

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
12.00	<u>1200: GENERAL REQUIREMENTS AND PROVISIONS</u>				
B12.02	Provision for a Community Liaison Officer				
	(a) Provisional sum for the payment of the Community Liaison Officer	Prov. Sum			60,000.00
	(b) Handling costs and profit in respect of sub-item B12.01(a)	%	60,000.00		
B12.03	Payment of PSC members				
	a) Provisional sum for the payment of PSC members	Prov. Sum			60,000.00
	b) Handling costs and profit in respect of sub-item B12.02(a)	%	60,000.00		
B12.04	Relocation and protection of existing services:				
	a) Relocation, including lowering or raising, protection and/or repair of existing services which are not allowed for under any other items in the schedule of quantities.	Prov. Sum			180,000.00
	b) Handling cost and profit in respect of sub-item B12.03(a)	%	180000.00		
B12.05	Payment of student trainee (Civil Engineering Graduate Programme)				
	a) Provisional sum for the payment of Student Trainee (R6000 per month)	Prov. Sum			120,000.00
	b) Handling costs and profit in respect of sub-item B12.08(a)	%	120,000.00		
B12.07	Contract Nameboard (As per drawing)	No	2		
1200	TOTAL CARRIED TO SUMMARY				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
13.00	<u>1300: CONTRACTORS ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS</u>				
B13.01	The contractors general obligations :				
	(a) Fixed obligations	Lump sum			
	(b) Value-related obligations	Lump sum			
	(c) Time-related obligations	Month	10		
	[Note : The combined total tendered for sub-items (a), (b) and (c) shall not exceed 15% of the tender sum.]				
1300	TOTAL CARRIED TO SUMMARY				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
14.00	<u>1400: HOUSING, OFFICES AND LABORATORIES FOR THE ENGINEER'S SITE PERSONNEL</u>				
14.01	Office and laboratory accommodation: The provision of accommodation as specified, including roof, external and internal walls, windows complete with glazing, doors with locks and fittings burglar proofing, painting, floors, fencing, the provision of a 220/250 volt electrical installation with wiring, switchboards, etc, water and sewerage installation, and stores, complete, in accordance with the drawings and specifications, except for items scheduled elsewhere :				
	(a) Offices (Fully furnished)	m²	15		
	(e) Ablution units	No.	2		
14.02	Office and laboratory furniture:				
	(a) Chairs	No.	15		
	(d) Desks, complete with drawers and locks	No.	1		
1400	TOTAL CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	AMOUNT BROUGHT FORWARD				
B14.03	Office and laboratory fittings, installations and equipment:				
	(b) Prime-cost items and items paid for in a lump sum:				
	(ix) Provision of cellular telephones:				
	(1) Provision of cellular telephones	Prov. sum			R10,000.00
	(2) Cost of calls and other charges	Prov. sum			R15,000.00
	(3) Handling cost and profit in respect of subsubitem B14.03(b)(ix)(2) above	%	25000		
	(c) Items measured by area:				
	(viii) Notice boards as per dwg. No.	m ²	15		
	(ix) White board	m ²	4		
14.04	Car ports				
	Car ports, 3.0m wide and 2,5m high, at offices	No.	2.00		
B14.07	Rented, hotel and other accommodation				
	(a) Provisional sum for providing rented housing, hotel or other accommodation as described in subsubclause 14.03 (c)(ii)	Prov.Sum			R60,000.00
	(b) Handling costs and profit in respect of subitem 14.07 (a)	%	60000		
1400	TOTAL CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	AMOUNT BROUGHT FORWARD				
14.08	The provision of water, electricity, low-pressure gas, sewerage, septic tanks, sewage and rubbish removal, cleaning services, maintenance and repairs, all as specified in clause 1404, including the construction and maintenance of the access roads, footpaths, etc:				
	(a) Services at offices and laboratories:				
	(i) Fixed costs	Lump Sum			15,000.00
	(ii) Running costs	Month	10		
14.10	Provision of photostat facilities	Month	10		
B14.12	Provision of computer equipment	Lump sum			30,000.00
B14.13	Handling Costs	%	30,000.00		
1400	TOTAL CARRIED TO SUMMARY				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
15.00	<u>1500: ACCOMMODATION OF TRAFFIC</u>				
B15.01	Accommodating traffic and maintaining temporary deviations	km	3.2		
B15.02	Earthworks for temporary deviation				
	(a) Shaping of temporary deviations	km	3.2		
B15.03	Temporary traffic-control facilities:				
	(a) Flagmen	man-days	280		
	(b) Portable STOP and GO-RY signs	No.	2		
	(e) Road signs, R- and TR-series (1200 mm)	No.	2		
	(f) Road signs, TW-series (1500 mm high)	No.	6		
	(g) Road signs, STW-, DTG-, TGS- and TG-series (excluding delineators and barricades)	No.	15		
	(h) Delineators (DTG 50J)				
	(i) Single	No.	50		
	(ii) Mounted back to back	No.	50		
	(i) Moveable barricade / road sign combination (2.4m chevron)	No.	6		
	(j) Traffic cones 750 mm high	No.	40		
	(i) Supply to site, initial placement and removal from site of rented barriers:	m	100		
	(ii) Dismantling and re-erection rented barriers during the works	m	100		
	(m) Two-way communication devices	No.	6		
	(n) Provision of high visibility safety jackets and safety hats	No.	20		
B15.06	Watering Temporary Deviations	Kilolitre	4400		
B15.07	Blading by road grader of:				
	(a) Temporary Deviations	Km-pass	25		
B15.15	Penalty to be conducted for non-compliance with requirements for accomodation of traffic				
	(a) Fixed penalty for occurrence	No.		-5,000.00	Rate Only
	(b) Time related penalty	hr		1,000.00	Rate Only
1500	TOTAL CARRIED TO SUMMARY				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
17.00	<u>1700: CLEARING AND GRUBBING</u>				
17.01	(a) Clearing and grubbing				
	(i) Within the road reserve	ha	3.0		
17.02	Removal and grubbing of large trees and tree stumps				
	(a) Girth exceeding 1m up to and including 2m	No.	3		
1700	TOTAL CARRIED TO SUMMARY				

UPGRADING OF REAGILE INTERNAL ROADS AND STORMWATER

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
21.00	<u>2100: DRAINS</u>				
B21.01	Excavation for open drains:				
	(a) Excavating soft material situated within the following depth ranges below the surface level: (i) 0m up to 1,5m	m³	120		
B21.02	(b) Extra over subitem 22.01(a) for excavation in hard material irrespective of depth	m³	42		
21.02	Clearing and Shaping Existing open drains	m³	60		
21.03	Excavation for Subsoils Drainage System				
	(a) Excavating soft material situated within the following depth (i) 0m up to 1,5m	m³	720		
	Extra over subitem B21.03 for excavation in Hard material irrespective of depth	m³	252		
	Impermeable backfilling to subsoils drainage systems				
	(a) Crushed Stones from Commercial Sources	m³	360		
	(b) Permeable Sand from Commercial Source	m³	300		
	(c) Dumprock	m³	60		
22.04	Unplasticised PVC pipe and fittings normal duty complete with couplings				
	(i) Perforated 100mm diameter	m	600		
21.05	Synthetic fibre filter fabric				
	(a) Kaymat U24 or approved equivalent	m2	960		
21.06	Overhaul for material hauled in excess of 1.0 km free haul	m3-km	4000		
2100	TOTAL CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
22.00	<u>2200: PREFABRICATED CULVERTS</u>				
B22.01	Excavation:				
	(a) Excavating soft material situated within the following depth ranges below the surface level:				
	(i) 0m up to 1,5m	m ³	7200		
	(ii) Exceeding 1,5m up to 3,0m	m ³	2880		
	(b) Extra over subitem 22.01(a) for excavation in hard material irrespective of depth	m ³	1152		
22.02	Backfilling:				
	(a) Using the excavated material	m ³	2846.02		
	(b) Using imported selected material	m ³	2846.02		
	(c) Extra over subitems 22.02(a) and 22.02(b) for soil cement backfilling (3% cement)	m ³	0		Rate Only
22.03	Concrete pipe culverts				
	(a) On class A bedding (600mm diameter SC Type)	m	2000		
22.17	Manholes, catchpits, precast inlets and outlets structure complete				
	(a) Catchpits (1.5m to 2.0m)	No	18		
	(a) Catchpits (1.0m to 1.5m)	No	24		
22.18	Brickwork				
	(a) 230mm thck	m ²	172.80		
22.19	Plaster	m ²	432.00		
22.23	Service ducts:				
	(a) Ordinary pipes (Unplasticised PVC pipes				
	(i) 200mm diameter pipes (Class C - SANS 286)	m	100.00		
2200	TOTAL CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	AMOUNT BROUGHT FORWARD				
	(c) In inlet and outlet structures, skewed ends, catchpits, manholes, thrust and anchor blocks, excluding formwork but including Class U2 surface finish:				
	(i) Class 25/19 concrete	m ³	0		Rate Only
	(d) Formwork of concrete under subitem 22.07(c)				
	(i) Vertical formwork for F1 surface finish	m ²	0		Rate Only
	(ii) Vertical formwork for F2 surface finish	m ²	0		Rate Only
22.1	Steel reinforcement:				
	(b) High tensile steel bars	t			Rate Only
	(c) Welded steel fabric REF 395	kg	0		
22.12	Removing existing concrete:				
	(b) Reinforced concrete	m ³	0		
B22.13	Removing existing pipes				
	All sizes	m	0		
22.23	Service ducts:				
	(a) Ordinary pipes				
	(i) 110mm Upvc Class 6	m	0		
	Overhaul on excavated material carted to spoil, backfill material	m ³ -km	0		
2200	TOTAL CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
23.00	<u>2300: CONCRETE KERBING, CONCRETE CHANNELLING, CHUTES AND DOWNPIPES, AND CONCRETE LININGS FOR OPEN DRAINS</u>				
23.01	Concrete kerbing (Class 25/19 concrete):				
	(a) Figure 8c as shown on the drawings	m	6600		
23.02	Concrete kerbing-channelling combination				
	(a) Transition kerb and channel (Class 25/19 concrete)	m	250		
23.06	Inlet, outlet, transition and similar structures: (including in-situ concrete chutes)				
	(a) Cast in situ concrete lining for Chute inlets Type "E": (Class 25/19 concrete):	m3	0		
	(b) Formwork (Class F1 surface finish) for Type "E" chutes & inlets :				
	(i) To side with formwork on both internal and external faces (each face measured)	m2	0		
	(c) Class U2 surface finish to cast in situ concrete:	m2	0		
23.07	Trimming of excavation for concrete-lined open drains:				
	(a) In soft material	m2	0		
	(b) In hard material	m2	0		
23.08	Concrete lining for open drains				
	(a) Cast in situ concrete lining (25/19) (i) 1000 mm x 1000 mm x 150 mm	m3	30		
	(b) Class U2 surface finish to cast in situ concrete	m2	0		
	(c) To ends of slabs	m2	0		
23.10	Sealed joints in concrete linings of open drains				
	(a) 10mm: "flexcell" joint	m	30		
23/21,01	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	m³	150		
	(b) Extra over sub item 21.01 (a) for excavation in hard material	m³			Rate Only
2300	TOTAL CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
3300	<u>3300: MASS EARTHWORKS</u>				
33.01	Cut and borrow to fill, including 1.0 km free haul				
	(a) Gravel material in compacted layer thicknesses of 200 mm and less:				
	(ii) Compacted to 93% of modified AASHTO density	m ³	4800		
33.03	Extra over item 33.01 for excavating and breaking down material in -				
	(a) Intermediate excavation	m ³	300		
	(b) Hard excavation	m ³	400		
33.04	Cut to spoil (including free haul up to 0.5 km)				
	Material obtained from:				
	(a) Soft excavation	m ³	10692		
	(b) Intermediate excavation	m ³	600		
	(c) Hard excavation	m ³	1200		
	(d) Boulder excavation Class B	m ³			Rate Only
33.10	Roadbed preparation and the compaction of material				
	(a) (i) Compaction to 90% of modified AASHTO density	m ³	4800		
3200	Stockpiling of Material				
	(a) Existing road layers	m ³	10500		
33/16.02	Overhaul on material hauled in excess of 1,0 km (ordinary overhaul) :	m ³ km	37500		
3300	TOTAL CARRIED TO SUMMARY				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
3400	<u>3400: PAVEMENT LAYERS OF GRAVEL MATERIAL</u>				
B34.01	Pavement layers constructed from gravel taken from Commercial Sources				
	(a) Gravel selected layer - Imported G7 material from commercial sources and compacted to: (i) 150mm layer thickness to 93% modified AASHTO Density	m³	3416		
	(d) Gravel subbase - Imported G6 gravel from commercial sources and compacted to: (i) 95% modified AASHTO density(150mm layer thickness)	m³	3267		
	(f) Gravel base -Imported G5 material from commercial sources compacted to : (i) 97% of modified AASHTO density (150mm layer thickness)	m³	3119		
34/16.02	Overhaul on material hauled in excess of 1.0 km(ordinary overhaul)	m³.km	0		
3400	TOTAL CARRIED TO SUMMARY				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
3500	<u>3500: STABILIZATION</u>				
35.01	Chemical stabilisation extra-over unstabilized compacted layers:				
	(a) Subbase layer : 150mm thickness	m ³	0		Rate Only
	(b) Base layer: 150mm thickness	m ³	0		Rate Only
B35.02	Chemical stabilising agent:				
	(a) CEM II A/L 32.5 cement	t	0		Rate Only
35.04	Provision and application of water for curing	kl	0		Rate Only
35.05	Curing by covering with subsequent layer	m ²			Rate Only
3500	TOTAL CARRIED TO SUMMARY				0.00

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
51.00	<u>5100: PITCHING, STONEMASONRY AND PROTECTION AGAINST EROSION</u>				
51.01	Stone pitching:				
	(b) Grouted stone pitching	m ²	20		
51.03	Stone masonry walls:				
	(b) Cement-mortared stone walls	m ³	1		
51.04	Concrete edge beams:				
	(a) Class 25/19 cast in-situ concrete	m ³	5		
5600	TOTAL CARRIED TO SUMMARY				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
56.00	<u>ROAD SIGNS</u>				
B56.01	Road sign boards with painted or coloured semi-matt background. Symbols, lettering and borders in diamond grade retro- reflective material (Class III), where the sign board is constructed from:				
	(c) Prepainted galvanized steel plate (chromadek or approved equivalent):				
	(i) Area not exceeding 2m ²	m ²	48		
	(ii) Area exceeding 2m ² but not exceeding 10m ²	m ²	32		
	(iii) Area exceeding 10m ²	m ²			
56.02	Extra over item 56.01 for using:				
	(a) Background of retro-reflective material:				
	(i) Class III	m ²	20		
56.03	Road sign supports (over-head road sign structures excluded):				
	(a) Steel Tubbing :				
	(i) 75mm Diameter D-Shape, 2.5mm wall thickness galvanised	m	60		
56.06	Extra over item 56.05 for cement-treated soil backfill	m ³	15		
56.07	Extra over item 56.05 for rock excavation	m ³	5		
B56.10	Danger plates at culverts/structures:				
	(a) Type A at Drifts (800mm x 200mm)	No	14		
5600	TOTAL CARRIED TO SUMMARY				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
57.00	<u>5700: ROAD MARKINGS</u>				
57.03	Hot-melt platistic road marking material (thermoplastic paint)				
	(a) White lines (broken or unbroken):				
	(i) 100mm wide	km	3.5		
	(ii) 150mm wide	km			Rate only
	(b) Yellow lines - 100mm width				
	(i) 100mm wide	km			Rate Only
	(ii) 150mm wide	km			Rate only
	(iii) 200mm wide	km			Rate only
	(d) White lettering and symbols	m ²	500		
	(e) Yellow lettering and symbols	m ²			Rate only
	(f) Transverse lines, painted island and arrestor bed markings (any colour)	m ²	200		
57.04	Variations in rate of application:				
	(a) White paint	l			Rate only
	(b) Yellow paint	l			Rate only
	(d) Retro-reflective beads	kg			Rate only
B57.06	Setting out and premarking the lines (excluding traffic island markings, lettering and symbols)	km	3.5		
#REF!	TOTAL CARRIED TO SUMMARY				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
59.00	<u>FINISHING THE ROAD AND ROAD RESERVE AND TREATING OLD ROADS</u>				
59.01	Finishing the road and road reserve:				
	(b) Single carriageway road	km	3.5		
5900	TOTAL CARRIED TO SUMMARY				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
7300	<u>7300: CONCRETE BLOCK PAVING FOR ROADS</u>				
73,01	Concrete Block Paving (i) 80mm concrete paving block, the rate shall include full compensation for furnishing all materials, constructing the sand bedding - 20mm depth, laying and compacting the concrete pavement blocks, filling the joints with jointing sand, and for all other work necessary to complete the concrete block paving as specified.	m ²	20,000		
73/B51.1 0	Construction of Speed Humps - According to the Drawings issued by the Engineer	No	10		
4200	TOTAL CARRIED TO SUMMARY				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
81.00	<u>8100: TESTING MATERIALS AND WORKMANSHIP</u>				
81.02	Other special tests requested by the engineer				
	(a) Cost of testing	Prov. Sum			50,000.00
	(b) Handling costs and profits in respect of subitems B81.02(a)	%	50,000.00		
8100	TOTAL CARRIED TO SUMMARY				50,000.00

PROJECT NAME: UPGRADING OF REAGILE INTERNAL ROADS AND STORMWATER

C2.3 SUMMARY OF SCHEDULE OF QUANTITIES

SCHEDULE A: ROADWORKS

SECTION	DESCRIPTION	AMOUNT
1200	General Requirements and Provisions	
1300	Establishment and General Obligations	
1400	Housing, Offices & Laboratories	
1500	Accommodation of Traffic	
1700	Clearing and Grubbing	
2100	Drains	
2200	Prefabricated Culverts	
2300	Concrete Kerbing, Concrete Channeling, Open Chutes	
3300	Mass Earthworks	
3400	Pavement Layers of Gravel Material	
3500	Stabilization	
5100	Pitching, Stonework and Protection Against Erosion	
5600	Road Signs	
5700	Road Markings	
5900	Finishing the Road and Road Reserve and treating old roads	
7300	Concrete Block Paving	
8100	Testing Materials and Workmanship	
TOTAL SCHEDULE A: (CARRIED TO CALCULATION OF TENDER SUM)		

SCHEDULE B: OHS ACT OBLIGATIONS
UPGRADING OF REAGILE INTERNAL ROADS AND STORMWATER

SCHEDULE B

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	<u>SCHEDULE B: OCCUPATIONAL HEALTH AND SAFETY ACT OBLIGATIONS</u>				
B1.1	Contractor's initial obligations in respect of the Occupational Health and Safety Act and Construction Regulations	Lump Sum	-		
B1.2	Contractor's time related obligations in respect of the Occupational Health and Safety Act and Construction Regulations	Month	10		
B1.3	Submission of the Health and Safety File	Lump Sum	-		
TOTAL SCHEDULE B CARRIED TO SUMMARY					

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
D	<u>PROVISION OF STRUCTURED TRAINING</u>				
D12.05	Provision for accredited training:				
	(a) Accrediated Training	Prov. Sum			190,000.00
	(c) Handing cost and profit in respect of sub-items E12.05(a) and (b) above	%	190,000.00		
D	TOTAL CARRIED TO SUMMARY				190,000.00



UPGRADING OF REAGILE INTERNAL ROADS AND STORMWATER

C2.3 SUMMARY OF SCHEDULE OF QUANTITIES (CONTINUE)

SCHEDULE C: ENVIRONMENTAL MANAGEMENT PLAN

SECTION	DESCRIPTION	AMOUNT
B	Occupational Health and Safety	
TOTAL SCHEDULE B: (CARRIED TO CALCULATION OF TENDER SUM)		
C	Environmental Management Plan	
TOTAL SCHEDULE C: (CARRIED TO CALCULATION OF TENDER SUM)		
D	Structured Training	
TOTAL SCHEDULE D: (CARRIED TO CALCULATION OF TENDER SUM)		



UPGRADING OF REAGILE INTERNAL ROADS AND STORMWATER

CALCULATION OF TENDER SUM

ITEM	AMOUNT
TOTAL SCHEDULE A: ROADWORKS	
TOTAL SCHEDULE B: OHS	
TOTAL SCHEDULE C: ENVIRONMENTAL MANAGEMENT PLAN	
TOTAL SCHEDULE D: STRUCTURED TRAINING	
TENDER (CONTRACT) SUM	
CONTINGENCIES (10%)	
SUB-TOTAL	
ADD VAT (15%)	
TOTAL	