

## New

Ministry

Transportation

### Describe: Basic Job Details

#### Position

Position ID

Position Name (30 characters)

Operations Engineer

Requested Class

Engineering & Related Level 2

Job Focus

Operations/Program

Supervisory Level

00 - No Supervision

Agency (ministry) code

Cost Centre

Program Code: (enter if required)

#### Employee

Employee Name (or Vacant)

Vacant

#### Organizational Structure

Division, Branch/Unit

Construction & Maintenance, Central Region/Ops

Current organizational chart attached?

Supervisor's Position ID

Supervisor's Position Name (30 characters)

Operations Manager

Supervisor's Current Class

### Design: Identify Job Duties and Value

#### Job Purpose and Organizational Context

Why the job exists:

Under the direction of the Operations Manager, the position provides front line operations engineering advice and supervision within the district. Primary responsibilities include the delivery of the highway maintenance program including summer and winter maintenance programs, contract administration of the highway maintenance contract for the District, partnering efforts with the maintenance contractor, and serving municipalities within the district with respect to highway operations issues. The position requires well developed communication skills to respond to external and internal contacts to provide advice on matters relating highway maintenance and operations within the district and in coordinating activities required to carry out the maintenance program. The position also provides support to other groups or other Managers within Regional or Provincial authority.

#### Responsibilities

Job outcomes (4-6 core results), and for each outcome, 4-6 corresponding activities:

Under the direction of the Operations Manager, the position provides front line operations engineering advice and supervision within the district. Primary responsibilities include the delivery of the highway maintenance program including summer and winter maintenance programs, contract administration of the highway maintenance contract for the Hanna District, partnering efforts with the maintenance contractor, and serving municipalities within the district

with respect to highway operations issues. The position requires well developed communication skills to respond to external and internal contacts to provide advice on matters relating highway maintenance and operations within the district and in coordinating activities required to carry out the maintenance program. The position also provides support to other groups or other Managers within Regional or Provincial authority.

## Problem Solving

Typical problems solved:

Contract Management of the Highway Maintenance Contract often requires addressing claims or contract challenges from the contractor. As an example, these contracts often span ten or more years, and contractors request additional time or payment for certain types of work completed. Balancing the merit of these requests requires a firm understanding of contract law, budgets and forecasts, in order to recommend solutions.

Municipalities often request assistance with local drainage concerns, for their residents or within their local road network. Technical knowledge of hydrology and Alberta's Water Act is required in order to recommend solutions that balance the client's needs with the feasibility of the improvements.

Types of guidance available for problem solving:

The operations manager, and peer operations engineers, are available to provide support for problems. It is expected that an Operations Engineer work independently, and guidance is only required on the most complex situations.

Direct or indirect impacts of decisions:

The decisions made at the Operations Engineer's level impact relationships with landowners, municipalities, and the highway maintenance contractor. When not addressed adequately, these impacts result in complaints to Minister's office, local MLA's, or the Regional Director.

## Key Relationships

Major stakeholders and purpose of interactions:

### District Operations Manager

- Interacts daily for work direction and allocations and for providing information as directed.

### District Maintenance Contract Inspectors

- Interacts daily for dissemination and direction of their work.

### Local Maintenance Contractor Superintendent

- Interacts very often with Superintendent for purposes of maintenance contract delivery.

### District administrative Staff

- Interacts on daily / weekly basis to help coordinate district work and to provide technical assistance.

### Regional Bridge, Contract, Infrastructure, Property staff

- Position works infrequently with regional staff in coordination of work to be performed in the district boundary.

### Budget Allocation Task Group

- Position works with this group to help set yearly district allocations.

## Required Education, Experience and Technical Competencies

Education Level

Bachelor's Degree (4 year)

Focus/Major

Engineering

2nd Major/Minor if applicable

Designation

If other, specify:

Job-specific experience, technical competencies, certification and/or training:

Most important knowledge factors, skills and abilities including knowledge about practical procedures, specialized techniques, etc.; analytical and conceptual skills and abilities; and skills needed for direct interaction with others. Specific training if it is an occupational certification/registration required for the job.

The position shall be selected on the basis of a candidates potential for management development and overall adaptability into the Department. Based on the potential and adaptability, an experienced Engineer 2 level candidate is desired but not necessarily required.

#### Knowledge, Skills & Abilities

- Class 5 Driver's License.
- Effective written and verbal communication and public relations skills.
- The position is responsible for the day-to-day administration of maintenance and operations, functions in the service area, relative to established standards and departmental policies, as outlined in the Contract Administration, Contact Specifications, Maintenance Standards, Uniform Traffic Control Device, Materials Design and Highway Signing Manuals.
- Must ensure adherence to the Highway Traffic Act, Public Highways Development Act, Public Service Act.
- Creativity and innovative solutions to transfer initiatives, complex maintenance and construction problems.
- Utilization of technology transfer/innovations
- The ability to achieve consensus for changes to operational techniques within the Department.
- Ability to set priorities and handle multiple work assignments.
- General working knowledge of construction, development control, land management, highway safety and basic function of the Region.
- Knowledge of the highway network, municipal and electoral structures, Department business function and transportation engineering standards.
- Ability to work in a team environment and demonstrate time management and effective communication with internal and external stakeholders.
- Graduate degree in Engineering, with eligibility for membership in APEGGA.
- Five years post-graduate experience in highway maintenance and/or construction is desirable.
- Supervisory experience and transportation experience a definite asset.
- Extensive knowledge of highway maintenance, operation and construction procedures.
- Proficient in the use of personal computers, Windows operating environment and Microsoft Office Suite.
- Knowledge of applicable provincial legislation (Public Highways Development Act, Highway Traffic Act.)
- Extensive knowledge of highway maintenance and construction procedures.
- Knowledge of department policies and standards, Highway Maintenance Contract Administration Manual,

- Contract Specifications, highway design standards, maintenance standards, Traffic Accommodation in Work
- Zones Manual, Highway Signing Manual and the Manual of Uniform Traffic Control Devices.
- Knowledge of municipal and utility standards desirable for highways passing through urban areas.
- Ability to develop creative solutions to complex maintenance and construction problems using existing standards, guidelines and technology transfers.

### Behavioral Competencies

Pick 4-5 representative behavioral competencies and their level.

Competency	Level					Level Definition	Examples of how this level best represents the job
	A	B	C	D	E		
Drive for Results	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Works to exceed goals and partner with others to achieve objectives: <ul style="list-style-type: none"> <li>• Plans based on past experience</li> <li>• Holds self and others responsible for results</li> <li>• Partners with groups to achieve outcomes</li> <li>• Aims to exceed expectations</li> </ul>	Planning and execution of maintenance programs is completed annually under varying constraints - both time, and financial. The end result influences the condition of the highway network, and supports jobs for the maintenance contractor.
Systems Thinking	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Considers inter-relationships and emerging trends to attain goals: <ul style="list-style-type: none"> <li>• Seeks insight on implications of different options</li> <li>• Analyzes long-term outcomes, focus on goals and values</li> <li>• Identifies unintended consequences</li> </ul>	Development control advice is made on specific files while recognizing external influences. This requires an appreciation of unintended consequences and some political acumen.
Creative Problem Solving	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Engages the community and resources at hand to address issues: <ul style="list-style-type: none"> <li>• Engages perspective to seek root causes</li> <li>• Finds ways to improve complex systems</li> <li>• Employs resources from other areas to solve problems</li> <li>• Engages others and encourages debate and idea generation to solve problems while addressing risks</li> </ul>	Work with regional and district staff to optimize funding decisions and make strong asset management decisions.

Agility	<input type="radio"/> <input type="radio"/> <input checked="" type="radio"/> <input type="radio"/> <input type="radio"/>	Identifies and manages required change and the associated risks: <ul style="list-style-type: none"> <li>• Identifies alternative approaches and supports others to do the same</li> <li>• Proactively explains impact of changes</li> <li>• Anticipates and mitigates emotions of others</li> <li>• Anticipates obstacles and stays focused on goals</li> <li>• Makes decisions and takes action in uncertain situations and creates a backup plan</li> </ul>	Managing the district budget and programs under changing budget targets.
Develop Networks	<input type="radio"/> <input checked="" type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	Works on maintaining close relations with all stakeholders: <ul style="list-style-type: none"> <li>• Identifies key stakeholder relationships</li> <li>• Has contact with range of interested parties</li> <li>• Actively incorporates needs of a broader group</li> <li>• Influences others through communication techniques</li> </ul>	Maintaining relationships with municipal clients while working under budget constraints.

**Benchmarks**

List 1-2 potential comparable Government of Alberta: [Benchmark](#)

522ER05, Transportation, Operations Eng.