PRESIDENT'S OFFICE

REGIONAL ADMNISTRATION AND LOCAL GOVERNMENT



BILL OF QUANTITIES FOR THE PROPOSED CONSTRUCTION OF THREE IN ONE SEMI DETACHED STAFF HOUSE URBAN TYPE

November, 2021

GENERAL SUMMARY

GENERAL DESCRIPTIONS	AMOUNT
BILL No 01 - PRELIMINARIES	
BILL No 02 - SPECIFICATIONS	
BILL No 03 - MEASURED WORKS {STAFF HOUSE -URBAN YPE}	
BILL No 04 - PRIME COSTS AND PROVISIONAL SUMS	
SUB-TOTAL	
INSURANCE CLAUSES:	
. Clause 13 - Contractor to maintain in joint names of the Employer and Contractor, Insurance Against Loss and Damages to the works by fire, earthquakes, etc.	
. Clause 54 - Performance Security	
SUB-TOTAL (1)	
ADD: 18% Value Added Tax (VAT)	
SUB-TOTAL (2)	
AMOUNT CARRIED TO FORM OF TENDER TShs.	

Signed by For and on behalf of

In the capacity of 2021

ITEM	DESCRIPTIONS OF WORKS	TSHS.
	DESCRIPTION OF SITE:	
Α.	The site is located District/Councils WITHIN TANZANIA COUNTRY	
В.	The Contractor shall provide and maintain any necessary temporary roads; sleeper tracks; and temporary cross over during the execution of the works; clear away the same at completion and reinstate and make good any work disturbed to the satisfaction of the Local Authority and the Employer.	
C.	The Contractor shall be deemed to have visited the site and satisfied himself as to:- i) The nature of the site	
	ii) The amount of bush; rubbish or debris to be cleared away before. commencement.	
	iii) The nature of proximity and size of adjoining building and property.	
	iv) The nature of existing communications by roads or otherwise.	
	v) The means of access to the site.	
	vi) The availability of land for the erection and positioning of all temporary structures; plant and materials necessary for the execution of the works.	
	vii) The source of adequate supplies of labour, plant and materials for the completion of the works.	
D.	If the Contractor wishes to execute trial holes before submitting his tender; he may do so in positions to be agreed with the Employer and at his sole expenses; including the reinstatement of the ground if so required by the Employer.	
E.	The whole of the site will be available to the Contractor immediately upon the issue of the order to commence.	
F.	Any sand; aggregate to or other building materials shall be the property of the Employer and shall not be used in the construction of the works without the written consent of the Employer.	
G.	The Contractor is to satisfy himself as to any difficulties that the site may present and to make all necessary enquiries to any point which in his opinion requires further elucidation as no claim for lack of information on any of the above will be entertained.	
	TO COLLECTION TSHS.	

ITEM	DESCRIPTIONS OF WORKS	TSHS.
A.	DESCRIPTION OF WORKS: The work within this contract comprises of: Substructure, Frames ,Walls,ramp,Stairs, Roof, Doors, Windows, Service Engineering, Finishings, Decorations and External Works on Construction of Two Bedroom Staff house three in one urban type	
В.	SINGULAR AND PLURAL Word importing the singular only also includes the plural.	
C.	LAW GOVERNING CONTRACT The contract shall be in all respect to be constructed and operated in accordance with the law of Tanzania.	
	METHOD OF MEASUREMENT:	
D	These Bills of Quantities have been prepared in accordance with the standard method of measurement of Building Works for East Africa first edition (metric) published by the architectural association of Kenya chapter of Quantity Surveyor Act; 1970; and applied equally to the measurement of proposed works and of variations by Quantity Surveyors.	
Е	Variation of 'Builder's Work' will be subject to the same amended rates of percentage of adjustment.	
	DEFINITIONS OF ABBREVIATIONS:	
F	The Contractor should take due notice of the under mentioned abbreviations:- mm - millimetres cm - centimetres M ³ - cubic meters M ² - square metres M - linear metres No - Number Kg - Kilograms P.C - Prime cost	
G	The Contractor shall allow for keeping all records appertaining to the work and shall keep on the site a daily diary recording weather conditions; temperature; visitors to the site, etc.	
Η	The Contractor is to supply to the Employer such information as he may be required in connection with the work; including statement showing the number of men employed in all trades daily; and delivery notes (stating the name of the project) for all materials delivered to the site.	
	TO COLLECTION TSHS.	

ITEM	DESCRIPTIONS OF WORKS	TSHS.
A.	EMPLOYER'S INSPECTION: No work shall be covered up until it is inspected and approved by the Employer.	
B.	The Employer may at any time before the end of defects liability period or during any extended time where any defect are being made good, instruct the Contractor to open up; pull down; test or expose any part of the works in order to satisfy himself as to the quality of materials or workmanship used. If in the opinion of the Employer such parts are not in strict accordance with the contract documents he may order the Contractor to remove all defective work, replace with approved materials and reinstate any such part of the works and any other disturbed at his own expenses and to the entire satisfaction of the Employer. If any such parts of the works are found to be in accordance with the contract documents the Contractor will be reimbursed with the General conditions of contract.	
C.	DISTURBANCE OR NUISANCE: The Contractor shall allow for taking all necessary precautions in the order and execution of the work so as to avoid causing disturbance or nuisance to the occupants of existing buildings and those adjacent to the works and for complying with the Employer's instructions in this respect. The Contractor shall be in tort for such nuisance and shednets.	
D.	TRESPASS, DAMAGE AND CARE OF WORKS: The Contractor shall prevent any trespass on the opinion adjoining property and he shall take all reasonable precautions during the progress of the contract to prevent any damage to the adjoining property or plant or private roadways and to prevent material; plant; rubbish and debris; etc. collecting on the adjoining property or roadways.	
E.	Should the Contractor wish to erect scaffolding or to make use of adjoining property; he shall obtain prior permission from the Employer and clear away at a completion of his work or when directed and make good any damage to his satisfaction. Except as provided for in the General conditions of contract; the Contractor; shall be held responsible for the care of works generally until their completion; including all works executed and materials deposited on the site by himself or his Sub-Contractors or supplier together with all risks arising from weather; carelessness of operatives; damages and he shall make good all such damage or loss at his own expense	
F.	The Contractor shall be responsible for the protection of any adjacent building; boundary walls; fences; services either overhead or underground and for the making good of or paying for all damage thereto; should such be caused in the course of building operations.	
G.	The Contractor shall allow for making good all damage to the road; kerbs; surface water channels; etc. occasioned by heavy traffic; delivery of materials and building operations generally to the entire satisfaction of the Employer and shall be responsible for observing any by law of Local Authority regarding keeping the road free from mud; filth dirt; etc, out of the execution of the works.	-
	TO COLLECTION TSHS.	

TO COLLECTION TSHS.

ITEM	DESCRIPTIONS OF WORKS	TSHS.
	PROTECTION FROM THE WEATHER:	
A.	The Contractor shall allow for covering up and protecting all new work from injury by weather or any other cause. Any damage; loss or expense caused by non- compliance with the clause shall be at sole risk of the contract.	
B.	TOOLS, PLANT AND SCAFFOLDING: Provide all necessary cranes, hoists, concrete mixer and other plant including ladder, staging, access gangways tackle, tarpaulins, tools, moulds templates and other requisites necessary for proper executing, adapting from time to time as may be necessary and maintain all plant and equipment during the course of the contract.	
C.	The Contractor shall allow for providing adapting from time to time as may be necessary and maintaining all scaffolding scaffold boards and temporary staging, etc, necessary for the execution of the works.	
D.	The Contractor is to provide everything necessary for the proper execution of the works according to the true intent and meaning of the drawings; etc. whether the same may or may not be particularly shown on the drawings; specifications provided that the same is reasonably to be inferred there from.	
	SITE ACCOMODATION:	
E.	The Contractor shall provide and maintain any necessary temporary office accommodation required by himself and his Sub-Contractors suitably equipped with desks; chairs; drawing boards; and electric lighting and telephone.	
F.	The Contractor shall provide and maintain for his workers latrine facilities washing and drinking water, first aid equipment's and shelters equipped with tables; benches and checking facilities all to the reasonable satisfaction of the workers and approved by the Employer and Health Authorities.	
G	The Contractor shall provide and maintain any temporary storage, shed or buildings which in his opinion are necessary for himself and his Sub-Contractors for the execution of the works.	
Н	WATER FOR THE WORKS The Contractor shall allow for all necessary clean fresh water for the works, including that required by Sub-Contractors and for any temporary plumbing metres and storage facilities and pay all charges in connection therewith and clear away on completion and make good works disturbed.	
J	The Contractor shall allow for providing and maintaining a temporary electricity supply for the works including that required by Sub-Contractor and for any meters and fittings to give artificial lighting and power necessary for the execution of the works and pay all charges, in connection and make good all works disturbed.	
	TO COLLECTION TSHS.	

ITEM	DESCRIPTIONS OF WORKS	TSHS.
A.	WATCHING AND LIGHTING:	
Λ.	The Contractor shall allow for providing and maintaining any barriesrs; hoalding; watching; lighting which must comply with the By-laws of requirements of the Local Authority and polycy regulations and the Contractor must give all requiste policies to those authorities and provide everything necessary to protect the general public workmen; plant; materials and the whole of the works	
В.	No advertisement will be permitted without the written authority of the Employer.	
C.	SIGN BOARD: The Contractor shall provide and erect a large sized sign board on the site showing the title of the contract, the name and address of the Employer; consultant, nominated suppliers and Sub-Contractor and such information as may be required by the Employer who shall provide the sign layout and colours of the Board. The board shall be repainted when necessary and removed when no longer required.	
D.	PROTECTION: The Contractor is required to protect works section until completion.	
E.	TESTING: Allow for testing all materials as will be identified by Project Manager like concrete cube test, reinforcements etc, submit sample and allow for installations required to be tested and provide everything necessary for this purpose and leave the whole in perfect working order to the satisfaction of the Employer and Local Authority.	
F.	REMOVING RUBBISH AND CLEANING: The Contractor shall make good all defects and injuries to the works, clean down external faces wash off stains to face work, clean off marks mortar and cement, clean windows inside and out, scrub floors, flush drains run and leave all parts of the works clean, free from rubbish and waste materials and perfect on completion.	
G.	The Contractor shall clean and cart away all rubbish as it accumulate and keep the works in orderly condition to the satisfaction of the Employer	
	TO COLLECTION	
	COLLECTION	
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	BILL No. 01- PRELIMINARIES CARRIED TO GENERAL SUMMARY	

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NR. 1 : SUBSTRUCTURE				
	EXCAVATION AND EARTHWORK				
A	Site clearance of small trees, shrubs and the like including grubbing up roots	184	m²		
	Excavating				
В	Surfaces to reduce levels average 150mm deep vegetable soil and remove from site	184	m²		
	Trenches in natural ground; to receive foundations; starting from reduced level				
С	Not exceeding 1.50 meters deep	71	m³		
	Pits; to receive foundations; starting from stripped level				
D.	Not exceeding 1.50 meters deep	1	m³		
E.	Extra over all kinds of excavations irrespective of depth for breaking up rock	1	m³		
F.	Backfilling; depositing and compacting in layers maximum 150mm thick impoted material around foundations	33	m³		
G.	Remove away from the site surplus excavated materials.	39	m³		
	Disposal of water				
H.	Keeping all excavation free from all water by pumping, bailing or other means including spring or running water		Item		
	Plunking and Strutting				
J.	Allow for provision and subsequent removal for planking and strutting to uphold and maintain all faces of excavations		ltem		
	To Collection				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Filling				
A	<u>Sand filling in making up levels; average 150 mm</u> thick	35	m³		
	Hardcore and the like				
В.	150mm thick stone hardcore bed; leveled compacted and sand blinded to receive damp proof ;membrane; measured separately.	150	m²		
	Soil Sterilization				
С	Chemical anti termite treatment around the building plinth	66	m		
D	Aldrin' solution applied at a rate of 7 litres per square metre	150	m²		
	Concrete works				
	Plain in-situ concrete; grade 15N/sq.mm nominal mix (1:3:6)				
E	100mm Bed	150	m²		
F	Ditto to ramp	1	m²		
G	Foundation footing	17	m³		
	Vibrated Reinforced in-situ concrete; grade 25 nominal mix (1:11/2:3)				
н	Plinth beam	8	m³		
	Reinforcement; bars; BS 4449:1969 hot rolled round high yield steel straight or bent				
J	12mm Diameter bars	472	kg		
К	8mm Diameter bars	196	kg		
	To Collection				

COUNCIL HOSPITALS

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Sawn Formwork to:				
A	Sawn to vertical sides of beams	78	m²		
В	Edges of slab over 75mm not exceeding 150mm Walling	66	m		
	Concrete block B.S 2028 type A; 5N per square millimetre; solid in cement sand mortar (1:4)				
С	230mm Thick wall	80	m²		
	Damp-proof Courses (DPC)				
D	230mm Wide	130	m		
	Damp-proof Membrane (DPM)				
E.	500Gauge polythene sheet laying on blinded hardcore with 150mm sides and end laps	150	m²		
	<u>Sundries</u>				
F.	12mm Cement and sand (1:3) external rendering to concrete block wall	33	m²		
G.	Prepare and apply two coats of black bituminous paint on rendered or concrete surfaces, externally	33	m²		
	To Collection				
	COLLECTION				
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	ELEMENT NO. 1 - SUBSTRUCTURE CARRIED TO SUMMARY				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 2 - FRAME				
	Concrete work				
	Vibrated Reinforced in-situ concrete; grade 25 nominal mix (1:11/2:3)				
A	Beams; horizontal or sloping not exceeding 15 degrees from horizontal	7	m³		
	Reinforcement; bars; BS 4449:1969 hot rolled round high yield steel straight or bent				
В	12mm Diameter bars	561	kg		
С	8mm Diameter bars	180	kg		
	Sawn formwork to.				
D	Horizontal sides and soffites of beams	80	m²		
	ELEMENT NO. 2 - FRAME CARRIED TO				
	<u>SUMMARY</u>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO4: WALLS				
	Block Work				
	Internal wall				
	Solid Concrete block B.S 2028 type A; 5MPa bedded and jointed in cement/sand mortar (1:4)				
А	150mm Wall	198	m²		
	External wall				
	Solid Concrete block B.S 2028 type A; 5MPa bedded and jointed in cement/sand mortar (1:4)				
В	150mm Wall	158	m²		
	Vibrated reinforced concrete grade 25 nominal mix (1:11/2:3)				
С	230x150mm Coping with wire mesh 2.5mm and all formwork	35	m		
	ELEMENT NO4: WALLS CARRIED TO SUMMARY				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO 5: DOORS				
	Hardwood Mninga or equal and approved				
A	50x150mm Frame with one labour	130	m		
В	50x150mm Transome or Mulion	17	m		
С	25 x 25mm Glazing beads	66	m		
	Hardwood Mninga or equal and approved				
D	45mm thick panelled door hardwood size 1180 x2100mm double door; comprising of 45x100mm rebated stiles; all panel filled in with and including 25mm thick hardwood boards; {DI}	3	Nr.		
Е	Ditto Size 900 x 2100m single door {D2}	13	Nr.		
F	Size 800 x 2100m single door {D3}	5	Nr.		
	Ironmongery; supply and fix the following as manufactured by Union Itd."or other equal and approved to hardwood with matching screws"				
G	150mm Brass butt hinges.	36	Pairs		
н	3 Lever Mortice lock	15	Nr.		
J	Two Lever Mortice lock	6	Nr.		
	<u>Clear glass</u>				
к	<u>6mm thick clear glass sheet; glazed with hardwood</u> <u>beads:</u> Glass panes over 0.1m ² not exceeding 0.5m ²	8	m²		
	ELEMENT NO 5: DOORS CARRIED TO <u>SUMMARY</u>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO 6: WINDOWS				
	Aluminium glazing approved by the Architect;				
	single glazed combination frame and				
	windows, 45 x 50mm Aluminium section				
	framing, all mullions and transomes; epoxy				
	power coat RAL 9006 finish, 6.14mm laminated				
	glass pre assembled with stainless steel plates				
	and screws window ironmongery, glazed beads,				
	fiber mosquito net, rubber gaskets and backer				
	rods and fixing to mansory or concrete grounds,				
	sealing all around with non-hardening EPDM				
	silicone sealant; screws bolts and fasterners				
А	Size 1500 x 1500mm high	16	Nos		
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В	Ditto, Size 900 x 600mm high	6	Nos		
	<u>Composite items</u>				
	Mild steel; welded together with welding fillets; protected				
	from rust by applying three coats of zinc chromate primer				
	and two full coat of gloss painting; including fixing in position.				
С	Supply and fix in position "WINDOW GRILLES";				
Ŭ	comprising of 25x25x3mm SHS pipes framing;				
	filled in with 40x6mm flat; bars cut and bent to				
	patterns spaced at not more than 150mm centres				
	complete to the aproval of Architect for				
	window Size 1500 x 1500mm high	16	Nos		
D	Ditto, for window size 900 x 600mm high	6	Nos		
E	Ditto for door vent size 1180 x 400mm high	3	Nr.		
F	Ditto for door vent size 900 x 400m high	13	Nr.		
	ELEMENT NO6: WINDOWS CARRIED TO				
	SUMMARY				

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ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO.7: ROOFING				
	Sawn soft wood; Impregnated with Preservatives				
А	50X150mm Beam	156	m		
В	50X150mm Rafters	188	m		
С	50X100mm Struts	230	m		
D	50X100mm Wall Plate	66	m		
E	50X50mm Purlins	210	m		
	Selected Hardwood				
F	Fascial/Barge board; 25 x 250mm; with semi-circular decorative mouldings along the bottom edges	68	m		
	Roofing; 28gauge Resin Colour Coated IT5 aluminium sheets; single length; supplied by Aluminium Africa Ltd. or equal and approved; fixed to timber purlins with 150mm end laps fixed with roofing nails				
G	Roof covering;sloping not exceeding 45 degrees from horizontal	210	m²		
н	Ridge capping	33	m		
J	Valley capping	19	m		
	Metal Works and Plates				
к	16mm Diameter Anchor Bolts, 850mm long, one end fish-tailed and cast into concrete	32	No		
L	10mm thick steel plate	16	No		
	ELEMENT NO. 07 - ROOFING CARRIED TO SUMMARY				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 08: FINISHINGS				
	Insitu finishings				
	Plaster; 12mm first coat cement and sand (1:6); 3mm second coat of cement and lime (1:5) steel trowelled to smooth surfaces; internally:				
А	15mm To walls	364	m²		
В	15mm to sides of beams	80	m²		
	External cement sand (1:4); rendering with approved plasticizer trowelled smooth:				
С	22mm To walls	158	m²		
	TILES, SLAB OR BLOCK FINISHINGS				
	Glazed ceramic wall tiles with cushion edges to BS 1281 fixed to backings with cement sand mortar and pointing with white cement				
D	400 x 250 x 6mm Tiling to walls	110	m²		
	Graniti GN 572 Mid Grey porcelain tiles "high quality" bedding in premixed thin set cement mortar and grouting with coloured sandless tile grout				
E	600x600x8mm; 4mm diagonally joints ways; to floors to level; to cement and sand base	130	m²		
F	400 x400 x 8mm; 4mm diagonally joints ways to floor level of toilets, cement and sand base	26	m²		
G	150mm Thick skirting	220	m		
	Floor edge strips				
н	GENESIS ESA 10(10mm high) or similar and approved, aluminium straight edge trim; junctions				
	of flooring finishes	50	m		
	To Collection		•		

COUNCIL HOSPITALS

URBAN TYPE TWO BEDROOM 3IN 1 BLOCK GROSS AREA 165M2

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
A	<u>Weather Bars</u> 6 x 25mm Brass weather bar strip at external door thresholds; in prepared groove	6	m		
	Beds and Backings				
	Cement and sand (1:4) wood floated surface finish				
В	32mm Bed to receive floor tiles	156	m²		
С	12mm Backing to receive wall tiles	110	m²		
	Gypsum plasterboard BS 1230 Pt. 2 1970 tapered wallboard self tapping galvanized drive screws				
D	9mm Thick ceiling; horizontal; internal	156	m2		
Е	Cornice	180	m		
F	Extra; moulding gypsum	38	m		
G	Extra ceiling access panel	3	Nr.		
н	Supply and fix PVC ceiling complete including PVC and corner joints, shoe nail and all accessories	53	M ²		
	Sawn softwood pressure impregnated with preservatives				
J	50x50mm brandering fixed at 600mm centre to centre	533	m		
	WORKTOP AT KITCHEN				
к	Supply and fix Worktop at kitchen and cabinet as per Architectural drawings and details including associated finishing with mable and any other to the aproval of Architect	10	m2		
	To Collection				
	COLLECTION				
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	ELEMENT NO 08: FINISHINGS CARRIED TO SUMMARY				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 09: PAINTING AND DECORATIONS				
	Internal works				
	Prepare and apply one thinned coat and two full coats of wash 'n' ware paint				
А	Plastered walls	444	m²		
В	Gyspum ceiling	156	m²		
	External works				
	Prepare and apply one thinned coat and two full coats of weather guard paint to				
С	Rendered surfaces	158	m²		
	Varnishing; internal work; prepare and apply three coats of clear polyurethane clear varnish; wood surfaces.				
D	General surfaces	81	m²		
Е	Frames, linings and associated mouldings 200-300mm girth	130	m		
	ELEMENT NO. 09 : PAINTING AND DECORATIONS CARRIED TO SUMMARY				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 10: SANITARY WARE INSTALLATIONS				
	KITCHEN SINK				
	Stainless steel kitchen single with single drainer complete with tap hole provided on the sink the waste unit as manufactured by castleware: sink Model No. D10050A including all fixing fixtures				
A	Overall size L1000 X W500mm x D180mm bowel size L380 x W330mm	3	Nr.		
	WASH HAND BASIN				
В	White vitreous wash hand basin (HWB), size 450x440x200mm complete with self closing; semi pedestal and chain stay hole; fairline ½in pillar taps with clear acrylic handles; 1¼in bead chain waste and plug; 80cm slotted tail bolt stay; isovalve servicing valves. rubber plug with slotted tail; 32mm plastic bottle trap with 75mm seal, flexible pipes, angle valves and other accesories as manufactured by castleware or equal and approved	6	No		
	SOAP DISH				
С	Ceramic soap dish Model A:101 as manufactured by castleware or equal aproved including fixing fixtures, fixed to the wall as per manufacturer recommendations	6	Nr.		
	<u>WC</u>				
D.	Western type low level W.C suite vitrious china to B.S 3402 s/p-trap, 9litres flushing tank with single push button complete with all necessary accessories. "Casterware "	6	No		
E.	80mm Diameter high quality plastic floor drain (ALBETONY) trap built in concrete bed.	6	No		
	TOILET PAPER ROLL HOLDER				
F	Wall mounted stainless Toilet paper holder Model BC 70 complete with fixing accessories as manufactured by castleware or equal and approved	6	Nr.		
	To Collection				
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ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	SHATTAF				
A	Wall mounted 'trigger spray' shattaf Oasis chrome finish complete with fixingaccessories as manufactured by castleware or equal and approved	6	Nr.		
	MIRROR				
В	600 X 800 X4mm Thick mirror with JX -S501 as per castleware or other approved, fixed on lacquer with double sided self adhesive pads finished with bevelled edges.	6	Nr.		
	COLD WATER INSTALLATION:				
	IPS pipes, Class D painted with special paint; including joints in running length.Fixing in accordance with maufacture's instructions.				
	Distribution pipes IPS pipes including screwed and socketted joints in running length: complete with all accessories like elbows, Unon, Tee etc				
С	25mm Diameter Polypipe, class D	18	М		
D	19mm Diameter Polypipe, class D	30	М		
Е	19 mm Diameter supply IPS pipes; in blockwork chase.	27	М		
F	Angle valve	15	No		
G	Bib tape pex 1/2	3	No		
н	Pillar tape pex 1/2	6	No		
J	Stop cock pex 3/4	3	No		
	UPVC pipes;Class 'E'; including fittings in running length complete with all accessories, elbows, plug etc				
к	38mm Diameter pipe; in chase in block work.	30	М		
L	50mm pipe	27	М		
	TO COLLECTION				

ITEM	DESCRIPTIONS OF WORKS	QTY	UNIT	RATE	AMOUNT
	SOIL AND PIPES:				
	UPVC pipes and fittings; Class 'B'; in running lengths; BS 4660 for underground pipes and B.S 3506 for pipes above ground complete with all accessories				
A	100mm. Diameter pipes; fixed to walls.	40	М		
В	Ditto; laid in trenches.	30	М		
	<u>Ancillaries:</u> Draw off taps; stop valves; copper alloy to BS 5154 or BS 1010:				
С	25mm Diameter stop valve	3	No		
D	19mm Diameter stop valve	3	No		
Е	13mm Diameter bib taps	3	No		
F	<u>GULLY TRAPS</u> Construct a standard gully trap 300x300x300mm deep;in thick concrete block walls complete with benching and all fittings and gully trap cover	9	No		
	TESTING				
G	Allow for testing and commisioning the whole plumbing and drainage isntallation as per service Engineer approval	-	ltem		
н	Builders work in connection to plumbing	-	14 0 100		
	SUNDRIES:		Item		
J	Allow for preparation and production of four (4) copies of 'AS BUILT DRAWINGS' of plumbing and engineering installations to Engineer's satisfaction.	-	ltem		
	COLLECTION				
	COLLECTIONS				
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	ELEMENT NO. 10 SANITARY WARE AND INSTALLATIONS CARRIED TO SUMMARY				

S/No	DESCRIPTION OF MATERIALS	UNIT	QTY	RATE	AMOUNTS
	ELEMENT NR. 11: ELECTRICAL INSTALLATIONS				
	DISTRIBUTION SYSTEM				
A	4Ways TPN distribution board (DB 3) with 100A/300mmA RCCB incomer and outgoing MCBs as shown in Schematic diagram as ABB or approved equal.	No	3		
	POWER POINTS				
В	2 x 13A Double switch socket as ABB or HAGER or LEGRAND make	No	12		
С	20A DP control switch with neon indicator c/w steel box for Air Conditioners, Security lights and Hand driers as ABB or HAGER or LEGRAND make	No	0		
D	45A DP Cooker Control Unit with neon indicator c/w steel box as ABB or HAGER or LEGRAND make	No	3		
E	2.4KW Hand dryer c/w sensing unit automatically controlled as GET Ex UK	No	0		
	LIGHT FITTINGS, FANS AND SWITCHES				
F	Single fluorescent fitting complete LED philips or other equal approved	No	6		
G	LED: Fluorescent fitting 60mm cassette type	No	0		
н	Ceiling light complete with energy saver 18W	No	15		
J	80W 56" Sweep ceiling fan c/w regulator, ceiling rose and hooks as Panasonic or National or KDK of Japan.	No	0		
К	52W 16" Sweep ceiling fan c/w regulator, ceiling rose and hooks as Panasonic or National or KDK of Japan.	No	0		
L	10A 1 gang 1 way flush light switch c/w steel box as ABB or HAGER or LEGRAND make	No	5		
М	10A 2 gang 1 way flush light switch c/w steel box as ABB or HAGER or LEGRAND make	No	10		
Ν	10A 1 gang 2 way flush light switch c/w steel box as ABB or HAGER or LEGRAND make	No	0		
Ρ	10A 2 gang 2 way flush light switch c/w steel box as ABB or HAGER or LEGRAND make	No	0		
Q	10A 3 gang 1 way flush light switch c/w steel box as ABB or HAGER or LEGRAND make	No	0		
R	Twin switch socket ABB or other equal approved	No	3		
S	10A 3 gang 2 way flush light switch c/w steel box as ABB or HAGER or LEGRAND make	No	0		
Т	10A 4 gang 1 way flush light switch c/w steel box as ABB or HAGER or LEGRAND make	No	0		
	LIGHTNING PROTECTION SYSTEM				
V	Soil treatment and interconnection to general earthing of building to meet the requirement of IEE regulations.	Item	1		
	To collection		1		

S/No	DESCRIPTION OF MATERIALS	UNIT	QTY	RATE	AMOUNT
	CABLES NB: Cables for 1.5sqmm 2.5sqmm and 4sqmm should be EURO or other equal approved				
А	1C x 1.5mm ² PVC copper cable				
~	(i) Red	Roll	3		
	(ii) Black	Roll	3		
	(iii) Green	Roll	3		
В	1C x 2.5mm ² PVC copper cable		, s		
	(i) Red	Roll	2		
	(ii) Black	Roll	2		
	(iii) Green	Roll	2		
С	1C x 4.0mm ² PVC copper cable				
	(i) Red	М	30		
	(ii) Black	М	30		
	(iii) Green	Μ	30		
	FIXED ENCLOSURES FOR CABLE RUNS				
D	20mm Dia heavy gauge PVC conduit to all lighting, fans c/w all				
	accessories as MCL make	Pcs	150		
Е	75mm Dia heavy gauge PVC conduit for supply from the Main				
	Panel Distribution Board to all necessary accessories as MCL/				
	PLASCO make	Pcs	9		
		1.00	0		
F	Accessories (Single PVC Rectangular/Square Boxes, Twin PVC				
	Rectangular/Square Boxes, Round PVC Boxes, Cover plates)				
	and Binding wires	Item	1		
	EARTHING SYSTEM.				
G	Soil treatment and interconnection to general earthing of building				
	to meet the requirement of IEE regulations. Two earth pits with				
	adequate number of earth rods linked together with the earthing				
	cables from the main distribution panel board, filled with wet				
	charcoal/salt or bentonite powder.				
н	Earth rod approved copper 16mm not less than 1200mm	No.	3		
J	Charcoal	Item	1		
0	Unarcoal	nem	•		
K	Salt	Item	1		
L	Eath wire 4sqmm	Mts	30		
	"AS BUILT/INSTALLED" DRAWINGS				
Μ	Prepare "As Built/Installed" drawings clearly indicating all conduit routes, installed fittings and submit in hard and soft copies.				
	Toules, installed littings and submit in hard and soft copies.	Sets	1		
		0013			
	To collection				
	COLLECTION				
	Page 1				
	Page 2				
	Total Cost for Electrical Carried to Summa	ary Page		I	

ITEM	DESCRIPTION	PAGE	AMOUNT
	BILL NR.3: MEASURED WORKS SUMMARY		
	ELEMENT NO. 01 - SUBSTRUCTURE	3/1/3	-
	ELEMENT NO. 02 - FRAME	3/2/1.	
	ELEMENT NO. 03 - STAIRS	NA	NA
	ELEMENT NO. 04 - WALLS	3/4/1.	
	ELEMENT NO. 05 - DOORS	3/5/1	
	ELEMENT NO. 06 - WINDOWS	3/6/1	
	ELEMENT NO. 07 - ROOF	3/7/1.	
	ELEMENT NO. 08 - FINISHINGS	3/8/2.	
	ELEMENT NO. 09 - PAINTING AND DECORATIONS	3/9/1.	
	ELEMENT NO. 10: SANITARY WARE	3/10/2.	
	ELEMENT NO. 11: ELECTRICAL INSTALLATION	3/11/2.	
	BILL NO.3 - MEASURED WORKS CARRIED GENERAL SUMMARY	T.Shs	

BILL NO: 04 - PRIME COST AND PROVISIONAL SUMS

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	BILL NR.4: PRIME COST AND PROVISIONAL SUM				
	Prime Cost (PC) Sums for works to be carried out by Nominated subcontractors or Nominated suppliers				
А	Electrical Connection and meter		Sum		
В	Manholes 10Nr., Septic tank (1Nr.) & soakaway pit (1Nr.)		Sum		
	BILL NR.4- PC AND PROVISIONAL SUMS				
	WORK CARRIED TO GENERAL SUMMARY				