SECTION 1: PRELIMINARIES

ITEM	DESCRIPTION	1	C1.2 G	ENERAL REQ	UIREMENTS AN T	D PROVISIONS AMOUNT
		LIC	UNIT	QTY	RATE	(RAND)
C1.2	GENERAL REQUIREMENTS AND PROVISIONS					
C1.2.1	Environmental Management:					
C1.2.1.1	Monitoring of compliance with and reporting on the EMP		month	6.0		Rate Only
C1.2.1.2	Dedicated environmental officer		month	6.0		
C1.2.4	Stakeholder liaison		month	6.0		Rate Only
C1.2.5	Safety:					
C1.2.5.1	Health and safety plan		lump sum	1.0		
C1.2.5.2	Implementation of health and safety plan		month	6.0		
C1.5.11	Provision of safety equipment for visitors					
C1.5.11.1	Provision of reflective safety vests for visitors		No	25.0		
C1.5.11.2	Provision of hard hats for visitors		No	25.0		
PSC1.2.8	Dayworks:					
C1.2.8.1	Personnel:					
	(a) Unskilled labourer		h			Rate Only
	(b) Semi-skilled labourer		h			Rate Only
	(c) Skilled labourer		h			Rate Only
	(d) Gang leader		h			Rate Only
	(e) Foreman		h			Rate Only
T-4-1 C	 ried Forward					R0.00

					DADI IAMENT	ARY VILLAGE
			C1.2 G	ENERAL REQU	JIREMENTS AN	
ITEM	DESCRIPTION	LIC	UNIT	QTY	RATE	AMOUNT (RAND)
Brought F	orward			·		
C1.2.8.2	Construction equipment (specify size and / or model number):					
	(a) Motor grader		h			Rate Only
	(b) Vibratory roller		h			Rate Only
	(c) Pneumatic roller		h			Rate Only
	(d) Front end loader		h			Rate Only
	(e) Tractor loader backhoe		h			Rate Only
	(f) Excavator		h			Rate Only
C1.2.8.3	Vehicles (specify size):					
	(a) Light delivery vehicle		km			Rate Only
	(b) Flatbed truck		km			Rate Only
	(c) Dump truck		km			Rate Only
PSC1.2.10	Community Participation					
	(a) Cost for CLO		Prov sum	4.0	R7,500.00	R30,000.00
	(b) Handling costs and profit in respect of (a) above		%	30,000.0		
<u></u>						
Total Carr	ied Forward to Section Summary					

	01 - 00 NWW	~~~				TARY VILLAGE
ITEM	C1.3 CONTRA					AMOUNT
C1.3	CONTRACTOR'S SITE ESTABLISHMENT	LIC	UNIT	QTY	RATE	(RAND)
	AND GENERAL OBLIGATIONS					
C1.3.1	The Contractor's general obligations:					
			lump			
C1.3.1.1	Fixed obligations		sum	1.0		
C1.3.1.3	Time-related obligations		month	6.0		
C1.3.2	Contract Name board		No	1.0		
Total Carr	ied Forward to Section Summary					

				CLAFAC		TARY VILLAG
ITEM	DESCRIPTION	LIC	UNIT	QTY	CILITIES FOR T	AMOUNT (RAND)
C1.4	FACILITIES FOR THE ENGINEER	LIC	UNII	QII	KATE	(KAND)
C1.4.1	Site accommodation:					
C1.4.1.1	Offices and conference room		m²	130.00		
C1.4.1.6	Car ports		No	6.00		
C1.4.1.7	Ablution unit (equipped as specified)		No	2.00		
C1.4.1.9	Kitchen unit (equipped as specified)		No	1.00		Rate Only
C1.4.1.13	Rented housing paid for by the Contractor		prov sum	1.00	R80,000.00	R80,000.00
C1.4.1.14	Contractor's handling costs, profit and all other charges in respect of item C1.4.1.13		%	80,000.00		
C1.4.3	Items measured by number:					
C1.4.3.1	Office swivel chair		No	2.00		
C1.4.3.2	Office chair		No	6.00		
C1.4.3.5	Office desk with 3 drawers (at least one lockable drawer)		No	2.00		
C1.4.3.8	Conference table		No	2.00		
C1.4.3.11	General purpose steel cabinet with shelves		No	1.00		
C1.4.3.13	220 / 250 volt power outlet plug point		No	2.00		Rate Only
C1.4.3.14	400 / 231 volt 3-phase power outlet plug point		No	2.00		Rate Only
C1.4.3.15	Single 1 500 mm, 58 watt fluorescent tube ceiling light		No	4.00		Rate Only
C1.4.3.16	Single 1 500 mm, 22 watt LED tube ceiling light		No	2.00		Rate Only
C1.4.3.19	Wash-hand basin		No	3.00		Rate Only
C1.4.3.23	Fire extinguisher 9,0 kg, dry powder type		No	2.00		Rate Only
C1.4.3.24	Air-conditioning unit		No	4.00		Rate Only
Total Carı	ried Forward	•		•		

ITEM	DESCRIPTION			C1.4 FAC	ILITIES FOR TI	AMOUNT
Brought F		LIC	UNIT	QTY	RATE	(RAND)
C1.4.3.27	Waste paper basket		No			Rate Only
C1.4.3.28	UPS / Voltage stabiliser		No			Rate Only
C1.4.3.29	A3 / A4 colour printer, copier, scanner		No			Rate Only
C1.4.3.30	A4 colour printer, copier, scanner		No	1.00		
C1.4.3.31	Rain gauge		No			Rate Only
C1.4.3.36	Measuring wheel		No			Rate Only
C1.4.3.37	First aid kit		No			Rate Only
C1.4.3.38	Refridgerator		No	1.00		
C1.4.3.39	Microwave oven (28 litre)		No			Rate Only
C1.4.3.40	Electric kettel		No	1.00		
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		PC sum	1.00	R22,000.00	R22,000.00
C1.4.4.2	Handling costs and profit in respect of item C1.4.4.1		%	22,000.00		
C1.4.4.3	The provision of a direct independent telephone line for the Engineer, including the monthly rental charges and the cost of business calls		PC sum	1.00	R30,000.00	R30,000.00
C1.4.4.4	Handling costs and profit in respect of item C1.4.4.3		%	30,000.00		
C1.4.4.5	The provision of internet connectivity and WiFi data for Engineer's site staff		PC sum	1.00	R15,000.00	R15,000.00
C1.4.4.6	Handling costs and profit in respect of item C1.4.4.5		%	15,000.00		
C1.4.4.7	The provision of paper and ink for a combination colour printer / copier / scanner		PC sum	1.00	R150,000.00	R150,000.00
C1.4.4.8	Handling costs and profit in respect of item C1.4.4.7		%	150,000.00		
C1.4.4.9	The provision of a complete 220 / 250 volt single phase electrical power installation, including all poles, insulators, wiring, switchboards, mains connections, meters, etc.		PC sum	1.00	R25,000.00	R25,000.00
C1.4.4.10	Handling costs and profit in respect of item C1.4.4.9		%	25,000.00		

				C1 AEAC	PARLIAMENT.	
ITEM	DESCRIPTION				CILITIES FOR T	AMOUNT
		LIC	UNIT	QTY	RATE	(RAND)
Brought F	orward 	1				R0.00
C1.4.4.13	Provision of a 440 / 231 volt three phase electricity generator if electricity from a power supply authority is not available on site		PC sum	45,000.00	R1.00	R45,000.00
C1.4.4.14	Handling costs and profit in respect of item C1.4.4.13		%	45,000.00		
C1.4.5	Services at site offices, laboratories and site accommodation:					
C1.4.5.1	Fixed costs		lump sum	1.00		
C1.4.5.2	Running costs		month	6.00		
C1.4.8	Site security measures for the Engineer's facilities:					
C1.4.8.1	Supply and installation of all required security measures at the Engineer's site offices and laboratories		lump sum	1.00		
Total Carr	ied Forward to Section Summary					

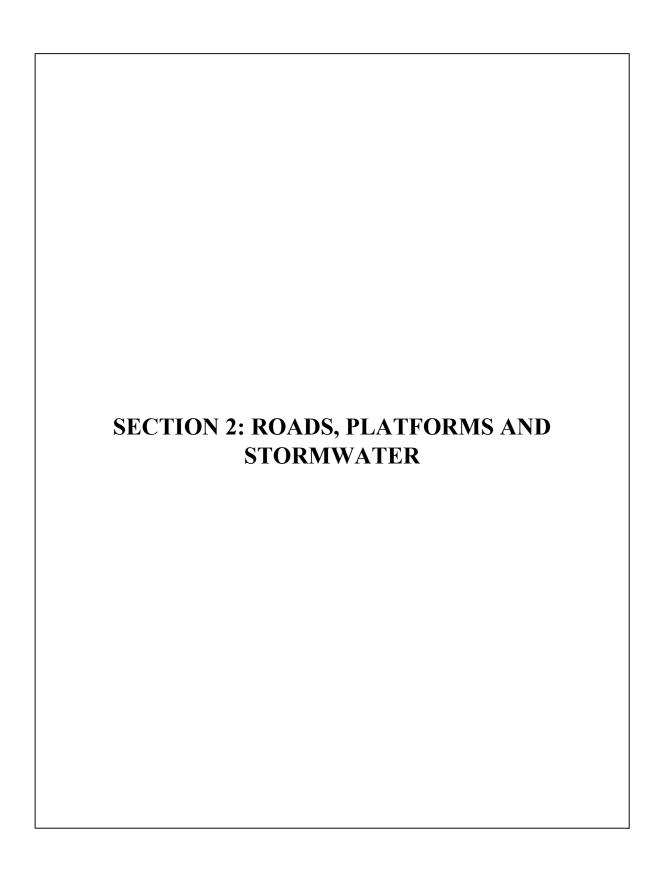
C1.2.3.1 Grass cutting C1.2.3.2 Drain cleaning C1.2.3.3 Cleaning out culverts C1.2.3.4 Collection of rubbish / litter C1.2.3.9 Grading of temporary gravel deviations and existing roads used as detours C1.2.3.10 Watering of temporary gravel deviations and existing roads used as detours LIC UNIT QTY RATE (RAND) C1.2.3.1 QTY RATE (RAND) C1.2.3.1 QTY RATE (RAND) C1.2.3.2 UNIT QTY RATE (RAND) C1.2.3.3 Li UNIT QTY RATE (RAND) C1.2.3.4 Li UNIT QTY RATE (RAND) C1.2.3.1 Li UNIT QTY RATE (RAND)						ARLIAMENTA	
C1.2.3 Routine road maintenance of existing public roads within the Site of the Works or other public roads outside the Site of the Works which are used as detours: C1.2.3.1 Grass cutting C1.2.3.2 Drain cleaning C1.2.3.3 Cleaning out culverts C1.2.3.4 Collection of rubbish / litter C1.2.3.9 Grading of temporary gravel deviations and existing roads used as detours C1.2.3.10 Watering of temporary gravel deviations and existing roads used as detours C1.2.3.11 Other road maintenance work ordered by the Engineer C1.2.3.12 of them C1.2.3.11 of	ITEM	DESCRIPTION	110	LINUT			AMOUNT
roads within the Site of the Works or other public roads outside the Site of the Works which are used as detours: C1.2.3.1 Grass cutting C1.2.3.2 Drain cleaning C1.2.3.3 Cleaning out culverts C1.2.3.4 Collection of rubbish / litter C1.2.3.9 Grading of temporary gravel deviations and existing roads used as detours C1.2.3.10 Watering of temporary gravel deviations and existing roads used as detours C1.2.3.11 Other road maintenance work ordered by the Engineer Handling cost, profit and all other charges in respect of item C1.2.3.11 **The C1.2.3.11** C1.2.3.12 For the Works or other works are the Works which are used as detours C1.2.3.12 For the Works or other works and existing roads used as detours C1.2.3.11 Other road maintenance work ordered by the Engineer C1.2.3.12 For the Works of the Works which are used to be a support to the Works of the Works which are used to be a support to the Works of the Works which are used to be a support to the Works of the Works which are used to be a support to the Works of the Works	C1.5	ACCOMMODATION OF TRAFFIC	LIC	UNII	QIY	RATE	(RAND)
C1.2.3.2 Drain cleaning C1.2.3.3 Cleaning out culverts C1.2.3.4 Collection of rubbish / litter C1.2.3.9 Grading of temporary gravel deviations and existing roads used as detours C1.2.3.10 Watering of temporary gravel deviations and existing roads used as detours C1.2.3.11 Other road maintenance work ordered by the Engineer C1.2.3.12 Handling cost, profit and all other charges in respect of item C1.2.3.11 C1.2.3.12 Solution of temporary gravel deviations and existing roads used as detours C1.2.3.12 Solution of temporary gravel deviations and existing roads used as detours C1.2.3.11 Other road maintenance work ordered by the Engineer C1.2.3.12 Solution of temporary gravel deviations and existing roads used as detours C1.2.3.11 Other road maintenance work ordered by the Engineer C1.2.3.12 Family and the province of temporary gravel deviations and existing roads used as detours C1.2.3.11 Other road maintenance work ordered by the Engineer C1.2.3.12 Family and the province of temporary gravel deviations and existing roads used as detours C1.2.3.11 Other road maintenance work ordered by the Engineer C1.2.3.12 Family and the province of temporary gravel deviations and existing roads used as detours C1.2.3.11 Other road maintenance work ordered by the Engineer C1.2.3.12 Family and the province of temporary gravel deviations and existing roads used as detours C1.2.3.11 Other road maintenance work ordered by the Engineer C1.2.3.12 Family and the province of temporary gravel deviations and existing roads used as detours C1.2.3.11 Other road maintenance work ordered by the Engineer C1.2.3.12 Family and the province of temporary gravel deviations and existing roads used as detours C1.2.3.11 Other road maintenance work ordered by the Engineer family and the province of the province of temporary gravel deviations and existing roads used as detours C1.2.3.11 Other road maintenance work ordered by the Engineer family and the province of the province o	C1.2.3	roads within the Site of the Works or other public roads outside the Site of the Works which					
C1.2.3.3 Cleaning out culverts C1.2.3.4 Collection of rubbish / litter C1.2.3.9 Grading of temporary gravel deviations and existing roads used as detours C1.2.3.10 Watering of temporary gravel deviations and existing roads used as detours C1.2.3.11 Other road maintenance work ordered by the Engineer C1.2.3.12 Handling cost, profit and all other charges in respect of item C1.2.3.11 C1.2.3.11 Other road maintenance work ordered by the Engineer C1.2.3.12 Handling cost, profit and all other charges in respect of item C1.2.3.11	C1.2.3.1	Grass cutting	LI	ha	1.3		
C1.2.3.4 Collection of rubbish / litter C1.2.3.9 Grading of temporary gravel deviations and existing roads used as detours C1.2.3.10 Watering of temporary gravel deviations and existing roads used as detours C1.2.3.11 Other road maintenance work ordered by the Engineer C1.2.3.12 Handling cost, profit and all other charges in respect of item C1.2.3.11 C1.2.3.11 Other cost, profit and all other charges in respect of item C1.2.3.11	C1.2.3.2	Drain cleaning	LI	km	3.2		
C1.2.3.9 Grading of temporary gravel deviations and existing roads used as detours C1.2.3.10 Watering of temporary gravel deviations and existing roads used as detours C1.2.3.11 Other road maintenance work ordered by the Engineer C1.2.3.12 Handling cost, profit and all other charges in respect of item C1.2.3.11 C1.2.3.12 Solution of temporary gravel deviations and existing roads used as detours km 1.0 kt 250.0 prov sum 50,000.0 R1.00 R50,000.00	C1.2.3.3	Cleaning out culverts	LI	m³	26.0		
roads used as detours C1.2.3.10 Watering of temporary gravel deviations and existing roads used as detours C1.2.3.11 Other road maintenance work ordered by the Engineer C1.2.3.12 Handling cost, profit and all other charges in respect of item C1.2.3.11 C1.2.3.12 Solution in the state of item C1.2.3.11 C1.2.3.13 Solution in the state of item C1.2.3.11 C1.2.3.14 Solution in the state of item C1.2.3.11 C1.2.3.15 Solution in the state of item C1.2.3.11 C1.2.3.16 Solution in the state of item C1.2.3.11 C1.2.3.17 Solution in the state of item C1.2.3.11	C1.2.3.4	Collection of rubbish / litter	LI	km	3.0		
existing roads used as detours C1.2.3.11 Other road maintenance work ordered by the Engineer C1.2.3.12 Handling cost, profit and all other charges in respect of item C1.2.3.11 % 50,000.00 R1.00 R50,000.00	C1.2.3.9			km	1.0		
Engineer C1.2.3.12 Handling cost, profit and all other charges in respect of item C1.2.3.11 Sum 50,000.0 R1.00 R50,000.00 Stopped Sum 50,000.0 R1.00 R50,000.00	C1.2.3.10			kℓ	250.0		
of item C1.2.3.11 % 50,000.00	C1.2.3.11			_	50,000.0	R1.00	R50,000.00
	C1.2.3.12			%	50,000.00		
	m						

TIEM DESCRIPTION LIC UNIT OTY RATE AMOUNT (RAND CL6.1 CLEARING AND GRUBBING CL6.1.1 Clearing with machines and some hand labour where necessary Cl.6.2.1 Grubbing: Cl.6.2.1 Grubbing with machines and some hand labour where necessary Cl.6.3.1 Girth equal to or exceeding 1,0 m up to and including 2,0 m Cl.6.3.2 Girth exceeding 2,0 m up to and including 3,0 m LI No 2.0 Total Carried Forward to Section Summary		PARLIAMENTARY	VILL	AGE - F			
C1.6.1 Clearing: C1.6.1.1 Clearing with machines and some hand labour where necessary C1.6.2.1 Grubbing: C1.6.2.1 Grubbing with machines and some hand labour where necessary C1.6.3 Removal and grubbing of large trees and tree stumps: C1.6.3.1 Girth equal to or exceeding 1,0 m up to and including 2,0 m C1.6.3.2 Girth exceeding 2,0 m up to and including 3,0 m L1 No 2.0	ITEM	DESCRIPTION	LIC	UNIT			AMOUNT
C1.6.1.1 Clearing with machines and some hand labour where necessary C1.6.2 Grubbing: C1.6.2.1 Grubbing with machines and some hand labour where necessary C1.6.3.3 Removal and grubbing of large trees and tree stumps: C1.6.3.1 Girth equal to or exceeding 1,0 m up to and including 2.0 m C1.6.3.2 Girth exceeding 2,0 m up to and including 3,0 m LI No 2.0	C1.6	CLEARING AND GRUBBING	Lic	CIVII	ŲII	KATE	(RZHVD)
where necessary C1.6.2.1 Grubbing: C1.6.2.1 Grubbing with machines and some hand labour where necessary C1.6.3 Removal and grubbing of large trees and tree stumps: C1.6.3.1 Girth equal to or exceeding 1,0 m up to and including 2,0 m C1.6.3.2 Girth exceeding 2,0 m up to and including 3,0 m LI No 2.0	C1.6.1	Clearing:					
C1.6.2.1 Grubbing with machines and some hand labour where necessary C1.6.3 Removal and grubbing of large trees and tree stumps: C1.6.3.1 Girth equal to or exceeding 1,0 m up to and including 2,0 m C1.6.3.2 Girth exceeding 2,0 m up to and including 3,0 m L1 No 2.0	C1.6.1.1			ha	4.0		
where necessary C1.6.3 Removal and grubbing of large trees and tree stumps: C1.6.3.1 Girth equal to or exceeding 1,0 m up to and including 2,0 m LI No 4.0 C1.6.3.2 Girth exceeding 2,0 m up to and including 3,0 m LI No 2.0	C1.6.2	Grubbing:					
stumps: C1.6.3.1 Girth equal to or exceeding 1,0 m up to and including 2,0 m C1.6.3.2 Girth exceeding 2,0 m up to and including 3,0 m LI No 2.0	C1.6.2.1			ha	10.0		
including 2,0 m C1.6.3.2 Girth exceeding 2,0 m up to and including 3,0 m LI No 2.0	C1.6.3						
	C1.6.3.1		LI	No	4.0		
	C1.6.3.2	Girth exceeding 2,0 m up to and including 3,0 m	LI	No	2.0		

	PARLIAMENTARY	VILL	AGE - R			
ITEM	DESCRIPTION	LIC	LINUT			AND HAULING AMOUNT
C1.7	LOADING AND HAULING	LIC	UNIT	QTY	RATE	(RAND)
C1.7.1	Loading:					
C1.7.1.1	Loading from stockpile using machines and some hand labour where necessary		m³			
C1.7.1.2	Loading from heaps or windrows using machines and some hand labour where necessary		m³			
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		m³-km			
	(b) Boulders and hard material		m³-km			
C1.7.2.2	Hauling material to spoil and off-loading it at a designated spoil area:					
	(a) Cleared and grubbed material (organic matter and all other unsuitable or waste material)		m³-km	33,750.0		
	(b) Soil and gravel material		m³-km			
	(c) Boulders and hard material		m³-km			
Total Carr	ied Forward to Section Summary					

BULK SERVICES (EXTERNAL WORKS) FOR THE CONSTRUCTION OF 15 NEW MPL HOUSES AT PARLIAMENTARY VILLAGE SECTION SUMMARY

	PRELIMINARIES, GENERAL AND OBLIGATIONS SUMMARY	
SECTION 1	DESCRIPTION	AMOUNT
		(RAND)
1	C1.2 GENERAL REQUIREMENTS AND PROVISIONS	
1	C1.3 CONTRACTOR'S SITE ESTABLISHMENT AND GENERAL	
	OBLIGATIONS	
1	C1.4 FACILITIES FOR THE ENGINEER	
1	C1.5 ACCOMMODATION OF TRAFFIC	
SUB-TOTAL 1:	CARRIED TO FINAL SUMMARY	



PARLIAMENTARY VILLAGE - ROADS, PLATFORMS AND STORMWATER C2.1 GENERAL REQUIREMENTS AND TRENCHING FOR SERVICES

	C2.1 GEN	ERA	L REQUI	REMENTS ANI	TRENCHING I	FOR SERVICES
ITEM	DESCRIPTION	LIC	UNIT	QTY	RATE	AMOUNT (RAND)
C2.1	GENERAL REQUIREMENTS AND TRENCHING FOR SERVICES					
C2.1.1	Location, identification, protection and relocation of existing services:					
C2.1.1.1	Contractor's obligations		lump sum	1.0		
C2.1.1.5	Permanent services relocation or protection work by the Contractor		Prov Sum	1.0		
C2.1.2	Existing services location, detection and verification:					
C2.1.2.1	Using specialist detection services (ground penetrating radar, radio detection etc.)		PC Sum	1	R250,000.00	R250,000.00
C2.1.3	Handling costs and profit in respect of item C2.1.2.1 above		%	250000		
C2.1.2.5	Using hand excavation to locate, expose and verify services		m³	1600		
Takile	ind Farmanda Sari's S					
Total Carr	ied Forward to Section Summary					

ITEM	DESCRIPTION					CO 1 DD A INIC
	DESCRIPTION	LIC	UNIT	QTY	RATE	C3.1 DRAINS AMOUNT (RAND)
C3.1	DRAINS		01121	· · ·	T.T.Z	(ILL.D)
C3.1.1	Excavation 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	LI	m^3	693.0		
C3.1.1.2	Extra over sub-item C3.1.1.1 for excavation in hard and boulder material irrespective of depth		m^3	69.3		
C3.1.1.4	Excavating soft material situated 0 m to 1,5 m below the surface level using labour enhanced construction methods	LI	m^3	12.0		
C3.1.2	Clearing, shaping and disposal of accumulated sediment in existing unlined open drains:					
C3.1.2.2	Using labour enhanced construction methods	LI	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	LI	m^3			Rate Only
	(b) Culvert barrels	LI	m^3			Rate Only
	(c) Concrete or other lined side drains	LI	m³			Rate Only
C3.1.4	Excavation and disposal of material for subsoil drainage systems:					
C3.1.4.1	Excavating in all material situated within the following depth ranges below the surface:					
	(a) 0 m to 1,5 m	LI	m^3			Rate Only
	(b) Exceeding 1,5 m and up to 3,0 m		m^3			Rate Only
C3.1.4.4	Extra over sub-item C3.1.4.1 for excavation in hard and boulder material, irrespective of depth		m³			Rate Only
Total Car	ried Forward					

PARLIAMENTARY VILLAGE - ROADS, PLATFORMS AND STORMWATER C3.1 DRAINS AMOUNT ITEM DESCRIPTION LIC UNIT QTY RATE (RAND) **Brought Forward** C3.1.5 Impermeable backfilling to subsoil drainage C3.1.5.1 Un-stabilised natural gravel obtained from approved m^3 Rate Only sources on the site C3.1.6 Construction of banks and dykes: C3.1.6.1 Banks and dykes using conventional methods ${\rm m}^{\rm 3}$ Rate Only C3.1.7 Natural permeable material in subsoil drainage systems (approved crushed stone): C3.1.7.2 Crushed stone obtained from commercial sources LI m^3 Rate Only (state grade) C3.1.8 Natural permeable material in subsoil drainage systems (approved natural sand): C3.1.8.2 Natural sand from commercial sources (fine) LI m^3 Rate Only C3.1.9 Pipes in subsoil drainage systems: C3.1.9.1 U-PVC pipes and fittings, normal duty, complete with couplings (110mm dia., perforated) Rate Only LI m C3.1.11 Geotextiles (Grade 2 or similar) LI Rate Only m^2 C3.1.13 Concrete outlet structures, manhole boxes, junction boxes and cleaning eyes for subsoil drainage systems (refer Standard details): C3.1.13.1 Outlet structures LI No 4.0 C3.1.13.4 Cleaning eyes LI No Rate Only C3.1.14 Caps for subsoil drain pipes: C3.1.14.1 Rate Only Concrete caps LI No C3.1.16 Loading and hauling of material in excess of 1,0 km m³-km Rate Only C3.1.22 Test flushing of subsoil drain pipe systems LI No Rate Only C3.1.23 Subsoil drain outlet marker (type or drawing LI No Rate Only specified)

Total Carried Forward to Section Summary

		VILL.	AGE - N	OADS, I LATI		TORMWATER C3.2 CULVERTS
ITEM	DESCRIPTION	LIC	LIMIT	OTV		AMOUNT
C3.2	CULVERTS	LIC	UNIT	QTY	RATE	(RAND)
C3.2.1	Excavation for culvert structures:					
C3.2.1.1	Excavating in all material situated within the following depth ranges below the surface level:					
	(a) 0 m to 1,5 m	LI	m³	360.0		
	(b) Exceeding 1,5 m and up to 3,0 m		m³	90.0		
C3.2.1.4	Extra over sub-item C3.2.1.1 for excavation in hard or boulder material, irrespective of depth		m³	54.0		
C3.2.2	Backfilling:					
C3.2.2.1	Using the excavated material	LI	m³	427.5		
C3.2.2.2	Using imported selected material:					
	(a) From commercial sources (G6)		m³			Rate Only
C3.2.2.3	Extra over sub-items C3.2.2.1 and C3.2.2.2 for soil cement backfilling:					
	(b) With dry mixture (specify cement content) of 3 % cement		m³			Rate Only
C3.2.3	Concrete pipe culverts:					
C3.2.3.3	On Class C bedding					
	(iii) Type 100D 525mm dia.		m	240		
	(iv) Type 100D 600mm dia.		m			Rate Only
C3.2.3.4	Concrete box culverts:					
	i) 900mm x 1200mm box culverts		m	18.0		
C3.2.3.5	Provision of skew ends of pipe culvert (Type 100D 900mm dia.)		No			Rate Only
C3.2.7	Cast-in-situ concrete and formwork:					
C3.2.7.2	In complete in-situ floor slabs for rectangular culverts, manholes and catchpits including formwork, joints and Class U2 surface finish (class of concrete indicated) (installed at a standard depth of 1,0 m)	LI	m^{3}	42.0		
C3.2.7.6	Formwork of concrete under items C3.2.7.3 to 5 above (Class F2 finish)	LI	m^2	90.6		

PARLIAMENTARY VILLAGE - ROADS, PLATFORMS AND STORMWATER C3.2 CULVERTS

ITEM	DESCRIPTION					C3.2 CULVERTS AMOUNT
Brought F	prward	LIC	UNIT	QTY	RATE	(RAND)
Drought 1	, waru					
C3.2.10	Reinforcement:					
C3.2.10.3	Welded mesh ref 193	LI	kg	56.0		
C3.2.13	Removing and re-laying existing culverts:					
C3.2.13.1	Removing and stacking existing culverts for re-use (Type 100D 600mm dia.)		m			Rate Only
C3.2.16	Brickwork (engineering bricks):					
C3.2.16.2	230 mm thick	LI	m²	20.0		
C3.2.17	Plaster	LI	m²	20.0		
C3.2.18	Benching	LI	m³	8.0		
C3.2.19	Accessories:					
C3.2.22	Cutting of concrete pipes	LI	No			Rate Only
	Inlet structures complete	LI	No	4.0		
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 (depth indicated)	LI	m³	360.0		
Total Carri	ed Forward to Section Summary					
Total Call	ca i oi mara to occuon bummary					I

PARLIAMENTARY VILLAGE - ROADS, PLATFORMS AND STORMWATER C3.3 CONCRETE KERBING AND CHANNELING, ASPHALT BERMS, CHUTES, DOWNPIPES, CONCRETE, STONE PITCHED AND GABION LININGS FOR OPEN DRAINS

ITEM	AND GABION LININGS FOR OPEN DRAINS DESCRIPTION					AMOUNT
		LIC	UNIT	QTY	RATE	(RAND)
C3.3	CONCRETE KERBING AND CHANNELING, ASPHALT BERMS, CHUTES, DOWNPIPES, CONCRETE, STONE PITCHED AND GABION LININGS FOR OPEN DRAINS					
C3.3.2	Concrete kerbing-channeling combination:					
C3.3.2.1	Prefabricated kerbing-channeling (description of type of channel and bedding with reference to drawing)					
	(a) Precast half-battered figure 3 kerb to SANS 927 on 20mm mortar and 20MPa concrete haunching	LI	m	1,320.0		
	(b) Precast tapered figure 14 to SANS 927 on 20mm mortar		m	528		
	(b) Transitional kerbing (as per drawings) with cast in situ class 15/19 concrete	LI	m	8.0		
C3.3.3	Extra over items C3.3.1 and C3.3.2 for 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	LI	m	68.0		
C3.3.3.2	On curves with radii more than or equal to 1,0 m but less than 5,0 m	LI	m			Rate Only
C3.3.4	Extra over item C3.3.2 for drop kerbs at pedestrian crossings and driveways	LI	m			Rate Only
C3.3.6	Concrete chutes (typical design):					
C3.3.6.2	Cast-in-situ concrete chutes with class 20/19 concrete.)	LI	m	6.0		
C3.3.8	Linings for open drains:					
C3.3.8.1	Cast Class U2 surface finish ready mix concrete lining class 20/19 concrete per drawing	LI	m³	72.0		
C3.3.9	Formwork to cast-ready mix concrete lining for open drains (Class F2 surface finish):					
C3.3.9.2	To sides with formwork on both internal and external faces (each face measured)	LI	m²	30.0		
Total Car	ried Forward					
						1

PARLIMENTARY VILLAGE - ROADS, PLATFORMS AND STORMWATER

C3.3 CONCRETE KERBING AND CHANNELING, ASPHALT BERMS, CHUTES, DOWNPIPES, CONCRETE, STONE PITCHED AND GABION LININGS FOR OPEN DRAINS

ITEM	AND GABION LININGS FOR OPEN DRAINS DESCRIPTION			O.T.Y.	D. 1777	AMOUNT
Brought F	orward	LIC	UNIT	QTY	RATE	(RAND)
C3.3.9.3	To ends of slabs	LI	m²			Rate Only
C3.3.10	Sealed joints in concrete and stone pitched linings of open drains (125mm x 10mm "Flexcell" or similar)	LI	m			Rate Only
C3.3.13	Polymer film sheeting (150 micron.) for concrete- lined open drains	LI	m²			Rate Only
C3.3.16	Demolition and removal of existing kerbs and / or channel	LI	m³			Rate Only
C3.3.12	Reinforcement:					
C3.3.12.3	Welded mesh ref 193	LI	kg	167.22		
C3.3.15	Energy dissipaters in outlet structures					
C3.3.15.1	Precast concrete blocks in outlet structures		No	18		
C3.3.15.2	Stones set in outlet structures		m ²	38		
Total Carr	ied Forward to Section Summary					

PARLIAMENTARY VILLAGE - ROADS, PLATFORMS AND STORMWATER C4.2 CUT MATERIALS

ITEM	DESCRIPTION	LIC	UNIT	QTY	RATE	AMOUNT (RAND)
C4.2	CUT MATERIALS - ROAD WORKS					
C4.2.7	Removal of unsuitable stable cut material to spoil					
C4.2.7.1	In layer thicknesses of 200 mm and less		m ³			Rate Onl
C4.2.9	Excavate material to spoil in sites designated by the Contractor, material obtained from					
C4.2.9.1	Soft excavation		m ³	3,704.4		
C4.2.9.2	Boulder excavation class A		m ³	370.4		
C4.2.9.3	Boulder excavation class B		m ³			Rate Onl
C4.2.9.4	Hard excavation (other than by blasting)		m ³	185.22		
C4.2.9.5	Hard excavation (by blasting)		m ³	74.1		
C1.7.2.2	Hauling material to spoil and off-loading it at a designated spoil area:					
	(b) Soil and gravel material		m³-km	43,341.5		

PARLIMENTARY VILLAGE - ROADS, PLATFORMS AND STORMWATER C4.2 CUT MATERIALS

ITEM	DESCRIPTION	LIC	UNIT	QTY	RATE	UT MATERIALS AMOUNT (RAND)
Brought Fo	orward			T	T	
C4.2	CUT MATERIALS - PLATFORMS					
C4.2.7	Removal of unsuitable stable cut material to spoil					
C4.2.7.1	In layer thicknesses of 200 mm and less		m ³			Rate Only
C4.2.9	Excavate material to spoil in sites designated by the Contractor, material obtained from					
C4.2.9.1	Soft excavation		m ³	1,605.6		
C4.2.9.2	Boulder excavation class A		m ³	160.6		
C4.2.9.3	Boulder excavation class B		m ³			Rate Only
C4.2.9.4	Hard excavation (other than by blasting)		m ³	80.28		
C4.2.9.5	Hard excavation (by blasting)		m ³	32.1		
C1.7.2.2	Hauling material to spoil and off-loading it at a designated spoil area:					
	(b) Soil and gravel material		m³-km	18,785.5		
Total Carri	ed Forward to Section Summary					

PARLIAMENTARY VILLAGE - ROADS, PLATFORMS AND STORMWATER C4.4 COMMERCIAL MATERIALS

ITEM	DESCRIPTION				4 COMMERCIA	AMOUNT
CLA	COMMERCIAL MATERIALS, DOAD	LIC	UNIT	QTY	RATE	(RAND)
C4.4	COMMERCIAL MATERIALS - ROAD WORKS					
C4.4.1	Commercial materials identified by the Contractor from commercial suppliers					
C4.4.1.1	Pavement layer material:					
	(d) Type G5 material		m³	1,246.1		
	(e) Type G6 material		m³	3,738.4		
	(p) Natural or crushed gravel material for an unsealed shoulder layer		m³			Rate Only
C4.4.1.5	Fill material in the earthworks:					
	(b) Rock fill		m³			Rate Only
C4.4.7	Sampling and material testing by a commercial laboratory for the stabilisation designs:					
C4.4.7.1	Cost of sampling and material testing		prov sum	1.0		
C4.4.7.2	Handling cost and profit in respect of item C4.4.7.1		%	0.00		
C1.7.2.2	Hauling material to spoil and off-loading it at a designated spoil area:					
	(b) Soil and gravel material		m³-km	49,845.6		
Total Carri	ied Forward to Section Summary					

${\bf PARLIAMENTARY\ VILLAGE\ -\ ROADS,\ PLATFORMS\ AND\ STORMWATER}$

C4.5 INSITU FILL MATERIALS

ITEM	DESCRIPTION					AMOUNT
		LIC	UNIT	QTY	RATE	(RAND)
C4.5.1	Utalisation of insitu material for construction of Platform Layers compacted to 93% MOD ASSHTO					
C4.5.1.1	Pavement layer material:					
	(e) Type G6 material		m³	3,960.3		
C4.5.1.5	Fill material in the earthworks: (b) Rock fill		m³			Rate Only
C4.5.7	Sampling and material testing by a commercial laboratory for the stabilisation designs:		111			Rate Only
C4.5.7.1	Cost of sampling and material testing		prov sum	1.0		
C4.5.7.2	Handling cost and profit in respect of item C4.4.7.1		%	0.00		
C1.7.7.3	Hauling material to spoil and off-loading it at a designated spoil area:					
	(b) Soil and gravel material		m³-km	39,603.5		
Total Carri	ed Forward to Section Summary					

PARLIAMENTARY VILLAGE - ROADS, PLATFORMS AND STORMWATER

C5.1 ROADBED

ITEM	DESCRIPTION	1				C5.1 ROADBED AMOUNT
		LIC	UNIT	QTY	RATE	(RAND)
C5.1	ROADBED ROAD WORKS					
C5.1.1	Roadbed construction and compaction:					
C5.1.1.5	Compaction of in-situ material to 95 % of MDD		m³	2,826.0		
C5.1.11	Construction of roadbed comprising a pioneer layer		m³			Rate Only
C1.7.2.2	Hauling material to spoil and off-loading it at a designated spoil area:					
	(b) Soil and gravel material		m³-km	28,260.0		
Total Carri	ed Forward to Section Summary					

PARLIAMENTARY VILLAGE - ROADS, PLATFORMS AND STORMWATER C5.3 ROAD PAVEMENT LAYERS

ITEM	DESCRIPTION					AMOUNT
		LIC	UNIT	QTY	RATE	(RAND)
C5.3	ROAD PAVEMENT LAYERS					
C5.3.2	Construction of pavement layers:					
C5.3.2.1	Construction of layers using conventional construction methods:					
	a) Selected subgrade layer (150mm) compacted to 96 % of MDD		m³	2,543.4		
	b) Gravel shoulder layer (200mm) compacted to 95 % of MDD		m³			Rate Only
	c) Subbase gravel layer (unstabilised), (150mm) compacted to 96 % of MDD		m³	2,260.8		
	d) Gravel base layer (chemically stabilised), (150mm) compacted to 98 % of MDD		m³	1978.2		
Total Carr	ied Forward to Section Summary	<u> </u>				

PARLIAMENTARY VILLAGE - ROADS, PLATFORMS AND STORMWATER C5.4 STABILISATION

ITEM	DESCRIPTION			O.T.Y.		TABILISATION AMOUNT
		LIC	UNIT	QTY	RATE	(RAND)
C5.4.2	Chemical stabilisation					
C5.4.2	Chemical stabilisation (150mm) of pavement layers (Base layer to be stabilised)		m ³			
C5.4.5	Cementitious stabilisation agents for pavement layers					
C5.4.5.1	CEM-II B-L Grade 32,5		t	124.63		
C5.4.10	Provision and application of water for curing		kl	1704		
Total Carri	ed Forward to Section Summary					

PARLIAMENTARY VILLAGE - ROADS, PLATFORMS AND STORMWATER C6.2 SEGMENTAL BLOCK PAVING LAYERS

ITEM	DESCRIPTION	1		CO.2 SEGMEN	TAL BLOCK PA	AMOUNT
TIENI	DESCRIPTION	LIC	UNIT	QTY	RATE	(RAND)
C6.2	SEGMENTAL BLOCK PAVING LAYERS			,		
C6.2.1 C6.2.1.1	Segmental block paving - Roads Concrete block paving (80mm/30MPa Interlocking blocks on 20mm sand bedding) furnishing all materials, constructing the sand bedding, laying and compacting the concrete pavement blocks, filling the joints with jointing sand, and for all other work	LI	m²	3,024		
	Segmental block paving - Walkways Concrete block paving (60mm/30MPa Interlocking blocks on 20mm sand bedding) furnishing all materials, constructing the sand bedding, laying and compacting the concrete pavement blocks, filling the joints with jointing sand, and for all other work	LI	m²	2,400.0		
C6.2.2	Segmental block paving - Driveways Concrete block paving (60mm/30MPa Interlocking blocks on 20mm sand bedding) furnishing all materials, constructing the sand bedding, laying and compacting the concrete pavement blocks, filling the joints with jointing sand, and for all other work Provision and application of approved herbicide and ant poison	LI	m ³	2,592		
C6.2.3.1	Provision of materials		Prime cost	1.0	400,800.00	400,800.00
C6.2.3.2	Contractor's charges and profit added to the prime cost sum		%	400,800.0		
	Concrete edge beams (class 15/19 concrete)	LI	m³	35.0		
Total Carr	ied Forward to Section Summary	Ь	l			

PARLIAMENTARY VILLAGE - ROADS, PLATFORMS AND STORMWATER

C11.1 PITCHING, STONEWORK, CAST IN SITU CONCRETE FOR PROTECTION AGAINST EROSION

ITEM	DESCRIPTION					AMOUNT
		LIC	UNIT	QTY	RATE	(RAND)
C11.1	PITCHING, STONEWORK, CAST IN SITU CONCRETE FOR PROTECTION AGAINST EROSION					
C11.1.2	Stone pitching:					
C11.1.2.3	Grouted stone pitching on a concrete bed	LI	m²	40.0		
C11.1.6	Concrete edge beams (class 15/19 concrete)	LI	m³			Rate Only
C11.1.7	Provision of approved herbicide and ant poison:					
C11.1.7.1	Provision of materials		PC sum	1.0	R100,000.00	R100,000.00
C11.1.7.2	Contractor's charges and profit added to the prime cost sum		%	100,000.00		
	Provision for loffelstein retaining blocks as per drawings	LI	m²	576		
Total Carri	ed Forward to Section Summary					

PARLIAMENTARY VILLAGE - ROADS, PLATFORMS AND STORMWATER

C11.5 FENCING

ITEM	DESCRIPTION			0555		C11.5 FENCING AMOUNT
		LIC	UNIT	QTY	RATE	(RAND)
C11.5	FENCING					
	Supply and erect new fencing material for new		ъ			
BC11.5.1	fences and for supplementing material in existing fences which are being repaired or removed:	LI	Prov Sum	1	R600,000.00	R600,000.0
CC11.5.2	Contractor's charges and profit added to the prime					
CC11.3.2	cost sum		%	10%		
			Prov			
BC11.5.3	Moving existing fences and gates:	LI	sum	1	R450,000.00	R450,000.00
BC11.5.4	Contractor's charges and profit added to the prime					
2011.0	cost sum		%	450000.00		
BC11.5.5	Dismantling existing fences and gates		Prov			
		LI	Sum			
	Contractor's charges and profit added to the prime					
	cost sum		%			
 Total Carri	led Forward to Section Summary	<u> </u>				

${\bf PARLIAMENTARY\ VILLAGE\ -\ ROADS,\ PLATFORMS\ AND\ STORMWATER}$

C11.6 ROAD SIGNS

ITEM	DESCRIPTION					AMOUNT
		LIC	UNIT	QTY	RATE	(RAND)
C11.6	ROAD SIGNS					
C11.6.1	Road signboards with painted or coloured semi- matt background. Symbols, lettering and borders in semi- matt black or in Class I retro- reflective material, where the sign board is constructed from:					
C11.6.1.3	Prepainted galvanized steel plate:					
	(a) Area 0 to 0,5 m ²	LI	m²	8.0		
C11.6.1.4	Prepainted galvanized steel profiles (200 mm high panels):					
	(c) Area exceeding 2,0 m² but not 10 m²	LI	m²	18.0		
C11.6.1.7	Regulatory signs, permanent:					
	(a) 600 mm diameter (signboard material, background and symbol retro-reflective class 1)	LI	No	6.0		
C11.6.1.9	Warning signs, permanent:					
	(c) 600 mm size (signboard material, background and symbol retro-reflective class 1)	LI	No	10.0		
C11.6.5	Excavation and backfilling for road sign supports (not applicable to kilometre posts):					
C11.6.5.1	Excavating soft material and backfilling	LI	m³	12.0		
C11.6.5.2	Excavating soft or intermediate material and backfilling using labour enhanced construction methods	LI	m³	12.0		
C11.6.5.3	Extra over item C11.6.5.1 and 2 for cement-treated soil backfill		m³	6.0		
Total Carri	ed Forward to Section Summary					

C11.7 ROAD MARKINGS AND ROAD STUDS

ITEM	DESCRIPTION			CII.7 KOAD I	A A A A A A A A A A A A A A A A A A A	D ROAD STUDS AMOUNT
		LIC	UNIT	QTY	RATE	(RAND)
C11.7.1	Road marking:					
C11.7.1.1	White lines broken or unbroken (Retro-reflective road-marking paint and 100mm thick lines)		km	0.5		
C11.7.1.2	Yellow lines broken or unbroken (Retro-reflective road-marking paint and 100mm thick lines)		km	0.5		
C11.7.1.4	White lettering and symbols (Retro-reflective road-marking paint)		m ²	12.0		
C11.7.1.5	Yellow lettering and symbols (Retro-reflective road-marking paint)		m ²			Rate Only
C11.7.1.7	Transverse lines, painted island and arrestor bed markings (any colour) (Retro-reflective road-marking paint)		m ²	2.0		
C11.7.7	Road studs					
C11.7.7.5	Provision of temporary and permanent road studs		Prov Sum			
C11.7.7.6	Handling cost, profit and all other charges of sub item C11.7.7.5		%			Rate Only
C11.7.8	Setting out and premarking the lines (excluding traffic island markings, lettering and symbols)		km			Rate Only
C11.7.9	Re-establishing the painting unit during the defects notification period and at other instances on instruction of the Engineer		No			Rate Only
Total Carri	ed Forward to Section Summary					

C11.9 FINISHING THE ROAD AND ROAD RESERVE AND TREATING OLD ROADS

ITEM	DESCRIPTION	I		RESERVE	TREATH	AMOUNT
		LIC	UNIT	QTY	RATE	(RAND)
C11.9	FINISHING THE ROAD AND ROAD					
	RESERVE AND TREATING OLD ROADS					
C11.9.1	Finishing the road and road reserve:					
C11.7.1	I misming the road and road reserve.					
C11.9.1.2	Single carriageway road		km	1.0		
C11.9.2	Treatment of old roads and temporary deviations:					
C11.9.2.1	Conventional construction methods		,	0.5		
C11.9.2.1	Conventional construction methods		km	0.5		
Total Carri	ed Forward to Section Summary			1	l	
	January					

C20.1 TESTING MATERIALS AND JUDGEMENT OF WORKMANSHIP

ITEM	DESCRIPTION C20.1 TES	11116	IVIAIEN	MALS AND JUD	GEMENT OF W	AMOUNT
		LIC	UNIT	QTY	RATE	(RAND)
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) Other special tests requested by the Engineer					
	(a) Other special tests requested by the Engineer		PC sum	1.0	R150,000.00	R150,000.00
	(i) Handling costs and profit in respect of item C20.1.2.2(a)		%	150,000.00		
	C20.1.2.2(a)		70	130,000.00		
Total Carri	 ed Forward to Section Summary	<u> </u>				
Total Carri	LU FOI WALU TO SECTION SUMMALY					

BULK SERVICES (EXTERNAL WORKS) FOR THE CONSTRUCTION OF 15 NEW MPL HOUSES AT PARLIAMENTARY VILLAGE SECTION SUMMARY

	ROADS, PLATFORMS AND STORMWATER SUMMARY	
SECTION 2	DESCRIPTION	AMOUNT (RAND)
2	C1.6 CLEARING AND GRUBBING	
2	C1.7 LOADING AND HAULING	
2	C2.1 GENERAL REQUIREMENTS AND TRENCHING FOR SERVICES	
2	C3.1 DRAINS	
2	C3.2 CULVERTS	
2	DRAINS	
2	C4.2 CUT	
2	C4.4 COMMERCIAL MATERIALS	
2	C4.5 IN-SITU FILL PLATFORMS	
2	C5.1 ROADBED	
2	C5.3 ROAD PAVEMENT LAYERS	
2	C5.4 STABILISATION	
2	C6.2 PAVING BLOCKS	
2	C11.1 PITCHING, STONEWORK, PROTECTION AGAINST EROSION	
2	C11.5 FENCING	
2	C11.6 ROAD SIGNS	
2	C11.7 ROAD MARKINGS AND ROAD STUDS	
2	C11.9 FINISHING THE ROAD AND ROAD RESERVE AND TREATING OLD ROADS	
2	C20.1 TESTING MATERIALS AND JUDGEMENT OF WORKMANSHIP	1
SUB-TOTAL	2: CARRIED TO FINAL SUMMARY	

SECTION 3:WATER INFRASTRUCTURE

WATER INFRASTURCTURE

W1.1 EARTHWORKS FOR PIPE TRENCHES

WI.1.1 Excavation using Plant: a) Excavate in all materials for trench depths up to 1200 mm, 600 mm wide. b) Extra-over items 1.2.1 for excavation in rock, (Provisional) d) Excavate and dispose of unsuitable material from trench bottom. WI.1.2 Excavation using Labour Intensive Methods: a) Extra-over items 1.2.1 for excavation in soft material using labour intensive methods. b) Extra-over items 1.2.4 for excavation in intermediate material using labour intensive methods. c) Extra-over Item 1.2.4 for excavation in intermediate material using labour intensive methods. b) Extra-over Item 1.2.6 for excavation in intermediate material using labour intensive methods. c) Extra-over Item 1.2.6 for excavation in intermediate material using labour intensive methods. b) Extra-over Item 1.2.6 for excavate and dispose of unsuitable materisl using labour intensive methods. b) Backfill and Compact trenches using labour intensive methods. b) Backfill and compact trenches using labour intensive methods. b) Backfill and compact trenches using labour intensive methods. b) Backfill and compact trenches using labour intensive methods. b) Backfill and compact trenches using labour intensive methods. b) Backfill and compact trenches using labour intensive methods. b) Backfill and compact trenches using labour intensive methods. b) Backfill and compact trenches using labour intensive methods. b) Backfill and compact trenches using labour intensive methods. b) Backfill and compact trenches using labour intensive methods. b) Backfill and compact trenches using labour intensive methods. b) Backfill and compact trenches using labour intensive methods. b) Backfill and compact trenches using labour intensive methods. b) Backfill and compact trenches using labour intensive methods. c) Extra-over lem 1.2.6 for excavation in m² 103.68 LIC m³ 11.0 LIC m³ 21.0 LIC m³ 4147.2 LIC m³ 4147.2 LIC m³ 4147.2 Department m² 100.68 Diametrial using labour intensive methods. b) Backfill material using labour intensive methods. b) Backfill material			1		WI.I EAKI		AMOUNT
W1.1.1 Excavation using Plant: a) Excavate in all materials for trench depths up to 1200 mm, 600 mm wide. b) Extra-over items 1.2.1 for excavation in intermediate material. c) Extra-over items 1.2.1 for excavation in rock. (Provisional) d) Excavate and dispose of unsuitable material from trench bottom. W1.1.2 Excavation using Labour Intensive Methods: a) Extra-over Item 1.2.1 for excavation in soft material using labour intensive methods. b) Extra-over Item 1.2.4 for excavation in intermediate material using labour intensive methods. c) Extra-over Item 1.2.6 for excavation in intermediate material using labour intensive methods. c) Extra-over Item 1.2.6 for excavate and dispose of unsuitable material using labour intensive methods. b) Extra-over Item 1.2.6 for excavate and dispose of unsuitable material using labour intensive methods. b) Backfill and Compaction: a) Backfill and compact trenches using labour intensive methods. b) Backfill and compact trenches using labour intensive methods. b) Backfill and compact trenches using labour intensive methods. b) Backfill and compact to 95% Mod. AASHTO density. W1.1.4 Overhaul: Overhaul in excess of the free-haul of 5.0 km. W1.1.5 Existing Services: expose and protect: Services that intersect a trench. W1.1.6 Finishing: Gravel M2 5184 m3 103.68 m3 1103.68 m3 1103.68 m3 1103.68 m4 1103.68 m5 1103.68 m6 1103.68 m7 1103.68 m7 1103.68 m8 1103.68 m9 1103.68 m1 1103.68 m1 1103.68 m3 1103.68 m	ITEM	DESCRIPTION	LIC	UNIT	QTY	RATE	
a) Exeavate in all materials for trench depths up to 1200 mm, 600 mm wide. b) Extra-over items 1.2.1 for exeavation in intermediate material. c) Extra-over items 1.2.1 for exeavation in rock. (Provisional) d) Exeavate and dispose of unsuitable material from trench bottom. WI.1.2 Exeavation using Labour Intensive Methods: a) Extra-over Item 1.2.1 for exeavation in soft material using labour intensive methods. b) Extra-over Item 1.2.4 for exeavation in intermediate material using labour intensive methods. c) Extra-over Item 1.2.6 for exeavation in intermediate material using labour intensive methods. c) Extra-over Item 1.2.6 for exeavation in intermediate material using labour intensive methods. d) Extra-over Item 1.2.6 for exeavation in intermediate material using labour intensive methods. d) Extra-over Item 1.2.6 for exeavation in intermediate material using labour intensive methods. d) Extra-over Item 1.2.6 for exeavation in intermediate material using labour intensive methods. d) Extra-over Item 1.2.6 for exeavation in intermediate material using labour intensive methods. d) Extra-over Item 1.2.6 for exeavation in intermediate material using labour intensive methods. d) Extra-over Item 1.2.6 for exeavation in intermediate material using labour intensive methods. d) Extra-over Item 1.2.6 for exeavation in intermediate material using labour intensive methods. d) Extra-over Item 1.2.6 for exeavation in intermediate material using labour intensive methods. d) Extra-over Item 1.2.6 for exeavation in intermediate material using labour intensive methods. d) Extra-over Item 1.2.6 for exeavation in intermediate material using labour intensive methods. d) Extra-over Item 1.2.6 for exeavation in intermediate material using labour intensive methods. d) Extra-over Item 1.2.6 for exeavation in intermediate material using labour intensive methods. d) Extra-over Item 1.2.6 for exeavation in intermediate material using labour intensive methods. d) Extra-over Item 1.2.6 for exeavation in intensive methods. d) Extra-over Item	W1.1	EARTHWORKS FOR PIPE TRENCHES					
a) Exeavate in all materials for trench depths up to 1200 mm, 600 mm wide. b) Extra-over items 1.2.1 for exeavation in intermediate material. c) Extra-over items 1.2.1 for exeavation in rock. (Provisional) d) Exeavate and dispose of unsuitable material from trench bottom. WI.1.2 Exeavation using Labour Intensive Methods: a) Extra-over Item 1.2.1 for exeavation in soft material using labour intensive methods. b) Extra-over Item 1.2.4 for exeavation in intermediate material using labour intensive methods. c) Extra-over Item 1.2.6 for exeavation in intermediate material using labour intensive methods. c) Extra-over Item 1.2.6 for exeavation in intermediate material using labour intensive methods. d) Extra-over Item 1.2.6 for exeavation in intermediate material using labour intensive methods. d) Extra-over Item 1.2.6 for exeavation in intermediate material using labour intensive methods. d) Extra-over Item 1.2.6 for exeavation in intermediate material using labour intensive methods. d) Extra-over Item 1.2.6 for exeavation in intermediate material using labour intensive methods. d) Extra-over Item 1.2.6 for exeavation in m³ 11.0 to m³ 11.0 t	******						
up to 1200 mm, 600 mm wide. b) Extra-over items 1.2.1 for excavation in intermediate material. c) Extra-over items 1.2.1 for excavation in rock. (Provisional) d) Excavate and dispose of unsuitable material from trench bottom. W1.12 Excavation using Labour Intensive Methods: a) Extra-over Item 1.2.4 for excavation in soft material using labour intensive methods. b) Extra-over Item 1.2.4 for excavation in intermediate material using labour intensive methods. c) Extra-over Item 1.2.6 for excavate and dispose of unsuitable material using labour intensive methods. W1.13 Backfill and Compact trenches using labour intensive methods. b) Backfill and compact trenches using labour intensive methods. b) Backfill road crosings using a commercial type G6 material compacted to 95% Mod. AASHTO density. W1.14 Overhaul: Overhaul in excess of the free-haul of 5.0 km. W1.15 Existing Services: expose and protect: Services that intersect a trench. W1.16 Finishing: Gravel M3 103.68 m3 103.68 m3 103.68 m3 11.0 LIC m3 311.0 LIC m3 4147.2 LIC m3 4147.2 LIC m3 4147.2 M3 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	W1.1.1						
b) Extra-over items 1.2.1 for excavation in intermediate material. c) Extra-over items 1.2.1 for excavation in rock. (Provisional) d) Excavate and dispose of unsuitable material from trench bottom. WI.1.2 Excavation using Labour Intensive Methods: a) Extra-over Item 1.2.1 for excavation in soft material using labour intensive methods. b) Extra-over Item 1.2.4 for excavation in intermediate material using labour intensive methods. c) Extra-over Item 1.2.6 for excavation in intermediate material using labour intensive methods. c) Extra-over Item 1.2.6 for excavation in intermediate material using labour intensive methods. c) Extra-over Item 1.2.6 for excavation in intermediate material using labour intensive methods. LIC m³ 311.0 LIC m³ 311.0 LIC m³ 4147.2 Backfill and Compaction: a)Backfill and compact trenches using labour intensive methods. b) Backfill road crosings using a commercial type G6 material compacted to 95% Mod. AASHTO density. WI.1.4 Overhaul: Overhaul in excess of the free-haul of 5.0 km. WI.1.5 Existing Services: expose and protect: Services that intersect a trench. WI.1.6 Finishing: Gravel May 103.68 m³ 103.68 m³ 103.68 m³ 103.68 m³ 207.36				m ³	5184		
e) Extra-over items 1.2.1 for exeavation in rock. (Provisional) d) Exeavate and dispose of unsuitable material from trench bottom. WI.1.2 Excavation using Labour Intensive Methods: a) Extra-over Item 1.2.1 for excavation in soft material using labour intensive methods. b) Extra-over Item 1.2.2 for excavation in intermediate material using labour intensive methods. c) Extra-over Item 1.2.6 for excavation in intermediate material using labour intensive methods. c) Extra-over Item 1.2.6 for excavation in intermediate material using labour intensive methods. c) Extra-over Item 1.2.6 for excavation in intermediate material using labour intensive methods. LIC m³ 311.0 LIC m³ 311.0 LIC m³ 4147.2 Backfill and Compaction: a)Backfill and compact trenches using labour intensive methods. b) Backfill road crosings using a commercial type G6 material compacted to 95% Mod. AASHTO density. WI.1.4 Overhaul: Overhaul in excess of the free-haul of 5.0 km. WI.1.5 Existing Services: expose and protect: Services that intersect a trench. WI.1.6 Finishing: Gravel May 103.68 m³ 103.68							
rock. (Provisional) d) Excavate and dispose of unsuitable material from trench bottom. W1.1.2 Excavation using Labour Intensive Methods: a) Extra-over Item 1.2.4 for excavation in soft material using labour intensive methods. b) Extra-over Item 1.2.4 for excavation in intermediate material using labour intensive methods. c) Extra-over Item 1.2.6 for excavate and dispose of unsuitable material using labour intensive methods. C) Extra-over Item 1.2.6 for excavate and dispose of unsuitable material using labour intensive methods. ULC m³ 311.0 LIC m³ 311.0 LIC m³ 4147.2 b) Backfill and Compact trenches using labour intensive methods. W1.1.3 Backfill and Compact trenches using labour intensive methods. b) Backfill and compact trenches using labour intensive methods. W1.1.4 Overhaul: Overhaul: Overhaul in excess of the free-haul of 5.0 km. W1.1.5 Existing Services: expose and protect: Services that intersect a trench. W1.1.6 Finishing: Gravel M1.1.7 Services in a dispose of unsuitable material more intensive methods. LIC m³ 1,555.2 LIC m³ 311.0 LIC m³ 207.36				m ³			Rate Only
(a) Excavate and dispose of unsuitable material from trench bottom. W1.1.2 Excavation using Labour Intensive Methods: a) Extra-over Item 1.2.1 for excavation in soft material using labour intensive methods. b) Extra-over Item 1.2.6 for excavation in intermediate material using labour intensive methods. c) Extra-over Item 1.2.6 for excavation in intermediate material using labour intensive methods. c) Extra-over Item 1.2.6 for excavate and dispose of unsuitable material using labour intensive methods. b) Backfill and Compaction: a) Backfill and Compaction: b) Backfill and compact trenches using labour intensive methods. b) Backfill and compact to 95% Mod. AASHTO density. W1.1.4 Overhaul: Overhaul: Overhaul in excess of the free-haul of 5.0 km. W1.1.5 Existing Services: expose and protect: Services that intersect a trench. W1.1.6 Finishing: Gravel Rate Only m³ 1.555.2 m³ 311.0 LIC m³ 4147.2 bm³ 4147.2 m³ 4147.2 m³ 4147.2 m³ 58320 m³-km 58320 m³-km 58320				m ³	103.68		
W1.1.2 Excavation using Labour Intensive Methods: a) Extra-over Item 1.2.1 for excavation in soft material using labour intensive methods. b) Extra-over Item 1.2.4 for excavation in intermediate material using labour intensive methods. c) Extra-over Item 1.2.6 for excavate and dispose of unsuitable material using labour intensive methods. W1.1.3 Backfill and Compaction: a)Backfill and compact trenches using labour intensive methods. b) Backfill and compacted trenches using labour intensive methods. b) Backfill and compacted to 95% Mod. AASHTO density. W1.1.4 Overhaul: Overhaul in excess of the free-haul of 5.0 km. W1.1.5 Existing Services: expose and protect: Services that intersect a trench. W1.1.6 Finishing: Gravel LIC m³ 1,555.2 LIC m³ 311.0 LIC m³ 4147.2 m3 207.36 W1.47.2 m3 207.36 W3 207.36 W3 207.36 W3 207.36 W3 207.36 W3 207.36							
a) Extra-over Item 1.2.1 for excavation in soft material using labour intensive methods. b) Extra-over Item 1.2.4 for excavation in intermediate material using labour intensive methods. c) Extra-over Item 1.2.6 for excavate and dispose of unsuitable materisl using labour intensive methods. W1.1.3 Backfill and Compaction: a)Backfill and compact trenches using labour intensive methods. b) Backfill and compact trenches using labour intensive methods. b) Backfill and compact trenches using labour intensive methods. b) Backfill and compact trenches using labour intensive methods. b) Backfill and compact trenches using labour intensive methods. b) Backfill and compact trenches using labour intensive methods. b) Backfill and compact trenches using labour intensive methods. b) Backfill and compact trenches using labour intensive methods. b) Backfill and compact trenches using labour intensive methods. b) Backfill and compact trenches using labour intensive methods. b) Backfill and compact trenches using labour intensive methods. b) Backfill and compact trenches using labour intensive methods. b) Backfill and compact trenches using labour intensive methods. b) Backfill and compact trenches using labour intensive methods. b) Backfill and compact trenches using labour intensive methods. b) Backfill and Compaction: a) Backfill and compact trenches using labour intensive methods. b) Backfill and Compaction: a) Backfill		from trench bottom.		m ³			Rate Only
a) Extra-over Item 1.2.1 for excavation in soft material using labour intensive methods. b) Extra-over Item 1.2.4 for excavation in intermediate material using labour intensive methods. c) Extra-over Item 1.2.6 for excavate and dispose of unsuitable materisl using labour intensive methods. W1.1.3 Backfill and Compaction: a)Backfill and compact trenches using labour intensive methods. b) Backfill and compact trenches using labour intensive methods. b) Backfill and compact trenches using labour intensive methods. b) Backfill and compact trenches using labour intensive methods. b) Backfill and compact trenches using labour intensive methods. b) Backfill and compact trenches using labour intensive methods. b) Backfill and compact trenches using labour intensive methods. b) Backfill and compact trenches using labour intensive methods. b) Backfill and compact trenches using labour intensive methods. b) Backfill and compact trenches using labour intensive methods. b) Backfill and compact trenches using labour intensive methods. b) Backfill and compact trenches using labour intensive methods. b) Backfill and compact trenches using labour intensive methods. b) Backfill and compact trenches using labour intensive methods. b) Backfill and compact trenches using labour intensive methods. b) Backfill and Compaction: a) Backfill and compact trenches using labour intensive methods. b) Backfill and Compaction: a) Backfill	W1 1 2	Everystian using Labour Intensive Methods					
material using labour intensive methods. b) Extra-over Item 1.2-4 for excavation in intermediate material using labour intensive methods. c) Extra-over Item 1.2-6 for excavate and dispose of unsuitable materisl using labour intensive methods. W1.1.3 Backfill and Compaction: a)Backfill and compact trenches using labour intensive methods. b) Backfill road crossings using a commercial type G6 material compacted to 95% Mod. AASHTO density. W1.1.4 Overhaul: Overhaul: Overhaul in excess of the free-haul of 5.0 km. W1.1.5 Existing Services: expose and protect: Services that intersect a trench. W1.1.6 Finishing: Gravel m1 1,555.2 LIC m3 11.0 LIC m3 4147.2 m3 207.36 W1.7.2 m3 207.36 W1.8 m3 207.36	W 1.1.2						
intermediate material using labour intensive methods. c) Extra-over Item 1.2.6 for excavate and dispose of unsuitable materisl using labour intensive methods. W1.1.3 Backfill and Compaction: a)Backfill and compact trenches using labour intensive methods. b) Backfill and crosings using a commercial type G6 material compacted to 95% Mod. AASHTO density. W1.1.4 Overhaul: Overhaul in excess of the free-haul of 5.0 km. W1.1.5 Existing Services: expose and protect: Services that intersect a trench. W1.1.6 Finishing: Gravel ILC m³ 155.5 LIC m³ 4147.2 m³ 207.36 No. 5			LIC	m	1,555.2		
methods. o) Extra-over Item 1.2.6 for excavate and dispose of unsuitable material using labour intensive methods. W1.1.3 Backfill and Compaction: a)Backfill and compact trenches using labour intensive methods. b) Backfill road crosings using a commercial type G6 material compacted to 95% Mod. AASHTO density. W1.1.4 Overhaul: Overhaul in excess of the free-haul of 5.0 km. W1.1.5 Existing Services: expose and protect: Services that intersect a trench. W1.1.6 Finishing: Gravel LIC m3 4147.2 M147.2 m3 207.36 M155.5 M167.5 Mm3 4147.2 m3 207.36 M17.6 Finishing: M18.7 Mm3 1036.8							
c) Extra-over Item 1.2.6 for excavate and dispose of unsuitable material using labour intensive methods. W1.1.3 Backfill and Compaction: a)Backfill and compact trenches using labour intensive methods. b) Backfill road crosings using a commercial type G6 material compacted to 95% Mod. AASHTO density. W1.1.4 Overhaul: Overhaul in excess of the free-haul of 5.0 km. W1.1.5 Existing Services: expose and protect: Services that intersect a trench. No. 5 W1.1.6 Finishing: Gravel m3 1036.8			LIC	m ³	311.0		
intensive methods. W1.1.3 Backfill and Compaction: a)Backfill and compact trenches using labour intensive methods. b) Backfill road crosings using a commercial type G6 material compacted to 95% Mod. AASHTO density. W1.1.4 Overhaul: Overhaul in excess of the free-haul of 5.0 km. W1.1.5 Existing Services: expose and protect: Services that intersect a trench. No. 5 W1.1.6 Finishing: Gravel LIC m3 4147.2 M3 207.36 M3 207.36 M3 207.36 M3 207.36 M3 1036.8					311.0		
W1.1.3 Backfill and Compaction: a)Backfill and compact trenches using labour intensive methods. b) Backfill road crosings using a commercial type G6 material compacted to 95% Mod. AASHTO density. W1.1.4 Overhaul: Overhaul in excess of the free-haul of 5.0 km. W1.1.5 Existing Services: expose and protect: Services that intersect a trench. W1.1.6 Finishing: Gravel M1.1.8 Gravel LIC m3 4147.2 m3 207.36 M3 207.36 m3 1036.8		= = = = = = = = = = = = = = = = = = = =		,			
a)Backfill and compact trenches using labour intensive methods. b) Backfill road crosings using a commercial type G6 material compacted to 95% Mod. AASHTO density. W1.1.4 Overhaul: Overhaul in excess of the free-haul of 5.0 km. W1.1.5 Existing Services: expose and protect: Services that intersect a trench. W1.1.6 Finishing: Gravel a) Backfill and compact trenches using labour intensive methods. LIC m3 4147.2 m3 207.36 w3 207.36 m3 km 58320 m3 km 58320 m3 lo36.8		intensive methods.	LIC	m	155.5		
a)Backfill and compact trenches using labour intensive methods. b) Backfill road crosings using a commercial type G6 material compacted to 95% Mod. AASHTO density. W1.1.4 Overhaul: Overhaul in excess of the free-haul of 5.0 km. W1.1.5 Existing Services: expose and protect: Services that intersect a trench. W1.1.6 Finishing: Gravel a) H147.2 m3 4147.2 m3 207.36 m3 207.36 m3 km 58320 m3 km 58320 m3 1036.8	W1.1.3	Backfill and Compaction:					
b) Backfill road crosings using a commercial type G6 material compacted to 95% Mod. AASHTO density. W1.1.4 Overhaul: Overhaul in excess of the free-haul of 5.0 km. W1.1.5 Existing Services: expose and protect: Services that intersect a trench. W1.1.6 Finishing: Gravel m3 207.36 m3-km 58320 m3-km 58320 m3-km 58320 m3 1036.8							
G6 material compacted to 95% Mod. AASHTO density. W1.1.4 Overhaul: Overhaul in excess of the free-haul of 5.0 km. W1.1.5 Existing Services: expose and protect: Services that intersect a trench. W1.1.6 Finishing: Gravel m3 207.36 m3-km 58320 No. 5			l	m3	4147.2		
density. W1.1.4 Overhaul: Overhaul in excess of the free-haul of 5.0 km. W1.1.5 Existing Services: expose and protect: Services that intersect a trench. W1.1.6 Finishing: Gravel m3 207.36 m3-km 58320 No. 5 m3 lo36.8							
Overhaul in excess of the free-haul of 5.0 km. W1.1.5 Existing Services: expose and protect: Services that intersect a trench. No. 5 W1.1.6 Finishing: Gravel m3 1036.8				m3	207.36		
Overhaul in excess of the free-haul of 5.0 km. W1.1.5 Existing Services: expose and protect: Services that intersect a trench. No. 5 W1.1.6 Finishing: Gravel m3 1036.8	W1 1 4	Overhand					
W1.1.5 Existing Services: expose and protect: Services that intersect a trench. W1.1.6 Finishing: Gravel m3 1036.8	W 1.1.4			m3 km	58320		
W1.1.6 Finishing: Gravel m3 1036.8		o vermual in excess of the free mail of 5.0 km.		III3-KIII	36320		
W1.1.6 Finishing: Gravel m3 1036.8	W1.1.5	Existing Services: expose and protect:					
Gravel m3 1036.8		Services that intersect a trench.		No.	5		
Gravel m3 1036.8							
	W1.1.6				10260		
Total Carried Forward To Summary		Gravei		m3	1036.8		
Total Carried Forward To Summary							
Total Carried Forward To Summary							
Total Carried Forward To Summary							
Total Carried Forward To Summary							
Total Carried Forward To Summary							
Total Carried Forward To Summary							
A VIIII CALLICAL IVI IVALA LV DAIMINALI		Total Carried Forward To Summary	<u> </u>				

WATER INFRASTURCTURE W1.2 PIPE BEDDING

			1	1	W	1.2 PIPE BEDDING
ITEM	DESCRIPTION	LIC	UNIT	QTY	RATE	AMOUNT (RAND)
W1.2	PIPE BEDDING					,
W1 2 1	D. Him form Town b Form of the					
W1.2.1	Bedding from Trench Excavations: (Bedding to be Class C for flexible pipes as					
	indicated in the contract drawings)					
	a) Provision of bedding from pipe trench					
	excavation within 1.0 km, using selected granular		m ³	1,944		
	material. b) Provision of bedding from pipe trench			1,944		
	excavation within 1.0 km, using selected fill		m ³			
	material.			388.8		
W1.2.2	Bedding from Trench Excavations:					
	(Bedding to be Class C for RIGID pipes as					
	indicated in the contract drawings)					
	a) Provision of bedding from pipe trench excavation within 1.0 km, using selected granular		m ³			
	material.			50.00		
	b) Provision of bedding from pipe trench					
	excavation within 1.0 km, using selected fill material.		m ³			
	material.					
W1.2.3	Imported Bedding Material:					
	(Bedding to be Class C for flexible pipes as					
	indicated in the contract drawings) a) Provision of bedding imported from designated					
	borrow pit using selected granular material.		m ³			
				972		
	b) Provision of bedding imported from designated borrow pit using selected fill material.		m ³			
	borrow pit using selected in material.		111	291.6		
W1.2.4	Imported Bedding Material:					
	(Bedding to be Class C for RIGID pipes as					
	indicated in the contract drawings)					
	a) Provision of bedding imported from designated borrow pit using selected granular material.		m ³			
	borrow pit using selected granular material.		"			Rate Only
	b) Provision of bedding imported from designated					
	borrow pit using selected fill material.		m ³			Rate Only
W1.2.5	Overhaul:					
W 1.2.3	a) Overhaul of material for bedding from trench					1
	excavations. Free-haul distance is 1.0 km.					
			m3-km	3,646		
Total Carr	ied Forward to Section Summary	<u> </u>			l	
	·					!

WATER INSTRUCTURE W1.3 MEDIUM PRESSURE PIPELINES AND ANCILLARIES

W1.3 W1.3.1	DESCRIPTION MEDIUM PRESSURE PIPELINES AND ANCILLARIES	LIC	UNIT	QTY	RATE	AMOUNT (RAND)
	MEDIUM PRESSURE PIPELINES AND ANCILLARIES					
W1.3.1						
W1.3.1						
	Supply, Lay and Bed uPVC Pipes Complete:					
	63mm HDPE medium pressure pipes - Class 12		m	305		
	63mm uPVC medium pressure pipes - Class 12		m	682		
	90mm uPVC medium pressure pipes - Class 12		m	366		
	110mm uPVC medium pressure pipes - Class 12		m	1,488		
	160 mm uPVC medium pressure pipes - Class 12		m	190		
W1.3.2	Fittings and Specials - uPVC Lyng Bends:					
	(Extra-over rate to Items 3.1.1 to 3.1.6.)					
	63 mm uPVC:					
	uPVC bends less than 25 degree angle.		No.	18		
	uPVC bends with 45 degree angle.		No.	7		
	uPVC bends with 90 degree angle.		No.	6		
	75 mm uPVC:					
	uPVC bends less than 25 degree angle.		No.	4		
	uPVC bends with 45 degree angle.		No.	6		
	uPVC bends with 90 degree angle.		No.	4		
	90 mm uPVC:					
	uPVC bends less than 25 degree angle.		No.	15		
	uPVC bends with 45 degree angle.		No.	12		
	uPVC bends with 90 degree angle.		No.	12		
	110 mm uPVC:					
	uPVC bends less than 22.5 degree angle.		No.	20		
	uPVC bends with 45 degree angle.		No.	10		
	uPVC bends with 90 degree angle.		No.	8		
	160 mm uPVC:					
	uPVC bends less than 22.5 degree angle.		No.	3		
	uPVC bends with 45 degree angle.		No.	2		
	uPVC bends with 90 degree angle.		No.	2		
W1.3.3	Specials and Fittings - Cast Iron Equal Tees:					
W 1.3.3	(Bitumen dipped and LYNG sockets on all sides all to					
	SABS 546 and SABS 966.)					
	75 mm dia.		No.	1		
	90 mm dia.		No.	1		
	110 mm dia.		No.	1		
	160 mm dia		No.	1		
W1.3.4	Specials and Fittings - Hydrant Tees:					
	(Cast iron hydrant tees, Bitumen dipped and LYNG					
	sockets to SABS 546 and SABS 966 with flanged branch,					
	80 mm dia, drilled to SABS 1123, Table 16.)					
	75 mm dia.		No.			
	90 mm dia.		No.	10		
	110 mm dia.		No.			
	160 mm dia		No.			
W1 2 5	Charials and Fittings Cost Iven C					
W1.3.5	Specials and Fittings - Cast Iron Scour Tees: (Cast iron scour tee, Bitumen dipped and LYNG sockets					
	to SABS 546 and SABS 966 with flanged branch, 100					
	mm dia, drilled to SABS 1123, Table 16.)					
	63 mm dia.		No.	6		
	90 mm dia.		No.	4		
	110mm dia.		No.	5		
	160mm dia.		No.	3		
Total Carr	ried Forward					

WATER INSTRUCTURE W1.3 MEDIUM PRESSURE PIPELINES AND ANCILLARIES

Brought Forward W1.3.6 Specials and Fittings - Cast Iron End Caps: 63 mm dia 110 mm dia. W1.3.7 Specials and Fittings - Cast Iron Reducers: (Bitumen dipped, spigot and socket and socketed cast iron reducers all to SABS 546 and SABS 966.) 160 mm x 110 mm dia. Specials and Fittings - Cast Iron Reducers: (Bitumen dipped, spigot and socket and socketed cast iron reducers all to SABS 546 and SABS 966.) 160 mm x 110 mm dia. [S] No. Specials and Fittings - Cast Iron Reducers: (Bitumen dipped and LYNG flanged to SABS 546 and SABS 966.) 125mm xi 10 mm dia. [S] No. Specials and Fittings - Isolating Valves: (Flanged RSV isolating valves. Valves to be non-rising spindles with cap top.) 3 mm dia. Class 12 110mm dia. Class 12 110mm dia. Class 12 110mm dia. Class 12 110mm dia. Class 12 Specials and Fittings - Socketed Valves: (Socket ends RSV isolating valves. Valves to be non-rising spindles with cap top.) 110mm dia. Class 16 160 mm dia. Class 16 200 mm dia. Class 16 No. Rate Only W1.3.11 Specials and Fittings - Air Valve: (Vent O' Mat SERIES RBX with screwed BSP male inlet, or similar. Complete with flange, barrel nipple, and 50 mm gate valve) 50 mm Air Valve W1.3.12 Extra-over Item 3.14.1 for depth increments of 250 mm. new connections to service reservoirs with flow		T	W1	MEDIU	M PRESSURE I	Trelines and	
W1.3.6 Specials and Fittings - Cast Iron End Caps: 63 mm dia 110 mm dia. 110 m	ITEM	DESCRIPTION	LIC	UNIT	QTY	RATE	AMOUNT (RAND)
Samm dia No. 4 No. 3 No. 2.0 No.	Brought Fo	orward					
Samm dia No. 4 No. 3 No. 2.0 No.							
90 mm dia 110 mm dia. 110 mm d	W1.3.6						
NI.3.7 Specials and Fittings - Cast Iron Reducers: (Bittumen dispeed, spigot and socket and socketed east iron reducers all to SABS 454 and SABS 966.) 150 mm x 110 mm dia. [8] 150 mm x 125mm dia. [8] No. Specials and Fittings(PN16) - Flang Adaptors: (Bittumen dispeed and LYNG flanged to SABS 546 and SABS 966 with flange drilled to SABS 1123, Table 16.) 125 mm dia. WI.3.9 Specials and Fittings - Isolating Valves: (Flanged RSV isolating valves. Valves to be non-rising spindles with cap top.) 63 mm dia. Class 12 No. 6.0 No. 2 WI.3.10 Specials and Fittings - Socketed Valves: (Socket ends RSV isolating valves. Valves to be non-rising spindles with cap top.) 110 mm dia. Class 12 Specials and Fittings - Socketed Valves: (Socket ends RSV isolating valves. Valves to be non-rising spindles with cap top.) 110 mm dia. Class 16 No. Specials and Fittings - Socketed Valves: (Socket ends RSV isolating valves. Valves to be non-rising spindles with cap top.) 110 mm dia. Class 16 No. No. Rate Only WI.3.11 Specials and Fittings - Air Valve: (Vent O' Mat SERIES RBX with screwed BSP male inlet, or similar. Complete with flange, barrel nipple, and 50 mm gate valve) 50 mm Air Valve Valve Chambers: (Vent O' Mat SERIES RBX with screwed BSP male inlet, or similar. Complete with flange, barrel nipple, and 50 mm gate valve) 50 mm Air Valve WI.3.12 Extra-over Item 3.14.1 for depth increments of 250 mm. No. 15.0 Extra-over Item 3.14.1 for depth increments of 250 mm. No. 1.0							
W1.3.7 Specials and Fittings - Cast Iron Reducers: (Bitumen dipped, spigot and socket and socketed cast iron reducers all to SABS 546 and SABS 96.) 150mm x 125mm dia. [S] No. Specials and Fittings(PN16) - Flang Adaptors: (Bitumen dipped and LYNG flanged to SABS 546 and SABS 966 with flange drilled to SABS 1123, Table 16.) 125mm dia. W1.3.9 Specials and Fittings - Isolating Valves: (Flanged RSV isolating valves. Valves to be non-rising spindles with cap top.) 35 mm dia. Class 12 15 mm dia. Class 12 110mm dia. Class 12 110mm dia. Class 12 100mm dia. Class 15 160 mm dia. Class 16 160 mm dia. Class 16 160 mm dia. Class 16 100 mm dia. Class 16 200 mm dia. Class 16 Specials and Fittings - Air Valve: (Vent Of Mat SERIES RBX with flange, barrel nipple, and 50 mm gate valve) 50 mm Air Valve W1.3.11 Specials and Fittings - Air Valve: (Vent Of Mat SERIES RBX with flange, barrel nipple, and 50 mm gate valve) 50 mm Air Valve W1.3.11 Can Series - Content of the Complete including execuation, materials, plant, labour and incidentals, as per detail drawings. Extra-over Item 3.14.1 for depth increments of 250 mm. new connections to service reservoirs with flow control hydraulic actuation valves 110mm 90mm No. 1.0 No. 1.0 No. 1.0 No. 1.0							
Bitumen dipped, spigot and socket and socketed cast iron reducers all to \$ABS 546 and \$ABS 966.) 160 mm x 110 mm dia. [8] No. Specials and Fittings (PN16) - Flang Adaptors: (Bitumen dipped and LYNG flanged to \$ABS 546 and \$ABS 966 with flange drilled to \$ABS 1123, Table 16.) 125 mm dia. Specials and Fittings - Isolating Valves: (Flanged RSV isolating valves. Valves to be non-rising spindles with cap top.) 63 mm dia. Class 12 100 mm dia. Class 12 110 mm dia. Class 12 No. Specials and Fittings - Socketed Valves: (Socket ends RSV isolating valves. Valves to be non-rising spindles with cap top.) 110 mm dia. Class 16 160 mm dia. Class 16 160 mm dia. Class 16 200 mm dia. Class 10 No. 3 Rate Only W1.3.11 Valve Chambers: Reinforced Concrete Valve chamber - 1200 mm x 3000 mm gate valve) Som mair Valve Reinforced Concrete Valve chamber - 1200 mm x 3000 mm x 1800 mm depth, complete including excavation, materials, plant, labour and incidentals, as per detail drawngs. Extra-over Item 3.14.1 for depth increments of 250 mm. new connections to service reservoirs with flow control hydraulic actuation valves No. 1.0 No. 1.0 No. 1.0 No. 1.0 No. 1.0 No. 1.0		110 mm dia.		NO.	2.0		
reducers all to SABS 546 and SABS 966.) 160 mm x 110 mm dia. [S] No. Specials and Fittings (PN16) - Flang Adaptors: (Bitumen dipped and LYNG flanged to SABS 546 and SABS 966 with flange drilled to SABS 1123, Table 16.) 125mm dia. W1.3.9 Specials and Fittings - Isolating Valves: (Flanged RSV isolating valves. Valves to be non-rising spindles with cap top.) 63 mm dia. Class 12 No. 2 110mm dia. Class 12 110mm dia. Class 12 No. 2 W1.3.10 Specials and Fittings - Socketed Valves: (Socket ends RSV isolating valves. Valves to be non-rising spindles with cap top.) 110mm dia. Class 16 160 mm dia. Class 16 200 mm dia. Class 16 200 mm dia. Class 16 No. Specials and Fittings - Air Valve: (Vent O' Mat SERIES RBX with screwed BSP male inlet, or similar. Complete with flange, barrel nipple, and 30 mm gate valve) 50 mm Air Valve (Vent O' Mat SERIES RBX with screwed BSP male inlet, or similar. Complete with flange, barrel nipple, and 30 mm gate valve) 50 mm Air Valve chamber: Reinforced Concrete Valve chamber - 1200 mm x 3000 mm x 1800 mm depth, complete including excavation, materials, plant, labour and incidentals, as per detail drawings. Extra-over Item 3.14.1 for depth increments of 250 mm. new connections to service reservoirs with flow control by draulic actuation valves 110mm 90mm No. 1.0 No. 1.0 No. 1.0 No. 1.0	W1.3.7	Specials and Fittings - Cast Iron Reducers:					
160 mm x 110 mm dia. [S] 150mm x 125mm dia. [S] No. No. No. Rate Only		(Bitumen dipped, spigot and socket and socketed cast iron					
Sopecials and Fittings (PN16) - Flang Adaptors: (Bitumen dipped and LYNG flanged to SABS 546 and SABS 966 with flange drilled to SABS 1123, Table 16.) 125mm dia.		reducers all to SABS 546 and SABS 966.)					
W1.3.8 Specials and Fittings (PN16) - Flang Adaptors: (Bitumen dipped and LYNG flanged to SABS 546 and SABS 966 with flange drilled to SABS 1123, Table 16.) 125mm dia. W1.3.9 Specials and Fittings - Isolating Valves: (Flanged RSV isolating valves. Valves to be non-rising spindles with cap top.) 63 mm dia. Class 12 75 mm dia. Class 12 110mm dia. Class 12 No. 6.0 No. 2 W1.3.10 Specials and Fittings - Socketed Valves: (Socket ends RSV isolating valves. Valves to be non-rising spindles with cap top.) 110mm dia. Class 16 No. 0 Rate Only W1.3.11 Specials and Fittings - Air Valve: (Vent Of Mat SERIES RBX with screwed BSP male inlet, or similar. Complete with flange, barrel ripple, and 50 mm gate valve) 50 mm Air Valve W1.3.12 Valve Chambers: Reinforced Concrete Valve chamber - 1200 mm x 3000 mm x 1800 mm depth, complete including excavation, materials, plant, labour and incidentals, as per detail drawings. Extra-over Item 3.14.1 for depth increments of 250 mm. new connections to service reservoirs with flow control hydraulic actuation valves 110mm No. 1.0 No. 1.0 No. 1.0 No. 1.0							Rate Only
(Bitumen dipped and LYNG flanged to SABS 546 and SABS 966 with flange drilled to SABS 1123, Table 16.) 125mm dia. Specials and Fittings - Isolating Valves: (Flanged RSV isolating valves. Valves to be non-rising spindles with cap top.) 63 mm dia. Class 12 75 mm dia. Class 12 10mm dia. Class 16 100 mm dia. Class 10 100 mm dia. Cla		150mm x 125mm dia. [S]		No.			Rate Only
SABS 966 with flange drilled to SABS 1123, Table 16.) 125mm dia. W1.3.9 Specials and Fittings - Isolating Valves: ((Flanged RSV isolating valves. Valves to be non-rising spindles with cap top.) 63 mm dia. Class 12 110mm dia. Class 12 110mm dia. Class 12 110mm dia. Class 12 10mm dia. Class 12 10mm dia. Class 12 10mm dia. Class 16 10mm dia. Class 10 10	W1.3.8	Specials and Fittings(PN16) - Flang Adaptors:					
SABS 966 with flange drilled to SABS 1123, Table 16.) 125mm dia. W1.3.9 Specials and Fittings - Isolating Valves: ((Flanged RSV isolating valves. Valves to be non-rising spindles with cap top.) 63 mm dia. Class 12 110mm dia. Class 12 110mm dia. Class 12 110mm dia. Class 12 10mm dia. Class 12 10mm dia. Class 12 10mm dia. Class 16 10mm dia. Class 10 10		(Bitumen dipped and LYNG flanged to SABS 546 and					
W1.3.9 Specials and Fittings - Isolating Valves: (Flanged RSV isolating valves. Valves to be non-rising spindles with cap top.) 63 mm dia. Class 12 75 mm dia. Class 12 110mm dia. Class 12 110mm dia. Class 12 110mm dia. Class 12 No. 6.0 No. 2 W1.3.10 Specials and Fittings - Socketed Valves: (Socket ends RSV isolating valves. Valves to be non-rising spindles with cap top.) 110mm dia. Class 16 160 mm dia. Class 16 No. Rate Only W1.3.11 Specials and Fittings - Air Valve: (Vent O' Mat SERIES RBX with screwed BSP male inlet, or similar. Complete with flange, barrel nipple, and 50 mm gate valve) 50 mm Air Valve Valve Chambers: Reinforced Concrete Valve chamber - 1200 mm x 3000 mm x 1800 mm depth, complete including excavation, materials, plant, labour and incidentals, as per detail drawings. Extra-over Item 3.14.1 for depth increments of 250 mm. No. 15.0 Extra-over Item 3.14.1 for depth increments of 250 mm. No. 1.0		1					
Flanged RSV isolating valves. Valves to be non-rising spindles with cap top.)		125mm dia.		No.	4.0		
Flanged RSV isolating valves. Valves to be non-rising spindles with cap top.)							
Flanged RSV isolating valves. Valves to be non-rising spindles with cap top.)							
spindles with cap top.) 63 mm dia. Class 12 75 mm dia. Class 12 110mm dia. Class 12 110mm dia. Class 12 110mm dia. Class 12 100mm dia. Class 12 No. 6.0 No. 2 No. 6.0 No. 2 No. 6.0 No. 2 No. 2 No. 6.0 No. 10mm dia. Class 16 No. Rate Only 10mm dia. Class 16 No. Rate Only 10mm dia. Class 16 No. No. Rate Only 10mm dia. Class 16 No. No. No. No. No. Rate Only 10mm dia. Class 16 No.	W1.3.9	Specials and Fittings - Isolating Valves:					
63 mm dia. Class 12 75 mm dia. Class 12 110mm dia. Class 12 110mm dia. Class 12 160mm dia. Class 12 110mm dia. Class 12 110mm dia. Class 12 No. 6.0 No. 2 W1.3.10 Specials and Fittings - Socketed Valves: (Socket ends RSV isolating valves. Valves to be nonrising spindles with cap top.) 110mm dia. Class 16 160 mm dia. Class 16 No. No. Rate Only 110mm dia. Class 16 No. No. No. Rate Only 110mm dia. Class 16 No. No. No. 15.0 W1.3.11 Valve Chambers: Reinforced Concrete Valve chamber - 1200 mm x 3000 mm x 1800 mm depth, complete including excavation, materials, plant, labour and incidentals, as per detail drawings. Extra-over Item 3.14.1 for depth increments of 250 mm. No. 15.0 No. 15.0 No. 1.0 No. 1.0 No. 1.0 No. 1.0 No. 1.0		1					
75 mm dia. Class 12 110mm dia. Class 12 No. 2 No. 6.0 No. 2 No. 6.0 No. 2 No. 6.0 No. 2 W1.3.10 Specials and Fittings - Socketed Valves: (Socket ends RSV isolating valves. Valves to be non-rising spindles with cap top.) 110mm dia. Class 16 100 mm dia. Class 16 No. No. Rate Only No. No. Rate Only No. No. No. No. Rate Only No.		1 1/		NT.	8.0		
110mm dia. Class 12 160mm dia. Class 12 No. No. 2 Specials and Fittings - Socketed Valves: (Socket ends RSV isolating valves. Valves to be non- rising spindles with cap top.) 110mm dia. Class 16 No. No. No. Rate Only No.							
M1.3.10 Specials and Fittings - Socketed Valves: (Socket ends RSV isolating valves. Valves to be non- rising spindles with cap top.) 110mm dia. Class 16 160 mm dia. Class 16 200 mm dia. Class 16 No. Specials and Fittings - Air Valve: (Vent O' Mat SERIES RBX with screwed BSP male inlet, or similar. Complete with flange, barrel nipple, and 50 mm gate valve) 50 mm Air Valve W1.3.12 Valve Chambers: Reinforced Concrete Valve chamber - 1200 mm x 3000 mm x 1800 mm depth, complete including excavation, materials, plant, labour and incidentals, as per detail drawings. Extra-over Item 3.14.1 for depth increments of 250 mm. No. Extra-over Item 3.14.1 for depth increments of 250 mm. new connections to service reservoirs with flow control hydraulic actuation valves 110mm 90mm No. 1.0 No. 1.0 No. 1.0							
W1.3.10 Specials and Fittings - Socketed Valves: (Socket ends RSV isolating valves. Valves to be non-rising spindles with cap top.) 110mm dia. Class 16 160 mm dia. Class 16 200 mm dia. Class 16 No. Specials and Fittings - Air Valve: (Vent O' Mat SERIES RBX with screwed BSP male inlet, or similar. Complete with flange, barrel nipple, and 50 mm gate valve) 50 mm Air Valve W1.3.12 Valve Chambers: Reinforced Concrete Valve chamber - 1200 mm x 3000 mm x 1800 mm depth, complete including excavation, materials, plant, labour and incidentals, as per detail drawings. Extra-over Item 3.14.1 for depth increments of 250 mm. No. 15.0 Extra-over Item 3.14.1 for depth increments of 250 mm. No. 15.0							
(Socket ends RSV isolating valves. Valves to be non-rising spindles with cap top.) 110mm dia. Class 16 160 mm dia. Class 16 200 mm dia. Class 16 No. Specials and Fittings - Air Valve: (Vent O' Mat SERIES RBX with screwed BSP male inlet, or similar. Complete with flange, barrel nipple, and 50 mm gate valve) 50 mm Air Valve W1.3.12 Valve Chambers: Reinforced Concrete Valve chamber - 1200 mm x 3000 mm x 1800 mm depth, complete including excavation, materials, plant, labour and incidentals, as per detail drawings. Extra-over Item 3.14.1 for depth increments of 250 mm. No. 15.0 Extra-over Item 3.14.1 for depth increments of 250 mm. No. 110mm 90mm 110mm 90mm 110mm 90mm 110mm 90mm 110mm 110		120011111111111111111111111111111111111		1101	_		
rising spindles with cap top.) 110mm dia. Class 16 160 mm dia. Class 16 200 mm dia. Class 16 No. No. Specials and Fittings - Air Valve: (Vent O' Mat SERIES RBX with screwed BSP male inlet, or similar. Complete with flange, barrel nipple, and 50 mm gate valve) 50 mm Air Valve Valve Chambers: Reinforced Concrete Valve chamber - 1200 mm x 3000 mm x 1800 mm depth, complete including excavation, materials, plant, labour and incidentals, as per detail drawings. Extra-over Item 3.14.1 for depth increments of 250 mm. No. 15.0 Extra-over Item 3.14.1 for depth increments of 250 mm. No. 110mm 90mm 63mm No. 1.0 No. 1.0	W1.3.10	Specials and Fittings - Socketed Valves:					
110mm dia. Class 16 160 mm dia. Class 16 200 mm dia. Class 16 No.							
160 mm dia. Class 16 200 mm dia. Class 16 No. Specials and Fittings - Air Valve: (Vent O' Mat SERIES RBX with screwed BSP male inlet, or similar. Complete with flange, barrel nipple, and 50 mm gate valve) 50 mm Air Valve No. 3 Rate Only W13.12 Valve Chambers: Reinforced Concrete Valve chamber - 1200 mm x 3000 mm x 1800 mm depth, complete including excavation, materials, plant, labour and incidentals, as per detail drawings. Extra-over Item 3.14.1 for depth increments of 250 mm. No. Extra-over Item 3.14.1 for depth increments of 250 mm. No. 15.0 No. 15.0 No. 15.0 No. 15.0 No. 1.0 No. 1.0 No. 1.0							
200 mm dia. Class 16 W1.3.11 Specials and Fittings - Air Valve: (Vent O' Mat SERIES RBX with screwed BSP male inlet, or similar. Complete with flange, barrel nipple, and 50 mm gate valve) 50 mm Air Valve No. 3 Rate Only W1.3.12 Valve Chambers: Reinforced Concrete Valve chamber - 1200 mm x 3000 mm x 1800 mm depth, complete including excavation, materials, plant, labour and incidentals, as per detail drawings. Extra-over Item 3.14.1 for depth increments of 250 mm. No. 15.0 Extra-over Item 3.14.1 for depth increments of 250 mm. No. 1.0 No. 1.0 No. 1.0 No. 1.0 No. 1.0 No. 1.0							Rate Only
W1.3.11 Specials and Fittings - Air Valve: (Vent O' Mat SERIES RBX with screwed BSP male inlet, or similar. Complete with flange, barrel nipple, and 50 mm gate valve) 50 mm Air Valve No. 3 Rate Only W13.12 Valve Chambers: Reinforced Concrete Valve chamber - 1200 mm x 3000 mm x 1800 mm depth, complete including excavation, materials, plant, labour and incidentals, as per detail drawings. Extra-over Item 3.14.1 for depth increments of 250 mm. No. 15.0 No. 2 No. 15.0 No. 1.0							1
(Vent O' Mat SERIES RBX with screwed BSP male inlet, or similar. Complete with flange, barrel nipple, and 50 mm gate valve) 50 mm Air Valve No. 3 Rate Only W13.12 Valve Chambers: Reinforced Concrete Valve chamber - 1200 mm x 3000 mm x 1800 mm depth, complete including excavation, materials, plant, labour and incidentals, as per detail drawings. Extra-over Item 3.14.1 for depth increments of 250 mm. No. 2 new connections to service reservoirs with flow control hydraulic actuation valves 110mm 90mm 63mm No. 1.0 No. 1.0		200 mm dia. Class 16		No.			Rate Only
(Vent O' Mat SERIES RBX with screwed BSP male inlet, or similar. Complete with flange, barrel nipple, and 50 mm gate valve) 50 mm Air Valve No. 3 Rate Only W13.12 Valve Chambers: Reinforced Concrete Valve chamber - 1200 mm x 3000 mm x 1800 mm depth, complete including excavation, materials, plant, labour and incidentals, as per detail drawings. Extra-over Item 3.14.1 for depth increments of 250 mm. No. 2 new connections to service reservoirs with flow control hydraulic actuation valves 110mm 90mm 63mm No. 1.0 No. 1.0	W1.3.11	Specials and Fittings - Air Valve:					
or similar. Complete with flange, barrel nipple, and 50 mm gate valve) 50 mm Air Valve No. 3 Rate Only W13.12 Valve Chambers: Reinforced Concrete Valve chamber - 1200 mm x 3000 mm x 1800 mm depth, complete including excavation, materials, plant, labour and incidentals, as per detail drawings. Extra-over Item 3.14.1 for depth increments of 250 mm. No. 2 new connections to service reservoirs with flow control hydraulic actuation valves 110mm 90mm 63mm No. 1.0 No. 1.0		•					
W13.12 Valve Chambers: Reinforced Concrete Valve chamber - 1200 mm x 3000 mm x 1800 mm depth, complete including excavation, materials, plant, labour and incidentals, as per detail drawings. Extra-over Item 3.14.1 for depth increments of 250 mm. No. 15.0 No. 2 No. 15.0 No. 15.0 No. 15.0 No. 1.0 No. 1.0 No. 1.0 No. 1.0 No. 1.0 No. 1.0		I'					
W1.3.12 Valve Chambers: Reinforced Concrete Valve chamber - 1200 mm x 3000 mm x 1800 mm depth, complete including excavation, materials, plant, labour and incidentals, as per detail drawings. Extra-over Item 3.14.1 for depth increments of 250 mm. No. 2 new connections to service reservoirs with flow control hydraulic actuation valves 110mm No. 1.0 90mm No. 1.0 No. 1.0		9					
Reinforced Concrete Valve chamber - 1200 mm x 3000 mm x 1800 mm depth, complete including excavation, materials, plant, labour and incidentals, as per detail drawings. Extra-over Item 3.14.1 for depth increments of 250 mm. No. 2 new connections to service reservoirs with flow control hydraulic actuation valves 110mm No. 1.0 90mm No. 1.0 No. 1.0 No. 1.0		50 mm Air Valve		No.	3		Rate Only
Reinforced Concrete Valve chamber - 1200 mm x 3000 mm x 1800 mm depth, complete including excavation, materials, plant, labour and incidentals, as per detail drawings. Extra-over Item 3.14.1 for depth increments of 250 mm. No. 2 new connections to service reservoirs with flow control hydraulic actuation valves 110mm No. 1.0 90mm No. 1.0 No. 1.0 No. 1.0	W13.12	Valve Chambers:					
materials, plant, labour and incidentals, as per detail drawings. Extra-over Item 3.14.1 for depth increments of 250 mm. No. 2 new connections to service reservoirs with flow control hydraulic actuation valves 110mm No. 1.0 90mm No. 1 63mm No. 1.0							
drawings. Extra-over Item 3.14.1 for depth increments of 250 mm. No. 2 new connections to service reservoirs with flow control hydraulic actuation valves 110mm 90mm No. 1.0 No. 1.0 No. 1.0 No. 1.0							
Extra-over Item 3.14.1 for depth increments of 250 mm. No. 2 new connections to service reservoirs with flow control hydraulic actuation valves 110mm 90mm No. 1.0 No. 1 No. 1.0 No. 1.0		1					
new connections to service reservoirs with flow control hydraulic actuation valves 110mm 90mm No. 1.0 No. 1 63mm No. 1.0		drawings.		No.	15.0		
Value Control hydraulic actuation valves		Extra-over Item 3.14.1 for depth increments of 250 mm.		No.	2		
90mm 63mm No. 1 No. 1.0	W1.3.13						
63mm No. 1.0				No.	1.0		
		90mm		No.	1		
Total Carried Forward		63mm		No.	1.0		
Total Carried Forward							
	Total Carr	ied Forward					

WATER INSTRUCTURE
W1.3 MEDIUM PRESSURE PIPELINES AND ANCILLARIES

		W1.,	3 MEDIU	M PRESSURE	PIPELINES AND	ANCILLARIES AMOUNT
ITEM	DESCRIPTION	LIC	UNIT	QTY	RATE	(RAND)
Brought Fo	orward					
W1.3.14	Hydraulic Pipe Testing:					
	Hydraulic Pipe Testing irrespective of Pipe Size		sum	1.0		
W1.3.15	Disinfecting Pipe Works.					
	Disinfecting Pipeworks irrespective of Pipe Size		sum	1		
W1.3.16	Thrust Blocks:					
W 1.5.10	Excavation.		m3	15.0		
	Formwork.		m2	20		
	Concrete. [Class 20/19 MPa]		m3	5.0		
W1.3.17	Pipe Works Ancillaries:					
	550 mm x 550 mm Fabricated manhole cover with frame, galvanised.		No.	12		
	Access ladder - 304 SS, galvanised.		No.	12.0		
	Concrete pipe line markers as per details.		No.	45		
W1.3.18	Supply, Lay and Bed Ductile Iron Pipes (PN16)					
W1.3.18	Complete: 400 mm Diameter		m			Rate Only
	450 mm Diameter		m			Rate Only
						1
W1.3.19	Concrete works					
	Install 100mm thick, Grade 20 reinforced concrete (mesh					
	s193) on upper level of pipe trenches		m3	15.0		
Total Carri	ied Forward to Section Summary	•	•		•	

WATER INSTRUCTURE W1.4 BOREHOLE

					W	.4 BOREHOLE
ITEM	DESCRIPTION	LIC	UNIT	QTY	RATE	AMOUNT (RAND)
W1.4	BOREHOLE	1	01111	V11	Turi E	(10.11.15)
W1.4.1	Geophysics studies, Drilling and equipping of		Prov			
	borehole with pump and all fittings.		Sum	1	R250,000.00	R250,000.00
	Purification Plant for Borehole 1 to change water					
	classification from class 2 to class 1 water quality		Prov			
			Sum	1	R200,000.00	R200,000.00
	Overheads, charges and profit on Item above		%	R450,000.00		
	Overheaus, charges and profit on hem above		/0	K430,000.00		
Total Carr	ied Forward to Section Summary					

WATER INSTRUCTURE W1.5 STEEL STRUCTURE STORAGE TANK

******	Programme 2.1	W1.5 STEEL STRUCTURE STORAGE TA								
ITEM	DESCRIPTION	110	LINUT	OTW	DATE	AMOUNT				
W1.5	STEEL STRUCTURE STORAGE TANK	LIC	UNIT	QTY	RATE	(RAND)				
W1.5.1	Supply, Deliver, Install, and Commission the following steel structure tank with approximate dimensions and minimum supply volume required, including all inlets 63mm,90mm, and 110mm diameter steel pipes, and outlet pipe with outlet pipes of 110mm diameter in size. Tank to be corrosion protected according to SANS 121:									
	Combined domestic and Fire structural steel tank with minimum supply capacity of 500kl approximately (17,08m x 12,2m x 2,44m) LxWxH		Prov Sum	1	3000000	R3,000,000.00				
	Overheads, charges and profit on Item above		%	3000000						
Total Carr	ied Forward to Section Summary	<u> </u>								

	WATER INSTRUCTURE					
	W1.6 PUMP HOUSE					
ITEM	DESCRIPTION	LIC	UNIT	QTY	RATE	AMOUNT (RAND)
W1.6	DOMESTIC, FIRE PRESSURE PUMP AND			4		(10.1.1.2)
	DOMESTIC, THE TREESCRET CHE IN .					
	Construction of a domestic, fire pressure					
	pump and purification plant housing in					
	accodance with design specification					
			Prov Sum	1	260000	R260,000.00
	Overheads, charges and profit on Item above		%	260000		
Total Carr	ied Forward to Section Summary		1	1		
i otai Cari	icu r oi waru to section summary					

	WATER INFRASTRUCTURE SUMMARY				
SECTION 3	DESCRIPTION	AMOUNT (RAND)			
3	W1.1 EARTHWORKS FOR PIPE TRENCHES				
3	W1.2 PIPE BEDDING				
3	W1.3 MEDIUM PRESSURE PIPELINES AND ANCILLARIES				
3	W1.4 BOREHOLE				
3	W1 5 STEEL STRUCTURE STORAGE TANK -500KL				
3	W1,6 PUMP HOUSE				
SUB-TOTAL 3	SUB-TOTAL 3: CARRIED TO FINAL SUMMARY				

SECTION 4 SEWERAGE INSTRASTURCTURE

SEWER INFRASTURCTURE

ITEM	DESCRIPTION	LIC	UNIT	QTY	RATE	AMOUNT (RAND)
W1.5	SEWER INFRASTURCTURE					
	PRIME COST ITEMS					
	Acceptance control testing of sewers and concrete works where ordered		P.C.	1.00	R30,000.00	R30,000.00
	Overheads, charges and profit on Item above		%	30,000.00		
	CLEAR AND GRUB					
	a. Pipeline route - 3 m wide		m	720.00		
	REMOVE & GRUB LARGE TREES AND TREE STUMPS OF GIRTH					
	over 1 m and up to 2 m		no	5.00		
	over 2 m		no	1.00		
	Remove and reinstate fences where required irrespective of height					
	Mesh and barbed wire fences		m	150.00		
	Pallisade, brick or concrete panel type		m	100.00		
	Maintain roads during construction period		Sum	1.00		
	FINISHING					
	Reinstate road surface complete with all courses using manual techniques					
	Gravel surface		m ²	250.00		
	Tarred/paved surface (Prov)		m ²	10.00		
	EARTHWORKS (PIPE TRENCHES)					
	EXCAVATION (including stockpiling suitable for backfilling)					
	Excavate in all materials for trenches, backfill and compact, including disposal of surplus unsuitable material within the freehaul distance for pipes as detailed in drawings					
	Up to 315mm diameter for depths					
	0,0m to 1,0,		m	1,080.00		
	1,0m to 2,0m 2,0m to 3,0m		m m	756.00 378.00		
	2,0m to 3,0m		III	378.00		
	extra over Items C3.1.1 to C3.1.4 for excavation to waste					
	in hard rock material (provisional)		m ³	405.00		
	in intermediate excavation (provisional)		m ³	203.00		
	excavate to waste unsuitable soft material from trench bottom		m ³	338.00		
	excavate by hand in soft material to expose existing services		m ³	338.00		
	excavate and backfill by hand in restricted areas		m ³	169.00		
	shoring of trenches where instructed by the engineer		m	200.00		
	compaction in road reserves (where ordered by engineer)		m ³	400.00		
Total Carr	led Forward	_				

EM	DESCRIPTION					FRASTURCTU AMOUNT
EIVI	DESCRIPTION	LIC	UNIT	QTY	RATE	(RAND)
ght Fo	rward				'	
	extra over item C3.1 for existing services that intersect or adjoin services					
	end over help con tel ending services and intersect of dayon services					
	Services that intersect a trench					
	(a) under ground cables		No	10.00		
	(b) overhead cables		No	10.00		
	(c) water mains		No	20.00		
	(d) sewer mains		No	5.00		
	(e) stormwater pipes		No	10.00		
	Services that adjoin a trench					
	(a) under ground cables		No	5.00		
	(b) overhead cables		No	5.00		
	(c) water mains		No	10.00		
	(d) sewer mains		No	5.00		
	(e) stormwater pipes		No	5.00		
			İ			
	IMPORT BACKFILL MATERIALS FROM DESIGNATED BORROW					
	AREAS					
	Designated borrow pit within 5km range free haul		m ³	1,350.00		
	extra over C3.10.1 for overhaul beyond 5km		m³km	1,350.00		
	CENTEDO					
	SEWERS					
	SUPPLY, HANDLE, BED (flexible pipe bedding), LAY, JOINT and					
	TEST 160 mm nb, uPVC ,Class 34 (heavy duty) solid wall		m	720.00		
	PIPE SPECIALS AND FITTINGS					
	SPECIALS AND FITTINGS (complete with rubber rings and sockets)					
	SUPPLY, HANDLE, BED, LAY, JOINT, TEST uPVC FITTINGS to					
	SANS 791					
	uPVC pipe fittings to SABS 791 (buried)					
	a) 160 mm Ø x 90deg, plain ended bend		No	15.00		
	b) 160 mm Ø x 45deg, plain junction		No	12.00		
	c) 160 mm Ø x 45deg, plain ended bend		No	9.00		
	d) 160 mm Ø x 45deg , rodding eye		No	9.00		
	e) 160 mm Ø x 45deg, access right junction (Prov)		No	11.00		
	f) 160 mm Ø x 45deg, access left junction (Prov)		No	14.00		
	g) 160 mm Ø x 45deg double access junction (Prov)		No	12.00		
	h) 160 mm Ø x 45deg double junction (Prov)		No	10.00		
	MANHOLES					
	Construct Precact Concrete Manholes (1.0m ND) complete with cover slab and concrete lid					
	0,0m - 1,5m		No	10.00		
	1,5m - 2,5m		No	2.00		
	2,5m - 3,5m 3,5m - 4,5m		No No	3.00 1.00		
	- ,5m		110	1.00		
	Construct Precact Concrete Manholes (1.5m ND) complete with cover slab					
	and concrete lid for deep manholes (over 3.0m) where instructed (Prov)		<u>, </u>			
		1	No	5.00		

SEWER INFRASTURCTURE

Brought Forward						SEWER IN	FRASTURCTURE
Supply and Install HDPE coated stepirons including caulking a) 200 mm long x 160mm wide Concrete bases and benching Class 20/19 concrete base cast on levelled surface minimum 100mm thick Class 20/19 concrete benching including chamelling with steel float finish Class 20/19 concrete benching including schamelling with steel float finish Class 20/19 concrete in mass concrete where instructed Miscellaneous Manhole Works Breaking into live sewer and building new manhole Lovering or rasing cristing manholes BEDDING (PIPES) FROM TRENCH EXCAVATION selected granular material for bedding and cradle selected fill material SUPPLY ONLY OF BEDDING MATERIAL BY IMPORTING FROM BORROW PIT selected granular material for bedding and cradle OVERHAUL OF MATERIAL OR BEDDING overhaul Provision of bedding stone (19mmND) by importation from commercial source Opening up and closing down of designated borrow pits (provisional) MANHOLE EXCAVATION Extra over treach executation for executating and back filling in all material for manhole rings including working space to pipe invert For manhole rings including working space to pipe invert For manhole rings including working space to pipe invert For manhole rings including working space to pipe invert For manhole rings including working space to pipe invert For manhole rings including working space to pipe invert For manhole rings including working space to pipe invert For manhole rings including working space to pipe invert For manhole rings including working space to pipe invert For manhole rings including working space to pipe invert For manhole rings including working space to pipe invert For manhole rings including working space to pipe invert For manhole rings including to sort and pipe invert For manhole rings including working space to pipe invert For manhole rings including working space to pipe invert For manhole rings including working space to pipe invert For manhole rings including working space to pipe invert For manhole rings including working sp	ITEM	DESCRIPTION	LIC	UNIT	QTY	RATE	AMOUNT (RAND)
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for manhole rings including working space to pipe invert For manhole rings including working space to pipe invert Base excavation below pipe invert MISCELLANEOUS PC sum for laying sewers in river bed including dealing with live sewers Class 25/19 concrete encasing encasing for sewer pipe in C10.1 above Y10 reinforcing where ordered by Engineer Allow for diversion of stormwater drains from sewer alignment Allow for other material and costs not covered in the sewer items m³ 120.00 m³ 3.00 m³ 8.00 t 1.00 m³ 100.00 sum 11.00		MANHOLE EXCAVATION					
For manhole rings including working space to pipe invert Base excavation below pipe invert MISCELLANEOUS PC sum for laying sewers in river bed including dealing with live sewers Class 25/19 concrete eneasing encasing for sewer pipe in C10.1 above Y10 reinforcing where ordered by Engineer Allow for diversion of stormwater drains from sewer alignment Allow for other material and costs not covered in the sewer items m³ 120.00 m³ 3.00 t 1.00 m³ 8.00 t 1.00 m³ 100.00 sum 11.00		Extra over trench excavation for excavating and backfilling in all material					
For manhole rings including working space to pipe invert Base excavation below pipe invert MISCELLANEOUS PC sum for laying sewers in river bed including dealing with live sewers Class 25/19 concrete eneasing encasing for sewer pipe in C10.1 above Y10 reinforcing where ordered by Engineer Allow for diversion of stormwater drains from sewer alignment Allow for other material and costs not covered in the sewer items m³ 120.00 m³ 3.00 t 1.00 m³ 8.00 t 1.00 m³ 100.00 sum 11.00		for manhole rings including working space to pipe invert					
Base excavation below pipe invert MISCELLANEOUS PC sum for laying sewers in river bed including dealing with live sewers Class 25/19 concrete encasing encasing for sewer pipe in C10.1 above Y10 reinforcing where ordered by Engineer Allow for diversion of stormwater drains from sewer alignment Allow for other material and costs not covered in the sewer items m³ 8.00 t 1.00 m³ 100.00 sum 100.00 sum 11.00				m ³	120.00		
PC sum for laying sewers in river bed including dealing with live sewers Class 25/19 concrete encasing encasing for sewer pipe in C10.1 above Y10 reinforcing where ordered by Engineer Allow for diversion of stormwater drains from sewer alignment Allow for other material and costs not covered in the sewer items PC sum 3.00 m ³ 8.00 m3 100.00 sum 1.00		Base excavation below pipe invert			120.00		
Class 25/19 concrete encasing encasing for sewer pipe in C10.1 above Y10 reinforcing where ordered by Engineer Allow for diversion of stormwater drains from sewer alignment Allow for other material and costs not covered in the sewer items Testini 5.00 m³ 8.00 t 1.00 m3 100.00 sum 1.00		MISCELLANEOUS					
Class 25/19 concrete encasing encasing for sewer pipe in C10.1 above Y10 reinforcing where ordered by Engineer Allow for diversion of stormwater drains from sewer alignment Allow for other material and costs not covered in the sewer items Testini 3.00 m³ 8.00 t 1.00 m3 100.00 sum 1.00							
Y10 reinforcing where ordered by Engineer Allow for diversion of stormwater drains from sewer alignment Allow for other material and costs not covered in the sewer items 1.00 sum 1.00		PC sum for laying sewers in river bed including dealing with live sewers		PC sum	3.00		
Allow for diversion of stormwater drains from sewer alignment Allow for other material and costs not covered in the sewer items m3 100.00 sum 1.00		Class 25/19 concrete encasing encasing for sewer pipe in C10.1 above		m ³	8.00		
Allow for other material and costs not covered in the sewer items sum 1.00		Y10 reinforcing where ordered by Engineer		t			
Total Carried Forward to Section Summary		Allow for other material and costs not covered in the sewer items		sum	1.00		
Total Carried Forward to Section Summary							
Total Carried Forward to Section Summary							
Total Carried Forward to Section Summary							
Total Carried Forward to Section Summary							
	Total Carri	L ed Forward to Section Summary					

	SEWER INFRASTRUCTURE SUMMARY	
SECTION 4	DESCRIPTION	AMOUNT (RAND)
4	S1.1 SEWER INFRASTURCTURE	
SUB-TOTAL 4:	CARRIED TO FINAL SUMMARY	

SECTION 5: BULK ELECTRICAL WORKS

ITEM No	DESCRIPTION		UNIT	QTY	RATE	AMOUNT
PECTION 5	Bill No. 1: ELECTRICAL RETICULATION INSTALLATION					
	Shop drawings shall be submitted to the Electrical Engineer for approval at least two weeks prior to the date on which such approval is required in order to					
I .	comply with the Contract Programme.					
5.1	Trenching					
1	HV/LV trench - 800mm deep in soft, pickable soil below final ground level complete					
	with, bedding and backfill as per specification	Labour	m	340		
	HV/LV trench - 1100mm deep in soft, pickable soil for depth beneath roads complete with, bedding and backfill as per specification	Labour	m	40		
5.1.3	Extra over above trenches for excavation in hard, rocky conditions	Labour	m	0		
5.1.4	PVC warning tape	Material	m	380		
5.1.5		Labour	m	380		
5.2	Slagge					
3.2	Sleeves					
	Supply and install the following as shown on the drawing					
	110mm PVC, 50mm PVC	Material	m	380		
5.2.2	D. con seiter.	Labour	m	380		
	Draw wires	Material	m	380		
5.2.4	Electrical Manholes	Labour	m	380		
	300mm x 300mm x 1000mm with heavy duty lid	Supply	ea	7		
5.2.7		Labour	ea	7		
	Main supply, Upgrade the supply point required from the supply authority to add the new 630kVA on existing					
5.3.1	Municipality,	Supply	sum	1		
	Maintain and Major service for exiting Generator, Maintain, service, install, connect and commisson the generator should be also					
	enclosed with noise reduction canopy, should be equiped with AMF futer linking	Supply and				
5.3.2	switch and complete earthing system.	Labour	sum	1		
	Contain mined (2007) A Minimb. since main part and Main motor binds. County install					
	Containerized 630kVA Minisub, ring main unit and Main meter kiosk, Supply, install and commisson a free standing with all the acceeories, painted, steel panel lockable					
1	metering kiosk complete with door frames, subframes, chasis, fixtures, fittings,					
	termination, busbars and wiring, danger signs, plinth withspare space as per specification and drawings and installed with complete bonding and earthing.	Supply and Labour	sum	,		
	Maintain the existing 630kVA Minisub, ring main unit and Main meter kiosk and	Supply and	Sum	1		
	other existing kiosks, Remove the hanging cables and make good	Labour	sum	1		
,	Upgrade the existing switching area, Build a 3m x 9m Switch Room for the existing	Supply and				
	minisub and generator	Labour	sum	1		
		Supply and				
5.3.6	LV distribution Kiosks feeding the units	Labour	sum	5		
	All MV, HT underground / surface cables shall be stranded copper-core, 600/1000					
,	Volt grade, multi-cored, PVC insulated, PVC covered, wire armoured and PVC					
	encased (PVC/SWA/PVC) unless otherwise specified. No joints are allowed in distribution cables, accept where it is specifically authorised. HV Cable copper	Cummler and				
	conductor, 95mm/2 3 core armoured cable and accessories.	Supply and Labour	sum	40		
	For the delivery to site, supply and installation of 11kV Three Core Cables,	Supply and				
	Terminations and Joints for PILC Cable, as per specification.	Labour	sum	1		
	Contractor to allow for Tracing of existing HV cables and LV cables. Create Asbuilt drawings	Supply and Labour	sum	1		
	MINISUB-Pre-cast Plinth, 25 MPA vibrated Concrete to be used	Supply	sum	1		
5.3.10		···	1			
	as per D - DT- 1010, refer to the specifications	Labour	sum	1		
5.3.11		Labour Supply	sum sum	1		
5.3.11	as per D - DT- 1010, refer to the specifications					

		I	T			
ITEM No	DESCRIPTION		UNIT	QTY	RATE	AMOUNT
TIEMINO	DESCRIPTION		CIVII	QII	KAIE	AMOUNI
Total Brough	nt Forward					
	Distribution Boards		+			
	Upgrading of the circuit breakers is recommended for the burnt house	Material	ea	1		
5.4.2	Eighteen-way Distribution Board 63A	Labour	ea	1		
5.5	Low Voltage Cables		-			
	All LV underground / surface cables shall be stranded copper-core, 600/1000 Volt grade, multi-cored, PVC insulated, PVC covered, wire armoured and PVC encased					
	(PVC/SWA/PVC) unless otherwise specified, The low voltage cable in a continuous					
	cable run must be of one size, except where a change in cable size is necessary, in which case the change must be approved by the Engineer.					
				400		
	70mm² 1+N Cu PVC/SWA/PVC	Material	m	180		
5.5.2	From main kiosk	Labour	m	180		
	70mm ² 4 core PVC SWA Copper Cable + 95mm ² BCEW from 630KVA Mini-sub to					
5.5.3	kiosks	Material	m	300		
5.5.4		Labour	m	300		
5.6	Cable terminations					
	70mm² 1+N Cu PVC/SWA/PVC	Material	ea	15		
5.6.2	From main kiosks to DB-1-15 70mm ² 4 core PVC SWA Copper Cable + 95mm ² BCEW from 630KVA Mini-sub to	Labour	ea	15		
5.6.3	/0mm ² 4 core PVC SWA Copper Cable + 95mm ² BCEW from 630KVA Mini-sub to kiosks	Material	ea	12		
5.6.4		Labour	ea	12		
5.7	Bare Copper Earth Wire installed with cable		+			
	For the supply and instalation of the following BCEW with the 4 Core PVC insulated PVC Bedded SWA PVC					
5.7.1	sheathed 600/1000V copper cables as specified. 50mm² 4core Cu PVC/SWA/PVC	Material	m	180		
		Labour	m	180		
5.8	Bare Copper Earth Wire installed with cable Terminations		+			
5.8.1	50mm² 2 core Cu PVC/SWA/PVC	Material	ea	15		
5.8.2	D. L. C. P. LC.	Labour	ea	15		
5.9	Perimeter lighting Integrated LED solar lighting solution, lamp compartment to be of IP 65. Comply		+			
	with SANS 60598-2-3, all certified by a SABS test report, 8M Pole mounted, with integrated battery solution, 8M Pole Mounting Height 9.2M Total - Hot Dip					
	Galvanised, complete installation	Material	ea	33		
5.9.2		Labour	ea	33		
5.10	LED solar sports lighting solution, 84lx average, complete installation		+			
	8x SOLARFLOOD-SPORT on four (4) 10m poles/masts(include masts)	26	1			
	10M Pole Mounting Height 11.5M Total - Hot Dip Galvanised Concrete foundation including soil and concrete cube tests & earthing	Material Labour	sum	1		
	EARTHING OF SUBSTATIONS	Luocui	Suiti			
	Measuring of earth resistance by an earthing specialist and issuing of a report	Material	sum	1		
	Measuring of earth resistivity over the site, Issuing of a report	Labour	sum	1		
5.12	Earthing and lightning protection:		1			
	Design supply and install lightning protection, banding, and earthing system as nor					
5.12.1	Design, supply and install lightning protection, bonding and earthing system as per general and detail specifications document for the existing 11 houses	Material	sum	11		
	Design supply and installation of the full earthing system for the site	Labour				
	Design supply and install a complete earthing and lightning protection system for the building based on SANS					
	10199/ 10313/ 62305 and IEC 62305	Material	sum	1		
	Issuing of earthing Certificates	Labour	sum	1		
5.12.5	Rehabilitation of groundworks	Material	sum	1		
	For the rehabilitation of groundworks where the contractor excavated through existing paved areas, gardens, road					
	crossings etc.	Labour	sum	1		
5.12.7 5.12.8	Cable markers	Material Labour	ea ea	10 10		
	Padlocks	Material	ea	10		
5.12.10		Labour	ea	10		
5.12.11 5.12.12	Lever arch file	Material Labour	ea ea	5		
	100 Position key cabinet	Material	ea	1		
		Labour	ea	1		
ı otal Carrie	d Forward to Section Summary					

	BULK ELECTRICAL WORKS	
SECTION 5	DESCRIPTION	AMOUNT (RAND)
5	ELECTRICAL RETICULATION	
SUB-TOTAL 5	S: CARRIED TO FINAL SUMMARY	

SECTION 6. EVISTING (BUDNT) HOUSE DEFUDRISHMENT	
SECTION 6: EXISTING (BURNT) HOUSE REFURBISHMENT	
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ITEM NO	DESCRIPTION		UNIT	QTY	RATE	AMOUNT
SECTION 6	BIII No. 2: BURNT HOUSE REFURBISHMENT COMPLETE INTERNAL ELECTRICAL					
	INSTALLATION					
	Small Power and Lighting					
61	Switched Socket Outlets					
	and draw box for complete instalation	M 4 1 1	ea	16		
0.1.1	and draw box for complete instalation	Material	ea	10		
6.1.2		Labour	ea	16		
6.1.3	4mm ² PVC Insulated Copper Conductor	Material	m	384		
6.1.4	• •	Labour	m	384		
6.1.5	4mm ² Bare Copper Eearth Wire	Material	m	128		
6.1.6	•	Labour	m	128		
6.1.7	20mm dia PVC conduit chased into brickwall complete	Material	m	128		
6.1.8		Labour	m	128		
6.2	Light Fittings					
	LEDQUAD, RECTANGULAR LED DOWNLIGHT 18W					
6.2.1	518mm*200mm*100, in compliance with SANS60598	Material	ea	4		
6.2.2	·	Labour	ea	4		
	LED 17W, Luminaire with SANS 60598-2-1 safety mark. The					
6.2.3	IP rating is certified by an SABS test report.	Material	ea	8		
6.2.4		Labour	ea	8		
	SERIES 20 LED BULKHEAD LUMINAIRE 17W, Lamp					
	compartment to be of IP 66. Comply with SANS 60598-2-1,					
6.2.5	all certified by a SABS test report.	Material	ea	8		
6.2.6		Labour	ea	8		
6.2.7	2.5mm² PVC Insulated Copper Conductor	Material	m	288		
6.2.8		Labour	m	288		
6.2.9	2.5mm ² Bare Copper Eearth Wire	Material	m	288		
6.2.10		Labour	m	288		
6.2.11	60mm diameter round draw box with draw wire	Material	ea	20		
6.2.12		Labour	ea	20		
	20mm dia PVC conduit chased into brickwall andsurface					
	installed complete	Material	m	20		
6.2.14		Labour	m	20		
6.3	Light Switches					
	16 Amp 1 lever 1-way, 2way, multiple levers light switch with	<u> </u>				
	cover plate installed in draw box	Material	ea	12		
6.3.2		Labour	ea	12		
	2.5mm ² PVC Insulated Copper Conductor	Material	m	432		
6.3.4		Labour	m	432		
	2.5mm² Bare Copper Eearth Wire	Material	m	144		
6.3.6		Labour	m	144		-
	100mm x 50mm x 50mm draw box with draw wires	Material	ea	12		
6.3.8	20 1 777	Labour	ea	12		
	20mm dia PVC conduit chased into brickwall or surface	.				
	installed complete	Material	m	144		
6.3.10		Labour	m	144		
Total Carrie	u rorward					

ITEM No	DESCRIPTION		UNIT	QTY	RATE	AMOUNT
Total Brough	nt Forward					
6.4	Appliances					
	16 Amp 250V photocell in an empty bulk head luminaire Type					
6.4.1	В	Material	ea	4		

6.4.2		Labour	ea	4		
6.4.3	Earthing and lighting protection, submitt certificate	Material	m	1		
6.4.4		Labour	m	1		
6.4.5	Gyeser isolator	Material	m	1		
6.4.5		Labour	m	1		
6.5	Provisional sums					
	Provisionl mount for the renovations of the burnt house -					
3.5.3	assessment & measurement by specilists	Material	sum	1	150,000.00	150,000.00
		Labour	sum	1		
Total Carrie	Total Carried Forward to Section Summary					

	REFURBISHMENT				
SECTION 6	DESCRIPTION	AMOUNT (RAND)			
6	EXISTING (BURNT) HOUSE REFURBISHMENT				
SUB-TOTAL 6:	SUB-TOTAL 6: CARRIED TO FINAL SUMMARY				

ITEM NO	DESCRIPTION		UNIT	QTY	RATE	AMOUNT
SECTION 7	BILL NO 04: FIRE PROTECTION INSTALLATION					
	Design, manufacture, works testing, supply and deliver to site, moving into position, erection, connecting up, site testing, witness testing, proving to insurance inspectors, demonstrating to the Employer, commissioning					
7.1	FIRE HOSE REELS					
	30m Fire hose reel including pro-rata cost for 50mm connecting pipework from the fire reticulation main including 25 diameter drop pipe to hose reel and break ins, fittings, pipework, hanging/fixing materials, finished paintwork, pressure gauge, etc., as per detail on tender drawings.	Material/ Labour	No.	4		
7.2	PIPEWORK					
7.2.1	Supply and install medium grade, seamless galvanized mild steel pipework c/w pipe supports and accessories as specified and shown on the drawings					
	100 "	Material/		7.00		
7.2.2	100mm dia	Labour Material/	m	560		
7.2.3	80mm dia	Labour	m	350		
		Material/				
7.2.4	50mm dia	Labour	m	100		
7.2.5	25mm dia	Material/ Labour	m	80		
	Supply and install PVC pipework c/w pipe and accessories as specified and shown on the drawings rate to include excavation and backfilling to a depth of 500mm					
7.3.1	80 -100mm dia	Material/ Labour	m	1050		
7.4	Galvanised, Tees and Reducing Tees					
7.4.1	100 x 100 x 100mm	Material/ Labour	No	80		
7.4.2	100 x 80 x 100mm	Material/ Labour	No	80		
7.4.3	100 x 65 x 100mm	Material/ Labour	No	20		
7.4.4	80 x 80 x 80mm	Material/ Labour	No	24		
7.4.5	80 x 65 x 80mm	Material/ Labour	No	24		
7.4.6	80 x 50 x 80mm	Material/ Labour	No	24		
7.4.7	50 x 25 x 50mm	Material/ Labour	No	8		
7.4.8	25 x 25 x 25mm	Material/ Labour	No	10		
7.5	PVC	Material/ Labour				
7.5.1	100 x 100 x 100mm	Material/ Labour	No	8		
7.5.2	100 x 80 x 100mm	Material/ Labour	No	8		
	100 x 65 x 100mm	Material/ Labour	No	6		
Total Carried	Forward					

ITEM No	DESCRIPTION		UNIT	QTY	RATE	AMOUNT
otal Brought	Forward	1				
	PORTABLE FIRE EXTINGUISHERS Supply and install fire extinguishers complete at a maximum handle height of 1200mm from finished floor level. Each fire extinguisher must be provided with a					
7.6	suitable sized Meranti backing board, complete with mounting bracket and suitable wall anchors as support as specifiedBacking boards must be painted "Signal Red". Refer to standard drawings					
	9 kg DCP fire extinguishers complete with backboard	Material/	.,	20		
	mounted as required 2kg Carbon dioxide extinguishers in weather proof polycarbonate cabinet complete with backboard	Labour Material/ Labour	No.	30		
		Material/				
	Fire blanket mounted as required	Labour	No.	15		
7.7	STATUTORY FIRE SIGNAGE					
	Supply and install photo luminescent fire and evacuation signage as described below and as per the tender drawings:					
	All signed to be framed in the natural anodized aluminium frame with mitred corner and concealed elbow joints.					
	All wall mounted fire and evacuation signs to be fixed with concealed screws and no double sided tape will be permitted for the mounting of the signs. All suspended fire and evacuation signs to be hung from a steel cables or metal chains.					
	All signage to be a minimum 190mm size. All fire and evacuation signs to be SANS 1186-1, 1186-3 and 1186-5 approved, and also to bear the SANS stamp of approval.					
7.7.1	F13	Material/ Labour	no.	20		
7.7.2	F30	Material/ Labour	no.	30		
7.7.3	Others	Material/ Labour	sum	1		
7.8	HYDRANTS, VALVES ETC.					
	Install fire hydrants on permanently charged fire mains in position as indicated on project drawing. All fire hydrants must conform to SANS 1128 – Part I. Hydrant hose couplings, connectors and branch pipe and nozzle connections must conform to SANS 1128 – Part II. Provide all hydrants with purpose made vandal proof covers, caps or plugs complete with chains to secure to valves Hydrants valves must be cast iron, right angled, single lug tamper proof valves with non-protruding sheathed spindles suitable for tamper proof keys.					
701	65mm cast iron tamper proof pillar hydrant valve	Material/ Labour	No	16		
7.0.1	"Chubb" 03451 pair of gunmetal instantaneous steamer	Laovui	110	10		
7.8.2	connections fitted with caps and short lengths of chain, including U-tube and pressure gauge	Material/ Labour	No	16		
7.8.3	Provide 1500m x 80mm galvanised piping riser	Material/ Labour	No	16		
	Provide hydrants with 15MPA concrete anchors to each hydrant.	Material/ Labour	No	16		
	Fire check valves ensuring one-way of water flow	Material/ Labour	No	8		
	Fire stopping	Material/ Labour	sum	1		
	Fire Detection(including LPG)	Material/ Labour	sum	1		
	Fire Storage	Material/ Labour	sum	1		
otal Carried		1	20111	1		

ITEM No	DESCRIPTION		UNIT	QTY	RATE	AMOUNT
Total Brought	Forward					
7.9	FIRE PUMPING SYSTEM AND DOMESTIC WATER					
7.9.1	Multi-pump system SiBoost Smart 2 Helix V 5203, 35,56l/s, 11kW, 400V, 21A, Max. operating pressure 16kPa(Fire Pump)	Material/ Labour	Item	1		
	High-pressure multistage centrifugal pump Helix V 2203-1/16/E/KS/400-50, 5,951/s, 4kW, 400V, 7,5A, Max. operating pressure 16kPa(Domestic Pump)	Material/ Labour	Item	1		
7.9.3	Pressure vessel 1001	Material/ Labour	No	2		
7.9.4	Float Switch 10m micros	Material/ Labour	No	2		
7.9.5	Electrical work associated to the above installation	Material/ Labour	Item	1		
7.9.5	Verify pump performance and automatic controls.	Material/ Labour	Sum	1		
7.9.6	Flow test hydrants at 90 L/s and 16 bar.	Material/ Labour	Sum	1		
Total Carried	Forward to Section Summary					

	FIRE PROTECTION			
SECTION	DESCRIPTION	AMOUNT (RAND)		
7				
7	FIRE PROTECTION			
SUB-TOTAL	SUB-TOTAL 7: CARRIED TO FINAL SUMMARY			

SECTION	DESCRIPTION	AMOUNT (RAND)
1	PRELIMINARIES, GENERAL AND OBLIGATIONS	
2	ROADS, PLATFORMS AND STORMWATER	
3	WATER INFRASTRUCTURE	
4	SEWER INFRASTRUCTURE	
5	BULK ELECTRICAL WORKS: ELECTRICAL RETICULATION	
6	EXISTING (BURNT) HOUSE REFURBISHMENT	
7	FIRE PROTECTION	
	SUB-TOTAL 1	
	CONTINGENCIES:	
	Provide contingency allowance of 5% to be used as and when needed by the Employer's Agent	
	SUB-TOTAL 2	
	ADD: VAT (15%)	
	CARRIED FORWARD TO FORM OF TENDER	