



GOVERNMENT OF BERMUDA
MINISTRY OF PUBLIC WORKS

PATI Information Statement

Name of Public Authority: Works & Engineering

Introduction:

Overview of Public Access to Information Act 2010.

The purpose of the Public Access to Information Act (PATI) 2010 is to:

- a) Give the public the right to obtain access to information held by public authorities to the greatest extent possible, subject to exceptions that are in the public interest or for the protection of the rights of others.
- b) Increase transparency, and eliminate unnecessary secrecy, with regard to information held by public authorities
- c) Increase the accountability of public authorities
- d) Inform the public about the activities of public authorities, including the manner in which they make decisions
- e) Have more information placed in the public domain as a matter of course.

The PATI Act 2010 requires each public authority to prepare an information statement describing the following information about the authority:

- Structure and organization, and governing legislation;
- Functions, powers, duties and obligations;
- Summary of services provided;
- Classes of records held, in order to facilitate the exercise of right of access;
- Administrative manuals;
- Policies, rules and guidelines used for decision-making; and
- Name and contact information of the person designated by a public authority as the person to whom requests for information are to be directed;
- Any other information that the head of the authority considers relevant, in order to facilitate the exercise of right of access;
- Any other information that may be prescribed.

In summary the purpose of the information statement is to provide people wanting access to information held by a public authority a 'window' of the types of documents held by that public authority, what that public authority does and how a person can access the information they require.

1.2 Access to Information:

Subject to PATI Act 2010 every person who is Bermudian or a resident of Bermuda has a right to and shall, on request, be given access to any record that is held by a public authority, other than an exempt record.

The following are considered to be exempt records by the Ministry of Public Works.

- 1) Health & Safety of Individual: if disclosure would endanger the physical or mental health or safety of the individual
- 2) Personal information. Unless it relates to the position or function of an officer or employee within the Ministry. Or unless it is about an individual who is or was carrying out services for the Ministry under contract and it relates solely to the services performed including the terms of the Contract. Or it relates to any discretionary benefit of a financial nature, including the granting of a licence or permit that was conferred upon the individual.
- 3) Commercial Information: such as trade secrets or where the commercial value of the information would be destroyed or diminished by disclosure.
- 4) Information Received in Confidence. Information that was given in confidence to the Ministry by a third party.
- 5) Cabinet Documents. Documents that were created for and submitted by the Ministry to Cabinet for consideration. This also includes records that are proposed to be submitted to Cabinet.
- 6) Ministerial responsibility. This includes discussion and advice between the Minister and other Ministers and between the Minister and technical officers of the Ministry.
- 7) Deliberations of the Ministry where disclosure of the information would or could reasonably be expected to undermine the deliberative process of the Ministry.
- 8) Operations of the Ministry. Where the disclosure of information could prejudice the effectiveness of tests, examinations, investigations or audits conducted on or on behalf of the Ministry. Or have a significant, adverse affect on the performance of the Ministry and its functions relating to management (including industrial relations and management of its staff) Or disclose positions taken, or to be taken, plans, procedures, criteria or instructions used or followed or to be used or followed, for the purpose of any ongoing negotiations by or on behalf of the Ministry.
- 9) Law Enforcement. If the disclosure would or could reasonably be expected to, prejudice the prevention, detection or investigation of a breach or possible breach of the law. Or prejudice the fair trial of a person or the impartial adjudication of a particular case. Or prejudice the enforcement of, compliance with, or administration of any law.

The Ministry of Public Works comprises six Government Departments:

- 1) Ministry of Public Works Headquarters
- 2) Works and Engineering
- 3) Public Lands and Buildings
- 4) Land Valuation
- 5) Land Surveys and Registration
- 6) Parks

The Department of Works & Engineering is made up of seven sections: Structures, Highways, Electrical and Mechanical, Water and Sewage, Tynes Bay Waste to Energy centre and Solid Waste.

Legislation

The Ministry of Public Works mandate is legislated through the Public Lands Act (1984). This legislation charges the Minister of Public Works with responsibility for the management of all public lands, public roads, public water supply, public sewage schemes, public buildings and highways, and the construction, erection, improvement, maintenance, and repair of such lands, works, water supply, sewerage schemes, buildings and highways.

The Department of Works and Engineering provides oversight and enforcement of the following legislation:

Amenities (Control of Ruinous Structures) Act 1950

Waste and Litter Control Act 1987

Waste and Litter Control Amendment Act 2011.

Professional Engineers Registration Act 1972

Private Roads (Improvement) Act 1969.

Private Roads (lighting) Act 1984.

Pembroke Marsh Canal Act 1969

Section B: I) Functions, powers, duties of the Authority [s5(1)b]

Department of Works and Engineering

The Department of Works and Engineering is an integral part of the Ministry of Public Works both in terms of numbers of employees (2015/2016 estimate 339) and in terms of budget. For the 2015/16 fiscal year the overall budget for the department is as follows:

Operational budget of \$30,165,000

Capital budget of \$25,780,000

Capital Acquisition Plan \$1,000,000

The Department of Works and Engineering provides highly visible and essential services to the Bermuda public in the form of maintenance of major elements of the Government Infrastructure, including garbage collection and disposal, road maintenance and repairs,

Government vehicle maintenance and safe water extraction, treatment and distribution.

The mission statement of the Department of Works & Engineering is:

To ensure the effective and prudent management of all operations and engineering services relating to the construction, erection, improvement, maintenance and repairs of Government Infrastructure

Departmental Objectives:

To develop and maintain the public road infrastructure to ensure the safe passage of motorists and pedestrians

To manage the provision of planning, design, construction, installation and maintenance services for electrical and mechanical systems associated with the Government facilities

To manage the provision of structural inspection, design, construction, maintenance, and project and contract services associated with Government facilities.

To arrange for the collection and safe disposal of Bermuda's solid wastes

To provide planning, design, construction, operation and maintenance of the Government water extraction, treatment and distribution systems and waste water collection and distribution systems

To manage the Government vehicle fleet and equipment leasing, mechanical maintenance and quarry operations

The department of Works and Engineering is made up of seven sections; Structures, Highways, Electrical and Mechanical, Water and Sewage, Tynes Bay, Quarry and Solid Waste. These sections represent some of the backbone infrastructure of the country and can have far reaching impacts on society. Maintaining service levels is thus, of the utmost importance to each section head both personally and professionally.

Government Boards

Ministry of Public Works Board

Professional Engineer's Registration Council.

Section B: 2) Obligations under PATI Act [s5(1)b]

To provide an **information statement** for the public and promulgate it [s5],

- To provide **other information** to the public so that the public needs only to have minimum resort to the use of the Act to obtain information [s6]. This includes:
 - General information, e.g. activities of the Authority
 - Log of all information requests and their outcome
 - Quarterly expenditure (upon request) [s6(5)]
 - Contracts valued at \$50,000 or more.
- To **respond to information requests** in a timely manner [s12-16]
- To **track information requests**, and provide this data to the Information Commissioner
- To respond to requests from the Information Commissioner [s9]
- To **amend personal information** held by the Authority that it is wrong or misleading following a written request by the person to whom the information relates [s19]
- To conduct an **internal review** if formally requested [part 5]

- To give evidence for **review by the Information Commissioner** [part 6, 47(4)], or for **judicial review** [s49], if required
- To provide an **annual written report** to the Information Commissioner of the status of information requests [s58 (3)].
- **To do anything else as required** under the PATI Act and subsequent Regulations [s59, 60], including:
 - **Fees** for Requests for information
 - Management and maintenance of **records**
 - **Procedures** for administering the Act
- To **train staff and make arrangements** so as to facilitate compliance with the Act [s61]
- To **designate one of its officers** to be the person to whom requests are directed [s62]

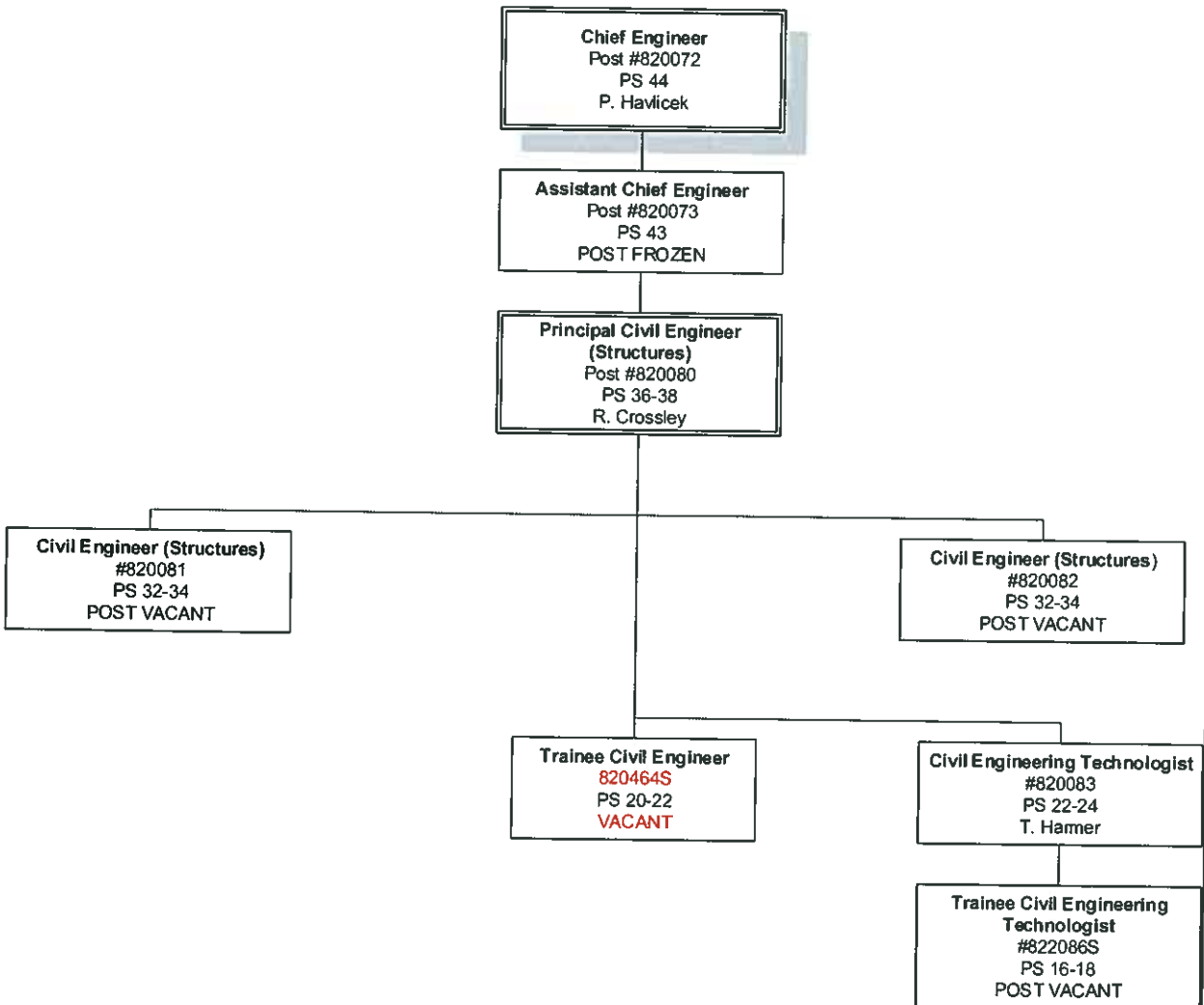
Section C: Services and Programmes [s5(1)c]

Services & Programmes

Structures Section

(i) Organizational Chart

Department of Works and Engineering
Structures Section
Current Organization Chart – March 2015



(ii) Mandate

The mandate of the *Structures Section* is to manage the provision of structural inspection, design, construction, maintenance and project and contract management services and to act as the Government functional authority on structural and related civil engineering matters.

(iii) Performance Measures Target Outcome 2015/16

- 1) Number of Bridges that have had an inspection (general or principal) during the year: 4 number
- 2) Number of Public Docks that have been inspected during the year; 10 number

(iv) Main Functions

The *Structures Section* is responsible for the upkeep of Bermuda's 30+ bridges and 90+ public docks at the same time as maintaining safe infrastructure inspecting retaining walls throughout the island and detailing strengthening and replacement designs for those walls damaged in collisions or simply failing due to inadequate construction.

Historically the *Structures Section* has a depth of experience on contract management and so is used also as a guidance service to the other section with respect to contract preparation and procurement. The *Structures Section* a depth of experience in large and small contracts as well as service contracts and Public Private Partnership (P3) procurement knowledge.

The *Structures Section* manages many contracts both capital and operational each year of varying size. These are managed from feasibility level through to design, detailing, procurement and completion of construction. The section also procures professional services for specialized areas of engineering such as marine engineering, coastal defense works, environmental engineering and remediation.

(v) Current Activities

Presently the *Structures Section* has a number of projects progressing through the management process some of which are listed below:

North Channel Widening
#12 Perimeter Lane Wall
#6 Perimeter Lane Wall
Railway Trail stabilization by Winton Hill condos
Swing Bridge Repairs
New Crossing Waters of Castle Harbour/Grotto Bay
Morgan's Point Remediation
Aquarium Hall Roof Replacement
Department of Parks Building
Watford Bridge Joint Replacement

These projects are funded both within the Ministry of Public Works and externally.

4.1 (vi) Budget

For the fiscal year 2015/16 the budget for the *Structures Section* is as follows:

Operational Budget: \$398,000

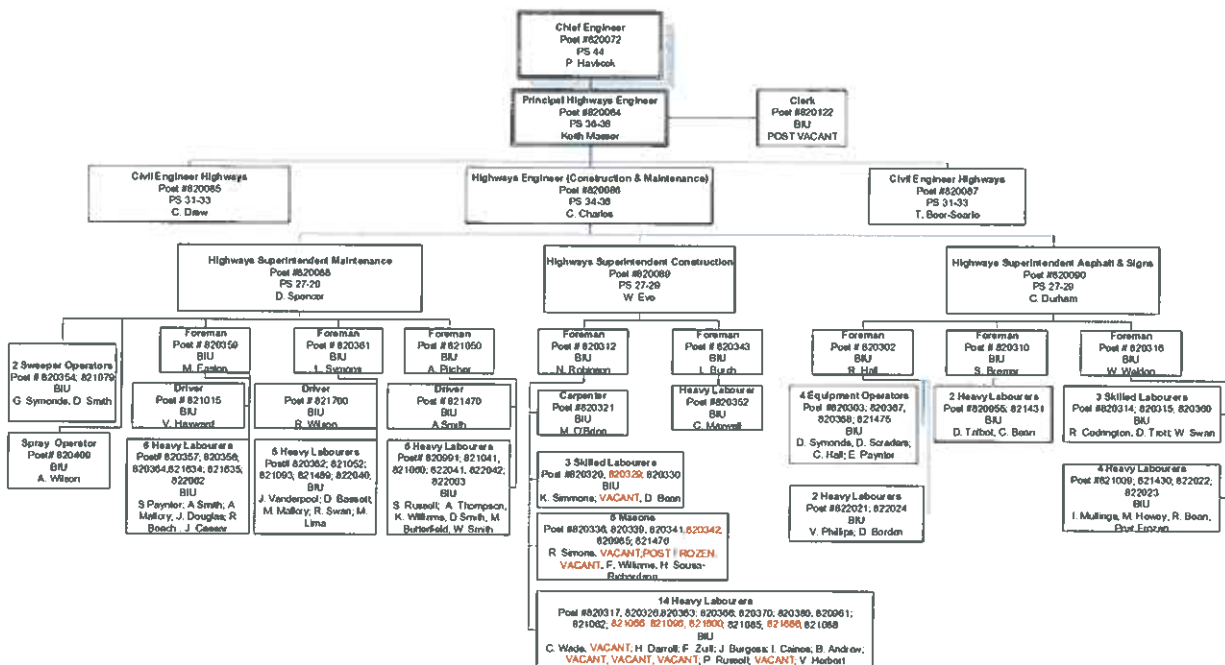
Capital Budget: \$7,355,000. This is comprised:

- Structural Refurbishment of bridges: \$1,255,000

- Refurbishment of ferry Docks and Public Landings: \$3,500,000
- Foreshore protection Works: \$350,000
- Causeway Refurbishment: \$750,000
- Dangerous Walls and Rock Cuts: \$400,000
- Pembroke Canal Upgrading: \$100,000
- Morgans Point Works: \$1,000,000

Highways Section

(i) Organizational Chart



(ii) Mandate

The mandate of the *Highways Section* is to develop and maintain the 200km of public road infrastructure for the safe passage of motorists and pedestrians.

(iii) Performance Measures Target Outcome 2015/16 :

- 1) Amount of road centre line marked out during the year: 27km
- 2) Amount of public road resurfaced during year. 10km
- 3) Percentage of public roads that have not been resurfaced in 20 years compared to the overall total: 30%
- 4) Number of Bus shelters built during the year: 3 number
- 5) Amount of Sidewalks built during the year: 200ft
- 6) Amount of wooden fencing installed during the year: 150ft
- 7) Amount of road cleaned by mechanical means in km during the year: 15000km
- 8) Number of emergency call outs: 20 Number
- 9) Number of Private Roads on waiting list: 35 number

10) Number of private roads completed during year:5 number

(iv) Main Functions

The main functions of the *Highways Section* are as follows:

- To provide all work associated with the planning, design and construction of road schemes and includes activities such as resurfacing, drainage, signage, road markings, retaining walls and bus shelters.
- To provide technical advice to other Government Ministries and agencies of highway related matters.
- To manage the improvement of public roads and other roads under the Private Road Improvement Act
- To assist citizens with their private improvement road needs
- To act as the Government functional authority on highways engineering-related matters.

(v) Current Activities

Road Improvement Schemes:

Middle Road / North Shore junction at Flatts Roundabout (design)

Blackwatch Pass / North Shore junction roundabout (construction work in progress)

Middle Road Warwick between Spicelands and Whites supermarket (planned 2015/16)

Crosswalk Improvements – continuation of flashing lights installation (planned 2015/16)

Cemetery Road / Serpentine Road, Pembroke – junction improvement (planned 2015/16)

South Road, Paget – pedestrian crossing at Railway Trail (planned 2015/16)

Middle Road / Industrial Park Road junction improvement (planned 2015/16)

Happy Valley Road near Hillsdale Avenue – sidewalk improvement (planned

2015/16) Harrington Sound Road, Hamilton – low bridge improvement (design)

Middle Road, Southampton - junction improvement at Rockaway (planned 2015/16)

Old Military Road, Pembroke – sidewalk improvement for safer route to school (design)

Lighthouse Road sidewalk improvement (design)

Middle Road, Southampton near Evans Bay Road – crosswalk and sidewalk (design)

Middle Road / Tee Street, Devonshire – junction improvement (design and priority assessment)

Middle Road / Chapel Road, Paget – sidewalk and crosswalk (design and priority assessment)

Middle Road, Southampton, at #2 Avocado Lane – sidewalk (design and priority assessment)

Berry Hill Road, Paget – sidewalk extension (design and priority assessment)

The following roads will priority assessed for resurfacing in 2015/16 together with roads to be identified via site inspections undertaken during March 2015:

St Davids Road (including some realignment)

Harrington Sound Road (Paynters Hill to Broken Hill Road)

North Shore Road (Store Hill to Loyal Hill)

North Shore Road (Barkers Hill r/about to Dock Hill)

Store Hill (North Shore to Middle Road)
Marsh Folly Road (Bishop Spencer to Dutton Avenue)
Happy Valley Road (Montpelier Road to King Street Fort Hamilton)
Shelton Road (Happy Valley to Cavendish Road)
Somerset Road (Scaur Hill)
Somerset Road (Scotts Hill to Cambridge Road)
Cockburn Road (Grave Yard to Spar Lane east access)
Mullet Bay Road (Part) St Georges
Harbour Road (Near Red Hole)
South Road, Paget (Mission Road to Paraquet Restaurant)
South Road (Warwick Camp to Princess Hotel)
South Road, Warwick (Bend west of 24 South Road)
Parsons Road, Pembroke/Devonshire
Frog Lane, Pembroke
Pitts Bay Road, Pembroke
Spanish Point Road, Pembroke
Riddells Bay Road, Warwick

In addition, bus shelter works, retaining wall reconstruction and stabilisation of roadside rock cut works will be undertaken in response to requests and reports, subject to budget availability and priority assessment.

(vi) Budget

The operational budget for the *Highways Section* for the 2015-2016 fiscal year is \$3,705,000. The Highways budget is split up into five sections which reflects the range of activities namely:

- Highways Management (\$586,000),
- Asphalt and Road Markings (\$896,000),
- Public Road maintenance (\$469,000),
- Road Sweeping and Vegetation cutting (\$1,754,000),

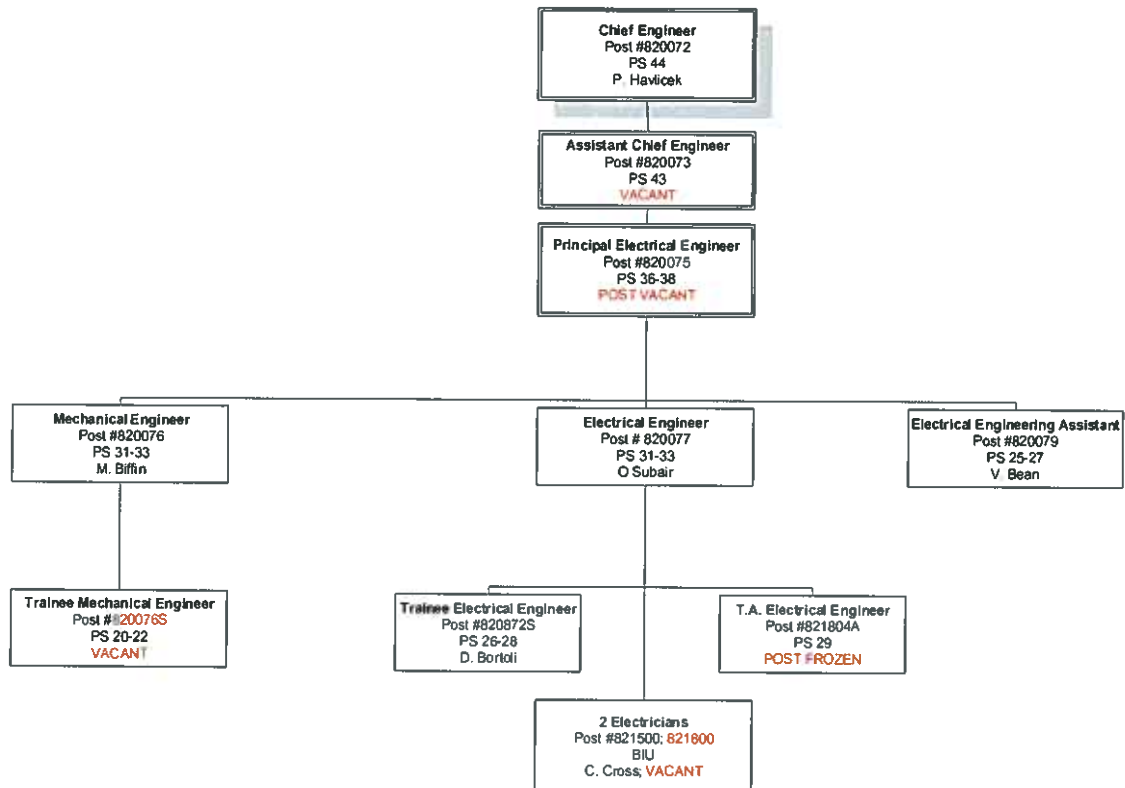
Capital budget: \$5,750,000. This is comprised:

- Bus shelters, \$50,000
- Road Works: \$5,000,000
- Reconstruction retaining walls: \$500,000
- Stabilize Road side Rock cut: \$200,000

Electrical and Mechanical Section

(i) Organizational Chart

Department of Works and Engineering
Electrical Section
Current Organization Chart – March 2015



(ii) Mandate

The mandate of the *Electrical and Mechanical Section* is the provision of planning, design, construction, installation and maintenance services for electrical and mechanical systems associated with the Government's facilities. This includes such areas as electrical power distribution, lighting, fire protection, security, telecommunications, heating, ventilation and air-conditioning (HVAC), plumbing, street lighting and energy conservation. In addition the section acts as the Government of Bermuda's functional authority in regard to these matters.

(iii) Performance Measures Target Outcome 2015/16

- 1) Percentage of managerial hours billed to other Government Departments in the year: 30%
- 2) Number of communications received from the public, relating to Street lighting maintenance per year: 400 number

- 3) Average number of streetlights out per month: less than 3%
- 4) Number of new street lights installed per year: 30 number.

(iv) Main Functions

Construction project management for capital projects:

- Preparation of electrical and mechanical contract documents, tender drawings, and specifications
- Tender phase services
- Contract award recommendations
- Project management through duration of construction period

Electrical design and consulting:

- Electrical distribution
- Fire alarm systems
- Lighting systems
- Security systems
- Telecommunications cabling and infrastructure
- Street lighting design for new installations – Note: Belco maintains street lighting in Bermuda (except City of Hamilton).
- Lightning protection
- Standby power generation
- Coordination with Belco, BTC, and Bermuda CableVision

Mechanical design and consulting:

- HVAC systems
- Plumbing systems
- Fire protection systems
- Standby power generation

Operations Support

- Quarry Depot
- Water Section

Energy management and sustainable design and consulting:

- Building energy management systems (BEMS) - HVAC and lighting controls
- Energy metering and monitoring
- Water conservation studies
- Energy auditing and feasibility studies
- Renewable energy systems (including Solar Photovoltaic Systems and Wind Turbines)

(v) Current Activities

These include :

Airport Waste Management Site CCTV cameras

Aquarium Roof and Generator

Arc Flash Studies for Government Buildings

Belco – island wide monitoring of upgrades

GPO GAB Renovations

GSEC Committee

IMaint Implementation

Kings Wharf Hurricane Damage Repair

Marsh Folly Fire Protection

Quarry Depot Office Electrical Upgrade

Sessions House Electrical Upgrade

Street Lighting – island wide.

Tynes Bay Septage Upgrade

Tynes Bay Water Section Reporting and Monitoring system

(v) Budget:

For the fiscal year 2015/16 the budget for the *Electrical and Mechanical Section* is as follows:

Operational budget: \$1,666,000

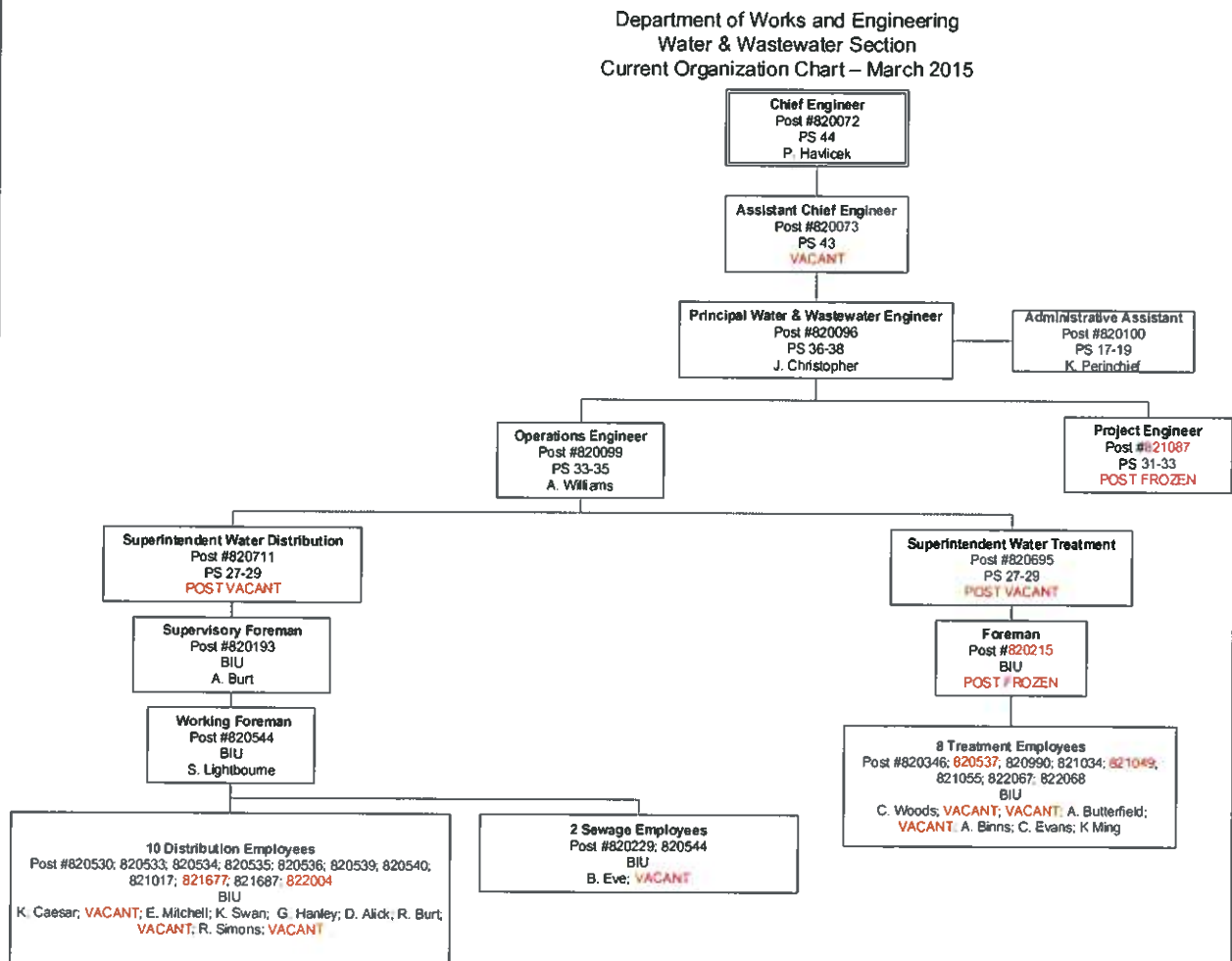
Capital budget: \$225,000. This is comprised:

- Improvement Street Lighting : \$200,000

Private Road Street Lighting and Improvement: \$25,000.

WATER & SEWAGE SECTION

(i) Organizational Chart



(ii) Mandate

The mandate of the *Water and Sewage Section* is;

- To provide planning, design, construction, operation and maintenance of the Government water extraction, treatment and distribution systems and the wastewater collection and distribution systems;
- To produce potable water on a cost recovery basis to meet demand;
- To provide septage receiving facilities for private sanitation truckers and for limited public facilities; and
- To act as the Government functional authority on all matters related to water and wastewater engineering.

(iii) Performance Measures: Target Outcome 2015/16

- 1) Customer enquiries responded to within 24 hrs: 100%
- 2) Total number of metered customers: 1000 number
- 3) Total amount of production of Water per year in Millions of Imperial gallons: 300
- 4) Total amount of water extracted from the central lenses in Millions of Imperial gallons expressed in gallons per year: 550.
- 5) Weekly bacterial tests complying to DOH standards expressed in percentage: 100%
- 6) Non revenue water (% volume of the water calculated using the difference between System Input Volume and Billed Authorized Consumption.): 25%
- 7) Total number of pipeline installed in year expressed in linear feet: 500
- 8) Total amount of sewage expressed in tons deposited at Tynes bay facility (1 load equivalent to 1/2 ton): 1500
- 9) Total amount of time septage plant is fully operational during year expressed in percentage:100%

(iv) Main Functions:

The role of this section is to provide a potable water supply, sewage conveyance via trunk collection sewers and a septage receiving facility for wastewater. The current Government water supply system produces approximately 200 million gallons of water each year by abstracting from fresh and brackish ground waters as well as seawater wells. The section is responsible for potable water supply from six (6) water treatment plants at various locations across Bermuda.

In order to meet present and future demands for potable water and wastewater needs, the Water and Sewage Section must manage, build construct and install water and waste related facilities to provide water and wastewater servicing. The Permanent Secretary of the Ministry of Public Works is legislatively responsible for this activity and has delegated this responsibility, through the Chief Engineer to the Principal Engineer of the Water and Sewage Section.

(v) Current Activities:

An additional well needs to be installed to enable the Seawater Reverse Osmosis (SWRO) Plant near Tynes Bay to achieve its full potential of 1 Million Imperial gallons per day. It is anticipated that the additional raw water well and pump will be commissioned before March 2016.

The Ministry of Public Works has signed a Memorandum of Understanding with Bermuda Water Works with the intention to sell all water infrastructures currently belonging to Government in the west end to them. The project will be completed in several phases and will eventually extend all the way to Westgate prison.

As a result of this MOU an asset register of all Government water assets in the western portion of the Governments distribution system is being compiled. The register consists of a list along with graphical maps indicating the physical location of the assets. This asset register includes all water mains, meters, plants, wells and trucker's outlets as well as well supply lines and valve locations.

Installation of Containerized SWRO water plant at 49 North shore Road to provide

supplementary water supply to the Central Distribution systems which includes Hamilton a recently upgraded pumps station which services portions of Hamilton Parish.

The existing Tynes Bay Septage Facility is poorly designed and controlled for its current use. Significant improvements are being made to bring the process up to tertiary wastewater process effluent emission standards. Disposal methods for grease and sludge are being improved to allow disposal by incineration.

For years, municipalities, utilities, manufacturing organizations and others have used remote monitoring technology to facilitate the alarm notification, monitoring, data logging and maintenance functions of unattended equipment. This is best practice and we need to follow the industry. For this reason a project has been initiated to take a phased approach to achieve this ability. Firstly, we will use a remote web based application to log operational and maintenance data at the plants and other remote facilities. This will assist in having a more efficient operation which will save money, increase revenues and as support timely reaction to adverse events.

The Water and Sewage Section is initiating a project to implement, using a phased approach, specialist Reverse Osmosis Systems training as well as water and wastewater operator training and certification. The role of a drinking water or wastewater operator is essential to the overall health of a community. It is essential that operators have the knowledge and skills required to efficiently and effectively operate a drinking water system by making sound educated decisions. Operator Certification has been proven effective in advancing operator training and knowledge.

(vi) Budget:

Operational Budget for 2015/16: \$5,716,000. This is comprised as follows:

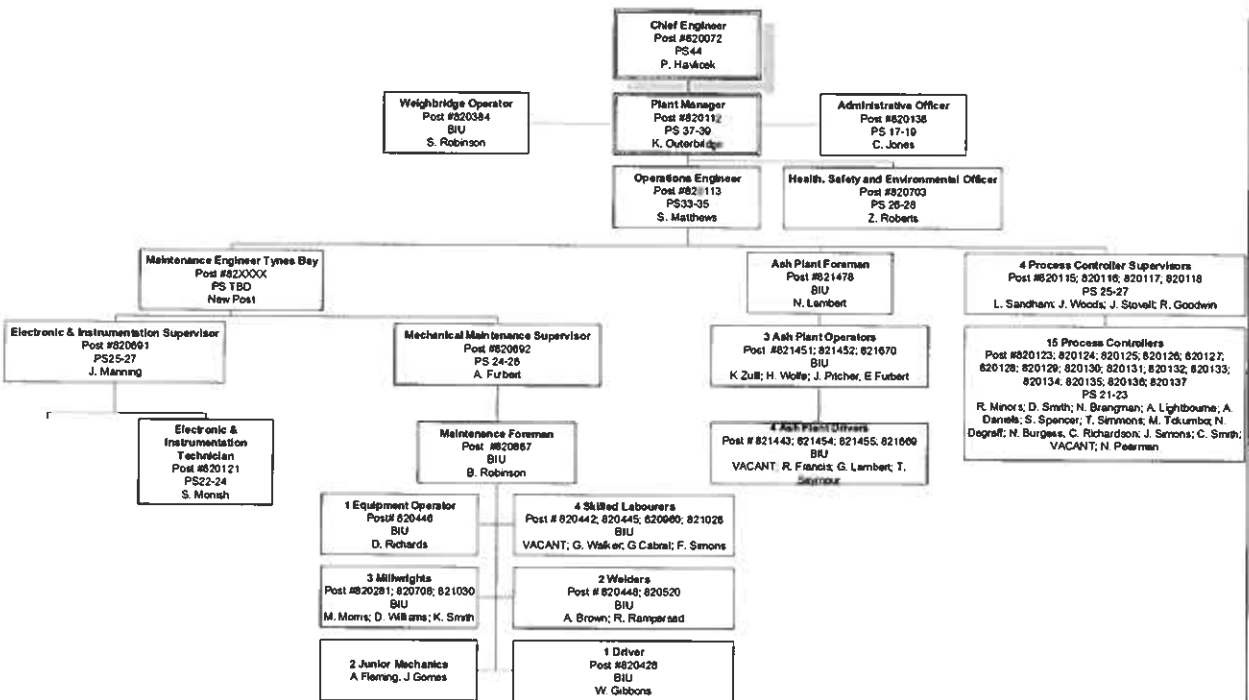
- Water and Sewage Administration: \$1,163,000
- Water Supply and Treatment: \$3,339,000
- Water Storage and Distribution \$935,000
- Sewage Collection \$279,000

Capital Budget for 2015/16: \$1,000,000. This is comprised as follows:

- Water Projects \$800,000
- RO Plants Electrical systems \$200,000

Tynes Bay Waste-to-Energy Facility

(i) Organizational Chart:



(ii) Mandate

The Tynes Bay Waste to Energy Facility is mandated to thermally disposal of all municipal solid waste produced on island. This includes waste from the domestic collections as well as commercial waste and construction waste.

(iii) Performance Measure: Target Outcome 2015/16

Administration

- 1) Conduct 25 Tours
- 2) Receive less than 5 complaints from Public Drop Off
- 3) Employ 20 power engineers

Operations

- 1) To incinerate up to 56,000 tonnes of solid waste
- 2) To generate up to 25,000 megawatt-hours of electricity for Belco distribution
- 3) Produce 5000 tonnes of ash concrete

Maintenance

- 1) Maintain Stream one availability at 85%
- 2) Maintain Stream two availability at 85%
- 3) Maintain turbine availability at 85%

iv) Main Functions:

The Tynes Bay Waste to Energy Facility combusts the waste in a furnace and the resulting heat is applied to a boiler which makes high pressure steam. The steam then turns a steam turbine coupled to an alternator and produces electrical power. This power is used to run the plant and the excess is sold to Belco on the local grid.

The plant also processes the waste ash by removing ferrous metals and then mixing the ash with Portland cement for stabilization. The ash concrete mix is trucked by redi-mix truck to the airport waste management facility where it is cast into blocks and later used for shore protection for the airport site.

The plant has two combustion streams and one steam turbine. Annually the plant processes approximately 55,000 metric tonnes of waste and produces an average of 26 million kwh of electricity a year (3.5 Mw equivalent). This power is equivalent to about 2% of the Belco total island supply.

Tynes Bay Public Drop Off

The Public Drop-Off facility at Tynes Bay is open to accept waste from 9 a.m. until 6 p.m., Monday thru Friday, 7a.m. until 7 p.m. on Saturday and 1 p.m. until 6 p.m. on Sunday. Public Holidays the facility is open from 9am to 12pm and closed on Christmas day.

(v) Current Projects

The plant is currently in the process of installing a larger 7.4MW Steam turbine. The new turbine will make use of steam being generated by the plant that is currently unutilized. Based on seasonal refuse amounts it is forecast for the turbine to produce 6.5MW on average throughout the year which is a 3MW increase over the current turbine. Revenue is targeted to be around \$5M per year. The third stream is another long term project required to provide the plant with redundancy so that future repairs and upgrades can take place sustainably. The plant reached a point where major upgrading of the current steams had to take place before the addition of stream 3. Plans for stream three are currently on hold due to budget considerations.

Tynes Bay has embarked on several initiatives to promote the Bermudianization of its technical staff, increase succession planning and to increase the performance of its plant maintenance to safeguard the multimillion dollar investment made by the refurbishments.

(vi) Budget:

The Operational budget for 2015/16 is \$7,339, 000. This is comprised:

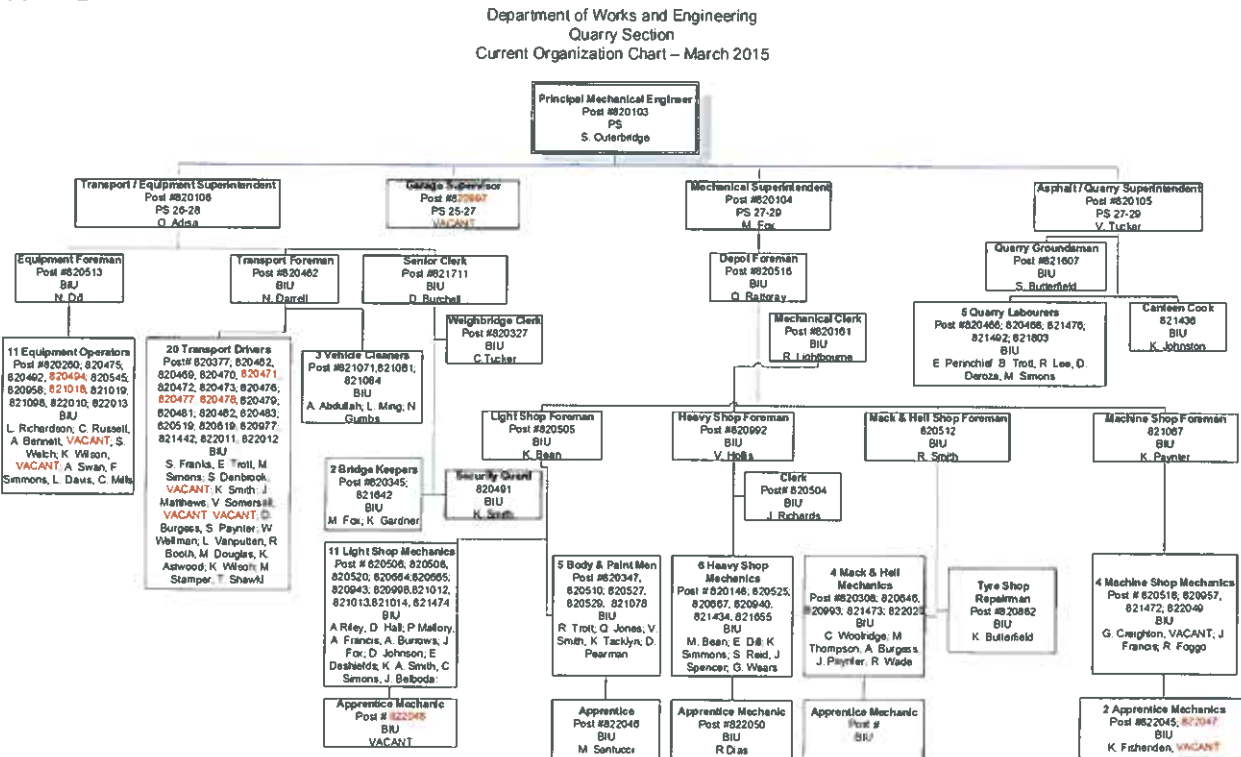
- Tynes Bay Administration: \$541,000
- Tynes Bay Operations: \$4,528,000
- Tynes Bay Maintenance: \$2,270,000

The Capital budget for 2015/16 is \$8,600,000. This is comprised:

- Tynes Bay Waste Treatment Expansion: \$4,500,000 – Completion of the steam turbine project
- Tynes Bay Capital Maintenance: \$4,100,000 – For major boiler replacement works including the Superheaters and related equipment.

Quarry Depot

(i) Organizational Chart



(ii) Mandate

The mandate of the Quarry Depot is:

- To manage the fleet and equipment leasing, mechanical maintenance, quarry operations,
- To act as the Government functional authority on all matters related to fleet management and vehicle and other mechanical engineering and maintenance activities.

(iii) Performance Measure: Target Outcome 2015/16

- 1) Amount of customer complaints during the year: 10 Number.
- 2) Accident Frequency rate for quarry personnel for year: 4
- 3) Average amount of vehicles of the Government fleet, expressed in percentage per week, operational: 75%
- 4) Average Number of training days per employee during the year: 2 days
- 5) Average number of services per Government vehicles per year: 2 number
- 6) Average time in hours to carry out a full service on a Government fleet vehicle during the year: 8 hrs

(iv) Main Functions:

The role of the Quarry Depot is to purchase, repair and maintain vehicles and mechanical equipment for the Ministry of Public Works and other Government departments. Its primary function is to manage the distribution and maintenance of 450 vehicles and equipment as well as operate and maintain Government Quarry and Asphalt Plant and Swing Bridge.

The services include:

- Leasing and purchasing of vehicles and equipment
- Repair, maintenance and replacement of most Government Vehicles and Equipment
- Operation and maintenance of Long bird Bridge and Swing Bridge

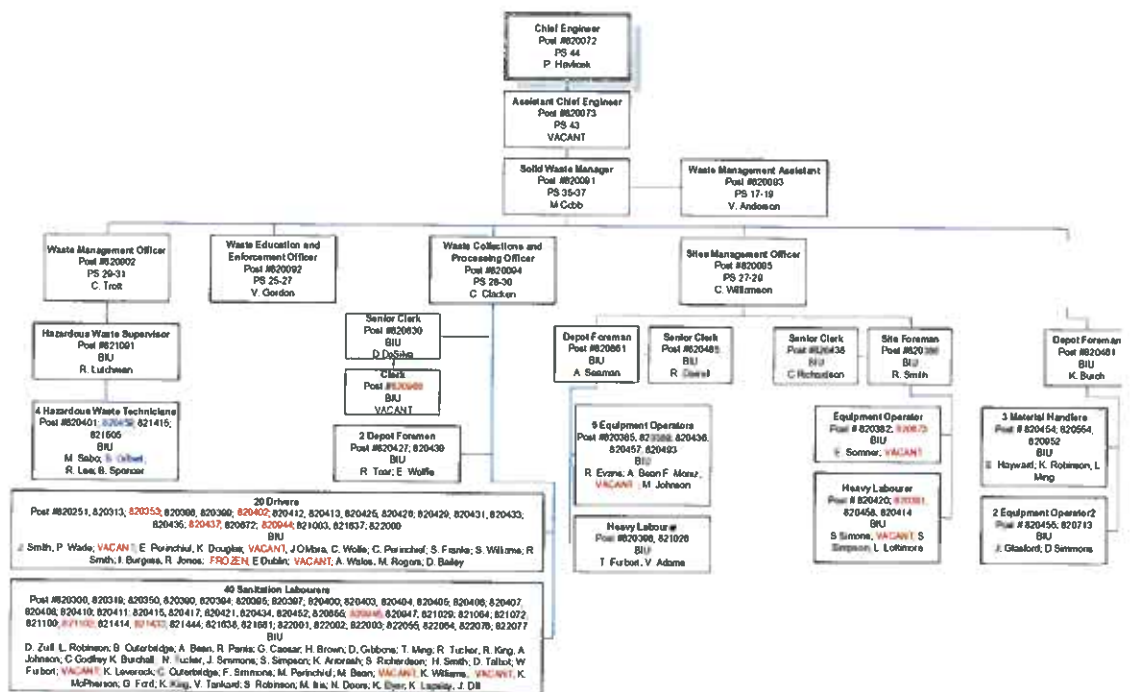
(v) Budget:

Operational Budget for 2015/16: \$.9,591,000 This is comprised
Quarry Administration \$, \$522,000
Vehicle Equipment and Operations \$2,911,000
Vehicle and Equipment Maintenance \$4,332,000
Asphalt Plant \$1,826,000

Capital Acquisition Budget for 2015/16: \$1,000,000

Solid Waste Section

(i) Organizational Chart



(ii) Mandate:

The mandate of the *Solid Waste Section* is to arrange for the collection and safe disposal of Bermuda's solid wastes. This includes:

- The collection of household refuse, provision of appropriate programmes to recycle materials, management of special wastes, waste education and enforcement and management of the waste disposal and composting sites.
- To act as the Government functional authority on all matters relating to solid waste, environmental engineering, waste-to-energy and process engineering.

(iii) Performance Measures: Target Outcome 2015/16

- 1) Number of Educational lectures given during year: 55 Number
- 2) Number of adverts placed during year: 1500 radio, 45 print
- 3) Average amount of residential waste expressed in tons picked up per week: 400 tons
- 4) Average number of working garbage trucks available for work each week.: 12 number
- 5) Average amount of recycling materials expressed in tons picked up in a month: 100 tons
- 6) Amount of e-waste material expressed in tons picked up during the year: 40 tons
- 7) Average amount of materials expressed in loads received at airport dump per year: 20,000 loads
- 8) Number of scrapped vehicles received at airport dump during the year: 800 number.
- 9) Total amount of horticultural waste material expressed in loads delivered to Marsh Folly composting facility during year: 17,500 loads
- 10) Number of hot spots observed and treated at Marsh Folly during year; less than 10

- 11) Number of 20 foot containers of hazardous waste exported overseas during the year: 50 number.
12) Amount of asbestos expressed in tons received during the year: 50 tons

(iv) Main Functions:

The *Solid Waste Section* is responsible for the safe disposal of all household and commercial waste and recycling in Bermuda.

The *Solid Waste Section* collects garbage and recyclables from residents (excluding the cities of Hamilton and St. George's). Garbage is taken to the Tynes Bay Waste to Energy Facility and recyclables are taken to the Material Recovery Facility (MRF) for processing and either shipping abroad or use on island.

The *Solid Waste Section* is also responsible for the operation of the Airport facility where bulky metal waste is use for land fill.

The Section also has responsibility for the processing of special waste, both household amounts and commercially generated waste. The special waste is shipped off the island for reprocessing and/or disposal.

Composting the island's horticulture waste, some food waste and animal carcasses is also the responsibility of the Waste Management Section and this is done at the Marsh Folly composting facility.

The Section is also responsible for the public awareness of waste management issues and enforcement.

(v) Current Activities

Currently the handling of Bermuda's waste is divided between six interdependent facilities.

1. The Tynes Bay Waste to Energy Facility Incinerating 50,000 tons of municipal and commercial waste annually.
2. The Compost Facility (Former Pembroke Dump) receiving 16,000 tons of horticultural waste annually.
3. Materials Recovery Facility (Recycling Plant) The new eight million dollar facility designed to process 10 tons of cans and glass jars per hour. Also recycling vehicle lead acid batteries, e-waste and used air-conditioners.
4. Airport Waste Facility Receiving 800 of the islands automobiles, white goods and 20,000 loads of construction and demolition debris annually. Additionally supplements the processing of ash from the incinerator producing 10,000 tons of ash/concrete blocks annually.
5. Collections: Twice weekly residential garbage collection from households. Mondays and Thursdays in the West Sector (12 zones) and Tuesdays and Fridays in the East

Sector (12 zones) 23,000 tons collected annually

6. The Special Waste Section handles the receipt, collection and disposal of all other waste materials which cannot be handled through the aforementioned facilities. These waste materials can be both hazardous and non hazardous. These include oils, fuels, chemicals, and gases detergents, asbestos. etc. This section also assists the emergency services (Fire/rescue and Police) if needed.

(vi) Budget

The operational budget for 2015/16 is \$8,568,000. This is comprised as follows;

- Solid waste Management \$355,000
- Recycling \$168,000
- Airport Disposal Facility \$1,073,000
- Composting operations \$1,557,000
- Special / Hazardous waste \$1,083,000
- Collections \$4,332,000

The capital budget for 2015/16 is \$1,000,000. This is comprised as follows:

- Asbestos disposal \$1,000,000

Section D: Records and documents held [s5(1)d]

Structures

Project Designs (Plans & Calculations)
Contract Documents
Bridge and Dock inspections.

Highways

Project designs (calculations and plans)
Contract Documents
Traffic Counts
Highway asset records (partial)
Consents to excavate the highway (s11 Public Lands Act 1984)
Traffic restriction notices (Road Traffic Act 1947)

Electrical and Mechanical

Numbers and locations of Street lights
Project Designs (plans and calculations)
Contract Documents

Water and Sewage

Project designs (calculations and plans)
Contract Documents
Records of water Quality tests

Tynes Bay Waste to Energy Facility

Quantities of Garbage Delivered to the facility.

Quarry

Solid waste

Shipments for recyclables
E waste details
Types of batteries received.
Waste oil shipments
Asbestos received.

Section E: Administration (all public access) manuals [s5(1)e]

Structures

Manuals and Legislation Used:

The Bermuda Plan 2008 Planning Statement
Retaining Wall Design Criteria Ministry of Public Works.
Department for Transport Design Manual for Road and Bridges
Department for Transport Manual of Contract Documents for Highways Works
British Standards (various)
Canadian Highway Bridge Design Codes (Canadian Standards Associate)
Bermuda Residential Building Code.
Coastal Engineering Manual Department of the Army US Army Corps of Engineers
Hurricane waves and surges around Bermuda December 1991 HR Wallingford.
Coastal Protection and Development Planning Guidelines for Bermuda, Smith Warner
International November 2004.
Bermuda Coastal Erosion Vulnerability Assessment Final Report. Smith Warner November
2004.
Federation Internationale Des Ingenieurs-conseils (FIDIC) Conditions of Contract.
Institution of Civil Engineers (ICE) New Engineering Contract
Occupational Safety and Health Act 1982
Occupational Safety and Health Regulations 2009.

Highways

Manuals and Legislation Used:

The Bermuda Plan 2008 Planning Statement

Occupiers and Highway Authorities Liability Act 1978
Public Lands Act 1984
Road Traffic Act 1947
Traffic Signs Regulations 1973
Traffic Signs (Amendment) Regulations 1993
Private Roads (Improvement) Act 1969
Occupational Safety and health Act 1982
Occupational Safety and Health Regulations 2009
UK Department for Transport Design Manual for Road and Bridges
UK Department for Transport Manual of Contract Documents for Highways Works
UK Traffic Signs Manual (The Stationery Office)
Highways Safety Manual (American Association of State Highways and Transportation Officials)
UK The traffic Signs regulations and General directions 2002.
Federation Internationale Des Ingenieurs-conseils (FIDIC) Conditions of Contract.
Institution of Civil Engineers (ICE) New Engineering Contract

Electrical – Mechanical

Manuals and Legislation Used

Project designs (calculations and plans)
Contract Documents
NFPA Codes (including NEC Codes)
ANSI Codes
ASHRAE Codes and Energy Standards
American Society of Mechanical Engineers (ASME)
Fundamentals of Facilities Management
International Plumbing Code
International Mechanical Code
Bermuda Building Code
Bermuda Residential Building Code
Fire Protection Handbook
Sheet Metal & Air Conditioning Contractors National Association (SMACNA)
Bermuda Occupational Safety and Health Act 1982
Bermuda Waste and Litter Amendment Act 2011
Department of Works and Engineering Act 1984

Water & Sewage

Operating License from Environmental Protection for Septage receiving facility
Safety, Health and Environmental management system manuals
Water Resources Act (1975)
Water Resources Amendment Act (1998)
Public Health (Water Storage) Regulations 1951
Department of Works and Engineering Amendment Act 2006
Department of Works and Engineering Act 1984
Occupational Safety & Health Act 1982

Tynes Bay Waste to Energy Facility

Operating License from Environmental Protection
Safety, Health and Environmental management system manuals
Plant Equipment Operation and maintenance manuals
Plant operational procedures
Bermuda Pressure Vessel Legislation
Clean Air Act (1991).

Quarry

Clean Air Act 1991
Operating License from Environmental Protection
Motor Car Act 1951
Occupational Safety & Health Act 1982
Safety & Health Manual

Solid Waste

Operating Licenses from Environmental Protection
Construction and demolition policy

Section F: Decision-making documents [s5(1)f]

Procurement Guidelines, Financial Instructions

Section G: The Information officer [s5(1)g]

A request for access to a record to the Department of Works & Engineering must be made in writing to the following address;

Pete Havlicek
Chief Engineer.
Ministry of Public Works
Department of Works & Engineering
General Post Office Building
3rd Floor 56 Church Street
Hamilton HM12

In the absence of the Chief Engineer the following persons will be authorised to act as information officers in the following order.

- 1) Kirk Outerbridge Plant Manager Tynes Bay Waste to Energy Centre
- 2) Keith Masser Principal Highways Engineer.

In all circumstances a request for access to a record to the Department of Works & Engineering must be made in writing to the address given above.

The request must contain sufficient detail in order for the Ministry to identify what it is referring to. The Ministry of Public Works will acknowledge receipt of any request within five working days. If the request is valid, the record is accessible and does not contain any exempt information and the Department of Works & Engineering decides that the information is to be disclosed, a decision notice will be sent within six weeks of receiving the request.

Section H: Any Other Information [s5(1)h]

Fees and Charges

The fees in respect of access requests will be in accordance with regulations under the Public Access to Information Act 2010.

Head of Public Authority

Ms Marva Jane O'Brien
Permanent Secretary
Ministry of Public Works
General Post Office Building
3rd Floor 56 Church Street
Hamilton HM12

Section I: Any Other Information To be Provided? [s5(1)i]

Section J: Information Statement: Copies and Updates [s5(2,3,4,5)]

Every public authority shall update its information statement at least once a year, and make it available for inspection by the public at reasonable times by [s5(1-5), PATI Act]:

Date Information Statement was updated:

27 March 2015

Signed



Information Officer Department of Works & Engineering