Update

Ministry

Forestry and Parks

Describe: Basic Job Details

Position

Position ID

Position Name (30 characters)

Utilities Data Technologist

Current Class

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

Parks, Parks Regional Operations/Infr. Management

[✓] 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

2025-02-03

Responsibilities Added:

This position previously focused on water and wastewater infrastructure maintenance, but as part of a broader restructuring the program is responsible for all utilities including in Kananaskis Region including water and wastewater, various forms of power generation and distribution, as well as diverse types of gas, including LNG and propane. Following the reclassification of a separate Utilities Technologist position to Tech 5 due to increased scope, the primary focus of this position is changing to utilities data collection, verification, analysis, and management. These changes are essential for ensuring the conditions of Environmental Approvals are met. The data management in this position also directly contribute to the effective management of numerous utilities contracts.

Responsibilities Removed:

The position is now less-focused on conducting preventative maintenance field work but will support senior technologists in carrying out preventative maintenance tasks in the field.

Job Purpose and Organizational Context

Why the job exists:

The Utilities Data Technologist is responsible for the collection, management, analysis, and reporting of utilities program data within the Kananaskis Region of Alberta Parks. This position involves supporting the development, implementation, and ongoing upkeep of the ArcGIS Utilities Network, ensuring accurate data collection and verification, as well as assisting with field support and maintenance activities. Additionally, the role includes monitoring and tracking utility system-related contracts, ensuring compliance with contract terms, and supporting the management of contractor performance. The position requires a balance of technical expertise in data management and analysis with practical, hands-on involvement in the field, supporting seasonal utility system operations and contributing to the continuous improvement of utility infrastructure within Alberta Parks.

Responsibilities

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

Utilities Program Data Collection and Management:
- Collect, manage, and maintain utilities-related data, including water, wastewater, electrical, and natural gas systems within the Kananaskis Region.
- Ensure that data is accurate, complete, and up to date by performing routine data verification, validation, and data entry tasks.
- Work with field staff and contractors to ensure proper data collection procedures are followed in accordance with industry standards and Alberta Parks' protocols.

Utilities Program Data Analysis and Reporting:
- Analyze utility system data to identify trends, system performance issues, and opportunities for improvement.
- Prepare detailed reports and presentations that communicate data analysis findings to internal stakeholders, including management and the broader Kananaskis Operation Support Team.
- Provide insights that support decision-making for the operation, maintenance, and enhancement of utilities systems within Alberta Parks/Kananaskis Region.

ArcGIS Utilities Network Implementation and Maintenance:
- Assist with the implementation and configuration of the ArcGIS Utilities Network, supporting the ongoing upkeep and optimization of the system.
- Perform regular updates to the ArcGIS network, ensuring all utilities data is accurately reflected and maintained within the system.
- Provide training and technical support to staff on using the ArcGIS platform for utilities data management, ensuring proper usage of tools and workflows.

Field Support and Maintenance Activities:
- Support the annual opening and closing of seasonal utility systems, including water, wastewater, and electrical systems, in collaboration with the utilities team lead.
- Assist with basic field-level support for ongoing maintenance activities, troubleshooting utility systems, and addressing issues as they arise.
- Provide hands-on assistance during system repairs, inspections, and other maintenance tasks, contributing to the safe and efficient operation of utilities systems in the field.

Contractual Oversight Tracking and Monitoring:
- Monitor and track utility system-related contracts, ensuring that contractors are meeting project timelines, specifications, and budgets.
- Collaborate with procurement and project management teams to ensure compliance with

contractual terms and that all necessary reporting and documentation are in place.
- Support the performance evaluation of contractors by providing data-driven insights and feedback on project progress.

Collaboration and Team Support:
- Work closely with other utilities team members, field staff, contractors, operations support colleagues, and stakeholders to ensure the successful operation and enhancement of utility systems within the region.
- Assist with project planning and implementation, contributing technical expertise and practical knowledge to the development of utility-related projects.
- Participate in regular team meetings, providing updates on data management activities, system performance, and any issues or challenges encountered.

Problem Solving

Typical problems solved:

This position involves solving critical problems that impact thousands of residents, visitors, and stakeholders who rely on the continuous delivery of utility services. The Utilities Data Technologist must independently identify issues, troubleshoot creatively, and implement effective solutions under tight time-frames and budget constraints. These solutions often require coordinating multiple actions over time, collaborating with multiple internal departments, and engaging with municipalities such as Calgary, Canmore, and Kananaskis. Whether addressing data discrepancies, system failures, contractor performance, or seasonal system transitions, the role requires cross-departmental collaboration to resolve complex challenges.

Typical problems addressed in this role include:
- Data Accuracy and Integrity Issues: Ensuring accurate, up-to-date utilities data through routine verification and validation to avoid incorrect system performance assessments.
- Utility System Performance Problems: Identifying trends and issues in utility data to improve system efficiency and preempt failures.
- ArcGIS Network Configuration and Maintenance Challenges: Keeping the ArcGIS Utilities Network updated and providing staff with training to ensure proper data management.
- Contractor and Project Management Oversight: Monitoring contractors to ensure compliance with timelines, budgets, and project specifications.
- Field-Level Utility Maintenance and Troubleshooting: Assisting with hands-on maintenance, repairs, and troubleshooting of utility systems to ensure smooth operations.
- Seasonal Utility System Opening and Closing: Supporting timely and efficient opening and closing of seasonal utility systems to ensure service continuity.

Types of guidance available for problem solving:

The incumbent will receive direction on program objectives and priorities from the Regional Utilities Team Lead. However, they are expected to rely heavily on their own expertise in the relevant fields and independently apply various acts, policies, and regulations (e.g Water Act, Parks Act, APEA regulations, fire and building codes) when developing solutions. While the employee will draw upon their technical experience and fiscal intelligence they are encouraged to collaborate with colleagues, consultants, contractors, and regulatory agencies to formulate well-rounded solutions.

In addition to seeking guidance when necessary, the incumbent is also responsible for advising others, ensuring that program colleagues remain well-informed and up to date. This proactive communication is critical for managing public and political pressures effectively and maintaining confidence in the program's operations.

Direct or indirect impacts of decisions:

The decisions made in this position have both direct and indirect impacts on the safety, operational efficiency, and reliability of the Kananaskis Region's utility infrastructure, which is critical for fulfilling the

mandate of the Parks Division. Directly, by ensuring accurate utility data and analyzing system performance, the role helps maintain reliable services that protect the health and safety of residents, visitors, businesses, and the local municipality. These decisions also directly influence the quality and availability of Parks services, shaping the experiences of stakeholders and directly contributing to public perception of the Parks Division. Indirectly, the role plays a key part in upholding legal and environmental standards, ensuring that operations meet high-quality service expectations and support sustainability goals. Additionally, by monitoring contracts and providing field support for system maintenance, the position helps ensure the continued efficiency and safety of utility services, reinforcing the reputation of the Parks Division for professionalism and public safety. Ultimately, these decisions contribute to the long-term success and sustainability of the Kananaskis Region, fostering trust and ensuring continued safe, efficient utility services for all stakeholders.

Key Relationships

Major stakeholders and purpose of interactions:

The main interactions and contacts for this position include the Regional Utilities Team Lead, Forestry and Parks management, Alberta Infrastructure, Alberta Environment and Protected Areas, regional administrative and financial staff, municipal governments such as the Kananaskis Improvement District, the Town of Canmore, the City of Calgary, as well as numerous facility operators

Required Education, Experience and Technical Competencies

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

If other, specify:

• A diploma or degree in a related field such as Geographic Information Systems (GIS), Environmental Engin

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

- At least 2 years of experience in data collection, data management, and analysis, preferably within a utilities or infrastructure setting.
- Hands-on experience with GIS platforms, particularly ArcGIS, including utilities network management and data verification.
- Experience in fieldwork, maintenance activities, or utilities systems operations (eg, water, wastewater, electrical, natural gas or propane) is preferred.

Behavioral Competencies

Pick 4-5 representative behavioral competencies and their level.

Competency	Level A B C D E	Level Definition	Examples of how this level best represents the job
Systems Thinking	○ ◉ ○ ○ ○	Considers inter-relationships and emerging trends to attain goals: • Seeks insight on implications of different options • Analyzes long-term outcomes, focus on goals and values • Identifies unintended consequences	When evaluating problems and managing program responsibilities this position must look at the long term implications of decisions being made and recommendations being presented. They must understand the impact daily decisions have on the regions ability to deliver public services in the most cost effective and sustainable manner.

Creative Problem Solving	○ ◉ ○ ○ ○	Focuses on continuous improvement and increasing breadth of insight: • Asks questions to understand a problem • Looks for new ways to improve results and activities • Explores different work methods and what made projects successful; shares learning • Collects breadth of data and perspectives to make choices	When evaluating problems and managing program responsibilities this position must look at the long term implications of decisions being made and recommendations being presented. They must understand the impact daily decisions have on the regions ability to deliver public services in the most cost effective and sustainable manner.
Drive for Results	○ ◉ ○ ○ ○	Works to exceed goals and partner with others to achieve objectives: • Plans based on past experience • Holds self and others responsible for results • Partners with groups to achieve outcomes • Aims to exceed expectations	Whether on projects or in contract management the position is responsible for continuous improvement in outcomes and outputs.
Agility	○ ◉ ○ ○ ○	Works in a changing environment and takes initiative to change: • Takes opportunities to improve work processes • Anticipates and adjusts behaviour to change • Remains optimistic, calm and composed in stressful situations • Seeks advice and support to change appropriately • Works creatively within guidelines	The incumbent works in a dynamic environment, subject to changes in regulations, funding, staffing and supervision. The position will also be called upon to fill positions at higher classification levels on an as-needed basis.
Build Collaborative Environments	○ ◉ ○ ○ ○	Facilitates open communication and leverages team skill: • Leverages skills and knowledge of others • Genuinely values and learns from others • Facilitates open and respectful conflict resolution • Recognizes and appreciates others	In working within a team, advising management and working with internal and external stakeholders, this position will only succeed by supporting others and being willing to receive support.

Benchmarks

List 1-2 potential comparable Government of Alberta: Benchmark

Assign

The signatures below indicate that all parties have read and agree that the job description accurately reflects the work assigned and required in the organization.

_____ _____ _____
Employee Name   Date yyyy-mm-dd   Employee Signature

_____ _____ _____
Supervisor / Manager Name   Date yyyy-mm-dd   Supervisor / Manager Signature

_____ _____ _____
Director / Executive Director Name   Date yyyy-mm-dd   Director / Executive Director Signature

_____ _____ _____
ADM Name   Date yyyy-mm-dd   ADM Signature

_____ _____ _____
DM Name   Date yyyy-mm-dd   DM Signature