



## NIRB Human Resource Position Descriptions

### I. General Information

<b>Position / Title:</b>	GIS Specialist	<b>Date in Effect</b>	March 31,2012
<b>Department:</b>	Technical Services	<b>Reports To:</b>	Director, Technical Services

### II. Purpose of Position

Under the direction of the Director, Technical Services, the GIS Specialist will develop and maintain the NIRB GIS database and maps related to impact assessment.

### III. Essential Duties and Responsibilities

1. Research, gather and interpret data and maps:
  - Gather, input, manipulate, query, analyze and visualize GIS data
  - Gather digital and hard copy maps related to lands and waters in Nunavut
  - Research property ownership and boundary disputes or inaccuracies and interpret aerial photographs
  - Discuss and resolve issues related to the preparation of mapping databases, editing of maps, digitizing of information for use in maps
2. Publish and make available NIRB GIS data and maps:
  - Digitize or plot spatial data for inclusion in ArcGIS and other geospatial software as required
  - Catalogue and index digital GIS data, hard copy maps and other information held by NIRB
  - Design, prepare, and produce reports, maps, posters, charts and related information for NIRB staff, the IPGs and the general public
3. Assist NIRB and the other Institutions of Public Government:
  - Accessing information and using proper protocols
  - Development and maintenance of the databases
  - Network and computer hardware/software issue identification and troubleshooting

### IV. Other Duties and Responsibilities

1. Maintain GIS hardware and software:
  - Assist with ordering of computer supplies
  - Perform backups of personal computers and workstations
  - Conduct routine cleaning of computer and GIS equipment
  - Conduct software and hardware repairs as required
  - Provide technical assistance as requested
2. Assist in the building of GIS skills capacity within Nunavut:
  - Assist in the demonstration of mapping techniques and map information access techniques to NIRB staff and other audiences
  - Undertake any training necessary to attain the level of GIS expertise required by NIRB
  - Apply established protocols to enable others to access NIRB maps and digitized map
  - Carry out general GIS support activities

## **V. Qualifications**

- Knowledge:**
- Microsoft Windows and other operating systems
  - GIS applications, development and customization
  - ArcGIS software
  - At least one computer programming language (VISUAL BASIC, Python, Java, AML)
  - Relational databases (Access and SQL Server)
  - Familiar with Nunavut Land Claims Agreement
  - Understanding of Inuit and Northern social and cultural needs and aspirations
  - Digital data standards and data management practices
  - Fluency in Inuktitut and/or Inuinnaqtun would be considered a strong asset
- Ability:**
- Using mapping software programs and systems including: ArcGIS (ArcInfo and ArcView), AutoCAD MAP, and PCI Remote Sensing
  - Using Windows 2010 (and earlier versions) operating systems, as well as any other operating system required in future NIRB GIS projects
  - Ability to work co-operatively with a variety of individuals and groups, both government and client
- Skills:**
- Problem solving
  - Computer skills (hardware and software programs – technical)
  - Oral, written, presentation and interpersonal communications skills
  - Organizational and analytical skills
- Education:**
- Minimum - Diploma related to Geography or Land and Resource Management or GIS
  - Software specific courses offered by vendors and other organizations as appropriate
- Experience:**
- Working with land, resources, and environmental database systems
  - Digitizing and editing mapping information
  - Applying map production and map analysis techniques
  - Personal and professional experience in the Arctic or in a cross-cultural setting

## **VII. Physical Demands**

- Exposure to computer work for extended times
- Able to lift 20 kilograms
- Able to work in all weather conditions
- Working with office equipment which requires some manual dexterity
- Possible overtime required

## **VIII. Work Environment**

- Work inside is in a clean, well-lit office or facility
- Work outside may have some exposure to weather
- Work can sometimes be stressful

## **IX. Mental Demands**

- Prioritizing tasks and meeting deadlines.
- Communication and consultation with other agencies in Nunavut regarding data availability
- Must be prepared to meet the personal and professional challenges associated with living in a small, isolated community with limited resources