

**Tender for the Supply of Fine Sand for 33kV  
Cabling Works in Suva**



**MR 53/2015**

## PURPOSE AND DESCRIPTION OF THE TENDER

The Fiji Electricity Authority (FEA) is requesting proposal from Interested Contractors to Provide Fine Sand for 33kV Cabling Works between Cunningham Substation, Vatuwaqa Substation, Suva Substation, Hibiscus Park Substation, and Kinoya Substation all of which are located in the greater Suva Area.

### Eligibility/Selection Criteria of the Bidding Contractor

The Contractor shall have a good knowledge of the subject area. Contractor shall also be familiar with the contents of the Authority's "Safety Manual". The Contractor shall take all necessary precautions to prevent any damages to the FEA assets and private properties in the area. The Contractor shall visit offloading areas and accordingly offer to execute and complete the provision and carting of Fine Sand to areas identified by the FEA Representative. The contractor should be able to supply one or multiple truck loads to the site within 24hours of the FEA Representative having requested so.

The Bidder shall submit the names/contacts of utilities or projects where they have previously undertaken such work required by this Tender.

### 1. Contract Price:

The Contractor shall submit the lump sum VIP price in Fijian currency to carry out the following works. The Contractor shall submit his price for the **Supply of 6000m<sup>3</sup> of Fine Sand** to the site (**roadside** locations), which would be multiple locations along the cable route.

The Contractor shall submit his price for the **Supply of Six Thousand Cubic Meters (6000m<sup>3</sup>) of Fine Sand** to Project Site, Including Cartage, Delivery, etc the following manner.

<b>PRICE SCHEDULE TEMPLATE (To Be Filled and Submitted By Bidders)</b>		
Item No.	Pricing Schedule Description	\$
		(VIP – Lump Sum Price)
1.	<b>VIP Lump Sum Price</b> for the Supply of <b>6000m<sup>3</sup></b> (Cubic Meter) of Fine Sand to the site as per specification, including cartage and all other associated costs.	\$ (VIP – Lump Sum Price)
2.	<b>VIP Price Per Cubic Meter</b> of Fine Sand	\$ (VIP –Unit Price)
3.	Minimum Number of Cubic Meters of Fine Sand, which the Contractor is willing to dump at one location along the Project Site.	( <i>Example:</i> 5m <sup>3</sup> per dump to one location on the Project Site.)
4.	Maximum Number of Cubic Meters of Fine Sand, in ONE truck load which the Contractor can provide at one location along the Project Site.	( <i>Example:</i> 10m <sup>3</sup> or 20m <sup>3</sup> per truck load)  (This is contractors trucks' maximum loading Capability)
5.	Maximum Number of Truck Loads and Cubic Meter of Fine Sand the Contractor Can supply in one day.	( <i>Example:</i> 10 Truck loads per day And 200m <sup>3</sup> of Fine Sand per day)

These offloading areas along Multiple Road Side locations along the cable route will be shown to the Contractors by FEA Site Visit Representative.

## **2. Scope of Work**

1. The Contractor shall be fully responsible for the extracting, sieving and carting and unloading of Fine Sand and providing machinery for the same.
2. Loading and unloading of the Fine Sand will be the responsibility of the Contractor.
3. FEA representative will be showing interested Bidders offload locations at the site.
4. The Contractor shall be responsible to repair any damages to access road during the execution of the above work.
5. No royalty is payable by the FEA to any party for the extraction of Aggregate.
6. Any damage to the roads, vehicles and machines during the extraction and transportation process is entirely the Contractors risk and responsibility.
7. Under this Scope of Work, if required by the FEA, the Contractor must complete the whole project within 40 days from the date of the award of Tender and upon receiving the Purchase Order from FEA.
8. At FEA's discretion, the deliveries may be spread over the 12 months.
9. Prices shall be firm and valid till December 31<sup>st</sup>, 2015
10. Quantity specified is approximate indicative figure, and subject to increase or decrease.
11. Delivery shall be multi-staged and spread over 2015 calendar year.
12. FEA shall establish the successful bidder(s) as a preferred supplier and multiple small quantity purchase orders shall be furnished as deemed necessary and required by FEA. A lump sum order for 6000m<sup>3</sup> shall not be issued to the successful bidder(s).

**Interested Bidders are required to attend a compulsory site visit on Wednesday 8<sup>th</sup> April, 2015 at 1 pm. For site briefing and collection of tender documents Contractors are to assemble in FEA's Kinoya Depot, and report at the Security Check Point to notify the Transmission Unit on Extension #3557.**

**The designated FEA representative for the site visit shall be Mr Isaia who can be reached on the above extension, or on mobile number 9992072, if Required.**

**Attendance for the site visit will be recorded and Bids from Contractors who do not attend the site visit may not be considered.**

### **3. Registration & Other Information:**

The following information is required with the offer letter:

- 1 Registration details of the company.
- 2 Occupational Health & Safety Policy of the company.
- 3 Certificates and work experience of employees.
- 4 List of tools, equipment, machines and safety gears

**The tender bid may not be considered if the above information is not attached with the offer letter.**

The Contractor is to confirm in writing in their offer letter that they will submit the following information within five (5) days prior to the award of the contract:

- 1 Insurance cover for workers' health and safety.
- 2 Public liability cover.
- 3 Safety Management Plan

The award will be cancelled if the contractor is unable to provide the above information on time.

### **4. Contractor Personnel:**

The Contractor shall only employ Licensed Machinery Operators and they shall be available on site as and when required by the FEA in 24hours of the request.

## 5. Bidder Details

The Bidder shall provide all the necessary information specified in the tables below:

<b>General</b>
<b>The registered name of the Bidder:</b>
<b>Business address for correspondence:</b> <i>(Location, Street , Locality City, TIN, Country, Telephone, Facsimile, Email Other)</i>
<b>Contact name of the Authorised Person:</b>
<b>Contact's position:</b> <i>Contact addresses if different from above</i> <i>Locality City, TIN, Location, Street, Country, Telephone, Facsimile, Email, Web address</i>
<b>Business structure:</b>
<b>Include the organisations years of experience in this field and reputation in the market place.</b>
<b>Financial standing</b> (Information designed to give client confidence in the financial competence of the BIDDER.) Audited financial accounts for past three years shall be included in appendix.
<b>Company Profile(s)</b>

## 6. Other value added services.

The bidder is open to include any other information that may add value to services.

## 7. Tender Evaluation

After the bids are received, it will go through a normal tender evaluation process as per FEA's Tender Policy and Procedures. The successful and unsuccessful bidders will be advised of the outcome after completion of the Tender evaluation process.

# SPECIFICATION FOR BEDDING SAND USED FOR UNDERGROUND CABLING WORKS

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## Introduction

The requirement for bedding sand to conform to FEA standards ensures that no Health and Safety risk exists for workers and no damage will occur to cables being installed.

Contractors & Suppliers shall ensure that any bedding sands used on FEA works shall comply with these specifications. FEA reserves the right to request that suppliers and contractors provide evidence of compliance to the standards mentioned below.

## Specification for Bedding and Backfill Sand

Cable Bedding Sand shall be clean sand free of rocks, clay lumps, tree roots, building rubble, metal, glass, sharp objects, organic solvents or other deleterious material that is likely to damage cables or pose a health and safety risk to workers and shall comply with the following grading requirements in Table 1.

### **Tolerance on size:**

Percentage by weight passing AS1152 sieves in accordance with test method AS 1289.3.6.1.

Sieve Size (mm)	% passing by Weight
4.75	100
2.36	80/100
1.18	43/100
0.600	19/100
0.425	13/70
0.300	8/45
0.150	0/18
0.075	0/5

Table 1: Grading Requirements

The material would be described as “**Fine Grained**” Sieve Size 2.36 mm as per AS 1289.0 Sect 5(a) and have the following particle characteristics described in AS 1726.

“Well graded” or “Uniform” size having “rounded” or “sub-rounded” of equidimensional shape. Sands shall be a natural occurring type.

### **Note**

### **Not Permitted**

Manufactured sands such as quarry or crusher dust or by-product sands are **not acceptable**. Recycled ‘Glass Sand’ and other recycled crushed glass products are **not approved** as cable bedding materials.

## Mentioned Standards

### **AS1152: Specifications for Test Sieves**

This Standard specifies the requirements for test sieves made from woven wire cloth or from plates with square or round perforations for use in determining the size distribution of granular products in the particle size range 32 mm to 125 mm.

The aperture sizes and tolerances of this Standard apply to new test sieves.

For wire cloth test sieves, successive sizes of which are in a ratio of about 1:2, the R40/3 series of aperture sizes is proposed. For perforated plate test sieves, both the R40/3 and the R20 series are proposed, particularly to meet the requirements of the aggregate, coal and iron industries.

### **AS 1289.3.6.1-2009 Methods of testing soils for engineering purposes**

Soil classification tests - Determination of the particle size distribution of a soil - Standard method of analysis by sieving.

This Standard sets out the method for the quantitative determination by sieve analysis of the particle size distribution in a soil, down to the 75 µm sieve. By using this Method the combined silt and clay fraction can be obtained by difference. For particle sizes smaller than 75 µm the sedimentation method described in AS 1289.3.6.3, using a hydrometer to secure the necessary data, applies

### **AS1289.0 Section 5 SOIL GROUPS**

For the purposes of the methods in the AS 1289 series, soils are grouped as follows:

- (a) Fine-grained soils-soils containing not less than 80% passing a 2.36 mm AS 1152 sieve.
- (b) Medium-grained soils-soils containing not less than 80% passing a 19 mm AS 1152 sieve.
- (c) Coarse-grained soils-soils containing not less than 80% passing a 37.5 mm AS 1152 sieve.

Any soil shall be regarded as belonging to the finest-grained group appropriate under the definitions given above. This grouping is not a soil classification framework and soils should be described as detailed in AS 1726.

With the exception of a soil classifications test and some soil compaction and density tests, soils with a greater proportion of material than 20% retained on a 37.5 mm AS 1152 sieve, cannot be usefully examined by the methods in AS 1289.

### **AS1726 Geotechnical Site Investigation**

Australian Standards AS1726-1993 groups soils into clays (<0.002 mm), silts (0.002-0.075 mm), sands (0.075-2.36 mm), gravels (2.36-63 mm), cobbles (63-200mm) and boulders (>200 mm).

While the gravels, sands and silts are equi-dimensional (same order of magnitude in all three directions), clay particles are like plates or needles. Their surfaces are electrically charged due to a charge imbalance between the cations and anions within the atomic structure. The microstructure or microfabric of the clay depends on the mineralogy of the clay and the valence, concentration and the type of the cations present in the pore water.



## **Submission of Tenders**

**Two (2) hard copies** of the tender bids in sealed envelope shall be deposited in the tender box located at the Supply Chain Office at the FEA Head Office, 2 Marlow Street, Suva, Fiji.

**Courier charges for delivery of Tender Document must be paid by the bidders.**

**This tender closes at 4:00pm, on Wednesday 15<sup>th</sup> of April, 2015.**

Each tender shall be sealed in an envelope with:

The envelope bearing only the following marking:

**Tender- MR 53/2015 – Supply of Fine Sand for 33kV Cabling Works in Suva**

The Secretary, Tender Committee  
Fiji Electricity Authority

Supply Chain Office

Private Mail Bag, Suva

**It must also indicate the name and address of the tenderer on the reverse of the envelope.**

**All late tenders, unmarked Envelopes and envelopes without bidder's name and address on the reverse of the envelope. (Bids via e-mail or fax will not be considered).**

For further information or clarification please contact our Supply Chain Office on phone **(+679) 3224360 or (+679) 9991587.**