

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
13,00	CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS				
B13.01	Contractor's general obligations (a) Fixed obligations (b) Value-related obligations (c) Time-related obligations The combined total tendered for sub-items (a), (b) and (c) shall not exceed 15% of the tender sum.	Lump Sum Lump Sum Month	1 1 10		
13/C12.01	Project Liaison (a) Remuneration for community liaison officer @ R4500 per month (b) Project Steering Committee @ R200 per member per seating (c) Handling cost and profit in respect of sub-items 13/C12.01(a) and (b)	Prov.sum Prov.sum %	 62000	R 50 000,00 R 12 000,00	R 50 000,00 R 12 000,00
13/B12.01	Protection, removal, realignment and replacement of services as ordered by the Engineer (a) Utility services (i) The removal, protection and replacement of utility service (ii) Handling costs and profit in respect of item B12.01(a)	Prov.sum %	1 20000	R 20 000,00	R 20 000,00
13/E23.01	Contractor's initial obligation in respect of the Occupational Health and Safety Act and Construction Regulations including Covid -19 related protocols and including (i) Entry & Exit Medicals of Employees, (ii) Supply of PPE to all Employees	Lump Sum	1		
13/E23.02	Contractor's time related obligation in respect of the Occupational Health and Safety Act and Construction Regulations	Mths	10		
13/E23.03	Submission of the Health and Safety File	Lump Sum	1		
13/F10.01	HIV/AIDS Awareness obligations	Lump Sum	1		
13/F10.02	Generic Training	Prov Sum	1	R 100 000,00	R 100 000,00
13/F10.03	Allowance for two (2) Student Training @ R4500 per student per month Handling costs and profit in respect of item 13/F10.02 and 13/F10.03	Prov Sum %	1 190000	R 90 000,00	R 90 000,00
13/F10.04	Provision for water supply	Prov Sum	1	R 120 000,00	R 120 000,00
13/F10.05	Provision for special services(Professional) (a) EAI Tech Services (b) Geo-Tech Services (c) Topographical Survey (d) Safety Agent (d) Handling cost and Profit in respect of Sub item 813.02(a)(b)(c) and (d)	PROV SUM PROV SUM PROV SUM PROV SUM %	1 1 1 1 R670 000,00	R 165 000,00 R110 000,00 R80 000,00 R315 000,00	R 165 000,00 R 110 000,00 R 80 000,00 R 315 000,00
TOTAL CARRIED FORWARD TO SUMMARY					

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	ENGINEER'S SITE PERSONNEL				
14,01	Office and laboratory accommodation				
	(a) Provisional sum for the office accommodation for the Engineer.	Prov. Sum	1	80000	R 80 000,00
	(b) Handling cost and profit in respect of sub-item 14.01(a)	%	80000		
	(c)				
	(e) Ablution units	m²	2		
14,02	Office and laboratory furniture				
	(a) Chairs	No	15		
	(d) Desks, complete with drawers and locks	No	3		
	(e) Portable Computer and accessories	Sum	1		
	(f) Conference tables	No	1		
	(g) Survey equipment	Lump Sum	1		
	(h) Pinboard (size 1.0m x 1.5m)	No	1		
	(i) Name board	No	2		
	(j) Provision of Safety Equipment & PPE to the Engineer and his personnel	Sum	1		
14,03	(b) Prime-cost items and items paid for in a lump sum:				
	(a) Provisional sum items				
	(i) Provision for use by the Engineer of an independent laboratory.	Prov. Sum	1	120000	R 120 000,00
	(ii) Handling costs and profit in respect of subitem B24.03(d)(i) above	%	120000		
TOTAL CARRIED FORWARD TO SUMMARY					

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
15,00	ACCOMMODATION OF TRAFFIC				
15,01	Accommodating traffic and maintaining temporary deviations	km	3,500		
15,02	Earthworks for temporary deviations				
	(a) Shaping of temporary deviations	km	3,500		
	(b) Cut and borrow to fill	m3	1500		
	(c) Cut to spoil	m3	150		
15,03	Temporary traffic-control facilities				
	(a) Flagmen	man-day	120		
	(b) Portable STOP and GO-RY signs	No	2		
	(c) Road signs R and TR series (as shown on drawings)	No	10		
	(d) Road signs TW series (as shown on drawings)	No	10		
	(h) Delineators (DTG50J) (250 mm x 1000 mm):				
	(i) Single	No	2		
	(ii) Mounted back to back	No	2		
	(j) Traffic cones (750 mm)	No	8		
	(k) Single guardrails attached to posts	m	Rate only		
	(l) Movable barriers	m	2		
	(m) Two-way communication devices	No	Rate only		
	(n) Amber flashing lights roof mounted for engineer's staff	No	3		
15,04	Relocated of traffic-control facilities	Lump Sum			
15,05	Gravelling and repair of temporary deviations and existing gravel shoulders used as temporary deviations:				
	(a) Temporary deviations	m3	280		
	(b) Existing gravel shoulders	m3	163		
15,06	Watering of temporary deviations	kl	770		
TOTAL CARRIED FORWARD					

BROUGHT FORWARD					
15,07	Blading by road grader of:				
	(a) Temporary deviations	km-pass	3,200		
	(b) Existing roads used as temporary deviations	km-pass	3,200		
15,08	Repairs, alterations and/or additions to existing roads used as temporary deviations	Prov Sum	1	R 50 000,00	R 50 000,00
15,11	Traffic signals	Prov Sum	1	R 10 000,00	R 10 000,00
TOTAL CARRIED FORWARD TO SUMMARY					

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
17,00	CLEARING AND GRUBBING				
17,01	Clearing and grubbing	ha	3,00		
17,02	Removing and grubbing of large trees and tree stumps				
	(a) Girth exceeding 1m up to and including 2m	No	4		
	(b) Girth exceeding 2m up to and including 3m	No	2		
17,03	Re-clearing of surfaces (on the written instructions of the Engineer only)	ha	1		
17,04	Clearing and grubbing at inlets and outlets of hydraulic structures	m²	10		
17,05	Cleaning out of hydraulic structures				
	(a) Pipes with an internal diameter up to and including 750 mm	m3	5		
	(b) Pipes with an internal diameter exceeding 750 mm	m3	5		
	(c) Box culverts up to and including 1,5 m vertical dimension	m3	5		
	(d) Box culverts exceeding 1,5 m vertical dimension	m3	Rate only		
17,06	Removal and storage of selected vegetation				
	(a) Cost of removal, storing, protection and replanting in a protected and fenced-off area of selected vegetation	Prov Sum	1	R 3 000,00	R 3 000,00
	(b) Charge on provisional sum	%	3000		
TOTAL CARRIED FORWARD TO SUMMARY					

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
22,00	EXCAVATION				
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	m3	2700		
	(ii) Exceeding 1,5 m and up to 3,0 m	m3	Rate only		
	(iii) Exceeding 3,0 m and up to 4,5 m	m3	Rate only		
	(iv) Exceeding 4,5 m and up to 6,0 m	m3	Rate only		
	(b) Extra over subitem 22.01(a) for excavation in hard material, irrespective of depth	m3	1350		
22,02	Backfilling:				
	(a) Using the excavated material	m3	1560		
	(b) Using imported selected material	m3	Rate only		
	(c) Extra over subitems 22.02(a) and (b) for soil cement backfilling with 5% cement of the dry mass	m3	Rate only		
22,03	Concrete pipe culverts, interlocking joint pipes:				
	(b) On class B bedding				
	(1) Class 100D Pipes				
	(i) 600 mm dia.	m	400		
	(ii) 750 mm dia.	m	180		
	(iii) 900 mm dia.	m	160		
	(iv) 1200 mm dia.	m	Rate Only		
22,05	Portal and rectangular culverts:				
	(b) Without prefabricated floor slabs				
	(1) 600mm x 600mm, Rectangular, class 100s	m	Rate Only		
	(2) 1200mm x 600mm, Rectangular, class 100s	m	30		
	(3) 1500mm x 900mm, Rectangular, class 100s	m	60		
22,06	Extra over items 22.03 and 22.05 for constructing inclined culverts				
	(a) Concrete pipe culverts	m	Rate only		
TOTAL CARRIED FORWARD					

BROUGHT FORWARD					
	(b) In floor slabs for portal or rectangular culverts, including formwork and class U2 surface finish				
	(1) Class 25/19 concrete	m3	61		
	(c) In inlet and outlet structures, skewed ends, catchpits, manholes, thrust and anchor blocks, excluding formwork but including class U2 surface finish				
	(1) Class 25/19	m3	Rate only		
	(d) Formwork of concrete under subitem 22.07(c) above				
	(1) Vertical formwork for F1 surface finish	m ²	Rate only		
	(2) Vertical formwork for F2 surface finish	m ²	Rate only		
	(3) Horizontal formwork for F2 surface finish	m ²	Rate only		
22,07	Cast in situ concrete and formwork				
	(a) In class A bedding, screeds and the encasing for pipes, including formwork	m ³	18		
		m ²	10		
	(1) 75mm Screed below floor slab and concrete infill (Class 15/38)				
	(2) 25mm 1:6 Mortar Mix as per drawing				
	(b) In floor slabs for portal or rectangular culverts, including formwork and class U2 surface finish (class 30/19 concrete)	m ³	48		
22,08	Concrete backfill for culverts				
	(a) Class 20/19	m3	Rate only		
22,10	Steel reinforcement				
	(a) Mild steel bars	t	2,00		
	(b) High-tensile steel bars	t	Rate only		
	(c) Welded steel fabric	kg	Rate only		
	(i) Mesh Ref 311	kg	280,00		
22,10	Bitumen impregnated burlap 150mm wide	m	38,00		
22,11	Dowels for joining old and new concrete	kg	Rate only		
22,12	Removing existing concrete				
	(a) Plain concrete	m3	Rate only		
	(b) Reinforced concrete	m3	Rate only		
22,13	Removing and re-laying existing pipes				
	(b) Class B bedding				
	(1) 450 mm dia.	m	Rate only		
	(2) 600 mm dia.	m	Rate only		
	(3) 900 mm dia.	m	Rate only		
22,18	Brickwork				
	(a) 115 mm thick	m ²	Rate only		
	(b) 230 mm thick	m ²	Rate only		
TOTAL CARRIED FORWARD TO SUMMARY					

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
23,00	CHUTES AND DOWNPIPES, AND CONCRETE LININGS FOR OPEN DRAINS				
23,01	Concrete kerbing				
	(a) Precast kerbing to SABS 927				
	(1) Figure 7 kerb (Semi-mountable)	m	40		
	(2) Figure 8B (Mountable)	m	1500		
	(3) Figure 12	m	1000		
23,02	Concrete kerbing-channeling combination				
	(1) Figure 7 kerb (Semi-Mountable) Type B:				
	(i) with 300m wide concrete channel	m	Rate only		
	(2) Figure 8B kerb (Mountable) Type C:				
	(i) with 300m wide concrete channel	m	Rate only		
	(b) Cast in situ concrete edge beams, class 25/19 concrete (Formwork and clause U2 surface finish included)				
	(1) 300mm x 200mm	m	Rate Only		
	(2) 300mm x 300mm	m	700		
23,03	Concrete chutes (Type 4):				
	(a) 450 mm precast concrete chute	m	Rate only		
23,05	Inlet, outlet, transition and similar structures (typical designs):				
	(a) In situ outlet structures for pipes at fills as shown on drawing , class 25/19 MPa concrete.	No	2		
	(b) In situ stilling basin for concrete lined drains as shown on drawing, class 25/19 Mpa concrete.	No	10		
23,07	Trimming of excavations for concrete-lined open drains				
	(a) In soft material	m ²	Rate only		
	(b) In hard material	m ²	Rate only		
TOTAL CARRIED FORWARD					

BROUGHT FORWARD					
B23.08	Concrete lining for open drains				
	(a) Cast in situ concrete lining class 25/19 for all types of open drains	m3	1238		
	(b) Class U2 surface finish to cast in situ concrete for all types of open drain	m ²	Rate only		
23,09	Formwork to cast in situ concrete lining for open drains (Class F2 surface finish)				
	(a) To sides with formwork on the internal face only	m ²	Rate only		
	(b) To sides with formwork on both internal & external faces (each face measured)	m ²	Rate only		
	(c) To ends of slabs	m ²	Rate only		
23,10	Sealed joints in concrete linings of open drains				
	(a) Polysulphide sealants	m	Rate Only		
	(b) Soft Board expansion	m	500		
23,12	Steel Reinforcement				
	a) Mild Steel	t	Rate only		
	b) High Tensile Steel	t	Rate only		
	c) REF 395 MERSH	m ²	6930		
TOTAL CARRIED FORWARD TO SUMMARY					

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
31,00	BORROW MATERIALS				
31,01	Excess overburden	m3	14850		
31,03	Finishing-off borrow areas in:				
	(a) Hard material	ha	1		
	(b) Intermediate material	ha	1		
	(c) Soft material	ha	1		
B31.04	(a) Allow a Prime Cost Sum as compensation to owner/authority for royalties for land used gravel borrowpits	PC Sum	1	R 60 000,00	R 60 000,00
B31.04	(b) Handling costs and profit in respect of subitem B31.04(a) above	%	60000		
TOTAL CARRIED FORWARD TO SUMMARY					

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
33,00	BORROW MATERIALS				
B33.01	Cut and borrow to fill, including free-haul up to 0.5km				
	(a) Gravel material in compacted layer thickness of 200 mm and less:				
	(1) Material obtained from cut in the road prism and road prism and road reserve areas;				
	(i) Compacted to 90% of modified AASHTO density	m3	7805		
	(c) Rock fill (as specified in subclause 3209(c))	m3	30		
	(d) Toes for rock fill embankments (as specified in subclause 3307(h))				
	(e) Blasting (All rates must include establishment distestablishment)	m3	60		
33,03	Extra over item 33.01 for excavating and breaking down material in:				
	(a) Intermediate excavation	m3	3771		
	(b) Hard excavation	m3	500		
	(c) Boulder excavation class A	m3	150		
	(d) Boulder excavation class B	m3	80		
33,04	Cut to spoil, including free-haul up to 0,5 km. Material obtained from:				
	(a) Soft excavation	m3	2933		
	(b) Intermediate excavation	m3	900		
	(c) Hard excavation	m3	350		
	(d) Boulder excavation class A	m3	25		
	(e) Boulder excavation class B	m3	55		
33,07	Removal of unsuitable material (including free-haul of 0.5 km):				
	(a) In layer thicknesses of 200 mm and less:				
	(1) Stable material	m3	Rate only		
	(2) Unstable material	m3	6600		
	(b) In layer thicknesses exceeding 200 mm:				
	(1) Stable material	m3	Rate only		
	(2) Unstable material	m3	Rate only		
33,10	Roadbed preparation and the compaction of material				
	(a) Compaction to 90% of modified AASHTO density	m3	7450		
	(b) Compaction to 93% of modified AASHTO density	m3	Rate only		
TOTAL CARRIED FORWARD					

BROUGHT FORWARD					
33,13	Finishing-off cut and fill slopes, medians and interchange areas:				
	(a) Cut slopes	m ²	560		
	(b) Fill slopes	m ²	350		
33,16	Widening of fills as specified in subclause 33.07(i) extra over				
	(a) item 33.01(a)	m3	1400		
33/32.00	Selecting, stockpiling and breaking down the material from borrow pits, cuttings and existing pavement layers, and placing and compacting the gravel layers				
33/32.04	Removal of oversize pavement material	m3	100		
33/32.05	Stockpiling of material	m3	7450		
TOTAL CARRIED FORWARD TO SUMMARY					

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
34,00	BORROW MATERIALS				
34,01	Pavement layers constructed from gravel taken from cut or borrow, including free haul up to 1,0km (a) 150 mm Gravel selected layers (G6) compacted to: (1) 93% of modified AASHTO density (d) 150 mm Gravel subbase C4 (chemically stabilized material with 3% roadsure cement) compacted to: (1) 95% of modified AASHTO density (e) 150mm Gravel (G6) shoulder compacted to: (1) 93% of modified AASHTO density	m3	7450		
34,02	Extra over item 34.01 for excavation of material in: (a) Intermediate excavation (b) Hard excavation	m3 m3	400 220		
B34.07	Extra over item 34.01 and 34.06 for ripping, scarifying and temporarily blading the material to windrow	m3	1000		
34/16.00	Overhaul				
34/16.01	Overhaul on material hauled in excess of 1,0 km (ordinary overhaul)	m3-km	1200		
34/32.00	Selecting, stockpiling and breaking down the material from borrow pits, cuttings and existing pavement layers, and placing and compacting the gravel layers				
34/32.04	Removal of oversize pavement material	m3	800		
TOTAL CARRIED FORWARD TO SUMMARY					

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
35,00	BORROW MATERIALS				
35,01	Chemical stabilization extra over unstabilized compacted layers				
	(a) 150mm Sub-base	m3	7190		
35,02	Chemical stabilizing agent:				
	(a) Ordinary Portland cement	t	431		
35,04	Provision and application of water for curing	kl	500		
TOTAL CARRIED FORWARD TO SUMMARY					

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
3600	CRUSHED STONE BASE				
36,01	Crushed stone base (150mm) (a) Constructed from type G2 type material obtained from commercial sources and compacted to 88% apparent relative density (i) 150mm thickness	tons	13268		
TOTAL CARRIED FORWARD TO SUMMARY					

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
41,00	PRIME COAT				
41,01	Prime coat:				
	(a) RTH 3/12P or similar (Max. 0,8 l/m²)	litre	39688		
	(c) MC-30 cut-back bitumen	litre	Rate Only		
	(d) MC-70 cut-back bitumen	litre	Rate Only		
41,02	Aggregate for blinding	m²	Rate Only		
TOTAL CARRIED FORWARD TO SUMMARY					

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
42,00	ASPHALT SURFACING				
42,02	Asphalt surfacing (30mm, modified bitumen)				
	(a) Continuously graded (max 7.5mm)	m²	52030		
42.04	Tack coat of 30% stable-grade emulsion (max. 0,5 l/m²)	litre	26 015,		
42.05	Binder variations:				
	(a) 60/70 penetration-grade bitumen	t	2,5		
42.06	Variations in active filler content:				
	(b) Lime	t	rate only		
42.07	(a) Trial sections (nominal thickness: 30 mm)	m²	6,		
B42.08	100 mm cores in asphalt paving	No.	10,		
42,15	Application of Prime coat and/or tack coat to the edges of a layer	litre	Rate Only		
TOTAL CARRIED FORWARD TO SUMMARY					

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (R)
5100	PITCHING, STONEMWORK AND PROTECTION AGAINST EROSION				
51,01	Stone pitching				
	(b) Grouted stone pitching	m²	100,00		
5100	TOTAL CARRIED TO SUMMARY				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (R)
5200	GABIONS				
52,01	Foundation trench excavation and backfilling; (b) In all other classes of materials	m ³	100,00		
52,02	Surface preperation for bedding the Gabions	m ²	80,00		
52,03	Gabions:				
	(a) Galvanized gabion boxes:				
	(i) 1m wide x 1m deep x 1m long	m ³	36,00		
	(c) Galvanized gabion mattresses:				
	(i) 2m wide x 0.2m deep x 6m long	m ³	36,00		
52,05	Filter fabric				
	(c) Bidim U24 or similar	m ²	100,00		
5200	TOTAL CARRIED TO SUMMARY				

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ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
57,00	ROAD MARKING				
57,02	Retro-reflective road marking paint:				
	(a) White lines (broken or unbroken)				
	(1) 100 mm wide	km	5,500		
	(3) 200 mm wide	km	0,50		
	(b) Yellow lines (broken or unbroken)				
	(1) 100 mm wide	km	Rate Only		
	(3) 200 mm wide	km	Rate Only		
	(c) Red lines (broken or unbroken)				
	(1) 100 mm wide	km	Rate Only		
	(d) White lettering and symbols	m ²	Rate Only		
	(e) Yellow lettering and symbols	m ²	Rate Only		
	(f) Transverse lines, painted island and arrestor bed markings (any colour)	m ²	Rate Only		
	(g) Kerb markings (any colour)	m ²	Rate Only		
57,04	Variations in rate of application:				
	(a) White paint	litre	Rate Only		
	(b) Yellow paint	litre	Rate Only		
	(c) Red paint	litre	Rate Only		
	(d) Retro-reflective beads	kg	Rate Only		
	(e) Plastic road-marking paints (specify)	litre	Rate Only		
57,06	Setting out and premarking the lines (Excluding traffic-island markings, lettering and symbols)	km	5,500		
57,07	Re-establishing the painting unit at the end of the maintenance period	Lump Sum			
TOTAL CARRIED FORWARD TO SUMMARY					

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	TREATING OLD ROADS				
59,01	Finishing the road and road reserve: (b) Single carriageway road	km	5,500		
TOTAL CARRIED FORWARD TO SUMMARY					

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
6400	CONCRETE FOR STRUCTURES				
64,01	Cast-in-situ concrete:				
	(a) Class 30/19 in:				
	(i) Floor Slab	m ³	30		
	(ii) Wing Wall Bases	m ³	5		
	(iii) Apron Slab and Cut-off walls	m ³	60		
	(iv) Wing Walls	m ³	10		
	(v) Head walls	m ³	6		
B64.07	Curing of concrete:				
	(a) All concrete using a water based low viscosity clear wax emulsion curing compound	m ²	490		
Total Carried Forward To Summary					

CONSTRUCTION OF ACCESS ROAD FROM MASHABELA TO MACHACHA PHASE 2

PROJECT NUMBER: LIM473/Mashabela-Machacha/21/22/002PH2

ITEM	DESCRIPTION	AMOUNT
	SUMMARY OF SCHEDULE OF QUANTITIES	
1300	CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS	
1400	HOUSING, OFFICES AND LABORATORY FOR ENGINEER'S SITE PERSONNEL	
1500	ACCOMMODATION OF TRAFFIC	
1700	CLEARING AND GRUBBING	
2200	PREFABRICATED CULVERTS	
2300	CONCRETE KERBING, CONCRETE CHANNELING, CHUTES AND DOWNPIPES, AND CONCRETE LININGS FOR OPEN DRAINS	
3100	BORROW MATERIALS	
3300	MASS EARTHWORKS	
3400	PAVEMENT LAYERS OF GRAVEL MATERIAL	
3500	STABILIZATION	
3600	CRUSHED STONE BASE	
4100	PRIME COAT	
4200	ASPHALT BASE AND SURFACING	
5100	PITCHING, STONWORK AND PROTECTION AGAINST EROSION	
5200	GABIONS	
5600	ROAD SIGNS	
5700	ROAD MARKINGS	
5900	FINISHING THE ROAD AND ROAD RESERVE AND TREATING OLD ROADS	
6400	CONCRETE FOR STRUCTURES	
Total		
0% CONTINGENCIES		
SUB-TOTAL 1		
SUB-TOTAL 2		
15% VAT		
TENDER AMOUNT		