

CONSTRUCTION OF MASINGA TO ENTOKOZWENI ROAD PHASE 2
Part C2.2 BILL OF QUANTITIES

ITEM	DESCRIPTION	LIC	UNIT	QTY	RATE	AMOUNT R
1300	SECTION 1300					
13.00	CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS					
13.01	Contractor's general obligations					
	(a) Fixed obligations		Lump Sum	1		
	(b) Value-related obligations		Lump Sum	1		
	(c) Time-related obligations		Month	12		
B13.02(a)	Community Liaison Officer		Prov Sum	1	120 000.00	R120 000.00
B13.02(b)	(b) Handling costs and profit in respect of sub-item B13.02 (a)		%	120 000		
B13.03	(a)Provisional sum for training allowance to targeted labor undergoing training					
	(i) Technical Skills		Prov Sum	1		
	(ii) Generic Skills		Prov Sum	1		
	(iii) Entrepreneurial skills		Prov Sum	1		
	(iv) Remuneration of labours undergoing technical skills training.		Prov Sum	1		
	(v) Training Venue		Prov Sum	1	10 000.00	R10 000.00
	(b) Contractors handling costs, profit and all other charges in respect of sub-item B13.03 (a)		%	10 000		
B13.04	(a) Contractors time related obligation in OHS					
	All staff and compliance in respect of occupational health and safety Act, construction regulations and COVID-19 (C19 OHS), 2020 will be paid by the contractor		Months	12		
	(b) Contractors time related obligation EMP		Months	12		
1300	TOTAL CARRIED FORWARD TO NEXT PAGE					

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ITEM	DESCRIPTION	LIC	UNIT	QTY	RATE	AMOUNT R
BROUGHT FORWARD						
B13.05	Relocation and/or protection of existing services:					
	(a) By the contractor		Prov Sum	1	10 000.00	R10 000.00
	(b) By the service provider		Prov Sum	1	10 000.00	R10 000.00
	(c) Handling cost in respect of B13.05 (b)		%	20 000		
B13.06	Information Board		No	2		
B13.07	Hand excavation to determine the position of existing service in soft material		m ³	200		
NB	Should the combined total tendered for subitems (a), (b), and (c) exceed 15% of the tender sum (excluding CPA, contingencies and VAT), the tenderer shall states the reasonsin writing for tendering in this manner					
1300	TOTAL CARRIED FORWARD TO SUMMARY					

CONSTRUCTION OF MASINGA TO ENTOKOZWENI ROAD PHASE 2
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ITEM	DESCRIPTION	LIC	UNIT	QTY	RATE	AMOUNT R
1400	SECTION 1400					
B14.00	HOUSING, OFFICES AND LABORATORIES FOR THE ENGINEER'S SITE PERSONNEL					
14.01	Office and laboratory accommodation:					
	(a) Office accommodation for the Engineer		Prov Sum	1	120 000.00	R120 000.00
	(b) Handling cost and profits in respect of		%	120 000		
14.02	Office and laboratory furniture					
	(a) Chairs		No	6		
	(d) Desks, complete with drawers and locks		No	2		
	(f) Conference table		No	1		
14.03	Office and laboratory fittings installations and equipment					
	(a) Items measured by number					
	(i) 220/250 volt power points		No	4		
	(iii) Double 80 watt fluorescent light fittings complete with ballast and tubes		No	4		
	(v) Single incandescent-light fittings complete with 100 watt globes		No	4		
	(vi) Wash-hand basins complete with taps and drains		No	1		
	(x) Fire extinguishers, 9,0 kg, all purpose dry powder type, complete, mounted on wall with brackets		No	3		
	(xi) Air conditioning units with 2,2 kW minimum capacity, mounted and with own power connection		No	1		
1400	TOTAL CARRIED FORWARD TO NEXT PAGE					

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ITEM	DESCRIPTION	LIC	UNIT	QTY	RATE	AMOUNT R
BROUGHT FORWARD						
14.03 (cont)	(xiv) General-purpose steel cupboards with shelves		No	1		
	(xv) Steel filing cabinets with drawers		No	1		
	(xvi) Refrigerators		No	1		
	(xviii) Voltage stabilizers		No	1		
	(b) Prime cost items and items measured and paid for in a lump sum					
	(i) The provision of telephone service, including the cost of calls in connection with contract administration and telephone rental		PC Sum	1	50 000.00	R50 000.00
	(c) Items measured by area:					
	(vii) Venetian blinds		m ²	8		
	(viii) Notice boards as specified		m ²	8		
14.04	Car ports					
	(a) Car ports, as specified, at offices and laboratory buildings		No	2		
	(viii) Notice boards as specified		m ²	5		
14.07	Rented, hotel and other accommodation					
	(a) Provisional Lump Sum for providing rented housing, hotel or other accommodation as described in subclause 1403(c)(ii)		Prov Sum	1	150 000.00	R150 000.00
	(b) Handling costs and profit in respect of subitem 14.07(a)		%	150 000		
TOTAL CARRIED FORWARD TO NEXT PAGE						

CONSTRUCTION OF ZWELISHA BERMUDA ROAD
 Part C2.2 BILL OF QUANTITIES

ITEM	DESCRIPTION	LIC	UNIT	QTY	RATE	AMOUNT R
BROUGHT FORWARD						
14.08	Services					
	(a) Services at office and laboratories					
	(i) Fixed costs		Lump Sum	1		
	(ii) Running costs		Month	6		
B14.03	(d)Provisional Sums items					
	(i)Provision for use by the Engineer for an independent Geotechnical laboratory		Prov Sum	1	150 000.00	R150 000.00
	(ii)Handling cost and profits in respect of sub-item B1403 (d) (i)		%	150 000		
	(iii)Provision for Training of Engineering		Prov Sum	1	100 000.00	R100 000.00
	(iv)Handling cost and profits in respect of sub-item B1403 (d) (iii)		%	100 000		
	(v)Provision for use by Engineer of Surveyor		Prov Sum	1	90 000.00	R90 000.00
	(vi)Handling costs and profit in respect of subitem B14.03 (d)(v) above		%	90 000		
	(vii)Provision for use by Engineer of Environmental Specialist		Prov Sum	1	300 000.00	R300 000.00
	(viii)Handling costs and profit in respect of subitem B14.03(d)(vx) above		%	300 000		
	(ix) Provision of a direct independent telephone line for the Engineer		Prov Sum	1	30 000.00	R30 000.00
	(x) Handling costs and profit in respect of subitem B14.03(d)(ix) above		%	30 000		
	(xi) Provision of Site Monitoring Fees- Resident Engineer		Prov Sum	1	600 000.00	R600 000.00
	(xiii)Handling costs and profit in respect of subitem B14.03(d)(xi) and (xii) above		%	600 000		
	(xiv)Provision of safety consultant		Prov Sum	1	300 000.00	R300 000.00
	(xv)Handling costs and profit in respect of subitem% B14.03(d)(xiv) above		%	300 000		
1400	TOTAL CARRIED FORWARD TO SUMMARY					

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ITEM	DESCRIPTION	LIC	UNIT	QTY	RATE	AMOUNT R
1500	SECTION 1500					
15.00	ACCOMMODATION OF TRAFFIC					
15.01	Accommodating traffic and maintaining temporary deviations		km	1		
B15.03	Temporary traffic-control facilities					
	(a) Flagmen		man-day	1 200		
	(e) Road signs, R- and TR-series, (1200 Ø)		No	38		
	(f) Road signs, TW-series, (1500 mm sides)		No	16		
	(g) Road signs, STW-, DTG-, TGS- AND TG-series (excluding delineators and barricades)		m ²	12		
	(h) Delineators (TW401 or TW402) (800x200):					
	(i) Single		No	160		
	(ii) Mounted back to back		No	20		
	(j) Traffic cones (750 mm high)		No	50		
	(l) Moveable barriers (Plastic "New Jersey" type)		m	10		
	(n) Other traffic control measures ordered by the Engineer:					
	(i) Provision of other traffic control measures		Prov Sum	1	20 000.00	R20 000.00
	(ii) Handling costs and profit in respect of sub-item B15.03 (o)(i)		%	20 000		
15.05	Gravelling and repair of temporary deviations and existing gravel shoulders used as temporary deviations					
	(a) Temporary deviations					
	(i) Regrading existing gravel road to 150 mm G5 layer compacted to 93% of modified AASHTO density		m ³	1 675		
1500	TOTAL CARRIED FORWARD TO NEXT PAGE					

CONSTRUCTION OF MASINGA TO ENTOKOZWENI ROAD PHASE 2
Part C2.2 BILL OF QUANTITIES

ITEM	DESCRIPTION	LIC	UNIT	QTY	RATE	AMOUNT R
BROUGHT FORWARD						
15.06	Watering of temporary deviations		kl	1200		
B15.14	Provision of traffic safety equipment for visitors					
	(a) Rotating Amber lights		No	2		
	(b) Safety vests		No	4		
1500	TOTAL CARRIED FORWARD TO SUMMARY					

CONSTRUCTION OF MASINGA TO ENTOKOZWENI ROAD PHASE 2
Part C2.2 BILL OF QUANTITIES

ITEM	DESCRIPTION	LIC	UNIT	QTY	RATE	AMOUNT R
1700	SECTION 1700					
17.00	CLEARING AND GRUBBING					
B17.01	Clearing and grubbing		ha	2.5		
17/22.12	Removing existing concrete and brickwork (for including roadwork)					
	(a) Concrete		m ³	20		
	(b) Reinforced concrete		m ³	20		
B17.07	Relocation / replacement of walls and fencing					
	(a) Provisional Lump Sum		Prov Sum	1	320 000.00	R320 000.00
	(b) Handling Cost and profit in respect of Sub-item B17.07 (a)		%	320 000		
1700	TOTAL CARRIED FORWARD TO SUMMARY					

CONSTRUCTION OF MASINGA TO ENTOKOZWENI ROAD PHASE 2
Part C2.2 BILL OF QUANTITIES

ITEM	DESCRIPTION	LIC	UNIT	QTY	RATE	AMOUNT R
B1800	DAYWORKS					
B18.01	Personnel					
	(i) During normal working hours					
	(a) Unskilled labour		hour	140		
	(b) Semi-skilled labour		hour	35		
	(c) Skilled labour		hour	15		
	(d) Ganger		hour	15		
	(e) Foreman		hour	20		
	(ii) During outside normal working hours					
	(a) Unskilled labour		hour	70		
	(b) Semi-skilled labour		hour	15		
	(c) Skilled labour		hour	15		
	(d) Ganger		hour	5		
	(e) Foreman		hour	10		
B18.02	Equipment					
	(a) Front-end loaders, 1,9 m ³ (97kW)		hour	15		
	(b) Graders (140 G or similar)		hour	15		
	(c) Rollers-vibratory (10 ton)		hour	15		
	(d) Pneumatic tyre rollers (20 ton)		hour			
	(e) Trucks (6 m ³)		hour	15		
	(f) Water truck (9 000 litres)		hour	15		
B1800	TOTAL CARRIED FORWARD TO NEXT PAGE					

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Part C2.2 BILL OF QUANTITIES

ITEM	DESCRIPTION	LIC	UNIT	QTY	RATE	AMOUNT R
BROUGHT FORWARD						
B18.03	(g) TLB (416 or similar)		hour	15		
	(h) Hand propelled vibratory roller (0.5 ton)		hour	15		
	(j) Wacker compactor		hour	15		
	(k) Compressor plus two jackhammers and two paving breakers, including hoses		hour	15		
	Materials					
	(a) Procurement of materials		Prov Sum	1	30 000.00	R40 000.00
B18.04	(b) Contractor's handling costs, profit and all other charges in respect of subitem		%	30 000		
	Transport					
	(a) LDV (2 000 cc)		km	500		
	(b) Flatbed truck (5 ton)		km	500		
1800	TOTAL CARRIED FORWARD TO SUMMARY					

CONSTRUCTION OF MASINGA TO ENTOKOZWENI ROAD PHASE 2
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ITEM	DESCRIPTION	LIC	UNIT	QTY	RATE	AMOUNT R
2100	SECTION 2100					
21.00	DRAINS					
B21.01	Excavation for open drains					
	(a) Excavating soft material situated within the following depth ranges below the surface level:					
	(i) 0 m up to 1,5 m		m ³	400		
	(b) Extra over subitem 21.01(a)(i) for excavation in hard material irrespective of depth		m ³	40		
21.02	Clearing and shaping existing open drains		m ³	100		
21.03	Excavation for subsoil drainage systems					
	(a) Excavating soft material situated within the following depth ranges below the surface level:					
	(i) 0 m up to 1,5 m		m ³	900		
	(b) Extra over subitem 21.03(a) for excavation in hard material irrespective of		m ³	180		
21.04	Impermeable backfilling to subsoil drainage systems					
	(a) Unstabilised natural gravel		m ³	75		
21.06	Natural permeable material in subsoil drainage systems (washed crushed stone)					
	(b) Crushed stone obtained from commercial sources					
	(i) Course Grade - 20mm nominal size		m ³	75		
21.07	Natural permeable material in subsoil drainage systems (washed sand)					
	(b) Sand from commercial sources					
	(ii) Medium Grade		m ³	900		
TOTAL CARRIED FORWARD TO NEXT PAGE						

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ITEM	DESCRIPTION	LIC	UNIT	QTY	RATE	AMOUNT R
BROUGHT FORWARD						
21.08	Pipes in subsoil drainage systems					
	(c) High-density type pipe polyethylene pressure pipes and fittings, complete with couplings (110mmØ slotted)		m	1 000		
21.10	Synthetic -fibre filter fabric					
	(a) Grade 2		m ²	1 500		
21.12	Concrete outlet structures, manhole boxes, Junction boxes, and cleaning eyes for subsoil drainage systems					
	(a) Outlet structures		No	4		
	(c) Junction boxes		No	16		
21.13	Concrete caps for subsoil drain pipes		No	4		
21.19	Selected backfill material under concrete-lined side drains compacted to 93% of modified AASHTO density		m ³	80		
2100	TOTAL CARRIED FORWARD TO SUMMARY					

CONSTRUCTION OF MASINGA TO ENTOKOZWENI ROAD PHASE 2
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ITEM	DESCRIPTION	LIC	UNIT	QTY	RATE	AMOUNT R
2200	SECTION 2200					
22.00	PREFABRICATED CULVERTS					
22.01	Excavation:					
	(a) Excavating soft material situated within the following depth ranges below the surface level:					
	(i) 0 m up to 1,5 m		m ³	2 700		
	(ii) 1.5 m up to 3.0 m		m ³	800		
	(iii) 3.0 m up to 4,5 m		m ³	300		
	(b) Extra over subitem 22.01(a)(i) for excavation in hard material irrespective of depth		m ³	1 140		
	(c) Extra-over sub-item 22.01(a) for excavation by hand		m ³	3 100		
22.02	Backfilling:					
	(a) Using the excavated material		m ³	100		
	(b) Using imported selected material		m ³	150		
22.03	Concrete pipe culverts:					
	(c) On class C bedding					
	(i) 750 mm diameter interlocking joint pipes Class 100D		m	960		
	(ii) 900 mm diameter interlocking joint pipes Class 100D		m	40		
2200	TOTAL CARRIED FORWARD TO NEXT PAGE					

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ITEM	DESCRIPTION	LIC	UNIT	QTY	RATE	AMOUNT R
BROUGHT FORWARD						
22.07	Cast in situ concrete and formwork:					
	(a) In class A bedding, screeds and the encasing of pipes, including formwork, class 20/20 concrete		m ³	10		
	(b) In floor slabs for portal or rectangular culverts, including formwork, joints and class U2 surface finish, class 30/20 concrete		m ³	5		
	(c) In inlet and outlet structures, skewed ends, catchpits, manholes, thrust and anchor blocks, excluding formwork but including class U2 surface finish					
	(1) Class 15/20 blinding (min. 200mm)		m ³	2		
	(2) Class 30/20 in concrete inlet and outlet structures		m ³	5		
	(d) Formwork of concrete under subitem					
	(1) Vertical formwork for F1 surface finish		m ²	20		
	(2) Horizontal formwork for F1 surface finish		m ²	30		
	(3) Vertical formwork for F2 surface finish		m ²	30		
	(4) Horizontal formwork for F2 surface finish		m ²	20		
22.10	Steel reinforcement:					
	(a) Mild steel bars		t	0.5		
	(b) High-tensile steel bars		t	1		
	(c) Welded steel fabric - Ref 245		kg	200		
2200	TOTAL CARRIED FORWARD TO NEXT PAGE					

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ITEM	DESCRIPTION	LIC	UNIT	QTY	RATE	AMOUNT R
BROUGHT FORWARD						
B22.17	Manholes, catchpits, precast inlet and outlet structures complete:					
	(a) Manholes					
	(i) Raised manholes		No.	5		
	(ii) Manhole junction		No.	6		
	(b) Catchpits					
	(i) Side inlets		No.	18		
	(f) Headwalls					
	(i) for 600 mm dia pipe (skewed)		No	5		
2200	TOTAL CARRIED FORWARD TO SUMMARY					

CONSTRUCTION OF MASINGA TO ENTOKOZWENI ROAD PHASE 2
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BROUGHT FORWARD

ITEM	DESCRIPTION	LIC	UNIT	QTY	RATE	AMOUNT R
BROUGHT FORWARD						R0.00
22.18	Brickwork					
	(b) 230 mm thick		m ²	0		
22.21	Accessories					
	(a) Manhole covers including frames					
	(i) Medium duty 1220 mm x 1220 mm cast iron		No	11		
	(d) Netlon drainage strips					
	(i) M65 Netlon drainage pipe		m	22		
	(ii) 1800 mm x 325 mm DNI netlon drainage strips, with Geofabric grade 2 covering netlon strips and wrapped around M65 netlon drainage pipe, and 20 mm Ø weepholes at 600 mm centers		No.	30		
B22.23	Service Ducts					
	(a) Pitch fibre pipes					
	(ii) 250 mm diameter		m	50		
22.24	Duct marker blocks		No	2		
22.25	Overhaul on excavated material carted to spoil, backfill material (but excluding Portland cement in the case of soil cement), exisiting structures demolished and removed to spoil, and removing and relaying, and removing and stacking exsiting prefabricated culverts, for haul in excess of the free-haul distance		m ³ km	2 500		
SCHEDULE OF QUANTITIES						
2200	TOTAL CARRIED FORWARD TO SUMMARY					

CONSTRUCTION OF MASINGA TO ENTOKOZWENI ROAD PHASE 2
Part C2.2 BILL OF QUANTITIES

ITEM	DESCRIPTION	LIC	UNIT	QTY	RATE	AMOUNT R
2300	SECTION 2300					
23.00	CONCRETE KERBING, CONCRETE CHANNELLING, CHUTES AND DOWNPIPES AND CONCRETE LININGS FOR OPEN DRAINS					
23.01	Concrete kerbing precast with class 30/20 concrete to SANS 927:2007:					
	(b) Figure 8b mountable kerb		m	1690		
	(c) Figure 12 kerb		m	1700		
B23.02	Concrete kerbing-channelling combination with class 30/20 concrete					
	(a) Figure 8b mountable kerb and channel combination		m	50		
23.07	Trimming of excavations for concrete-lined open drains + Island					
	(a) in soft material		m ²	2 600		
	(b) in hard material		m ²	260		
23.08	Concrete lining for open drains complete as shown on drawings					
	(a) Cast in situ concrete lining class 30/20 concrete:		m ³	330		
	(b) Class U2 surface finish to cast in situ concrete for all types open drains		m ²	2 650		
23.08	Repairs to existing drainage Concrete lining for open drains complete as shown on drawings					
	(a) Cast in situ concrete lining class 30/20 concrete:		m ³	5		
	(b) Class U2 surface finish to cast in situ concrete for all types open drains		m ²	20		
2300	TOTAL CARRIED FORWARD TO NEXT PAGE					

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ITEM	DESCRIPTION	LIC	UNIT	QTY	RATE	AMOUNT R
BROUGHT FORWARD						
23.09	Formwork to cast in situ concrete lining for open drains (Class F2 surface finish only)					
	(b) To sides with formwork on both internal and external faces (each face measured)		m ²	530		
	(c) To ends of slabs		m ²	20		
23.10	Sealed joints in concrete linings of open drains					
	(a) Polysulphide sealant		m	540		
23.12	Steel reinforcement					
	(c) Welded steel fabric (Ref. no 193)		kg	4 550		
23.13	Cutting bituminous surfacing and pavement layers for concrete kerbing, channelling or concrete-lined drains					
	(i) 40mm asphalt surfacing		m	150		
	(i) 150mm concrete surfacing		m	100		
B23.16	Demolition and removal of existing kerbs and/or channel (minimum height of 100mm)		m ³	20		
2300	TOTAL CARRIED FORWARD TO SUMMARY					

CONSTRUCTION OF MASINGA TO ENTOKOZWENI ROAD PHASE 2
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ITEM	DESCRIPTION	LIC	UNIT	QTY	RATE	AMOUNT R
3300	SECTION 3300					
33.00	MASS EARTHWORKS					
33.01	Cut and borrow to fill, including free-haul up to 0,5 km:					
	(a) Material in compacted layer thicknesses of 200 mm and less:					
	(ii) Compacted to 93% of modified AASHTO density		m ³	3 300		
	(iii) Eight roller passes compaction		m ³	2 000.00		
33.04	Cut to spoil, including free-haul up to 0,5 km. Material obtained from:					
	(a) Soft excavation		m ³	2 000		
33.03	Extra over item 33.01 for excavating and breaking down material in:					
	(b) Hard excavation		m ³	3 500.00		
	(c) Boulder excavation class A		m ³	2 600.00		
	(d) Boulder excavation class B		m ³	1 800.00		
B33.04	Cut to spoil including free haul of up to 1.0km material obtained from:					
	(c) Hard excavation		m ³	3 500.00		
	(d) Boulder excavation class A		m ³	2 600.00		
	(e) Boulder excavation class B		m ³	1 800.00		
33.05	Overbreak in hard and boulder class A excavation		m ²	1 300.00		
B33.07	Removal of unsuitable material including free-haul					
	(a) In layer thicknesses of 200 mm and less:					
	(i) Stable material		m ³	500.00		
	(ii) Unstable material		m ³	250.00		
33/B16.02	Overhaul on material hauled in excess of 1.0km		m ³ km	30 000.00		
3300 TOTAL CARRIED FORWARD TO NEXT PAGE						

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ITEM	DESCRIPTION	LIC	UNIT	QTY	RATE	AMOUNT R
BROUGHT FORWARD						
33.06	Variations in the number of roller passes (applicable to sub items 33.01 (a)(3) and 33.01(b)(3) and item 33.11):					
	(a) Vibratory rollers		m ² -pass	2800		
33.07	Removal of unsuitable material (material to spoil - off site):					
	(a) In layer thicknesses of 200mm or less					
	(i) Stable material		m ³	1 200		
33.09	Material bladed to windrow		m ³	400		
33.10	Roadbed preparation and the compaction of material:					
	(a) Compaction to 93% of modified AASHTO density		m ³	1 720		
33.13	Finishing-off cut and fill slopes, medians and interchange areas:					
	(a) Cut slopes		m ²	5500		
	(b) Fill slopes		m ²	6500		
33.14	Extra over item 33.01 for excavating material from the pavements and fills of existing roads:					
	(a) Non-cemented material		m ³	200		
	(b) Cemented material		m ³	50		
3300	TOTAL CARRIED FORWARD TO SUMMARY					R0.00

ITEM	DESCRIPTION	LIC	UNIT	QTY	RATE	AMOUNT R
3400	SECTION 3400					
34.00	PAVEMENT LAYERS OF GRAVEL MATERIAL					
B34.01	Pavement layers constructed from gravel obtained from commercial sources: (a) Gravel selected layer compacted to: (i) 93% of modified AASHTO density (150 mm thick G7 layer) (f) G5 Gravel base (chemically stabilized material) compacted to: (ii) 95% of modified AASHTO density (150 mm thick C4 layer)		m³			
			m³			
3400	TOTAL CARRIED FORWARD TO SUMMARY					

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ITEM	DESCRIPTION	LIC	UNIT	QTY	RATE	AMOUNT R
3500	SECTION 3500					
35.00	STABILIZATION					
35.01	Chemical stabilization extra over unstabilized compacted layers (Gravel subbase layer compacted to 95% of modified AASHTO density 150 mm (G5))		m ³	1 600	-	R0.00
35.02	Chemical stabilizing agent:					
	(a) Ordinary portland cement		ton (t)	135	-	R0.00
35.04	Provision and application for water curing		l	6000	-	R0.00
3500	TOTAL CARRIED FORWARD TO SUMMARY					

CONSTRUCTION OF MASINGA TO ENTOKOZWENI ROAD PHASE 2
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ITEM	DESCRIPTION	LIC	UNIT	QTY	RATE	AMOUNT R
5100	SECTION 5100					
51.00	PITCHING, STONEMASONRY and PROTECTION AGAINST EROSION					
51.01	Stone pitching					
	(b) Grouted stone pitching		m ²	200		
51.04	Concrete pitching and block paving					
	(b) Segmented block paving to walkways					
	(i) 40mm interlocking		m ²	2550		
51.05	Concrete edge beams - 300x300, 30/19		m ³	22		
51.06	Provision of approved herbicide and ant poison:					
	(a) Provision of materials		PC Sum	1	12 000.00	R12 000.00
	(b) Contractor's charges and profit added to the prime cost sum		%	12 000		
51.07	Foundation trenches		m ³	5		
B51.08	Construction of Speedhumps, complete as per drawing		No	4		
5100	TOTAL CARRIED FORWARD TO SUMMARY					R12 000.00

CONSTRUCTION OF MASINGA TO ENTOKOZWENI ROAD PHASE 2
Part C2.2 BILL OF QUANTITIES

ITEM	DESCRIPTION	LIC	UNIT	QTY	RATE	AMOUNT R
5200	SECTION 5200					
52.00	GABIONS					
52.01	Foundation trench excavation and backfilling					
	(b) in all classes of materials		m ³	250		
52.02	Surface preparation for bedding the gabions		m ²	150		
52.03	Gabions					
	(a) Galvanised gabion boxes					
	(i) Length 2 m, depth 1 m, width 1 m and nominal diameter of mesh wire 2.7 mm, mesh size 80 mm x 100 mm		m ³	175		
	(c) Galvanized gabion mattresses					
	(i) 0,3 mm deep, width 2 m, length 6 m, and mesh size 80 mm x 100 mm nominal diameter of mesh size 2,5 mm, and 1 m diaphragm spacing		m ³	75		
52.04	Filter fabric (grade 2)		m ²	200		
5200	TOTAL CARRIED FORWARD TO SUMMARY					

CONSTRUCTION OF MASINGA TO ENTOKOZWENI ROAD PHASE 2
Part C2.2 BILL OF QUANTITIES

ITEM	DESCRIPTION	LIC	UNIT	QTY	RATE	AMOUNT R
5400	SECTION 5400					
54.00	GUARDRAILS					
B54.01	Guardrails on 3.81m spaced posts					
	(a) Complete galvanised system on:					
	(i) Timber posts		m	350		
	(b) Extra over 54.01(a) for the following					
	(i) Flared ends (including end wing)		No	8		
	(iii) End treatments where double guardrail sections are used (including additional posts)		No			
54.05	Additional guardrail posts					
	(i) Timber posts		No	22		
54.06	Reflective plates		No	10		
5400	TOTAL CARRIED FORWARD TO SUMMARY					

CONSTRUCTION OF MASINGA TO ENTOKOZWENI ROAD PHASE 2
Part C2.2 BILL OF QUANTITIES

ITEM	DESCRIPTION	LIC	UNIT	QTY	RATE	AMOUNT R
5500	SECTION 5500					
55.00	FENCING					
55.01	Clearing the fence line, 2 m wide strip		km	1.60		
55.02	Supply and erect new fencing material for new fences and for supplementing material in existing fences which are being repaired or removed:					
	(a) Diamind Mesh fencong 1.8m high on timber poles		km	1.60		
55.03	New gates					
	(a) Pedestrian Gates		No	12		
55.05	Dismantling existing fences:					
	(a) Fences:		km	0.8		
	(b) Gates		No	6		
5500	TOTAL CARRIED FORWARD TO SUMMARY					

CONSTRUCTION OF MASINGA TO ENTOKOZWENI ROAD PHASE 2
Part C2.2 BILL OF QUANTITIES

ITEM	DESCRIPTION	LIC	UNIT	QTY	RATE	AMOUNT R
5600	SECTION 5600					
56.00	ROAD SIGNS					
B56.01	<p>Road sign boards with painted or coloured semi-matt background. Symbols, lettering and borders in semi-matt black or in Class 1 retro-reflective material, where the sign board is constructed from:</p> <p>(c) Prepainted galvanized steel plate (chromadek 1,6 mm thick or approved equivalent):</p> <p>(i) Area not exceeding 2 m²</p> <p>(e) Aluminum sheet regulatory warning and information signs</p> <p>(iii) Round 1220 mm dia</p>		m ²	5		
56.02	<p>Extra over item 56.01 for using:</p> <p>(a) Background of retro-reflective material of:</p> <p>(i) Class 1</p> <p>(b) Lettering, symbols, numbers, arrows, emblems and borders of retro-reflective material:</p> <p>(i) Class 111</p>		No	18		
			m ²	9		
			m ²	9		
5600	TOTAL CARRIED FORWARD TO NEXT PAGE					

CONSTRUCTION OF MASINGA TO ENTOKOZWENI ROAD PHASE 2
Part C2.2 BILL OF QUANTITIES

ITEM	DESCRIPTION	LIC	UNIT	QTY	RATE	AMOUNT R
BROUGHT FORWARD						
56.03	Road sign supports (overhead road sign structures excluded):					
	(c) Timber					
	(i) 100 mm dia.		m	20		
	(ii) 150 mm dia.		m	20		
56.05	Excavation and backfilling for road sign supports (not applicable to kilometre posts)		m ³	10		
56.06	Extra over item 56.05 for cement-treated backfill		m ³	10		
56.07	Extra over item 56.05 for rock excavation		m ³	5		
56.08	Dismantling, storing and re-erecting road signs with a surface area of:					
	(a) Up to 2 m ²		No	2		
	(b) Exceeding 2 m ² but not 10 m ²		No	1		
	(c) Exceeding 10 m ²		No	1		
B56.10	Hazard plates at culverts					
	(a) Provision and erection of hazard plates at		No	10		
5600	TOTAL CARRIED FORWARD TO SUMMARY					

CONSTRUCTION OF MASINGA TO ENTOKOZWENI ROAD PHASE 2
Part C2.2 BILL OF QUANTITIES

ITEM	DESCRIPTION	LIC	UNIT	QTY	RATE	AMOUNT R
5700	SECTION 5700					
57.00	ROAD MARKINGS					
57.02	Retro-reflective road marking paint (Permanent markings):					
	(a) White lines (broken or unbroken)					
	(i) 100 mm wide		km	1.60		
	(ii) 150 mm wide		km	0.60		
	(iii) 300 mm wide		km	0.2		
	(d) White lettering and symbols		m ²	20		
	(f) Transverse lines, painted island and arrestor bed markings (any colour)		m ²	50		
57.04	Variations in rate of application:					
	(a) White paint					
	(i) Water-based		litre	20		
	(b) Yellow paint					
	(i) Water-based		litre	20		
	(d) Retro-reflective beads		kg	10		
B57.06	Setting out and pre-marking the lines (excluding traffic-island markings, lettering and symbols)		km	2.4		
5700	TOTAL CARRIED FORWARD TO SUMMARY					

CONSTRUCTION OF MASINGA TO ENTOKOZWENI ROAD PHASE 2
Part C2.2 BILL OF QUANTITIES

ITEM	DESCRIPTION	LIC	UNIT	QTY	RATE	AMOUNT R
5800	SECTION 5800					
58.00	LANDSCAPING AND PLANTING PLANTS					
58.01	Trimming					
	(b) Hand trimming		m ²	20000		
B58.03	Preparing the areas for grassing:					
	(c) Topsoiling within the road reserve, where the following materials are used:					
	(i) Topsoil obtained from within the road reserve or borrow areas (free haul 1,0 km)		m ³	50		
	(ii) Topsoil obtained from other sources by the contractor (including all haul)		m ³	950		
58.04	Grassing:					
	(b) Sodding by using the following types of sods:					
	(i) Nursery sods -		m ²	20000		
	(c) Hydroseeding:					
	(i) Providing an approved seed mixture for hydroseeding		kg	45		
58.05	Watering the grass when established by topsoiling only		kl	3		
5800	TOTAL CARRIED FORWARD TO SUMMARY					

CONSTRUCTION OF MASINGA TO ENTOKOZWENI ROAD PHASE 2
Part C2.2 BILL OF QUANTITIES

ITEM	DESCRIPTION	LIC	UNIT	QTY	RATE	AMOUNT R
5900	SECTION 5900					
59.00	FINISHING THE ROAD AND ROAD RESERVE AND TREATING OLD ROADS					
59.01	Finishing the road and road reserve:					
	(b) Single carriageway road		km	2		
5900	TOTAL CARRIED FORWARD TO SUMMARY					

CONSTRUCTION OF MASINGA TO ENTOKOZWENI ROAD PHASE 2
Part C2.2 BILL OF QUANTITIES

ITEM	DESCRIPTION	LIC	UNIT	QTY	RATE	AMOUNT R
7300	SECTION 7300					
73.00	CONCRETE BLOCK PAVING FOR ROADS					
73.01	Concrete block paving:					
	80mm type S-A segmented paving blocks (herringbone bond), with 20mm bedding sand		m ²	10800		
73.03	Provision for approved herbicide and ant					
	(a) Provision of materials		Prov Sum	1	15 000.00	R15 000.00
	(b) Contractor's Charges and profit added to		%	25000		
7300	TOTAL CARRIED FORWARD TO SUMMARY					R15 000.00

CONSTRUCTION OF MASINGA TO ENTOKOZWENI ROAD PHASE 2
Part C2.2 BILL OF QUANTITIES

ITEM	DESCRIPTION	LIC	UNIT	QTY	RATE	AMOUNT R
7400	SECTION 7400					
74.00	PATENTED EARTH RETAINING SYSTEMS					
74.01	Patented Earth Retaining Systems:					
	(d) Flora Wall system		m ²	2000		
74.02	Excavation for concrete baees for earth retaining system					
	(a) in Soft material		m ²	155		
74.03	Concrete baeses for earth retaining					
	(a) in Soft material		m ²	90		
7300	TOTAL CARRIED FORWARD TO SUMMARY					

CONSTRUCTION OF MASINGA TO ENTOKOZWENI ROAD PHASE 2
Part C2.2 BILL OF QUANTITIES

ITEM	DESCRIPTION	LIC	UNIT	QTY	RATE	AMOUNT R
8100	SECTION 8100					
81.00	TESTING MATERIALS AND WORKMANSHIP					
B81.02	Other special tests requested by the Engineer					
	(a) Cost of testing		Prov Sum	1	20 000.00	R20 000.00
	(b) Handling costs and profits in respect of subitem B81.02(a)		%	20 000		
8100	TOTAL CARRIED FORWARD TO SUMMARY					

SCHEDULE OF QUANTITIES A: SUMMARY ROAD WORKS

SECTION	DESCRIPTION	AMOUNT (R)
1300	CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS	
1400	HOUSING, OFFICES AND LABORATORIES FOR THE ENGINEER'S SITE PERSONNEL	
1500	ACCOMMODATION OF TRAFFIC	
1700	CLEARING AND GRUBBING	
1800	DAYWORKS	
2100	DRAINS	
2200	PREFABRICATED CULVERTS	
2300	CONCRETE KERBING, CONCRETE CHANNELLING, CHUTES AND DOWNPIPES AND CONCRETE LININGS FOR OPEN DRAINS	
3300	MASS EARTHWORKS	
3400	PAVEMENT LAYERS OF GRAVEL MATERIAL	
3500	STABILIZATION	
5100	PITCHING, STONWORK and PROTECTION AGAINST EROSION	
5200	GABIONS	
5400	GUARDRAILS	
5500	FENCING	
5600	ROAD SIGNS	
5700	ROAD MARKINGS	
5800	LANDSCAPING AND PLANTING PLANTS	
5900	FINISHING THE ROAD AND ROAD RESERVE AND TREATING OLD ROADS	
7300	CONCRETE BLOCK PAVING FOR ROADS	
7400	PATENTED EARTH RETAINING SYSTEMS	
8100	TESTING MATERIALS AND WORKMANSHIP	
TOTAL SCHEDULE A: SUMMARY OF ROAD WORKS		

SCHEDULE OF SECTIONS TOTALS

	DESCRIPTION	AMOUNT (R)
	TOTAL SCHEDULE A: SUMMARY OF ROAD WORKS	
	SUBTOTAL 1	
	<u>ADD:</u> CONTINGENCIES (10% OF SUBTOTAL 1)	
	SUBTOTAL 2	
	<u>ADD:</u> ESCALATION ALLOWANCE (10% OF SUBTOTAL 2)	
	SUBTOTAL 3	
	<u>ADD:</u> VAT (15% OF SUBTOTAL 3)	
	TOTAL CARRIED FORWADED TO FORM OF OFFER	

Signed on behalf of the Tenderer.....(Signature)

Date.....

Tenderer's Name.....(Company Name)

DISCLAIMER

Kindly note that the responsibility lies with Tenderer to check the tender document and the tender addenda (if issued) to verify that all the information is correct and all changes have been incorporated as no claims will be entertained in this regard afterwards. Accordingly, we confirm that the hard copies of the original tender document and the tender addenda are to be regarded to contain the correct items and quantities.