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**Government of Saint Lucia**

**Department of Economic Development, Transport and Civil Aviation**



**Disaster Vulnerability Reduction Project**

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**TERMS OF REFERENCE**

**FOR CONSULTING SERVICES  
OF A**

**BIOMEDICAL ENGINEER  
FOR FINALISATION OF EQUIPMENT REQUIREMENTS AND  
SPECIFICATIONS FOR INSTALLATION FOR  
THE CONSTRUCTION OF HEALTH FACILITIES (DENNERY, SOUFRIERE  
AND MICOUD)**

**July 6, 2018  
NOOBJ November 15, 2018**

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## 1) Background

Saint Lucia is exposed to a range of natural hazards, particularly weather-related phenomena such as hurricanes, winds, storm surges, and heavy rainfalls which leads to flooding and landslides. In addition, climate change related impacts are expected to intensify precipitation patterns, thereby generating more extreme storms, hurricanes, floods and rises in sea-level. These extreme natural events can cause considerable destruction to the island's infrastructure, social and economic sectors as they typically devastate coastal and low lying areas, which are the areas where the majority of the island's population and main commercial activities are situated. Such disasters can impose exorbitant costs on the country's fragile economy and thus exacerbate poverty levels.

The Government of Saint Lucia (GOSL) has obtained assistance from the World Bank towards the financing of the Disaster Vulnerability Reduction Project (DVRP). The Disaster Vulnerability Reduction Project aims to measurably reduce the Country's vulnerability to natural hazards and climate change impacts, and includes various activities related to institutional strengthening and training as well as the execution of various civil works to improve the resilience, preparedness, and response capacity of Saint Lucia to natural hazards. One of the components of the Project is prevention and adaptation investments (rehabilitation of existing and construction of new infrastructures and new construction of disaster mitigation structures).

The need to design and equip medical facilities to ensure that they withstand and remain functional in the aftermath of those adverse conditions cannot be over emphasized. During and in the aftermath of disasters the need for effective medical healthcare delivery is of paramount importance in reducing loss of life and improving health outcomes. To this end, the Denney Polyclinic, Soufriere Hospital and the Micoud Wellness Centre are facilities that have been identified for construction under the DVRP.

While the DVRP is being implemented by the Department of Economic Development, Transport and Civil Aviation through the Project Coordination Unit (PCU) the Department of Health and Wellness, is the Beneficiary Agency and the Department of Infrastructure, Ports and Energy shall be the technical Implementation Agency responsible for coordinating and managing all civil works activities for the execution of the proposed works.

### Denney Polyclinic:

The contracts for works and supervision services were signed in February 2018. At the preliminary stage of supervision the Firm has sought clarification on design specifications contained in the signed works contract. Therefore, there is need to retain the services of the design consultant to provide the necessary clarification as required.

Micoud Wellness Centre and Soufriere Hospital - Contracts have been awarded for detailed designs which is ongoing.

## **2) Background**

### **– Dennery Polyclinic**

In 2005, the Department of Health and Wellness conducted a review of the health services delivery system, which included a focus on both the infrastructure and the services needs throughout the island. The resulting National Strategic Plan Summary document and the detailed technical documents Volume 4 and 5, outline how services are rationalized throughout the island network of services. The strategic plan aimed to increase access to an appropriate level of care along a continuum of services, and to ensure that no one is denied access to an essential package of services. The construction of the Dennery polyclinic will significantly improve patient access to healthcare services to the eastern region of the island. Improved access has a tremendous positive impact on the socio-economic outlook of the entire St Lucian population.

According to the results of the planning and rationalization exercise, the New Dennery Polyclinic was prioritized for construction. The preparation of detailed designs for bidding of the works was completed in 2016 and the procurement process for selection of a contractor for execution of the works was completed in November, 2017; with contract signature in February 2018.

### **– Micoud Health Centre**

The existing designs that were prepared in 2017/2018 for Micoud health Centre are intended to provide the content and background for the purpose of this consultancy.

In 2005, the Ministry of Health conducted a review of the health services delivery system, which included a focus on both the infrastructure and the services needs throughout the island. The resulting National Strategic Plan Summary document and the detailed technical documents Volume 4 and 5, outline how services are rationalized throughout the island network of services. The strategic plan aimed to increase access to an appropriate level of care along a continuum of services, and to ensure that no one is denied access to an essential package of services.

According to the results of the planning and rationalization exercise, Micoud Health Centre is categorized as a level four<sup>1</sup> facility, which represents the highest non-hospital referral facility in Region 6. This facility represents a comprehensive set of general and specialized services and consists of the full complement of preventive, treatment and diagnostic services delivered within an integrated, client centered environment. The facility is also supported by laboratory, and pharmacy services. The documents outlined below provide additional details on the role and function of the Micoud Health Centre. The facility supports five satellite health facilities consisting of level 1 and 2 facilities which provide a

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<sup>1</sup> See Appendix 2- Levels of Service Delivery

basic package of general services with visiting specialist services supported mainly by a visiting pharmacist.

### **Background – Soufriere Hospital**

The Soufriere Hospital built in 1946 is the main facility providing emergency care to the west of the island from Canaries to Choiseul. In 1985 the Kirby Lamontagne Wing was built, and in 2005 renovations was made to the wing to facilitate the Mental Ward. In 2010 minor renovations was also done to the hospital which included offices for Clinical Care as well as repair to the roof. The structure has a timber framed roof with galvanized sheets as well as concrete reinforced roof slabs. The original roof has a 900mm over hang however the portion of roof which was recently renovated has a 600mm over hang. The original building has 100mm thick solid concrete walls; however the new additions and renovation has 150mm thick concrete block walls.

The Building is a single storey unit with a basement to provide services for laundry and physiotherapy; these services are located towards the back of the building. The suspended floor level varies between 600mm to 2100mm. The hospital comprise of the following spaces;

- Doctor's Offices
- Female and Male Ward
- Children's Ward
- Maternity Ward
- Labour Room
- Casualty
- Pharmacy & Laboratory Services
- Dental Services
- Administration
- Nurses Quarters, Kitchen & Laundry (*are currently condemned*)
- *Basement of the Building*
- Physiotherapy Room
- Laundry

In 2005, the Ministry of Health conducted a review of the health services delivery system, which included a focus on both the infrastructure and the services needs throughout the island. The resulting National Strategic Plan Summary document and the detailed technical documents Volume 4 and 5, outline how services are rationalized throughout the island network of services. The strategic plan aimed to increase access to an appropriate level of care along a continuum of services, and to ensure that no one is denied access to an essential package of services.

According to the results of the planning and rationalization exercise, Soufriere Hospital is categorized as a level four<sup>2</sup> facility, which represents the highest non-hospital referral

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<sup>2</sup> See Appendix 2- Levels of Service Delivery

facility in Region 6. This facility represents a comprehensive set of general and specialized services and consists of the full complement of preventive, treatment and diagnostic services delivered within an integrated, client centered environment. The facility is also supported by laboratory, and pharmacy services. The documents outlined below provide additional details on the role and function of the Soufriere hospital. The facility supports five satellite health facilities consisting of level 1 and 2 facilities which provide a basic package of general services with visiting specialist services supported mainly by a visiting pharmacist.

## **Vulnerability Assessment and Pre-Engineering Studies - Existing Site Soufriere Hospital**

The initial activity funded by the DVRP was a Vulnerability Assessment and Pre-Engineering Studies commissioned in January 2017. This Study was undertaken by Engineering Construction and Management Consulting Ltd (Saint Lucia) and included a) vulnerability assessment of the existing site and health facility, b) development of options. (*The Terms of Reference for the assignment is contained in Annex 1*). The Study was completed in October 2018. In developing the options, the Consultant was to use design considerations for the hospital to function as a Level 4 facility with Region 6.

The Consultant, ECMC, recommends that the health facility and associated services be relocated to an alternative site. The alternative site, selected by the Client, comprise of approximately 2.4 acres and is located at the Corner of Sir Arthur Lewis Street and the Diamond Road (Block 0231 B and Parcel 390). The lands proposed as the alternative site is private owned (Soufriere Estates owned by Du Boulay Holdings Ltd. Consistent with the recommendations of the Vulnerability Assessment and Pre-Engineering Studies the Government of Saint Lucia, Department of Economic Development, Transport and Civil Aviation seeks to engage Consulting services to prepare detailed designs for the construction of a Hospital at Soufriere (on the lands identified as Block 02331B and Parcel #390 and to provide the associated supervision services.

The lands identified for construction would trigger the World Bank OP procedures relating to land acquisition and therefore compensation needs to made prior to the construction of the facility. In addition, the Consultant recommends a construction period of eighteen (18) months.

The options designs presented by the Consultant is based on the National Strategic Plan prepared by the Department of Health which categorizes health services for Soufriere (Region 6) as a Level 4 Facility. The care services are comprehensive and includes general and specialized services. In addition, full complementary preventive, treatment and diagnostic services delivered within an integrated, client centered environment. The proposed facility should also be supported by laboratory and pharmacy services. The proposed facility will also support the existing five satellite health facilities offering level 1 and 2 services.

### **3) Objectives of the Assignment**

#### *General Objectives*

The Department of Economic Development Transport and Civil Aviation seeks to engage the services of a Biomedical Engineer to develop the plans for procurement of equipment, furniture and fittings critical for operations of the proposed Health Facilities and to provide support with the overall supervision of the works during the installation, testing, commissioning, monitoring and the development of a Medical Equipment Inventory and Asset Management Plan.

#### *Specific Objectives*

The specific objectives of the assignment require the Consultant to finalize the list and specification for all relevant medical equipment and furniture in accordance with the facilities final design and user needs. To provide supervision services during the equipment and furniture installation, testing, commissioning and monitoring period, to ensure compliance of the installation works to the manufacture and user specifications. To develop and prepare a Medical Equipment Inventory and Asset Management Plan for all relevant medical equipment and furniture that are installed at the proposed health facilities with the view to identify and establish the requisite tasks needed to properly maintain and manage these medical equipment and furniture, thereby ensuring that the new health facilities are able to function successfully to deliver effective health care services to clients.

### **4) Scope of Services**

#### *General Services`*

The Consultant shall perform all of the services hereafter described as expeditiously and with the highest professional skills and care to ensure timely completion of the works. During all stages of the service the Consultant shall make all efforts to maintain full coordination with the Client and the beneficiary agency to ensure a common understanding on the requirements of the assignment.

#### *Specific Scope of Services*

The consultancy shall include a) review and finalization of the list and specifications for all relevant medical equipment and furniture; b) supervision services during the equipment installation, testing, commissioning and monitoring period and c) the development and preparation of a medical equipment inventory and asset management plan. Accordingly, the Consultant shall be responsible for services as follows:

#### **Review and Planning Services:**

The Consultant shall review the design drawings and the usage / functionality level of the facility and accordingly finalize the list and prepare detailed specifications and costs estimates for all medical equipment and furniture. This should involve a room by room

loading of medical equipment and furniture distribution. The consultant shall recommend all necessary modifications to the final designs to facilitate the installation of all medical equipment and furniture.

**Supervision Services:**

The Consultant shall provide supervision services for the installation, testing, commissioning and monitoring of all medical equipment and furniture at the proposed health facilities.

**Maintenance Plan:**

The Consultant shall develop and prepare a ten (10) year Medical Equipment Inventory and Asset Management Plan for all relevant medical equipment and furniture at the proposed health facilities.

**5) General Responsibilities and Duties**

The Consultant will be required to provide consultancy services to the Department of Infrastructure, Ports and Energy for the supervision services during the equipment installation, testing and commissioning period and to develop and prepare a medical equipment inventory and asset management plan to ensure that the Polyclinic can deliver the intended services, particularly after the impacts of natural hazards with a view to strengthen disaster management capacity at the national level. This will require efficient supervision, quality checks monitoring and certification of the contracted works to ensure that the necessary actions are taken in a timely manner during the execution stages of the works.

**6) Specific Responsibilities and Duties**

- a) Coordinating, interacting and reporting at least weekly with the Client. Copies of coordination meetings, reports should also be forwarded to the PCU.
- b) Provide fulltime supervision services during medical equipment and furniture installation, testing and commissioning period.

***Review and Planning Services:***

Under the direct supervision of the Chief Engineer of the Department of Infrastructure, Ports and Energy, the Consultant will undertake a) a review of the design drawings; b)

assess the needs for medical equipment and furniture and plan for the procurement and installation for all medical equipment and furniture for the proposed health facilities, which shall include:

- a) Finalization of the list and specification for all medical equipment and furniture for the proposed health facilities in accordance to the established usage / functionality level of the facility.
- b) Review the approve construction drawings and make all the necessary recommendations to the Client to ensure;
  1. All pre-installation requirements (including spatial, electrical, mechanical, networking/data, etc.) for the medical equipment and furniture are identified and allocated for during the construction works.
  2. Seamless installation and proper functionality of all medical equipment and furniture.
- c) Review the contractors' approved work program and synchronize procurement and installation activities of all medical equipment and furniture accordingly.
- d) Organize all necessary consultations with appropriate agencies, authorities, the works supervisory consultant and the contractor on all matters related to the review and planning for all medical equipment and furniture.
- e) Assist the PCU in the preparation of bidding document and the evaluation of bids for the procurement of medical equipment and furniture.

***Supervision services:***

Under the direct supervision of the Chief Engineer of the Department of Infrastructure, Ports and Energy, the Consultant will undertake the supervision and certification of works:

- a) Carry out technical inspections and supervision of the all activities relating to the removal and the installation of all medical equipment and furniture which would ensure that the contractor remains obligated to the timely and qualitative implementation of the works.
- b) Prepare quality assurance plan in consultation with the supervising consultant and the contractor consistent with the conditions of the contracts as it relates to all medical equipment and furniture. The Plan should be reviewed and approved by the technical unit within Department of Infrastructure, Ports and Energy.
- c) Certify all completed physical works related to medical equipment and furniture, ensuring quality and standards are maintained before acceptance by the Government of Saint Lucia - Department of Infrastructure, Ports and Energy.

- d) Represent the interest of the Government vis-à-vis the construction contract in any manner related to the installation, testing, commissioning and monitoring of medical equipment and furniture and the proper execution thereof.
- e) Organization of necessary consultations with appropriate agencies and authorities on all matters related to the installation, testing, commissioning and monitoring of all medical equipment and furniture.
- f) Examine any technical proposals related to medical equipment and furniture by the contractor and furnish the employer with the necessary technical advice and recommendation.
- g) Maintain a complete set of field records, timesheets, diary and minutes of site meetings. Attend site meetings as and when required, review contractor's work schedule and monthly progress report in accordance with the agreed quality assurance plan as it relates to the installation, testing, commissioning and monitoring of medical equipment and furniture.
- h) Verify periodic and final payment statements submitted by the contractor and certify the quality and quantity of completed work activities for payment after checking their consistency with the technical specifications, terms of contract and agreed quality assurance plan for all works related to medical equipment and furniture.
- i) Examine and make recommendations to the Department of Infrastructure, Ports and Energy on all claims from the Contractors including variations (scope, cost and time), extension of time, compensation for work and expenses or other matters of a similar nature for all works related to medical equipment and furniture.
- j) Review the breakdown of unit rates and justification submitted by the contractor for the unit price of work activities relating to work activities that are not included in the original contract (including variation orders), and make recommendations for the approval by the employer for all works related to medical equipment and furniture.
- k) Provide timely assistance and direction to the Contractors on all matters related to the interpretation of the Contract Documents, work performance and other matters related to contract compliance and progress of the project for all works related to medical equipment and furniture.
- l) Organize the supervision for all works related to medical equipment and furniture by engaging the necessary full time site personnel to ensure effective execution of the works.

- m) Inspect the safety aspects of the installation and temporary works to ensure that adequate measures have been taken to protect life and property.
- n) Preparation of progress reports and hold consultation with the employer on the progress for all works related to medical equipment and furniture.
- o) Participate in meetings of the management committee, which has oversight responsible for the works.
- p) Prepare and submit progress reports on the progress for all works related to medical equipment and furniture, the Contractors' performance, and the quality of works. The report should highlight problems or potential problems that may arise in connection with the works and make recommendations for possible solutions.
- q) Prepare and submit a final report on all completed works related to medical equipment and furniture, the Contractors' performance, the quality of works and the functional operation of the medical equipment and furniture. The report should highlight problems experienced in connection with the works and the recommended solutions employed.
- r) Monitor medical equipment and furniture performance post-installation and during the warranty period.
- s) Ensure all user and service manuals for all installed medical equipment are secured and provided to the client. Additionally, records of all modifications to original manufactures' installation instructions are to be properly documented and presented to the client.
- t) Certify practical completion and issue Completion Certification to the contractor for all works related to medical equipment and furniture.
- u) The Consultant shall facilitate the inspection of the substantially completed works related to medical equipment and furniture, by representatives of Department of Health and Wellness, Project Coordination Unit and Department of Infrastructure, Ports and Energy before the issuance of the Taking Over certificate.
- v) Perform all other tasks not specifically mentioned above but which are necessary and essential to successfully supervise and control all installation activities in accordance with the terms of the works contract.

***Medical Equipment Inventory and Asset Management Plan:***

Under the direct supervision of the Chief Engineer of the Department of Infrastructure, Ports and Energy, the Consultant shall develop and prepare a ten (10) year Medical

Equipment Inventory and Asset Management Plan for all relevant medical equipment and furniture at the proposed health facilities.

Provide On-the-job training to technical staff, to be identified by the Government of Saint Lucia, in the use of a Medical Equipment Inventory and Asset Management Plan particularly to establish the tasks needed to properly maintain and manage the facility's medical equipment and furniture. This plan should include:

- A descriptive title for each maintenance task to be performed
- A frequency assigned for performing of each task
- Assignment of a specific type of technician or workgroup and the number of technicians required to perform the task
- Equipment condition required for performance of the task (i.e. running or shut down)
- Type of Work – Preventive Maintenance (PM), Predictive Maintenance (PdM), Corrective Maintenance (CM), Situational Maintenance (SIT), etc
- Procedure number – Unique identifier for the task, or file name if linked to another document that gives the individual task instructions
- Special tools, materials and equipment required to perform the task
- Worker safety and prevention of workplace exposure to radiation hazard
- Waste handling, storage, and disposal for biomedical waste, non-anatomical waste, and other waste, in accordance with Saint Lucia regulations and best practice

The asset management plan should also provide the following additional planning and budgeting information:

- Annualized hours for performing the task
- Annualized hours for shut down of the equipment during performance of the task
- Annualized hours for performance of the task by technician.
- Human resources needed to effectively manage the medical equipment at the proposed health facilities.

### **Manpower Scheduling and Costs:**

A period of Eighteen (18) calendar months will be required for the construction of the Polyclinic. The key personnel required for review and planning, supervision and the development of an Inventory and Asset Management plan for all works related to medical equipment and furniture shall be the Team Leader (Biomedical Engineer).

Apart from the key personnel (Biomedical Engineer) the Consultant shall have the necessary supporting staff (administrative and technical) and shall ensure that the relevant specialist listed below be available throughout the period of engagement to perform a) the necessary review and planning exercise; b) to provide effective supervision, c) to provide timely advise and recommendations to the client, and d) to advise on instructions and approvals to be provided to the Contractor during the pre-installation and installation period for the successful completion of the assignment.

The Consultant shall make provision for services of approximately three (3) man-months during the review and planning period for the services.

The Consultant shall make provision for services of approximately thirteen (13) man-months during the construction/installation period and post-installation/monitoring period for the services. It is estimated that the consultant will require 3 man months as time input for services to develop the Medical Equipment Inventory and Asset Management Plan.

The consultancy services for the whole works are required for an estimated period of sixteen (16) man-months over a period of twenty four (24) months.

The Consultant shall be employed on a time based contract. Payments shall made on the basis of the real time spent and deliverables, therefore the consultant should take this into consideration when calculating cost estimates, list of personnel and schedule of rates for performing the services. The contract sum shall be established based on the understanding that it includes all of the consultants cost and profits including any taxes and obligations. Payments shall be made on the basis of a fixed monthly rate.

The Consultancy services will be financed under the Disaster Vulnerability Reduction Project and the contract shall be administered by the Department of Infrastructure, Ports and Energy (Technical Implementing Agency).

## **7) Deliverables**

The Consultant shall prepare and submit the following reports to the client:

### ***Review and Planning Services:***

#### **Inception Report:**

No later than one (1) month after commencement of the consultancy the Consultant shall submit a report on the analysis of the existing situation including but not limiting to the availability and condition of the medical equipment and furniture to be installed at facility, feedback and recommendations from the review of the approved construction drawings, and provide guidelines and structure for administering, monitoring and evaluating project progress and plan of cooperation and operation with the consultant for the supervision of the construction works contract.

***Finalized list of all medical equipment and furniture with specifications Report:***

No later than three (3) month after commencement of the consultancy the Consultant shall submit a report detailing the finalized list and specification for all medical equipment and furniture to be installed at the proposed health facilities.in accordance the usage / functionality level of the facility. This should involve a room by room loading/listing of medical equipment and furniture.

***Supervision Service – Medical Equipment and Furniture installation, testing, commissioning and monitoring period***

***Monthly Progress Reports***

The Monthly progress reports shall be submitted no later than one (1) week after the end of each month. It shall be brief and concise and provide means of closely monitoring project progress and forecasting installation costs and shall cover percentage completion of the proposed works, detail the progress of works including revised cost estimates (if any), and cash flow statements. Generally the report should include but not limited to the following:

- Main activities undertaken and events for the period and progress of activities of the contractor and supervision staff
- Monitoring and evaluation of project progress
- Quantity of works completed as the date thereof
- Observations on the progress of works, sharing what is actually taking place in the execution of the contract
- Photographic pictures
- Variation orders issued to date
- Payments received by the contractor and consultant, including project accounts balances as at the date there of
- Define achievements, setbacks, problems, shortages, impediments, and means of rectification
- Number of skilled and ordinary labourers and their attendance
- Minutes of site and progress meetings, including extra ordinary meetings
- Works schedules and duration

The consultant is expected to provide a statement in support of works certified based on claims submitted by the Contractor.

***Medical Equipment Inventory and Asset Management Plan Report:***

The Medical Equipment Inventory and Asset Management Plan Report shall be submitted within eight (8) weeks after Practical Completion of all works related to medical equipment and furniture. This report shall include the following, but is not limited to:

- A descriptive title for each maintenance task to be performed
- A frequency assigned for performing of each task
- Assignment of a specific type of technician or workgroup and the number of technicians required to perform the task
- Equipment condition required for performance of the task (i.e. running or shut down)
- Type of Work – Preventive Maintenance (PM), Predictive Maintenance (PdM), Corrective Maintenance (CM), Situational Maintenance (SIT), etc
- Procedure number – Unique identifier for the task, or file name if linked to another document that gives the individual task instructions
- Special tools, materials and equipment required to perform the task
- Annualized hours for performing the task
- Annualized hours for shut down of the equipment during performance of the task
- Annualized hours for performance of the task by technician.
- Human resources needed to effectively manage the medical equipment at the Dennery Polyclinic

#### Draft Final Report

The Final Report shall be submitted within four (4) weeks after Practical Completion of all works related to medical equipment and furniture. This report will detail the level of achievement made and provide an assessment of the contractors' performance under the contract. Generally the report should include all the points required in the interim report given above but not limited to the following:

- Project Description (purpose, scope and dimensions)
- Project data (historical data on contract, financial resources, etc)
- Monthly Certificates
- Claims. Variation Orders and Addenda
- Project Organisation
- Quality and time evaluation
- Major problems arisen and measures taken

- Quantity of works completed as the date thereof
- Photographic pictures
- Statement of Accounts Payments received by the contractor and consultant,
- Minutes of site and progress meetings, including extra ordinary meetings
- Conclusions and Recommendations

The client will take no longer than ten (10) days to review and provide feedback to the reports submitted by the Consultant.

### Project Completion Report

This report shall provide an appropriate update to the Draft Final Report to take into account any additional work event, recommendations and feedback from the client subsequent to the review of the draft final report. It should also include the final project accounts. The project completion report shall be submitted within one month of receipt of the client's comments on the draft final report.

- ❖ *All reports shall be submitted in English. All reports shall be submitted in the following format:*
  - *Editable soft copy – one (1)*
  - *Printed Hard Copy – two (2)*
  
- ❖ *All reports and documents relevant to the Consultant's services, computer programmers, etc. shall become the property of the Government of Saint Lucia.*

## **8) Duration of Services**

The consultancy is to be undertaken over a period of twenty four (24) months. The Consulting services for the review and planning period, will be carried out over a period - three (3) months. Consulting services for the supervision during the equipment installation, testing, commissioning and monitoring period and for the development and preparation of a ten (10) year Medical Equipment Inventory and Asset Management Plan, will be carried out over a period of twenty one (21) months.

## **9) Working Arrangements**

The consultant will be supervised by the Chief Engineer – Department of Infrastructure, Ports and Energy with technical support provided by the Project Engineer - (DVRP). The Chief Engineer will provide the necessary instructions to the Consultant consistent with

direction provided by the Department of Health and Wellness and DVRP Project Engineers.

***Client's Responsibility***

- i) Ensure timely review of the reports submitted by the consultant and within the stipulated duration stated in the Terms of Reference.
- ii) Initiate the consultation and co-operation of other consultants and agencies required to provide support to the consultant for realization of the relevant aspects of the assignment.
- iii) Facilitate access to the site for effective delivery of the assignment.
- iv) The PCU will be responsible for the circulation of all reports.

***Consultant Responsibility***

- i) The Consultant shall submit at the outset the expected outputs, as well as ensure their timely submission to the Client for review.
- ii) Be responsible for the supervision of its technical staff including providing all office space, equipment, materials, accommodation, office requirements and transportation.
- iii) Shall engage the appropriate qualified and experienced technical and administrative staff and other resources necessary to undertake the services.
- iv) The Consultant shall execute the services in accordance with the laws, customs and practices of Saint Lucia and use the appropriate international standards for carrying out the services.

**10) Qualification Requirements and Evaluation Performance Criteria**

**The minimum required qualifications and experience of the Consultant are:**

Interested Consultant should have the following key staff with the requisite minimum qualifications and skills, and specific professional experiences listed below for undertaking the assignment.

V

<b>WORK TEAM MINIMUM REQUIREMENTS</b>
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POSITIONS	QUALIFICATIONS AND SKILLS	SPECIFIC EXPERIENCE
Team Leader (Biomedical Engineer)	At least Bachelor's level or equivalent in Medical Equipment Physics or Biomedical Engineering or related Hospital Equipment technical discipline.	<ul style="list-style-type: none"> <li>• The consultant must demonstrate expertise and experience in hospital equipment assessments.</li> <li>• Previous working experience in developing countries on similar assignments, preferably in the Caribbean would be highly desirable.</li> <li>• Must have at least 10 years of experience proven extensive experience and up-to-date knowledge on technical specifications and operation of advanced imaging, radiology and diagnostic hospital medical equipment, with state of the art medical technologies</li> <li>• The consultant must have at least 10 years of experience in the supervision of installation, assessment of installation, evaluation of operation, and training of hospital equipment of a similar scale, complexity and technology to the services requested in the present Terms of Reference.</li> </ul>

Through this consultancy, it is expected that the works will be completed within the stipulated timeframe, cost and approved scope. Therefore, the services of the Consultant will be evaluated on the following:

- Efficiency in submission of reports
- Effective oral and written communication
- Tasks are completed with the agreed timeframe
- A high level of accuracy in preparation of documents

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The ability to meet deadlines