

**GRAEME COLLEGE ELECTRICAL BOQ**

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1	<b><u>PRELIMINARIES AND GENERAL</u></b>				
1.1	Preliminaries and general required to comply with the conditions of contract and all regulations governing this contract including insurances et cetera	Item	1		
1.2	<b><u>OCCUPATIONAL HEALTH &amp; SAFETY</u></b>  Allowance for Compliance with Construction Regulations, as detailed in the Occupational Health & Safety Act (OHS), Act 85 of 1993. Submission of an (OHS) plan and all applicable documentation to the Clients satisfaction.	Item	1		
	<b>TOTAL CARRIED FORWARD TO SUMMARY PAGE</b>				
2	<b><u>BUILDING WORK</u></b>				
2.1	<b><u>CONCRETE PLINTH</u></b>				
2.1.1	Provide materials & cast a concrete plinth according to the specifications & drawings for Generator CAR20E/2018/001E	Item	1		
2.1.2	Provide materials & cast a concrete plinth according to the specifications & drawings for Changeover Kiosk CAR20E/2018/002E	Item	1		
2.1.3	Supply and Install Clearview Fence with gate as per specification CAR20E/2018/003E Typical Clearview Fence Detail	Item	1		
2.2	Supply and install the following Kabelflex (HDPE) sleeves.				
2.2.1	Supply and install 110mmØ sleeves c/w bends etc for main supply cables Supply Install	m m	40 40		
2.2.3	Cable sleeve seal Supply Install	ea. ea.	8 8		
2.2.4	Galvanised steel draw wire Supply Install	m m	40 40		
2.3	<b><u>TRENCHING</u></b>				
2.3.1	Cutting of concrete pavement or tar 300mm wide and breaking up of concrete or tar	m	10		
2.3.2	Allow for removal of rubble from site and reinstating once cable is installed.  <b>Excavations for cables in trenches (450mm wide x 600mm deep)</b>	m³	4		
2.3.3	Excavate in normal earth	m	40		
2.3.4	Allow for new earth fill in above trench	m³	10		
2.3.5	Allow for Soft Rock in above trench	m³	5		
2.3.6	Allow for Hard rock in above trench	m³	5		
	<b>TOTAL CARRIED FORWARD TO SUMMARY PAGE</b>				

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
3	<b><u>MECHANICAL INSTALLATION</u></b>				
3,1	<b><u>EMERGENCY STANDY GENERATOR</u></b>				
3.1.1	Allow a provisional sum of R840 000.00 (Eight Hundred and Fourty Thousand Rand only), for the supply and delivery of a complete 1 x 100kVA & 1 x 80kVA outdoor emergency generator inside an IP65 canopy/container set on a concrete plinth as specified in the generator specification, to be used in part or whole, per Engineers discretion.	Prov. Sum	1	R 840 000,00	R 840 000,00
	Allow for Profit and attendance on item 3.1.1 above Installation and commissioning on item 3.1.1 above	% No.	1		
3.1.2	New Kiosk incl. c/o, controller & modem as per drawing provided	No.	2		
	Supply	No.	2		
	Install				
3.1.3	Label equipment as prescribed in the wiring code	Item	2		
3.1.4	Compilation of Maintenance, Operational and Technical Manuals	No.	4		
3,2	<b><u>GENERATOR EARTHING</u></b>				
3.2.1	Supply and install earthing system as per specification and as required by Regulations.	Item	1		
	<b>TOTAL CARRIED FORWARD TO SUMMARY PAGE</b>				
4	<b><u>ELECTRICAL INSTALLATION</u></b>				
	<b><u>EXISTING SUPPLY</u></b>				
4,1	Disconnect the existing supply cable and re-connect (where necessary).	Sum	2		
	<b><u>LOW VOLTAGE SUPPLY CABLES</u></b>				
	Supply and install the following 600/1000V PVC/SWA/PVC cables with copper conductors to SABS 1507 laid vertically or horizontally in conduiting or ducting or direct in accordance with the specification and drawings including fixing, termination measured elsewhere				
4,2	95mm <sup>2</sup> x 4 core PVCPVCSWAPVC cable	m	20		
	Supply	m	20		
	Install	each	8		
	Terminations				
4,3	70mm <sup>2</sup> x 4 core PVCPVCSWAPVC cable	m	20		
	Supply	m	20		
	Install	each	8		
	Terminations				
4,4	50mm <sup>2</sup> bare copper earth wire	m	40		
	Supply	m	40		
	Install				
4,5	100mm wide cable tray	m	10		
	Supply	m	10		
	Install				
	<b>TOTAL CARRIED FORWARD TO SUMMARY PAGE</b>				

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
5	<b><u>DISTRIBUTION BOARDS AND SWITCHGEAR</u></b>				
	<b><u>EXISTING MAIN DISTRIBUTION BOARD</u></b>				
5,1	Trace incoming cable outgoing circuits including cable sizes	Item	2		
5,2	Supply and install earthing system as per specification and as required by Regulations.	Item	2		
5,3	Label distribution boards as prescribed in the wiring code	Item	2		
	<b>Allow for the supply and installation of the following switchgear as per specification, and to the satisfaction of the engineer.</b>				
5,4	200 - 400 amp TP MCCB - 15kA	each	2		
	Supply	each	2		
	Install				
5,5	Housekeeping, sundry items, consumable stocks such as circuit beads engraving, labels, painting etc.	Sum	1		
5,6	Testing of complete installation in terms of the regulations	Each	1		
5,7	Provide Certificates of Compliance	Sum	1		
	<b>TOTAL CARRIED FORWARD TO SUMMARY PAGE</b>				
6	<b><u>MISCELLANEOUS</u></b>				
6,1	Supply and install A82 padlocks	Item	2		
6,2	Supply set of Warning Notices as per SANS and OHS specifications.	Item	2		
6,3	<b><u>TEST AND COMMISSION</u></b>				
	Testing and Commissioning of a fully operational generating set to the Client and Engineer's satisfaction including all the necessary test reports, test equipment, fuel, dummy load equivalent to the expected load, etc				
6.3.1	Conduct tests at the supplier's premises and provide test reports to the Engineer, prior to inviting the Engineer and Client's representative	Item	1		
6.3.2	Conduct tests at the suppliers premises, prior to delivery to site in the presence of the Engineer and Client's representative. This item is inclusive of travelling cost and possible accommodation of the Engineer and Client's representative	Item	1		
6.3.3	Conduct tests on site using a dummy load equivalent to the expected load in the presence of the Engineer and provide test reports	Item	1		
6.3.4	Conduct tests on site after completion of the installation and produce final test reports and provide a full tank of fuel prior to handing over the generator to the beneficiary	Item	1		
6,4	Decommissioning and relocation of existing generator to a DOE facility within 100km from site per the Clients or Engineers instruction.	Prov. Sum	1	R 50 000,00	R 50 000,00
6,5	<b>ALLOW FOR MARKUP ON MISCELLANEOUS ITEMS NOT LISTED WHICH HAVE THE FOLLOWING PRICE RANGES</b>				
6.5.1	Up to R100,000	%			
6.5.2	From R100,001 up to R250,000	%			
6.5.3	From R250,001 Up to R400,000	%			
6.5.4	From R400,001 and above	%			
	<b>TOTAL CARRIED FORWARD TO SUMMARY PAGE</b>				