

SCHEDULE 1 : PRELIMINARY AND GENERAL						
ITEM NO.	REF	DESCRIPTION	UNIT	QUANT	RATE	AMOUNT
	SABS 1200A	<u>SCHEDULE 1 : PRELIMINARY AND GENERAL</u>				
	8.3	<u>FIXED CHARGE AND VALUE RELATED ITEMS</u>				
1,1	PSA 4.1	Contractual Requirements	Sum	1		
	8.3.2	<u>Establish facilities on the site</u>				
	8.3.2.1	i) <u>Facilities for Engineer</u>				
1,2		a) Engineer's office (PSA 4.3.1)	Sum	1		
1,3		b) Name board (PSA 4.3.2)	No	2		
1,4		c) Survey assistants and material	Sum	1		
	8.3.2.2	ii) <u>Facilities for Contractor</u>				
1,5		a) Offices and storage sheds	Sum	1		
1,6		e) Ablution and latrine facilities	Sum	1		
1,7		g) Water supplies, electric power & communications	Sum	1		
1,8		h) Dealing with water	Sum	1		
1,9	8.3.3	Other fixed charge obligations	Sum	1		
1,10	8.3.4	Removal of Engineer's and Contractor's site establishment from site on completion of works.	Sum	1		
	SABS 1200A					
1,2	8.4	<u>TIME RELATED ITEMS</u>				
	PSA 4,2	Contractual requirements	Sum	1		
1,11	PSA 4.2.1	a) Mobilisation Period	Month	1		
1,12		b) Construction Period	Month	31		
1,13	PSA 4.2.2	c) Commissioning Operating and Training Period	Month	4		
	8.4.2	<u>Operations and maintenance of facilities on site</u>				
	8.4.2.1	Facilities for Engineer for duration of construction (SABS 1200 AB)				
1,14		a) Engineer's office	Sum	1		
1,15		b) Name board	No	2		
1,16		c) Survey assistants and material	Sum	1		
	8.4.2	<u>Operations and maintenance of facilities on site</u>				
	8.4.2.2	Facilities for the Contractor for the duration of the Contract, except where otherwise stated				
1,17		a) Offices and storage sheds	Sum	1		
1,18		d) Ablution and latrine facilities	Sum	1		
TOTAL CARRIED FORWARD						

ITEM NO.	REF	DESCRIPTION	UNIT	QUANT	RATE	AMOUNT
TOTAL BROUGHT FORWARD						
1,19		f) Water supplies, electric power & communications	Sum	1		
1,20		g) Dealing with water	Sum	1		
1,21	8.4.3	Supervision for duration of the construction	Sum	1		
1,22	8.4.4	Company and Head Office overhead costs for the duration of the Contract	Sum	1		
1,23	8.4.5	Other time related obligations	Sum	1		
1,24	PSA 4,4	Excavation by hand in all materials to expose existing services	m³	500		
	PSA 4,5	<u>Occupational Health and Safety</u> Provision for the cost related to the Occupational Health and Safety Act, 85 of 1993, and the relevant Regulations:				
1,25		a) Preparation of a Health & safety Plan	Sum	1		
1,26		b) Compilation of a Risk Assessment prior to Construction	Sum	1		
1,27		c) Health & Safety induction Training of employees	Sum	1		
1,28		d) Compilation and keeping up to date the Health & Safety file which shall include all documentation required in terms of the act	Sum	1		
1,29		e) Implementation of the Health and Safety Plan over the entire construction period	Sum	1		
	PSA 4,6	<u>SUMS STATED PROVISIONALLY BY THE ENGINEER</u>				
1,30	4.6.1	a) Project Liaison Officer	Prov. Sum	1		R 560 000,00
1,31	4.6.2	b) Project Liaison Committee	Prov. Sum	1		R 895 000,00
1,32	4.6.3	c) Additional laboratory testing (only when directed by Engineer)	Prov. Sum	1		R 170 000,00
1,33	4.6.4	d) Cathodic Protection	Prov. Sum	1		R 1 340 000,00
1,34	4.6.5	e) Specialised surge verification and monitoring	Prov. Sum	1		R 670 000,00
1,35	4.6.6	f) Electrical control panels and telemetry	Prov. Sum	1		R 26 800 000,00
1,36	4.6.7	g) AS BUILT Survey	Prov. Sum	1		R 33 500,00
1,37	4.6.7	h) Services instructed by the Clients representative	Prov. Sum	1		R 10 000 000,00
1,38	4.6.9	<u>Extra-over Item 1.30 to 1.37 for handling fee:</u>	%		R40 468 500,00	
	DWK 6	<u>DAYWORKS</u>				
	DWK 6.1	Labourers:				
1,39		a) Unskilled	hr	800		
1,40		b) Semi-skilled	hr	500		
TOTAL CARRIED FORWARD						

ITEM NO.	REF	DESCRIPTION	UNIT	QUANT	RATE	AMOUNT
TOTAL BROUGHT FORWARD						
1,41		c) Skilled	hr	400		
1,42	DWK 6.2	Foreman	hr	500		
	DWK 6.3	Tipper trucks:				
1,43		a) 3 - 5 ton	hr	300		
1,44	DWK 6.4	Loader (0.5m³ bucket)	hr	500		
1,45	DWK 6.5	Excavator (CAT 350 or similar)	hr	500		
1,46	DWK 6.9	Pedestrian roller (Bomag BW90 or similar)	hr	200		
1,47	DWK 6.10	Wackers (Rammers)	hr	200		
1,48	DWK 6.12	Water truck (minimum 10 000liter capacity)	hr	100		
1,49	DWK 6.15	LDV (1800cc minimum)	km	2000		
	DWK 6.16	Materials under dayworks				
1,50		a) Materials acquired under dayworks material	Prov. Sum	1	R 200 000,00	R 200 000,00
TOTAL SCHEDULE 1 CARRIED FORWARD TO SUMMARY						

SCHEDULE 2: SPECIAL PIPE WORKS AND FITTINGS						
ITEM NO.	REF	DESCRIPTION	UNIT	QUANT	RATE	AMOUNT
2	SABS 1200 DB	<u>SPECIAL PIPE WORK AND FITTINGS</u> <u>EARTHWORKS</u>				
	SABS 1200L PSL4.1	<u>STEEL PIPES and FITTINGS</u> Fabrication, supply, transport and install and test the following pipe fittings. All items to be approved by Engineer prior to ordering.				
		<u>Pump station 3 :</u>				
	PSL4.1	<u>STEEL PRESSED TANK Inlet Pipework (dwg - N/3110/M/6/302RA&303RA)</u>				
2,1		a) Pipe item number 3.1.1. : 600mm Ø Flange adaptor	no	1		
2,2		b) Pipe item number 3.1.2. : 600mm Ø Flanged MS elbow.	no	2		
2,3		c) Pipe item number 3.1.3. : 600mm Ø Flanged MS pipe. 8400mm long	no	2		
2,4		d) Pipe item number 3.1.4. : 600mm Ø Flanged MS pipe. 500mm long	no	2		
2,5		e) Pipe item number 3.1.5 : 600mm Ø Flanged MS pipe. 1131mm long	no	2		
2,6		f) Pipe item number 3.1.6 : 600mm Ø Flange adaptor.	no	1		
2,7		g) Pipe item number 3.1.7 : 600mm Ø Flanged MS pipe piece with puddle flange as indicated. 1144mm long	no	1		
2,8		h) Pipe item number 3.1.8 : 600 x 450mm Ø Flanged MS concentric reducer.	no	2		
2,9		i) Pipe item number 3.1.9 : 450mm Ø RSV gate valve.	no	1		
2,10		j) Pipe item number 3.1.10 : 450mm Ø Flanged MS pipe piece 989mm long	no	1		
2,11		k) Pipe item number 3.1.11 : 450mm Ø Hydraulic control valve. Oblique pattern, globe valves with double chamber unitized actuator	no	1		
2,12		l) Pipe item number 3.1.12 : 450mm Ø Flanged MS pipe piece with puddle flange as indicated. 860mm long	no	1		
2,13		m) Pipe item number 3.1.13 : 600mm Ø MS pipe Flanged one end with other end suitable for flange adaptor.	no	1		
	PSL4.1	<u>Suction Pipework (dwg - N/3110/M/6/302RA)</u>				
2,14		a) Pipe item number 3.2.1: 700mm Ø to 300mm Ø flanged ms concentric reducer.	no	3		
2,15		b) Pipe item number 3.2.2. : 700mm Ø flanged ms pipe with position of puddle flange as indicated. 2500mm long	no	2		
2,16		c) Pipe item number 3.2.3. : 700mm Ø flanged ms 45° bend.	no	3		
2,17		d) Pipe item number 3.2.4. : 700mm Ø flanged ms pipe. 4000mm long	no	2		
TOTAL CARRIED FORWARD						

ITEM NO.	REF	DESCRIPTION	UNIT	QUANT	RATE	AMOUNT
TOTAL BROUGHT FORWARD						
2,18		e) Pipe item number 3.2.5. : 700mm Ø flanged ms 45° bend	no	3		
2,19		f) Pipe item number 3.2.6. 700mm Ø butterfly valve	no	3		
2,20		g) Pipe item number 3.2.7. : 1200mm Ø to 700mm Ø bell mouth with flange as indicated.	no	3		
2,21		h) Pipe item number 3.2.8. : 700mm Ø flanged ms pipe. 2831mm long	no	1		
2,22		i) Pipe item number 3.2.9. : 700mm Ø flanged ms pipe with position of puddle flange as indicated. 3467mm long	no	1		
	PSL4.1	<u>Delivery Pipework (dwg - N/3110/M/6/303RA)</u>				
2,23		a) Pipe item number 3.3.1. : 400mm Ø to 250mm Ø Flanged MS concentric reducer.	no	3		
2,24		b) Pipe item number 3.3.2. : 400mm Ø Flanged check valve. Metal seated single door one piece body non return valve.	no	3		
2,25		c) Pipe item number 3.3.3. : 400mm Ø pump control valve. double chambered, hydraulically operated, diaphragm actuated active check valve that opens fully or shuts off in response to electric signals.	no	3		
2,26		d) Pipe item number 3.3.4. : 400mm Ø RSV gate valve	no	3		
2,27		e) Pipe item number 3.3.5. : 600mm Ø x 400mm Ø Flanged MS sweep tee- piece.	no	3		
2,28		f) Pipe item number 3.3.6. : 600mm Ø Flanged MS pipe.	no	2		
2,29		g) Pipe item number 3.3.7. : 600mm Ø Flanged MS pipe with position of puddle flange as indicated.	no	1		
2,30		h) Pipe item number 3.3.8. : 600Ø x 600Ø Flanged MS tee-piece.	no	1		
2,31		i) Pipe item number 3.3.9. : 600 mm Ø MS blank flange with 150 mm Ø Flanged tee-stub	no	1		
2,32		j) Pipe item number 3.3.10. : 150 mm Ø Flanged gate valve	no	1		
2,33		k) Pipe item number 3.3.11. : 150 mm Ø Double acting SS air valve	no	1		
2,34		l) Pipe item number 3.3.12. : 600mm Ø Flanged MS 45° bend.	no	1		
2,35		m) Pipe item number 3.3.13. : 600mm Ø Flanged MS pipe.	no	1		
2,36		n) Pipe item number 3.3.14. : 600mm Ø Flanged MS 45° bend.	no	1		
2,37		o) Pipe item number 3.3.15. : 600mm Ø Flanged MS pipe.	no	1		
2,38		p) Pipe item number 3.3.16. : 600mm Ø Flanged MS pipe.	no	1		
2,39		q) Pipe item number 3.3.17. : 500mm Ø MS pipe piece, Flanged one end & other end suitable for flexible coupling.	no	1		
TOTAL CARRIED FORWARD						

ITEM NO.	REF	DESCRIPTION	UNIT	QUANT	RATE	AMOUNT
TOTAL BROUGHT FORWARD						
2,40		r) Pipe item number 3.3.18. : 500mm Ø Flexible coupling.	no	1		
2,41		s) Pipe item number 3.3.19. : 500mm Ø MS pipe piece, Flanged one end & other end suitable for flexible coupling. puddle flange in position as indicated.	no	1		
2,42		t) Pipe item number 3.3.20. : 500mm Ø MS pipe piece, Flanged one end & other end suitable for flexible coupling. puddle flange in position as indicated.	no	1		
2,43		u) Pipe item number 3.3.21. : 500mm Ø Flange adaptor bolts to suit length of restraining flange.	no	1		
2,44		v) Pipe item number 3.3.22. : 500mm Ø Flanged concentric non - return valve.Axial flow, spring assisted check valve.	no	1		
2,45		w) Pipe item number 3.3.23. : 500 x 200 mm Ø Flanged MS tee-piece.	no	1		
2,46		x) Pipe item number 3.3.24. : 500 x Flanged RSV Valve	no	1		
2,47		y) Pipe item number 3.3.25. : 600mm Ø to 500mm Ø Flanged MS concentric reducer.	no	2		
2,48		z) Pipe item number 3.3.26. : 600mm Ø Flanged MS pipe piece. puddle flange in position as indicated.	no	1		
2,49		aa) Pipe item number 3.3.27. : 600mm Ø Flange adaptor.	no	1		
2,50	PSL4.1	<u>Surge Pipework (dwg - N/3110/M/6/303RA)</u>				
		a) Pipe item number 3.4.1. : 200mm Ø MS pipe piece, Flanged one end & other end suitable for flange adaptor.	no	1		
2,51		b) Pipe item number 3.4.2. : 200mm Ø Flange adaptor.	no	1		
2,52		c) Pipe item number 3.4.3. : 200 mm Ø Flanged RSV valve	no	1		
2,53		d) Pipe item number 3.4.4. : 200mm surge anticipating valve model 835.	no	1		
2,54		e) Pipe item number 3.4.5. : 200mm Ø MS pipe piece, Flanged one end & other end suitable for flexible coupling. puddle flange in position as indicated.	no	1		
2,55		f) Pipe item number 3.4.6. 200mm Ø Flexible coupling	no	1		
2,56		g) Pipe item number 3.4.7 : 200mm Ø MS pipe piece, Flanged one end & other end suitable for flexible coupling.	no	1		
2,57		h) Pipe item number 3.4.8. : 200mm Ø Flanged MS 45° bend.	no	1		
2,58		i) Pipe item number 3.4.9. : 200mm Ø Flanged MS pipe.	no	1		
2,59		j) Pipe item number 3.4.10. : 200mm Ø Flanged MS pipe.	no	3		
TOTAL CARRIED FORWARD						

ITEM NO.	REF	DESCRIPTION	UNIT	QUANT	RATE	AMOUNT
TOTAL BROUGHT FORWARD						
2,60	PSL4.1	<u>Overflow & Scour Pipe work (dwg - N/3110/M/6/303RA)</u>				
		a) Pipe item number 3.5.1. : 300mm Ø flanged ms pipe. 671mm long	no	1		
2,61		b) Pipe item number 3.5.2. : 300mm Ø flanged ms elbow.	no	3		
2,62		c) Pipe item number 3.5.3. : 300mm Ø flanged ms pipe. 8400mm long	no	1		
2,63		e) Pipe item number 3.5.4. : 300Ø x 300Ø flanged ms tee-piece.	no	1		
2,64		f) Pipe item number 3.5.5. : 300mm Ø flanged ms pipe.	no	1		
2,65		g) Pipe item number 3.5.6. : 300mm Ø ms pipe with flange one end. 627mm long	no	1		
2,66		h) Pipe item number 3.5.7 : 300mm Ø RSV gate valve.	no	1		
2,67		i) Pipe item number 3.5.8. : 900mm Ø to 300mm Ø bell mouth with flange as indicated.	no	1		
2,68		j) Pipe item number 3.5.9. : 300mm Ø MS Pipe with flange one end 627mm	no	1		
	PSL4.1	<u>Pump station 4</u>				
		<u>STEEL PRESSED TANK Inlet Pipework (dwg - N/3110/M/6/402RA)</u>				
2,69		a) Pipe item number 4.1.1. : 600mm Ø Flange adaptor	no	1		
2,70		b) Pipe item number 4.1.2. : 600mm Ø Flanged MS elbow.	no	2		
2,71		c) Pipe item number 4.1.3. : 600mm Ø Flanged MS pipe. 8400mm long	no	2		
2,72		d) Pipe item number 4.1.4. : 600mm Ø Flanged MS pipe. 500mm long	no	1		
2,73		e) Pipe item number 4.1.5 : 600mm Ø Flanged MS pipe. 1131mm long	no	1		
2,74		f) Pipe item number 4.1.6 : 600mm Ø Flange adaptor.	no	1		
2,75		g) Pipe item number 4.1.7 : 600mm Ø Flanged MS pipe piece with puddle flange as indicated. 1144mm long	no	1		
2,76		h) Pipe item number 4.1.8 : 600 x 450mm Ø Flanged MS concentric reducer.	no	2		
2,77		i) Pipe item number 4.1.9 : 450mm Ø RSV gate valve.	no	1		
2,78		j) Pipe item number 4.1.10 : 450mm Ø Flanged MS pipe piece	no	1		
2,79		k) Pipe item number 4.1.11 : 450mm Ø Hydraulic control valve. Oblique pattern, globe valves with double chamber unitized actuator	no	1		
2,80	l) Pipe item number 4.1.12 : 450mm Ø Flanged MS pipe piece with puddle flange as indicated.	no	1			
2,81	m) Pipe item number 4.1.13 : 600mm Ø MS pipe Flanged one end with other end suitable for flange adaptor.	no	1			
TOTAL CARRIED FORWARD						

ITEM NO.	REF	DESCRIPTION	UNIT	QUANT	RATE	AMOUNT
TOTAL BROUGHT FORWARD						
2,82	PSL4.1	<u>Suction Pipework (dwg - N/3110/M/6/402RA)</u> a) Pipe item number 4.2.1: 700mm Ø to 300mm Ø flanged ms concentric reducer.	no	3		
2,83		b) Pipe item number 4.2.2. : 700mm Ø flanged ms pipe with position of puddle flange as indicated. 2500mm long	no	2		
2,84		c) Pipe item number 4.2.3. :700mm Ø flanged ms 45° bend.	no	3		
2,85		d) Pipe item number 4.2.4. : 700mm Ø flanged ms pipe. 4000mm long	no	2		
2,86		e) Pipe item number 4.2.5. : 700mm Ø flanged ms 45° bend	no	3		
2,87		f) Pipe item number 4.2.6. 700mm Ø butterfly valve	no	3		
2,88		g) Pipe item number 4.2.7. : 1200mm Ø to 700mm Ø bell mouth with flange as indicated.	no	3		
2,89		h) Pipe item number 4.2.8. : 700mm Ø flanged ms pipe. 2831mm long	no	1		
2,90		i) Pipe item number 4.2.9. : 700mm Ø flanged ms pipe with position of puddle flange as indicated. 3467mm long	no	1		
2,91		PSL4.1	<u>Delivery Pipework (dwg - N/3110/M/6/403RA)</u> a) Pipe item number 4.3.1. : 400mm Ø to 250mm Ø Flanged MS concentric reducer.	no	3	
2,92	b) Pipe item number 4.3.2. : 400mm Ø Flanged check valve. Metal seated single door one piece body non return valve.		no	3		
2,93	c) Pipe item number 4.3.3. : 400mm Ø pump control valve. double chambered, hydraulically operated, diaphragm actuated active check valve that opens fully or shuts off in response to electric signals.		no	3		
2,94	d) Pipe item number 4.3.4. : 400mm Ø RSV gate valve		no	3		
2,95	e) Pipe item number 4.3.5. : 600mm Ø x 400mm Ø Flanged MS sweep tee- piece.		no	3		
2,96	f) Pipe item number 4.3.6. : 600mm Ø Flanged MS pipe.		no	2		
2,97	g) Pipe item number 4.3.7. : 600mm Ø Flanged MS pipe with position of puddle flange as indicated.		no	1		
2,98	h) Pipe item number 4.3.8. : 600Ø x 600Ø Flanged MS tee-piece.		no	1		
2,99	i) Pipe item number 4.3.9. : 600 mm Ø MS blank flange with 150 mm Ø Flanged tee-stub		no	1		
2,100	j) Pipe item number 4.3.10. : 150 mm Ø Flanged gate valve		no	1		
2,101	k) Pipe item number 4.3.11. : 150 mm Ø Double acting SS air valve		no	1		
2,102	l) Pipe item number 4.3.12. : 600mm Ø Flanged MS 45° bend.		no	1		
2,103	m) Pipe item number 4.3.13. : 600mm Ø Flanged MS pipe.		no	1		
TOTAL CARRIED FORWARD						

ITEM NO.	REF	DESCRIPTION	UNIT	QUANT	RATE	AMOUNT
TOTAL BROUGHT FORWARD						
2,104		n) Pipe item number 4.3.14. : 600mm Ø Flanged MS 45° bend.	no	1		
2,105		o) Pipe item number 4.3.15. : 600mm Ø Flanged MS pipe.	no	1		
2,106		p) Pipe item number 4.3.16. : 600mm Ø Flanged MS pipe.	no	1		
2,107		q) Pipe item number 4.3.17. : 500mm Ø MS pipe piece, flanged one end & other end suitable for flexible coupling.	no	1		
2,108		r) Pipe item number 4.3.18. : 500mm Ø Flexible coupling.	no	1		
2,109		s) Pipe item number 4.3.19. : 500mm Ø MS pipe piece, flanged one end & other end suitable for flexible coupling. puddle flange in position as indicated.	no	1		
2,110		t) Pipe item number 4.3.20. : 500mm Ø MS pipe piece, flanged one end & other end suitable for flexible coupling. puddle flange in position as indicated.	no	1		
2,111		u) Pipe item number 4.3.21. : 500mm Ø Flange adaptor bolts to suit length of restraining flange.	no	1		
2,112		v) Pipe item number 4.3.22. : 500mm Ø Flanged concentric non - return valve. Axial flow, spring assisted check valve	no	1		
2,113		w) Pipe item number 4.3.23. : 500 x 200 mm Ø Flanged MS tee-piece.	no	1		
2,114		x) Pipe item number 4.3.24. : 500 mm Ø Flanged gate valve	no	1		
2,115		y) Pipe item number 4.3.25. : 600mm Ø to 500mm Ø flanged MS concentric reducer.	no	2		
2,116		z) Pipe item number 4.3.26. : 600mm Ø Flanged MS pipe piece. puddle flange in position as indicated.	no	1		
2,117		aa) Pipe item number 4.3.27. : 600mm Ø Flange adaptor.	no	1		
	PSL4.1	<u>Surge Pipework (dwg - N/3110/M/6/403RA)</u>				
2,118		a) Pipe item number 4.4.1. : 200mm Ø MS pipe piece, flanged one end & other end suitable for flange adaptor.	no	1		
2,119		b) Pipe item number 4.4.2. : 200mm Ø Flange adaptor.	no	1		
2,120		c) Pipe item number 4.4.3. : 200 mm Ø Flanged RSV valve	no	1		
2,121		d) Pipe item number 4.4.4. : 200mm surge anticipating valve	no	1		
2,122		e) Pipe item number 4.4.5. : 200mm Ø MS pipe piece, flanged one end & other end suitable for flexible coupling. puddle flange in position as indicated.	no	1		
2,123		f) Pipe item number 4.4.6. : 200mm Ø Flexible coupling	no	1		
2,124		g) Pipe item number 4.4.7 : 200mm Ø MS pipe piece, flanged one end & other end suitable for flexible coupling.	no	1		
2,125		h) Pipe item number 4.4.8. : 200mm Ø Flanged bend.	no	1		
TOTAL CARRIED FORWARD						

ITEM NO.	REF	DESCRIPTION	UNIT	QUANT	RATE	AMOUNT
TOTAL BROUGHT FORWARD						
2,126		i) Pipe item number 4.4.9. : 200mm Ø Flanged MS pipe.	no	1		
2,127		j) Pipe item number 4.4.10. : 200mm Ø Flanged MS pipe.	no	3		
2,128	PSL4.1	<u>Overflow & Scour Pipe work (dwg - N/3110/M/6/403RA)</u>				
		a) Pipe item number 4.5.1. : 300mm Ø flanged ms pipe. 671mm	no	1		
2,129		b) Pipe item number 4.5.2. : 300mm Ø flanged ms 90 Deg. elbow.	no	3		
2,130		c) Pipe item number 4.5.3. : 300mm Ø flanged ms pipe.	no	1		
2,131		e) Pipe item number 4.5.4. : 300Ø x 300Ø flanged ms tee-piece.	no	1		
2,132		f) Pipe item number 4.5.5. : 300mm Ø flanged ms pipe piece	no	1		
2,133		g) Pipe item number 4.5.6. : 300mm Ø ms pipe with flange one end. 627mm long	no	1		
2,134		h) Pipe item number 4.5.7 : 300mm Ø RSV gate valve.	no	1		
2,135		i) Pipe item number 4.5.8. : 900mm Ø to 300mm Ø bell mouth with flange as indicated.	no	1		
2,136		i) Pipe item number 4.5.9. : 300mm Ø MS Pipe with flange one end.	no	1		
		<u>Steel Pressed Reservoir</u> Supply, Deliver, Install and Commission the following steel pressed tank with aproximate dimensions and minimum supply volume required. Tank to be corrosion protected according to SANS 121:				
2,137		a) 9.76m x 8.54 x 7.32 (H x W x B) with minimum supply capacity of 610kl	no	2		
TOTAL SCHEDULE 2 CARRIED FORWARD TO SUMMARY						

SCHEDULE 3 : EARTHWORKS - RESERVOIR & BOOSTER PUMP STATIONS						
ITEM NO.	REF	DESCRIPTION	UNIT	QUANT	RATE	AMOUNT
3	SABS 1200 D	<u>SITE PREPARATION</u>				
		<u>Site Clearance</u>				
	PSC4.1	<u>Clear and grub</u>				
3,1		i) Reservoir	m ²	3416		
3,2		ii) Pump Station	m ²	1617		
		<u>Remove topsoil</u>				
	8.3.1.2	<u>Remove topsoil to a nominal depth of 150mm stockpile and maintain</u>				
3,3		i) Reservoir	m ²	3416		
3,4		ii) Pump Station	m ²	1617		
		<u>BULK EXCAVATION</u>				
	8.3.2 a)	Excavate in all materials and use for embankment or backfill or dispose, as ordered				
3,5		a) Cut to Fill	m ³	295		
3,6		b) Cut to Spoil	m ³	15		
	PSDB2.2	<u>Extra-over items 3.5 for excavation in:</u>				
3,7		a) Hard rock excavation (Provisional)	m ³	50		
		<u>RESTRICTED EXCAVATION</u>				
	8.3.3 a)	<u>Excavate for restricted foundations, footings and pipe trenches</u>				
	PSDB2.1	<u>in all materials and backfill to 95% Mod</u>				
		<u>AASHTO density:</u>				
3,8		i) Reservoir & valve chambers	m ³	234		
3,9		ii) Pump Station	m ³	900		
	8.3.3 a)	<u>Excavate for restricted foundations, footings and pipe trenches in all materials and dispose:</u>				
3,10		i) Reservoir & valve chambers	m ³	132		
3,11		ii) Pump Station	m ³	750		
	PSDB2.2	<u>Extra-over items 3.8 to 3.11 for excavation in:</u>				
3,12		b) Hard rock excavation (Provisional)	m ³	425		
TOTAL SCHEDULE 3 CARRIED FORWARD TO SUMMARY						

SCHEDULE 4 : RESERVOIRS - PIPE FITTINGS						
ITEM NO.	REF	DESCRIPTION	UNIT	QUANT	RATE	AMOUNT
4	SABS	MEDIUM PRESSURE PIPELINES				
	1200 L	STEEL PIPES, SPECIALS AND FITTINGS				
	8.2.5	Supply, fabricate, deliver to site, install and test the following pipes and specials. Refer also PSL 2.1:				
	PSL 2.1	Wall thickness of steel pipe to be 4,5 mm minimum. Flanges to be drilled to SANS 1123 Table as indicated on drawing.				
	PSL4.1	Raw water Reservoir: Inlet Pipework (dwg - N/3110/M/7/001RA-003RA)				
4,1		a) Pipe item number 7.1.1 : 500mm Ø 45° Flanged MS elbow	no	1		
4,2		b) Pipe item number 7.1.2 : 500mm Ø 90° Flanged MS elbow extended with puddle flange	no	1		
4,3		c) Pipe item number 7.1.3 : 500mm Ø Flanged MS pipe	no	1		
4,4		d) Pipe item number 7.1.4 : 500mm Ø Flanged MS pipe	no	1		
4,5		e) Pipe item number 7.1.5 : 500mm Ø 90° Flanged MS elbow	no	1		
4,6		f) Pipe item number 7.1.6 : 500mm Ø MS pipe piece flanged one end & other end suitable for flexible coupling	no	1		
4,7		g) Pipe item number 7.1.7 : 500mm Ø Flexible coupling	no	1		
4,8		h) Pipe item number 7.1.8 : 500mm Ø MS pipe piece, flanged one end & other end suitable for flexible coupling. restraining flange in position as indicated restraining flange class 25.	no	1		
4,9		i) Pipe item number 7.1.9 : 500mm Ø x 400mmØ, GMS concentric reducer flanged both ends and drilled to SABS 1123, TABLE 2500/3.	no	1		
4,10		j) Pipe item number 7.1.10 : 400mm Ø Flanged Altitude valve	no	1		
4,11		k) Pipe item number 7.1.11 : 500mm Ø MS pipe piece, flanged one end & other end suitable for flange adaptor	no	1		
4,12		l) Pipe item number 7.1.12 : 450mm Ø Battery operated Electro magnetic flow meter.	no	1		
4,13		m) Pipe item number 7.1.13 : 500mm Ø Flanged MS pipe	no	1		
4,14		n) Pipe item number 7.1.14 : 400mm Ø, RSV gate valve. flanged both ends and drilled to SABS 1123, TABLE 2500/3.	no	1		
4,15		o) Pipe item number 7.1.15 : 600mm Ø MS pipe piece, flanged one end & other end suitable for flexible coupling. paddle flange in position as indicated.	no	1		
4,16		p) Pipe item number 7.1.16 : 400mm Ø Flange adaptor. bolts to suit length of restraining flange.	no	1		
4,17		q) Pipe item number 7.1.17 : 600mm Ø Flexible coupling	no	1		
4,18		r) Pipe item number 7.1.18 : 600mm Ø x 400mmØ, GMS concentric reducer. Flanged both ends and drilled to sabs 1123, table 2500/3.	no	1		
TOTAL CARRIED FORWARD						

ITEM NO.	REF	DESCRIPTION	UNIT	QUANT	RATE	AMOUNT
TOTAL BROUGHT FORWARD						
4,19	PSL4.1	<u>Raw Reservoir: Scour Pipework (dwg - N/3110/M/7/001RA-003RA)</u> a) Pipe item number 7.2.1 : 700mm Ø TO 500mm Ø MS reducing pipe piece flanged one end.	no	1		
4,20		b) Pipe item number 7.2.2 : 500mm Ø Flanged MS pipe	no	2		
4,21		c) Pipe item number 7.2.3 : 500mm Ø 90° Flanged MS elbow	no	2		
4,22		d) Pipe item number 7.2.4 : 500mm Ø MS pipe piece, flanged one end & other end suitable for flexible coupling.	no	1		
4,23		e) Pipe item number 7.2.5 : 500mm Ø Flexible coupling	no	1		
4,24		f) Pipe item number 7.2.6 : 500mm Ø MS pipe piece, flanged one end & other end suitable for flexible coupling.	no	1		
4,25		g) Pipe item number 7.2.7 : 500mm Ø MS flanged pipe piece. puddle	no	1		
	PSL4.1	<u>Raw Reservoir: overflow Pipework (dwg - N/3110/M/7/001RA-003RA)</u>				
4,26		a) Pipe item number 7.3.1 : 500mm Ø MS pipe piece. both ends plain with puddle flange in position as indicated.	no	1		
4,27		b) Pipe item number 7.3.2 : 500mm Ø Flexible coupling	no	2		
4,28		c) Pipe item number 7.3.3 : 500mm Ø MS pipe piece. both ends plain with puddle flange in position as indicated.	no	1		
4,29		d) Pipe item number 7.3.4 : 500mm Ø Flange adaptor	no	1		
4,30		e) Pipe item number 7.3.5 : 500mm Ø, RSV gate valve. flanged both ends and drilled to SABS 1123, TABLE 2500/3.	no	1		
4,31		f) Pipe item number 7.3.6 : 500Ø x 500Ø Flanged MS tee-piece	no	1		
4,32		g) Pipe item number 7.3.7 : 500mm Ø MS pipe piece, flanged one end & other end suitable for flexible coupling.	no	1		
	PSL4.1	<u>Raw Reservoir: Outlet Pipework (dwg - N/3110/M/7/001RA-003RA)</u>				
4,33		a) Pipe item number 7.4.1 : 800mm Ø Flange adaptor	no	2		
4,34		b) Pipe item number 7.4.2 : 800mm Ø Flanged GMS pipe piece, with position of puddle flange as indicated.	no	1		
4,35		c) Pipe item number 7.4.3 : 800mm Ø Flanged GMS pipe piece, with position of puddle flange as indicated.	no	1		
4,36		d) Pipe item number 7.4.4 : 800mm Ø, RSV gate valve. flanged both ends and drilled to SABS 1123, TABLE 2500/3	no	1		
TOTAL SCHEDULE 4 CARRIED FORWARD TO SUMMARY						

SCHEDULE 5 : PUMPSTATION CONCRETE WORK						
ITEM NO.	REF	DESCRIPTION	UNIT	QUANT	RATE	AMOUNT
5	SABS 1200G	<u>CONCRETE WORK</u>				
		<u>Concrete</u>				
5,1	8.4.2	Blinking layer in class 15MPa/19mm to a minimum thickness of 50mm underneath structures ii) Pump Station	m ²	900		
5,2	8.4.3	<u>Strength concrete - Class 25 MPa/19mm</u> ii) Pump Station	m ³	493		
5,3	8.4.3	<u>Strength concrete - class 15MPa/10mm Mass concrete to:</u> i) All structures (provisional)	m ³	155		
5,4	8.4.3	<u>Screed to:</u> i) All structures	m ³	33		
	SABS 1200G	<u>CONCRETE: Formwork</u>				
	8.2.2	<u>Formwork - Smooth:</u>				
5,5	a) <u>Vertical plane</u> i) Pump Station		m ²	1478,5		
5,6	b) <u>Horizontal plane - elevated to walkways and slabs</u> ii) Pump Station		m ²	480		
5,7	c) <u>Inclined - to staircases</u> i) Pump Station		m ²	17		
5,8	8.2.5	d) <u>Narrow widths (up to 300mm wide) to:</u> ii) Pump Station	m	500		
	8.2.6	<u>Box-out holes for pipes</u>				
		<u>Box-out holes, rectangular through concrete 200 to 500 mm thick: for pipework supplied and installed by the Mechanical Contractor : Pump Station:</u>				
5,9	a)	980 x 980mm box-out for 700mm flanged steel pipe	no	6		
5,10	b)	930 x 930mm box-out for 600mm flanged steel pipe	no	6		
5,11	c)	900 x 900mm box-out for 500mm flanged steel pipe	no	2		
5,12	c)	900 x 900mm box-out for 600mm flanged steel pipe	no	1		
5,13	d)	700 x 700mm box-out for 450mm flanged steel pipe	no	2		
5,14	e)	450 x 450 mm box-out for 200mm flanged steel pipe	no	2		
		<u>REINFORCEMENT</u>				
5,15	8.3.1	Reinforcement, high tensile steel ii) Pump Station	t	65		
5,16	8.3.1	Reinforcement, mild steel ii) Pump Station	t	6		
5,17	8.3.2	High tensile welded mesh - Ref No 395 (Provisional) ii) Pump Station	m ²	40		
TOTAL CARRIED FORWARD						

ITEM NO.	REF	DESCRIPTION	UNIT	QUANT	RATE	AMOUNT
TOTAL BROUGHT FORWARD						
5,18	8.4.4	<u>Unformed surface finish</u> a) Wood floated finish	m²	480		
5,19		ii) Pump Station b) Steel floated finish	m²	480		
		ii) Pump Station				
		<u>Grouting / casting in of pipes and specials</u>				
	PSG6.1	a) Grouting/casting in of pipe pieces in the following pipe diameters (Refer also PSG2.6.4)				
		<u>Pump Station:</u>				
5,20		a) 980 x 980mm box-out for 700mm flanged steel pipe	no	6		
5,21		b) 930 x 930mm box-out for 600mm flanged steel pipe	no	6		
5,22		c) 900 x 900mm box-out for 500mm flanged steel pipe	no	2		
5,23		d) 900 x 900mm box-out for 600mm flanged steel pipe	no	1		
5,24		e) 700 x 700mm box-out for 450mm flanged steel pipe	no	2		
5,25		f) 450 x 450 mm box-out for 200mm flanged steel pipe	no	2		
	SABS 1200G	<u>MISCELLANEOUS</u>				
5,26	8.8	Supply and install lockable manhole covers and frames: 560mm Heavy Duty Lockable concrete cover with galvanised steel	no	5		
TOTAL SCHEDULE 5 CARRIED FORWARD TO SUMMARY						

SCHEDULE 6 : RESERVOIR CONCRETE WORK						
ITEM NO.	REF	DESCRIPTION	UNIT	QUANT	RATE	AMOUNT
6	SABS 1200G	<u>CONCRETE WORK</u>				
		<u>Concrete</u>				
6,1	8.4.2	Blinding layer in class 15MPa/19mm to a minimum thickness of 50mm underneath structures i) Reservoir	m ²	1425		
6,2	PSG 6.4	No fines concrete (NF19) to a minimum thickness of 80mm underneath structures, complete with mortar seal i) Reservoir	m ²	1425		
6,3	8.4.3	<u>Strength concrete - class 35MPa/19mm</u> i) Reservoir floor slabs and footings	m ³	600		
6,4		ii) Reservoir walls	m ³	400		
6,5		iii) Reservoir roof slabs and columns	m ³	750		
6,6		iv) Valve chamber floor slabs and footings	m ³	6		
6,7	8.4.3	<u>Strength concrete - Class 25 MPa/19mm</u> i) Reservoir apron slab	m ³	20		
6,8		iii) Valve chamber walls	m ³	15		
6,9	8.4.3	<u>Strength concrete - class 15MPa/10mm Mass concrete to:</u> i) All structures (provisional)	m ³	5		
6,10	8.4.3	<u>Screed to:</u> i) All structures	m ³	100		
	SABS 1200G	<u>CONCRETE: Formwork</u>				
	8.2.2	<u>Formwork - Smooth:</u>				
6,11		<u>b) Horizontal plane - elevated to walkways and slabs</u> i) Reservoir	m ²	1750		
6,12	8.2.5	<u>d) Narrow widths (up to 300mm wide) to:</u> i) Reservoir	m	80		
6,13	8.2.2	<u>e) Vertical plane (curved)</u> i) Reservoir walls & footings(curved)	m ²	2100		
6,14		ii) 300 mm diam. columns (reservoir)	m ²	750		
6,15	8.2.5	<u>e) Narrow widths (up to 300mm wide) curved to:</u> i) Reservoir	m	160		
		<u>Box-out holes for pipes</u>				
	8.2.6	<u>Box-out holes, rectangular through concrete 200 to 500 mm thick: for pipework supplied and installed by the Mechanical Contractor :</u>				
		<u>Reservoir: 10MI</u>				
6,16		a) 850 x 850mm box-out for 500mm flanged steel pipe	no	4		
TOTAL CARRIED FORWARD						

ITEM NO.	REF	DESCRIPTION	UNIT	QUANT	RATE	AMOUNT
TOTAL BROUGHT FORWARD						
6,17		b) 950 x 950mm box-out for 600mm flanged steel pipe	no	1		
6,18		c) 1100 x 1100mm box-out for 800mm flanged steel pipe	no	2		
		<u>REINFORCEMENT</u>				
6,19	8.3.1	Reinforcement, high tensile steel i) Reservoir	t	220		
6,20	8.3.1	Reinforcement, mild steel i) Reservoir	t	22		
6,21	8.3.2	High tensile welded mesh - Ref No 395 (Provisional) i) Reservoir	m²	24		
	8.4.4	<u>Unformed surface finish</u>				
6,22		a) Wood floated finish i) Reservoir	m²	1450		
6,23		b) Steel floated finish i) Reservoir	m²	1450		
		<u>Grouting / casting in of pipes and specials</u>				
	PSG6.1	a) Grouting/casting in of pipe pieces in the following pipe diameters (Refer also PSG2.6.4) <u>Reservoir: 10ML</u>				
6,24		a) 850 x 850mm box-out for 500mm flanged steel pipe	no	4		
6,25		b) 950 x 950mm box-out for 600mm flanged steel pipe	no	1		
6,26		c) 1100 x 1100mm box-out for 800mm flanged steel pipe	no	2		
	SABS 1200G	<u>MISCELLANEOUS</u>				
	PSG6.3	<u>Watertight testing of structures</u>				
6,27		i) Reservoir	no	1		
	PSG6.2	<u>Subsoil drain (provisional)</u>				
6,28		Subsoil drainage as detailed on drawing i) Reservoir	m	360		
	8,5	<u>Joints</u>				
6,29		<u>Reservoir:</u> Joint type A1 as detailed	m	940		
6,30		Joint type B1 as detailed	m	145		
6,31		Roof joint incl. silicone bearing	m	145		
	PSG 6.5	<u>Items cast into concrete</u>				
		Supply and install the following sleeves (including draw wires) to be cast into concrete				
6,32		i) 110 dia. uPVC telemetry pipe at Reservoir (5950mm long)	no	1		
6,33		ii) 40mm dia. HDPE sleeve in Reservoir roof (500mm long)	no	4		
TOTAL CARRIED FORWARD						

ITEM NO.	REF	DESCRIPTION	UNIT	QUANT	RATE	AMOUNT
TOTAL BROUGHT FORWARD						
6,34		iii) 40mm dia. HDPE sleeve in Reservoir wall (5500mm long)	no	4		
6,35		Supply and install the following outlet pipes to be cast into concrete: iv) 50mm diameter uPVC pipe 350mm long for roof drainage	no	50		
6,36	PSG 6.7	<u>Disinfection of reservoir</u> i) Disinfection and cleaning of reservoir	no	1		
6,37	PSG 6.6	<u>19mm stone on reservoir roof</u> Supply and install 19mm stone on top of reservoir roof: i) Reservoir	m³	250		
6,38	PSG 6.8	<u>Step irons</u> i) Step irons (Calcamite or similar approved)	no	19		
TOTAL SCHEDULE 6 CARRIED FORWARD TO SUMMARY						

SCHEDULE 7 : PUMPSTATION STEEL WORK ITEMS						
ITEM NO.	REF	DESCRIPTION	UNIT	QUANT	RATE	AMOUNT
7	SABS 1200HA	<u>STRUCTURAL STEELWORK (Sundry Items)</u>				
	PSHA 4.1	<u>Handrailing</u>				
7,1		a) Top mounted handrailing (galvanised)	m	80		
		ii) Pump Station				
7,2		c) Stair mounted handrailing (galvanised)	m	20		
		i) Pump Station				
7,3	PSHA 4.3	<u>Open grid / chequer plate flooring</u> Supply and install RS40 40 x 4.5 mm SS rectagrid steel flooring	m ²	65		
	PSHA 4.4	<u>Pipe supports</u> Supply and install as per drawing DWG N3110/RWW/11/025RA				
7,4		Type 2 (GMS)	no	15		
7,5		Type 1 (GMS)	no	4		
	PSHA 4.8	<u>Gantry rails</u> Supply and install, align gantry rail for crawl including fastening and corrosion protection (galvanised) as detailed				
7,6		i) 305 x 165 x 67 kg/m in pumping station	m	45		
TOTAL SCHEDULE 7 CARRIED FORWARD TO SUMMARY						

SCHEDULE 8 : RESERVOIR STEEL WORK ITEMS						
ITEM NO.	REF	DESCRIPTION	UNIT	QUANT	RATE	AMOUNT
8	SABS 1200HA	<u>STRUCTURAL STEELWORK (Sundry Items)</u>				
	PSHA 4.1	<u>Handrailing</u>				
8,1		a) Top mounted handrailing (galvanised) i) Reservoir	m	8		
	PSHA 4.2	<u>Cat ladders</u>				
		<u>Reservoir:</u>				
8,2		Stainless steel cat ladder Type RL1 (inside)	no	1		
8,3		Galvanised cat ladder Type RL2 (outside)	no	1		
	PSHA 4.9	<u>Open grid / chequer plate flooring</u>				
8,4		Supply and install cast-in galvanised 45 x 45 x 5 mm SS angle support complete with fishtail lugs	m ²	2		
	PSHA 4.10	<u>Pipe supports</u>				
		Supply and install as per drawing (DWG N3110/W/7/102RB)				
8,5		Type A (GMS)	no	2		
8,6		Type A (SS)	no	2		
8,7		Type C (SS)	no	2		
		<u>Reservoir access manholes</u>				
	PSHA 4.5	<u>Access manhole:</u>				
8,8		Supply and install complete 1000x1000mm access manhole cover and frame as detailed (DWG N3110/W/8/097RA)	no	2		
	PSHA 4.6	<u>Vent pipe</u>				
8,9		Supply and install complete ventilation pipe as detailed (DWG N3110/W/7/100RA)	no	8		
	PSHA 4.7	<u>Level indicator</u>				
8,10		Supply and install complete level indicator	no	1		
TOTAL SCHEDULE 8 CARRIED FORWARD TO SUMMARY						

SCHEDULE 9 :PUMPSTATION AND RESERVOIR BUILDING WORKS						
ITEM NO.	REF	DESCRIPTION	UNIT	QUANT	RATE	AMOUNT
9	PART	PARTICULAR SPECIFICATION				
	SPEC PB	BUILDING WORK				
	PB9	Pump Station:				
	PB9.1.1	<u>Brickwork</u>				
		Walls (including brickforce every fourth course)				
9,1		a) <u>One brick walls (230 mm wide)</u> Face bricks Type FBS external with 6 mm half round ruled joints and type NFP internal, the latter with joints raked for cement plaster	m²	576		
9,2		b) <u>Half brick walls (110 mm wide)</u> Clay bricks internal to receive plaster	m²	576		
	PB9.1.3	<u>Windows</u>				
9,3		'Winblock' modular precast concrete window surrounds, finished smooth on exposed surfaces, incl. bedding, jointing and pointing 590x590x260mm Type WB66	no	64		
9,4		'Winblok Winvent' natural anodised aluminium 4mm clear float glass, factory glazed window insets complete:				
9,5		a) 590x590 Type WV(A) 66F fixed frame window fixed in surround with silicone sealant adhesive	no	32		
9,6		b) 590x590 Type WV) 66T top hung window fixed in surround with silicone sealant adhesive in:	no	32		
9,7		<u>Damp Proofing</u> a) Single layer 375 micron "Gundle Brickgrip" plastic waterproof sheeting under all walls at top of floor level, and underneath window sills:	m	120		
9,8	PB9.1.2	<u>Plaster</u> a) One layer cement plaster rendered 12 mm thick and finished smooth with steel trowel	m²	576		
	PB9.1.2	<u>Painting wall finishes</u>				
9,9		a) One coat universal undercoat, Type 1 to SABS 681	m²	576		
9,10		b) Two coats approved interior acrylic paint (Gun ship grey)	m²	576		
9,11	PB9.1.2	<u>Waterproofing</u> Waterproofing of pumping station roof with "Acrylastic" as supplied by "Gundle coatings" or similar approved	m²	425		
9,12	PB9.1.3	<u>Doors and Frames</u> a) Mild steel door and frame, 815 mm wide x 2 032 mm high all complete with 3 lever lockset, chrome plated handles and painted	no	2		
9,13		c) Mild steel door and frame, 3 000 mm wide x 3 400 mm high all complete with 3 lever lockset, chrome plated handles and painted	no	1		
TOTAL CARRIED FORWARD						

ITEM NO.	REF	DESCRIPTION	UNIT	QUANT	RATE	AMOUNT
TOTAL BROUGHT FORWARD						
	SPEC PC	<u>FENCING</u>				
		<u>Fence</u>				
	PC4.1	Supply and install 1,8m high security fence as detailed on drawing including excavation, concrete work, corrosion protection (galvanising), corner posts, intermediate posts, stays, diamond mesh, barbed wire, etc. Also refer specification Section PC: Fencing				
9,14		i) Reservoir	m	255		
9,15		ii) Pump Station	m	410		
		<u>Gate</u>				
	PC4.1	Supply and install 1,8m high security gate Type 'B' as detailed on dwg including excavation, concrete work, corrosion protection (galvanising), gate posts, struts, diamond mesh, padlock, barbed wire, etc. Also refer specification Section PC: Fencing				
9,16		i) Reservoir	no	1		
9,17		ii) Pump Station	no	2		
		<u>Roof bearing pads:</u>				
9,18		3T50/50 Kilcher Teflon sliding Bearing pad between roof slab and brick work	m	145		
		<u>Cable Trench Filling and Topping</u>				
		All cable trenches to be filled with sand and topped with a concrete topping as per drawing.				
9,19		a) Sand filling	m ³	7		
9,20		b) 80mm Concrete screed topping	m ²	15		
TOTAL SCHEDULE 9 CARRIED FORWARD TO SUMMARY						

SCHEDULE 10 : STRUCTURAL CONCRETE WORKS TO PIPELINE MANHOLES AND CHAMBERS						
ITEM NO.	REF	DESCRIPTION	UNIT	QUANT	RATE	AMOUNT
10	SABS 1200 G	<u>CONCRETE (Structural)</u>				
	SABS 1200G	<u>CONCRETE WORK</u>				
		<u>Concrete</u>				
10,1	8.4.2	Blinding layer in class 15MPa/19mm to a minimum thickness of 50mm underneath structures	m ²	698		
	8.4.3	<u>Strength concrete - class 25MPa/19mm in manholes</u>				
10,2		i) Air valves on pump mains	m ³	165		
10,3		ii) Scour valve chamber on pump mains	m ³	155		
10,4		iii) Air valve - check valve combination box on pump mains	m ³	64		
10,5		iv) Valve chambers and connection chambers	m ³	27		
10,6		v) Gravity pedestals	m ³	536		
10,7		vi) Concrete Encasing	m ³	101		
10,8		vii) Pump Line Pedestals	m ³	250		
	SABS 1200G	<u>FORMWORK:</u>				
	8.2.2	<u>Formwork - Class S1: Manholes</u>				
		a) <u>Vertical plane</u>				
10,9		i) External and internal walls of manholes	m ²	3557		
		b) <u>Horizontal plane</u>				
10,10		i) Manholes and boxes	m ²	268		
	8.2.5	<u>Narrow width (up to 300mm wide) to:</u>				
10,11		a) Sides of manhole floor slab, roof slabs and support pedestals	m	895		
	8.2.6c)	<u>Box-out holes, rectangular through concrete 150 to 300 mm thick: for pipe fitting equipment supplied by Contractor and installed by the Civil Contractor : (Prov.)</u>				
10,12		i) 930mm x 930mm for 600mm pipe	no	77		
10,13		ii) 400mm x 400mm for 200mm pipe	no	22		
		<u>Reinforcement</u>				
10,14	8.3.1	Reinforcement, (high tensile steel)	t	157		
10,15	8.3.1	Reinforcement, (mild steel)	t	15		
10,16	8.3.2	High tensile welded mesh - Ref No 395	m ²	67		
	8.4.4	<u>Unformed surface finish</u>				
10,17		a) Wood float finish to manhole roof structures	m ²	212		
TOTAL CARRIED FORWARD						

ITEM NO.	REF	DESCRIPTION	UNIT	QUANT	RATE	AMOUNT
TOTAL BROUGHT FORWARD						
		<u>Grouting / casting in of pipe specials</u>				
10,18	PSG6.1	a) Grouting in of puddle flanged pipe pieces (installed by the Civil Contractor) in the following pipe diameters (Refer PSG4.1) (Provisional)				
10,19		i) 200 dia. flanged steel pipe	no	22		
		ii) 600 dia. flanged steel pipe	no	39		
	SABS 1200G	<u>MISCELLANEOUS</u>				
10,20	8.8	Supply and install lockable manhole covers and frames: 650mm Heavy Duty lockable concrete cover with galvanised steel ring encased in concrete cover slab.	no	38		
10,21	PSG6.8	Step irons (calcimite or similar approved)	no	86		
TOTAL SCHEDULE 10 CARRIED FORWARD TO SUMMARY						

SCHEDULE 11 : GABIONS						
ITEM NO.	REF	DESCRIPTION	UNIT	QUANT	RATE	AMOUNT
11	SABS 1200DK	<u>GABIONS</u>				
	8,2	<u>Surface preparation</u>				
11,1	8.2.1	Surface preparation for bedding of gabions	m ²	469		
11,2	8.2.2	<u>Gabions</u> Construction of gabion structure as and when instructed by the Engineer. Gabions to be 2m(L) X 1m(W) X 1m(H) in dimension and the material to be Class A Galvanise with a 0.50mm plastic PVC coating and a 80 x 100mm aperture	m ³	167,5		
11,3	8.2.2	Construction of reno mattresses with dimensions of 2m(L) X 1m(W) X 0.3m(H) and the material to be Class A Galvanise with a 0.50mm plastic PVC coating and a 60 x 80mm aperture	m ³	114		
11,4	8.2.3	Extra-over item 11.2 and 11.3 for packing selected stone for exposed rock surface	m ³	100		
11,5	8.2.4 a)	<u>Geomembrane</u> Supply, lay bed and secure Fibretex -25 SA geomembrane on interface between gabion and in situ material	m ²	469		
TOTAL SCHEDULE 11 CARRIED FORWARD TO SUMMARY						

SCHEDULE 12: SPECIAL PIPE WORKS AND FITTINGS TO PIPELINE						
ITEM NO.	REF	DESCRIPTION	UNIT	QUANT	RATE	AMOUNT
12	SABS 1200 DB	<u>SECTION 4: SPECIAL PIPE WORK AND FITTINGS</u>				
		<u>EARTHWORKS</u>				
		Excavate in all materials for pipe valve manholes. Backfill, compact, and dispose of surplus/unsuitable material for pipes:				
	8.3.2(a)					
12,1		a) Air valve chambers	m ³	1072		
12,2		b) Scour valve chambers	m ³	1152		
12,3		c) Junction boxes and chambers	m ³	372		
12,4		d) Surface pipeline pedestals	m ³	810		
		<u>Extra-over item 12.1 to 12.4 for:</u>				
12,5		a) Hard rock excavation	m ³	855		
		<u>EXCAVATION ANCILLARIES</u>				
12,6	8.3.3.3	Compaction in roads reserves	m ³	647		
	SABS 1200L					
	PSL 4.1	<u>STEEL PIPES and FITTINGS</u>				
		Fabrication, supply, transport and install and test the following pipe fittings. All items to be approved by Engineer prior to ordering.				
	PSL 4.1	<u>80mmØ DOUBLE ACTING AIR VALVE CHAMBER ON 630mmØ PIPELINE. Class 25. (dwg - N/3110/W/11/006RA)</u>				
12,7		a) Item 4.1: 600mm dia. flange adaptor.	no	10		
12,8		b) Item 4.2: 600mm dia. flanged MS equal tee-piece	no	5		
12,9		c) Item 4.3: 600 x 400mm dia. flanged MS concentric reducer.	no	5		
12,10		d) Item 4.4: 400mm x 200mm dia. flanged MS concentric reducer.	no	5		
12,11		e) Item 4.5: 80mm Ø MS pipe with one side flanged and the other side a 200mm x 80mm Reducing Flange	no	5		
12,12		f) Item 4.6: 80mm dia. flanged RSV gate valve	no	5		
12,13		g) Item 4.7: 80mm dia. flanged MS pipe piece	no	5		
12,14		h) Item 4.8: 80mm dia. Double acting airvalve with anti shock mechanism, Flanged	no	5		
12,15		i) GMS Gooseneck vent pipe for all structures	no	5		
	PSL 4.1	<u>100mmØ DOUBLE ACTING AIR VALVE CHAMBER ON 630mmØ PIPELINE. Class 25. (dwg - N/3110/W/11/007RA)</u>				
12,16		a) Item 7.1: 600mm dia. flange adaptor.	no	4		
12,17		b) Item 7.2: 600mm dia. flanged MS equal tee-piece	no	2		
12,18		c) Item 7.3: 600 x 400mm dia. flanged MS concentric	no	2		
TOTAL CARRIED FORWARD						

ITEM NO.	REF	DESCRIPTION	UNIT	QUANT	RATE	AMOUNT
TOTAL BROUGHT FORWARD						
12,19		d) Item 7.4: 400 x 200mm dia. flanged MS concentric reducer.	no	2		
12,20		e) Item 7.5: 100mm Ø MS pipe with one side flanged and the other side a 200mm x 100mm Reducing Flange	no	2		
12,21		f) Item 7.6: 100mm dia. flanged RSV gate valve	no	2		
12,22		g) Item 7.7: 100mm dia. flanged MS pipe piece	no	2		
12,23		h) Item 7.8: 100mm dia. Double acting airvalve with anti shock mechanism, Flanged	no	2		
12,24		i) GMS Gooseneck vent pipe for all structures	no	2		
	PSL 4.1	<u>150mmØ DOUBLE ACTING AIR VALVE CHAMBER ON 630mmØ PIPELINE. Class 25. (dwg - N/3110/W/11/008RA)</u>				
12,25		a) Item 7.1: 600mm dia. flange adaptor.	no	14		
12,26		b) Item 7.2: 600mm dia. flanged MS equal tee-piece	no	7		
12,27		c) Item 7.3: 600 x 400mm dia. flanged MS concentric reducer.	no	7		
12,28		d) Item 7.4: 400 x 200mm dia. flanged MS concentric reducer.	no	7		
12,29		e) Item 7.5: 150mm dia. MS pipe with one side flanged and the other side a 200mm x 150mm Reducing Flange	no	7		
12,30		f) Item 7.6: 150mm dia. flanged RSV gate valve	no	7		
12,31		g) Item 7.7: 150mm dia. MS pipe piece flanged	no	7		
12,32		h) Item 7.8: 150mm dia. Double acting airvalve with anti shock mechanism, Flanged	no	7		
12,33		i) GMS Gooseneck vent pipe for all structures	no	7		
	PSL 4.1	<u>200mmØ DOUBLE ACTING AIR VALVE CHAMBER ON 630mmØ PIPELINE. Class 25. (dwg - N/3110/W/11/009RA)</u>				
12,34		a) Item 7.1: 600mm dia. flange adaptor.	no	4		
12,35		b) Item 7.2: 600mm dia. flanged MS equal tee-piece	no	2		
12,36		c) Item 7.3: 600 x 400mm dia. flanged MS concentric reducer.	no	2		
12,37		d) Item 7.4: 400 x 200mm dia. flanged MS concentric reducer.	no	2		
12,38		e) Item 7.5: 200mm dia. MS pipe piece flanged	no	2		
12,39		f) Item 7.6: 200mm dia. flanged gate valve	no	2		
12,40		g) Item 7.7: 200mm dia. MS pipe piece flanged	no	2		
TOTAL CARRIED FORWARD						

ITEM NO.	REF	DESCRIPTION	UNIT	QUANT	RATE	AMOUNT
TOTAL BROUGHT FORWARD						
12,41	PSL 4.1	h) Item 7.8: 200mm dia. Double acting with anti shock mechanism, Flanged	no	2		
12,42		i) GMS Gooseneck vent pipe for all structures	no	2		
		<u>100mmØ ARI D-060 AIR & CHECK VALVE COMBINATION CHAMBER ON 600mmØ PIPELINE. Class 25 (dwg - N/3110/W/11/010RA)</u>				
12,43		a) Item 8.1: 600mm dia. flange adaptor.	no	10		
12,44		b) Item 8.2: 600mm dia. flanged MS pipe piece, with position of puddle flange as indicated. 1500mm long	no	5		
12,45		c) Item 8.3: 600mm dia. flanged swing check valve,	no	5		
12,46		d) Item 8.4: 600mm dia. MS pipe piece, flanged one end and other end suitable for flange adaptor.	no	5		
12,47		e) Item 8.5: 600mm dia. flanged MS equal tee-piece.	no	5		
12,48		f) Item 8.6: 600 x 500mm dia. flanged MS concentric reducer.	no	5		
12,49		g) Item 8.7: 100mm dia. flanged MS pipe piece, one end flanged to suit 500mm dia. and other end to suit 100mmdia..	no	5		
12,50		h) Item 8.8: 100mm dia. flanged RSV, right hand closing, non rising spindle gate valve. (PN25)	no	5		
12,51		i) Item 8.9: 100mm dia. flanged air valve.	no	5		
12,52		j) Item 8.10: 600mm x 100mm Flanged MS reducing Tee Piece	no	5		
12,53		k) Item 8.11: 100mm Flanged MS 45Deg Bend	no	5		
12,54		l) Item 8.12: 100mm Flanged MS on one end only.	no	5		
12,55		m) Item 8.13: 100mm Flanged butterfly valve with gearbox operator	no	5		
12,56		n) Item 8.14: 100mm Flange adaptor	no	5		
		<u>200mm Ø PIP LINE SCOUR ASSEMBLY ON 630mm PIPELINE. (dwg - N/3110/W/11/012RA)</u>				
12,57		a) Item SC 11.1: 600 x 200mm dia. flanged MS reducing tee-piece.	no	16		
12,58		b) Item SC 11.2: 600mm dia. flanged MS pipe piece, with position of puddle flange as indicated.	no	32		
12,59	c) Item SC 11.3: 600mm dia. flange adaptor.	no	32			
12,60	d) Item SC 11.4: 200mm dia. PN16 butterfly valve.	no	16			
12,61	e) Item SC 11.5: 200mm dia. flange adaptor.	no	16			
TOTAL CARRIED FORWARD						
ITEM NO.	REF	DESCRIPTION	UNIT	QUANT	RATE	AMOUNT

TOTAL BROUGHT FORWARD						
12,62		f) Item SC 11.6: 200mm dia. MS pipe piece, flanged one end, with other end suitable for flange adaptor. position of puddle flange as indicated	no	16		
12,63		g) Item SC 11.7: 200mm dia. flanged MS pipe piece.	no	16		
12,64		h) Item SC 11.8: 200mm dia. MS puddle pipe piece, flanged one end and the other end plain ended. Position of puddle flange as indicated	no	16		
	PSL 4.1	HORIZONTAL AND VERTICAL BENDS <u>Fabrication, supply, transport and install and test the following pipe fittings. All items to be approved by Engineer prior to ordering.</u> 600ND Flanged Long radius steel bends FBE and Drilled SABS 1123, Table 2500/3.				
12,65		a) From 3 degrees to 6 degrees	no	123		
12,66		b) From 6 degrees to 9 degrees	no	64		
12,67		c) From 9 degrees to 12 degrees	no	36		
12,68		d) From 12 degrees to 15 degrees	no	30		
12,69		e) From 15 degrees to 18 degrees	no	20		
12,70		f) From 18 degrees to 21 degrees	no	12		
12,71		g) From 21 degrees to 24 degrees	no	15		
12,72		h) From 24 degrees to 27 degrees	no	7		
12,73		i) From 27 degrees to 30 degrees	no	8		
12,74		j) From 30 degrees to 33 degrees	no	6		
12,75		k) From 33 degrees to 36 degrees	no	6		
12,76		l) From 36 degrees to 39 degrees	no	6		
12,77		m) From 39 degrees to 42 degrees	no	4		
12,78		n) From 42 degrees to 45 degrees	no	9		
12,79		o) From 45 degrees to 48 degrees	no	4		
12,80		p) From 48 degrees to 51 degrees	no	8		
12,81		q) From 51 degrees to 54 degrees	no	4		
12,82		r) From 54 degrees to 57 degrees	no	4		
12,83		s) From 57 degrees to 60 degrees	no	4		
12,84		t) From 60 degrees to 63 degrees	no	2		
12,85		u) From 63 degrees to 66 degrees	no	3		
12,86		v) From 66 degrees to 69 degrees	no	4		
TOTAL CARRIED FORWARD						
ITEM NO.	REF	DESCRIPTION	UNIT	QUANT	RATE	AMOUNT
TOTAL BROUGHT FORWARD						
12,87		w) From 69 degrees to 72 degrees	no	2		

12,88		x) From 72 degrees to 75 degrees	no	4		
12,89		y) From 75 degrees to 78 degrees	no	3		
12,90		z) From 78 degrees to 81 degrees	no	1		
12,91		aa) From 81 degrees to 84 degrees	no	2		
	PSL 4.1	<u>Fabrication, supply, transport and install and test the following MS Flange adaptors. Drilled SABS 1123, table 2500/3</u>				
12,92		a) For 600mm pipe fittings	no	782		
TOTAL SCHEDULE 12 CARRIED FORWARD TO SUMMARY						

SCHEDULE 13 : CONSTRUCTION OF PIPELINES

ITEM NO.	REF	DESCRIPTION	UNIT	QUANT	RATE	AMOUNT
13	SABS					
	1200DB	<u>SITE CLEARANCE</u>				
13,1	PSC 4.1	a) Clear and Grub	m	19338		
	SABS					
	1200DB	<u>EXCAVATION</u>				
	PSDB1.1	Excavate in all materials for trenches for 700DN pipes and smaller. Rate to include backfill, compact and dispose of surplus material				
13,2		a) Up to 1.5m deep	m ³	3500		
13,3		b) over 1.5m and up to 2.5m deep	m ³	38000		
13,4		c) over 2.5m and up to 3.5m deep	m ³	250		
13,5		d) over 3.5m and up to 4.5m deep	m ³	100		
	PSDB1.2	<u>Extra-over item 11.2.1 for :</u>				
13,6		a) Hard rock excavation	m ³	10500		
13,7	8.3.2c)	Excavate and dispose of unsuitable material from trench bottom (Prove)	m ³	100		
13,8	8.3.3b)	Import backfill material from designated borrow area within the free haul distance of 1.0km.	m ³	100		
13,9	8.3.3.3	Compaction in road reserves	m ³	23450		
	8.3.3.4	<u>Overhaul</u>				
13,10		a) Long overhaul in excess of 2.0km	m ³ .km	16750		
	SABS					
	1200DB	<u>EXISTING SERVICES</u>				
	8.3.5a)	<u>Services that intersect a trench</u>				
13,11		a) Water and sewer pipelines	no	14		
13,12		b) Cables	no	14		
	8.3.5b)	<u>Services that adjoin a trench</u>				
13,13		a) Water and sewer pipelines	m	100		
13,14		b) Cables	m	268		
	SABS					
	1200LB	<u>PIPE BEDDING</u>				
		<u>Selected granular material for bedding cradle from:</u>				
13,15	8.2.1	a) Trench excavation	m ³	15500		
13,16		b) Commercial Sources	m ³	775		
		<u>Provision of selected fill material from:</u>				
13,17	8.2.1	a) Trench excavation	m ³	4800		
13,18	8.2.1	b) Commercial Sources	m ³	240		
TOTAL CARRIED FORWARD						

ITEM NO.	REF	DESCRIPTION	UNIT	QUANT	RATE	AMOUNT
TOTAL BROUGHT FORWARD						
	SABS 1200L	<u>STEEL PIPES</u>				
	PSL 4.1	<u>Supply, lay, bed and test the following Mild Steel pipes with fusion bonded epoxy lining and coating</u>				
13,19	8.2.1	a) 650mm Dia. Plain ended pipes, Class 25 (9m Lengths)	m	700		
	SABS 1200L	<u>PRESSURE PIPES</u>				
	8.2.1	<u>Supply, lay, bed and test the following pressure pipes:</u>				
13,20		a) 630mm dia. oPVC, Class 20 pipes	m	4500		
13,21		b) 630mm dia. oPVC, Class 25 pipes	m	3900		
13,22		c) 630mm dia. oPVC, Class 12.5 pipes	m	10345		
		<u>Pipeline markers</u>				
13,23		Construct and install concrete pipeline markers as per drawing	no	226		
	SABS 1200L	<u>MISCELLANEOUS</u>				
	8.2.11	<u>Concrete thrust block configuration</u>				
13,24		a) Concrete volume 0.25 - 0.5 m ³	no	80		
13,25		b) Concrete volume 0.5 - 1.0 m ³	no	150		
13,26		c) Concrete volume 1,0 - 1.5 m ³	no	70		
	PSL 4.2	<u>Fabrication, supply, transport and install and test the following VJ couplings.</u>				
13,27		a) For 650mm pipe	no	156		
	PSL 4.3	<u>Reinstate road surface</u>				
		Reinstate road surface as per detail drawing				
13,28		a) Cut and remove existing gravel layer in windrow and stockpile	m ³	120		
13,29		b) Reinstate existing gravel layers to original state (98% MOD AASHTO)	m ³	120		
	SABS 1200L	<u>HDPE PIPES</u>				
	8.2.1	<u>Supply, lay, bed and test the following HDPE pipes:</u>				
13,3		a) 900mm dia. HDPE Pipe PE 100 PN12.5 (Road Crossing Sleeve)	m	120		
TOTAL SCHEDULE 13 CARRIED FORWARD TO SUMMARY						

SCHEDULE 14 : MECHANICAL EQUIPMENT

ITEM NO.	PAYM. REF.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
14	PSX 1	<u>Pumps</u>				
		<u>Pump Station 3</u>				
	PSX 1.3C	Raw water pumps with a working duty point 1040m³/hr @ 148.5m. Motors to be compatible with Variable Speed Control. Price provided to include the following:				
14,1		a) Supply, Deliver, Install and Commission	No	2		
14,2		b) Witness testing by design Engineer and Client representative (5x) at manufacturing premises	Sum	1		
14,3		c) Special insurances on items	Sum	1		
		<u>Pump Station 4</u>				
	PSX 1.3D	Raw water pumps with a working duty point 1040m³/hr @ 103m. Motors to be compatible with Variable Speed Control. Price provided to include the following:				
14,4		a) Supply, Deliver, Install and Commission	No	2		
14,5		b) Witness testing by design Engineer and Client representative (5x) at manufacturing premises	Sum	1		
14,6		c) Special insurances on items	Sum	1		
	PSX2	<u>Gantry Hoist</u>				
		<u>Pump stations</u>				
14,7	PSX2.1	i) Electrically operated crab and hoist rated 4tn capacity	No	2		
	PSX3	<u>FIBRE INSTALLATION</u>				
		<u>HDPE Sleeve</u>				
14,8		i) Installation of 50mm HDPE PE 100 PN 10 sleeve for the installation of fibre optic cable. The rate shall include supply, deliver, excavation (Min depth 0.6m) and backfilling	m	30150		
14,9		ii) Installation of plastic manholes 600mm Diameter for HDPE sleeve. Rate shall cover the supply deliver and installation of the manholes every 200m.	no	151		
TOTAL SCHEDULE 14 CARRIED FORWARD TO SUMMARY						

SCHEDULE 15 : TARGETED ENTERPRISE ADMINISTRATION

ITEM NO.	PAYM. REF.		UNIT	QTY	RATE	AMOUNT
		<u>STAKEHOLDER AND COMMUNITY LIAISON</u>				
15,1	PCY13.1a	Cost of liaison and plc support	Prov. Sum	1	R 100 000,00	R 100 000,00
15,2	PCY13.1a	<u>Extra-over item 15.1 for:</u> Contractor's handling fee	%			
		<u>TENDER PROCESS FOR TARGETED ENTERPRISES</u>				
		Contractor's charge for the management and execution of the targeted enterprise procurement process:				
15,3	PCY13.2 (i)	Procurement process for the totality of all tenders concluded for the appointment of CIDB rated targeted enterprise subcontractors.	Sum	1		
		<u>RESPONSIBILITIES OF THE CONTRACTOR TOWARDS TARGETED ENTERPRISES</u>				
15,4	PCY13.3 a	Contractor's establishment, management, management support, assistance, coaching, guidance, mentoring and supervision of targeted enterprises	Month	36		
15,5	PCY13.3 b	Targeted enterprise construction manager	Month	36		
15,6	PCY13.3 c	Targeted enterprise site supervisors	Month	36		
		<u>CONSTRUCTION WORKS BY TARGETED ENTERPRISES</u>				
15,7		Payments associated with the construction works carried out by CIDB rated targeted enterprise subcontractors appointed in consultation with the Employer in terms of section PSY	Prov. Sum	1	R 87 100 000,00	R 87 100 000,00
15,8		<u>Extra-over item 15.7 for:</u> Contractor's handling fee	%			
	PCY 13.4	<u>TRAINING, COACHING, GUIDANCE, MENTORING AND ASSISTANCE</u>				
		<u>TRAINING COSTS</u>				
15,9	PCY13.4a(iii)	c) Community skills training	Prov. Sum	1		R 300 000,00
15,10	PCY13.4d(iv)	d) Training venue	Prov. Sum	1		R 100 000,00
		<u>STUDENT EXPERIENTIAL TRAINING</u>				
15,11	PCY13.4b(i)	a) Student Stipends	Prov. Sum	1		R 270 000,00
15,12	PCY13.4b(ii)	b) Provision of experiential training	Person Month	36		
15,13		<u>Extra-over item 15.9 to 15.11 for:</u> Contractor's handling fee	%		R 670 000,00	
TOTAL SCHEDULE 15 CARRIED FORWARD TO SUMMARY						

LOSKOP REGIONAL BULK WATER SUPPLY SCHEME	
Construction of the Loskop Regional Bulk Water Supply Scheme in Thembisile Hani Local Municipality – Work Package 2 (Bulk Pipeline from Pump Station 2 to Verena, Pump Station 3 and 4, 10 MI Raw Water Reservoir, Gravity Main from 10 MI Raw Water Reservoir to the Water Treatment Plant)	
DESCRIPTION	AMOUNT
SCHEDULE 1 : PRELIMINARY AND GENERAL	
SCHEDULE 2: SPECIAL PIPE WORKS AND FITTINGS	
SCHEDULE 3 : EARTHWORKS - RESERVOIR & BOOSTER PUMP STATIONS	
SCHEDULE 4 : RESERVOIRS - PIPE FITTINGS	
SCHEDULE 5 : PUMPSTATION CONCRETE WORK	
SCHEDULE 6 : RESERVOIR CONCRETE WORK	
SCHEDULE 7 : PUMPSTATION STEEL WORK ITEMS	
SCHEDULE 8 : RESERVOIR STEEL WORK ITEMS	
SCHEDULE 9 :PUMPSTATION AND RESERVOIR BUILDING WORKS	
SCHEDULE 10 : STRUCTURAL CONCRETE WORKS TO PIPELINE MANHOLES AND CHAMBERS	
SCHEDULE 11 : GABIONS	
SCHEDULE 12: SPECIAL PIPE WORKS AND FITTINGS TO PIPELINE	
SCHEDULE 13 : CONSTRUCTION OF PIPELINES	
SCHEDULE 14 : MECHANICAL EQUIPMENT	
SCHEDULE 15 : TARGETED ENTERPRISE ADMINISTRATION	
SUBTOTAL A	
Allow for 10% Escalation on sub total A	
SUBTOTAL B	
Add 10% for contingencies on subtotal B	
SUBTOTAL C	
Add 15% VAT on subtotal C	
TOTAL AMOUNT CARRIED TO C1.1 FORM OF OFFER AND ACCEPTANCE	