

# **TENDER NO - MR 140/2015**

# PROJECT: CONSTRUCTION OF POWER LINES FROM NAYAVU TO BALEKINAGA VILLAGE,

# **WAINIBUKA**

SCHEME: RA09 -13A

#### Notes:

- 1. <u>Bidders to submit copies of FEA training records with current validity. Bids</u> without this will be disqualified.
- 2. Safety Plan to be included in tender bid.
- 3. Lineman, Cable jointer and Trainee Lineman/Line worker Certificate to be included in tender bid.
- 4. Safety Report for 2012 to be submitted with tender.
- 5. List of Construction projects completed for FEA to be submitted with tender.
- 6. Please pay specific attention to Clause 12 under PART C, Contractor Requirements: "Lineman Contractor shall ensure that the project has one Certified lineman and 3 registered Trainee Line Workers/ Linemen working on the project on a full time basis. Records of these personnel shall be submitted with the tender bid." Contractors unable to submit positive proof that they meet this key requirement shall not be considered.
- 7. Please pay specific attention to Clause 24 under PART C, Contractor Requirements: "Transportation of material The Contractor shall transport all materials from Kinoya Stores to work site, EXCEPT concrete poles, which shall be picked up from Humes Depot, and spalls which shall be handpicked from SCIL Depot."



#### **FIRST SCHEDULE**

#### A: SPECIAL CONDITIONS OF CONTRACT - STAGE 1 - Pole 1 to Pole 48

 The works shall comprise the installation of power lines as per attached Drawing #A3-04-N75 101

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: RA09 -13A Extension of Line from Nayavu to Balekinaga village Wainibuka **UNIT RATES:** Unit Rate Item Description Quantity Total No. 1 Install concrete power pole [11m] 2 2 48 Install concrete power pole [10.2m] 3 Install wooden power pole [10.2m] 15 4 Install ground stay 38 5 Install Fly stay 4 7 6 Install 14B dressing 7 8 Install 12B dressing 34 Install 11B dressing 9 3 Install 4A dressing 10 23 Install 3A dressing Install 3B dressing 5 11 12 Install 2B dressing 3 13 Install 1A dressing 14 Install 1B dressing 13 15 Install 30KV A 11kV/415 V transformer complete with earthing, dressing, 2 16 3.733KM Install 3Ø HV conductor (route length - km) 17 3.309KM Install 3Ø LV conductor (route length - km)



LUMP SI	LUMP SUM COSTS:		
Item No.	Item No. Material Transport Cost Total		
1	Transportation of materials from FEA Depot/Supplier to site		

Item No.	Vegetation Management	Total
1	Vegetation Management as required	

## **FIRST SCHEDULE**

#### A: SPECIAL CONDITIONS OF CONTRACT – STAGE 2 Pole 49 – Pole 97

 The works shall comprise the installation of powerlines as per attached Drawing #A3-04-N75 101

Please enter unit rates and lump-sum prices in table below.	
The total Contract sum for the works shall be \$	VIP.

Power Line Construction				
SCHEN	SCHEME NO: RA09 -13A Extension of Line from Nayavu to Balekinaga village Wainibuka			
UNIT	RATES:			
Item No.	Description	Quantity	Unit Rate	Total
1	Install concrete power pole [11m]	2		
2	Install concrete power pole [10.2m]	32		
3	Install wooden power pole [10.2m]	3		
4	Install wooden power pole [15m]	5		
5	Install ground stay	34		
6	Install Fly stay	1		
7	Install 19Bdressing	1		
8	Install 14B dressing	1		
9	Install 12B dressing	5		
10	Install 11B dressing	41		
11	Install 13B dressing	1		
12	Install 4A dressing	1		
13	Install 4B dressing	1		
14	Install 3A dressing	7		



15	Install 3B dressing	2	
16	Install 2A dressing	1	
17	Install 2B dressing	1	
18	Install 1A dressing	6	
19	Install 1ABdressing	8	
20	Install 30KV A 11kV/415 V transformer complete with earthing, dressing, etc.	1	
21	Install 3Ø HV conductor (route length - km)	3.733km	
22	Install 3Ø LV conductor (route length - km)	1.380km	

LUMP SUM COSTS:		
Item No.	Material Transport Cost	Total
1	Transportation of materials from FEA Depot/Supplier to site	

Item No.	Vegetation Management	Total
1	Vegetation Management as required	



# Note: All work on existing pole A including final connection to 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: 2 weeks from issue of LPO. (c) Date of completion of Phase 2: 3 weeks from issue of LPO. (d) Date of completion of Phase 3: 3 weeks from issue of LPO. (e) Date of completion of Phase 4: 4 weeks from issue of LPO. (f) Date of completion of Phase 5: 4 weeks from issue of LPO. (g) Date of practical completion of the works: 4 weeks from issue of LPO. (h) Date for final completion of the works: 4 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 Central or his designated officer. The Project Manager shall be the Unit Leader Distribution Central, the Project Engineer shall be the Construction, Operations & Maintenance Engineer 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 FOR BOTH STAGE 1 & 2

# <u>Specification for Distribution Powerlines installation for Supply from Nayavu to Balekinaga Village Wainibuka</u>

#### 1.0 General

3. This specification covers the installation of Distribution Power lines from Nayavu to Balekinaga Village Wainibuka as per attached Drawing # A3-04-N75 101 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
- vi) FEA assets ID ( pole number, transformer numbered/O fuse etc)

#### 2.1 Phase One – <u>Transportation of Material</u>

The first phase comprises of the following works:

Transportation 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 Humes 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 – <u>Pole dressing, erection, stays etc.</u>

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.

#### 2.6 Installation of ABS shall be carried out by FEA



### C: CONTRACTOR REQUIREMENTS

- Tender 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 which is compulsory. Bids from tenderers who do not participate in the site visit shall be disqualified.
- 3. **Standards** All construction work shall be in compliance with FEA Standard Overhead Line Design & Construction Manual.
- 4. **Safety Plan** The tender bid shall include a Safety Plan that will be evaluated by the FEA's HSE Unit. Tender bids with incomplete, unacceptable, or without a Safety Plan will not be considered for award.
- 5. **Safety Record** Tender bid shall include a brief report on Safety performance over the last two years. The report shall include all incidents and accidents.
- 6. **Sub-contracting** Subcontracting shall not be permitted, except where this is specifically presented in the tender bid, and only upon approval by FEA. Subcontractors shall be required to fulfil all requirements as if they were the contractor.
- 7. **Scope of works** Work involved in this contract is broadly classified into six phases, and progress payments shall be processed accordingly.
  - i) Vegetation Clearing
  - ii) Transportation of material
  - iii) Pole dressed & erected. Stays installed
  - iv) Stringing of conductors, Isolators, and line dropouts.
  - v) Installation of transformers, earthing, etc
- 8. **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.
- **9. Work Program** Contractor shall submit a work programme before starting of project. This shall be part of the contract. Work shall commence within seven (7) days after receiving an official FEA Local Purchase Order.
- 10. **Training** Contractor shall ensure his employees have attended FEA Safety Manual Training and Pole Top Rescue Training at least once in the past 6 months, and records of this shall be submitted with the tender bid. In the event that the training has not been carried out, the Contractor shall ensure these training are carried **PRIOR** to



induction for new project.

Copies of training records and valid certificates shall be provided with the tender. Bids without these documents will be disqualified.

- 11. **Ground condition** Contractors are to note that sub-soil comprises soapstone and could contain other services like Telecom Fiji Ltd, Water & Sewerage, etc.
- 12. **Lineman** Contractor shall ensure that the project has **one certified lineman** and **3 registered Trainee Line Workers/ Linemen** working on the project on a full time basis. Records of these personnel shall be submitted with the tender 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. Contractor shall ensure that all employees who work on the project attend the Safety Induction. All contractor employees are to present a valid company ID card clearly showing a current photo, employee name, employee date of birth and employee job description.
- 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 :

DANGER	
PROJECT:POWERLINE CONSTRUCTION-[Description of project]	
CONTRACTOR:	
POWER LINE CONSTRUCTION WORK.	
Driver please reduces speed. Pedestrians please use other footpath/side of road	
THANKS	

- 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 and will be within falling distance from the FEA lines are to 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.**
- 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 FEA Stores to work site, EXCEPT concrete poles, which shall be picked up from <u>Humes Depot</u>, and <u>spalls which shall be handpicked from SCIL Depot</u>.
- 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 at 50m intervals.
- 28. **Traffic and Pedestrian Control** 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.
- 29. **Worksite protection** Bollards/cone must be placed at 10m intervals.
- 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. **Contractor HSE Compliance** Contractor shall comply with FEA/Contractor HSE Manual at all times.
- 33. **Credit of surplus material** The contractor shall transport and credit all unused materials to FEA Stores.
- 34. **Defects Rectification** The contractor shall rectify all defects within seven (7) days as per contract.
- 35. **Project completion** The contractor shall complete work on time as per contract.
- 36. **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 to complete the works at the Contractor's risk and expense.
- 37. **Safe Work Procedure Training** Contractor must have completed Distribution Safe Work Procedure training.
- 38. **FEA/Contractor HSE Manual** Contractor shall comply with FEA/Contractor HSE Manual at all times.



## 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.



#### **Tender submission**

<u>Two (2) hard copies</u> 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 16<sup>th</sup> September, 2015

Site Inspection will be held at the FEA's Kinoya Depot at 9.00am on Tuesday 8<sup>th</sup> September, 2015.

Each tender shall be sealed in an envelope with:

The envelope bearing only the following marking:

Tender NO. MR 140/2015 – Construction of Power Lines from Nayavu to Balekinaga Village, Wainibuka - Scheme No. RA09/13A

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.

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