CONTRACT NUMBER:		CONSTRUCTION OF 400 m PAVED ROAD AND STORMWATER DRAINAGE (WARD 4)				Section C1.2
				CONTRACT		
ITEM NO	PAYMENT REFERS TO	DESCRIPTION	Unit	QUANTITY	RATE	AMOUNT
		GENERAL REQUIREMENTS AND PROVISIONS				
C1.2.1		**Environmental Management**				
	C1.2.1.1	Monitoring of compliance with and reporting on the EMP	months	3,00		R -
	C1.2.1.2	Dedicated environmental officer	months			Rate only
	C1.2.2.6	Preparing and submission of all information and reports specified in the Contract Documentation Safety	months	3,00		R -
	C1.2.5.1	Health and safety plan	Lump	1,00		R -
	C1.2.5.2	Implementation of health and safety plan	months	3,00		R -
C.1.2.6		**Work adjacent to properties**				
	C1.2.6.1	Survey of adjacent properties	No.			Rate Only
	C1.2.6.2	Preventing and/or mitigation measures	Prime cost	1,00	R 10 000,00	R 10 000,00
	C1.2.6.3	Handling costs, profit and all other charges in respect of item C1.2.6.2	%		R 10 000,00	R -
C.1.2.7		**Road Safety Audits**				
	C1.2.7.1	Stage 4 work zone traffic management audit	Prime cost	1,00	R 10 000,00	R 10 000,00
	C1.2.7.2	Handling costs, profit and all other charges in respect of item C1.2.7.1	%		R 10 000,00	R -
	C1.2.7.3	Stage 5 Pre-Opening Road Safety Audit	Prime cost	1,00	R 10 000,00	R 10 000,00
	C1.2.7.4	Handling costs, profit and all other charges in respect of item C1.2.7.3	%		R 10 000,00	
C.1.2.8		**Dayworks**				
	C1.2.8.1	Personnel				
		(a) Unskilled Labour	hour	4,00		R -
		(b) Semi-skilled Labour	hour	4,00		R -
		(c) Skilled Labour	hour	4,00		R -
		(d) Gang Leader	hour	4,00		R -
		(e) Foreman	hour	4,00		R -
		(f) Skilled Artisan	hour	4,00		R -
	C1.2.8.2	Construction equipment				
		(a) Motor Grader	hour	2,00		R -
		(b) Vibratory Roller				
		(i) Model Mass 2t with 0,9m	hour	4,00		R -
		(ii) Model Mass 10t with 2,2m	hour	4,00		R -
		(c) Pneumatic Roller	hour	4,00		R -
		(d) Front end loader	hour	4,00		R -
		(e) Tractor Loader and Backhoe				
		(i) Model Power 55 kW	hour	4,00		R -
		(ii) Model Power 70 kW	hour	4,00		R -
BILL No. 2	**TOTAL SECTION C1.2: CONTRACTOR'S GENERAL REQUIREMENTS AND PROVISIONS CARRIED FORWARD**					R30 000,00

ITEM NO		DESCRIPTION	Unit	QUANTITY	RATE	AMOUNT
	TOTAL SECTION C1.2: CONTRACTOR'S GENERAL REQUIREMENTS AND PROVISIONS CARRIED FORWARD					R30 000,00
		(f) Excavator				
		(i) 20t	hour	4,00		R -
		(ii) 40t	hour	4,00		R -
		(g) Compresor	hour	4,00		R -
		(h) Water Truck (9000 litres)	km	20,00		R -
	C1.2.8.3	Vehicles				
		(a) Light delivery vehicles	km	20,00		R -
		(b) Flatbed truck (min 5 ton)	km	20,00		R -
		(c) Dump truck				
		(i) 6 m³	km	20,00		R -
		(ii) 10 m³	km	20,00		R -
		(d) Other vehicles				
		(i) Water Truck (9000 litres)	km	20,00		R -
	C1.2.8.4	Materials:				
		(a) Procurement of materials	Prov Sum	1,00	R 10 000,00	R 10 000,00
		(b) Handling costs, profit and all other charges in respect of item C1.2.8.4(a)	%		R 10 000,00	R -
C1.2.9		**Disposal of non-usable assets**				
	C1.2.9.2	Disposal of non-usable assets not identified at time of tender	Prov Sum	1,00	R 10 000,00	R 10 000,00
	C1.2.9.3	Handling costs, profit and all other charges in respect of item C1.2.9.2	%		R 10 000,00	R -
B.C1.2.10		**Contractor's obligations in respect of local and other labourers**				
		(a) Remuneration of Community Liason Officer	Prov Sum	1,00	R -	R -
		(b) PSC sitting	Prov Sum	1,00	R -	R -
		(c) Contractor's charge for handling costs and profit in respect of (a) & (b)	%		R -	R -
B.C1.2.11		**Provision of compulsory accredited training**				
		(a) Local labour	Prov Sum	1,00	R 100 000,00	R 100 000,00
		(b) Contractors charge to allow for handling costs and profit in respect of (a)	%		R 100 000,00	R -
B.C1.2.12		**Penalties**				
		(a) Penalty for failure to comply with contractual requirements				
		(i) Failure to maintain valid contract guarantee			-R 5 000,00	
		(ii) Failure to have a project Contracts Manager			-R 20 000,00	
		(iii) Failure to have site Agent on site			-R 10 000,00	
C1.2	**TOTAL SECTION C1.2: CONTRACTOR'S GENERAL REQUIREMENTS AND PROVISIONS CARRIED FORWARD**					R150 000,00

ITEM NO	DESCRIPTION	Unit	QUANTITY	RATE	AMOUNT
	TOTAL SECTION C1.2: CONTRACTOR'S GENERAL REQUIREMENTS AND PROVISIONS BROUGHT DOWN				R150 000,00
	(iv) Failure to have OHS officer onsite			-R 10 000,00	
	(v) Failure to practical completion date			-R 5 000,00	
	(b) Penalty for failure to comply with contractual reporting requirements (to be submitted 2 days before progress meeting)				
	(i) Progress report			-R 1 000,00	
	(ii) OHS report			-R 1 000,00	
	(ili) EPWP report			-R 1 000,00	
	(a) Penalty for failure to attend progress meetings				
	(ii) Contract Manager			-R 20 000,00	
	(ii) Site Agent			-R 10 000,00	
	(c) Penalty for serious violations:				
	(i) Hazardous chemical/oil spill and/or dumping non-approved sites			-R 1 000,00	
	(d) Penalty for less serious violations:				
	(i) Littering on site			-R 1 000,00	
	(ii) Persistent or un-repaired fuel and oil leaks			-R 500,00	
	(ii) Excess dust or excess noise emanating from site			-R 1 000,00	
	(iv) Possession or use of intoxicating			-R 500,00	
C1.2	**TOTAL SECTION C1.2: CONTRACTOR'S GENERAL REQUIREMENTS AND PROVISIONS CARRIED TO SUMMARY**				R150 000,00

CONTRACT NUMBER:		CONSTRUCTION OF 400 m PAVED ROAD AND STORMWATER DRAINAGE (WARD 4)				Section C1.3
				CONTRACT		
ITEM NO	**PAYMENT REFERS TO**	**DESCRIPTION**	**Unit**	**QUANTITY**	**RATE**	**AMOUNT**
		CONTRACTOR'S SITE ESTABLISHMENT AND GENERAL OBLIGATIONS				
		Contractor's general obligations				
	C1.3.1.1	Fixed Obligations	Lump Sum	1,00		R -
	C1.3.1.2	Value-related obligations	Lump Sum	1,00		R -
	C1.3.1.3	Time-related obligations	months	3,00		R -
		Contract sign boards	m^2	4,00		R -
C1.3	**TOTAL SECTION C1.3: CONTRACTOR'S SITE ESTABLISHMENT AND GENERAL OBLIGATIONS CARRIED TO SUMMARY**					R0,00

CONTRACT NUMBER:		CONSTRUCTION OF 400 m PAVED ROAD AND STORMWATER DRAINAGE (WARD 4)				Section C1.4
				CONTRACT		
ITEM NO	PAYMENT REFERS TO	DESCRIPTION	Unit	QUANTITY	RATE	AMOUNT
C1.4		**FACILITIES FOR THE ENGINEER**				
C1.4.1		**Site Accommodation**				
	C1.4.1.1	Offices and conference room	m^2	56,00		R -
	C1.4.1.6	Car ports	No	4,00		R -
	C1.4.1.7	Ablution unit	No	4,00		R -
	C1.4.1.9	Kitchen	No	1,00		R -
C1.4.3		**Items measured by number**				
	C1.4.3.1	Office swivel chair	No	4,00		R -
	C1.4.3.2	Office chair	No	12,00		R -
	C1.4.3.5	Office desk with 3 drawers (at least one lockable drawer)	No	2,00		R -
	C1.4.3.8	Conference table	No	1,00		R -
	C1.4.3.13	220/250 volt power outlet plug point	No	2,00		R -
	C1.4.3.19	Wash-hand basin	No	2,00		R -
	C1.4.3.23	Fire extinguisher 9,0 kg, dry powder type	No	1,00		R -
	C1.4.3.24	Air-conditioning unit	No	1,00		R -
	C1.4.3.25	Heater	No	1,00		R -
	C1.4.3.26	Concrete specimen curing bath	No	1,00		R -
	C1.4.3.27	Waste paper basket	No	1,00		R -
	C1.4.3.28	UPS / Voltage stabiliser	No	1,00		R -
	C1.4.3.29	A3 / A4 colour printer, copier, scanner	No	1,00		R -
	C1.4.3.30	A4 colour printer, copier, scanner	No	1,00		R -
	C1.4.3.31	Rain gauge	No	1,00		R -
	C1.4.3.32	Minimum/maximum atmospheric temperature gauge	No	1,00		R -
	C1.4.3.36	Measuring wheel	No	1,00		R -
	C1.4.3.37	First aid kit	No	1,00		R -
	C1.4.3.38	Standpipe complete with 30 m of 19 mm dia. Heavy duty hose pipe	No	1,00		R -
C1.4.4		**Prime Cost Items**				
	C1.4.4.1	Cell phones costs, including pro-rata rentals, for calls made in connection with contract administration	Prime cost	1,00	R 10 000,00	R 10 000,00
	C1.4.4.2	Handling costs and profit in respect of item C1.4.4.1	%		R 10 000,00	R -
	C1.4.4.5	The provision of internet connectivity and WiFi data for the Engineer's site staff	Prime cost	1,00	R 2 000,00	R 2 000,00
	C1.4.4.6	Handling costs and profit in respect of item C1.4.4.5	%		R 2 000,00	R -
	C1.4.4.7	The provision of paper and ink for a combination colour printer/copier/ scanner	Prime cost	1,00	R 5 000,00	R 5 000,00
	C1.4.4.8	Handling costs and profit in respect of item C1.4.4.7	%		R 5 000,00	R -
C1.4	**TOTAL SECTION C1.4: FACILITIES FOR THE ENGINEER CARRIED FORWARD**					R17 000,00

ITEM NO	DESCRIPTION		Unit	QUANTITY	RATE	AMOUNT
	TOTAL SECTION C1.4: FACILITIES FOR THE ENGINEER BROUGHT DOWN					R17 000,00
	C1.4.4.9	The provision of complete 220/250 volt single phase electrical power installation, including all poles, insulators, wiring, switchboards, mains connections, meters etc.	Prime cost	1,00	R 20 000,00	R 20 000,00
	C1.4.4.10	Handling costs and profit in respect of item C1.4.4.9	%		R 20 000,00	R -
C1.4	**TOTAL SECTION C1.4: FACILITIES FOR THE ENGINEER CARRIED TO SUMMARY**					R37 000,00

CONTRACT NUMBER:		CONSTRUCTION OF 400 m PAVED ROAD AND STORMWATER DRAINAGE (WARD 4)				Section C1.5
				CONTRACT		
ITEM NO	PAYMENT REFERS TO	DESCRIPTION	Unit	QUANTITY	RATE	AMOUNT
C1.5		**ACCOMMODATION OF TRAFFIC**				
C1.5.1		**Accommodation of pedestrian and non-motorised traffic**				
	C1.5.1.1	Accommodation of pedestrian and non-motorised traffic	Months	3,00		R -
C1.5.2		**Acccommodation of traffic**	Months	3,00		R -
C1.5.3		**Liaison with traffic authorities**	Months	3,00		R -
C1.5.5		**Maintenance of temporary deviations**				
	C1 5.5.2	Drain cleaning	m	2,00		R -
	C1.5.5.3	Cleaning out culverts	m^3	2,00		R -
	C1.5.5.4	Collection of rubbish / litter	km	0,40		R -
	C1.5.5.11	Other road maintenance work ordered by the Engineer	Prime cost	1,00	R 10 000,00	R 10 000,00
	C1.5.5.12	Handling cost, profit and all other charges in respect of item C1.5.6.11	%		R 10 000,00	R -
C1.5.7		**Temporary traffic control facilities**				
	C1.5.7.1	Delineators including mounting bases and ballast:				
		(a) Single sided, reversible left or right (size indicated)	No	10,00		R -
		(b) Double sided, reversible left or right (size indicated)	No	10,00		R -
	C1.5.7.2	Traffic cones, minimum height 750 mm	No	10,00		R -
	C1.5.7.3	Flagmen	man-shift	66,00		R -
	C1.5.7.4	Traffic controllers	man-shift	66,00		R -
C1.5.11		**Provision of safety equipment for visitors**				
	C1.5.11.1	Provision of reflective safety vests for visitors	No	10,00		R -
	C1.3.1.3	Provision of hard hats for visitors	No	10,00		R -
C1.5.12		**Additional traffic accommodation facilities ordered by the Engineer:**				
	C1.5.12.1	Provision of additional traffic accommodation facilities	Prime cost	1,00	R 10 000,00	R 10 000,00
	C1.5.12.2	Handling cost, profit and all other charges in respect	%		R 10 000,00	R -
		Speed humps	m^2	4,00		R -
C1.5	**TOTAL SECTION C1.5: ACCOMMODATION OF TRAFFIC CARRIED TO SUMMARY**					R20 000,00

CONTRACT NUMBER:	CONSTRUCTION OF 400 m PAVED ROAD AND STORMWATER DRAINAGE (WARD 4)				Section C1.6
				CONTRACT	
ITEM NO	**PAYMENT REFERS TO**	**DESCRIPTION**	**Unit**	**QUANTITY**	**RATE**	**AMOUNT**
C1.6		**CLEARING AND GRUBBING**				
C1.6.10		**Disposal of hazardous waste material:**				
	C1.6.10.1	Disposal of hazardous waste material at an approved hazardous waste material facility.	Prime cost	1,00	R 5 000,00	R 5 000,00
		Handling cost, profit and all other charges in respect of item C1.6.10.1	%		R 5 000,00	R -
C1.6	**TOTAL SECTION C1.6: CLEARING AND GRUBBING CARRIED TO SUMMARY**					R5 000,00

ITEM NO	PAYMENT REFERS TO	DESCRIPTION	Unit	QUANTITY	RATE	AMOUNT
C1.7		**LOADING AND HAULING**				
C1.7.1		**Loading**				
	C1.7.1.1	Loading from stockpile using machines and some labour where necessary	m^3	522,00		R -
	C1.7.1.2	Loading from heaps or windrows using machines and some labour where necessary	m^3			Rate only
C1.7.2		**Hauling**				
	C1.7.2.1	Hauling material for use in the works and off-loading it on the site of the works				
		(a) Soil, gravel, crushed stone and pavement layer material	m^3/km	522,00		R -
		(b) Boulders and hard material	m^3/km			Rate only
	C1.7.2.1	Hauling material to spoil and off-loading it at a disignated spoil of stockpile area				
		(a) Cleared and grubbed material (organic matter and all other unsuitable or waste material)	m^3/km	522,00		R -
		(b) Soil and gravel material	m^3/km	522,00		R -
		(c) Boulders, hard material and concrete	m^3/km	1,00		R -
C1.7	**TOTAL SECTION C1.7: LOADING AND HAULING CARRIED TO SUMMARY**					R0,00

CONTRACT NUMBER:		CONSTRUCTION OF 400 m PAVED ROAD AND STORMWATER DRAINAGE (WARD 4)				Section C2.1
				CONTRACT		
ITEM NO	**PAYMENT REFERS TO**	**DESCRIPTION**	**Unit**	**QUANTITY**	**RATE**	**AMOUNT**
C2.1		**GENERAL REQUIREMENTS AND TRENCHING FOR SERVICES**				
	C2.1.1	**Location, identification, protection and relocation of services**				
	C2.1.1.1	Contractor's obligations	Lump Sum	1,00		R -
	C2.1.1.2	Permanent services relocation or protection of work by others	Prime cost	1,00	R 5 000,00	R 5 000,00
	C2.1.1.3	Handling costs and profit in respect of item C2.1.1.2 above	%		R 5 000,00	R -
	C2.1.1.4	Permanent services relocation or protection of work by the contractor	Prov Sum	1,00	R 10 000,00	R 10 000,00
C2.1.2		**Existing services location, detection and verification**				
	C2.1.2.1	Using specialist detection services (ground penetrating radar, radio detection etc.)	Prime cost	1,00	R 10 000,00	R 10 000,00
	C2.1.2.2	Handling costs and profit in respect of item C2.1.2.1 above	%		R 10 000,00	R -
	C2.1.2.5	Using hand excavation to locate, expose and verify services	m^3	1,00		R -
C2.1.3		**Obtaining construction or work permits**	Lump Sum	1,00		R 10 000,00
C2.1.4		**Provision of guarantees or deposits for services**				
	C2.1.4.1	Providing guarantees and deposits	Prime cost	1,00	R 10 000,00	R 10 000,00
	C2.1.4.2	Handling costs and profit in respect of item C2.1.4.1 above	%		R 10 000,00	R 10 000,00
C2.1.5		**Provision of of record drawings and applicable data**	Lump Sum	1,00		R -
C2.1	**TOTAL SECTION C2.1: GENERAL REQUIREMENTS AND TRENCHING FOR SERVICES CARRIED TO SUMMARY**					R55 000,00

ITEM NO	PAYMENT REFERS TO	DESCRIPTION	Unit	QUANTITY	RATE	AMOUNT
		DRAINS				
C3.1.1		**Excavations for open drains**				
	C3.1.1.1	Excavating all material situated within the following depth ranges below the surface level using conventional methods:				
		(a) 0 m to 1,5 m	m^3	78,00		R -
		(b) Exceeding 1,5 m and up to to 3,0 m	m^3	2,00		R -
	C3.1.1.4	Extra over sub-item C3.1.1.1 for excavation in hard and / or boulder material, irrespective of depth	m^3	1,00		R -
	C3.1.1.5	Extra over sub-item C3.1.1.1 for excavation in stabilised existing road layers, irrespective of depth	m^3			Rate only
C3.1.3		**Excavation, clearing and disposal of accumulated Sediment in existing lined drains and drainage systems**				
	C3.1.3.3	Using labour enhanced construction methods:				
		(a) Manholes and inlet and outlet structures	m^3	1,00		R -
		(b) Culvert barrels	m^3			Rate only
		(c) Concrete or other lined side drains	m^3			Rate only
C3.1.4		**Excavation and disposal of material for subsoil drainage systems**				
	C3.1.4.1	Excavating all material situated within the following depth ranges below the surface				
		(a) 0 m to 1,5 m	m^3	78,00		R -
		(b) Exceeding 1,5 m and up to to 3,0 m	m^3	2,00		R -
	C3.1.4.5	Extra over sub-item C3.1.4.1 for excavation in hard and boulder material, irrespective of depth	m^3	1,00		R -
	C3.1.4.6	Extra over sub-item C3.1.4.1 for excavation through stabilised existing road layers	m^3	2,00		R -
C3.1.5		**Impermeable backfilling to subsoil drainage systems**				
	C3.1.5.1	Un-stabilised natural gravel obtained from approved sources on the site	m^3	2,00		R -
	C3.1.5.2	G5 material obtained from commercial sources	m^3	2,00		R -
	C3.1.5.3	Extra over items C3.1.5.1 and C3.1.5.2 for stabilisation with 4,0 % CEM II (32.5) cement	m^3	1,00		R -
C3.1.7		Natural permeable material in subsoil drainage systems (approved crushed stone):	m^3	1,00		R -
	C3.1.7.1	Crushed stone obtained from approved sources on the site (19 mm)				
	C3.1.7.2	Crushed stone obtained from commercial sources				
		(a) (19 mm)	m^3	2,00		R -
		(b) (13,0 mm)	m^3	2,00		R -
		(c) (7,0 mm)	m^3	2,00		R -
C3.1	**TOTAL SECTION C3.1: DRAINS CARRIED FORWARD**					R0,00

ITEM NO		DESCRIPTION	Unit	QUANTITY	RATE	AMOUNT
	TOTAL SECTION C3.1: DRAINS BROUGHT DOWN					R0,00
C3.1.8		**Natural permeable material in subsoil drainage systems (approved natural sand):**				
	C3.1.8.1	Natural sand obtained from approved sources (coarse graded sand)	m^3	2,00		R -
	C3.1.8.1	Natural sand obtained from commercial sources (coarse graded sand)	m^3	2,00		R -
C3.1.9		**Pipes in subsoil drainage systems**				
	C3.1.9.1	U-PVC pipes and fittings, normal duty, complete with couplings				
		(a) 160 mm dia perforated	m	2,00		R -
		(b) 160 mm non perforated	m	2,00		R -
C3.1.10		**Polymer film sheeting or similar approved material, for lining subsoil** drainage				
	C3.1.10.1	0,15 mm thick	m^2	5,00		R -
	C3.1.10.2	0,25 mm thick	m^2	5,00		R -
C3.1.11		**Geotextiles (o,5mm thk)**	m^2	5,00		R -
C3.1.13		**Concrete outlet structures, manhole boxes, junction boxes and cleaning eyes for subsoil drainage systems:**				
	C3.1.13.1	Outlet structures	No.	2,00		R -
	C3.1.13.3	Cleaning eyes	No.	2,00		R -
C3.1.14		**Caps for subsoil drainage pipes**				
	C3.1.14.4	PVC caps	No.	2,00		R -
C3.1.15		**Repairing or replacing existing drainage systems**				
C3.1.16		**Loading and hauling material in excess of 1,0 km**	m^3	2,00		R -
C3.1.18		**Backfilling of drains with selected material compacted to 93 % MDD prior to constructioon of concrete lining and/or stone pitching**	m^3	2,00		R -
C3.1.22		**Test flushing of subsoil drain pipe systems**	No.	1,00		R -
C3.1.23		**subsoil drain outlet marker**	No.	2,00		R -
C3.1.24		**Submission of as-built drawings by the contractor**	No.	1,00		R -
C3.1	**TOTAL SECTION C3.1: DRAINS CARRIED TO SUMMARY**					R0,00

ITEM NO	PAYMENT REFERS TO	DESCRIPTION	Unit	QUANTITY	RATE	AMOUNT
C3.2		**CULVERTS**				
	C3.2.1.1	Excavations for open drains				
	C3.2.1.1	Excavating all material situated within the following depth ranges below the surface level using conventional methods:				
		(a) 0 m to 1,5 m	m^3	78,00		R -
		(b) Exceeding 1,5 m and up to to 3,0 m	m^3	2,00		R -
	C3.2.1.4	Extra over sub-item C3.2.1.1 for excavation in hard and / or boulder material, irrespective of depth	m^3	1,00		R -
	C3.2.1.5	Extra over sub-item C3.2.1.1 for excavation in stabilised existing road layers, irrespective of depth	m^3	2,00		R -
C3.2.2		**Backfilling**				
	C3.2.2.1	Using the excavated material	m^3	2,00		R -
	C3.2.2.2	Using the imported selected material				
		(a) From commercial sources (G6)	m^3	2,00		R -
		(b) From sources on site (G7)	m^3	1,00		R -
	C3.2.2.3	Extra over sub-item C3.2.2.1 and C3.2.2.2 for soil cement backfilling				
		(a) With wet mixture (CEM I 42.5) of 3 % cement	m^3	8,00		R -
		(b) With dry mixture (CEM I 42.5) of 3 % cement	m^3	8,00		R -
		(c) Variation in cement	kg	101,00		R -
	C3.2.2.4	Extra over sub-item C3.2.2.1 and C3.2.2.2 for screed layers (C25)	m^3	2,00		R -
C3.2.7		**Cast in-situ concrete and formwork**				
	C3.2.7.3	In walls, excluding formwork but including class U2 surface finish (C30 concrete)	m^3	48,00		R -
	C3.2.7.5	In inlet and outlet structures including kerbs, chutes and down pipes, skwed ends, catchpits, manholes, thrust blocks and anchor blocks, excluding formwork but including class U2 surface finish (C30 Conrete)	m^3	2,00		R -
	C3.2.7.6	Formwork of concrete under items C3.2.7.3 to 5 above (U2 surface finish)	m^3	2,00		R -
C3.2.8		Concrete backfill or encasement for culverts (C25 concrete)	m^3	2,00		R -
C3.2.10		**Reinforcement**				
	C3.2.10.1	Mild steel bars	ton	2,00		R -
	C3.2.10.2	High-yield steel bars	ton	2,00		R -
	C3.2.10.3	Welded steel fabric (ref 193)	kg	2,00		R -
	C3.2.10.4	Welded steel fabric (ref 395)	kg	2,00		R -
C3.2.17		**Plaster (20mm thick)**	m^2			Rate only
C3.2.18		**Benching**	m^3	2,00		R -
C3.2	**TOTAL SECTION C3.2: CULVERTS CARRIED FORWARD**					R0,00

ITEM NO		DESCRIPTION	Unit	QUANTITY	RATE	AMOUNT
	TOTAL SECTION C3.2: CULVERTS BROUGHT DOWN					R0,00
C3.2.21		**Prefabricated reinforced-concrete skew end units for concrete culverts constructted at a skew angle (600mm diameter on class C bedding)**	No.	5,00		R -
C3.2.22		**Cutting of concrete pipes (600mm diameter)**	No.	5,00		R -
C3.2.24		**Compaction of bedding for inlets, outlets, manholes and catchpits:**				
	C3.2.24.1	Preparation and compaction of in-situ bedding material to 90 % of MDD (150mm)	m^2	5,00		R -
	C3.2.24.2	Extra over sub-item C3.2.24.1 for compaction to 93 % of MDD (150mm)	m^3	20,00		R -
C3.2	**TOTAL SECTION C3.2: CULVERTS CARRIED TO SUMMARY**					R0,00

ITEM NO	PAYMENT REFERS TO	DESCRIPTION	Unit	QUANTITY	RATE	AMOUNT
C3.3		**CONCRETE KERBING AND CHANNELING, ASPHALT BERMS, CHUTES, DOWNPIPES,AS WELL AS CONCRETE, STONE PITCHED AND GABION LININGS FOR OPEN DRAINS**				
C3.3.2		Concrete kerbing-channeling combination				
	C3.3.2.1	Prefabricated kerbing-channeling with C30 concrete haunching (see Drg. 2614-C-102)				
		(a) Fig 8C	m	400,00		R -
	C3.3.2.2	Cust in situ kerbing-channeling (C30 concrete class U2 finish see Drg. 2418-C-102)				
		(a) Fig 8C	m	40,00		R -
		Extra over items C3.3.1 and C3.3.2 for concrete kerbing or concrete kerbing or concrete kerbing and channeling on curves				
	C3.3.3.1	On curves of radii more than or equal to 5,0 m but less than 20 m	m	10,00		R -
	C3.3.3.2	On curves of radii more than or equal to 1,0 m but less than 5,0 m	m	10,00		R -
	C3.3.3.3	On curves of radii less than 1,0 m	m	5,00		R -
		Extra over item C3.3.2 for drop kerbs at pedestrain crossing and driveways	m	2,00		R -
		Linings for open drains				
	C3.3.8.1	Cast in-situ C30 concrete lining	m^3	72,00		R -
	C3.3.8.2	Class U2 surface finish to cast in-situ concrete	m^2	580,00		R -
	C3.3.8.3	Stone pitched lining (200 mm thickness)				
		(a) Grouted stone pitching to approach to culvert inlets and outlets	m^2	1,00		R -
		(b) Grouted stone pitching on C30 concrete bed to open drains and at culvert inlets and outlets	m^2	1,00		R -
C3.3.9		**Formwork to cast in-situ concrete lining for open drains (class F2 surface finish)**				
	C3.3.9.1	To sides with formwork on the internal face only	m^2	100,00		R -
	C3.3.9.2	To sides with formwork on both internal and external faces	m^2	130,00		R -
	C3.3.9.3	To ends of slab	m^2	30,00		R -
C3.3.10		**Sealed joints in concrete and stone pitched linings of open drains (see layout drawings of jointed structures)**				
C3.3.12		**Reinforcement**				
	C3.3.12.3	Welded steel fabric	ton (t)	1,90		R -
C3.3.13		**Polymer film sheeting (250 micron) for concrete-lined drains**	m^2	480,00		R -
C3.3	**TOTAL SECTION C3.3: CONCRETE KERBING AND CHANNELING CARRIED TO SUMMARY**					R0,00

CONTRACT NUMBER:		CONSTRUCTION OF 400 m PAVED ROAD AND STORMWATER DRAINAGE (WARD 4)				Section C4.1
				CONTRACT		
ITEM NO	**PAYMENT REFERS TO**	**DESCRIPTION**	**Unit**	**QUANTITY**	**RATE**	**AMOUNT**
C4.1		**BORROW MATERIALS**				
C4.1.10		**Compacting the floor of the sockpile site**	m^3	220,00		R -
C4.1.11		**Constructing the platform for the stockpile site**	m^3	150,00		R -
C4.1.12		**Stockpiling the material**				
	C4.1.12.2	Material directly from the excavation	m^3	50,00		R -
C4.1.13		**Removing surplus material from the stockpile**				
C4.1.14		**Removing the fill platform and temporary banks at the stockpile sites upon completion**				
	C4.1.14.1	**Fill platform**	m^3	50,00		R -
	C4.1.14.2	Temporary banks	m^3	50,00		R -
C4.1	**TOTAL SECTION C4.1: BORROW MATERIALS CARRIED TO SUMMARY**					R0,00

CONTRACT NUMBER:		CONSTRUCTION OF 400 m PAVED ROAD AND STORMWATER DRAINAGE (WARD 4)				Section C4.3
				CONTRACT		
ITEM NO	**PAYMENT REFERS TO**	**DESCRIPTION**	**Unit**	**QUANTITY**	**RATE**	**AMOUNT**
C4.3		**EXISTING ROAD MATERIALS**				
	C4.3.18	**Excavate non-compliant or excess pavement layer material to spoil in sites designated by the Contractor, material consisting of C4.3.18.2** Crushed stone, macadam, gravel and sand material	m^3	444,00		R -
C4.3	**TOTAL SECTION C4.3: EXISTING ROAD MATERIALS CARRIED TO SUMMARY**					R0,00

CONTRACT NUMBER:		CONSTRUCTION OF 400 m PAVED ROAD AND STORMWATER DRAINAGE (WARD 4)				Section C4.4
				CONTRACT		
ITEM NO	**PAYMENT REFERS TO**	**DESCRIPTION**	**Unit**	**QUANTITY**	**RATE**	**AMOUNT**
C4.4		**COMMERCIAL MATERIALS**				
C4.4.2		**Commercial material indentified by the Contractor from commercial, private or other non-commercial suppliers**				
	C4.4.2.1	Pavement layer material				
		(e) Type G5 material	m^3	444,00		R -
	C4.4.2.3	Drainage blanket layer material	m^3			Rate only
C4.4.3		**Cementitious stabilising agents**				
	C4.4.3.1	Cement	t	25,00		R -
C4.4.7		**Sampling of material testing by a commercial laboratory for the stabilisation design**				
	C4.4.7.1	Cost of sampling and materail testing	Prime cost	1,00	R 10 000,00	R 10 000,00
	C4.4.7.2	Handling costs and profit in respect of item C4.4.7.1	%		R 10 000,00	R -
C4.4	**TOTAL SECTION C4.4: COMMERCIAL MATERIALS CARRIED TO SUMMARY**					R10 000,00

ITEM NO	PAYMENT REFERS TO	DESCRIPTION	Unit	QUANTITY	RATE	AMOUNT
C5.1		**ROADBED**				
C5.1.1		**Roadbed construction and compaction**				
	C5.1.1.5	Compaction of in-situ sand material to 95 % MDD	m^3	444,00		R -
C5.1.2		**Excavate material to spoil sites designated by the Engineer**				
	C5.1.2.1	Excavate material to spoil from roadbed construction, material obtained from:				
		(a) Soft excavation	m^3	444,00		R -
		(b) Bolder excavation class A	m^3	10,00		R -
		(c) Bolder excavation class B	m^3	5,00		R -
		(d) Hard excavation (other than by blasting)	m^3	1,00		R -
C5.1.4		**Removal of unsuitable material to spoil**				
		In layer thicknesses of 200 mm and less				
		(a) Stable material	m^3	5,00		R -
		(b) Unstable material	m^3	5,00		R -
C5.1.5		**In-situ treatment of roadbed in hard material**				
	C5.1.5.1	In-situ treatment by ripping	m^3	444,00		R -
C5.1.13		**Construction of levelling layer**				
	C5.1.6.1	Over roadbed treatment in hard material compacted to 90 % MDD	m^3	150,00		R -
C5.1	**TOTAL SECTION C5.1: ROADBED CARRIED TO SUMMARY**					R0,00

CONTRACT NUMBER:		CONSTRUCTION OF 400 m PAVED ROAD AND STORMWATER DRAINAGE (WARD 4)				Section C5.2
				CONTRACT		
ITEM NO	**PAYMENT REFERS TO**	**DESCRIPTION**	**Unit**	**QUANTITY**	**RATE**	**AMOUNT**
C5.2		**FILL**				
C5.2.2		**Fill construction**				
	C5.2.2.1	Normal fill material in compacted layer thicknesses of 200 mm and less				
		(a) Compacted to 90 % of MDD	m^3	444,00		R -
		(b) Compacted to 93 % of MDD	m^3	50,00		R -
		(c) Roller passes	m^3	50,00		R -
C5.2.3		**Side-cut to fill compacted to 93 % of MDD in compacted layer thicknesses of 200 mm and less**	m^3	10,00		R -
C5.2.4		**Correcting rock fills that are deficient in fine material, extra over C5.2.2.4**	m^3	1,00		R -
C5.2.9		**Removal of oversized material**	m^3	2,00		R -
C5.2	**TOTAL SECTION C5.2: FILL CARRIED TO SUMMARY**					R0,00

CONTRACT NUMBER:		CONSTRUCTION OF 400 m PAVED ROAD AND STORMWATER DRAINAGE (WARD 4)				Section C5.3
				CONTRACT		
ITEM NO	PAYMENT REFERS TO	DESCRIPTION	Unit	QUANTITY	RATE	AMOUNT
C5.3		**ROAD PAVEMENT LAYERS**				
	C5.3.2	**CONSTRUCTION OF PAVEMENT LAYERS**				
	C5.3.2.1	Construction of layers using conventional construction methods: (n) Gravel base layer (chemically stabilised) (150mm) compacted to 97 % of MDD	m^3	444,00		R -
C5.3		**TOTAL SECTION C5.3: ROAD PAVEMENT LAYERS CARRIED TO SUMMARY**				R0,00

ITEM NO	PAYMENT REFERS TO	DESCRIPTION	Unit	QUANTITY	RATE	AMOUNT
C5.4.2		**STABILISATION CHEMICAL STABILISATION**				
	C5.4.2.1	Chemical stabilisation of G5 150mm base layer Cementitious stabilisation agents for pavement layers C5.4.5.1	m^3	444,00		R -
C5.4.5		**Cementitious stabilisation agents for pavement layers**				
	C5.4.5.1	**Addition of cementitious stabilisation agents for pavement layers**				
		(a) CEM II (A-L) 42,5N	tons	25,00		R -
C5.4	**TOTAL SECTION C5.4: STABILISATION CHEMICAL STABILISATION CARRIED TO SUMMARY**					R0,00

CONTRACT NUMBER:		CONSTRUCTION OF 400 m PAVED ROAD AND STORMWATER DRAINAGE (WARD 4)				Section C6.2
				CONTRACT		
ITEM NO	**PAYMENT REFERS TO**	**DESCRIPTION**	**Unit**	**QUANTITY**	**RATE**	**AMOUNT**
C6.2		**SEGMENTAL BLOCK PAVING LAYERS**				
C6.2.1		**Segmental block paving**				
	C6.2.1.1	Concrete block paving (Class 25, 80mm Interlocking)	m^2	3000,00		R -
C6.2.2		**Cast in-situ concrete edge and intermediate beams**	m^3	10,00		R -
C6.2.3		**Provision and application of approved herbicide ant poison.**				
	C6.2.3.1	Provision of materials	Prime cost	1,00	R 30 000,00	R 30 000,00
	C6.2.3.2	Contractor's charges and profit added to the prime cost sum	%		R 30 000,00	R -
C6.2.4		**Re sanding of joints in segmental block paving**				
	C6.2.4.1	Concrete block paving (Class 25, 80mm Interlocking)	m^2	3000,00		R -
C6.2	**TOTAL SECTION C6.2: SEGMENTAL BLOCK PAVING LAYERS CARRIEDTO SUMMARY**					R30 000,00

ITEM NO	PAYMENT REFERS TO	DESCRIPTION	Unit	QUANTITY	RATE	AMOUNT
C11.6		**ROAD SIGNS**				
C11.6.1		**Roadsign boards with painted or coloured semi-matt background. Symbols, lettering and borders in semi-matt black or Class 1 retro-reflective material, where the sign board is constructed from:**				
	C11.6.1.7	Regulatory signs, permanent				
		(a) 600mm diameter (signbord material, background and symbol retro-reflective class indicated)	No	6,00		R -
		(b) 900mm diameter (signbord material, background and symbol retro-reflective class indicated)	No			Rate only
		(c) 1200mm diameter (signbord material, background and symbol retro-reflective class indicated)	No			Rate only
	C11.6.1.9	Warning signs, permanent				
		(a) 600mm diameter (signbord material, background and symbol retro-reflective class indicated)	No	6,00		R -
		(b) 900mm diameter (signbord material, background and symbol retro-reflective class indicated)	No			Rate only
		(c) 1200mm diameter (signbord material, background and symbol retro-reflective class indicated)	No			Rate only
C11.6.2		Extra over on item C11.6.1 for using:				
	C11.6.2.1	Background of retro-reflective material:				
		(b) Class III	m^2	1,00		R -
	C11.6.2.2	Lettering, symbols, numbers, arrows, emblems and borders of retro-reflective material:				
		(b) Class III	m^2	1,00		R -
C11.6.3		**Road sign supports (overhead road sign structures excluded);**				
	C11.6.3.1	Galvanised steel tubing 75mm dia, 2mm thick painted grey	No	6,00		R -
C11.6	**TOTAL SECTION C11.6: ROAD SIGNS CARRIED FORWARD**					R0,00

ITEM NO	PAYMENT REFERS TO	DESCRIPTION	Unit	QUANTITY	RATE	AMOUNT
C11.7		**ROAD MARKINGS AND ROAD STUDS**				
	C11.7.1	Roadsign marking				
	C11.7.1.1	White lines				
		(a) 150 mm wide (broken)	km	0,40		R -
		(b) 150 mm wide (unbroken)	km	0,40		R -
	C11.7.1.2	Yellow lines				
		(a) 150 mm wide (broken)	km			Rate only
		(b) 150 mm wide (unbroken)	km			Rate only
	C11.7.1.3	Red lines				
		(a) 150 mm wide (broken)	km			Rate only
		(b) 150 mm wide (unbroken)	km			Rate only
	C11.7.1.4	White lettering and symbol	m^2	0,50		R -
	C11.7.1.5	Yellow lettering and symbol	m^2	0,50		R -
	C11.7.1.6	Red lettering and symbol	m^2	1,00		R -
		C11.7.1.7 Transverse lines, painted island (yellow) Variation in rate of application:				
	C11.7.5.1	White paint	l	40,00		R -
	C11.7.5.2	Yellow paint	l	20,00		R -
	C11.7.5.3	Red paint	l	20,00		R -
C11.7	**TOTAL SECTION C11.7: ROAD MARKINGS AND ROAD STUDS CARRIED TO SUMMARY**					R0,00

CONTRACT NUMBER:		CONSTRUCTION OF 400 m PAVED ROAD AND STORMWATER DRAINAGE (WARD 4)				Section C20.1
				CONTRACT		
ITEM NO	**PAYMENT REFERS TO**	**DESCRIPTION**	**Unit**	**QUANTITY**	**RATE**	**AMOUNT**
C20.1		**TESTING MATERIALS AND JUDGEMENT OF WORKMANSHIP**				
	C20.1.2	Special tests requested by the Engineer				
	C20.1.2.2	Employer's contribution to other special tests				
		(a) Concrete cube tests	Prime cost	1,00	R 15 000,00	R 15 000,00
		(i) Handling costs and profit in respect of item C20.1.2.2(a)	%		R 15 000,00	R -
		(b) Compaction tests	Prime cost	1,00	R 30 000,00	R 30 000,00
		(i) Handling costs and profit in respect of item C20.1.2.2(b)	%		R 30 000,00	R -
C20.1	**TOTAL SECTION C20.1: TESTING MATERIALS AND JUDGEMENT OF WORKMANSHIP CARRIED FORWARD**					R45 000,00

CONTRACT NUMBER:	CONSTRUCTION OF 400 m PAVED ROAD AND STORMWATER DRAINAGE (WARD 4)				Bill SUMMARY
SUMMARY					AMOUNT
SECTION C1.2	GENERAL REQUIREMENTS AND PROVISIONS				R 150 000,00
SECTION C1.3	CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS				R -
SECTION C1.4	FACILITIES FOR THE ENGINEER				R 37 000,00
SECTION C1.5	ACCOMMODATION OF TRAFFIC				R 20 000,00
SECTION C1.6	CLEARING AND GRUBBING				R 5 000,00
SECTION C1.7	LOADING AND HAULING				R -
SECTION C2.1	GENERAL REQUIREMENTS AND TRENCHING FOR SERVICES				R 55 000,00
SECTION C3.1	DRAINS				R -
SECTION C3.2	CULVERTS				R -
SECTION C3.3	CONCRETE KERBING AND CHANNELIMG, ASPHALT BERMS, CHUTES, DOWNPIPES,AS WELL AS CONCRETE, STONE PITCHED AND GABION LININGS FOR OPEN DRAINS				R -
SECTION C4.1	BORROW MATERIALS				R -
SECTION C4.3	EXISTING ROAD MATERIALS				R -
SECTION C4.4	COMMERCIAL MATERIALS				R 10 000,00
SECTION C5.1	ROADBED				R -
SECTION C5.2	FILL				R -
SECTION C5.3	ROAD PAVEMENT LAYERS				R -
SECTION C5.4	STABILISATION				R -
SECTION C6.2	SEGMENTAL BLOCK PAVING LAYERS				R 30 000,00
SECTION C11.6	ROAD SIGNS				R -
SECTION C11.7	ROAD MARKINGS AND ROAD STUDS				R -
SECTION C20.1	TESTING MATERIALS AND JUDGEMENT OF WORKMANSHIP				R 45 000,00
	Sub-total			**Cur**	R 352 000,00
	Contingency Allow ten percent (10%) of the above sub-total for contingencies to be used as directed.	Item	**0%**		R -
	Sub-total			**Cur**	R 352 000,00
	Value Added Tax Allow fifteneen per cent (15%) of the above sub-total for Value Added Tax	Item	**15%**		R 52 800,00
	Carried to form of tender			**Cur**	R 404 800,00