1. PROJECT INFORMATION

1.1 Background

The National Insurance Services (NIS) of St. Vincent and the Grenadines and General Employees Co-Operative Credit Union Limited (GECCU) have embarked on a major land development project.

The two (2) organizations have entered into a joint venture arrangement and are in the process of engaging the services of a Consultant who in-turn will have a team of professionals (e.g. Civil/Structural Engineer, Road Engineer, Quantity Surveyor and Land Surveyor) and specialists/analyst (e.g. Soil/Geotechnical, Hydrological, Ecological, Environmental and Archeological) from various disciplines to provide engineering drawings, designs and specifications for the projects. Currently the project is at Planning (Design) and Engineering (Specification) phase.

1.2. Scope of the Project

The site consists of 57.199 acres (2,491,588.44 sq. ft) of freehold lands, which will be sub-divided into parcels of land for a mixed residential and small commercial development.

The land developers require the provision of horizontal infrastructure such as potable water, electricity, public amenity space (i.e. recreational facility, hike/bike trails), drainage (i.e. wastewater and storm-water drains, inlets and catch basins and culverts), roads (i.e. pavement, lay bys, shoulders, curbs and gutters), bridges (i.e. abutment, anchorage, deck and span), land slippage/slope protection and traffic control (pavement markers, signage, barriers and guardrails).

1.3 Project Location

The lands for development are located at Peter’s Hope, situated in the parish of St. Patrick on mainland St. Vincent. The site area is located on the western coastline (i.e. leeward coast) and is approximately nine and a half miles from capital Kingstown.

The property is situated to the north of the Peters Hope Housing Scheme and immediately above and behind the Central Leeward (formerly Barrouallie) Secondary School. To the north is a small settlement and to the south is Mt. Wynne, an undeveloped settlement.
1.4 Project Duration

The assignment is expected to last for a period of thirty six (36) months. This will be subject to annual review.

1.5 Project Team Organization

The land developers established a joint working team, which is called the NIS/GECCU Peter’s Hope Land Development Project Steering Committee, herein referred to as the Project Steering Committee.

The Project Steering Committee consists of people with various backgrounds from within the NIS/GECCU respectively. The Project Steering Committee members still have their own responsibilities within their work areas, hence are NOT fully dedicated to the activities related to the land development project.

The Project Manager will report directly to the Project Steering Committee.

2. OBJECTIVES OF THE ASSIGNMENT

The objectives of the assignment are to provide technical services.

2.1 To provide management oversight for all phases of the project and oversee the completion of all construction in accordance with the engineer’s design, drawings and specifications together with the prevailing standards, code of practice and regulations.

2.2 To provide management oversight for ensuring compliance with quality standards. The responsibilities span a broad spectrum, covering all the areas of project management, including, but not limited to: Cost Management, Time Management, Quality Management, Contract Administration and Safety Management.

2.3 To provide management oversight for smooth organization, implementation and completion of the projects, within the approved budget and time to the satisfaction of the Client.
3. RESPONSIBILITIES

3.1 Project Manager

The Project Manager oversees the planning, implementation and tracking of specific project activities which have a beginning, an end and specified deliverables.

Primary Duties and Responsibilities
The Project Manager performs a wide range of duties which include but are not limited to the following:

**Implement the project**
- Execute the project according to the project plan
- Develop forms and records to document project activities
- Set up files to ensure that all project information is appropriately documented and secured
- Monitor the progress of the project and make adjustments as necessary to ensure the successful completion of the project
- Establish a communication schedule to update stakeholders including appropriate staff in the organization on the progress of the project
- Review the quality of the work completed with the project team on a regular basis to ensure that it meets the project standards

**Control the project**
- Write reports on the project for the Client
- Communicate with Client as outlined in funding agreements
- Monitor, review and approve all budgeted project expenditures
- Monitor cash flow projections and report actual cash flow and variance to the Client on a regular basis
- Manage all project funds according to established accounting policies and procedures
- Ensure that all financial records for the project are up to date
- Prepare financial reports and supporting documentation for Client as outlined in funding agreements

**Evaluate the project**
- Ensure that the project deliverables are on time, within budget and at the required level of quality
- Evaluate the outcomes of the project as established during the planning phase

3.2. Client – National Insurance Services and General Employees Co-Operative Credit Union

The Client will make existing documentations (e.g. reports, analyses, investigations, photographs, maps, plans, drawings, designs, specifications and completed works) available.
4. SCOPE OF SERVICE

STANDARD SERVICES
Here under is the detailed description of standard services (activities and functions) inherent in delivering professional Construction Project Management (CPM) services.

The Project Manager shall perform standard services under the following project stages:

<table>
<thead>
<tr>
<th>Project Stages</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Design Development</td>
</tr>
<tr>
<td>2</td>
<td>Procurement and Documentation</td>
</tr>
<tr>
<td>3</td>
<td>Construction Management and Documentation</td>
</tr>
<tr>
<td>4</td>
<td>Project Close Out</td>
</tr>
</tbody>
</table>

4.1. STAGE 1 - DESIGN DEVELOPMENT

**Definition**
Manage, co-ordinate and integrate the detailed design development process within the project scope, time, cost and quality parameters

**Standard Services**

4.1.1. Assist the Client with the contract signing between the Engineering Consultant Services firm and the Client;

4.1.2. Establish and co-ordinate the formal and informal communication structure, processes and procedures for the design development of the project;

4.1.3. Prepare, co-ordinate and agree a detailed Design and Documentation Programme, based on an updated Indicative Construction Programme, with the Engineering Consultant Services firm;

4.1.4. Manage, co-ordinate and integrate the design by the Engineering Consultant Services firm in a sequence to suit the project design, documentation programme and quality requirements;

4.1.5. Conduct and record the appropriate planning, co-ordination and management meetings;

4.1.6. Facilitate any input for the design by the Engineering Consultant Services firm on constructability;
4.1.7. Manage and monitor the timely submission by the Engineering Consultant Services firm of all engineering designs, plans and documentation;

4.1.8. Monitor the timely submission by the Engineering Consultant Services firm to obtain the necessary statutory approvals;

4.1.9. Facilitate the information flow between the Engineering Consultant Services firm and the Client;

4.1.10. Facilitate the preparation of cost estimates budgets, and monitor cost reports;

4.1.11. Administer the cost control process to ensure progressive design compliance with approved budget, including necessary design reviews to achieve budget compliance;

4.1.12. Facilitate and monitor the timely co-ordination of the technical design by the Engineering Consultant Services firm;

4.1.13. Facilitate the Client’s approval of all Stage 3 documentation.

Project Management Deliverables
   (i) Report on signed Engineering Consultant Services firm & Client Contract Agreement
   (ii) Report on Detailed Engineering Design & Documentation Programme
   (iii) Report on Updated Indicative Construction Programme
   (iv) Record of all meetings
   (v) Approval by Client to proceed to Stage 2

4.2. STAGE 2 - TENDER DOCUMENTATION AND PROCUREMENT

<table>
<thead>
<tr>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>The process of establishing and implementing procurement strategies and procedures, including the preparation of necessary documentation, for effective and timely execution of the project.</td>
</tr>
</tbody>
</table>

Standard Services

4.2.1. Select, recommend and agree the procurement strategy for contractors, subcontractors and suppliers with the Client and the Engineering Consultant Services firm.

4.2.2. Prepare and agree the Project Procurement Programme.
4.2.3. Co-ordinate and monitor the preparation of the tender documentation by the Engineering Consultant Services firm in accordance with the Project Procurement Programme.

4.2.4. Monitor the tender process conducted by the Engineering Consultant Services firm in accordance with agreed procedures, including calling for tenders, adjudication of tenders, and recommendation of appropriate contractors for approval by the Client;

4.2.5. Advise the Client, in conjunction with the Engineering Consultant Services firm on the appropriate insurances required for the implementation of the project by the Contractor(s);

4.2.6. Administer the reconciliation of the tender prices with the project budget;

4.2.7. Establish the format and procedures for monitoring and control of the cost of the works;

4.2.8. Facilitate Client approval of the tender recommendation(s).

Project Management Deliverables
   (i) Prepare and present monthly Report on:
      (a) Contractors, subcontractors, and suppliers activities
      (b) Engineering Consultant Services firm activities
      (c) Project Procurement Programme
      (d) Project Tender Conditions
      (e) Project Contract Conditions
   (ii) Record of all meetings
   (iii) Report on Tender recommendation(s) for approval by Client
   (iv) Report to Client on approval to proceed to Stage 3

4.3. STAGE 3 - CONSTRUCTION DOCUMENTATION AND MANAGEMENT

<table>
<thead>
<tr>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>The management and administration of the construction contracts and processes, including the preparation and co-ordination of the necessary documentation to facilitate effective execution of the works</td>
</tr>
</tbody>
</table>

**Standard Services**

4.3.1. Review the Engineering Consultant Services firm detailed engineering designs prior to mobilization of civil works, with emphasis on the geotechnical investigations, culverts, pavement, other structural designs and specifications;

4.3.2. The Project Manager shall prepare a report where his concurrence with the
designs is stated and/or modifications are proposed to achieve greater economy, safety, reliability, and/or durability;

4.3.3. Review the appointment by the Engineering Consultant Services firm of contractor(s) on behalf of the Client including the finalization of all agreements;

4.3.4. Monitor the instructions by the Engineering Consultant Services firm to the contractor(s) on behalf of the Client;

4.3.5. Monitor and review all contract documentation approved by the Engineering Consultant Services firm and provided to the contractor, subcontractors, and suppliers for compliance with all of the contract requirements;

4.3.6. Monitor the ongoing projects insurance requirements;

4.3.7. Monitor the handover of the site to the Contractor;

4.3.8. Establish and co-ordinate the formal and informal communication structure and procedures for the construction process;

4.3.9. Record and report on site meetings conducted;

4.3.10. Monitor and review the preparation of the Contract Programme and Method Statement by the Contractor, approved by the Engineering Consultant Services firm;

4.3.11. Regularly monitor the performance of the Contractor against the Contract Programme and Method Statement;

4.3.12. Report on any review and/or adjudication circumstances and entitlements that may arise from any changes required to the Contract Programme and Method Statement;

4.3.13. Monitor the preparation of the Contractor’s Environmental Management Plan;

4.3.14. Monitor the auditing of the Contractor’s Environmental Management Plan;

4.3.15. Monitor the compliance by the Contractor(s) on the Contractor’s Environmental Management Plan and monitor the issue of notices to the Contractor advising of any non-compliance with environmental mitigation measures, as set out in the contract documents;

4.3.16. Establish the construction information distribution procedures;
4.3.17. Agree and monitor the Construction Documentation Schedule for timely delivery of required information by the Engineering Consultant Services firm to and from the contractor(s);

4.3.18. Review all working drawings prepared by Engineering Consultant Services firm and provide written confirmation to the Client indicating the acceptance of ownership of the drawings;

4.3.19. Establish efficient procedures for verifying contractor performance, reporting progress and problems in a timely manner, including quality control reports and quantity survey records;

4.3.20. Establish effective procedures for monitoring and controlling cost variations, including, but not limited to requests for variation or change orders, requests for time extension, and contractor’s claims and invoices;

4.3.21. Agree the quality assurance procedures and monitor the implementation thereof by the Engineering Consultant Services firm and contractors;

4.3.22. Monitor and review, all necessary testing and commissioning by the Engineering Consultant Services firm and contractors, including but not limited to: sample measurements of any work that is about to be covered or put out of view before permanent work is placed thereon, inspect and test all materials and works to ensure compliance with specifications, and inspection of the contractor’s construction equipment to ensure that they are adequate and in accordance with the terms and conditions specified in the contract for the Works;

4.3.23. Monitor and review the approved progress report (Certificate) and certify monthly progress payments;

4.3.24. Monitor and review, monthly cost reports;

4.3.25. Monitor and review, any adjudicated contractual claims;

4.3.26. Prepare a monthly project report for submission to the Client, which must include, but not limited to: the Contractor’s Report, Contractual Claims, Engineering Consultant Services firm’s Report, Cost Variation and/or Extension of Time Report, Progress Payment Certificate and Project Manager’s Project Progress Report.

4.3.27. Monitor long lead items and off-site production by the contractors and suppliers;

4.3.28. Facilitate and monitor the issue of Works Completion Lists and the Certificate of Work Completion, after certified payments for the Works are carried out against the relevant bill of quantities along with the issue of Interim Payment Certificates and Final Payment Certificate, as required under the civil works contract;
4.3.29. Co-ordinate and monitor the preparation, and issue of the Works Completion List by the Engineering Consultant Services firm to the contractors;

4.3.30. Facilitate and co-ordinate adequate access with the Engineering Consultant Services firm for the rectification of defects by the Contractor(s);

4.3.31. Monitor the Engineering Consultant Services firm achieved Works Completion of the defect items by execution of the Contractor(s);

Project Management Deliverables
(i) Report on signed Contractor(s) Agreements
(ii) Report on agreed Contract Programme
(iii) Report on adjudication and award of contractual claims
(iv) Report on Construction Documentation Schedule
(v) Report on Cost Variations and/or Extension of Time
(vi) Report on monthly Progress Payment Certificates
(vii) Report on monthly Project Progress Reports
(viii) Record of all meetings
(ix) Report on Certificates of Work Completion

4.4. STAGE 4 - PROJECT CLOSE OUT

<table>
<thead>
<tr>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>The process of managing and administering the project closeout, including preparation and co-ordination of the necessary documentation to facilitate the effective operation of the project.</td>
</tr>
</tbody>
</table>

**Standard Services**

4.4.1. Monitor and review the issuance of the Works Completion Certificate;

4.4.2. Manage, co-ordinate and expedite the preparation by the design consultants of all ‘as-built’ drawings and design documentation;

4.4.3. Manage and expedite the procurement of all operating and maintenance manuals as well as all warranties and guarantees;

4.4.4. Manage and expedite the procurement of all statutory compliance certificates and documentation;

4.4.5. Manage the finalization of the Health and Safety File for submission to the Client;

4.4.6. Co-ordinate, monitor and manage the rectification of defects during the Defects Liability Period;
4.6.7. Manage, co-ordinate and expedite the preparation and agreement of the final account with the Engineering Consultant Services firm and Contractor(s);

4.4.8. Co-ordinate, monitor and review the issuance of the Final Completion Defects list and Certificate of Final Completion;


Project Management Deliverables
   (i) Works Completion Certificate
   (ii) Certificate of Final Completion
   (iii) Record of all meetings
   (iv) Project closeout report
APPENDIX I

Consultant – Engineering Service Firm
The Consultant is to direct a team of professionals (i.e. Civil Engineer, Structural Engineer, Road Pavement & Material Engineer, Soil/Geotechnical Engineer, Quality Control Specialist, Environmental Specialist, Quantity Surveyor and Land Surveyor) in the design, planning, coordinating, safety and construction work in accordance with contract documents, design specifications, schedule and budget.

Primary Duties and Responsibilities
The design, management and supervision of the civil contract works extends across a wide range of activities. The works will include, but are not limited to:

1) Design review – assess existing engineering designs and specifications for full compliance with international road-civil engineering standards and for the achievement of high quality construction work;
2) General Project Management – preparation of a project management document, which will include general provisions, reporting and communication procedures, supervision procedures, payment procedures, project risk mitigation procedures, financial reporting procedures and issuing of certificates;
3) Starting the Works – Prior to the Contractor's starting any work at the Site, the Consultants will verify that the Contractor has provided evidence to the Client that he has effected all insurances and indemnifications required under the Contract;
4) Program Management – review and approve the Contractor’s Programme, cash-flow estimate of payment, preliminary actions and systematically check the progress of work;
5) Quality Assurance – approve the Contractor's quality assurance plan and audit process, sources of material, plant and equipment, working drawings, setting out of work, order test on material and completed works, order removal of improper materials and/or substandard work, issue instructions to Contractor;
6) Payment Procedures – Ascertain and determine by measurement the value of the works, check Contractor's invoices, claims and other statements, Preparation of Interim Payment Certificates;
7) Coordination with stakeholders – carry out a stakeholder (e.g. local authorities, landowners, public utility companies, the police, shareholders, government authorities, road users, the media and the general public) review at the start of the Contract, the Consultants will work with the Contractor to identify the responsible individuals and bodies for issues of all the required approvals, permits and licenses.
8) Minor design work – assess the design and the Contractor's work proposals critically to determine if any changes to either plans or specifications are desirable. The Consultant must obtain the specific approval from the Client before any variations instruction is issued that increases the Contract Price,
extends the time for completion, or in any substantial way changes the scope, character or quality of the works;

9) Variations – the Consultants will instruct the Contractor, in writing to make any necessary or desired variations of the form, quality or quantity of the works including: (i) increase or decrease of work quantities (except as resulting from quantities exceeding or being less than those stated in the Bill of Quantities but not arising from a variation); (ii) deletion of works; (iii) change of character or quality of works; (iv) execution of additional works; and (v) change of sequence or timing of works; the consultant will approve the amount of Extension of Time granted in consideration of: the amount and nature of extra or additional work; delays which were outside the Contractor’s control, including any delays, impediment or prevention by the Client; exceptional adverse climatic conditions; and other special circumstances; negotiations and recommend rates and prices for unscheduled work items;

10) Contract Administration – assist the Client to avoid, mitigate and resolve disputes and potential claims. Efforts will be focused on avoiding disputes, mitigating the impacts of disputes on the project budget and schedule, and providing clear documentation to assist in the resolution of disputes and claims;

11) Site Safety and Environmental Protection – monitor the Contractor’s for (i) compliance with all applicable safety regulations; (ii) taking care for the safety of all persons entitled to be on the site; (iii) using reasonable efforts to keep the Site and works clear of unnecessary obstruction; (iv) providing fencing, lighting, guarding and watching of the works when necessary; (v) providing any temporary works including roadways, footways, guards and fences for the use and protection of the public and landowners, to monitor the works to ensure mitigation measures identified by the Environmental Impact Assessment (EIA) are included in the design (such as planting, treatment of runoff water from the roads etc) as well as during construction (protection of watercourses during construction activities, dust suppression, limitation on transit routes for construction traffic, restrictions on noise etc.);

12) Communications – initiate Weekly and Monthly Progress Meetings with the Contractor at which the Client’s Project Manager will be encouraged to attend and participate. The purpose of the meetings will be: (i) to review progress to date; (ii) to discuss and resolve administrative and communication problems; (iii) to discuss and resolve technical issues or problems; (iv) to discuss and resolve contractual issues or problems; (v) to discuss plans to avoid potential delays and to mitigate any current or anticipated delays; (vi) for the Contractor to submit and the meeting to review the proposed program of works for the forthcoming period, including identification of any required actions by the Client or Consultants to facilitate such program; (vii) for the Contractor to submit any revisions to its cash flow estimates; and (viii) any other pertinent business;

13) Reporting and record keeping – develop a project Document Management System (DMS), which will focus on Contract documents, correspondence and construction drawings; Approval of Contractor’s drawings; Contractual issues;
Progress monitoring, physical and financial; Minutes of meetings; Audits; Design manuals, codes, standards, etc.; Legal issues; and As-built drawings, data and documents; also the Consultants will set up and maintain a project database. Reports are to be prepared in line with the requirements of these Terms of Reference; It is important that the reports anticipate problems and, where appropriate, suggest remedies as early as possible. In addition to regular reports there may be a need for the Consultants to submit special reports on particular site problems. A system will be set up whereby any administrative order, variation, instruction to the Contractor or clarification is assessed to determine if there is a requirement to change the drawings whenever there is a change or variation to the works;

14) Project performance – monitor project performance on based pre-set achievement indicators and preparation of relevant reports.

15) Completion of Works and Taking Over – prepare and issue Taking-Over Certificates based on the readiness of the works to be taken over without obstruction or impediment to the Client’s or the public use of the works. Prepare a list of works remaining to be completed and defective works to be rectified by the Contractor during the Defects Notification Period. Certify repayment to the Contractor of one half of the Retention Money applicable to the part of the works to which the Taking-Over Certificate pertains. Prepares an Interim Payment Certificates, after the Contractor submit a statement of completion showing: (i) the value of work done in accordance with the Contract Agreement and/or further sums considered to be due; (ii) an estimate of any other amounts which will become due. Outline the obligations of the Contractor during the Defects Liability Period, and contain a list of outstanding work items to be completed.

16) Management and Supervision during Defects Liability Period – enforce any obligation placed on the Contractor to remove from that part of the Site to which the Certificate relates all obstructions, surplus materials, plant, wreckage, rubbish and Temporary works. Conduct periodic inspections of the works during the Defects Notification Period to determine any work defects that might become apparent. Supervise the Contractor’s completion of any works outstanding and remedial works to rectify defects during the Defects Notification Period for each stage of the works. The Contract shall not be considered completed until a Performance Certificate is signed by the Consultants and delivered to the Client and copied to the Contractor, stating the date on which the Contractor shall have completed its obligations to complete the works and remedy any defects to the Consultants’ satisfaction.