

27th August, 2020

To: ALL BIDDERS

SUBJECT: ADDENDUM NO. 01 FOR CONSTRUCTION OF FACILITIES IN SELECTED INSTITUTIONS IN UGANDA IN 5 LOTS AS FOLLOWS:

Lot 1: Uganda Technical College (UTC) - Elgon (Curriculum based)

Lot 2: Uganda Technical College (UTC) - Elgon (Non curriculum based)

Lot 3: Kaliro Technical Institute

Lot 4: Butaleja Technical Institute

Lot 5: Kasodo Technical Institute

PR: MOES/WORKS/2020-2021/00004

This is to issue Addendum No. 01 to the a fore-mentioned bidding document and includes the following:

- (i) Modification to the Bills of Quantities
- (ii) Extension of procurement schedule

S/N	Reference to bidding document	Amendment
1.	Volume 4 of 5; Lot 4 (Butaleja Technical Institute); Bills of Quantities; Bill No. 6 – External Works.	Replace Bill No.6 – External works with the attached bil as per Annex: 1
2.	Volume 4 of 5; Lot 4 (Butaleja Technical Institute), Bills of Quantities, Bill No 5- Typical Toilet	Replace Bill No.5 – Typical Toilet with the attached bil as per Annex: 2
3.	Volume 4 of 5; Lot 5 (Kasodo Technical Institute), Bills of Quantities, Bill No 5 page 5/22.	Replace Page 5/22 with the new attached Page 5/22 as pe Annex: 3
4.	Section II Bid Data Sheet ITB 22.1	Replace “Deadline for bid submission is: 1 st September 2020. Time: 10:00 am” with Deadline for bid submission is: 15th September, 2020 Time: 10:00 am (local time)
5.	Section II Bid Data Sheet ITB 25.1	Replace The bid opening shall take place at: Date: 1 st September, 2020. Time: 10.30 am With The bid opening shall take place on: 15th September 2020. Time: 10.30 am (local time)

1 Addendum No. 1 to Bid document for Procurement Ref No: MoES/WORKS/2018-19/00189.

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Bidders are required to consider the new deadline for bid submission while preparing the bid security and specifying the bid validity period as required using appropriate format in Section IV of the bidding document.

All the other details in the bidding document remain unchanged.

Annexure to Addendum No.1:

1	Annex 1: Bill No. 6 – External Works for Lot 4
2	Annex 2: Bill No 5-Typical Toilet for Lot 4
3	Annex 3: Bill No 5 page 5/22. For Lot 5

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ANNEX 1

BILL NO. 6

EXTERNAL WORKS

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BILL No.6 - EXTERNAL WORKS					
	<u>SUMMARY</u>			<u>PAGE NO.</u>	<u>AMOUNT (UGX)</u>
1	EARTH WORKS AND EXCAVATIONS			6/2	
2	PARKING AND WALKWAYS			6/4	
3	LANDSCAPING			6/5	
4	ELECTRICAL INSTALLATION			6/8	
5	MECHANICAL INSTALLATIONS			6/18	

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ITEM	DESCRIPTION	UNIT	QTY	RATE (UGX)	AMOUNT (UGX)
	ELEMENT NO. 2: ACCESSES AND WALKWAYS				
A	Shape to camber and falls and Compact formation to 95% modified AASHO to receive sub-base course	SM	15		
B	Imported gravel filling to make up levels and to form sub base deposited in 150 mm thick layers and compacted with a 10 - tonne roller to 95% MDD (Provisional)	CM	5		
C	Base course layer of imported gravel on formation stabilised with 6% lime deposited in 150mm thick layers and compacted with a 10-tonne roller to falls and cambers.	CM	3		
D	Provide and lay 60mm thick cabro precast concrete class 20 paviments in approved pattern to the Architect's specification including a 50mm layer of sand blinding laid to falls and cross falls	SM	15		
	Kerbs				
E	Provide, lay and joint in cement mortar (1:3), 150mm x 230mm precast concrete class 20 splayed kerbs on 140mmx350mm concrete grade 15 bed and haunched on both sides including earthworks.	LM	19		
F	Do. But curved	LM	5		
	Painting				
G	Do. But gloss oil paint in multi colours to kerbs 200-300mm girth	LM	24		
	Total Carried to Collection				

ITEM	DESCRIPTION	UNIT	QTY	RATE (UGX)	AMOUNT (UGX)
A	Acess Excavate in soft material for pipe culverts and lay 100mm thick hardcore filling to receive blinding layer concrete 1:3:6 to receive culvert pipes (M.S)	CM	14		
B	<i>Supply, deliver and install concrete pipes laid on concrete bed and with concrete cover as per drawings and technical specifications provided; bed and cover of class 26/20 concrete</i> 600 mm internal diameter culverts, 100 mm thickness made in concrete of class 30/20 reinforced with a double cage of 6mm diameter steel bars (A142 BRC; 200x100) at a circular spacing of 100 mm C/C and a longitudinal spacing of 200 mm C/C per cage.	m	6		
C	Culvert End Structures: Construct 300mm thick concrete grade 25 reinforced with BRC 142 for headwalls, wing walls and outlet structures as per drawing and Technical specifications provided.	CM	3		
D	Construct sides and bottom of cascades, drop pits and outlets of culverts with concrete mix of 1:3:6 as per drawing and technical specifications to the Engineers satisfaction.	CM	5		
	Total Carried to Collection				
	COLLECTION Total Carried from page 6/3 Total Carried from page 6/4				
	Total Carried to Summary				

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ITEM	DESCRIPTION	UNIT	QTY	RATE (UGX)	AMOUNT (UGX)
	ELEMENT NO. 3				
	LANDSCAPING				
	Lawn creation Planting of lawns with grassseedlings, including soil preparation (two millings at least 15 cm deep, possibly integrated by digging over, weeds removal, raking and levelling of the ploughed for the preparation of a good planting bed, mixed grass seeds and namely Poa Trinalis Nemoralis and Pratensis, Estuca Ovina and Rubra, Agrostis Tenui and Lolium Perennis or equivalent type with a maximum percentage of 20% proportioned in 26/30 g/sq, including following raking of the ground to incorporate seeds, rolling, watering and whatever might be necessary.) and soil works during and after planting, watering (according to plant season) and first two cuttings of the lawn (2-3 weeks and 4-5 weeks after seeding).				
A	The contractor is responsible for seeding and the good growth, health and aspect of the lawn until its fully grown and should take any additional measures if necessary including all other necessary works.	SM	20		
B	Provide, lay and joint in cement mortar (1:3), 150mm x 230mm precast concrete garden kerbs on 140mmx350mm concrete grade 15 bed and haunched on one sides including earthworks.	m	10		
C	Dig up holes fill with black fertile soils, plant flowers and keep watered until established	NO	5		
D	Dig up holes fill with black fertile soils, plant tree seedlings and keep watered until established	NO	2		
	Total Carried to Summary				

ITEM	DESCRIPTION	UNIT	QTY	RATE (UGX)	AMOUNT (UGX)
	ELEMENT NO.4 : ELECTRICAL INSTALLATION				
A	6way Feeder pillar outdoor type with concrete foundation or feeder pillar pinth, panel made of 2.5mm hot dip galvanized GI sheet coated with permanent paint of suitable size double door & locking arrangement with the following incomer MCCB 250Amp 4pole .HRC fuses,50x6cu bus bar 3Ph&N,volt meter(0-500v),Ammeter (0-1000A)Danger board,dimension requirements tentative size 1200x800x600mm refer to BS EN 61439-5::2015 or it's equivalent	No	1		
B	750X450MM (internally) manhole 600mmdeep invert consisting of150mm thick concrete block well,benched and channeled in 20mm thick water proofed cement/sand screed including excavation and medium duty approved cast iron cover and frame	NO	3		
C	Excavation of cable trenches, 900mm deep by 400mm wide, sand bedding and backfilling, with proper compaction	m	150		
D	Rack u16,with fan,and earthing details in Compliance to IEC 60297-3-101	No	1		
	Total Carried to Collection				

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ITEM	DESCRIPTION	UNIT	QTY	RATE (UGX)	AMOUNT (UGX)
A	Router with optical fiber interface, Supported Cards, 4-Port 1000BASE-SFP-L2 Ethernet Interface Card to 24-Port 10/100/1000BASE(RJ45)-L2/L3 Ethernet Switch Interface Card, Service interfaces (standard configuration) WAN interfaces: 2 GE electrical interfaces and 1 GE combo interface LAN interfaces, Expansion Card Slots 4 SIC slots and 2 WSIC slots, RPS150 Supported, Memory 1 GB, Flash 512 MB, Power module type Built-in AC power module, Fan type Built-in fansin, Power Switch(1) power switch, (2) AC Power Jack (3) Two USB interfaces (host) (4) RPS power socket (5) Mini USB interface (6) Micro SD card slot (7) CON/AUX interface (8) WAN interface: GE combo interface (9), RST button, DSP slots 2, USB 2.0 ports 2, Mini-USB ports 1, Console port 1, Maximum power 150W, AC power 100 V-240 V, Frequency 50 Hz/60 Hz, DC power -48 V~60 V, Ambient temperature 0°C to 45°C, WAN speed with services* 800 Mbps, Firewall performance (large packets) 3Gbps, Number of recommended users 300, Fixed WAN ports 3xGE (1xcombo port), SIC slots 4, WSIC slots (default/max**) 2/4, XSIC slots (default/max**) 0/2, Voice service card, 1-Port VE1 Interface card, 4-Port FXO Voice Interface Card, Dimensions (height x width x depth) 44.5 mm x 442 mm x 420 mm, accordance to IEC60603-7-4, ISO/IEC11801 or it's	No	1		
B	48 Port Switch with 2 fiber optic interface & GE (10/100/1000), Uplink Interfaces 2 x 10/100/1000 uplinks and 2 SFP uplinks, throughput 6.5 Mpps, Backplane Capacity 16 Gbps, Topology Ethernet (10/100BaseTX)/Ethernet (10/100/1000BaseT) Gigabit Ethernet (SFP) Architecture Layer 2 Switching (basic connectivity). Voice Enabled	No	1		
Total Carried to collection					

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29/2

ITEM	DESCRIPTION	UNIT	QTY	RATE (UGX)	AMOUNT (UGX)
A	Inter Connection between the main feeder pillars 4x95 sqmm XLPE copper cable complete with termination ,shrouding protection against touch and all accessories will be at measrement and earthing	M	300		
B	Spiral -Polyethylene HDPE Corrugated thermo setting plastic pipe diameter 300mm	M	300		
Total Carried to Collection					
COLLECTION Total Brought Forward from Page 6/6 Total Brought Forward from Page 6/7 Total Brought Forward from Page 6/8					
Total Carried to Summary					

ITEM	DESCRIPTION	UNIT	QTY	RATE (UGX)	AMOUNT (UGX)
	ELEMENT NO.5 : MECHANICAL INSTALLATIONS MECHANICAL SYSTEMS PART No.1- Cold and Hot Water Supply System <i>Cold and hot water pipes shall be Polypropylene Random Co-polymer resins (PP Type 3 raw material) PPR pipes for cold and hot water , and be fixed to slabs, walls, beams or etc...with metal straps or similar material. Unit price shall include all associated civil works and necessary fittings such as T, bends etc. according to the drawing. All water pipes shall be tested with pressure of 10kg/cm (10bar) at the expense of the contractor.</i> <i>Supply, lay and connect Poly propylene (PPR- PN20) pipes for both internal cold and hot water supply at risers and to fixtures as per the drawing shown, complete with all the necessary connecting accessories such as metal inserts (plastic finished internally), bends, unions, Tees, etc. Cost shall include all incidental works thereto such as chiseling, filling with mortar, supporting with tension wire at at least every 50mm.</i>				
A	40mm Diameter pipe	m	400		
B	32mm Diameter pipe	m	380		
C	25mm Diameter Pipe	m	112		
D	20mm Diameter pipe	m	110		
	supply and install galvanized steel(GS) pipe for municipality extension fire fighting system and roof installation with pressure rating of PN16 with all fittings and gate valves where required.				
E	Internal diameter of 20mm	m	200		
	Total Carried to collection				

ITEM	DESCRIPTION	UNIT	QTY	RATE (UGX)	AMOUNT (UGX)
A	Internal diameter of 50mm <i>Cold water pipes shall be High Density Polyethylene (HDPE) pipes, and be laid in trench as shown in the sanitary site drawing. Provide 100mm thick sand bedding material rammed and tamped and 150mm thick approved material to cover the pipe all as per the typical trench section and detail. Unit price shall include all associated civil works and necessary fittings such as T, bends etc. as shown on the drawing. All water pipes shall be tested two times the working pressure or 160 meters head, which ever is greater at the expense of the contractor.</i>	m	316		
B	Internal diameter of 40mm	m	400		
C	Internal diameter of 50mm (including Municipal connection)	m	350		
D	Internal diameter of 65mm	m	585		
E	Supply and install fire hydrant stand 100mm internal diameter with all accessories as shown in the site drawing	No	4		
Total Carried to collection					
COLLECTION					
Total carried from page 6/9					
Total carried from page 6/10					
Total Carried to element Summary					

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ITEM	DESCRIPTION	UNIT	QTY	RATE (UGX)	AMOUNT (UGX)
	PART No.3- Fire Fighting and Domestic Water Pumps Factory assembled Fire pumps with steel base approved by the Engineer. Diesel pump (1 unit) Q = 8 L/S H = 45m Electric pump (1 units) Q = 7 L/S H = 45m Jockey pump (1 unit) Q =1 L/s H = 45m				
A	Efficiency of the pumps > 60 percent	set	1		
B	supply and fix variable speed domestic water pump set with stand by, connections and accessories, and based on the following rate. a. Qmax=3 l/s,Qmin=0.5 l/s H=20m	set	1		
	DRILLING,SUPPLY, INSTALL AND COMMISSION BUTALEJA WATER WELL				
C	Geological survey capable to fill 150M3 tank in a day, drilling water well and installion of water pump set.	No	1		
	Pump set and Controller				
D	AC Solar Submersible Pump System for well including non-return valve, dry running protection, motor and pump end.it should be capable of running solar ,utility grid and generator.	No	1		
E	AC Solar pumping inverter Controller with Data module, Digital timers,Pressure Sensor, Surge Protector, SmartPSUk2, SmartStart,Well Probe	No	1		
F	Heavy Duty DN 80 riser pipe	m	100		
G	DN 80 Flanged Water Meter	No	1		
H	PV Disconnect 1000-40-5,PV Combiner 1000-125-4,PV Protect 1000-125	No	3		
	Total Carried to Collection				

ITEM	DESCRIPTION	UNIT	QTY	RATE (UGX)	AMOUNT (UGX)
A	Solar panels of 300wp to provide power to the solar pump system	No	20		
B	Batteries 220HP.	No	2		
C	6 sq mm ² 3-phase cable for power and 1-phase cable for ground	m	110		
D	Cable splicing Kit	No	2		
E	Allow a Provisional Sum for Lv 3 phase Power using ABC cable , connection from UMEME supply to pump control panels	No	1		
	Solar Panel Mounting Structure				
F	Aluminum structure for solar panels installation	Sum	1		
	Earthing and Bonding and Lightning Protection				
G	Concrete inspection chamber : size 300x300 internal dimension as to FURSE Cat No. PT005 or approved equivalent complete with heavy duty manhole cover ,charcoal and salt solution .	M	2		
H	Copper earth rod 16mm diameter, 1200mm long; complete with tower earth clamps, nuts and bolts for fastening to copper down conductors.	No	2		
I	25mm x 3mm PVC-Insulated copper down conductor complete with Gutter clamps, roof conductor holders/ clips to FURSE Cat.No. TC 115, or approved equivalent. <i>Fixed through a conduit and embedded into the wall.</i>	M	30		
J	25mm X 3mm Copper test clamp with flush inspection tape (test Link), as FURSE Cat. No. CT 105, or equal approved.	No	2		
K	2000mm x 15mm air rod, Type A ;as to FURSE Cat. No. RA 240 c/w multiple point, as to FURSE Cat. No. RA 600, or approved equivalent.	No	2		
	Total Carried to Collection				

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ITEM	DESCRIPTION	UNIT	QTY	RATE (UGX)	AMOUNT (UGX)
A	Air terminals base as to FURSE Cat. No. SD 105, or approved equivalent complete with tape adapter and all accessories.	No	3		
B	Equipotential bonding to indoor and outdoor metallic parts consisting of bi-metallic connectors and clips made of 8mm copper round conductors.	M	30		
C	Surge Protective Devices (SPD's) SPD's shall provide protection against lightning and transient over voltages on phase/neutral, phase/earth and neutral/earth modes.	No	2		
D	Allow for testing and commissioning of the installation	No	1		
E	Supply and install water transmissions pipes made of rigid plastic pipe 50 ^ø (HDPE) .PN-16, of approved standard including fittings like bends,Y's, T's, clean out, chromed metal support etc. for internal and all installations works incidental works .	m	180		
	<u>Electricity supply cable laid or drawn into 25mm concealed PVC conduits for final circuits.</u>				
F	1.5mm ² twin with earth PVC-insulated copper cables for lighting points	m	50		
G	2.5mm ² twin with earth PVC--insulated copper cables for socket outlet points	m	50		
H	16mm ² x 3core PVC/SWA/PVC Copper cables to the Consumer Units above.	m	50		
	<i>Switches</i>				
I	100A 4-Way SPN MCB Consumer Unit flush mounting complete with integral isolator, MCBs and all accessories as MEM, CRABTREE or equal approved.	No	1		
J	6A 2 gang 1 way moulded switch as MK or approved equal.	No	3		
K	6A 2 photocell switch or approved equal.	No	1		
	Total Carried to Collection				

ITEM	DESCRIPTION	UNIT	QTY	RATE (UGX)	AMOUNT (UGX)
	Lighting Outlets				
A	1x23W energy saving compact fluorescent pendant light complete with daylight bulb and all accessories as Thorn or equal approved.	No	2		
B	1 x 18W 150mm single waterproof, surface mounted fluorescent light fitting with GRP body and acrylic diffuser, as Thorn or equal approved.	No	2		
C	1 x 18W 600mm single waterproof, surface mounted fluorescent light fitting with GRP body and acrylic diffuser, as Thorn or equal approved.	No	2		
	Sockets				
D	13A 1 gang switched socket outlet as MK, in MK boxes complete with all accessories.	No	2		
	<u>Supply and complete installation of all items as specified and as directed by the Engineer</u>				
	<u>Civil works</u>				
E	Construction of 6x3x3 (54m3) sump/control room	No	1		
	Total Carried to Collection				
	COLLECTION				
	Total Brought Forward from Page 6/11				
	Total Brought Forward from Page 6/12				
	Total Brought Forward from Page 6/13				
	Total Brought Forward from Page 6/14				
	Total Carried to element Summary				

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ITEM	DESCRIPTION	UNIT	QTY	RATE (UGX)	AMOUNT (UGX)
	PART NO.4- Waste, Vent and Rain Water Pipes and Accessories <i>All domestic waste, vent and storm water pipe lines</i> <i>Supply and lay approved quality storm water uPVC, PN-6 down pipes according to the drawing including all the necessary connecting accessories.</i>				
A	Nominal Diameter. 110 mm <i>Construct 150mm thick concrete ditch around building and parking 200mm bottom layed upon lean concrete, compacted fill underneath, including plastering inside wall and 540mm wide factory made cast iron grill as per the drawing.</i>	m	210		
B	Internal width, 400mm (200m length) Waste Water Drainage <i>Supply and install waste water pipes made of rigid plastic pipe (upvc). PN-8, of approved standard including fittings like bends, Y's, T's, clean out, chromed metal support etc. for internal and all installations works incidental works .</i>	m3	12		
C	50mm Diameter of min. pipe wall thickness=2mm	m	120		
D	80mm Diameter of min. pipe wall thickness=3mm	m	285		
E	110 mm diameter of min. Pipe wall thickness=3.2mm	m	310		
F	150 mm diameter of min. Pipe wall thickness=4mm	m	220		
	Total Carried to collection				

ITEM	DESCRIPTION	UNIT	QTY	RATE (UGX)	AMOUNT (UGX)
	<i>Supply, install, test and commissioning vent caps of rigid uPVC to be connected to the roof terminal of vent pipe as shown on the riser diagram, Complete with all the necessary sealing gaskets and accessories .</i>				
A	50mm diameter Waste water Manhole	No	10		
B	Construct manholes on a sanitary sewer drainage systems as shown on the drawing in 230mm thick brick wall, 150mm thick reinforced concrete bottom slab and 120mm thick reinforced cover slab including all reinforcement and associated civil works, depth not exceeding 1750mm Solid Waste Bin	No	2		
C	Supply and install 10m3 waste bin complete with one coat of red oxide primer before site delivery and two coats of epoxy enamel paint all as per Architect's detail drawings, all accessories and other incidental works.	No.	0		
D	Supply and install 30m3 waste bin complete with one coat of red oxide primer before site delivery and two coats of epoxy enamel paint all as per Architect's detail drawings, all accessories and other incidental works.	No.	0		
E	Supply and install 5000L Chemical Neutralization tank with walls made of polypropylene or polyethylene, walls constructed with a seamless material that will prevent leaking.	No.	0		
	Total Carried to collection				
	<u>COLLECTION</u> Total carried from page 6/15 Total carried from page 6/16				
	Total Carried to element Summary				

ITEM	DESCRIPTION	UNIT	QTY	RATE (UGX)	AMOUNT (UGX)
A	PART NO.5- Rainwater Harvesting Underground rainwater harvest reservoir of 150m ³ capacity made of reinforced concrete 200mm bottom slab, 200mm thick reinforced concrete wall and 200mm top cover with cover, outlet pipe and necessary details all as shown on the Sanitary drawing. Supply and install galvanized steel(GS) pipe for connection from reservoir to roof water tanker with pressure rating of PN16 and provided with all fittings and gate valves where necessary.	No.	0		
B	50mm Diameter pipe	m	80		
C	32mm Diameter pipe	m	50		
D	supply and fix variable speed domestic water pump set with stand by, connections and accessories, and based on the following rate. Q=5.4l/s, H=32m, Efficiency > 60%	No.	0		
	20M³ WATER TANK For Domestic water storage				
E	Supply and install GRP (GLASS REINFORCED PLASTIC) or Equivalent water tanks on and including a Steel support at height of 10meters as shown on the drawings.	No	1		
F	Dia. 50 mm strainers with foot valve	No	2		
G	Dia. 50 mm HDPE drain and over flow pipe nearest storm drain manhole (P.Q.)	m	80		
H	Bronze Gate valve on drain pipe, dia. 50mm	No	3		
I	Dia. 100 mm vent pipe with cap	No	2		
J	Dia. 50 mm float valve	No	2		
K	Dia. 50 mm Bronze gate valve on inlet pipe	No	2		
L	Automatic level switch to be connected to domestic pumps to avoid (protect) dry running.	No	2		
M	Dia. 50mm HDPE connection pipe with Bronze gate valve.	No	2		
	Total Carried to element Summary				

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ANNEX 2

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BILL NO. 5

TYPICAL TOILET

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BILL No. 5 - TYPICAL TOILET			
	SUMMARY	PAGE NO.	AMOUNT (UGX)
A	ELEMENT NO. 1 : SUB STRUCTURE	5/5	
B	ELEMENT NO. 2 : R.C. FRAME	5/6	
C	ELEMENT NO. 3 : WALLING	5/7	
D	ELEMENT NO. 4 : ROOF STRUCTURE AND COVERINGS	5/9	
E	ELEMENT NO. 5 : DOORS	5/10	
F	ELEMENT NO. 6 : INTERNAL FINISHES	5/12	
G	ELEMENT NO. 7 : EXTERNAL FINISHES	5/14	
H	ELEMENT NO. 8 : FITTINGS AND FIXTURES	5/15	
I	ELEMENT NO. 9 : MECHANICAL INSTALLATIONS	5/21	
J	ELEMENT NO. 10 : ELECTRICAL INSTALLATIONS	5/24	
	TOTAL CARRIED TO GRAND SUMMARY		

ITEM	DESCRIPTION	UNIT	QTY	RATE (UGX)	AMOUNT (UGX)
	ELEMENT No. 1				
	SUBSTRUCTURE (All Provisional)				
	<u>This element includes all works up to and including the ground floor slab</u>				
A	Clear site of all bushes, scrub, tall grass, trees not exceeding 600mm girth and grabbing up their roots, load and cart away from site to a dumping place gazetted by the local authority.	Sm	124		
B	Excavate oversite to remove vegetable top soil average 150mm deep, load and cart away from site to a dumping ground that is gazetted by the local authority, deposit, spread and level.	Sm	124		
C	Mass excavation to reduce levels commencing from stripped levels	Cm	37		
D	Excavate pits for pad foundations not exceeding 1.5 meters deep starting from reduced level.	Cm	15		
E	Ditto but over 1.5 - not exceeding 3.00m deep	Cm	5		
F	Excavate trench for strip foundation and ground beams not exceeding 1.5 meters deep starting from reduced level	Cm	38		
G	Ditto but 1.5 -3.00m deep	Cm	8		
H	Extra over excavations for excavating in rock. <u>'Termidor 25 EC' or other equal and approved anti-termite chemical applied in accordance with the manufacturer's instructions to:</u>	Cm	10		
I	Bottom, sides, surfaces of excavated ground and tops of hardcore with ten years guarantee <u>Disposal of excavated material</u>	Sm	223		
J	Filling with approved Murrum to make up levels below hardcore; in 150mm layers, well rolled and compacted to 95% MDD to Project Manager's approval	Cm	15		
K	Return, fill and ram selected excavated materials around foundations in 150mm layers and compact to 95% MDD.	Cm	42		
L	Load from spoil heaps, spread and level surplus excavated materials where directed on site including compacting in layers not exceeding 150mm thick using 15 ton vibrating roller to 95% MDD to Engineer's approval	Cm	61		
	Total Carried to Collection				

ITEM	DESCRIPTION	UNIT	QTY	RATE (UGX)	AMOUNT (UGX)
A	<u>Hardcore</u> 200mm thick hardcore filling using approved hard stone ballast, compacted / rolled with a vibrating roller (minimum 2 tonne) or 10 tonne yard roller. Where rolling is not accessible, compaction shall be by hand or mechanical tampers)	Sm	63		
B	50mm thick stone dust blinding over surfaces of hardcore	Sm	63		
C	<u>Insitu cast plain normal weight concrete class 15, (20mm aggregate) in:</u> 50mm blinding layer below: pad foundations and strip foundations	Sm	35		
D	<u>Insitu cast vibrated mass normal weight concrete class 20, 20mm aggregates (maximum) as described: in:</u> Strip foundations <u>Insitu cast vibrated reinforced normal weight concrete class 25, 20mm aggregates (maximum) cast into formworks and vibrated around rod reinforcement bars.(MS) In:</u>	Cm	5		
E	Pad foundations	Cm	2		
F	Starter columns	Cm	1		
G	Ground beams	Cm	2		
H	100mm thick ground floor slab	Sm	51		
I	100mm thick Ground access ramp with a broom swept finish including concrete upstands and, weathered and throated copings to detailed drawing.	Sm	12		
J	<u>Water proofing membrane</u> 1000 Gauge polythene water-proof sheet membrane laid on blinded hard-core (MS) <u>Fabric Mesh reinforcement reference A 142 to BS 4483:2005 anti-crack; weighing 2.22kg per square meter: 200mm laps of 48.00x2.40 m size with 6mm dia wires</u>	Sm	63		
K	In surface beds	Sm	63		
Total Carried to Collection					



ITEM	DESCRIPTION	UNIT	QTY	RATE (UGX)	AMOUNT (UGX)
	<u>Maintenance of excavation</u>				
A	Allow for keeping the whole of the excavation free from silt and general water by bailing, pumping or otherwise as approved by the Project Manager	Item	1		
B	Allow for provision and subsequent removal of Planking and strutting to uphold the sides of excavations as per approved Contractor's work methodology	Item	1		
	<u>High yield tensile reinforcement bars to BS 4449:2005 as described including cutting to lengths, bending, hoisting and fixing including all necessary tying wire and spacing blocks</u>				
C	8mm Diameter bars	Kg	110		
D	12mm Diameter bars	Kg	368		
	<u>Provide, cut and fix in position formwork as described to:</u>				
E	Vertical sides of ground beams	Sm	17		
F	Vertical sides of concrete strip	Sm	17		
G	Vertical sides of starter columns	Sm	12		
H	Vertical sides of pad columns	Sm	8		
I	Edges of floor slab over 150mm not exceeding 225mm high	m	29		
J	Edges of ramp over 150mm not exceeding 225mm high	m	13		
	<u>Sundries</u>				
K	20 SWG hoop iron wall tie 25mm wide x 450mm long, cast 75mm into concrete and built into joints of block walling after every two courses.	No	96		
	<u>Plinth Walling</u>				
	<u>Solid concrete block walling load bearing (3.5 N/mm²) bedded, jointed and pointed with cement and sand (1:3) mortar as described including 20 SWG hoop iron double strand every two courses built into joint of block walling</u>				
L	200mm Thick plinth walls	Sm	72		
	Total Carried to Collection				

ITEM	DESCRIPTION	UNIT	QTY	RATE (UGX)	AMOUNT (UGX)
A	<u>Two Coats external cement sand render (1:4)</u> <u>finished with wood float</u> 12mm thick to walls	Sm	144		
	<u>Three coats black Bitumastic paint to</u>				
B	Rendered walls	Sm	144		
	Total Carried to Collection				
	<u>COLLECTION</u>				
	Total brought forward from Page 5/2				
	Total brought forward from Page 5/3				
	Total brought forward from Page 5/4				
	Total brought forward from Page 5/5				
	Total Carried to Summary				




ITEM	DESCRIPTION	UNIT	QTY	RATE (UGX)	AMOUNT (UGX)
	ELEMENT No. 3				
	<u>WALLING AND PARTITIONING</u>				
	<u>WALLING</u>				
	<u>Solid concrete block walling load bearing (3.5 N/mm²) bedded, jointed and pointed with cement and sand (1:3) mortar as described including 20 SWG hoop iron double strand every two courses built into joint of block walling</u>				
A	150mm Thick walls	Sm	66		
B	200mm Thick walls	Sm	105		
C	Labour and materials for Eaves fillings in 200mm thick wall 312mm height.	Lm	16		
	<u>Pompeii vents</u>				
	<u>Burnt clay pompeii vent bricks from approved supplier bedded, jointed and pointed with cement and sand (1:3) mortar as described</u>				
D	200mm thick pompeii grill	Sm	17		
	<u>Precast Concrete Class 25 ; 20mm aggregates : reinforced as necessary; finished fair on all exposed surfaces including bedding and jointing in cement sand (1:3) mortar in:</u>				
E	200 mm x 150 mm Lintol.	Lm	10		
	<u>Damp proof courses: hessian based bituminous felt: bedded in cement and sand (1:4) mortar: 300mm laps.</u>				
F	150mm Wide	m	14		
G	200mm Wide	m	30		
	Total Carried to Summary				

AK

ITEM	DESCRIPTION	UNIT	QTY	RATE (UGX)	AMOUNT (UGX)
	ELEMENT No. 4				
	<u>STRUCTURAL STEELWORK, ROOF STRUCTURE AND COVERINGS</u>				
	<u>Structural framed steel work</u>				
	<u>The following in structural steel work fabricated in R.H.S grade 250 including all necessary welding, gusset plates, bolts and nuts, base plates and primed by gun spraying before fixing in position at specified heights above ground level</u>				
	<u>The following in various trusses spanning of different sizes to Structural Engineer's details</u>				
A	40x40x3mm SHS(weight 3.41kg/m); Struts and ties	Kg	160		
B	40x40x3mm SHS(weight 3.41kg/m); Rafters	Kg	112		
C	40x40x3mm SHS(weight 3.41kg/m); Tie Beams	Kg	108		
	<u>Structural unframed steel work</u>				
D	150 x 50 x 20 x 2mm Thick Z-purlins (weight 4.33kg/m)	Kg	400		
	<u>Plates</u>				
E	200x300x5mm (slotted with 4no 18mm Dia holes to receive 16mm dia bolts)	Pcs	8		
F	200x300x5mm (slotted with 4no 18mm Dia holes to receive 16mm dia bolts)	Pcs	8		
G	40x200x3mm with 1no. 10mm dia hole to receive 8mm dia bolts	Pcs	40		
H	142X300X40X5	Pcs	16		
I	Splice plate with 4no 18mmDia holes to receive 16mm dia bolts	Pcs	4		
	<u>J bolt with nut - Grade 4.6</u>				
J	Dia. 16mm (length=250mm)	Pcs	32		
K	40x40x3 angle iron welded to purlin and bolted to metal plate	Pcs	40		
	<u>Bolts with nuts and washers</u>				
L	Dia. 8mm	Pcs	40		
M	Dia. 16mm	Pcs	16		
	<u>ROOF COVERING</u>				
N	26 Gauge prepainted IT4 steel Roof covering fixed to Z- purlin with proprietary fixings.	m ²	67		
O	Ditto but ridge cover galvanized metal sheet fixed to Z- purlin including RHS supports and all necessary fixing accessories.	m	9		
	Total Carried to Collection				

ITEM	DESCRIPTION	UNIT	QTY	RATE (UGX)	AMOUNT (UGX)
A	Supply and fix Filler Blocks to Manufacturer's instructions, size and shape to match roofing sheet profile.	m	18		
	Metal work				
B	3mm thick plate fascia; welded onto steel rafters; complete with one coat of antirust and two coats of approved metal paint.	SM	5		
	<u>Rainwater goods as described:-</u>				
	<u>Mild steel; Grade GJ</u>				
C	3mm Thick galvanised mild steel gutters bent four times bent; 1065mm girth; one side dressed under roofing sheets; fixed with 20mm x 6mm thick metallic steel brakets at 2000mm centres. as per structural drawings, complete with one coat of antirust and two coats of approved metal paint.	m	18		
D	Extra over gutter for outlet to suit 200mm diameter downpipes.	No	2		
E	Extra over gutter for stopped end <u>PVC Key terrain fixed in accordance with manufacturer's instructions</u>	No	4		
F	200mm Diameter uPVC down pipe secured to block wall and jointed with approved compound	m	9		
G	Extra over down pipe for bends	No	6		
H	Extra over down pipe for shoe	No	2		
	Total Carried to Collection				
	COLLECTION				
	Total brought forward from page 5/8				
	Total brought forward from page 5/9				
	Total Carried to Summary				

ITEM	DESCRIPTION	UNIT	QTY	RATE (UGX)	AMOUNT (UGX)
	ELEMENT No. 5				
	<u>DOORS</u>				
	<u>STEEL CASEMENT DOORS</u>				
	<u>Supply and fix glazed steel casement doors comprising 2mm thick steel framing, infill and burglar proof. glazing (MS), including hinges, door locks, door handles (all iron mongery as approved by project manager) and one coat red oxide primer all to Architect's drawings and specifications in;</u>				
A	D ₁ overall size 700x2100mm high	No	6		
B	D ₂ overall size 900x2100mm high	No	3		
	<u>Supply and fix the following ironmongery : locks and furniture where applicable are to be equal to those manufactured by "UNION" and approved by the Architect</u>				
C	Oval/half moon door stop floor mounted; ref. DS-F-001-SSS	No	9		
	<u>Painting to steel surfaces</u>				
	<u>Prepare and apply one coat red oxide zinc chromate primer, one coat universal undercoat and three coats of approved super gloss enamel paint all in accordance with an approved manufacturer's instructions to;</u>				
D	General surfaces of all steel (measured flat both sides)	Sm	29		
E	Allow a provisional sum of 1,000,000/= (Uganda Shillings One Million Only) for signages as directed by the project manager.	Sum	1		
	Total Carried to Summary				

ITEM	DESCRIPTION	UNIT	QTY	RATE (UGX)	AMOUNT (UGX)
	ELEMENT No. 6 INTERNAL FINISHES <i>Finishing work includes all surface pre cleaning, removal of mortar by chiseling, making good edges of columns and beams, preparation of grooves b/n surface where ever indicated, preparation and application of finish, polishing and cleaning after end of work.</i> Floor Finishes Cement and washed sand screed mix ratio (1:3) trowelled smooth A 15mm Thick Cement and sand 1:3 screed finished to receive Tilling floor finish (MS) Tilling 300 x 300 x 10mm size glazed ceramic floor tiles fixed with adhesive in strict accordance with manufacturer's instruction on cement sand mortar backing (MS) with fine butt joints pointed and grouted in matching colour including washing and polishing on completion: to B Floor surfaces. C 100 x 10mm Skirting Wall Finishes Cement sand mortar mix ratio (1:4) finished to: D 15mm Thick plaster finished to receive Tilling finish (MS) 300 x 300 x 8mm size glazed ceramic wall tiles fixed with adhesive in strict accordance with manufacturer's instruction on cement sand mortar backing (MS) with fine butt joints pointed and grouted in matching colour including washing and polishing on completion: to E Wall surfaces. Cement sand mortar mix ratio (1:4) finished to: F 15mm Thick plastering to walls Internal surfaces.	Sm	51		
		Sm	51		
		Lm	8		
		Sm	210		
		Sm	210		
		Sm	25		
	Total Carried to Collection				

ITEM	DESCRIPTION	UNIT	QTY	RATE (UGX)	AMOUNT (UGX)
A	<u>Painting and Decorating</u> <u>Prepare and apply two coats plaster primer and three coats first grade vinyl silk paint all in accordance with an approved manufacturer's instructions internally on:</u>				
	Plastered walls and column surfaces	Sm	25		
B	<u>CEILING FINISHES</u> Supply and fix 10mm thick water proof PVC ceiling well leveled and fixed with and including aliminium framing plugged into walls and tie beams, aluminium structural member joists at 600mm centers both ways complete with necessary accessories, skimming and concealing of joints.	m2	51		
	Total Carried to Collection				
	<u>COLLECTION</u> Total carried forward from page 5/11 Total carried forward from page 5/12				
	Total Carried to Summary				

AA

SD

ITEM	DESCRIPTION	UNIT	QTY	RATE (UGX)	AMOUNT (UGX)
	ELEMENT No.7				
	<u>EXTERNAL FINISHES</u>				
	<u>Floor Finishes</u>				
	<u>Splash Apron</u>				
A	75mm thick concrete grade 20 splash apron on and including 100mm compacted murrum base and 150mm thick x 500mm deep edge solid concrete block walls bedded and jointed in cement sand (1:3)mortar, on 150mm thick x 600mm wide mass concrete class 20, (20mm maximum aggregate) strip foundation, 50mm thick sand blinding; 100mm thick hard core bed with and including all the necessary excavations and formwork.	SM	19		
	<u>In-Situ Terrazzo flooring</u>				
	<u>50mm Thick Polished Terrazzo; comprising of first coat of 25mm Thick water proofed cement and sand (1:3) Screed, Second coat 25 mm thick coloured cement and approved marble aggregates 1:2:4 (1 cement : 2 coarse sand : 4 graded marble aggregate 1 - 4 mm nominal size) flooring rubbed and polished to granolithic finish complete with 25 x 6mm plastic dividing strips at 1200mm centre on:</u>				
B	Splash apron	Sm	27		
C	Ditto: 100 x 10mm thick Skirting	Lm	34		
	<u>Storm Water Drainage</u>				
D	Storm water channel 300mm wide x 400mm average depth. In 100mm thick insitu cast concrete on 50 mm thick blinding, with 150mm thick block walls finished with cement sand plaster (1:3) and cement sand (1:3) screed to fall using water proof cement, covered with a metal grill. All to architect's detailed drawing.	m	42		
	<u>Wall Finishes</u>				
	<u>Cement and washed sand external rendering mix ratio (1:4), trowelled smooth in two coats: to</u>				
E	15mm thick to walls and concrete surfaces	Sm	65		
	Total Carried to Collection				

ITEM	DESCRIPTION	UNIT	QTY	RATE (UGX)	AMOUNT (UGX)
	<u>Prepare and apply two coats plaster primer and three coats first grade weather guard paint all in accordance with an approved manufacturer's instructions internally on:</u>				
A	Rendered surfaces	Sm	65		
B	Extra over for Building Signages 600mm height, in bold letters using a visible colour approved by the project manager.	Sm	20		
	Total Carried to Collection				
	<u>COLLECTION</u>				
	Total carried forward from page 5/13				
	Total carried forward from page 5/14				
	Total Carried to Summary				




ITEM	DESCRIPTION	UNIT	QTY	RATE (UGX)	AMOUNT (UGX)
	ELEMENT NO. 9: MECHANICAL / SANITARY INSTALLATIONS PART No.1- Cold and Hot Water Supply System <i>Cold and hot water pipes shall be Polypropylene Random Co-polymer resins (PP Type 3 raw material) PPR pipes for cold and hot water , and be fixed to slabs, walls, beams or etc...with metal straps or similar material. Unit price shall include all associated civil works and necessary fittings such as T, bends etc. according to the drawing. All water pipes shall be tested with pressure of 10kg/cm (10bar) at the expense of the contractor.</i> <i>Supply, lay and connect Poly propylene (PPR-PN20) pipes for both internal cold and hot water supply at risers and to fixtures as per the drawing shown, complete with all the necessary connecting accessories such as metal inserts (plastic finished internally), bends, unions, Tees, etc. Cost shall include all incidental works thereto such as chiseling, filling with mortar, supporting with tension wire at at least every 50mm.</i>				
A	40mm Diameter pipe	m	8		
B	32mm Diameter pipe	m	20		
C	25mm Diameter Pipe	m	45		
D	Supply and fix approved Angle valves, PN-10 to hand wash basins, water closets and other fixtures, complete with unions, elastic water proofing, and with all other necessary accessories.Dia 15mm	No	17		
E	Supply and fix bronze or other approved service valves 20mm diameter complete with unions, plastic water proofing, hand wheels and all the necessary accessories .	No	2		
	<i>supply and install galvanized steel(GS) pipe for municipality extension fire fighting system and roof installation with pressure rating of PN16 with all fittings and gate valves where required.</i>				
F	Internal diameter of 20mm	m	10		
	Total Carried to Collection				

ITEM	DESCRIPTION	UNIT	QTY	RATE (UGX)	AMOUNT (UGX)
A	Internal diameter of 25mm	m	8		
B	Internal diameter of 32mm	m	8		
C	Internal diameter of 40mm	m	5		
	<i>Cold water pipes shall be High Density Polyethylene (HDPE) pipes, and be laid in trench as shown in the sanitary site drawing. Provide 100mm thick sand bedding material rammed and tamped and 150mm thick approved material to cover the pipe all as per the typical trench section and detail. Unit price shall include all associated civil works and necessary fittings such as T, bends etc. as shown on the drawing. All water pipes shall be tested two times the working pressure or 160 meters head, which ever is greater at the expense of the contractor.</i>				
D	Internal diameter of 40mm	m	10		
E	Internal diameter of 50mm (including Municipal connection)	m	5		
	Total Carried to Collection				
	COLLECTION				
	Total carried from page 5/16				
	Total carried from page 5/17				
	Total Carried to element Summary				

A	PART No. 2-WATER RESERVIOR GRP elevated water tanker or equivalent, 5000 liter, on a steel tower (all inclusive to engineer's detailed drawing) for gravity water supply to toilet	No	1		
	Total Carried to element Summary				



ITEM	DESCRIPTION	UNIT	QTY	RATE (UGX)	AMOUNT (UGX)
	PART No. 3-Sanitary Fixtures and Appliances <i>Unit Price shall include all the necessary fixing brackets or hooks and all associated civil works such as chiseling of walls, floors, beams etc. All fittings shall be enhanced by water efficient technology, and the water efficiency shall be certified.</i> All fixtures are to be approved European Brand				
A	Supply and fix R.A.K. or equivalent, hand wash basins made of white vitreous china with REMER or Equivalent chrome plated cold and hot water chrome plated lever action mixer tap, with pedestal stand ,complete with mixing battery plug, chrome plated chain holder, P-trap with connection pipe and with all other necessary accessories.Flexible hose to be REMER or Equivalent to be Vinyle coated and should be capable of resisting pressure of 4 bar. P- trap should be brass chrome plated with 50mm height of water seal and trap.				
	Size :-500 x 400 mm , Single bowl pedestal type	No	6		
B	Supply and fix R.A.K. or Equivalent wash down water closets complete with low flush cistern in "compact" form; of white vitreous china with plasticseat and cover including all accessories. Flexible hose to be REMER or Equivalent to be Vinyle coated and should be capable of resisting pressure of 4 bar.				
	Approximate size : 735x385 mm	No	8		
C	Supply and fix R.A.K. or equivalent approved quality urinals made of vitreous china with extended lip, complete with cistern,manual flush valve, P- trap strainer and with all the accessories.	No	5		
D	Supply and fix R.A.K. or Equivalent toilet paper holder with synthetic roller 150 x 150 x 25mm, chrome plated fastening screws and other accessories.	No	8		
E	Supply and fix R.A.K. or Equivalent soap holder size 150x150mm, white vitreous china complete with the necessary fixing and other accessories for hand wash basins.	No	8		
F	Supply and fix crystal glass mirror (minimum thickness of 6mm) of chrome plated brass frames, clips & screws Size, 500 x 400 mm.	No	6		
	Total Carried to Collection				



ITEM	DESCRIPTION	UNIT	QTY	RATE (UGX)	AMOUNT (UGX)
A	Supply and fix standard towel hanger made of chrome plated tabular metal rollers including fastening screws and the necessary accessories.	No	2		
B	Supply and fix shower units made of enameled cast-iron, complete with approved quality flexible shower head-smell trap and with all other necessary accessories. Size: 700 x 700 mm .	No	3		
C	Supply and fix NAFFCO or Equivalent 6kg Dry Powder fire extinguisher for ABCE class of fire at location shown on floor plan or as directed by the Engineer on site. The material shall comply ,complete with approved standard hanging and fixing materials	No	2		
D	Supply and fix approved quality screw type slab clean out as shown on the drawing including all the necessary connecting pieces diameter 100mm	No	2		
E	Supply and fix approved quality Floor Drains as shown on the drawing including all the necessary connecting pieces diameter 80mm.	No	2		
Total Carried to Collection					
<u>COLLECTION</u>					
Total carried from page 5/18					
Total carried from page 5/19					
Total Carried to element Summary					

AA

SLW

ITEM	DESCRIPTION	UNIT	QTY	RATE (UGX)	AMOUNT (UGX)
	PART NO.4- Waste, Vent and Rain Water Pipes and Accessories <i>All domestic waste, vent and storm water pipe lines shall be comply to BS 459, BS 4660, BS 5481 as appropriate, using double ring seals and gaskets complying with BS 2394 uPVC, PN-4 pipes and shall be provided with a minimum slope as stated in the drawing. Pipes and necessary fittings shall be standard quality and free from damage during storage, construction and etc. Unit price shall include all the necessary associated civil works, such as excavation cartaway, fixing or hanging to walls, beams or slabs. etc., necessary fittings such as bends, Y, etc. Storm water uPVC,PN-4 pipes Supply and lay approved quality storm water uPVC, PN-6 down pipes according to the drawing including all the necessary connecting accessories.</i>				
A	Nominal Diameter. 110 mm Waste Water Drainage <i>Supply and install waste water pipes made of rigid plastic pipe (upvc).PN-8, of approved standard including fittings like bends,Y's, T's,clean out,chromed metal support etc. for internal and all installations works incidental works .</i>	m	100		
B	300x300x450mm gully trap with gulley piece, concrete surround, grating and 300x300mm cast iron cover	NO	3		
C	750X450MM(internally) inspection chamber 600mmdeep invert consisting of150mm thick concrete block well,benched and channeled in 20mm thick water proofed cement/sand screed including excavation and medium duty approved cast iron cover and frame	NO	4		
D	50mm Diameter of min. pipe wall thickness=2mm	m	15		
E	80mm Diameter of min. pipe wall thickness=3mm	m	20		
F	110 mm diameter of min. Pipe wall thickness=3.2mm	m	50		
G	150 mm diameter of min. Pipe wall thickness=4mm	m	50		
	Total Carried to Collection				

Kx

Ach

ITEM	DESCRIPTION	UNIT	QTY	RATE (UGX)	AMOUNT (UGX)
A	<i>Supply, install, test and commissioning vent caps of rigid uPVC to be connected to the roof terminal of vent pipe as shown on the riser diagram, Complete with all the necessary sealing gaskets and accessories .</i> 50mm diameter	No	4		
B	<i>Supply and fix approved quality screw type under slab clean out as shown on the drawing including all the necessary connecting pieces.</i> 50 mm Diameter	No	12		
C	80 mm Diameter	No	14		
D	110 mm Diameter	No	17		
	Total Carried to Collection				
	<u>COLLECTION</u>				
	Total carried from page 5/20				
	Total carried from page 5/21				
	Total Carried to element Summary				

SUMMARY MECHANICAL INSTALLATIONS					
1	Cold and Hot Water Supply System			UGX	
2	Water Reservoir			"	
3	Sanitary Fixtures and Appliances			"	
4	Waste, Vent and Rain Water Pipes and Accessories			"	
	Total Carried to Summary				

A-X

X-X

ITEM	DESCRIPTION	UNIT	QTY	RATE (UGX)	AMOUNT (UGX)
	ELEMENT NO. 9 : ELECTRICAL INSTALLATION CABLE - SECONDARY DISTRIBUTION				
A	3x1.5mmsq L.V cable for distribution lines: .All cables shall be BASEC approved. P.V.C. insulated cables shall be 500V/1000V grade to B.S. 6004. Flexible cables shall be 300V/500V grade to B.S EN 50525-1.	M	150		
B	3x2.5mmsq L.V cable for main distribution lines: .All cables shall be BASEC approved. P.V.C. insulated cables shall be 500V/1000V grade to B.S. 6004. Flexible cables shall be 300V/500V grade to B.S EN 50525-1.	M	30		
C	4x4mmsq L.V cable for main distribution lines:	M	200		
	ELECTRICAL POWER ACCESSORIES				
D	Two gang 2way and one gang two way 10A,240v,50Hz Switch contacts made of high quality silver alloy material with agood preformance against electric arc the on & off operations switching cycles exceeding 100000 times for mechanical life, tested to 40000 operations at 10A rating, with all conduits, boxes, wires and all accessories: use BS EN 60669-1,	No	8		
	ELECTRICAL LIGHTING ACCESSORIES				
E	20W ,1200mm LED Tube light ,luminous flux1850lm,voltage 220- 260 ,colors rendering index 82,at maximum ambient temperature of 45 c in accordance IEC 62776,EN12464-2 or it's equivalent	No	11		
	Total Carried to Collection				

AA

AW

ITEM	DESCRIPTION	UNIT	QTY	RATE (UGX)	AMOUNT (UGX)
A	9W LED long lifetime of up to 25000h,nominal wattage 9w,voltage 240,operation frequency 50Hz,rated color temperature 2700k,lumen main upto end of lifetime 0.7,color warm white ,luminous fulx 806lm,color rendering index 80,number of switching cycles 100000,overall length 115mm light with a lamp holder rated at 250 ,rated current 4A, rated operating temperature 190 °c, heat resistance resin body and screw shell ' pillar terminal for conductors up to 1mm2 , lateral double resilient contacts .conformity to standard EN 60238 Universal	No	9		
B	Power point and switching points assembly incl. devices, conduits of 25mm, boxes, wires ,jumpers fixing , and all accessories: PANEL BOARD	No	8		
C	Distribution board 20A with lockable doors including comb bus bars,timer and all accessories 4ways EARTHING DETAILS INSTALLATION IN ACCORDANCE TO BS EN/IEC 62305	No	1		
D	Concrete inspection chamber : size 300x300mm internal dimension as to FURSE Cat No. PT005 or approved equivalent complete with heavy duty manhole cover ,charcoal and salt solution .	NO	3		
E	Copper earth rod 16mm diameter, 1200mm long; complete with tower earth clamps, nuts and bolts for fastening to copper down conductors.	NO	3		
F	25mm x 3mm PVC-Insulated copper down conductor complete with Gutter clamps, roof conductor holders/ clips to FURSE Cat.No. TC 115, or approved equivalent. <i>Fixed through a conduit and embedded into the wall.</i>	M	60		
G	25mm X 3mm Copper test clamp with flush inspection tape (test Link), as FURSE Cat. No. CT 105, or equal approved.	NO	3		
Total Carried to Collection					

A-X

SW

ITEM	DESCRIPTION	UNIT	QTY	RATE (UGX)	AMOUNT (UGX)
A	2000mm x 15mm air rod, Type A ;as to FURSE Cat. No. RA 240 c/w multiple point, as to FURSE Cat. No. RA 600, or approved equivalent.	NO	3		
B	Air terminals base as to FURSE Cat. No. SD 105, or approved equivalent complete with tape adapter and all accessories.	NO	3		
C	Equipotential bonding to indoor and outdoor metallic parts consisting of bi-metallic connectors and clips made of 8mm copper round conductors.	M	40		
D	Surge Protective Devices (SPD's) SPD's shall provide protection against lightning and transient over voltages on phase/neutral, phase/earth and neutral/earth modes.	NO	2		
E	Allow for testing and commissioning of the installation	NO	1		
Total Carried to Collection					
COLLECTION					
Total brought forward from page 5/22					
Total brought forward from page 5/23					
Total brought forward from page 5/24					
Total Carried to Summary					

ANNEX 3

lx

HK

ITEM	DESCRIPTION	UNIT	QTY	RATE (UGX)	AMOUNT (UGX)
	ELEMENT NO. 9 : ELECTRICAL INSTALLATION CABLE - SECONDARY DISTRIBUTION				
A	3x1.5mmsq L.V cable for distribution lines: .All cables shall be BASEC approved. P.V.C. insulated cables shall be 500V/1000V grade to B.S. 6004. Flexible cables shall be 300V/500V grade to B.S EN 50525-1.	M	150		
B	3x2.5mmsq L.V cable for main distribution lines: .All cables shall be BASEC approved. P.V.C. insulated cables shall be 500V/1000V grade to B.S. 6004. Flexible cables shall be 300V/500V grade to B.S EN 50525-1.	M	30		
C	4x4mmsq L.V cable for main distribution lines:	M	200		
	ELECTRICAL POWER ACCESSORIES				
D	Two gang 2way and one gang two way 10A,240v,50Hz Switch contacts made of high quality silver alloy material with agood preformance against electric arc the on & off operations switching cycles exceeding 100000 times for mechanical life, tested to 40000 operations at 10A rating, with all conduits, boxes, wires and all accessories: use BS EN 60669-1,	No	8		
	ELECTRICAL LIGHTING ACCESSORIES				
E	20W ,1200mm LED Tube light ,luminous flux1850lm,voltage 220- 260 ,colors rendering index 82,at maximum ambient temperature of 45 c in accordance IEC 62776,EN12464-2 or it's equivalent	No	11		
	Total Carried to Collection				