

	REFERENCE	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		<b>SECTION NO. 1</b>				
	SABS 1200A	<b>PRELIMINARY AND GENERAL</b>  (Applicable to the whole of the Works)				
	8.3	<b><u>FIXED CHARGE ITEMS</u></b>				
	8.3.1	Contractual requirements.	Sum			
	8.3.2	<b>Establishment of Facilities on the Site</b>				
	8.3.2	<b>Facilities for Engineer:</b>				
	8.3.2.1c	Name boards (In No. 2)	sum			
	8.3.2.2	<b>Facilities for Contractor :</b>				
	8.3.2.2a	Offices and storage sheds.	Sum			
	8.3.2.2b	Workshops.	Sum			
	8.3.2.2c	Laboratories.	Sum			
	8.3.2.2d	Living accommodation.	Sum			
	8.3.2.2e		Sum			
		Ablution and latrine facilities (chemical portable toilets to be well maintained / serviced for the entire duration of the contract).				
	8.3.2.2f	Tools and equipment.	Sum			
	8.3.2.2g	Water supplies, electric power, compressed air supply and communications (all to be available from beginning of contract and for entire duration of the contract).	Sum			
	8.3.2.2h	Dealing with water.				
		The Contractor is to ALLOW for all necessary dewatering for the entire duration of the contract, or as deemed necessary to complete this contract successfully. The price is to include for all piping, pumps, discharging of water into suitable outlet points, standby generator/s, etc., complete.	Sum			
	8.3.2.2i	Access to the site.	Sum			
	8.3.2.2j	Plant.	Sum			
	8.2.2.2	Density Tests	Sum			
	8.3.2.2	Concrete Tests	Sum			
	8.3.3	Other fixed charge obligations				
	8.3.4	Removal of site establishment	Sum			
	8.3.3	Complying with Health and Safety Specifications	Sum			
	8.3.3	Complying with Environmental Management Programme Act and all other statutory environmental requirements	Sum			
	8.3.3	Security for the works for the duration of the contract	Sum			
	<b>8.4</b>	<b><u>TIME RELATED ITEMS</u></b>				
	8.4.1	Contractual requirements	Sum			
	8.4.2	<b>Operation and Maintenance of Facilities on Site, for the Duration of Construction, (Unless otherwise stated)</b>				
	8.4.2.1	<b>Facilities for the Engineer:</b>				

8.4.2.1c	Name boards (In No. 2)	Sum			
8.4.2.2	<b>Facilities for Contractor:</b>	Sum			
8.4.2.2a	Offices and storage sheds.	Sum			
8.4.2.2b	Workshops.	Sum			
8.4.2.2c	Laboratories.	Sum			
8.4.2.2d	Living accommodation.	Sum			
8.4.2.2e	Ablution and latrine facilities (chemical portable toilets to be well maintained / serviced for the entire duration of the contract).	Sum			
8.4.2.2f	Tools and equipment.	Sum			
8.4.2.2g	Water supplies, electric power, compressed air supply and communications (all to be available from beginning of contract and for entire duration of the contract).	Sum			
8.4.2.2h	Dealing with water.				
	The Contractor is to ALLOW for all necessary dewatering for the entire duration of the contract, or as deemed necessary to complete this contract successfully. The price is to include for all piping, pumps, discharging of water into suitable outlet points, standby generator/s, etc., complete.	Sum			
8.4.2.2i	Access to the site.	Sum			
8.4.2.2j	Plant.	Sum			
8.3.2.2	Density Tests	Sum			
8.3.2.2	Concrete Tests	Sum			
8.4.3	Supervision for duration of construction	Sum			
8.4.3	Complying with Health and Safety Specifications	Sum			
8.4.4	Complying with head office overhead costs for duration of construction	Sum			
8.4.5	Other time related obligations	Sum			
8.4.5	Complying with Environmental Management Programme Act and all other statutory environmental requirements	Sum			
8.4.5	Security for the works for the duration of the contract	Sum			
8.7	<b><u>DAYWORK</u></b>				
8.8.4a	<b>Existing Services</b>				
8.8.4a	Supply or hire of specialist equipment for the detection of a particular service	Sum			
8.8.4b	The use of equipment referred to in (a) above	Sum			
8.8.4c	Excavation by hand in soft material to expose unknown services	m <sup>3</sup>	1		
8.8.4d	Temporary protection, as required in terms of the project specification and as directed by the Engineer	Sum			
8.7	<b><u>DAYWORK (PROVISIONAL)</u></b>				
	<b>Site Return and Transporting of Equipment (Hourly Rate)</b>				
	Supervisor	Hour			
	Artisan	Hour			

		Skilled Labour	Hour			
		Driver	Hour			
		1 Ton Truck (with a cherry picker)	km			
		8 Ton Crane Truck	Hour			
		20 Ton Crane Truck (reach of 20m high)	Hour			
		4 x 4 LDV	km			
		4 x 2 LDV	km			
		<b>TOTAL - carried forward to FINAL SUMMARY</b>				

	REFERENCE	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		<p>SECTION NO. 2</p> <p>ALTERATIONS</p> <p>BILL NO. 1</p> <p>MODIFICATION OF EXISTING WORK</p> <p>STRUCTURAL STEELWORK</p> <p>Modification of steel supports</p> <p>Reduce 6m high PI supports (0.54/5573) already erected on site by 500mm for the clearance under the 275kV line in accordance with drawing 0.18/33561</p>	No.	8		
		TOTAL - carried forward to FINAL SUMMARY				

REFERENCE	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	SECTION NO. 3				
	EARTHWORKS (PROVISIONAL)				
	1. Note : The following bills in this section , have been measured according to the "SABS 1200 System for Measuring Civil Works" as published by the SABS. All quantities are provisional and subject to remeasurement during the project.				
	2. For pricing purposes all items are to be read in conjunction with the tender drawings. No additional compensation will be made for any information shown on the drawings but not mentioned in the Bills of Quantities - the drawings take precedence over the Bills of Quantities.				
	3. All 'Imported Material' for earthworks will be obtained from a commercial source, as selected by the contractor and shall be regarded as freehaul.				
	4. All surplus excavated material is to be disposed of at a registered, designated dumping site, as selected by the Contractor, which cost is to include for all sundry charges, royalties, etc.				
	5. All cut and fill materials will be regarded as freehaul, ie. haulage, loading and offloading of material shall be included in the rates submitted by the Contractor - NO additional compensation whatsoever shall be entertained, or additional monies paid in this regard.				
SABS 1200C	SITE CLEARANCE				
8.2.6	Clear hedge or fence (or both) where not scheduled separately:				
8.2.6	Supply and install baricading (Shark Net) around the working area, compliant to Eskom safety requirements	m	100		
	EARTHWORKS				
SABS 1200DA 8.3.1	Excavation:				
DA 8.3.1a	Dig up and remove rubbish, debris, vegetation and shrubs	m <sup>2</sup>	100		
DA 8.3.1b	Remove top soil to nominal depth of 150mm, stockpile and maintain	m <sup>2</sup>	100		
SABS 1200DA 8.3.1b	Excavate in all materials and use for backfill or embankment as ordered	m <sup>3</sup>	249		
SABS 1200D.8.3.2b	Extra-over for:				
SABS 1200D.8.3.2b.1	Intermediate excavation.	m <sup>3</sup>	26		
SABS 1200D.8.3.2b.2	Hard rock excavation.	m <sup>3</sup>	26		
SABS 1200	Soil Poisoning				
SABS 1200DA 8.3.7	Approved weedkiller applied in strict accordance to the manufacturer's instructions	m <sup>2</sup>	150		
SABS 1200D.8.3.4	Importing of materials from commercial sources (Provisional)				

SABS 1200D 8.3.4	G6 Material from commercial sources in accordance with SABS 1200 DM compacted to 95% Mod AAASHTO density to be approved by Engineer	m³	108		
SABS 1200D.8.3.1	<b>Pitching of surfaces (Provisional)</b>				
SABS 1200D.8.3.1.2	Supply and spread 20mm river sand	m²	1 011		
	Supply and lay 80mm class 25 type sa concrete interlocking paving blocks in herringbone pattern	m²	1 000		
SABS 1200C.8.2.9	<b>Rubble disposal:</b>				
8.2.9	Transport all rubble from demolitions and the works to a nearby registered dumping site	m³	1 000		
<b>TOTAL - carried forward to SECTION SUMMARY</b>					

	REFERENCE	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		<b>SECTION NO. 3</b>				
	SABS 1200GA	<b>CONCRETE, FORMWORK AND REINFORCEMENT (SMALL WORKS)</b>				
	8.2	<b>FORMWORK</b>				
	8.2.2	<b>Smooth:</b>				
	8.2.2	Sides of bases, stub columns.	m <sup>2</sup>	44		
	8.2.4	<b>Special off-form:</b>				
	8.2.4	Form 20 x 20mm chamfer along top edge of exposed stub column or base.	m <sup>2</sup>	17		
	SABS 1200G.8.3	<b>Reinforcement:</b>				
	8.3.1	<b>High tensile steel bars:</b>				
	8.3.1	12mm	t	0.592		
	8.3.1d	16mm	t	0.715		
	8.3.1d	20mm	t	0.633		
	8.3.1	<b>Mild steel bars:</b>				
	8.3.1	8mm	t	0.210		
	SABS 1200G.8.4	<b>Concrete (Structural):</b>				
	8.4.2	<b>Blinding layer in 15MPa/ 19mm concrete:</b>				
	8.4.2	Blinding layer 50mm minimum thick	m <sup>2</sup>	47		
	8.4.3	<b>Strength concrete, 25MPa/19mm in:</b>				
	8.4.3	Bases and stubs columns	m <sup>3</sup>	34		
	8.4.4	<b>Unformed surface finishes:</b>				
	8.4.4a	Wood - floated finish.	m <sup>2</sup>	47		
		<b>TOTAL - carried forward to SECTION SUMMARY</b>				

	REFERENCE	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		<b>SECTION NO. 3</b>				
	SABS 1200D 8.3.14	<b>EARTHMAT (PROVISIONAL)</b>				
	8.3.14	Supply, deliver and lay copper earthmat equipment earthing, earthing straps, including excavation complete with risks of collapse, bedding, backfill, compaction and testing at depth up to (See earthmat specification). All flat copper to be 50 x 3mm in accordance with BS 1432, pickled and annealed black copper ( ).701kg/m:				
	SABS 1200E	<b>ELECTRICAL</b>				
	SABS 1200EE	1 x 10mm Diameter copper at 1.0m deep	m	200		
	8	50 x 3mm Flat copper laid at 0.15m to 1.0m deep or on top of concrete, including fixing	m	10		
	8	Clamp connection, 50 x 3mm flat to 2 no. x 10mm diameter rods	No	20		
	8	Crimp joints, 10mm round to round (Refer sheets C5 to C8)	No	20		
		<b>Sundries</b>				
	SABS 1200P12	Excavate, search for and locate existing earthmat, including excavations complete with risk of collapse, backfill and compaction	m		Item	
		<b>TOTAL - carried forward to SECTION SUMMARY</b>				



	REFERENCE	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		<b>SECTION NO. 2</b>  <b>CABLE TRENCHES, DUCTS, JUNCTIONS AND RAMPS</b>  <b>ELECTRICAL INSTALLATION</b>  <b>THE FOLLOWING IN CABLE TRENCHES, DUCTS &amp; JUNCTIONS</b>  Construct cable trench complete as per drawing 0.18/17324 (Sheet 4 Rev. 2 and 0.54-390)  Install 160mm diameter PVC cable sleeves as per drawing 0.18-17324 (Sheet 4 Rev 2)	m  m	35  16		
		<b>TOTAL - carried forward to SECTION SUMMARY</b>				

	REFERENCE	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		SECTION. NO. 3				
		STRUCTURAL STEELWORK				
		Notes to Tenderers:				
		The Tenderer is to allow in the pricing of structural steelwork for all steelwork to be erected plumb and to include for ALL necessary steel packing pieces to achieve same.				
	SABS 1200H	STRUCTURAL STEELWORK				
	SABS 1200H.8.3.3	Erection of steel on site				
		Structural steelwork.	t	15.780		
	SABS 1200H 8.3.6	HD BOLTS AND MISCELLENEOUS METALWORKS				
	8.3.4	Erection bolts (Provisional)				
		Grade 4.8 Black bolts	t	0.527		
		Grade 8.8 H.T. bolts	No	492		
	SABS 1200HA 8.3.1	Erection of steel fence o site:				
	8.3.1	Install new 1.8m high galvanised diamond mesh "security fence" complete including excavations, backfilling, disposing of surplus material, concrete, formwork, etc. all as per detail drawing no. 0.54/4963 (Sheets 1 to 4)	m	85		
		TOTAL - carried forward to SECTION SUMMARY				

	SCHEDULE	SECTION SUMMARY - CIVIL WORKS	AMOUNT
	1	EARTHWORKS	
	2	CONCRETE	
	3	EARTHMAT	
	4	CABLE TRENSCHES, DUCTS AND RAMPS	
	5	STRUCTURALM STEELWORK	
		TOTAL - CARRIED TO FINAL SUMMARY	

	ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		<b>SECTION NO. 4</b>				
		<b>CABLING AND STRINGING</b>				
		<b>ERECTION OF EQUIPMENT</b>				
		<b>SCHEDULE 1</b>				
		<b>PRIMARY PLANT EQUIPMENT</b>				
	1	Install 132kV bypass isolator	No	1		
	2	Install 275kV bypass isolator	No	1		
	3	Install 132kV Post Insulator	No	9		
	4	Install 375kV Post Insulator	No	12		
		<b>TOTAL - carried forward to SECTION SUMMARY</b>				

	ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		<b>SECTION NO. 4</b>  <b>CABLING AND STRINGING</b>  <b>88kV FEEDER 11 - SAR MODDER 2 TEE</b>  <b>SCHEDULE 2</b>  <b>CABLING - DISCONNECTING, REMOVAL, INSTALLATION AND TERMINATIONS</b>  NOTE: The rate for terminating must include all activities and items as specified in cabling and earthing specification (i.e. earthing of spare cores)  Rates to be included even if no quantity is indicated				
	1	BVX 2 ECV (Installing and Testing New Cable)	m	250		
	2	BVX 2 ECV (Gland supply)	No	2		
	3	BVX 2 ECV (Terminations)	No	2		
		<b>TOTAL - carried forward to FINAL SUMMARY</b>				

	ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		<b>SECTION NO. 4</b>  <b>CABLING AND STRINING</b>  <b>ERECTION OF EQUIPMENT</b>  <b>SCHEDULE 2</b>  <b>CABLING - DISCONNECTING, REMOVAL, INSTALLATION AND TERMINATIONS</b>  NOTE: The rate for terminating must include all activities and items as specified in cabling and earthing specification (i.e. earthing of spare cores)  Rates to be included even if no quantity is indicated				
	1	BVX 2 ECV (Installing and Testing New Cable)	m	250		
	2	BVX 2 ECV (Gland supply)	No	2		
	3	BVX 2 ECV (Terminations)	No	2		
		<b>TOTAL - carried forward to SECTION SUMMARY</b>				

	ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		<b>SECTION NO. 4</b>				
		<b>CABLING AND STRINGING</b>				
		<b>SCHEDULE 4</b>				
		<b>STRINGING</b>				
	1	2 x 800mm2 (Install)	m	1 226		
	2	1 x 400mm2 (Install)	m	101		
	3	14.16mm2 Earthwire (Install)	No	2		
		<b>TOTAL - carried forward to SECTION SUMMARY</b>				

	ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		SECTION NO. 4				
		CABLING AND STRINGING				
		SCHEDULE 5				
		CLAMPS				
	1	B44	No	42		
	2	E42	No	3		
	3	A40	No	6		
	4	S-2	No	216		
	5	STA-30/40	No	84		
	6	STA-20/30	No	6		
	7	TC-10	No	84		
	8	TC-3	No	6		
	9	YC-17	No	3		
	10	STP-26/P	No	3		
	11	K-10	No	18		
	12	P-38/127-150	No	15		
		TOTAL - carried forward to SECTION SUMMARY				



	SCHEDULE	SECTION SUMMARY - CABLES AND STRINGING	AMOUNT
	1	ERECTION OF EQUIPMENT	
	2	88kV FEEDER 11 - SAR MODDER 2 TEE	
	3	275kV FEEDER - APOLLO 2	
	4	STRINGING	
	5	CLAMPS	
		TOTAL - CARRIED TO FINAL SUMMARY	

SCHEDULE		FINAL SUMMARY	AMOUNT
1	SECTION 1 - PRELIMINARY AND GENERAL		
2	SECTION 2 - ALTERATIONS		
3	SECTION 3 - CIVIL WORKS		
4	SECTION 4 - CABLING AND STRINGING		
		SUBTOTAL	
		ADD VAT @ 15%	
		TOTAL - CARRIED TO FORM OF TENDER	