

**GSDM 94/2021: THE UPGRADING OF THE ROOIKOPPEN SEWER
PHASE 01 , PHASE 04 & BOOSTER PUMP STATION 2.
SCHEDULE OF QUANTITIES**

SANS 1200 A : PRELIMINARY AND GENERAL

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (RANDS)
A	SANS 1200 A	SECTION A : PRELIMINARY AND GENERAL				
A.1	8.3	FIXED-CHARGE ITEMS				
A.1.1	8.3.1	Contractual Requirements	Sum	1		
	8.3.2	Establish Facilities on the Site :				
		a) Facilities for Engineer (SANS 1200 AB)				
A.1.2		Offices: 1 furnished room with a telephone and 2 name-boards	Sum	1		
		b) Facilities for Contractor				
A.1.3		Offices and storage sheds	Sum	1		
A.1.4		Workshops	Sum	1		
A.1.5		Laboratories	Sum	1		
A.1.6		Living accommodation	Sum	1		
A.1.7		Ablution and latrine facilities	Sum	1		
A.1.8		Tools and equipment	Sum	1		
A.1.9		Water supplies, electric power and communications	Sum	1		
A.1.10		Dealing with water (Subclause 5.5)	Sum	1		
A.1.11	8.3.3	Other fixed-charge obligations	Sum	1		
A.1.12	8.3.4	Remove Engineer's and Contractor's Site establishment on completion	Sum	1		
A.1.13	8.8.2	Deal with traffic and maintain road (or accommodation of traffic)	Sum	1		
A.2	8.4	TIME-RELATED ITEMS				
A.2.1	8.4.1	Contractual Requirements	month	16		
	8.4.2	Operate and maintain facilities on the Site:				
	8.4.2.1	a) Facilities for Engineer for duration of construction (SANS 1200 AB)				
A.2.2		Offices: 1 room, etc., as for item .1.2	month	16		
A.2.3		Survey assistants and material	month	16		
	8.4.2.2	b) Facilities for Contractor for duration of construction, except where otherwise stated				
A.2.4		Offices and storage sheds	month	16		
A.2.5		Workshops	month	16		
A.2.6		Laboratories	month	16		
A.2.7		Living accommodation	month	16		
A.2.8		Ablution and latrine facilities	month	16		
Total Carried Forward						

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PHASE 01 , PHASE 04 & BOOSTER PUMP STATION 2.
SCHEDULE OF QUANTITIES**

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ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (RANDS)
Brought Forward						
A.2.9		Tools and equipment	month	16		
A.2.10		Water supplies, electric power and communications	month	16		
A.2.11		Dealing with water (Subclause 5.5)	month	16		
A.2.12		Access (Subclause 5.8)	month	16		
A.2.13	8.4.3	Supervision	month	16		
A.2.14	8.4.4	Company and head office overhead costs	month	16		
A.2.15	8.4.5	Other time-related obligations	month	16		
A.3	8.5	SUMS STATED PROVISIONALLY BY ENGINEER				
A.3.1		Provision of accommodation for Engineer's representative for the duration of the contract	month	16	R7 000,00	R112 000,00
A.3.2		Telephone calls for the Engineer	month	16	R1 500,00	R24 000,00
A.3.3	8.6	Prime cost of laboratory testing by other concerns where so directed by the Engineer	Prov. Sum	16	R30 000,00	R480 000,00
A.3.4	8.9	Engineer's Design Fees	Prov. Sum	1	R9 994 720,08	R9 994 720,08
A.3.5	8.6	Supervision Fees for the duration of Construction for Engineer	month	16	R51 500,00	R824 000,00
A.3.6		Project Social Initiation and Facilitation	Prov. Sum	1	R1 210 000,00	R1 210 000,00
A.3.7		Institutional and Social Development Support throughout the Project Period	Prov. Sum	16	R70 000,00	R1 120 000,00
A.3.8		Additional Survey	Prov. Sum	1	R45 000,00	R45 000,00
A.3.9		Remuneration of Health and Safety Agent	month	16	R57 750,00	R924 000,00
A.3.10		Remuneration of Health and Safety Representative	month	16	R19 250,00	R308 000,00
A.3.11		Remuneration of Community Liaison Officer(CLO) including transport, cellphone and overtime	month	16	R7 500,00	R120 000,00
A.3.12		Allowance for Conformance and Control tests by independent Agent for additional tests that may be	Prov. Sum	1	R300 000,00	R300 000,00
A.3.13		Allowance for 2 No. of Students for in-service training for the duration of the Contract (the stipend include	Prov. Sum	1	R300 000,00	R300 000,00
A.3.14		Allow for testing and commissioning of new sewer networks, rising mains and pumps	Prov. Sum	1	R110 000,00	R110 000,00
A.3.15		Community Participation and PLC support Ward 11	Prov. Sum	1	R200 000,00	R200 000,00
Total Carried Forward						

SCHEDULE OF QUANTITIES

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**GSDM 94/2021: THE UPGRADING OF THE ROOIKOPPEN SEWER
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ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (RANDS)
Brought Forward						
A.5	8.8	TRAINING				
A.5.1		Wages and salaries of local and other labourers employed by Contractor, Sub-Contractor and Emerging Contractors in respect of training periods for on-site training by the Contractor during which no productive work is executed.	PC Sum	1	R50 000,00	R50 000,00
A.5.2		Accredited and approved training courses for selected local and other labourers including wages during training as approved by Client.	Prov. Sum	1	R150 000,00	R150 000,00
A.5.3		Contractor's charge to allow for the handling costs and profit in respect of sub-items A.5.1 & A.5.2 above.	%	200 000		
A.6		IMPLEMENTING COVID-19 REGULATIONS & PLANS				
A.6.1		Appointment of Covid-19 Compliance Officer (CCO) for the Client	month	16	R40 000,00	R640 000,00
A.6.2		Provision for daily audit, compilation monthly audits reports and enforcing COVID-19 Regulation and Plans on Site.	month	16	R20 000,00	R320 000,00
A.6.3		Handling costs and profit in respect of sub-items A.6.1 & A.6.2 above	%	960 000		
A.7	PSA 8.4.1	COVID-19 RISK & MITIGATION PLANS				
A.7.1		Appointment of Covid-19 Compliance Officer (CCO) for the duration of the project	month	16		
		Provision for supplying the following equipment and materials on site as required by the Government to prevent the spread of Covid-19				
A.7.2		a) GS320 Handheld Infrared Digital Laser Thermometer	No.	5		
A.7.3		b) Handsfree Sanitiser Stands	No.	10		
A.7.4		c) 5x10litre bottle of 70% alcohol sanitiser per month	No.	105		
A.7.5		d) 5x10litre surface disinfectant cleaner per month	No.	105		
A.7.6		e) FFP1 surgical face masks for labourers and visitors per 100 pack	No.	46 200		
A.7.7		f) Surgical gloves per 100 pack	No.	46 200		
A.7.8		g) Fumigation services when required	Sum	1		
A.7.9		h) Dust-proof oil-splash mask/Transparent mask	No.	2 100		
A.7.10		i) Isolation room size: 2.8m long x 2.4m wide	No.	2		
A.7.11		j) iBlow10 no contact breathalyser for industry and law enforcement	No.	4		
Total Carried Forward To Summary						

GSDM 94/2021: THE UPGRADING OF THE ROOIKOPPEN SEWER
PHASE 01 , PHASE 04 & BOOSTER PUMP STATION 2.
SCHEDULE OF QUANTITIES

SANS 1200 C : SITE CLEARANCE

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GSDM 94/2021: THE UPGRADING OF THE ROOIKOPPEN SEWER
PHASE 01 , PHASE 04 & BOOSTER PUMP STATION 2.
SCHEDULE OF QUANTITIES

SANS 1200 DB : PIPE TRENCHES

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (RANDS)
C	SANS 1200 DB	SECTION C : PIPE TRENCHES				
C.1		PIPE TRENCHES				
	8.3.2(a)	Excavate in all materials for trenches backfill, compact, and dispose of surplus/unsuitable material, for pipes up to 400 mm diam. for total trench depth:				
C.1.1		Exceeding 0,0 m but not exceeding 1,0 m	m	3 029		
C.1.2		Exceeding 1,0 m but not exceeding 2,0 m	m	16 940		
C.1.3		Exceeding 2,0 m but not exceeding 3,0 m	m	3 120		
C.1.4		Exceeding 3,0 m but not exceeding 4,0 m	m	62		
	8.3.2(b)	Extra-over incl. for (prov):				
C.1.5		Intermediate excavation	m³	1 581		
C.1.6		Hard rock excavation	m³	3 536		
C.1.7		Boulder excavation Class A	m³	489		
C.1.8		Boulder excavation Class B	m³	216		
C.1.9	8.3.2(b)	Excavate and dispose of unsuitable material from trench bottom (Provisional)	m³	6 945		
C.2	PSD 8.3.3	RESTRICTED EXCAVATION				
		Excavate for pipe trenches confined spaces in all materials and use for backfill or embankment , or dispose:				
C.2.1		Depth up to 1,0 m	m³	1 311		
C.2.2		Depth over 1,0 m and up to 2,0 m	m³	2 081		
C.2.3		Depth over 2,0 m and up to 3,0 m	m³	1 823		
		Extra over items above for:				
C.2.4		Intermediate excavation	m³	684		
C.2.5		Hard rock excavation	m³	435		
C.2.6		Boulder excavation Class A	m³	287		
C.2.7		Boulder excavation Class B	m³	152		
C.2.8		Extra over item 140.02 for hand excavation	m³	1 565		
		EXCAVATION. ANCILLARIES Make up deficiency in backfill material (Provisional)				
C.2.9	8.3.3.1(a)	from other necessary excavations on site	m³	15 534		
C.2.10	8.3.3.1(c)	by importation from commercial or off-site sources selected by the Contractor	m³	15 534		
C.3	PSD 8.3.3	SUPPLY ONLY OF BEDDING BY IMPORTATION				
Total Carried Forward						

GSDM 94/2021: THE UPGRADING OF THE ROOIKOPPEN SEWER
PHASE 01 , PHASE 04 & BOOSTER PUMP STATION 2.
SCHEDULE OF QUANTITIES

SANS 1200 DB : PIPE TRENCHES

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (RANDS)
Brought Forward						
		From other necessary excavations:				
C.3.1		Bedding Cradle	m³	4 167		
C.3.2		200mm layer compacted selected fill blanket (Class I)	m³	5 556		
C.3.3		300mm layer of consolidated selected backfill (Class II)	m³	8 334		
		From borrow pits:				
C.3.4		Bedding Cradle	m³	4 167		
C.3.5		200mm layer compacted selected fill blanket (Class I)	m³	5 556		
C.3.6		300mm layer of consolidated selected backfill (Class II)	m³	8 334		
		From commercial sources:				
C.3.7		Bedding Cradle	m³	4 167		
C.3.8		200mm layer compacted selected fill blanket (Class I)	m³	5 556		
C.3.9		300mm layer of consolidated selected backfill (Class II)	m³	8 334		
C.3.10		200mm layer of 19mm Aggregate	m³	2 873		
C.4	8.3.3.4	OVERHAUL				
C.4.1		Overhaul (provisional)	m³.km	20 928		
C.5		EXISTING SERVICES				
	8.3.5	Services across and in trenches				
	PSDB ...	Location				
C.5.1		Supply or hire of specialist equipment for the detection of a particular service	Sum	1		
C.5.2		The use of equipment in item 142.4.1	h	630		
C.5.3		Excavate by hand in soft material to expose ... service...	m³ / daywk	653		
	PSDB ...	Dealing with services				
	8.3.5(a)	Services that intersect a trench				
C.5.4		Cables	No.	18		
C.5.5		Water mains up to 300 mm diam.	No.	173		
C.5.6		Stormwater pipes up to 600mm diam.	No.	15		
	8.3.5(b)	Services that adjoin a trench				
C.5.7		Cables	m	231		
Total Carried Forward						

SCHEDULE OF QUANTITIES

SANS 1200 DB : PIPE TRENCHES

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (RANDS)
Brought Forward						
C.5.8		Water mains up to 300 mm diam.	m	3 473		
C.5.9		Stormwater pipes up to 600mm diam.	m	861		
C.6		PARTICULAR ITEMS				
	8.3.4	Temporary Works: Control water inflow from the ground to trench or any source, trench depth of not more than 4,0m and width not more than 2,0m				
C.6.1		Provide equipment or hire equipment	Sum	1		
C.6.2		Operate and maintain	Days	630		
C.6.3		Remove equipment	Sum	1		
		Excavating and Removing Existing Sewer Pipelines				
C.6.4		110mm diameter pipe	m	3 570		
C.6.5		160mm diameter pipe	m	4 170		
Total Carried Forward To Summary						

GSDM 94/2021: THE UPGRADING OF THE ROOIKOPPEN SEWER
PHASE 01 , PHASE 04 & BOOSTER PUMP STATION 2.
SCHEDULE OF QUANTITIES

SECTION : EARTHWORKS (ROADS, SUBGRADE)

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (RANDS)
D	SANS 1200 DM	SECTION D : EARTHWORKS (ROADS, SUBGRADE)				
D.1		SITE CLEARANCE				
D.1.1		Clear site	m ²	5 400		
D.1.2		Remove trees	No.	5		
D.1.3	8.3.2(a)	Remove topsoil to stockpile and maintain	m ³	486		
D.2		TREATMENT OF ROAD-BED				
	PSDM 1.3.4	Three-pass roller compaction				
D.2.1		Vibratory roller	m ²	3 240		
D.2.2		Impact roller	m ²	3 240		
	8.3.3(a)	Road-bed preparation and compaction of material				
D.2.3		Compact to 93 % mod. AASHTO maximum density	m ³	810		
	8.3.3(b)	In-place treatment of road-bed in intermediate or hard material				
D.2.4		Ripping	m ³	486		
D.2.5		Blasting	m ³	74		
D.3		EARTHWORKS				
	8.3.4	Cut to fill				
D.3.1		Compact to 90 % mod. AASHTO maximum density	m ³	3 240		
D.3.2		Rockfill, process, and compact	m ³	1 620		
	8.3.4	Borrow to fill				
D.3.3		Compact to 90 % mod. AASHTO maximum density	m ³	3 240		
D.3.4		Rockfill, process, and compact	m ³	1 620		
D.3.5	8.3.5	Selected layer compacted to 93 % mod. AASHTO maximum density	m ³	756		
	8.3.6	Extra-over items .7 to .9 inclusive for excavating and breaking down material in:				
D.3.6		Intermediate excavation	m ³	1 620		
D.3.7		Hard excavation	m ³	1 134		
	8.3.7	Cut to spoil from				
D.3.8		Soft excavation	m ³	1 620		
D.3.9		Intermediate excavation	m ³	243		
D.4		COMPACTION				
Total Carried Forward						

SCHEDULE OF QUANTITIES

SECTION : EARTHWORKS (ROADS, SUBGRADE)

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (RANDS)
Brought Forward						
	PSDM 1.3.4	Variations in compactive effort:				
D.4.1		Vibratory rollers	m². pass	5 040		
D.4.2		Oscillatory rollers	m². pass	5 040		
D.5	SANS 1200 DM	SUNDRIES				
D.5.1	8.3.11	Extra-over for temporary stockpiling of material	m³	648		
D.5.2		Extra-over for obtaining material from commercial sources	m³	2 448		
D.5.3		Removal of oversized and unstable materail incl.free-haul of 0.5km	m³	14 400		
D.6		BORROW PITS				
D.6.1		Opening up and closing down of designated borrow pit	Sum	1		
D.6.2		Deal with overburden	m³	2 187		
D.7	8.3.12	OVERHAUL				
D.7.1		Extra-over for hauling material in excess of the freehaul of 0,5km but not more than 1,0km (limited haul)	m³	1 863		
D.7.2		Extra-over for hauling material in excess of the haul of 1,0 km (long haul)	m³.km	932		
D.8	8.3.16	GRAVEL SURFACING				
D.8.1		Gravel surface layer	m³	2 520		
D.9		ACCOMMODATION OF TRAFFIC				
D.9.1	8.3.12 PS	Traffic signs for deviation and provision of bypass	Sum	1		
Total Carried Forward To Summary						

GSDM 94/2021: THE UPGRADING OF THE ROOIKOPPEN SEWER
PHASE 01 , PHASE 04 & BOOSTER PUMP STATION 2.
SCHEDULE OF QUANTITIES

SANS 1200 LD : SEWERS

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (RANDS)
E	SANS 1200 LD	SECTION E : SEWERS				
E.1		PIPEWORK				
	8.2.1	Supply, lay, joint, bed Class B and test SANS 966-1 uPVC Pipe Class 34 SDR 34 Heavy Duty sewer pipes with joints				
E.1.1		160 mm diam.	m	12 764		
E.1.2		250 mm diam.	m	2 534		
E.1.3		315 mm diam.	m	148		
	8.2.2	Extra-over for specials				
E.1.4		160 mm diam.	No.	633		
E.1.5		250 mm diam.	No.	280		
E.1.6		315 mm diam.	No.	23		
E.2	1200 LD	MANHOLES, ETC.				
	8.2.3	Manholes to Dwg No.....complete with Type 4 cover and frame, for depths over and up to				
E.2.1		0 m - 1,0 m	No.	222		
E.2.2		1,0 m-2,0 m	No.	77		
E.2.3		2,0 m -3,0 m	No.	36		
E.2.4		3,0 m - 4,0 m	No.	30		
	8.2.4	Extra-over for construction of backdrops and ramps including extra excavation, formwork, joints, etc.for depths over and up to				
E.2.5		0 m - 1,0 m	No.	84		
E.2.6		1,0 m-2,0 m	No.	30		
E.2.7		2,0 m -3,0 m	No.	15		
E.2.8		3,0 m - 4,0 m	No.	12		
E.3		CONCRETE BASES & BENCING				
E.3.1		Class 20/19 concrete base cast on levelled surface minimum 100mm thick	m³	2 738		
E.3.2		Class 20/19 concrete benching including channelling with steel float finish	m³	2 738		
E.3.3		Class 20/19 concrete in mass concrete where instructed	m³	2 738		
E.3.4		REMOVAL OF EXISITING MANHOLES, irrespective of the depth (the rate to include the excavation, removal and disposal)	No.	548		
E.4		RAISING OR LOWERING OF EXISTING MANHOLES				
Total Carried Forward						

**GSDM 94/2021: THE UPGRADING OF THE ROOIKOPPEN SEWER
PHASE 01 , PHASE 04 & BOOSTER PUMP STATION 2.
SCHEDULE OF QUANTITIES**

SANS 1200 LD : SEWERS

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (RANDS)
Brought Forward						
		Raise/lower precast manholes, all types				
E.4.1		Raise/lower 0 m up to 0,5 m	No.	5		
E.4.2		Raise/lower 0,5 m up to 1,0 m	No.	5		
E.4.3		Raise/lower 1,0 m up to 1,5 m	No.	5		
E.5		SUNDRIES				
E.5.1	8.2.9	Marker posts, complete, installed at 200m spacing	No.	120		
E.5.2		A4 Bidim Geotextile	m²	24 305		
		House Connections for all the toilet available within the households, e.g outside toilet and indoor toilet, including all required material as per drawing ROOI-INT-25				
E.5.3		110mm x 160mm	No.	1 875		
E.5.4		110mm x 250mm	No.	366		
E.5.5		Reconstruction of damaged erven and toilets connections in Phase 1 and Phase 4 households.	No.	1 136		
		Reconstruction of severely damaged erven and toilets				
E.5.6		Provide new toilet structure (such as door, roofing,walls), installing and assembling of flush system components(all associated plumbing) to supplier specification to enable it to be a waterbone	Prov. Sum	1		
Total Carried Forward To Summary						

GSDM 94/2021: THE UPGRADING OF THE ROOIKOPPEN SEWER
PHASE 01 , PHASE 04 & BOOSTER PUMP STATION 2.
SCHEDULE OF QUANTITIES

PS PA FENCING

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**GSDM 94/2021: THE UPGRADING OF THE ROOIKOPPEN SEWER
PHASE 01 , PHASE 04 & BOOSTER PUMP STATION 2.
SCHEDULE OF QUANTITIES**

PS PB OXIDATION PONDS

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (RANDS)
G	PS PB	SECTION G : MISCELLANEOUS WORKS_OXIDATION PONDS				
G.1	PB.03	EARTHWORKS				
G.1.1		Excavate in all materials and backfill or place embankment as ordered	m³	1 982		
G.1.2		Draining water from the existing pond	m³	2 500		
G.1.3		Desludge exisisting pond of the settled solids	m³	1 200		
G.1.4		Excavate bottom of trench to remove contaminates soils	m³	750		
G.1.5		Import Dump rock to stabilize bottom of pond	m³	450		
G.1.6		Removal of spoiled soil, from top layer of the pond untill stable soil	m³	453		
G.1.7		Import and prepare bedding material forthe lining, G4 material compact to minimum of 93% of modified AASHTO maximum density to pond level	m³	453		
G.2	PB.04	HPDE LINING				
G.2.1		Supply, lay and weld a 100% Waterproof 1000 micron Black HDPE Liner Soft and Flexible UV Stabilized or similar for the pond including pond overlaps areas	m²	1 626		
G.2.2		Test and document HDPE liner to specification	Sum	1		
G.3	PB.05	GEOSYNTHETIC CLAY LINING				
G.3.1		Supply,lay and joining Geosynthetic Clay Liner GCLX1000-10mm Thick Liner or similar for the pond including pond overlaps areas	m²	1 626		
G.3.2		Test and document geosynthetic clay liner to specification	Sum	1		
G.4	PB.06	ANCILLARY WORKS				
G.4.1		Supply and install pond outlet as detailed on drawings	No.	1		
G.4.2		Cast concrete structure for inlet as detailed on drawings	No.	1		
G.4.3		Concrete encase pipe at inlet and outlet	Sum	1		
G.4.4		Cast reinforced concrete for overflow weir	No.	1		
G.4.5		Supply and install safety signage	No.	2		
G.4.6		Supply and Install dewatering pump system and pipelines	No.	1		
G.5	PB.07	PERIMETER OF THE POND				
G.5.1		Excavate around the pond 140m*1000mm*450mm	m³	150		
G.5.2		Import and prepare and place gravel material for the perimeter G4/G7 materials in layers of 150mm and compact to minimum of 93% of modified AASHTO maximum density to pond top perimeter	m³	90		
G.5.3		Spray herbicide	m2	300		
G.5.4		Place Gundle USB - Green 250 Microns	m²	300		
G.5.5		Precast kerbing to SABS 927				
G.5.6		Figure 8C kerb (mountable) with 300mm - Concrete kerbing-channelling combination	m	200		
G.5.7		Concrete termination channelling combination	m	60		
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PHASE 01 , PHASE 04 & BOOSTER PUMP STATION 2.
SCHEDULE OF QUANTITIES**

PS PB OXIDATION PONDS

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GSDM 94/2021: THE UPGRADING OF THE ROOIKOPPEN SEWER
PHASE 01 , PHASE 04 & BOOSTER PUMP STATION 2.
SCHEDULE OF QUANTITIES

PS PD BUILDING WORKS

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (RANDS)
H	PS PD	SECTION H : BUILDING WORKS_EXISTING GUARDHOUSE & PUMP HOUSE				
H.1		ROOF COVERING				
		Profiled roofing				
		0,58mm Chromadek or similar IBR roof sheet fixed to timber purlins (elsewhere)				
H.1.1		Roof covering with pitch not exceeding 25 degrees	m²	98		
H.1.2		Ridge plate	m	71		
H.2		ROOF AND WALL INSULATION				
H.2.1		Insulation laid taut over rafters (at approximately 600mm centres) and fixed concurrent with tiling battens, purlins, etc	m²	98		
H.3		RAINWATER DISPOSAL				
		Seamless aluminum gutters with chromadek finish				
H.3.1		100x100x0.6mm standard rainwater gutters fixed with brackets	m	48		
H.3.2		Extra over for closed ends	No.	4		
H.3.3		75x100x0.6mm standard rainwater downpipes fixed to wall	m	17		
H.3.4		Extra over rainwater pipe for eave offset	No.	4		
H.3.5		Ditto, for shoe	No.	4		
H.4		CARPENTRY AND JOINERY				
H.5		EAVES, VERGES, ETC,				
		Pressed fibre-cement				
H.5.1		12 x 225mm tempered fascias boards including H-profile galvanised steel jointing strips steel jointing strips	m	50		
H.6		DOORS ETC				
		Wrought meranti doors hung to steel frames (steel frames measured elsewhere)				
H.6.1		2100 x 813 x 44mm Solid Weather Board Timber Door	No.	1		
H.6.2		813x2032mm Semi solid core flush panel timber door	No.	1		
H.7		SKIRTINGS,ETC				
H.7.1		19x90mm wrought meranti timber skirting	m	40		
H.8		NAILED-UP CEILINGS				
Total Carried Forward						

GSDM 94/2021: THE UPGRADING OF THE ROOIKOPPEN SEWER
PHASE 01 , PHASE 04 & BOOSTER PUMP STATION 2.
SCHEDULE OF QUANTITIES

PS PD BUILDING WORKS

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (RANDS)
Brought Forward						
		6,4mm "Rhino" gypsum plasterboard with H-type pressed steel jointing strips				
H.8.1		Ceilings including 38 x 50mm sawn softwood bandering at 400mm centres	m²	98		
H.8.2		Extra on plasterboard ceiling for 650 x 650mm trap door of 38 x 50mm wrought softwood rebated framing with covered with ceiling board and fitted flush opening	No.	2		
		Gypsum cornices				
H.8.3		75mm Gypsum Coved cornice	m	71		
H.9		INSULATION				
		'Aerolite" Ceiling Insulation				
H.9.1		75mm Insulation closely fitted and laid on top of bandering between roof timbers etc	m²	98		
H.10		SPECIAL FITTINGS				
H.10.1		Provide a sum of R50 000 ,00 (Fifty Thousand Rand) for fitted cupboards with granite worktops and fitted desk as per architect's specification	Prov. Sum	1		
H.10.2		Add for profit	%	0		
H.10.3		Add for attendance	%	0		
H.11		IRONMONGERY				
H.12		HINGES, BOLTS, ETC				
		'ASSA ABLOY" or other equal and approved				
H.12.1		100 x 75mm Nylon insert aluminium butt, AS HMP No,H91	No.	4		
H.12.2		150mm cabin hook and eye including 70x70x20mm chamfered hardwood block twice oil and plugged	No.	4		
H.13		LOCKS				
H.13.1		3-lever mortice lockset	No.	2		
H.13.2		Indicator lockset	No.	2		
H.14		DOORSTOP				
H.14.1		Approved 38mm dia. Rubber door stop plugged	No.	2		
H.15		LETTERS, NAMEPLATES,ETC				
H.15.1		Aluminium plate with engraved or painted letters not exceeding 0,1m²	No.	2		
H.16		BATHROOM FITTINGS				
H.16.1		Kimberly Clark' white lockable toilet roll holder	No.	1		
Total Carried Forward						

GSDM 94/2021: THE UPGRADING OF THE ROOIKOPPEN SEWER
PHASE 01 , PHASE 04 & BOOSTER PUMP STATION 2.
SCHEDULE OF QUANTITIES

PS PD BUILDING WORKS

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (RANDS)
Brought Forward						
H.16.2		Satin finished stainless steel foam dispenser size 100 x 134x 304mm ,plugged and screwed to the wall	No.	1		
H.16.3		Electric hand drier	No.	1		
H.17		METALWORK				
H.18		PRESSED STEEL DOOR FRAMES				
		1.6mm Single rebated galvanised metal frames suitable for one brick walls				
H.18.1		Frame for door size 813 x 2032mm high	No.	3		
H.19		STEEL WINDOWS ,DOORS ETC				
H.19.1		Window type NE7, 533 x 654mm high including burglar bars	No.	1		
H.19.2		Window type ND2, 1022 x 1245mm high including burglar bars	No.	1		
H.19.3		Window type ND10, 1511 x 1245mm high including burglar bars	No.	1		
H.19.4		Window type NC11F, 2000 x 949mm high including burglar bars	No.	1		
H.20		ROLLER SHUTTER				
H.20.1		1200 x 2100mm high over counter "Serranda" or similar approved roller shutter door with overhead box ancillary components including 4,5mm thick end plates in line with specifications	No.	1		
H.21		WELDED SCREENS, GATES ,ETC				
		Steel gates and frames				
H.21.1		Purpose made 40x40x3mm square tubing mild steel security gate with R12 and R16 bars @ 100mm c/c, size 900x2100mm high	No.	1		
H.22		STEEL LOCKERS				
H.22.1		Cubical Solutions 2T Locker (Code CSL/CHPL/304/2), overall size 300 x 450 x 1900mm high (1800mm high locker and 100mm plinth), comprising 4mm compact high pressure laminate white carcasses with 12mm Pastel Grey compact high pressure laminate doors including auto return hinges (Code:CSSH/E112) and D Shapped keeps (Code: (CSLI/LK/3_ for padlocks (no locking mechanism included), lock cover plate and handles (Code:CSLI/HI/9) or similar approved	Sum	2		
H.22.2		Add for profit	%			
H.22.3		Add for attendance	%			
H.23		PLASTERING				
Total Carried Forward						

GSDM 94/2021: THE UPGRADING OF THE ROOIKOPPEN SEWER
PHASE 01 , PHASE 04 & BOOSTER PUMP STATION 2.
SCHEDULE OF QUANTITIES

PS PD BUILDING WORKS

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (RANDS)
Brought Forward						
H.24		INTERNAL PLASTER				
		Cement plaster on brickwork				
H.24.1		On walls	m ²	300		
H.24.2		On narrow widths not exceeding 300mm wide	m ²	50		
H.25		TILING				
H.26		FLOOR TILING				
		600 x 600 x 10mm Fully body porcelain tiles delivered to site and including fixed with TAL Goldstar adhesive and flush pointed with grey waterproof jointing compound including waste				
H.26.1		On floors and landings	m ²	98		
H.26.2		On walls	m ²	50		
H.26.3		100mm High porcelain skirting	m	50		
H.27		PLUMBING AND DRAINAGE (PROVISIONAL)				
H.28		SOIL DRAINAGE				
		PVC-U soil and vent pipes				
H.28.1		110mm Pipes vertically or ramped to cleaning eyes (no excavation)	m	50		
H.28.2		110mm Pipes laid in and including trenches not exceeding 1,5m deep	m	100		
		Extra over PVC-U soil and vent pipes for fittings				
H.28.3		110mm Junction	No.	2		
H.28.4		110mm Bend	No.	2		
H.28.5		110mm Rodding eye	No.	2		
H.28.6		Precast concrete standard dished gulley size 430 x 445 x 165mm high including 125mm diameter cast iron gulley head grate and uPVC gulley head with 100mm outlet and including standard gulley trap	No.	1		
H.29		SANITARY PLUMBING				
		PVC-U pipes				
H.29.1		50mm waste pipes	m	50		
		Extra over PVC-U soil and vent pipes for fittings				
H.29.2		110mm Pan connector	No.	2		
H.29.3		110mm Access Junction	No.	2		
H.29.4		50mm Junction	No.	2		
H.29.5		50mm Bend	No.	2		
Total Carried Forward						

GSDM 94/2021: THE UPGRADING OF THE ROOIKOPPEN SEWER
PHASE 01 , PHASE 04 & BOOSTER PUMP STATION 2.
SCHEDULE OF QUANTITIES

PS PD BUILDING WORKS

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (RANDS)
Brought Forward						
H.29.6		50mm Access Bend	No.	2		
H.29.7		110 x 50mm Eccentric Reducer	No.	2		
H.29.8		50mm Vent valve	No.	2		
H.30		SANITARY FITTINGS				
		"Duravit" Ceramic or similar approved				
H.30.1		Vitreous china semi-close coupled suite color white, overall size 680 x 360 x 820mm high with Thermosate Soft-close seat, comprising 90Deg Outlet open rim pan with matching 9 litre front single flush cistern including lid, fitments and flushpipe,	No.	1		
H.30.2		510 x 405mm Wall mounted basin with one taphole, including integrated overflow attachment (code 8784ZO) and chainstay hole including floor mounted pedestal	No.	1		
H.31		STAINLESS STEEL FITTING				
		Manufactured by "Franke" or similar approved				
H.31.1		Kitchen sink 1 bowl 1 drainer stainless steel drop in FRANKE PLN611 800 x 460 x 140mm with stainless screws,	No.	1		
H.32		WASTE UNIONS ETC				
		Manufactured by "Cobra Watertech" or similar approved				
H.32.1		40mm "301 CP" chromium plated basin waste union with plug, chain, stay, flange and slotted shank, (Basin with overflow)	No.	1		
H.33		TAPS, VALVES, ETC				
		Manufactured by "Cobra Watertech" or similar approved				
H.33.1		22mm stopcock	No.	2		
H.33.2		22mm fullway gate valve	No.	2		
H.33.3		22mm Non-return valve	No.	2		
H.33.4		15mm "Carina" chromium plated pillar tap	No.	2		
H.33.5		PBI,10RB 22mm vacuum breaker	No.	2		
H.33.6		PA1,1L+RB "Closy" 400 kpa pressure reducing valve with PBI,10RB vacuum breaker	No.	2		
H.34		TRAPS ETC				
		Manufactured by "Cobra Watertech" or or similar approved				
H.34.1		50mm Rubber reseat "P" or "S" trap	No.	2		
Total Carried Forward						

GSDM 94/2021: THE UPGRADING OF THE ROOIKOPPEN SEWER
PHASE 01 , PHASE 04 & BOOSTER PUMP STATION 2.
SCHEDULE OF QUANTITIES

PS PD BUILDING WORKS

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (RANDS)
Brought Forward						
H.35		TESTING				
H.35.1		Testing waste pipe system	Sum	1		
H.36		WATER SUPPLIES				
		Class 1 Copper (hard drawn) pipes				
H.36.1		25mm Pipes laid in and including selected granular material in trenches not exceeding 1,5m deep	m	100		
H.36.2		15mm Pipes	m	50		
H.36.3		22mm Pipes	m	50		
H.36.4		22mm Pipes chased into brickwork including brown paper lagging	m	50		
H.36.5		35mm Pipes to walls,etc	m	50		
		Extra over Class 1 copper (hard drawn) pipes for capillary fittings				
H.36.6		15mm Fittings	No.	10		
H.36.7		22mm Fittings	No.	10		
H.36.8		22mm Conex tee	No.	3		
H.36.9		22 x 15mm Reducer	No.	3		
H.36.10		35mm Reducer	No.	3		
H.36.11		15mm Elbow	No.	3		
H.36.12		35mm elbow	No.	3		
H.36.13		35mm Tee	No.	3		
H.36.14		15mm Tee	No.	3		
H.36.15		15mm Reducing tee	No.	3		
H.36.16		15mm Threaded elbow	No.	3		
H.36.17		15mm Threaded union	No.	3		
H.37		SUNDRIES				
H.37.1		High pressure Geyser (150L) complete with fittings, support and electrical connection	No.	1		
H.37.2		Franke ZIP Hydroboil 5 Litre Stainless Steel complete	No.	1		
H.38		TESTING				
H.38.1		Testing water pipe system	Sum	1		
H.39		PAINTWORK				
H.40		ON INTERNAL FLOATED PLASTER SURFACES				
Total Carried Forward						

GSDM 94/2021: THE UPGRADING OF THE ROOIKOPPEN SEWER
PHASE 01 , PHASE 04 & BOOSTER PUMP STATION 2.
SCHEDULE OF QUANTITIES

PS PD BUILDING WORKS

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (RANDS)
Brought Forward						
		One coat primer and two coats interior quality PVA emulsion paint				
H.40.1		On internal walls	m ²	293		
H.41		ON INTERNAL GYPSUM PLASTER SURFACES				
		One coat primer and two coats superior quality acrylic emulsion paint for interior and exterior use				
H.41.1		Ceilings and beams (Color: "White")	m ²	100		
H.41.2		On fascias and barge boards	m ²	30		
H.42		ON WOOD SURFACES				
		Three coats of high gloss varnish				
H.42.1		Doors	m ²	9		
		Grain filling and three coats clear eggshell polyurethane varnish				
H.42.2		On skirting, etc not exceeding 500mm girth	m	65		
		Two coats "Carbolineum" wood primer				
H.42.3		Exposed roof timbers at eaves and verges	m ²	32		
H.43		ON METAL SURFACES				
		One coat alkyd based universal undercoat and one coat superior quality universal enamel paint				
H.43.1		On door frames	m ²	23		
		One coat galvagrip primer, one undercoat and two coats Super Universal enamel paint on galvanised steel				
H.43.2		On gates	m ²	23		
H.43.3		On gutters and downpipes	m ²	57		
H.43.4		On burglar bars	m ²	23		
H.44		GLAZING				
H.45		GLAZING TO STEEL WITH PUTTY				
		4mm Clear float glass				
H.45.1		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	2		
H.45.2		Panes exceeding 2m ² and not exceeding 4m ²	m ²	3		
H.46		MIRRORS,ETC				
		Chrome Regular Shaped Wall Mirror with frosted boarder				
H.46.1		Mirror 900 x 800mm High	No.	1		
Total Carried Forward To Summary						

SCHEDULE OF QUANTITIES

PS PI PUMPING EQUIPMENT

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GSDM 94/2021: THE UPGRADING OF THE ROOIKOPPEN SEWER
PHASE 01 , PHASE 04 & BOOSTER PUMP STATION 2.
SCHEDULE OF QUANTITIES

PS PS ELECTRICAL WORKS

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (RANDS)
J	PS PS	SECTION J : ELECTRICAL WORKS				
J.1	SANS 1200 DB	PIPE TRENCHES				
	8.3.2(a)	Excavate in all materials for trenches backfill,compact, and dispose of surplus/unsuitable material, for pipes: 200 mm diam. for total trench depth:				
J.1.1		Exceeding 0,0 m but not exceeding 1,0 m	m	300		
J.1.2		Exceeding 1,0 m but not exceeding 2,0 m	m	160		
J.2		LT DISTRIBUTION				
		Supply & Install Electrical distribution boards as specified and as per the detail line diagrams complete with doors, frames, sub-frames, chassis, fixtures, fittings, with spare space and including all switching equipment.				
J.2.1		(a) Guardhouse	No.	1		
J.2.2		(b) Pumphouse	No.	1		
J.3		POWER - GENERAL PURPOSE OUTLETS				
		Supply & Install Conduit placed in position for casting into concrete or screed, for building or chased into concrete or brickwork and for surface mounted in ceiling void including bending, threading, jointing, short lengths, draw boxes, couplings, bends, tees and saddles.				
J.3.1		(a) 20mm	m	400		
J.3.2		(b) 25mm	m	100		
J.4		ROUND BOXES				
		Round conduit boxes as specified placed in position for casting into concrete, built or chased into brickwork or surface mounted including lock-nuts and bushes.				
J.4.1		(a) 50mm round boxes	No.	20		
J.5		WALL BOXES				
		Wall boxes as specified placed in position for casting into concrete, built or chased into brickwork including lock-nuts and bushes.				
J.5.1		(a) 100 x 50 x 50mm	No.	9		
J.5.2		(b) 100 x 100 x 50mm	No.	22		
J.6		BLANK COVERS.				
J.6.1		(a) 100 x 100mm	No.	3		
J.7		DRAW WIRE.				
J.7.1		Supply and Install 1.5mm galvanised draw wire pulled into sleeve / conduit	m	100		
Total Carried Forward						

GSDM 94/2021: THE UPGRADING OF THE ROOIKOPPEN SEWER
PHASE 01 , PHASE 04 & BOOSTER PUMP STATION 2.
SCHEDULE OF QUANTITIES

PS PS ELECTRICAL WORKS

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (RANDS)
Brought Forward						
J.8		CONDUCTORS.				
		600/1000V grade PVC insulated stranded copper conductors drawn in conduit. Supply and Install the following conductors.				
J.8.1		(a) 2.5mm² PVC cable	m	200		
J.8.2		(b) 4.0mm² PVC cable	m	360		
J.8.3		(c) 6.0mm² PVC cable	m	300		
		Bare stranded copper earth conductors drawn in conduit.				
J.8.4		(a) 2.5mm²	m	860		
J.8.5		(b) 4mm²	m	150		
J.9		APPLIANCES.				
		Apparatus complete with cover plates fixed in flush boxes in the position as indicated on the drawings, draw boxes measured somewhere else				
J.9.1		(a) 16 Ampere round 3-pin 250 V grade, Single switched socket outlet	No.	25		
J.9.2		(b) 16 Ampere round 3-pin 250 V grade, red Single Double switched socket outlet with flat earth	No.	5		
J.9.3		(c) 16 Ampere round 3-pin 250 V grade, red Single Double switched socket outlet with flat earth on power skirting	No.	3		
J.9.4		(d) 16 Ampere 250 V grade, single lever One way light switch	No.	20		
J.9.5		(e) 15 Ampere Photo cell fitted in bulkhead fitting.	No.	3		
J.9.6		(f) 40 Ampere 2 Pole Stove Isolator isolator.	No.	1		
J.10		LUMINARIES.				
		Installed and mounted to round boxes in brickwork or ceiling including all fixings, brackets, supports, connectors, connections and lamps.				
J.10.1		Type A (2x58w Fluo Open Channel)	No.	35		
J.10.2		Type B1 (2x18w Weather Proof Bulkhead Lights)	No.	7		
J.10.3		Type B2 (2x18w Round Bulkhead Lights)	No.	20		
J.11		EARTHING, BONDING AND LIGHTING PROTECTION.				
		Earth and bond the complete electrical installation per building in compliance with SANS Code of Practise.				
J.11.1		Supply 16mm² stranded bare copper earth conductor.	m	104		
Total Carried Forward						

GSDM 94/2021: THE UPGRADING OF THE ROOIKOPPEN SEWER
PHASE 01 , PHASE 04 & BOOSTER PUMP STATION 2.
SCHEDULE OF QUANTITIES

PS PS ELECTRICAL WORKS

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (RANDS)
Brought Forward						
J.11.2		Supply and Install 16mm ² 1500mm long "Cadweld" copper coated earth electrodes, complete with clamp, driven into ground.	No.	7		
J.11.3		Supply and Install terminations of 16mm ² stranded bare copper earth conductor to roof sheeting and earthing electrodes including all fixing accessories.	No.	7		
J.11.4		Allow amount for Bonding of entire installation including all fixing accessories.	No.	1		
J.11.5		The complete Earthing and Lightning Protection installation for the building	No.	1		
J.12		BUILDING ENTRY SLEEVES.				
		Supply, deliver, store and install where specified on drawings the following sleeves, inclusive of loading and off-loading.				
J.12.1		50mm dia. Kabelflex Sleeves for power cable	m	50		
J.13		TESTING AND COMMISSIONING.				
J.13.1		Test and commission the complete installation as per the Distribution Standard and issue all the necessary test certificates	Sum	1		
J.14		EXTERNAL LIGHTING				
		Supply and Install Complete of the following:				
J.14.1		3m high light mast complete with 6 way Bracket Galvanised including Spike	No.	10		
J.14.2		Excavation and Concrete Mast Foundation Class 30/19	m ³	45		
J.14.3		Electrical Installation inside Mast including Earthing with 2 x 1.2m earth spikes	No.	3		
J.14.4		150W LED floodlights complete with Lamp including Aiming of lights	No.	6		
J.14.5		Charges for hiring of Crane Truck	No.	1		
J.15		MAINTENANCE KIT				
J.15.1		Portable Hand-winch complete with cable	No.	1		
J.16		TESTING AND COMMISSIONING				
J.16.1		Test and commission the complete installation as per the Distribution Standard and issue all the necessary test certificates	No.	1		
J.17	PK14	GENERATOR				
J.17.1		Transportation of the generator from the municipal stores	Sum	1		
J.17.2		Installation of the generator,fuel tank and container	Sum	1		
Total Carried Forward						

GSDM 94/2021: THE UPGRADING OF THE ROOIKOPPEN SEWER
PHASE 01 , PHASE 04 & BOOSTER PUMP STATION 2.
SCHEDULE OF QUANTITIES

PS PS ELECTRICAL WORKS

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**GSDM 94/2021: THE UPGRADING OF THE ROOIKOPPEN SEWER
PHASE 01 , PHASE 04 & BOOSTER PUMP STATION 2.**

SCHEDULE OF QUANTITIES

SECTION	SUMMARY OF SECTIONS DESCRIPTION	AMOUNT (RANDS)
A	PRELIMINARY AND GENERAL	
B	SITE CLEARANCE	
C	PIPE TRENCHES	
D	EARTHWORKS (ROADS, SUBGRADE)	
E	SEWERS	
F	FENCING	
G	MISCELLANEOUS WORKS_OXIDATION PONDS	
H	BUILDINGS WORKS	
I	PUMPING EQUIPMENT	
J	ELECTRICAL WORKS	
Sub-Total 1		
Add Contingencies @ 10%		
Sub-Total 2		
Add Contract Price Adjustment @ 7,5%		
Sub-Total 3		
Add VAT @ 15%		
Total Tender Amount		