

**AVON INTERNAL STREETS.
TENDER NO. BM 02/17/18**

Item	Description	Unit	Quantity	Rate	Amount
1200	GENERAL REQUIREMENTS AND PROVISIONS (As specified in Section B1231 of the project specification)				
B12.01	Payment of Community Liaison Officer				
	a) Provisional sum for the payment of the Community Liaison Officer	Prov Sum	6	3,500	21000
	b) Handling costs and profit in respect of sub-item B12.01(a) above	%	21000%	
E12.05	<u>Provision for Accredited Training</u>				
	(a) Generic Skills	Prov Sum	1		50,000.00
	(b) Entrepreneurial Skills	Prov Sum	1		65,000.00
	(c) Handling costs and profit in respect of sub-items (a) and (b) above	%	115000%	
	(d) Training venue (only if required)	Lump Sum	1	10000	10,000.00
12.06	Provision for specialist services				
	(a) Geotechnical Investigation	Prov Sum	1		99,430.00
	(b) Topographic & Land survey	Prov Sum	1		45,229.55
	(c) Environmental Impact Assessment (EIA)	Prov Sum	1		48,500.00
	(d) Handling costs and profit in respect of sub-item 12.06 (a - c) above	%	193,160%	
1200	TOTAL CARRIED TO SUMMARY				

Item	Description	Unit	Quantity	Rate	Amount
1300	CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS				
B13.01	The contractor's general obligations:				
	(a) Fixed obligations	lump sum	1.00		
	(c) Time-related obligations	month	4		
1300	TOTAL CARRIED TO SUMMARY				

Item	Description	Unit	Quantity	Rate	Amount
14.00	HOUSING & OFFICES FOR THE ENGINEER'S SITE PERSONNEL (As specified in Section 1400 and Project Specifications)				
14.01	Office and Laboratory accommodation. The provision of office and laboratory accommodation as specified, including roof, external and internal walls, windows complete with glazing, doors with locks and fittings, buglar proofing, painting, floors, fencing, the provision of a 220/250 volt electrical installation and stores, complete, in accordance with the drawings and specifications, except for the items scheduled elsewhere:				
	(a) Offices (interior floor space only).	m2	50		
	(e) Ablution Units.	m2	5		
14.02	Office and Laboratory Furniture				
	(a) Chairs	No.	10		
	(d) Desks complete with drawers and locks.	No.	1		
	(f) Conference tables	No.	1		
B14.03	Office and Laboratory fittings, and Installations and equipment.				
	(a) Items measured by number:				
	(i) 220/250 volt power points.	No.	3		
	(iii) Double 80 watt fluorescent-light fittings complete with ballast and tubes.	No.	3		
	(v) Single incandescent-light fittings complete with 100 watt globes	No.	3		
	(vi) Wash Hand Basins complete with taps and drains.	No.	1		
	(x) Fire estinguishers, 9.0kg all purpose dry powder type, complete, mounted on wall with braskets.	No.	2		
	(xi) Air conditioning Units with, 2.2kw minimum capacity, mounted and with own powder connection.	No.	2		
	(xiv) General-purpose steel cupboards with shelves.	No.	1		
	(xvi) Refrigerators.	No.	1		
	(xix) Flood lights complete with poles and 500 watt minimum globes	No.	2		
1400	TOTAL CARRIED FORWARD				

Item	Description	Unit	Quantity	Rate	Amount
1400	TOTAL BROUGHT FORWARD				0.00
B14.03	(b) Prime cost items and items paid for in a lump sum:				
	(1) The provision of telephone service and fax facility, including the cost of calls in connection with contract administration and telephone rental.	PC Sum	1		12,000.00
	(2) Handling cost and profit in respect of subitem 14.03 (b)(1) above.	%	12,000.00%	
	(b) (ix) Provision of Cellular Telephones				
	(1) Provision of cellular telephones	No.	2	15,000.00	30,000.00
	(2) Costs of cellular calls and other charges	Prov Sum	1	10,000.00	10,000.00
	(3) Handling costs and profit in respect of 14.03(b)(ix)(2) above	%	10,000.00%	
14.04.	Car ports Car ports, as specified, at office and Laboratory buildings.	No.	2	3,000.00	6,000.00
14.08	Services: The provision of water, electricity, low pressure gas, sewerage, septic tank, sewage and rubbish removal, cleaning services, maintainance and repairs, all as specified in clause 1404, including the construction and maintainance of the access roads, footpaths, etc:				
	(a) Services at offices and laboratories:				
	(i) Fixed costs	lump sum	1	22,500.00	22,500.00
	(ii) Running costs	month	6	3,000.00	18,000.00
14.10	Provision of photostat facilities	month	6	2,500.00	15,000.00
1400	TOTAL CARRIED TO SUMMARY				

AVON INTERNAL STREETS.			TENDER		
NO. BM 02/17/18					
Item	Description	Unit	Quantity	Rate	Amount
1500	ACCOMMODATION OF TRAFFIC				
B15.01	Accommodating traffic				
	(a) Accomodation of traffic	km	1.20		
B15.03	Temporary traffic-control facilities:				
	(a) Flagmen	man-day	88		
	(b) Portable STOP and GO-RY signs	No.	5		
	(d) Amber flicker lights	No.	2		
	(e) Road signs, R- and TR-series, (1200mm)	No.	5		
	(f) Road signs, TW-series, (1200mm)	No.	5		
	(g) Road signs, STW-, DTG-, TGS- and TG-series excluding delineators and barricades)	m²	5		
	(h) Delineators (TW401/tw402),600mm x 150mm				
	(i) Single	No.	15		
	(ii) Mounted back to back	No.	15		
	(i) Movable barricade/roadsign combination	No.	2		
	(j) Traffic cones (size indicated)	No.	10		
	(m) Two way communication devices	No.	4		
	(n) Provision of High visibility safety jackets and hats	No.	6		
	(o) Provision of rotating amber light	No.	2		
B15.16	Penalty to be deducted for non-compliance with requirements for accommodation of traffic:				
	(a) Fixed penalty per occurance	No.	-		Rate Only
	(b) Time related penalty	hour	-		Rate Only
1500	TOTAL CARRIED TO SUMMARY				

Item	Description	Unit	Quantity	Rate	Amount
1700	CLEAR AND GRUBBING				
17.01	Clearing and grubbing	m2	10800		
1700	TOTAL CARRIED TO SUMMARY				

Item	Description	Unit	Quantity	Rate	Amount
1800	DAYWORK AND HIRE OF CONSTRUCTION EQUIPMENT				
B18.01	Labour				
	(a) Normal working hours:				
	(i) Foreman	hour	1		Raten Only
	(ii) Skilled	hour	1		Raten Only
	(iii) Semi-skilled	hour	1		Raten Only
	(iv) Unskilled	hour	1		Raten Only
B18.02	Hire of construction equipment:				
	(a) Grader (100 - 200 kW)	hour	1		Raten Only
	(b) Loader (0.5m ³ bucket capacity)	hour	1		Raten Only
	(c) Tipper truck :				
	(i) 3-5 ton	hour	1		Raten Only
	(ii) 5.1-10 ton	hour	1		Raten Only
	(d) Pneumatic-tyred roller (8 tons capacity)	hour	1		Raten Only
	(e) Vibratory roller (as per 33.04(b)(i))	hour	1		Raten Only
	(f) Walk behind roller	hour	1		Raten Only
	(g) Steel-wheeled roller (8 tons capacity)	hour	1		Raten Only
B18.03	Transport				
	(a) LDV	km	1		Raten Only
	(b) Flatbed truck	km	1		Raten Only
1800	TOTAL CARRIED TO SUMMARY				

AVON INTERNAL STREETS. TENDER NO. BM 02/17/18					
Item	Description	Unit	Quantity	Rate	Amount
2100	DRAINS				
21.01	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	200		
	(ii) Exceeding 1,5 m and up to 3,0 m	m ³	150		
	(b) Extra over item 21.01 (a) for excavation in hard	m ³	10		
2100	TOTAL CARRIED TO SUMMARY				

Item	Description	Unit	Quantity	Rate	Amount
2200	PREFABICATED 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	100		
	(ii) Exceeding 1,5 m and up to 3,0 m	m ³	50		
	(b) Extra over item 22.01 (a) for excavation in hard	m ³	50		
22.05	Portal and Rectangular culverts (Class S), complete without prefabricated floor slabs				
	Class 200S				
	(i) 900x600mm	m	180		
	(ii) 450 x 600	m	60		
22.07	Cast insitu concrete and formwork				
	(b) In floor slabs for portal culverts, including formwork and class U2 surface finish				
	(i) Class 30/19	m3	60		
	(c) In inlet and outlet structures, thrust and anchor blocks excluding formwork but including class U2 surface finish				
	(i) Class 30/19	m3	35		
	(d) Formwork of concrete under sub-item 22.07(c) above				
	(i) Vertical Formwork for F2 surface finish	m2	24		
22.10	Steel reinforcement				
	(c) Welded steel fabric	kg	500		
22.12	Removing existing concrete				
	(a) Plain concrete	m3	3		
	(b) Reinforced concrete	m3	2		
2200	TOTAL CARRIED TO SUMMARY				

Item	Description	Unit	Quantity	Rate	Amount
2300	CONCRETE KERBING, CHANNELING, CHUTES, DOWN PIPES AND CONCRETE LININGS FOR DRAINS				
23.01	Concrete kerbing (class 30/19)				
	(a) Kerbing Fig 7, 8b, 8c on straights (1m kerbs)				
	(ii) Figure 7	m	350		
	Kerbing Fig 7, 8b, 8c on radius (short kerbs)				
	(ii) Figure 7	m	220		
	(iii) Figure 7/ transition	m	10		
2300	TOTAL CARRIED TO SUMMARY				

Item	Description	Unit	Quantity	Rate	Amount
3100	BORROW MATERIALS				
31.01	Excess overbudden	m3	1300.00		
31.05	Finish off borrow areas in:				
(a)	Hard Material	ha	0.10		
(b)	Intermediate Material	ha	0.50		
(c)	Soft material	ha	1.00		
B31.15/ 12.14	Guarantee to DME for rehabilitation of Borrow Pit	L/Sum	1.00		
3100	TOTAL CARRIED TO SUMMARY				

Item	Description	Unit	Quantity	Rate	Amount
3300	MASS EARTHWORKS				
33.01	Cut and borrow to fill including fill up to 0.5km				
	(a) Gravel material in compacted layer thickness of 200mm and less				
	(i) Compacted to 90% mod. AASHTO desity	m3	4050		
33.03	Extra over item 33.01 for excavating and breaking down material in:				
	(a) Intermediate excavation	m3	500		
	(b) Hard excavation	m3	140		
33.04	Cut to spoil including freehaul up to 0.5km				
	(a) Intermediate excavation	m3	2700		
	(b) Hard excavation	m3	540		
33.06	Variation on the number of roller passes (applicable to sub-items 33.01(a)(i))				
	(e) Impact rolling 3-pass	m2	2000		
33.10	Roadbed preparation and the compaction of material:				
	(b) Compaction to 93% mod. AASHTO density	m3	2250		
33.13	Finishing off cut and fill slopes:				
	(a) Cut slopes	m2	110		
	(b) Fill slopes	m2	1100		
33/16.01	Overhaul material hauled in excess of a freehaul distance of 0.5km, for haul up to and through:				
	1.0km	m3	4690		
33/16.02	Overhaul material hauled in excess of a freehaul distance of 1.0km (ordinary overhaul)	m3km	3240		
3300	TOTAL CARRIED TO SUMMARY				

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Item	Description	Unit	Quantity	Rate	Amount
3400	PAVEMENT LAYERS OF GRAVEL MATERIAL				
34.01	Pavement layers constructed from gravel taken from cut or borrow, including freehaul up to 1,0km				
	(a) Gravel selected layer				
	(i) 95-93% Mod AASHTO density 300mm thick placed in 150mm think layers	m ³	4050		
	(b) Gravel subbase(chemically/mechanically un-stabilised)				
	(i) 96% Mod AASHTO density 150mm thick	m ³	3750		
	(c) Gravel base G5				
	(i) 98% Mod AASHTO density 150mm thick	m ³	2160		
	(g) Gravel shoulders compacted to:				
	(i) 93% Mod AASHTO	m ³	1350		
34/16.02	Overhaul on material for a distance exceeding 1,0km	m ³ .km	10883		
3400	TOTAL CARRIED TO SUMMARY				

Item	Description	Unit	Quantity	Rate	Amount
3500	STABILISATION				
35.01	Chemical/mechanical stabilization base over unstabilized compacted layers				
(a)	C3/C4 base 150mm thickness	m3	2160		
35.02	Chemical stabilizing agent:				
(a)	Ordinary Portland cement	t	126		
35.04	Provision and application of water for curing:	kl	2,160		
3500	TOTAL CARRIED TO SUMMARY				

Item	Description	Unit	Quantity	Rate	Amount
4100	PRIME COAT				
41.02	Prime and Tack coat:				
	(a) Quick drying RTH 1/4P tar primer applied at 0.75l/m ²	L	9,000.00		
4100	TOTAL CARRIED TO SUMMARY				

Item	Description	Unit	Quantity	Rate	Amount
4200	ASPHALT BASE AND SURFACING				
42.02	Asphalt surfacing				
	(a) Continously graded 60/70 penetration Bitumen				
	(i) 30mm thickness	m²	12,000.00		
	(ii) provision of 2 speed humps	No	2		
42.08	100mm cores in asphalt paving	no	5		
4400	TOTAL CARRIED TO SUMMARY				

Item	Description	Unit	Quantity	Rate	Amount
5100	PITCHING, STONework AND PROTECTION AGAINST EROSION				
51.03	Stone pitching:				
	(b) Grouted stone pitching	m ²	250		
51.05	Concrete edge beam (300mm x 300mm Class 30/19)	m ³	50		
5100	TOTAL CARRIED TO SUMMARY				

Item	Description	Unit	Quantity	Rate	Amount
5600	ROAD SIGNS				
56.01	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:				
	(c) Prepainted galvanised steel plate (chromadek)				
	(i) Area not exceeding 2m2	m ²	40		
	(ii) Area exceeding 2m2 but not 10m2	m ²	6		
56.02	Extra over item 56.01 for using:				
	(a) Background of retroreflective material:				
	(i) Class I	m ²	46		
56.03	Road sign supports				
	(c) Steel tubing (dip galvanised D profile)	kg	760		
56.05	Excavation and backfilling for road sign supports	m ³	5		
56.06	Extra over item 56.05 for cement-treated soil backfill	m ³	5		
5600	TOTAL CARRIED TO SUMMARY				

Item	Description	Unit	Quantity	Rate	Amount
5700	ROAD MARKINGS				
57.02	Retro-reflective road-marking paint:				
(a)	White and yellow line (100mm wide broken or	km	4.80		
(b)	White and yellow line (200mm wide broken or	km	2.40		
(d)	White lettering and symbols	m ²	200.00		
(e)	Yellow lettering and symbols	m ²	200.00		
57.04	Variations in rate of application:				
(a)	White paint	litre	20.00		
(b)	Yellow paint	litre	20.00		
57.06	Setting out and premarking the lines (excluding traffic island markings, lettering and symbols)	km	4.80		
5700	TOTAL CARRIED TO SUMMARY				

Item	Description	Unit	Quantity	Rate	Amount
8100	TESTING MATERIALS AND WORKMANSHIP				
81.02	Other special tests requested by the engineer:	PC Sum	1	50,000.00	50,000.00
(a)	Contractor's handling costs, profit and all other charges in respect of subitem B81.04(a)	%	50,000.00%	
8100	TOTAL CARRIED TO SUMMARY				

**AVON INTERNAL STREETS.
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SUMMARY OF SCHEDULE OF QUANTITIES

SECTION	DESCRIPTION	AMOUNT
1200	General Requirements and Provisions	
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 and Hire of Construction Equipment	
2100	Drains	
2200	Prefabricated Culverts	
2300	Concrete kerbing, channeling, chutes, down pipes and concrete lining for drains	
3100	Borrow Materials	
3300	Mass Earthworks	
3400	Pavement Layers of Gravel Material	
3500	Stabilisation	
3600	Crushed Stone Base	
4100	Prime Coat	
4200	Asphalt Base and Surfacing	
5100	Pitching, Stonework and Protection Against Erosion	
5200	Gabions	
5600	Road Signs	
5700	Road markings	
8100	Testing Materials and Workmanship	
Subtotal Schedule (A)		

AVON INTERNAL STREETS.

TENDER

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CALCULATION OF TENDER

ITEM		AMOUNT
Total from Schedule (A)		
Add Contingencies (10%)		
Subtotal (B) (Schedule (A) & Contigencies)		
Vat (14%)		
Total cost of works to Tender Summary		