

ITEM NO	DESCRIPTION	QUANTITY	RATE	AMOUNT
	Brought Forward		R	
	<u>"Polycop" polypropylene pipes:</u>			
	Polypropylene pipes 54mm diameter and under shall be seamless copper coloured class 16 pipes jointed with "Fast-fuse" heat welded thermoplastic or brass compression fittings as designed for use with copper pipes as stated			
	Pipes shall be firmly fixed to walls etc with coloured nylon snap-in pipe clips with provision for accommodating thermal movement and jointed and fixed strictly in accordance with the manufacturer's instructions			
	All pipe diameters are nominal external			
	<u>"Polylink" polypropylene pipes:</u>			
	Polypropylene pipes 63mm diameter and over shall be class 12 pipes jointed with cast iron "Supraclamp" running joints			
	Fusion welded bends, once or twice mitred as necessary, and tees shall be factory manufactured			
	Fusion welded bends and tees shall include jointing to pipes with PVC rubber ring double Z joint couplers			
	Branch tees shall include flanged and bolted joints to "Polycop" branch pipes in addition and for brass compression male iron to copper straight couplers			
	Reducers shall include jointing to pipes with PVC rubber ring double Z joint couplers and reducers shall be of sufficient overall length to accommodate same			
	All pipes shall be jointed and fixed strictly in accordance with the manufacturer's instructions			
	All pipe diameters are nominal external			
	<u>Concrete pipes:</u>			
	Pipes shall be jointed with ogee joints with rubber collars or socket and spigot joints with rubber rings			
	Carried Forward		R	
	Bill No. 15 Plumbing and Drainage (Provisional) Moletlane Police Station			

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MS
5m

ITEM NO	DESCRIPTION	QUANTITY	RATE	AMOUNT
	Brought Forward		R	
	<p><u>Vitrified clay pipes:</u></p> <p>Pipes shall rest on solid ground and, where necessary, pockets of sufficient size shall be cut around joints to enable the jointing to be properly performed or, alternatively, pipes shall be bedded full length on and including unreinforced concrete laid in a semi-dry state immediately before pipes are laid</p> <p>Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings</p> <p><u>uPVC pipes and fittings:</u></p> <p>Soil, waste and vent pipes and fittings shall be solvent weld jointed</p> <p><u>uPVC pressure pipes and fittings:</u></p> <p>Pipes for water supply shall be of the class stated</p> <p>Pipes of 40mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings</p> <p>Pipes of 50mm diameter and greater shall have sockets and spigots with push in type integral rubber ring joints. Bends shall be uPVC and all other fittings shall be cast iron, all with similar push-in type joints</p> <p><u>Copper pipes:</u></p> <p>Pipes shall be hard drawn and half-hard pipes of the class stated. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half-hard), class 2 (half-hard) and class 3 (heavy walled half-hard) pipes shall only be bent with benders with inner and outer formers. Fittings to copper waste, vent and anti-syphon pipes, capillary solder fittings and compression fittings shall be "Cobra Watertech" type. Capillary solder fittings shall comply with ISO 2016. Only compression fittings shall be used in walls or in ground</p>			
	Carried Forward		R	
	<p>Bill No. 15</p> <p>Plumbing and Drainage (Provisional)</p> <p>Moletlane Police Station</p>			

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MS

ITEM NO	DESCRIPTION	QUANTITY	RATE	AMOUNT
	Brought Forward		R	
	<u>Fixing of pipes</u>			
	Unless specifically otherwise stated, descriptions of pipes shall be deemed to include fixing to walls etc, casting in, building in or suspending not exceeding 1m below suspension level			
	<u>Lead pipes and fittings</u>			
	All soldered joints shall be wiped and brass unions shall be used for jointing lead to steel			
	<u>Reducing fittings</u>			
	Where fittings have reducing ends or branches they are described as "reducing". In the case of pipes with diameters not exceeding 60mm only the largest end or branch size is given. Should the contractor wish to use other fittings and bushes or reducers he may do so on the understanding that no claim in this regard will be entertained. In the case of pipes with diameters exceeding 60mm all sizes are given and no claim for extra bushes, reducers, etc will be entertained			
	<u>Wire gratings</u>			
	Descriptions of gutter outlets etc shall be deemed to include wire balloon gratings			
	<u>Septic tanks</u>			
	Descriptions of septic tanks shall be deemed to include excavation, bedding and jointing, concrete base slabs, jointing to drains and backfilling, compaction, etc all in accordance with the manufacturer's instructions			
	<u>Exposed concrete surfaces</u>			
	Exposed surfaces of concrete stormwater channels, cover slabs, inspection eye marker slabs, gulley tops, cleaning eye tops, catchpits, inspection chambers, etc shall be finished smooth with plaster			
	Carried Forward		R	
	Bill No. 15 Plumbing and Drainage (Provisional) Moletlane Police Station			

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MS
SM

ITEM NO	DESCRIPTION	QUANTITY	RATE	AMOUNT
	Brought Forward		R	
	<p><u>Excavations</u></p> <p>No claim for rock excavation will be entertained unless the contractor has timeously notified the quantity surveyor thereof prior to backfilling</p> <p>"Soft rock" and "hard rock" shall be as defined in "Earthworks"</p> <p><u>Laying, backfilling, bedding, etc. of pipes</u></p> <p>Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' instructions</p> <p>Where no manufacturers' instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following: SABS 1200 L : Medium-pressure pipelines LD : Sewers LE : Stormwater drainage Pipe trenches etc shall be backfilled in accordance with clauses 3, 5.5, 5.6, 5.7 and 7 of SABS 1200 DB : Earthworks (Pipe trenches) Pipes shall be bedded in accordance with clauses 3.1 to 3.4.1, 5.1 to 5.3 and 7 of SABS 1200 LB : Bedding (Pipes). Unless otherwise described bedding of rigid pipes shall be class B bedding</p> <p><u>Flush pans</u></p> <p>Flush pans shall have straight or side outlets and "P" or "S" traps as necessary</p> <p><u>Stainless steelbasins, sinks, wash troughs, urinals, etc.</u></p> <p>Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable</p> <p><u>Waste unions</u></p> <p>Descriptions of waste unions shall be deemed to include rubber or vulcanite plugs and chains fixed to fittings</p> <p><u>Steel sectional water tanks</u></p> <p>Tanks shall comply with SABS CKS 114</p>			
	Carried Forward		R	
	<p>Bill No. 15</p> <p>Plumbing and Drainage (Provisional)</p> <p>Moletlane Police Station</p>			

184
MS
5m

ITEM NO	DESCRIPTION	QUANTITY	RATE	AMOUNT
	Brought Forward		R	
	<u>"Densyl" petrolatum anti-corrosion tape as manufactured by Denso SA (Pty) Ltd.</u>			
	Pipes to be taped shall be coated with the appropriate primer and the tape shall be applied with minimum 15mm lap per spiral unless otherwise described			
	Couplings and fittings to pipes shall be taped in strict accordance with the manufacturer's instructions including all mastic, tape, "Layflat" sheeting, securing of same, etc			
	<u>CPAP WORK GROUP</u>			
	Unless otherwise stated, all items in this bill will be Work Group 148			
	<u>RAINWATER DISPOSAL</u>			
	<u>0,8mm Galvanised sheet steel gutters and rainwater pipes with chromadek paint system finish of approved standard colour</u>			
2/15/338	127 x 140mm Box gutters pre-painted, complete with snow straps	m	670	
2/15/339	Extra over 127 x 140mm eaves gutter for stopped end	No	65	
2/15/340	Extra over 127 x 140mm eaves gutter for angle	No	60	
2/15/341	Extra over for outlet and welded steel plate to suit chain downpipe	No	60	
2/15/342	100 mm Diameter rainwater downpipe fixed to walls with and including aluminium alloy clip-spike holder bats at 1200 mm centres.	m	241	
2/15/343	Extra over 100mm rainwater pipe for bend	No	60	
2/15/344	Extra over 100mm rainwater pipe for shoe	No	60	
2/15/345	75mm Diameter fullbore outlet	No	17	
2/15/346	210mm Diameter vertical roof outlet with centre bolt	No	17	
	Carried Forward		R	
	Bill No. 15 Plumbing and Drainage (Provisional) Moletlane Police Station			

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MS

ITEM NO	DESCRIPTION	QUANTITY	RATE	AMOUNT
	Brought Forward		R	
	<u>PIPEWORK, ETC IN WALLS, COLUMNS, SOFFITS, ETC</u>			
	<u>Pipes, pipe fittings, etc</u>			
	<u>Soil, waste & vent uPVC pipes</u>			
2/15/347	40mm Pipes to walls, columns, soffits, etc	m 47		
2/15/348	50mm Pipes to walls, columns, soffits, etc	m 137		
2/15/349	110mm Pipes to walls, columns, soffits, etc	m 158		
	<u>Extra over uPVC pipes for fittings</u>			
2/15/350	40mm Bend	No 20		
2/15/351	40mm Access Bend	No 10		
2/15/352	40mm Junction	No 10		
2/15/353	50mm Bend	No 56		
2/15/354	50mm Access bend	No 28		
2/15/355	50mm Junction	No 28		
2/15/356	50mm Access junction	No 20		
2/15/357	110mm Bend	No 60		
2/15/358	110mm Access bend	No 30		
2/15/359	110mm Junction	No 30		
2/15/360	110mm Access junction	No 15		
2/15/361	110mm Pan connector	No 21		
2/15/362	110mm Bent pan connector	No 5		
2/15/363	110 x 50mm Reducing junction	No 24		
2/15/364	110 x Comm access reducing junction	No 14		
	Carried Forward		R	
	Bill No. 15 Plumbing and Drainage (Provisional) Moletlane Police Station			

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MS 5m

ITEM NO	DESCRIPTION	QUANTITY	RATE	AMOUNT
	Brought Forward		R	
2/15/365	110mm Air vent cowl	No 18		
2/15/366	50mm "GI Two way" vent valve	No 14		
2/15/367	110mm "GI Two way" vent valve	No 14		
2/15/368	Testing the whole of the plumbing and sanitary plumbing system, etc including fittings	Item		
	<u>Encasing</u>			
	<u>Concrete encasing to pipes</u>			
2/15/369	Class 25/19 concrete encasing to shower and drinking fountain water supply pipes	m 10		
	<u>Inspection chambers, catch pits, etc</u>			
	<u>Septic tank</u>			
2/15/370	Excavation in earth not exceeding 2m deep for pipe trenches (method A)	m³ 279		
2/15/371	Backfilling to pipe trenches compacted to 93% Mod AASHTO density	m³ 251		
2/15/372	Selected granular filling in bedding under and filling around pipes	m³ 40		
2/15/373	19mm Crushed stone bedding under pipes	m³ 75		
	<u>Concrete components</u>			
	<u>Class 25/19 concrete</u>			
2/15/374	Anchor blocks	m³ 4		
	<u>Rough Formwork (Degree of Accuracy II)</u>			
	<u>Rough formwork to sides</u>			
2/15/375	Anchor blocks	m² 19		
	Carried Forward		R	
	Bill No. 15 Plumbing and Drainage (Provisional) Moletlane Police Station			

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MS
5m

ITEM NO	DESCRIPTION	QUANTITY	RATE	AMOUNT
	Brought Forward		R	
	<u>Reinforcement</u>			
	<u>High tensile steel reinforcement to structural concrete work</u>			
2/15/376	12mm Diameter bars	t 2.90		
	<u>Manholes</u>			
2/15/377	1000mm Pre-cast manhole base sections, space rings, space slabs, lid, reducer slabs complete with type 4A cover & frame for depth over and up to 1.0m to 1.5m in accordance to DWG NKP (p) 425_STD01	No 21		
	<u>Testing</u>			
2/15/378	Testing water pipe system	Item		
	<u>Medium pressure pipelines</u>			
2/15/379	160mm uPVC solid wall class 34 sewer pipe	m 330		
	<u>Connections</u>			
	<u>Building connections, including additional excavation, backfilling, bedding, etc. All connection pipes to be 110mm class 34 uPVC</u>			
2/15/380	Type one connection 3-4m long	No 4		
	<u>SANITARY FITTINGS</u>			
	<u>Sanitary fittings, etc</u>			
2/15/381	White vitreous china WC close coupled suite complete with lid, fitments, top dual flush, and including approved toilet seat	No 13		
2/15/382	White vitreous china WC semi-close coupled suite complete with lid, fitments and purpose made side flush lever, and including purpose made thermoset seat and cover plate	No 1		
	Carried Forward		R	
	Bill No. 15 Plumbing and Drainage (Provisional) Moletlane Police Station			

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MS
SF

ITEM NO	DESCRIPTION	QUANTITY	RATE	AMOUNT
	Brought Forward		R	
2/15/383	Vandal proof wall and floor mounted shrouded stainless steel WC pan overall size 550 x 360 x 410mm high, flanges bent inwards, 250mm in/outlets, 20mm brushed chromium econo-flush front access junior concealed toilet flush master with intergral shut-off valve, box stainless steel faceplate and chromium plated push button assembly (including flush pipes, elbow and pan connector)	No 4		
2/15/384	White vitreous china wall hung urinal 385 x 380 x 600mm high, installed complete with top inlet, chrome plated domical grating and c.p. spreader, approved 4.5 litre automatic symphonic cistern, flush pipe and fittings	No 3		
2/15/385	Wash hand basin with pedestal and one taphole for an approved mixer unit, waste, overflow and chainstay hole through the centre semi-punched taphole	No 16		
2/15/386	Hospital basin, size 585 x 435mm with two tapholes for an approved mixer unit, waste, overflow and chainstay hole through the centre semi-punched tapholes	No 1		
2/15/387	Wall mounted vitreous china basin, size 510 x 400mm semi rectangular medical basin, with 32mm chromium plated overflow tube and 32mm waste union, c.p. flange, shank, slotted and back nut, plug, chain, stay and two 8mm bolts	No 1		
2/15/388	Vandal proof wash hand basin overall size 340 x 350 x 125mm, fully welded and polished to a 180 grit No.4 satin finish, including 15mm push button tap, with 38mm c.p. brass waste outlet, suitable for prison cells, with recessed back and built into wall with stainless steel straps	No 1		
2/15/389	Vandal proof stainless steel recessed type drinking fountain wash hand basin with 20mm brushed chromium econo-flush front access junior concealed flushmaster with intergral shut-off valve, box stainless steel faceplate and chromium plated pushbutton assembly (including flushpipes and elbow)	No 4		
2/15/390	1700 x 745mm Enamelled steel bath with waste outlet, overflow grating with coupling and pair of handles, bedded in position	No 3		
	Carried Forward		R	
	Bill No. 15 Plumbing and Drainage (Provisional) Moletlane Police Station			

189
MS
5m

ITEM NO	DESCRIPTION	QUANTITY	RATE	AMOUNT
	Brought Forward		R	
2/15/391	900 x 900 x 140mm Porcelain enamelled steel shower tray bedded in position with anti-slip floor and corner waste outlet fittings and c.p. shower cubicle	No 6		
2/15/392	1200 x 650mm Grade 304 (18/10) s/s single center bowl catering sink with high integral splash-back to the rear and 50 x 10mm turndown with a beaded edge on the remaining sides, the underside sprayed with vermin proof bitumastic sound deadening and supported with a 30 x 30 x 3mm framework and galvanized m/s backing sheet fitted onto 38mm diameter s/s detachable legs with adjustable flanged foot pieces bowl size, 500 x 500 x 230mm deep	No 1		
2/15/393	380mm Diameter kitchen system grade 304 (18/10) 1.2mm thick stainless steel round wash hand basin, including 38mm waste with overflow	No 1		
2/15/394	600 x 500mm Kitchen system grade 304 (18/10) stainless steel drip sink, including 25mm high upturn at back and hinged bucket grid set on pair of pressed stainless steel brackets, each bolted to wall with two M8 expansion bolts	No 1		
2/15/395	Pre-cast concrete double wash-trough, complete with all necessary pipework	No 1		
	<u>Taps, valves, etc</u>			
2/15/396	15mm Vandal proof brushed chromium plated shower head with self cleaning nozzle all to be built according to SAPS Project 5-Star Specifications 2012 drawing no. POL2012/S3	No 3		
2/15/397	Shower metering valve with vandal resistant sleeve and no hold feature and including 50mm rough brass screwed male shower waste, 75mm diameter chrome plated shower grating, connection and approved 40mm rough brass shallow seal bath P-trap with FI outlet and two cleaning eyes	No 3		
2/15/398	15mm Single level basin mixer with cast fixed spout, plug, chain, stay, basin waste, mounted kit and angle valves	No 16		
	Carried Forward		R	
	Bill No. 15 Plumbing and Drainage (Provisional) Moletlane Police Station			

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MS
5m

ITEM NO	DESCRIPTION	QUANTITY	RATE	AMOUNT
	Brought Forward		R	
2/15/399	15mm Single level sink mixer with overarm swivel outlet, plug, chain, stay, waste, mounted kit and flexible connection tubes	No 3		
2/15/400	15mm Chromium plated elbow action pillar-type mixer with "swan neck" swivel spout outlet, plug, chain, stay, basin waste, mounted kit and angle valves	No 1		
2/15/401	Shower set comprising shower mixer, overhead shower arm and concorde	No 6		
	<u>Waste union, traps, etc</u>			
2/15/402	40mm rough brass shallow seal shower P-trap with FI outlet and chromium plated grating	No 3		
2/15/403	40mm chromium plated deep seal bottle trap with outlet for 40mm PVC pipe	No 17		
2/15/404	40mm chromium plated heavy pattern slotted sink waste union	No 2		
2/15/405	Bath waste with plug	No 3		
	<u>TANKS</u>			
	<u>Steel tank</u>			
2/15/406	Supply pressed steel tank 200kilolitre capacity, with diameter of 8200mm and 4200mm high	No 1		
2/15/407	Galvanised cat ladder, platform size 2000mm x 1200mm and access hatch as per manufacturers specifications	No 2		
2/15/408	40mm Balem level control valve	No 2		
2/15/409	100mm Standard outlet complete with anti-vortex	No 2		
2/15/410	100mm Galvanised steel pipework (3mm wall thickness)	m 24		
2/15/411	200mm galvanised 90° bend	No 8		
2/15/412	80mm Secure outlet and valve, floor mounted, internal flanged and external threaded	No 1		
	Carried Forward		R	
	Bill No. 15 Plumbing and Drainage (Provisional) Moletlane Police Station			

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MS
G.M

ITEM NO	DESCRIPTION	QUANTITY	RATE	AMOUNT
	Brought Forward		R	
2/15/413	100mm Threaded ball valve	No 4		
2/15/414	Water level indicator - mechanical full range	No 1		
2/15/415	76mm Static ventilator	No 1		
2/15/416	Installation, testing and commissioning of tank assembly	No 1		
Carried Forward to Summary of Section No. 2				R
Bill No. 15 Plumbing and Drainage (Provisional) Moletlane Police Station				

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MS
SM

ITEM NO	DESCRIPTION	QUANTITY	RATE	AMOUNT
	<u>SECTION NO. 2</u>			
	<u>BILL NO. 17</u>			
	<u>PAINTWORK</u>			
	<u>PREAMBLES FOR TRADES</u>			
	The General Preambles for Trades 2017 published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said General Preambles will be entertained			
	Supplementary preambles and/or specifications are incorporated in these bills of quantities to satisfy the requirements of this project. Such supplementary preambles and/or specifications shall take precedence over the provisions of the General Preambles			
	The contractor's prices for all items throughout these bills of quantities shall take account of and include where applicable for all of the obligations, requirements and specifications given in the General Preambles and in any supplementary preambles and/or specifications			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>SAPS - Project 5-Star Specifications 2012</u>			
	Where applicable the South African Police Service (SAPS) Project 5-Star Specifications 2012 for police cells should be consulted for more information. The contractor will be responsible and liable for any unapproved deviations from the specifications.			
	<u>CPAP WORK GROUP</u>			
	Unless otherwise stated, all items in this bill will be Work Group 152			
	Carried Forward		R	
	Bill No. 17 Paintwork Moletlane Police Station			

195

MS
5th

ITEM NO	DESCRIPTION	QUANTITY	RATE	AMOUNT
	Brought Forward		R	
	<u>PAINTWORK</u>			
	<u>On internal floated plaster surfaces</u>			
	<u>One coat alkali resistant primer, one coat alkyd based universal undercoat and two coats superior quality universal enamel paint</u>			
2/17/418	Walls	m ² 3,288		
2/17/419	Ceilings and beams	m ² 246		
	<u>On plasterboard surfaces</u>			
	<u>One coat alkali resistant primer, one coat alkyd based universal undercoat and two coats superior quality universal enamel paint</u>			
2/17/420	Ceilings and cornices, including priming metal coverstrips and nailheads	m ² 1,098		
	<u>On fibre-cement board surfaces</u>			
	<u>One coat alkali resistant primer, one coat alkyd based universal undercoat and two coats superior quality universal enamel paint</u>			
2/17/421	Fascias and barge boards	m ² 171		
	<u>On metal surfaces</u>			
	<u>One coat alkali resistant primer, one coat alkyd based universal undercoat and two coats superior quality universal enamel paint</u>			
2/17/422	Door frames	m ² 183		
2/17/423	Steel grill gates	m ² 85		
	<u>On wood surfaces</u>			
	<u>One coat wood primer, one coat universal undercoat and two coats premium gloss enamel paint</u>			
2/17/424	Internal doors	m ² 344		
	Carried Forward		R	
	Bill No. 17 Paintwork Moletlane Police Station			

1916
MS
SM

ITEM NO	DESCRIPTION	Unit	QUANTITY	RATE	AMOUNT
	<u>SECTION NO. 2</u>				
	<u>BILL NO. 18</u>				
	<u>EXTERNAL WORK (PROVISIONAL)</u>				
	<u>PREAMBLES FOR TRADES</u>				
	The General Preambles for Trades 2017 published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said General Preambles will be entertained				
	Supplementary preambles and/or specifications are incorporated in these bills of quantities to satisfy the requirements of this project. Such supplementary preambles and/or specifications shall take precedence over the provisions of the General Preambles				
	The contractor's prices for all items throughout these bills of quantities shall take account of and include where applicable for all of the obligations, requirements and specifications given in the General Preambles and in any supplementary preambles and/or specifications				
	<u>SUPPLEMENTARY PREAMBLES</u>				
	<u>SAPS - Project 5-Star Specifications 2012</u>				
	Where applicable the South African Police Service (SAPS) Project 5-Star Specifications 2012 for police cells should be consulted for more information. The contractor will be responsible and liable for any unapproved deviations from the specifications.				
	<u>Nature of material to be excavated</u>				
	A soils investigation has been carried out on site by the engineer and the report is annexed to these bills of quantities. Descriptions of excavations shall be deemed to include all ground conditions classifiable as "earth" described in the above report and where conditions of a more difficult character are indicated these are separately measured				
	Carried Forward			R	
	Bill No. 18 External Work (Provisional) Moletlane Police Station				

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MS
SM

ITEM NO	DESCRIPTION	Unit	QUANTITY	RATE	AMOUNT
	Brought Forward			R	
	<p><u>Subterranean water</u></p> <p>No information regarding subterranean water is available. The Tenderer must acquaint himself of the presence and depth of subterranean water and allow therefor in his rates.</p> <p><u>Carting away of excavated material</u></p> <p>Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or alternatively, from stock piles situated on the building site.</p> <p><u>Prices</u></p> <p>Prices for all filling and carting away of surplus material must make allowance for bulking.</p> <p><u>Filling</u></p> <p>Notwithstanding the reference to prescribed multiple handling in clause 1 page 6 of the Standard System of Measuring Building Work, prices for filling and backfilling shall include for all selection and any multiple handling of material</p> <p><u>Testing</u></p> <p>Prices for filling are to include borrow pit identification, necessary soil classification and density tests, and all other tests in accordance with SABS 1200D</p> <p><u>LANDSCAPING</u></p> <p><u>Topsoil, compost, lime and fertilizer</u></p> <p><u>Garden soil supplied by the contractor (3 parts well sifted top soil, 1 part compost and 1 part milled pine bark), including spreading and levelling</u></p>				
2/18/426	In plant beds, grassed areas and holes for trees, shrubs, etc	m ³	294		
	Carried Forward			R	
	<p>Bill No. 18</p> <p>External Work (Provisional)</p> <p>Moletlane Police Station</p>				

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MS
5m

ITEM NO	DESCRIPTION	Unit	QUANTITY	RATE	AMOUNT
	Brought Forward			R	
	<u>Compost, lime and fertilizer</u>				
2/18/427	Compost in plant beds, holes for trees, shrubs, etc	m³	147		
	<u>Grassing, ground cover, etc</u>				
	<u>Grassing, ground cover, herbaceous plants, etc</u>				
2/18/428	Rotovate to a depth of 150mm and pulverise clods and rake smooth, mix in compost and supply and lay instant Kikuyu lawn, butt jointing the sods within the line, staggering the joints in successive lines, forming a continuous covering of lawn. All areas to be rolled immediately as each section is complete with a suitable roller and thoroughly watered with a sprinkler on a drag line hose.	m²	3,363		
	<u>Stone filling supplied by the contractor</u>				
2/18/429	19mm Crushed stones encasing to pipes	m³	10		
	<u>Maintenance</u>				
2/18/430	Allow for maintaining the full extent of the works for a period of 6 months	Item			
	<u>RETAINING STRUCTURES</u>				
	<u>Retaining structures formed of filled gabion boxes and mattresses, concrete, precast concrete, interlocking blocks, masonry, etc</u>				
	<u>Bulk excavations, excavations for trenches and excavations for holes not exceeding 2m deep</u>				
2/18/431	Trenches	m³	233		
2/18/432	Holes	m³	5		
	<u>Bulk excavations, excavations for trenches and excavations for holes exceeding 2m and not exceeding 4m deep</u>				
2/18/433	Trenches	m³	54		
	Carried Forward			R	
	Bill No. 18 External Work (Provisional) Moletlane Police Station				

200

MS
Lm

ITEM NO	DESCRIPTION	Unit	QUANTITY	RATE	AMOUNT
	Brought Forward			R	
	<u>Extra over bulk excavations, excavations for trenches and excavations for holes for rock material</u>				
2/18/434	Trenches, holes, etc	m³	43		
	<u>Filling</u>				
	<u>Earth filling obtained from the excavation (not compacted)</u>				
2/18/435	Backfilling to trenches, holes, etc	m³	100		
	<u>Filling of G7 material in accordance with SABS 1200 DM compacted to 98% Mod AASHTO density</u>				
2/18/436	Trenches, holes, etc	m³	20		
	<u>Filling of G7 material, stabilised with 2% cement to yield C4 in accordance with SABS 1200 DM compacted to 98% Mod AASHTO density</u>				
2/18/437	Trenches, holes, etc	m³	20		
	<u>Concrete components</u>				
	<u>Class 25/19 concrete</u>				
2/18/438	Concrete structures:- stormwater sump, septic tank, concrete junction boxes, channels, etc	m³	48		
	<u>Surface treatment</u>				
	<u>Finishing top surface of concrete smooth with power float</u>				
2/18/439	Concrete structures, etc	m²	126		
	<u>Smooth Formwork (Degree of Accuracy II)</u>				
	<u>Smooth formwork to sides, soffits, etc</u>				
2/18/440	Concrete structures, etc	m²	126		
	Carried Forward			R	
	Bill No. 18 External Work (Provisional) Moletlane Police Station				

201

MS
5th

ITEM NO	DESCRIPTION	Unit	QUANTITY	RATE	AMOUNT
	Brought Forward			R	
	<u>Reinforcement</u>				
	<u>Mild steel reinforcement to structural concrete work</u>				
2/18/441	8mm diameter bars	t	0.50		
	<u>High tensile steel reinforcement to structural concrete work</u>				
2/18/442	12mm diameter bars	t	1.00		
	<u>Fabric reinforcement</u>				
2/18/443	Type Ref. 395 fabric reinforcement in concrete surface beds, slabs, etc	m²	50		
2/18/444	Type Ref. 617 fabric reinforcement in concrete surface beds, slabs, etc	m²	126		
	<u>Galvanized gabion boxes, etc</u>				
2/18/445	Galvanized gabion mattresses, size 6000 x 2000 x 500mm high, using 2.7mm diameter wire and 80 x 100mm mesh	No	3		
2/18/446	Galvanized gabion boxes, size 1000 x 1000 x 500mm high, using 2.7mm diameter wire and 80 x 100mm mesh	No	36		
	<u>Pre-cast pipes, pipe fittings, etc</u>				
	<u>Concrete pipe culverts</u>				
2/18/447	300mm Class 100D pipe	m	220		
	<u>Extra over concrete pipes for connections</u>				
2/18/448	Type A junction box of up to 2500mm deep	No	4		
2/18/449	Kerb inlets	No	2		
2/18/450	Grid inlets	m²	12		
	<u>Testing</u>				
2/18/451	Testing the whole of the plumbing and sanitary plumbing system, etc including fittings		Item		
	Carried Forward			R	
	Bill No. 18 External Work (Provisional) Moletlane Police Station				

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MS
SM

ITEM NO	DESCRIPTION	Unit	QUANTITY	RATE	AMOUNT
	Brought Forward			R	
	<u>Filter fabric</u>				
2/18/452	Grade 2 synthetic-fibre filter fabric	m ²	1,200		
	<u>PAVING, PLATFORMS, ETC</u>				
	<u>Testing of material and filling</u>				
	Descriptions of earth filling, compaction, etc shall be deemed to include for all necessary testing required in accordance with the SABS 1200 series				
	<u>Precast concrete block road surfacing</u>				
	Paving shall be laid in accordance with SABS 1200 MJ, SANS 1058 and the Concrete Masonry Association's specifications				
	Paving shall be laid to herringbone segmented pattern on 20mm thick (thickness after final compaction) clean river sand (preparation of ground or filling elsewhere)				
	Clean sand shall be swept into joints between roadstones at completion				
	<u>Site clearance</u>				
2/18/453	Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush, etc and trees not exceeding 200mm girth	m ²	3,532		
2/18/454	Stripping average 200mm thick layer of top soil to be cart away (elsewhere)	m ²	3,532		
	<u>Open face excavation in earth over sloping site</u>				
2/18/455	Open face excavation to form platforms under parking areas etc and depositing excavated material over site, including haulage not exceeding 5km from perimeter of excavations	m ³	1,093		
	<u>Extra over bulk excavations, excavations for trenches and excavations for holes for rock material</u>				
2/18/456	Bulk including haulage not exceeding 5km from perimeter of excavations	m ³	110		
	Carried Forward			R	
	Bill No. 18 External Work (Provisional) Moletlane Police Station				

203
MS
5M

ITEM NO	DESCRIPTION	Unit	QUANTITY	RATE	AMOUNT
	Brought Forward			R	
	<u>Extra over all excavations for carting away</u>				
2/18/457	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m³	650		
	<u>Keeping excavations free of water</u>				
2/18/458	Keeping excavations free of water other than subterranean water		Item		
	<u>Compaction of surfaces</u>				
2/18/459	Compaction of ground surfaces under pavings etc, including scarifying for a depth of 200mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m²	3,532		
	<u>Layer work</u>				
	<u>Selected earth filling obtained from the excavations and/or prescribed stock piles on site and borrowpits</u>				
2/18/460	Subbase course under paving, etc, (chemically stabilised material) compacted to 95% Mod AASHTO density	m³	884		
2/18/461	Base course under paving, etc, (chemically stabilised material) compacted to 97% Mod AASHTO density	m³	735		
	<u>Tests</u>				
	<u>Tests to determine the degree of compaction or other properties of the ground or filling</u>				
2/18/462	"Modified AASHTO Density" test	No	25		
2/18/463	Unconfined compressive strength "UCS" test	No	25		
	<u>Concrete components</u>				
	<u>Class 25/19 concrete</u>				
2/18/464	Straight sections	m³	5		
	Carried Forward			R	
	Bill No. 18 External Work (Provisional) Moletlane Police Station				

2014
MS
5A

ITEM NO	DESCRIPTION	Unit	QUANTITY	RATE	AMOUNT
	Brought Forward			R	
	<u>Surface treatment</u>				
	<u>Finishing top surface of concrete smooth with power float</u>				
2/18/465	Concrete structures, etc	m ²	15		
	<u>Smooth Formwork (Degree of Accuracy II)</u>				
	<u>Smooth formwork to sides, soffits, etc</u>				
2/18/466	Concrete structures, etc	m ²	15		
	<u>Concrete pavers</u>				
	<u>80mm Thick 40MPa precast concrete Z-interlocking block paving of 200 x 100mm grey paving blocks in accordance with SANS 1058, laid to falls on and including 20mm thick sand layer with joints filled in with sand, compacted with a vibration compactor</u>				
2/18/467	Paving to driveways, parking areas, etc to falls, including necessary straight edge blocks	m ²	3,532		
2/18/468	Paving to sidewalks, etc to falls, including necessary straight edge blocks	m ²	163		
	<u>Concrete bases and kerbs</u>				
	<u>Kerbs</u>				
2/18/469	Concrete kerbing (figure 7) including earthworks, formwork, etc	m	130		
2/18/470	Concrete kerbing (figure 8b) including earthworks, formwork, etc	m	305		
	<u>Circular kerbing</u>				
2/18/471	Concrete kerbing (figure 7) including earthworks, formwork, etc	m	50		
2/18/472	Concrete kerbing (figure 8b) including earthworks, formwork, etc	m	150		
	Carried Forward			R	
	Bill No. 18 External Work (Provisional) Moletlane Police Station				

205
MS
(m)

ITEM NO	DESCRIPTION	Unit	QUANTITY	RATE	AMOUNT
	Brought Forward			R	
	<u>Sundries</u>				
	<u>Road signs</u>				
2/18/473	Standard "STOP" sign with 50mm diameter galvanised mild steel post bedded in and including unreinforced concrete base, including any necessary excavation, paint finish, etc	No	5		
2/18/474	Standard W104 sign with 50mm diameter galvanised mild steel post bedded in and including unreinforced concrete base, including any necessary excavation, paint finish, etc at T-Junction	No	1		
2/18/475	Standard W107 or W108 sign with 50mm diameter galvanised mild steel post bedded in and including unreinforced concrete base, including any necessary excavation, paint finish, etc to side road junction	No	2		
2/18/476	Standard W307 sign with 50mm diameter galvanised mild steel post bedded in and including unreinforced concrete base, including any necessary excavation, paint finish, etc for pedestrians	No	2		
	<u>Paintwork</u>				
	<u>Etching primer and two coats reflective road marking paint on concrete pavers</u>				
2/18/477	Line 100mm wide	m	900		
2/18/478	Line 300mm wide	m	50		
2/18/479	Line 500mm wide	m	100		
2/18/480	Numerals, letter or symbols	m ²	50		
	<u>Weedkillers, insecticides, etc</u>				
	<u>Treating surfaces with weedkillers, insecticides, etc</u>				
2/18/481	Under paving, etc,	m ²	3,532		
	Carried Forward			R	
	Bill No. 18 External Work (Provisional) Moletlane Police Station				

206
MS
5m

ITEM NO	DESCRIPTION	Unit	QUANTITY	RATE	AMOUNT
	Brought Forward			R	
	<u>DRAINAGE</u>				
	<u>Excavations</u>				
	<u>Bulk excavations, excavations for trenches and excavations for holes not exceeding 2m deep</u>				
2/18/482	Trenches	m³	485		
2/18/483	Holes	m³	15		
	<u>Bulk excavations, excavations for trenches and excavations for holes exceeding 2m and not exceeding 4m deep</u>				
2/18/484	Trenches	m³	2		
	<u>Extra over bulk excavations, excavations for trenches and excavations for holes</u>				
2/18/485	Trenches, holes, etc	m³	50		
	<u>Filling</u>				
	<u>Earth filling obtained from the excavation (not compacted)</u>				
2/18/486	Backfilling to trenches, holes, etc	m³	420		
	<u>Stone filling supplied by the contractor</u>				
2/18/487	19mm Crushed stones encasing to pipes	m³	240		
	<u>Pipes, pipe fittings, etc</u>				
	<u>Soil, waste & vent uPVC pipes</u>				
2/18/488	110mm Pipes to trenches, perforated	m	500		
2/18/489	110mm Pipes to trenches, unperforated	m	20		
2/18/490	160mm Class 34 heavy duty pipes to trenches, unperforated	m	350		
	Carried Forward			R	
	Bill No. 18 External Work (Provisional) Moletlane Police Station				

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MS
5m

ITEM NO	DESCRIPTION	Unit	QUANTITY	RATE	AMOUNT
	Brought Forward			R	
	<u>Extra over uPVC pipes for fittings</u>				
2/18/491	110mm Bend	No	12		
2/18/492	110mm Access bend	No	15		
	<u>Testing</u>				
2/18/493	Testing the whole of the plumbing and sanitary plumbing system, etc including fittings		Item		
	<u>Sundries</u>				
2/18/494	Polyethylene sheeting, 0.15mm thick for lining subsoil drainage system	m ²	120		
2/18/495	Cleaning eye for subsoil drainage system including caps	No	12		
	<u>WATER SUPPLIES</u>				
2/18/496	Excavation in earth not exceeding 2m deep for pipe trenches (method A)	m ³	290		
2/18/497	Backfilling to pipe trenches compacted to 93% Mod AASHTO density	m ³	261		
2/18/498	Selected granular filling in bedding under and filling around pipes	m ³	47		
2/18/499	19mm Crushed stone bedding under pipes	m ³	112		
	<u>Class 9 PVC-U pressure pipes with socketed joints</u>				
2/18/500	63mm Pipes laid in and including trenches not exceeding 1m deep	m	100		
2/18/501	75mm Pipes laid in and including trenches not exceeding 1m deep	m	500		
2/18/502	110mm Pipes laid in and including trenches not exceeding 1m deep	m	420		
	<u>Extra over Class 9 PVC-U pressure pipes for fittings with socketed joints</u>				
2/18/503	75mm Bend	No	12		
	Carried Forward			R	
	Bill No. 18 External Work (Provisional) Moletlane Police Station				

ITEM NO	DESCRIPTION	Unit	QUANTITY	RATE	AMOUNT
	Brought Forward			R	
2/18/504	110mm Bend	No	22		
	<u>Extra over Class 9 PVC-U pressure pipes for cast iron pressure fittings</u>				
2/18/505	75mm Equal tee	No	1		
2/18/506	75mm End caps	No	1		
2/18/507	110mm Equal tee	No	8		
2/18/508	75 x 50mm Reducer	No	2		
2/18/509	75mm Flanged adaptor	No	1		
	<u>Valves to waterworks pattern, Class 16 clockwise closing, non-rising spindle, with cap top, complying with SABS 664 and fitted with resilient seal seats</u>				
2/18/510	75mm Gate valves	No	3		
2/18/511	100mm Two-port booster with 65mm brass booster connectors and pressure gauge and 100mm T/16 inlet	No	1		
2/18/512	Right angel tamperproof hydrant with 100mm storz outlet and 100mm female BSP inlet	No	1		
2/18/513	Valve chamber according to detail on drawing: NKP(p)425-TWL01, including manhole covers	No	3		
	<u>Concrete components</u>				
	<u>Class 25/19 concrete</u>				
2/18/514	In foundations for water tank by a specialist	m³	10		
2/18/515	Anchor blocks	m³	5		
2/18/516	Stand connections	m³	1		
	<u>Rough Formwork (Degree of Accuracy II)</u>				
	<u>Rough formwork to sides</u>				
2/18/517	Anchor blocks	m²	23		
	Carried Forward			R	
	Bill No. 18 External Work (Provisional) Moletlane Police Station				

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MS
SM

ITEM NO	DESCRIPTION	Unit	QUANTITY	RATE	AMOUNT
	Brought Forward			R	
	<u>Reinforcement</u>				
	<u>High tensile steel reinforcement to structural concrete work</u>				
2/18/518	12mm Diameter bars	t	4.50		
	<u>Sundries</u>				
2/18/519	Domestic water metering unit including 20mm galvanized pipe extensions, elbows, bends, gate valves, etc	No	5		
	<u>Testing</u>				
2/18/520	Testing water pipe system		Item		
	<u>STORMWATER CHANNELS</u>				
	<u>Stormwater channels</u>				
	<u>Stormwater channels of concrete</u>				
2/18/521	Segmental channel formed therein and finished smooth on exposed surfaces including necessary excavation and formwork	m	75		
	<u>Angles, intersections, ends, etc</u>				
2/18/522	Extra over for angles, intersections, ends, etc	m	10		
	<u>FENCING</u>				
	<u>Fencing, posts, gates, etc</u>				
	<u>Bulk excavations, excavations for trenches and excavations for holes not exceeding 2m deep</u>				
2/18/523	Trenches	m³	79		
2/18/524	Holes	m³	16		
	Carried Forward			R	
	Bill No. 18 External Work (Provisional) Moletlane Police Station				

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MS