

**TENDER NO**

### Schedule A: GEORGE

[illegible]

**TENDER NO****Schedule A: GEORGE**

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
Brought Forward							
A1.2	8.4	SCHEDULED TIME-RELATED ITEMS					
A1.2.1	8.4.1	Contractual Requirements	Sum	1			
	8.4.2	Operate and maintain facilities on the Site:					
	8.4.2.2	Facilities for Contractor					
A1.2.2		a) Offices and storage sheds	Sum	1			
A1.2.3		d) Living accommodation	Sum	1			
A1.2.4		e) Ablution and latrine facilities	Sum	1			
A1.2.5		f) Tools and equipment	Sum	1			
A1.2.6		g) Water supplies, electric power and communications	Sum	1			
A1.2.7	PSA 5.5	h) Dealing with water	Sum	1			
A1.2.8	5.8	i) Access	Sum	1			
A1.2.9	8.4.3	Supervision for Duration of Construction	Sum	1			
A1.2.10	8.4.4	Company and Head office Overhead Costs for the Duration of the Contract	Sum	1			
	PSA 8.1	Comply with the Health and Safety Act					
A1.2.11	PSA 8.1.2	Health and Safety Measures	Sum	1			
A1.2.12	PSA 8.1.3	Health and safety Plan	Sum	1			
A1.2.13	PSA 8.1.4	Health and Safety File	Sum	1			
	PSA 8.4.6	Standing time costs					
A1.2.14		a) Plant	day			Rate Only	
A1.2.15		b) Labour	day			Rate Only	
A1.2.16		c) Other resources (to be specified by the contractor	day			Rate Only	
Total Carried Forward							

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ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
Brought Forward							
A1.3	8.5	SUMS STATED PROVISIONALLY BY ENGINEER					
	PSA 8.5	a) For work to be executed by the Contractor (alterations, lowering, raising, moving and replacing of existing services)					
A1.3.1		ii) Water connections	Prov Sum	1		10,000	00
A1.3.2		iii) Electrical connections	Prov Sum	1		10,000	00
A1.3.3		b) Material testing by commercial laboratories if required by the Engineer	Prov Sum	1	5,000.00	5,000	00
A1.3.4		c) Overhead, charges and profit on item (b)	%	5,000.00			
	PS AB 8.4.1	d) Cellular telephones					
A1.3.5		(i) Cost of calls in connection with contract administration by the Engineers's Representative	Prov Sum	1	500.00	500	00
A1.3.6		(ii) Handling costs and profit in respect of item (d)	%	500.00			
	PSA 8.8.4	Existing services					
A1.4	8.8.4	TEMPORARY WORKS					
	8.8.5	Cost of survey in Terms of the Land Survey Act					
A1.4.1		a) Verify existing levels in the construction area prior to commencement of construction and setting out of all works as well as the As-built survey to be send to engineer in DWG format at end of project	Sum	1			
	8.8.4	Existing services					
A1.4.2		c) Excavate by hand in soft material to expose existing services and reinstate test hole	m³	2			
A1.4.3		d) Temporary protection of existing services	Sum	1			
Total Carried Forward To Summary							

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ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
A3		CIVIL WORKS BUND AREA					
A3.1	SANS 1200 DA	EARTH - AND LAYERWORKS					
	SANS 1200 M	Earthworks to new bund area					
A3.1.1		a) Cut to spoil off site	m <sup>3</sup>	15			
A3.1.2		b) Neatly trim insitu subgrade to final line and level, and compact to 93% Mod AASTHO to accept layerworks	m <sup>2</sup>	180			
A3.1.3	SANS 1200 M	c) Supply and place 150mm G5 subbase layer compacted to 98% MOD AASTHO density with material from commercial sources	m <sup>3</sup>	30			
A3.2	SANS 1200 G	FORMWORK					
		Vertical smooth finish to :					
A3.2.1		a) Foundations	m <sup>2</sup>	3			
A3.2.2		b) Containment slab sides	m <sup>2</sup>	12			
A3.2.3		c) Walls and Plinths	m <sup>2</sup>	17			
A3.3		REINFORCEMENT					
		High-tensile steel:					
A3.3.1		a) Y12	kg	350			
A3.3.2		b) Y10	kg	350			
		High-tensile welded mesh:					
A3.3.3		a) Ref 245	m <sup>2</sup>	95			
A3.3.4		b) Ref 617	m <sup>2</sup>	100			
A3.4		CONCRETE					
		Strength Concrete, Grade 30/19					
A3.4.1		a) Bund area surface bed slab	m <sup>3</sup>	10			
		Strength Concrete, Grade 35/19					
A3.4.2		a) Plinths and upstands	m <sup>3</sup>	5			
A3.4.3		b) Containment area slab	m <sup>3</sup>	18			
A3.4.4		c) Concrete to paving laid to fall (100mm thickness)	m <sup>3</sup>	8			
Total Carried Forward							

**TENDER NO****Schedule A: GEORGE**

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
Brought Forward							
A3.5		TEST BLOCKS					
A3.5.1		Making and testing set of three 150 x 150 x 150 mm concrete strength test cubes	Set	2			
A3.6		FINISHING					
		Wood float finish to exposed horizontal surfaces:					
A3.6.1		a) Bund area surface bed slab	m²	80			
A3.6.2		b) Containment area slab to falls	m²	90			
A3.7		JOINTING					
A3.7.1		a) Expansion joints against plinths, structural and concrete edges (depth up to 125mm) incl. formwork, Sikaflex 11 FC or similar approved sealant, jointex, closed cell backing cord all inclusive	m	35			
A3.7.2		b) Construction joints (depth up to 125mm) including formwork, primer, closed cell backing cord, jointex, Sikaflex 11 FC or similar approved sealant, all inclusive	m	25			
A3.7.3		c) Saw cut contraction joints in slabs to a depth of 50mm to neat and straight lines, supply and install primer, backing cord, Sikaflex 11 FC or similar approved sealant all inclusive	m	25			
A3.8		SUNDRY					
		Supply and install non-shrink grout (Barragrout or equal approved) to:					
A3.8.1		a) Tank cradles and under baseplates	ℓ	60			
A3.8.2		Supply and install M16 chemical anchors 180mm long (galvanised) - Hilti or similiar approved to support plinths	No	12			
A3.8.3		Supply and install 400mm x 400mm sump with galvanised mentis grid frame (RS 40 with 25 x 4.5 bearer bars) to sumps complete including 30x30x30 angle iron, chemical anchors, fish tail lugs and all things necessary as per detail on drawing.	No	1			
A3.8.4		Supply and install 110 diam Isolating valve including valve chamber	No	1			
Total Carried Forward							

### Schedule A: GEORGE

Total Carried Forward To Summary

**TENDER NO****Schedule A: GEORGE**

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
A4		BUILDING WORKS BUND AREA					
A4.1	SANS 1200 DA	EARTHWORKS					
		Excavate in earth not exceeding 1.5 m deep:					
A4.1.1		a) Trenches	m <sup>3</sup>	25			
		Extra-over trench excavations for :					
A4.1.2		i) Soft rock	m <sup>3</sup>	3			
A4.1.3		ii) Hard rock	m <sup>3</sup>	3			
		Backfilling to trenches, holes, etc.					
A4.1.4		Backfilling with material from excavations compacted to a density of at least 95% MOD AASHTO density.	m <sup>3</sup>	5			
		Extra-over all excavations for carting away:					
A4.1.5		Surplus material from excavations and/or stockpiles on site to a dumping site to be located by the contractor	m <sup>3</sup>	3			
		Compacted sand layers					
A4.1.6		30 mm blinding layer of well compacted sand	m <sup>3</sup>	3			
A4.2	SANS 1200 GA	REINFORCED CONCRETE					
		Formwork					
		Rough vertical finish to:					
A4.2.1		a) Foundations	m <sup>2</sup>	3			
A4.3		REINFORCEMENT					
		High-tensile steel:					
A4.3.1		a) Y10 bars	kg	100			
A4.3.2		b) Y12 bars	kg	300			
A4.4		CONCRETE					
		Strength Concrete, Grade 25/19 for:					
A4.4.1		a) Strip foundations	m <sup>3</sup>	8			
A4.5		MASONRY					
Total Carried Forward							



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ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
Brought Forward							
		NOTE: Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of the brick					
		Brickwork:					
		Brickwork of 222 x 106 x 73 mm burnt clay NFX bricks (14MPa nominal compressive strength) in Class II mortar:					
A4.5.1		a) One brick (230 mm) walls	m²	60			
A4.5.2		b) Half brick (115 mm) walls	m²	5			
A4.5.3		c) Access staircase into bund area	m²	5			
		Brickwork reinforcement:					
A4.5.4		150 mm wide reinforcement built in horizontally	m	360			
A4.6		WATERPROOFING					
		One layer of co-extruded Under Surface Bed membrane placed with sheets overlapping minimum 200 mm and taped at overlaps.					
		Under bund area surface bed:					
A4.6.1		250 micron damp proof course to SANS 952-1 such as Gundle USB GREEN 3 or similar approved.	m²	80			
A4.7		EXTERNAL PLASTERING					
A4.7.1		1:4 Cement plaster on brickwork	m²	130			
A4.8		PAINTWORK					
		On floated plaster					
		Prepare and brush to remove all loose contaminants, apply one coat alkali resistant plaster primer and two coats premium quality enamel paint on:					
A4.8.1		External walls	m²	130			
Total Carried Forward To Summary							

**TENDER NO****Schedule A: GEORGE**

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
A5		ROADWORKS					
A5.1	SANS 1200 DM	EARTHWORKS (ROADS, SUBGRADE)					
	PSDM 5.2.3.3	Treatment of Roadbed: (Refer to Geotechnical Report; if left undisturbed, the residual materials can provide adequate founding for the lower selected road prism layers (provided a minimum cover of at least 600 mm of imported material is allowed for)).					
A5.1.1		a) 150mm thick Roadbed preparation and compaction of material to a minimum of 93% of modified AASHTO maximum density	m <sup>3</sup>	2			
A5.1.2	8.3.5	Import from commercial sources 150mm thick G7 natural gravel material selected layers (upper- and lower) compacted to 93% of modified AASHTO maximum density	m <sup>3</sup>	2			
A5.2	SANS 1200 ME	SUBBASE					
A5.2.1	8.3.3	Import from commercial sources, 150mm thick G5 natural gravel material for road subbase, compacted to 98% of modified AASHTO maximum density	m <sup>3</sup>	2			
A5.3	SANS 1200 MF	BASE					
A5.3.1	8.3.3	Import from commercial sources, 150mm thick G4 natural gravel material, compacted to 98% of modified AASHTO maximum density	m <sup>3</sup>	2			
A5.4	SANS 1200 MH	ASPHALT BASE AND SURFACING					
		Prime Coat Using:					
A5.4.1	8.5.1	Prime coat using type MC-30 cut-back bitumen applied at a rate of 0.7l/m <sup>2</sup>	m <sup>2</sup>	10			
		Asphalt Surfacing					
A5.4.2		30mm Cold mixed continuously graded premix	m <sup>2</sup>	10			
A5.4.3		Saw-cut asphalt surfacing	m	20			
A5.4.4		Remove and dispose of asphalt surfacing	m <sup>2</sup>	10			
Total Carried Forward To Summary							

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ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
A6		MECHANICAL & ELECTRICAL WORKS					
A6.1		NEW ABOVE GROUND TANKS & DISPENSERS					
		Supply, install and protect the following above ground horizontal tanks (Provide all labour, material, equipment ALL inclusive) refer to DRW 230103-G3 for pipe, accessories and fittings schedule					
A6.1.1		23m3 Horizontal tank (ref DRW 230103-G2) including Tank access ladder	No	2			
A6.2		PUMPS (DISPENSERS)					
		Supply and install the following dispenser including commissioning and testing, ALL electrical works included.					
A6.2.1		12W Heavy duty Electric pump (supplied by SAMD) on a galvanised angle steel frame (to be approved by engineer)	No	2			
A6.2.2		Certificate of Compliance to SANS 10142-1 certified by an Installation Electrician	Sum	1			
A6.3		SUMS STATED PROVISIONALLY BY ENGINEER					
		Provisional amount allowed for work to be done by a nominated sub contractor appointed by the Engineer					
A6.3.1		Fuel Management System including GSM modem, power supply, Sensors and all labour to install - ALL inclusive	Prov Sum	2	65,000.00	130,000	00
A6.3.2		a) Overhead, charges and profit on item 5.3.1	%	130,000			
A6.3.3		Yearly Subscription fee per console including WEB Portal reporting	No	2	4,500.00	9,000	00
A6.3.4		a) Overhead, charges and profit on item 5.3.2	%	9,000			
		FIRE (refer to DRW 230103-G4)					
A6.3.5		Supply and install new fire hose reel including connection to existing water supply	No	1			
A6.3.6		Supply and install new 9K DCP Fire extinguishers	No	2			
Total Carried Forward							

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ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
A7		OIL SEPARATOR / INTERCEPTOR					
		Oil Separator Installation					
A7.1		Excavate for new tank installation, install blinding, position tanks in excavated area, backfill and compact accordingly as per drawing and to manufacturers specifications. Work area to be hoarded off with 'Ready-fence' type barrier with safety signage attached. Removal of rubble included.	Sum	1			
A7.2		Supply and Install Polution Solution (NS07 complete) separator including transport to site	No	1			
A7.3		Supply and cast concrete slab above tank as per drawing and engineers details	m³	2			
A7.4		Supply and fix Mesh Ref 617 incl waste and cutting.	m²	10			
A7.5		Broom Burlap finish to concrete surfaces	m²	10			
A7.6		Install precast concrete manholes over tanks complete with 'Securex' DI round frame and cover Z600D by Saint Gobain	No	4			
A7.7		Supply, trench and install tank vent line, 50mm dia HDPE pipe to vent line stack. Backfill/compact and make good surface to match existing. All HDPE welded fittings included.	m	20			
A7.8		Supply and install 50mm galvanised tank vent line above ground at the main vent line stack.	m	6			
A7.9		Supply, trench and install new 110mm dia HDPE pipe from filler / forecourt slab to tank interceptor all welded fittings for HDPE pipe included	m	20			
A7.10		Supply, trench and install new 110mm dia UPVC pipe from tank interceptor to stormwater/sewer point on site all welded HDPE fittings included. Reinstate surface to match existing.	m	20			
A7.11		Supply and install 450mm x 600mm Type 8A H/D grid manhole at filler slab including frame and cover	No	1			
Total Carried Forward To Summary							

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### Schedule A: GEORGE

[illegible]

SUMMARY OF SECTIONS

SECTION	DESCRIPTION	AMOUNT (RAND)
A1	PRELIMINARY AND GENERAL	.....
A2	SITE CLEARANCE AND EARTH WORKS	.....
A3	CIVIL WORKS BUND AREA	.....
A4	BUILDING WORKS BUND AREA	.....
A5	ROADWORKS	.....
A6	MECHANICAL & ELECTRICAL WORKS	.....
A7	OIL SEPARATOR	.....
A8	TESTING	.....
	Sub-total	.....
1	ADD 10% CONTINGENCIES	.....
	Sub-total	.....
2	ADD 15% VAT	.....
Total Carried Forward To Summary Of Schedules		.....

**TENDER NO**

## Schedule B: OUDTSHOORN

[illegible]



**TENDER NO**

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[illegible]

**TENDER NO****Schedule B: OUDTSHOORN**

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
Brought Forward							
B1.3	8.5	SUMS STATED PROVISIONALLY BY ENGINEER					
	PSA 8.5	a) For work to be executed by the Contractor (alterations, lowering, raising, moving and replacing of existing services)					
B1.3.1		ii) Water connections	Prov Sum	1		10,000	00
B1.3.2		iii) Electrical connections	Prov Sum	1		10,000	00
B1.3.3		b) Material testing by commercial laboratories if required by the Engineer	Prov Sum	1	5,000.00	5,000	00
B1.3.4		c) Overhead, charges and profit on item (b)	%	5,000.00			
	PS AB 8.4.1	d) Cellular telephones					
B1.3.5		(i) Cost of calls in connection with contract administration by the Engineers's Representative	Prov Sum	1	500.00	500	00
B1.3.6		(ii) Handling costs and profit in respect of item (d)	%	500.00			
	PSA 8.8.4	Existing services					
B1.4	8.8.4	TEMPORARY WORKS					
	8.8.5	Cost of survey in Terms of the Land Survey Act					
B1.4.1		a) Verify existing levels in the construction area prior to commencement of construction and setting out of all works as well as the As-built survey to be send to engineer in DWG format at end of project	Sum	1			
	8.8.4	Existing services					
B1.4.2		c) Excavate by hand in soft material to expose existing services and reinstate test hole	m³	2			
B1.4.3		d) Temporary protection of existing services	Sum	1			
Total Carried Forward To Summary							

**TENDER NO**

## Schedule B: OUDTSHOORN

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**TENDER NO**
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ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
B3		CIVIL WORKS BUND AREA					
B3.1	SANS 1200 DA	EARTH - AND LAYERWORKS					
	SANS 1200 M	Earthworks to new bund area					
B3.1.1		a) Cut to spoil off site	m <sup>3</sup>	15			
B3.1.2		b) Neatly trim insitu subgrade to final line and level, and compact to 93% Mod AASTHO to accept layerworks	m <sup>2</sup>	140			
B3.1.3		c) Supply and place 150mm G5 subbase layer compacted to 98% MOD AASTHO density with material from commercial sources	m <sup>3</sup>	20			
B3.2	SANS 1200 G	FORMWORK					
		Vertical smooth finish to :					
B3.2.1		a) Foundations	m <sup>2</sup>	3			
B3.2.2		b) Containment slab sides	m <sup>2</sup>	15			
B3.2.3		c) Walls and Plinths	m <sup>2</sup>	17			
B3.3		REINFORCEMENT					
		High tensile steel:					
B3.3.1		a) Y12	kg	350			
B3.3.2		b) Y10	kg	350			
		Hgh-tensile welded mesh					
B3.3.3		Ref 245	m <sup>2</sup>	60			
B3.3.4		Ref 617	m <sup>2</sup>	100			
B3.4		CONCRETE					
		Strength Concrete, Grade 30/19					
B3.4.1		a) Bund area surface bed slab	m <sup>3</sup>	8			
		Strength Concrete, Grade 35/19					
B3.4.2		a) Plinths and upstands	m <sup>3</sup>	3			
B3.4.3		b) Containment area slab	m <sup>3</sup>	16			
B3.4.4		c) Concrete to paving laid to fall (100mm thickness)	m <sup>3</sup>	8			
Total Carried Forward							

**TENDER NO****Schedule B: OUDTSHOORN**

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
Brought Forward							
B3.5		TEST BLOCKS					
B3.5.1		Making and testing set of three 150 x 150 x 150 mm concrete strength test cubes	Set	2			
B3.6		FINISHING					
		Wood float finish to exposed horizontal surfaces:					
B3.6.1		a) Bund area surface bed slab	m²	50			
B3.6.2		b) Containment area slab to falls	m²	80			
B3.7		JOINTING					
B3.7.1		a) Expansion joints against plinths, structural and concrete edges (depth up to 125 mm) incl. formwork, Sikaflex 11 FC or similar approved sealant, jointex, closed cell backing cord, all inclusive	m	30			
B3.7.2		b) Construction joints (depth up to 125 mm) including formwork, primer, closed cell backing cord, jointex, Sikalfex 11 FC or similar approved sealant, all inclusive	m	6			
B3.7.3		c) Saw cut contraction joints in slabs to a depth of 50 mm to neat and straight lines, supply and install primer, backing cord, Sikaflex 11 FC or similar approved sealant, all inclusive	m	6			
B3.8		SUNDRY					
		Supply and install non-shrink grout (Barragrout or equal approved) to:					
B3.8.1		a) Tank cradles and under baseplates	ℓ	60			
B3.8.2		Supply and install M16 chemical anchors 180mm long (galvanised) - Hiltui or similiar approved to support plinths	No	12			
B3.8.3		Supply and install 400mm x 400mm sump with galvanised mentis grid frame (RS 40 with 25 x 4.5 bearer bars) to sumps complete including 30x30x30 angle iron, chemical anchors, fish tail lugs and all things necessary as per detail on drawing.	No	1			
B3.8.4		Supply and install 110 diam Isolating valve including valve chamber	No	1			
Total Carried Forward							

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## Schedule B: OUDTSHOORN

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ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
B4		BUILDING WORKS BUND AREA					
B4.1	SANS 1200 DA	EARTHWORKS					
		Excavate in earth not exceeding 1.5 m deep:					
B4.1.1		a) Trenches	m <sup>3</sup>	19			
		Extra-over trench excavations for :					
B4.1.2		i) Soft rock	m <sup>3</sup>	3			
B4.1.3		ii) Hard rock	m <sup>3</sup>	3			
		Backfilling to trenches, holes, etc.					
B4.1.4		Backfilling with material from excavations compacted to a density of at least 95% MOD AASHTO density.	m <sup>3</sup>	3			
		Extra-over all excavations for carting away:					
B4.1.5		Surplus material from excavations and/or stockpiles on site to a dumping site to be located by the contractor	m <sup>3</sup>	3			
		Compacted sand layers					
B4.1.6		30 mm blinding layer of well compacted sand	m <sup>3</sup>	2			
B4.2	SANS 1200 GA	REINFORCED CONCRETE					
		Formwork					
		Rough vertical finish to:					
B4.2.1		a) Foundations	m <sup>2</sup>	2			
B4.3		REINFORCEMENT					
		High-tensile steel:					
B4.3.1		a) Y10 bars	kg	100			
B4.3.2		b) Y12 bars	kg	250			
B4.4		CONCRETE					
		Strength Concrete, Grade 25/19 for:					
B4.4.1		a) Strip foundations	m <sup>3</sup>	6			
B4.5		MASONRY					
Total Carried Forward							

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ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
Brought Forward							
		NOTE: Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of the brick					
		Brickwork:					
		Brickwork of 222 x 106 x 73 mm burnt clay NFX bricks (14MPa nominal compressive strength) in Class II mortar:					
B4.5.1		a) One brick (230 mm) walls	m²	50			
B4.5.2		b) Half brick (115 mm) walls	m²	5			
B4.5.3		c) Access staircase into bund area	m²	5			
		Brickwork reinforcement:					
B4.5.4		150 mm wide reinforcement built in horizontally	m	300			
B4.6		WATERPROOFING					
		One layer of co-extruded Under Surface Bed membrane placed with sheets overlapping minimum 200 mm and taped at overlaps.					
		Under bund area surface bed:					
B4.6.1		250 micron damp proof course to SANS 952-1 such as Gundle USB GREEN 3 or similar approved.	m²	80			
B4.7		EXTERNAL PLASTERING					
B4.7.1		1:4 Cement plaster on brickwork	m²	107			
B4.8		PAINTWORK					
		On floated plaster					
		Prepare and brush to remove all loose contaminants, apply one coat alkali resistant plaster primer and two coats premium quality enamel paint on:					
B4.8.1		External walls	m²	107			
Total Carried Forward To Summary							



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ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
B5		ROADWORKS					
B5.1	SANS 1200 DM	EARTHWORKS (ROADS, SUBGRADE)					
	PSDM 5.2.3.3	Treatment of Roadbed: (Refer to Geotechnical Report; if left undisturbed, the residual materials can provide adequate founding for the lower selected road prism layers (provided a minimum cover of at least 600 mm of imported material is allowed for)).					
B5.1.1		a) 150mm thick Roadbed preparation and compaction of material to a minimum of 93% of modified AASHTO maximum density	m <sup>3</sup>	2			
B5.1.2	8.3.5	Import from commercial sources 150mm thick G7 natural gravel material selected layers (upper- and lower) compacted to 93% of modified AASHTO maximum density	m <sup>3</sup>	2			
B5.2	SANS 1200 ME	SUBBASE					
B5.2.1	8.3.3	Import from commercial sources, 150mm thick G5 natural gravel material for road subbase, compacted to 98% of modified AASHTO maximum density	m <sup>3</sup>	2			
B5.3	SANS 1200 MF	BASE					
B5.3.1	8.3.3	Import from commercial sources, 150mm thick G4 natural gravel material, compacted to 98% of modified AASHTO maximum density	m <sup>3</sup>	2			
B5.4	SANS 1200 MH	ASPHALT BASE AND SURFACING					
		Prime Coat Using:					
B5.4.1	8.5.1	Prime coat using type MC-30 cut-back bitumen applied at a rate of 0.7l/m <sup>2</sup>	m <sup>2</sup>	10			
		Asphalt Surfacing					
B5.4.2		30mm Cold mixed continuously graded premix	m <sup>2</sup>	10			
B5.4.3		Saw-cut asphalt surfacing	m	20			
B5.4.4		Remove and dispose of asphalt surfacing	m <sup>2</sup>	10			
Total Carried Forward To Summary							

**TENDER NO****Schedule B: OUDTSHOORN**

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
B6		MECHANICAL & ELECTRICAL WORKS					
B6.1		NEW ABOVE GROUND TANKS & DISPENSERS					
		Supply, install and protect the following above ground horizontal tanks (Provide all labour, material, equipment ALL inclusive) refer to DRW 230103-O2 for pipe, accessories and fittings schedule					
B6.1.1		23m3 Horizontal tank (ref DRW 230103-O2) including Tank access ladder	No	1			
B6.2		PUMPS (DISPENSERS)					
		Supply and install the following dispenser including commissioning and testing, ALL electrical works included.					
B6.2.1		12W Heavy duty Electric pump (supplied by SAMD) on a galvanised angle steel frame (to be approved by engineer)	No	2			
B6.2.2		Certificate of Compliance to SANS 10142-1 certified by an Installation Electrician	Sum	1			
B6.3		SUMS STATED PROVISIONALLY BY ENGINEER					
		Provisional amount allowed for work to be done by a nominated sub contractor appointed by the Engineer					
B6.3.1		Fuel Management System including GSM modem, power supply, Sensors and all labour to install - ALL inclusive	Prov Sum	1	65,000.00	65,000	00
B6.3.2		a) Overhead, charges and profit on item 5.3.1	%	65,000			
B6.3.3		Yearly Subscription fee per console including WEB Portal reporting	No	1	4,500.00	4,500	00
B6.3.4		a) Overhead, charges and profit on item 5.3.2	%	4,500			
		FIRE (refer to DRW 230103-G4)					
B6.3.5		Supply and install new fire hose reel including connection to existing water supply	No	1			
B6.3.6		Supply and install new 9K DCP Fire extinguishers	No	2			
Total Carried Forward							

**TENDER NO**

## Schedule B: OUDTSHOORN

[illegible]

**TENDER NO**
**Schedule B: OUDTSHOORN**

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
B7		OIL SEPARATOR					
		Oil Separator Installation					
B7.1		Excavate for new tank installation, install blinding, position tanks in excavated area, backfill and compact accordingly as per drawing and to manufacturers specifications. Work area to be hoarded off with 'Ready-fence' type barrier with safety signage attached. Removal of rubble included.	Sum	1			
B7.2		Supply and Install Pollution Solution (NS07 complete) separator including transport to site	No	1			
B7.3		Supply and cast concrete slab above tank as per drawing and engineers details	m³	2			
B7.4		Supply and fix Mesh Ref 617 incl waste and cutting.	m²	10			
B7.5		Broom Burlap finish to concrete surfaces	m²	10			
B7.6		Install precast concrete manholes over tanks complete with 'Securex' DI round frame and cover Z600D by Saint Gobain	No	4			
B7.7		Supply, trench and install tank vent line, 50mm dia HDPE pipe to vent line stack. Backfill/compact and make good surface to match existing. All HDPE welded fittings included.	m	20			
B7.8		Supply and install 50mm galvanised tank vent line above ground at the main vent line stack.	m	6			
B7.9		Supply, trench and install new 110mm dia HDPE pipe from filler / forecourt slab to tank interceptor all welded fittings for HDPE pipe included	m	20			
B7.10		Supply, trench and install new 110mm dia UPVC pipe from tank interceptor to stormwater/sewer point on site all welded HDPE fittings included. Reinstate surface to match existing.	m	20			
B7.11		Supply and install 450mm x 600mm Type 8A H/D grid manhole at filler slab including frame and cover	No	1			
Total Carried Forward To Summary							

**TENDER NO**

## Schedule B: OUDTSHOORN

[illegible]

SUMMARY OF SECTIONS

SECTION	DESCRIPTION	AMOUNT (RAND)
B1	PRELIMINARY AND GENERAL	.....
B2	SITE CLEARANCE AND EARTH WORKS	.....
B3	CIVIL WORKS BUND AREA	.....
B4	BUILDING WORKS BUND AREA	.....
B5	ROADWORKS	.....
B6	MECHANICAL & ELECTRICAL WORKS	.....
B7	OIL SEPARATOR	.....
B8	TESTING	.....
Total Carried Forward To Summary Of Schedules		.....

**TENDER NO**

### Schedule C VAN WYKSDORP

[illegible]

**TENDER NO****Schedule C VAN WYKSDORP**

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
Brought Forward							
C1.2	8.4	SCHEDULED TIME-RELATED ITEMS					
C1.2.1	8.4.1	Contractual Requirements	Sum	1			
	8.4.2	Operate and maintain facilities on the Site:					
	8.4.2.2	Facilities for Contractor					
C1.2.2		a) Offices and storage sheds	Sum	1			
C1.2.3		d) Living accommodation	Sum	1			
C1.2.4		e) Ablution and latrine facilities	Sum	1			
C1.2.5		f) Tools and equipment	Sum	1			
C1.2.6		g) Water supplies, electric power and communications	Sum	1			
C1.2.7	PSA 5.5	h) Dealing with water	Sum	1			
C1.2.8	5.8	i) Access	Sum	1			
C1.2.9	8.4.3	Supervision for Duration of Construction	Sum	1			
C1.2.10	8.4.4	Company and Head office Overhead Costs for the Duration of the Contract	Sum	1			
	PSA 8.9	Comply with the Health and Safety Act					
C1.2.11	PSA 8.9.1	Health and Safety Measures	Sum	1			
C1.2.12	PSA 8.9.2	Health and safety Plan	Sum	1			
C1.2.13	PSA 8.9.3	Health and Safety File	Sum	1			
	PSA 8.4.6	Standing time costs					
C1.2.14		a) Plant	day			Rate Only	
C1.2.15		b) Labour	day			Rate Only	
C1.2.16		c) Other resources (to be specified by the contractor	day			Rate Only	
Total Carried Forward							



**TENDER NO**

## Schedule C VAN WYKSDORP

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
Brought Forward							
C1.3	8.5	SUMS STATED PROVISIONALLY BY ENGINEER					
	PSA 8.5	a) For work to be executed by the Contractor (alterations, lowering, raising, moving and replacing of existing services)					
C1.3.1		ii) Water connections	Prov Sum	1		10,000	00
C1.3.2		iii) Electrical connections	Prov Sum	1		10,000	00
C1.3.3		b) Material testing by commercial laboratories if required by the Engineer	Prov Sum	1	5,000.00	5,000	00
C1.3.4		c) Overhead, charges and profit on item (b)	%	5,000.00			
	PS AB 8.4.1	d) Cellular telephones					
C1.3.5		(i) Cost of calls in connection with contract administration by the Engineers's Representative	Prov Sum	1	500.00	500	00
C1.3.6		(ii) Handling costs and profit in respect of item (d)	%	500.00			
	PSA 8.8.4	Existing services					
C1.4	8.8.4	TEMPORARY WORKS					
	8.8.5	Cost of survey in Terms of the Land Survey Act					
C1.4.1		a) Verify existing levels in the construction area prior to commencement of construction and setting out of all works as well as the As-built survey to be send to engineer in DWG format at end of project	Sum	1			
	8.8.4	Existing services					
C1.4.2		c) Excavate by hand in soft material to expose existing services and reinstate test hole	m³	2			
C1.4.3		d) Temporary protection of existing services	Sum	1			
Total Carried Forward To Summary							

**TENDER NO**

## Schedule C VAN WYKSDORP

[illegible]

**TENDER NO****Schedule C VAN WYKSDORP**

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
C3		CIVIL WORKS BUND AREA					
C3.1	SANS 1200 DA	EARTH - AND LAYERWORKS					
	SANS 1200 M	Earthworks to new bund area					
C3.1.1		a) Cut to spoil off site	m <sup>3</sup>	15			
C3.1.2		b) Neatly trim insitu subgrade to final line and level, and compact to 93% Mod AASTHO to accept layerworks	m <sup>2</sup>	82			
C3.1.3		c) Supply and place 150mm G5 subbase layer compacted to 98% MOD AASTHO density with material from commercial sources	m <sup>3</sup>	15			
C3.2	SANS 1200 G	FORMWORK					
		Vertical smooth finish to :					
C3.2.1		a) Foundations	m <sup>2</sup>	3			
C3.2.2		b) Containment slab sides	m <sup>2</sup>	9			
C3.2.3		c) Walls and Plinths	m <sup>2</sup>	12			
C3.3		REINFORCEMENT					
		High tensile steel:					
C3.3.1		a) Y10	kg	350			
C3.3.2		b) Y12	kg	350			
		High-tensile welded mesh:					
C3.3.3		Ref 245	m <sup>2</sup>	42			
C3.3.4		Ref 617	m <sup>2</sup>	45			
C3.4		CONCRETE					
		Strength Concrete, Grade 30/19					
C3.4.1		a) Bund area surface bed slab	m <sup>3</sup>	5			
		Strength Concrete, Grade 35/19					
C3.4.2		a) Plinths and upstands	m <sup>3</sup>	3			
C3.4.3		b) Containment area slab	m <sup>3</sup>	9			
C3.5		TEST BLOCKS					
Total Carried Forward							

**TENDER NO****Schedule C VAN WYKSDORP**

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
Brought Forward							
C3.5.1		Making and testing set of three 150 x 150 x 150 mm concrete strength test cubes	Set	2			
C3.6		FINISHING					
		Wood float finish to exposed horizontal surfaces:					
C3.6.1		a) Bund area surface bed slab	m²	37			
C3.6.2		b) Containment area slab to falls	m²	40			
C3.7		JOINTING					
C3.7.1		a) Expansion joints against plinths, structural and concrete edges (depth up to 125 mm) incl. formwork, Sikaflex 11 FC or similar approved sealant, jointex, closed cell backing cord all inclusive	m	26			
C3.7.2		b) Construction joints (depth up to 125 mm) including formwork, primer, jointex, closed cell backing cord, Sikaflex 11 FC or similar approved sealant all inclusive	m	5			
C3.7.3		c) Saw cut contraction joints in slabs to a depth of 50 mm to neat and straight lines, supply and install primer, closed cell backing cord, Sikaflex 11 FC or similar approved sealant, all inclusive	m	5			
C3.8		SUNDRY					
		Supply and install non-shrink grout (Barragrout or equal approved) to:					
C3.8.1		a) Tank cradles and under baseplates	ℓ	60			
C3.8.2		Supply and install M16 chemical anchors 180mm long (galvanised) - Hiltui or similiar approved to support plinths	No	8			
C3.8.3		Supply and install 400mm x 400mm sump with galvanised mentis grid frame (RS 40 with 25 x 4.5 bearer bars) to sumps complete including 30x30x30 angle iron, chemical anchors, fish tail lugs and all things necessary as per detail on drawing.	No	1			
C3.8.4		Supply and install 110 diam Isolating valve including valve chamber	No	1			
Total Carried Forward							

**TENDER NO**

### Schedule C VAN WYKSDORP

[illegible]

**TENDER NO****Schedule C VAN WYKSDORP**

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
C4		BUILDING WORKS BUND AREA					
C4.1	SANS 1200 DA	EARTHWORKS					
		Excavate in earth not exceeding 1.5 m deep:					
C4.1.1		a) Trenches	m <sup>3</sup>	16			
		Extra-over trench excavations for :					
C4.1.2		i) Soft rock	m <sup>3</sup>	3			
C4.1.3		ii) Hard rock	m <sup>3</sup>	3			
		Backfilling to trenches, holes, etc.					
C4.1.4		Backfilling with material from excavations compacted to a density of at least 95% MOD AASHTO density.	m <sup>3</sup>	3			
		Extra-over all excavations for carting away:					
C4.1.5		Surplus material from excavations and/or stockpiles on site to a dumping site to be located by the contractor	m <sup>3</sup>	3			
		Compacted sand layers					
C4.1.6		30 mm blinding layer of well compacted sand	m <sup>3</sup>	2			
C4.2	SANS 1200 GA	REINFORCED CONCRETE					
		Formwork					
		Rough vertical finish to:					
C4.2.1		a) Foundations	m <sup>2</sup>	2			
C4.3		REINFORCEMENT					
		High-tensile steel:					
C4.3.1		a) Y10 bars	kg	100			
C4.3.2		b) Y12 bars	kg	200			
C4.4		CONCRETE					
		Strength Concrete, Grade 25/19 for:					
C4.4.1		a) Strip foundations	m <sup>3</sup>	5			
C4.5		MASONRY					
Total Carried Forward							

**TENDER NO****Schedule C VAN WYKSDORP**

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
Brought Forward							
		NOTE: Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of the brick.					
		Brickwork:					
		Brickwork of 222 x 106 x 73 mm burnt clay NFX bricks (14MPa nominal compressive strength) in Class II mortar:					
C4.5.1		a) One brick (230 mm) walls	m²	42			
C4.5.2		b) Half brick (115 mm) walls	m²	5			
C4.5.3		c) Access staircase into bund area	m²	5			
		Brickwork reinforcement:					
C4.5.4		150 mm wide reinforcement built in horizontally	m	250			
C4.6		WATERPROOFING					
		One layer of co-extruded Under Surface Bed membrane placed with sheets overlapping minimum 200 mm and taped at overlaps.					
		Under bund area surface bed:					
C4.6.1		250 micron damp proof course to SANS 952-1 such as Gundle USB GREEN 3 or similar approved.	m²	45			
C4.7		EXTERNAL PLASTERING					
C4.7.1		1:4 Cement plaster on brickwork	m²	90			
C4.8		PAINTWORK					
		Ons floated plaster					
		Prepare and brush to remove all loose contaminants, apply one coat alkali resistant plaster primer and two coats premium quality enamel paint on:					
C4.8.1		External walls	m²	90			
Total Carried Forward To Summary							

**TENDER NO****Schedule C VAN WYKSDORP**

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
C5		ROADWORKS					
C5.1	SANS 1200 DM	EARTHWORKS (ROADS, SUBGRADE)					
	PSDM 5.2.3.3	Treatment of Roadbed: (Refer to Geotechnical Report; if left undisturbed, the residual materials can provide adequate founding for the lower selected road prism layers (provided a minimum cover of at least 600 mm of imported material is allowed for)).					
C5.1.1		a) 150mm thick Roadbed preparation and compaction of material to a minimum of 93% of modified AASHTO maximum density	m <sup>3</sup>	2			
C5.1.2	8.3.5	Import from commercial sources 150mm thick G7 natural gravel material selected layers (upper- and lower) compacted to 93% of modified AASHTO maximum density	m <sup>3</sup>	2			
C5.2	SANS 1200 ME	SUBBASE					
C5.2.1	8.3.3	Import from commercial sources, 150mm thick G5 natural gravel material for road subbase, compacted to 98% of modified AASHTO maximum density	m <sup>3</sup>	2			
C5.3	SANS 1200 MF	BASE					
C5.3.1	8.3.3	Import from commercial sources, 150mm thick G4 natural gravel material, compacted to 98% of modified AASHTO maximum density	m <sup>3</sup>	2			
C5.4	SANS 1200 MH	ASPHALT BASE AND SURFACING					
		Prime Coat Using:					
C5.4.1	8.5.1	Prime coat using type MC-30 cut-back bitumen applied at a rate of 0.7l/m <sup>2</sup>	m <sup>2</sup>	10			
		Asphalt Surfacing					
C5.4.2		30mm Cold mixed continuously graded premix	m <sup>2</sup>	10			
C5.4.3		Saw-cut asphalt surfacing	m	20			
C5.4.4		Remove and dispose of asphalt surfacing	m <sup>2</sup>	10			
Total Carried Forward To Summary							



**TENDER NO****Schedule C VAN WYKSDORP**

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
C6		MECHANICAL & ELECTRICAL WORKS					
C6.1		NEW ABOVE GROUND TANKS & DISPENSERS					
		Supply, install and protect the following above ground horizontal tanks (Provide all labour, material, equipment ALL inclusive) refer to DRW 230103-V2 for pipe, accessories and fittings schedule)					
C6.1.1		9m3 Horizontal tank (ref DRW 230103-V2) including Tank access ladder	No	1			
C6.2		PUMPS (DISPENSERS)					
		Supply and install the following dispenser including commissioning and testing, ALL electrical works included.					
C6.2.1		12W Heavy duty Electric pump (supplied by SAMD) on a galvanised angle steel frame (to be approved by engineer)	No	1			
C6.2.2		Certificate of Compliance to SANS 10142-1 certified by an Installation Electrician	Sum	1			
C6.3		SUMS STATED PROVISIONALLY BY ENGINEER					
		Provisional amount allowed for work to be done by a nominated sub contractor appointed by the Engineer					
C6.3.1		Fuel Management System including GSM modem, power supply, Sensors and all labour to install - ALL inclusive	Prov Sum	1	65,000.00	65,000	00
C6.3.2		a) Overhead, charges and profit on item 5.3.1	%	65,000			
C6.3.3		Yearly Subscription fee per console including WEB Portal reporting	No	1	4,500.00	4,500	00
C6.3.4		a) Overhead, charges and profit on item 5.3.2	%	4,500			
		FIRE (refer to DRW 230103-G4)					
C6.3.5		Supply and install new fire hose reel including connection to existing water supply	No	1			
C6.3.6		Supply and install new 9K DCP Fire extinguishers	No	2			
Total Carried Forward							

**TENDER NO**

## Schedule C VAN WYKSDORP

[illegible]

**TENDER NO**
**Schedule C VAN WYKSDORP**

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
C7		OIL SEPARATOR					
		Oil Separator Installation					
C7.1		Excavate for new tank installation, install blinding, position tanks in excavated area, backfill and compact accordingly as per drawing and to manufacturers specifications. Work area to be hoarded off with 'Ready-fence' type barrier with safety signage attached. Removal of rubble included.	Sum	1			
C7.2		Supply and Install Polution Solution (NS07 complete) separator including transport to site	No	1			
C7.3		Supply and cast concrete slab above tank as per drawing and engineers details	m³	2			
C7.4		Supply and fix Mesh Ref 617 incl waste and cutting.	m²	10			
C7.5		Broom Burlap finish to concrete surfaces	m²	10			
C7.6		Install precast concrete manholes over tanks complete with 'Securex' DI round frame and cover Z600D by Saint Gobain	No	4			
C7.7		Supply, trench and install tank vent line, 50mm dia HDPE pipe to vent line stack. Backfill/compact and make good surface to match existing. All HDPE welded fittings included.	m	20			
C7.8		Supply and install 50mm galvanised tank vent line above ground at the main vent line stack.	m	6			
C7.9		Supply, trench and install new 110mm dia HDPE pipe from filler / forecourt slab to tank interceptor all welded fittings for HDPE pipe included	m	20			
C7.10		Supply, trench and install new 110mm dia UPVC pipe from tank interceptor to stormwater/sewer point on site all welded HDPE fittings included. Reinstate surface to match existing.	m	20			
C7.11		Supply and install 450mm x 600mm Type 8A H/D grid manhole at filler slab including frame and cover	No	1			
Total Carried Forward To Summary							

**TENDER NO**

### Schedule C VAN WYKSDORP

[illegible]

SUMMARY OF SECTIONS

SECTION	DESCRIPTION	AMOUNT (RAND)
C1	PRELIMINARY AND GENERAL	.....
C2	SITE CLEARANCE AND EARTH WORKS	.....
C3	CIVIL WORKS BUND AREA	.....
C4	BUILDING WORKS BUND AREA	.....
C5	ROADWORKS	.....
C6	MECHANICAL & ELECTRICAL WORKS	.....
C7	OIL SEPARATOR	.....
C8	TESTING	.....
Total Carried Forward To Summary Of Schedules		.....

**TENDER NO**

## Schedule D: RIVERSDALE

[illegible]

**TENDER NO****Schedule D: RIVERSDALE**

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
Brought Forward							
D1.2	8.4	SCHEDULED TIME-RELATED ITEMS					
D1.2.1	8.4.1	Contractual Requirements	Sum	1			
	8.4.2	Operate and maintain facilities on the Site:					
	8.4.2.2	Facilities for Contractor					
D1.2.2		a) Offices and storage sheds	Sum	1			
D1.2.3		d) Living accommodation	Sum	1			
D1.2.4		e) Ablution and latrine facilities	Sum	1			
D1.2.5		f) Tools and equipment	Sum	1			
D1.2.6		g) Water supplies, electric power and communications	Sum	1			
D1.2.7	PSA 5.5	h) Dealing with water	Sum	1			
D1.2.8	5.8	i) Access	Sum	1			
D1.2.9	8.4.3	Supervision for Duration of Construction	Sum	1			
D1.2.10	8.4.4	Company and Head office Overhead Costs for the Duration of the Contract	Sum	1			
	PSA 8.9	Comply with the Health and Safety Act					
D1.2.11	PSA 8.9.1	Health and Safety Measures	Sum	1			
D1.2.12	PSA 8.9.2	Health and safety Plan	Sum	1			
D1.2.13	PSA 8.9.3	Health and Safety File	Sum	1			
	PSA 8.4.6	Standing time costs					
D1.2.14		a) Plant	day			Rate Only	
D1.2.15		b) Labour	day			Rate Only	
D1.2.16		c) Other resources (to be specified by the contractor	day			Rate Only	
Total Carried Forward							

**TENDER NO**

## Schedule D: RIVERSDALE

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
Brought Forward							
D1.3	8.5	SUMS STATED PROVISIONALLY BY ENGINEER					
	PSA 8.5	a) For work to be executed by the Contractor (alterations, lowering, raising, moving and replacing of existing services)					
D1.3.1		ii) Water connections	Prov Sum	1		10,000	00
D1.3.2		iii) Electrical connections	Prov Sum	1		10,000	00
D1.3.3		b) Material testing by commercial laboratories if required by the Engineer	Prov Sum	1	5,000.00	5,000	00
D1.3.4		c) Overhead, charges and profit on item (b)	%	5,000.00			
	PS AB 8.4.1	d) Cellular telephones					
D1.3.5		(i) Cost of calls in connection with contract administration by the Engineers's Representative	Prov Sum	1	500.00	500	00
D1.3.6		(ii) Handling costs and profit in respect of item (d)	%	500.00			
	PSA 8.8.4	Existing services					
D1.4	8.8.4	TEMPORARY WORKS					
	8.8.5	Cost of survey in Terms of the Land Survey Act					
D1.4.1		a) Verify existing levels in the construction area prior to commencement of construction and setting out of all works as well as the As-built survey to be send to engineer in DWG format at end of project	Sum	1			
	8.8.4	Existing services					
D1.4.2		c) Excavate by hand in soft material to expose existing services and reinstate test hole	m³	2			
D1.4.3		d) Temporary protection of existing services	Sum	1			
Total Carried Forward To Summary							



## Schedule D: RIVERSDALE

Total Carried Forward To Summary

**TENDER NO****Schedule D: RIVERSDALE**

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
D3		CIVIL WORKS BUND AREA					
D3.1	SANS 1200 DA	EARTH - AND LAYERWORKS					
	SANS 1200 M	Earthworks to new bund area					
D3.1.1		a) Cut to spoil off site	m <sup>3</sup>	15			
D3.1.2		b) Neatly trim insitu subgrade to final line and level, and compact to 93% Mod AASTHO to accept layerworks	m <sup>2</sup>	140			
D3.1.3		c) Supply and place 150mm G5 subbase layer compacted to 98% MOD AASTHO density with material from commercial sources	m <sup>3</sup>	22			
D3.2	SANS 1200 G	FORMWORK					
		Vertical smooth finish to :					
D3.2.1		a) Foundations	m <sup>2</sup>	3			
D3.2.2		b) Containment slab sides	m <sup>2</sup>	15			
D3.2.3		c) Walls and Plinths	m <sup>2</sup>	12			
D3.3		REINFORCEMENT					
		High tensile steel:					
D3.3.1		a) Y10	kg	350			
D3.3.2		b) Y12	kg	350			
		High-tensile welded mesh:					
D3.3.3		Ref 245	m <sup>2</sup>	57			
D3.3.4		Ref 617	m <sup>2</sup>	90			
D3.4		CONCRETE					
		Strength Concrete, Grade 30/19					
D3.4.1		a) Bund area surface bed slab	m <sup>3</sup>	7			
		Strength Concrete, Grade 35/19					
D3.4.2		a) Plinths and upstands	m <sup>3</sup>	5			
D3.4.3		b) Containment area slab	m <sup>3</sup>	16			
D3.4.4		c) Concrete to paving laid to fall (100mm thickness)	m <sup>3</sup>	8			
Total Carried Forward							

**TENDER NO****Schedule D: RIVERSDALE**

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
Brought Forward							
D3.5		TEST BLOCKS					
D3.5.1		Making and testing set of three 150 x 150 x 150 mm concrete strength test cubes	Set	2			
D3.6		FINISHING					
		Wood float finish to exposed horizontal surfaces:					
D3.6.1		a) Bund area surface bed slab	m²	50			
D3.6.2		b) Containment area slab to falls	m²	80			
D3.7		JOINTING					
D3.7.1		a) Expansion joints against plinths, structural and concrete edges (depth up to 125 mm) incl. formwork, Sikaflex 11 FC or similar approved sealant, jointex, closed cell backing cord, all inclusive	m	35			
D3.7.2		b) Construction joints (depth up to 125 mm) including formwork, primer, jointex, closed cell backing cord, Sikaflex 11 FC or similar approved sealant, all inclusive	m	10			
D3.7.3		c) Saw cut contraction joints in slabs to a depth of 50 mm to neat and straight lines, supply and install primer, closed cell backing cord, Sikaflex 11 FC or similar approved sealant, all inclusive	m	10			
D3.8		SUNDRY					
		Supply and install non-shrink grout (Barragrout or equal approved) to:					
D3.8.1		a) Tank cradles and under baseplates	ℓ	60			
D3.8.2		Supply and install M16 chemical anchors 180mm long (galvanised) - Hiltui or similiar approved to support plinths	No	12			
D3.8.3		Supply and install 400mm x 400mm sump with galvanised mentis grid frame (RS 40 with 25 x 4.5 bearer bars) to sumps complete including 30x30x30 angle iron, chemical anchors, fish tail lugs and all things necessary as per detail on drawing.	No	1			
D3.8.4		Supply and install 110 diam Isolating valve including valve chamber	No	1			
Total Carried Forward							

**TENDER NO**

## Schedule D: RIVERSDALE

[illegible]

**TENDER NO****Schedule D: RIVERSDALE**

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
D4		BUILDING WORKS BUND AREA					
D4.1	SANS 1200 DA	EARTHWORKS					
		Excavate in earth not exceeding 1.5 m deep:					
D4.1.1		a) Trenches	m <sup>3</sup>	19			
		Extra-over trench excavations for :					
D4.1.2		i) Soft rock	m <sup>3</sup>	3			
D4.1.3		ii) Hard rock	m <sup>3</sup>	3			
		Backfilling to trenches, holes, etc.					
D4.1.4		Backfilling with material from excavations compacted to a density of at least 95% MOD AASHTO density.	m <sup>3</sup>	3			
		Extra-over all excavations for carting away:					
D4.1.5		Surplus material from excavations and/or stockpiles on site to a dumping site to be located by the contractor	m <sup>3</sup>	3			
		Compacted sand layers					
D4.1.6		30 mm blinding layer of well compacted sand	m <sup>3</sup>	2			
D4.2	SANS 1200 GA	REINFORCED CONCRETE					
		Formwork					
		Rough vertical finish to:					
D4.2.1		a) Foundations	m <sup>2</sup>	2			
D4.3		REINFORCEMENT					
		High-tensile steel:					
D4.3.1		a) Y10 bars	kg	125			
D4.3.2		b) Y12 bars	kg	275			
D4.4		CONCRETE					
		Strength Concrete, Grade 25/19 for:					
D4.4.1		a) Strip foundations	m <sup>3</sup>	6			
D4.5		MASONRY					
Total Carried Forward							

**TENDER NO****Schedule D: RIVERSDALE**

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
Brought Forward							
		NOTE: Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of the brick.					
		Brickwork:					
		Brickwork of 222 x 106 x 73 mm burnt clay NFX bricks (14MPa nominal compressive strength) in Class II mortar:					
D4.5.1		a) One brick (230 mm) walls	m²	50			
D4.5.2		b) Half brick (115 mm) walls	m²	5			
D4.5.3		c) Access staircase into bund area	m²	5			
		Brickwork reinforcement:					
D4.5.4		150 mm wide reinforcement built in horizontally	m	300			
D4.6		WATERPROOFING					
		One layer of co-extruded Under Surface Bed membrane placed with sheets overlapping minimum 200 mm and taped at overlaps.					
		Under bund area surface bed:					
D4.6.1		250 micron damp proof course to SANS 952-1 such as Gundle USB GREEN 3 or similar approved.	m²	57			
D4.7		EXTERNAL PLASTERING					
D4.7.1		1:4 Cement plaster on brickwork	m²	107			
D4.8		PAINTWORK					
		On floated plaster					
		Prepare and brush to remove all loose contaminants, apply one coat alkali resistant plaster primer and two coats premium quality enamel paint on:					
D4.8.1		External walls	m²	107			
Total Carried Forward To Summary							

**TENDER NO****Schedule D: RIVERSDALE**

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
D5		ROADWORKS					
D5.1	SANS 1200 DM	EARTHWORKS (ROADS, SUBGRADE)					
	PSDM 5.2.3.3	Treatment of Roadbed: (Refer to Geotechnical Report; if left undisturbed, the residual materials can provide adequate founding for the lower selected road prism layers (provided a minimum cover of at least 600 mm of imported material is allowed for)).					
D5.1.1		a) 150mm thick Roadbed preparation and compaction of material to a minimum of 93% of modified AASHTO maximum density	m <sup>3</sup>	2			
D5.1.2	8.3.5	Import from commercial sources 150mm thick G7 natural gravel material selected layers (upper- and lower) compacted to 93% of modified AASHTO maximum density	m <sup>3</sup>	2			
D5.2	SANS 1200 ME	SUBBASE					
D5.2.1	8.3.3	Import from commercial sources, 150mm thick G5 natural gravel material for road subbase, compacted to 98% of modified AASHTO maximum density	m <sup>3</sup>	2			
D5.3	SANS 1200 MF	BASE					
D5.3.1	8.3.3	Import from commercial sources, 150mm thick G4 natural gravel material, compacted to 98% of modified AASHTO maximum density	m <sup>3</sup>	2			
D5.4	SANS 1200 MH	ASPHALT BASE AND SURFACING					
		Prime Coat Using:					
D5.4.1	8.5.1	Prime coat using type MC-30 cut-back bitumen applied at a rate of 0.7l/m <sup>2</sup>	m <sup>2</sup>	10			
		Asphalt Surfacing					
D5.4.2		30mm Cold mixed continuously graded premix	m <sup>2</sup>	10			
D5.4.3		Saw-cut asphalt surfacing	m	20			
D5.4.4		Remove and dispose of asphalt surfacing	m <sup>2</sup>	10			
Total Carried Forward To Summary							

**TENDER NO****Schedule D: RIVERSDALE**

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
D6		MECHANICAL & ELECTRICAL WORKS					
D6.1		NEW ABOVE GROUND TANKS & DISPENSERS					
		Supply, install and protect the following above ground horizontal tanks (Provide all labour, material, equipment ALL inclusive) refer to DRW 230103-R2 for pipe, accessories and fittings schedule					
D6.1.1		23m3 Horizontal tank (ref DRW 230103-R2) including Tank access ladder	No	1			
D6.2		PUMPS (DISPENSERS)					
		Supply and install the following dispenser including commissioning and testing, ALL electrical works included.					
D6.2.1		12W Heavy duty Electric pump (supplied by SAMD) on a galvanised angle steel frame (to be approved by engineer)	No	2			
D6.2.2		Certificate of Compliance to SANS 10142-1 certified by an Installation Electrician	Sum	1			
D6.3		SUMS STATED PROVISIONALLY BY ENGINEER					
		Provisional amount allowed for work to be done by a nominated sub contractor appointed by the Engineer					
D6.3.1		Fuel Management System including GSM modem, power supply, Sensors and all labour to install - ALL inclusive	Prov Sum	1	65,000.00	65,000	00
D6.3.2		a) Overhead, charges and profit on item 5.3.1	%	65,000			
D6.3.3		Yearly Subscription fee per console including WEB Portal reporting	No	1	4,500.00	4,500	00
D6.3.4		a) Overhead, charges and profit on item 5.3.2	%	4,500			
		FIRE (refer to DRW 230103-G4)					
D6.3.5		Supply and install new fire hose reel including connection to existing water supply	No	1			
D6.3.6		Supply and install new 9K DCP Fire extinguishers	No	2			
Total Carried Forward							



**TENDER NO**

## Schedule D: RIVERSDALE

[illegible]

**TENDER NO**
**Schedule D: RIVERSDALE**

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
D7		OIL SEPARATOR					
		Oil Separator Installation					
D7.1		Excavate for new tank installation, install blinding, position tanks in excavated area, backfill and compact accordingly as per drawing and to manufacturers specifications. Work area to be hoarded off with 'Ready-fence' type barrier with safety signage attached. Removal of rubble included.	Sum	1			
D7.2		Supply and Install Polution Solution (NS07 complete) separator including transport to site	No	1			
D7.3		Supply and cast concrete slab above tank as per drawing and engineers details	m <sup>3</sup>	2			
D7.4		Supply and fix Mesh Ref 617 incl waste and cutting.	m <sup>2</sup>	10			
D7.5		Broom Burlap finish to concrete surfaces	m <sup>2</sup>	10			
D7.6		Install precast concrete manholes over tanks complete with 'Securex' DI round frame and cover Z600D by Saint Gobain	No	4			
D7.7		Supply, trench and install tank vent line, 50mm dia HDPE pipe to vent line stack. Backfill/compact and make good surface to match existing. All HDPE welded fittings included.	m	20			
D7.8		Supply and install 50mm galvanised tank vent line above ground at the main vent line stack.	m	6			
D7.9		Supply, trench and install new 110mm dia HDPE pipe from filler / forecourt slab to tank interceptor all welded fittings for HDPE pipe included	m	20			
D7.10		Supply, trench and install new 110mm dia UPVC pipe from tank interceptor to stormwater/sewer point on site all welded HDPE fittings included. Reinstate surface to match existing.	m	20			
D7.11		Supply and install 450mm x 600mm Type 8A H/D grid manhole at filler slab including frame and cover	No	1			
Total Carried Forward To Summary							

**TENDER NO**

## Schedule D: RIVERSDALE

[illegible]

SUMMARY OF SECTIONS

SECTION	DESCRIPTION	AMOUNT (RAND)
D1	PRELIMINARY AND GENERAL	.....
D2	SITE CLEARANCE AND EARTH WORKS	.....
D3	CIVIL WORKS BUND AREA	.....
D4	BUILDING WORKS BUND AREA	.....
D5	ROADWORKS	.....
D6	MECHANICAL & ELECTRICAL WORKS	.....
D7	OIL SEPARATOR	.....
D8	TESTING	.....
Total Carried Forward To Summary Of Schedules		.....

**TENDER NO**

## Schedule E: UNIONDALE

[illegible]

**TENDER NO****Schedule E: UNIONDALE**

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
Brought Forward							
E1.2	8.4	SCHEDULED TIME-RELATED ITEMS					
E1.2.1	8.4.1	Contractual Requirements	Sum	1			
	8.4.2	Operate and maintain facilities on the Site:					
	8.4.2.2	Facilities for Contractor					
E1.2.2		a) Offices and storage sheds	Sum	1			
E1.2.3		d) Living accommodation	Sum	1			
E1.2.4		e) Ablution and latrine facilities	Sum	1			
E1.2.5		f) Tools and equipment	Sum	1			
E1.2.6		g) Water supplies, electric power and communications	Sum	1			
E1.2.7	PSA 5.5	h) Dealing with water	Sum	1			
E1.2.8	5.8	i) Access	Sum	1			
E1.2.9	8.4.3	Supervision for Duration of Construction	Sum	1			
E1.2.10	8.4.4	Company and Head office Overhead Costs for the Duration of the Contract	Sum	1			
	PSA 8.9	Comply with the Health and Safety Act					
E1.2.11	PSA 8.9.1	Health and Safety Measures	Sum	1			
E1.2.12	PSA 8.9.2	Health and safety Plan	Sum	1			
E1.2.13	PSA 8.9.3	Health and Safety File	Sum	1			
	PSA 8.4.6	Standing time costs					
E1.2.14		a) Plant	day			Rate Only	
E1.2.15		b) Labour	day			Rate Only	
E1.2.16		c) Other resources (to be specified by the contractor	day			Rate Only	
Total Carried Forward							

**TENDER NO****Schedule E: UNIONDALE**

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
Brought Forward							
E1.3	8.5	SUMS STATED PROVISIONALLY BY ENGINEER					
	PSA 8.5	a) For work to be executed by the Contractor (alterations, lowering, raising, moving and replacing of existing services)					
E1.3.1		ii) Water connections	Prov Sum	1		10,000	00
E1.3.2		iii) Electrical connections	Prov Sum	1		10,000	00
E1.3.3		b) Material testing by commercial laboratories if required by the Engineer	Prov Sum	1	5,000.00	5,000	00
E1.3.4		c) Overhead, charges and profit on item (b)	%	5,000.00			
	PS AB 8.4.1	d) Cellular telephones					
E1.3.5		(i) Cost of calls in connection with contract administration by the Engineers's Representative	Prov Sum	1	500.00	500	00
E1.3.6		(ii) Handling costs and profit in respect of item (d)	%	500.00			
	PSA 8.8.4	Existing services					
E1.4	8.8.4	TEMPORARY WORKS					
	8.8.5	Cost of survey in Terms of the Land Survey Act					
E1.4.1		a) Verify existing levels in the construction area prior to commencement of construction and setting out of all works as well as the As-built survey to be send to engineer in DWG format at end of project	Sum	1			
	8.8.4	Existing services					
E1.4.2		c) Excavate by hand in soft material to expose existing services and reinstate test hole	m³	2			
E1.4.3		d) Temporary protection of existing services	Sum	1			
Total Carried Forward To Summary							

**TENDER NO**

## Schedule E: UNIONDALE

[illegible]



**TENDER NO**
**Schedule E: UNIONDALE**

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
E3		CIVIL WORKS BUND AREA					
E3.1	SANS 1200 DA	EARTH - AND LAYERWORKS					
	SANS 1200 M	Earthworks to new bund area					
E3.1.1		a) Cut to spoil off site	m <sup>3</sup>	15			
E3.1.2		b) Neatly trim insitu subgrade to final line and level, and compact to 93% Mod AASTHO to accept layerworks	m <sup>2</sup>	85			
E3.1.3		c) Supply and place 150mm G5 subbase layer compacted to 98% MOD AASTHO density with material from commercial sources	m <sup>3</sup>	15			
E3.2	SANS 1200 G	FORMWORK					
		Vertical smooth finish to :					
E3.2.1		a) Foundations	m <sup>2</sup>	3			
E3.2.2		b) Containment slab sides	m <sup>2</sup>	9			
E3.2.3		c) Walls and Plinths	m <sup>2</sup>	12			
E3.3		REINFORCEMENT					
		High tensile steel:					
E3.3.1		a) Y10	kg	350			
E3.3.2		b) Y12	kg	350			
		High-tensile welded mesh					
E3.3.3		Ref 245	m <sup>2</sup>	45			
E3.3.4		Ref 617	m <sup>2</sup>	40			
E3.4		CONCRETE					
		Strength Concrete, Grade 30/19					
E3.4.1		a) Bund area surface bed slab	m <sup>3</sup>	5			
		Strength Concrete, Grade 35/19					
E3.4.2		a) Plinths and upstands	m <sup>3</sup>	3			
E3.4.3		b) Containment area slab	m <sup>3</sup>	8			
E3.4.4		c) Concrete to paving laid to fall (100mm thickness)	m <sup>3</sup>	8			
Total Carried Forward							

**TENDER NO****Schedule E: UNIONDALE**

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
Brought Forward							
E3.5		TEST BLOCKS					
E3.5.1		Making and testing set of three 150 x 150 x 150 mm concrete strength test cubes	Set	2			
E3.6		FINISHING					
		Wood float finish to exposed horizontal surfaces:					
E3.6.1		a) Bund area surface bed slab	m²	36			
E3.6.2		b) Containment area slab to falls	m²	40			
E3.7		JOINTING					
E3.7.1		a) Expansion joints against plinths, structural and concrete edges (depth up to 125 mm) incl. formwork, jointex, closed cell backing cord, Sikaflex 11 FC or similar approved sealant, all inclusive	m	26			
E3.7.2		b) Construction joints (depth up to 125 mm) including formwork, primer, jointex, closed cell backing cord, Sikaflex 11 FC or similar approved sealant, all inclusive	m	12			
E3.7.3		c) Saw cut contraction joints in slabs to a depth of 50 mm to neat and straight lines, supply and install primer, closed cell backing cord, Sikaflex 11 FC or similar approved sealant, all inclusive	m	12			
E3.8		SUNDRY					
		Supply and install non-shrink grout (Barragrout or equal approved) to:					
E3.8.1		a) Tank cradles and under baseplates	ℓ	60			
E3.8.2		Supply and install M16 chemical anchors 180mm long (galvanised) - Hiltui or similiar approved to support plinths	No	12			
E3.8.3		Supply and install 400mm x 400mm sump with galvanised mentis grid frame (RS 40 with 25 x 4.5 bearer bars) to sumps complete including 30x30x30 angle iron, chemical anchors, fish tail lugs and all things necessary as per detail on drawing.	No	1			
E3.8.4		Supply and install 110 diam Isolating valve including valve chamber	No	1			
Total Carried Forward							

## Schedule E: UNIONDALE

Total Carried Forward To Summary

**TENDER NO****Schedule E: UNIONDALE**

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
E4		BUILDING WORKS BUND AREA					
E4.1	SANS 1200 DA	EARTHWORKS					
		Excavate in earth not exceeding 1.5 m deep:					
E4.1.1		a) Trenches	m <sup>3</sup>	16			
		Extra-over trench excavations for :					
E4.1.2		i) Soft rock	m <sup>3</sup>	3			
E4.1.3		ii) Hard rock	m <sup>3</sup>	3			
		Backfilling to trenches, holes, etc.					
E4.1.4		Backfilling with material from excavations compacted to a density of at least 95% MOD AASHTO density.	m <sup>3</sup>	3			
		Extra-over all excavations for carting away:					
E4.1.5		Surplus material from excavations and/or stockpiles on site to a dumping site to be located by the contractor	m <sup>3</sup>	3			
		Compacted sand layers					
E4.1.6		30 mm blinding layer of well compacted sand	m <sup>3</sup>	2			
E4.2	SANS 1200 GA	REINFORCED CONCRETE					
		Formwork					
		Rough vertical finish to:					
E4.2.1		a) Foundations	m <sup>2</sup>	2			
E4.3		REINFORCEMENT					
		High-tensile steel:					
E4.3.1		a) Y10 bars	kg	110			
E4.3.2		b) Y12 bars	kg	220			
E4.4		CONCRETE					
		Strength Concrete, Grade 25/19 for:					
E4.4.1		a) Strip foundations	m <sup>3</sup>	6			
E4.5		MASONRY					
Total Carried Forward							

**TENDER NO****Schedule E: UNIONDALE**

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
Brought Forward							
		NOTE: Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of the brick.					
		Brickwork:					
		Brickwork of 222 x 106 x 73 mm burnt clay NFX bricks (14MPa nominal compressive strength) in Class II mortar:					
E4.5.1		a) One brick (230 mm) walls	m²	45			
E4.5.2		b) Half brick (115 mm) walls	m²	5			
E4.5.3		c) Access staircase into bund area	m²	5			
		Brickwork reinforcement:					
E4.5.4		150 mm wide reinforcement built in horizontally	m	260			
E4.6		WATERPROOFING					
		One layer of co-extruded Under Surface Bed membrane placed with sheets overlapping minimum 200 mm and taped at overlaps.					
		Under bund area surface bed:					
E4.6.1		250 micron damp proof course to SANS 952-1 such as Gundle USB GREEN 3 or similar approved.	m²	42			
E4.7		EXTERNAL PLASTERING					
E4.7.1		1:4 Cement plaster on brickwork	m²	92			
E4.8		PAINTWORK					
		On floated plaster					
		Prepare and brush to remove all loose contaminants, apply one coat alkali resistant plaster primer and two coats premium quality enamel paint on:					
E4.8.1		External walls	m²	92			
Total Carried Forward To Summary							

**TENDER NO****Schedule E: UNIONDALE**

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
E5		ROADWORKS					
E5.1	SANS 1200 DM	EARTHWORKS (ROADS, SUBGRADE)					
	PSDM 5.2.3.3	Treatment of Roadbed: (Refer to Geotechnical Report; if left undisturbed, the residual materials can provide adequate founding for the lower selected road prism layers (provided a minimum cover of at least 600 mm of imported material is allowed for)).					
E5.1.1		a) 150mm thick Roadbed preparation and compaction of material to a minimum of 93% of modified AASHTO maximum density	m <sup>3</sup>	2			
E5.1.2	8.3.5	Import from commercial sources 150mm thick G7 natural gravel material selected layers (upper- and lower) compacted to 93% of modified AASHTO maximum density	m <sup>3</sup>	2			
E5.2	SANS 1200 ME	SUBBASE					
E5.2.1	8.3.3	Import from commercial sources, 150mm thick G5 natural gravel material for road subbase, compacted to 98% of modified AASHTO maximum density	m <sup>3</sup>	2			
E5.3	SANS 1200 MF	BASE					
E5.3.1	8.3.3	Import from commercial sources, 150mm thick G4 natural gravel material, compacted to 98% of modified AASHTO maximum density	m <sup>3</sup>	2			
E5.4	SANS 1200 MH	ASPHALT BASE AND SURFACING					
		Prime Coat Using:					
E5.4.1	8.5.1	Prime coat using type MC-30 cut-back bitumen applied at a rate of 0.7l/m <sup>2</sup>	m <sup>2</sup>	10			
		Asphalt Surfacing					
E5.4.2		30mm Cold mixed continuously graded premix	m <sup>2</sup>	10			
E5.4.3		Saw-cut asphalt surfacing	m	20			
E5.4.4		Remove and dispose of asphalt surfacing	m <sup>2</sup>	10			
Total Carried Forward To Summary							

**TENDER NO****Schedule E: UNIONDALE**

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
E6		MECHANICAL & ELECTRICAL WORKS					
E6.1		NEW ABOVE GROUND TANKS & DISPENSERS					
		Supply, install and protect the following above ground horizontal tanks (Provide all labour, material, equipment ALL inclusive) refer to DRW 230103-V2 for pipe, accessories and fittings schedule					
E6.1.1		9m3 Horizontal tank (ref DRW 230103-V2) including Tank access ladder	No	1			
E6.2		PUMPS (DISPENSERS)					
		Supply and install the following dispenser including commisioning and testing, ALL electrical works included.					
E6.2.1		12W Heavy duty Electric pump (supplied by SAMD) on a galvanised angle steel frame (to be approved by engineer)	No	1			
E6.2.2		Certificate of Compliance to SANS 10142-1 certified by an Installation Electrician	Sum	1			
E6.3		SUMS STATED PROVISIONALLY BY ENGINEER					
		Provisional amount allowed for work to be done by a nominated sub contractor appointed by the Engineer					
E6.3.1		Fuel Management System including GSM modem, power supply, Sensors and all labour to install - ALL inclusive	Prov Sum	1	65,000.00	65,000	00
E6.3.2		a) Overhead, charges and profit on item 5.3.1	%	65,000			
E6.3.3		Yearly Subscription fee per console including WEB Portal reporting	No	1	4,500.00	4,500	00
E6.3.4		a) Overhead, charges and profit on item 5.3.2	%	4,500			
		FIRE (refer to DRW 230103-G4)					
E6.3.5		Supply and install new fire hose reel including connection to existing water supply	No	1			
E6.3.6		Supply and install new 9K DCP Fire extinguishers	No	2			
Total Carried Forward							

**TENDER NO**

## Schedule E: UNIONDALE

[illegible]



**TENDER NO**
**Schedule E: UNIONDALE**

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
E7		OIL SEPARATOR					
		Oil Separator Installation					
E7.1		Excavate for new tank installation, install blinding, position tanks in excavated area, backfill and compact accordingly as per drawing and to manufacturers specifications. Work area to be hoarded off with 'Ready-fence' type barrier with safety signage attached. Removal of rubble included.	Sum	1			
E7.2		Supply and Install Polution Solution (NS07 complete) separator including transport to site	No	1			
E7.3		Supply and cast concrete slab above tank as per drawing and engineers details	m³	2			
E7.4		Supply and fix Mesh Ref 617 incl waste and cutting.	m²	10			
E7.5		Broom Burlap finish to concrete surfaces	m²	10			
E7.6		Install precast concrete manholes over tanks complete with 'Securex' DI round frame and cover Z600D by Saint Gobain	No	4			
E7.7		Supply, trench and install tank vent line, 50mm dia HDPE pipe to vent line stack. Backfill/compact and make good surface to match existing. All HDPE welded fittings included.	m	20			
E7.8		Supply and install 50mm galvanised tank vent line above ground at the main vent line stack.	m	6			
E7.9		Supply, trench and install new 110mm dia HDPE pipe from filler / forecourt slab to tank interceptor all welded fittings for HDPE pipe included	m	20			
E7.10		Supply, trench and install new 110mm dia UPVC pipe from tank interceptor to stormwater/sewer point on site all welded HDPE fittings included. Reinstate surface to match existing.	m	20			
E7.11		Supply and install 450mm x 600mm Type 8A H/D grid manhole at filler slab including frame and cover	No	1			
Total Carried Forward To Summary							

**TENDER NO**

## Schedule E: UNIONDALE

[illegible]

SUMMARY OF SECTIONS

SECTION	DESCRIPTION	AMOUNT (RAND)
E1	PRELIMINARY AND GENERAL	.....
E2	SITE CLEARANCE AND EARTH WORKS	.....
E3	CIVIL WORKS BUND AREA	.....
E4	BUILDING WORKS BUND AREA	.....
E5	ROADWORKS	.....
E6	MECHANICAL & ELECTRICAL WORKS	.....
E7	OIL SEPARATOR	.....
E8	TESTING	.....
Total Carried Forward To Summary Of Schedules		.....

**TENDER NO**

## Schedule F: LADISMITH

[illegible]

**TENDER NO****Schedule F: LADISMITH**

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
Brought Forward							
F1.2	8.4	SCHEDULED TIME-RELATED ITEMS					
F1.2.1	8.4.1	Contractual Requirements	Sum	1			
	8.4.2	Operate and maintain facilities on the Site:					
	8.4.2.2	Facilities for Contractor					
F1.2.2		a) Offices and storage sheds	Sum	1			
F1.2.3		d) Living accommodation	Sum	1			
F1.2.4		e) Ablution and latrine facilities	Sum	1			
F1.2.5		f) Tools and equipment	Sum	1			
F1.2.6		g) Water supplies, electric power and communications	Sum	1			
F1.2.7	PSA 5.5	h) Dealing with water	Sum	1			
F1.2.8	5.8	i) Access	Sum	1			
F1.2.9	8.4.3	Supervision for Duration of Construction	Sum	1			
F1.2.10	8.4.4	Company and Head office Overhead Costs for the Duration of the Contract	Sum	1			
	PSA 8.9	Comply with the Health and Safety Act					
F1.2.11	PSA 8.9.1	Health and Safety Measures	Sum	1			
F1.2.12	PSA 8.9.2	Health and safety Plan	Sum	1			
F1.2.13	PSA 8.9.3	Health and Safety File	Sum	1			
	PSA 8.4.6	Standing time costs					
F1.2.14		a) Plant	day			Rate Only	
F1.2.15		b) Labour	day			Rate Only	
F1.2.16		c) Other resources (to be specified by the contractor	day			Rate Only	
Total Carried Forward							

**TENDER NO**

## Schedule F: LADISMITH

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
Brought Forward							
F1.3	8.5	SUMS STATED PROVISIONALLY BY ENGINEER					
	PSA 8.5	a) For work to be executed by the Contractor (alterations, lowering, raising, moving and replacing of existing services)					
F1.3.1		ii) Water connections	Prov Sum	1		10,000	00
F1.3.2		iii) Electrical connections	Prov Sum	1		10,000	00
F1.3.3		b) Material testing by commercial laboratories if required by the Engineer	Prov Sum	1	5,000.00	5,000	00
F1.3.4		c) Overhead, charges and profit on item (b)	%	5,000.00			
	PS AB 8.4.1	d) Cellular telephones					
F1.3.5		(i) Cost of calls in connection with contract administration by the Engineers's Representative	Prov Sum	1	500.00	500	00
F1.3.6		(ii) Handling costs and profit in respect of item (d)	%	500.00			
	PSA 8.8.4	Existing services					
F1.4	8.8.4	TEMPORARY WORKS					
	8.8.5	Cost of survey in Terms of the Land Survey Act					
F1.4.1		a) Verify existing levels in the construction area prior to commencement of construction and setting out of all works as well as the As-built survey to be send to engineer in DWG format at end of project	Sum	1			
	8.8.4	Existing services					
F1.4.2		c) Excavate by hand in soft material to expose existing services and reinstate test hole	m³	2			
F1.4.3		d) Temporary protection of existing services	Sum	1			
Total Carried Forward To Summary							

**TENDER NO**

### Schedule F: LADISMITH

[illegible]

**TENDER NO****Schedule F: LADISMITH**

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
F3		CIVIL WORKS BUND AREA					
F3.1	SANS 1200 DA	EARTH - AND LAYERWORKS					
	SANS 1200 M	Earthworks to new bund area					
F3.1.1		a) Cut to spoil off site	m <sup>3</sup>	15			
F3.1.2		b) Neatly trim insitu subgrade to final line and level, and compact to 93% Mod AASTHO to accept layerworks	m <sup>2</sup>	83			
F3.1.3		c) Supply and place 150mm G5 subbase layer compacted to 98% MOD AASTHO density with material from commercial sources	m <sup>3</sup>	15			
F3.2	SANS 1200 G	FORMWORK					
		Vertical smooth finish to :					
F3.2.1		a) Foundations	m <sup>2</sup>	3			
F3.2.2		b) Containment slab sides	m <sup>2</sup>	9			
F3.2.3		c) Walls and Plinths	m <sup>2</sup>	12			
F3.3		REINFORCEMENT					
		High tensile steel:					
F3.3.1		a) Y10	kg	350			
F3.3.2		b) Y12	kg	350			
		High-tensile welded mesh					
F3.3.3		Ref 245	m <sup>2</sup>	42			
F3.3.4		Ref 617	m <sup>2</sup>	45			
F3.4		CONCRETE					
		Strength Concrete, Grade 30/19					
F3.4.1		a) Bund area surface bed slab	m <sup>3</sup>	5			
		Strength Concrete, Grade 35/19					
F3.4.2		a) Plinths and upstands	m <sup>3</sup>	3			
F3.4.3		b) Containment area slab	m <sup>3</sup>	8			
F3.4.4		c) Concrete to paving laid to fall (100mm thickness)	m <sup>3</sup>	8			
Total Carried Forward							



**TENDER NO****Schedule F: LADISMITH**

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
Brought Forward							
F3.5		TEST BLOCKS					
F3.5.1		Making and testing set of three 150 x 150 x 150 mm concrete strength test cubes	Set	2			
F3.6		FINISHING					
		Wood float finish to exposed horizontal surfaces:					
F3.6.1		a) Bund area surface bed slab	m²	40			
F3.6.2		b) Containment area slab to falls	m²	42			
F3.7		JOINTING					
F3.7.1		a) Expansion joints against plinths, structural and concrete edges (depth up to 125 mm) incl. formwork, jointex, closed cell backing cord, Sikaflex 11 FC or similar approved sealant, all inclusive	m	27			
F3.7.2		b) Construction joints (depth up to 125 mm) including formwork, primer, jointex, closed cell backing cord, Sikaflex 11 FC or similar approved sealant, all inclusive	m	12			
F3.7.3		c) Saw cut contraction joints in slabs to a depth of 50 mm to neat and straight lines, supply and install primer, closed cell backing cord, Sikaflex 11 FC or similar approved sealant, all inclusive	m	12			
F3.8		SUNDRY					
		Supply and install non-shrink grout (Barragrout or equal approved) to:					
F3.8.1		a) Tank cradles and under baseplates	ℓ	60			
F3.8.2		Supply and install M16 chemical anchors 180mm long (galvanised) - Hiltui or similiar approved to support plinths	No	12			
F3.8.3		Supply and install 400mm x 400mm sump with galvanised mentis grid frame (RS 40 with 25 x 4.5 bearer bars) to sumps complete including 30x30x30 angle iron, chemical anchors, fish tail lugs and all things necessary as per detail on drawing.	No	1			
F3.8.4		Supply and install 110 diam Isolating valve including valve chamber	No	1			
Total Carried Forward							

**TENDER NO**

## Schedule F: LADISMITH

[illegible]

**TENDER NO****Schedule F: LADISMITH**

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
F4		BUILDING WORKS BUND AREA					
F4.1	SANS 1200 DA	EARTHWORKS					
		Excavate in earth not exceeding 1.5 m deep:					
F4.1.1		a) Trenches	m <sup>3</sup>	18			
		Extra-over trench excavations for :					
F4.1.2		i) Soft rock	m <sup>3</sup>	3			
F4.1.3		ii) Hard rock	m <sup>3</sup>	3			
		Backfilling to trenches, holes, etc.					
F4.1.4		Backfilling with material from excavations compacted to a density of at least 95% MOD AASHTO density.	m <sup>3</sup>	5			
		Extra-over all excavations for carting away:					
F4.1.5		Surplus material from excavations and/or stockpiles on site to a dumping site to be located by the contractor	m <sup>3</sup>	3			
		Compacted sand layers					
F4.1.6		30 mm blinding layer of well compacted sand	m <sup>3</sup>	2			
F4.2	SANS 1200 GA	REINFORCED CONCRETE					
		Formwork					
		Rough vertical finish to:					
F4.2.1		a) Foundations	m <sup>2</sup>	3			
F4.3		REINFORCEMENT					
		High-tensile steel:					
F4.3.1		a) Y10 bars	kg	100			
F4.3.2		b) Y12 bars	kg	250			
F4.4		CONCRETE					
		Strength Concrete, Grade 25/19 for:					
F4.4.1		a) Strip foundations	m <sup>3</sup>	6			
F4.5		MASONRY					
Total Carried Forward							

**TENDER NO****Schedule F: LADISMITH**

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
Brought Forward							
		NOTE: Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of the brick					
		Brickwork:					
		Brickwork of 222 x 106 x 73 mm burnt clay NFX bricks (14MPa nominal compressive strength) in Class II mortar:					
F4.5.1		a) One brick (230 mm) walls	m²	45			
F4.5.2		b) Half brick (115 mm) walls	m²	5			
F4.5.3		c) Access staircase into bund area	m²	5			
		Brickwork reinforcement:					
F4.5.4		150 mm wide reinforcement built in horizontally	m	260			
F4.6		WATERPROOFING					
		One layer of co-extruded Under Surface Bed membrane placed with sheets overlapping minimum 200 mm and taped at overlaps.					
		Under bund area surface bed:					
F4.6.1		250 micron damp proof course to SANS 952-1 such as Gundle USB GREEN 3 or similar approved.	m²	45			
F4.7		EXTERNAL PLASTERING					
F4.7.1		1:4 Cement plaster on brickwork	m²	95			
F4.8		PAINTWORK					
		On floated plaster					
		Prepare and brush to remove all loose contaminants, apply one coat alkali resistant plaster primer and two coats premium quality enamel paint on:					
F4.8.1		External walls	m²	95			
Total Carried Forward To Summary							

**TENDER NO**
**Schedule F: LADISMITH**

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
F5		ROADWORKS					
F5.1	SANS 1200 DM	EARTHWORKS (ROADS, SUBGRADE)					
	PSDM 5.2.3.3	Treatment of Roadbed: (Refer to Geotechnical Report; if left undisturbed, the residual materials can provide adequate founding for the lower selected road prism layers (provided a minimum cover of at least 600 mm of imported material is allowed for)).					
F5.1.1		a) 150mm thick Roadbed preparation and compaction of material to a minimum of 93% of modified AASHTO maximum density	m <sup>3</sup>	2			
F5.1.2	8.3.5	Import from commercial sources 150mm thick G7 natural gravel material selected layers (upper- and lower) compacted to 93% of modified AASHTO maximum density	m <sup>3</sup>	2			
F5.2	SANS 1200 ME	SUBBASE					
F5.2.1	8.3.3	Import from commercial sources, 150mm thick G5 natural gravel material for road subbase, compacted to 98% of modified AASHTO maximum density	m <sup>3</sup>	2			
F5.3	SANS 1200 MF	BASE					
F5.3.1	8.3.3	Import from commercial sources, 150mm thick G4 natural gravel material, compacted to 98% of modified AASHTO maximum density	m <sup>3</sup>	2			
F5.4	SANS 1200 MH	ASPHALT BASE AND SURFACING					
		Prime Coat Using:					
F5.4.1	8.5.1	Prime coat using type MC-30 cut-back bitumen applied at a rate of 0.7l/m <sup>2</sup>	m <sup>2</sup>	10			
		Asphalt Surfacing					
F5.4.2		30mm Cold mixed continuously graded premix	m <sup>2</sup>	10			
F5.4.3		Saw-cut asphalt surfacing	m	20			
F5.4.4		Remove and dispose of asphalt surfacing	m <sup>2</sup>	10			
Total Carried Forward To Summary							

**TENDER NO**
**Schedule F: LADISMITH**

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
F6		MECHANICAL & ELECTRICAL WORKS					
F6.1		NEW ABOVE GROUND TANKS & DISPENSERS					
		Supply, install and protect the following above ground horizontal tanks (Provide all labour, material, equipment ALL inclusive) refer to DRW 230103-L2 for pipe, accessories and fittings schedule					
F6.1.1		9m3 Horizontal tank (ref DRW 230103-L2) including Tank access ladder	No	1			
F6.2		PUMPS (DISPENSERS)					
		Supply and install the following dispenser including commissioning and testing, ALL electrical works included.					
F6.2.1		12W Heavy duty Electric pump (supplied by SAMD) on a galvanised angle steel frame (to be approved by engineer)	No	1			
F6.2.2		Certificate of Compliance to SANS 10142-1 certified by an Installation Electrician	Sum	1			
F6.3		SUMS STATED PROVISIONALLY BY ENGINEER					
		Provisional amount allowed for work to be done by a nominated sub contractor appointed by the Engineer					
F6.3.1		Fuel Management System including GSM modem, power supply, Sensors and all labour to install - ALL inclusive	Prov Sum	1	65,000.00	65,000	00
F6.3.2		a) Overhead, charges and profit on item 5.3.1	%	65,000			
F6.3.3		Yearly Subscription fee per console including WEB Portal reporting	No	1	4,500.00	4,500	00
F6.3.4		a) Overhead, charges and profit on item 5.3.2	%	4,500			
		FIRE (refer to DRW 230103-G4)					
F6.3.5		Supply and install new fire hose reel including connection to existing water supply	No	1			
F6.3.6		Supply and install new 9K DCP Fire extinguishers	No	2			
Total Carried Forward							

**TENDER NO**

## Schedule F: LADISMITH

[illegible]

**TENDER NO**
**Schedule F: LADISMITH**

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
F7		OIL SEPARATOR					
		Oil Separator Installation					
F7.1		Excavate for new tank installation, install blinding, position tanks in excavated area, backfill and compact accordingly as per drawing and to manufacturers specifications. Work area to be hoarded off with 'Ready-fence' type barrier with safety signage attached. Removal of rubble included.	Sum	1			
F7.2		Supply and Install Polution Solution (NS07 complete) separator including transport to site	No	1			
F7.3		Supply and cast concrete slab above tank as per drawing and engineers details	m³	2			
F7.4		Supply and fix Mesh Ref 617 incl waste and cutting.	m²	10			
F7.5		Broom Burlap finish to concrete surfaces	m²	10			
F7.6		Install precast concrete manholes over tanks complete with 'Securex' DI round frame and cover Z600D by Saint Gobain	No	4			
F7.7		Supply, trench and install tank vent line, 50mm dia HDPE pipe to vent line stack. Backfill/compact and make good surface to match existing. All HDPE welded fittings included.	m	20			
F7.8		Supply and install 50mm galvanised tank vent line above ground at the main vent line stack.	m	6			
F7.9		Supply, trench and install new 110mm dia HDPE pipe from filler / forecourt slab to tank interceptor all welded fittings for HDPE pipe included	m	20			
F7.10		Supply, trench and install new 110mm dia UPVC pipe from tank interceptor to stormwater/sewer point on site all welded HDPE fittings included. Reinstate surface to match existing.	m	20			
F7.11		Supply and install 450mm x 600mm Type 8A H/D grid manhole at filler slab including frame and cover	No	1			
Total Carried Forward To Summary							



**TENDER NO**

## Schedule F: LADISMITH

[illegible]

SUMMARY OF SECTIONS

SECTION	DESCRIPTION	AMOUNT (RAND)
F1	PRELIMINARY AND GENERAL	.....
F2	SITE CLEARANCE AND EARTH WORKS	.....
F3	CIVIL WORKS BUND AREA	.....
F4	BUILDING WORKS BUND AREA	.....
F5	ROADWORKS	.....
F6	MECHANICAL & ELECTRICAL WORKS	.....
F7	OIL SEPARATOR	.....
F8	TESTING	.....
Total Carried Forward To Summary Of Schedules		.....

# SUPPLY AND INSTALLATION OF ABOVE GROUND FUEL TANKS

## SUMMARY OF SCHEDULES

SCHEDULE	DESCRIPTION	AMOUNT (RAND)
1	Schedule A: GEORGE	.....
2	Schedule B: OUDTSHOORN	.....
3	Schedule C: VAN WYKSDORP	.....
4	Schedule D: RIVERSDALE	.....
5	Schedule E: UNIONDALE	.....
6	Schedule F: LADISMITH	.....
Total		.....