

BILL NO 1 - PRELIMINARY AND GENERAL						
Electrification of Sixhotyeni			PRICE (EXC.VAT)			
Item	Description	Unit	QTY	Labour Rate	Material Rate	Total Price (R)
1.1	Conditions of Contract Contractual requirements including, amongst others, Transport , Preparation of Site Camp, maintenance of fire-breaks, Dismantling of Site Camp & restoration to original condition, Attendance to meetings, liaison & co-ordination with TSC, roads authority, SAPS for outages, Handing Over as per TQRRP020, weekly stats reporting, monthly man hours reporting, etc...	Item	1.00			
1.2	Site Store and Office The Electrical contractor shall provide for a temporary site office, for his own use where all drawings and specifications shall be kept in accordance with the provisions of the specifications, as well as provision of safe and adequate storage space for all material and the removal of such on completion.	Per Month	4.00			
1.3	Materials Management Allow for co-ordination with Eskom, receipt and handling of "free-issue" materials from the New Germany stores, including the transport, loading & offloading, safekeeping & storage and the maintenance of a record keeping system to track the issue of materials for incorporation into the works.	Item	1.00			
1.4	Sample Line Allow for the co-ordination with T&Q & the construction of a sample line as detailed in EI048MVL & Eskom specifications.	Item	1.00			
1.5	As-built drawings (on Survey Department approval) Allow for the marking up, annotating of a set of drawings to accurately represent the works constructed, the co-ordination with the surveyor on site for re-pegging where appropriate and supply to the Engineer for approval (2-5m accuracy). Engineer supplies only 3 sets of Construction Drawings. Supply As-Built to Engineer 4 weeks before Outage, to allow the CoW to verify and forward to Survey for approval.	Item	1.00			
1.6	Safety Regulations The Electrical Contractor is to invoke adequate allowances to abide by the Construction Regulations that has been promulgated in the Government Gazette in July 2003 extracted from the OHS ACT 85 of 1993. This will include the services of a competent safety officer that will ensure that all requirements pertaining to the construction regulations have been met for the duration of the contract.					
1.6(a)	Legal and contractual compliance as per OHS Act, Construction Regulations & Eskom Safety Regulations.	Item	1.00			
1.6(b)	Personal protective Equipment. The contractor is to make adequate provision for the supply and management of acceptable safety clothing for his/her duly appointed casual labour in order to facilitate compliance with the OHS ACT 85 of 1993.	per person	20.00			
1.6(c)	Fall arrest system/Ladders/Climbing Irons etc...	Month	4.00			
1.6(d)	Health & Safety Plan, File & and requirements as per Works Information and Eskom DDT standards.	Item	1.00			
TOTAL : Amount Carried Forward to Next Page						

	TOTAL: Amount Brought Forward from Previous Page					
1.7	Labour Intensive Works Expanded Public Works Programme (EPWP)					
1.7.1	Compliance with the EPWP reports	Per Month	4.00			
1.7.2	PC Amount for CLO	Per Month	4.00	R5,000.00		R 20,000.00
1.7.3	PC Amount for PSC Members	Sum	4.00	R5,000.00		R 20,000.00
1.8	Electricity					
1.8.1	Contractor is to Source Temporary Power Supply for the Site Office. Contractor will Ascertain that this Temporary Supply is Metered at all Times.	Sum	1.00			
1.9	Site Fence					
1.9.1	Contractor is to Supply and Install Diamond Mesh Fence at 1.8m	m	40.00			
1.9.2	Supply and Install Diamond mesh Lockable Gate 1.8m high x 3.6m wide	each	1.00			
1.10	Other					
1.10.1	Supply, Install and remove on completion Project Notice Board, as per Municipality's requirements	Item	1.00			
1.10.2	Provide Site Security	Per Month	4.00			
1.10.3	PC amount for Re-Pegging	Sum	1.00			
1.10.4	PC amount for Compiling PCS File and Handover Documentation	Sum	1.00			
1.11	Eskom Service					
	The Contractor shall make allowance to Organize and Receive Customer Education Material From Eskom For the Project Site	Sum	1.00			
1.12	Contractual Requirements					
	Comply ,maintain all insurance and statutory contributions, etc.					
	Allowance to Comply ,maintain all insurance and statutory contributions, etc. (Actual cost will be paid at the end of the project and proof of policy must be provided and must be compliant to contractual requirements)	Sum	1.00			
1.13	Accommodation					
	Accommodation Allowance is for the Contractors Staff excluding the casual labourers which are assumed to be residing in the area where the works are executed.					
	Staff Accommodation Allowance	Month	4.00			
1.14	Compaction Material					
	Allow for sourcing , transporting , delivering , back filling and compacting of G2, G3 and G5 soil material and Cement for reinforced compaction of MV & LV poles.	Sum	1.00			R 70,000.00
TOTAL : Carried Over to Summary						

BILL NO 2 - MEDIUM VOLTAGE SWITCHGEAR, SECTIONALISERS, TRANSFORMERS, ETC							
Electrification of Sixhotyeni				PRICE (EXCL VAT)			
Item	Description	DDT	Unit	Qty	Supply Rate	Install Rate	Total Price (R)
2.1	Transformers (Coastal Spec.) - pole mounted Installation of existing or new Eskom-supplied transformers on an appropriate structure and secure as required including the termination of cables and conductors, the provision of suitable lugs for 35, 50 or 70mm conductor as required & all accessories. Excluding cable, conductors, and the transformer structure. Include transport, offloading/loading, safe storage from appropriate Eskom store.						
2.1.1	NEW Transformer 32kVA, 22kV/+460V/-460V	3021	No	1			Rate Only
2.1.2	NEW Transformer 64kVA, 22kV/+460V/-460V	3021	No	7			
2.1.3	NEW Transformer 100kVA, 22kV/415V	3021	No	1			Rate Only
2.2	Medium Voltage Surge Arrestors Supply, deliver, off load on site and safely store on site the following surge arrestors, complete with galvanised steel mounting brackets for securing the surge arrestor, nuts, bolts, washers and lock washers as specified. Secure the surge arrestors and brackets to the transformer as specified including the termination of conductors. Excluding the conductors and transformer. Discharge current 10kA.						
2.2.1	22kV, MCOV Surge arrestor, Inland	3100	No	16			
2.3	Medium Voltage Sectionalisers and Links Supply and install link isolators as detailed including the installation of crossarm brackets and the termination of conductors and including the drilling of holes in wooden poles as required.						
2.3.1	Section Links, Single Pole (2.5m X-arm) (three phase)	1848	No	8			
2.3.2	Equipment Links, Single Pole (2.5m X-arm) (dual phase)	1849	No	1			Rate Only
2.3.3	Equipment Links, Single Pole (2.5m X-arm) (three phase)	1849	No	5			
2.4	Neutral Surge Arrestor Supply and install a LV surge arrestor including lugs and galvanised bolts						
2.4.1	6kV, 10kA Surge Arrestor	3088	No	8			
2.5	Transformer & Equipment Earthing Supply and install all materials for the complete MV earthing of transformer structures for ABC networks as specified. Included in the rate shall be all required spikes, insulated copper conductor, galvanised conduits, staples, bare copper, excavations, backfilling, etc. The rate shall allow for all required MV earth electrodes, consisting of four earth spikes in accordance with the Distribution specifications, Part 2. Additional earth spikes/conductor shall be measured elsewhere if required.						
2.5.1	MV Earth (Crow Foot)	1860	No	7			
2.5.2	Section Breaker Earthing 22kV, 400A, 8kA with IRTU	1829 B	No	1			Rate Only
TOTAL : Carried Over to Summary							

BILL NO 3 - MEDIUM VOLTAGE OVERHEAD DISTRIBUTION SYSTEM							
Electrification of Sixhotyeni				PRICE (EXCL VAT)			
Item	Description	DDT	Unit	Qty	Supply Rate	Install Rate	Total Price (R)
3.1	Conductor						
	Supply, safely store on sealed drums with ends adequately secured and transport to site conductor as specified. String conductor as specified including splices, jumper conductor ties, strain clamps, suspension clamps, tensioning, sagging, etc.						
Note	The following dimensions will all be "Conductor Length" with 10% is allowed for slack & wastage. Additional wastage/slack is for Contractor's account.						
3.1.1	ACSR Fox - 8.37D	3136	m	6,000			
	MV Structures						
Note	Allow for the following structures and insulator assemblies in accordance with the specifications as shown in the drawings. Include the specified crossarms, drilling of holes and treating of such holes, the provision of the U-nails and earthwire in accordance with Eskom specifications. All jumpers to links and transformers to be installed with PVC black pipe. Supply and installation of 15m of 3/3.35x1100MPa steel wire for a BIL for each pole structure as per Eskom specification. Exclude the supply and planting of poles, stays and struts which are measured elsewhere. Insulators as per EI090SS.						
	Supply and install all material as specified for the construction of the following MV structures. Including bonding of hardware and earthing. All excavations, poles, crossarms and stays are measured elsewhere.						
	Note: RX refers to statutory road crossings with the relevant DDT0257-10kN-31mm/kV post insulator, full wrap tie or DDT0251-40kN-31mm/kV longrod with pistolgrips.						
3.2	2 Phase Structures General Arrangement						
3.2.1	Phase / phase – Staggered Vertical (600mm spacing) – Intermediate – 0° Deviation	1310	No	1			Rate Only
3.2.2	Phase / phase – Vertical (600mm spacing) – Intermediate – Small(1°-±10°) Deviation	1311	No	1			Rate Only
3.2.3	Phase / phase – Vertical (600mm spacing) – Strain - 0° Deviation	1313	No	1			Rate Only
3.3	3 Phase Structures General Arrangement						
3.3.2	3 Phase - Vertical (600mm spacing) - Strain – Small(1°-30°) Deviation	1714	No	1			Rate Only
3.3.3	3 Phase - Vertical (600mm spacing) - Strain – Large(30°-90°) Deviation	1715	No	1			Rate Only
3.3.4	3 Phase - Vertical (600mm spacing) - Strain – Terminal	1716	No	1			Rate Only
3.3.5	3 Phase - Delta / 2,5m Wood X-arm - Intermediate – 0° Deviation	1740 B	No	16			
3.3.6	3 Phase-Delta / 2.5m Wood X-arm Strain 0° Deviation	1743	No	2			
3.3.6	3 Phase-Delta / 2.5m Wood X-arm Strain 1 - 60° Deviation	1744	No	10			
3.3.7	3 Phase - Delta / 2,5m Wood X-arm - Strain Terminal	1746	No	13			
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Item	Description		Unit	Qty	Supply Rate	Install Rate	Total Price (R)
	TOTAL:Brought Forward from Previous Page						
3.4	Auxiliary Structures						
3.4.1	3Ph, Take off (2.5m X-arm)	1804	No	13			
3.4.2	2Ph, Take off (2.5m X-arm)	1814	No	1			Rate Only
3.4.3	Transformer - Single Pole mount (16-100kVA).	1860	No	1			Rate Only
3.4.4	Transformer - Pole mounting out-of-line (16-100kVA) includes 1866 module, etc... as per EI067-MVL) and excludes transforme and equipment links.	1866	No	7			
3.4.5	3Ph, T-Frame (2m Steel X-arm)	1870 B	No	1			Rate Only
3.4.6	Equipment Links Cut-Outs Or Disconnectors 2.5m Wood Crossarm / Single Pole	1849	No	5			
3.4.7	Section / Equipment Links Or Disconnectors 1.3m Steel Crossarm / Single Pole	1850	No	2			Rate Only
3.5	Recloser Installation						
3.5.1	Recloser, 11 + 22kV 400A 8kA with IRTU (DDT3180). Install recloser, control box & IRTU supplied as free issue from Eskom. Transport to site, load/offload, safe storage, install on appropriate structure and secure as required including termination of cables and conductors provision of suitable lugs & glands for all size cables as required. Supply and install surge arrestors & links (200A load break).	1829 B	No	1			Rate Only
3.6	Testing						
	Allowance shall be made for the complete testing and commissioning of the Medium Voltage overhead distribution system						
3.6.1	MV Test (per transformer installation) Ref. SCSASABZ1	0311	No	7			
3.6.2	MV Phasing of line, ensure correct phasing per Transformer	0311	Sum	7			
3.7	General						
	Supply and install MV Full tension Joints as per the DDT Standards						
3.7.1	Fox - Line splice	3228	Ea	1			Rate Only
3.7.2	Insulation Co-ordination and Bonding. The unit rate shall allow for the complete installation of a BIL lightning downwire on New and existing structures; including the excavation around the pole, the installation of a 3x3.5mm galvanised BIL downwire, installed down the pole in accordance with the Eskom standard, 03TB-34.	0310	No	49			
	TOTAL: Carried Over to Summary						

BILL NO 4 - SUPPORT FOR OVERHEAD RETICULATION							
Electrification of Sixhotyeni			PRICE (EXCL VAT)				
Item	Description	DDT	Unit	Qty	Supply Rate	Install Rate	Total Price (R)
4.1	Poles and Crossarms						
	Supply and safely store the following poles. Transport to site of works and install pole in excavated hole, including cutting and scaffing, kicking blocks, bonding, treating, etc. Excavations and compaction are measured elsewhere.						
4.1.1	2.5m Wood X-Arm , 120-139mm top diameter	0316	No	72			
4.1.2	4.5m Wood X-Arm, 120-139mm top diameter	0318	No	7			
4.1.3	9m Pole, 160-179mm top diameter	0055	No	118			
4.1.4	9m Pole, 180-199mm top diameter	0055	No	8			
4.1.5	10m Pole,160-179mm top diameter	0051	No	7			
4.1.6	11m Pole, 160-179mm top diameter	0051		39			
4.1.7	11m Pole, 180-199mm top diameter	0051	No	20			
4.1.8	12m Pole, 160 - 179mm top diameter	0053	No	1			Rate Only
4.1.9	12m Pole, 180 - 199mm top diameter	0053	No	12			
4.1.10	16m Pole, 180 - 199mm top diameter	53	No	1			
4.2	Stays, Flying Stays and Anti-Climbing Devices						
Note	The unit price for a standard stay and an aerial stay shall exclude the wooden poles, but include the stay wire, stay rods, insulators, stay plate, stay guards, bitumastic paint, guy grip dead end, earthing of stay, line splice, precast concrete slabs, pole clamp, nuts bolts and washers etc. The following stays shall be in accordance with the specification and shall include a stay plate						
4.2.1	MV Stay (DDT0341 rev 9, BIL 40kV & 150kV)	0341	No	37			
4.2.2	LV Stay	0341	No	100			
	The following flying stays shall be in accordance with the specifications and shall include poles & excavation.						
4.2.3	MV Flying Stay	0343	No	1			
	The following struts shall be in accordance with the specifications and shall include poles & excavation.						
4.2.4	MV Strut	0342	No	6			
4.2.5	LV Strut	1167	No	22			
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Item	Description	DDT	Unit	Qty	Supply Rate	Install Rate	Total Price (R)
	TOTAL: Brought Forward from Previous Page						
4.3	Excavations and Compaction						
Note	The excavations for service connections are measured elsewhere Determine pole positions, excavate, and supply a mechanical boring device if required. The rate shall include backfilling, compaction to 93% MOD AASHTO density. Any damage to existing services shall be made good by the Contractor at his own expense and to the approval or the PM(C).						
4.3.1	Hole for 9m pole - 1.5m deep - pickable	0332	No	70			
4.3.2	Hole for 9m pole - 1.5m deep - compressor drilling	0332	No	56			
4.3.3	Hole for 10m pole - 1.8m deep - pickable	0332	No	7			
4.3.4	Hole for 11m pole - 1.8m deep - pickable	0332	No	42			
4.3.5	Hole for 11m pole - 1.8m deep - Compressor drilling	0332	No	18			
4.3.6	Hole for 12m pole - 2.0m deep - pickable	0332	No	7			
4.3.7	Hole for 12m pole - 2.0m deep - Compressor drilling	0332	No	5			
4.3.8	Hole for MV stay - 1.8m deep - pickable	0350	No	19			
4.3.9	Hole for MV stay - 1.8m deep - Compressor drilling	0350	No	18			
4.3.10	Hole for LV stay - 1.4m deep - pickable	0350	No	60			
4.3.11	Hole for LV stay - 1.4m deep - compressor drilling	0350	No	40			
4.3.12	Hole for MV strut - 0,5m deep - pickable	0342	No	1			Rate Only
4.3.13	Hole for MV strut - 0,5m deep - Compressor drilling	0342	No	6			
4.3.14	Hole for LV strut - 1.3m deep - pickable	0342	No	14			
4.3.15	Hole for LV strut - 1.3m deep - compressor drilling	0342	No	8			
4.4	Pole Labels						
	Install labels on all poles in accordance with the specifications including the provision of all fixing materials. Transport from Eskom stores to site to be priced in Preliminary & General 1.3. Labels to the Eskom Standard SCSSCAAP5, TQGHSP05 and TQCSS005. Dynatape, masking tape or Hand written with permanent marker type labels are not to be considered for operational labelling under any circumstances.						
4.4.1	Equipment labels		No	164			
4.4.2	Mosdorfer fuse rating labels (transformers)		No	16			
4.4.3	Fuse - "Warning. Open all fuses before working on line"		No	16			
4.4.4	Transformer Max fuse notification label		No	14			
4.4.5	Feeder Max Fuse notification label		No	15			
4.4.6	Danger Labels (transformers, links, anti-climbings)	3202	No	14			
4.4.7	LV Feeder Labels		No	15			
4.4.8	Pole Top Box Phase Labels		No	78			
	TOTAL: Carried Over to Next Page						

Item	Description		Unit	Qty	Supply Rate	Install Rate	Total Price (R)
	TOTAL: Brought Forward from Previous Page						
4.5	General Items						
4.5.1	Supply and install labels Spiral Vibration Dampers as per the DT Standards						
	Spiral Vibration Dampers (Hare & Fox)	3175	Each	6			
4.5.2	Supply and Install Anti-Climbing Devices as per the latest DDT Standards. Anti-Climbing Device as per 05TI09. Including the removal of existing spikes. Galvanised wire per DDT3170. Galvanises staples per DDT3129. Install on trfr str, struts, parallel MV stay wires, recloser str, OOL trfr str, etc, structures where meter boxes or equipment is installed <2m above ground, any str having cable secured by means of strapping <0.5m apart, any climbable pole str, apparatus etc as per DDT standard.	0399	per str	38			
4.5.3	Supply and Install, where MV & LV Earths are on the same structure, UV protected black PVC pipe of length 1.2m on each earth downwire, cutting the top and bottom of the pipe at 45deg, split the pipe so as to insert the MV/LV earth and installing clout nails at the bottom and top.		per str	7			
	TOTAL : Carried Over to Summary						

BILL NO 5 - LV OVERHEAD DISTRIBUTION LINES

Electrification of Sixhotyeni		PRICE (EXCL VAT)					
Item	Description	DDT	Unit	Qty	Supply Rate	Install Rate	Total Price (R)
5.1	LV ABC (Insulated Neutral)						
Note	The LV insulated aerial bundle conductor system shall be in accordance with SABS 1418 and insulated in accordance with SABS 0198 and the Distribution						
Note	The unit rate per meter shall include the tensioning and stringing of the bundle in accordance with the sag and stress tables provided by the manufacturer with all plant, equipment and accessories required to erect an LV overhead bundled distribution line i.e. Drum trailer, winch, wind-off pulleys, pulling rope/cable with connection, dynamometer, slide-lock, sheathed synthetic-fibre belt, woven snatch belt, snatch block, tackle, shackle, etc.						
Note	Measured lengths for stringing shall be net line route lengths and unit rates shall include for sag, off-cuts, etc.						
	Ensure correct tooling - D 51 Hydraulic Crimping Tool and dies, a 13mm tube spanner with T – bar, Phase separators, Slings, Wide Grooved Pulleys, Steel Pulling Socks, Pulling Swivels, Rickie, Come-along and Dynamometers.						
5.1.1	Dual phase ABC (35mm2, 3 core) - Insulated neutral	3141	m	7,800			
5.1.2	Three phase ABC (35mm2, 4 core) - Insulated neutral	3141	m	1			Rate Only
5.1.3	Three phase ABC (70mm2, 4 core) - Insulated neutral	3141	m	1			Rate Only
5.2	LV Structures						
	Allow for the assembly of the following LV strain and suspension assemblies in accordance with the specifications shown in the drawings. Including all earthing, drilling of holes and treating of drilled holes. All LV ABC hardware, line connectors, PVC cable ties, nuts, bolts, washers, lock washers shall be allowed for in the appropriate item below.						
	Supply and install all the materials as specified for the following:						
5.2.1	LV 1 Phase Insulated ABC Suspension Assembly (0-30°)	1153	No	44			
5.2.2	LV 1 Phase Insulated ABC Terminal Assembly	1154	No	55			
5.2.3	LV 1 Phase Insulated ABC Strain Assembly (0 - 60°)	1155	No	29			
5.2.4	LV 1 Phase Insulated ABC Strain Assembly (60°- 90°)	1156	No	29			
5.2.5	LV 1 Phase Insulated ABC T Off from Intermediate	1157	No	14			
5.2.6	LV 1 phase Insulated ABC T-Off from from Strain	1159	No	26			
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Item	Description	DDT	Unit	Qty	Supply Rate	Install Rate	Total Price (R)
	TOTAL : Brought Forward from Previous Page						
5.2.7	2 Phase Delta intermediate 0 degrees D2063 - A-Frame with 4kN Posts	2063	No	1			Rate Only
5.2.8	2 Phase Delta Terminal	1346	No	1			Rate Only
5.2.9	2 Phase Delta inline strain 0 degrees D-DT 1752SR (0-60 degrees single 2.5m x-arm)	1752	No	1			Rate Only
5.2.10	2 Phase Delta inline strain 0 degrees D-DT 1752SR (60-90 degrees double 2.5m x-arm)	1752	No	1			Rate Only
5.2.13	2 Phase Delta intermediate 0 degrees D-ER1340B-2.5 X-ARMwith 10kN Posts	1340	No	1			Rate Only
5.2.14	Three Phase ABC Intermediate Assembly	1100	No	1			Rate Only
5.2.15	Three Phase ABC Terminal Assembly	1120	No	1			Rate Only
5.2.16	Three Phase ABC Strain Assembly (0-60 deg)	1121	No	1			Rate Only
5.2.17	Three Phase ABC Strain Assembly (60-90 deg)	1122	No	1			Rate Only
5.2.18	Three Phase ABC Tee from Intermediate	1140	No	1			Rate Only
5.2.19	Three Phase ABC Cross Intermediate assembly	1141	No	1			Rate Only
5.2.20	Three Phase ABC Tee from Strain	1142	No	1			Rate Only
5.3	LV Fuse Switch Units						
	Supply, deliver to site, off load on site and safely store. The fused switch shall be supplied complete with the pole mounting bracket, nuts, bolts, washers, etc. for securing the unit to the wooden pole. The fuses shall be supplied with the fuse switch unit. Fuse ratings shall be as shown on the drawings. Install the on load fused disconnecting switch on the transformer structure including the drilling of holes as required, including the termination of the LV ABC to the unit. Fuse ratings below allow for 120% overload. One fuse unit is for the transformer and one unit per LV feeder for isolation/protection.						
5.3.1	80A Dual Phase Load disconnecting switch MORSDORPHER Fuse	0309	No	14			R 0.00
5.3.2	160A Three Phase Load disconnecting switch MORSDORPHER Fuse	0309	No	1			Rate Only
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Item	Description	DDT	Unit	Qty	Supply Rate	Install Rate	Total Price (R)
	TOTAL : Brought Forward from Previous Page						
5.4	Earthing of LV Network						
Note	All MV transformer earthing is measured elsewhere and all LV earths per structure are measured with the structure. This section is intended for LV earths at transformers. Allowance shall be made for the testing (including earth loop impedance) of the earth resistance for the entire reticulation system in accordance with the TN-C-S earthing system as defined in the Distribution Standard Part 2 and any earth tests which may be required in terms of the standard and detailed specifications. Use 2 x H-Crimps - neutral connection point.						
5.4.1	LV Earth (Crowsfoot)	0627	No	7			
5.5	LV Pole Mounted Service Boxes (Outdoor)						
	Supply and install on a wooden and/or concrete pole a pole mounted distribution box as specified complete with pole mounting brackets, cable ties, PG clamps, miniture circuit breaker(s), neutral, phase and earth bars, insulated copper tails for connecting to LV ABC, insulation piercing connectors and factory installed cable openings. Included shall be the stainless steel strapping and buckles and terminations of the tails onto the LV ABC.						
5.5.1	2-Way pole box , split smart-meter, complete with insulated copper tails, insulation piercing connectors and nylon compression glands, per DDT0180.	3055	No	72			
5.5.2	4-Way pole box, split smart-meter complete with insulated copper tails, insulation piercing connectors and nylon compression glands, per DDT0180.	3055	No	5			
5.6	Testing						
	Allowance shall be made for the testing of each LV ABC distributor on accordance with the project specification. Included shall be the provision of test certificates and all documentation as required.						
5.6.1	LV Test, per zone. Ref. SCSASABZ1		No	7			
5.7	General						
5.7.1	Supply and install ABC Full tension Joints as per the DT Standards - Dual phase ABC (35mm ²)		Ea	1			Rate Only
5.7.2	Supply and install ABC Full tension Joints as per the DT Standards - Three phase ABC (35mm ²)		Ea	1			Rate Only
5.7.3	Supply and install ABC Full tension Joints as per the DT Standards - Three phase ABC (70mm ²)		Ea	1			Rate Only
	TOTAL : Carried Over to Summary						

BILL NO 6 - HOUSE CONNECTIONS							
Electrification of Sixhotyeni				PRICE (EXCL VAT)			
Item	Description	DDT	Unit	Qty	Supply Rate	Install Rate	Total Price (R)
6.1	House Connections Install, test, commission including CoC, IC's, sealing and as built drawing on completion. Include installation of EMU in PTB, Ready Board, CIU LCD Keypad, Smart-Meter Seal .						
6.1.1	Type A (5m service pole)	0360	No	26			
6.1.2	Type B - (5m service pole)	0361	No	90			
6.2	Conductor Measured lengths for stringing shall be net line route lengths and unit rates shall include for sag, cut-offs etc.						
6.2.1	6 mm² AIRDAC with Communication Cable		m	5900			
6.3	Ecu's and Passive Bases						
6.3.1	Customer Interface Unit		No	115			
6.3.2	Split Meter Ready-Board		No	115			
6.3.3	Smart meter installation (incl of all components)		No	115			
6.4	Sundry Items Supply and safely store the following poles. Transport to site of works and install pole in excavated hole, including cutting and scaffing, kicking bolts, bonding, treating, etc.						
6.4.1	5m pole, 80-100mm top diameter	0058 A	No	30			
6.4.2	7m Pole, 100-120mm top diameter	0050 B	No	22			
6.4.3	Install 'Unique Seals' and record on Control Sheet and PCS file. Two seals per unit.		No	115			
6.4.4	Submit populated Control Sheet and PCS CorDaptix information to the Project Engineer upon the successful energising of a customer. Payment will only be made upon the successful loading of the Data ontoMunicipality's customer database.		No	115			
6.5	Excavations and Compaction Determine pole positions, excavate, and supply a mechanical boring device if required. The rate shall include backfilling and compaction.						
6.5.1	Hole for 5m service pole - 1.0m deep		No	30			
6.5.2	Hole for 7m service pole - 1.3m deep		No	22			
6.7	Data Concentrator Equipment Contractor is to provide all necessary material and equipment for installation of Data Concentrators on the new transformers as per Eskom specification.						
6.7.1	Kiosk Meter/ 3phase / KVA / Data Concentrator secure Pole Mount		No	7			
6.7.2	Interface Data Concentrator 450 G3; PLC DC ; 230V (Internal Modem)		No	7			
6.7.3	Buckle, Strap 12 C254 D3110		No	50			
6.7.4	Strap, Tie Down: WD 12mm x THK 0.75mm		No	2.45			
6.7.5	Cable End 4-25mm² D3148		No	7			
6.7.6	Cale Elect: 1 KV / 4C / CU / 4mm² / STL Wire		No	21			
6.7.7	Gland; Cable : Adjustable; No 1; BRS CD PLTD		No	7			
6.7.8	Padlock: Master Steel Restr-A Orange D6050		No	7			
TOTAL : Carried Over to Summary							

FINAL SUMMARY		
Electrification of Sixhotyeni		
	Description	Total
1	PRELIMINARY AND GENERAL	
2	MEDIUM VOLTAGE SWITCHGEAR, SECTIONALISERS, TRANSFORMERS, ETC.	
3	MEDIUM VOLTAGE OVERHEAD DISTRIBUTION SYSTEM	
4	SUPPORT FOR OVERHEAD RETICULATION	
5	LOW VOLTAGE OVERHEAD DISTRIBUTION LINES	
6	HOUSE CONNECTIONS	
7	SUB TOTAL 1	
8	CONTINGENCY AMOUNT (5% OF SUBTOTAL 1)	
9	SUB TOTAL 2	
10	INCLUDE 15% VAT	
TOTAL INCLUSIVE OF VAT		