



TENDER NO. 10395627/22R
TENDER FOR THE CONSTRUCTION OF THE STOCKPILE AREA AND REHABILITATION OF DRYING BEDS AT PANFONTEIN

BoQ Summary

Schedule	Description	Amount
A	Preliminary and General	
B	Environmental	
C	SHEQ	
D	Quality	
G1	Civil - Sacrificial Beds	
G2	Civil - Stockpiling	
SUB TOTAL A		
M	SED	
SUB TOTAL B		
ADD 15% FOR VAT		
TOTAL (Carried forward to the Form of Offer Page 65 of 82 of the Bid Document)		



**TENDER FOR THE CONSTRUCTION OF THE STOCKPILE AREA AND REHABILITATION OF DRYING BEDS AT
PANFONTEIN**

TENDER NO. 10395627/22R

Schedule A: P&G

Item No.	Payment Refers	Description	Unit	Qty	Rate	Amount
1	SABS 1200A	<u>SCHEDULE A: PRELIMINARY & GENERAL FIXED CHARGES</u>				
1.1		<u>FIXED CHARGED ITEMS</u>				
1.1.1	8.3.1	Contractual requirements	SUM	1		
1.1.2	8.3.1	Surety or bank guarantee	SUM	1		
1.1.3	8.3.1	Common law liability insurance	SUM	1		
1.1.4	8.3.1	Third party insurance	SUM	1		
1.1.5	8.3.1	Insurance of construction plant and equipment	SUM	1		
1.1.6	8.3.1	Other (detail.....))	SUM	1		
1.2		<u>ESTABLISH FACILITIES ON THE SITE FACILITIES FOR THE ENGINEER (SANS 1200AB)</u>				
1.2.1	8.3.2.1	Engineer's offices and facilities	SUM	1		
1.2.2	8.4.2.1 (d)	Survey Instruments	SUM	1		
1.3		<u>SERVICES</u>				
1.3.1	8.3.2.2	Services for offices and for cooking and ablution facilities on site for the Engineer's site staff	SUM	1		
1.3.2		Treatment and maintenance of areas surrounding offices	SUM	1		
1.3.3	8.3.2.1(c)	Name board (including posts and erection)	No	1		
1.3.34		SANS 1200 Standardized Specifications	SUM	1		
1.4		<u>FACILITIES FOR CONTRACTOR</u>				
1.4.1	8.3.2.2 (a)	Offices and storage sheds	SUM	1		
1.4.2	8.3.2.2 (b)	Workshops	SUM	1		
1.4.3	8.3.2.2 (d)	Living accommodation	SUM	1		
1.4.4	8.3.2.2 (e)	Ablution and latrine facilities	SUM	1		
1.4.5	8.3.2.2 (f)	Tools and equipment	SUM	1		
1.4..6	8.3.2.2 (g)	Water supply, electric power, communications, dealing with water and access	SUM	1		
1.4.7	8.3.2.2 (h)	Dealing with water	SUM	1		
1.4.8	8.3.2.2 (i)	Access	SUM	1		
1.4.9	8.3.2.2 (j)	Plant	SUM	1		
1.4.10	8.3.3	Provision of safety manager	SUM	1		
1.4.11	8.3.4	Removal of Engineer's and Contractor's site establishment on completion	SUM	1		

1.5	COVID-19 Prevention and Management cost				
1.5.1	Developing and implementing a COVID-19 risk assessment and health and safety plan including the recording & reporting of COVID statistics.				
		SUM	1		
1.5.2	Conducting worker education and training on COVID19	SUM	1		
1.5.3	Non-Contact Digital Thermometer /calibrated	SUM	1		
1.5.4	Foot Operated hand sanitiser stand	SUM	1		
1.5.5	Hand Sanitiser Dispenser	SUM	1		
1.5.6	Paper towel dispenser	SUM	1		
1.5.7	Hand Soap Dispenser. For the kitchen	SUM	1		
1.5.8	Empty Sanitiser spray bottles	SUM	1		
1.5.9	Water Container with Tap	SUM	1		
1.5.10	Bio-hazard bin for Covid-19 waste	SUM	1		
1.5.11	Provision of no touch/pedal refuse bins for kitchen, dining rooms, & boardrooms				
		SUM	1		
1.5.12	Prefab Isolation Room near site camp entrance	SUM	1		
1.5.13	Face Shield for screeners/tester(s)	SUM	1		
1.5.14	Covid-19 Awareness Signage Posters/Notice at entrances/social distancing floor markings				
		SUM	1		
1.5.15	Cloth masks for employees	SUM	1		
1.5.16	Batteries for Thermometer & Dispenser	SUM	1		
1.5.17	Medical/Disinfectant (Alcohol) -Wipes Canister	SUM	1		
1.5.18	Full body Coverall with hood for Screeners/testers	SUM	1		
1.5.19	Examination Gloves for screeners/tester(s)	SUM	1		
1.5.20	Screening stickers per day	SUM	1		
1.5.21	Surgical Masks for suspected/sick person(s) /Screeners/testers				
		SUM	1		
1.5.22	Disinfection Control by Accredited professional services	SUM	1		
1.5.23	Disinfectant solutions for surface	SUM	1		
1.5.24	Hand Sanitizers solution for refills	SUM	1		
1.5.25	Hand soap for refills	SUM	1		
	Personal Hand Sanitizer	SUM	1		
1.5.26	Biological waste Skip Disposal	SUM	1		
1.5.27		SUM	1		
1.5.28	Other: "Please specify"	SUM	1		

1.6		<u>TIME RELATED ITEMS</u>				
		<i>All time related items to cover the whole contract period</i>				
1.6.1	8.4.1	Contractual requirements	SUM	1		
1.6.2	8.4.1	Surety or bank guarantee	SUM	1		
1.6.3	8.4.1	Third party insurance	SUM	1		
1.6.4	8.4.1	Insurance of construction plant and equipment	SUM	1		
1.6.5	8.4.1	Other (detail.....))	SUM	1		
1.7		<u>OPERATE AND MAINTAIN FACILITIES ON THE SITE FOR ENGINEER FOR THE DURATION OF CONSTRUCTION</u>				
1.7.1	8.4.2.1 (a)	Engineer's offices and facilities	SUM	1		
1.7.2	8.4.2.1 (d)	Survey Instruments	SUM	1		
1.8		<u>SERVICES</u>				
1.8.1	8.4.2.1 (a)	Services for offices and for cooking and facilities on site for the Engineer's staff	SUM	1		
1.8.2	8.4.2.1 (d)	Survey assistants	SUM	1		
1.8.3		Treatment and maintenance of areas surrounding offices	SUM	1		
1.8.4	8.4.2.1 (c)	Name board	SUM	1		
1.9		<u>FACILITIES FOR CONTRACTOR FOR THE DURATION OF CONSTRUCTION</u>				
1.9.1	8.4.2.2 (a)	Offices and storage sheds	SUM	1		
1.9.2	8.4.2.2 (b)	Workshops	SUM	1		
1.9.3	8.4.2.2 (d)	Living accommodation	SUM	1		
1.9.4	8.4.2.2 (e)	Ablution and latrine facilities	SUM	1		
1.9.5	8.4.2.2 (f)	Tools and equipment	SUM	1		
1.9.6	8.4.2.2 (g)	Water supply, electric power, communications, dealing with water and access	SUM	1		
1.9.7	8.4.2.2 (h)	Dealing with water	SUM	1		
1.9.8	8.4.2.2 (i)	Access	SUM	1		
1.9.9	8.4.2.2 (j)	Plant	SUM	1		
1.9.7	8.4.3	Supervision	SUM	1		
1.9.8	8.4.4	Company and head office overhead costs	SUM	1		
1.9.9	8.4.5	Testing and commissioning of equipment	SUM	1		

1.10		COVID-19 Prevention and Management cost				
1.10.1		Updating of the COVID-19 risk assessment and health and safety plan including the recording & reporting of COVID statistics.	SUM	1		
1.10.2		Conducting worker education and training on COVID19	SUM	1		
1.10.3		Face Shield for screeners/tester(s)	SUM	1		
1.10.4		Batteries for Thermometer & Dispenser	SUM	1		
1.10.5		Medical/Disinfectant (Alcohol) -Wipes Canister	SUM	1		
1.10.6		Full body Coverall with hood for Screeners/testers	SUM	1		
1.10.7		Examination Gloves for screeners/tester(s)	SUM	1		
1.10.8		Screening stickers per day	SUM	1		
1.10.9		Surgical Masks for suspected/sick person(s)	SUM	1		
1.10.10		/Screeners/testers	SUM	1		
1.10.11		Disinfection Control by Accredited professional services	SUM	1		
1.10.12		Disinfectant solutions for surface	SUM	1		
1.10.13		Hand Sanitizers solution for refills	SUM	1		
1.10.14		Hand soap for refills	SUM	1		
1.10.15		Personal Hand Sanitizer	SUM	1		
1.10.16		Biological waste Skip Disposal	SUM	1		
		Other: "Please specify"	SUM	1		
		<u>TEMPORARY WORKS</u>				
1.11		<u>EXISTING SERVICES</u>				
1.11.1	8.8.4	Excavate by hand to expose existing services (provisional)	m2	100		
1.11.2	8.8.4	Protection of existing services	SUM	1		
1.12		<u>SURVEY AND REFERENCE PEGS</u>				
1.12.1	8.8.5	Protect and re-establish all reference pegs and bench marks	SUM	1		
		<u>PUBLIC LIAISON OFFICER (Provisional Item)</u>				
1.12.2		Remuneration of public liaison officer for the duration of the contract	Item	1.00		
1.12.3		Contractor's charges to provisional amount above	%	15.00		
1.13		<u>PROVISIONAL SUM</u>				
1.13.1		Provisional sum for unforeseen events	Sum	1	2 000 000.00	R 2 000 000.00
		Total amount excluding Value-Added Tax (VAT) to be carried to Summary of Price Schedules				



**TENDER FOR THE CONSTRUCTION OF THE STOCKPILE AREA AND REHABILITATION OF DRYING BEDS AT
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Schedule B: ENVIRONMENTAL

Item No.	Payment Refers	Description	Unit	Qty	Rate	Total Amount
		SCHEDULE B: ENVIRONMENTAL				
		Please refer to Preamble document				
		Preparation of the Environmental which must contain:				
		1 Risk assessment to identify potential emergencies. (This must also contain emergency telephone numbers to react to emergencies)				
		2.Permits and licenses				
		3 Environmental specification				
		4 Environmental audit reports				
		5 Complaints register				
2.1		6 Agreements with landowners or other stake holders.	Sum	1		
		7 Noncompliance notifications				
		8.Reporting of environmental incidence				
		9 Waste disposal documentation				
		10.Safety data sheet for all chemicals				
		11.Method statements				
		Administrative requirements as per the approved EMPr.				
		Environmental awareness of employees-administrative processes				
		Compliance with environmental protection specifications				
		Response to public complaints				
		Safety and security				
2.2		Checklist of minimum environmental provisions on site	Sum	1		
		The maintenance of the environmental file on site				
		Penalties as per rand water standards				
		Induction				
2.3		Preparation of method statements and costing to comply:				
2.3.1		<input type="checkbox"/> Method Statement for establishing the construction camp;	Sum	1		
		<input type="checkbox"/> Method Statement to show procedures for dealing with possible emergencies and must include the listed items below				
2.3.2		a) Provision for bee, snake and other fauna removal	Sum	1		
		b) Provision for hydrocarbon spillages that require intervention from professional clean up provider				
		c) Provision to clean up sewage spillages				
		d) Equipment for fire fighting				
		e) Call out of fire department				
2.3.3		<input type="checkbox"/> Method Statement for keeping dry works and discharge of water from trenches. Water trench pumps must have a filter sock on the outlet to reduce silt discharge into the river.	Sum	1		
2.3.4		<input type="checkbox"/> Method Statement for dust control, including water source to be used;	Sum	1		
2.3.5		<input type="checkbox"/> Method Statement for managing storm water during the construction phase;	Sum	1		
2.3.6		<input type="checkbox"/> Method Statement for the storage and handling of hazardous substances;	Sum	1		
2.3.7		<input type="checkbox"/> Method Statement for management of concrete works, batching plant, including associated washing facilities for equipment and concrete truck drums and shoots;	Sum	1		
2.3.8		<input type="checkbox"/> Method Statement for drainage/ river line diversions;	Sum	1		
2.3.9		<input type="checkbox"/> Method Statement for controlling alien invasive species and noxious weeds;	Sum	1		

2.3.10		<input type="checkbox"/> Method Statement for the decommissioning of the construction works area; and final cleaning up. Reintating soil levels. All soil surface clear of rubble and ready for rehabilitation.	Sum	1		
2.3.11		<input type="checkbox"/> Method Statement for rehabilitation of construction footprint.	Sum	1		
2.3.12	7.7	Method statements for Preservation of the environment: fauna ,flora, scenic value, Archaeological artefacts The rate for this item shall include costs for preservation of the environment that have not been itemised	Lump Sum	1		
2.3.13		Method statements for for soil works that include the itemised items below:	Lump Sum	1		
2.3.14		a)No soil to be stored in drainage lines or water courses	Lump Sum	1		
2.3.15		b) Crain mates to be used over wet area for access routes	Lump Sum	1		
2.3.16		c) Access routes to to kept to a minimum to reduce construction footprint.	Lump Sum	1		
2.3.17		Method statements for Erosion control and silt management : The amount shall represent the costs associated with the practice of preventing or controlling wind or water erosion during construction. The erosion control measures must effectively prevent water pollution, soil loss, wildlife habitat loss and human property loss. The rate shall also include the costs of silt control where devices shall be designed to keep eroded soil on a construction site, so that it does not wash off and cause water pollution to a nearby stream, river, lake, or dam.	Lump Sum	1		
2.4	9.2	Emergency preparedness funding a) Provision for bee, snake and other fauna removal b) Provision for hydrocarbon spillages that require intervention from professional clean up provider c) Provision to clean up sewage spillages d) Equipment for fire fighting e) Call out of fire department	Sum	1		
2.5	9.1.4	Environmental awareness and training				
2.5.1		The rate for this item shall include costs for inductions and environmental awareness and training	Sum	1		
2.6	9.3	Establishment of site camp and works area. Signage The rate for this item must cover all expenses incurred in preparing signage at the entrance of the site offices indicating the following information · The contractor's contact numbers · ECO details · Emergency numbers and provision for: – snake removal, bee removal, fire, large hydrocarbon spillages, sewerage spillages				
2.6.1		Identifying the PPE required before entering a specific area Signage measuring a minimum of 30mmx30mm must also be made available for no go areas. speed limits signage	Sum	1		

2.7		Establishment of site camp and works area.				
2.7.1		The rate for this item shall include costs for establishment of construction campsite and working areas as per EMPr Signage The rate for this item must cover all expenses incurred in preparing signage at the entrance of the site offices indicating the following information • The contractor's contact numbers	Sum	1		
2.7.2		• Authorisations details • ECO details • Emergency numbers and provision for: – snake removal, bee removal, fire, large hydrocarbon spillages, sewerage spillages Signage measuring 30mmx30mm must also be made available for no go areas.	Sum	1		
2.8		Barricading and demarcation a. Screening for unsightly works b. Clear demarcating of the working foot print c. Barricading of sensitive no go areas	sum	1		
2.9	12	Pollution prevention and preservation of environmental resources				
2.9.1		The rate for this item shall include costs for pollution prevention and preservation of environmental resources	sum	1		
2.9.2		a) Cleaning the site of litter and rubble	sum	1		
2.9.3		b) Weed control on site	sum	1		
2.9.4		c) Waste bins and receptacles that comply with the waste clauses of the Environmental specification.	sum	1		
2.9.5		d) Servicing of ablution facilities	sum	1		
2.9.6		e) Provision of water carts (twice a day)	sum	1		
2.9.7		f) Appropriate skips for waste separation	sum	1		
2.9.8		g) General waste Waste removal	sum	1		
2.9.9		h) Hazardous waste Waste removal	sum	1		
2.9.10		i) Recycled waste management Waste removal	sum	1		
2.9.11		j) Spillage kits to clean up spillages	sum	1		
2.9.12		k) Hard impervious surfaces for storage of chemicals	sum	1		
2.9.13		l) Bunding facility for hazardous products	sum	1		
2.9.14		m) Labelled containers for decanting of liquids	sum	1		
2.9.15		n) Drip trays for all vehicles staying on site over night	sum	1		
2.9.16		o) Biologs	rate	1		
2.9.17		p) Silt fencing				
2.9.18		q) Embankments stabilization with geomatting x 100m ²	rate	1		
2.9.19		r) Dust suppression	sum	1		

2.10		Administration and Documentation Submission of Environmental File (For approval by Rand Water ECO) Contractor's appointed Environmental Officer (Environmental Officer must have relevant training). Maintenance of Environmental file and final documentation for submission	Lump sum Lump sum Lump sum	1 1 1		
2.11	SAM QA 00030 Pr Clause	QUALITY ASSURANCE AND CONTROL Preparation and submission of Contractors Quality Management Plan (CQMP), for review and approval prior to commencement of works	Lump sum	1		
2.11.1	7.1	Implementing activities of the Quality Control Plan or Inspection Test Plan	Lump sum	1		
2.11.2	7.3	Provision of Qualified Quality Officer (The contractor shall provide RW with relevant to the scope of work qualified Quality Officer)	Lump sum	1		
2.11.3	7.5.3	Maintenance of documents and final documentation for submission	Lump sum	1		
2.11.4	7.4	Provision of Quality Officer's relevant training (The contractor to provide related training for the quality officer)	Lump sum	1		
2.11.5	7.5.5	Provision of Compliance Audits (The contractor to audit the project once a year for the duration of the project)	Lump sum	1		
2.11.6	7.6.2	Testing Equipment calibration (The testing Equipments should be calibrated as per the manual)	Lump sum	1		
2.11.7	7.5.4	Welders qualification training as per the code (The contractors must qualify the welders as per API 5L)	Lump sum	1		
2.11.8	7.6.2	Provision of any other testing and inspections requested by the Engineer	Lump sum	1		
2.11.9	7.6.1					
Total amount excluding Value-Added Tax (VAT) to be carried to Summary of Price Schedules						

**TENDER FOR THE CONSTRUCTION OF THE STOCKPILE AREA AND REHABILITATION OF DRYING BEDS AT
PANFONTEIN**
Schedule C: SHEQ

Item No.	Payment Refers	Description	Unit	Qty	Rate	Total Amount
		Please refer to Preamble document				
3		SCHEDULE C: OCCUPATIONAL HEALTH AND SAFETY				
3.1	2.4 & 2.5.	Preparation of the Contractor's site specific Health and Safety Plan	lump sum	1		
3.2	3.2	Principal Contractor's initial obligations in respect of the Occupational Health and Safety Act and Construction Regulations	lump sum	1		
3.3	4	Principal Contractor's time related obligations in respect of the Occupational Health and Safety Act and Construction Regulations	Contract period	1		
3.4	10.d	Provision of Personal Protective Equipment (PPE)	lump sum	1		
3.5	3.2.1	Provision of a full-time Construction Health and Safety Officer	Contract period	1		
3.6	15	Cost of medical certificates and medical surveillance				
	15	(a) Initial (baseline) medical examinations	lump sum	1		
	15	(b) Periodic examinations	lump sum	1		
	15	(c) Exit examinations	lump sum	1		
3.7	9.3	Induction training	lump sum	1		
3.8	16	Provision of First Aid Boxes to GSR requirements and other emergency safety equipment such as fire extinguishers.	lump sum	1		
3.9	24 C09	Transportation of Workers	lump sum	1		
3.10	11	Welfare Facilities	lump sum	1		
3.11	14	Occupational Hygiene Surveys	lump sum	1		

3.12	10	Training	lump sum	1	
3.13	Part B (Annexure 11.1)	Security requirements including the security risk assessment (before site establishment)	lump sum	1	
3.14	24 C14, 7	Employee wellness programs	lump sum	1	
3.15	7	Drug and Alcohol Testing, Policies and Procedures	lump sum	1	
3.16	Part B 10 k	Barricading	lump sum	1	
3.17	Part B 10 a	Safety notices and signs	lump sum	1	
3.18	8	SHE Incentives	lump sum	1	
3.19	3.2.1 & 5C	COVID-19 Prevention and Management: The Engineer to advise at the relevant stage after award	Item covered under Items 1.5 and 1.10 above.		
3.20	Part B 10n,6.6	Adequate ventilation and lighting during construction	lump sum	1	
3.21	2.9	Submission of the Health and Safety File (hard and soft copies)	lump sum	1	
Total amount excluding Value-Added Tax (VAT) to be carried to Summary of Price Schedules					



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Schedule D: QUALITY

Item No.	Payment Refers	Description	Unit	Qty	Rate	Total Amount
		Please refer to Preamble document				
4		SCHEDULE D: QUALITY CONTROL AND ASSURANCE				
4.1		Preparation and submission of Contractors Quality Management Plan (CQMP), for review and approval prior to commencement of works	lump sum	1		
4.2		Provision of Qualified Quality Officer (The contractor shall provide RW with relevant to the scope of work qualified Quality Officer)	Contract period	1		
4.3		Maintenance of documents and final documentation for submission - Provision of Document controller	Contract period	1		
4.4		Provision of Quality Officers relevant training (The contractor to provide related training for the quality officer)	Sum	1		
4.5		Testing Equipment calibration (The testing Equipments should be calibrated as per the manual)	Sum	1.5		
4.6		Provision of any other testing and inspections requested by the Engineer	Provisional Sum	1		
Total amount excluding Value-Added Tax (VAT) to be carried to Summary of Price Schedules						

**TENDER FOR THE CONSTRUCTION OF THE STOCKPILE AREA AND REHABILITATION OF DRYING
BEDS AT PANFONTEIN**

Schedule G 1: CIVIL - SACRIFICIAL BEDS						
Item No.	Payment Refers	Description	Unit	Qty	Rate	Total Amount
5	SANS 1200 D	<u>BULK EARTHWORKS</u>				
5.1		<u>SITE CLEARANCE</u>				
5.1.1		Clear and grub dry sludge dams of all vegetation	m ²	750 000		
5.1.2		Dispose of site clearance material to a dump site identified by the contractor.	m ³	112 500		
5.2		<u>BULK EXCAVATION/DESLUDGING</u>				
5.2.1	8.3.2	Excavate in soft material and use suitable for embankment and or dispose unsuitable and excess materials on a dump site identified by the contractor within a free haul distance of 2km, as ordered by the Engineer.	m ³	762 500		
5.2.2	8.3.4	Import G7 commercial material for forming embankments, Compacted to 98% Mod Aashto	m ³	185 625		
5.2.3	3.3.2 & 8.3.2	Re-use of suitable excavated materials (see item 3.3) for forming and shaping up of embankments on dam walls using mechanical equipment	m ³	9 281		
Sub-total amount excluding Value-Added Tax (VAT) to be carried to Total for G1 of Price Schedules						



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Schedule G 1: CIVIL - SACRIFICIAL BEDS

Item No.	Payment Refers	Description	Unit	Qty	Rate	Total Amount
6	SANS 1200 L	REINSTATEMENT				
6.1		<u>STEEL MEDIUM PRESSURE PIPELINES: NETWORK RETICULATION</u>				
6.1.1		Excavate to expose pipeworks	m ³	420		
6.2		<u>SLUDGE SUPPLY PIPELINE</u>				
6.2.1		<u>Supply and deliver pipes to site</u>				
		<u>Supply and deliver spigot and socket mild steel pipe.</u>				
		<u>Epoxy coated on outer surface only</u>				
6.2.1.1	8.2.1	(a) Grade X42 (t=4,5 mm) pipe				
		.1 80 mm OD pipes	m	18		
6.2.1.2	8.2.1	(b) Grade X42 (t=4,5 mm) pipe				
		.1 150 mm OD pipes	m	540		
6.2.2		<u>Laying of pipes</u>				
		<u>Lay and bed spigot and socket pipes, and fillet weld joints. Repair external coating after welding</u>				
6.2.2.1	8.2.1	(a) Grade X42 (t=4.5 mm) pipe				
		.1 80 mm OD pipes	m	18		
	8.2.1	(b) Grade X42 (t=4.5 mm) pipe				
		.1 150 mm OD pipes	m	540		
6.3		<u>PIPE FITTINGS</u>				
6.3.1		<u>Supply and deliver fittings</u>				
6.3.1.1		(a) '1 Flanges welded to the following pipe sizes				
		'1 150 mm	no	4		
		'2 80 mm	no	10		
6.3.1.2		(a) '2 T sections on the following pipe sizes				
		'1 150 mm to 80 mm reducing T	no	6		
		'2 80 mm to 80 mm T	no	2		
6.3.1.3		(a) '3 Reducer on the following pipe sizes				
		.1 150 mm to 80 mm	no	6		

6.3.2		<u>Installation of fittings</u>				
6.3.2.1	8.2.2	(b) '1 Flanges welded to the following pipe sizes				
		'1 150 mm	no	4		
		'2 80 mm	no	10		
6.3.2.2		(b) '2 T sections on the following pipe sizes				
		'1 150 mm to 80 mm reducing T	no	6		
		'2 80 mm to 80 mm T	no	2		
6.3.3.3		(b) '3 Reducer on the following pipe sizes				
		'1 150mm to 80mm	no	4		
6.4		<u>CONCRETE ELEMENTS</u>				
6.4.1	8.2.11	<u>Construction of concrete bollards for the 80mm diameter upstands in strength concrete 25Mpa/19mm, including all formwork, reinforcement, etc</u>				
		'1 Concrete bollards	no	6		
6.4.2	8.2.12	<u>Construction of concrete plinths in strength concrete 25Mpa/19mm to secure valve for 80mm scour pipe including all formwork, reinforcement, etc</u>				
		'1 Concrete plinths	no	2		
6.5		<u>SUPPLY AND INSTALL NEW SPRINKLERS (WATER GUNS)</u>				
6.5.1		<u>Supply and install Rainbird (or similar) sprinklers</u>				
		.1 6 Bar Rainbird Model 1005 Sprinklers	no	2		
6.6		<u>CONCRETE ENCASEMENT AND THRUST BLOCKS</u>				
6.6.1	8.2.11	<u>Anchor/thrust blocks and pedestals in strength concrete 25Mpa/19mm, including all formwork, reinforcement, etc</u>				
6.6.2	8.2.11	(b) Measured per m³				
		'1 Thrust blocks	m³	1		
6.6.3	8.2.12	<u>Encasement of pipes in strength concrete 25Mpa/19mm including all formwork, reinforcement, etc</u>				
		'1 Casing around pipes	m³	3		

6.7		<u>SOILCRETE</u>			
6.7.1		<u>Soilcrete (5% OPC)</u>			
		(a) Backfilling around pipes	m ³	4	
6.8		<u>Access Road between the drying beds</u>			
6.8.1		Rip, scarify level and compact to 90% MOD Ashto including compaction existing layer	m ²	20 000	
6.8.2		Base layer constructed from gravel taken from cut or borrow all modified with crushed stone including compaction to 95% MOD Ashto (150mm thick)	m ²	20 000	
6.9		<u>Decanting Towers (Steel Work)</u>			
6.9.1		<u>Access walkway</u>			
		Supply and assemble access walkway as per drawing no. RA26830	No.	1	
		Contractor's Markup on Prov Sum	%		
6.9.2	8.3.7	<u>Handrails</u>			
		Supply and install hot dipped galvanised stell handrails as per drawing RA26830	m	20	
		Contractor's Markup on Prov Sum	%		
6.9.3	8.3.8	<u>Ladders</u>			
		Supply and install hot dipped galvanised steel ladders as per drawing RA_18252	No.	1	
		Contractor's Markup on Prov Sum	%		
6.9.4	8.3.9	<u>Flooring</u>			
		Supply and install hot dipped galvanised steel open grid flooring as per drawing RA26830	No.	1	
		Contractor's Markup on Prov Sum	%		
6.10		<u>Sluice Gate</u>			
		Supply and install 'FULTON' Wall-mounted Sluice gate valve or similar approved. Specificatios as follows:	No.	1	
6.10.1		(a) Size: 500mm (width) x 500mm (height)			
6.10.2		(b) Pressure head: 6m			
6.10.3		(c) Flow Direction: Both ways			
6.10.4		Contractor's Markup on Prov Sum	%		
6.11		<u>Tower panels</u>			
		Supply and install of Engineering (Fibre Plastic) light weight plastic panel with the following specifications:	No.	6	
6.11.1		(a) With staggered handles at an angle of between 30 and 45 degrees			
6.11.2		(b) 1200mm x 100mm x 60mm thick			
6.11.3		Contractor's Markup on Prov Sum	%		

6.12	<u>Decanting Towers (Concrete)</u>					
6.1.2.1	<u>Excavation</u> Excavate in all materials and dipose of material at designated spoil site as directed by the Engineer	m ³	6			
6.12.2	<u>Importation of Materials</u> Importing of G5 quality material from commercial sources, place in maximum 150mm thick layers and compact to 95% Mod AASHTO density.	m ³	6			
6.12.3	<u>Concrete Formwork</u> Decanting Chamber	m ²	6			
6.12.4	<u>Concrete</u> Grade 40/19 Concrete for Chambers	m ³	7			
6.12.5	<u>Reinforcing Steel</u> High Tensile Bars	t	1			
6.12.6	<u>Demolishment</u> Demolishment of Old Decanting Towers including pipework and steel items and disposal of material	No.	1			
	Contractor's Markup on Prov Sum	%				
6.13	<u>Subsoil Drains</u>					
6.13.1	<u>Installation of Subsoil Drains</u> Installation of 100MM DIA subsiol drains wrapped in BIDEM and gravel	m	650			
6.13.2	Contractor's Markup on Prov Sum	%				
6.14	<u>Prov Sum for Additional Work</u> Any additional concrete work, reinforcing steel, structural steel, associated steel work, excavations, pipework, sprayers, platforms, subsoil drains, roads, drying beds wall etc. required and directed by the Engineer	Prov Sum	1	R	28 000 000.00	R 28 000 000.00
G 1 Total amount excluding Value-Added Tax (VAT) to be carried to Summary of Price Schedules						



TENDER FOR THE CONSTRUCTION OF THE STOCKPILE AREA AND REHABILITATION OF DRYING BEDS AT PANFONTEIN

TENDER NO. 10395627/22R

Schedule G 2: CIVIL - STOCKPILING

Item No.	Payment Refers	Description	Unit	Qty	Rate	Total Amount
7	SANS 1200 D	<u>BULK EARTHWORKS</u>				
7.1		<u>SITE CLEARANCE</u>				
7.1.1		Clear and grub Stockpiling Area	m ²	505 000		
7.1.2		Dispose of site clearance material to a dump site identified by the contractor.	m ³	252 500		
7.2		<u>STOCKPILE WALL</u>				
7.2.1	8.3.2	Excavate 1m into natural ground along stockpile footprint	m ³	138 400		
7.2.2		Rip & Recompect In-situ Material for Stockpile Wall (90% MOD AASHTO)	m ²	175 000		
7.2.3	8.3.4	Import G7 commercial material for forming embankments, Compacted to 95% Mod Aashto. Rate to include transport, placement, compaction and compaction tests	m ³	530 000		
7.2.4	8.3.2	Excavate into Formed Embankment for Drainage Outlets	m ³	130		
7.2.5	PSC3.2	1.5MM HPPE Liner To fully line the Stockpile Walls and Stockpile Area. Rate to include supply, delivery, installation and anchoring where required or by suppliers guidelines. The Barrier is to be approved by Rand Water Engineer	m ²	515 000		
7.2.6		4m precast concrete v-drain panels. Rate to include supply, deliver, installation and jointing	No.	450		
7.2.7	8.2.11	Construction of outlet collection points	No.	3		
7.2.8	8.2.1	Construction of 300mm Concrete storm water Pipeline from outlet points to canal or Return water dams. Rate to include excavation, placement, SANS stage 1 & 2 backfilling, topsoil reinstatement and jointing	m	350		
7.3		<u>REMOVAL OF WTR AND PLACEMENT IN STOCKPILE AREA</u>				
7.3.1	8.3.2	Excavate in soft material from existing semi-dry and dry beds and place in stockpile area. Rate to include placement and shaping of Water Treatment residue. Rate to also include repair to liner if damaged during execution of works	m ³	1 400 000		
7.4		<u>Commissioning</u>				
7.4.1	PS12.1	The Contractor is to undertake an electric leak detection survey in compliance with DWS standards on the completion of the works	Sum	1		
7.4.2	PSD7.2	Testing of G7 Material on Stock Pile Wall - see specifications	Sum	1		
Total amount excluding Value-Added Tax (VAT) to be carried to Summary of Price Schedules						



TENDER FOR THE SACRIFICIAL BEDS AND STOCKPILING AREA AT PANFONTEIN

TENDER NO. 10395627/22R

Schedule M: SED

Item No.	Payment Refers	Description	Unit	Qty	Rate	Total Amount
8		<i>Please refer to Preamble document</i>				
		SCHEDULE M: SED				
8.1		SKILLS DEVELOPMENT PROGRAM				
8.1.1		Accredited training programmes are targeted which will provide the beneficiaries with significant and recognized credit value in accordance with the National Qualification Framework (NQF) (2.5% of Project Value - Sub Total A)	Sum		2.5%	
8.1.2		Contractors mark-up on Item 8.1.1 above	%			
8.2		SOCIAL RESPONSIBILITY PROGRAM				
8.2.1		Social Responsibility programs aimed at community development (1% of Project Value - Sub Total A)	Sum		1%	
8.2.2		Contractors mark-up on Item 8.2.1 above	%			
8.3		COMMUNITY LIASON OFFICER				
8.3.1		Community Liason Officer. A key component in aiding the realisation of the SED objectives is effective community liaison with all the relevant role-players, structures, civic organisations and the community at large. (0.5% of Project Value - Sub Total A) <i>(The Bidder to input a sum that comprises the salary that would be paid to the CLO)</i>	Sum		0.5%	
8.3.2		Contractors mark-up on Item 8.3.1 above	%			
8.4		SED ADMINISTRATION				
8.4.1		Labour Management Services (1% of Project Value - Sub Total A)	Sum		1%	
8.4.2		Contractors mark-up on Item 8.4.1 above	%			
8.5		PARTICIPATION OF LOCAL ENTERPRISES				
8.5.1		Work Allocated to Local Enterprises (Inclusive of P&G's and SHEQ) (Minimum 5% of Project Value) (Sub-Total A)	Sum			Rate Only
8.5.2		Contractors mark-up on Item 8.5.1 above	%			
		Total amount excluding Value-Added Tax (VAT) to be carried to Summary of Price Schedules				