



FIJI ELECTRICITY AUTHORITY TENDER DOCUMENT

Addendum # 1

TENDER NUMBER: MR283/2017

TENDER NAME: 33kV Underground Cable Installation Works

REVISED TENDER CLOSING: 4pm on Wednesday, 8th November, 2017

**Note: Bidder's are to disregard the previous tender document and refer to
this addendum tender document only.**

FIJI ELECTRICITY AUTHORITY

TENDER No. MR 283/2017

33kV Underground Cable Installation Works

The Fiji Electricity Authority invites sealed bids from reputable companies for 33,000V Underground Cable Installation Works between Cunningham Zone Substation and Hibiscus Park Zone Substations, in the greater Suva Area.

Interested Bidders are to meet at the FEA's Kinoya Depot at **10.00am on Wednesday the 25th of October, 2017** for the project briefing and site visit. SITE VISIT IS COMPULSORY ATTENDANCE WILL BE TAKEN.

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

This tender closes at 4.00pm (16.00hrs Fiji Time) on Wednesday, 8th November, 2017.


It is mandatory for bidders to submit **three (3) hard copies** of tenders in sealed envelopes and clearly marked as – **“Tender MR 283/2017 – 33kV Underground Cable Installation Works”**. Bids must be addressed to:

**The Secretary – Tender Committee,
Fiji Electricity Authority,
Private Mail Bag, Suva;**

And be deposited in the **Tender Box** located at the **Fiji Electricity Authority Head Office, 2 Marlow Street, Suva;** by no later than the above stipulated date and time.

All late tenders, unmarked envelopes and envelopes without bidder's name and addresses on the reverse will be returned to the Tenderers.

The lowest bid will not necessarily be accepted as the successful bid.

1.	Scope of Bid	<p>The Fiji Electricity Authority (hereinafter referred to as "the Employer"), wishes to receive bids for 33kV Underground Cable Installation Works, as specified in these bidding documents.</p> <p>Stage 0 thru 17 of this project encompasses the installation of 33kV cables as per attached drawings and plans. The numbering of Stages shall be commenced from Cunningham Zone Substation, as follows:</p> <ul style="list-style-type: none"> • Stage 0: being from the 33kV Switchgear inside Cunningham Substation to the Cunningham Roadside till the vicinity of GPS Coordinates Longitude: 178° 27' 27 " East (or 178.4575015 E) and Latitude: 18° 6' 15.92874" South or (18.10442465 S) • Stage 1 being the first 500m of trench length from outside Cunningham Zone Substation commencing from the vicinity of the above noted GPS Coordinates and progressing towards Princess Road (Hibiscus Park Zone Substation) • Stage 2 thru 16 being progressively numbered for each 500m progression of route length towards Hibiscus Park Zone Substation • The above noted GPS Coordinates shall be shown during the site visit as the illustrated signpost below which is located along Cunningham Roam immediately outside the Substation: 
2.	Eligible Bidders	<p>This Invitation to Bid is open to bidders who have sound technical and financial background and have relevant previous experience.</p>

		<p>Bidders shall provide such evidence of their continued eligibility satisfactory to the Employer as the Employer may reasonably request.</p> <p>Bidders shall not be under a declaration of ineligibility for corrupt or fraudulent practices.</p>
3.	Compulsory Site Visit	<p>10.00am on Wednesday the 25th of October, 2017. Interested Bidders are to report to the FEA Kinoya Depot in Lautoka for tender discussion, followed by Compulsory Site Visit.</p> <p>Bidders are to arrange their own 4vehicles for transportation to site.</p>
4.	Qualification of the Bidder	<p>To be qualified for award of Contract, bidders shall submit proposals regarding construction methods, scheduling and resourcing which shall be provided in sufficient detail to confirm the bidder's capability to fulfil the contract.</p>
5.	Cost of Bidding	<p>The bidder shall bear all costs associated with the preparation and submission of its bid and the Employer will in no case be responsible or liable for those costs.</p>
6.	Sealing, Marking and Submission of Bids	<p>Bidders are required to submit hard copies of the Bid.</p> <p><u>Tender Submission - Instruction to bidders</u></p> <p><u>Hard Copy Submission:</u> Three (3) <u>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.</p> <p>The bidder shall seal the original hardcopy of the bid comprising of both the technical proposal and the price proposal, in one envelope, and clearly mark the envelope as: "ORIGINAL - PROPOSAL". Bidders shall also provide 2 copies of the original bid and mark them as "COPY - PROPOSAL". Each copy proposal shall also be individually sealed within an envelope. The 3 envelopes comprising the Original and Copies shall be sealed within an outer envelope. All inner and outer envelopes shall bear the following marking / identification:</p> <ul style="list-style-type: none"> • Bid for Tender MR 283/2017 – 33kV Underground Cable Installation Works • DO NOT OPEN BEFORE TENDER CLOSING DATE AND TIME. <p>All envelopes shall also indicate the name and address of the Bidder on the reverse of the envelope.</p> <p>The inner and outer envelopes shall be addressed to the Employer as follows:</p> <p style="text-align: center;">Tender MR 283/2017 – 33kV Underground Cable Installation Works The Secretary - Tender Committee, c/o Supply Chain Office, Fiji Electricity Authority,</p>

		<p>Private Mail Bag, 2 Marlow Street, Suva, Fiji Islands</p> <p><u>All postage or courier charges for delivery of Tender documents must be paid by the bidders.</u> It is the responsibility of the bidder to pay courier chargers and all other cost associated with the delivery of the hard copy of the Tender submission.</p> <p>This tender closes at 4:00pm, on Wednesday 8th of November, 2017.</p> <p>All late tenders, and inadequately marked envelopes shall be returned to the Tenderers unopened. (Bids via e-mail or fax will not be considered).</p> <p>For further information or clarification on the submission of bids, please contact our Supply Chain Office on phone (+679) 3224360 or (+679) 9991587 Hard copies of the Tender bid will also be accepted after the closing date and time provided a <u>soft copy is uploaded in the e-Tender Box</u> and it is dispatched before the closing date and time.</p> <p>For further information contact The Secretary Tender Committee, by e-mail TDelairewa@fea.com.fj</p> <p>Tenders received after the closing date shall not be considered.</p> <p>Lowest bid will not necessarily be accepted as successful bid.</p>
7.	Deadline for Submission of Bids	<p>Bids must be received by the Employer at the address specified above 4:00pm or 16:00hrs, on Wednesday 8th of November, 2017.</p> <p>The Employer may, at its sole discretion, extend the deadline for submission of bids by issuing an addendum, in which case all rights and obligations of the Employer and the bidders previously subject to the original deadline will thereafter be subject to the deadlines extended.</p>
8.	Late Bids	<p>Any bid received by the Employer after the deadline for submission of bids prescribed will be rejected and returned unopened to the bidder.</p>
9.	Modification and Withdrawal of Bids	<p>The bidder may modify or withdraw its bid after bid submission, provided that written notice of the modification or withdrawal is received by the Employer prior to the deadline for submission of bids.</p> <p>The bidder's modification or withdrawal notice shall be prepared, sealed, marked and delivered, with the outer and inner envelopes additionally marked "MODIFICATION" or "WITHDRAWAL", as appropriate. A withdrawal notice may also be sent by fax but must be followed by a signed confirmation copy.</p>

		No bid may be modified by the bidder after the deadline for submission of bids.
10.	Employer's Right to Accept any Bid and to Reject any or all Bids	The Employer reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids, at any time prior to award of Contract, without thereby incurring any liability to the affected bidder or bidders or any obligation to inform the affected bidder or bidders of the grounds for the Employer's action.
11.	Notification of Award	<p>Prior to expiration of the period of bid validity prescribed by the Employer, the Employer will notify the successful bidder by fax/email, confirmed by registered letter, that its bid has been accepted. This letter (hereinafter and in the Conditions of Contract called the "Letter of Award") shall name the sum which the Employer will pay the Bidder in consideration of the execution, completion and maintenance of the Works by the Bidder as prescribed by the Contract (hereinafter and in the Conditions of Contract called "the Contract Price"). The notification of award will constitute the formation of the Contract.</p> <p>The Employer will promptly notify the other bidders that their bids have been unsuccessful.</p>
12.	Corrupt or Fraudulent Practices	<p>The Employer requires that the Bidder observe the highest standard of ethics during the procurement and execution of such contracts. In Pursuance of this policy, the Employer:</p> <p>(a) defines, for the purposes of this provision, the terms set forth below as follows:</p> <p>(i) "corrupt practice" means behavior on the part of officials in the public or private sectors by which they improperly and unlawfully enrich themselves and/or those close to them, or induce others to do so, by misusing the position in which they are placed, and it includes the offering, giving, receiving or soliciting of anything of value to influence the action of any such official in the procurement process or in contract execution; and</p> <p>(ii) "fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Employer, and includes collusive practice among bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Employer of the benefits of free and open competition;</p> <p>(b) Will reject a proposal for tender award if it is determined that the bidder has engaged in corrupt or fraudulent practices in competing for the contract in question.</p>

13.	Project Drawings	Bidders are to refer to attached project drawings for bidding and construction.
14.	Guidelines for Execution of Works	<p><u>All trench excavation works shall be mandatorily carried out manually</u> by hand tools only and not utilizing excavators or any other form of mechanized excavation, as per tender specifications, with the exceptions of the tools noted below specific to the purposes noted below:</p> <ol style="list-style-type: none"> 1. Powered Saw Cutting Machine shall be permitted, which is only to be utilized for saw cutting of concrete footpaths and paved roads, such the a clean precise cut / break is obtained while trenching across concrete footpaths and paved roads. 2. Powered Jack-Hammer may also be permitted by FEA at its sole discretion, on a case by case basis, upon the contractor's written request for the purpose of: <ol style="list-style-type: none"> a. breaking through solid concrete or bedrock for the initial depth of 200mm or 8 inches from the existing surface being trenched b. breaking through and excavating bedrock where it is known or anticipated that no other utility services such as water mains, sewer mains, telecommunication cables, and power cables exist within 1000mm or 40 inches in the horizontal vicinity of the trench location. 3. Vibrational Plate Compactors and Tamping Rammers (Wacker-Packer) shall be permitted by FEA for the purpose of: <ol style="list-style-type: none"> a. smoothing of trench bottom, after the trench has been excavated to its full depth and prior to sand bedding, provided no other utility services exist within the excavated trench which could be damaged through the use of the Vibrational Plate Compactor(s). b. compaction of backfilled material in maximum 300mm layers such that proper cohesion and solidity of backfilled material is achieved whereby future sinkage or settlement of backfilled material can be avoided. <p>No other mechanized excavation tools or machines shall be permitted. Bidders are to price for 100% manual excavation.</p> <p>Mechanized cable pulling using a winch shall not be permitted. Bidders are to price for 100% manual cable pulling. It is required that each 5m section of cables shall be individually manned during cable installation.</p> <p>In the interest of expediting the execution of the project, the FEA reserves the right to suggest, approve or deny the areas where mechanized works may allowed or required and also what mechanized tools are to be permitted, upon the contractor's written request.</p> <p>All works shall be carried out in a practical and professional manner, without compromise to safety of people and property or assets.</p> <p>Proper planning and communication shall be conducted by the contractor with the FEA and all other relevant external stakeholders.</p>

		<p>The following guidelines shall be utilized and adhered to, for the smooth execution of works:</p> <ol style="list-style-type: none"> 1. While the FEA has already finalized the cable routes and prepared provisional construction drawings (attached with this tender), which were availed to the contractor and according to which the site visits shall be conducted, and while the routes were indicated/pegged/marked according to the provisional construction drawings, and a joint site visit was carried out by the FEA with relevant external stakeholders, who have availed their consents in principle for the works encompassed by this contract. Nevertheless, the FEA shall once again peg and/or mark the finalized route for each stage, to clearly indicate where trenching is to be done, prior to the commencement of these works, in a progressive manner, for each 500m progression of the route prior to the commencement of works by the contractor. 2. The contractor shall be responsible for implementing a traffic management Plan (TMP) wherever pedestrian or vehicular traffic is encountered along the trench route. 3. The FEA's Project Manager or designated representative(s) shall liaise with the relevant stakeholders to carry out a joint site visits along the finalized marked route, together with the contractor, prior to the commencement of works. The following stakeholders shall be typically present, as and where applicable: <ol style="list-style-type: none"> a. Telecom Fiji Limited (TFL) b. Water Authority of Fiji (WAF) c. Suva City Council (SCC) d. Fiji Roads Authority (FRA) 4. Once the cable route and the location of existing utility services has been field inspected and verified by the relevant stakeholders, the FEA shall record the finalized/marked route using Global Positioning System (GPS) and reflect this on the finalized construction drawings, and provide the contractor and relevant stakeholders with a revised issue for construction drawings indicating any changes done to the original plans. 5. The drawings shall not indemnify the contractor from any damages to the utility services. All damages caused by the contractor to existing utility services shall be rectified professionally as deemed necessary. The payment for the final cost for the damages, associated rectification costs and any loss in revenue shall be made by the FEA to the aforementioned stakeholders, and this shall be recovered in entirety from the contractor. The contractor is solely responsible for all damages pertaining to the execution of the works encompassed by the scope of this contract. 6. To execute works safely and with due care and without damage to existing utility services, it is mandatory that the contractor shall manually excavate a pilot trench 500mm x 500mm x 1200mm deep at every 10m interval along the finalized trench route, and field verify the exact site conditions, and the presence of any existing utility services.
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		<p>planned and discussed with the FEA, prior to execution. The contractor shall not proceed forward without this mandatory onsite supervision and relevant signoffs for all works pertaining to cable transportation, cable handling and cable laying works.</p> <p>19. FEA's mandatory supervision does not indemnify the contractor from any damages to the power cables. The contractor shall be <u>solely liable</u> in entirety for any damages to the power cables due to the actions and/or decisions of the contractor.</p> <p>20. Once the cables are laid by the contractor and have been inspected and tested by FEA, the contractor shall not delay the backfilling of the trench to applicable specifications. Additional sand covering of 200mm depth (levelled and hand compacted) above the power cables is required prior to the commencement of any backfilling as per specifications. The contractor's backfilling shall facilitate open pits at ends for cable jointing and cable testing upon cable joint completion. Temporary drainage and covering shall be provided to mediate water ingress into the cable jointing and testing pits. Appropriate signage and physical measures shall be provided for public safety.</p> <p>21. Where road crossings and/or driveway crossings are encountered along the cable route, HDPVC ducts are to be installed as per tender specifications. For each 500m drum length of cable to be laid, the trenching, installation of ducts for cables crossing the road/drive-way shall be completed prior to the excavation of the remaining trench along this 500m route.</p> <p>22. All encumbrances to public shall be minimized, both in duration and intensity through proper planning and work execution methodologies.</p> <p>23. Installation of ducts shall be carried out under mandatory FEA supervision and inspection. The FEA shall approve these works, prior to the commencement of any backfilling. The FEA shall also record the duct locations by GPS.</p> <p>24. The backfilling and restoration of roads and driveways shall be completed at the earliest. The backfilling, compaction and restoration of roads shall be executed as per FRA mandated specifications. The backfilling and compaction of road crossings shall be inspected and approved by the FRA. All defective works shall be re-excavated and rectified by the contractor in a timely manner at the contractor's sole expense.</p> <p>25. Final road resurfacing shall be carried out by FRA approved contractors and the FEA shall engage the FRA and its approved contractors for the same. The payment for road resurfacing shall be made by the FEA and all costs associated with road resurfacing shall be borne by the FEA.</p> <p>26. The Contractor shall provide the FEA at least 48 hours prior notice in writing to facilitate any of the site visits together with the relevant external stakeholders.</p>
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15.	Variations or Additional Works	<p>Any variation or additional works foreseen by the contractor shall be immediately brought to the notice of the FEA's designated Project Manager [Unit Leader Transmission], in writing. The FEA shall issue a separate Local Purchase Order (LPO), for the relevant variation or additional works if justified. The contractor shall only proceed forward with the relevant works only after having received the LPO and/or written/emailed consent from the FEA Project Manager on which the General Manager Network has been duly copied on the correspondence. NO PAST DATED VARIATIONS OR ADDITIONAL WORKS CLAIMS SHALL BE ENTERTAINED AND DEEMED PAYABLE BY THE FEA. The contractor shall allow the FEA adequate prior notice of 3 working days to facilitate the LPO, with prior planning such that zero disruptions in works eventuate due to the claim for any variation or additional works.</p>

16.	Progressive Milestone Payments	<p>Progressive Milestone Payments: shall be made for each 500m Stage (or part thereof) of cabling works, comprising the route of cabling works.</p> <table border="1" data-bbox="635 300 1412 685"> <thead> <tr> <th>Phase</th><th>Description / Breakdown</th><th>Percentage payment</th></tr> </thead> <tbody> <tr> <td>1</td><td>Ducting and Trenching</td><td>30%</td></tr> <tr> <td>2</td><td>Installation of cable</td><td>30% upon positive cable test results</td></tr> <tr> <td>3</td><td>Backfilling and Site Restoration</td><td>30%</td></tr> <tr> <td>4</td><td>Retention</td><td>10% to be released after 6 months, pending zero defects</td></tr> </tbody> </table>	Phase	Description / Breakdown	Percentage payment	1	Ducting and Trenching	30%	2	Installation of cable	30% upon positive cable test results	3	Backfilling and Site Restoration	30%	4	Retention	10% to be released after 6 months, pending zero defects																					
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17.	Project Timeline and Deadline for project Completion	<p>The Works shall be tentatively commenced on or before the 15th of November, 2017 and each 500m stage shall be progressively completed within 21 calendar days of commencement. Project shall be deemed commenced from the next day from the date of issuance of the LPO.</p> <p>Each Stage shall be completed within a Maximum Number of 21 Calendar Days from the Commencement of Works for each stage.</p> <table border="1" data-bbox="595 1043 1453 2000"> <thead> <tr> <th>Stage #</th><th>Total Route Length</th><th>Maximum Number of Consecutive Calendar Days</th></tr> </thead> <tbody> <tr> <td>0</td><td>Switchgear inside Cunningham Substation to Cunningham Road location with GPS Coordinates Longitude: 178° 27' 27 " East (or 178.4575015 E) and Latitude: 18° 6' 15.92874" South or (18.10442465 S) (Approximately 150m route length)</td><td>21</td></tr> <tr> <td>1</td><td>First 500m from above GPS Coordinated towards Princes Road and Hibiscus Park Substation</td><td>42</td></tr> <tr> <td>2</td><td>More than 500m and up to 1000m</td><td>63</td></tr> <tr> <td>3</td><td>More than 1000m and up to 1500m</td><td>84</td></tr> <tr> <td>4</td><td>More than 1500m and up to 2000m</td><td>105</td></tr> <tr> <td>5</td><td>More than 2000m and up to 2500m</td><td>126</td></tr> <tr> <td>6</td><td>More than 2500m and up to 3000m</td><td>147</td></tr> <tr> <td>7</td><td>More than 3000m and up to 3500m</td><td>168</td></tr> <tr> <td>8</td><td>More than 3500m and up to 4000m</td><td>189</td></tr> <tr> <td>9</td><td>More than 4000m and up to 4500m</td><td>210</td></tr> <tr> <td>10</td><td>More than 4500m and up to 5000m</td><td>231</td></tr> </tbody> </table>	Stage #	Total Route Length	Maximum Number of Consecutive Calendar Days	0	Switchgear inside Cunningham Substation to Cunningham Road location with GPS Coordinates Longitude: 178° 27' 27 " East (or 178.4575015 E) and Latitude: 18° 6' 15.92874" South or (18.10442465 S) (Approximately 150m route length)	21	1	First 500m from above GPS Coordinated towards Princes Road and Hibiscus Park Substation	42	2	More than 500m and up to 1000m	63	3	More than 1000m and up to 1500m	84	4	More than 1500m and up to 2000m	105	5	More than 2000m and up to 2500m	126	6	More than 2500m and up to 3000m	147	7	More than 3000m and up to 3500m	168	8	More than 3500m and up to 4000m	189	9	More than 4000m and up to 4500m	210	10	More than 4500m and up to 5000m	231
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		<table><tr><td>11</td><td>More than 5000m and up to 5500m</td><td>252</td></tr><tr><td>12</td><td>More than 5500m and up to 6000m</td><td>273</td></tr><tr><td>13</td><td>More than 6000m and up to 6500m</td><td>294</td></tr><tr><td>14</td><td>More than 6500m and up to 7000m</td><td>315</td></tr><tr><td>15</td><td>More than 7000m and up to 7500m</td><td>336</td></tr><tr><td>16</td><td>More than 7500m and up to 8000m</td><td>357</td></tr><tr><td>17</td><td>More than 8000m and up to 8200m entering into Hibiscus Park Substation and terminated inside Hibiscus Park Zone Substation Switchgear</td><td>378</td></tr></table> <p>The FEA anticipates the contractor to be working on a continuous daily basis, at least 5 days in a week and all necessary facilitation required from the FEA’s end shall be furnished for the weekend days, provided the contractor has provided adequate prior notice.</p>	11	More than 5000m and up to 5500m	252	12	More than 5500m and up to 6000m	273	13	More than 6000m and up to 6500m	294	14	More than 6500m and up to 7000m	315	15	More than 7000m and up to 7500m	336	16	More than 7500m and up to 8000m	357	17	More than 8000m and up to 8200m entering into Hibiscus Park Substation and terminated inside Hibiscus Park Zone Substation Switchgear	378			
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18.	Liquidated Damages	<p>Failure to meet the aforementioned deadlines stipulated in the above table shall consequent in the contractor incurring LIQUIDATED DAMAGES of 1% per stage per working day and up to the total of 15% of the respective price for each Stage.</p> <p>Liquidated Damages shall be applied ONLY to the respective project stage(s) which encounter(s) delays. When executing the liquidated damages, the FEA shall take into account force majeure, and/or any genuine delays directly caused by the FEA and/or any extreme/inclement weather days which may deteriorate site conditions and cause delays to works, and shall offer the contractor a grace period equal in number to the <u>sum of</u> force majeure, and/or any genuine delays directly caused by the FEA and/or extreme/inclement weather days, provided the contractor has notified the FEA Project Manager in writing or by email, of the disruption to works due to such eventualities deemed beyond the control of the contractor, and within 48 hours of such disruptions happening.</p>																								
19.	Insurance Policies	<p>Bidders shall at the time of bidding provide proof of insurance. The following are minimum insurance requirements from the Employer:</p> <table><tr><th>Policy type</th><th>Value</th><th>Date of Issue</th><th>Expiry Date</th><th>Insurance Company</th><th>Policy Number</th></tr><tr><td>Workers Compensation</td><td>\$250,000.00</td><td></td><td></td><td></td><td></td></tr><tr><td>Public Liability</td><td>\$500,000.00</td><td></td><td></td><td></td><td></td></tr><tr><td>Contractors All Risk</td><td>\$500,000.00</td><td></td><td></td><td></td><td></td></tr></table>	Policy type	Value	Date of Issue	Expiry Date	Insurance Company	Policy Number	Workers Compensation	\$250,000.00					Public Liability	\$500,000.00					Contractors All Risk	\$500,000.00				
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20.	Necessary Competent Personnel	The contractor shall be required to maintain competent and qualified personnel for the supervision and execution of works. A competent cable jointer shall be required at all times during the execution of the project, and especially during the trenching and cable handling. Bidders are to provide details of competent cable jointers to be engaged in these works. Bidders are required to submit the necessary ID Cards and Licenses / Certifications for the same at the time of bidding.
21.	Prices & Validity	Bidders are to submit prices in Fijian Dollars (FJ\$). Prices noted in bids shall be Value Added Tax (VAT) Inclusive Prices (VIP)
22.	Drawings	Bidders are to refer to the attached drawings for bidding purposes. Bidders are required to bring a copy of the attached drawings for site visit.
23.	Tools and Equipment supplied by FEA	<p>The Tools and Equipment supplied by FEA is limited to the following:</p> <ol style="list-style-type: none"> 1. Cable Roller(s) 2. Drum Stand(s) 3. Steel Checker Plates for covering pedestrian footpaths in busy areas where no alternative pedestrian walkway can be created to implement a safe traffic management plan <p>Notes:</p> <ol style="list-style-type: none"> a) All other tools and equipment envisaged in the project shall be supplied by the bidder. b) All equipment supplied by FEA shall be picked up and loaded by the contractor from the FEA depot where the equipment is located. c) Any FEA tool or equipment supplied by FEA which is damaged or lost by the contractor shall be replaced with equivalent items. If the contractor is unable to replace the lost or damaged tools or equipment within a reasonable amount of time then the FEA shall invoice the contractor for the full amount of item's historic purchase cost or the item replacement cost (whichever is greater), plus any other costs associated with replacing the equipment.
24.	Equipment supplied by Contractor	<p>The Tools and Equipment supplied by the contractor is envisaged as follows but not limited to the list below:</p> <ol style="list-style-type: none"> 1. Hiab Trucks or Crane Trucks for the lifting cartage of cables and other materials, tools and equipment 2. Hiab Trucks or Crane Trucks for holding and supporting existing FEA power poles, if trenching is being carried out in close vicinity of existing poles and it is anticipated that the pole would become unstable. 3. Trucks for the cartage of project materials 4. Trucks for the cartage of trench's excavated material for temporary stockpiling for future usage in trench reinstatement 5. Trucks for the cartage of trench's surplus excavated material to the Kinoya Depot for landfilling purposes. 6. Excavator or Bull-dozer for leveling of stockpiled or landfilled material at Kinoya Depot. 7. Tools, equipment and PPE items for contractor's employees 8. Trench Barricading items 9. Traffic Management items 10. Etc. <p>Note: Bidders to self-verify the exact requirements for project execution.</p>

25.	Materials Supplied by the Contractor	<p>The Materials to be supplied by the contractor <u>which shall be permanently installed</u> are limited to the following:</p> <ol style="list-style-type: none"> 1. PVC Glue for suitable bonding of HDPVC conduits. 2. 20 MPa Batch Plant mixed Concrete for footpath reinstatement 3. D665 Steel Mesh for footpath reinstatement 4. Plastic Bar Chairs (places at 500mm centers) for securing 665 or 665A mesh during concrete casting for footpath reinstatement
26.	Materials Supplied by the FEA	<p>All materials which are to be permanently installed in the project shall be supplied by the FEA, except those materials noted above in <i>Clause 25: Materials Supplied by the Contractor.</i></p> <p>Notes:</p> <ol style="list-style-type: none"> 1. All materials supplied by the FEA shall only be used for their intended purpose in the project. 2. All other consumable materials required by the contractor for the execution of the works shall be supplied by the contractor.

Bidders shall submit prices in the following tabular format.

<p align="center">MR283/2017: 33kV Underground Cable Installation Works</p> <p align="center">Pricing Schedule</p> <p align="center">OPTION - 1</p>		
<p>Bidder's Name:</p> <p>Bidder's Address:</p> <p>Bidder's Telephone Numbers:</p> <p>Bidder's Email Address:</p> <p>Bidder's Company Stamp / Seal:</p>		
Project Stage	Remarks	Bid Price (FJ\$ & VIP)
Stage 0: Switchgear inside Cunningham Substation to Cunningham Road location with GPS Coordinates Longitude: 178° 27' 27 " East (or 178.4575015 E) and Latitude: 18° 6' 15.92874" South or (18.10442465 S)	700mm wide trench and double circuit cable installation	{Bidders to Insert Price}
Stage 1: 0m to 500m from Cunningham Substation	700mm wide trench and double circuit cable installation	{Bidders to Insert Price}
Stage 2: 500m to 1000m from Cunningham Substation	700mm wide trench and double circuit cable installation	{Bidders to Insert Price}
Stage 3: 1000m to 1500m from Cunningham Substation	700mm wide trench and double circuit cable installation	{Bidders to Insert Price}
Stage 4: 1500m to 2000m from Cunningham Substation	700mm wide trench and double circuit cable installation	{Bidders to Insert Price}
Stage 5: 2000m to 2500m from Cunningham Substation	700mm wide trench and double circuit cable installation	{Bidders to Insert Price}

Stage 6: 2500m to 3000m from Cunningham Substation	700mm wide trench and double circuit cable installation	{Bidders to Insert Price}
Stage 7: 3000m to 3500m from Cunningham Substation	700mm wide trench and double circuit cable installation	{Bidders to Insert Price}
Stage 8: 3500m to 4000m from Cunningham Substation	700mm wide trench and double circuit cable installation	{Bidders to Insert Price}
Stage 9: 4000m to 4500m from Cunningham Substation	700mm wide trench and double circuit cable installation	{Bidders to Insert Price}
Stage 10: 4500m to 5000m from Cunningham Substation	Partially 700mm wide trench and double circuit cable installation till Wairua Road Intersection with Princes Road Partially 500mm wide trench and single circuit cable installation Approximate Split is 50% each	{Bidders to Insert Price}
Stage 11: 5000m to 5500m from Cunningham Substation	500mm wide trench and single circuit cable installation	{Bidders to Insert Price}
Stage 12: 5500m to 6000m from Cunningham Substation	500mm wide trench and single circuit cable installation	{Bidders to Insert Price}
Stage 13: 6000m to 6500m from Cunningham Substation	500mm wide trench and single circuit cable installation	{Bidders to Insert Price}
Stage 14: 6500m to 7000m from Cunningham Substation	500mm wide trench and single circuit cable installation	{Bidders to Insert Price}
Stage 15: 7000m to 7500m from Cunningham Substation	500mm wide trench and single circuit cable installation	{Bidders to Insert Price}

Stage 16: 7500m to 8000m from Cunningham Substation	500mm wide trench and single circuit cable installation	{Bidders to Insert Price}
Stage 17: 8000m and up to 8200m entering into Hibiscus Park Substation and terminated inside Hibiscus Park Zone Substation Switchgear	500mm wide trench and single circuit cable installation	
TOTAL:		{Bidders to Insert Price}

As an Option – 2, Bidders shall also submit prices for a 700mm wide trench and double circuit cable installation for entire route length from Cunningham Substation to Hibiscus Park Substation.

<p align="center">MR283/2017: 33kV Underground Cable Installation Works</p> <p align="center">Pricing Schedule</p> <p align="center">OPTION - 2</p>		
<p>Bidder's Name:</p> <p>Bidder's Address:</p> <p>Bidder's Telephone Numbers:</p> <p>Bidder's Email Address:</p> <p>Bidder's Company Stamp / Seal:</p>		
Project Stage	Remarks	Bid Price (FJ\$ & VIP)
Stage 0: Switchgear inside Cunningham Substation to Cunningham Road location with GPS Coordinates Longitude: 178° 27' 27 " East (or 178.4575015 E) and Latitude: 18° 6' 15.92874" South or (18.10442465 S)	700mm wide trench and double circuit cable installation	{Bidders to Insert Price}
Stage 1: 0m to 500m from Cunningham Substation	700mm wide trench and double circuit cable installation	{Bidders to Insert Price}
Stage 2: 500m to 1000m from Cunningham Substation	700mm wide trench and double circuit cable installation	{Bidders to Insert Price}
Stage 3: 1000m to 1500m from Cunningham Substation	700mm wide trench and double circuit cable installation	{Bidders to Insert Price}
Stage 4: 1500m to 2000m from Cunningham Substation	700mm wide trench and double circuit cable installation	{Bidders to Insert Price}
Stage 5: 2000m to 2500m from Cunningham Substation	700mm wide trench and double circuit cable installation	{Bidders to Insert Price}

Stage 6: 2500m to 3000m from Cunningham Substation	700mm wide trench and double circuit cable installation	{Bidders to Insert Price}
Stage 7: 3000m to 3500m from Cunningham Substation	700mm wide trench and double circuit cable installation	{Bidders to Insert Price}
Stage 8: 3500m to 4000m from Cunningham Substation	700mm wide trench and double circuit cable installation	{Bidders to Insert Price}
Stage 9: 4000m to 4500m from Cunningham Substation	700mm wide trench and double circuit cable installation	{Bidders to Insert Price}
Stage 10: 4500m to 5000m from Cunningham Substation	700mm wide trench and double circuit cable installation	{Bidders to Insert Price}
Stage 11: 5000m to 5500m from Cunningham Substation	700mm wide trench and double circuit cable installation	{Bidders to Insert Price}
Stage 12: 5500m to 6000m from Cunningham Substation	700mm wide trench and double circuit cable installation	{Bidders to Insert Price}
Stage 13: 6000m to 6500m from Cunningham Substation	700mm wide trench and double circuit cable installation	{Bidders to Insert Price}
Stage 14: 6500m to 7000m from Cunningham Substation	700mm wide trench and double circuit cable installation	{Bidders to Insert Price}
Stage 15: 7000m to 7500m from Cunningham Substation	700mm wide trench and double circuit cable installation	{Bidders to Insert Price}
Stage 16: 7500m to 8000m from Cunningham Substation	700mm wide trench and double circuit cable installation	{Bidders to Insert Price}
Stage 17: 8000m and up to 8200m of route length or trench, with one circuit entering into Hibiscus Park Substation and terminated inside Hibiscus Park Zone Substation Switchgear, and second circuit to stop outside Hibiscus Park Zone substation near the driveway.	700mm wide trench and double circuit cable installation	

Stage 18: 500m route length of single circuit cable installation from Rokobili Substation to outside Hibiscus Park Zone substation near the driveway (second circuit noted above in stage 17). Note: One major road crossing of Queens Road opposite Rokobili Switchyard.	500mm wide trench and single circuit cable installation from Hibiscus Park Substation to Rokobili Substation	{Bidders to Insert Price}
TOTAL:		{Bidders to Insert Price}

MR283/2017: 33kV Underground Cable Installation Works Pricing Schedule Foot Path Reinstatement	
<p>Bidders Shall Submit Prices for footpath reinstatement on a footpath's surface area (square meter) basis. Footpath reinstatement shall be carried out as per attached FRA drawings and specifications.</p> <p>Bidder's prices shall include the cost of all required materials for footpath concreting works, including but not limited to:</p> <ol style="list-style-type: none"> 1. 20MPa Batch Plant mixed concrete (Slump to be approx. 80mm (+ or – 5)). Minimum Concrete thickness requirement by FRA for footpaths is 100mm thick. Based on this minimum thickness, it is anticipated that a 1 cubic meter mix of concrete shall have coverage of upto 10 square meters of footpath surface area. 2. Steel Mesh (665 or 665A), 3. Plastic Bar Chairs (to be placed at 500mm centers). 4. There's need for starter bars to be drilled (doweling) into the existing concrete. <p>Note: For footpath reinstatement works the only material provided by FEA shall be the AP40 crushed rock for compacted base. Use of Visqueen plastic is not required by FRA.</p>	
Bidder's Price for reinstatement of 10 square meters of footpath surface area including materials:	Bid Price (FJ\$ & VIP) {Bidders to Insert Price}