



Item	Payment Reference	Description	Unit	Qty	Rate (R)	Amount (R)
		<u>BILL NO 5.1</u> <u>SWITCHING STATION SS 1A2</u>				
		<u>CIVIL WORKS</u>				
5.1.1		(a) Make provision for temporary works to accommodate existing cables during extension of the switching station building	Sum	0		
		<u>BUILDINGS (Contractor to do quantity survey on all buildings extensions)</u> <u>Extension to existing control building</u>				
		Construct an extension to the switching room building inclusive of all required foundations, brickwork, roof & tiles, gutters, down-pipes, plumbing, electrical works, earth bonding to main earthgrid, carpentry, plastering, painting, doors, air ventilation, concrete ramp/porch and control cable trench entry into building. All accessories such as nuts, bolts, brackets, supports, etc. included				
5.1.2		.1 Supply	m ²	0		
5.1.3		.2 Install	m ²	0		
		<u>Demolish existing wall 5m long and 3 meter high</u>				
5.1.4		.1 Supply	ea	-		
5.1.5		.2 Install	ea	0		
		<u>Wall mounted cable rack (flush to wall) - heavy duty</u>				
5.1.6		.1 Supply	m	10		
5.1.7		.2 Install	m	10		
		<u>Overhead mounted cable rack - heavy duty</u>				
5.1.8		.1 Supply	m	10		
5.1.9		.2 Install	m	10		
		<u>Safety signs/Danger labels</u>				
5.1.10		.1 Supply	ea	2		
5.1.11		.2 Install	ea	2		
		<u>Hardwood wall mounted drawing frame to house drawings</u>				
5.1.12		.1 Supply	ea	1		
5.1.13		.2 Install	ea	1		
		<u>6m 300mm PE sleeves for power cable entry</u>				
5.1.14		.1 Supply	ea	1		
5.1.15		.2 Install	ea	1		
		<u>Lock and keys for doors and gates</u>				
5.1.16		.1 Supply	ea	0		
5.1.17		.2 Install	ea	0		
Carried Forward						

[illegible]

				Brought Forward	
		<u>Install 120mm² BCEW ECC including joints, termination and other accessories</u>			
5.1.54	.1	Supply	m	1	
5.1.55	.2	Install	m	1	
		<u>Concrete Cable Route Markers</u>			
5.1.56	.1	Supply	no	18	
5.1.57	.2	Install	no	18	
		<u>Danger Tape: Orange/Yellow PVC material (300mm above cable)</u>			
5.1.58	.1	Supply	m	2600	
5.1.59	.2	Install	m	2600	
		<u>Built of a complete 800 x 800 mm brick manhole with concrete lid as indicated on the drawing</u>			
5.1.60	.1	Supply	no	4	
5.1.61	.2	Install	no	4	
		<u>PRIMARY PLANT -INDOOR</u>			
		Supply & installation of complete switchboard including all inter-panel connections, busbars and bus wiring; switchboard consisting of:			
		<u>11kV Switchboard</u>			
		<u>11kV 1250A Circuit Breaker (outgoing feeder)</u>			
5.1.62	.1	Supply	ea	0	
5.1.63	.2	Install	ea	0	
		<u>11kV 1250A Circuit Breaker 's 320mm Deep extention box</u>			
5.1.64	.1	Supply	ea	2	
5.1.65	.2	Install	ea	2	
		<u>CONTROL PLANT</u>			
		<u>Design, supply and install all protection, metering, control, telecom-</u> <u>munication, AC/DC and security systems:</u> Panels to be fully equipped with all relays, switches, indication lamps, mimic display, terminals, fuses, links and all other equipment required for the HV and MV protection and control system as generally specified and indicated for HV & MV plant on the drawings. Supply, delivery & installation of control panels, including all connections, inter-panel cabling, complete testing and commissioning to ensure a fully functional system			
5.1.66		Make provision for new AC/DC Panel (3x3Phase Circuit, 6x1Phase Circuits, 9 DC circuits) with 25% spare space	sum	1	
5.1.67		Make provision for 110V Charger & Batteries (54 cells 161 Ah lead acid cells), 30A charger and Battery cabinet	sum	1	
5.1.68		Integration of the new board to the existing or existing AC/DC source including any upgrade	lot	1	
		<u>MISCELLANEOUS</u>			
		<u>Pipes and Sleeves</u>			
		<u>160mm 6m PE pipe/sleeve, include sealing and draw wires</u>			
5.1.69	.1	Supply	item	2	
5.1.70	.2	Install	item	2	
		<u>110mm 6m PE pipe/sleeve, include sealing and draw wires</u>			
5.1.71	.1	Supply	item	2	
5.1.72	.2	Install	item	2	
				Carried Forward	

[illegible]