



**EXECUTIVE ENGINEER  
PROVINCIAL BUILDING DIVISION-III  
WORKS & SERVICES DEPARTMENT  
GOVERNMENT OF SINDH  
KARACHI**

**CONSTRUCTION OF RESIDENTIAL & STUDIO  
APARTMENT ON PLOT NO. 2, 3 & 4  
AT BATH ISLAND KARACHI  
(ADP NO. 1167 OF 2016-17)**

**BILL OF QUANTITIES  
&  
SPECIFICATIONS  
(CIVIL - PLUMBING & ELECTRICAL WORKS)  
VOLUME - II**

**CONTRACT NO. CPE-I-0296**

**SUBMITTED BY:**

**August 2016**



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

# **ABSTRACT OF COST**



**CONSTRUCTION OF RESIDENTIAL & STUDIO APARTMENTS AT  
BATH ISLAND BUNGALOW No. 2, 3 & 4 KARACHI ADP No. 1167 - 2016 - 17**

**ABSTRACT OF COST**

1.	Cost of Civil Works	....	Rs. ....
2.	Cost of Plumbing Works	....	Rs. ....
3.	Cost of Electrical Works	....	Rs. ....
TOTAL RS.			..... =====

(Rupees .....)

Date: \_\_\_\_\_

\_\_\_\_\_  
Signature & Seal of Contractor

# CIVIL WORKS



**CONSTRUCTION OF RESIDENTIAL & STUDIO APARTMENTS AT**  
**BATH ISLAND BUNGALOW No. 2 , 3 & 4 KARACHI - ADP No. 1167 - 2016 - 17**  
**SUMMARY OF COST**

( Civil Works Basement )

**SCHEDULE ITEMS**

1	Earth Work	....	Rs. 2,510,043.41
1	Steel	....	Rs. 58,995,081.63
2	Block Masonry	....	Rs. 966,225.12
3			

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**Total Amount Rs. 62,471,350.16**

(Rupees \_\_\_\_\_ Only)

**CONSTRUCTION OF RESIDENTIAL & STUDIO APATMENTS AT**  
**BATH ISLAND BUNGALOW No. 2 , 3 & 4 KARACHI - ADP No. 1167 - 2016 - 17**

**COST ESTIMATE**  
**CIVIL WORKS ( BASEMENT )**  
**(SCHEDULE ITEMS)**

S. No	G.O.S Sch.2012	Description of Items	Quantity	Unit	Rate	Amount
		<b>EATRH WORK</b>				
1	CH-18 Item = 92 Page = 109	Providing Anti termmite treatment by spraying / sprinkling / spreading Neptachlar 05% Emulsion as an overall pre construction treatment in slab type construction under the slab and along attached perches or entrances etc. Complete as per direction of Engineer / Incharge.	46,240.12	P.Sft.	9.74	450,378.77
2	CH-6 Item = 24 Page = 32	Stone Pitching hand packed with surface levelled off to the correct Section with hammer dressed Stone and voids filled in 1:8 Cement mortar in floor of bridges and along hands and in aprons etc. Including three chain lead.	26,719.50	%Cft	7,708.47	2,059,664.64
		<b>Total Earth Works Rs.</b>				<b>2,510,043.41</b>
		<b>STEEL</b>				
3	CH-4 Item=9 Page=17  (b)	Fabrication of mild steel reinforcement for cement cocrete including cutting, bending, laying in position, jointsand fastenings including cost of binding wire ( also includes removal of ) using Tor bars	10,662.44	Cwt.	5001.70	53,330,326.15
4	CH-10 Item=51 Page=64	Supply and Fixing special heavy type steel doors for look - ups within angle iron frame of 2- 1/2" to 2- 1/2" x 3/8' size and shutter of 2" x 2" x 3/8" with 1" diameter M.S. Bars placed @ 4" center to center with aseparate locking box having size of 12" x 12" of M. steel sheet embeded in masonry with proper locking arrangement as per approved design including cost of erection of steel gate and fixing in masonry wall in cement concrete 1 : 2 : 4 etc. coomplete, as per instruction of Engineer Inchage.	324.00	Sft.	930.76	301,566.24
		<b>Steel Works Rs.</b>				<b>53,631,892.39</b>
		Add 10% Above =				<b>5,363,189.24</b>
		<b>Total Steel Works Rs.</b>				<b>58,995,081.63</b>
		<b>BLOCK MASONRY</b>				
5	CH-4 Item=24 Page=19	Providing and laying 1:3:6 cement concrete solid block masonry wall 6" and below in thickness set in 1:6 cement mortar in ground floor Super Structure including raking out joints & curring etc.	6,126.59	%Cft.	15771.01	966,225.12
		<b>Total Block Masonry Works Rs.</b>				<b>966,225.12</b>



**CONSTRUCTION OF RESIDENTIAL & STUDIO APARTMENTS AT**  
**BATH ISLAND BUNGALOW No. 2 , 3 & 4 KARACHI - ADP No. 1167 - 2016 - 17**  
**SUMMARY OF COST**  
**( Civil Works Basement )**

**NON SCHEDULE ITEMS**

1.	Earth Work	....	Rs. ....
2	Plain Cement Concrete	....	Rs. ....
3	Reinforced Cement Concrete	....	Rs. ....
4	Enternal Plaster	....	Rs. ....
5	Paint Work	....	Rs. ....
6	Doors & Windows Work	....	Rs. ....
7	Miscellaneous Items	....	Rs. ....

**Total Amount Rs.** \_\_\_\_\_

(Rupees \_\_\_\_\_ Only)



**CONSTRUCTION OF RESIDENTIAL & STUDIO APARTMENTS AT  
BATH ISLAND BUNGALOW No. 2 , 3 & 4 KARACHI - ADP No. 1167 - 2016 - 17**

**BILL OF QUANTITIES**

**CIVIL WORKS ( BASEMENT )**

**NON SCHEDULE ITEMS**

S. No.	G.O.S Sch.2012	Description of Items	Quantity	Unit	Rate	Amount
1		<b><u>NON SCHEDULE ITEMS</u></b> <b><u>EARTH WORK</u></b> Excavation in all kind of soil / rock , hard / soft using mechanical and/or manual methods as per site requirement and disposal of excavated material as approved at designated location including cost of providing / installing and operation of dewatering at all stages of work if required and all arrangement for shoring of earth and protection of Existing structure/ foundation and all underground / overhead installations etc. Complete in all respect as per specification and approval of Engineer. <b>Note:</b> Payment shall be made on the measurement made on net lines offsets & dimensions only as shown on drawings:	437,110.60	Cft.		
			Total Earth Works Rs.			
2		<b><u>PLAIN CEMENT CONCRETE</u></b> Providing & laying P.C.C. 1:4:8 (having 28 day Cylindrical Strength of 2000 p.s.i.) using S.R. Cement in Foundation, under floor etc. wherever upto any lifts and leads required using graded screened bajri 1/2" and down guage and Hub river crushed stone 1" and down guage including form work, all equipment, Tools, Plant & labour etc. Complete in all respect as per drawing, specification and approval of Engineer.	26,719.50	Cft.		
3		Providing & Laying 3" thick 1: 2: 4 protective layer over Membrane, laid in panels with rough finish ( <b>with S.R.C.</b> )	35,977.96	Sft.		
			Total Plain Cement Concrete Works Rs.			





S. No.	G.O.S Sch.2012	Description of Items	Quantity	Unit	Rate	Amount
4		<b><u>REINFORCED CEMENT COCRETE</u></b>				
		Providing, laying & transport <b>READY MIX</b> (at approved batching plant) Reinforced Cement Concrete manufactured, transported and delivered at site with O.P. Cement using graded coarse and fine aggregates as per mix design for specified class of concrete strengths (at 28 days cylindrical) including providing and fixing in place any shape and size water tight form work and at any lift, leads & height including cost of all types of concrete admixture or approved, compacting the concrete with external vibrator poker vibrator and finishing the top surface and cost of concrete pumps from transit mixer upto required locations cover blocks.				
		Ready mix concrete shall be made and transported at site as per ASTM C94 and other relevant specification. Concrete shall meet the requirement of AC1/ ASTM specification. Complete in all respect but excluding cost of reinforcement steel as per drawings, specification and approval of Consultant/ Engineer.				
		<b>CONCRETE RATIO 4500 psi</b>				
		(a) Raft Foundation Concrete	106,096.24	Cft.		
		(b) R. C. C. Wall Concrete	9,311.32	Cft.		
		(c) R. C. C. Columns Concrete	3,312.00	Cft.		
		<b>CONCRETE RATIO 3000 psi</b>				
		(a) R.C.C. Slab Concrete	22,729.44	Cft.		
		(b) R. C. C. Beams Concrete	6,986.25	Cft.		
Total Reinforced Cement Concrete Works Rs.						



S. No.	G.O.S Sch.2012	Description of Items	Quantity	Unit	Rate	Amount
<b><u>PLASTER &amp; RENDERING</u></b>						
5		<b><u>INTERNAL PLASTER</u></b> Providing & applying using O.P. Cement unless otherwise notified, sand, mortar plaster , including hacking, chipping & nikking cementing (Nero) steel trowel finish upto any height. Complete in all respect as per drawings, specifications and instructions of the Engineer/Architect.  1/2" THICK	75,970.40	Sft.		
<b>Total Internal Plaster Works Rs.</b>						
6		<b><u>PAINT WORK</u></b> Providing & applying Two coat of destember with one coat of primer base filling including rubbing etc. as per direction of Engineer/ Consultant at any height and floor. ( JOTTON , ICI , BURGER )	49,015.00	Sft.		
7		Providing & applying of three coats of Plastic Emulsion paint of JOTUN, NIPPON, ICI or equivalent shade on ceiling, walls, beams, columns etc. complete as per drawing and specifications and direction of Engineer/ Consultant at any height and floor..	15,605.78	Sft.		
<b>Total Paint Works Rs.</b>						
<b><u>DOORS &amp; WINDOWS</u></b>						
		<b><u>DOORS FRAME</u></b> Providing and fixing <b>Doors &amp; Windows Frame solid wood using</b> best quality Deodar wood & Hinges with SIKKEN Polish of Holland or equalent finished as shown in drawing at any height and floor Complete in all respect and as per drawings and instructions of the Engineer/Architect.  2" X 7"	200.00	Rft.		
		<b><u>DOORS SHUTTER</u></b>				



S. No.	G.O.S Sch.2012	Description of Items	Quantity	Unit	Rate	Amount
		Providing and fixing 1-1/2" thick laminated block board (Formica) finish shutter including the cost of commercial ply wood facing 4mm thick (3 ply) fixed over best quality dodar wood frame 4" wide all around .6" wide lock rail and 2nd. class deodar wood middle strip 3/4" wide 2-3/4" centre to centre including 1/4" thick best quality dodar wood lipping on all side as per approved drawing , manufactured under power hydraulic press and including all hardware, brass hinges, nail, screws, complete in all respect and as per direction of the Engineer/Architect.	264.00	Sft.		
					<b>Total Door Works Rs.</b>	
1		<b>MISCELLANEOUS</b> Providing & laying 4 mm thick modified Bitumen membrane with non-woover polypropylene/ polyesterne fibre mesh under foundation and on wall and Roof at any height & Floor including all overlaps extra layer on bends etc. including cost of Primer, Torch, application of membrane (ECOGUM/ Dermabit of K.S.A./ EVERPOL (Green Seal, Malaysia) Make. Striping, nailing as per Manufacturer's instruction/ Manual. Complete in all respect upto any lift & lead as per specification, drawings, and approval of Consultant/ Engineer.	46,473	Sft.		
2		Providing and Fixing of size 4 1/2" x 9" x or Approved size and colour of National Tiles for Parking and any other mentioned services area with 2 1/2" thick 1:2:4 Base including Jointing, Matching and Pigment etc. Complete in all respect as per Design, drawings and instructions of the Engineer/Architect.	39,022.13	Sft.		
3		Providing, applying, laying of free expansion type Bentonite (Green Seal Malaysia) water stops 25 x 20mm for construction joint as per Manufacturer's specification and instructions for application. Complete in all respect at predesignated locations of construction joints as per approval of Consultant/ Engineer and shop drawings including cost of making notches in concreting pouring.	503.26	Rft.		



S. No.	G.O.S Sch.2012	Description of Items	Quantity	Unit	Rate	Amount
4		Providing, laying, fixing of designated and specified types of PVC water stoppers 250 mm wide between expansion joints as manufactured by M/s Green Seal Malaysia)- 3 Series of specified type or approved equivalent. Complete as per Manufacturer's installation detail including cost of pre-moulded corners & bends (Intersections) Tee, Cross etc. PVC Welding using standard equipment. Complete in all respect as per approval of Consultant/ Engineer.				
		a) Type GS 953, 4mm Centrally placed.	832	Rft.		
5		Providing & fixing 3/4" thick marble (cream) for landing & tread steps (in one piece) as per drawing with 1:4 mortar including bull noising, grinding, pre polishing, cutting etc. complete in all respect as per direction of Consultant/ Client.	478.50	Sft.		
6		Same as Item No. 7.02 but 3/8" thick for Riser.	171	Sft.		
7		Providing & fixing 1" thick best quality Granite imported Marble of approved shed & Colour over C.C. 1 : 4 Concrete & wall clamp using O.P. Cement unless otherwise notified, setting in cement slurry and filling the joints with white / matching shed cement including grinding rubbing and best quality chemical polish . complete in all respect and as per direction of Engineer / Consultant.	358.34	Sft.		
8		Providing & fixing 3'-0" high S.S. Stair Railing at steps consisting on 3"x3" Top round , 1 1/2" dia post Alternate Steps with bottom cap and 3 nos. 1/2"dia mid Rod of post as per drawing and design. complete in all respect as per direction of Consultant/ Client.	100	Rft.		
Total Miscellaneous Item Works Rs.						



**CONSTRUCTION OF RESIDENTIAL & STUDIO APARTMENTS AT**  
**BATH ISLAND BUNGALOW No. 2 , 3 & 4 KARACHI - ADP No. 1167 - 2016 - 17**

**SUMMARY OF COST**  
**(Civil Works Studio Apartments)**

**SCHEDULE ITEMS**

1	Steel	....	Rs. .... 28,458,815.98
2	Block Masonry	....	Rs. .... 5,147,798.26
3	Doors & Windows	....	Rs. .... 14,862,015.20

**Total Amount Rs. .... 48,468,629.44**

(Rupees ..... Only)



**CONSTRUCTION OF RESIDENTIAL & STUDIO APATMENTS AT  
BATH ISLAND BUNGALOW No. 2 , 3 & 4 KARACHI - ADP No. 1167 - 2016 - 17**

**BILL OF QUANTITIES**  
**CIVIL WORKS ( STUDIO APARTMENTS )**  
**(SCHEDULE ITEMS)**

S. No.	G.O.S Sch.2012	Description of Items	Quantity	Unit	Rate	Amount
1	CH-4 Item=9 Page=17	<b><u>STEEL</u></b> Fabrication of mild steel reinforcement for cement concrete including cutting, bending, laying in position, joints and fastenings including cost of binding wire ( also includes removal of )  (b) using Tor bars				
		a) Ground Floor	527.58	Cwt.	5001.70	2,638,796.89
		b) First Floor	527.58	Cwt.	5001.70	2,638,796.89
		c) Second Floor	527.58	Cwt.	5152.95	2,718,593.36
		d) Third Floor	527.58	Cwt.	5304.20	2,798,389.84
		e) Fourth Floor	527.58	Cwt.	5455.45	2,878,186.31
		f) Fifth Floor	527.58	Cwt.	5606.70	2,957,982.79
		g) Sixth Floor	527.58	Cwt.	5757.95	3,037,779.26
		h) Seventh Floor	527.58	Cwt.	5909.20	3,117,575.74
		i) Eight Floor	302.25	Cwt.	6060.45	1,831,771.01
		j) Above Roof	108.07	Cwt.	6211.70	671,298.42
11	CH-17 Item=30 Page=94	Providing and Fixing Iron Steel Grill using Solid Square Bar of Size 1/2"x1/2" placed at 4" c/c i/c and Frame of Flat Iron Patti 3/4"x1/4" including Circle Shape 1-0 part Equivalent Fitted with Screws or pins including Painting 3 Coats with first coat of Red Oxide Paint etc.	3,000.00	Sft.	194.16	582,480.00
Steel Works Rs. =						25,871,650.49
Add 10% Above Rs. =						2,587,165.49
Total Steel Works Rs. =						28,458,815.98





**CONSTRUCTION OF RESIDENTIAL & STUDIO APARTMENTS AT**  
**BATH ISLAND BUNGALOW No. 2 , 3 & 4 KARACHI - ADP No. 1167 - 2016 - 17**  
**SUMMARY OF COST**  
**(Civil Works Studio Apartments)**

**NON SCHEDULE ITEMS**

1.	Reinforced Cement Concrete	....	Rs. ....
2.	Plaster & Rendering ( Internal )	....	Rs. ....
3	Plaster & Rendering ( External )	....	Rs. ....
4	Paint Work	....	Rs. ....
5	Flooring / Skirting / Dado	....	Rs. ....
6	Doors & Windows	....	Rs. ....
7	Miscellaneous Items	....	Rs. ....

**Total Amount Rs. \_\_\_\_\_**

(Rupees \_\_\_\_\_ Only)





**CONSTRUCTION OF RESIDENTIAL & STUDIO APARTMENTS AT  
BATH ISLAND BUNGALOW No. 2 , 3 & 4 KARACHI - ADP No. 1167 - 2016 - 17**

**BILL OF QUANTITIES**  
**CIVIL WORKS ( STUDIO APARTMENTS )**

**NON SCHEDULE ITEMS**

S. No.	Description of Items	Quantity	Unit	Rate	Amount
6	<p><b><u>REINFORCED CEMENT CONCRETE</u></b></p> <p>Providing, laying &amp; transport <b>READY MIX</b> (at approved batching plant) Reinforced Cement Concrete manufactured, transported and delivered at site with O.P. Cement using graded coarse and fine aggregates as per mix design for specified class of concrete strengths (at 28 days cylindrical) including providing and fixing in place any shape and size water tight form work and at any lift, leads &amp; height including cost of all types of concrete admixture or approved, compacting the concrete with external vibrator poker vibrator and finishing the top surface and cost of concrete pumps from transit mixer upto required locations cover blocks.</p> <p>Ready mix concrete shall be made and transported at site as per ASTM C94 and other relevant specification. Concrete shall meet the requirement of AC1/ ASTM specification. Complete in all respect but excluding cost of reinforcement steel as per drawings, specification and approval of Consultant/ Engineer.</p> <p><b><u>CONCRETE RATIO 4500 psi</u></b> <b><u>COLUMNS CONCRETE</u></b></p> <p>a) Ground Floor</p> <p>b) First Floor</p> <p>c) Second Floor</p> <p>d) Third Floor</p> <p>e) Fourth Floor</p> <p>f) Fifth Floor</p>	807.19 807.19 807.19 807.19 807.19 807.19	Cft. Cft. Cft. Cft. Cft. Cft.		



S. No.		Description of Items	Quantity	Unit	Rate	Amount
		g) Sixth Floor	807.19	Cft.		
		h) Seventh Floor	807.19	Cft.		
		i) Eight Floor	623.44	Cft.		
		j) Stair Tower / O.H.W. Tank	160.00	Cft.		
		<b><u>LIFT WALL CONCRETE</u></b>				
		a) Ground Floor	366.19	Cft.		
		b) First Floor	366.19	Cft.		
		c) Second Floor	366.19	Cft.		
		d) Third Floor	366.19	Cft.		
		e) Fourth Floor	366.19	Cft.		
		f) Fifth Floor	366.19	Cft.		
		g) Sixth Floor	366.19	Cft.		
		h) Seventh Floor	366.19	Cft.		
		i) Eight Floor	366.19	Cft.		
		j) Machine Room / Slab	770.94	Cft.		
		<b>CONCRETE RATIO 3000 psi</b>				
		<b><u>R.C.C. SLAB CONCRETE</u></b>				
		a) Ground Floor	3,375.86	Cft.		
		b) First Floor	2,830.57	Cft.		
		c) Second Floor	2,777.06	Cft.		
		d) Third Floor	2,777.06	Cft.		
		e) Fourth Floor	2,777.06	Cft.		
		f) Fifth Floor	2,777.06	Cft.		
		g) Sixth Floor	2,777.06	Cft.		
		h) Seventh Floor	2,777.06	Cft.		



S. No.	Description of Items	Quantity	Unit	Rate	Amount
1	i) Eight Floor	1,853.85	Cft.		
	j) Stair Tower	357.00	Cft.		
	k) O.H.W. Tank	229.00	Cft.		
	<b><u>R.C.C. BEAMS CONCRETE</u></b>				
	a) Ground Floor	1,377.41	Cft.		
	b) First Floor	1,155.01	Cft.		
	c) Second Floor	1,155.01	Cft.		
	d) Third Floor	1,155.01	Cft.		
	e) Fourth Floor	1,155.01	Cft.		
	f) Fifth Floor	1,155.01	Cft.		
	g) Sixth Floor	1,155.01	Cft.		
	h) Seventh Floor	1,155.01	Cft.		
	i) Eight Floor	1,155.01	Cft.		
	j) Stair Tower	100.00	Cft.		
	k) O.H.W. Tank	180.00	Cft.		
	<b>Total Reinforced Cement Concrete Works Rs. =</b>				
	<b><u>PLASTER &amp; RENDERING ( INTERNAL )</u></b>				
	Providing & applying using O.P. Cement unless otherwise notified, sand, mortar plaster , including hacking, chipping & nikking cementing (Nero) steel trowel finish upto any height. Complete in all respect as per drawings, specifications and instructions of the Engineer/Architect. 1/2" THICK				
	a) Ground Floor	11,982.76	Sft.		
	b) First Floor	16,278.14	Sft.		
	c) Second Floor	17,186.64	Sft.		
	d) Third Floor	17,186.64	Sft.		
	e) Fourth Floor	17,186.64	Sft.		
	f) Fifth Floor	17,186.64	Sft.		
	g) Sixth Floor	17,186.64	Sft.		



S. No.	Description of Items	Quantity	Unit	Rate	Amount
2	h) Seventh Floor	17,186.64	Sft.		
	i) Eighth Floor	11,254.65	Sft.		
	j) Stair Tower and parapet Wall	1,604.38	Sft.		
	Total Internal Plaster Works Rs. =				
	<b><u>PLASTER &amp; RENDERING ( EXTERNAL )</u></b>				
	a) Ground Floor	3,280.34	Sft.		
	b) First Floor	3,536.68	Sft.		
	c) Second Floor	3,536.68	Sft.		
	d) Third Floor	3,536.68	Sft.		
	e) Fourth Floor	3,536.68	Sft.		
	f) Fifth Floor	3,536.68	Sft.		
	g) Sixth Floor	3,536.68	Sft.		
	h) Seventh Floor	3,536.68	Sft.		
	i) Eighth Floor	3,120.71	Sft.		
	j) Stair Tower and parapet Wall	1,493.25	Sft.		
	Total External Plaster Works Rs. =				
3	<b><u>PAINT WORK</u></b>				
	Providing & applying Two coat of destember with one coat of primer base filling including rubbing etc. as per direction of Engineer/ Consultant at any height and floor. ( JOTTON , ICI , BURGER )	38,700.00	Sft.		
4	Providing & applying of three coats of Plastic Emulsion paint of JOTUN, NIPPON, ICI or equivalent shade on ceiling, walls, beams, columns etc. complete as per drawing and specifications and direction of Engineer/ Consultant at any height and floor.. ( JOTTON , ICI , BURGER )	105,546.00	Sft.		



S. No.	Description of Items	Quantity	Unit	Rate	Amount
5	Providing & applying colour crete plaster 1/2" thick using fine sand with white cement ratio 1:4 including approved colour pigment over 3/4" thick C.C. plaster finished with groove 1/8" thick. Complete in all respect and as per drawing, specifications and instruction of the Engineer/Architects.	32,651.06	Sft.		
Total Paint Works Rs. =					
7	<b><u>FLOORING / SKIRTING / DADO</u></b> Providing and fixing best quality <b>imported made porcelain Matt tiles flooring</b> 24" x 24" or any other approved size, shade and design including 2-1/2" thick base CC 1:2:4 concrete, using O.P. cement unless other wise notified, setting tiles in cement slurry / dry bond imported or equivalent and grouted the joints with admixture of matching pigment in provided grove and sealer including washing, cleaning and curing Complete in all respect and as per drawings, specifications and instructions of the Engineer/Architect				
	a) Ground floor	5,100.00	Sft.		
	b) First floor	4,309.00	Sft.		
	c) Second floor	4,309.00	Sft.		
	d) Third floor	4,309.00	Sft.		
	e) Fourth floor	4,309.00	Sft.		
	f) Fifth floor	4,309.00	Sft.		
	g) Sixth floor	4,309.00	Sft.		
	h) Seventh floor	4,309.00	Sft.		
	j) Eighth floor	2,750.00	Sft.		
	k) Top of Roof	440.00	Sft.		
8	Same as above Item No.1 but polish tile use in 4" high skirting (3/4" thick base in 1:4 mortar) Complete in all respe				
	a) Ground floor	350.00	Sft.		
	b) First floor	350.00	Sft.		



S. No.		Description of Items	Quantity	Unit	Rate	Amount
	c)	Second floor	350.00	Sft.		
	d)	Third floor	350.00	Sft.		
	e)	Fourth floor	350.00	Sft.		
	f)	Fifth floor	350.00	Sft.		
	g)	Sixth floor	350.00	Sft.		
	h)	Seventh floor	350.00	Sft.		
	j)	Eighth floor	285.00	Sft.		
	k)	Top of Roof	40.00	Sft.		
9		Providing and fixing best quality <b>imported made porcelain Matt tiles flooring 12"X18", 12"X24", 9" x 26"</b> or any other approved size, shade and design including 2-½" thick base CC 1:2:4 concrete, and 1: 6 cement sand mortar using O.P. cement unless other wise notified, setting tiles in cement slurry / dry bond imported or equivalent and grouted the joints with admixture of matching pigment in provided grove and sealer including washing, cleaning and curing Complete in all respect and as per drawings, specifications and instructions of the Engineer/Architect. ( at anv height and floor )	15,679.05	Sft.		
		Providing & fixing 3/4" thick Marble (Cream) for Landing and Tread steps (in one piece) with 1:4 mortar including bull noising, grinding, polishing, cutting etc. complete in all respect.				
10	a)	Ground floor	240.00	Sft.		
	b)	First floor	240.00	Sft.		
	c)	Second floor	240.00	Sft.		
	d)	Third floor	240.00	Sft.		
	e)	Fourth floor	240.00	Sft.		
	f)	Fifth floor	240.00	Sft.		
	g)	Sixth floor	240.00	Sft.		
	h)	Seventh floor	240.00	Sft.		
	j)	Eighth floor	240.00	Sft.		
		Same as Item No.4 but 3/8" thick for Riser.				
	a)	Ground floor	95.00	Sft.		
	b)	First floor	95.00	Sft.		
	c)	Second floor	95.00	Sft.		
	d)	Third floor	95.00	Sft.		
	e)	Fourth floor	95.00	Sft.		
	f)	Fifth floor	95.00	Sft.		



S. No.		Description of Items	Quantity	Unit	Rate	Amount
11	g)	Sixth floor	95.00	Sft.		
	h)	Seventh floor	95.00	Sft.		
	j)	Eighth floor	95.00	Sft.		
		Providing & fixing 1" thick best quality Granite imported Marble of approved shed & Colour over C.C. 1 : 4 Concrete & wall clamp using O.P. Cement unless otherwise notified, setting in cement slurry and filling the joints with white / matching shed cement including grinding rubbing and best quality chemical polish . complete in all respect and as per direction of Engineer / Consultant. ( at any height and floor )	1,425.00	Sft.		
		<b>Total Porcelain Tiles and Marbels Works Rs. =</b>				
		<b><u>DOORS AND WINDOWS</u></b>				
		Providing and fixing <b>Doors &amp; Windows Frame solid wood using</b> best quality Deodar wood & Hinges with SIKKEN Polish of Holland or equalent finished as shown in drawing at any height and floor Complete in all respect and as per drawings and instructions of the Engineer/Architect.				
		2" X 5"	1,054.00	Rft.		
		2" X 7"	1,890.00	Rft.		
		Providing and fixing <b>Doors &amp; Windows Frame solid wood using</b> best quality Teak wood & Hinges with SIKKEN Polish of Holland or equalent finished as shown in drawing at any height and floor Complete in all respect and as per drawings and instructions of the Engineer/Architect.				
		2" X 7"	128.00	Rft.		
		Providing and fixing <b>Solid Paneled Doors Shutter 1¾" Thick</b> using best quality Teak wood with SIKKEN Polish of Holland or equalent finished, <b>Single Swing</b> door with stop holds, hinges, stopper, at any height and floor Complete in all respect and as per drawings and instructions of the Engineer/Architect.	323.00	Sft.		



S. No.	Description of Items	Quantity	Unit	Rate	Amount
	Providing and fixing 1-1/2" thick laminated block board (Formica) finish shutter including the cost of commercial ply wood facing 4mm thick (3 ply) fixed over best quality dodar wood frame 4" wide all around .6" wide lock rail and 2nd. class deodar wood middle strip 3/4" wide 2-3/4" centre to centre including 1/4" thick best quality dodar wood lipping on all side as per approved drawing , manufactured under power hydraulic press and including all hardware, brass hinges, nail, screws, complete in all respect and as per direction of the Engineer/Architect.	3,633.00	Sft.		
<b>Total Door and Windows Works Rs. =</b>					
	<b><u>MISCELLANEOUS</u></b>				
1	Providing, laying & fixing at site 1" thick RCC 1:2:4 Precast Slab with arrange vanity hole including 1/4" dia steel bar @ 6" CC both way with binding wire, curing, leveling and jointing in 1:4 cement sand mortar over block masonry. Complete in all respect (at any height & floor)	300	Sft.		
2	Provide & fixing of 3/4" thick Tevera Polish finish Marble Top with vanity hole for Vanity Type Wash Basin and as per required size. Complete in all respect (at any height & floor).	300	Sft.		
3	Providing & fixing best approved quality mortice lock (base price 750/-) with brass screws etc. Complete in all respect (at any height & floor).	80	No.		
4	Providing fixing Bath Local lock (ALPHA) of approved quality with screw etc. Complete in all respect (at any height & floor).	150	No.		
5	Providing fixing 6" high best approved quality brass tower bolt with screw. Complete in all respect and as per instruction of Engineer / Consultant. (at any height & floor).	230	No.		
6	Providing & fixing 3'-0" high S.S. Stair Railing at steps consisting on 3"x3" Top round , 1 1/2" dia post Alternate Steps with bottom cap and 3 nos. 1/2"dia mid Rod of post as per drawing and design. complete in all respect as per direction of Consultant/ Client. ( at any height & floor )	500	Rft.		





S. No.	Description of Items	Quantity	Unit	Rate	Amount
7	Providing & fixing best approved Hydraulic Door Closer. Complete in all respect. (at any height floor).as per instruction of Consultant/Engineer.	6	No.		
8	Providing & laying 2.5" thick (Average) 1:2:4 screed laid to proper slopes in panels not exceeding (4'-0" x 4'-0") to be smooth finish etc. complete in all respect at any height and floor as per drawing specifications (On Top Roof).	4,350	Sft.		
9	Provide & fixing 17" x 22" stainless steel sink bowl (Rashid) fixed in marble slab. Complete in all respect and as per specification and direction of Consultant/Client.	14	No.		
10	Providing & fixing Floor mounted Kitchen Cabinete 20" Deep and 30" High using Best quality Deodar Wood with SIKKEN Polish of holand or equalent finished, frame deodar wood 1 1/2"x 1 1/2" square with ply wood at back side, 3/4" thick shutter teak veenerd board with 1/4" thick teak wood lipping all around the prifery of shutter, using best quality brass hinges, brass screw, Knobs and 3/4"thick marble Top at 2" thick precast slab on top and 4" thick block masonry vertical support etc. complete in all respect and as per direction of Engineer / Consultant. ( at any height and Floor )	1,950	Sft.		
11	Providing & fixing Wall mounted Kitchen Cabinete 15" Deep and 24" High using Best quality Deodar Wood with SIKKEN Polish of holand or equalent finished, frame deodar wood 1 1/2"x 1 1/2" square with ply wood at back side, 3/4" thick shutter teak veenerd board with 1/4" thick teak wood lipping all around the prifery of shutter, using best quality brass hinges, brass screw, Knobs. complete in all respect and as per direction of Engineer / Consultant. ( at any height and Floor )	825	Sft.		
12	Providing & Fixing C.C. Jali compressive strength 2000 psi with 1/4" thick mesh wire reinforcement 3" thick, comprising O.P. Cement with approved pigment . complete in all respect and as per direction of Engineer / Consultant. ( at any height and Floor )	5,260	Sft.		
13	Providing , Making & Fixing of Garbaje Chhute with G.I. Sheet 18SWG Joint ring 1"x1" 16 SWG etc. complete in all respect and as per direction of Engineer / Consultant. ( at any height and Floor )	120	Rft.		
TOTAL					



**CONSTRUCTION OF RESIDENTIAL & STUDIO APARTMENTS AT**

**BATH ISLAND BUNGALOW No. 2 , 3 & 4 KARACHI - ADP No. 1167 - 2016 - 17**

**SUMMARY OF COST**

**(Civil Works Residential Apartments)**

**SCHEDULE ITEMS**

1	Steel	....	Rs. .... 34,873,614.44
2	Block Masonry	....	Rs. .... 5,923,166.20
3	Doors & Windows	....	Rs. .... 9,159,277.52

**Total Amount Rs. .... 49,956,058.15**

(Rupees ..... only)



**COST ESTIMATE**  
**CIVIL WORKS ( RESIDENTIAL APARTMENTS )**  
**(SCHEDULE ITEMS)**

[illegible]





**CONSTRUCTION OF RESIDENTIAL & STUDIO APARTMENTS AT**  
**BATH ISLAND BUNGALOW No. 2 , 3 & 4 KARACHI - ADP No. 1167 - 2016 - 17**

**SUMMARY OF COST**

**(Civil Works Residential Apartments)**

**NON SCHEDULE ITEMS**

1.	Reinforced Cement Concrete	....	Rs. ....
2	Plastering & Rendering ( Internal )	....	Rs. ....
3	Plastering & Rendering ( External )	....	Rs. ....
4	Paint Work	....	Rs. ....
5	Flooring / Skirting / Dado	....	Rs. ....
6	Doors & Windows	....	Rs. ....
7	Miscellaneous Items	....	Rs. ....

**Total Amount Rs. \_\_\_\_\_**

Rupees \_\_\_\_\_ only)



**CONSTRUCTION OF RESIDENTIAL & STUDIO APATMENTS AT  
BATH ISLAND BUNGALOW No. 2 , 3 & 4 KARACHI - ADP No. 1167 - 2016 - 17**

**BILL OF QUANTITIES  
( CIVIL WORKS - RESIDENTIAL APARTMENTS )**

**NON SCHEDULE ITEMS**

S. No.	Description of Items	Quantity	Unit	Rate	Amount
1	<p>Providing, laying &amp; transport <b>READY MIX</b> (at approved batching plant) Reinforced Cement Concrete manufactured, transported and delivered at site with O.P. Cement using graded coarse and fine aggregates as per mix design for specified class of concrete strengths (at 28 days cylindrical) including providing and fixing in place any shape and size water tight steel form work and steel scaffolding at any lift, leads &amp; height including cost of all types of concrete admixture or approved, compacting the concrete with external vibrator poker vibrator and finishing the top surface and cost of concrete pumps from transit mixer upto required locations cover blocks.</p> <p>Ready mix concrete shall be made and transported at site as per ASTM C94 and other relevant specification. Concrete shall meet the requirement of AC1/ ASTM specification. Complete in all respect but excluding cost of reinforcement steel as per drawings, specification and approval of Consultant/ Engineer.</p> <p><b>CONCRETE RATIO 4500 psi</b></p> <p><b><u>COLUMNS CONCRETE</u></b></p> <p>a) Ground Floor</p> <p>b) First Floor</p> <p>c) Second Floor</p> <p>d) Third Floor</p> <p>e) Fourth Floor</p> <p>f) Fifth Floor</p> <p>g) Sixth Floor</p> <p>h) Stair Tower</p>				
		912	Cft.		
		912	Cft.		
		912	Cft.		
		912	Cft.		
		912	Cft.		
		912	Cft.		
		912	Cft.		
		128	Cft.		



S. No.	Description of Items	Quantity	Unit	Rate	Amount
	<b><u>LIFT WALL CONCRETE</u></b>				
	a) Ground Floor	488	Cft.		
	b) First Floor	488	Cft.		
	c) Second Floor	488	Cft.		
	d) Third Floor	488	Cft.		
	e) Fourth Floor	488	Cft.		
	f) Fifth Floor	488	Cft.		
	g) Sixth Floor	488	Cft.		
	h) Top of Roof	1,505	Cft.		
	<b>CONCRETE RATIO 3000 psi</b>				
	<b><u>R.C.C. SLAB CONCRETE</u></b>				
	a) Ground Floor	4,758	Cft.		
	b) First Floor	4,758	Cft.		
	c) Second Floor	4,758	Cft.		
	d) Third Floor	4,758	Cft.		
	e) Fourth Floor	4,758	Cft.		
	f) Fifth Floor	4,758	Cft.		
	g) Sixth Floor	4,758	Cft.		
	h) Top of Roof	537	Cft.		
	<b><u>R.C.C. BEAMS CONCRETE</u></b>				
	a) Ground Floor	2,273	Cft.		



S. No.	Description of Items	Quantity	Unit	Rate	Amount
	b) First Floor	2,273	Cft.		
	c) Second Floor	2,273	Cft.		
	d) Third Floor	2,273	Cft.		
	e) Fourth Floor	2,273	Cft.		
	f) Fifth Floor	2,273	Cft.		
	g) Sixth Floor	2,273	Cft.		
	h) Top of Roof	222	Cft.		
Total Reinforced Cement Concrete Works Rs. =					
<b><u>PLASTER &amp; RENDERING ( INTERNAL )</u></b>					
2	Providing & applying using O.P. Cement unless otherwise notified, sand, mortar plaster , including hacking, chipping & nikking cementing (Nero) steel trowel finish upto any height. Complete in all respect as per drawings, specifications and instructions of the Engineer/Architect.				
	1/2" THICK				
	a) Ground Floor	19,204.27	Sft.		
	b) First Floor	20,124.75	Sft.		
	c) Second Floor	20,124.75	Sft.		
	d) Third Floor	20,124.75	Sft.		
	e) Fourth Floor	20,124.75	Sft.		
	f) Fifth Floor	20,124.75	Sft.		
	g) Sixth Floor	20,124.75	Sft.		
	h) Above Sixth Floor	2,500.00	Sft.		
Total Internal Plaster Works Rs. =					
<b><u>PLASTER &amp; RENDERING ( EXTERNAL )</u></b>					
	a) Ground Floor	3,783.25	Sft.		
	b) First Floor	4,841.75	Sft.		





S. No.	Description of Items	Quantity	Unit	Rate	Amount
	c) Second Floor	4,841.75	Sft.		
	d) Third Floor	4,841.75	Sft.		
	e) Fourth Floor	4,841.75	Sft.		
	f) Fifth Floor	4,841.75	Sft.		
	g) Sixth Floor	4,841.75	Sft.		
	h) Above Sixth Floor	3,139.00	Sft.		
<b>Total External Plaster Works Rs. =</b>					
<b><u>PAINT WORK</u></b>					
3	Providing & applying Two coat of destember with one coat of primer base filling including rubbing etc. as per direction of Engineer/ Consultant at any height and floor. ( JOTTON , ICI , BURGER )	57,100.00	Sft.		
4	Providing & applying of three coats of Plastic Emulsion paint of JOTUN, NIPPON, ICI or equivalent shade on ceiling, walls, beams, columns etc. complete as per drawing and specifications and direction of Engineer/ Consultant at any height and floor..	84,700.00	Sft.		
5	Providing & applying colour crete plaster 1/2" thick using fine sand with white cement ratio 1:4 including approved colour pigment over 3/4" thick C.C. plaster finished with groove 1/8" thick. Complete in all respect and as per drawing, specifications and instruction of the Engineer/ Architects.	35,835.00	Sft.		
<b>TOTAL</b>					
<b><u>FLOORING / SKIRTING / DADO</u></b>					
6	Providing and fixing best quality imported made porcelain Matt tiles flooring 24" x 24" or any other approved size, shade and design including 2-1/2" thick base CC 1:2:4 concrete, using O.P. cement unless other wise notified, setting tiles in cement slurry / dry bond imported or equivalent and grouted the joints with admixture of matching pigment in provided grove and sealer including washing, cleaning and curing Complete in all respect and as per drawings, specifications and instructions of the Engineer/Architect.				
	a) Ground floor	7,513.00	Sft.		
	b) First floor	6,626.00	Sft.		
	c) Second floor	6,626.00	Sft.		



S. No.	Description of Items	Quantity	Unit	Rate	Amount
	d) Third floor	6,626.00	Sft.		
	e) Fourth floor	6,626.00	Sft.		
	f) Fifth floor	6,626.00	Sft.		
	g) Sixth floor	6,626.00	Sft.		
	h) Top of Roof	798.00	Sft.		
7	Same as above Item No.1 but polish tile use in 4" high skirting (3/4" thick base in 1:4 mortar) Complete in all respect.				
	a) Ground floor	257.00	Sft.		
	b) First floor	665.00	Sft.		
	c) Second floor	665.00	Sft.		
	d) Third floor	665.00	Sft.		
	e) Fourth floor	665.00	Sft.		
	f) Fifth floor	665.00	Sft.		
	g) Sixth floor	665.00	Sft.		
	h) Top of Roof	47.00	Sft.		
8	Providing and fixing best quality <b>imported made porcelain Matt tiles flooring 9" x 26"</b> or any other approved size, shade and design including 2-1/2" thick base CC 1:2:4 concrete, using O.P. cement unless other wise notified, setting tiles in cement slurry / dry bond imported or equivalent and grouted the joints with admixture of matching pigment in provided groove and sealer including washing, cleaning and curing Complete in all respect and as per drawings, specifications and instructions of the Engineer/Architect. ( at any height and floor )	25,543.00	Sft.		
9	Providing & fixing 3/4" thick Marble (Cream) for Landing and Tread steps (in one piece) with 1:4 mortar including bull nosing, grinding, pre polishing, cutting etc. complete in all respect.				
	a) Ground floor	260.00	Sft.		
	b) First floor	260.00	Sft.		
	c) Second floor	260.00	Sft.		



S. No.	Description of Items	Quantity	Unit	Rate	Amount
10	d) Third floor	260.00	Sft.		
	e) Fourth floor	260.00	Sft.		
	f) Fifth floor	260.00	Sft.		
	g) Sixth floor	260.00	Sft.		
	h) Top of Roof	260.00	Sft.		
	Same as Item No.4 but 3/8" thick for Riser.				
	a) Ground floor	130.00	Sft.		
	b) First floor	130.00	Sft.		
	c) Second floor	130.00	Sft.		
	d) Third floor	130.00	Sft.		
11	e) Fourth floor	130.00	Sft.		
	f) Fifth floor	130.00	Sft.		
	g) Sixth floor	130.00	Sft.		
	h) Top of Roof	130.00	Sft.		
	Providing & fixing 1" thick best quality Granite imported Marble of approved shed over C.C. 1:2:4 Concrete using O.P. Cement unless otherwise notified, setting in cement slurry and filling the joints with white / matching shed cement including grinding rubbing and best quality chemical polish . complete in all respect and as per direction of Engineer / Consultant. ( at any height and Floor )	900.00	Sft.		
	Total Porcelain Tiles and Marbels Works Rs. =				
	<b><u>DOORS AND WINDOWS</u></b>				
	12 Providing and fixing <b>Doors &amp; Windows Frame solid wood using</b> best quality Deodar wood & Hinges with SIKKEN Polish of Holland or equalent finished as shown in drawing at any height and floor Complete in all respect and as per drawings and instructions of the Engineer/Architect.				
	2" X 5"	2,618.00	Rft.		
	2" X 7"	4,012.50	Rft.		



S. No.	Description of Items	Quantity	Unit	Rate	Amount
13	Providing and fixing <b>Doors &amp; Windows Frame solid wood using</b> best quality Teak wood & Hinges with SIKKEN Polish of Holland or equalent finished as shown in drawing at any height and floor Complete in all respect and as per drawings and instructions of the Engineer/Architect.  2" X 7"	171.00	Rft.		
14	Providing and fixing <b>Solid Paneled Doors Shutter 1¾" Thick</b> using best quality Teak wood with SIKKEN Polish of Holland or equalent finished, <b>Single Swing</b> door with stop holds, hinges, stopper, at any height and floor Complete in all respect and as per drawings and instructions of the Engineer/Architect.	312.00	Sft.		
15	Providing and fixing 1-1/2" thick laminated block board (Formica) finish shutter including the cost of commercial ply wood facing 4mm thick (3 ply) fixed over best quality dodar wood frame 4" wide all around .6" wide lock rail and 2nd. class deodar wood middle strip 3/4" wide 2-3/4" centre to centre including 1/4" thick best quality dodar wood lipping on all side as per approved drawing , manufactured under power hydraulic press and including all hardware, brass hinges, nail, screws, complete in all respect and as per direction of the Engineer/Architect.	7,945.00	Sft.		
<b>Total Door and Windows Works Rs. =</b>					
<b><u>MISCELLANEOUS</u></b>					
1	Providing, laying & fixing at site 1" thick RCC 1:2:4 Precast Slab with arrange vanity hole including 1/4" dia steel bar @ 6" CC both way with binding wire, curing, leveling and jointing in 1:4 cement sand mortar over block masonry. Complete in all respect (at any height & floor).	200.00	Sft.		
2	Provide & fixing Kitchen 3/4" thick Tevera Polished marble slab fixed over 2" thick R.C.C. slab. Complete in all respect and as per specification and direction of Consultant/ Client. (at any height & floor).	650.00	Sft.		
3	Providing & fixing best approved quality mortice lock (base price 750/-) with brass screws etc. Complete in all respect (at any height & floor).	132.00	No.		
4	Providing fixing Bath Local lock (ALPHA) of approved quality with screw etc. Complete in all respect (at any height & floor).	150.00	No.		
5	Providing fixing 6" high best approved quality brass tower bolt with screw. Complete in all respect and as per instruction of Engineer / Consultant. (at any height & floor).	200.00	No.		



S. No.	Description of Items	Quantity	Unit	Rate	Amount
6	Providing & fixing 3'-0" high S.S. Stair Railing at steps consisting on 3"x3" Top round , 1 1/2" dia post Alternate Steps with bottom cap and 3 nos. 1/2"dia mid Rod of post as per drawing and design. complete in all respect as per direction of Consultant/ Client.	350	Rft.		
7	Providing & fixing best approved Hydraulic Door Closer. Complete in all respect. (at any height floor).as per instruction of Consultant/Engineer.	6.00	No.		
8	Providing & laying 2.5" thick (Average) 1:2:4 screed laid to proper slopes in panels not exceeding (4'-0" x 4'-0") to be smooth finish etc. complete in all respect at any height and floor as per drawing specifications (On Top Roof).	8,100.00	Sft.		
9	Provide & fixing 17" x 22" stainless steel sink bowl fixed in marble slab. Complete in all respect and as per specification and direction of Consultant/ Client.	25.00	No.		
10	Providing & fixing Pavers ( ENVICREATE, HUB CREATE OR EQUALMENT )on mentioned area with sand cushion as per approved pattern, design and colour and as per drawing. complete in all respect and as per direction of Engineer / Consultant.	2,500.00	Sft.		
11	Providing & fixing Floor mounted Kitchen Cabinete 20" Deep and 30" High using Best quality Deodar Wood with SIKKEN Polish of holand or equalent finished, frame deodar wood 1 1/2"x 1 1/2" square with ply wood at back side, 3/4" thick shutter teak veenerd board with 1/4" thick teak wood lipping all arround the prifery of shutter, using best quality brass hinges, brass screw, Knobs and 3/4"thick marble Top at 2" thick precast slab on top and 4" thick block masonry vertical support etc. complete in all respect and as per direction of Engineer / Consultant. ( at any height and Floor )	740.00	Sft.		
12	Providing & fixing Wall mounted Kitchen Cabinete 15" Deep and 24" High using Best quality Deodar Wood with SIKKEN Polish of holand or equalent finished, frame deodar wood 1 1/2"x 1 1/2" square with ply wood at back side, 3/4" thick shutter teak veenerd board with 1/4" thick teak wood lipping all arround the prifery of shutter, using best quality brass hinges, brass screw, Knobs. complete in all respect and as per direction of Engineer / Consultant. ( at any height and Floor )	1,360.00	Sft.		
13	Providing , Making & Fixing of Garbage Chhute with G.I. Sheet 18SWG Joint ring 1"x1" 16 SWG etc. complete in all respect and as per direction of Engineer / Consultant. ( at any height and Floor )	168.00	Rft.		
				<b>TOTAL</b>	

# **PLUMBING WORKS**



**CONSTRUCTION OF RESIDENTIAL & STUDIO APARTMENTS AT**  
**BATH ISLAND BUNGALOW No. 2, 3 & 4 KARACHI ADP No. 1167 - 2016 - 17**

**SUMMARY OF COST**  
**(PLUMBING WORKS)**

**1. SCHEDULE ITEMS**

a) Basement	....	Rs. _____
b) Studio Apartments	....	Rs. _____
c) Residential Apartments	....	Rs. _____

**SUB-TOTAL RS.** \_\_\_\_\_

**2. NON-SCHEDULE ITEMS**

a) Basement	....	Rs. _____
b) Studio Apartments	....	Rs. _____
c) Residential Apartments	....	Rs. _____

**SUB-TOTAL RS.** \_\_\_\_\_

**TOTAL OF 1 + 2 RS.** \_\_\_\_\_

(Rupees \_\_\_\_\_)



**CONSTRUCTION OF RESIDENTIAL & STUDIO APARTMENTS AT  
BATH ISLAND BUNGALOW No. 2, 3 & 4 KARACHI ADP No. 1167 - 2016 - 17**

**SUMMARY OF COST  
BASEMENT  
SCHEDULE ITEMS  
(PLUMBING WORKS)**

BELOW RESIDENTIAL APARTMENT		AMOUNT
1.0	PIPING	112,773
2.0	EXTERNAL WORKS - DRAINAGE SYSTEM	28,947
		<b>141,721</b>
BELOW STUDIO APARTMENT		
4.0	PIPING	92,861
5.0	EXTERNAL WORKS - DRAINAGE SYSTEM	28,947
		<b>121,808</b>
	<b>TOTAL =</b>	<b>263,529</b>
<b>Percentage on Schedule Items Above / Below =</b>		
<b>Gross Total Amount Rs.=</b>		

(Rupees \_\_\_\_\_ Only).





**CONSTRUCTION OF RESIDENTIAL & STUDIO APARTMENTS AT  
BATH ISLAND BUNGALOW No. 2, 3 & 4 KARACHI ADP No. 1167 - 2016 - 17**

**COST ESTIMATE  
(BASEMENT - PLUMBING WORKS BELOW RESIDENTIAL APARTMENT)  
(SCHEDULED ITEMS)**

ITEM No.	DESCRIPTION	UNIT	QTY.	RATE (Rs.)	TOTAL AMOUNT (Rs.)
	<b>PIPING</b>				
1	Providing & fixing 6"x2" or 6"x3" C.I. Floor trap of approved self cleaning design with a C.I. Screwed down grating with or without a vent arm complete with and i/c, making requisite No. of holes in walls, plinth and floor for making pipe connection and making good in cement concrete 1:2:4 (item No. 20,chapter-1).	5	No.	2,042.43	10,212.15
2	Providing and installation of full way gun metal valves with wheels, threaded or flanged ends with rubber washings. Make: "ANWAR MECH. WORKS. (Item No.4, Chapter-6).				
	a) 1-1/2" Dia. Gate Valve "Make: Anwar" item No. 4(B-v), Chapter-6.	0		640.92	RATE ONLY
	b) 2" Dia. Gate Valve "Make: Anwar" item No. 4(B-vi), Chapter-6.	2	No.	1,382.92	2,765.84
	c) 2-1/2 Dia, Gate valve "Make Anwar" item No. 4 - (B-vii), Chapter-6.	6	No.	1,225.84	7,355.04
	d) 3" Dia, Gate valve "Make Anwar" item No. 4 - (B-viii), Chapter-6.	2	No.	1,940.84	3,881.68
	e) 4" Dia, Gate valve "Make Anwar" item No. 4 - (B-ix), Chapter-6.	2	No.	3,095.84	6,191.68
3	Providing G.I. Pipes, specials and clamps etc. i/c fixing, cutting and fitting complete with and including the cost of breaking through walls and roof, Making good etc. painting 2- coats after cleaning the pipes etc. with white zinc paint with pigment to match the colour of the building. Testing with water to a pressure head of 200 feet and handling. Item No.1, (Chapter-4). for pumps to Overhead water tanks.				
	iv) 1-1/2 inch Dia	0	Rft.	188.97	RATE ONLY
	v) 2 inch Dia	0	Rft.	233.00	RATE ONLY
	vi) 2-1/2 Inch Dia	190	Rft.	310.47	58,989.30
	vii) 3 Inch Dia	40	Rft.	360.40	14,416.00
	viii) 4 inch Dia	10	Rft.	896.17	8,961.70
				<b>SUB-TOTAL =</b>	<b>112,773.39</b>



ITEM No.	DESCRIPTION	UNIT	QTY.	RATE (Rs.)	TOTAL AMOUNT (Rs.)
<b>EXTERNAL WORKS- DRAINAGE SYSTEM</b>					
1	Excavation for pipe line in trenches and pits in hard soil.	600	Cft.	3.90	2,340.00
2	Excavation for pipe line in trenches and pits in gravity soil.	1200	Cft.	4.20	5,040.00
3	Construction of small wheel Valve chambers, Clear inside size 18"x18"x18" (457x457x457 mm) with valve of 9" (229mm) thick of B.B. in cement Mortar 1:3/4 inch thick cement concrete 1:3:6 cement plaster 1/2 inch. Thick 1:3 inside i/c supplying and fixing C.I. light weight manhole cover with frame and locking arrangement of 18"x18" (457x457 mm) clear opening etc. complete.	1	No.	4,103.00	4,103.00
4	Construction manhole or inspection chamber for the required dia of circular sewer of 3'-6" depth with walls of B.B. in cement mortar 1:3 and 1:3 cement plastered 1/2" thick inside of walls and 1" thick over benching and channels including fixing C.I. manhole cover with frame of clear opening 1-1/2" x 1-1/2" of 1.75 Cwt embedded in plain C.C. 1:2:4 and fixing 1" dia M.S. steps 6" wide projecting 4" from the face of wall at 1" C/C duly painted etc. complete as per specification and drawing No. D-P/1 of Public Health Circle. Southern Zone.  Item P (a) Chapter-II,-P2, Part-B.  Internal dia of Sewer 4" to 6".  internal dia of Chamber 2'-0" x 2'-0"	1	No.	14,748.00	14,748.00
5	Construction of Gully traps of 12"x12" internal size and required depth of max 18" with walls of in cement mortar 1:3 and 1:3 cement plastered 1/2" thick inside of walls including fixing of C.I. Cover and frame.	2	No.	1,358.17	2,716.34
<b>SUB-TOTAL =</b>					<b>28,947.34</b>
<b>TOTAL =</b>					<b>141,720.73</b>
<b>( BASEMENT - PLUMBING WORKS BELOW STUDIO APARTMENT )</b>					
<b>PIPING</b>					
1	Providing & fixing 6"x2" or 6"x3" C.I. Floor trap of approved self cleaning design with a C.I. Screwed down grating with or without a vent arm complete with and i/c, making requisite No. of holes in walls, plinth and floor for making pipe connection and making good in cement concrete 1:2:4 (item No. 20,chapter-1).	5	No.	2,042.43	10,212.15
2	Providing and installation of full way gun metal valves with wheels, threaded or flanged ends with rubber washings. Make: "ANWAR MECH. WORKS. (Item No.4, Chapter-6).				



ITEM No.	DESCRIPTION	UNIT	QTY.	RATE (Rs.)	TOTAL AMOUNT (Rs.)
3	a) 1-1/2" Dia. Gate Valve "Make: Anwar" item No. 4(B-v), Chapter-6.	0		640.92	RATE ONLY
	b) 2" Dia. Gate Valve "Make: Anwar" item No. 4(B-vi), Chapter-6.	2	No.	1,382.92	2,765.84
	c) 2-1/2 Dia, Gate valve "Make Anwar" item No. 4 - (B-vii), Chapter-6.	4	No.	1,225.84	4,903.36
	d) 3" Dia, Gate valve "Make Anwar" item No. 4 - (B-viii), Chapter-6.	4	No.	1,940.84	7,763.36
	e) 4" Dia, Gate valve "Make Anwar" item No. 4 - (B-ix), Chapter-6.	2	No.	3,095.84	6,191.68
	Providing G.I. Pipes, specials and clamps etc. i/c fixing, cutting and fitting complete with and including the cost of breaking through walls and roof, Making good etc. painting 2- coats after cleaning the pipes etc. with white zinc paint with pigment to match the colour of the building. Testing with water to a pressure head of 200 feet and handling. Item No.1, (Chapter-4). for pumps to Overhead water tanks.				
	iv) 1-1/2 inch Dia	0	Rft.	188.97	RATE ONLY
	v) 2 inch Dia	0	Rft.	233.00	RATE ONLY
	vi) 2-1/2 Inch Dia	40	Rft.	310.47	12,418.80
	vii) 3 Inch Dia	110	Rft.	360.40	39,644.00
	viii) 4 inch Dia	10	Rft.	896.17	8,961.70
				<b>SUB-TOTAL =</b>	<b>92,860.89</b>
<b>EXTERNAL WORKS- DRAINAGE SYSTEM</b>					
1	Excavation for pipe line in trenches and pits in hard soil.	600	Cft.	3.90	2,340.00
2	Excavation for pipe line in trenches and pits in gravity soil.	1200	Cft.	4.20	5,040.00
3	Construction of small wheel Valve chambers, Clear inside size 18"x18"x18" (457x457x457 mm) with valve of 9" (229mm) thick of B.B. in cement Mortar 1:3/4 inch thick cement concrete 1:3:6 cement plaster 1/2 inch. Thick 1:3 inside i/c supplying and fixing C.I. light weight manhole cover with frame and locking arrangement of 18"x18" (457x457 mm) clear opening etc. complete.	1	No.	4,103.00	4,103.00



ITEM No.	DESCRIPTION	UNIT	QTY.	RATE (Rs.)	TOTAL AMOUNT (Rs.)
4	Construction manhole or inspection chamber for the required dia of circular sewer of 3'-6" depth with walls of B.B. in cement mortar 1:3 and 1:3 cement plastered 1/2" thick inside of walls and 1" thick over benching and channels including fixing C.I. manhole cover with frame of clear opening 1-1/2" x 1-1/2" of 1.75 Cwt embedded in plain C.C. 1:2:4 and fixing 1" dia M.S. steps 6" wide projecting 4" from the face of wall at 1" C/C duly painted etc. complete as per specification and drawing No. D-P/1 of Public Health Circle, Southern Zone.  Item P (a) Chapter-II,-P2, Part-B.  Internal dia of Sewer 4" to 6".  internal dia of Chamber 2'-0" x 2'-0"	1	No.	14,748.00	14,748.00
5	Construction of Gully traps of 12"x12" internal size and required depth of max 18" with walls of in cement mortar 1:3 and 1:3 cement plastered 1/2" thick inside of walls including fixing of C.I. Cover and frame.	2	No.	1,358.17	2,716.34
				<b>SUB-TOTAL =</b>	<b>28,947.34</b>
				<b>TOTAL =</b>	<b>121,808.23</b>
				<b>GRAND TOTAL =</b>	<b>263,529.00</b>



**CONSTRUCTION OF RESIDENTIAL & STUDIO APARTMENTS AT  
BATH ISLAND BUNGALOW No. 2, 3 & 4 KARACHI ADP No. 1167 - 2016 - 17**

## **SUMMARY OF COST**

<b>ITEM NO</b>	<b>COLLECTION</b>	<b>AMOUNT (Rs.)</b>
<b>1.0</b>	<b>BELOW RESIDENTIAL APARTMENTS</b>	
	<b>TOTAL =</b>	

(Rupees \_\_\_\_\_ Only)



**CONSTRUCTION OF RESIDENTIAL & STUDIO APARTMENTS AT  
BATH ISLAND BUNGALOW No. 2, 3 & 4 KARACHI ADP No. 1167 - 2016 - 17**

**BILL OF QUANTITIES  
(PLUMBING WORKS)**

**(BASEMENT - PLUMBING WORKS BELOW RESIDENTIAL APARTMENT)**

**(NON SCHEDULE ITEMS)**

ITEM No.	DESCRIPTION	UNIT	QTY.	RATE (Rs.)	TOTAL AMOUNT (Rs.)
1	Providing and fixing uPVC Cleanouts with sunk type C.P. brass screw caps including cost of making requisite number of hole in walls, plinth and floor for pipe connection and restoring damaged surfaces to original condition.				
	a) 3" dia. (70 mm).	21	No.		
	b) 4" dia. (100 mm/110mm).	20	No.		
	c) 6" dia. (150/160 mm).	15	No.		
	d) 8" dia (200mm).	1	No.		
2	Providing and installation of uPVC class 'B' Pipes and fittings, such as Elbows, wyes, Reducers and etc. conforming to BS4515, push fit rubber ring or solvent jointing system, including the cost of all kind of clamps, fising material, cutting in floors and walls. Testing at 8 feet of water head for 24 hours. (Make: Terreine SDP, Marley, Paling) or Eq.				
	i) Dia 200 mm	70	Rft.		
	ii) Dia 150 mm or 160 mm	450	Rft.		
	i) Dia 100 mm or 110 mm	185	Rft.		
	ii) Dia 70 mm or 75 mm	110	Rft.		
	iii) Dia 50 mm	40	Rft.		



ITEM No.	DESCRIPTION	UNIT	QTY.	RATE (Rs.)	TOTAL AMOUNT (Rs.)
3	Providing & fixing Dia 3 inches C.I. Goose neck Air vent on under ground water tanks	2	No.		
4	Providing & installation of end suction water lift pumps i/c the cost of starter panel for each pump, C.C.Pad pad size 36"x18"x6" for pump installation. As per details shown on drawings. Performing Commissioning and testing up to satisfaction of engineer incharge. Similer to Grundfos Model No. CM-10-2. or Equivelant. Capacities of the each pump shall be as follows:  a) Flow= 70 (US) GPM b) Total Head= 165 feet. c) Motor HP. = 7.5 HP (Varies upon selection of make and model).	2	No.		
5	Providing & fixing swing / lift check Valve/Non return Valve Threaded ends, Cap, Hinge pin, Body, hinge, disc nut and disc shall be of bronze. Best quality heavy duty type, Valve should provide tight shut off at full closed position. As per approval of engineer inchargs. Make: Kitz. or eq. approved.  i) Dia 2 inches.  ii) Dia 2-1/2 inches.  iii) Dia 3 inches.	2 2 2	No. No. No.		
6	Providing & fixing Float Valve, Best quality heavy duty type, Provided with Dia 6 inches (150 mm) copper ball and heavy duty broze float arm,. Valve shall provide tight shut off at full closed position.. As per approval of engineer inchargs. Make: Kitz. or eq. approved.  i) Dia 1-1/2 inches.	4	No.		
7	Providing & installation of submersible sump water lift pumps i/c the cost of starter panel for each pump, Water proof cable for pump installation. As per details shown on drawings. Performing Commissioning and testing up to satisfaction of engineir incharge. Similer to Make "GRUNDFOS, KSB or Equivelant. Capacities of the each pump shall be as follows:  a) Flow= 55 (US) GPM b) Total Head= 20 feet c) Motor HP. = 1.5 (Varies upon selection of make and model).	2	No.		
				<b>TOTAL =</b>	



ITEM No.	DESCRIPTION	UNIT	QTY.	RATE (Rs.)	TOTAL AMOUNT (Rs.)
<b>( BASEMENT - PLUMBING WORKS BELOW STUDIO APARTMENT )</b>					
1	Providing and fixing uPVC Cleanouts with sunk type C.P. brass screw caps including cost of making requisite number of hole in walls, plinth and floor for pipe connection and restoring damaged surfaces to original condition.				
	a) 3" dia. (70 mm).	10	No.		
	b) 4" dia. (100 mm/110mm).	16	No.		
	c) 6" dia. (150/160 mm).	5	No.		
	d) 8" dia (200mm).	5	No.		
2	Providing and installation of uPVC class 'B' Pipes and fittings, such as Elbows, wyes, Reducers and etc. conforming to BS4515, push fit rubber ring or solvent jointing system, including the cost of all kind of clamps, fising material, cutting in floors and walls. Testing at 8 feet of water head for 24 hours. (Make: Terreine SDP, Marley, Paling) or Eq.				
	i) Dia 200 mm	215	Rft.		
	ii) Dia 150 mm or 160 mm	235	Rft.		
	i) Dia 100 mm or 110 mm	450	Rft.		
	ii) Dia 70 mm or 75 mm	105	Rft.		
	iii) Dia 50 mm	40	Rft.		
3	Providing & fixing Dia 3 inches C.I. Goose neck Air vent on under ground water tanks	2	No.		
4	Providing & installation of end suction water lift pumps i/c the cost of starter panel for each pump, C.C.Pad pad size 36"x18"x6" for pump installation. As per details shown on drawings. Performing Commissioning and testing up to satisfaction of engineer incharge. Similer to Grundfos Model No. CM-10-2. or Equivelant. Capacities of the each pump shall be as follows:				
	a) Flow= 70 (US) GPM				
	b) Total Head= 165 feet.				
	c) Motor HP. = 7.5 HP (Varies upon selection of make and model).	2	No.		





ITEM No.	DESCRIPTION	UNIT	QTY.	RATE (Rs.)	TOTAL AMOUNT (Rs.)
5	Providing & fixing swing / lift check Valve/Non return Valve Threaded ends, Cap, Hinge pin, Body, hinge, disc nut and disc shall be of bronze. Best quality heavy duty type, Valve should provide tight shut off at full closed position. As per approval of engineer incharge. Make: Kitz. or eq. approved.				
	i) Dia 2 inches.	2	No.		
	ii) Dia 2-1/2 inches.	4	No.		
	iii) Dia 3 inches.	2	No.		
6	Providing & fixing Float Valve, Best quality heavy duty type, Provided with Dia 6 inches (150 mm) copper ball and heavy duty broze float arm,. Valve shall provide tight shut off at full closed position.. As per approval of engineer incharge. Make: Kitz. or eq. approved.				
	i) Dia 1-1/2 inches.	1	No.		
7	Providing & installation of submersible sump water lift pumps i/c the cost of starter panel for each pump, Water proof cable for pump installation. As per details shown on drawings. Performing Commissioning and testing up to satisfaction of engieer incharge. Similer to Make "GRUNDFOS, KSB or Equivelant. Capacities of the each pump shall be as follows:				
	a) Flow= 55 (US) GPM b) Total Head= 20 feet c) Motor HP. = 1.5 (Varies upon selection of make and model).	2	No.		
8	Providing & installation of submersible sump water lift pumps i/c the cost of starter panel for each pump, Water proof cable for pump installation. As per details shown on drawings. Performing Commissioning and testing up to satisfaction of engieer incharge. Similer to Make "GRUNDFOS, KSB or Equivelant. Capacities of the each pump shall be as follows:				
	a) Flow= 75 (US) GPM b) Total Head= 20 feet c) Motor HP. = 2.0 (Varies upon selection of make and model).	2	No.		
				TOTAL =	



**CONSTRUCTION OF RESIDENTIAL & STUDIO APARTMENTS AT  
BATH ISLAND BUNGALOW No. 2, 3 & 4 KARACHI ADP No. 1167 - 2016 - 17**

## **SUMMARY OF COST**

<b>ITEM NO</b>	<b>COLLECTION</b>	<b>AMOUNT (Rs.)</b>
<b>1.0</b>	<b>BELOW STUDIO APARTMENTS</b>	
	<b>TOTAL =</b>	

(Rupees \_\_\_\_\_ Only)



**CONSTRUCTION OF RESIDENTIAL & STUDIO APARTMENTS AT  
BATH ISLAND BUNGALOW No. 2, 3 & 4 KARACHI ADP No. 1167 - 2016 - 17**

**BILL OF QUANTITIES  
(PLUMBING WORKS)**

**(BASEMENT - PLUMBING WORKS BELOW RESIDENTIAL APARTMENT)**

**(NON SCHEDULE ITEMS)**

ITEM No.	DESCRIPTION	UNIT	QTY.	RATE (Rs.)	TOTAL AMOUNT (Rs.)
1	Providing and fixing uPVC Cleanouts with sunk type C.P. brass screw caps including cost of making requisite number of hole in walls, plinth and floor for pipe connection and restoring damaged surfaces to original condition.				
	a) 3" dia. (70 mm).	21	No.		
	b) 4" dia. (100 mm/110mm).	20	No.		
	c) 6" dia. (150/160 mm).	15	No.		
	d) 8" dia (200mm).	1	No.		
2	Providing and installation of uPVC class 'B' Pipes and fittings, such as Elbows, wyes, Reducers and etc. conforming to BS4515, push fit rubber ring or solvent jointing system, including the cost of all kind of clamps, fising material, cutting in floors and walls. Testing at 8 feet of water head for 24 hours. (Make: Terreine SDP, Marley, Paling) or Eq.				
	i) Dia 200 mm	70	Rft.		
	ii) Dia 150 mm or 160 mm	450	Rft.		
	i) Dia 100 mm or 110 mm	185	Rft.		
	ii) Dia 70 mm or 75 mm	110	Rft.		
	iii) Dia 50 mm	40	Rft.		



ITEM No.	DESCRIPTION	UNIT	QTY.	RATE (Rs.)	TOTAL AMOUNT (Rs.)
	b) Total Head= 165 feet. c) Motor HP. = 7.5 HP (Varies upon selection of make and model).	2	No.		
5	Providing & fixing swing / lift check Valve/Non return Valve Threaded ends, Cap, Hinge pin, Body, hinge, disc nut and disc shall be of bronze. Best quality heavy duty type, Valve should provide tight shut off at full closed position. As per approval of engineer incharge. Make: Kitz. or eq. approved.				
	i) Dia 2 inches.	2	No.		
	ii) Dia 2-1/2 inches.	4	No.		
	iii) Dia 3 inches.	2	No.		
6	Providing & fixing Float Valve, Best quality heavy duty type, Provided with Dia 6 inches (150 mm) copper ball and heavy duty broze float arm,. Valve shall provide tight shut off at full closed position.. As per approval of engineer incharge. Make: Kitz. or eq. approved.				
	i) Dia 1-1/2 inches.	1	No.		
7	Providing & installation of submersible sump water lift pumps i/c the cost of starter panel for each pump, Water proof cable for pump installation. As per details shown on drawings. Performing Commissioning and testing up to satisfaction of engieer incharge. Similer to Make "GRUNDFOS, KSB or Equivelant. Capacities of the each pump shall be as follows:				
	a) Flow= 55 (US) GPM b) Total Head= 20 feet c) Motor HP. = 1.5 (Varies upon selection of make and model).	2	No.		
8	Providing & installation of submersible sump water lift pumps i/c the cost of starter panel for each pump, Water proof cable for pump installation. As per details shown on drawings. Performing Commissioning and testing up to satisfaction of engieer incharge. Similer to Make "GRUNDFOS, KSB or Equivelant. Capacities of the each pump shall be as follows:				
	a) Flow= 75 (US) GPM b) Total Head= 20 feet c) Motor HP. = 2.0 (Varies upon selection of make and model).	2	No.		
				<b>TOTAL =</b>	

**CONSTRUCTION OF RESIDENTIAL & STUDIO APARTMENTS AT****BATH ISLAND BUNGALOW No. 2, 3 & 4 KARACHI****ADP No. 1167 - 2016 - 17****SUMMARY OF COST****(STUDIO APARTMENTS - PLUMBING WORKS)**

ITEM NO	COLLECTION	AMOUNT (Rs.)
1.0	SANITARY ITEMS	3,471,835.65
2.0	PIPING	209,286.18
	<b>Total Amount Rs.</b>	<b>3,681,122</b>

(Rupees \_\_\_\_\_ Only)



**CONSTRUCTION OF RESIDENTIAL & STUDIO APARTMENTS AT  
BATH ISLAND BUNGALOW No. 2, 3 & 4 KARACHI ADP No. 1167 - 2016 - 17**

**COST ESTIMATE  
(STUDIO APARTMENTS - PLUMBING WORKS)  
(SCHEDULE ITEMS)**

ITEM No.	DESCRIPTION	UNIT	QTY.	RATE (Rs.)	TOTAL AMOUNT (Rs.)
	<b>SANITARY ITEMS</b>				
1	Providing & fixing a squatting type white glazed earthenware W.C. pan with including the cost of flushing Cistern with internal fittings and flush pipe with bends & making requisite number of holes in wall, plinth and floor for pipe connection and making good in cement concrete 1:2:4.				
	a). With 4" dia white glazed earthen ware trap & plastic thumble (item no. 1A, chapter-1)	1	No.	5,044.60	5,044.60
2	Providing & fixing European type white glazed earthenware wash down W.C. pan complete with and including the cost of white/black-plastic seat (Best quality) and lid with C.P. brass hinges and buffers, 3 gallons white glazed earthenware low level flushing cistern with siphon fittings, 1-1/2" dia. white procelain enamelled flush bend, 3/4" dia and making requisite No. of holes in walls, plinth & floor for pipe connetion and making good in cement concrete 1:2:4 (Foreign quality) (item No.5, chapter-1)	62	No.	11,477.40	711,598.80
3	Providing & fixing 24" x 18" lavatory basin in white glazed earthenware complete with and incuding the cost of W.I. Or C.I. Cantilever bracket 6 inches built into wall, painted white in two coats after a primary coat of red lead paint, a pair of 1/2" dia chrome plated pillar taps, 1-1/2" dia rubber plug and chrome plated brass chain, 1-1/4" dia malleable iron or brass, brass unions making requisite number of hole in walls, plinth and floor for pipe connection and making good in cement concrete 1:2:4, standard pattern including earthen ware glazed padestal (Item No.8, chapter-1)	65	No.	4,253.70	276,490.50
4	Providing and fixing steel sink stainless local make complete with cast iron or wrought iron brackets 6 inches built in wall, 1-1/2" rubber plug chrome plated brass chain 1-1/2" c.p. brass waste, with 1-1/2" PVC waste pipe and making requisite number of holes in wall and plinth and floor for pipe connection and making good in concrete 1:2:4. size 40"x20" local make (item No. 19a. chapter-1)	0	No.	5,052.30	RATE ONLY
5	Providing and fixing steel sink stainless local make complete with cast iron or wrought iron brackets 6 inches built in wall, 1-1/2" rubber plug chrome plated brass chain 1-1/2" c.p. brass waste, with 1-1/2" PVC waste pipe and making requisite number of holes in wall and plinth and floor for pipe connection and making good in concrete 1:2:4, size 38"x18" local make (item No. 19b, chapter-1)	68	No.	5,162.30	351,036.40



ITEM No.	DESCRIPTION	UNIT	QTY.	RATE (Rs.)	TOTAL AMOUNT (Rs.)
6	Providing and fixing c.p. brass toilet paper holder of standard size with chrome plated brass brackets complete (superior quality) (item No.2b. chapter-2)	62	No.	1,071.40	66,426.80
7	Providing and fixing chrome plated brass towel rail complete with brackets fixing on wooden cleats with 1" long c.p. brass screws. 1). Towel rail 24' long ,3/4" dia round or square superior quality (item No.1- III(b), chapter-2).	126	No.	1,082.95	136,451.70
8	Providing & fixing 24" x 18" bavelled edge mirror of Belgium glass complete with 1/8" thick hardboard and c.p brass screw fixed to wooden pleat with glass shelves. b) Superior quality (item No.3(b)chapter-2).	65	No.	2,376.00	154,440.00
9	Providing & fixing soap tray earthen with c.p. brass screws etc. complete (item No.5, chapter -2)	130	No.	497.20	64,636.00
10	Supplying & fixing in position 1/2" dia. C.P. bib cocks standard pattern. (Item No. 2(1),b, chapter-6).	3	No.	150.92	452.76
11	Supplying & fixing in position 1/2" dia tee stop of superior quality with C.P. head (item No.12b, chapter-6).	200	No.	889.46	177,892.00
12	Supplying and fixing of CP Muslim shower with double bib cock and ring pipe etc complete. Item 19(a), chapter-6.	64	No.	3,432.00	219,648.00
13	Providing and fixing of swan neck pillar cock of superior quality single C.P. Head Dia 1/2 inch, Item No. 16, chapter 6.	3	No.	795.23	2,385.69
14	Supplying and fixing of Wash Basin Mixer of superior quality with C.P. Heads etc. 1/2 inch dia. Item No. 14, Chapter-6.	68	No.	2,822.00	191,896.00
15	Providing and fixing of Sink mixer of superior qualitywith C.P. headsc. 1/2 inch dia. Item No. 17, Chapter-6.	69	No.	2,745.60	189,446.40
16	Supply and fixing of jet showers with rod, superior quality, C. P. Heads dia 1/2 inches etc. complete. (Item No. 15, chapter-6)	59	No.	1,142.00	67,378.00
17	Supplying and fixing of Bath mixer of superior quality, with Heads of approved quality. (Item no.18 (a), Chapter-6)	59	No.	4,048.00	238,832.00
18	Supplying and fixing of bath room accessories (7) piece ic Towel Rod, Brush holder, Soap Tray, Shelf of approved design is cost of Screw, nuts and etc complete, (Master Brand). In Guests Room & Parents Room. (Item-23, chapter-6).	59	No.	10,322.00	608,998.00
19	Providing & fixing 24"x18"x8" white glazed fire clay sinks complete with 6 inchs built into wall, 1/2"dia rubber plug & chrome plated brass chain , 1/2" CP brass washer, 1-1/2" dia malloable iron or CP brass trap with malliable iron or brass unions & making requist number of holes in walls, plinth and floor for pipe connections and making good in cement concrete 1:2:4, (Standard Pattern). Item No. 17, Chapter-1, page 5.	2	No.	4,391.00	8,782.00
				<b>TOTAL =</b>	<b>3,471,835.65</b>
<b>PIPING</b>					



ITEM No.	DESCRIPTION	UNIT	QTY.	RATE (Rs.)	TOTAL AMOUNT (Rs.)
1	Providing & fixing 6"x2" or 6"x3" C.I. Floor trap of approved self cleaning design with a C.I. Screwed down grating with or without a vent arm complete with and i/c, making requisite No. of holes in walls, plinth and floor for making pipe connection and making good in cement concrete 1:2:4 (item No. 20,chapter-1).	10	No.	2,042.43	20,424.30
2	Providing & fixing Handle valves (China) Item No. 5 Chapter-6.				
	i) 1/2" Dia (For Dia 20mm PPRC Pipe)	0	No.	591.30	RATE ONLY
	ii) 3/4" Dia (For Dia 25 mm PPRC Pipe)	5	No.	271.92	1,359.60
	iii) 1" Dia (For Dia 32 mm PPRC Pipe)	74	No.	365.42	27,041.08
	iv) 1-1/4" Dia (Dia 40mm for PPRC Pipe)	1	No.	475.42	475.42
	v) 1-1/2" Dia ( Dia 50 mm for PPRC Pie )	10	No.	640.92	6,409.20
	vi) 2" Dia (For Dia 63mm PPRC Pipe)	8	No.	1,382.92	11,063.36
	vii) 2-1/2 Dia, (For Dia 75mm PPRC Pipe) gate valve "Make Anwar" item No. 4 (A) B- (B-vii), Chapter-6.	2	No.	1,225.84	2,451.68
	vii) 3" Dia, gate valve "Make Anwar" item No. 4 (A) B- (B-viii), Chapter-6.	1	No.	1,940.84	1,940.84
3	Providing G.I. Pipes, specials and clamps etc. i/c fixing, cutting and fitting complete with and including the cost of breaking through walls and roof, Making good etc. painting 2- coats after cleaning the pipes etc. with white zinc paint with pigment to match the colour of the building. Testing with water to a pressure head of 200 feet and handling. Item No.1, (Chapter-4).				
	i) 1-1/ 2 inch Dia	165	Rft.	188.97	31,180.05
	ii) 2 inch Dia	145	Rft.	233.00	33,785.00
	iii) 2-1/ 2 inch Dia	195	Rft.	310.47	60,541.65
	iv) 3 Inch Dia	35	Rft.	360.40	12,614.00
				<b>TOTAL =</b>	<b>209,286.18</b>





**CONSTRUCTION OF RESIDENTIAL & STUDIO APARTMENTS AT**

**BATH ISLAND BUNGALOW No. 2, 3 & 4 KARACHI**

**ADP No. 1167 - 2016 - 17**

**SUMMARY OF COST**

**(STUDIO APARTMENTS - PLUMBING WORKS)**

ITEM NO	DESCRIPTION	AMOUNT (Rs.)
1.0	PLUMBING WORKS NON SCHEDULE ITEMS	
	<b>Total Amount Rs.</b>	

( Rupees ----- Only )



**CONSTRUCTION OF RESIDENTIAL & STUDIO APARTMENTS AT  
BATH ISLAND BUNGALOW No. 2, 3 & 4 KARACHI ADP No. 1167 - 2016 - 17**

**BILL OF QUANTITIES  
(PLUMBING WORKS - STUDIO APARTMENTS )  
(NON-SCHEDULE ITEMS)**

ITEM No.	DESCRIPTION	UNIT	QTY.	RATE (Rs.)	TOTAL AMOUNT (Rs.)
1	Providing and fixing C.I. Cleanouts with sunk type C.P. brass screw caps including cost of making requisite number of hole in walls, plinth and floor for pipe connection and restoring damaged surfaces to original condition.				
	a) 3" dia.	130	No.		
	b) 4" dia				
2	Providing and fixing 24 SWG C.P copper connection 18" x 3/8" with two C.P. brass nuts, etc., complete (Asia code No. 329)	128	No.		
3	Providing and installing of c.p. bottle trap as manufactured by Master /Asia	65	No.		
4	providing and installation of Electric operated Geysers along with all accessories. Capacity= 6 Gallons. (1.5 kw.)	68	No.		
5	Providing and installation of uPVC class 'B' Pipes and fittings, such as Elbows, wyes, Reducers and etc. conforming to BS4515, push fit rubber ring or solvent jointing system, including the cost of all kind of clamps, fising material, cutting in floors and walls. Testing at 8 feet of water head for 24 hours. (Make: Terreine SDP, Marley, Paling) or Eq.				
	i) Dia 100 mm or 110 mm	1710	Rft.		
	ii) Dia 70 mm or 75 mm	1980	Rft.		
	iii) Dia 50 mm	70	Rft.		
6	Providing and installation of P.P.R.C. PN-20, Pipes, fittings specials and clamps etc., l/c, fixing cutting and fitting complete with and including the cost of breaking through walls and roof, making good etc., flushing and cleaning the pipe etc., and testing with water to a pressure head of 200 feet. Make "HYDRO-PLAST, COSMOPLAST, DIZAYN or EQ.) Confirming to BS 4991.DIN 8078.				
	i) O.Dia 20 mm	1410	Rft.		
	ii) O.Dia 25 mm	2180	Rft.		
	iii) O.Dia 32 mm	120	Rft.		
	iv) O.Dia 40 mm	242	Rft.		



ITEM No.	DESCRIPTION	UNIT	QTY.	RATE (Rs.)	TOTAL AMOUNT (Rs.)
	v) O.Dia 50 mm	185	Rft.		RATE ONLY
	vi) O.Dia 63 mm	230	Rft.		
	vii) O.Dia 70mm	25	Rft.		
	viii) O.Dia 90 mm	0	Rft.		
7	Providing and fixing of Floor Gully, having 50-70 mm water seal, 3- inlet of Dia 50 mm and 1 x dia 70 Or 75 mm outlet and with cleaning eye. 150x150 mm stainless steel grating (tile).Conforming to BS4515. Make " HYDROPLAST, COSMOPLAST, PALING or EQ.	220	No.		
8	Providing and fixing of Geysers (Gas operated) with all accessories and connecting to Cold, Hot and Gas piping. Testing and commissioning . As per approval of engineer incharge. (Make: VENUS / SINGER/ NASGAS. Pakistan).				
	i) Capacity= 30 Gallons each	2	No.		
9	Providing & fixing Handle valves for Gas application.				
	i) 1-1/2" Dia	1	No.		
	ii) 3/4" Dia	4	No.		
10	Providing & fixing Dia 3 inches C.I. Goose neck Air vent on overhead water tank.	2	No.		
11	Providing & fixing Dia 70/75 mm uPVC vent cowls.	17	No.		
12	Providing & fixing of Dia 4 inches uPVC domiclal/ angle drain and grating for dia 100/110 mm uPVC pipe on roof for rain water disposal. Similer to make "TERRAINE SDP" SPAIN or approved equivalent	7	No.		
13	Providing & fixing Float valve, best quality heavy duty type, provided with Dia 6 inches (150 mm) copper ball and heavy duty Bronze float arm. Valve should provide tight shut off at full closed position. As per approval of engineer inchargs.				
	i) Dia 2-1/2 inches.	1	No.		
				<b>TOTAL =</b>	



**CONSTRUCTION OF RESIDENTIAL & STUDIO APARTMENTS AT  
BATH ISLAND BUNGALOW No. 2, 3 & 4 KARACHI  
ADP No. 1167 - 2016 - 17**

**SUMMARY OF COST  
(RESIDENTIAL APARTMENTS - PLUMBING WORKS)**

**SCHEDULE ITEMS**

ITEM NO	COLLECTION	AMOUNT (Rs.)
1.0	SANITARY ITEMS	5,780,566
2.0	PIPING	291,583
		6,072,149
Percentage on Schedule Items Above / Below =		
Gross Total Amount Rs.=		

(Rupees \_\_\_\_\_ Only).



**CONSTRUCTION OF RESIDENTIAL & STUDIO APARTMENTS AT  
BATH ISLAND BUNGALOW No. 2, 3 & 4 KARACHI ADP No. 1167 - 2016 - 17**

**COST ESTIMATE  
(RESIDENTIAL APARTMENTS - PLUMBING WORKS)  
(SCHEDULE ITEMS)**

ITEM No.	DESCRIPTION	UNIT	QTY.	RATE (Rs.)	TOTAL AMOUNT (Rs.)
<b>SANITARY ITEMS</b>					
1	Providing & fixing a squatting type white glazed earthenware W.C. pan with including the cost of flushing Cistern with internal fittings and flush pipe with bends & making requisite number of holes in wall, plinth and floor for pipe connection and making good in cement concrete 1:2:4.  a). With 4" dia white glazed earthen ware trap & plastic thumble (item no. 1A, chapter-1)	12	No.	5,044.60	60,535.20
2	Providing & fixing European type white glazed earthenware wash down W.C. pan complete with and including the cost of white/black-plastic seat (Best quality) and lid with C.P. brass hinges and buffers, 3 gallons white glazed earthenware low level flushing cistern with siphon fittings, 1-1/2" dia. white procelain enamelled flush bend, 3/4" dia and making requisite No. of holes in walls, plinth & floor for pipe connetion and making good in cement concrete 1:2:4 (Foreign quality) (item No.5, chapter-1)	108	No.	11,477.40	1,239,559.20
3	Providing & fixing 24" x 18" lavatory basin in white glazed earthenware complete with and incuding the cost of W.I. Or C.I. Cantilever bracket 6 inches built into wall, painted white in two coats after a primary coat of red lead paint, a pair of 1/2" dia chrome plated pillar taps, 1-1/2" dia rubber plug and chrome plated brass chain, 1-1/4" dia malleable iron or brass, brass unions making requisite number of hole in walls, plinth and floor for pipe connection and making good in cement concrete 1:2:4, standard pattern including earthen ware glazed padestal (Item No.8, chapter-1)	137	No.	4,253.70	582,756.90
4	Providing and fixing steel sink stainless local make complete with cast iron or wrought iron brackets 6 inches built in wall, 1-1/2" rubber plug chrome plated brass chain 1-1/2" c.p. brass waste, with 1-1/2" PVC waste pipe and making requisite number of holes in wall and plinth and floor for pipe connection and making good in concrete 1:2:4, size 40"x20" local make (item No. 19a, chapter-1)	1	No.	5,052.30	5,052.30



ITEM No.	DESCRIPTION	UNIT	QTY.	RATE (Rs.)	TOTAL AMOUNT (Rs.)
5	Providing and fixing steel sink stainless local make complete with cast iron or wrought iron brackets 6 inches built in wall, 1-1/2" rubber plug chrome plated brass chain 1-1/2" c.p. brass waste, with 1-1/2" PVC waste pipe and making requisite number of holes in wall and plinth and floor for pipe connection and making good in concrete 1:2:4, size 38"x18" local make (item No. 19b, chapter-1)	30	No.	5,162.30	154,869.00
6	Providing and fixing c.p. brass toilet paper holder of standard size with chrome plated brass brackets complete (superior quality) (item No.2b. chapter-2)	108	No.	1,071.40	115,711.20
7	Providing and fixing chrome plated brass towel rail complete with brackets fixing on wooden cleats with 1" long c.p. brass screws. 1). Towel rail 24' long ,3/4" dia round or square superior quality (item No.1- III(b), chapter-2).	137	No.	1,082.95	148,364.15
8	Providing & fixing 24" x 18" bavelled edge mirror of Belgium glass complete with 1/8" thick hardboard and c.p. brass screw fixed to wooden pleat with glass shelves. b) Superior quality (item No.3(b)chapter-2).	137	No.	2,376.00	325,512.00
9	Providing & fixing soap tray earthen with c.p. brass screws etc. complete (item No.5. chapter -2)	209	No.	497.20	103,914.80
10	Supplying & fixing in position 1/2" dia. C.P. bib cocks standard pattern. (Item No. 2(1),b, chapter-6).	2	No.	150.92	301.84
11	Supplying & fixing in position 1/2" dia tee stop of superior quality with C.P. head (item No.12b, chapter-6).	394	No.	889.46	350,447.24
12	Supplying and fixing of CP Muslim shower with double bib cock and ring pipe etc complete. Item 19(a). chapter-6.	136	No.	3,432.00	466,752.00
13	Providing and fixing of swan neck pillar cock of superior quality single C.P. Head Dia 1/2 inch, Item No. 16, chapter-6.	33	No.	795.23	26,242.59
14	Supplying and fixing of Wash Basin Mixer of superior quality with C.P. Heads etc. 1/2 inch dia. Item No. 14, Chapter-6.	137	No.	2,822.00	386,614.00
15	Providing and fixing of Sink mixer of superior qualitywith C.P. headsc. 1/2 inch dia. Item No. 17, Chapter-6.	28	No.	2,745.60	76,876.80
16	Supply and fixing of jet showers with rod, superior quality, C. P. Heads dia 1/2 inches etc. complete. (Item No. 15, chapter-6)	110	No.	1,142.00	125,620.00
17	Supplying and fixing of Bath mixer of superior quality, with Heads of approved quality. (Item no.18 (a), Chapter-6)	110	No.	4,048.00	445,280.00
18	Supplying and fixing of bath room accessories (7) piece ic Towel Rod, Brush holder, Soap Tray, Shelf of approved design is cost of Screw, nuts and etc complete, (Master Brand). In Guests Room & Parents Room. (Item-23, chapter-6).	110	sets	10,322.00	1,135,420.00



ITEM No.	DESCRIPTION	UNIT	QTY.	RATE (Rs.)	TOTAL AMOUNT (Rs.)
19	Providing & fixing 24"x18"x8" white glazed fire clay sinks complete with 6 inches built into wall, 1/2" dia rubber plug & chrome plated brass chain, 1/2" CP brass washer, 1-1/2" dia malleable iron or CP brass trap with malleable iron or brass unions & making requisite number of holes in walls, plinth and floor for pipe connections and making good in cement concrete 1:2:4, (Standard Pattern). Item No. 17, Chapter-1. page 5.	7	No.	4,391.00	30,737.00
	<b>PIPING</b>			<b>TOTAL =</b>	<b>5,780,566.22</b>
1	Providing & fixing 6"x2" or 6"x3" C.I. Floor trap of approved self cleaning design with a C.I. Screwed down grating with or without a vent arm complete with and i/c, making requisite No. of holes in walls, plinth and floor for making pipe connection and making good in cement concrete 1:2:4 (item No. 20, chapter-1).	10	No.	2,042.43	20,424.30
2	Providing & fixing Handle valves (China) Item No. 5 Chapter-6.				
	i) 1/2" Dia (For Dia 20mm PPRC Pipe)	24	No.	200.42	4,810.08
	ii) 3/4" Dia (For Dia 25 mm PPRC Pipe)	24	No.	271.92	6,526.08
	iii) 1" Dia (For Dia 32 mm PPRC Pipe)	92	No.	365.42	33,618.64
	iv) 1-1/4" Dia (Dia 40mm for PPRC Pipe)	90	No.	475.42	42,787.80
	v) 1-1/2" Dia (Dia 50 mm for PPRC Pie)	8	No.	640.92	5,127.36
	vi) 2" Dia (For Dia 63mm PPRC Pipe)	3	No.	1,382.92	4,148.76
	vii) 2-1/2" Dia, (For Dia 75mm PPRC Pipe) gate valve "Make Anwar" item No. 4 (A) B- (B-vii), Chapter-6.	3	No.	1,225.84	3,677.52
	viii) 3" Dia, gate valve "Make Anwar" item No. 4 (A) B- (B-viii), Chapter-6.	2	No.	1,940.84	3,881.68
3	Providing G.I. Pipes, specials and clamps etc. i/c fixing, cutting and fitting complete with and including the cost of breaking through walls and roof, Making good etc. painting 2- coats after cleaning the pipes etc. with white zinc paint with pigment to match the colour of the building. Testing with water to a pressure head of 200 feet and handling. Item No.1, (Chapter-4).				
	i) 1-1/4 inch Dia	55	Rft.	153.91	8,465.05
	ii) 1-1/2 inch Dia	310	Rft.	188.97	58,580.70
	iii) 2 inch Dia	110	Rft.	233.00	25,630.00
	iv) 2-1/2 Inch Dia	180	Rft.	310.47	55,884.60
	v) 3 Inch Dia	50	Rft.	360.40	18,020.00
				<b>TOTAL =</b>	<b>291,582.57</b>



**CONSTRUCTION OF RESIDENTIAL & STUDIO APARTMENTS AT**

**BATH ISLAND BUNGALOW No. 2, 3 & 4 KARACHI**

**ADP No. 1167 - 2016 - 17**

**SUMMARY OF COST**

**(RESIDENTIAL APARTMENTS - PLUMBING WORKS)**

ITEM NO	DESCRIPTION	AMOUNT (Rs.)
1.0	PLUMBING WORKS NON SCHEDULE ITEMS	
	<b>Total Amount Rs.</b>	

(Rupees \_\_\_\_\_ Only)





**CONSTRUCTION OF RESIDENTIAL & STUDIO APARTMENTS AT  
BATH ISLAND BUNGALOW No. 2, 3 & 4 KARACHI ADP No. 1167 - 2016 - 17**

**BILL OF QUANTITIES**

**(RESIDENTIAL APARTMENTS - PLUMBING WORKS)**

**(NON-SCHEDULE ITEMS)**

ITEM No.	DESCRIPTION	UNIT	QTY.	RATE (Rs.)	TOTAL AMOUNT (Rs.)
1	Providing and fixing C.I. Cleanouts with sunk type C.P. brass screw caps including cost of making requisite number of hole in walls, plinth and floor for pipe connection and restoring damaged surfaces to original condition.				
	a) 3" dia.	190	No.		
	b) 4" dia				
2	Providing and fixing 24 SWG C.P copper connection 18" x 3/8" with two C.P. brass nuts, etc., complete (Asia code No. 329)	395	No.		
3	Providing and installing of c.p. bottle trap as manufactured by Master /Asia	137	No.		
4	providing and installation of Electric operated Geysers along with all accessories. Capacity= 6 Gallons. (1.5 kw.)	0	No.		RATE ONLY
5	Providing and installation of uPVC class 'B' Pipes and fittings, such as Elbows, wyes, Reducers and etc. conforming to BS4515, push fit rubber ring or solvent jointing system, including the cost of all kind of clamps, fising material, cutting in floors and walls. Testing at 8 feet of water head for 24 hours. (Make: Terreine SDP, Marley, Paling) or Eq.				
	i) Dia 100 mm or 110 mm	3610	Rft.		
	ii) Dia 70 mm or 75 mm	3670	Rft.		
	iii) Dia 50 mm	810	Rft.		
6	Providing and installation of P.P.R.C. PN-20, Pipes, fittings specials and clamps etc., l/c, fixing cutting and fitting complete with and including the cost of breaking through walls and roof, making good etc., flushing and cleaning the pipe etc., and testing with water to a pressure head of 200 feet. Make "HYDRO-PLAST, COSMOPLAST, DIZAYN or EQ.) Confirming to BS 4991.DIN 8078.				
	i) O.Dia 20 mm	3850	Rft.		
	ii) O.Dia 25 mm	3185	Rft.		
	iii) O.Dia 32 mm	1205	Rft.		



ITEM No.	DESCRIPTION	UNIT	QTY.	RATE (Rs.)	TOTAL AMOUNT (Rs.)
	iv) O.Dia 40 mm	555	Rft.		RATE ONLY
	v) O.Dia 50 mm	460	Rft.		
	vi) O.Dia 63 mm	425	Rft.		
	vii) O.Dia 70mm	80	Rft.		
	viii) O.Dia 90 mm	0	Rft.		
7	Providing and fixing of Floor Gully, having 50-70 mm water seal, 3- inlet of Dia 50 mm and 1 x dia 70 Or 75 mm outlet and with cleaning eye. 150x150 mm stainless steel grating (tile).Conforming to BS4515. Make " HYDROPLAST, COSMOPLAST, PALING or EQ.	346	No.		
8	Providing and fixing of Geysers (Gas operated) with all accessories and connecting to Cold, Hot and Gas piping. Testing and commissioning . As per approval of engineer incharge. (Make: VENUS / SINGER/ NASGAS. Pakistan).				
	i) Capacity= 30 Gallons each	27	No.		
	ii) Capacity= 50 Gallons each	1	No.		
9	Providing & fixing Handle valves for Gas application.				
	i) 1-1/2" Dia	2	No.		
	ii) 3/4" Dia	2	No.		
	iii) 1/2" Dia	27	No.		
10	Providing & fixing Dia 3 inches C.I. Goose neck Air vent on overhead water tank.	2	No.		
11	Providing & fixing Dia 70/75 mm uPVC vent cowls.	40	No.		
12	Providing & fixing of Dia 4 inches uPVC domiclal/ angle drain and grating for dia 100/110 mm uPVC pipe on roof for rain water disposal. Similer to make "TERRAINE SDP" SPAIN or approved equivalent	12	No.		
13	Providing & fixing Float valve, best quality heavy duty type, provided with Dia 6 inches (150 mm) copper ball and heavy duty Bronze float arm. Valve should provide tight shut off at full closed position. As per approval of engineer inchargs.				
	i) Dia 2-1/2 inches.	2	No.		
				TOTAL =	

# **ELECTRICAL WORKS**



**CONSTRUCTION OF RESIDENTIAL & STUDIO APARTMENTS AT**  
**BATH ISLAND BUNGALOW No. 2, 3 & 4 KARACHI ADP No. 1167 - 2016 - 17**

**SUMMARY OF COST**  
**(ELECTRICAL WORKS)**

1. Basement	....	Rs. _____
2. Studio Apartments	....	Rs. _____
3. Residential Apartments	....	Rs. _____
4. Infrastructure Works	....	Rs. _____
		_____
		<b>TOTAL RS.</b> _____

(Rupees \_\_\_\_\_)



**CONSTRUCTION OF RESIDENTIAL & STUDIO APARTMENTS**

**BATH ISLAND BUNGALOW No. 2, 3 & 4 KARACHI**

**ADP No. 1167 - 2016 - 17**

**SUMMARY OF COST**

**( Electrical Works Basement )**

1. Section A ( Lighting Fixture and Fan )	....	Rs. ....
2. Section B ( L.V. Switch Gear and Distribution Board )	....	Rs. ....
3. Section C ( LV Main/Sub Main Cable & Accessories )	....	Rs. ....
4. Section D ( Earthing System )	....	Rs. ....
5. Section E ( Light , Fan , Socket Wiring )	....	Rs. ....
6. Section F ( Fire Alarm System )	....	Rs. ....
7. Section G ( Close Circuit TV System )	....	Rs. ....

**Total Amount Rs.**

(Rupees \_\_\_\_\_ only)

**CONSTRUCTION OF RESIDENTIAL & STUDIO APARTMENTS AT**  
**BATH ISLAND BUNGALOW No. 2, 3 & 4 KARACHI ADP No. 1167 - 2016 - 17**  
**BILL OF QUANTITIES**  
**(ELECTRICAL WORKS)**

Item No.	Particulars	Qty.	Unit	Rate Rs.	Amount Rs.
<b>B A S E M E N T</b>					
	<b><u>SECTION - A</u></b>				
<b>A</b>	<b><u>LIGHTING FIXTURES AND FANS</u></b>				
1.0	Supply , installation and connection of the following lighting fixtures (Philips make) as specified in the lighting fixtures schedule & specification complete with lamp, holders, electronic ballast, supports, hanging & fixing materials, etc. including all mounting				
<b>Note:</b>	Fluorescent / PLC lamps shall be Philips color 83/84 or equivalent Osram code.				
1.1	Fixture Type (Surface) TMS 015 2 x 28 W T5 Fluorescent lamp color 83/84.	108	No.		
1.2	Fixture Type (Surface) TMS 015 1 x 14 W T 5 Fluorescent lamp color 83/84.	65	No.		
1.3	Fixture Type (Surface) FBH-145, Down light with 2 x 18 W, PLC Lamps.	18	No.		
1.4	Supply ,installation and connection of 12 inch dia. sizes of wall / glass mounted exhaust fan, with louvers and all fixing accessories.	2	No.		
1.5	Supply,installation and connection of 56 inch Sweep ceiling fan, with all fixing accessories.	2	No.		
1.6	Supply, installation and connection of inch Sweep wall bracket fan, with all fixing accessories.	2	No.		
				<b>TOTAL SECTION - A</b>	
<b>2.00</b>	<b><u>SECTION - B</u></b>				
<b>B</b>	<b>L.V. SWITCH GEAR AND DISTRIBUTION BOARD</b>				
2.1	DB-B1	1	No.		
2.2	DB-B2	1	No.		
				<b>TOTAL SECTION - B</b>	

Item No.	Particulars	Qty.	Unit	Rate Rs.	Amount Rs.
<b>3.00</b>	<b><u>SECTION - C</u></b>				
<b>C</b>	<b>L.V. MAIN/ SUB-MAIN CABLE &amp; ACCESSORIES</b>				
3.1	Supply, installation, connection, testing & commissioning of the following main submain 600 V / 1000 V grade copper cables to BS 6346 OR as required, clipped to surface with cleats or on previously installed cable tray / trunking or raceway or laid direct underground as per drawings and specifications.				
a)	1x4C-25mm <sup>2</sup> PVC / PVC + 1C - 16 Sq.mm ECC	85	Mtr.		
b)	1x4C-16mm <sup>2</sup> PVC / PVC + 1C - 16 Sq.mm ECC	120	Mtr.		
3.2	Supply, installation of following sizes PVC conduit with all accessories for submain cables on concealed / surface, complete in all respect as per drawing & specification.				
a)	25mm dia PVC Conduit	500	Mtr.		
b)	32mm dia PVC Conduit	150	Mtr.		
c)	38mm dia PVC Conduit	300	Mtr.		
d)	50mm dia PVC Conduit	300	Mtr.		
	<b>TOTAL SECTION - C</b>				
<b>4.00</b>	<b><u>SECTION - D</u></b>				
<b>D</b>	<b>EARTHING SYSTEM</b>				
4.1	Supply, installation of earthing pits complete with earth plate, etc as indicated in specification and drawings. Complete with cable clamps G.I. pipe and all accessories as per drawings. Each earth pit is to be provided with a concrete manhole 300 x 300 x 450(mm) deep with heavy duty C.I. cover including test clamp, specified cable, complete in all respect. (Note 2 nos. of earthing for neutral generator, 2 nos. of earthing for generator body, 2 nos. of earthing for LT Panel 1 no. of earthing for Lift equipment & 2 nos. of earthing for Main Breaker & Sync. Panel)	2	No.		
4.2	Supply, installation & connection of earthing copper strip of size 300 x 25 x 5(mm) as per drawings.	2	No.		
4.3	Supply, installation and connection of the following PVC insulated earthing conductors in PVC pipe Schedule 'D' of required size from earth pit to respective equipment as per drawings and specifications.				
a)	2x1C - 70 mm <sup>2</sup> PVC Cables ( Green )	60	Mtr.		
b)	50 mm Dia PVC Pipes Class D	75	Mtr.		
	<b>TOTAL SECTION - D</b>				

Item No.	Particulars	Qty.	Unit	Rate Rs.	Amount Rs.
<b>5.00</b>	<b><u>SECTION - E</u></b>				
<b>E</b>	<b>LIGHT , FAN , SOCKET WIRING</b>				
5.1	Wiring of light and fan point with 3x1.5 sq.mm single core PVC insulated 450/750 V grade copper wire in 25mm dia. PVC conduit surface/ concealed mounted including all accessories, connector/ceiling roses, 10A switches with plastic finish cover plates, sheet steel back boxes with brass earth terminal, 1.0 sq.mm 3 core PVC/PVC cable in flexible PVC conduit for final connection, complete in all respects.				
a)	Light point controlled by one switch (with switch & back box).	7	No.		
b)	Light point from point to point.	3	No.		
c)	Light point controlled by Two way switch (with switch & back box).	2	No.		
d)	Light point controlled by push switch (with push switch & back box).	8	Sets		
e)	Light point from point to point.	16	No.		
f)	Ceiling Fan Point	15	No.		
g)	Wall Bracket Fan Point	10	No.		
h)	Exhaust Fan Point	15	No.		
i)	Circuit wiring from distribution board to switch/lighting points with 3x2.5 sq.mm single core PVC wires in 20 mm dia PVC conduit complete with all accessories.	65	No.		
j)	Circuit wiring for Emergency Lights/Exit light with 3x1.5 sq.mm single core PVC wires in 20 mm dia PVC conduit complete with all accessories.	4	No.		
k)	Same as item (J) but point to point.	45	No.		
5.2	Wiring for 5A/10A, 3 Pin switch socket outlets with 3x1C-2.5mm <sup>2</sup> PVC insulated copper wires in 20mm dia PVC conduit / trunking surface / concealed mounted and connections with 16 SWG sheet steel back box with brass earth terminal and specified face plate with all accessories (raw power circuit), complete in all respect as per drawing and specification.	10	No.		
5.3	Same as item no 5.2 but point to point.	30	No.		
5.4	Wiring for 15A 3-Pin switch socket outlets with 3x1C-4mm <sup>2</sup> PVC insulated copper wires in 20mm dia PVC conduit surface / concealed mounted and connections (raw power circuits)with 16 SWG powder coated sheet back box with brass earth terminal and specified face plate with all accessories, complete in all respect as per drawing and specifications.	8	No.		





Item No.	Particulars	Qty.	Unit	Rate Rs.	Amount Rs.
5.5	Same as item no 5.4 but point to point.	4	No.		
5.6	Wiring of 20A connection unit for Hand Dryer from respective DB with 3x4 sq.mm single core PVC insulated copper wire in 20mm dia. PVC conduit concealed/surface mounted with all accessories, sheet steel back box with earth terminal, including 20A connector block, complete in all respect.	2	No.		
5.7	Supply , installation and wiring of FCU unit from DB to respective FCU unit with 3 x4sqmm PVC insulated copper wires in PVC conduit complete with all accessories, including terminations.	9	No.		
5.8	Same as item no 5.7 but point to point.	11	No.		
<b>TOTAL SECTION - E</b>					
<b>6.00</b>	<b><u>SECTION - F</u></b>				
<b>F</b>	<b>FIRE ALARM SYSTEM</b>				
6.1	Supply, Installation of Intelligent Microprocessor controlled networkable Addressable type 2 Loop Fire Alarm Control Panel with capable of handling 120 detectors and 120 devices per loop, located Reception / Control room. Panel should have alarm facilities, hooter, fire / fault indicators, audio video signals, battery, battery charger, central processing unit, network integrator module, power supply, independent time delay circuits for MCP actuated alarms and also for detector actuated alarms, etc., complete in all respects as per detailed specifications.	1	No.		
6.2	Supply & installation of Addressable optical smoke detector with base as per specifications.	24	No.		
6.3	Supply & installation of Addressable optical Heat detector with base as per specifications.	1	No.		
6.4	Supply & installation of addressable Manual Break Glass Unit as per specifications.	8	No.		
6.5	Supply& installation of Electronic Sounder as per specifications.	12	No.		
6.6	Supply & installation of Electronic Sounder with flasher as per specifications.	1	No.		
6.7	Supply & installation of wiring of Fire Alarm System devices with 1.5sq.mm two core shielded PVC/PVC cable in 1" dia. MS conduit 16 SWG anticorrosive painted from FACP to devices, complete in all respect.	550	No.		
6.8	Supply & installation of wiring of Fire Alarm System devices with 2.5sq.mm two core shielded PVC/PVC fire retardant cable in 1" dia. MS conduit 16 SWG anticorrosive painted from FACP to devices, complete in all respect.	400	No.		
6.9	Testing and Commissioning of Fire Alarm System by authorized local representative of the manufacturer.	1	JOB		
<b>TOTAL SECTION - F</b>					

RATE ONLY



Item No.	Particulars	Qty.	Unit	Rate Rs.	Amount Rs.
<b>7.00</b>	<b><u>SECTION - G</u></b>				
<b>G</b>	<b>CLOSE CIRCUIT TV SYSTEM</b>				
7.1	Supply and installation of 1/3" colour low light TM enhanced sensitivity PAL digital colour Ex-view CCD camera high resolution 480 TVL at 0.2 Lux scan illumination operating on 230VAC including 3-8mm varifocal Auto Iris lens and wall mounting bracket with all accessories as per specifications.				
a)	Fixed	8	No.		
b)	Dome	1	No.		
7.2	Supply and installation of 230 V / 24 V-28 V AC output power supply unit for 30 Camera input with all accessories as per specifications.	1	JOB		
7.3	Supply and installation of 21" high resolution colour PC Monitor and all features as per specifications.	1	No.		
7.4	Supply and installation of Digital video multiplexer & recorder (DVR) 16 channel simultaneous recording & viewing and remote viewing, access, for 30 days expandable upto 60 days recordings built in storage, complete in all respect as per specifications.	1	No.		
7.5	Supply, installation and connection of 0.8 sqmm CCTV co-axial cable double Shielded RG59 B/U of 75 ohms for CCTV camera. (Make SAXTON USA) in 25mm dia. PVC conduit including all accessories as per specifications and drawings.	1150	Mtr.		
7.6	Supply, installation and connection of 3C-1.5mm <sup>2</sup> PVC/PVC cable for power supply to CCTV cameras in same PVC conduit as item No.9.1, complete in all respect.	5	No.		
7.7	Supply and installation of CCTV-Junction Box (CCTV-J/B) 12" x 8" x 4" with cover plate, concealed / surface mounted, fabricated from 16 SWG sheet steel, powder coated complete with all fixing arrangements and accessories, complete in all respect.	4	No.		
7.8	Testing and Commissioning of CCTV System by authorized local representative of the manufacturer.	1	job		
<b>TOTAL SECTION - G</b>					



**CONSTRUCTION OF RESIDENTIAL & STUDIO APARTMENTS**

**AT BATH ISLAND BUNGALOW No. 2, 3 & 4 KARACHI**

**ADP No. 1167 - 2016 - 17**

**SUMMARY OF COST**

**( Electrical Works Stodio Apartments )**

1. Section A ( Wiring / Wiring Accessories )	....	Rs. ....
2. Section B ( Switches & Socket )	....	Rs. ....
3. Section C ( Lighting Fixture )	....	Rs. ....
4. Section D ( Telephone & Television System )	....	Rs. ....
5. Section E ( Fire Alarm System )	....	Rs. ....
6. Section F ( Close Circuit TV System )	....	Rs. ....

**Total Amount Rs.**

(Rupees \_\_\_\_\_ Only)

**CONSTRUCTION OF RESIDENTIAL & STUDIO APARTMENTS AT**  
**BATH ISLAND BUNGALOW No. 2, 3 & 4 KARACHI ADP No. 1167 - 2016 - 17**  
**BILL OF QUANTITIES**  
**(ELECTRICAL WORKS)**

Item No.	Particulars	Qty.	Unit	Rate Rs.	Amount Rs.
<b>STUDIO APARTMENT</b>					
	<b><u>SECTION - A</u></b>				
<b>A</b>	<b><u>WIRING / WIRING ACCESSORIES</u></b>				
	Supply, installation , testing and commissioning of following items including all material , labor, tools, accessories etc. Complete in all respects upto the entire satisfaction of client and consultant. Cost of allied civil works like chiseling, cutting, openings in floor/wall, shall be included in the contractor's scope of works.				
1	Circuit Wiring from DB to switchboard with 2 x 2.5 sq.mm + ECC1 x 2.5 sqmm, 1-core PVC wires including any wiring between switch board to switch board in appropriate size of pvc conduit above false ceiling / concealed in wall. Complete in all respects.	86	No.		
2	Wiring of Light Point from switch board to point with 2.5 sq.mm common neutral of 2.5 sq. mm. and common ECC of 1.5 sq. mm wires in specified / appropriate size of exposed / concealed PVC conduit.	465	No.		
3	Wiring from Light Point to Light Point with 1.5 sq.mm common neutral of 2.5 sq. mm. and common ECC of 1.5 sq. mm wires in specified / appropriate size of exposed / concealed PVC conduit.	310	No.		
4	Wiring for group control light point from first light point to respective floor distribution board using single core PVC insulated, stranded Copper Conductor, color coded wires of 2 x 2.5 sq.mm + ECC 1 x 2.5 sqmm in 25 mm dia PVC conduit concealed in ceiling slab / wall as required .	16	No.		
5	Wiring for group control light point to light point using single core PVC insulated, stranded Copper Conductor, color coded wires of 2 x 2.5 sq.mm + ECC 1 x 2.5 sqmm in 25 mm dia PVC conduit concealed in ceiling slab / wall as required.	101	No.		
6	Circuit wiring from DB to emergency / exit luminaries with 2 x 2.5 sq.mm + ECC 1 x 2.5 sqmm, Solid Copper Conductor, color coded , single core PVC insulated wires in 25 mm dia pvc conduit with all accessories.	10	No.		



Item No.	Particulars	Qty.	Unit	Rate Rs.	Amount Rs.
7	Wiring for Emergency / Exit light point to light point using single core PVC insulated, stranded Copper Conductor, color coded wires of 2 x 2.5 sq.mm + ECC 1 x 2.5 sqmm in 25 mm dia PVC conduit with all accessories.	45	No.		
8	Wiring of 5A/15 A Switch Socket unit from DB to first outlet with following size of wires in appropriate size of concealed PVC conduits run under floor.				
a	2 x 4 sq.mm + ECC 1 x 4 sq.mm	115	No.		
9	Same as above item-4 but wiring from Outlet to Outlet using following size of wires including any wiring on same workstation.				
a	2 x 2.5 sq.mm + ECC 1 x 2.5 sq.mm	235	No.		
10	Wiring of 13 A , Flat Pin Switch Sockets ( Computer Power ) with 2 x 4.0 sqmm PVC + ECC, 1x 4 sqmm PVC wires from r UPS DB to first outlet including any wiring on same workstation in appropriate size of concealed PVC conduit run under floor.	22	No.		
11	Same as above item-6 but wiring from Outlet to Outlet.	85	No.		
12	Wiring for Split Type Air-Conditioning Units from DB to indoor fan coil unit using 2 x 6 Sqmm + ECC 1 x 6 Sqmm PVC insulated wires in 25mm dia PVC conduit concealed in wall, or exposed above false ceiling as shown in drawings. Wiring from indoor to outdoor unit shall be provided by the AC contractor.	65	No.		
13	Wiring of call bell with 3x1.5 sq.mm wires in 25 mm dia PVC conduit (concealed), including 16 SWG sheet steel back box for bell push.	60	No.		
14	Wiring of water pump motor with following size of wires in appropriate size of PVC conduit (concealed).				
a	2 x 6 sq.mm + ECC 1 x 2.5 sq.mm	2	No.		
15	Wiring for Boundary wall lights with 3x1.5 sq.mm. (switch to point and point to point) in specified size of PVC conduit.	6	No.		
16	Supply & installation of 10 feet long 3/4" dia copper rod Earthing System directly driven into ground to achieve earthing resistance not more than 3 ohm including earthing leads , earth connecting bar and inspection chamber as shown on drawing.	2	No.		

Item No.	Particulars	Qty.	Unit	Rate Rs.	Amount Rs.
17	Supply , laying , termination testing of following PVC single-core / multi-core cables for mains or sub-main of concealed / exposed PVC conduit / cable tray as shown on drawing including lugs, glands etc. complete in all respect. (Contractor shall be finalized exact length of Main and Submain Cables)				
i	<b><u>From L.V Panel to MDB-2</u></b>				
	2Nos. 4C, 300 Sq.mm PVC/PVC+ ECC, 1x70 Sq.mm PVC	65	Rm.		
ii	<b><u>From MDB-2 to DB-G</u></b>				
	4C, 25 Sq.mm PVC/PVC+ ECC, 1x16 Sq.mm PVC	10	Rm.		
iii	<b><u>From MDB-2 to DB-F</u></b>				
	4C, 16 Sq.mm PVC/PVC+ ECC, 1x16 Sq.mm PVC	15	Rm.		
iv	<b><u>From MDB-2 to DB-2</u></b>				
	4C, 16 Sq.mm PVC/PVC+ ECC, 1x16 Sq.mm PVC	20	Rm.		
v	<b><u>From MDB-2 to DB-3</u></b>				
	4C, 16 Sq.mm PVC/PVC+ ECC, 1x16 Sq.mm PVC	25	Rm.		
vi	<b><u>From MDB-2 to DB-4</u></b>				
	4C, 16 Sq.mm PVC/PVC+ ECC, 1x16 Sq.mm PVC	30	Rm.		
vii	<b><u>From MDB-2 to DB-5</u></b>				
	4C, 16 Sq.mm PVC/PVC+ ECC, 1x16 Sq.mm PVC	35	Rm.		
viii	<b><u>From MDB-2 to DB-6</u></b>				
	4C, 16 Sq.mm PVC/PVC+ ECC, 1x16 Sq.mm PVC	40	Rm.		
ix	<b><u>From MDB-2 to DB-7</u></b>				
	4C, 16 Sq.mm PVC/PVC+ ECC, 1x16 Sq.mm PVC	45	Rm.		
x	<b><u>From MDB-2 to DB-8</u></b>				
	4C, 16 Sq.mm PVC/PVC+ ECC, 1x16 Sq.mm PVC	50	Rm.		
xi	<b><u>From MDB-2 to DB-UPS-1</u></b>				
	4C, 10 Sq.mm PVC/PVC+ ECC, 1x10 Sq.mm PVC	15	Rm.		

Item No.	Particulars	Qty.	Unit	Rate Rs.	Amount Rs.
xii	<b><u>From MDB-2 to DB-UPS-2</u></b>				
	4C, 10 Sq.mm PVC/PVC+ ECC, 1x10 Sq.mm PVC	20	Rm.		
xiii	<b><u>From MDB-2 to ROOF</u></b>				
	4C, 6 Sq.mm PVC/PVC+ ECC, 1x6 Sq.mm PVC	55	Rm.		
xiv	<b><u>From MDB-2 to DB-AC-G</u></b>				
	4C, 25 Sq.mm PVC/PVC+ ECC, 1x16 Sq.mm PVC	10	Rm.		
xv	<b><u>From MDB-2 to DB-AC-F</u></b>				
	4C, 25 Sq.mm PVC/PVC+ ECC, 1x16 Sq.mm PVC	15	Rm.		
xvi	<b><u>From MDB-2 to DB-AC-2</u></b>				
	4C, 25 Sq.mm PVC/PVC+ ECC, 1x16 Sq.mm PVC	20	Rm.		
xvii	<b><u>From MDB-2 to DB-AC-3</u></b>				
	4C, 25 Sq.mm PVC/PVC+ ECC, 1x16 Sq.mm PVC	25	Rm.		
xxiii	<b><u>From MDB-2 to DB-AC-4</u></b>				
	4C, 25 Sq.mm PVC/PVC+ ECC, 1x16 Sq.mm PVC	30	Rm.		
xix	<b><u>From MDB-2 to DB-AC-5</u></b>				
	4C, 25 Sq.mm PVC/PVC+ ECC, 1x16 Sq.mm PVC	35	Rm.		
xx	<b><u>From MDB-2 to DB-AC-6</u></b>				
	4C, 25 Sq.mm PVC/PVC+ ECC, 1x16 Sq.mm PVC	40	Rm.		
xxi	<b><u>From MDB-2 to DB-AC-7</u></b>				
	4C, 25 Sq.mm PVC/PVC+ ECC, 1x16 Sq.mm PVC	45	Rm.		
xxii	<b><u>From MDB-2 to DB-AC-8</u></b>				
	4C, 25 Sq.mm PVC/PVC+ ECC, 1x16 Sq.mm PVC	50	Rm.		
xxiii	<b><u>From MDB-2 to DB-LIFT</u></b>				
	4C, 25 Sq.mm PVC/PVC+ ECC, 1x25 Sq.mm PVC	55	Rm.		
xxvi	<b><u>From MDB-HVAC to HVAC - 2</u></b>				
	4C, 95 Sq.mm PVC/PVC+ ECC, 1x70 Sq.mm PVC	15	Rm.		



Item No.	Particulars	Qty.	Unit	Rate Rs.	Amount Rs.
18	Following Distribution boards as shown on drawing made with 16 SWG sheet steel housing , flush in wall / surface type , with approved color and having specified circuit breakers and components as shown in drawings / specified in list of approved manufacturers. Shop drawings shall be submitted by the contractor before fabrication.				
i	MDB - 2	1	No.		
ii	DB-G	1	No.		
iii	DB-F	1	No.		
iv	DB-2	1	No.		
v	DB-3	1	No.		
vi	DB-4	1	No.		
vii	DB-5	1	No.		
viii	DB-6	1	No.		
ix	DB-7	1	No.		
x	DB-8	1	No.		
xi	DB-AC-G	1	No.		
xii	DB-AC-F	1	No.		
xiii	DB-AC-2	1	No.		
xiv	DB-AC-3	1	No.		
xv	DB-AC-4	1	No.		
xvi	DB-AC-5	1	No.		
xvii	DB-AC-6	1	No.		
xviii	DB-AC-7	1	No.		
xix	DB-AC-8	1	No.		
xx	DB-UPS-1	1	No.		
xxi	DB- PUMP	1	No.		
xxii	DB-LIFT	1	No.		
xxiii	DB-ROOF	1	No.		
xxiv	DB-HVAC-2	1	No.		





Item No.	Particulars	Qty.	Unit	Rate Rs.	Amount Rs.
19	Supply and installation of following PVC Conduit / Pipes including all installation accessories such as saddels,bend,sockets etc.. complete in all respect. (Provide Pull boxes where ever required)				
a	25 mm dia PVC	850	Rm.		
b	32 mm dia PVC	560	Rm.		
c	38 mm dia PVC	350	Rm.		
d	50 mm dia PVC	210	Rm.		
TOTAL SECTION - A					
<b>SECTION - B</b>					
<b>B SWITCHES &amp; SOCKET</b>					
1	Supply and installation of following 10A, one-way gang type switches / sockets MK /Orange series make including 16 SWG sheet steel back boxes, recessed on wall or column as per design drawings.				
a	One switch unit.	19	No.		
b	Two switch unit.	79	No.		
c	Three switch unit.	66	No.		
d	Four switch unit.	26	No.		
e	Five switch unit.	7	No.		
f	Dimmer	185	No.		
g	Two Way switch unit.	25	No.		
2	5A (Round 2Pin+E) switch socket unit including 16 SWG sheet steel back box.	385	No.		
3	15A (Round 2Pin+E) switch socket unit including 16 SWG sheet steel back box.	86	No.		
4	13A (Flat 2Pin+E) Simplex switch socket unit including 16 SWG sheet steel back box.	120	No.		
5	20A , DP & N, weather proof Isolator for fan coil units to be installed near out door condensing unit.	65	No.		
TOTAL SECTION - B					

Item No.	Particulars	Qty.	Unit	Rate Rs.	Amount Rs.
<b>C</b>	<b><u>SECTION - C</u></b>				
	<b><u>LIGHTING FIXTURE</u></b>				
	Supply & Installation of following Lighting Fixture complete with ballast, starter p.f.i capacitor and specified lamps as per details. Contractor shall provide samples of all light fixtures for consultants approval.				
	<b>1</b> Recessed fluorescent light fixture similar Philips model TCS - 079 with 1 x 36W TLD color - 84 lamp , 1 x 40 W ballast including capacitor and all accessories with M5 louver.	14	No.		
	<b>2</b> Recessed Ceiling Fluorescent Light fixture having 4 x 18W T8, Color-84 lamps , 2x 40W Electronic Ballast and M5 Louver as approved by architect. (Similar Philips Model TBS-300 or equivalent approved by consultant)	32	No.		
	<b>3</b> Recessed Ceiling Fluorescent Light fixture having 2 x 36W T8, Color-84 lamps , 2x 40W Electronic Ballast and M5 Louver as approved by architect. (Similar Philips Model TCS-240 or equivalent approved by consultant)	48	No.		
	<b>4</b> Recessed Down Light fixture round shape with anti-glare having 2 x 18W PLC lamp and prismatic tempered glass cover.	473	No.		
	<b>5</b> Surface Down Light fixture round shape with anti-glare having 18W LED lamp and prismatic tempered glass cover.	99	No.		
	<b>6</b> Recessed Down Light fixture with 1 x 15W CFL Lamp with drop down frosted glass including all accessories. Complete in all respects.	267	No.		
	<b>7</b> External Wall Mounted Light Fixture	28	No.		
	<b>8</b> TMS - 140 , 1 x 36 W Flourecent Light Fixture	18	No.		
	<b>9</b> Mirror Light Fixture	60	No.		
	<b>10</b> Surface Wall Mounted Emergency Exit Light Fixture, Maintained Type made with premium quality extruded aluminum body and 8W T5 lamp and maintenance free battery with 3 hours backup.	73	No.		
	<b>11</b> 12 inches dia Plastic Body Exhaust Fans	66	No.		
	<b>12</b> Ceiling Fans 56" inch	185	No.		
	<b>13</b> Flood Light	15	No.		
	<b>14</b> Wall Bracket Fans	4	No.		
	Note: Contractor should submit a complete list of light fixtures with name of supplier, make, model & country of origin.				
<b>TOTAL SECTION - C</b>					

Item No.	Particulars	Qty.	Unit	Rate Rs.	Amount Rs.
<b>D</b>	<b><u>SECTION - D</u></b>				
	<b><u>TELEPHONE &amp; TELEVISION SYSTEM</u></b>				
	Supply , installation , testing and commissioning of following items. for telephone system including all material, labor, tools, accessories etc. complete in all respects. Quantities for cables and conduit shown in BOQ are estimated and taken from drawing contractor is advised to take measurement at site before commencement of works.				
	<b>1</b> 16 SWG Sheet Steel Back Boxes for installation of voice outlets.	78	No.		
	<b>2</b> 16 SWG Sheet Steel Back Boxes for installation of data outlets.	75	No.		
	<b>3</b> Simplex Face Plate with 1 No. RJ-45 I/O for Voice , white / off white finish , complete with shuttered click-ins, labels , and all accessories but excluding back box.	78	No.		
	<b>4</b> Simplex Face Plate with 1 No. RJ-45 I/O for Data , white/off white finish , complete with shuttered click-ins, labels and all accessories but excluding back box.	75	No.		
	<b>5</b> CAT-6, UTP Cables, for Data Communication system from Com Rack to each workstation in appropriate size of PVC conduit flush in floor as per drawings including termination and tagging at both ends. Complete in all respects.	2260	Rm.		
	<b>6</b> CAT-6, UTP Cables, for Voice Communication system from Com Rack to each workstation in appropriate size of PVC conduit flush in floor as per drawings including termination and tagging at both ends. Complete in all respects.	2150	Rm.		
	<b>7</b> Main Distribution frame ( MDF ) for Telephone Network made with 16 SWG sheet steel box having 1x50 pair Connecting Block, CRONE make including testing and termination at both ends.	1	No.		
	<b>8</b> 25 Pair , CAT-5 Shielded , 0.6 mm dia , twisted pair telephone cable to be installed in appropriate size of PVC conduit/ channel from PABX (MDF) to Com rack as per drawings including connection , labeling and tagging. Complete in all respects.	150	Rm.		
	<b>9</b> Communication Rack 42U wall mounted, 3 meter electrical wiring with plugs, internal power sockets made with 16 SWG, powder coated sheet steel, front glass door with lock / handle etc.	1	No.		
	Following CAT-6 , Patch Panels equipped with RJ-45 I/Os for Data and Voice communication system with rear cable organizer including all labeling and all mounting accessories. Complete in all Respect.				



Item No.	Particulars	Qty.	Unit	Rate Rs.	Amount Rs.
10	24 - port CAT - 6 , Patch Panel for Voice.	3	No.		
11	24 - port CAT - 6 , Patch Panel for Data.	4	No.		
12	Front Cable Organizer for voice & data patch panels / wiring blocks with complete labeling and dressing for incoming cable management.	9	No.		
13	50 Pair , Rack Mounted 19" Wiring Tag blocks to be used in voice communication racks for incoming PABX extensions / direct lines. Wiring blocks shall be connected with voice patch panels using RJ-45-2xKATT patch cords. ( Rates without patch cords )	1	No.		
14	1 meter long CAT-6 , factory certified Patch Cords of specified color having RJ-45-2xKATT connectors for Voice Communication.	78	No.		
15	1 meter long CAT-6 Patch Cord with RJ-45 connectors at both ends for data.	75	No.		
16	3 meter long CAT-6 , factory certified Drop Cords of specified color having RJ-45 connectors at both ends for Data Communication.	75	No.		
17	3 meter long CAT-6 , Drop Cords of specified color having RJ-45 connector at outlet end and RJ-11 Connector at user end for Voice Communication.	78	No.		
<b>TOTAL SECTION - D</b>					
<b><u>SECTION - E</u></b>					
<b>E</b>	<b><u>FIRE ALARM SYSTEM</u></b>				
	Supply, testing & commissioning of Conventional Fire Alarm System comprising of following equipments including all accessories required for the completion of the system in all respects.				
1	Addressable Fire Alarm Control Panel of 2- Loop. The FACP shall be self powered with built in 12V NICAD battery for 24 hrs. backup with charging unit.	1	No.		
2	Addressable Smoke Detector incorporating a pulsing LED located in labyrinth with in the housing of the detector.	134	No.		
3	Addressable Heat Detector incorporating a pulsing LED located in labyrinth with in the housing of the detector.	10	No.		

Item No.	Particulars	Qty.	Unit	Rate Rs.	Amount Rs.
4	Break Glass type Manual Call Station. It also incorporates an indication LED flashed after pressing the button to acknowledge the activation and key operation facility for testing purposes.	20	No.		
5	Indoor Electronic Sounder with Flasher, minimum sound output 100 db at 1meter with frequencies for variety of sounds as required.	20	No.		
6	Programming, Testing & Commissioning of the complete system as per the client requirements permissible for the FACP with training sessions of maintenance personnel's.	1	Job		
7	Complete Wiring for whole fire alarm system using 2C, 1.5 sqmm fire resistance cable in appropriate size of MS Conduit from fire alarm control panel to all sensors & devices including all installation accessories complete in all respect.	1	Job		
	NOTE :				
a	The Bidder shall provide the complete Technical Literature for the system offered.				
<b>TOTAL SECTION - E</b>					
<b><u>SECTION - F</u></b>					
<b>F</b>	<b><u>C.C. TV SYSTEM</u></b>				
	Supply, installation, testing and commissioning of following items for Close Circuit TV System including but not limited to the description given herein.				
1	Co-axial Cable RG-6 for CCTV system in 25 mm dia pvc conduit from each camera to Digital video Recorder (DVR) as per drawings including terminations.	2650	Rm.		
2	Wiring for CCTV Power from DB-UPS to first outlet and outlet to outlet with 3x2.5 sqmm single core wires in appropriate size of PVC conduit. Complete in all respects.	1	Job		
3	1/3" CCD Fixed Mini Dome Color Camera with 2.8 - 8 mm auto iris vary focal lens, low power and spot filter, source luminance of 0.1 lux having resolution of 420 TVL ( min ) operated on 220 V, 50 Hz AC supply. Complete with mounting bracket and all accessories. Complete in all respects.	20	No.		
4	1/3" CCD Fixed Bracket Mounted Color Camera with 2.8 - 8 mm auto iris vary focal lens, low power and spot filter, source luminance of 0.1 lux having resolution of 420 TVL ( min ) operated on 220 V, 50 Hz AC supply. Complete with mounting bracket and all accessories. Complete in all respects.	6	No.		
5	Digital Video Recorder, DVR with 16 channel video input. The DVR shall be used for on line operation with LAN / WAN facility. DVR should have 500 GB HDD. Complete with all connecting cords and accessories.	2	No.		
6	21" CCTV Color LCD Monitor with all connecting cords and mounting accessories to be installed in security room.	3	No.		
<b>TOTAL SECTION - F</b>					



**CONSTRUCTION OF RESIDENTIAL & STUDIO APARTMENTS**

**AT BATH ISLAND BUNGALOW No. 2, 3 & 4 KARACHI**

**ADP No. 1167 - 2016 - 17**

**SUMMARY OF COST**

**( Electrical Works Residential Apartments )**

1. Section A ( Wiring / Wiring Accessories )	....	Rs. ....
2. Section B ( Switches & Socket )	....	Rs. ....
3. Section C ( Lighting Fixture )	....	Rs. ....
4. Section D ( Telephone & Television System )	....	Rs. ....
5. Section E ( Fire Alarm System )	....	Rs. ....
6. Section F ( Close Circuit TV System )	....	Rs. ....

**Total Amount Rs.**

(Rupees \_\_\_\_\_ Only)

**CONSTRUCTION OF RESIDENTIAL & STUDIO APARTMENTS AT**  
**BATH ISLAND BUNGALOW No. 2, 3 & 4 KARACHI ADP No. 1167 - 2016 - 17**  
**BILL OF QUANTITIES**  
**(ELECTRICAL WORKS)**

Item No.	Particulars	Qty.	Unit	Rate Rs.	Amount Rs.
<b>RESIDENTIAL APARTMENTS</b>					
	<b><u>SECTION - A</u></b>				
<b>A</b>	<b><u>WIRING / WIRING ACCESSORIES</u></b>				
	Supply, installation , testing and commissioning of following items including all material , labor, tools, accessories etc. Complete in all respects upto the entire satisfaction of client and consultant. Cost of allied civil works like chiseling, cutting, openings in floor/wall, shall be included in the contractor's scope of works.				
1	Circuit Wiring from DB to switchboard with 2 x 2.5 sq.mm + ECC1 x 2.5 sqmm, 1-core PVC wires including any wiring between switch board to switch board in appropriate size of pvc conduit above false ceiling / concealed in wall. Complete in all respects.	124	No.		
2	Wiring of Light Point from switch board to point with 2.5 sq.mm common neutral of 2.5 sq. mm. and common ECC of 1.5 sq. mm wires in specified / appropriate size of exposed / concealed PVC conduit.	650	No.		
3	Wiring from Light Point to Light Point with 1.5 sq.mm common neutral of 2.5 sq. mm. and common ECC of 1.5 sq. mm wires in specified / appropriate size of exposed / concealed PVC conduit.	310	No.		
4	Wiring of 5A/15 A Switch Socket unit from DB to first outlet with following size of wires in appropriate size of concealed PVC conduits run under floor.				
a	2 x 4 sq.mm + ECC 1 x 4 sq.mm	95	No.		
5	Same as above item-4 but wiring from Outlet to Outlet using following size of wires including any wiring on same workstation.				
a	2 x 2.5 sq.mm + ECC 1 x 2.5 sq.mm	530	No.		
6	Wiring of 13 A , Flat Pin Switch Sockets ( Computer Power ) with 2 x 4.0 sqmm PVC + ECC, 1x 4 sqmm PVC wires from r UPS DB to first outlet including any wiring on same workstation in appropriate size of concealed PVC conduit run under floor.	30	No.		

Item No.	Particulars	Qty.	Unit	Rate Rs.	Amount Rs.
7	Same as above item-6 but wiring from Outlet to Outlet.	50	No.		
8	Wiring for Split Type Air-Conditioning Units from DB to indoor fan coil unit using 2 x 6 Sqmm + ECC 1 x 6 Sqmm PVC insulated wires in 25mm dia PVC conduit concealed in wall, or exposed above false ceiling as shown in drawings. Wiring from indoor to outdoor unit shall be provided by the AC contractor.	120	No.		
9	Wiring of call bell with 3x1.5 sq.mm wires in 25 mm dia PVC conduit (concealed), including 16 SWG sheet steel back box for bell push.	30	No.		
10	Wiring of water pump motor with following size of wires in appropriate size of PVC conduit (concealed).				
i	2x4 sq.mm + ECC 1x2.5 sq.mm.	6	No.		
11	Wiring for Boundary wall lights with 3x1.5 sq.mm. (switch to point and point to point) in specified size of PVC conduit.	10	No.		
12	Supply & installation of 10 feet long 3/4" dia copper rod Earthing System directly driven into ground to achieve earthing resistance not more than 3 ohm including earthing leads, earth connecting bar and inspection chamber as shown on drawing.	2	No.		
13	Supply, laying, termination testing of following PVC single-core / multi-core cables for mains or sub-main of concealed / exposed PVC conduit / cable tray as shown on drawing including lugs, glands etc. complete in all respect. <b>(Contractor shall be finalized exact length of Main and Submain Cables)</b>				
i	<b>From L.V Panel to MDB-1</b> 2Nos. 4C, 300 Sq.mm PVC/PVC+ ECC, 1x70 Sq.mm PVC	45	Rm.		
ii	<b>From MDB-1 to DB-GYM</b> 4C, 6 Sq.mm PVC/PVC+ ECC, 1x6 Sq.mm PVC	25	Rm.		
iii	<b>From MDB-1 to DB-G</b> 4C, 10 Sq.mm PVC/PVC+ ECC, 1x10 Sq.mm PVC	10	Rm.		
iv	<b>From MDB-1 to DB-H1-1</b> 4C, 16 Sq.mm PVC/PVC+ ECC, 1x16 Sq.mm PVC	35	Rm.		
v	<b>From MDB-1 to DB-H1-2</b> 4C, 16 Sq.mm PVC/PVC+ ECC, 1x16 Sq.mm PVC	35	Rm.		





Item No.	Particulars	Qty.	Unit	Rate Rs.	Amount Rs.
vi	<u>From MDB-1 to DB-H1-3</u> 4C, 16 Sq.mm PVC/PVC+ ECC, 1x16 Sq.mm PVC	35	Rm.		
vii	<u>From MDB-1 to DB-H2-1</u> 4C, 16 Sq.mm PVC/PVC+ ECC, 1x16 Sq.mm PVC	40	Rm.		
viii	<u>From MDB-1 to DB-H2-2</u> 4C, 16 Sq.mm PVC/PVC+ ECC, 1x16 Sq.mm PVC	40	Rm.		
ix	<u>From MDB-1 to DB-H2-3</u> 4C, 16 Sq.mm PVC/PVC+ ECC, 1x16 Sq.mm PVC	40	Rm.		
x	<u>From MDB-1 to DB-H2-4</u> 4C, 16 Sq.mm PVC/PVC+ ECC, 1x16 Sq.mm PVC	40	Rm.		
xi	<u>From MDB-1 to DB-H3-1</u> 4C, 25 Sq.mm PVC/PVC+ ECC, 1x16 Sq.mm PVC	45	Rm.		
xii	<u>From MDB-1 to DB-H3-2</u> 4C, 25 Sq.mm PVC/PVC+ ECC, 1x16 Sq.mm PVC	45	Rm.		
xiii	<u>From MDB-1 to DB-H3-3</u> 4C, 25 Sq.mm PVC/PVC+ ECC, 1x16 Sq.mm PVC	45	Rm.		
xiv	<u>From MDB-1 to DB-H3-4</u> 4C, 25 Sq.mm PVC/PVC+ ECC, 1x16 Sq.mm PVC	45	Rm.		
xv	<u>From MDB-1 to DB-H4-1</u> 4C, 25 Sq.mm PVC/PVC+ ECC, 1x16 Sq.mm PVC	50	Rm.		
xvi	<u>From MDB-1 to DB-H4-2</u> 4C, 25 Sq.mm PVC/PVC+ ECC, 1x16 Sq.mm PVC	50	Rm.		



Item No.	Particulars	Qty.	Unit	Rate Rs.	Amount Rs.
xvii	<u>From MDB-1 to DB-H4-3</u> 4C, 25 Sq.mm PVC/PVC+ ECC, 1x16 Sq.mm PVC	50	Rm.		
xviii	<u>From MDB-1 to DB-H4-4</u> 4C, 25 Sq.mm PVC/PVC+ ECC, 1x16 Sq.mm PVC	50	Rm.		
xix	<u>From MDB-1 to DB-H5-1</u> 4C, 25 Sq.mm PVC/PVC+ ECC, 1x16 Sq.mm PVC	55	Rm.		
xx	<u>From MDB-1 to DB-H5-2</u> 4C, 25 Sq.mm PVC/PVC+ ECC, 1x16 Sq.mm PVC	55	Rm.		
xxi	<u>From MDB-1 to DB-H5-3</u> 4C, 25 Sq.mm PVC/PVC+ ECC, 1x16 Sq.mm PVC	55	Rm.		
xxii	<u>From MDB-1 to DB-H5-4</u> 4C, 25 Sq.mm PVC/PVC+ ECC, 1x16 Sq.mm PVC	55	Rm.		
xxiii	<u>From MDB-1 to DB-H6-1</u> 4C, 25 Sq.mm PVC/PVC+ ECC, 1x16 Sq.mm PVC	60	Rm.		
xxiv	<u>From MDB-1 to DB-H6-2</u> 4C, 25 Sq.mm PVC/PVC+ ECC, 1x16 Sq.mm PVC	60	Rm.		
xxv	<u>From MDB-1 to DB-H6-3</u> 4C, 25 Sq.mm PVC/PVC+ ECC, 1x16 Sq.mm PVC	60	Rm.		
xxvi	<u>From MDB-1 to DB-H6-4</u> 4C, 25 Sq.mm PVC/PVC+ ECC, 1x16 Sq.mm PVC	60	Rm.		
xxvii	<u>From MDB-1 to DB-H7-1</u> 4C, 25 Sq.mm PVC/PVC+ ECC, 1x16 Sq.mm PVC	65	Rm.		

Item No.	Particulars	Qty.	Unit	Rate Rs.	Amount Rs.
xxviii	<b>From MDB-1 to DB-H7-2</b>				
	4C, 25 Sq.mm PVC/PVC+ ECC, 1x16 Sq.mm PVC	65	Rm.		
xxix	<b>From MDB-1 to DB-H7-3</b>				
	4C, 25 Sq.mm PVC/PVC+ ECC, 1x16 Sq.mm PVC	65	Rm.		
xxx	<b>From MDB-1 to DB-H7-4</b>				
	4C, 25 Sq.mm PVC/PVC+ ECC, 1x16 Sq.mm PVC	65	Rm.		
xxxi	<b>From MDB-1 to DB-UPS-DB-G/1</b>				
	4C, 16 Sq.mm PVC/PVC+ ECC, 1x16 Sq.mm PVC	15	Rm.		
xxxii	<b>From MDB-1 to DB-PUMP</b>				
	4C, 6 Sq.mm PVC/PVC+ ECC, 1x6 Sq.mm PVC	20	Rm.		
xxxiii	<b>From DB-GEN-1 to DB-PUMP</b>				
	4C, 6 Sq.mm PVC/PVC+ ECC, 1x6 Sq.mm PVC	20	Rm.		
xxxiv	<b>From DB-GEN-1 to DB-UPS-DB-G/1</b>				
	4C, 6 Sq.mm PVC/PVC+ ECC, 1x6 Sq.mm PVC	15	Rm.		
xxxv	<b>From MDB-1 to DB-LIFT</b>				
	4C, 25 Sq.mm PVC/PVC+ ECC, 1x25 Sq.mm PVC	45	Rm.		
xxxvi	<b>From DB-GEN-1 to DB-LIFT</b>				
	4C, 25 Sq.mm PVC/PVC+ ECC, 1x25 Sq.mm PVC	45	Rm.		
xxxvii	<b>From MDB-HVAC to DB-HVAC-1</b>				
	4C, 95 Sq.mm PVC/PVC+ ECC, 1x50 Sq.mm PVC	15	Rm.		

Item No.	Particulars	Qty.	Unit	Rate Rs.	Amount Rs.
<b>14</b>	Following Distribution boards as shown on drawing made with 16 SWG sheet steel housing , flush in wall / surface type , with approved color and having specified circuit breakers and components as shown in drawings / specified in list of approved manufacturers. Shop drawings shall be submitted by the contractor before fabrication.				
<b>i</b>	MDB	1	No.		
<b>ii</b>	DB-GYM	1	No.		
<b>iii</b>	DB-G	1	No.		
<b>iv</b>	DB-H1-1	1	No.		
<b>v</b>	DB-H1-2	1	No.		
<b>vi</b>	DB-H1-3	1	No.		
<b>vii</b>	DB-H2-1	1	No.		
<b>viii</b>	DB-H2-2	1	No.		
<b>ix</b>	DB-H2-3	1	No.		
<b>x</b>	DB-H2-4	1	No.		
<b>xi</b>	DB-H3-1	1	No.		
<b>xii</b>	DB-H3-2	1	No.		
<b>xiii</b>	DB-H3-3	1	No.		
<b>xiv</b>	DB-H3-4	1	No.		
<b>xv</b>	DB-H4-1	1	No.		
<b>xvi</b>	DB-H4-2	1	No.		
<b>xvii</b>	DB-H4-3	1	No.		
<b>xviii</b>	DB-H4-4	1	No.		
<b>xix</b>	DB-H5-1	1	No.		
<b>xx</b>	DB-H5-2	1	No.		
<b>xxi</b>	DB-H5-3	1	No.		
<b>xxii</b>	DB-H5-4	1	No.		
<b>xxiii</b>	DB-H6-1	1	No.		



Item No.	Particulars	Qty.	Unit	Rate Rs.	Amount Rs.
xxiv	DB-H6-2	1	No.		
xxv	DB-H6-3	1	No.		
xxvi	DB-H6-4	1	No.		
xxvii	DB-H7-1	1	No.		
xxviii	DB-H7-2	1	No.		
xxix	DB-H7-3	1	No.		
xxx	DB-H7-4	1	No.		
xxxi	UPS-DB-G/1	1	No.		
xxxii	DB-PUMP	1	No.		
xxxiii	DB-LIFT	1	No.		
xxxiv	DB-HVAC-1	1	No.		
xxxv	DB-MCC-1	1	No.		
xxxvi	DB-GEN-1	1	No.		
15	Supply and installation of following PVC Conduit / Pipes including all installation accessories such as saddels,bend,sockets etc.. complete in all respect. (Provide Pull boxes where ever required)				
a	25 mm dia PVC	450	Rm.		
b	32 mm dia PVC	150	Rm.		
c	38 mm dia PVC	100	Rm.		
d	50 mm dia PVC	80	Rm.		
TOTAL SECTION - A					



Item No.	Particulars	Qty.	Unit	Rate Rs.	Amount Rs.
	<b><u>SECTION - B</u></b>				
<b>B</b>	<b><u>SWITCHES &amp; SOCKET</u></b>				
<b>1</b>	Supply and installation of following <b>10A, one-way gang type switches</b> / sockets MK /Clipsal E-2000 series make including 16 SWG sheet steel back boxes, recessed on wall or column as per design drawings.				
<b>a</b>	One switch unit.	81	No.		
<b>b</b>	Two switch unit.	187	No.		
<b>c</b>	Three switch unit.	137	No.		
<b>d</b>	Four switch unit.	84	No.		
<b>e</b>	Dimmer	143	No.		
<b>f</b>	Two Way switch unit.	30	No.		
<b>2</b>	5A (Round 2Pin+E) switch socket unit including 16 SWG sheet steel back box.	650	No.		
<b>3</b>	15A (Round 2Pin+E) switch socket unit including 16 SWG sheet steel back box.	60	No.		
<b>4</b>	15A (Round 2Pin+E) switch socket unit including 16 SWG sheet steel back box.	30	No.		
<b>5</b>	20A , DP & N, weather proof Isolator for fan coil units to be installed near out door condensing unit.	120	No.		
<b>TOTAL SECTION - B</b>					

<b>Item No.</b>	<b>Particulars</b>	<b>Qty.</b>	<b>Unit</b>	<b>Rate Rs.</b>	<b>Amount Rs.</b>
	<b><u>SECTION - C</u></b>				
<b>C</b>	<b><u>LIGHTING FIXTURE</u></b>				
	Supply & Installation of following <b>Lighting Fixture</b> complete with ballast, starter p.f.i capacitor and specified lamps as per details. Contractor shall provide samples of all light fixtures for consultants approval.				
<b>1</b>	Recessed fluorescent light fixture similar Philips model TCS - 079 with 1 x 36W TLD color - 84 lamp , 1 x 40 W ballast including capacitor and all accessories with M5 louver.	27	No.		
<b>2</b>	Recessed Down Light fixture round shape with anti-glare having 2 x 18W PLC lamp and prismatic tempered glass cover.	545	No.		
<b>3</b>	Recessed Down Light fixture similar Pierlite Model DJ-403-H series with 1 x 15W CFL Lamp with drop down frosted glass including all accessories. Complete in all respects.	108	No.		
<b>4</b>	Wall Mounted Light Fixture (Basic Cost Rs. 850)	351	No.		
<b>5</b>	External Wall Mounted Light Fixture (Basic Cost Rs. 900)	81	No.		
<b>6</b>	TMS-140, 1x36W Flourecent Light Fixture	54	No.		
<b>7</b>	Mirror Light Fixture (Basic Cost Rs. 550)	110	No.		
<b>8</b>	Surface Wall Mounted Emergency Exit Light Fixture, Maintained Type made with premium quality extruded aluminum body and 8W T5 lamp and maintenance free battery with 3 hours backup.	27	No.		
<b>9</b>	12 inches dia Plastic Body Exhaust Fans	137	No.		
<b>10</b>	Ceiling Fan 56" Inch	143	No.		
<b>11</b>	Wall bracket fan Fan 20" Inch	54	No.		
<b>12</b>	Schiendlier	54	No.		
	Note: Contractor should submit a complete list of light fixtures with name of supplier, make, model & country of origin.				
<b>TOTAL SECTION - C</b>					

Item No.	Particulars	Qty.	Unit	Rate Rs.	Amount Rs.
	<b><u>SECTION - D</u></b>				
D	<b><u>TELEPHONE &amp; TELEVISION SYSTEM</u></b>				
	Supply , installation , testing and commissioning of following items. for telephone system including all material, labor, tools, accessories etc. complete in all respects. Quantities for cables and conduit shown in BOQ are estimated and taken from drawing contractor is advised to take measurement at site before commencement of works.				
1	25 mm dia pvc conduit for telephone system as per drawings from TJB to each voice outlet including all accessories. Complete in all respects.	2280	Rm		
2	Simplex RJ - 11 face plate with 1 No. RJ-11 outlet for telephone including shutter and 16 swg sheet steel back boxes	95	No		
3	CAT - Ve , UTP cable for Telephone in already installed PVC conduit including connection in RJ - 11 jack at both ends .	1850	Rm		
4	10 Pair Telephone cable to be installed in appropriate size of conduit including termination at both ends.	10	No		
5	Telephone junction box (TJB) fabricated in 16 SWG sheet steel housing having terminals string for tel. Outlets shown on drawing. Complete in all respects (2x10 terminal)	18	No		
6	Sub Main Telephone junction box (SMTJB) fabricated in 16 SWG sheet steel housing having terminals string for tel. Outlets shown on drawing. Complete in all respects (2x10 terminal)	10	No		
<b>TOTAL SECTION - D</b>					





Item No.	Particulars	Qty.	Unit	Rate Rs.	Amount Rs.
	<b><u>SECTION - E</u></b>				
<b>E</b>	<b><u>FIRE ALARM SYSTEM</u></b>				
	Supply, testing & commissioning of Addressable Fire Alarm System comprising of following equipments including all accessories required for the completion of the system in all respects.				
1	Addressable Fire Alarm Control Panel of 1- Loop. The FACP shall be self powered with built in 12V NICAD battery for 24 hrs. backup with charging unit.	1	No.		
2	Addressable Smoke Detector incorporating a pulsing LED located in labyrinth with in the housing of the detector.	43	No.		
3	Addressable Heat Detector incorporating a pulsing LED located in labyrinth with in the housing of the detector.	27	No.		
4	Break Glass type Manual Call Station. It also incorporates an indication LED flashed after pressing the button to acknowledge the activation and key operation facility for testing purposes.	12	No.		
5	Indoor Electronic Sounder with Flasher, minimum sound output 100 db at 1meter with frequencies for variety of sounds as required.	15	No.		
6	Programming, Testing & Commissioning of the complete system as per the client requirements permissible for the FACP with training sessions of maintenance personnel's.	1	Job		
7	Complete Wiring for whole fire alarm system using 2C, 1.5 sqmm fire resistance cable in appropriate size of MS Conduit from fire alarm control panel to all sensors & devices including all installation accessories complete in all respect.	1	Job		
a	NOTE : The Bidder shall provide the complete Technical Literature for the system offered.				
<b>TOTAL SECTION - E</b>					

Item No.	Particulars	Qty.	Unit	Rate Rs.	Amount Rs.
	<b><u>SECTION - F</u></b>				
F	<b><u>C.C. TV SYSTEM</u></b>				
	Supply, installation, testing and commissioning of following items for Close Circuit TV System including but not limited to the description given herein.				
1	Co-axial Cable RG-6 for CCTV system in 25 mm dia pvc conduit from each camera to Digital video Recorder (DVR) as per drawings including terminations.	1250	Rm.		
2	Wiring for CCTV Power from DB-UPS to first outlet and outlet to outlet with 3x2.5 sqmm single core wires in appropriate size of PVC conduit. Complete in all respects.	1	Job.		
3	1/3" CCD Fixed Mini Dome Color Camera with 2.8 - 8 mm auto iris vary focal lens, low power and spot filter, source luminance of 0.1 lux having resolution of 420 TVL ( min ) operated on 220 V, 50 Hz AC supply. Complete with mounting bracket and all accessories. Complete in all respects.	20	No.		
4	1/3" CCD Fixed Bracket Mounted Color Camera with 2.8 - 8 mm auto iris vary focal lens, low power and spot filter, source luminance of 0.1 lux having resolution of 420 TVL ( min ) operated on 220 V, 50 Hz AC supply. Complete with mounting bracket and all accessories. Complete in all respects.	2	No.		
	<b>TOTAL SECTION - F</b>				



**CONSTRUCTION OF RESIDENTIAL & STUDIO APARTMENTS**

**AT BATH ISLAND BUNGALOW No. 2, 3 & 4 KARACHI**

**ADP No. 1167 - 2016 - 17**

**SUMMARY OF COST**

**( Electrical Works Infrastructure )**

- |   |      |          |
|---|------|----------|
| 1. Section A ( M.V. Panel, Transformer, LV & MV Cable | .... | Rs. .... |
| 2. Section B ( Main & Sub Main Panel )                | .... | Rs. .... |
| 3. Section C ( Manhole / Handhole & UPVC Conduit )    | .... | Rs. .... |
| 4. Section D ( Diesel Generator )                     | .... | Rs. .... |

**Total Amount Rs.**

(Rupees \_\_\_\_\_ Only)

**CONSTRUCTION OF RESIDENTIAL & STUDIO APARTMENTS AT**  
**BATH ISLAND BUNGALOW No. 2, 3 & 4 KARACHI ADP No. 1167 - 2016 - 17**  
**BILL OF QUANTITIES**  
**(ELECTRICAL WORKS)**

Item No.	Particulars	Qty.	Unit	Rate Rs.	Amount Rs.
<b>INFRASTRUCTURE</b>					
	<b><u>SECTION - A</u></b>				
<b>A</b>	<b>M.V. PANEL, TRANSFORMER, L.V. &amp; M.V. CABLES</b>				
<b>1</b>	Supply, installation, testing and commissioning of Oil Filled Natural Coolar 1500 KVA 11 / 0.4 KV, 50 Hz Step Down Power Transformer including all protection divices CTs, PTs, relay etc. Complete in all respects.				
<b>1.1</b>	TRANSFORMER 1500kVA	1	No.		
<b>2</b>	800A, TP 11KV 1No. Incoming + 2Nos. Outgoing Vacume Circuit Breaker (VCB) complete with all protection and accessories like PTs, CTs, relays and metering. VCBs shall be installed substation.	1	No.		
<b>3</b>	800A, TP 11KV 1No. Incoming + 1Nos. Outgoing Vacume Circuit Breaker (VCB) complete with all protection and accessories like PTs, CTs, relays and metering. VCBs shall be installed substation.	1	No.		
	Supply , installation , testing and commissioning of following items related to MV & LV Power Distribution System including all equipments , material , labor , tools , accessories , supports , hangers etc. Complete in all respects. Any associated material required to complete the testing & commissioning shall be included in the scope of works.				
<b>4</b>	<b>M.V CABLES</b> Supply, installation, testing and commissioning of following size of M.V Cable 11KV/15KV PVC/PVC Cables for M.V Panels in already installed PVC conduit / cable tray including all accessories, complete in all respect as shown on drawing.				
	Note : Contractor is advised to confirm the cable size, running lengths and termination as per site conditions before commencement of work.				
<b>4.1</b>	From Grid Station to KESC M.V Panel 3C, 300 Sq.mm 11KV/15KV , PVC-CU (Actual length measured as required).	1	Mtr.		
<b>4.2</b>	From KESC M.V Panel to Client M.V Panel 3C, 300 Sq.mm 11KV/15KV , PVC-CU	15	Mtr.		
<b>4.3</b>	From Client M.V Panel to Transformer 3C, 300 Sq.mm 11KV/15KV , PVC-CU	15	Mtr.		



Item No.	Particulars	Qty.	Unit	Rate Rs.	Amount Rs.
5	Supply , Installation , testing and commissioning of following size of cables for Main/ Sub main DBs in Already install cable tray / pvc conduit etc. Including all installation accessories, complete all respect as shown on drawing.				
5.1	From Transofrmer to L.V Panel 16Nos. 1C, 300 Sqmm PVC/PVC + ECC 1 x 70 Sqmm	15	Mtr.		
5.2	From Generator-1 to Synchronizing Panel 12Nos. 1C, 240 Sqmm PVC/PVC + ECC 1 x 70 Sqmm	15	Mtr.		
5.3	From Generator-2 to Synchronizing Panel 08Nos. 1C, 240 Sqmm PVC/PVC + ECC 1 x 70 Sqmm	15	Mtr.		
5.4	From Synchronizing Panel to L.V Panel 16Nos. 1C, 300 Sqmm PVC/PVC + ECC 1 x 70 Sqmm	10	Mtr.		
5.5	From L.V PANEL - TO MDB-HVAC 2Nos. 4C, 240 Sqmm PVC/PVC + ECC 1 x 70 Sqmm	15	Mtr.		
5.6	From GEN SET PANEL - TO DB-GEN 1 NO 4C, 50 Sqmm PVC/PVC + ECC 1 x 25 Sqmm	15	Mtr.		
5.7	From L.V PANEL - TO EXT-1 1 NO 4C, 10 Sqmm PVC/PVC + ECC 1 x 10 Sqmm	50	Mtr.		
5.8	From L.V PANEL - TO EXT-2 1 NO 4C, 10 Sqmm PVC/PVC + ECC 1 x 10 Sqmm	40	Mtr.		
TOTAL SECTION - A					
<b><u>SECTION - B</u></b>					
<b>B</b>	<b>MAIN &amp; SUB MAIN PANEL</b>				
1	Supply and installation of Main / Sub-Main Panel / Distribution Boards made with 16 SWG sheet steel housing with approved color and having specified circuit breakers as shown on drawing.				
a	LVP-1 (including Pfi Panel)	1	No.		
b	Synchronizing Panel	1	No.		
c	GEN SET PANEL	1	No.		
d	MDB-HVAC	1	No.		
TOTAL SECTION - B					



Item No.	Particulars	Qty.	Unit	Rate Rs.	Amount Rs.
	<b><u>SECTION - C</u></b>				
C	<b>MANHOLE / HANDHOLE &amp; UPVC CONDUIT</b>				
1	Making of C.C. Handhole 450x450x450mm complete with inside plaster and heavy duty C.I.Cover.Complete in all respect as shown on drawing.	8	No.		
2	300 mm x 100 mm perforated G.I sheet cable trays including cover, joints, bend, mounting brackets hanger complete with all accessories.	45	Mtr.		
3	300 mm x 100 mm perforated G.I sheet cable trays including cover, joints, bend, mounting brackets hanger complete with all accessories.				
a	25 mm dia UPVC	55	Mtr.		
b	32 mm dia UPVC	50	Mtr.		
c	38 mm dia UPVC	90	Mtr.		
d	50 mm dia UPVC	165	Mtr.		
e	100 mm dia UPVC	150	Mtr.		
				TOTAL SECTION - C	

Item No.	Particulars	Qty.	Unit	Rate Rs.	Amount Rs.
	<b><u>SECTION - D</u></b>				
<b>D</b>	<b>DIESAL GENERATOR</b>				
	Supply, installation, testing and commissioning of following items including all material, labor, tools etc. Complete in all respects.				
	Following rating stand-by power, 415 V, 3-phase, water cooled diesel generating set with AMF . The work also include transportation upto the site, exhaust pipe and residential silencer with elbow and etc. Complete in all respects as per instructions of consultant and specifications.				
<b>a</b>	For 250 KVA DG Set	1	No.		
<b>b</b>	For 500 KVA DG Set	1	No.		
<b>2</b>	Following weather proof acoustic canopy made with 22 SWG sheet steel and steel structure to achieve the noise level not more than 75 db from 1 m. Contractor shall have to submit material specifications and constructions details along with the quotation. Canopy shall be painted with epoxy paint of approved color. The bottom of the canopy must be completely closed.				
<b>a</b>	For 250 KVA DG Set	1	No.		
<b>b</b>	For 500 KVA DG Set	1	No.		
<b>3</b>	Supply for spares for engine generator and control panel required for 500 operating hours as per detail given in spares list attached in specifications.				
<b>a</b>	For 250 KVA DG Set	1	No.		
<b>b</b>	For 500 KVA DG Set	1	No.		
<b>4</b>	On load testing of DG sets with material required for 4 hours operation inclusive of fuel, engine oil etc. Load should be provided by the client at site. Fuel, Battery liquid and lube oil included.	1	job		
<b>5</b>	Obtaining of NOC, commencement order and fitness certificate from electric inspector and approval from local authorities for installation of above DG sets and storage of diesel.	1	job		
	NOTE: Factory acceptance with consultant arragne visit by the contractor				
	NOTE: foundation of D.G.Set to be carried out by Civil Contractor.				
<b>TOTAL SECTION - C</b>					