

TENDER NO – MR 274/2019

**PROJECT: ELECTRICITY SUPPLY TO THE
PROPOSED SUBDIVISION AT TAVUA**

SCHEME: SD12-18

**INSTALLATION OF DISTRIBUTION
UNDERGROUND POWER CABLES**

Notes:

1. **Bidders to submit copies of EFL training records with current validity. Bids without this will be disqualified.**
2. Safety Plan to be included in tender bid.
3. Safety Report for 2017, 2018 to be submitted with tender.
4. List of Construction projects completed for EFL to be submitted with tender.
5. **Please pay specific attention to Clause 12 under PART C, Contractor Requirements:**
“Certified Cable Jointer/ 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 Cable Jointer/ 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 25 under PART C, Contractor Requirements:**
“Loading, Transportation and Unloading of Material - Loading and Transportation of all Materials from EFL’s Stores and unloading at the site will be the responsibility of the Contractor.

All work requiring EFL supervision shall be started and completed during normal working hours.

In the event that the contractor carries out work which requires EFL supervision after normal working hours, the contractor shall pay for the overtime costs incurred.

Weekly progress reports should include the details below; this shall be submitted without fail, otherwise it will affect process of payment.

Personal Protective Equipment - Condition								
Name of Personnel	Hard Hat	Safety Glass	Safety Boot	Gum Boot	Working Gloves	Reflective Vest	Safety Harness	Pole Strap

Tender #	Scheme #	LPO #	Contract Name	Area of Work	Progress (%)	Invoice Submitted	Payment Received	Comments

Contractor Name/Stamp

COMPLIANCE CHECKLIST

Compliance - The following documents are to be provided with the tender bid:

No.		Check (v)
1	Tax Compliance Certificate from FRCA	
2	Business Registration details	
3	FNPF Compliance Certificate	
4	Evidence of manpower employment (e.g. payroll listing, etc.)	
5	Project Team Composition of the team executing the works, including photo IDs, qualification of personnel	
6	Insurance cover details – Public Liability, Workers Compensation, Contractor's all risk	
7	Evidence of 1% Grant Levy to FNU	

Bidders are to ensure that the above items are included as part of their bid. Failure to provide documentation for the above will disqualify the bid.

FIRST SCHEDULE

Contractor Name/Stamp

A: SPECIAL CONDITIONS OF CONTRACT –

- The works shall comprise the installation of power lines as per attached Drawing No. **A1-09-N57-006**

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

The total Contract sum for all of the works shall be: \$ _____ VIP.

Installation of Distribution Underground Power Cables

Scheme: SD12/18 – Electricity Supply to the Proposed Subdivision at Tavua.

Part 1: High Voltage Cable Installation

Pole Marked J to TX-1		Route Length (m)	Unit Rates	Total Price (VIP)
i	Dig Trench	800m		
ii	Lay 1 x 95mm ² 3C AL XLPE HV cable	800m		
iii	Backfilling	800m		
TOTAL:				

Part 2: Low Voltage Cable Installation

(a) 4 x 185mm² 1C AL XLPE LV cable

From TX-1 to PB-18 via PB-1, PB-3, PB-5, PB-7, PB-9, PB-11, PB-12, PB-14, PB-15, PB-17 From TX-1 to PB-31 via PB-20, PB-21, PB-23, PB-24, PB-26, PB-27, PB-29 From TX-1 to PB-45 via PB-33, PB-34, PB-36, PB-37, PB-39, PB-40, PB-42, PB-43 From TX-1 to PB-62 via PB-48, PB-50, PB-52, PB-53, PB-55, PB-56, PB-58, PB-60		Route Length (m)	Unit Rates	Total Price (VIP)
i	Dig Trench	5,500m		
ii	Lay 4 x 185mm ² 1C AL XLPE LV cable	5,500m		
iii	Backfilling	5,500m		
TOTAL:				

(b) 2 x 185mm² 1C AL XLPE LV cable

PB-19, PB-16, PB-13, PB-10, PB-8, PB-6, PB-4, PB-2, PB-47, PB-49, PB-51, PB-54, PB-57, PB-59, PB-61, PB-63, PB-46, PB-44, PB-41, PB-38, PB-35, PB-22, PB-25, PB-28, PB-30, PB-32		Route Length (m)	Unit Rates	Total Price (VIP)
i	Dig Trench	2,400m		
ii	Lay 4 x 185mm ² 1C XLPE AL LV cable	2,400m		
iii	Backfilling	2,400m		
TOTAL:				

Part 3: Pillar Box Installation

Item No.	Description	Quantity	Unit Rate	Total Price (VIP)
1	Install Residential Pillar Box	63		

LUMP SUM COSTS:

Item No.	Materials Transportation Cost	Total Price (VIP)
1	Transportation of materials from EFL Depot/Supplier to site	

Note:

- Any Road and Footpath Re-instatement works will be Housing Authority's responsibility including forming of drainage at the site if required.
- All work on Existing Poles A, B, C, D, E, F, G, H, J shall be carried out by EFL.
- The installation of 500KVA Padmount transformer shall be carried out by EFL.
- All LV cable terminations to the 63 x Residential Pillar Boxes shall be carried out by EFL.
- All HV cable terminations to the 500KVA Padmount transformer shall be carried out by EFL.
- The final stringing and connection to the existing grid shall be carried out by EFL.

3. Work schedule

(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:	12 weeks from issue of LPO.
(d) Date of completion of Phase 3:	16 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:	30 weeks from issue of LPO.
(h) Date for final completion of the works:	30 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 Western**, the Project Engineer shall be the **Construction Engineer Western**, and the Project Supervisor shall be the **Construction Coordinator Western**.

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 EFL 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 EFL Finance Policy.

B: SECOND SCHEDULE

Specification for Distribution Power lines installation for Electricity Supply to the Proposed Subdivision at Tavua. Scheme # SD12-18.

1.0 General

2. This specification covers the installation of Distribution Power Cables for **Electricity Supply to the Proposed Subdivision at Tavua** as per attached Drawing No. **A1-09-N57-006** under conditions of Contract attached herein.

2.0 Scope of Work

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

- i) Loading, Transportation and Unloading of Material
- ii) Trenching & Ducting
- iii) Laying of Power Cables, slabs and danger notice tape
- iv) Backfilling of trench
- v) Installation of Residential Pillar Boxes

2.1 Phase One – Loading, Transportation and Unloading of Material

The first phase comprises of the following works:

- Loading and Transportation of all Materials from EFL's Stores and unloading at the site will be the responsibility of the Contractor.

2.2 Phase Two – Trenching & Ducting

The second phase comprises of the following works:

- Excavation and Installation of ducts across roads and drive ways.
- Excavation and trenching works for the power cable.
- Reinstatement works for vegetation, customer compound and boundary.

Note – all ducting works is to be completed BEFORE excavation of grass verge. This is to ensure that trenches are kept open for a minimum duration.

2.3 Phase Three – Installation of Power Cables

The third phase will involve the installation of power cable. This involves manually pulling the cable along the trench using rollers, and through ducts.

All the work of phase two must be as per the specifications given in the drawing and it shall conform to all aspects of the standards outlined in the "Standard Overhead Line Design and Construction Manual" a guideline set by EFL.

This work shall be carried out under direct supervision of EFL personnel, and is to be done during normal working hours only. Set up of cable drums shall be done by EFL.

This phase shall be deemed complete once the cable has been tested healthy by EFL Technicians. In the event that the cable fails to pass the test, the Contractor shall be

required to pay all costs associated with the location and repair of the damage/fault.

2.4 Phase Four – Backfilling of Trenches

This phase of the contract involves the backfilling of trenches.

Various works for this phase will be:

- i) Apply suitable layer of sand bedding (to be supervised by EFL).
- ii) Backfill sand on top of cable to height specified by EFL site supervisor.
- iii) Backfill remainder of trench with trench soil and basecourse material (AP40) in road crossings/driveways.

All materials (cable and slab) are to be transported to work site by the contractor. The contractor is responsible for ensuring that all unused excavated soil is laid neatly on top of the trench to allow for soil subsidence. All left over materials is to be returned to the EFL Stores and credited accordingly.

Fine Sand for sand bedding works shall be supplied by EFL.

All works for phase four must be as per the specifications, and it shall conform with all aspects of the standards outlined in the "Standard Overhead Line Design and Construction Manual", guideline set up by EFL.

2.5 Phase Five – Installation of Residential Pillar Boxes

This phase involves the installation of Residential Pillar boxes at pegged locations to EFL standards.

Note: **All LV cable terminations to pillar boxes shall be carried out by EFL.**

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 EFL) 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 EFL will not be entertained.
- 3) **Standards** – All construction work shall be in compliance with EFL 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 EFL Unit Leader Distribution
- 4) **Materials** – To ensure quality control, all material for the project shall be supplied by EFL. 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 EFL. 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. Loading, Transportation and Unloading of Material
 - II. Trenching & Ducting
 - III. Laying of Power Cables, slabs and danger notice tape
 - IV. Backfilling of trench
 - V. Installation of Residential Pillar Boxes
- 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 EFL 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) **Cable Jointer/ 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 Cable Jointer/ 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 underground cabling projects.
- 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]

Driver please reduce speed.

Pedestrians please use other footpath/side of road

CONTRACTOR:

Emergency phone contact: _____

UNDERGROUND CABLE CONSTRUCTION WORKS.

Please reduce speed.

Pedestrians please use other footpath/side of road.

THANKS

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 EFL using approved forms available in the EFL Safety Plan Template, or equivalent.
- 18) Project Updates** - Contractor shall meet with EFL 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) Weekly Reports** – The Contractor shall submit weekly updates on the status of the project to the Project Manager, Project Engineer, Project Supervisor and the General Manager Network.
- 20) Vegetation clearing** – Vegetation clearing shall be in accordance with EFL Vegetation Management Policy. Vegetation, which at a mature height will exceed 2m in height, must be removed. Vegetation within falling distance from the EFL lines must be removed. Vegetation debris shall be disposed of neatly at a location agreed to by EFL. No debris shall be left by the roadside or blocking drains under any condition. Any debris not cleared promptly will be cleared from the site by EFL (or designated agent) at the expense of the contractor.
- 21) Tidiness** – The Contractor shall maintain the worksite in a neat and tidy condition.
- 22) 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 EFL his consent to remove the tree, prior to proceeding with cutting the tree.
- 23) Fires** – No fires are to be lit at jobsites for the purpose of clearing vegetation or vegetation debris.
- 24) Village Protocols** – the contractor shall comply with protocols involved in working on land owned by Indigenous Fijians to ensure smooth work progress.

- 25) Loading, Transportation and Unloading of Material** - Loading and Transportation of all Materials from EFL's Stores and unloading at the site will be the responsibility of the Contractor. Spalls shall be picked up by the contractor either from EFL Depot or suitable supplier after instruction from EFL. Concrete Poles shall be picked up either from EFL Depot or Humes (Navutu, Kinoya, Labasa) upon instruction from EFL. Loading the Poles at EFL yard, transportation and unloading at the site will be the responsibility of the Contractor.
- 26) 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.
- 27) 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.
- 28) Portable signboards** - Portable signboards must be placed as per the EFL Safety Manual along the roads, and must meet minimum FRA requirements.
- 29) Traffic and Pedestrian Management** – The Contractor shall ensure that there is minimum disruption to the flow of traffic and pedestrian. EFL procedures on Traffic Control and Pedestrian Control shall be diligently exercised. Traffic and pedestrian management shall, as a minimum, meet Fiji Roads Authority standards.
- 30) 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.
- 31) Barricades** - Open trench/pole-hole is to be barricaded on a full time basis by the Contractor.
- 32) Jobsite Safety Assessment** - Contractor to carry out Jobsite Safety Assessment daily, and as and when required, and submit these to EFL on a weekly basis.
- 33) Credit of surplus material** – The contractor shall transport and credit all unused materials to the designated EFL 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.
- 34) Defects Rectification** – The contractor shall rectify all defects within seven (7) days as per the contract.
- 35) Project completion** – The contractor shall complete work on time as per the 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 EFL 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, EFL may itself call any other person/company/new contractor to complete the works at the Contractor's risk and expense.
- 37) 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
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- 38) OHS Compliance** - To provide/submit evidence of OHS compliance from the Ministry of Labour
- 39) Personal Protective Equipment** – Submit a list of personal protective equipment (PPE) available with the contractor.
- 40) HSE Requirements** – The contractor’s bid shall include all requirements from the EFL HSE Contractor Safety Management System. These will be evaluated by the EFL’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 :
- i) **Contractor HSE Specification** – it contains 10 clauses which contains the overall HSE requirements and the contractor needs to agree to this.
 - ii) **Contractor HSE Plan** (Document HSE41C04) – The contractor shall fill in each part of the Plan.
 - iii) 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**.
 - iv) The **JSA & Risk Assessment** form will require the contractor to identify hazards which may not have been adequately addressed in EFL’s existing procedures and outline proposed controls.
- 41) Invoicing for Payment** – the contractor shall submit invoices of appropriate value for payment. The invoice shall be accompanied by a copy of the latest project status report from the Contractor. Payment shall not be processed unless the invoice is submitted together with the Contractor’s Project Status Report.
- 42) Final Pre-commissioning payment** – note that the final pre-commissioning payment will only be released after materials reconciliation has been carried out by EFL team. This is to ensure materials charged to the job is matching with the materials used in the field for that particular job. In case where contractor has overdrawn materials, they will be required to transport and credit the surplus materials promptly to the designated EFL Stores after which their payment will be released.
- 43) Bid Validity** - The Bidders must provide their validity of **90 days**.

D: EFL REQUIREMENT

- EFL Project Supervisor shall obtain Road/footpath opening permits.
- EFL Project Engineer shall obtain clearance from Municipal Council, Telecom Fiji Ltd, Water Supply Department, and Sewerage Department.
- EFL's HSE Unit shall vet Safety Plan submitted by Contractor and approve after queries clarified by Contractor.
- EFL Project Engineer shall ensure that any EFL underground mains on the jobsite is clearly located, marked and identified to the Contractor.
- EFL 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.
- EFL 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.
- EFL 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	Trenching & Ducting	30%
2	Laying of Power Cables	30% upon positive cable test results
3	Backfilling of trench	15%
4	Installation of pillar boxes	15%
5	Retention	10% to be released after 6 months pending zero defects.

TENDER SUBMISSION CHECK LIST

The Bidders must ensure that the details and documentation mention below must submitted as part of their tender Bid

Tender Number _____

Tender Name _____

1. Full Company Name: _____

(Attach copy of Registration Certificate)

2. Director/Owner(s): _____

3. Postal Address: _____

4. Phone Contact: _____

5. Fax Number: _____

6. Email address: _____

7. Office Location: _____

8. TIN Number: _____

(Attach copy of the VAT/TIN Registration Certificate - Local Bidders Only)

9. Company Registration Number: _____
(Attach copy of the Business License)

10. FNPF Employer Registration Number: _____

(For Local Bidders only)

11. Contact Person: _____

I declare that all the above information is
correct. Name:

Position: _____

Sign: _____ Date: _____

Submission of Tender

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 EFL Head Office, 2 Marlow Street, Suva, Fiji.

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

This tender closes at 4:00 p.m. (16.00hrs Fiji time) on Wednesday 18th September, 2019.

Each tender shall be sealed in an envelope with the envelope bearing only the following marking:

MR 274/2019
Installation of Distribution Underground Power Cables for the Supply to the
Proposed Subdivision at Tavua Scheme # SD12/18

The Secretary, Tender Committee
Energy Fiji Limited
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 on the envelope will be returned to the Tenderers unopened. (Bids via e-mail or fax will not be considered).

The bidders must ensure that their bid is inclusive of all Taxes payable under Fiji Income Tax Act and must have the most current Tax Compliance Certificate.

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

Bidders are requested to submit a:

- Valid Tax Compliance Certificate
- FNPF Compliance Certificate