

**TENDER NO – MR 117/2016**

**PROJECT: SUPPLY TO TOKAIMALO PHASE II,  
STAGE 3.**

**SCHEME: RA10/13C**

Notes:

1. **Bidders to submit copies of FEA training records with current validity. Bids without this will be disqualified.**
2. Safety Plan to be included in tender bid.
3. Safety Report for 2015, 2016 to be submitted with tender.
4. List of Construction projects completed for FEA to be submitted with tender.
5. **Please pay specific attention to Clause 12 under PART C, Contractor Requirements:**  
**“Electric Power Lineman/ Line Mechanic/ Line Worker** – Contractor shall ensure that the Construction Team comprises a minimum of five personnel, at least one of whom shall be a certified Electric Power Lineman/ Line Mechanic/ Line Worker. The remaining team members shall comprise of registered Trainee Line Workers/ Trainee Linemen/ Trainee Line Mechanic working on the project on a full time basis. Records of these personnel shall be submitted with the bid.  
Contractors unable to submit positive proof (Certificates) that they meet this key requirement shall not be considered.
6. **Please pay specific attention to Clause 24 under PART C, Contractor Requirements:**  
**“Transportation of material** – The Contractor shall transport all materials from the FEA Depot (exact depot dependent on project location) to worksite, EXCEPT concrete poles, which may be picked up from Humes Depot, or otherwise as specified by FEA.”

## FIRST SCHEDULE

Contractor Name/Stamp

### A: SPECIAL CONDITIONS OF CONTRACT –

1. The works shall comprise the installation of power lines as per attached Drawing No. **A1-04-N85-093**.

Please enter unit rates and lump-sum prices in table below.

The total Contract sum for the works shall be \$\_\_\_\_\_VIP.

Power Line Construction				
SCHEME NO: RA10/13C – Supply to Tokaimalo Phase II, Rakiraki, Stage 3				
UNIT RATES:				
Item No.	Description	Quantity	Unit Rate	Total
1	Install concrete power pole [11.0m]	8		
2	Install concrete power pole [10.2m]	100		
3	Install 2 x LV conductor (route length – km)	2.044		
4	Install 2Ø HV conductor (route length – km)	2.159		
5	Install 3Ø HV conductor (route length – km)	4.75		
6	Install ground stay	79		
7	Install fly stay	1		
8	Install 1A dressing	15		
9	Install 2A dressing	4		
10	Install 3A dressing	18		
11	Install 4A dressing	3		
12	Install 11A dressing	8		
13	Install 12A dressing	7		
14	Install 12B dressing	16		
15	Install 13A dressing	7		
16	Install 13B dressing	11		
17	Install 14A dressing	8		
18	Install 14B dressing	18		
19	Install 18A dressing	1		
20	Install 18B dressing	21		
21	Install 5kVA pole mount transformer	3		
22	Install 16kVA pole mount transformer	2		
LUMP SUM COSTS:				
Item No.	Material Transport Cost	Total		



1	Transportation of materials from FEA Depot/Supplier to site	
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Item No.	Vegetation Management	Total
1	Vegetation Management as required	

**Note: All work on existing pole A including final connection to the existing grid shall be carried out by FEA.**

3. Work schedule for both stage 1 & 2

(a) Latest date for commencement of the works:	7 days from issue of LPO.
(b) Date of completion of Phase 1:	4 weeks from issue of LPO.
(c) Date of completion of Phase 2:	5 weeks from issue of LPO.
(d) Date of completion of Phase 3:	10 weeks from issue of LPO.
(e) Date of completion of Phase 4:	20 weeks from issue of LPO.
(f) Date of completion of Phase 5:	24 weeks from issue of LPO.
(g) Date of practical completion of the works:	26 weeks from issue of LPO.
(h) Date for final completion of the works:	26 weeks from issue of LPO.

4. For the purpose of supervising the contract on behalf of the Authority, references in the General Conditions to the Authority shall include the Unit Leader Distribution Western or his designated officer. The Project Manager shall be the Unit Leader Distribution Central, the Project Engineer shall be the Unit Leader Distribution Central, and the Project Supervisor shall be the Construction Coordinator Central.

5. Insurance (refer clause 14)

(a) Contractor's risk	\$500,000.
(b) Public Liability	\$500,000.
(c) Worker's Compensation	\$250,000.

The contractor shall indemnify FEA against any claims for liability, injuries, losses, damages etc that may arise during the execution of the works.

6. Liquidated and ascertained damages (refer clause 20):  
\$200 per day.

7. Defects Liability period (refer clause 21): 6 months

8. Retention Fund (refer clause 24)

(a) Limit of retention fund:	10% of contract sum
(b) Nature of retention fund:	cash
(c) Release of retention fund:	Subject to no pending defect, and as per FEA Finance Policy.

B: **SECOND SCHEDULE**

**Specification for Distribution Powerlines installation for Supply to Tokaimalo Phase II, Rakiraki, Stage 3, RA10/13C**

1.0 **General**

2. This specification covers the installation of Distribution Power lines for Supply to Tokaimalo Phase II, Rakiraki, Stage 3 as per attached Drawing No. A1-04-N85-093 under conditions of Contract attached herein.

2.0 **Scope of Work**

Work involved in this contract is broadly classified into five phases:

- i) Transportation of material
- ii) Vegetation clearing
- iii) Pole dressing, erection stays etc.
- iv) Stringing of conductors
- v) Installation of transformer, earthing etc

2.1 **Phase One – Transportation of Material**

The first phase comprises of the following works:

**Transportation and load of all material** to the jobsite from FEA Depot, except for concrete poles which shall be picked up from Humes Depot, and spalls which shall be picked from either the FEA Depot or SCIL Depot after instruction from FEA.

2.2 **Phase Two – Vegetation Clearing**

The second phase will involve the clearing of vegetation within 30m from the powerlines.

2.3 **Phase Three – Pole dressing, erection, stays etc.**

This phase of the contract involves the dressing and erection of poles, the installation of stays, Isolators etc.

2.4 **Phase Four – Stringing of conductors**

This phase involves the stringing of conductors to FEA standards, their binding, sagging etc.

2.5 **Phase Five – Installation of Transformer**

This phase involves the installation of transformer, earthing, dressing etc. to FEA standards.

Note : **Installation of ABS shall be carried out by FEA**

## C: CONTRACTOR REQUIREMENTS

General Below is a list of minimum requirements for overhead power line construction contractors:

- 1) **Bid** – Contractor shall submit a firm bid clearly listing unit costs for all items required. Vegetation clearing and Transportation costs shall be submitted as a lump sum.
- 2) **Site Visit** – Contractor shall participate in a site visit (date, time and location as advised by FEA) which is compulsory. Bids from companies who do not participate in the site visit shall be disqualified. Site visits outside the date/time/location specified by FEA will not be entertained.
- 3) **Standards** – All construction work shall be in compliance with FEA Standard Overhead Line Design & Construction Manual. If any instances occur whereby the requirements of this Manual cannot be complied with or where it is desired for a specific reason to depart from them, written permission must first be obtained from the FEA Unit Leader Distribution
- 4) **Materials** – To ensure quality control, all material for the project shall be supplied by FEA. Non-technical items may be supplied by the contractor only if it is specifically stated in the bid document.
- 5) **Safety Record** –bid shall include a brief report on safety performance over the last two years. The report shall include all incidents and accidents.
- 6) **First Aid** – each team on the jobsite must have a full First Aid Kit.
- 7) **Sub-contracting** – Subcontracting shall not be permitted, except where it is specifically stated by the contractor, and only upon approval by FEA. Subcontractors shall be required to fulfil all requirements as if they were the contractor.
- 8) **Scope of works** - Work involved in this contract is broadly classified into the following six phases, and progress payments shall be processed accordingly.
  - i) Vegetation Clearing;
  - ii) Transportation of material;
  - iii) Pole dressing and installation, including stays (scarfing – if specified in bid document);
  - iv) Stringing of conductors, installation of Air Break Switch, Isolators and line dropouts;
  - v) Installation of transformers, earthing, etc; and
  - vi) Labelling of poles.
- 9) **Contact** - Contractor shall have a valid postal address, office phone/fax/e-mail contact. The Principal shall be available by mobile phone at any time.
- 10) **Work Program** - Contractor shall submit a work program before start of project. This shall be part of the contract. Work shall commence within seven (7) days after receiving an official FEA Purchase Order.
- 11) **Ground condition** – Contractors are to note that sub-soil comprises soapstone and could contain other services such as Telecommunication, Water & Sewerage, etc.

- 12) **Electric Power Lineman/ Line Mechanic/ Line Worker** – Contractor shall ensure that the Construction Team comprises a minimum of five personnel, at least one of whom shall be a certified Electric Power Lineman/ Line Mechanic/ Line Worker. The remaining team members shall comprise of registered Trainee Line Workers/ Trainee Linemen/ Trainee Line Mechanic working on the project on a full time basis. Records of these personnel shall be submitted with the bid.
- 13) **Invoicing** – Contractor shall submit details of work completed to allow prompt approval of invoice.
- 14) **Safety Induction** - A Safety induction must be conducted before start of power line construction work.
- 15) **Instruction to Commence Work** - Contractor shall NOT commence work on site unless an “Instruction to Commence Work” has been received from the Project Manager.
- 16) **Signboards** - One signboard (6’X 4’) must be erected at the start of the works and one at the end of the works clearly stating :

<p><b>DANGER</b></p> <p><b>PROJECT:POWERLINE CONSTRUCTION – [Description of project]</b>  Driver please reduce speed.  Pedestrians please use other footpath/side of road</p> <p><b>CONTRACTOR:</b> .....  Emergency phone contact : _____</p> <p><b>POWER LINE CONSTRUCTION WORK.</b></p> <p><b>Please reduce speed.</b>  <b>Pedestrians please use other footpath/side of road.</b></p> <p><b>THANKS</b></p>
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The above must be facing traffic entering into the work area.

The reverse face of the signage must state “Work Ends. Thank You”.

- 17) **Accident Reporting** – All accidents and incidents shall be reported immediately to FEA using approved forms available in the FEA Safety Plan Template, or equivalent.
- 18) **Project Updates** - Contractor shall meet with FEA Project Manager, Project Engineer and Project Supervisor on a weekly basis to discuss project progress and bottlenecks. These meetings shall be minuted for records, and circulated to the appropriate stakeholders.
- 19) **Vegetation clearing** – Vegetation clearing shall be in accordance with FEA Vegetation Management Policy. Vegetation, which at a mature height will exceed 2m in height, must be removed. Vegetation within falling distance from the FEA lines must be removed. Vegetation debris shall be disposed off neatly at a location agreed to by FEA. No debris shall be left by the



roadside or blocking drains. Any debris not cleared promptly will be cleared from the site by FEA (or designated agent) at the expense of the contractor.

- 20) **Tidiness** – The Contractor shall maintain the worksite in a neat and tidy condition.
- 21) **Consent for Vegetation clearing** – no vegetation shall be cleared unless specific instruction to do so has been received from the Project Supervisor. Notwithstanding this, the contractor shall inform the tree owner that he is required to clear the tree, and shall obtain the owner's confirmation that he has given FEA his consent to remove the tree, prior to proceeding with cutting the tree.
- 22) **Fires** – No fires are to be lit at jobsites for the purpose of clearing vegetation or vegetation debris.
- 23) **Village Protocols** – the contractor shall comply with protocols involved in working on land owned by Indigenous Fijians to ensure smooth work progress.
- 24) **Transportation of material** – The Contractor shall transport all materials from the FEA Depot (exact depot dependent on project location) to worksite, EXCEPT concrete poles, which may be picked up from Humes Depot, or otherwise as specified by FEA.
- 25) **Security** - Contractor shall be responsible for the safekeeping of all materials at work site, and will be required to pay for damage and/or loss.
- 26) **Damage to property** – The Contractor shall ensure that there is no damage to roadways, footpaths, drains, water-courses, properties and other services. The Contractor shall make good to the satisfaction to the owner any damage caused by the contractor.
- 27) **Portable signboards** - Portable signboards must be placed as per the FEA Safety Manual along the roads, and must meet minimum FRA requirements.
- 28) **Traffic and Pedestrian Management** – The Contractor shall ensure that there is minimum disruption to the flow of traffic and pedestrian. FEA procedures on Traffic Control and Pedestrian Control shall be diligently exercised. Traffic and pedestrian management shall, as a minimum, meet Fiji Roads Authority standards.
- 29) **Worksite protection** - Bollards/cone must be placed at intervals not exceeding 10m. At critical locations the interval distances shall be reduced to 5m or lower (e.g. 1m) depending on the risks.
- 30) **Barricades** - Open trench/pole-hole is to be barricaded on a full time basis by the Contractor.
- 31) **Jobsite Safety Assessment** - Contractor to carry out Jobsite Safety Assessment daily, and as and when required, and submit these to FEA on a weekly basis.
- 32) **Credit of surplus material** – The contractor shall transport and credit all unused materials to the designated FEA Stores promptly after the completion of each job. Note that the award of new projects may be put on hold until material verification has been completed.
- 33) **Defects Rectification** – The contractor shall rectify all defects within seven (7) days as per the contract.

- 34) **Project completion** – The contractor shall complete work on time as per the contract.
- 35) **Project progress** – If the Contractor fails to proceed with the works with reasonable diligence or suspends the works or refuses to comply with the reasonable direction from FEA by reason of which the works are materially affected and any such default continues for a period of seven (7) days after the issue of written notice, FEA may itself call any other person/company/new contractor to complete the works at the Contractor's risk and expense.
- 36) **Insurance** – The Contractor will be required to possess valid insurance policies as shown below :

Policy type	Value
Workers Compensation	\$250,000
Public Liability	\$500,000
Contractors All Risk	\$500,000

- 37) **OHS Compliance** - To provide/submit evidence of OHS compliance from the Ministry of Labour
- 38) **Personal Protective Equipment** – Submit a list of personal protective equipment (PPE) available with the contractor.
- 39) **HSE Requirements** – The contractor's bid shall include all requirements from the FEA HSE Contractor Safety Management System. These will be evaluated by the FEA's HSE Unit. Bids with incomplete, unacceptable, or without the HSE requirements will not be considered for award. The Contractor must submit the following with their bid :
- Contractor HSE Specification** – it contains 10 clauses which contains the overall HSE requirements and the contractor needs to agree to this.
  - Contractor HSE Plan** (Document HSE41C04) – The contractor shall fill in each part of the Plan.
  - The Contractor will list down all the plants and equipment to be used in the **Plant & Equipment Register** as well as chemicals in the **Chemical register**.
  - The **JSA & Risk Assessment** form will require the contractor to identify hazards which may not have been adequately addressed in FEA's existing procedures and outline proposed controls.

## D: FEA REQUIREMENT

- FEA Project Supervisor shall obtain Road/footpath opening permits.
- FEA Project Engineer shall obtain clearance from Municipal Council, Telecom Fiji Ltd, Water Supply Department, and Sewerage Department.
- FEA's HSE Unit shall vet Safety Plan submitted by Contractor and approve after queries clarified by Contractor.
- FEA Project Engineer shall ensure that any FEA underground mains on the jobsite is clearly located, marked and identified to the Contractor.
- FEA Project Engineer shall submit to the Project Manager all necessary approval documentation from Municipal Council, Fiji Roads Authority, Telecom Fiji Ltd, Water Supply Department and Sewerage Department. Upon receipt of these approvals, and the approved Safety Plan, the Project Manager shall issue an "Instruction to Commence Work" to the Contractor.
- FEA Project Supervisor and Project Engineer shall carry out regular site inspections to ensure compliance with HSE requirements, and submit Safety Visit Reports of the visit.
- FEA Project Supervisor and Project Engineer shall issue Non-Conformance Report if required, and follow up for verification of implementation of Action Items arising out of the Non-Conformance Report.

## E: PAYMENT SCHEDULE

**Payment shall be made as per payment schedule:**

Phase	Description	Percentage payment
1	Material Transportation to worksite	15%
2	Vegetation Clearing	5%
3	Pole dressing, erection, stays, ABS etc	50%
4	Conductor Stringing	15%
5	Transformer installation complete	5%
6	Retention	10% to be released after 6 months pending zero defects.