

BILL No. 1 - PRELIMINARY AND GENERAL

Ngojini Village		PRICE (EXC. VAT)				
Item	Description	Unit	QTY	Supply Rate	Install Rate	Amount
1.1	Conditions of Contract Contractual requirements including, amongst others, Insurance of Works, Transport & Residence, 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			
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	6			
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. Eskom to supply free issue material to site which include: Section Breaker, Transformers, Meters and Bases, Fox Conductor, LV ABC Conductor, 4 and 10mm² Airdac, Labels & Seals.	Item	1			
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			
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			
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. Include, amongst others, the preparation, implementation, updating, amending, checking and upon completion of the works and handing over of the H&S file to the Engineer.					
1.6(a)	Legal and contractual compliance as per OHS Act, Construction Regulations & Eskom Safety Regulations.	Item	1			
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			
1.6(c)	Fall arrest system/Ladders/Climbing Irons etc...	Months	6			
1.6(d)	Health & Safety Plan, File & and requirements as per Works Information and Eskom DDT standards.	Item	1			
1.7	Labour Intensive Works Expanded Public Works Programme (EPWP)					
1.7.1	Compliance with the EPWP reports	Per Month	6			
1.7.2	PC Amount for CLO	Per Month	6	R 5,000.00		R 30,000.00
1.7.3	PC Amount for PSC Members	Per Month	6	R 2,500.00		R 15,000.00
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.	Per Month	6			
1.9	Site Fence					
1.9.1	Contractor is to Supply and Install Diamond Mesh Fence at 1.8m	m	40			
1.9.2	Supply and Install Diamond mesh Lockable Gate 1.8m high x 3.6m wide	each	1			
	Amount Carried Forward to Next Page					

UMZIMVUBU LOCAL MUNICIPALITY Contract No. UMZ/2025-26/INFRA/INEP.....						
Item	Description	Unit	QTY	Labour Rate	Material Rate	Amount
	Amount Brought Forward From Previous Page					
1.10	Other					
1.10.1	Supply, Install and remove on completion of a Project Notice Board,as per Municipality's requirements	Item	1			
1.10.2	Security	Per Month	6			
1.10.3	PC amount for Re-Pegging	Sum	1			
1.10.4	PC amount for Compiling PCS File and Handover Documentation	Sum	1			
1.11	Eskom Service					
1.11.1	The Contractor shall make allowance to Organize and Receive Customer Education Material From Eskom For the Project Site	Sum	1			
1.12	Contractual Requirements					
1.12.1	Comply ,maintain all insurance and statutory contributions, etc	Sum	1			
1.13	Accommodation					
1.13.1	Staff Accommodation Allowance	Per Month	6			
1.14	Engineering Services					
	Allow for Engineer's QMS Services	Sum	1			R 129,158.30
1.15	Dismantling of Electrical Infrastructure					
	Allow for Dismantling of Sections of the Existing Network to Connect Existing Customers to New Transformers	m	282			
TOTAL : Carried forward to summary						

BILL No. 2 - MEDIUM VOLTAGE SWITCHGEAR, SECTIONALISERS, TRANSFORMERS, ETC

Ngojini Village		PRICE (EXC. VAT)					
Item	Description	Unit	DDT	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/+240V/-240V	No	3021	4			
2.1.2	NEW Transformer 50kVA, 22kV/+460V/-460V	No	3021	1			Rate Only
2.1.3	NEW Transformer 64kVA, 22kV/+460V/-460V	No	3021	1			Rate Only
2.1.4	NEW Transformer 100kVA, 22kV/+460V/-460V	No	3021	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	No	3100	8.00			
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)	No	1848	1			Rate Only
2.3.2	Equipment Fused Links, Single Pole (2.5m X-arm) (dual phase)	No	1849	13			
2.3.3	Equipment Links, Single Pole (2.5m X-arm) (three phase)	No	1849	1			
2.4	Neutral Surge Arrestor Supply and install a LV surge arrestor including lugs and galvanised bolts						
2.4.1	6kV, 10kA Surge Arrestor	No	3088	4			
2.5	Transformer & Equipment Earthing Supply and install all materials for the complete 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	No	1860	4			
2.5.2	Section Breaker Earthing 22kV, 400A, 8kA with IRTU	No	1829B				Rate Only
1.9.2							
	Amount carried over to next page						

BILL No. 3 - MEDIUM VOLTAGE OVERHEAD DISTRIBUTION SYSTEM

Ngojini Village		PRICE (EXC. VAT)					
	Description	Unit	DDT	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	m	3136	2,234			
	MV Structures						
	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. Include BIL insulation co-ordination for shared MV & LV structures as per 03TB-34 or later approved Eskom standard.						
Note	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 stavs 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	No	1310	1			Rate Only
3.2.2	Phase / phase – Vertical (600mm spacing) – Intermediate – Small(1°-±10°) Deviation	No	1311	1			Rate Only
3.2.3	Phase / phase – Vertical (600mm spacing) – Strain - 0° Deviation	No	1313	1			Rate Only
3.2.4	Phase / phase – Delta 2.5m X-arm Strain Terminal	No	1346	1			
3.3	3 Phase Structures General Arrangement						
3.3.1	3 Phase - Delta / 2.5m Wood X-arm - Intermediate– 0° Deviation	No	1740B	2			
3.3.2	3 Phase-Delta / 2.5m Wood X-arm Strain 0° Deviation	No	1743	1	R 1,850.00	R 300.00	Rate Only
3.3.3	3 Phase-Delta / 2.5m Wood X-arm Strain 1 - 60° Deviation	No	1744	8			
3.3.4	3 Phase - Delta / 2.5m Wood X-arm - Strain Terminal	No	1746	4			
3.3.5	3 Phase Steel A Frame	No	DEC 2063	1			
	Amount carried over to next page						

	Description	Unit		QTY	Supply Rate	Install Rate	Total Price (R)
	Amount brought forward from previous page						
3.4	Auxiliary Structures						
3.4.1	3 Phase - Vertical (600mm spacing) Take-Off	No	1801	1			
3.4.2	3 Phase - Delta / 2.5m Wood X-arm Strain Take-Off	No	1804	1			
	3 Phase - Delta / Take Off / H - Pole 3.5m X-Arm	No	1806	1			
3.4.3	3 Phase - Delta / 2.5m Wood X-arm Strain Take-Off	No	1814	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.	No	1866B	5			
3.4.5	Transformer - Pole mounting out-of-line (100-200kVA) includes 1865B module, etc... as per EI067-MVL) and excludes transformer and equipment links.	No	1865	1			Rate Only
3.4.5	3Ph, T-Frame (2m Steel X-arm)	No	1870B				Rate Only
3.4.6	Equipment Links Cut-Outs Or Disconnectors 2.5m Wood Crossarm / Single Pole	No	1849				Rate Only
3.4.7	Section / Equipment Links Or Disconnectors 1.3m Steel Crossarm / Single Pole	No	1850				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).	No	1829B				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	No	0311	4			
3.6.2	MV Phasing of line, ensure correct phasing.	Sum	0311	4			
3.7	General Supply and install MV Full tension Joints as per the DDT Standards						
3.7.1	Fox - Line splice 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. Galvanized BIL wire to be installed on MV/LV sharing poles, Transformer structures , poles with Sectionalizers/Breakers and MV Take-off Structures.	Ea	3228	1			Rate Only
3.7.2		No	310	18			
	Amount carried over to next page						

BILL No. 4 - SUPPORT FOR OVERHEAD RETICULATION

Ngojini Village		PRICE (EXC. VAT)					
Item	Description	Unit	DDT	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	No	0316	36			
4.1.2	4.5m Wood X-Arm, 120-139mm top diameter	No	0318	1			Rate Only
4.1.3	3.5m Wood X-Arm, 120-139mm top diameter	No	0055	1			Rate Only
4.1.4	9m Pole, 160-179mm top diameter	No	0055	42			
4.1.5	9m Pole, 180-199mm top diameter	No	0051	4			
4.1.6	10m Pole, 160-179mm top diameter	No	0051	1			Rate Only
4.1.7	10m Pole, 180-199mm top diameter	No	0051	1			Rate Only
4.1.8	11m Pole, 160-179mm top diameter	No	0051	1			Rate Only
4.1.9	11m Pole, 180-199mm top diameter	No	0053	11			
4.1.10	12m Pole, 160 - 179mm top diameter	No	0053	1			Rate Only
4.1.11	12m Pole, 180 - 199mm top diameter	No	0053	1			Rate Only
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)	No	0341	20			
4.2.2	LV Stay	No	0341	25			
	The following flying stays shall be in accordance with the specifications and shall include poles & excavation.						
4.2.3	MV Flying Stay	No	0343	2			Rate Only
	The following struts shall be in accordance with the specifications and shall include poles & excavation.						
4.2.4	MV Strut	No	0342	2			
4.2.5	LV Strut	No	0342	9			
1.9.2							
	Amount carried over to next page						

Item	Description	Unit	DDT	QTY	Supply Rate	Install Rate	Total Price (R)
	Amount brought forward from previous page						
4.3	Excavations and Compaction						
Note	The excavations for service connections are measured elsewhere						
	Determination of pole positions, excavate, and supply a mechanical boring device if required. The rate shall include backfilling, compaction to 93% MOD AASHTO density, and where necessary the supply and transportation of suitable ground as may be required to receive the desired compaction, except where cement is specified. Any damage to existing services shall be made good by the Contractor at his own expense and to the approval or the PM(C).						
	Before excavation work begins the Contractor shall evaluate the stability of the ground before excavation begins. Contractor shall use warning signs, positioned next to an excavation within which persons are working or carrying out inspections. Ref CR (11)						
4.3.1	Hole for 9m pole - 1.5m deep - pickable	No	0332	46			
4.3.2	Hole for 9m pole - 1.5m deep - compressor drilling	No	0332	1			Rate Only
4.3.3	Hole for 10m pole - 1.8m deep - pickable	No	0332	1			Rate Only
4.3.4	Hole for 10m pole - 1.5m deep - compressor drilling	No	0332	1			Rate Only
4.3.5	Hole for 11m pole - 1.8m deep - pickable	No	0332	11			
4.3.6	Hole for 11m pole - 1.8m deep - Compressor drilling	No	0332	1			Rate Only
4.3.7	Hole for 12m pole - 2.0m deep - Compressor drilling	No	0332	1			Rate Only
4.3.8	Hole for MV stay - 1.8m deep - pickable	No	0350	20			
4.3.9	Hole for MV stay - 1.8m deep - Compressor drilling	No	0350	1			Rate Only
4.3.10	Hole for LV stay - 1.4m deep - pickable	No	0350	25			
4.3.11	Hole for LV stay - 1.4m deep - compressor drilling	No	0350	1			Rate Only
4.3.12	Hole for MV strut - 0,5m deep - pickable	No	0342	2			
4.3.13	Hole for MV strut - 0,5m deep - Compressor drilling	No	0342	1			Rate Only
4.3.14	Hole for LV strut - 1.3m deep - pickable	No	0342	10			
4.3.15	Hole for LV strut - 1.3m deep - compressor drilling	No	0342	1			Rate Only
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	5050	4			
4.4.2	Mosdorfer fuse rating labels (transformers)	No	5050	12			
4.4.3	Fuse - "Warning. Open all fuses before working on line"	No	5050	4			
4.4.4	Transformer Max fuse notification label	No	5050	4			
4.4.5	Feeder Max Fuse notification label	No	5050	8			
4.4.6	Danger Labels (transformers, links, anti-climbings)	No	3202	16			
4.4.7	LV Feeder Labels	No	5050	12			
4.4.8	Pole Top Box Phase Labels	No	5050	40			
	TOTAL : Carried forward to summary						

Item	Description	Unit		QTY	Supply Rate	Install Rate	Total Price (R)
	Amount 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)	Each	3175				Rate Only
4.5.2	Supply and Install Anti-Climbing Devices as per the latest DDT Standards. Anti-Climbing Device as per 05T109. 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.	per str	3170	12			
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	1860	4			
TOTAL : Carried forward to summary							

BILL No. 5 - LV OVERHEAD DISTRIBUTION LINES							
Ngojini Village			PRICE (EXC. VAT)				
Item	Description	Unit	DDT	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 Standard Part 3. Ref. EI-092-LVL						
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.						
	Supply, safely store and transport to site and string. The conductor will be delivered on sealed drums and adequate allowance shall be made for the correct handling thereof.						
	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	Single phase ABC (35mm ² , 2 core) - Insulated neutral	m	3141	1160			
5.1.2	Dual phase ABC (35mm ² , 3 core) - Insulated neutral	m	3141	682			
5.1.3	Three phase ABC (35mm ² , 4 core) - Insulated neutral	m	3141				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. Excluding the supply and planting of poles, stays and struts, which are measured elsewhere. Use strain assembly when crossing roads.						
	Supply and install all the materials as specified for the following:						
	LV 2 Phase Insulated Neutral Suspension Assembly (0°-30°)	No	1145				Rate Only
5.2.1	LV 2 Phase Insulated ABC Terminal Assembly	No	1146				Rate Only
5.2.2	LV 2 Phase Insulated ABC Strain Assembly (0-60°)	No	1147				Rate Only
5.2.3	LV 2 Phase Insulated ABC Strain Assembly (60°- 90°)	No	1148				Rate Only
5.2.4	LV 2 Phase Insulated ABC Suspension Assembly (0°-30°)	No	1149				Rate Only
5.2.5	LV 2 phase insulated/bare neutral ABC T from Intermediate	No	1150				Rate Only
5.2.6	LV 2 phase insulated/bare neutral ABC Intermediate Suspension Assembly	No	1152				Rate Only
5.2.7	LV 1 phase insulated neutral ABC Suspension Assembly (0°- 30°)	No	1153	14			
5.2.8	LV 1 phase insulated neutral ABC Terminal Assembly	No	1154	24			
5.2.9	LV 1 phase insulated neutral ABC Terminal Assembly	No	1155	14			
5.2.10	LV 1 phase insulated neutral Strain Assembly (60° -90°)	No	1156	3			
5.2.11	LV 1 phase insulated neutral ABC T from Intermediate	No	1157	1			Rate Only
5.2.12	LV 1 phase insulated neutral ABC Cross Intermediate Suspension Assembly	No	1158	1			Rate Only
5.2.13	LV 1 phase insulated/bare neutral ABC T from Strain	No	1159	3			
5.2.14	LV 1 phase insulated/bare neutral ABC X Intermediate-Strain Assembly	No	1160	48			Rate Only
	Amount carried over to next page						

Item	Description	Unit	DDT	QTY	Supply Rate	Install Rate	Total Price (R)
	Amount brought forward from previous page						
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	No	0309	10			
5.3.2	160A Three Phase Load disconnecting switch MORSDORPHER Fuse	No	3185	1			Rate Only
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)	No	627	4			
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.	No	0929	40			
5.5.2	4-Waypolebox,splitsmart-metercompletewithinsulatedcopper tails, insulation piercing connectors and nylon compression glands, per DDT0180.	No	0929	6			
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		4			
5.7	General						
5.7.1	Supply and install ABC Full tension Joints as per the DT Standards - Dual phase ABC (35mm ²)	Ea	3228	1			Rate Only
5.7.2	Supply and install ABC Full tension Joints as per the DT Standards - Three phase ABC (35mm ²)	Ea	3228	1			Rate Only
	TOTAL : Carried forward to summary						R 0.00

BILL No. 6 - HOUSE CONNECTIONS							
Ngojini Village				PRICE (EXC. VAT)			
Item	Description	Unit	DDT	QTY	Supply Rate	Install Rate	Total Price (R)
6.1	House Connections Installation, testing, commissioning complete including CoC, IC's, sealing and as built drawing on completion. Includes installation of EMU in PTB, Ready Board, CIU LCD Keypad, Meter Seal and associated accessories. Make good house walls. Poles and excavations are measured elsewhere.						
6.1.1	Type A Connection (Pole Top Box Addition)	No	0330	2			
6.1.2	Type B Connection (Extension of Network)	No	0361	39			
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	0360	1340			
6.3	Ecu's and Passive Bases						
6.3.1	Customer Interface Unit	No		41			
6.3.2	Split-Meter Ready Board	No		41			
6.3.3	Smart Meter Installation (Inc.of all Components)	No		41			
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. Excavation and compaction are measured elsewhere.						
6.4.1	5m pole, 80-100mm top diameter	No	0330	5			
6.4.2	7m Pole, 100-120mm top diameter	No	0330	7			
6.4.3	Install 'Unique Seals' and record on Control Sheet and PCS file. Two seals per unit.	No		41			
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		41			
6.5	Excavations and Compaction Determination of pole positions, excavate, and supply a mechanical boring device if required. The rate shall include backfilling, compaction to 93% MOD AASHTO density, and where necessary the supply and transportation of suitable ground as may be required to receive the desired compaction, except where cement is specified. Any damage to existing services shall be made good by the Contractor at his own expense and to the approval or the PM(C).						
6.5.1	Hole for 5m service pole - 1.0m deep	No	0330	5			
6.5.2	Hole for 7m service pole - 1.3m deep	No	0330	7			
6.6	Data Concenter Equipment						
6.6.1	Kisok Meter/ 3Phase /kVA/Data Concentrator	No		4			
6.6.2	IDC 450 G3; PLC DC (Internal Modem)	No		4			
6.6.3	Buckle, Strap 12 C254 D3110	No		20			
6.6.4	Strap, Tie Down: WD 12mm x THK 0.75mm	No		4			
6.6.5	Cable End 4-25mm² D3148	No		8			
6.6.6	Cale Elect: 1 KV / 4C / CU / 4mm² / STL Wire	No		8			
6.6.7	Gland; Cable : Adjustable; No 1; BRS CD PLTD	No		4			
6.6.8	Padlock: Master Steel Restr-A Orange D6050	No		4			
TOTAL : Carried forward to summary							

FINAL SUMMARY		
Electrification of Ngojini		
PRICE (EXCL VAT)		
Item	Description	Total
1	PRELIMINARY AND GENERAL	R -
2	MEDIUM VOLTAGE SWITCHGEAR, SECTIONALISERS, TRANSFORMERS, ETC.	R -
3	MEDIUM VOLTAGE OVERHEAD DISTRIBUTION SYSTEM	R -
4	SUPPORT FOR OVERHEAD RETICULATION	R -
5	LOW VOLTAGE OVERHEAD DISTRIBUTION LINES	R -
6	HOUSE CONNECTIONS	R -
7	SUB TOTAL A	R -
8	CONTRACT CONTINGENCY AMOUNT (10% of SUB-TOTAL)	R -
9	SUB TOTAL B	R -
10	ADD 15% VAT	R -
11	TOTAL AMOUNT	R -