

ITEM	DESCRIPTION	UNIT	QTY	RATE	TENDER AMOUNT
	<u>BILL 1</u>				
1	<u>BILL OF QUANTITIES FOR PRELIMINARY AND GENERAL COSTS</u>				
	<u>SITE ESTABLISHMENT</u>				
1.1	Camp and Fencing	ea	1		
1.2	Office equipment	ea	1		
1.3	Store	ea	1		
	<u>ADMINISTRATIVE COSTS</u>				
1.4	Site Personnel	ea	1		
1.5	Supervisory Staff	ea	1		
1.6	Guards	ea	1		
1.7	Transport (Staff)	ea	1		
1.8	Insurance	ea	1		
1.9	Running cost e.g. telephone, electricity, water, cleaning, services, printing, stationary, etc	ea	1		
	<u>GENERAL COSTS</u>				
1.10	Setting out of works	ea	1		
1.11	Cleaning of site upon completion	ea	1		
1.12	Critical Path/Schedule	ea	1		
1.13	"As installed" drawings	ea	1		
1.14	Safety compliance	ea	1		
1.15	Contractual compliance	ea	1		
1.16	All technical information and drawings shall be submitted also in electronic format on CD / USB drive, both in .dxf/dwg and .pdf formats	ea	1		
	<u>Other</u>				
1.17	Any other items deemed necessary for the successful completion of the Works.	ea	1		
	TOTAL BILL 1 - PRELIMINARY & GENERAL COST - CARRY AMOUNT OVER TO SUMMARY OF BILLS				

ITEM	DESCRIPTION	UNIT	QTY	RATE	TENDER AMOUNT
	<u>BILL 2</u>				
2	<u>30m HIGH MAST LIGHTING</u>				
	Supply, delivery, loading, offloading, installation of the following:				
2.1	Digging holes for concrete foundation for high mast complete with excavation, in ALL soil conditions, etc. (No compensation for blasting)				
	Supply	ea	1		
	Install	ea	1		
2.2	Installation of concrete foundation for high mast complete with steel reinforcing, cables inlet pipes, earth spikes, foundation bolts , etc.				
	Supply	ea	1		
	Install	ea	1		
2.3	Manufacturing and Installation of Head Frame (carriage) as specified complete with all electrical equipment, photo cell, luminaire ring, top pulley assembly, winches, lightning spike, trailing cable, control gear etc.				
	Supply	ea	1		
	Install	ea	1		
2.4	Manufacturing and Installation of 30m Galvanised Pole with base plate.				
	Supply	ea	1		
	Install	ea	1		
2.5	Supplying of LED floodlights complete with luminaires (IP66) 200 Light Emitting Diodes per luminaire, control gear (IP65) and connections (360° Area)				
	Supply	ea	1		
	Install	ea	1		
2.6	Supply of 10mm ² 3-core 600/1000V PVC Cu Cable				
	Supply	ea	1		
	Install	ea	1		
2.7	Allow for Eskom Application and Connection including 16kVA Transformer	ea	1		
2.8	Soil bearing pressure test certificates signed by a Professional Engineer	ea	1		
2.9	Reinforced concrete foundation complete as specified for 20 m high mast structure, c/w excavation, barricades, certified engineering design, holding down bolts, earth spikes, earthing connections, 2x50mm dia PVC sleeves	ea	1		
2.10	Concrete test cubes on site for every 30 m mast foundation	ea	1		
2.11	Test certificates for concrete, for every 30 m mast foundation	ea	1		
2.12	Complete technical information including SANS certification for masts, lights and all other relevant equipment, for every 30 m high mast light	ea	1		
2.13	Certificate for approval for the structural steelwork and scaffolding on site, issued by a structural engineer	ea	1		
2.14	Certificate of compliance for galvanising specifications	ea	1		
2.15	Testing and commissioning complete, for every 30 m high mast light	ea	1		
2.16	Single drum winch with suitably rated diameter stainless steel rope compatible with the mast's rope design, complete with manual handle suitable for raising	ea	1		
2.17	Inspection of intended sites prior to delivery of each mast site with the	ea	1		
	<u>Other</u>				
2.17	Any other items deemed necessary for the successful completion of the Works. Tenderer to state:	ea	1		
TOTAL BILL 2 - AREA (HIGH MAST) LIGHTING - CARRY AMOUNT OVER TO SUMMARY OF BILLS					

ITEM	DESCRIPTION	UNIT	QTY	RATE	TENDER AMOUNT
	<u>BILL 3</u>				
3	<u>20m SOLAR HIGH MAST LIGHTING</u>				
	Supply, delivery, loading, offloading, installation of the following:				
3.1	20m mast, three-rope system, hot dipped galvanized, including baseplate, luminaire cluster (to accommodate six fittings) with a luminaire mounting height of 20 m and the luminaire cluster lowered with the aid of a winch (winch and luminaires listed under separate items)				
	Supply	ea	1		
	Install	ea	1		
3.2	65W, Die-cast marine grade aluminium LED luminaire, IP66, with high impact clear glass, 4000K, complete with: •Monocrystalline 120 cell photovoltaic panels 330-345W, as per specification, mounted to mast luminaire cluster with associated Frame •Lithium-Ion maintenance free battery packs with battery management systems installed in corrosion free glass reinforced polymer IP65 enclosures, as per specification mounted to mast luminaire cluster				
	Supply	ea	1		
	Install	ea	1		
3.3	Wiring between solar PV panels, batteries, luminaires, battery management system and MPPT charge controller, complete per mast, inclusive of all terminations. glands. labelling				
	Supply	ea	1		
	Install	ea	1		
3.4	All earthing materials per mast including the lightning spike on top of the high mast and earth resistance of less than 10 Ohm. Complete installation as specified. with test certificate.				
	Supply	ea	1		
	Install	ea	1		
3.5	Soil bearing pressure test certificates signed by a Professional Engineer	ea	1		
3.6	Reinforced concrete foundation complete as specified for 20 m high mast structure, c/w excavation, barricades, certified engineering design, holding down bolts. earth spikes. earthing connections. 2x50mmdia PVC sleeves	ea	1		
3.7	Concrete test cubes on site for every 20 m mast foundation	ea	1		
3.8	Test certificates for concrete, for every 20 m mast foundation	ea	1		
3.9	Complete technical information including SANS certification for masts, lights and all other relevant equipment, for every 20 m high mast light	ea	1		
3.10	Certificate for approval for the structural steelwork and scaffolding on site, issued by a structural engineer	ea	1		
3.11	Certificate of compliance for galvanising specifications	ea	1		
3.12	Testing and commissioning complete, for every 20 m high mast light	ea	1		
3.13	Single drum winch with suitably rated diameter stainless steel rope compatible with the mast's rope design, complete with manual handle suitable for raising	ea	1		
	Inspection of intended sites prior to delivery of each mast site with the	ea	1		
	<u>Other</u> Any other items deemed necessary for the successful completion of the Works. Tenderer to state:	ea	1		
	TOTAL BILL 3 - AREA (HIGH MAST) LIGHTING - CARRY AMOUNT OVER TO SUMMARY OF BILLS				

ITEM	DESCRIPTION	UNIT	QTY	RATE	TENDER AMOUNT
	BILL4				
	PROVISIONAL SUMS AND DAYWORKS				
	PROVISIONAL AMOUNTS The following amounts can only be utilized if the Engineer issues an instruction and requests quotations against the provisional amounts, and proper approval has been obtained				
4.1	Provisional amount for project information board specifications to be submitted to successful tenderer.	Provisional sum			20 000.00
4.2	Provisional amount for extra excavations of foundations, if required.	Provisional sum			20 000.00
4.3	Provisional amount for Community Liasion Officer (CLO).	Provisional sum			20 000.00
3.4	Provisional amount for Project Management Co-ordinator (PMC/PLC).	Provisional sum			20 000.00
4.5	Provisional amounts for training requirements	Provisional sum			20 000.00
4.6	Provisional sum for any unscheduled material not listed above	Provisional sum			20 000.00
4.7	Contractor's profit and attendance on Provisional sums (this amount will only be certified if any amount is approved against the provisional sums)	%	R 120 000.00	%	
	DAYWORKS Rates for additional labour, at the request of the Engineer				
4.8	Engineer				
4.8.1	Normal time	Rate/hr	1		
4.8.2	Overtime	Rate/hr	1		
4.9	Site foreman				
4.9.1	Normal time	Rate/hr	1		
4.9.2	Overtime	Rate/hr	1		
4.10	Artisan				
4.10.1	Normal time	Rate/hr	1		
4.10.2	Overtime	Rate/hr	1		
4.11	Semi-skilled labourer				
4.11.1	Normal time	Rate/hr	1		
4.11.2	Overtime	Rate/hr	1		
4.12	Unskilled labourer				
4.12.1	Normal time	Rate/hr	1		
4.12.2	Overtime	Rate/hr	1		
4.13	3.5ton truck	Rate/km	1		
4.14	low-bed truck	Rate/km	1		
4.15	Crane truck	Rate/km	1		
TOTAL BILL 4 - DAYWORK SCHEDULE & PROVISIONAL AMOUNTS - CARRY AMOUNT OVER TO SUMMARY OF BILLS					

SUMMARY BILLS OF QUANTITIES

BILL	DESCRIPTION	TENDER AMOUNT
1	PRELIMINARY AND GENERAL COSTS 30m HIGH MAST LIGHT	
2	20m SOLAR HIGH MAST LIGHTING	
4	PROVISIONAL AMOUNTS & DAYWORKS	
5	SUBTOTAL A	
6	<i>Plus: Contingencies 10%</i>	
7	SUBTOTAL B	
8	<i>PLUS VAT (15%)</i>	
9	TOTAL TENDER PRICE	