys;
 - Monitoring technical practices, developments and innovations in other jurisdictions.
- 3. Provides professional/technical expertise to assist in the development and operation of information and management systems for highway maintenance by:**
 - Identifying deficiencies in existing systems;
 - Identifying specialty reports required to assist in performance of duties;
 - Analyzing data to identify trends, anomalies, opportunities and either acting upon the observations or referring the information to the appropriate manager;
 - Using the systems to retrieve information required to respond to Ministerial or management questions.
- 4. Supervises engineering consultants contracted to provide professional services in support of the highway maintenance program by:**
 - Preparing terms of reference and request for proposal documents;
 - Evaluating consultant proposals and awarding contracts within signing authority or recommending award of contracts which exceed signing authority;
 - Approving consultant work plans and schedules;
 - Reviewing and approving consultant work;
 - Approving and processing invoices for payment.

WORKING CONDITIONS

Physical Demands

No unusual demands.

Environmental Conditions

No unusual demands.

Sensory Demands

No unusual demands.

Mental Demands

Position requires extensive travel during construction season.

KNOWLEDGE, SKILLS AND ABILITIES

- Program Planning: Ability to use highway construction and maintenance expertise in the analysis and planning of medium and long term maintenance programs.
- Applications Development and Technical Support: Ability to use professional expertise to analyze and resolve technical problems, to develop and apply new technology and procedures, and to develop and improve technical and management support systems.
- Computers: High level of skill in the use of computer applications such as Lotus 123 or Excel spreadsheet programs; dBase, RBase, or FoxBase database programs; and specialized engineering programs.

Typically, the above qualifications would be attained by:

- Bachelor degree in Civil Engineering with 5 years of experience in highway maintenance or related work; or
- Diploma in Civil Engineering Technology (3 year course of study) with 10 years of experience in highway maintenance or related work;
- Two years of experience in one or more of the following areas: traffic engineering, highway reconstruction planning, geotechnical engineering, quantity surveying and value management, maintenance management systems, equipment management.
- Class 5 Driver's Licence.

ADDITIONAL REQUIREMENTS

Position Security

- ☐ 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 applies)

- ☐ 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

Aboriginal language: Choose a language

- ☐ Required
☐ Preferred