



JOB DESCRIPTION FORM

POSITION (PID) #		690095			
IDENTIFYING INFORMATION			POST CERTIFICATION		
Post Title	GIS Mapping Analyst		Print Name	Signature	Date
Present Grade	PS 28-30		Prepared By		
Department/Section	Conservation Services		Post holder Agreed		
Ministry	Public Works		Dept. Head Agreed		
POST STATUS			POST TRANSFER (if applicable)		
	New Post	Revised Post	Redefined Post	Previous Title	TA GIS Coordinator
Date	19 June 2012			Previous Department	
Cabinet Conclusion Ref	22(12)3			Previous Ministry	
Last Review Date	01 Jan 2012			Previous Number	
Panel Decision	Grade	Date	Signature	Previous Grade	
	PS 28-30	30 Aug 12	[Signature]	Date of Transfer	

1. SUMMARY OF MAIN DUTIES (Ideal Maximum Four)	%
1. Mapping and Data Management	50
2. GIS Project Coordinating	30
3. Training and Support	15
4. Associated Duties	5
	TOTAL = 100%

2. SUMMARY OF ACCOUNTABILITY

2.1 What specifically is this post accountable for?

Under the direction of the Director, this post is responsible for developing and maintaining key Geographical Information System (GIS) IT programs, database, infrastructure, applications and resources for the Department of Conservation Services. The post holder provides technical assistance to other Government departments in relation to the utilization of environmental data to analyze and create spatial maps. Further the post provides advice and assistance to other Departments, Quangos and Non-Government Organizations on all GIS operations including database management and administration, data development, system administration, technical consulting, marketing and training to provide geospatial service and advice to the Ministry on habitat and environmental matters. Coordinates and leads GIS initiatives with other departments and external agencies.

2.2 Briefly describe the level of decision making authority held by this post.

Responsible for all technical decisions relating to the Department's GIS programs and applications. The postholder works with scientists to utilize important environmental field data to create spatial analysis and mapping to assist with the development of Government policy. The post acts as the liaison officer with the co-ordinating Government GIS Committee.

2.3 To which position does this post report directly? Director

3. ESSENTIAL KNOWLEDGE & SKILLS

List the key knowledge and skills required to fulfill the *minimum requirements* of the post under the following categories.

3.1 General Knowledge / People Skills (Soft Skills).

Strong written and verbal communication skills. Good report writing skill. Ability to communicate technical information in a non-technical manner. Detail oriented with strong problem solving skills. Well organized and must be able to multi-task. Demonstrate initiative, lateral thinking and a positive attitude to develop customer-oriented solutions.

3.2 Technical Knowledge / Position Specific Skills (Hard Skills). This includes knowledge of particular legislation, processes, specialties, etc.

Experience with Government GIS applications, Knowledge of remote sensing technology, especially photogrammetry. Technical and administrative skills to ensure the GIS technology is used properly and efficiently. A thorough knowledge of digital mapping, GIS software (particularly ESRI products) and spatial data standards. Familiarity with business process analysis as it pertains to GIS.

4. MINIMUM EXPERIENCE REQUIRED (Tick the Appropriate Box)

Based upon the above identified knowledge and skills, what is the minimum number of years experience required to fulfill the duties of this post?

- No previous experience required
 Minimum one (1) year
 Minimum two (2) years
 Minimum three (3) years
 Minimum five (5) years
 Minimum ten (10) years

4.1 Identify specific experience.

A minimum of five (5) years experience working with GIS software and digital mapping, or in a related position.

5. MINIMUM EDUCATIONAL QUALIFICATION REQUIRED (TICK THE APPROPRIATE BOX)

- Secondary School Graduation Certificate
 Apprenticeship/College Certificate
 College Diploma
 Associates Degree
 Advanced or Specialist Qualification
 Bachelors Degree
 Masters Degree
 Professional Designation (Includes Chartered Status)
 Doctorate
 Other

5.1 Please list the title of the academic qualification / professional designation required:

The post holder must possess a Bachelor's Degree in Earth Science, Geography, Computer Science, Engineering or a related discipline.

5.2 List any special licenses, registrations or certifications required for this job:

6.0 RESOURCES UNDER MANAGEMENT

6.1 Management and Supervision of Staff

(Please ensure that the Organization Chart submitted is up to date, accurate and reflects the information listed below)

Please list the position titles (including PID) of 'All Staff' under the 'Direct Supervision' of this post.

1. N/A

6.2 Non-Staff Budget and Revenue Streams (FOR EACH SUB SECTION TICK THE APPROPRIATE BOX)

6.2.1 What 'Responsibility' does this post have for 'Managing Non-Staff Budget' and 'Government Revenue Collection'? (Non-Staff Budget typically applies to contracts for program delivery & capital expenditure projects)

- None
 Has Direct Management Responsibility
 Is the Accounting Officer

6.2.2 Please indicate the level of Non-Staff Budget and/or Revenue Streams for which this post is responsible.

- None
 Less than \$500k
 \$500k to \$2m
 \$2m to \$10m
 \$10m to \$40m
 Greater than \$40m

6.3 Infrastructure for Vital Government Services (FOR EACH SUB SECTION TICK THE APPROPRIATE BOX)

6.3.1 Is the post responsible for managing 'Infrastructure' critical to the delivery of 'Vital' Government Services?

No

Yes. Has Direct Management Responsibility

Yes. Is Ultimately Responsible

6.3.2 If 'Yes' to the above, what would be the impact of failure of this infrastructure?

Low Impact: Mainly internal to Government

Medium Impact: Mainly internal to Government

High Impact: Mainly internal to Government

Low Impact: Bermuda-Wide

Medium Impact: Bermuda-Wide

High Impact: Bermuda-Wide

7. Additional Information

The post holder should actively engage in geospatial policy support and cross-departmental partnerships to develop the national data portal, covering matters of data standards, policy, pricing structure and customer requirements.

The post holder must also keep abreast of the evolving spatial information needs of the department and ensure the necessary resources are in place to meet them.

DUTIES AND RESPONSIBILITIES OF THE POST

8. DETAILED DESCRIPTION OF MAIN DUTIES AND RESPONSIBILITIES OF THE POST	
(Please use the same Headings for Main Duties as Listed in Section 1.0)	
8.1	MAPPING AND DATA MANAGEMENT
8.1.1	Supervises and manages all aspects of the departments GIS, under the direction of the Director. Ensures that all key GIS work elements - database, infrastructure, applications and resources - are managed, maintained and enhanced to meet agreed-upon requirements.
8.1.2	Ensures the department's geospatial data meets the appropriate data standards as set by the Department of Land Surveys and Registration's Mapping Officer.
8.1.3	Designs and manages the Department's central data repository using ESRI software or the equivalent software used by the Government to facilitate access to spatial data, ensuring specific agreements and security measures are in place for the protection of sensitive information and copyright. Specify and develop databases and graphical user interfaces; maintain and publish agreed upon data through a web interface. Facilitate improved service delivery by geospatial users internal and external to Government.
8.1.4	Receives and carries out all map and spatial data requests, ensuring they are completed on time and to the customers' satisfaction. Ensures that appropriate terms and conditions are agreed to when sharing data and maps with outside organizations. Follows up on any conditional agreements whereby the department is expected to receive reports and/or data in return, and ensures those products are properly stored in the BAMZ library and/or data repository.
8.1.5	Designs, develops and implements strategies for more effective and efficient use of GIS. Use technical as well as administrative skills to ensure GIS technology is used properly and efficiently. Manage and maintain GIS software licenses.
8.1.6	Work in partnership with other Ministries to design and build the national geospatial infrastructure and portal for the management of all national datasets, as part of the Governments GIS strategy. Collaborates with data collectors, i.e. scientists or other officers within the Department to determine what data should be published to the national spatial data portal.
8.1.7	Recommends data policy, pricing and licensing on mapping sales and marketing policy to the Director; implement and enforce policy and copyright. Responsible for production for sale and marketing of geospatial products within the framework of the national spatial data infrastructure, including hardcopy and digital.
8.1.8	Manages Government and private sector client relationships, and negotiates agreements for use of mapping products. Encourages and enables the generation of geospatial user groups and partnerships to enhance the use and understanding of a national spatial data infrastructure.
8.1.9	Responds to public information requests, and develop public information policies and procedures.
8.2	GIS PROJECT COORDINATION
8.2.1	Acts as technical project manager for all GIS projects, in consultation with the Director. Manages risk, quality and issues to ensure these projects are completed on time, within financial constraints and to specification, to the satisfaction of the Director. Provides advice, information and guidance to other project management teams, i.e. BIOS, Department of Parks, stakeholders with planning projects and feasibility studies.
8.2.2	Oversees all GIS project operations including database management and administration, data development, system administration, technical consulting, marketing and training. Supervises contractors and temporary staff on specialist contracts when required.
8.2.3	Plans, budgets and implements GIS projects; and report to the Director on projects. Carry out user needs assessments, management and supervision of GIS resources during each project.
8.2.4	Represents the department on the Geospatial Information Committee, coordinating and initiating government and private sector GIS initiatives.
8.2.5	Assesses customer needs and specify, develop, maintain and support customer-focused policy for the publication of spatial data. Initiates and amends policy alterations and recommends new procedures to the Director.
8.2.6	Provides supporting advice on technical solutions and customizes datasets for other departments within the Ministry, as needed.
8.2.7	Provides technical advice and recommendations to the Director on the development of habitat mapping and environmental GIS within the department and/or ministry. Performs data conversion, manipulations and management. In consultation with the Director give technical advice to members of the public and all government departments and agencies on habitat mapping and environmental GIS related issues.
8.2.8	Collaborates with other departments and ministries to facilitate data sharing and technical assistance particularly with the Ministry of Environment, Planning and Infrastructure Strategies.
8.2.9	Acts as a resource for other areas of the Ministry where assistance may be needed with the creating of maps and data.

8.3 TRAINING AND SUPPORT

- 8.3.1 Trains departmental officers in GIS tools such as ArcMap, to facilitate more efficient data capture and management.
- 8.3.2 Provides orientation and primary training ESRI GIS system products to Department staff.
- 8.3.3 Provides support for ESRI GIS system products to Department staff.
- 8.3.4 Co-ordinates training of staff in GIS software products by internal and external trainers.

8.4 ASSOCIATED DUTIES

- 8.4.1 Consults with the Biodiversity Officer and Director regarding website content. This includes developing content for the website such as photographs, charts, etc.
- 8.4.2 Assists the Biodiversity Officer with the development and maintenance of the Department's website.
- 8.4.3 Provides graphics to assist with the development of displays within Bermuda Aquarium Museum and Zoo (BAMZ) to support the Department's mission.
- 8.4.4 Performs any other associated duties as requested by the Director.