

**SCHEDULE B**  
**SECTION 2: SITE CLEARANCE**

ITEM NO	PAYMENT REF	DESCRIPTION	UNIT	BOQ	RATE	AMOUNT
2.	SANS 1200 C	<b>SECTION 2: SITE CLEARANCE</b>				
2.1	8.2.1	<b>Clear and Grub</b>	m <sup>2</sup>	10000.00		
2.2	8.2.4	<b>Reclear surfaces (only on instruction from the Engineer)</b>	m <sup>2</sup>	500.00		
2.3	8.2.9	<b>Transport materials and debris to unspecified sites and dump</b>	m <sup>3</sup> /km	30		
2.4		<b>Take down and reconstruct existing fence with new material.</b>				
2.4.1		1.2m high galvaine diamant mesh	m	10		
<b>TOTAL CARRIED FORWARD TO SUMMARY</b>						

**SCHEDULE B**  
**SECTION 3: EARTHWORKS**

ITEM NO	PAYMENT REF	DESCRIPTION	UNIT	BOQ	RATE	AMOUNT
3.	SANS 1200 DA	<b>SECTION 3: EARTHWORKS</b>				
3.1	8.3.1	<b>Excavations</b>				
3.1.1	8.3.1(b)	Excavate in all materials and dispose of excess	m <sup>3</sup>	400		
		<b>Extra over all excavations for carting away</b>				
3.1.2		Surplus material from excavations and/or stock piles on site to a dumping site to be allocated by the contractor	m <sup>3</sup>	360		
		<b>Risk of collapse of excavations</b>				
3.1.3	SANS 1200D 8.3.7	Sides of trench and hole excavations not exceeding 1,5m deep	m <sup>2</sup>	50		
		<b>Keeping excavations free of water</b>				
3.1.4		Keep excavations free of water	Item	1		
		<b>Earth filling supplied by the contractor compacted to 98% Mod AASHTO density</b>				
3.1.5		Under base of G6 material in accordance with SABS 1200 DM	m <sup>3</sup>	75		
		<b>Earth filling obtained from the excavations and/or prescribed stock piles on site</b>				
3.1.6		Backfilling of base	m <sup>3</sup>	40		
	SANS 10124	<b>SOIL POISONING</b>				
		<b>Soil insecticide with poison in accordance to SABS 0124</b>				
3.1.7		To bottoms and sides of trenches	m <sup>2</sup>	240		
3.2		<b>Sundry Items</b>				
3.2.1	SANS 1200 DM	Rip, mix and compact in-situ material to 93% of mod AASTHO density	m <sup>3</sup>	39		
3.2.2	SANS 1200 ME	Import G6 type material from commercial sources and compact to 93% of mod AASTHO density	m <sup>3</sup>	78		

<b>TOTAL CARRIED FORWARD TO SUMMARY</b>						
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**SCHEDULE B**  
**SECTION 4: GROUND LEVEL STORAGE TANK (WET WELL)**

ITEM NO	PAYMENT REF	DESCRIPTION	UNIT	BOQ	RATE	AMOUNT
4.1	SANS 1200 GA	<b>CONCRETE SMALL WORKS</b>				
	8.2.2	<b>Formwork</b>				
4.1.1		Smooth to beams and foundations	m <sup>2</sup>	400.0		
	8.3	<b>Reinforcement</b>				
4.1.2	8.3.1	High tensile steel bars	t	15		
	8.4	<b>Concrete</b>				
4.1.3	8.4.3	25 Mpa strength concrete in slab and beams	m <sup>3</sup>	150.0		
4.2		<b>PRESSED STEEL TANK</b>				
4.2.1		<b>Prefabricated pressed steel tank</b>				
		Supply, deliver, erect, disinfection, test for water proofing and commission pressed steel tank, complete with roof cover, inlet, outlet, scour, overflow, water level indicator, ladder and protective steel cage .  All steel components are to be hot dip galvanized.  Pressed tank size: 12 panels wide x 10 panels long x 5 panels high (14.64 x 12.20 x 6.10m high) Cost to include the structural design and sign off by a competent person (Professional Engineer registered with the Engineering Council of South Africa) Note: The concrete base and support and bearing plates will be measures elsewhere.	No	1		
4.2.2		Provide the sum of R500,000 (Five Hundred Thousand Rand) for the supply and complete installation of booster pump room	No	1		
4.2.3		80mm wide x 8 mm thick flatbar cast into concrete complete with fishtail anchor as per detail drawings.	m	170		
4.2.4						
4.2.5	SANS 1200 GB 8.2.9	Grouting under plates where concrete is uneven	m <sup>3</sup>	15		
<b>TOTAL CARRIED FORWARD TO SUMMARY</b>						

**SCHEDULE B**  
**SECTION 5: PIPE TRENCHES**

ITEM NO	PAYMENT REF	DESCRIPTION	UNIT	BOQ	RATE	AMOUNT
5.	SANS 1200DB	<b>SECTION 6: PIPE TRENCHES</b>				
5.1	DB 8.3.2	<b>EXCAVATION</b>				
	PS DB 8.3.2(a)(i)	Machine excavation in all material, including intermediate material, for trenches for up to 160mm diameter HDPE pipes and trench widths of 1000mm				
5.1.1.		Exceeding 0,0m up to 1,0m	m	1680		
5.1.2	PS DB 8.3.2(a)(ii)	Backfill and compaction of trenches above the bedding cradle and dispose of surplus materials	m <sup>3</sup>	588		
	PS DB 8.3.2(b)	Extra-over item DB 8.3.2 (a) & (d) for:				
5.1.3		Hard rock excavation	m <sup>3</sup>	150		
5.1.4	PS DB 8.3.2(c)	Excavation of unsuitable material from trench bottom.	m <sup>3</sup>	30		
	PS DB 8.3.2(d)	Labour intensive hand excavation and backfill in all materials for trenches, compact and dispose of surplus material within 0,5km for 90mm and 50mm diameter HDPE pipes and trench widths of 1000mm and trench depths of:				
5.1.5		Exceeding 0,0mm up to 1m	m	3050		
5.1.6	PS DB 8.3.2(e)	Excavation by hand to expose existing services	m <sup>3</sup>	250		
5.2	8.3.3	<b>EXCAVATION ANCILLARIES</b>				
	8.3.3.1	Make up deficiency in backfill material				
5.2.1	(a)	from other necessary excavations on site	m <sup>3</sup>	30		

5.2.2		(b) by importation from designated borrow pits	m <sup>3</sup>	5		
5.2.3		(c) by importation from commercial or off site sources selected by the contractor	m <sup>3</sup>	-		
	8.3.3.4	Additional overhaul for imported backfill material				
5.2.4		(a) Limited overhaul: Over 0,5km to 1,0km (provisional)	m <sup>3</sup>	3		
5.2.5		(b) Long overhaul: Over 1,0km (provisional)	m <sup>3</sup> /km	90		
5.3	8.3.4	<b>PARTICULAR ITEMS</b>				
5.3.1	PS DB 8.3.4(b)	Control of ground water	Item	1		
5.4	8.3.5	<b>EXISTING SERVICES</b>				
5.4.1	PS DB 8.3.5(a)	Services that intersect the trench	No.	250.0		
<b>TOTAL CARRIED FORWARD TO SUMMARY</b>						

**SCHEDULE B**  
**SECTION 6: MEDIUM PRESSURE PIPELINES**

ITEM NO	PAYMENT REF	DESCRIPTION	UNIT	BOQ	RATE	AMOUNT
6.	SANS 1200 L	<b>SECTION 7: MEDIUM PRESSURE PIPELINES</b>				
6.1		<b>PIPES</b>				
	8.2.1	Supply, handle, lay and in-bed. Complete with couplings, test and disinfect. HDPE Class 12 PE100 PN8:				
6.1.1		32mm	m	300		
6.1.2		50mm	m	500		
6.1.3		90mm	m	2600		
6.1.4		160mm	m	1800		
6.2		<b>COUPLINGS, FITTINGS AND SPECIALS</b>				
	8.2.2	Extra-over 8.2.1 for the supply, laying and bedding of HDPE PRESSURE BENDS (class 12)				
6.2.1		50 x 32mm Reducer	No.	135		
6.2.2		90mm 45 degree access bend	No.	40		
6.2.3		90mm Access Tee	No.	40		
6.2.4		90mm 90 degree access bend	No.	80		
6.2.5		90 x 50mm Access Tee reducing junction	No.	135		
6.2.6		160 x 90mm Access Tee reducing junction	No.	27		
6.2.7		160mm Access Tee	No.	6		
6.2.8		160mm 90 degree access bend	No.	40		
6.3		<b>Taps, valves, etc. including joints to pipes and/or fittings</b>				
6.3.1	8.2.3	160mm Non return valve, including joints to HDPE class 12 pipes and fittings	No.	1		
6.3.2		32mm Domestic connection see drawing W0001-01	No.	135		
6.3.3		90mm gate valve, including joints to HDPE class 12 pipes and fittings	No.	27		
6.3.4		160mm gate valve, including joints to HDPE class 12 pipes and fittings	No.	9		
6.4.1		80 x 65mm Brass right angle hydrant valve with cap and chain, including concrete footing, excavations etc.	No.	14		
6.5		<b>Chambers</b>				
		<b>Air Chambers</b>				
6.5.1	8.2.14	Air chamber 1050mm diameter (internal measurement) precast ring and not exceeding 1m deep on 230mm 25MPa/19mm concrete bottom, with 150mm 25MPa/19mm concrete slab, finished on exposed surfaces in untinted cement paving with angles rounded, with rebated opening for and including 450 x 600mm cast iron cover and frame.	No.	3		
6.5.2	8.2.14	Valve chamber 750mm diameter (internal measurement) precast ring and not exceeding 1m deep on 230mm 25MPa/19mm concrete bottom, with 150mm 25MPa/19mm concrete slab, finished on exposed surfaces in untinted cement paving with angles rounded, with rebated opening for and including 450 x 600mm cast iron cover and frame.	No.	30		
6.5.3	8.2.14	Valve chamber 1950mm diameter (internal measurement) precast ring and not exceeding 1m deep on 230mm 25MPa/19mm concrete bottom, with 150mm 25MPa/19mm concrete slab, finished on exposed surfaces in untinted cement paving with angles rounded, with rebated opening for and including 450 x 600mm cast iron cover and frame.	No.	4		
<b>TOTAL CARRIED FORWARD TO NEXT PAGE</b>						

**SCHEDULE B**  
**SECTION 6: MEDIUM PRESSURE PIPELINES**

ITEM NO	PAYMENT REF	DESCRIPTION	UNIT	BOQ	RATE	AMOUNT
<b>TOTAL BROUGHT FORWARD</b>						

6.6	SANS 1200MM 8.4.2	<b>PAINTING OF EXPOSED MANHOLE</b>				
6.6.1		750mm diameter lid (Yellow paint)	m <sup>2</sup>	20		
6.6.2		1950mm diameter lid (Red paint)	m <sup>2</sup>	20		
	SANS 1200 L	<b>Fire hydrant pedestals</b> Unreinforced concrete hydrant pedestal 900mm high cast around vertical pipe with bottom 300mm below ground, 300 x 300mm square at base and tapering to octagonal shaped top 200 x 200mm overall including necessary excavation, formwork and two coats of paint to exposed surfaces				
6.6.3	8.2.11		No.	7		
6.6.4		Booster connection ( Fire ) See drawing W0001-01	No.	1		
	SANS 1200 L	<b>Testing</b> Supply all the necessary apparatus, water, etc. for and test the water supply system to the satisfaction of the Representative / Agent and the Local Authority, rectify all defective work free of charge and leave in perfect order				
6.6.5			Item	25		
		<b>Equipment</b> Plasson Monomatic welder (25mm to 400mm)				
6.6.6			Item	2		
		Good working condition Plasson Monomatic welder to be handed over to the client after the completion of the project or on termination of the project as well as all surplus material.				
<b>TOTAL CARRIED FORWARD TO SUMMARY</b>						

**SCHEDULE B**  
**SECTION 7: BEDDING (PIPES)**

ITEM NO	PAYMENT REF	DESCRIPTION	UNIT	BOQ	RATE	AMOUNT
7.	SANS 1200 LB	<b>SECTION 8: BEDDING (PIPES)</b>				
7.1	8.2.1	<b>PROVISION OF BEDDING FROM TRENCH EXCAVATIONS</b>				
7.2	8.2.2	<b>IMPORTED FROM</b>				
	8.2.2.3	Commercial Sources (provisional)				
7.2.1	(a)	Selected granular material	m <sup>3</sup>	1477.8		
7.3	8.2.8	<b>COMPACTION OF TRENCH BOTTOM</b>	m <sup>2</sup>	5200		

