

BIDDING DOCUMENTS

CIVIL HOSPITAL KARACHI

HEALTH DEPARTMENT

GOVERNMENT OF SINDH

Contract No:- MW – X - 0223

Supplying, Installation, Testing, Commissioning & Maintenance
(during maintenance period) of
Internal Glass Partitioning & Miscellaneous Works for the project
“Shaheed Mohtarma Benazir Bhutto Accident, Emergency
& Trauma Centre and Ancillary Services Complex
at Civil Hospital Karachi”

VOLUME-II

FINANCIAL BID DOCUMENTS



Naqvi & Siddiquie Associates (PAKISTAN)
ARCHITECTS - ENGINEERS - PLANNERS - INTERIOR DESIGNERS - MANAGEMENT CONSULTANTS

FORM OF BID

The Project Director,
Shaheed Mohtarma Benazir Bhutto,
Accident, Emergency & Trauma Centre,
And Ancillary Services Complex At,
Civil Hospital Karachi.

Subject: Supply, Installation, Testing, Commissioning & Maintenance (during maintenance period) of **Internal Glass Partitioning & Miscellaneous Works** for the project Shaheed Mohtarma Benazir Bhutto Accident, Emergency & Trauma Centre and Ancillary Services Complex at Civil Hospital Karachi

Dear Sir,

1. Having examined the Tender Documents and the site conditions for the above mentioned Project, we, the undersigned offer to operate and run the whole of the said works in conformity with the said tender Documents (and Addendum if any) for the sum of undermentioned amount on DDP basis:-

Bid Price (In Figure):	Rs.
Bid Price (In Words):	Rupees

2. The above total sum is based on the quantities shown in the Bill of Quantities and other works as mentioned in Salient Features.
3. We undertake, if our tender is accepted, to sign an agreement within 15 calendar days following receipt of letter of award in the form laid out in annexure to this Tender with such alterations and additions thereto as may be required to adopt, such Agreement to circumstances of this Tender.
4. We undertake, if our Tender is accepted, to mobilize on site within 7 calendar days of receipt of the letter of award and commence the works on the first works comprised in the contract within the time of completion specified in the Salient Features.
5. We agree to abide by the Tender for a period of 90 calendar days from the date of opening of tender and shall remain binding upon us and may be accepted at any time before the expiration of that period.
6. Unless and until a formal Agreement is prepared and executed, this Tender together with your written acceptance thereof and other relevant correspondence subsequent to the Tender shall constitute a binding Contract between us.

7. We understand that you are not bound to accept the lowest or any tender you may receive, and that you will not reimburse any expenses incurred by us in preparing and submitting the Tender or otherwise in connection with the Tender.
8. As a guarantee for the performance of the undertakings and obligations of this Tender, we submit herewith Earnest Money/Bid Security equivalent to 1% of the quoted cost in an amount Rs. _____ (Rupees _____) in form of Pay Order issued by the Bank vide No. _____ dated _____ made in your favor and made payable to you without any reference to us and valid for 90 calendar days from the date of submission of Tender.
9. The Tender Documents referred to above constitute a part of this Tender and comprise of the documents listed hereunder:
 - a. Instructions to bidders.
 - b. Salient Features / Terms & Condition of the Tender.
 - c. Evaluation Criteria
 - d. Form of Agreement.
 - e. Scope of work / Bill of Quantities / Specification (Technical).
 - f. The Addendum (if any).
 - g. The Drawings (if any).

Dated this _____ day of _____ 20_____

Signature _____ in the capacity of _____ duly
authorized to sign bids for and on behalf of _____

(Name of Bidder in Block Capitals)
(Seal)

Address

Witness:

(Signature) _____

(Name) _____

Address: _____

Occupation _____



**INTERNAL GLASS PARTITIONING & MISCELLANEOUS WORKS FOR
SHAHEED MOHTARMA BENAZIR BHUTTO ACCIDENT, EMERGENCY &
TRAUMA CENTRE AND ANCILLARY SERVICES COMPLEX AT CIVIL HOSPITAL, KARACHI.**

ABSTRACT OF COST

1.	Part - "A"	Rs. _____
2.	Part - "B"	Rs. _____
3.	Part - "C"	Rs. _____
Total Cost of Project			Rs. _____

(Rupees _____)

Date: _____

Signature & Seal of Contractor



**INTERNAL GLASS PARTITIONING & MISCELLANEOUS WORKS FOR
SHAHEED MOHTARMA BENAZIR BHUTTO ACCIDENT, EMERGENCY &
TRAUMA CENTRE AND ANCILLARY SERVICES COMPLEX AT CIVIL HOSPITAL, KARACHI.**

(BILL OF QUANTITIES)

S. No	Description	Unit	Qty.	Rate	Amount
<u>PART - "A"</u>					
1.00	Skilled & non-skilled labour for dismantling, cutting cheisling upto 3" to 12" wide and 3" to 8" thick any surface at any height of 15 storied building such ceramic tile work, marble, granite work, plain cement, R.C.C. work including cutting steel bars etc. using required apparatus cutter, grinder, manual cheisler hammer including all charges i.e. Water, Electricity, part of apparatus T&P etc. wherever required and making good after completion the cheisling, cutting etc. cover with rough plaster or construct with wire mesh as per specification & instruction of Client / Consultant complete in all respect.	Sft.	2,300		
2.00	<u>BLOCK MASONRY:</u> Providing & laying first class solid 1:3:6 ratio block masonry set in cement mortar 1:4 in straight or curved wall including scaffolding, raking out joints and curing etc. at any height and any floor complete in all respect as per design, specifications and as directed by Client /				
	a) 6" thick	Sft.	900		
	b) 4" thick	Sft.	1,250		
3.00	<u>PLASTERING & RENDERING:</u> Applying cement plaster on Columns, Beams, Walls etc. straight using mortar tag at more than 5'-0" wide area or curved surfaces upto any height including curing scaffolding, cutting using corner beads with specialized mesh at corners mortar should be prepared on metal sheet or thick plastic sheet etc. complete as per drawing complete in all respect as approved by Engineer/Consultant.	Sft.	1,050		
	<u>FLOORING / TILE:</u> Laying 16" x 16" or any size (approved by Client / Consultant) China make Porcelain Matt finish Tiles with 2-1/2" thick base floor in 1:6 cement sand mortar including cutting, wastage and jointing fill by matching colour at any floor & any height new and repair work edges should be align and leveled complete in all respect as per design & specification and direction by Client / Consultant.	Sft.	4,700		



S. No	Description	Unit	Qty.	Rate	Amount
4.00	<u>DOOR FRAME</u> Providing & fixing 5" and 7" wide 16 SWG galvanized metal frame align with the reference wall comprising M.S. Hold Fast 8" length 4 Nos. each side and S.S. 6" hinges with S.S. 4" screw, pouring concrete 1:2:4 at hollow part of the frame, matching colour at any height any floor as per design, specification and direction by Client / Consultant complete with all respect. 5" wide 7" wide	Rft. Rft.	124 103		
5.00	Supplying & installation of 4'-0" wide Iron Staircase at Helipad platform to roof level 176' - 0" to 204' - 0" comprising 3" x 6" x 1/8" and 2" x 4" x 1/8" "U" type angle iron clad chequered plate on tread and riser over the foudation of anchor bolt & 1/4" thick M.S. 10" x 10" plate as per site requirement along with 3'-0" high 2" dia MS pipe 16 gauge railing including welding, nut bolt tighteners, red oxide primer surface colour as per drawing & specification and direction by Client / Consultant complete in all respect all charges lifting, elevating, placement at any floor any height should be included.	Sft.	350		
6.00	Providing & fixing of natural anodized/ Powder Coated aluminum 2 way structural curtain wall system using 4" x 2" section with top hung concealed with attached with 4 bar friction stay heavy duty. Including M.S. Brackets, joiners, N.V. rubber gasket, Nickel plated screws, galvanized bolts & nuts, (imported silicone sealent and Hilti or Fischer expansion bolts) with 6mm thick clear imported glass (distortion free) at any height any floor a) Curtain Wall	Sft.	290		
7.00	Providing & fixing of imported aluminum Composite Panel ALPOLIC fire rated cladding Mitsubishi Japan origin 4mm thick in Metallic G30% finish. Including local aluminum base framing with Nickel plated screws, Galvanized nuts, bolts, washers & aluminum rivets at any height any floor .	Sft.	340		
8.00	Supplying & installation at 204' level helipad moveable railing as per drawing and specification along with complete mechnism consisting of 2" dia, 1-1/2" dia, 3/4" dia 16 gauge S.S. pipe of 304 grade along with 3" x 2" S.S. plate embeded in slab 1"□ 16 gauge mesh welded with includig grinding, welding, cleaning making good any concrete surface complete with all respects as per directions by Client / Consultant.	Sft.	1,200		



S. No	Description	Unit	Qty.	Rate	Amount
9.00	Providing & installation of locally fabricated of Stainless Steel or Granite recessed type drinking water Fountain along with push type faucet, 1½" dia Stainless Steel waste fitting, Stainless Steel Bottle Trap and waste pipe of 1½" dia. Complete installation in wall at any floor and height, making connection to chilled water and drain pipe. Complete in all respects as per directions of Engineer Incharge.	Nos.	34		
10.00	Making & applying lane marking at parking area on different floor at any height any floor of various direction according to parking management rule approx. area 33000 Sft. (For more or less area payment adjusted from total amount) in all respect as per instructions of the Client / Consultant.	Job	1		
11.00	Providing & fixing of deluxe model Aluminium glazed wall and swing door single leaf double leaf action (exclusive S.S. push plate and Aluminium rail) in 4" x 2mm section in natural anodized finish. Including door lock, floor hinge, 8mm thick clear tempered glass and silicon sealant both side. Glazed wall Door	Sft. Sft.	1,800 520		
12.00	Providing & fixing of single glazed Aluminium top and central hung openable window in 4" x 2mm section in Powder coating RAL finish. Including S. S. friction stay and 5mm thick clear glass (non tempered) color and section complete in all respect at any height any floor as per instruction by Client / Consultant.	Sft.	2,500		
13.00	Supply and fixing of wood plastic composite(WPC) door and as per designs, colours and sizes with all fittings, at any height and floor. Complete in all respect and as per drawings and instructions of the Engineer/Architect. <u>DOORS</u>	Sft.	985		
14.00	Supply and fixing of wood plastic composite(WPC) windows as per designs, colours and sizes with all fittings, at any height and floor. Complete in all respect and as per drawings and instructions of the Engineer/Architect. <u>WINDOWS:</u>	Sft.	1,930		
15.00	Supply and fixing of wood plastic composite(WPC) ventilators as per designs, colours and sizes with all fittings, at any height and floor. Complete in all respect and as per drawings and instructions of the Engineer/Architect. <u>VENTILATOR</u>	Sft.	2,700		



S. No	Description	Unit	Qty.	Rate	Amount
16.00	Making & installation 8 mm thick Acrylic Plastic Sheet as per graphical design along with fly proofing aluminum wire mesh screwed with 1" wide 2 mm thick aluminum strip upon 1½" square aluminum pipe with aluminum rowel bolt 4" long the installation / erection applied upto 15 storied high building at window and ventilator opening complete with all respect colour and instruction as per drawing & instruction of Client / Consultant.	Sft.	3,700		
17.00	Providing & fixing Iron Grill at any floor any height for external surface of SMBB Trauma Centre Hospital as per drawings and specificaiton comprising 1" x 1/2" square pipe including welding, grinding, cleaning along with wire mesh (Fly proofing) Enamel paint as per instruction. Prior to paint prepare surface by two coat red oxide making good after drilling for fixing (Plastering & paint at out surface) complete with all respect as per direction of Client / Consultant.	Sft.	3,700		
18.00	Providing & fixing 2" x 2" S/S Angle at edges of wall corner with Screw 3" including drilling rowel plug and making good complete with all respect as per instruction by the Client / Consultant.	Rft.	3,500		
19.00	Supplying of iron rate cage local made as per instruction by Client / Consultant.	Nos.	50		
20.00	Supplying of iron rate catcher local / imported make as per Manufacturer specification.	Nos.	50		
<u>PART - "B"</u>					
21.00	Supplying & fixing of branded bathroom accessories at any height any floor . The description of accessories are as under:-				
21.01	Tissue holder for 6" wide tissue paper for single roll plastic body white colour.	Nos.	100		
21.02	Same as above for double roll.	Nos.	40		
21.03	Toilet paper louver dispenser plastic body with or without push louver.	Nos.	50		
21.04	Air blower hand dryer of S/S or colour coated body.	Nos.	30		
21.05	Towel Rail 3' metal colour coated	Nos.	50		
21.06	Towel Ring metal white colour coated.	Nos.	50		
21.07	Liquid soap bottle (750 ml) plastic body white color.	Nos.	50		



S. No	Description	Unit	Qty.	Rate	Amount
22.00	PIPING WORKS FOR LAUNDRY MACHINES: Supplying, fixing and operation of piping works for Laundry Machines at Trauma Centre 13th Floor at level () installation, testing etc. comprising following items with all respects according to drawing, specification and the instruction of Client / Consultant.				
22.01	<u>Main Steam Line Dia 4" from Heder to Laundry Area (Overhead).</u> - MS Sch-40 including bends, tees, flanges, rock wool and SS cladding / jacketing.	Rft.	150		
22.02	<u>Condensate Line Dia 3" from Machines' out-let to Blow Down Tank (Trenched).</u> - MS Sch-40 including bends, tees, flanges, rock wool and pinto sheet cladding / jacketing.	Rft.	150		
22.03	<u>Main Water Supply Lines (Hot - Cold) Dia 3" to Laundry Area (Overhead).</u> - GI Medium gauge including bends, tees, flanges.	Rft.	300		
22.04	<u>Main Drain Line Dia 10" from Machines' out-let to Drain pit (Trenched).</u> - PVC Medium gauge including bends, tees, unions.	Rft.	150		
22.05	<u>Main Air Line Dia 2" from Compressor to Laundry Area (Overhead).</u> - MS Sch-40 including bends, tees, flanges.	Rft.	150		
22.06	<u>Connecting Utilities to Flatwork Ironer (L50-250).</u> - Including supply, fitting, fixing of all accessories as mentioned in Schematics.	Job	1		
22.07	<u>Connecting Utilities to Pneumatic Press (LV-800).</u> - Including supply, fitting, fixing of all accessories as mentioned in Schematics.	Job	1		
22.08	<u>Connecting Utilities to Rotating Press (KP-516).</u> - Including supply, fitting, fixing of all accessories as mentioned in Schematics.	Job	1		
22.09	<u>Connecting Utilities to Medical Barrier Washer (MB-66).</u> - Including supply, fitting, fixing of all accessories as mentioned in Schematics.	Job	2		
22.10	<u>Connecting Utilities to Tumbler Driver (D-55).</u> - Including supply, fitting, fixing of all accessories as mentioned in Schematics.	Job	2		



S. No	Description	Unit	Qty.	Rate	Amount
22.11	<u>Connecting Utilities to Washer Extractor (FS-55).</u> - Including supply, fitting, fixing of all accessories as mentioned in Schematics.	Job	1		
22.12	<u>Connecting Utilities to Washer Extractor (FXB-180).</u> - Including supply, fitting, fixing of all accessories as mentioned in Schematics.	Job	1		
22.13	<u>Supply and installation of stainless steel 2000 Lit Feed Water Tank.</u> - Dia 4 Ft. Length 5.5 Ft. Stainless Steel Tank by 4mm thick sheet.	Job	1		
22.14	<u>Supply and installation of stainless steel Blow Down Tank.</u> - Dia 2 Ft. and Height 3 Ft. Stainless Steel Tank by 3mm thick sheet. - Including all accessories and internal steam drop mechism.	Job	1		
22.15	<u>Supply and installation of Compressor.</u> - Halli (Italian) technical specification available in brochure. - Including Air Reservoir Tank, Valves and etc.	Job	1		
23.00	COLD & HOT WATER SUPPLY SYSTEM				
	Polypropylene Piping for Cold & Hot Water inside the Toilets				
23.01	Providing, fixing, jointing, testing poly propylene pipe as per BS 5174 or DIN 8028 including specials fittings such as socket, tees, elbows bends, reducer plug and union etc) supported on wall or buried in walls or suspended from roof slab as per specifications including colour tagging complete in all respect, providing sleeve in wall at any height any floor .				
I	20 mm Ø	Rft.	170		
II	25 mm Ø	Rft.	90		
III	32 mm Ø	Rft.	60		
IV	40 mm Ø	Rft.	140		
V	50 mm Ø	Rft.	155		
VI	63 mm Ø	Rft.	85		
VII	75 mm Ø	Rft.	200		
VIII	82 mm Ø	Rft.	160		



S. No	Description	Unit	Qty.	Rate	Amount
24.00	TOILET FITTING AND ACCESSORIES Fixing European type water closet with coupled flushing cistern at any height any floor , including all accessories and fittings, waste and traps, CP flexible pipe, including seat and cover, tee stop cock with check nut, thimble, all joints to service and drains plugging and screwing as necessary to the structure. CLAYTON FIONA WC4503 / LCD3004D / PORTA HD9	Nos.	10		
25.00	Providing and fixing Asian type water closet with low Down flushing cistern at any height any floor complete with all accessories and fittings waste and traps, CP flexible pipe, including tee stop cock with check nuts, all joints plugging and screwing as necessary to the structure. CLAYTON ORIENTAL 11 WC 644 II C/W 3010 AHL / PORTA HD13	Nos.	4		
26.00	WASH BASIN Providing and fixing wash basin with half pedestal at any height any floor with all accessories such as, tee stop cock with check nuts, CP flexible pipe, waste pipe, waste coupling, bracket set, etc. Complete including bottle trap, and mixing valve, silicon sealant, all joint to service and drain, plugging and screwing as necessary to the structure. CLAYTON EAGLE WB 1066 / SR 1703 / PORTA HDLP 203H	Nos.	24		
27.00	<u>CHILLED DRINKING WATER GENERATING & DISPENSING SYSTEM</u>				
27.01	Manufacturing and supply of pre-piped, pre-wired IME model CWW-300V-60, drinking water system using primary chilled water source at 7OC inlet with an outlet of 12OC to heat exchanger drinking chelled water shall be at 55OF / 12.8OC.	Set	1		
27.02	System shall have a recovery rate of 200USGPH of water from 86OF inlet and 55OF outlet secondary water and generally as per general arrangement drawing and specification & as per instruction of Client / Consultant.	Set	1		
28.00	REVERSE OSMOSIS (R.O.) SYSTEM				
28.01	Providing, Installation, Testing/Commissioning, Operating and maintenance for 6-months from the date of commissioning, packaged type Reverse Osmosis Plant based on brackish/sub-soil/ KWSB water feed of max. 10,000 PPM, ZTDS. The system to be designed for immediate deployment under numerous conditions wherever purified drinking water is crucial, can produce more uninterrupted hours of pure water production in the harshest of envoirement's and from a wide range of available water sources. The system shall be provide with instrumentation to monitor, pre-treatment of feed waters, backwashing of filters, and system flushing, as well as numerous safety features to enhance the operators standard of living. The Reverse Osmosis Plant Designing parameters for this project shall be as follows:				



S. No	Description	Unit	Qty.	Rate	Amount
	<ul style="list-style-type: none"> - Permeate Production: 10,000 GPD - System Recovery : 43% - Feed Water Design Temperature: 22° C -28° C - Feed Water Requirements: 27.5 – 30 (US) GPM at R.O. Pre-Filtration - Membrane Manufacturer : Flimtec DOW - USA - Number of Pass: 1 - Number of Vessels: As required by manufacturer - Elements Per Vessel: 3 each, 8.00"x 40.00" - Feed Water Source: Brackish/sub-soil/ KWSB water - Feed Water Fouling Index (SDI): < 5 - Feed Water Turbidity: < 1 NTU <p>The installation at 13th floor all lifting, rigging charges are included.</p>	Job	1		
29.00	<u>POWERED DRAIN CLEANER MACHINE</u>				
29.01	<p>Supplying of Powered drain cleaner machine including the cost of all accessories and tools as mentioned below.</p> <p>a) K-400 Drum machine. For 1-1/2"(30mm)- 4" (110mm) drain lines.</p> <p>b) 10mm Cable best for 40mm -75mm lines.</p> <p>c) 12mm Cable best for 75mm – 110mm lines.</p> <p>d) Integrated transport cart.</p> <p>e) Integrated telescopic handle.</p> <p>f) Cable control system.</p> <p>g) "Solid core" cable uses tough 10mm-12mm integral wound solid core cable that is rugged and kink resistant.</p> <p>h) Auto feed.</p> <p>i) Drum capacity= 30.5M. of 10mm diameter Cable and 22.5M. of 12mm Diameter cable.</p> <p>j) Motor= 380 watts/230V Motor spins cable at 165 RPM.</p> <p><u>TOOLS</u></p> <p>a) Straight auger 125mm long.</p> <p>b) Bulb Augers. 30 & 22mm O.D (One each).</p> <p>c) 'C' cutter 35mm</p> <p>d) Funnel Auger 80 mm.</p> <p>e) Spiral Cutters. (32mm, 40 mm & 45mm) One each.</p> <p>f) 4" Blade cutters. (25 mm, 35mm & 45mm) One each.</p> <p>g) Chain knocker. 50 mm</p> <p>h) Drop Head 110 mm long.</p> <p>i) Tool set 10 mm, including 4- accessories as per manufacturer's recommendations.</p> <p><u>ACCESSORIES</u></p> <p>a) Drain Cleaning gloves, Leather.</p> <p>b) Drain cleaning gloves PVC.</p> <p>c) Pin key for 1/2" and 3/8" Cables.</p>				



S. No	Description	Unit	Qty.	Rate	Amount
	d) Auto-feed Assembly. e) Drain Assembly. f) 3/8"x 1/2" tool adaptor. g) 3/8"x1/2" Drop head adaptor. h) Coupling 1/2" drop head tool. i) Guide Hose. j) Trap leader. Complete with all respect as per Manufacturer's specification.	Nos.	2		
<u>PART - "C"</u>					
30.00	<u>LED LIGHTS:</u>				
30.01	Providing, fixing, testing & commissioning of complete LED light fixtures along allied accessories such as Chain, Rod, Screw direction of Manufacturer etc. complete in all respect at any height any floor as per drawing, specification and instruction of Client / Consultant.				
30.02	Panel light 35 Watts, size 300 x 1200 x 90 mm colour temperature 4000 K recessed mounted.	Nos.	1,100		
30.03	Panel light 35 Watts, size 300 x 1200 x 60 mm colour temperature 4000 K surface mounted.	Nos.	400		
30.04	Down light 18 Watts, size 200 x 39 mm colour temperature 4000 K surface mounted round shape.	Nos.	650		
30.05	Bed head light 18 Watts, size 1200 x 25 mm wall mounted.	Nos.	450		
30.06	Emergency light (Rechargeable) fixture imported with 1 x 3 Watt wall mounted.	Nos.	95		
30.07	Panel light 18 Watts, size 200 x H 13 Cutout 180 round shape, colour temperature 4000 K Recessed mounted.	Nos.	345		
30.08	Spot light fixture adjustable, complete with 7 Watts LED Lamp.	Nos.	150		
30.09	Emergency "Exit Sign Light" with high intensity LED and 3 hours battery back up.	Nos.	199		
30.10	Pole mounted light with 1 x 120 Watts LED, SPD with driver.	Nos.	12		
30.11	TCW-215 pacific 2 x 18 Watts Colour temperature 4000 K wall mounted / surface mounted.	Nos.	391		



S. No	Description	Unit	Qty.	Rate	Amount
31.00	Supply & erection of grey pointed of street light MS Pole 5 mm thick of size 122, 100 and 50 mm dia for mounting of street light buried 1200 mm deep in foundation to the depth with 1:2:4 cement concrete with graded stone.	Nos.	3		
32.00	<p>Providing, installation, testing and commissioning of UDB - DC1 & UDB - DC - 2 1.5 mm thick sheet steel fabricated wall mounted Recessed (Flash) type suitable for 3 Phase, 415 Volts, 4 Wire 50 Hz, A/C system as per following configuration.</p> <p>INCOMING:</p> <p>75 Amps Tp 25 KA MCCB 3 Phase indication lamps with fuse 75 Amps Tp COS 1 - 0 - 2 2 - 75 Amps Tp line up terminal Neutral bar, Earth bar.</p> <p>OUTGOING:</p> <p>9 - 16 Amps SP 6 KA MCB 9 - 25 Amps SP 6 KA MCB 1 - 32 Amps Tp 10 KA MCB</p>	Nos.	3		
33.00	<p>Providing, installation, testing and commissioning of DB - AC 1.5 mm thick sheet steel fabricated wall mounted Recessed (Flash) type suitable for 3 Phase, 415 Volts, 4 Wire 50 Hz, A/C system as per following configuration.</p> <p>INCOMING:</p> <p>150 Amps Tp 10 KA MCCB 3 Phase indication lamps with fuse 3 - CT 100/5 Amps 1 - Digital Ammeter Scaled 0-100 Amps with PSS 1 - Digital Ammeter 0 - 500 Volts with PSS Bus bar capacity = 140 Amps at 50°C Neutral and Earth bar</p> <p>OUTGOING:</p> <p>1 - 60 Amps Tp 10 KA MCB 12 - 25 Amps SP 6 KA MCB 9 - 16 Amps SP 6 KA MCB</p>	Nos.	1		
34.00	<p>Providing, fixing, testing and commissioning of DB - DC 1.5 mm thick sheet steel fabricated wall mounted Recessed (Flash) type suitable for 3 Phase, 415 Volts, 4 Wire 50 Hz, A/C system as per following configuration.</p> <p>INCOMING:</p> <p>40 Amps Tp 10 KA MCCB 3 Phase indication lamps with fuse 40 Amps Tp COS 1 - 0 - 2 2 - 40 Amps Tp line up terminal Neutral and Earth bar</p>				



S. No	Description	Unit	Qty.	Rate	Amount
	OUTGOING:				
	9 - 16 Amps SP KA MCB				
	6 - 25 Amps SP KA MCB				
	1 - 32 Amps Tp 10 KA MCB	Nos.	1		
35.00	Providing and wiring of one or first light controlled through one switch wired 3 x 1.5 mm, 1 Core Cu/ PVC insulated cable 25 mm dia PVC conduit complete with all respect (i.e. Ceiling rose pre junction box, flexible PVC conduit below ceiling rose and light fixture.	Nos.	100		
36.00	Providing and wiring of A/C etc. with 3 x 2.5 mm, 1 Core Cu/ PVC insulated cable in 25 mm dia PVC conduit concealed in slab / wall as required.	Nos.	40		
37.00	Providing, fixing and connecting of Clipsal MK make gang switches fixed in suitable size PVC back boxes recessed in wall or surface on wall as required.				
37.1	10 Amps Switch Two Gang	Nos.	30		
37.2	10 Amps Switch Four Gang	Nos.	30		
37.3	10 Amps Switch Three Gang	Nos.	30		
38.00	LIGHTING PROTECTION SYSTEM:				
38.01	Providing & installation of active earth technology system (Earth Resistance of less than One Ohm) Model No. VP 10 x 38 S straight shaft system, comprising of 1.5" dia 10 feet long electroplated copper electrode (Filled with soil conditioner) - Earth Conductivity Enhancement Compound (Primary) - Earth Conductivity Enhancement Compound (Secondary) - Brass nut bolt with washer etc. - Including Inspection Chamber made of 10" dia x 12" PVC pit with C. I. Powder coated cover.	Nos.	4		
38.2	Providing & installation, Testing & Commissioning of lightening arrestor terminal as per drawing complete in all respect.	Nos.	12		
38.3	Providing, Laying & connecting of copper strips 32mm x 3mm thick with pre-coated.	Mtrs.	655		
38.4	Providing, Laying & connecting of earth terminal block size of 2" x 10" x 1/4" thick fixed to wall with grouting bolts provided with copper nuts to connect incoming & outgoing earthing conductor complete in all respect.	Nos.	4		
38.5	Providing, Laying & connecting of earthing lead of 2 x 95mm of standard bare copper conductors in 50mm dia PVC class "d" conduit between earth terminal block and earth point complete in all respect.	Mtrs.	600		



S. No	Description	Unit	Qty.	Rate	Amount
39.00	<u>FM 200 FIRE SUPPRESSION SYSTEM</u>				
39.01	Providing, installation, testing & commissioning of FM 200 (700 Sft.) two different location Fire Suppression System with control panel maintenance-free battery supervised alarm and detection lines. Ionization and optical smoke detectors at 200 Sft./ detector spacing in each of three areas (above false ceiling) including wiring and hardware, relay panel for shut down of AHU and activation of fire dampers on supply and return air duct and start/ stop of exhaust fan manual discharge station, manual abort station / alarm horn / bell flasher, required amount of FM 200 Cylinder discharge heads valves nozzle assembly, mounting hardware exhaust / purging system with damper etc. including complete wiring, piping in data room nameplates instruction sign etc. & integrity listing for data room. a) CCTV Room b) BMS Room	No.	1		
40.00	Supplying & fixing of Airconditioners at any floor and any height upto 15 storied building upto 30' to 50' long condenser pipe fixing bracket for outer with paint complete with all respect as per instruction by the Client / Consultant. Split Unit 1.5 Ton Split Unit 2 Ton Floor Standing Unit 2 Ton	Nos. Nos. Nos.	6 6 8		
41.00	Supplying of padestal fan metal body Pakistan make Millat / Royal / Pak 18" / 24" size color as per instruction by Client / Consultant.	Nos.	60		
42.00	Supplying & fixing of bracket fan metal body Pakistan make Millat / Royal / Pak 18" / 24" size at any height any floorcolor as per instruction by Client / Consultant.	Nos.	60		