

CONSTRUCTION COMPLETION CONTRACT FOR DIEPSLOOT PULIC ENVIRONMENT UPGRADE - PHASE 2

Contract No. JDA/17/19.3.2.B.7020PH-2

SCHEDULE A: SECTION 1 A

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (RAND)
1 A	SANS 1200 A		SECTION : PRELIMINARY AND GENERAL				
1.1	8.3		FIXED-CHARGE ITEMS				
1.1.1	8.3.1		Contractual Requirements	Sum	1		
	8.3.2		Establish Facilities on the Site :				
			a) Facilities for Engineer (SANS 1200 AB)				
1.1.2			1 No. Furnished office. Minimal 1 desk with drawers, printer table, 3 chairs, filing cabinet and drawing rack.	Sum	1		
1.1.3			2 No. Carports	Sum	1		
1.1.4			2 No. Contract name boards (HxW 3200 x 2500 mm)	Sum	1		
1.1.5			1 No. Printer/Scanner/Copier, A4 colour	Sum	1		
			b) Facilities for Contractor				
1.1.7			Offices and storage sheds	Sum	1		
1.1.8			Workshops	Sum	1		
1.1.9			Laboratories	Sum	1		
1.1.10			Living accommodation	Sum	1		
1.1.11			Ablution and latrine facilities	Sum	1		
1.1.12			Tools and equipment	Sum	1		
1.1.13			Water supplies, electric power and communications	Sum	1		
1.1.14			Dealing with water (Subclause 5.5)	Sum	1		
1.1.15			Access (Subclause 5.8)	Sum	1		
1.1.16	8.3.3		Other fixed-charge obligations	Sum	1		
1.1.17	8.3.4		Remove Engineer's and Contractor's Site establishment on completion	Sum	1		
1.2	8.4		TIME-RELATED ITEMS				
1.2.1	8.4.1		Contractual Requirements	Month	5		
	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)				
1.2.2			1 No. Furnished office, including stationary	Month	5		
1.2.3			2 No. Carports	Month	5		
Total Carried Forward							

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Brought Forward							
1.2.4			2 No. Contract name boards	Month	5		
	8.4.2.2		b) Facilities for Contractor for duration of construction, except where otherwise stated				
1.2.7			Offices and storage sheds	Month	5		
1.2.8			Workshops	Month	5		
1.2.9			Laboratories	Month	5		
1.2.10			Living accommodation	Month	5		
1.2.11			Ablution and latrine facilities	Month	5		
1.2.12			Tools and equipment	Month	5		
1.2.13			Water supplies, electric power and communications	Month	5		
1.2.14			Dealing with water (Subclause 5.5)	Month	5		
1.2.15			Access (Subclause 5.8)	Month	5		
	8.4.3		Supervision				
1.2.16			a) Contract / Project manager (minimum of 1 person)	Month	5		
1.2.17			b) Site agent (minimum 1 person) for the whole of the works	Month	5		
1.2.18	PSA 8.4.3		c) Foreman (minimum 2 persons) specifically to monitor EME or QSE sub-contractors	Month	5		
1.2.19			d) Other supervisory staff required by the contractor	Month	5		
1.2.20	8.4.4		Company and head office overhead costs for the duration of the contract (Including EME or QSE Contractor(s) related, e.g. payment of EME or QSE Contractor(s))	Month	5		
1.2.21	PSA 8.4.5		Other time-related obligations	Month	5		
1.2.22	PSA 8.4.6		Provision of surveyor and survey equipment required for the survey of the works and construction setting out in accordance with the specifications. Including survey works requested by Employers Agent for coordinating existing services on site.	Month	5		
Total Carried Forward							

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Brought Forward							
1.2.23	PSA 8.4.7		Obtaining and maintaining in good standing, of wayleaves for the duration of the contract.	Month	5		
1.3			OTHER GENERAL				
	PSA 8.4.8		Community Liaison Officer				
1.3.1			a) Payment of Community Liaison Officer	Prov.S	1	R80 500,00	R 80 500,00
1.3.2			b) Communication for Community Liaison Officer	Prov.S	1	R10 500,00	R 10 500,00
1.3.3			c) Overheads, charges and profit on item above	%	91000		
	PSA 8.4.9		Training obligation				
1.3.4			a) Training allowance paid for targeted labour and EME or QSE Contractors in terms of formal training	Prov.S	1	R350 000,00	R 350 000,00
1.3.5			b) Overheads, charges and profit on item above	%	350000		
	PSA 8.4.10		EME or QSE Construction Mentor				
1.3.6			a) Payment of EME or QSE Construction Mentor	Sum	1	R350 000,00	R 350 000,00
			WORKS RESERVED FOR EME or QSE's DEVELOPMENT MANHOLES, KERBING, PAVING, KERBING, ROADMARKINGS, STREET FURNITURE				
1.3.9	PSA 8.4.11		Assisting Local Emerging Contractors	Prov.S	1	R150 000,00	R 150 000,00
1.3.10			(a) Contractor's handling costs and other charges		150000		
1.3.11			STORMWATER DRAINAGE, SITE CLEARANCE AND EXCAVATION (Total amount from SCHEDULE SECTION 4)	Prov.S	1		
1.3.12	PSA 8.4.12		<i>Payment for preliminary and general charges by appointed EME or QSE's, fixed and time-related.</i>	%			
1.3.13			Contractor's handling costs and other charges in respect to Development of EME or QSE's item 1200 LE	%			
1.3.14			SEGMENTED PAVING (Total amount from SCHEDULE SECTION 8)	Prov.S	1		
1.3.15	PSA 8.4.12		<i>Payment for preliminary and general charges by appointed EME or QSE's, fixed and time-related.</i>	%			
1.3.16			Contractor's handling costs and other charges in respect to Development of EME or QSE's item 1200 MJ	%			
1.3.17			KERBING AND CHANNELLING (Total amount from SCHEDULE SECTION 9)	Prov.S	1		
1.3.18	PSA 8.4.12		<i>Payment for preliminary and general charges by appointed EME or QSE's, fixed and time-related.</i>	%			
1.3.19			Contractor's handling costs and other charges in respect to Development of EME or QSE's item 1200 MK	%			
Total Carried Forward							

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SCHEDULE A: SECTION 1 A

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (RAND)
Brought Forward							
1.3.20			ROAD MARKING AND SIGNS (Total amount from SCHEDULE SECTION 10)	Prov.S	1		
1.3.21	PSA 8.4.12		<i>Payment for preliminary and general charges by appointed EME or QSE's, fixed and time-related.</i>	%			
1.3.22			Contractor's handling costs and other charges in respect to Development of EME or QSE's item 1200MM	%			
1.3.23			STREET FURNITURE, (Total amount from SCHEDULE SECTION 4)	Prov.S	1		
1.3.24	PSA 8.4.12		<i>Payment for preliminary and general charges by appointed EME or QSE's, fixed and time-related.</i>	%			
1.3.25			Contractor's handling costs and other charges in respect to Development of EME or QSE's item 1200MM	%			
1.3.26			Quality Control and Assurance	Prov.S	1	R700 000,00	R 700 000,00
1.3.27			Contractor's handling costs and other charges	%	700000		
1.3.10	PSA 8.4.13		Contractor's handling costs and other charges	%	700000		
1.3.11			a) Compile Environmental Management Plan and attain approval. (Item is only payable where the Contractors Plan is approved)	Sum	1		
1.3.12			b) Implement approved Environmental Management Plan, only payable if Contractors scores above 90% score per month and no serious offences exists	Sum	1		
1.3.13			Contractor's General Obligations in respect t Ensuring Compliance with the Enviromental Plan				
1.3.14			(a) Fixed obligation	Sum	1	R500 000,00	R 500 000,00
1.3.15			(b) Time-related obligations	Month	5		
	PSA 8.4.14		Health and Safety Obligations				
1.3.16			a) Compile Health and Safety Plan and attain approval based on the specifications provided	Sum	1		
1.3.17			b) Appoint Health and Safety Personnel, including Officer and Representatives, only payable if Contractors scores above 90% score per month and no serious offences occurred.	Sum	1		
1.3.18			c) Implement approved Health and Safety Plan	Sum	1		
Total Carried Forward							

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SCHEDULE A: SECTION 1 A

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (RAND)
Brought Forward							
1.4	8.7		DAYWORK				
1.4.1			Labour	Prov.S	1	R50 000,00	R 50 000,00
1.4.2			Percentage adjustment to items for labour	%	50000		
1.4.3			Materials	Prov.S	1	R50 000,00	R 50 000,00
1.4.4			Percentage adjustment to items for materials	%	50000		
1.4.5			Plant	Prov.S	1	R75 000,00	R 75 000,00
1.4.6			Percentage adjustment to items for plant	%	75000		
1.5	8.8		TEMPORARY WORKS				
1.5.1	8.8.1		Maintain accesses to properties	Sum	1		
	PSA 8.8.2		Dealing with traffic and maintain road (or accommodation of traffic)				
1.5.2			a) All temporary road traffic signs, markings and access control. As well as all flag-persons required to safely guide the public (vehicles as well as pedestrians around the works.	Sum	1		
1.5.3			b) Temporary hoarding for fencing of the works, including gates. Minimum 1.8m in height, covered in shading cloth or similar. Including placing the hoarding around the active portions of the works and moving the hoarding to follow the works for the duration of the works.	Sum	1		
1.5.4			c) Provision of qualified traffic controllers operational during morning and evening peak times. At times where intersections and or crossing roads are closed during the morning and evening peak times.	Sum	1		
1.5.5	8.8.3		Protect existing structures until construction in vicinity complete. Existing structures being all buildings (walls and foundations) where new pavement is constructed against the building edge, approx. 2000 meters in length.	Sum	1		
	PSA 8.8.4		Existing services:				
1.5.7			a) Conduct ground penetrating radar and CAT detection of existing underground services within the road reserve of the project streets as well as 20m up and down streets crossing with the project street. A full report need to be provided to the Engineer of the services found, including a survey in CAD format indicating position and depth of services (x,y,z-coords).	Sum	1		
1.5.8		LI	c) Excavate by hand in soft material to expose existing services	m ³	50		
1.5.9	8.8.5		Cost of Survey in Terms of Land Survey Act (See 5.1.2) for record drawings no later than 5 days of issue of Practical Completion Certificate and for quantification of final payment certificate.	Sum	1		
Total Carried Forward To Summary							

CONSTRUCTION COMPLETION CONTRACT FOR DIEPSLOOT PUPIC ENVIRONMENT UPGRADE - PHASE 2

Contract No. JDA/17/19.3.2.B.7020PH-2

SCHEDULE A: SECTION 1 B

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (RAND)
1 B	SANS 1200 A		SECTION : PROVISIONAL SUMS				
1.6	8.5		SUMS STATED PROVISIONALLY BY ENGINEER				
			For work to be done by Contractor and valued in terms of Clause 8.1.2.1 d) of conditions of contract				
1.6.1			a) Relocation of existing services (raising/lowering of manholes/valve chambers/etc., relocating water meters/electrical poles/etc.), including attaining wayleaves from Service Authorities.	Prov.S	1	R400 000,00	R 400 000,00
1.6.2			b) Overheads, charges and profit on item above	%	400000		
			For work to be done by Contractor and valued in terms of Clause 8.1.2.1 d) of conditions of contract				
1.6.3			a) Relocation of traffic lights (moving existing poles/cables/operating boxes, as well as replacing traffic light heads) or installation of new traffic lights	Prov.S	1	R200 000,00	R 200 000,00
1.6.4			b) Overheads, charges and profit on item above	%	200000		
			For work to be done by Contractor and valued in terms of Clause 8.1.2.1 d) of conditions of contract				
1.6.5			a) Provision for landscaping and street furniture additional to items described elsewhere in the bills of quantities.	Prov.S	1	R200 000,00	R 200 000,00
1.6.6			b) Overheads, charges and profit on item above	%	200000		
1.6.7			a) Provision for ablution facilities at Loading and Holding facilities.	Prov.S	1	R200 000,00	R 200 000,00
1.6.8			b) Overheads, charges and profit on item above	%	200000		
	8.5		For work to be done by Contractor and valued in terms of Clause 8.1.2.1 d) of conditions of contract				
1.6.9			a) Design and construction for new electricity installation	Prov.S	1	R1 000 000,00	R 1 000 000,00
1.6.10			b) Overheads, charges and profit on item above	%	1000000		
	8.5		For work to be done by Contractor and valued in terms of Clause 8.1.2.1 d) of conditions of contract				
1.6.11			a) Material testing as required by the Engineer	Prov.S	1	R100 000,00	R 100 000,00
1.6.12			b) Overheads, charges and profit on item above	%	100000		
Total Carried Forward To Summary							

CONSTRUCTION COMPLETION CONTRACT FOR DIEPSLOOT PULVIC ENVIRONMENT UPGRADE - PHASE 2

Contract No. JDA/17/19.3.2.B.7020PH-2

SCHEDULE A: SECTION 2

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (RAND)
2	SANS 1200 C		SECTION : SITE CLEARANCE				
2.1			CLEAR SITE				
2.1.1	8.2.1		Clear and grub Site	ha	1		
	8.2.2		Remove and grub large trees and tree stumps of girth Over and up to				
2.1.2			Including disposing of materials, haulage, dumping fees, City Park fees, etc. Up to 2 m	No.	3		
2.1.3			2 m to 3 m	No.	2		
2.2			DISMANTLE AND DEMOLISH STRUCTURES Inclusive of all haulage and dumping fees.				
2.2.1	8.2.5		Take down existing fences and dispose of materials (fence around Portplein Park and around ablution block)	km	1		
2.2.2	8.2.7		Dismantle and remove pipelines (not encased in concrete), electricity transmission lines, cables, etc.	m	100		
2.2.3	8.2.7		Dismantle and remove pipelines encased in concrete	m	100		
2.2.4	8.2.8		Demolish and remove structures, reinforced and unreinforced concrete and brickwork, including bollards, benches, planters, dustbins, etc.	m ³	50		
2.2.5	8.2.8		Dismantle steelwork, etc. (steel bins, bollards, benches)	t	5		
2.3			REMOVE AND DISPOSE PAVEMENTS				
	PSC 8.2.11		Demolish existing pavements and discard materials to an approved dumping site to be located by the Contractor, including all haulage and dumping fees:				
2.3.1		LI	a) Remove and dispose existing block paving (various types for walkways and driveways) along Works area	m ²	200		
2.3.2		LI	b) Remove and dispose existing block paving (various types within roadway) along Works area	m ²	100		
2.3.3		LI	c) Remove and dispose of unreinforced concrete along works area (channels, edge beams, edging around fixtures, etc.)	m ²	100		
2.3.4			d) Remove and dispose of existing asphalt paved surfaces up to 80mm thick (average) along Works area (from roadway for new pavement works and excavations for new drainage and sleeves)	m ²	1000		
2.3.5		LI	e) Remove and dispose of kerbs (all types precast and cast-insitu) deemed to be in poor condition and for universal access ramps at intersections.	m	500		
Total Carried Forward To Summary							

CONSTRUCTION COMPLETION CONTRACT FOR DIEPSLOOT PUBLIC ENVIRONMENT UPGRADE - PHASE 2

Contract No. JDA/17/19.3.2.B.7020PH-2

SCHEDULE A: SECTION 3

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (RAND)
3	SANS 1200 DB		SECTION : PIPE TRENCHES				
3.1	PSDB 8.3.2(a)		EXCAVATION Excavate in all materials for trenches and backfill, compact, and dispose of surplus/unsuitable material within 100m from excavation, utilising labour based construction methods:				
3.1.1		LI	a) For uPVC stormwater pipes within sidewalks, including connections to building downpipes. Exceeding 0,5 m but not exceeding 1,0 m	m ³	80		
3.1.2		LI	b) For fibre sleeves within sidewalks, including crossing streets. Exceeding 0,5 m but not exceeding 1,0 m	m ³	100		
3.1.3		LI	c) For electrical sleeves within sidewalks, including crossing streets. Exceeding 0,5 m but not exceeding 1,0 m	m ³	100		
3.1.4		LI	d) For cable ducts at intersections, for traffic signals etc. Exceeding 0,5 m but not exceeding 1,0 m	m ³	100		
	8.3.2(b)		Excavate in all materials for trenches and backfill, compact, and dispose of surplus/unsuitable material for pipes up to 750 mm diam, including excavations at kerb inlets and manholes. for total trench depth: All excavations are assumed to expose significant existing services. No additional payment will be made for intersecting and/or adjoining services within the trench excavations.				
3.1.5			Exceeding 1,0 m but not exceeding 2,5 m	m	200		
	8.3.2(b)		Extra-over for excavation items (prov): Intermediate excavation (no intermediate measured, all material not classified as hard will be considered as soft material)				
3.1.6		LI	Hard rock excavation (using jackhammers only, no blasting allowed)	m ³	40		
3.1.7	8.3.2(c)	LI	Excavate and dispose of unsuitable material from trench bottom (Provisional)	m ³	100		
3.2			EXCAVATION. ANCILLARIES Make up deficiency in backfill material (Provisional)				
3.2.1	8.3.3.1(a)		from other necessary excavations on site	m ³	100		
3.2.2	8.3.3.1(c)		by importation from commercial or off-site sources selected by the Contractor	m ³	60		
3.2.3	8.3.4(a)		Shore trenching	m	80		
Total Carried Forward							

CONSTRUCTION COMPLETION CONTRACT FOR DIEPSLOOT PUPLIC ENVIRONMENT UPGRADE - PHASE 2

Contract No. JDA/17/19.3.2.B.7020PH-2

SCHEDULE A: SECTION 3

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (RAND)
Brought Forward							
3.3			FINISHINGS				
	8.3.6		Reinstate road surfaces				
3.3.1			a) Complete with all courses except surfacing, only where trenches are crossing existing surfaced roads and no other layerworks is required. Soilcrete of excavated materials with 5% cement up to 200mm below NGL. Plus 200mm BSM 2 G2 material with 3% Emulsion and 1% Cement.	m ²	500		
	8.3.4(b)		Temporary works : Control water inflow from excavations				
3.3.2			Provide equipment	Sum	1		
3.3.3			Operate and maintain	Days	30		
3.3.4			Remove equipment	Sum	1		
Total Carried Forward To Summary							

CONSTRUCTION COMPLETION CONTRACT FOR DIEPSLOOT PUPLIC ENVIRONMENT UPGRADE - PHASE 2

Contract No. JDA/17/19.3.2.B.7020PH-2

SCHEDULE A: SECTION 4

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (RAND)
4			SECTION :STORMWATER DRAINAGE SITE CLEARANCE AND EXCAVATION				
4.1	SANS 1200 LE		PIPES				
	8.2.1		Supply, handle and lay concrete pipe culverts on class C bedding:				
			a) Type S/C 100D-load pipes with spigot and socket joints:				
4.1.1			1) 450 mm diameter	m	10		
4.1.2			2) 600 mm diameter	m	30		
			2) 700 mm diameter	m	150		
4.2	8.2.8		MANHOLES				
			Construct complete with covers and frames, benching, etc., as per Engineer's drawings				
		LI	a) Type 1 Manhole (at kerb inlet)				
4.2.1			1) Exceeding 1,0 m but not exceeding 2,5 m	No.	2		
		LI	b) Type 2 Manhole (rectangular box)				
4.2.2			1) Exceeding 1,0 m but not exceeding 2,5 m	No.	Rate only		
4.2.3			1) Exceeding 1,0 m but not exceeding 2,5 m	No.	Rate only		
4.2.4	PSDM 8.2.11	LI	Break into and connect to existing manholes including joints and make good all benching	No.	1		
4.3			INLET STRUCTURES				
	8.2.8	LI	KERB INLETS with chamber, complete with transitions and covers, benching etc. As per Engineer's drawings				
4.3.1			a) Kerb inlet with access chamber (complete manhole structure)	No.	6		
			OUTLET STRUCTURES				
4.3.2			a) Stormwter otlet strutures as per detail drawing	No.	2		
Total Carried Forward							

CONSTRUCTION OF SUPER STOP AND PARK AND RIDE FACILITIES IN TSHEPISONG: PHASE 2

Contract No. JDA TPTF/PH02

SCHEDULE A: SECTION 4

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (RAND)
Brought Forward							
4.4			MISCELLANEOUS				
4.4.1	8.2.11	LI	Pipes for connecting building stormwater downpipes with road stormwater system. Unplasticised PVC pipes and fittings, sewer pipes, complete with couplings, 160mm diameter.	m	100		
4.4.2	8.2.11	LI	Pipes for future fibre ducts placed along the full length of the works on both sides of the road. Polyethylene double walled corrugated pipe smooth inside (orange colour), complete with couplings, 160mm diameter.	m	Rate only		
4.4.3	8.2.11	LI	Pipes for electrical ducts placed along the full length of the works on both sides of the road. Unplasticised PVC pipes and fittings, normal duty, complete with couplings, 110mm diameter.	m	200		
4.4.4	8.2.11	LI	Pipes for service ducts and intersections. Unplasticised PVC pipes and fittings, normal duty, complete with couplings, 110mm diameter. Three pipes together in one trench.	m	200		
4.5			BRICKWORK Extra-over item for "Inlet Structures" where the standard detail size needs to be adjusted to existing situation in the ground.				
4.5.1	8.2.9(a)	LI	115 mm thick	m ²	50		
4.5.2		LI	230 mm thick	m ²	100		
4.5.3	8.2.9(b)	LI	Plaster (not less than 10 mm and not more than 15 mm thick)	m ²	100		
4.5.4	8.2.9(c)	LI	Benching in prescribed mix 15/19 concrete with granolithic rendering	m ²	50		
4.5.5		LI	In-Situ cast concrete floor slabs class 25/19	m ³	10		
4.5.6			High-tensile steel bars installed in concrete slabs	t	2		
Total Carried Forward To Summary							

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SCHEDULE A: SECTION 5

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (RAND)
5	SANS 1200 DM		SECTION : EARTHWORKS (ROADS, SUBGRADE)				
5.1			TREATMENT OF ROAD-BED				
	8.3.3(a)		Road-bed preparation and compaction of in-situ material. Compact to 90 % mod. AASHTO maximum density.				
5.1.1			a) For new walkway area, including driveways and road lay-by areas.	m ³	450		
5.1.2			b) For new road pavements, including raised pedestrian crossings.	m ³	250		
5.2			EARTHWORKS Including all haulage and dumping fees where applicable.				
	8.3.4		Cut to fill				
5.2.1			Compact to 90 % mod. AASHTO maximum density	m ³	1700		
	8.3.5		Selected layer compacted to 93 % mod. AASHTO maximum density. G7 materials commercially sourced by the Contractor, including haulage and temporary stockpiling if required.				
5.2.2			a) For new walkway area, including driveways and road lay-by areas.	m ³	1800		
5.2.3			b) For new road pavements, including raised pedestrian crossings.	m ³	250		
	8.3.7		Cut to spoil from soft excavations				
5.2.4			a) For new walkway area, including driveways and road lay-by areas.	m ³	850		
5.2.5			b) For new road pavements, including raised pedestrian crossings.	m ³	400		
	8.3.13		SURFACE FINISHES				
5.3.1			Topsoiling min depth 100 mm. Material to be imported from commercial sources.	m ²	1300		
5.3.2			Grassing (Cynodon dactylon (lawn) commonly known as Couch grass)	m ²	1300		
Total Carried Forward To Summary							

CONSTRUCTION COMPLETION CONTRACT FOR DIEPSLOOT PULVIC ENVIRONMENT UPGRADE - PHASE 2

Contract No. JDA/17/19.3.2.B.7020PH-2

SCHEDULE A: SECTION 6

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (RAND)
6	SANS 1200 ME		SECTION : (SUB)BASE				
6.1			SUBBASE				
	8.3.3		Construct gravel subbase with G5 material from commercial sources. Including all haulage and temporary stockpiling of materials where required.				
6.1.1			a) 150 mm compacted to 95% mod. AASHTO (C4 after stabilisation) for walkways, driveways and road lay-by's.	m ³	1700		
6.1.2			b) 150 mm compacted to 95% mod. AASHTO (C4 after stabilisation) for roadways and raised pedestrian crossings.	m ³	300		
6.1.3			c) 150 mm compacted to 97% mod. AASHTO (C3 after stabilisation) for roadways and raised pedestrian crossings.	m ³	300		
	8.3.5		Process material by means of:				
6.1.4			Stabilizing (extra-over items 6.1.1, 6.1.2 and 6.1.3)	m ³	2300		
	8.3.8		Stabilizing agent				
6.1.4			Portland cement CEM II 32.5 A/L	t	200		
6.2	SANS 1200 MF 8.3.3		CRUSHED STONE BASE				
			Construct base with material from commercial sources. Including all haulage and temporary stockpiling of materials where required.				
			d) Graded crushed (G1)				
6.2.1			150 mm to main carriageways, compacted to 88% of apparent relative density	m ³	250		
6.3			PAVEMENT REPAIRS				
6.3.1			Sawing of asphalt layers for patching (50mm to 100mm)	m	1500		
6.3.2			Sawing of cemented pavement layers for patching (150mm to 200mm)	m	100		
			Excavation in existing pavements for patching in: (including disposal of materials)				
6.3.3			a) Asphalt layers	m ³	150		
6.3.4			b) Cemented layers	m ³	50		
			Backfilling of excavations for patching with:				
6.3.5			a) Chemically stabilised pavement material (C4) for a patch with surface area not exceeding 5m2.	m ³	200		
			Crack sealing:				
			a) Cleaning the cracks with compressed air	m	300		
			b) Applying hot bitumen rubber for sealing cracks.	l	50		
Total Carried Forward To Summary							

CONSTRUCTION COMPLETION CONTRACT FOR DIEPSLOOT PUBLIC ENVIRONMENT UPGRADE - PHASE 2

Contract No. JDA/17/19.3.2.B.7020PH-2

SCHEDULE A: SECTION 7

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (RAND)	
7	SANS 1200 MH		SECTION : ASPHALT BASE AND SURFACING					
7.1			PRIME COAT					
	8.5.1		Prime coat using:					
7.1.1			a) Base material (BSM 2 G2 material with 3% Emulsion and 1% Cement) for a patch with surface area not exceeding 5m2.	m ²	2112			
7.1.2			a) 30mm continuous Asphalt: Bitumen treated base (BTB) with a maximum aggregate size of 26.5mm	m ²	2112			
			Surveys and Soil Tests:					
			Note : Scheduled tests are minimum expected tests as per SANS1200. This does not relieve the contractor of all necessary quality control obligations (including accurate setting out of works). The contractor must always conduct all necessary test to satisfy themselves that all works have been done to specifications. Such tests to be available to the Engineer on request.					
			COMPACTION TESTS; Compaction density tests on compacted surfaces, including CBR, UCS, PI and GM, by certified testing laboratory to be identified by the contractor.	No.	325			
			Provisional Sums: Additional soil tests or survey checks to be carried out as directed by the Engineer:					
			COMPACTION TESTS; Compaction density tests on compacted surfaces, in	item	1			
			Overheads, charges and profit on above.	%				
			Verification surveys as requested by the Engineer to be done by independ	item	1			
			Overheads, charges and profit on above.	%				
Total Carried Forward To Summary								

CONSTRUCTION COMPLETION CONTRACT FOR DIEPSLOOT PULVIC ENVIRONMENT UPGRADE - PHASE 2

Contract No. JDA/17/19.3.2.B.7020PH-2

SCHEDULE A: SECTION 8

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (RAND)
8	SANS 1200 MJ		SECTION : SEGMENTED PAVING				
8.1	8.2.1	LI	PROVISION OF EDGE RESTRAINTS				
8.1.1			a) Concrete edge beam 150 x 150 mm, in-situ cast concrete class 25/19. At edge of sidewalks against building line and between walkway paving and driveway paving.	m	2500		
8.1.2			b) Concrete edge beam 200 x 150 mm, insitu cast concrete class 25/19. At edge of driveways against building line.	m	300		
8.2	8.2.2	LI	CONSTRUCTION OF PRECAST CONCRETE SEGMENTED PAVING				
		8.2.2	<u>Construction of Paving complete</u>				
8.2.1			Inclusive of 20 mm layer bedding sand imported from commercial sources, with				
			a) Main Pedestrian Zone 1: Clay Paver Class PA, 220 x 110 mm, 50mm thick [Colour: RED] paving blocks laid to stretcher bond pattern in accordance with SANS 1200 MJ and CMA Concrete Block Paving Manuals, on 20mm compacted sand bed.	m ²	6180		
8.2.2			b) Main Pedestrian Zone (accents): Clay Paver Class PA 220 x 110 mm, 50mm thick [Colour: Yellow] paving blocks laid to stretcher bond pattern in accordance with SANS 1200 MJ and CMA Concrete Block Paving Manuals, on 20mm compacted sand bed.	m ²	2450		
8.2.3			c) Main Pedestrian Zone - Walkway edge: 600mm x 300mm x 60mm "Jap Concrete Slab" 25MPa (to architects approval) [Colour: Natural grey]. Laid flat on 30mm concrete bedding (haunching) Concrete class 15/19.	m ²	960		
8.2.4			d) Main Pedestrian Zone - Walkway Band: "Standard concrete cobble 110 x 110 mm" 50mm thick [Colour: Charcoal] paving blocks laid to block pattern in accordance with SANS 1200 MJ and CMA Concrete Block Paving Manuals, on 20mm compacted sand bed.	m ²	390		
8.2.5			e) Road lay-by paving: Concrete interlocking paving blocks Class S-A 221.2 x 110.8 mm, 80mm thick textured edge [Colour:Charcoal] paving blocks laid to herringbone pattern in accordance with SANS 1200 MJ and CMA Concrete Block Paving Manuals, on 20mm compacted sand bed.	m ²	180		
8.2.6			g) Driveway paving: Concrete interlocking paving blocks Class S-A 221.2 x 110.8 mm, 80mm thick smooth edge [Colour:Charcoal] paving blocks laid to herringbone pattern in accordance with SANS 1200 MJ and CMA Concrete Block Paving Manuals, on 20mm compacted sand bed.	m ²	1700		
8.2.7			h) Warning tactile blocks - 400 x 400 x 65 mm (SANS 784, 2007), in accordance with SANS 1200 MJ and CMA Concrete Block Paving Manuals, on 20mm compacted sand bed.	m ²	160		
8.2.8			i) Guidance tactile blocks - 400 x 400 x 65 mm (SANS 784, 2007), in accordance with SANS 1200 MJ and CMA Concrete Block Paving Manuals, on 25mm compacted sand bed.	m ²	150		
8.3		PSMJ 8.2	PEDESTRIAN RAMPS Extra-over precast concrete segmented paving items for lowering pavement and				
		PSMJ	ADDITIONAL SUPPLY OF PRECAST CONCRETE SEGMENTED PAVING				
8.3.1			a) Clay Paver Class PA 220 x 110 mm, 50mm thick [Colour: RED].	m ²	200		
8.3.2			b) Clay Paver Class PA 220 x 110 mm, 50mm thick [Colour: Yellow].	m ²	110		
8.3.3			c) 600mm x 300mm x 60mm "Jap Concrete Slab	m ²	20		
8.3.4			d) Standard concrete cobble 110 x 110 mm, 50mm thick [Colour: Charcoal].	m ²	40		
8.3.5			e) Concrete interlocking paving blocks Class S-A 221.2 x 110.8 mm, 80mm thick textured edge [Charcoal]	m ²	20		
8.3.6			f) Concrete interlocking paving blocks Class S-A 221.2 x 110.8 mm, 80mm thick smooth edge [Colour: Charcoal]	m ²	10		
8.3.7			g) Warning tactile blocks - 400 x 400 x 65 mm (SANS 784, 2007).	m ²	20		
8.3.8			h) Guidance tactile blocks - 400 x 400 x 65 mm (SANS 784, 2007).	m ²	20		
8.3.10		8.2.3	Extra for circular cutting not exceeding 2m radius.	m	992		

Total Carried Forward

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SCHEDULE A: SECTION 8

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (RAND)
Brought Forward							
8.3.11			h) Warning tactile blocks - 400 x 400 x 65 mm (SANS 784, 2007), in accordance with SANS 1200 MJ and CMA Concrete Block Paving Manuals, on 20mm compacted sand bed.	m ²	250		
8.2.12			i) Guidance tactile blocks - 400 x 400 x 65 mm (SANS 784, 2007), in accordance with SANS 1200 MJ and CMA Concrete Block Paving Manuals, on 25mm compacted sand bed.	m ²	250		
8.4	PSMJ 8.2.3	LI	PEDESTRIAN RAMPS				
8.4.1			Extra-over precast concrete segmented paving items for lowering pavement and skew sides for the construction of pedestrian scoops. Refer to Engineer's drawings	m ²	600		
8.5	PSMJ 8.2.4		ADDITIONAL SUPPLY OF PRECAST CONCRETE SEGMENTED PAVING FOR ATTIC STOCK TO JRA DEPOT				
8.5.1			a) Clay Paver Class PA 220 x 110 mm, 50mm thick [Colour: RED].	m ²	600		
8.5.2			b) Clay Paver Class PA 220 x 110 mm, 50mm thick [Colour: Yellow].	m ²	50		
8.5.3			c) Clay Paver Class PA 220 x 110 mm, 50mm thick [Colour: Nutmeg].	m ²	20		
8.5.4			d) Standard concrete cobble 110 x 110 mm, 50mm thick [Colour: Charcoal].	m ²	50		
8.5.5			e) Concrete interlocking paving blocks Class S-A 221.2 x 110.8 mm, 80mm thick textured edge [Colour: Multi-Blend]	m ²	270		
Total Carried Forward To Summary							

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SCHEDULE A: SECTION 8

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (RAND)
Brought Forward							
8.5.6			f) Concrete interlocking paving blocks Class S-A 221.2 x 110.8 mm, 80mm thick smooth edge [Colour: Charcoal]	m ²	100		
8.5.7			g) Concrete interlocking paving blocks Class S-A 221.2 x 110.8 mm, 80mm thick smooth edge [Colour: Multi-Blend]	m ²	100		
8.5.8			h) Warning tactile blocks - 400 x 400 x 65 mm (SANS 784, 2007).	m ²	70		
8.5.9			i) Guidance tactile blocks - 400 x 400 x 65 mm (SANS 784, 2007).	m ²	70		
Total Carried Forward To Summary							

CONSTRUCTION COMPLETION CONTRACT FOR DIEPSLOOT PULIC ENVIRONMENT UPGRADE - PHASE 2

Contract No. JDA/17/19.3.2.B.7020PH-2

SCHEDULE A: SECTION 9

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (RAND)
9	SANS 1200MK		SECTION : KERBING AND CHANNELLING				
9.1			CONCRETE KERBING AND CHANNELLING				
	8.2.2	LI	a) Pre-cast concrete kerbing (SANS 927) on sand-cement bedding with adequate haunching as per drawings. All radii and straights, in curved sections units max. 300mm long.				
	SANS 1200MK		KERBS				
	8.2.1	LI	Laid straight.	m	104		
	8.2.1	LI	Laid circular on plan not exceeding 10m radius.	m	136		
	8.2.1	LI	Laid flat.	m	105		
			300 x 125 x 90 mm Half-battered moutable concrete kerb (SABS 927				
	8.2.1	LI	Laid straight.	m	3420		
	8.2.1	LI	Laid circular on plan not exceeding 10m radius.	m	136		
			100 x 250mm Rectangular concrete kerb (SABS 927 Fig. 10) jointed and				
	8.2.1		Laid straight.	m	3000		
			300 x 200 x 100 mm Mountable concrete kerb (SABS 927 Fig. 8c) jointed and pointed in 5:1 cement mortar and bedded in 15mpa concrete including all necessary excavation, stabilised backfilling, carting away, continuous concrete haunching on curves, concrete haunching at joints on straights, etc.:				
	8.2.1	LI	Laid straight.	m	3420		
	8.2.1	LI	Laid circular on plan not exceeding 10m radius	m	136		
	8.2.1	LI	Mountable kerb to barrier kerb transitions as detailed in drawing (See Civil and Structural Drawings) and to meet JRA standards for typical kerb transitions JRA-SDRD-020	m	58		
			SUNDRIES				
	8.2.1	LI	25Mpa/19mm Concrete for gapfilling between the laid kerbs, finished smooth with a steel trowel on all exposed surfaces to a uniform dense finish with closed cell expanded polyethylene filler and polyurethane sealant expansion joints at 10m centres and saw cut construction joints and sealant at 2m centres including all necessary excavation, backfilling, formwork, dowels, etc.	m	135		
	8.2.1	LI	30Mpa/19mm Concrete edge beam size 300 x 200mm deep finished smooth on all exposed surfaces to a uniform dense finish with one top corner having a 25 x 25mm chamfer with and including closed cell expanded polyethylene filler and polyurethane sealant expansion joints at 6m centres and saw cut construction joints and sealant at 2m centres including all necessary excavation, backfilling, cutting into paving, formwork, dowels, etc.	m	83		
			CONCRETE				
	8.1.1a		25Mpa/19mm Concrete edging along existing buildings size 150 x 150mm deep finished smooth on all exposed surfaces to a uniform dense finish with one top corner having a 10 x 10mm chamfer with closed cell expanded polyethylene filler and polyurethane sealant expansion joints at 6m centres, saw cut construction joints and sealant at 2m centres and 10mm softboard expansion joint along full length including all necessary formwork, excavation, backfilling, cutting into paving, etc.	m ³	77		
	8.1.1b		25Mpa/19mm Concrete in triangular shaped ramps to transition area of footpaths, including all necessary formwork, reinforcement, cutting into paving, finishing top surfaces to an evenly ribbed non-slip finish, etc.	m ³	24		
Total Carried Forward							

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SCHEDULE A: SECTION 11

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (RAND)
Brought Forward							
	SANS 1200MM		<u>ANCILLARY ROADWORKS</u>				
8.3.4			30Mpa/19mm Concrete in surrounds to existing posts, manholes, etc. size overall 300 x 300 x 150mm thick including all necessary formwork, movement joints, cutting into paving, finishing top surfaces to a smooth finish, steel ruled joints all round top, casting around existing posts, manholes, etc.	no	20		
8.3.4			30Mpa/19mm Concrete in surrounds to existing posts, manholes, etc. size overall 400 x 400 x 200mm thick including all necessary formwork, movement joints, cutting into paving, finishing top surfaces to a smooth finish, steel ruled joints all round top, casting around existing posts, manholes, etc.	no	18		
8.3.4			30Mpa/19mm Concrete in surrounds to existing posts, manholes, etc. size overall 450 x 450 x 250mm thick including all necessary formwork, movement joints, cutting into paving, finishing top surfaces to a smooth finish, steel ruled joints all round top, casting around existing posts, manholes, etc.	no	15		
8.3.4			30Mpa/19mm Concrete in surrounds to existing posts, manholes, etc. size overall 1000 x 1000 x 80mm thick including all necessary formwork, movement joints, cutting into paving, finishing top surfaces to a smooth finish, steel ruled joints all round top, casting around existing posts, manholes, etc.	no	12		
8.2.1			300mm High x 83mm wide "W" shaped hot dip galvanised steel				
8.2.1			Installed straight.	m	80		
8.2.1			Installed circular on plan	m	0		
8.2.1			End units - end wing.	no	4		
8.2.5			Chromadek reflector type D1.	no	18		
Total Carried Forward To Summary							

CONSTRUCTION COMPLETION CONTRACT FOR DIEPSLOOT PULIC ENVIRONMENT UPGRADE - PHASE 2

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SCHEDULE A: SECTION 10

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (RAND)
10	SANS 1200 MM		SECTION : ANCILLARY ROADWORKS				
		SANS 1200M M	<u>ROAD MARKINGS AND SIGNS</u>				
			Prepare and paint one coat approved white, red or yellow 1.25mm thick thermoplastic, reflective road marking paint with Class 1 reflective beads within the paint on asphalt surface as per "The Southern African Development Community - Road Traffic Signs Manual (SARTSM), June 1999 Edition, Volumes 1 to 4" all in accordance with SABS 1091-1975:				
8.4.1			300mm Wide broken or continuous lines. Code: RTM1.	m	65		
8.4.1			100mm Wide broken or continuous lines. Code: RM1.	m	1200		
8.4.1			150mm Wide broken or continuous lines. Code: RM1.	m	150		
8.4.1			Kerb marking. Code: GM8	m	520		
8.4.1			Yield line marking sign. Code: RTM2.	no	2		
8.4.1			2400mm High letters. Code: GM7.	no	13		
8.4.1			2400mm High symbol. Code: WM5	no	2		
8.4.1			Statutory direction arrows 4000mm long. Codes: WM7.1, WM7.2,	no	2		
8.3.6			<u>ROAD SIGNS</u>				
8.3.6			<u>Class 1 retro-reflective road sign complying with the requirements of</u>				
8.3.6			600mm Diameter 'STOP' sign. Code: R1.	no	24		
8.3.6			'YIELD' sign. Code: R2.	no	2		
8.3.6			600mm Diameter 'NO PARKING' sign. Code: R216.	no	5		
8.3.6			600mm Diameter 'NO STOPPING' sign. Code: R217.	no	5		
8.3.6			450 x 100mm 'STREET NAME' sign as per JRA specifications. Code: GL1.	no	24		
8.3.6			600mm Diameter 'HAWKERS PROHIBITED' sign on two sides of pole. Code: R241	no	15		
8.3.6			SPEED HUMPS' sign. Code: W332.	no	7		
8.3.6			Take up and remove to stockpiles existing signage post approximately	no	45		
Total Carried Forward To Summary							

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SCHEDULE A: SECTION 11

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (RAND)
11			SECTION : STREET FURNITURE				
			SUPPLEMENTARY PREAMBLES				
11.1			LANDSCAPING SPECIFICATIONS: REFER TO ARCHITECT'S DRAWINGS				
			FOLLOWING IN STREET FURNITURE				
			Galvanised Steel Bollards (Refer to Architects drawing):				
			Galvanised Steel Bins (Refer to Architect's Drawing):				
			FOLLOWING IN TRADERS SHELTERS, BUS SHELTERS, SEATS AND TABLES				
			(REFER TO ARCHITECTS DRAWINGS)				
			The following items have been prepared in accordance with the Standard System of Measuring as Published by the Association of South African Quantity Surveyors				
			BRICK PLANTER BOX				
11.1.1			One brick walls(6 x courses above paving level) Clay Face Brick Classification: Face Brick Standard -FBS Typical comprehensive strength: 17-30 MPa Typical 24Hr Water absorption: 6-9% Type and colour: Country Classic Satin Size: 222x109x73mm.	m ²	550		
11.1.2			Foundation brick (7 x courses below paving level) Clay Non Face Brick Classification: Non Facing Extra - NFX Average Compressive Strength: 14 MPa Size: 222x106x73mm.	m ²	650		
11.1.3			Coping Precast purpose made concrete coping slab with 4mm diameter crimped galvanised wire wall to be set into slab by manufacturer. Each to be set at 232mm c/c. Number required of crimp wire per slab: 3. All edges to be rounded Compressive strength: 25MPa Size: 600 x 300 x 60 mm Colour: GREY	m ²	59		
11.1.4			Brickforce Brickforce, 2.8mm diameter min Yield Strength = 485 mpa Lap length = 400mm min. Brickforce to be placed in the first five layers of brickwork on footings. Thereafter to be placed in every 3 courses layer for all brickwalls above ground level	m ²	22		
11.1.5			Cementitious Waterproofing Cementitious waterproofing consisting of an osmotic cementitious mortar which complies with a 28 days compressive strength of 25MPa or greater. Maximum aggregate size of 0.4mm. Bond strength on concrete must be 2MPa or greater after 28 days. Apply two coats at an average total thickness of 3mm Consumption: 1.5Kg/m ² per mm of thickness Colour: Grey	m ²	560		
11.1.6			Concrete 30/19 Concrete mass bootleg footing to engineer's specs and details	m ³	50		
Total Carried Forward							

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SCHEDULE A: SECTION 11

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (RAND)
Brought Forward							
11.1.7			Grouting General purpose non-shrink formable grout. Flow of less than 60 seconds as per ASTM C939.	Kg	1500		
11.1.8			BRICK PLANTER BOX 1200 square Concrete Tree Grid Overall dimensions: 1200 x 1200 x 60mm with a minimum diameter of 420mm at centre of tree grid and consists of 4 sectional pieces each at 600x600mm. Finish: Exposed concrete aggregates.	No	19		
11.1.9			Type 1 - Planter edge restraints as per VJ paver specifications Precast concrete paving slab Compressive strength: 25MPa Size: 600 x 300 x 60 mm Colour: GREY	m ²	50		
11.1.10			Type 2 - Planter edge restraints as per VJ paver specifications Precast concrete paving slab	m ²	50		
11.1.11			BIN Perforated fixed bin as per architect's details and specifications	No	55		
11.1.12			20/19 Concrete mass to be filled into steel legs	m ³	20		
11.1.13			25/19 Concrete mass base footing	m ³	20		
11.1.14			BOLLARD 127mm diameter x 2.5mm thick x 1400 mm long Galvanised steel bollard with 3 x Galvanised steel rings with rounded edges welded to bollard	No	188		
11.1.15			Luminescent anti-slip tapes , 48mm width	m	15		
11.1.16			20/19 Concrete mass to be filled into bollards	m ³	10		
11.1.17			Bollards concrete base footing (25/19)	m ³	10		
LANDSCAPING							
<u>Tree type</u>							
11.1.19			Combretum Erythrophyllum: River Bushwillow(100 litres size tree)	No.	56		
<u>Tree hole</u>							
11.1.20			Dig tree hole 1x1x1m ³	m ³	37		
<u>Ground cover type</u>							
11.1.21			Dietes bicolor (1 Ltr @ 8 /planter) Yellow Wild Iris (1 litre)	No.	448		
<u>Import and spread topsoil</u>							
11.1.22			Loamy soil with pH of 6.8 to 7.2, with an ideal composition of 15 - 20% clay 10% silt / sludge 65 - 75% sand Minimum ration of organic material 2% All material shall be free of harmful deposits and unwanted seeds Soil is to be spread in planting areas and lightly compacted in layers of 150mm Application rate: 0.45m ³ or 450 dm ³ per tree hole planter	m ³	30		
Total Carried Forward							

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SCHEDULE A: SECTION 11

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (RAND)
Brought Forward							
11.1.23			<u>Import and spread compost</u> Compost with pH of 4 to 7, shall be composed of properly decayed organic material All material shall be free of harmful deposits, salts, unwanted seeds and any other harmful waste Compost application rate: 0.45m ³ or 450 dm ³ per tree hole planter	m ³	30		
11.1.24			Bonemeal Fertilizer Fertilizer as per specifications below, to be mixed thoroughly into topsoil. No fertilizer to be added to soil more than two weeks before planting. Application rate: Bonemeal in tree holes - 0.8kg / tree hole	Kg	50		
11.1.25			Super Phosphate Fertilizer as per specifications below, to be mixed thoroughly into topsoil. No fertilizer to be added to soil more than two weeks before planting. Application rate: Super Phosphate in tree holes - 1.5kg / tree hole	Kg	84		
11.1.26			<u>Vermiculite</u> Application rate: Vermiculite to be applied at 15% / m ³ of topsoil per planting hole 0.0675 m ³ or 67.5 dm ³	m ³	10		
11.1.27			<u>Import and spread mulch</u> Apply mulch in areas of planting. Mulch shall be composed of organic material such as wood chips, free from particles of bark residue, fungus disease etc. Mulch application rate: 50mm layer after planting 50 dm ³ per planter	m ³	10		
11.1.28			Drainage Pipe 110mm diam. and 1000 length perforated pipe	m	56		
11.1.29			<u>Gravels</u> 19mm aggregate to be filled in into 110mm diameter drain pipe	m ³	20		
11.1.30			<u>Tree timber stake</u> Timber tree stake to be a minimum 50mm in diameter x 3 metres long	No.	112		
11.1.31			<u>Post maintenance for Landscaping</u> Allow for maintaining landscaping, This includes watering, weeding,	month	6		
Total Carried Forward							

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SCHEDULE A: SECTION 12

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (RAND)
12	SANS 1200H		SECTION : STRUCTURAL STEELWORK				
12.1	8.3.1		Supply and Fabrication				
12.1.1	8.3.1.1		Preparation of shop detailed drawings	Sum	1		
12.1.2	PSH 8.3.1.2		Supply and fabrication of steelwork complete with all the necessary cleats, brackets, gussets, packs, etc as follows: including coating for a Bus Shelter	m ²	250		
	PSH 8.3.1.2		Members				
			Rafter				
12.1.3	PSH 8.3.1.2		IPE 200 rafter cut to shape	t	4		
			Base plates				
12.1.4	PSH 8.3.1.2		250mmx250mmx12mm thick base plate	t	4		
			Purlins				
12.1.5	PSH 8.3.1.2		75x50x20x2.0mm C-Channel Purlin	t	5		
			Other Members				
12.1.6	PSH 8.3.1.2		Cap Plate welded to top of column	t	2		
12.1.7	PSH 8.3.1.2		102mm dia m/steel chs back support to be welded or bolted to columns	t	3		
12.1.8	PSH 8.3.1.2		3 x 60mm dia m/steel chs for seat to be welded to shaped steel plate	t	3		
12.1.9	PSH 8.3.1.2		203 x 203 m/steel H-column welded to base plate and bolted to r.c footing	t	20		
12.1.10	PSH 8.3.1.2		8mm thick shaped m/steel seat side supports, bolted to steel columns	t	3		
12.1.11	PSH 8.3.1.2		B100 mentis grating 'gripweld' or similar with 25x4.5mm bearer bars, fixed to 50x50mm steel shs surround frame	m ²	80		
12.1.12	PSH 8.3.1.2		75 x 100 rectangular downpipe at both ends, colour to match roof sheeting	m	40		
12.1.13	PSH 8.3.1.2		8mm thick shaped m/steel side supports, bolted to steel columns	t	3		
12.1.14	PSH 8.3.1.2		50 x 50mm steel shs surround frame	t	3		
12.1.15	PSH 8.3.1.2		0.58mm Galvanized Z200 valley gutter, colour to match roof sheeting on 203 x 203 m/steel H-column to be used as roof support / gutter	t	3		
Total Carried Forward							

CONSTRUCTION COMPLETION CONTRACT FOR DIEPSLOOT PUPLIC ENVIRONMENT UPGRADE - PHASE 2

Contract No. JDA/17/19.3.2.B.7020PH-2

SCHEDULE A: SECTION 12

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (RAND)
Brought Forward							
12.1.16	PSH 8.3.1.2		203 x 203 m/steel H-column to be used as roof support / gutter	t	3		
12.2	8.3.2		Delivery				
12.2.1	8.3.2.1		Normal loads	t	56		
12.3	8.3.3		Erection on site	t	56		
12.4	8.3.6		Holding-down bolts				
12.4.1	8.3.6 (a)		M12 grade 8.8 threaded HD bolts complete with washers and nuts.	t	3		
Total Carried Forward To Summary							

CONSTRUCTION COMPLETION CONTRACT FOR DIEPSLOOT PUPLIC ENVIRONMENT UPGRADE - PHASE 2

Contract No. JDA/17/19.3.2.B.7020PH-2

SCHEDULE A: SECTION 13

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (RAND)
13	SANS 1200HB		SECTION : CLADDING AND SHEETING				
13.1	8.2.2		Supply and Fabrication				
			Roof cladding supply, deliver to site, erect 0.58mm @ 5Deg. Roof Slope. Chromadek finish: Dark Dolphin as per Engineer's drawings.				
13.1.1			Corrugated roof sheeting 0,58mm @ 5 deg Roof slope Chromadek finish: Dark Dolphin	m ²	200		
Total Carried Forward To Summary							

CONSTRUCTION COMPLETION CONTRACT FOR DIEPSLOOT PULVIC ENVIRONMENT UPGRADE - PHASE 2

Contract No. JDA/17/19.3.2.B.7020PH-2

SCHEDULE A: SECTION 14

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (RAND)
14	SANS 1200GA		SECTION : CONCRETE (SMALL WORKS)				
14.1	8.2		Scheduled formwork items				
14.1.1	8.2.1 (a)		Rough, 1200mm x 300mm deep strip foundation	m ²	10		
14.1.2	8.2.1 (b)		Rough, 800mm x 250mm deep strip foundation	m ²	5		
14.2	8.3		Scheduled reinforcement items				
14.2.1	8.3.1 (a)		High tensile steel (Diameter 12mm)	t	2		
14.2.2	8.3.1 (b)		Mild steel (Diameter 8mm)	t	1		
14.3	8.4		Scheduled concrete items				
14.3.1	8.4.2		15 MPa, 50mm thick blinding layer	m ³	20		
14.3.2	8.4.3		Strength Concrete, Grade 25/19 in strip footings				
14.3.3	8.4.3 (a)		1200mm x 300mm deep strip footing	m ³	100		
14.3.4	8.4.3 (b)		800mm x 250mm strip footing	m ³	50		
14.3.5	8.4.3 (c)		For transition ramps and reinstatement of existing concrete surfaces complete				
14.3.6			Strength Concrete, 19mm/15Mpa	m ³	30		
14.3.7	8.4.4		Unformed Surface Finishes				
14.3.8	8.4.4 (a)		Wood-floated finish	m ²	50		
14.3.9	8.4.4 (b)		Steel-floated finish	m ²	50		
14.4	8.7		Grouting				
14.4.1	8.7 (a)		Non shrink cementitious grout under structural steel members base plate	m ³	5		
Total Carried Forward To Summary							

CONSTRUCTION COMPLETION CONTRACT FOR DIEPSLOOT PULVIC ENVIRONMENT UPGRADE - PHASE 2

Contract No. JDA/17/19.3.2.B.7020PH-2

SCHEDULE A: SECTION 15

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (RAND)
15			JB MARKS BRIDGE (CULVERT STRUCTURE)				
			<u>GENERAL SITEWORKS</u>				
			<u>SUPPLEMENTARY PREAMBLE</u>				
			<u>Carting away of excavated material</u>				
			Descriptions of carting away of excavated material shall be deemed to include for bulking and loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site.				
15.1	SANS 1200C		<u>SITE CLEARANCE, ETC.</u>				
			<u>Site clearance:</u>				
15.1.1	8.2.1		Allow for digging up and removing all rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 100mm girth measured 1m above ground level, etc. including carting away all material to a dumping site to be located by the contractor.	m ²	140		
15.1.2	8.2.10		Remove topsoil to nominal depth of 150 mm and stockpile	m ²	140		
15.2	SANS 1200A		<u>SUMS STATED PROVISSIONAL BY THE ENGINEER</u>				
			<u>For work to be executed by the Employer or a nominated subcontractor</u>				
15.2.1	8.5a.1		Allow for removal of rubish,rubble, etc stockpiled along the river bank and rehabilitate the surface. This includes carting away all material to a dumping site to be located by the contractor, and making good the river bank to original shape, as per Engineer's instructions	Item	1		
15.2.2	8.5b.2		Overheads, charges and profit on (a) above.	Sum	1		
15.2.3	8.5c.3		Specified activities associated with or independent of (a) or (b) above.	Sum	1		
			<u>TEMPORARY WORKS</u>				
15.2.4	8.8.2		Dealing with or accommodation of traffic.	Sum	1		
15.2.5	8.8.3		The contractor is to provide all temporary works which he deems necessary to complete the project and he must protect all existing structures in the vicinity of the works.	Sum	1		
15.2.6	8.8.4a		Supply or hire of specialist equipment for the detection of all services.	Sum	1		
15.2.7	8.8.4b		Use of the equipment referred to in item (a) above.	Sum	1		
15.2.8	8.8.4d		Temporary protection of services.	Sum	1		
15.2.9	8.8.5.b.2		Cost of survey in terms of the land surveying act	Sum	1		
15.2.10	8,9		Compliance with the health and safety plan.	Sum	1		
15.2.11	8.9.4		Workman's Compensation Act.	Sum	1		
Total Carried Forward To Summary							

CONSTRUCTION COMPLETION CONTRACT FOR DIEPSLOOT PUBLIC ENVIRONMENT UPGRADE - PHASE 2

Contract No. JDA/17/19.3.2.B.7020PH-2

SCHEDULE A: SECTION 15

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (RAND)
Brought Forward							
			<u>Precast concrete portal culverts</u>				
			Excavation:				
			(a) Excavating soft material situated within the following depth ranges below the surface level:				
15.2.12			(i) 0m up to 1.5m	m ³	724		
15.2.13			(ii) Exceeding 1,5m and up to 3,0m	m ³	48		
15.2.14			(b) Extra over subitem (a) for excavation in hard material irrespective of depth	m ³	10		
			Backfilling:				
			(a) Using imported selected material				
15.2.15			i) G2 Material To Be Compacted in 100mm Layers to 98% Mod AASHTO	m ³	145		
15.2.16			ii) G5 Material To Be Compacted in 100mm Layers to 95% Mod AASHTO	m ³	116		
15.2.17			iii) G7 Material To Be Compacted in 150mm Layers to 95% Mod AASHTO	m ³	648		
15.2.18			(b) Extra over subitems(c) for soil cement backfilling (5% cement)	m ³	50		
15.2.19			(c) Using dump rock	m ³	837		
15.2.20			(d) 19mm Stones	m ³	53		
15.2.21			e) Riversand	m ³	140		
15.2.22			Precast Concrete Barrier	m	60		
			<u>Compaction of in-situ surfaces:</u>				
15.2.23	8.3.3a		Rip and recompact ground surface, including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% modified AASHTO density and trim to required levels.	m ²	560		
	SANS 1200ME		<u>SUB-BASE COURSE</u>				
15.2.24	8.3.3		Selected imported G5 (commercial sources) (C4 after stabilisation) natural gravel in 150mm layers and spread, level, water and compact to 95% modified AASHTO density	m ³	700		
	SANS 1200MF		<u>BASE COURSE</u>				
15.2.25	8.3.3		Selected imported C4 (commercial sources) (C4 after stabilisation) natural gravel in 150mm layers and spread, level, water and compact to 97% modified AASHTO density.	m ³	700		
	SANS 1200MH		<u>BITUMEN TREATED BASE</u>				
15.2.26	8.5.4		40mm Continuous Graded Asphalt	ton	0		
Total Carried Forward To Summary							

CONSTRUCTION COMPLETION CONTRACT FOR DIEPSLOOT PUBLIC ENVIRONMENT UPGRADE - PHASE 2

Contract No. JDA/17/19.3.2.B.7020PH-2

SCHEDULE A: SECTION 15

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (RAND)
Brought Forward							
15.2.27	SANS 1200ME 8.3.5d		<u>STABILISATION</u> Process base/sub-base course by stabilisation (cement elsewhere).	m ³	70		
15.2.28	8.3.8		Stabilising with ordinary portland cement at the rate of 3% by mass	ton	43		
15.2.28			<u>Soil Tests:</u> Note : Prices for soil tests must be included in the contractor's rates for earthworks items. Additional soil tests to be carried out as directed by the Engineer: Modified AASHTO density tests.	item	1		
15.2.29			<u>Supply, bed and lay precast concrete portal culverts:</u> 3000 x 3000mm High Class 75S culvert laid inverted with and including 1220mm wide x 140mm thick precast reinforced concrete cover slab with recessed edges.	No.	75		
15.2.30			<u>Cast in situ concrete</u> (i) Class 15/19 concrete blinding	m ³	53		
15.2.31			(ii) Class 30/19 concrete for deck slab	m ³	121		
15.2.32	SANSA 1200 DK 8.2.1		<u>Gabions and Pitching</u> Foundation trench excavation and backfilling with G4 or similar material.	m ³	2160		
15.2.33	8.2.1		Prepare surface for bedding the gabions	m ²	3600		
15.2.34	8.2.2		<u>Gabions and Reno matress</u>				
15.2.35			a) Supply and place 2000x1000x1000mm gabion boxes for gabion wall, 2.7/3.7mm, type 80 PVC coated Galfan wire mesh including lacing of wire mesh and assembling of rocks	m ³	1437		
15.2.36			Extra-over 8.2.2 a) for packing selected stone for exposure face	m ²	375		
15.2.37			b) Supply and place 2000x1000x300mm reno matress boxes for river bed protection, 2.7/3.7mm, type 60 PVC coated Galfan wire mesh or similar approved including lacing of wire mesh and assembling of the rocks	m ³	1160		
15.2.38	8.2.4		<u>Geotextile (or geomembrane) or similar</u> Supply and place nonwoven needlepunched and thermocalendered polypropylene geotextile with a CBR of 2.6 kN , puncture resistance of 17 mm. Permeability of 54 l/sqm.s and apparent opening size of 70 micron. Thickness at 2 kPa of 1.0mm.	m ²	3600		
15.2.39	8.2.5		<u>Stone Pitching</u> Supply and construct 150mm thick groudged pitching with 1:3 motar to fill gaps between the rocks, rock size between 150x200mm.	m ²	60		
Total Carried Forward To Summary							

CONSTRUCTION COMPLETION CONTRACT FOR DIEPSLOOT PULVIC ENVIRONMENT UPGRADE - PHASE 2

Contract No. JDA/17/19.3.2.B.7020PH-2

SCHEDULE A: SECTION 15

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (RAND)
Brought Forward							
15.2.40	8.2.7		Weep holes Drill, punture 110mm weep hole at a distance of 20m centre to centre (See architects drawings)	no	20		
15.2.41	8.2.1		Laid straight. 300 x 125 x 90 mm Half-battered moutable concrete kerb (SABS 927 Fig. 14) (This kerb act as gutter to convey water speedily to the nearest kerb inlet, jointed and pointed in 5:1 cement mortar and bedded in 15mpa concrete including all necessary excavation, backfilling, carting away, continuous concrete haunching on curves, concrete haunching at joints on straights, etc.:	m	100		
15.2.42	8.2.1		Laid straight. 100 x 250mm Rectangular concrete kerb (SABS 927 Fig. 10) jointed and pointed in 5:1 cement mortar and bedded in 15mpa concrete including all necessary excavation, backfilling, carting away, concrete haunching, etc.	m	100		
15.2.43	8.2.1		Laid straight. 300 x 200 x 100 mm Mountable concrete kerb (SABS 927 Fig. 8c) jointed and pointed in 5:1 cement mortar and bedded in 15mpa concrete including all necessary excavation, stabilised backfilling, carting away, continuous concrete haunching on curves, concrete haunching at joints on straights, etc.:	m	80		
15.2.44	8.2.1		Laid straight.	m	80		
15.2.45	8.2.1		Laid straight.	m	80		
			<u>SUNDRIES</u>				
15.2.46	8.2.1		25Mpa/19mm Concrete for gapfilling between the laid kerbs, finished smooth with a steel trowel on all exposed surfaces to a uniform dense finish with closed cell expanded polyethylene filler and polyurethane sealant expansion joints at 10m centres and saw cut construction joints and sealant at 2m centres including all necessary excavation, backfilling, formwork, dowels, etc.	m	9		
		SANS 1200MM	<u>ANCILLARY ROADWORKS</u>				
15.2.47	8.3.4		30Mpa/19mm Concrete in surrounds to existing posts, manholes, etc. size overall 450 x 450 x 250mm thick including all necessary formwork, movement joints, cutting into paving, finishing top surfaces to a smooth finish, steel ruled joints all round top, casting around existing posts, manholes, etc.	no	8		
15.2.48	8.2.1		300mm High x 83mm wide "W" shaped hot dip galvanised steel guardrails, or equal approved, with & including 175mm diameter x 1800mm long timber creosote treated gumpoles at 3800mm centres & planted 1000mm deep in the ground, guardrails fixed to timber gumpoles with & including 325 x 100 x 150mm thick hardwood spacer blocks & 16mm diameter high tension steel bolts with reinforcing plates, including all necessary excavations, backfilling, fixing, rivetting, spring washers, etc. installed in strict accordance with the manufacturer's instructions (As per attached JRA Drawing JRA-SD-R021):				
15.2.49	8.2.1		Installed straight.	m	80		
15.2.50	8.2.1		End units - end wing.	no	4		
15.2.51	8.2.5		Chromadek reflector type D1.	no	18		
		SANS 1200MM	<u>ROAD MARKINGS</u>				

15.2.52	8.4.1	Prepare and paint one coat approved white, red or yellow 1.25mm thick thermoplastic, reflective road marking paint with Class 1 reflective beads within the paint on asphalt surface as per "The Southern African Development Community - Road Traffic Signs Manual (SARTSM), June 1999 Edition, Volumes 1 to 4" all in accordance with SABS 1091-1975:				
15.2.53	8.4.1	100mm Wide broken or continuous lines. Code: RM1.	m	100		
15.2.54	8.3.6	<u>ROAD SIGNS</u>				
15.2.55	8.3.6	<u>Class 1 retro-reflective road sign complying with the requirements of "The Southern African Development Community - Road Traffic Signs Manual (SARTSM), June 1999 Edition, Volumes 1 to 4" all in accordance with SABS 1519, including galvanised steel support post 76mm diameter x 3mm thick x 2500mm long above finished ground level and minimum 600mm from road edge (to edge of sign) including all necessary excavation, backfilling, etc. including setting post in 25Mpa concrete base size 600mm diameter x 900mm minimum thickness</u>				
15.2.56		Narrow Bridge sign. Code: W326	no	3		
		Speed limit sign. Code: R201	no	3		
Total Carried Forward To Summary						

CONSTRUCTION COMPLETION CONTRACT FOR DIEPSLOOT PUPIC ENVIRONMENT UPGRADE - PHASE 2

Contract No. JDA/17/19.3.2.B.7020PH-2

SCHEDULE A: SUMMARY

SECTION	SUMMARY OF SECTIONS DESCRIPTION	AMOUNT (RAND)
1A	PRELIMINARY AND GENERAL	
1 B	PROVISIONAL SUMS	
2	SITE CLEARANCE	
3	PIPE TRENCHES	
4	STORMWATER DRAINAGE, SITE CLEARANCE AND EXCAVATION	included
5	EARTHWORKS (ROADS, SUBGRADE)	
6	(SUB)BASE	
7	ASPHALT BASE AND SURFACING	
8	SEGMENTED PAVING	Included
9	KERBING AND CHANNELLING	Included
10	ANCILLARY ROADWORKS	Included
11	STREET FURNITURE	Included
12	STRUCTURAL STEELWORK	
13	CLADDING AND SHEETING	
14	CONCRETE (SMALL WORKS)	
15	THE BRIDGE	
	SUBTOTAL SCHEDULE ITEMS	
	15% VAT	
	TOTAL To Be Carried to OFFER Page	