



### JOB DESCRIPTION FORM

|                                |  |               |                                      |                     |      |
|--------------------------------|--|---------------|--------------------------------------|---------------------|------|
| <b>POSITION (PID) #</b>        |  | <b>690019</b> |                                      |                     |      |
| <b>IDENTIFYING INFORMATION</b> |  |               | <b>POST CERTIFICATION</b>            |                     |      |
| Post Title                     | Plant Engineer                               |               | Print Name                           | Signature           | Date |
| Present Grade                  | N/A  |               | Prepared By                          |                     |      |
| Department/Section             | Conservation Services/Facilities Maintenance |               | Post holder Agreed                   |                     |      |
| Ministry                       | Environment and Sports                       |               | Dept. Head Agreed                    |                     |      |
| <b>POST STATUS</b>             |  |               | <b>POST TRANSFER (if applicable)</b> |                     |      |
|                                | New Post                                     | Revised Post  | Redefined Post                       | Previous Title      |      |
| Date                           | 9 Dec 2008                                   |               |                                      | Previous Department |      |
| Cabinet Conclusion Ref         | Cab. Concl. 42(08)6                          |               |                                      | Previous Ministry   |      |
| Last Review Date               |  |               |                                      | Previous Number     |      |
| Panel Decision                 | Grade  | Date          | Signature                            | Previous Grade      |      |
|                                | 24-26  | 1 OCT. 10     | <i>W. Kelly</i>                      | Date of Transfer    |      |

| 1. SUMMARY OF MAIN DUTIES (Ideal Maximum Four)            | %                   |
|---|---------------------|
| 1.Provision of facilities maintenance and repair services | 70%                 |
| 2.Administrative duties                                   | 25%                 |
| 3.Associated duties                                       | 05%                 |
|   | <b>TOTAL = 100%</b> |

**2. SUMMARY OF ACCOUNTABILITY**

2.1 What specifically is this post accountable for?

Works under the direction of the Plant Manager and in accordance with Departmental policies and procedures, to maintain and repair all machinery, equipment and systems at the Bermuda Aquarium, Museum and Zoo (BAMZ), to ensure that they are operational at all times for the use and enjoyment of the staff, visitors and clients. This includes the responsibility for implementing the planned and preventative maintenance plan of the facilities, buildings and systems. The Post also undertakes administrative duties associated with the provision of the maintenance services. In addition, the Postholder performs additional related duties, as required.

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

The Post has delegated responsibility for the maintenance and repair of the facilities and systems buildings and is, accordingly, responsible for making decisions at a technical level in respect to the maintenance and the safe operation of the equipment and systems of the facilities and in respect to the design and conduct of feasibility studies for the construction and repair work and the selection of contractor.

2.3 To which position does this post report directly? The Plant Manager.

**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).

The Plant Engineer must possess good organisational, interpersonal, problem solving and decision making skills. Additionally, the Postholder must possess excellent communication and motivational skills, to effectively engage co-workers. As well, the Postholder must possess a practical "can do" attitude and contribute positively to the work environment.

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

The Plant Engineer must be proficient in a wide range of trade skills, including electrical, plumbing, mechanical, and life support maintenance and must have a good working knowledge of Microsoft Office Suite and Computer Maintenance Software programmes.

**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 two (2) years' relevant experience is required for the Post.

**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:

A Bachelor's Degree in Mechanical Engineering, Plumbing or General Technology is required for the Post.

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

A valid Intermediate Truck Licence and certification in CPR and First Aid and Oxygen Provider are required for the Post.

**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)

- |  |   |  |
|--|---|--|
| <input checked="" type="checkbox"/> None | <input type="checkbox"/> Has Direct Management Responsibility | <input type="checkbox"/> 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.

- |  |   |   |  |   |   |
|--|---|---|--|---|---|
| <input checked="" type="checkbox"/> None | <input type="checkbox"/> Less than \$500k | <input type="checkbox"/> \$500k to \$2m | <input type="checkbox"/> \$2m to \$10m | <input type="checkbox"/> \$10m to \$40m | <input type="checkbox"/> 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?

- |  |   |   |
|--|---|---|
| <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes. Has Direct Management | <input type="checkbox"/> Yes. Is Ultimately Responsible |
|--|---|---|

|  |   |   |
|--|---|---|
|  | Responsibility  |   |
| 6.3.2 If 'Yes' to the above, what would be the impact of failure of this infrastructure? |   |   |
| <input type="checkbox"/> Low Impact: Mainly internal to Government                       | <input type="checkbox"/> Medium Impact: Mainly internal to Government | <input type="checkbox"/> High Impact: Mainly internal to Government |
| <input type="checkbox"/> Low Impact: Bermuda-Wide  | <input type="checkbox"/> Medium Impact: Bermuda-Wide                  | <input type="checkbox"/> High Impact: Bermuda-Wide                  |

## 7. Additional Information

The Plant Engineer must be physically fit and be capable and willing to work in hot and often difficult conditions within enclosures containing exotic and potentially dangerous animals. The Postholder must be flexible and willing to work irregular hours, including evenings and weekends and Public Holidays, and be willing to attend to occasional facility and animal related incidents or emergencies, as they occur, e.g. animal escapes, wildlife strandings, hurricanes, fires, etc. as part of his/her professional obligation. The Position requires a dedicated, highly organised individual with a strong work ethic and good client services skills, who is capable of working with minimum supervision. Established contacts within the international aquarium and zoo industry are advantageous to this Position.

Applicants, who do not possess a Bachelor's Degree, but possess an Associates' Degree or equivalent and at least five (5) years' experience in plant engineering, will also be considered for the Post.

## 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 PROVISION OF FACILITIES MAINTENANCE AND REPAIR SERVICES

- 8.1.1 Provides a range of mechanical and electrical services within the Section, so that all the equipment and systems of the Bermuda Aquarium, Museum and Zoo (BAMZ) are fully operational at all times for the use of the staff, visitors and clients. This includes the responsibility for implementing the established planned and preventative maintenance programme of the facilities.
- 8.1.2 Inspects the equipment, systems and fixtures and identifies areas/items requiring repairs and enhancements on a regular basis and undertakes the required repairs and upgrades, to maintain internal and external facilities and exhibits. Inspects, repairs and maintains all pumps, valves, electric motors, generators, compressors, blowers filtration systems, fittings, etc.
- 8.1.3 Diagnoses and repairs mechanical and electrical problems and orders and replaces equipment, as necessary. As well, resolves identified faults and problems with the systems immediately or indicates that further investigations are required.
- 8.1.4 Designs and constructs, in consultation with the Plant Manager, custom life support equipment and exhibits, using approved designs, drawings and specifications, including filtration systems, motion or surge machines, etc. in accordance with the implementation plan. As required, liaises with other departments, which are required to provide assistance in the construction of the equipment and systems. Makes custom equipment from assorted fiber glass, metals, plastic and wood.
- 8.1.5 Defines the scope, deadlines, quality, etc. and conducts feasibility studies for construction or repair work to the equipment and systems, selects the contractor(s) and monitors the quality of work, to ensure timely completion and adherence with the terms of the contract. Approves and processes the invoices from the contractor, for payment. Advises the Plant Manager of overruns or problems with the project, so that he/she can take appropriate action.
- 8.1.6 Complies with the health and safety policies and procedures and wears the appropriate safety equipment when performing duties. As necessary, secures training in the use of tools and in the steps to take in case of emergency.
- 8.1.7 Investigates all incidents/accidents resulting from faults and problems with the equipment and systems and involves the relevant agencies, such as the Health and Safety Office, Bermuda Crash, Fire and Rescue Service, etc., and prepares reports for submission to the Plant Manager.

#### 8.2 ADMINISTRATIVE DUTIES

- 8.2.1 Provides budget recommendations for all goods, materials, equipment and supplies to be used in maintaining and repairing all equipment and systems and administers the approved budget in accordance with the established financial procedures and with due regard to economy.
- 8.2.2 Purchases all equipment, goods, materials and supplies and collects and delivers materials, equipment, etc., required for maintenance and repairs. Maintains an inventory of all items and replaces, as necessary. Regularly services all equipment.

- 8.2.3 Provides accurate returns regarding all maintenance work and incidents at BAMZ, in accordance with the officially approved system of documentation, and prepares reports, for submission to the Plant Manager.
- 8.2.4 Develops, supports and monitors energy management strategies, to minimise operational costs and to ensure that systems in place are operational and efficient.
- 8.2.5 Liaises with other Sections, departments and external agencies, to discuss and resolve issues connected with the repairs and maintenance work at BAMZ. Responds to any queries in respect to the work undertaken.
- 8.2.6 Develops and maintains, in consultation with the Plant Manager, a Computerised Maintenance Management Software (CMMS) Programme, including the strategies, procedures, methods and activities.
- 8.2.7 Ensures that BAMZ is ready for opening at all times.
- 8.2.8 Provides orientation, training and supervision of junior staff and volunteers in the Section in the use of specialized equipment and in established protocols. Assigns work to junior staff and volunteers and ensures that the work is completed according to the established schedules and required standards.
- 8.2.9 Provides feedback to trainees and volunteers on their performance, so that, in cases where improvements in performance are necessary, corrective action can be taken.

### **8.3 ASSOCIATED DUTIES**

- 8.3.1 Undertakes other projects and duties, to support the operations of BAMZ, including providing chairs, tables etc. required for special events and cleaning up after events.
- 8.3.2 Undertakes any other duties assigned by the Plant Manager, including running errands, participating in special work related projects, etc.