



Solomon Islands Electricity Authority Headquarters Upgrade (Phase 2)

REQUEST FOR PROPOSAL - EPC

- Project Number SIEA-HQ-BUG-0914
- Rev 0.1 DRAFT FOR COMMENT
- October 2014

All responses must be in the format included at attachment A.

Delivery address is:

Tender box. Foyer of SIEA Ranandi.

Closing date is Friday 31st of October 2014 at 10:00AM

Any submissions received after that time or in the incorrect format

WILL NOT BE CONSIDERED



1. Introduction

1.1. Background

The Solomon Islands Electricity Authority (SIEA) has recently completed a major upgrade of our corporate offices housed in the Ranandi complex. The Authority is now seeking proposals from suitably qualified organizations for the upgrade of the remainder of the complex under an Engineer, Procure and Construct (EPC) contract. The remainder of the complex in this instance consists of the following key areas;

Internal to the main building, main areas of focus are the:

- Relocation and upgrading of the distribution departments workshop facilities
- Relocation and upgrading of the stores warehouse and office space
- Extension of the mezzanine level and the construction of additional office space and a large room to house a future SCADA control room

External to the main building

- Construction of adequate drainage for the site including drains, soakaways, additional guttering to the main building and the addition of a large capacity water tank
- Redesign of pedestrian & vehicle access and parking arrangements, this includes the SIEA cash power drive through window and paved areas.
- Improvements to the grounds including lighting, backup generator relocation, fencing upgrade, landscaping and green spaces.

1.2. Site

The site is the SIEA Headquarters facility in Ranandi. The site is our main office and houses corporate, technical, customer facing and support staff. In addition to the standard office hours of 8am to 5pm Monday to Friday we also operate cash power sales 65 hours per week and have on-call staff 24 hours a day. We will therefore require continuous access to the building throughout the duration of the building works and expect a staged approach to construction to insure minimal impact to normal operation.



1.3. Scope Overview

The SIEA wishes to improve the functionality of the complex through the use of good design and planning, to cater for both current and future requirements. This is a brown field site surrounding a working building. Respondents are encouraged to retain and incorporate as much of the existing infrastructure into the new design as is possible. Diagrams of current internal and external layouts are included at the appendix

The intention of this document is to provide sufficient information for suitably qualified and competent parties to develop a concept design and details of the required work and associated indicative costing for the phase two Ranandi redevelopment. This would include conducting a stakeholder review process to refine the concept design prior to taking the final design and requirements to market as a RFT ("**Works**").

With reference to the requirements detailed in this specification, the party awarded the contract (the "**Contractor**") will carry out the following:

To provide a detailed design that includes area allocated for the following:

- Distribution workshop. This includes tools and materials associated with transformers, poles, conductors and auxiliary components used in the electrical network.
- SIEA stores. In house logistics and materials for the support of the Authority. This includes bulky stores and materials, electrical and building materials, PPE, office supplies and sundry items.
- Mechanics workshop. This facility is to be re-established at Ranandi after its removal from our Lungga power station complex due to space constraints.
- Fleet parking. The SIEA operates approximately 70 vehicles in Honiara with a large percentage of these being work vehicles (Hilux + Land rover) plus 2x 8 Ton Hi Ab trucks, a 3 Ton truck, bucket trucks, forklifts, a small backhoe and several specialist trailers.

The existing items listed are to be retained and must be incorporated into the final design:

- Ranandi substation with a provision for the planned 2015 expansion project. (as detailed)
- The PV Solar installation and interconnecting cables. Structure to be unchanged, drainage, paving, road marking and landscaping are required.
- Current leaf house. Upgrade including reroofing and landscaping to be included in design.
- Existing back-up generator. To be relocated to the rear of the building.

Additional facilities:

- Carport style accommodation for trailers and excavator listed in Table 1.
- Permanent bays for ready use materials (sand, gravel, bulky goods such as poles/transformers) & rubbish



2. Glossary

In this Scope of Work the following definitions apply:

Term	Meaning
Approvals	Any certificates, licenses, consents, permits, approvals, authority or requirements of any Government Agency
Contract	Terms of agreement under which the Scope of Work is completed. The Scope of Work forms part of the Contract
Contractor	Qualified party awarded the Contract to carry out the Works
Equipment	The goods or equipment to be supplied by the Contractor including any variations provided for by the Contract
ITP	Inspection and Test Plan
MDR	Manufacture's Data Report
SIEA	Solomon Islands Electricity Authority (Owner)
Permit to Work	Authority notice - managed by SIEA and signed by all individuals involved in the work described in the permit – allowing access to work on SIEA equipment
Practical Completion	Acknowledgement by SIEA of completion of the Works as described in the Contract
Scope of Work	As provided in this document
SI	The International System of Units (Metric)
SIEA	Solomon Islands Electricity Authority
SIEA site representative	Authorized individual or individuals representing SIEA at Lungga during the Works. (SIEA)
Tenderer	Respondent to SIEA request for quotation on the Works
Works	The work to be carried out under the Contract



3. Existing Headquarters Building

The building is a steel frame construction on a concrete base. The approximate size is 120m long by 22m wide and it is clad with both timber and fibre panelling with steel cladding used on the roof. The first one third of the building has recently been renovated and is out of scope of this project.

3.1. Existing Office Facilities

The current office facilities are spread over two levels, the ground and first floors. The ground floor hosts the customer service and engineering departments while the first floor accommodates corporate services, finance and management. There is a requirement to interface the existing and the new sections of the building however these are clearly defined in both instances through a single doorway.

4. Scope of Works

4.1. Drainage Design

The main building has a roof area of approximately 2760m² and sits on the low side of a large flat block. The area is pronominally sand with a compacted Coronus crust at the surface. The site has poor natural drainage, a lack of storm water infrastructure in the surrounding area and is prone to minor flooring during heavy downfalls.

The proposal should incorporate all required components to deal with normal weather conditions in such a way as normal access to the building is not interrupted.

4.2. Traffic and ParkingAreas

There is a requirement to manage a mix of traffic through the complex including SIEA fleet, staff and customer vehicles.Details of the SIEA vehicle fleet are included at Table 1.

In order to address the issue of minor flooding at the site the use of permeable paving products for traffic, parking and pedestrian areas is encouraged.

TYPE	Number	Comment
Management cars	15	Parking under solar installation
Hilux	20	Parking in open area
Due Cab Land Rover	6	Short term parking required adjacent workshop
3 Ton truck	2	Parking required
8 Ton truck (with crane)	2	Currently undercover at Golf course end of the building
Bucket truck	2	1 or both parked inside the distribution workshop
Forklift	2	Parked inside stores area
Small excavator with backhoe	1	Dedicated storage required
Specialist trailers	2	Dedicated storage required

Table 1 SIEA Ranandi Based Vehicle Fleet



4.3. Workshop

The Distribution workshop houses machinery and ready use materials for the construction of power poles and other network components. Works include

- Welding, cutting, grinding, drilling of both metal and wood.
- The erection of friction fitted power poles and pole dressing.
- Set up and repair of transformers, ring mains and other items

The current workshop is poorly positioned in the building and not well set out. Our desire is to relocate the workshop to the end of the building to position the workshop well away from the office areas due to the noise, smoke and fire hazard associated with the workshop. The new workshop should also provide improved workflow, storage, lighting and OH&S standards.

4.4. Stores

The current stores area is dated and inefficient. We wish to relocate the main stores facility to the middle of the building and move the majority of staff to new accommodation in the expanded first floor office area. In order to reduce costs it is suggested that where possible the current walling, racks, shelves and other assets be relocated and reused rather than scrapped and replaced.

4.5. Mechanics Workshop

To support our fleet of vehicles we are looking to re-establish our mechanics workshop that was previously housed at Lungga. This will need to accommodate a vehicle hoist, machinery, tool storage and work bench space. A suitable space has been identified at the far end of the building (far end of the carport area) with the front part of this space retained for parking of the 8 Ton truck as per the current arrangements. This component of the project will need to be costed separately and its value for money evaluated independently.

4.6. Auxiliary Buildings and Structures

The leaf house is to be assessed as to its structural integrity and if found to be sound reroofed using local sago palm.

Guard houses are to be assessed for structural integrity and if found to be sound, should be brought up to a standard that enables them to blend into the new surroundings. (External refresh).

4.7. Landscaping & Green areas

The remainder of the grounds are to be suitably landscaped using native vegetation to integrate the components of the proposed design. The perimeter fencing is on the whole sound but will require new mesh and wire (barbed or razor) to be fitted. The use of screening plants and hedges to provide additional security and privacy is strongly encouraged.

4.8. Work Excluded

No work is to be undertaken in the area of the Ranandi substation. The existing substation is approximately 17.8 x 21.8m. It is planned that in 2015 the substation will be upgraded in size to 35.6 x 21.8m. Indicative location and size of the expanded substation is given at Appendix B.



4.9. Schedule

The Contractor must provide a proposed schedule of work as part of their proposal. As a minimum requirement the schedule shall include the dates and durations of the following tasks:

- Stake holder engagement process
- Completion of final design and preparation of RFT documentation;
- A hold point for the SIEA review of proposed works program;
- Indicative start dates for each major work component;
- Duration of the project including allowances for inclement weather;
- Payment schedule;
- Scheduled review; and
- Indicative completion date.

5. General requirements

5.1. Service Conditions

The finished works shall be capable of operating and performing under required service conditions and withstanding the worst environmental conditions likely to be encountered at the site within the design life of the works (see Section 4.2). The following table details the environmental conditions to be considered for the Works:

Ambient temperature range	24 to 34 degrees C
Max relative humidity	99 %
Rainfall range	66 to 187 mm/month
Maximum wind speed	200 km/h
Seismic design criteria	Magnitude 7
Corrosion protection	Costal aggressive

Table 2 Solomon Islands Service Conditions

5.2. Design Life

The works shall have an operating life of no less than ten years in the service conditions detailed in Section 4.1. The Contractor's design and installation work shall also be for a 10 year minimum operating life.

5.3. Isolation Requirements

SIEA's isolation and maintenance procedures (Permit to Work) shall be complied with in all aspects.



5.4. Exposure to Dangerous Environments

The Ranandi site includes a working substation and workshop, the contractor is to take all necessary precautions while on site to keep their personnel and their subcontractors safe from all site hazards.

Site hazards include but are not limited to:

- High voltage electrical lines and machinery both suspended and underground,
- Rotating machinery,
- Loud noise, high temperatures, hazardous and flammable materials.

5.5. Prohibited Materials

The Equipment shall not incorporate:

- Asbestos or asbestos-containing or derived materials;
- Lead base paints;
- Isocyanates;
- Polychlorinated Biphenyl's (PCB's);
- Chloro-Fluoro Carbons (CFC's) including Halo and Freon or other ozone depleting substances;
- Carcinogenic materials, including hydrazine;
- Toxic inhalation hazard chemicals;
- Cadmium plated nuts and bolts;
- Radiation materials; and
- Any other materials generally known in the construction industry at the time of use to be deleterious to health.
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5.6. Quality Assurance

After the award of the contract the Contractor shall submit a quality management plan with proposed inspection and test schedule. This shall, include the relevant standards to which they will conform.

The Contractor shall be fully responsible for ensuring and continuously monitoring that the quality procedures and practices are fully compatible with the requirements of their quality management plan.



6. Proposal Requirements

6.1. Site Inspection

A site inspection may be requested at any time during the proposal period by contacting the SIEA project manager Nik West at nik.west@sieacom.sb or +677 749 5809.

6.2. Evaluation Criteria

The key weighted criteria that will be assessed in selecting a contractor to carry out this work will be as follows:

- Price and value for money (40%)
- Concept design against stated requirements; (30%)
- Clarity of submitted documentation; (10%)
- Key professional staff qualifications and competence for the work; (10%)
- Work plan and schedule; (10%)

7. Project Management

7.1. Project Management

The Contractor is responsible for all project and construction management services required to manage the Works.

7.2. Communication

The Contractor shall nominate a Project Manager who will be the key point of contact for communication with SIEA representative. All contract related communication is to be directed to SIEA project manager Nik West at nik.west@sieacom.sb or +677 749 5809.

A record of all telephone conversations between the Contractor and either SIEA must be captured and forwarded by email to the appropriate parties.



7.3. Planning and reporting

The Contractor shall participate in a weekly progress meeting with SIEA Project Manager on site. This expected meeting duration is one hour. The contractor will capture the minutes of this meeting and distribute to relevant SIEA and Contractor representatives.

The Contractor is required to produce a written monthly progress report. The monthly progress report is to be delivered by the last week day of the month and should cover the following items at minimum:

- Progress of work to date
- Anticipated work plan for the following month
- Issues and Safety update – incidents, accidents, compliance to permit to work requirements
- Documentation status – submission of updated plans and certifications
- Design status
- Procurement status
- General schedule update

8. Safety and Environment Requirements

8.1. Safety requirements

Site safety control of the site will be held by SIEA who will have a safety representative on site at regular intervals. Work shall not begin if the SIEA site representative is not present. The Contractor is responsible for the safety of their personnel and subcontractors at all times. This includes transportation to and from the site. In particular the Contractor must ensure their personnel:

- Have access to and use the minimum Personal Protective Equipment (PPE) required by SIEA;
- Have access to and use any PPE that is generally used by a competent contractor to safely carry out specific tasks;
- Sign on to all relevant work permits; and
- Follow the permit to work requirements and all other reasonable direction from SIEA representatives.

All Contractor personnel are required to attend a site safety meeting before commencing work. This meeting will be led by SIEA. All Contractor personnel, suppliers or subcontractors arriving on site after the morning safety meeting must sign in and be briefed by the SIEA site representative.

8.2. Environmental requirements

The contractor shall comply with SIEA Lungga site environmental management requirements.



9. Housekeeping

9.1. Travel and Accommodation

The contractor is responsible for any travel and accommodation requirements of their personnel and sub-contractors.

9.2. Site amenities

SIEA will provide access to toilets on site for use by the Contractor's personnel. Power and water will be available on site. Power outlets are 240V, 10 A with the Australian / New Zealand standard plug type. The site has 24 hour security contractor in place and security lighting.

9.3. Disposal of materials

All excess soil or left over material is to be removed from site by the Contractor and or as directed by SIEA.

10. Commercial

10.1. Terms of agreement

The Tenderer is to provide a fixed price quote to carry out the works.

10.2. Pricing schedules

The Contractor is to complete and return the pricing schedule included in this document. All sections must be completed for the bid to be compliant.

Costs are to be provided in Solomon Island Dollars (SBD) before the addition of goods tax.



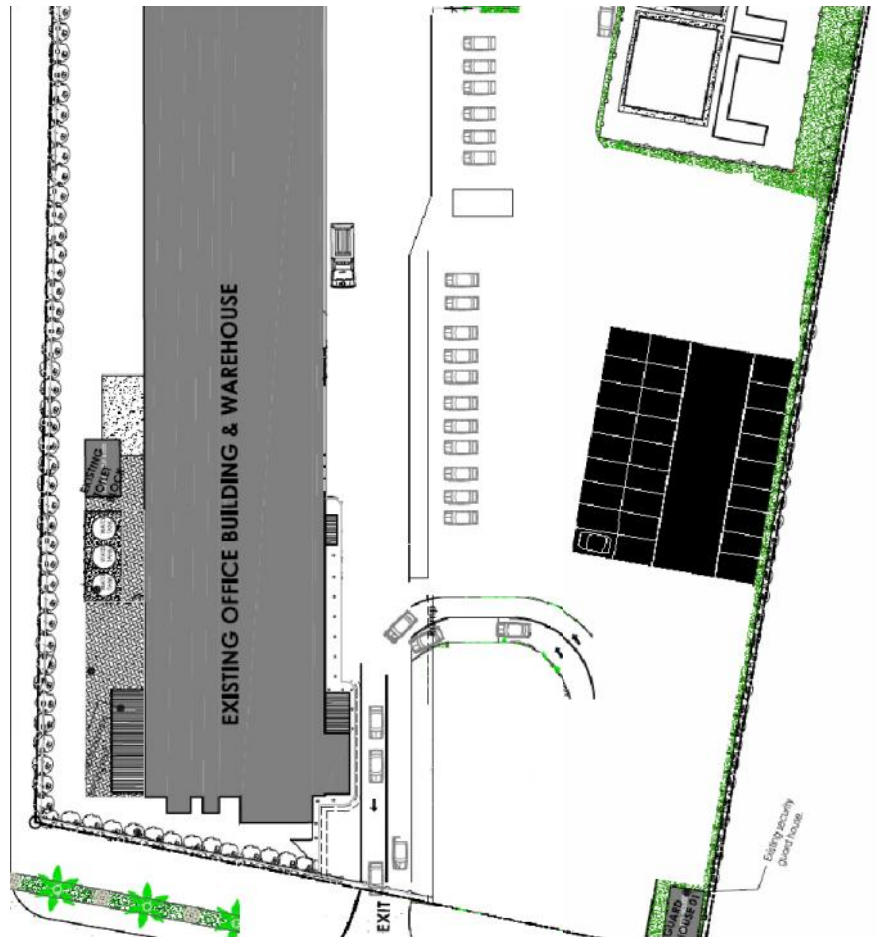
Appendix A Response matrix

PROJECT COSTING	
Detailed scope and final design	
Preparation of tender	
Project Management	
Indicative project pricing	

PROJECT TIMING	
Detailed scope and final design	
Preparation of tender	
Contract signature	
Indicative completion date	

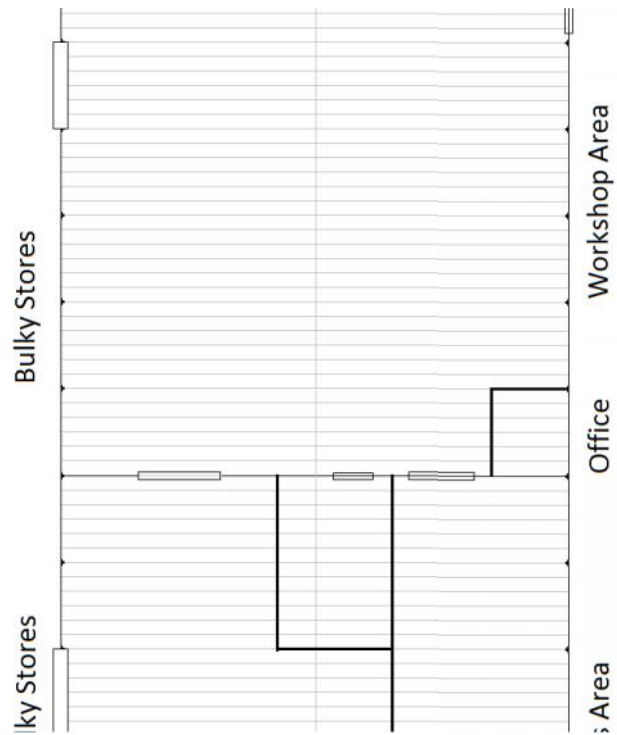


Appendix B Existing Complex





Appendix C Internal Layout





Appendix D New Internal Layout

