

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO. 2</u></p> <p><u>BILL NO 7</u></p> <p><u>PLUMBING</u></p> <p><u>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)</u></p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p>TENDERERS ARE TO NOTE THAT ALL WORK IS TO BE EXECUTED IN EXISTING BUILDINGS IN A COMBINATION OF NEW WORK, WORK IN PATCHES AND WORK IN SMALL QUANTITIES.</p>			
	<p><u>SANITARY FITTINGS</u></p>			
1	<p>"Vaal Sanitaryware Hibiscus Elite", or equal approved, vitreous china close coupled suite colour White (Code: 772401WH), overall size 643 x 355 x 830mm high with Embassy seat (Code: 8530Z000), comprising 90° outlet open rim pan (Code: 772300WH) with matching 6/3 litre top dual flush cistern (Code: 7373DT) including lid and fitments.</p>	No	13	
2	<p>"Vaal Lixil Grohe Bau", or equal approved, exposed flushing cistern including lid and fitments fixed to existing pan.</p>	No	29	
3	<p>"Vaal Orchid (Ref. 439016WH)", or equal approved, 90 degrees wall hung water closet with open white colour rim wash down pan, overall size 583 x 355 x 410mm high including Hibiscus Jazz thermostat seat (Ref. 8531Z000) with 90 degree outlet open rim back inlet pan, fixing in position with and including floor bracket (Ref. 8082Z000) with concealed back inlet flushvalve (elsewhere specified), and connecting complete in strict accordance with the manufacturer's instructions.</p>	No	14	
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4	"Vaal Sanitaryware Hibiscus", or equal approved, vitreous china wall hung basin colour White (Code: 702303WH), overall size 510 x 405mm with two tapholes including integrated overflow and chainstay hole and chrome plated basin waste (Code: 8794Z000), bolted to wall with 2No. x 10mm bolts (Code: 8448Z000) and sealed with silicone sealant where basin meets wall.	No	3		
5	Heavy duty toilet seat, including fixing in position on existing toilet in strict accordance with the manufacturer's instructions.	No	29		
	<u>TRAPS ETC.</u>				
6	"Cobra Watertech", or equal approved, 32mm chrome plated bottle trap (Code: 350) with 75mm deep re-seal, adjustable telescopic pipe and 40mm outlet.	No	5		
7	40mm Rubber P or S trap.	No	3		
8	40mm Brass deep seal shower trap with chromium plated grating.	No	3		
	<u>TAPS, VALVES, ETC</u>				
9	"Cobra Watertech", or equal approved, Chrome Junior Flushmaster exposed flush valve (Code: FJ6-000), installed in accordance with the manufacturer's recommendations.	No	9		
10	"Walcro WC-103LC-SS", or equal approved, concealed WC flushvalve with and including VR button and concealed flush pipes installed in strict accordance with the manufacturer's instructions.	No	7		
11	"Cobra Watertech (Code: FJT5-4)", or equal approved, chrome plated junior flushmaster with 12mm diameter inlet x 275mm long straight urinal flush pipe.	No	10		
12	"Cobra Star 128-15", or equal approved, underwall stoptap.	No	6		
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13	"Cobra (code: KP2.61)", or equal approved, vandal resistant shower head installed in strict accordance with the manufacturer's instructions.	No	3		
14	"Cobra Star 211-20", or equal approved, pillar tap installed in strict accordance with the manufacturer's instructions.	No	6		
15	"Cobra 220mm Wall Spout (Code: 066TU/WT220)", or equal approved, spout installed to existing pipes in strict accordance with the manufacturer's instructions, including all additional fittings, etc.	No	23		
16	"Cobra Demand (Code: FSTAF1DT-0GT01)", or equal approved, stop tap installed to existing pipes in strict accordance with the manufacturer's instructions, including all additional fittings, etc.	No	23		
<u>SANITARY PLUMBING</u>					
<u>Locate, isolate affected area and replace damaged uPVC piping and / or fittings including holderbats, pipe clips, etc.:</u>					
17	50mm Pipes.	m	96		
18	100mm Pipes.	m	64		
<u>uPVC pipes fixed to walls, concrete soffits, etc. including all hangers & brackets and connecting to existing pipes including temporary sealing off, diverting, necessary fittings, making good on completion, etc.:</u>					
19	50mm Pipes.	m	144		
20	100mm Pipes.	m	72		
21	100mm Pipes in vertical vent and stack pipes.	m	24		
<u>Extra over uPVC pipes for fittings including fittings to existing pipes:</u>					
22	50mm Bend.	No	120		
23	50mm Access bend.	No	40		
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24	50mm Junction.	No	24		
25	50mm Access junction.	No	24		
26	100mm Bend.	No	40		
27	100mm Access bend.	No	32		
28	100mm Access junction.	No	24		
29	100mm Access bend pan connector.	No	40		
30	100 x 50mm Access reducing junction.	No	20		
	<u>Sundries</u>				
31	Unblock existing 'P', 'S' or bottle trap not exceeding 40mm diameter.	No	32		
32	Unblock WC pan, stainless steel trough urinal traps, shower drains, etc. not exceeding 110mm diameter.	No	40		
33	Carefully chase brickwork and expose damaged pipes and fittings not exceeding 110mm diameter including making good plaster on completion.	m	15		
34	Seal leaking uPVC WC pan connector joint.	No	40		
35	Seal leaking uPVC soil or vent pipe joint not exceeding 110mm diameter	No	32		
	<u>WATER SUPPLIES</u>				
	<u>Locate, isolate affected area and replace damaged SABS 460 Class 0 hard drawn copper piping and / or fittings including holderbats, pipe clips, etc.:</u>				
36	15mm Pipes	m	96		
37	22mm pipes	m	72		
38	28mm pipes	m	48		
39	35mm pipes	m	24		
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	<u>Copper tubing (SABS 460 Class 0) with brass capillary fittings fixed to walls, concrete soffits, etc. and connecting to existing pipes including temporary sealing off, diverting, necessary fittings, making good on completion, etc.:</u>				
40	15mm Pipes.	m	128		
41	22mm Pipes.	m	96		
42	28mm Pipes.	m	96		
	<u>Extra over class 0 copper pipes for capillary fittings including fittings to existing pipes:</u>				
43	15mm Fittings.	No	240		
44	22mm Fittings.	No	160		
45	28mm Fittings.	No	144		
	<u>Sundries</u>				
46	Carefully chase brickwork and expose damaged pipes and fittings not exceeding 35mm diameter including making good plaster on completion.	m	40		
	<u>FIRE SERVICE</u>				
	<u>Hose Reels, etc.:</u>				
47	Approved hose reel complete with 30m of 19mm hose all to SABS 543 incorporating 25mm chromium plated gunmetal gate valve and connection for and joint to supply pipe with brackets bolted to wall with and including four 8mm bolts with plate washers built 100mm into brickwork in cement mortar.	No	8		
48	Approved 9Kg DCP cylindrical fire extinguisher fixed on and including backing boards to walls.	No	16		
	<u>Service existing fire equipment including refilling:</u>				
49	Fire hose reels.	No	60		
50	Fire extinguishers.	No	120		
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51	Fire hydrants.	No	8		
<u>EXTERNAL SEWER, WATER AND STORMWATER</u>					
<u>STORMWATER RETICULATION</u>					
<u>Cleaning existing grid inlets, kerb inlets, pipes, etc.:</u>					
52	Allow for cleaning existing kerb inlets, manholes, etc. (various sizes) of all rubbish, debris, etc., including cleaning of the inlet & outlet pipes for 20 metres in both directions, including removal of existing lids, relaying existing lids as per Engineer's instructions, making good & carting away all rubbish, debris, etc. to a dumping site to be located by the contractor.	No	3		
53	Allow for cleaning existing pipes by means of water jetting (various pipe sizes ranging from 300mm diameter to 800mm diameter) of all rubbish, debris, etc., including cleaning pipes between manholes for lengths not exceeding 50m, including removal of existing lids, relaying existing lids as per Engineer's instructions, making good & carting away all rubbish, debris, etc. to a dumping site to be located by the contractor.	No	6		
<u>Manhole covers, gratings, frames, etc.:</u>					
54	600mm Diameter heavy duty polymer concrete cover slab including frame as supplied by "civil cultured polymer products cc", or equal approved.	No	2		
55	600 x 600mm Heavy duty polymer concrete cover slab including frame as supplied by "civil cultured polymer products cc", or equal approved.	No	1		
<u>WATER RETICULATION</u>					
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<u>Termination of standpipe:</u>					
56	Locate, disconnect, demolish and remove existing standpipe including all necessary fittings, investigations, temporary sealing off, diverting, removal of cover slabs, brickwork & concrete, excavation, backfilling, making good on completion, etc. all in accordance with the Engineers instructions.	No	1		
<u>SEWER RETICULATION</u>					
<u>Cleaning existing manholes, pipes, etc.:</u>					
57	Allow for cleaning existing manholes. etc. (various sizes) of all rubbish, debris, etc., including cleaning of the inlet & outlet pipes for 20 metres in both directions, including removal of existing lids, relaying existing lids as per Engineer's instructions, making good & carting away all rubbish, debris, etc. to a dumping site to be located by the contractor.	No	13		
58	Allow for cleaning existing pipes by means of water jetting (various pipe sizes ranging from 75mm diameter to 300mm diameter) of all rubbish, debris, etc., including cleaning pipes between manholes for lengths not exceeding 50m, including removal of existing lids, relaying existing lids as per Engineer's instructions, making good & carting away all rubbish, debris, etc. to a dumping site to be located by the contractor.	No	19		
<u>Gulleys, etc.:</u>					
59	Allow for cleaning existing sewer gulley drains connected to 110mm diameter pipes of all blockages, rubbish, debris, etc., including cleaning of the inlet pipes for 20 metres, including removal of existing lids, relaying existing lids as per Engineer's instructions, making good & carting away all rubbish, debris, etc. to a dumping site to be located by the contractor.	No	64		
60	Precast concrete gulley top including gulley lid, bedded in cement mortar.	No	64		
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<u>uPVC heavy duty pressure piping to SABS 791 with high impact couplings (Diameters given are outside diameters):</u>					
61	200mm Diameter Class 34 pipe laid in ground to falls on and including Class B bedding (SABS 1200LB) and selected fill blanket, including excavation in compacted earth 750mm wide and not exceeding 1000mm deep and backfilling to 90% modified AASHTO density in 150mm layers, including carting away surplus excavated material, risk of collapse, dewatering of trenches, shoring, etc. including taking up and removing existing paving not exceeding 1000mm wide x 80mm thick formed of concrete pavers including setting aside neatly for re-use and cleaning down and laying existing concrete pavers bedded on and including 20mm thick bed of river sand including consequent cutting, weedkiller, etc.:	m	100		
<u>Extra on 200mm diameter uPVC pipes for fittings:</u>					
62	Junction.	No	7		
63	45° Plan reducing junction.	No	5		
64	Tee.	No	10		
<u>Sundries:</u>					
65	20Mpa Concrete in marker block size overall 200 x 100 x 1300mm high with 800mm projecting above ground including all necessary excavation, formwork, etc.	No	5		
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	<p><u>Excavate in earth for and including circular type precast concrete manhole formed of 1500mm diameter x 300mm thick 25Mpa concrete base with manhole formed of 1250mm diameter (internally) precast concrete rings with joints sealed with bituminous putty with and including precast concrete cover slab 159mm thick with opening for and including heavy duty road type manhole cover and lockable frame as type 2A set in cement mortar and sealed in tallow and with 20Mpa concrete benching in bottom floated smooth with falls and finished on all exposed surfaces with 25mm thick granolithic with angles rounded including all necessary excavation, backfilling, carting away, risk of collapse, shoring, dewatering, concrete blinding, formwork, step irons, etc.:</u></p>				
66	<p>Manhole exceeding 1500mm and not exceeding 2000mm deep.</p> <p><u>Connections:</u></p>	No	2		
67	<p>Cut into existing sewer manhole for and connect new 200mm diameter uPVC pipe, including temporary sealing off, diverting, backfilling, liaising with the authorities, making good on completion.</p> <p><u>Grease traps:</u></p>	No	3		
68	<p>"HAC Industrial Fatmaster", or equal approved, manual fattrap (4 litre / second capacity), size 1000 x 2000 x 1200mm, of fibreglass construction with standard inlet and outlet pipes, fibreglass lid, etc. installed complete in and including manhole with one brick wall sides in engineering bricks built in english bond on and including 20Mpa insitu concrete base 75mm thick with ref 245 mesh reinforcing, rendered smooth internally in 1:5 cement mortar, benching up bottom in 20Mpa concrete finished off smooth and 75mm thick 25Mpa concrete cover slab with ref 245 mesh reinforcing including all formwork, reinforcing, backfilling, compacting, etc. all in strict accordance with the manufacturer's instructions.</p>	No	2		
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<u>FINANCIAL PROVISION</u>				
69	Allow the amount of R100 000.00 for unblocking major manhole on Immink Drive.	Item		100 000.00
70	Allow the amount of R30 000.00 for general plumbing and drainage.	Item		30 000.00
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