

# BOQ - UNPRICED

JAN KEMPDORP CHC

FENCING

ERECTION OF HIGH SECURITY CLEARVU FENCE

ITEM	SPECIFICATION	UNIT	QTY	Unit Price	Amount
	<b>NB Material must be SABS approved.</b>				
	<b><u>PRELIMINARY AND GENERAL</u></b>				
	Contractual Requirements including Site Establishment and removal of site establishment.	no	1		
	Compliance to Occupational Health and Safety Act and Regulations  The contractors attention is drawn to the notes to tenderers "Occupational Health and Safety Act" with the full contents thereof as well as the Government Gazette No. 25207 (18 July 2003) and O H & S. The total cost of the Health and Safety items must be priced under this clause as no additional claims will be entertained.	no	1		
	<b>SUBTOTAL</b>				
	<b><u>1. REMOVAL OF EXISTING FENCE</u></b>				
	Carefully take and remove the existing 1500mm (h) mesh fence from all the posts and stays. Carefully pack and store on site for the re-use by the Department.	m	1020		
	Carefully remove the existing 1500mm (h) mesh fence with concrete base footing from all the posts and stays. Carefully pack and store on site for the re-use by the Department.	m	90		
	Cut down to at least 100mm below the natural ground level, all the posts and stay stumps of the existing old fence. Where the new boundary posts or stays must be erected, the existing concrete footings are to be completely removed. (All posts to be stored on site for the re-use by the Department).	m2	70		
	<b>SUBTOTAL</b>				
	<b><u>2. DEMOLITIONS</u></b>				
	Demolish and remove 500mm x 140mm brick wall, including all rubble, debris, temporary propping, making good adjacent surfaces, and carting away all materials.	m2	60		
	<b>SUBTOTAL</b>				
	<b><u>3. PREPARATION AND CLEANING OF SITE</u></b>				
	The line of the fence shall be thoroughly cleaned for a distance of 1 meter on either side of the centre line of the fence; any irregularities in the ground must be removed in order that the fence may follow the general contour of the ground. Clearing shall include the removal of all trees, shrubs and rubble, which may interfere with the erection of the fence. Slumps within the cleared area must be removed. The bottom of the fence shall be an even distance of 50mm above the ground level. All cleared rubble shall be dumped in municipal refuse dumps.	m2	2040		
	Felling of tree exceeding 200mm not exceeding 500mm girth. Tree should be cut down 200mm above natural ground level and poisoning tree stump. Cart away debris to nearest municipal dumping site.	no	5		
	<b>SUBTOTAL</b>				
	<b><u>4. EXCAVATIONS</u></b>				
	Excavate 400mm x 400mm x 600mm deep holes in ordinary earth for posts.	m <sup>3</sup>	42		
	Excavate 300mm wide x 300mm deep x 12m long in ordinary earth trench for six sliding gate track.	m <sup>3</sup>	18		
	<b>SUBTOTAL</b>				

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	<b><u>5. EXTRA OVER EXCAVATIONS</u></b>				
	Soft Rock	m <sup>3</sup>	5		
	Hard Rock	m <sup>3</sup>	8		
	<b>SUBTOTAL</b>				
	<b><u>SECURITY FENCING – 1020 METERS</u></b>				
	NOTE:				
	Tenderers are advised to study the “Specification of Materials and Methods to be used” (00G-001E) before pricing this bill. All excavations are measured as being in “earth” and/or filling compacted to 93% modified AASHTO density. Descriptions of excavations shall be deemed to include for setting aside surplus excavated material in soil heaps for use as filling or for depositing within 150m of the perimeter of the excavations and spreading and roughly leveling as directed as well as for increase in bulk and multiple handling of excavated material caused by the Contractor’s method of operation. Description 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 and for bulking.				
	<b><u>6.CONCRETE</u></b>				
	<b><u>Mass concrete with a coarse aggregate of 19mm and a minimum compressive strength of 15MPa at 28 days.</u></b>				
	In base for intermediate post, size 500 x 500 x 500mm, with chamfered top surface projecting 50mm above surrounding ground level, including any necessary excavation, formwork, etc.	m3	490,26		
	<b><u>Mass concrete with a coarse aggregate of 19mm and a minimum strength of 30MPa at 28 days.</u></b>				
	In plinth under gate, size 100mm wide 300mm deep, with wood floated top surface at ground level, including any necessary excavation, formwork, etc.	m	60		
	<b>SUBTOTAL</b>				
	<b><u>7. HIGH SECURITY FENCING AND GATES</u></b>				
	High Security Fencing and components for high security fencing to comply with SABS latest Standards				
	The whole of the work is to be carried out by workers skilled in this class of work and the materials and finishes are to be to the approval of the Representative/Agent.				
	High Security Fencing over sloping terrain shall be stepped to suit terrain, including the use of increased lengths of posts as necessary, excavations, etc.				
	All fixing bolts are to be electrogalvanized and passivated.				
	Posts shall be set plum, and follow the indicated alignment. All posts shall be set to the depth indicated on the design documents. Concrete shall be thoroughly consolidated around each post, free of voids, and finished with a domed shaped surface, with base of dome at grade elevation. Concrete shall be allowed to cure prior to installing any additional components to the posts.				
	Concrete footings shall be carried down to at least the depth indicated on the documents and shall not be smaller than the dimension shown. Where a rock layer is encountered with the required depth to which the post is to be erected, a hole of a diameter slightly larger than the largest dimension of the post may be drilled into the rock and the post grouted in. Then regular concrete footing shall be placed between top of the rock and top the footing elevations shown on the documents. Post shall be approximately centered in their footings. All concrete shall be placed promptly and consolidated by tamping or other approved methods.				

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	Where the ground is firm enough to permit excavation of the post hole to neat lines, the concrete may be placed without forms by completely filling the hole. Curing may be achieved by covering the concrete with not less than four inches of loose moist material immediately after placing concrete, or by using a curing compound. All excess material from footings, including loose material used for curing, shall be disposed of as directed by the Engineer.				
	Where the ground cannot be satisfactorily excavated to neat lines, forms shall be used to place the concrete for footings. Under these conditions the earth and forms coming in contact with concrete shall be moistened and all ponded water shall be removed from the hole prior to placing concrete. When forms are removed, the footing shall be backfilled with moistened material, and thoroughly tamped. The top of the concrete shall then be covered with not less than 100mm (4 inch) of loose moistened material or use curing compound if the 7 days cure is not completed. All excess materials from footings, including loose materials used for curing, shall be disposed off as directed.				
	Gates:				
	Gates shall be installed at the locations shown. Hinged gates shall be mounted to swing as indicated. Latches, stops, and keepers shall be installed as required. Slide gates shall be installed as recommended by the manufacturer.				
	Adjusting:				
	Gate: Adjust the gate to operate smoothly, easily and quietly, free from binding, warp, excessive deflection, distortion, non alignment, misplacement, disruption, or malfunction and secured without forcing or binding. Lubricate hardware and other moving parts.				
	<b><u>High Security Fencing (3m)</u></b>				
	Panel shall be of 3,305m width and 3m in height. Panel aperture size (centres) shall be 12.7mm x 76.2mm. The panel shall be reinforced with 4 x 50mm deep 'V' formation horizontal recessed bands (rigidity) Panel shall have 2 x 70° flanges along sides (internal fixtures - all fixtures shall be on the inside of fence line). Panel shall have 1 x 30° flanges along toe and 1 x 90° flanges top (integrated rigid angle). Panel post shall have a flush panel post finish. Panel shall be affixed to post over 48 line wires using 8 x Single bolt comb clamps and 8 x Double bolt comb clamps using Anti vandal bolts. Panel and fixtures shall be Galvanized and then coated with a Black polymeric Coating.	no	395		
	Post shall be 3,8m long Taper Locking Post. Post width shall be 85mm - tapering to 45mm with a depth of 85mm. Post shall include 'Locking Recess Mechanism' to secure panel edge. Post finish shall be Galvanized, and then coated with a Black polymeric Coating.	no	395		
	Post shall be 3,8m long 76mm x 76mm x 2,mm thick square tubing post. Post finish shall be Galvanized, and then coated with a Black polymeric Coating.	no	15		
	Supply and install a modular rail as extension to fence height according to manufacturer's design, shall be Hot Dipped Galvanized and then coated with a polymeric Coating black in colour.	no	395		
	A 100mm x 1,65m long toughened steel Castle spike shall be affixed to panel edge, internally at 150mm intervals using Anti vandal bolts. Spike finish shall be Hot Dipped Galvanized, and then coated with a polymeric Coating black in colour.	no	850		
	<b><u>Remote controlled Galvanised mild steel gates with motor</u></b>				
	The 5m (L) x 3m (H) sliding security gate is to be constructed of 76X76X2.5mm thick hot dipped galvanized gate framework all round with extensions of 500mm high on top of gate to install a galvanized flat wrap. Fill the gate framing with panel apertures 76.2mm x 12.7mm wire diameter of 3mm. The panel reinforced with 4 x 50mm deep 'V' formation horizontal recessed bands (rigidity). Internal fixtures to be anti-vandal proof using galvanized bolts with shearnuts.	no	2		
	Supply and install new 1,2m wide x 3m high heavy duty sliding pedestrian security gate. Complete with 3mm horizontal x 4mm vertical allu galvanised wires and polymeric 6000 "Black" coating, panel aperture centres at 76,2mm x 12,7mm incorporated into gate frame with steel track, locking gate post, guidepost with cross brace, including vertical plate restricting the lifting of the gate from the rail with heavy duty pad lockable facility and cover restricting lock tampering as per suppliers specification. A 100mm high toughened steel Castle spike shall be affixed to gate.	no	1		
	Supply and install heavy-duty manual boom gate with 4.5m aluminum arm. Includes counterweight for easy lifting, main post, and lockable receiver post (padlockable).	no	1		
	<b>SUBTOTAL</b>				

ITEM	SPECIFICATION	UNIT	QTY	Unit Price	Amount
	<b>8. TRANSPORT</b>				
	Transport to site	item	1		
	<b>SUBTOTAL</b>				
	<b>9. RUBBLE REMOVAL</b>				
	Remove all rubble from site and leave in safe condition	item	1		
	<b>SUBTOTAL</b>				
	<b>END OF SPECIFICATIONS</b>				

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<b>SUMMARY</b>					
	PRELIMINARY AND GENERAL				
	REMOVAL OF EXISTING FENCE				
	PREPARATION AND CLEANING OF SITE				
	EXCAVATIONS				
	EXTRA OVER EXCAVATIONS				
	CONCRETE				
	HIGH SECURITY FENCE & GATES				
	TRANSPORT				
	RUBBLE REMOVAL				
	<b>SUB TOTAL</b>				
	15% VAT				
	<b>TOTAL TENDER PRICE</b>				
<b>TENDER PRICE IN WORDS</b>					
	SIGNATURE OF TENDERER				
	DATE				