

Update

Ministry

Transportation and Economic Corridors

Describe: Basic Job Details

Position

Position ID

Position Name (30 characters)

Infrastructure Technologist

Current Class

Technologies 6

Job Focus

Operations/Program

Supervisory Level

00 - No Supervision

Agency (ministry) code

Cost Centre

Program Code: (enter if required)

Employee

Employee Name (or Vacant)

Organizational Structure

Division, Branch/Unit

C&M/Peace Region/Infrastructure

☐ Current organizational chart attached?

Supervisor's Position ID

Supervisor's Position Name (30 characters)

Supervisor's Current Class

Design: Identify Job Duties and Value

Changes Since Last Reviewed

Date yyyy-mm-dd

Responsibilities Added:

Responsibilities Removed:

Job Purpose and Organizational Context

Why the job exists:

This position reports to the Infrastructure Manager and is responsible for the delivery of development permits, planning assignments and assisting with project scoping, program development.

Responsibilities

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

1. Technical Review of Development Applications (50%)

Review and support the Development and Planning Technologists by providing accurate and timely responses to various development applications and assessments.

2. Planning (20%)

Support Infrastructure section in the development and administration of planning projects including development of Terms of Reference, technical review, collaboration with other sections, review proposals and participate in consultant selection, and provide support during administration of the assignment.

3. Project Scoping (15%)

Support Infrastructure section in development of project scoping documents including, but not limited to, review of geometric assessments, safety assessments, coordination with other sections, review of options and development of scoping document.

4. Programming of Highway Upgrades (15%)

Support Infrastructure section in identifying improvements to the highway network to ensure the safe movement of people and goods, review geometric assessments, safety assessments, and planning studies to identify new projects or include improvements in the scope of existing projects, calculate project estimates and submit new projects for programming.

Problem Solving

Typical problems solved:

The Infrastructure Technologist deals with a very broad range of issues including programming of highway upgrades, development applications, geometric design, transportation safety, land use planning, pavement rehabilitation. The Infrastructure Technologist provides support in coordinating activities with other functional areas (construction, operations, and bridges).

The position also provides support for Infrastructure section when dealing with municipalities and other sections to discuss transportation planning issues. Creativity, problem solving and excellent communication skills are required in order to support the Department's position on infrastructure issues.

Planning studies and project scoping provide the construction, bridge and operations sections with an understanding and direction for future work. The Infrastructure Technologist will provide recommendations to operational concerns on the existing highway network and provide direction and recommendations on roadside development issues where developments affect long range highway improvement plans.

The Infrastructure Technologist will provide and assist the Development group with all technical review requirements of various Development applications including:

- Review Traffic Impact Assessments (TIAs) and provide developers with guidance on what is required from a TIA.
- Support staff at various meetings with developers or municipalities.
- Review various Municipal submissions including ASP's, MDP's and Land Use plans from the highway planning perspective.
- Provide direction and recommendations on roadside development issues where developments affect long range highway improvement plans.
- Prepare municipal funding agreements as required.

Types of guidance available for problem solving:

The Infrastructure Technologist regularly refers to the Department's Highway Geometric Design Guide and

the TAC design guide for guidance on all design standards. In addition, the Highways Development and Protection Regulation is used as a guide for development decisions. The Department has guidance manuals available online including the Traffic Impact Assessment guidelines.

Direct or indirect impacts of decisions:

The Infrastructure Technologist assists in managing the highway network by ensuring any current or new projects are properly programmed in the Department's 3 and 5 years construction program. In addition, the Infrastructure Technologist ensures any roadside development is implemented with the best interests of the highway network by making sure the required upgrades are identified and completed by the developer as per the developer pays policy.

Key Relationships

Major stakeholders and purpose of interactions:

External

- * Municipalities - provide information, answer questions, liaison for project updates, payment processes
- * General Public - general inquiries
- * Other GOA Ministries - Ministerial briefing information, project status for grants, information sharing regarding various programs
- * Federal Government - available grant programs, Indigenous topics of interests for various projects

Internal

- * Section and Regional Staff - guidance, direction, clarification, insight, opinion, knowledge sharing, information in preparing briefing notes
- * Other Regional Staff - general discussion of programs, knowledge sharing, project review
- * Twin Atria Staff - guidance and clarification of guidelines, input for various projects, information for briefing notes

Required Education, Experience and Technical Competencies

Education Level	Focus/Major	2nd Major/Minor if applicable	Designation
Diploma (2 year)			

If other, specify:

Six years related experience (or equivalent 1:1 years education/experience or vice versa).

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

- Sound engineering background in transportation safety, construction and planning.
- Problem solving and mediation.
- Excellent written and verbal communication.
- Excellent interpersonal skills.
- Creativity and ingenuity.
- Expertise in transportation safety is required in order to identify and evaluate potential improvements at problem locations on the highway network throughout the Region.
- Technical expertise in pavement management and life cycle cost analysis is required in order to evaluate alternative highway alignments and construction methods.
- Ability to explain contents of technical reports.
- Department business functions, policies, procedures, and specifications.
- Department design manual, road classification system, pavement design guide, contract administration manual, consultant evaluation and selection criteria.
- Valid Class 5 driver's license.

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: • Plans based on past experience	Complete tasks within the time period. Discuss topics with others achieve results. review and understand

		<ul style="list-style-type: none"> • Holds self and others responsible for results • Partners with groups to achieve outcomes • Aims to exceed expectations 	similar situations from the past or from other areas.
Build Collaborative Environments	○ ● ○ ○ ○	Facilitates open communication and leverages team skill: <ul style="list-style-type: none"> • Leverages skills and knowledge of others • Genuinely values and learns from others • Facilitates open and respectful conflict resolution • Recognizes and appreciates others 	Discusses various topics and seeks opinions from staff of other sections and regions. Shares thoughts and opinions in an open and meaningful way. Participates and attends various meetings.
Develop Networks	○ ○ ● ○ ○	Leverages relationships to build input and perspective: <ul style="list-style-type: none"> • Looks broadly to engage stakeholders • Open to perspectives towards long-term goals • Actively seeks input into change initiatives • Maintains stakeholder relationships 	Regularly contact stakeholders for progress status and answer inquiries. Provide stakeholders with information as it becomes available.
Systems Thinking	○ ○ ● ○ ○	Takes a long-term view towards organization's objectives and how to achieve them: <ul style="list-style-type: none"> • Takes holistic long-term view of challenges and opportunities • Anticipates outcomes and potential impacts, seeks stakeholder perspectives • Works towards actions and plans aligned with APS values • Works with others to identify areas for collaboration 	Understand the task at hand and look beyond the current state into the life expectancy of the project. Collaborate with stakeholders and colleagues to understand the growth of the area and implications it may have with the project. Review available information to get a realistic perspective.

Benchmarks

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