

SPECIAL NOTES

- 1** The Contractor is required to check the numbers of the pages and should any be found to be missing or in duplicate or the figures or writing indistinct, they must inform the Quantity Surveyors at once and have the same rectified. Should the Contractor be in doubt about the precise meaning of any item, word or figure, for any reason whatsoever, or observe any apparent omission of words or figures they must inform the Quantity Surveyor in order that the correct meaning may be decided upon before the date for the submission of the Tender.
- 2** No liability whatever will be admitted nor claim allowed in respect of errors in the Contractor's Tender due to mistakes in the Bills of Quantities which should have been rectified in the manner described above.
- 3** Any doubt or obscurity as to the meaning or intention of any part of the tender documents, or any question arising, shall be taken up in writing, before submission of the tender so that the same can be clarified.
- 4** The Contractor shall not alter or otherwise qualify the text of these Bills of Quantities. Any alteration or qualification made without authority will be ignored and the text of the Bills of Quantities as printed will be adhered to.
- 5** The Contractor shall be deemed to have made allowance in their prices generally to cover items of Preliminaries or additions to Prime Cost Sums or other items, if these have not been priced against the respective items.
- 6** All items of measured work shall be priced in detail and tenders containing lump sums to cover trades or groups of work must be broken down to show prices for each item before they will be accepted. Lump sums to cover items of Preliminaries shall likewise be broken down if so required.
- 7** In no case will any expenses incurred by Contractors in preparation of this Tender be reimbursed.
- 8** The copyright of these Bills of Quantities is vested in the Quantity Surveyors and no part thereof may be reproduced without their express permission given in writing.
- 9** The Contractor is solely responsible for the accurate ordering of materials in accordance with the Drawings and Architect's instructions and no claims for any loss or expense will be entertained for orders for materials based upon the Bills of Quantities.
- 10** The Bills of Quantities must be priced in US Dollar currency, i.e. US Dollars and Cents.
- 11** The tender documents must be priced in ink.

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SECTION NO. 1	PRELIMINARIES AND GENERAL DESCRIPTIONS
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GRAND SUMMARY	

ITEM	GRANT NO.	
A	<p>SECTION NO. 1</p> <p>PRELIMINARIES AND GENERAL DESCRIPTIONS</p> <p>PRELIMINARY PARTICULARS</p> <p>PARTIES</p> <p>The "Employer" is INTERNATIONAL ORGANIZATION FOR MIGRATION</p>	
	<p>For the purpose of the works which are under the control of the consultants above, the respective consultants shall be deemed to be invested with the duties and be representatives of the Architect.</p> <p>B SITE</p> <p>The site is located on BeletHawa DISTRICT</p> <p>The site of the works shall be used solely for the purpose of executing and completing the Contract to the satisfaction of the Architect.</p> <p>The Contractor shall obtain the Architect's approval for the siting of all temporary storage areas for materials.</p> <p>The Contractors shall visit the site to acquaint themselves with its nature and position, the nature of the ground, sub- strata and other local conditions, position of power and water supplies, access roads or any other limitations, and no claims for extras will be considered on account of lack of knowledge in this respect.</p> <p>The Contractor's attention is drawn to the fact that they shall confine themselves to the area necessary for executing the works as instructed by the Architect.</p> <p>The contractor must obtain the Architect's approval and directions regarding the use of any materials found on the Site. Any such material utilized in the execution of the Contract shall be measured and value assessed by the Quantity Surveyor and the amount credited to the Employer.</p>	
	Carried To Collection	US\$

ITEM	GRANT NO.	
	<p>GENERAL MATTERS</p>	
A	<p>SUFFICIENCY OF TENDER</p> <p>The Contractor shall be deemed to have satisfied themselves before tendering as to the correctness and sufficiency of their Tender for the Works and of the rates and prices stated in the priced Bills of Quantities, which rates and prices shall cover all their obligations under the Contract and all matters and things necessary for the proper completion and maintenance of the Works.</p>	
B	<p>STAMP CHARGES</p> <p>The Contractor shall allow for the payment of all Stamp Charges in connection with the Surety Bond and Contract Agreement.</p>	
C	<p>DEFINITIONS AND ABBREVIATIONS</p> <p>Terms used in these Bills of Quantities shall be interpreted as follows:</p> <p>"Approved" shall mean approved by the Architect.</p> <p>"as directed" shall mean as directed by the Architect or any other consultant in the contract.</p> <p>"BS" Shall mean the current British Standard Specification published by the British Standards Institution, 2 Park Street, London W.1, England.</p> <p>"CM" shall mean Cubic Meters.</p> <p>"SM" shall mean Square Meters.</p> <p>"LM" shall mean Linear Meters.</p> <p>"mm" shall mean Millimeters.</p> <p>"Kg" shall mean Kilograms.</p> <p>"No." shall mean Number.</p> <p>"m.s" shall mean Measured separately.</p> <p>"Ditto " shall mean as described before or as above described.</p>	
D	<p>PROGRESS SCHEDULE</p> <p>The Contractor shall, upon receiving instructions to proceed with the work, draw up a Time and Progress Schedule setting out the order in which the Works are to be carried out with the appropriate dates thereof. This Time and Progress Schedule is to be agreed with the Architect and no deviation from the order set out in this Schedule will be permitted without the written consent of the Architect. The Main Contractor will be responsible for arranging the above programme with all Sub-Contractors including the Nominated Sub-Contractors and Nominated Suppliers.</p>	
E	<p>FIGURED DIMENSIONS</p> <p>Figured dimensions are to be followed in preference to dimensions scaled from the Drawings; but whenever possible dimensions are to be taken on the Site or from the Buildings. Before any work is commenced by Sub-Contractors or Specialist Firms, dimensions must be checked on the Site and/or buildings and agreed with the Contractor, irrespective of the comparable dimensions shown on the Drawings. The Contractor shall be responsible for the accuracy of such dimensions.</p>	
	<p>Carried To Collection</p>	<p>US\$</p>

ITEM	GRANT NO.	
<p>A</p>	<p>CONTRACTORS' SUPERINTENDENCE</p> <p>The Contractor shall constantly keep on the Works a literate English-speaking Agent or Representative, competent and experienced in the kind of work involved, who shall give his whole time to the superintendence of the Works. Such Agent or Representative shall receive on behalf of the Contractor, directions and instructions from the Architect and such directions and instructions shall be deemed given to the Contractor in accordance with the Conditions of Contract. The Agent shall not be replaced without the specific approval of the Architect.</p> <p>It is to be a specific condition of this Contract that the successful Tenderer shall provide on site throughout the period from the completion of the substructure to the Date for Practical Completion a suitably qualified, experienced and competent person to ensure that the works are carried out to the standard required by the specification and detailed on the Drawings; and shall ensure that upon any termination of employment a suitable replacement is found.</p> <p>Before the Tenderer's offer is accepted the Architect will personally interview the Contractor's proposed Representative. A curriculum vitae of past experience and qualifications must be provided for the Architect's scrutiny.</p> <p>The Architect's decision will be final regarding the suitability of the proposed Representative.</p> <p>B</p> <p>WATER</p> <p>All water shall be fresh, clean and pure, free from earthy vegetable or organic matter, acid or alkaline substance in solution or suspension.</p> <p>The Contractor shall provide at their own risk and cost all water for use in connection with the Works (including the work of Sub-Contractors). The Contractor shall provide at their own expense all temporary distribution pipes, storage tanks, meters, etc., and they shall clear away same upon completion of the Works.</p> <p>C</p> <p>LIGHTING AND POWER</p> <p>The Contractor shall provide at their own risk and cost all artificial lighting and power for use on the Works, including all Sub-Contractors' and Specialists' requirements and including all temporary connections, wiring, fittings, etc., and clearing away on completion. The Contractor shall pay all fees and obtain all permits in connection therewith.</p> <p>D</p> <p>SAFETY</p> <p>In particular there shall be proper provision of planked footways and guard-rails to scaffolding, etc.; protection against falling materials and tools and the Site shall be kept tidy and clear of dangerous rubbish.</p> <p>The Architect shall be empowered to suspend work on the Site should he consider these conditions are not being observed, and no claim arising from such a suspension will be allowed.</p>	
	<p style="text-align: right;">Carried To Collection</p> <p style="text-align: right;">US\$</p>	

ITEM	GRANT NO.	
<p>A</p> <p>PROTECTIVE CLOTHING</p> <p>The Contractor shall provide all protective or any other special clothing or equipment for their employees that may be necessary.</p> <p>These shall include, inter-alia, safety helmets, gloves, goggles, earmuffs, gumboots, steel toed boots, overalls, etc according to the type of work. The Contractor shall ensure that all safety and protective gear are worn by all staff on site at all times</p> <p><u>MATERIALS AND WORKMANSHIP</u></p> <p>B</p> <p>GENERALLY</p> <p>All materials shall be new unless otherwise directed or permitted by the Architect and in all cases where the quality of goods or materials is not described or otherwise specified, is to be the best quality obtainable in the ordinary meaning of the word "best" and not merely a trade signification of that word.</p> <p>All materials and workmanship shall, unless otherwise specified or described, conform to the appropriate Kenya Bureau of Standards or British Standards Institution Specification current at the date of tender.</p> <p>The Contractor shall order all materials to be obtained from overseas immediately after the Contract is signed and shall also order materials to be obtained from local sources as early as necessary to ensure that such materials are on Site when required for use in the Works.</p> <p>The Contractor shall be responsible for and shall replace or make good at their own expense any materials lost or damaged.</p> <p>The Works throughout shall be executed by skilled workmen well versed in their respective trades.</p> <p>C</p> <p>REJECTED WORKMANSHIP OR MATERIALS</p> <p>Any workmanship or materials not complying with the specific requirements or approved samples or which have been damaged, contaminated or have deteriorated, must immediately be removed from the Site and replaced at the Contractor's expense, as required.</p> <p>D</p> <p>PROPRIETARY MATERIALS</p> <p>Where proprietary materials are specified herein-after the Contractor may propose the use of materials of other manufacture but equal quality for approval by the Architect.</p> <p>All materials and goods, where specified to be obtained from a particular manufacturer or supplier are to be used or fixed strictly in accordance with their instructions.</p> <p>E</p> <p>SAMPLES</p> <p>The Contractor shall furnish at the earliest possible opportunity before work commences and at his own cost, any samples of materials or workman-ship that may be called for by the Architect for his approval or rejection, and any further samples in the case of rejection until such samples are approved by the Architect and such samples, when approved, shall be the minimum standard for the work to which they apply.</p>	<p>Carried To Collection</p> <p>US\$</p>	

ITEM	GRANT NO.	
<p>A</p> <p>EXISTING AND ADJACENT PROPERTY</p> <p>The Contractor must take all steps necessary to safeguard existing and adjacent property, make good at their own expense any damage to persons or property caused thereon, and hold the Employer indemnified against any such claim arising.</p> <p>The Contractor will be held fully responsible for the safety of the existing and adjacent buildings and for any damage caused in consequence of these Works. They must reinstate all damages at his own expense and indemnify the Employer against any loss.</p> <p>The Contractor must take such steps and exercise such care and diligence as to minimize nuisance from dust, noise or any other cause to the occupiers of the existing and adjacent property.</p> <p>B</p> <p>WATCHING AND LIGHTING</p> <p>The Contractor shall provide at their risk and cost all watching and lighting as necessary to safeguard the Works, plant and materials against damage and theft.</p> <p>C</p> <p>SIGNBOARD</p> <p>The Signboard and lettering on same for the display of the General and Sub-Contractors' names shall be of an approved size with the Employer's name painted thereon. The Architect's Quantity Surveyor's and other Consultants' names shall be printed in 50 mm letters all to the Architect's approved design. No other signboard or advertising will be permitted without prior permission from the Architect.</p>		
	<p style="text-align: right;">Carried To Collection</p>	<p style="text-align: right;">US\$</p>

ITEM	GRANT NO.
<u>Collection</u>	
Brought forward from Page	1/5
Brought forward from Page	1/6
Brought forward from Page	1/7
<u>TOTAL FOR SECTION 1: PRELIMINARIES AND GENERAL DESCRIPTIONS CARRIED TO GRAND SUMMARY</u>	
	US\$

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	RATE (US\$)	AMOUNT (US\$)
	<p><u>GRANT NO.</u> <u>PROPOSED STREETLIGHT INSTALLATION</u> <u>BELET-XAWA, DOLOW ROAD</u></p> <p><u>SECTION 2: SOLAR STREETLIGHTS</u></p> <p><u>ELEMENT NO. 1</u></p> <p><u>SOLAR STREETLIGHTING</u></p> <p><u>LENGTH COVERED = 2 KM</u> <u>TOTAL LENGTH ASSESSED = 3.6 KM</u></p> <p><u>Supply all materials and install intergrated solar streetlights complete set with and without pole as mentioned in SL.NO.1 & 2 above including complete civil works.</u> <u>The installation and erection shall be done as per prevailing industry standards and works shall be in accordance with good industrial practises and prudent engineering requirements required for adherence to applicable standards and applicable law shall be deemed to have been included.</u> <u>Operating temperature: -30°C~+70°C. Colour temperature: 6000k</u> <u>Recommended mounting height: 8m</u> <u>Recommended lightspacing: 20m</u> <u>Dimensions (mm): 1300(L) x 235(W) x 43(D)</u></p> <p><u>SOLAR PANEL AND LAMP</u></p> <p>A Assemble solar panel Rating: 18V 60W high efficiency (mono-crystalline silicon) solar panel with Maximum Power Point Tracker (MPPT) Controller lights packed with 28Ah (lithium) battery, Charge time: 6 hours (full sun) Discharge time: 10h @ max brightness, over 24h in safe mode Life expectancy: 5 years</p> <p>B Assemble all materials and mount an LED Lamp (with sensor) 16 lux average illumination on ground at 6m height. Aluminium housing with glass/poly carbonate cover. Outdoor Aluminium luminaire with transparent glass/acrylic cover. Fitted with gasket & accessories for weather-proof operation. Rating: 12V 30W lumen (LM): 3000-3300lm Life expectancy: 50000hours Viewing Angle: 120°</p> <p><u>POLE</u></p> <p>C Factory manufactured prepainted Galvanized Iron Pole dimensions; 4 inch diameter x 8m height complete with brackets and bracing arm with base plate drilling of 1" dia hole on the upper portion of the pole for the instalation of street light. Base pole paintng of red oxide and two coats of silver white aluminium paint. The poles shall have extra provided and fixed with 4'x2' dia being erected Nos 4 by laying 600mm length x 600mm width x 600mm deep (length,breadth and width) cement concrete block in the ratio1:3:6 and block be continued up to 1 feet above the ground level i.e 4 feet below ground level including surface plastering the job including excavationof pole with 4 feet deep and refilling the same after installation of the pole and with holes at top of the pole for fixing ring type GI braket as required</p>	No.	50		
		No.	50		

PROTECTION

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	RATE (US\$)	AMOUNT (US\$)
D	Over charge & deep discharge disconnects Short circuit protection of lamp Battery reverse connection Against discharge through array by blocking diode. Operating temperature: -30°C~+70°C Colour temperature: 6000k Recommended mounting height: 6-7m Recommended lightspacing: 18-20m Dimensions (mm): 1300(L) x 235(W) x 43(D)	No.	50		
E	<u>ELECTRONICS</u> Regulator : 5A series regulator with nominal system voltage 24V DC Dusk to dawn operation Separately located inside the battery box Indications: > On Charge > Battery Low > LED Driver: High efficiency constant current driver working on high frequency giving constant illumination and LED maintenance. > Operating Temperature 0 to 50 degree Celsius > Humidity: 95% rh (NC)	No.	50		
	TOTAL CARRIED TO THE END OF SECTION 2	US\$			

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	RATE (US\$)	AMOUNT (US\$)	
	<u>GRANT NO.</u>					
	<u>PROPOSED STREETLIGHT INSTALLATION</u>					
	<u>BELET-XAWA, DOLOW ROAD</u>					
	<u>MAIN SUMMARY</u>					
	<u>ELEMENT NO</u>					<u>PAGE</u>
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	2					
	3					
	4					
	TOTAL FOR SECTION 2					
TOTAL FOR SECTION 2: DOLOW ROAD FOR STREETLIGHTING CARRIED TO GRAND SUMMARY		US\$				

ITEM NO.	DESCRIPTION	PAGE	AMOUNT (US\$)
	<u>GRANT NO.</u> <u>PROPOSED STREETLIGHT INSTALLATION</u> <u>BELET-XAWA, DOLOW ROAD</u> <u>GRAND SUMMARY</u>		
1	SECTION 1: PRELIMINARIES AND GENERAL DESCRIPTIONS	1/8	
2	SECTION 2: SOLAR STREETLIGHTS	2/2	
	TOTAL AMOUNT CARRIED TO FORM OF TENDER	US\$	
	SIGNED: (CONTRACTOR) Address: Tel No: Date: SIGNED: (EMPLOYER) Address: Tel No: Date:		