



CAA/OT/EIA/0089/2019-2020

27th April, 2020

To: All Tenderers

**RE: REPLACEMENT OF AGL CABLES AND ACCESSORIES AT
ELDORET INTERNATIONAL AIRPORT
TENDER NO. CAA/OT/EIA/0089/2019-2020**

ADDENDUM NO. 3

The following are tender clarifications/addendum issued regarding the above tender in accordance to instructions to tenderers clause 7.1 of the bidding document for the referenced tender:-

ITEM NO.	ADDITIONAL CLARIFICATIONS / BIDDERS' QUESTIONS	REF. PAGE	RESPONSE
1.	We hereby request that you provide us with clarifications and avail us with information requested below; I. Section IV: Evaluation Criteria; (I) Preliminary Evaluation, Clause (xii) require bidders to submit "Current NCA 4 Registration Certification for specialized work and valid practicing license". This is specific hence limited to NCA 4 Registration only. Are higher qualifications i.e. NCA 3, NCA 2 and NCA 1 eligible?	Page 27 Item xii	NCA 4 Registration Certificate for specialized Works (Electrical Engineering Services) – This is the Minimum Requirement to carry out these works. Those with Higher Categories (NCA 1, NCA 2 & NCA 3) are eligible.
2.	Section VI: Technical Specifications; Clause 8. Work Execution – sub-clause 8.2 Trenching – a) Will importation of red soil or sand be required for bedding and surrounding of ducts?	Pages 45 & 46	a) Bedding of the trench with soft soil is required only where rock is encountered. The rate shall be included in the costing for Hard Rock. See clause 8.2(E)

	<p>b) If the answer in (a) above is yes, could you include a BOQ item with required quantity of red soil or sand to enable pricing in order to achieve equal treatment among all Tenderers?</p> <p>c) Item D requires trenches to be not less than 300mm wide while BOQ 4.3.1 and 4.3.2 requires trenches to be 450mm wide and 600 mm deep. Clarify whether bidders should consider a width of 300mm or of 450mm?</p> <p>d) Part of item E states “The Contractor shall ascertain the type of soil or rock to be excavated before bidding”. Such verification of the type of soil would require sub-surface soil exploration or geo-technical survey which bidders cannot do at this stage. Therefore, could you provide more information pertaining to the soil at the site?</p>		<p>b) The quantity of red soil shall be included in the cost of excavation on Hard Rock.</p> <p>c) Trenches are 300mm wide and 600mm deep in most of the project. However where we have more than two ducts running parallel, the trench will be 450mm wide and 600mm deep. The volumes provided in the BoQ have taken care of that. See Clause 8.2(D)</p> <p>d) No Verification before submission of tenders is required. This item will be treated as provisional and the rates provided in the BoQ takes care of all categories of materials likely to be encountered.</p>
<p>3.</p>	<p>Section VI: Technical Specifications; Clause 8; Sub-clause 8.2.1. Installation of Ducts Page 2 of 5</p> <p>a) item A – require schedule 40 PVC ducts, while in BOQ item 4.1, HDPE pipes are required. Please clarify where PVC and HDPE pipes shall be used.</p> <p>b) Item A again – you have required pipes to be 75mm inside diameter. However, our understanding is that such pipes are based on Standards ISO 4427, which classify the OD (outer diameters) as follows; 32mm, 75mm and 110mm OD for the three sizes. May you consider</p>	<p>Page 46</p>	<p>Minimum Specification for the Ducts shall be as follows:</p> <p>a) Type: HDPE</p> <p>b) Material: PE 100</p> <p>c) Sizes (DN): 32, 75 & 110</p> <p>d) Pressure Rating: PN 6</p> <p>e) Dimensions: SDR 26</p> <p><i>DN Means Nominal Diameter = Outer Diameter</i></p> <p>Replace all other specifications in any</p>



	adoption of the sizes to be OD in accordance with the standard.		part of the tender with above.
4.	<p>Section VI: Technical Specifications; Clause 8; Sub- clause 8.2.2. Transformer Housing –</p> <p>a) Item A – requires compliance to FAA L-867 specification AC 150/5345- 42B, and FAA E-1315 – non-load bearing. The AC 150/5345- 42B you have referenced does not exist anymore in the FAA website hence it is cancelled. The AC currently available hence applicable is AC 150/5345- 42J. Clarify whether the AC should be adopted.</p> <p>b) Item B again – what shall be the diameter of the transformer housings?</p>	Page 46	<p>The Minimum Dimensions of the Transformer Housing shall be:</p> <p>a) Diameter: 300mm b) Height : 600mm c) Type: Non Load Bearing as FAA L-867 d) All other details are as per Section VI, Clause 8.2.2</p> <p>Any Version of FAA Advisory Circular from AC 150/5345 - 42B to AC 150/5345 - 42J is valid for details required in this tender.</p>
5.	<p>Section VII: Schedule of Drawings – please clarify and provide more information as follows;</p> <p>a) Trenching layout – drawing is missing. Please provide.</p> <p>b) AGL Circuits Layout – drawing is missing. Please provide.</p> <p>c) Guidance Signs Layout drawing is missing. Please provide.</p> <p>d) Approach Lighting Circuit Layout – it is indicated that cables are drawn in PVC ducts while BOQ requires HDPE pipes and specifications require PVC. Please clarify.</p> <p>e) Secondary circuit installation details for edge lights drawing shows two 110mm diameter pipes for primary cables exiting the transformer pit. Please clarify if the pipes shall be 110mm or 75mm to</p>		<p>a) Trench are as per Circuits Drawings provided in Addendum II and Quantities in BoQ.</p> <p>b) A revised Runway Edge Lights and Threshold/ End Lights is attached to this addendum.</p> <p>c) Guidance Signs are part of Taxiway Circuit</p> <p>d) All Ducts are HDPE, see specification in item 3 above</p> <p>e) All Ducts Carrying Primary Cables are 75mm Diameter except at the Road or Pavement Crossing</p>

	<p>remove the contradiction with other contents of the tender document, since the holes on the transformer pits must be cut at the factory.</p> <p>f) In Edge lights, threshold and deep cans positioning drawing, it is stated that “primary cables drawn inside duct 12m from runway edge and 750mm deep with bare copper conductor above”. Please clarify whether the depth is 600mm or 750mm to remove the contradiction with other contents of the tender document.</p> <p>g) The Edge lights, threshold and deep cans positioning drawing shows a concrete plinth 600x600mm while item 1 of Addendum 2 note states, a suitable base made from class 15 concrete of size 400mm diameter and 75mm deep will be required to level the base of the transformer housing. This shall be priced together with the transformer housings. Please clarify whether it is a base or a plinth that shall be constructed.</p> <p>h) On item (g) above, include a BOQ item with required quantity of concrete to enable pricing in order to achieve equal treatment among all Tenderers.</p>	<p>where we have 110mm diameter ducts.</p> <p>f) All Trenches for primary and secondary cables circuits are 600mm deep except where there is rock.</p> <p>g) The Transformer Housing bases shall be 400mm Diameter and 75mm deep (See Addendum 2 item 1)</p> <p>h) The Quantity of Concrete per Transformer housing to be tabulated by the bidder and included in the unit cost of transformer housing.</p>
<p>6.</p>	<p>Section VII: Bills of Quantities;</p> <p>a) Notes for preparing Bills of Quantities, Preamble to Bill of Quantities; Item 1(L) give definition of hard materials and then classifies all other materials as soft, while BOQ item 4.3 (b) has item for intermediate materials. Please provide definition of intermediate materials. Page 3 of 5</p> <p>b) Schedule I - Preliminaries and General Requirements</p>	<p>a) Omit the item on Intermediate material in the BoQ. These quantities shall be treated as soft material.</p> <p>b) i. Temporally office shall be in form of a</p>

<p>i. Item 1.3 states - Allow for provision of temporarily office for the Project Supervision Team and a store for the contractor. (The facilities to revert to the employer after completion of works) – Clarify the office/store standard - whether masonry, portable containers etc. If masonry, please provide layout drawings.</p> <p>ii. Item 1.3 states – confirm what amenities shall be required -- toilet, shower water etc and if a water and electricity connection shall be required, and who shall meet monthly costs.</p> <p>iii. Item 1.8 states that Double-Cab pick-up shall be PETROL. We request that you clarify whether DIESEL double cab pick-up shall be acceptable, DIESEL is the most accepted Double-Cab pick-up in the industry.</p> <p>iv. As a general observation, you have not catered for profits and overheads for the contractor in most of the items in the preliminaries. We request that you clarify how the contractor shall be compensated.</p> <p>c) BOQ item 2.4 - Cable Markers and Marking Tape</p> <p>i. Item (a) require provision of Yellow Cable Marking Tape (Plastic Strip) for laying over primary cable. Is red tape acceptable?</p> <p>ii. Item (b) require cable markers for marking the route of the primary cable between substation and the runway – Please provide drawings for the markers.</p> <p>d) BOQ Item 3.1 Transformer Housing (Deep Cans) –</p>	<p>standard 40 foot container complete with a wooden conference table and 10 conference chairs. The container to be partitioned into 3 compartments with 2 office spaces accessed from a second door. Should have siting for 4 no. officers.</p> <p>ii. The office shall be provided with power. This shall be met by contractor as per special conditions of contract.</p> <p>iii. The Double Cab Pick-up shall be Petrol as stated. All other detail are as per tender.</p> <p>iv. The clause on contractor's costs, overhead and profit is covered in the preamble to the General Conditions of Contract (clause 1.6).</p> <p>c) i. Aviation colour is yellow therefore the colour for cable marking tape shall be Yellow and not red.</p> <p>ii. The quantity of cable markers is provided, there is no need for a drawing for this item</p> <p>d) i. Omit item 3.1(i) on Epoxy from the</p>
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<p>i. Item (i) require supply of Epoxy for sealing Deep Cans to be encased in concrete. Please provide the required volume to be filled with epoxy to enable pricing in order to achieve equal treatment among all Tenderers.</p> <p>ii. BOQ Item 3.1 Transformer Housings (Deep Cans) – you require deep cans that are 600 mm Deep. Please confirm the required diameter.</p> <p>iii. BOQ Item 3.1 Transformer Housings (Deep Cans) – the introduction states, “Deep Can complete for mounting Lights as Follows” – we seek clarification</p> <ul style="list-style-type: none"> • whether the lights shall be mounted on top of the deep cans and • and if yes, how many special covers for mounting the lights shall be required <p>iv. If the lights shall be mounted on top of deep cans, confirm whether the lights are located inside or outside the pavements.</p> <p>v. If the lights are located inside the pavements, confirm whether the contractor shall be responsible for cutting the pavement and installing the deep cans including all necessary sealing works.</p> <p>vi. If the lights are located inside the pavements where the contractor may be required to cut, provide existing pavement details to enable the tenderer price for the cutting</p> <p>e) BOQ Item 4.1 Ducts and Sleeves, 4.1.1 - 32 mm Diameter HDPE pipes from Deep Cans and Manholes to Lighting Fittings –</p> <p>i. Confirm if installation of the 32mm Diameter HDPE pipes shall require cutting grooves on the pavement? Page 4 of 5</p> <p>ii. If the installation shall require cutting of the pavement, provide details of the</p>	<p>BoQ. No deep cans to be installed in asphalt.</p> <p>ii. The Diameter of Transformer Housing (Deep Cans) is 300mm minimum. (See item 4 above).</p> <p>iii. There are no lights to be mounted on Transformer Housing. See Addendum 2 item 1.</p> <p>iv. No lights to be mounted on Deed cans (see item iii) above. All lights are outside the pavement except 2 Runway Edge lights. No cutting shall be carried out in this item.</p> <p>e) i. There is no cutting of concrete for Secondary cable installation in this tender.</p> <p>ii. Not cutting of pavement in this item</p> <p>iii. Not cutting of pavement in this item.</p>
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	<p>required groove and reinstatement method</p> <p>iii. Also, include a BOQ item with required quantity to enable pricing in order to achieve equal treatment among all Tenderers.</p> <p>f) BOQ Item 4.1.3 100 mm Diameter HDPE pipes:</p> <p>i. Item (a) 100 mm Diameter HDPE Pipes to be installed underneath Threshold/End complete with 50 mm T-off T-pieces for lights and suitable Couplings –</p> <ul style="list-style-type: none"> • Confirm whether the activity shall involve cutting of the pavement. • If cutting of the pavement shall be done, provide <ul style="list-style-type: none"> - Details of existing pavement - cutting and reinstatement details - Also, include a BOQ item with required quantity to enable pricing in order to achieve equal treatment among all Tenderers. <p>ii. Item (d) 100mm diameter Double wall, corrugated and flexible HDPE pipes for the following Taxiway and Road Crossings, including the supply of suitable Couplings:</p> <ul style="list-style-type: none"> • Confirm whether the activity shall involve cutting of the pavement. • If cutting of the pavement shall be done, provide <ul style="list-style-type: none"> - Details of existing pavement - cutting and reinstatement details - Also, include a BOQ item with required quantity to enable pricing in order to achieve equal treatment among all Tenderers. <p>g) BOQ Item 4.2 - DUCT CROSSINGS - Installation of Ducts/ Pipes encased in concrete for cable crossings on Taxiways and Runways as follows (Installation and concrete works only): TAXIWAYS AND ROADS</p>		<p>f) i. Omit BoQ item 4.1.3 (a) and (b). All Secondary cable ducts remain 32mm between the light fitting and the Transformer.</p> <p>ii. This is covered under BoQ item 4.3 and shall include cutting and reinstatement of a standard road pavement of depth 100mm asphalt and depth 450mm stabilized base with a natural subbase.</p> <p>g) The details have been provided in item f above. Your rates for cutting and reinstatement shall include asphalt surface and stabilized base.</p>
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	<p>i. Item (1) 12 x Ducts per crossing (3x layers), 1.2 Metre wide and 0.8 Metre deep for taxiway crossing - see drawing</p> <ul style="list-style-type: none"> • Confirm whether the activity shall involve cutting of the pavement and provide drawings • If cutting of the pavement shall be done, provide <ul style="list-style-type: none"> - Details of existing pavement - cutting and reinstatement details - Also, include a BOQ item with required quantity to enable pricing in order to achieve equal treatment among all Tenderers. <p>ii. Item (2) 16 x Ducts per crossing (3x layers), 1.2 Metre wide and 1.0 Metre deep for road crossing - see drawing</p> <ul style="list-style-type: none"> • Confirm whether the activity shall involve cutting of the pavement. • If cutting of the pavement shall be done, provide <ul style="list-style-type: none"> - Details of existing pavement - cutting and reinstatement details - Also, include a BOQ item with required quantity to enable pricing in order to achieve equal treatment among all Tenderers. Page 5 of 5 <p>h) BOQ Item 4.3 – Excavations 4.3.1 - Excavations for Duct Crossings, backfilling and compaction in accordance with the specification for Taxiways and Roads as follows:</p> <ul style="list-style-type: none"> i. Provide the specification for Taxiways and Roads you have referenced ii. Provide Details of existing pavement <p>i) BOQ Item 4.4 Manholes - Building of Manholes complete, including all excavations required, backfilling and removal of excess materials, sealing of pipes, all as per the specification and drawings. Provide referenced specifications and drawings.</p>		<p>h) i. The details of duct Crossing for roads or any other pavement is provided in addendum 2.</p> <p>ii. Drawings for road and pavement crossing are part of Addendum 2 drawings.</p> <p>i) Drawing for manholes to be issued later</p>
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	j) BOQ item 5.7 requires supply of Fluke 3000 FC clamp meter. Our understanding is that Fluke 3000 FC Wireless Digital Multimeter. Please clarify this requirement.		j) The Required Meter is as: Fluke 3000 FC Series Wireless Multimeter complete with Fluke a3000 FC Wireless AC Current Clamp Kit or approved equivalent.
7.	Drawing on RUNWAY EDGE THRESHOLD/END LIGHTING CIRCUIT LAYOUT not clear		A clear drawing has been attached herein.
8.	You have retained the tender submission deadline to 6th May 2020, while you haven't yet confirmed the date when a site visit shall be held.		<p>The pre-bid meeting that had been suspended indefinitely is hereby rescheduled for a period of four days from 4th May to 7th May 2020 in which the bidders will be given the following conditions;-</p> <ul style="list-style-type: none"> • Bidders to nominate only one representative to attend the site visit but not more than one time; during the five days period; • Invitation will be subject to requesting for an appointment to visit the site to enable us make necessary arrangements in line with government directive on social distancing; • Site visit will not be a mandatory requirement in the bidding process.



The closing/opening date has been extended to **14th May, 2020** from 6th May, 2020 at the same time and place as per the Tender Document.

Kindly amend your tender accordingly and ensure the tender is valid for **120 days** and your Tender Security/Bid bond is valid for **150 days** from the new closing/opening date and time on **14th May, 2020 at 11:00a.m.**

This addendum forms part of the bidding document and is binding on all bidders. All other conditions remain the same.



PATRICK K. WANJUKI
GENERAL MANAGER PROCUREMENT AND LOGISTICS
For: MANAGING DIRECTOR/CEO

