

BILL OF QUANTITIES (BOQ)

Item	Description	Unit	Qty	Rate	Amount
	BILL No: 01 <u>GENERAL & PRELIMINARIES</u>				
	GENERAL a) <u>Abbreviations</u> b) m - metre c) nos - numbers d) m ³ - cubic metre e) m ² - square metre f) m - Linear metre g) Kg-Kilogram h) t - Tonne i) incl - including j) mm - millimetre k) dia - diameter l) L/S -Lump Sum				
	<u>Notes</u> a) The contractor should take adequate measures to ensure the works are been carried out safely and would be held laible any nusance or injury to a third party. On practical completion of project the contractor should at not extra cost thoroughly clean out each room by washing all floors, cleaning glasses, removing paint stains, mortar droppings, and clear site completely of all debris and restore to original conditions, with all services interrupted during construction.				
1	PRELIMINARIES				
1.1	<u>Mobilization and Demobilization</u>				
a)	Mobilization and Demobilization of contractors personel, plants, machineries, equipments, materials, contractors facilities and the like.	Item	1.00		-
1.2	<u>Site Management Cost</u>				
a)	Allow provision for all on and off site management cost including costs of foreman and assistants, site office, Internet & telephone Facilities and equipments for site office and other Operational costs for site office. The Contractor shall constantly keep upon the Works on a full-time basis, along with key site personnel	Item	1.00		-
1.3	<u>Site Safety and Protection</u>				

Item	Description	Unit	Qty	Rate	Amount
a)	Providing and maintaining adequate safety measures on site for all workers and all authorized visitors on site safeguard the works including providing safety equipments, pest control, fire fighting equipments, materials and Plant against damage or theft including all necessary watching and lighting for the security of the Works and the protection of the public, Provide for carefully covering up and protecting the Works and Materials from inclement weather and theft.	Item	1.00		-
1.4	<u>Plants & Machineries</u>				
a)	Rate shall include cost of rentals, operation & maintenance, fuel, lubricant and the like.	Item	1.00		-
1.5	<u>Services and Facilities</u>				
a)	Allow Provision for services and facilities such as water, power supply, lighting, food, lodging and the like.	Item	1.00		-
1.6	<u>Temporary Structures</u>				
a)	Provide all necessary temporary fencing, hoarding, scaffolding, Safety nets, screens, fans, planked footways, guardrails, gantries, and the like to seal off the site and for the protection of the public and the occupants of any local or statutory authority, law or regulations and to the satisfaction of the Engineer. Provide all necessary lighting to same at night and for removing and making good any damage resulting there from on completion.	Item	1.00		-
1.7	<u>Sign Board</u>				
a)	Project Information Boards, Safety and Security Boards etc.	Item	1.00		-
1.8	<u>Clean-ups and Handover</u>				
a)	Daily removal of debris and unnecessary materials from the project site to the dump site 'area as designated by the Engineer. The General Contractor shall allow all costs for proper housekeeping of the project site at all times. Making good of the compacted areas during final completion.	Item	1.00		-
1.90	<u>Site Clearing</u>				
a)	Includes clearing of all trees and bushes complete with stems, roots Flooring and the reimbursement fees if applicable. The contractor is advised to survey the construction site and ensure that all necessary works for site clearing also included Reallocation of existing prefabricated garage within the health center site, Rates includes to additinal materials (if needed) and labour to reallocate garage.	m ²	893.40		-
1.10	Allow for all other cost not included elsewhere for General & Prelimineries. Each item to be detailed and priced seperately below.				
a)					
b)					
c)					
d)					
e)					

Item	Description	Unit	Qty	Rate	Amount
	f)				
	BILL No 01 : GENERAL & PRELIMINARIES TOTAL OF BILL 01- Carried over to summary				-
	<p align="center"><u>BILL No: 02</u> <u>SITE DEVELOPMENT & EARTH WORKS</u></p> <p><u>General</u> <u>Excavation</u> a) Excavation shall be carried out in all type of materials and by whatever means are necessary accurately to the lines and levels shown in the approved drawing. No blasting of any kind will be permitted. Excavation for foundations and will include timbering of soil faces. Excavation quantities are measured to the faces of concrete members. Rates shall include for leveling, grading, trimming compacting to faces of excavation, keeping sides plumb, backfilling, consolidating and disposing surplus soil and include for all additional excavation required to place the formwork / shuttering etc.</p> <p>b) Cost to include supply of material , labour , tools, & equipment, scaffolding, consumables (nails,screws,bolts,nuts,washer,etc.), cutting & forming, technical supervision and all other incidentals necessary to complete the work all in accordance with design & specifications.</p> <p>c) 'All the works in this section shall be carried out as directed by the Engineer to his approval.</p> <p>d) 'Unless otherwise described in the Bills of Quantities, excavation shall be deemed to commence at existing ground level.</p> <p>e) 'Rates for excavation shall include for additional excavation and backfilling due to planking and strutting and Contractor's method or process and keeping excavation and/or site free from water at all times.</p> <p><u>Backfilling</u> (a) Rates shall include for: leveling, grading, trimming, compacting to faces of excavation, keep sides plumb, backfilling, consolidating and disposing surplus soil. b) Ground needs to be compacted to the density required by the Engineer</p> <p>2.1 <u>Excavation</u> a) Excavation to receive foundation, foundation beams, tie beams and other concrete structures below ground level.</p> <p>2.2 <u>Back filling</u> a) Backfilling to receive finished floor level maximum thickness not exceeding 225mm. Rates shall include for: leveling, grading, trimming and compacting as specified.</p>				
	BILL No: 02 SITE DEVELOPMENT & EARTHWORKS TOTAL OF BILL No: 02 - Carried over to summary				-
	<p align="center"><u>BILL No: 03</u> <u>WATERPROOFING</u></p> <p><u>General</u></p>				

Item	Description	Unit	Qty	Rate	Amount
	<p><i>a) All the Waterproofing chemical shall be applied / mixed with the instruction of Manufacturer / Supplier and Consultant.</i></p> <p><i>b) Cutting and laying in position heavy duty polythene sheets of gauge 500 (not less than 1.5mm thick). Rates shall include for: dressing around and sealing to all penetrations. Apply slurry type waterproofing to all surfaces of concrete below ground level in accordance with manufacturer's instructions.</i></p>				
3.1	Apply 2 coats of water proofing bitumen paint conmix moya shield RBE or equivalent to all concrete structures and plastered masonry walls below ground level	Item	1.00		-
3.2	Add water proofing admixture, and concrete plasticizer, of approved material to all below ground concrete work.	Item	1.00		-
3.4	Apply approved Water Proofing membrane on top of toilet floor screed.	m ²	61.76		-
3.5	Polythene damp proof membrane 18 gauge to receive foundation and foundation beams. Rate shall include for: dressing around and sealing to all penetrations.	m ²	231.90		-
3.6	Ditto below ground slab	m ²	893.40		-
3.7	Apply Bituminous felt DPC through all ground floor masonry walls 1m above ground level.	m	128.22		-
	BILL No: 03 WATERPROOFING TOTAL OF BILL No: 03 - Carried over to summary				-
	<p style="text-align: center;"><u>BILL No: 04</u> <u>CONCRETE WORKS</u></p> <p><u>General</u> <u>Concrete Works</u></p> <p><i>(a) Rate shall include batching, mixing, compacting, leveling and placing of concrete and curing and removal of any formwork include for provision casting of required items & finishing after removal of formwork and additional concrete required to confirm to structural tolerances and rates shall include supply of all required materials and machineries</i></p> <p><i>(b) Mix ratio for reinforced concrete shall be 1:2:3 (20mm crushed aggregates) and lean concrete shall be 1:2:4 (20mm Crushed aggregates) by volume.</i></p> <p><i>(c) concrete test results shall be submitted by the contractor. All structural concrete shall be Grade 30 unless specified.</i></p> <p><i>d) Rate shall include to provide expansion joint where specified in the drawing.</i></p> <p><i>e) The cement shall be Villa Cement or equivalent brand for all works stated below.</i></p> <p><u>Formwork</u></p> <p><i>(a) Rates shall include for all necessary boarding, supports, erecting, framing, temporary cambering, cutting, perforations for reinforcing bars, bolts, straps, ties, hangers, pipes and removal of formwork.</i></p>				

Item	Description	Unit	Qty	Rate	Amount
	<p>b) All materials such as plywood, shutter oils and other items and transportation to site and secure the formwork in highly precise manner guaranteeing straight and smooth concrete edges.</p> <p><u>Reinforcement</u></p> <p>a) Rates shall include for cleaning, fabrication, placing, the provision for all necessary temporary fixings and supports including tie wire and other supports, laps and wastage.</p> <p>a) All reinforcement bars except 6 mm dia bars shall be of deformed high strength bars. 6 mm bar shall be round mild steel bars.</p> <p>c) Binding wire shall be of 1.6 mm or 1.4 mm soft iron wire.</p> <p>d) Reinforcement bars shall be cleaned before use i.e. should be free from rust, oil, din, or other coatings that reduces bonds, all reinforced bars and binding wires shall be stored under cover of at least 450 mm above the ground, cutting and bending according to approved manner.</p>				
4.1	<u>Below Ground</u>				
4.1.1	<p><u>Lean Concrete</u></p> <p>Lean concrete shall be 50mm thick & mix ratio shall be 1:3:6 by dry volume. Lean concrete placed at bottom of footing and foundation beam and below plinth for protection according to line and length mentioned in the approved drawing. Quantity measured to the edges of concrete foundation members. Rate shall include of placing any formwork where necessary, batching, mixing, casting in all required items pouring & compacting and curing for 3 days and removal of any formwork include for provision casting of required items & finishing after removal of formwork and additional concrete required to confirm to structural and excavated tolerances and rates shall include supply of all required works.</p>				
a)	50mm thk 1:2:4 Concrete Blinding to receive foundation & foundation beams	m ³	12.26		-
4.1.2	Pad Foundation				
a)	Concrete	m ³	32.60		-
b)	Formwork	m ²	112.04		-
c)	10mm dia bars	Kg	18.48		-
d)	12mm dia bars	Kg	2067.26		-
4.1.3	Foundation Beams				
a)	Concrete	m ³	45.19		-
b)	Formwork	m ²	313.55		-
c)	6mm dia bars	Kg	1166.65		-
e)	12mm dia bars	Kg	606.78		-
f)	16mm dia bars	Kg	2378.01		-
4.1.4	RC Column Stumps				
a)	Concrete	m ³	2.83		-
b)	Formwork	m ²	38.88		-
c)	6mm dia Bars	Kg	255.74		-
d)	12mm dia bars	Kg	92.71		-
e)	16mm dia bars	Kg	494.71		-
f)	20mm dia bars	Kg	1029.80		-
4.2	<u>Above Ground</u>				

Item	Description	Unit	Qty	Rate	Amount
4.2.1	100mm thk Ground Slab				
a)	Concrete	m ³	104.28		-
b)	10mm dia bars	Kg	6002.14		-
4.2.2	First Floor Slab				
a)	Concrete	m ³	74.24		-
b)	Formwork	Kg	496.92		-
c)	10mm dia bars	Kg	1833.08		-
d)	12mm dia bars	Kg	5175.17		-
e)	16mm dia bars	Kg	282.10		-
4.2.3	RC Columns				
a)	Concrete	m ³	35.25		-
b)	Formwork	m ²	482.98		-
c)	6mm dia Bars	Kg	958.98		-
d)	12mm dia bars	Kg	204.60		-
e)	16mm dia bars	Kg	2152.49		-
f)	20mm dia bars	Kg	3998.87		-
4.2.4	Floor Beams				
a)	Concrete	m ³	22.94		-
b)	Formwork	Kg	265.44		-
c)	6mm dia Bars	Kg	1096.13		-
d)	10mm dia bars	Kg	147.85		-
e)	12mm dia bars	Kg	200.15		-
f)	16mm dia bars	Kg	1872.38		-
g)	20mm dia bars	Kg	2972.00		-
4.2.5	Roof Beams				
a)	Concrete	m ³	19.03		-
b)	Formwork	Kg	232.64		-
c)	6mm dia Bars	Kg	434.04		-
d)	12mm dia bars	Kg	254.91		-
e)	16mm dia bars	Kg	1766.41		-
f)	20mm dia bars	Kg	205.98		-
4.2.6	RC Parapet Wall				
a)	Concrete	m ³	14.55		-
b)	Formwork	Kg	290.92		-
c)	10mm dia Bars	Kg	1280.66		-
4.2.7	Staircase				
a)	Concrete	m ³	3.09		-
b)	Formwork	Kg	28.60		-
c)	10mm dia Bars	Kg	70.20		-
d)	12mm dia Bars	Kg	52.00		-
4.2.8	Step & Ramps				
a)	Concrete	m ³	20.34		-
b)	Formwork	Kg	27.46		-
c)	6mm dia Bars	Kg	47.09		-
d)	10mm dia Bars	Kg	126.62		-
4.3	<u>Other Concrete Works</u>				
	<i>Rate shall include Concrete, formwork, reinforcement, casting, curing, placing etc required for complete works as specified in the drawings and specifications.</i>				

Item	Description	Unit	Qty	Rate	Amount
a)	Wall Stiffner members incl RC Lintel Beams, Sill beams, Stiffner columns, coping beams, etc.	item	1.00		-
	BILL No: 04 CONCRETE WORKS TOTAL OF BILL No: 04 - Carried over to summary				-
	<p style="text-align: center;"><u>BILL No: 05</u> <u>MASONRY AND PLASTERING</u></p> <p><u>General</u> <u>Masonry</u> (a) Rates shall include for: cleaning out cavities, forming rebated reveals and pointing and cleaning down to reveals where necessary; fractional size blocks, all necessary machine cutting, cutting or forming chases or edges of floor slabs, cutting or leaving holes and openings as recesses for and building in pipes, conduits, sleeves and similar as required for all trades; leaving surfaces rough or raking out joints for plastering and flashings, bedding frames or plates, building in joists, bearers or similar, temporary supports to openings, templates, reinforcement in walls and for all necessary making good. (b) Blocks shall be of standard quality with no defect. <u>Plastering</u> i) Rate shall include for G.I Fiberglass Mesh Plaster at the joint or provide flexible sealant joint as directed in the drawings.</p> <p>5.1 <u>Below Ground</u></p> <p>5.1.1 <u>Brick Work</u> 150mm thick solid block masonry wall, bricks laid to form alternate courses of headers and stretchers, laid on and incl. mortar</p> <p>a) Below Ground Walls</p>	m ²	109.19		-
	<p>5.1.2 <u>Plastering</u> Plastering 25mm thk. (12.5+12.5mm) 2 coats Plain Cement Plaster, 1:4 cement to river sand mix ratio on both sides of below ground walls with bituminous waterproofing application on both sides.</p> <p>a) Below Ground Walls</p>	m ²	218.38		-
	<p>5.2 <u>Above Ground</u></p> <p>5.2.1 <u>Brick Work</u> 100mm thick solid block masonry wall, bricks laid to form alternate courses of headers and stretchers, laid on and incl. mortar</p> <p>a) External Walls</p>	m ²	11.19		-
	<p>150mm thick solid block masonry wall, bricks laid to form alternate courses of headers and stretchers, laid on and incl. mortar</p> <p>b) External Walls</p>	m ²	527.96		-
	<p>150mm thick hollow block masonry wall, bricks laid to form alternate courses of headers and stretchers, laid on and incl. mortar</p> <p>c) Internal Walls</p>	m ²	336.97		-

Item	Description	Unit	Qty	Rate	Amount
5.2.2	<u>Plastering</u> <i>External plastering 20mm thk. (10+10mm)</i>				
a)	External Walls <i>External plastering 16mm thk</i>	m ²	664.60		-
b)	External Walls	m ²	11.19		-
c)	<i>Internal plastering 16mm thk.</i> Internal Walls	m ²	1201.91		-
BILL No: 05 MASONRY AND PLASTERING					
TOTAL OF BILL No: 05 - Carried over to summary					-
<p style="text-align: center;"><u>BILL No: 06</u> <u>DOORS & WINDOWS</u></p> <p><u>General</u> <i>(a) The prices for doors, windows, handrailings and fixed glass panels, etc., shall include for All necessary materials, labor and plant in connection with design, manufacturing, fabricating, transporting, handling, hoisting, installing, Cutting holes and chases for fixings, extract fans and making good, Pointing the clearances between the aluminum framings and structural openings with quality patent mastic as recommended, Large and small panes, cutting, waste, all risk putty, glazing beads, caulking compound, breakages before and after fixing, fixing at floor level or at heights, etc.</i> <i>(b) Rates shall include for locks, latches, closers, push plates, pull handles, bolts, kick plates, hinges and all door & window hardware.</i> <i>(c) Rates shall include for all doors and windows painting as specified</i> <i>(d) Rates shall be include all items specified in the door schedule</i> <i>(e) On Site Measurements shall be taken to verify the dimensions before fabricating any door/ window.</i> </p>					
6.1	<u>Supply and complete Installation of:</u>				
a)	D01	nos	4.00		-
b)	D02	nos	1.00		-
c)	D03	nos	4.00		-
d)	D04	nos	4.00		-
d)	D05	nos	6.00		-
e)	D06	nos	8.00		-
f)	D07	nos	1.00		-
g)	W01	nos	6.00		-
h)	W02	nos	6.00		-
i)	W03	nos	1.00		-
j)	W04	nos	1.00		-
k)	W05	nos	14.00		-
l)	W06	nos	1.00		-

Item	Description	Unit	Qty	Rate	Amount
m)	W07	nos	2.00		-
n)	G01	nos	1.00		-
	BILL No: 06 DOORS & WINDOWS TOTAL OF BILL No: 06 - Carried over to summary				-
	<p align="center">Bill No: 07 <u>WOOD, GLASS & METAL WORKS</u></p> <p><u>General</u></p> <p>a) Rates shall include for: all labour in framing, notching and fitting around projections, pipes, light fittings, hatches, grilles and similar and complete with cleats, packers, wedges and similar and all nails, bolts & screws.</p> <p>b) Rate shall include for all fabrication works, welding, polishing, Marking, drilling for bolts, nuts, washers, rivets, sounter sinking and the like.</p> <p>c) The Contractor / Supplier shall take On Site measurements before commencing any fabrication works.</p> <p>d) Any materials used shall be approved by the Client / Consultant before commencing the installation works.</p> <p>e) The Contractor shall submit shop drawings for Consultant's review / approval for any of the mentioned works.</p> <p>f) All the mentioned works shall be constructed in accordance to the given specifications.</p> <p>(g) Rates shall include for fabrication and erection of scaffolding and temporary supports and fixing in to position.</p> <p>(h) All are according to the drawings and specification. The rates shall cover all the works completely unless other wise measured separately.</p>				
7.1	<u>Ceiling Works</u>				
a)	Supply and complete Installation of cement board ceiling with 600x600 timber frame as specified.	m ²	279.42		-
b)	Supply and complete Installation of gypsum board ceiling with 600x600 timber frame as specified.	m ²	710.69		-
c)	Supply and complete Installation of cement board ceiling on external eve with 600x600 timber frame as specified.	m ²	96.47		-
7.2	<u>Stage</u>				
a)	Construction of 16.2m x 7.5m GI steel framed Stage complete with structure, deckig, steps etc. Rate shall include for 18mm thick plywood storage drawers bolted to the steel frame on 3 rows of U section guard rail bolted to ground slab with 2" dia wheels (21 nos per drawer) all as per the the detailed design and approved drawings	item	1.00		-
7.3	<u>Toilet Partition Works</u>				
a)	Providing and fixing HDPE partition panels in toilet cubical with approved fittings including openable doors with all required accessories & fittings. The works shall be completed as per drawings & Specifications. Complete area including doors shall be measured for payment purpose.	item	1.00		-
7.4	<u>Railing Works</u>				

Item	Description	Unit	Qty	Rate	Amount
a)	Supply & complete Installation of staircase railing as specified in the detailed drawing. Rate shall include for 50mm dia CHS GI Handrail and 75 x 75mm GI SHS Top & bottom post along with 1.2m vertical support members complete with 2 coats of anti-corrosive paint and approved finishing coat, bolted to concrete staircase, making good around the welding, polished and the like.	m	6.64		-
b)	Supply & complete Installation of railing in ramps as specified in the detailed drawing. Rate shall include for 900mm high, 25mm thick GI pipe railing, bolted to concrete slab, making good around the welding, polished and the like.	m	14.96		-
	BILL No: 07 - WOOD & METAL WORKS TOTAL OF BILL No: 07 - Carried over to summary				-
	<p align="center"><u>BILL No: 08</u> <u>FINISHING WORKS</u></p> <p><u>General</u> <u>Tiling Works</u> a) Rate shall include prepare surface for approved bedding tiles with reach bedding materials as per the technical specifications & approved working drawings, fix tiles with ct grout in a precise manner to maintain correct alignment, applying tile grout and wiping any excess grout to ensure the required standards of finished works. Rates shall include for: screeding, fixing, bedding, grouting, and pointing materials; making good around pipes, sanitary fixtures, and similar; cleaning down and polishing any other similar works to ensure the required finish.</p> <p>a) Approved Adhesive waterproofing chemical shall be used as screed for toilets, wet kitchens and external floor tiles as per manufacturers instruction. d) Rate shall include skirting for all floor finishing works where necessary</p> <p><u>Painting Works</u> (a) Rates shall include for: the provision, erection and removal of scaffolding, preparation, rubbing down between coats and similar work, the protection and/or masking floors, fittings and similar work, removing and replacing door and window furniture where necessary. (b) All painting work shall be carried in accordance with the drawings and Specifications and subject to approval by Engineer</p> <p><u>Floor Finishes & Tiling</u> a) 600mm X 600mm Homogenous non-slip tiles over 50mm screeding. b) 300mm X 300mm Homogenous non-slip tiles over 50mm screeding. c) Self Levelling cement floor screed with epoxy floor paint. d) Self Levelling cement floor screed with bituminous waterproofing agent.</p> <p><u>Wall Tiling</u> a) 300mm X 600mm Homogenous wall tiles.</p> <p><u>Wall putty & painting</u></p>				
8.1					
a)	600mm X 600mm Homogenous non-slip tiles over 50mm screeding.	m ²	286.88		-
b)	300mm X 300mm Homogenous non-slip tiles over 50mm screeding.	m ²	56.35		-
c)	Self Levelling cement floor screed with epoxy floor paint.	m ²	387.84		-
d)	Self Levelling cement floor screed with bituminous waterproofing agent.	m ²	424.96		-
8.2					
a)	300mm X 600mm Homogenous wall tiles.	m ²	106.44		-
8.5					

Item	Description	Unit	Qty	Rate	Amount
a)	2 coat of putty, Painting 2 coat of wall sealer, 2 coats of weather proof paint as specified to; External Walls, and Concrete Surfaces	m ²	675.79		-
b)	2 coat of putty, Painting 1 coat of wall sealer & 2 coats of emulsion white matt paint as specified to; Internal Walls and Concrete Surfaces	m ²	1201.91		-
8.6	<u>Ceiling putty & painting</u>				
a)	Putty & Painting 2 coat of wall sealer, 2 coats of emulsion white matt paint finish to suspended ceiling and Soffit of RC Slab and Soffit of Stairs.	m ²	393.58		-
	BILL No: 08 - FINISHING WORKS TOTAL OF BILL No: 08 - Carried over to summary				-
	<p align="center"><u>BILL No: 9</u> <u>ROOFING WORKS</u></p> <p><u>General</u> (a) Rates shall include for: all labour in framing, notching and fitting around projections, and complete with cleats, packers, wedges and similar and all nails and screws and the like. (b) Rates shall include for fair edges, dressing over angle fillets, turning into grooves, all other labors, circular edges, nails, screw and other fixings and laps. d) Rates shall include for: the provision, erection and removal of scaffolding d) Rate shall include for waterproofing and sealing through all penetrations. e) Rate shall include for applying anti- corrosive paint, redoxide on welding joints etc exposed for rusting.</p> <p>Fabricate, supply & erecting steel trusses comprising of 3.2mm thick x 50mm dia GI Pipe top and bottom chord complete with 25 x 2mm thick GI pipe web members. The works shall include all necessary ancillary works required such as 12mm thk steel plate bracket welded to truss along with fixing anchor bolts to RC roof beams with anchor fix chemical, base stiffeners etc. in complete as per drawings & specifications.</p>				
9.1		item	1.00		-
9.2	Lysaght or equivalent Roofing Sheets	m ²	891.33		-
9.3	50mm thick mineral wool insulation	m ²	891.33		-
9.4	200x200mm lysaght gutter	m	71.95		-
9.6	Lysaght ridge capping	m	35.97		-
9.7	50x150 C-Purlin	m	1043.25		-
9.8	30x250mm timber fascia board	m	71.95		-
9.9	Supply & installation of 110mm dia rainwater downpipe complete with fittings, clamps, consumables etc.	nos	11.00		-
	BILL No: 09 - ROOFING WORKS TOTAL OF BILL No: 09 - Carried over to summary				-
	<p align="center"><u>BILL No: 10</u> <u>ELECTRICAL INSTALLATIONS</u></p>				

Item	Description	Unit	Qty	Rate	Amount
	<p><u>General</u> (a) Rates shall include for: screws, nails, bolts, nuts, standard cable fixing or supporting clips, brackets, straps, rivets, plugs and all incidental accessories (c) Rates shall include for electrical conduits, fittings, equipment and similar all fixings to various building surfaces and also all electrical work shall be carried out according to STELCO & MEA standards and specifications. (e) Rates shall include for supply and complete installation (h) Rates shall include all costs associated with provision of all holes, openings, chases in block walls, duct and other builders work completely.</p> <p><u>Point Wiring</u> (a) Rates shall include for all conduits, conduit fittings, clips, earth cables, draw wire, wiring accessories, hardware fixing, insulating materials, making holes and chases in brick work, concrete work...etc. and making good the same. (b) Rates for socket outlets shall be inclusive of cables, switch socket outlets of correct rating, sunk boxes etc.</p> <p><u>Fixtures</u> (a) All the light fixtures to be without any defects to the complete satisfaction of the Architect/Engineer. (b) Rates shall also include for supply and installation of all the fittings complete with all the accessories, such as starters, bulbs, chokes, power factor correction capacitors...etc. (c) All outdoor lights shall be IP66 rated (d) All outdoor & toilet sockets & switches shall be in waterproof casing</p>				
10.1	<u>Electrical Mains Connection</u>				
	Allow Provision for 3 Phase Electrical mains Connection. Rate shall include supply and laying of main cable from the nearest Transformer / Road Distribution Box as approved by the local service provider. The size and quality of main cable shall be approved from the respective Authority.	item	1.00		-
	Allow Provision for Carrying out testing and commissioning as per the employers requirement for all components of the Electrical System and Obtain Approval for Permanent Electrical Connection to the building.	Item	1.00		-
10.2	<u>Electrical Boards</u>				
	Supply and installation of Distribution Boards complete with MCBs, ELCBs, Breakers, etc any other item required to working order, wall mounted steel powder coated IP44 enclosure with neutral link, earth bar and required accessories required for complete installation as per the specifications. Rate shall include wiring and connection from electrical fixtures.	nos	4.00		-
10.3	<u>Electrical wiring</u>				
	Electrical wiring with copper conductor cable in conduits in walls and in casing on soffits of slab as specified to:				
	a) 1.5mm ² cable to light & Fan fixtures	points	178.00		-
	b) 2.5mm ² cable to Power Points	points	56.00		-
10.4	<u>Electrical Fixtures</u>				

Item	Description	Unit	Qty	Rate	Amount
10.4.1	Lights and Fans				
a)	Ceiling Light (12W)	nos	11.00		-
a)	Ceiling Light (18W)	nos	2.00		-
b)	Indoor Wall Light (18W)	nos	3.00		-
b)	Recessed Ceiling Light (12W)	nos	13.00		-
c)	Weather Proof Wall Light IP55 (12W)	nos	40.00		-
d)	2 x 50W PLL Tube Light	nos	52.00		-
e)	42 inch To 48 inch Ceiling Fan	nos	40.00		-
e)	Ceiling Mounted Exhaust Fan	nos	3.00		-
f)	Emergency Light	nos	14.00		-
10.4.2	Light switches				
a)	Light Switch (1 Gang)	nos	3.00		-
a)	Light Switch (2 Gang)	nos	7.00		-
b)	Light Switch (3 Gang)	nos	8.00		-
c)	Light Switch (4 Gang)	nos	15.00		-
d)	Light Switch (5 Gang)	nos	12.00		-
10.4.3	Sockets				
a)	13A Power Socket	nos	14.00		-
b)	13A Twin Socket	nos	42.00		-
10.5	Telecommunication and IT System <i>Note: rate shall include for cables, electrical provisions and connection</i>				
a)	Computer network outlet	nos	1.00		-
b)	Telephone Outlet	nos	1.00		-
c)	Public Address System	nos	1.00		-
d)	Wall Mounted Speaker	points	18.00		-
	BILL No: 10 - ELECTRICAL INSTALLATIONS				
	TOTAL OF BILL No: 10 - Carried over to summary				-
	<u>BILL No: 11</u> <u>HYDRAULICS & DRAINAGE</u>				
	<u>General</u> <i>(a) Rates shall include for pipe laying works cutting & waste of pipe etc. & joining pipes , connecting pipes to sanitary fixture and appliances , valves , sockets, running joints, connectors, elbows, junctions, reducers, expansion joints , backnuts and similar , incidental fittings, clips, saddles, brackets, straps, hangers, screws, nails and fixing complete.</i>				
11.1	Allow provision for sewer and drainage mains connection complete with external pipe works for sewerage, drainage and vent pipes, fittings and accessories.	item	1.00		-
11.2	Allow Provision for complete installation of inspection chambers	nos	1.00		-
11.3	<u>Internal Pipes and Fittings</u>				
11.3.1	<u>Fresh Water Supply</u>				
a)	Allow Provision for internal pipes, complete with fittings, accessories, earthworks, connection to fixtures etc.	l/s	1.00		-
11.3.2	<u>Sewer & Drainage</u>				

Item	Description	Unit	Qty	Rate	Amount
a)	Allow Provision for Internal Sewerage Disposal Pipes complete with 100mm soil pipes, 50mm drain pipes, 75mm vent pipes fittings and Accessories, earthworks etc.	l/s	1.00		-
11.4	<u>Fixtures</u>				
a)	Basin Faucet	set	5.00		-
b)	Bidet Shower	set	3.00		-
c)	Head Shower	set	3.00		-
d)	Wash Basin	set	5.00		-
e)	Water Closet	set	3.00		-
f)	Angle Valve with Cap for Ground Water	nos	3.00		-
g)	Gate Valve	nos	3.00		-
h)	Floor Drain	nos	3.00		-
i)	Gully Trap	nos	1.00		-
j)	Bottle Trap	nos	5.00		-
k)	Clean Out Point	nos	2.00		-
	BILL No: 11 - HYDRAULICS & DRAINAGE				
	TOTAL OF BILL No: 11 - Carried over to summary				-
	<u>BILL No: 12</u> <u>FIRE FIGHTING INSTALLATION</u>				
	<u>General</u> (a) Rates shall include for: screws, nails, bolts, nuts, standard cable fixing or supporting clips, brackets, straps, rivets, plugs and all incidental accessories (b) Rate shall include for Electrical Conduits, fittings, pumps, controller boards, and other equipment and similar all fixings and making good around ducts. (c) Rate shall include for all necessary electrical wiring and accessories required for completion of fire fighting system installation in accordance with MNDF Regulations. (d) All materials, fixtures, boxes, cabinets and equipments should be approved by MNDF prior to installation. (e) All the quoted rates shall be inclusive of supply, installation, testing and commissioning.				
12.1	<u>Fire Fighting Equipments and Fixtures</u> Rate shall include for electrical wiring, connection & all required consumables etc Supply & Complete Installation of;				
a)	Addressable fire alarm control panel	nos	1.00		-
b)	Exit Sign with electrical connection.	nos	17.00		-
c)	Smoke Detector. Rate shall include for 1.5mm2 fire resistant cable.	nos	5.00		-
d)	Resettable Manual Call Point with Cabinet.	nos	17.00		-
e)	CO2 Portable Extinguisher 2KG with cabinet	nos	9.00		-
f)	9L H2O Portable Extinguisher with cabinet	nos	9.00		-
g)	Fire Alarm Bell (with sound level of 65dB).	nos	2.00		-
h)	Beacon	nos	3.00		-
	BILL No: 12 - FIRE FIGHTING INSTALLATION				
	TOTAL OF BILL No: 12 - Carried over to summary				-
	<u>BILL No:13</u>				

Item	Description	Unit	Qty	Rate	Amount
	<u>TENDERER'S ADJUSTMENTS</u>				
	Any adjustments, missing items, works, etc that are not specified in this BOQ but specified in drawings, specifications, etc and other document forming part of the contract that the contractor may deemed to consider necessary to complete the works should be written below and on similar continuation sheets if required, and the net amount of the adjustments is to be carried to the summary.				
13.1	<u>Additions</u>				
a)	BILL No 01 : GENERAL & PRELIMINARIES				
b)	BILL No: 02 SITE DEVELOPMENT & EARTHWORKS				
c)	BILL No: 03 WATERPROOFING				
d)	BILL No: 04 CONCRETE WORKS				
e)	BILL No: 05 MASONRY AND PLASTERING				
f)	BILL No: 06 DOORS & WINDOWS				
g)	BILL No: 07 - WOOD & METAL WORKS				
h)	BILL No: 08 - FINISHING WORKS				
i)	BILL No: 09 - ROOFING WORKS				
j)	BILL No: 10 - ELECTRICAL INSTALLATIONS				
k)	BILL No: 11 - HYDRAULICS & DRAINAGE				
l)	BILL No: 12 -'FIREFIGHTING INSTALLATION				
	<u>ADDITIONS TOTAL</u>				
13.2	<u>Omissions</u>				
a)	BILL No 01 : GENERAL & PRELIMINARIES				
b)	BILL No: 02 SITE DEVELOPMENT & EARTHWORKS				
c)	BILL No: 03 WATERPROOFING				
d)	BILL No: 04 CONCRETE WORKS				
e)	BILL No: 05 MASONRY AND PLASTERING				
f)	BILL No: 06 DOORS & WINDOWS				
g)	BILL No: 07 - WOOD & METAL WORKS				
h)	BILL No: 08 - FINISHING WORKS				
i)	BILL No: 09 - ROOFING WORKS				
j)	BILL No: 10 - ELECTRICAL INSTALLATIONS				
k)	BILL No: 11 - HYDRAULICS & DRAINAGE				
l)	BILL No: 12 -'FIREFIGHTING INSTALLATION				
	<u>OMISSIONS TOTAL</u>				
	BILL No: 13 - TENDERER'S ADJUSTMENTS				
	<i>TOTAL OF BILL No: 13 - Carried over to summary</i>				