

Item No	Ref	LIC	Description	Unit	Quantity	Rate	AMOUNT
1	SABS 1200A		GENERAL				
1.1	8.3		SCHEDULED FIXED-CHARGE AND VALUE-RELATED ITEMS				
1.1.1	8.3.1		Contractual requirements	Sum	1		
1.1.2	8.3.2		Establishment of facilities on the site				
1.1.2.1	8.3.2.1		a) Facilities required by Employer				
1.1.2.1	PSAB 1		Contract sign boards	No	2		
1.1.2.2	PSAB 3		Cellular phone allowance	Prov Sum	1		
1.1.3			b) Facilities required by Contractor	Sum	1		
1.1.4	8.3.3		Other fixed charge obligations(Printer)	Sum	1	8,000.00	
1.1.5	8.3.4		Removal of site establishment	Sum	1		
1.2	8.4		SCHEDULED TIME-RELATED ITEMS				
1.2.1	8.4.1		Contractual requirements	Sum	1		
1.2.2	8.4.2		Operation and Maintenance of Facilities on Site, for Duration of Construction, except where otherwise stated				
1.2.2.1	8.4.2.1		a) Facilities required by Employer	Sum	1		
1.2.2.2	8.4.2.2		b) Facilities required by Contractor	Sum	1		
1.2.3	8.4.5		Other time related obligations	Sum	1		
1.3	8.5		PROVISIONAL SUMS				
1.1.6	PSA 1 (c3.4.3)		Compliance with the OHS Act regulations (B13.03)	Prov Sum	1	100,000.00	100,000.00
				%	100,000.00		
1.3.1	PSA 2		Additional Tests required by Employer	Prov Sum	1	45,000.00	45,000.00
1.3.2			Overheads and profit on item 1.3.1	%	45,000.00		
1.3.3	PSA 3		Community Liaison Officer	Prov Sum	1	30,000.00	30,000.00
1.3.4			Overheads and profit on item 1.3.3	%	30,000.00		
1.3.5	PSA 9 (C3.4.2)		Allow survey on site as per item B13.04	Prov Sum	1	300,000.00	300,000.00
1.3.6			Overheads and profit on item 1.3.5	%	20,000.00		
1.3.7			Allow for Civil Engineering Trainee	Prov Sum	1	30,000.00	30,000.00
1.3.8			Overheads and profit on item 1.3.7	%	30,000.00		
1.3.9 (a)			Accredited Training	Prov Sum	1	150,000.00	150,000.00
			Overheads and profit item 1.3.9 a	%	150,000.00		0.00
			Engineers instruction	Prov Sum	1	180,000.00	180,000.00
1.3.13			Overheads and profit item 1.3.9 a	%	180,000.00		
			Allowance for PSC Meeting sit in	Prov Sum	1	35,000.00	35,000.00
1.3.14			Overheads and profit on item 1.3.7	%	35,000.00		
1.4	8.8		TEMPORARY WORKS				
1.4.1	8.8.2	LI	Accommodation of traffic for the duration of the contract	Sum	1		
1.4.2	8.8.4		Allow for safety kit for the duration of the contract	Prov Sum	1		
1.4.3	8.8.5		ADDITIONAL				
			Facilities for Contractor including offices, storage sheds, workshops, laboratories, living accommodation, ablution and latrine facilities, tools and equipment, water supplies, electric power, communications, setting out of Works, security and dealing with water, traffic and access. Made COVID-19 Safe				
			Re- Induction Training for COVID-19	Sum	1		
			Screenings for Employees with COVID-19Symptoms	Month	6		
			Face Mask for COVID -19 (respiratory protection (as required)				
			Surgical Gloves (for security and cleaning team)	No	40		
			Safety Goggles for Screening Person	No	2		
			Signage- COVID-19 Related				
			Protective Chlothing(boots,overalls and reflector ve	No	40		
			Face shields	No	2		
			Hand Soap 10lt	No	2		
			Paper Hand Towels 2100mm x 1500m incl. stand	No	10		
			Alcohol Based Wet Wipes 1000's	No	10		
			25lt Containers with tap	No	3		
			Desigfects of Vehicles on site	Sum	1		
Total carried to summary							

Item No	Ref	Description	Unit	Quantity	Rate	AMOUNT
2	SABS 1200C	SITE CLEARANCE				
2.1	8.2.1	Clear and grub	ha	12		
2.2	8.2.2	Remove and grub large trees and tree stumps of girth				
2.2.1		a) over 1m and up to and including 2m	No.	9		
2.2.2		b) over 2m and up to and including 3m	No.	2		
2.2.3		c) over 3m, in steps of 1m	No.	1		
2.3	8.2.4	Reclear surfaces (only on instruction of the Engineer)	ha	1		
2.4	8.2.5	Take down existing fences	km	0.2		
2.5	PSC 1	Re-instate existing fences	km	0.2		
2.6	8.2.10	Remove topsoil to a nominal depth of 150 stockpile, and maintain	m ³	2005		
Total carried to summary						

Item No	Ref	Description	Unit	Quantity	Rate	AMOUNT
3	SABS	EARTHWORKS (ROADS, SUBGRADE)				
	1200DM					
3.1	8.3.3	Treatment of road-bed				
3.1.1		a) Road-bed preparation and compaction of material to:				
3.1.2		2) minimum of 93% of modified AASHTO maximum density	m ³	9980		
3.1.3		b) In-place treatment of road-bed in intermediate or hard rock material by:				
		1) Ripping	m ³	1500		
3.2	8.3.4	Cut to fill, borrow to fill				
3.2.1		a) Compact to 90% of modified AASHTO maximum density				
3.2.1.1		i) Cut to fill	m ³	3350		
3.2.1.2		ii) Borrow to fill	m ³	2100		
3.2.2		b) Rockfill, process and compact	m ³	65		
3.3	8.3.6	Extra-over items 8.3.3 and 8.3.4 for excavating and breaking down material in				
3.3.1		b) Hard excavation	m ³	55		
3.3.2		c) Boulder excavation Class A	m ³	30		
3.3.3		d) Boulder excavation Class B	m ³	15		
3.4	8.3.7	Cut to spoil or stockpile from				
3.4.1		a) Soft excavation	m ³	2410		
3.4.2		c) Hard excavation	m ³	250		
3.4.3		d) Boulder excavation Class A	m ³	15		
3.4.4		e) Boulder excavation Class B	m ³	15		
3.5	8.3.8	Removal of oversize material (only where instructed by the Engineer)	m ³	30		
3.6	8.3.11	Extra-over Items 8.3.2, 8.3.4 or 8.3.5 for temporary stockpiling of material	m ³	30		
3.7	8.3.13	Surface finishes				
3.7.1		a) Topsoiling	m ²	6		
3.7.2		b) Grassing or other cover	m ²	0	Rate only	
3.8	8.3.15	Catchwater mounds and channels and mitre banks and channels	m ³	120		
3.9	8.3.14	Borrow pits				
3.9.1		a) Opening up and closing down of designation borrow pit	Prov	1	80,000.00	
3.9.2		b) Dealing with overburden	m ³	220		
3.9.3		c) Rehabilitation of borrow	Sum	1		
Total carried to summary						

Item No	Ref	Description	Unit	Quantity	Rate	AMOUNT
4	SABS	SUBBASE				
	1200 ME					
4.1	8.3.1	Construct the sub-base course/shoulders/ gravel wearing course with material excavated in all materilas from borrow pits (150mm G5/G6 compacted to 95% Mod AASHTO density)	m³	10250		
4.2	8.3.9	Overhaul (haul exceeding 2km)	m³.km	48000		
Total carried to summary						

Item No	Ref	Description	Unit	Quantity	Rate	AMOUNT
5	SABS	EARTHWORKS (PIPE TRENCHES)				
	1200 DB					
5.1	8.3.2	Excavation				
		a) Excavate in all materials for trenches, backfill, compact and dispose of surplus material for depths:				
5.1.1		i) Up to 1,0 m	m ³	190		
5.1.2		ii) Over 1,0 m and up to 2,0 m	m ³	60		
5.1.3		iii) Over 2,0 m and up to 3,0 m	m ³	10		
5.2		b) Extra-over Item (a) above for :				
5.2.1		2) Hard rock excavation	m ³	20		
5.3		c) Excavate and dispose of unsuitable material from trench bottom (provisional)	m ³	20		
5.4	8.3.3	Excavation Ancillaries				
5.4.1	8.3.3.1	Make up deficiency in backfill material (provisional)				
5.4.1.1		a) From other necessary excavations on site	m ³	3		
5.4.1.2		b) By importation from designated borrow pit	m ³	2		
5.5	8.3.6	Finishing				
5.5.1	8.3.6.1	Reinstate road surfaces complete with all courses				
5.5.1.1		a) Gravel on shoulders	m ²	20		
5.5.1.2		b) Gravel on road surface (gravel)	m ²	25		
Total carried to summary						

Item No	Ref	Description	Unit	Quantity	Rate	AMOUNT
6	SABS	BEDDING (PIPES)				
	1200 LB					
6.1	8.2.1	Provision of bedding from trench excavation (Class C bedding) :				
6.1.1		a) Selected granular material	m³	150		
6.1.2		b) Selected fill material	m³	75		
6.2	8.2.2	Supply only of bedding by importation (Class C bedding) :				
6.2.1	8.2.2.2	From borrow pits				
6.2.1.1		a) Selected granular material	m³	23		
6.2.1.2		b) Selected fill material	m³	11		
6.3	8.2.3	Concrete bedding cradle (15/19 concrete)	m³	1		
6.4	8.2.4	Encasing of pipes in concrete	m³	1		
Total carried to summary						

Item No	Ref	Description	Unit	Quantity	Rate	AMOUNT
7	SABS	STORMWATER DRAINAGE				
	1200 LE					
7.1	8.2.1	Supply and lay concrete pipe and portal culverts (OGEE pipes on Class C bedding) :				
7.1.1		450mm Ø , 75D	m	0		
7.1.2		600mm Ø , 100D	m	195		
7.1.3		750mm Ø , 75D	m	0		
7.1.4		900mm Ø , 75D	m	60		
7.1.5		1200mm Ø , 75D	No	0		
7.2	8.2.8	Supply and install manholes, catchpits, and the like				
7.2.1		b) Catchpits (complete, as per drawing)	No	34		
7.2.2		Headwalls (complete, as per drawing)	No	34		
7.3	PSLE 1	Construct dish drain (2m wide X 150mm X 5m long). Rate to include for all earthworks, Reinforcement ,formwork,	No	4		
7.4		Concrete work with formwork and reinforcement Ref 193 (25mpa)	m³	235		
Total carried to summary						

Item No	Ref	Description	Unit	Quantity	Rate	AMOUNT
8	SABS	GABIONS AND PITCHING				
	1200 DK					
8.1	8.2.1	Surface preparation for bedding of gabions				
8.1.1		a) Cavities filled with approved excavated material or rock	m ²	5		
8.2	8.2.2	Gabions (galvanised wire mesh)				
		Using aggregate from commercial sources				
8.2.1		a) 1m x 1m x 2m	m ³	6		
8.2.2		b) 1.5m x 1m x 2m	m ³	2		
8.2.3		c) Reno mattresses (230mm deep)	m ³	2		
8.3	8.2.4	Geotextile (U24 bidim)	m ²	40		
8.4	8.2.5	Pitching(Grouted)	m ²	245		
Total carried to summary						

Item No	Ref	Description	Unit	Quantity	Rate	Amount
9		CAUSEWAY				
9.1	SABS 1200G A	CONCRETE (SMALL WORKS)				
	8.2	<u>Scheduled Formwork Items</u>				
9.1.1	8.2.1	Rough formwork to:				
9.1.1.1	a)	Blinding concrete	m ²	40		
	8.2.2	Smooth formwork to:				
9.1.1.2	a)	Vertical faces of deck slab	m ²	90		
9.1.1.3	b)	Vertical faces of wing walls	m ²	284		
9.1.1.4	c)	Bolsters	m ²	60		
9.1.2	8.2.3	Narrow width up to 300 mm wide to:				
9.1.2.1	a)	Infill between culvert units	m ²	28		
9.1.3	8.3	<u>Scheduled Reinforcement Items</u>				
	8.3.1	Steel bars:				
9.1.3.1	a)	High tensile steel bars	t	8		
9.1.3.2	b)	Mild steel bars	t	4		
	8.3.2	High tensile weldmesh				
9.1.3.3	a)	Ref 617	m ²	80		
	b)	Ref 245	m ²	160		
3.1.4	8.4	<u>Scheduled Concrete Items</u>				
	8.4.1	15MPa/19mm Concrete to:				
9.1.4.1	a)	Filling between pipes	m ³	8		
	8.4.1	30MPa/19mm Concrete to:				
9.1.4.2	a)	Deck slab and wing walls	m ³	60		
9.1.4.3	b)	high tensile wire 618 mesh	m ³	48		
	8.4.2	Blinding layer of 15MPa/19mm concrete to:				
9.1.4.4	a)	Culvert foundation	m ³	45		
	b)	Approach slab on both sides	m ³	30		
	8.4.4	Uniformed surface finishes:				
9.1.4.5	a)	Steel floated finishes to all non-shuttered surfaces	m ²	127		
Total carried forward to next page						

Item No	Ref	Description	Unit	Quantity	Rate	Amount
Total brought forward from previous page						
9.1.4.6	8.7	Grouting to: a) Y 32 dowels, 800 mm deep	No.	8		
9.2	SABS 1200GE	PRECAST CONCRETE UNITS				
9.2.1	8.2.1	Provide structural precast portal culvert units (Infrasert or similar):				
9.2.1.1		a) 1500 x 1500 units to SANS 986, 1.2 m long	No.	rate only		
9.2.2	8.2.2	Erection of structural precast portal culvert units in riverbed on blinding layer, complete for				
9.2.2.1		a) 1500 x 1500 units to SANS 986, 1.2 m long	No.	Rate only		
9.3		Allow for water diversion. Rate to include for	Sum	1		
9.4		Allow for blasting on instruction by the Engineer	Prov Sum	Rate only		
9.5		Maintenance of water diversion at low level	Sum	1	80,000.00	
9.6		Supply all material and construct pioneer layer complete. Rate to include for all material, labour, shuttering, etc.	m³	2		
Total carried to summary						

Item No	Ref	Description	Unit	Quantity	Rate	AMOUNT
10	SABS	ANCILLARY ROADWORKS				
	1200 MM					
10.1	8.2	Scheduled items for Guardrails				
10,1,1	8.2.1	Guardrails on posts				
	a)	Galvanised	m	Rate only		
10,1,2	8.2.3	End units				
	a)	End wings	No	Rate only		
10.2	8.3	Scheduled items for permanent Road Signs				
10,2,1	8.3.1	Sign faces with painted or galvanized background, with painted symbols, characters, legend, and borders, and with signboards constructed from :				
	a)	Aluminium sheet (2,0mm thick), of area				
	1)	0m ² and up to 2m ²	m ²	10		
10,2,2	8.3.3	Sign supports				
	c)	Timber (125mm) complying with 3.2.10	m	70		
10,2,3	8.3.4	Excavation and backfilling and concreting (if any) for sign supports	m ³	10		
Total carried to summary						

Item No	Ref	Description	Unit	Quantity	Rate	AMOUNT
11		DAYWORKS				
11.1		Labour				
11,1,1		Provisional sum for labour	Prov Sum	1	Rate only	
11,1,2		Contractor's markup on item 11.1.1 above	%	Rate only		
11.2		Machinery				
11,2,2		Provisional sum for plant hire	Prov Sum	1	Rate only	
11,2,2		Contractor's markup on item 11.2.1 above	%	Rate only		
11.3		Materials				
11,3,1		Provisional sum for materials as requested by Engineer	Prov Sum	1	Rate only	
11,3,2		Contractor's markup on item 11.3.1 above	%	Rate only		
Total carried to summary						

SUMMARY OF BILL FOR MBOSISENI ACCESS ROAD

SECTION	DESCRIPTION	AMOUNT
1	1200 A : GENERAL	
2	1200 C : SITE CLEARANCE	
3	1200 DM : EARTHWORKS (ROADS, SUBGRADE)	
4	1200 ME : SUBBASE	
5	1200 DB : EARTHWORKS (PIPE TRENCHES)	
6	1200 LB : BEDDING PIPES	
7	1200 LE : STORM WATER DRAINAGE	
8	1200 DK : GABIONS AND PITCHING	
9	1200 G : CONCRETE	
10	1200 MM : ANCILLARY ROADWORKS	
11	DAYWORKS	
12	SUB-TOTAL (1+2+3+4+5+6+7+8+9+10+11)	
14	SUB-TOTAL (12+13)	
15	VAT @ 15%	
16	TOTAL CARRIED FORWARD TO FORM OF OFFER (14+15)	