

Government of Northwest Territories

IDENTIFICATION

| Department | Position Title | | |
|-----------------|-------------------|--------------------------|--|
| Finance | Geomatics Officer | | |
| Position Number | Community | Division/Region | |
| 15-3184 | Yellowknife, NWT | NWT Centre for Geomatics | |

PURPOSE OF THE POSITION

This position is responsible to develop and implement geomatics related projects; data management; provide advice, recommendations and assistance to the Centre's staff, departmental clients, and other governments and agencies. As well, the position will create geospatial data/databases, hardcopy, digital and online maps and products, in accordance with the Centre's mandate of providing remote sensing and geographic information systems (GIS) services to the departments of the Government of the NWT.

SCOPE

The position is located in Yellowknife and is part of the NWT Centre for Geomatics (NWTCG) Division within the Office of the Chief Information Officer branch in the Department of Finance. The Geomatics Officer reports to the Manager, Geomatics Services. The NWTCG is the GNWT Centre of Excellence for geomatic services, Earth Observation (EO), geographic databases and applications, remote sensing and geographic information systems.

The NWTCG provides leadership and expertise to all departments of the GNWT, as well as some boards and agencies, on matters related to mapping; spatial data creation, maintenance, storage and standards; unmanned airborne systems; remote sensing and data acquisition; geospatial software and hardware; and online geospatial tools and services. The Centre promotes the use of geospatial data and tools for decision making through education and outreach, and collaborates with a variety of internal and external partners to maximize the benefits of investments made in the GNWT's geospatial resources.

The position operates within the policy framework established by the GNWT Informatics Policy Council on matters related to information management, open data, and various technologies as they relate to spatially referenced data and information collections.

The incumbent works independently on projects for clients across all GNWT departments, boards and agencies. The incumbent also provides operational mapping support for the management of surface and subsurface land tenure for the departments of Industry, Tourism and Investment, and Lands. The Geomatics Officer is expected to manage multiple projects concurrently, and liaise with clients to scope requirements.

The incumbent is expected to follow operational processes related to data and project management and is responsible for maintaining data held within the NWTCG geospatial data holdings. The Geomatics Officer assists as needed with the development and facilitation of training activities.

RESPONSIBILITIES

The Geomatics Officer is responsible for developing and implementing geomatics and related projects. This includes consultation with project leaders and sponsors, digitizing, data input and manipulation within the Centre's Spatial Data Warehouse, and data output to plotting and printing devices, responsibility for specific transactional requests related to mineral and land tenure within expected timeframes and also to perform spatial data management. To meet this goal the incumbent will be expected to:

1. Prepare, develop and implement geomatics projects and products to client specifications by:

- Consulting with project sponsors to establish and define project conditions, requirements and action plans by intuitively responding to the client in a language related to their experience;
- Assist the client in defining their desired end product and clarify for them the steps required to do so and how this will affect time and costs. Associated with this is the responsibility of handling different projects with many different data sources.
- Apply technical experience with GIS software packages (Esri Suite) and programming languages to manipulate geospatial data in project work and to manage information in the Centre's GIS and other geographic or non-geographic related database systems;
- Use innovation and creativity in recommending products and deliverables to clients;
- Evaluating, conducting and collaborating on geospatial analysis and research;
- Preparation and output of map-based products for clients;
- Geospatial data digitizing:
- Technical documentation of procedures, metadata and project history;
- Supporting other GIS practitioners on their projects;

2. Provide operational support on land and mineral tenure by;

- Fulfilling standard transactional requests related to mineral and land tenure within established service level agreements;
- Identify process improvements to optimize service delivery;

- Adapt internal processes to use emerging technology;
- Updating procedural documentation associated with transactional services;
- Providing quality control and user testing related to datasets that are integrated with online map viewers.
- Troubleshooting issues and concerns related to the use of online map viewers by client departments and members of the public

3. Responsible for data management by:

- Performing regular spatial data maintenance including metadata creation and quality control of data holdings within the spatial data warehouse;
- Providing quality control and assurance of new data using NWTCG best practices;
- Preparing data through transformation and analysis for use in a GIS;
- Following defined change management processes for data related to spatial data warehouse and online map services;
- Conduct data improvement projects.

4. Assist clients with mapping support by:

- Providing technical advice, recommendations and assistance to staff;
- Translating digital data to the format of their request;
- Conducting training and outreach activities related to geomatics topics
- Locating spatial digital data;
- Digitizing and data manipulation;
- Plotting, printing, photocopying, cutting maps and laminating;
- Field support services (hardware preparation, GPS use and data downloads, form and template preparation;

WORKING CONDITIONS

Physical Demands

No unusual demands.

Environmental Conditions

No unusual conditions.

Sensory Demands

Prolonged, concentrated visual attention to colours, tones and textures of digital maps on a computer monitor. Unencumbered ability to determine full range of colours.

Mental Demands

The incumbent is required to manage multiple concurrent projects with competing deadlines. At times requests from executive management require tight turnarounds and possible

overtime. The Geomatics Officer also manages stressful requests related to public safety, requiring rapid and accurate responses.

KNOWLEDGE, SKILLS AND ABILITIES

- Knowledge in the ESRI suite including but not limited to ArcGIS (Desktop or Pro) and ArcGIS Online (knowledge of open source GIS packages would be an asset but is not required);
- Knowledge of Microsoft software products including Office Suite and Outlook;
- Knowledge of image analysis software would be an asset;
- Strong project management skills and the ability to work under minimal supervision;
- Demonstrated analytic, cognitive and problem solving skills, and the ability to deal with complex information;
- Proven interpersonal skills in working with individuals at all levels of Government and private industry;
- Proven communication and organizational skills;
- Effective technical and non-technical writing abilities;
- The ability to use multi-media technology for the management of projects and development of presentations;
- The ability to stay on top of trends and adapt new technologies in the work place;
- Demonstrated initiative and resourcefulness to work independently.

Typically, the above qualifications would be attained by:

- Technical diploma in GIS or a related field, with 3 years of directly related experience in client-based GIS services and project management, or
- Bachelor's degree in geography or a geomatics related field, and 1 year directly related experience in client-based GIS services and project management.
- Other equivalencies may be considered.

ADDITIONAL REQUIREMENTS

| Posi | tion Security (check of | one) | | | | |
|---|--|-------------------------|--|---|--|--|
| | No criminal records of Position of Trust – cri Highly sensitive posit | minal records checl | k required ication of identity and a criminal records checl | ζ | | |
| French language (check one if applicable) | | | | | | |
| | ☐ French required (must identify required level below) | | | | | |
| | Level required for this Designated Position is: | | | | | |
| | ORAL EXPRESSIO | N AND COMPREHENS | SION | | | |
| | Basic (B) □ | Intermediate (I) \Box | Advanced (A) □ | | | |
| | READING COMPR | EHENSION: | | | | |
| | Basic (B) □ | Intermediate (I) \Box | Advanced (A) □ | | | |
| | WRITING SKILLS | : | | | | |
| | Basic (B) □ | Intermediate (I) \Box | Advanced (A) □ | | | |

| | French preferred |
|------|----------------------------------|
| Indi | genous language: Select language |
| | Required |
| | Preferred |