

**REHABILITATION OF EXISTING METALLED ROAD
FROM MASKAN GATE TO PHARMACY INTERSECTION
AT KARACHI UNIVERSITY**

Tender # CW/15/24-25

BILL OF QUANTITIES

ROAD WORK

S.No.	CSR-24 Govt. of Sindh	Description	Qty.	Unit	Rate (PKR.)	Amount (PKR.)
(A) SCHEDULE ITEMS						
1	Vol-III, Part-IV, Highway works, Items #1, Page-211	Clearing and Grubbing Clearing and grubbing the site by cutting, uprooting and removing all rubbish and shrubs including disposal to (outside limits) designated places	12,272	Sq.m	31.00	380,432.00
2	Vol-III, Part-IV, Highway works, Items #39(1), Page-220 (a)	Jungle Clearance Jungle clearance and removing within 100 ft.	12,272	%Sq.m	4,258.86	522,647.30
3	Vol-III, Part-IV, Highway works, Items #39(5), Page-221 (a)	Relocate Trees Up-rooting stumps and removing within 100 ft.: 2.0 FT: TO 6.0 FT: GIRTH.	250	Each	3,168.59	792,147.50
4	Vol-III, Part-IV, Highway works, Items #39(11), Page-221	Dismantling Dismantling of existing asphalt concrete road including base, sub-base and disposal of dismantled materials to designated placed	200	Cu.m	974.59	194,918.00
5	Vol-III, Part-IV, Highway works Items #10, Page-212	Excavation Excavation in existing berm for widening the road, including Preparation of sub-grade after watering, rolling with Power Roller, dressing the excavated stuff etc.: complete	1,265	Sq.m	176.41	223,158.65
6	Vol-III, Part-IV, Highway works, Items #39(6), Page-221	Scarification Scarifying the existing road surface	1,050	Sq.m	68.14	71,547.00
7	Vol-III, Part-IV, Highway works Items #6(II)(a), Page-211 (II) (a)	Embankment Earth work for road embankment by bulldozer including ploughing, mixing, clod breaking dressing and compacting with optimum moisture content. Lead upto 100 ft: and lift upto 5 ft: in all types of soil except rock. If earth work is done by other then departmental agency. For 95-100% modified AASHO density	575	Cu.m	583.67	335,610.25
8	Vol-III, Part-IV, Highway works Items #3, Page-212	Sub-Grade Preparing sub grade including earth excavation or filling to an average depth of 9" dressing to camber and consolidation with power Roller	1,050	Sq.m	176.41	185,230.50
9	Vol-III, Part-IV, Highway works Items #11(d), Page-213	Sub-Base Course Preparing Sub-Base by supplying and spreading well graded pit or bed run gravel having a liquid limit not greater than 25 and plasticity Index not greater than 6 in proper camber and grade including watering rolling and compacting in layers, thickness of each compacted layer not exceeding 6" compacted upto 98-100% density as per modified AASHO density (Rate l/c all cost of materials T&P and carriage upto 3 chanlins)	1,160	Cu.m	3,429.99	3,978,738.40



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S.No.	CSR-24 Govt. of Sindh	Description	Qty.	Unit	Rate (PKR.)	Amount (PKR.)
10	Vol-III, Part-IV, Highway works Items # 13(b), Page- 214	Base Course Providing and laying Aggregate base course in proper grade and camber having CBR 80% as per specification i/c spreading and compacting by approved mechanical means (Motor grader, Vibratory roller and Smooth wheel roller etc.) watering to maintain the moisture content the compaction of each layer shall 100 percent to the max dry density (Rate i/c all cost of materials T&P and carriage upto 3 chains	3,162	Cu.m	4,893.72	15,473,942.64
11	Vol-III, Part-IV, Highway works Items # 31, Page- 218	SURFACE TREATMENT Prime Coat or Tack Coat Applying priming coat or tack coat with approved binder at the required rate including cleaning the road surface thoroughly, heating to the required temperature and spraying the binder with pressure as directed etc., complete	42,159	Sq.m	37.67	1,588,129.53
12	Vol-III, Part-IV, Highway works Items # 24.(A), Page- 217	Asphalt Wearing Course 1 1/2" Thick Asphalt Concrete Wearing Course Plant Mix Laying mechanically to proper line and grade plant mixed Asphalt Concrete specified formula according to job mixed formula approved by the Engineer incharge rolling and finishing to design Proper grade line level and comberetc (Machinery with POLs Cost of material carriage).	21,080	Sq.m	1,813.81	38,235,114.20
13	Vol-III, Part-IV, Ch.#8 Items # 39.(14), Page-221	Kerb Stone Providing & fixing Precast Edge Block 3750 PSI Industrial Made Size 6 Inches thick x 12 Inches long x 18 Inches high including the cost of Cartage, excavation, form Work for haunching, 1450 PSI lean concrete, 2250 PSI concrete for haunching, 1:4 cement sand mortar	5,775	Rm	2,225.09	12,849,894.75
14	Vol-III, Part-I, Ch.#8 Items # 67, Page-50	Paving Blocks on Footpath Providing & fixing cement paving blocks flooring having size of 197 x 97 x 60 (mm) of city /quddra / cobble shape with natural colours, having strength b/w 5000 PSI to 8500 PSI i/c filling the joints with hill sand over a bed of 2" thick hill sand or stone dust and laying and compacting in specified manner/ pattern and design etc. complete	2,599	Sqm	2,124.88	5,522,575.60
15	Vol-III, Part-IV, Highway works Items # 39.(13), Page-221	Thermo Plastic Paint Pavement marking in Reflective Thermo Plastic Paint for Lines of 6" Width.	1,500	Rm	282.51	423,765.00
16	Vol-III, Part-IV, Highway works Items # 39.(12), Page-221	Cat Eyes / Road Studs Supplying and Fixing of reflectorize Road Studs Double Face, Flush surface type	20	Each	1,520.42	30,408.40
17	Vol-III, Part-III, Ch. #16, Items #1 (b), Page 209 (b)	Manhole Cover Manufacturing & Supplying of R.C.C manhole cover cast in 1:2:4 cement concrete ratio 3" Inch deep at center reinforced with 1/2" dia tor steel bars with 4" c/c welded to a 3/16" thick 2 Inch wide M.S Plate and two hooks of 3/8" Inch dia tor bars including compacting, curing and transportation 24" Inch dia	10	Each	3,730.24	37,302.40



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S.No.	CSIT-24 Govt. of Sindh	Description	Qty.	Unit	Rate (PKR.)	Amount (PKR.)
18	Vol-III, Part-IV, Highway works Items # 18, Page- 222	Traffic Signs				
	(a)	Providing & Fixing traffic sign 3' dia G.I. Pipe post and sign of equilateral triangular shape each side 3' long i/c Painting, Marking as directed each.	3	Each	55,873.81	167,621.43
	(b)	Providing & Fixing 3' dia G.I single post sign of circular shape 3' Dia i/c Painting, Marking as directed each	3	Each	55,873.81	167,621.43
	(c)	(i) Providing & Fixing Rectangular shape 3'x2' comprizing 2 Nos: 3" Dia G.I pipe Post i/c Painting, writing as directed each.	5	Each	52,117.78	260,588.90
19	Vol-III, Part-I, Ch.#4 Items # 9, Page-26	Precast cement concrete solid or face block at edge of footpath (1 : 2 : 4) Including cost of templates	57	Cu.m	17,076.22	978,404.07
20	Vol-III, Part-I, Ch.#4 Items # 9, Page-26	Sleeves Marker				
		Precast cement concrete solid or face block (1 : 2 : 4) Including cost of templates	0.4531	Cu.m	17,076.22	7,736.71
21	Vol-III, Part-I, Ch.#4 Items # 5(f), Page-25	Speed Breaker				
		Cement concrete plain including placing compacting, finishing and curing, complete (Including screening and washing at stone aggregate without shuttering Ratio. 1:2 :4	23.7819	Cu.m	15,724.36	373,955.14
22		Sleeves				
	Vol-III, Part-II, Ch.# II, Items #4(d), Page-111	Providing, Laying uPVC pipes of Class 'B' fixing in trench/cutting, fitting and jointing with solvent cement i/c testing with water to a head of 61 meter or 200 ft.				
		d) 150 mm (6" dia)	174.0	R.m	2,508.07	436,404.33
		b) 100 mm (4" dia)	174.0	R.m	1,332.41	231,840.16
23	Vol-III, Part-I, Ch.#11 Items #5(e), Page-63	Paint on Kerb Stone				
		Preparing surface and painting filets, framings, skirtings, pipes, gutters and similar, linear work not exceeding 6" inches in with Priming coat.	5,775	Rm	25.99	150,066.38
		Each subsequent coat	5,775	Rm	16.44	94,928.35
TOTAL OF SCHEDULE ITEMS					Rs.	83,714,779.62
Premium / Rebate on Schedule Items: (- 28 %)					Rs.	23,440,138.29
TOTAL OF SCHEDULE ITEMS WITH PREMIUM / REBATE					Rs.	60,274,641.33

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ROAD WORK

S.No.	CSR-24 Govt. of Sindh	Description	Qty	Unit	Rate (PKR.)	Amount (PKR.)
(B) NON-SCHEDULE ITEMS						
24	N.S	Plantation				
		Plantation of Tree having height minimum 1.3m (4.5 feet) of following type including excavation , providing sweat earth with fertilizers. Excavation, Plantation and Back fill complete in all respect. The replacement / replantation of the dead plant is also included in the scope with in the currency of contract.				
		a. Neem	255	Each	700	178,500
		b. Gulmohar	15	Each	700	10,500
		c. Amaltas	15	Each	700	10,500
		d. Aerocaria	15	Each	700	10,500
		e. Jacaranda	15	Each	700	10,500
		f. Terminalia	15	Each	700	10,500
		g. Acacia Nodosa/Javinica	15	Each	700	10,500
		h. Bakain	15	Each	700	10,500
		i. Arjun	15	Each	700	10,500
		k. Alstonia	5	Each	700	3,500
		l. Sukhchian	20	Each	700	14,000
		m. Ulta Ashok	20	Each	700	14,000
		n. Moringa	5	Each	700	3,500
25	N.S	Binder				
		2" (50mm) Asphaltic Base Course Plant mix Providing and laying Plant mixed Asphalt Concrete Binder Course compacted thickness 2 inches (50mm thick) as per approved job mix formula using crush aggregate from approved sources. Using asphalt of grade 80/100 during laying temperature not less than 140C compacted by steel wheel & PTR roller. The procedure of laying binder course material & methodology shall fully comply with AASHTO and as directed by Engineer Incharge. Minimum bitumen content should be 3.5% binder course shall be spreading using paver machine. Rolling & Finishing to design proper grade line level and camber etc: (Machinery with POLs cost of material carriage)	21,080	Sq.m	1198	20,658,400
26		Bollard				
	N.S	Providing and Fixing Mild Steel Bolard of 6" dia pipe (filled with PVC) with C.C foundation including excavation and restoration of road as directed by the engineer complete in all respect with reflected 3M or equivalent sheets (Black and Yellow)	7	Each	17500	122,500
27		Arm Barrier				
	N.S	Providing and Installation of arm barrier of mild steel pipe with weight bucket dia 150 mm(6") for carriage way of 24' approx. including steel stand and foundation with all required civil works (excavation , backfill, concreting) as directed by the engineer complete in all respect	2	Each	105000	210,000
TOTAL OF NON-SCHEDULE ITEMS					Rs.	21,888,400
TOTAL OF (A + B)					Rs.	81,863,041

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BOUNDARY WALL & RELOCATE OF GATE

S.No.	CSR-24 Govt. of Sindh	Description	Qty.	Unit	Rate (PKR)	Amount (PKR)
(A) SCHEDULE ITEMS						
1		Dismantling				
a.	Vol-III, Part-I, Ch.#2 Items # 14, Page-19	Dismantling cement block masonry	9.47	Cu.m	1,790.47	16,951.28
b.	Vol-III, Part-I, Ch.#2 Items # 20, Page-20	Dismantling cement concrete reinforced separating reinforced cement from concrete cleaning and straightening the same	7.15	Cu.m	8,112.56	58,031.23
2		Earthwork				
	Vol-III, Part-I, Ch.#1 Items # 18, Page-17	Earth work excavation in irrigation channels, drains etc., dressed to designed section grades and profiles excavated material disposed off and dressed within 50 ft. (15 meter) lead				
		b. In ordinary soil	31.91	Cu.m	279.69	8,924.15
		c. In hard soil or soft murum	31.91	Cu.m	358.09	11,425.61
3		Plain Cement Concrete				
		j. Ratio 1:4:8	4.70	Cu.m	12,318.93	57,948.25
4		REINFORCED CEMENT CONCRETE (SUB-STRUCTURE)				
	Vol-III, Part-I, Ch.#4 Items # 6, Page-25	Reinforced cement concrete work including all labour and material except the cost of steel reinforcement and its labour for bending and binding which will be paid separately. This rate also includes all kinds of forms moulds, lifting, centering, shuttering and curing (including screening and washing of shingle.)				
		a. R.C.C work in roof slab, beams, column, rafts, lintels and other structural members laid in situ or precast laid in position complete in all respects				
		i. Ratio 1 : 2 : 4 90 Lbs of cement, 2 Cft sand and 4 Cft shingle 1/8" to 3/4" gauge				
		Foundation	10.40	Cu.m	25,341.69	263,510.90
		Plinth Beam	7.37	Cu.m	25,341.69	186,653.56
		Column (Short & Long)	7.37	Cu.m	25,341.69	186,653.56
5		REINFORCEMENT				
	Vol-III, Part-I, Ch.#4 Items # 8, Page-26	Fabrication of deformed steel reinforcement for cement concrete including cutting, bending, laying in position, making joints and fastenings including cost of binding wire (also includes removal of rust from bars.)				
		a. Deformed bar				
		i. Grade-60	60.00	Cwt	18,934.02	1,136,041.20
6		BLOCK MASONRY WORK				
	Vol-III, Part-I, Ch.#4 Items # 24, Page-27	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., complete	19.50	Cu.m	18,180.87	354,469.52
7		Colour Washing				
	Vol-III, Part-I, Ch.#9 Items # 38.A, Page-54	1st coat over white washed surface				
		New Surface	384.00	Sq.m	45.73	17,560.32
TOTAL OF SCHEDULE ITEMS					Rs.	2,298,169.74
Premium / Rebate on Schedule Items					Rs.	643,488
TOTAL OF SCHEDULE ITEMS WITH PREMIUM / REBATE					Rs.	1,654,682

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BOUNDARY WALL & RELOCATE OF GATE

S.No.	CSIR-24 Govt. of Sindh	Description	Qty.	Unit	Rate (PKR.)	Amount (PKR.)
(B) NON-SCHEDULE ITEMS						
8	N.S	M.S GATE (Removing & Re-fixing) Removing and re-fixing M.S Gate (double leaf) from existing boundary wall and fixed at new boundary wall with repair and alignment, level etc. Including required hardware and applying anti rustes paint, enamel paint with complete in all respect, as direct by the Engineer.	3.00	Job	70,000	210,000
TOTAL OF NON-SCHEDULE ITEMS					Rs.	210,000
TOTAL OF (A + B)					Rs.	1,864,682



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CHECK POST- CIVIL WORKS

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(A) SCHEDULE ITEMS						
1	Vol-III, Part-I, Ch.#1 Items #5, Page-15	EXCAVATION FOR FOUNDATION Earth work excavation in irrigation channels, drains etc, dressed to designed section grades and profiles excavated material disposed off and dressed within 50 ft. (15 metre) lead a. Ordinary Soil b. Hard Soil	1024.00 1024.00	Cft. Cft.	7.92 10.14	8,110.08 10,383.36
2	Vol-III, Part-I, Ch.#1 Items #21, Page-17	BACK FILLING (USING EXCAVATED / SURPLUS EARTH PRESENT AT SITE) Filling, watering and ramming earth in under floors with surplus earth from foundation etc. lead upto one chain and lift upto 5 feet.	1527.00	Cft.	6.50	9,925.50
3	Vol-III, Part-I, Ch.#4 Items #5(i), Page-24-25	LEAN CONCRETE Cement concrete plain including placing compacting, finishing and curing complete (including screining and washing at stone aggregate without shuttering. I. Ratio. 1: 4 :8	103.00	Cft.	348.83	35,929.49
4	Vol-III, Part-I, Ch.#4 Items #6, Page-25	REINFORCED CEMENT CONCRETE Reinforced cement concrete work including all labour and material except the cost of steel reinforcement and its labour for bending and binding which will be paid separately. This rate also includes all kinds of forms moulds lifting shuttering curing rendering and finishing the exposed surface (including screining and washing of shingle) NOTE: ALL STRUCTURAL CONCRETE UPTO PLINTH LEVEL SHALL BE WITH SULPHATE RESISTING CEMENT. R.C. work in roof slab, beams columns rafts, lintels and other a. structural members laid in situ or precast laid in position complete in all respects. I. Ratio 1:2: 4 Conc. 90 lbs OPC cement, 2 cft Sand 4 Cft stone aggregate a. Foundation b. Column upto plinth c. Plinth beams d. Columns in super structure e. Roof Beams f. Slabs	353.00 67.00 162.00 152.00 81.00 673.00	Cft. Cft. Cft. Cft. Cft. Cft.	717.59 717.59 717.59 717.59 717.59 717.59	253,309.27 48,078.53 116,249.58 109,073.88 58,124.79 482,938.07
5	Vol-III, Part-I, Ch.#4 Items #8, Page-26	STEEL REINFORCEMENT Fabrication of deformed steel reinforcement for cement concrete including cutting, bending, laying in position, making joints and fastenings including cost of binding wire (also includes removal of rust from bars.) a. Deformed bar I. Grade-60	77.45	Cwt	18,934.02	1,466,365.31
6	Vol-III, Part-I, Ch.#4 Items #23, Page-27	BLOCK MASONARY Providing and laying 1:3:6 Cement concrete solid Block masonry wall above 6" in thickness set in 1:6 cement mortar in G.F ground floor superstructure including raking out joints & curing etc, complete	1448.00	Cft.	493.79	715,007.92

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CHECK POST- CIVIL WORKS

S.No.	CSR-24 Govt. of Sindh	Description	Qty.	Unit	Rate (PKR)	Amount (PKR)
7		RENDERING (PLASTER)				
		Internal Plaster				
a	Vol-III, Part-I, Ch.#9 Items #11(b), Page-52	Cement Plaster 1:4 upto 12' height 1/2" thick Plaster (for ceiling)	1208.00	Sft.	39.83	48,114.64
b	Vol-III, Part-I, Ch.#9 Items #13(b), Page-52	Cement Plaster 1:6 upto 12' height (Internal) 1/2" thick Plaster (wall)	3209.00	Sft.	37.01	118,765.09
		External Plaster				
c	Vol-III, Part-I, Ch.#9 Items #11(c), Page-52	Cement Plaster 1:4 upto 12' height 3/4" thick Plaster (for wall)	3457.00	Sft.	53.82	186,055.74
8		FLOORING				
		FLOORING BASE CONC. 1:3 :6				
	Vol-III, Part-I, Ch.#4 Items #5(h), Page-24-25	Cement Concrete plain including placing, compacting, finishing and curing complete including screening and washing at stone aggregate with out shuttering.	399.00	Cft.	388.67	155,079.33
9		FLOOR, DADO & SKIRTING				
		Wall Tile				
	Vol-III, Part-I, Ch.#8 Items #24, Page-45	Laying floor of approved with glazed tiles 1/4" thick dado of approved color & size jointing in white cement and laid over 1:2 cement sand mortar 3/4" thick including grouting with matching color and finishing	739.00	Sft.	389.36	287,737.04
		Floor Tile & Skirting				
	Vol-III, Part-I, Ch.#8 Items #24, Page-45	Laying floor of approved with glazed tiles 1/4" thick floor of approved color & size jointing in white cement and laid over 1:2 cement sand mortar 3/4" thick including grouting with matching color and finishing	595.00	Sft.	389.36	231,669.20
10		Door with Door Frame				
	Vol-III, Part-I, Ch.#10 Items #8, Page-57	Providing and fixing in position, doors, windows and ventilators of 2"x2"x1/4" angle iron frames and 1- 3/4" thick commercial ply wood (3 ply) on both sides, including hold fasts, cleats, iron tower bolts, handles, hinges and one mortice lock.	127.00	Sft.	2,995.87	380,475.49
11		MS SECURITY GRILLS				
	Vol-III, Part-I, Ch.#17 Items #26, Page-76	Supplying & fixing in position iron/steel grill of 3/4" x 1/4" size flat iron of approved design including painting 3 coats etc. complete (weight not to be less than 3.7 lbs /sft of finished grill) item # 26 , pg 76	68.00	Sft.	1,124.10	76,438.80
12		ALUMINUM WINDOWS /VENTILATORS				
	Vol-III, Part-I, Ch.#18 Items #84, Page-63	Supplying & fixing in position Aluminum channels framing for sliding windows & ventilators of made with 5 mm thick tinted glass glazing (Belgium) & Aluminum fly screen l/c handles stoppers & locking arrangement etc. Complete. (a) Deluxe model	80.00	Sft.	2,386.73	190,938.40

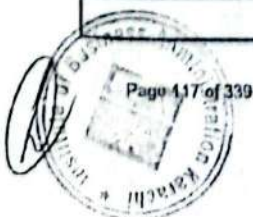


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13		PAINT				
	Vol-III, Part-I, Ch.#9 Items #24(c), Page-53	i. CEILING DESTEMPER Distempering three coats page	1208.00	Sft.	17.23	20,813.84
	Vol-III, Part-I, Ch.#9 Items #36(A), Page-54	ii. INTERNAL WALL PAINTING Preparing the surface and painting with matt finish i/c rubbing the surface with Bathy (silicon carbide rubbing brick) filling the voids with zink /chalk / plaster of paris mixture, applying first coat premix, making the surface smooth and then painting 3 coats with matt finish of approved make etc: complete.(new surface)	3209.00	Sft.	49.27	158,107.43
	Vol-III, Part-I, Ch.#9 Items #38(A), Page-54	iii. EXTERNAL WALL PAINTING Preparing the surface and painting with weather coat i/c rubbing the surface with rubbing brick / sand Paper, filling the voids with chalk/ plaster of Paris and then painting with weather coat of approved make.	3457.00	Sft.	39.38	136,136.66
	Vol-III, Part-I, Ch.#11 Items #5d), Page-63	iv. PAINT OVER IRON SURFACE Preparing surface and painting guard bars gates, Iron bars grating, railings (including standard braces etc) and similar open work.				
		i. Priming Coat	68.00	Sft.	9.76	663.68
		ii. Each Subsequent Coat	68.00	Sft.	7.12	484.16
TOTAL OF SCHEDULE ITEMS					Rs.	5,304,975.08
Premium / Rebate on Schedule Items: () % (-28 %)					Rs.	1485,393
TOTAL OF SCHEDULE ITEMS WITH PREMIUM / REBATE					Rs.	3,819,582.06
(B) NON-SCHEDULE ITEMS						
14	N S	P.C.C (2000 psi) Providing & laying P.C.C. concrete, having minimum compressive cylindrical strength 28 days of 2000 psi, graded coarse and fine aggregate conforming to ASTM specifications at over membrane & roof slab including leveling, compacting & curing, including form work if any, complete as per drawing and specification or as directed by the Engineer. Screed at roof	269	ct.	350	94,150
TOTAL OF NON-SCHEDULE ITEMS					Rs.	94,150
TOTAL OF (A + B)					Rs.	3,913,732



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CHECK POST- MEP WORKS

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(A) SCHEDULE ITEMS						
1	Vol-III, Part-I, Ch.#1 Items #5, Page-204	SANITARY FITTING Providing and fixing European type white glazed earthen ware wash down W.C. pan complete with & including the cost of white / black plastic seat (Best quality) and lid with C.P. brass hinges best quality and buffers 3 gallons white glazed earthen ware low level flushing cistern with siphon fitting 1½ " dia white porcelain enameled flush bend dia and making requisite number of holes in walls , plinth & floor for pipe connection & making good in cement concrete 1:2:4 (Foreign quality) . (ICL or equivalent).	1	P.No	42,354.59	42,354.59
2	Vol-III, Part-I, Ch.#1 Items #3(b), Page-204	Providing and fixing Orusa type white glazed earthen ware W.C. pan with front flush inlet & complete with including the cost of flushing cistern with internal fitting and flush pipe with bend and making requisite number of holes in walls, plinth & floor for pipe connection & making good in cement concrete 1:2:4.	3	P.No	11,282.90	33,848.70
3	Vol-III, Part-I, Ch.#6 Items #19-A), Page-198	Supplying & fixing C.P muslim shower with double bib cock and ring pipe etc. complete	3	P.No	5,475.60	16,426.80
4	Vol-III, Part-I, Ch.#1 Items #8, Page-205	Providing and fixing 24x18" lavatory basin in white glazed earthen ware complete with & including 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 ½" dia chrome plated pillar taps, 1-1/2" rubber plug & chrome plated brass chain 1-1/4" dia malleable iron or C.P. brass traps malleable iron or brass unions and making requisite number of holes in walls, plinth & floor for pipe connection & making good in cement concrete 1:2:4 (Standard Pattern) (Karam Ceramics).	3	P.No	9,495.14	28,485.42
5	Vol-III, Part-I, Ch.#1 Items #9, Page-205	Add extra for providing & fixing of earth ware pedestal white or coloured Glazed (Standard pattern)	3	P.No	3,276.00	9,828.00
6	Vol-III, Part-I, Ch.#6 Items #3(a), Page-215	Providing & Fixing C.P Shower brass shower rose with or 3/3" inlet (with detachable lid) 4" dia (Standard quality)	3	Each	1,333.80	4,001.40
7	Vol-III, Part-I, Ch.#2 Items #O(a), Page-134	Chamber for the required diameter of circular sewer and 3'-6" (1067 mm) depth with walls of B.B in cement sand mortar 1:3 cement plastered 1:3, 1/2" thick, inside of walls and 1" (25 mm) thick over benching and channel i/c fixing C.I manhole cover with frame of clear opening 1-1/2' x1- 1/2' (457x457 mm) of 1.75 cwt. (88.9 kg) embeded in plain C.C1:2:4 and fixing 1" (25 mm) dia M.S.steps 6" (150 mm) wide projecting 4" (102 mm) from the face of wall at 12" (305 mm) C/C duly painted etc. Complete as per standard specification and drawing a 4" to 12" dia 2'x2'x3'-6"	3	Each	55,584.18	166,752.54
8	Vol-III, Part-I, Ch.#16 Items #1(a), Page-209	Manufacturing & Supplying of R.C.C manhole cover cast in 1:2:4 cement concrete ratio 3" inch deep at center reinforced with 1/2" dia tor steel bars with 4" c/c welded to a 3/16" thick 2 inch wide M.S Plate and two hooks of 3/8" inch dia tor bars including compacting, curing and transportation within 10 miles. (a) 21" inch dia	3	Each	3,238.79	9,716.37



**REHABILITATION OF EXISTING METALLED ROAD
FROM MASKAN GATE TO PHARMACY INTERSECTION
AT KARACHI UNIVERSITY**

**BILL OF QUANTITIES
CHECK POST- MEP WORKS**

S.No.	CSR-24 Govt. of Sindh	Description	Qty.	Unit	Rate (PKR.)	Amount (PKR.)
9	Vol-III, Part-I, Ch.#7Items #22(a), Page-42	Cast iron rain water down pipe fixed in position, excluding heads and shoes, but including painting and clamps, etc. (a) 4" (100mm) dia Cast iron down pipe.	50	P.Rft	475.37	23,768.50
10	Vol-III, Part-I, Ch.#7Items #24, Page-42	Shoes bends or offsets for cast iron rain water down pipe including fixing and painting.	4	P.No	688.86	2,755.44
11	Vol-III, Part-I, Ch.#2Items #4(d), Page-111	Providing, Laying uPVC pipes of Class 'B' fixing in trench/cutting, fitting and jointing with solvent cement /c testing with water to a head of 61 meter or 200 ft. d) 150 mm (6" dia)	15	R.ft	764.46	11,466.90
12	Vol-III, Part-I, Ch.#6Items #4(B), Page-197	Providing and fixing full way gun metal valves with wheels, threaded or flanged end with rubber washer e 1-1/2" dia (Standard Pattern) f 2" dia (Standard Pattern)	1 1	Each Each	1,614.60 1,965.60	1,614.60 1,965.60
13	Vol-III, Part-I, Ch.#8Items #1(A), Page-201	Supplying & fixing Fiber glass tank of approved quality and design and wall thickness as specified including cost of nuts, bolts and fixing in plat form of cement concrete 1:3:6 and making connection for inlet, outlet and over flow pipes etc. complete. (A) 250 gallons tank with wall thickness 3.5mm. Material	1	Each	37,698.31	37,698.31
14	Vol-III, Part-I, Ch.#6Items #1(b), Page-197	Supplying & Fixing in Position C.P bib. 1/2" dia C.P Bib Cock (standard pattern)	3	Each	1,134.90	3,404.70
15	Vol-III, Part-I, Ch.#11Items #19(C), Page-188	Providing and fixing steel sinks stainless local bt make complete with cast iron or wrought iron LUNA ALVH brackets 6 inches built into wall, 1 1/2" rubber plug and chrome plated brass chain 1 1/2" C.P. brass waste with 1-1/2" P.V.C. waste pipe & making requisite number of holes in walls, plinth & floor for pipe connection & making good in cement concrete 1:2:4. c Steel Sink stainless size 33"x18" local make (standard pattern)	1	P.No	10,215.27	10,215.27
TOTAL OF SCHEDULE ITEMS					Rs.	404,303.14
Premium / Rebate on Schedule Items: (-28 %)					Rs.	113,205
TOTAL OF SCHEDULE ITEMS WITH PREMIUM / REBATE					Rs.	291,098
(B) NON-SCHEDULE ITEMS						
16	B N.S	SANITARY DRAINAGE PPR cold and hot water pipes SDR 6(PN 20) conforming to DIN 8077 & DIN 8078 & fittings SDR 6 (PN20) conforming to DIN 16962. a) 20 mm (outer dia 25mm) b) 25 mm (outer dia 32 mm) c) 32 mm (outer dia 40 mm)	60 15 40	R.ft R.ft R.ft	210 280 350	12600 4200 14000
17	N.S	Galvanized steel cold water pipe & fittings conforming to BS-1387 (medium quality) of the following diameter running on roof wrapped in fibre glass wool insulation as specified. (ring expose on roof) a) 32 mm (1.25 inch) b) 50 mm (2 inch) c) 100 mm (4 inch)	100 15 15	R.ft R.ft R.ft	420 1050 1400	4200 15750 21000

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S.No.	CSR-24 Govt. of Sindh	Description	Qty.	Unit	Rate (PKR.)	Amount (PKR.)
18	N.S	uPVC pipe conforming to ASTM D-1785 schedule 40 & fittings conforming to D-2466 Schedule 40 for soil, waste and vent pipe of following diameters: a) 40 mm b) 50 mm c) 80 mm d) 100 mm uPVC floor traps of the following diameter as specified. a) 75 mm uPVC floor drains of the following diameter as specified. a) 75 mm UPVC floor cleanout of the following diameter with brass cover as specified. a) 100 mm b) 75 mm	5 25 25 30 3 3 1 1	R.ft R.ft R.ft R.ft No. No. No. No.	350 420 560 700 700 9800 11200 8400	1750 10500 14000 21000 2100 29400 11200 8400
19	N.S	FIRE FIGHTING Ref. Spec. S150, S220 & S180 Portable fire extinguisher of following types with hanging arrangement as specified.(NEFCOor Equivalent) a) Dry Chemical Powder Type (5 Kg) b) Carbon Dioxide type (5 Kg) c) Foam type (9 litre)	6 2 1	No. No. No.	17500 35000 42000	105000 70,000 42000
20	N.S	PUMPING MACHINERY Ref. Spec. S240 & S220 Potable water booster pumps of following flow and head level suitable at UGWT and OHWT, gate valves, check valves and all other accessories required for installation and operation Flow = 10 US GPM Head = 40 feet	1	No.	1050,000	1,050,000

TOTAL OF SANITARY

Rs.

1474900

ELECTRICAL WIRING & FIXTURES

BASIC ELECTRICAL MATERIAL & METHODS

Particular Notes:

- See pricing preambles / General Instructions.
- Separate back boxes shall be used for Emergency / UPS circuits for normal light / power wiring
- Wiring shall be done with appropriate color codes as per latest edition of IEEE wiring regulations
- Wiring Accessories shall be based on Clipsal C-Vivace series (white)

Providing and fixing of following point wiring with single core PVC insulated 450/750 volt grade copper conductors, including green/yellow CPC (cream color for clean / isolated earth) in appropriate size class B PVC conduit rigid / flexible, clipped to the surface, or concealed in structure or in already-laid trunking, including cutting, chasing, making good and all accessories, 10A gang switch, fan dimmer, 2 way switch, bell push, ceiling rose, sheet steel back-box with earth terminal, fan hook, connectors etc., 1.0mmsq 3-core flexible PVC/PVC cord upto fixture, etc., for;
DB / UPS-DB / LCP to switch / relay / dimmer (including wiring between switching units on same circuit) with 2x2.5mmsq conductors and 2.5mmsq CPC
Light / exhaust / fan point to switch with 2x1.5mmsq conductors and 1.5mmsq CPC

1

- 3 Nos. 10500 31500
- 26 Nos. 5600 145600



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S.No.	CSR-24 Govt. of Sindh	Description	Qty.	Unit	Rate (PKR)	Amount (PKR)
2		Providing and fixing of switch socket-outlet point wiring with single core PVC Insulated 450/750 volt grade copper conductors, including green/yellow CPC (cream color for clean / isolated earth) in appropriate size class B PVC conduit rigid / flexible, clipped to the surface, or concealed in structure or in already-laid trunking, including cutting, chasing, making good, sheet steel back-box with earth terminal, connectors etc., and all accessories, as follows: a. From DB to SA/13A Round Universal switch socket outlet point with 2x2.5mmsq conductors and 2.5mmsq CPC b. Same as (a) above but, point to point with 2x2.5mmsq conductors and 2.5mmsq CPC c. From DB to 13A flat pin (simplex / duplex) / switch socket outlet point with 2x4 mmsq conductors + 4 mmsq isolated earth. d. Same as item (c) but, point to point with 2x2.5mmsq conductors and 2.5mmsq CPC e. 5 / 13 /15A adjacent outlet with 2x2.5mmsq conductors + 2.5mmsq CPC (isolated earth with 13A sockets) f. DB to 15A round pin switch socket outlet point with 2x4mmsq conductors + 4mmsq CPC	4 14 6 4 6 1	Nos. Nos. Nos. Nos. Nos. No.	7000 5600 5600 5600 5600 5600	28000 78400 33600 22400 33600 5600
3		Providing and fixing of 20 amp Isolator wiring for AC / ventilation fans/ Water Heater, including wiring between Isolator and Indoor unit with single core PVC Insulated 450/750 volt grade copper conductors, including green/yellow CPC, in appropriate size class B PVC conduit rigid / flexible, clipped to the surface, or concealed in structure or in already-laid trunking, including cutting, chasing, making good, sheet steel back-box with earth terminal for isolator and all mounting accessories, as follows: a. From DB to 20A SPN isoator point with 2x4.0mmsq conductors and 4.0mmsq as CPC	2	Nos.	35000	70,000
4		Providing and fixing of wiring for UPS / Data Center Rack power, with PVC Insulated 450/750 volt grade copper conductors, including green/yellow CPC, in appropriate size class B PVC conduit rigid / flexible, clipped to the surface, or concealed in structure or in already-laid trunking, including cutting, chasing, making good, sheet steel back-box with earth terminal for isolator and all mounting accessories, as follows: a. From DB / CDB to UPS In/out Isoator / Industrial socket outlet point with 5Cx6.0mmsq conductors [avg len = xx ft]	2	Nos.	35000	Ref. Section 70,000 "Wiring"
		Total Cost of Electrical Material and Methods:			Rs.	578,700
1		WIRING & RACEWAY Particular Notes: a) See pricing preambles / General Instructions. Note: Cost of ceiling suspended conduits, pipes, cable tray etc. even if not explicitly stated shall be inclusive of threaded rods, nuts washer, steel base plate etc WIRING (LV) Supply, laying, connecting up and testing of non armoured / armoured cable 600/1000 V grade, in already laid raceway, including all fixing, jointing & termination accessories, designation labels at both ends etc., in the following sizes (Actual length of cable shall be measured at site by the contractor before placing the order with the manufacturer, however approximate length of cable are shown herewith) a. 4C x 16mmsq Cu/PVC/PVC [From Existing MDB to MDB-IBA-G]	65	Rft	2100	136500

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Tender # CW/15/24-25

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S.No.	CSR-24 Govt. of Sindh	Description	Qty	Unit	Rate (PKR)	Amount (PKR)
2		Supply, laying, connecting up and testing of PVC Insulated 450/750V grade cable, in already laid raceway including all fixing, jointing & termination accessories, designation labels at both ends etc., in the following sizes: (Actual length of cable shall be measured at site by the contractor before placing the order with the manufacturer, however approximate length of cable are shown herewith)				
		a. 3C x 6mmsq Cu/PVC/PVC (For UPS)	20	Rft	700	14000
		b. 1C x 16mmsq PVC (Earthing Cable)	65	Rft	700	45500
		c. 1C x 6mmsq PVC (Earthing Cable)	20	Rft	10500	210000
		d. 1C x 4mmsq PVC (Equipment Earthing)	30	Rft	700	21000
3		RACEWAY Supply, laying and installation of following PVC / GI / MS pipe to be recessed in walls / floors or clipped to surface, as required at site and as shown on the drawing including accessories steel pull wires, complete in all respects;				
		a. 60mmx60mm PVC channel (Adamjee Dura Duct or equivalent)	80	Rft	700	56000
		b. 38mm dia (class B)	30	Rft	560	16800
		c. 32mm dia (class B)	45	Rft	420	18900
		d. 25mm dia (class B)	10	Rft	280	2800
4		Providing and fixing underfloor RCC / block masonry Man hole / Hand Hole, including medium duty uPVC (or appropriate rust proof) cover with collar and all installation accessories etc complete in all respects [with 2" thick 1:3:6 CC base and 1:4 wall plaster-1/2"]				
		a. 300x300x450mm block masonry hand hole with 5" horizontal block on cc base and 5" vertical blocks for walls	3	Nos.	17500	52500
		Total Cost of Wiring and Raceways:			Rs.	574,000
		WIRING ACCESSORIES <u>Particular Notes:</u> a) See pricing preambles / General Instructions. b) Cost of Industrial sockets shall be of complete set (male + female) c) Wiring Accessories shall be based on Clipsal C-Vivace series (white) Providing and fixing following rating 250/500 volt switch socket outlet and all mounting accessories				
1		a. 3 pin, 5 Amp, 250 volt universal switch socket outlet	20	Nos.	700	14000
		b. 3 pin, 13 Amp, flat pin, 250 volt switch socket outlet	16	Nos.	700	11200
		c. 3 pin, 15 Amp, 250 volt switch socket outlet	2	Nos.	2100	4200
		d. 32 Amp, SPN+E Industrial socket outlet (surface, flanged type) male - female set	2	Nos.	3500	7000
2		Providing and fixing following rating SP&N 250 / TP&N 500 volts weather proof load break switches / Isolator, including whether proof sheet steel enclosure and all mounting accessories				
		a. 20A, 250V, double pole isolator switch with neon indication (AC, air curtain, water heater, etc.)	1	No.	24500	24500
3		Providing and fixing following type 250 volts ceiling suspended, false ceiling mounted fan / exhaust fan, including all mounting accessories				
		a. 56" dia ceiling suspended fan with 12" long rod	3	Nos.	17500	52500
		b. 18" dia wall bracket fan	3	Nos.	17500	52500
		c. 8" plastic exhaust fan	3	Nos.	10500	31500
4		Providing and fixing following type pull boxes in 16swg sheet steel with cover and knockouts for cable entry, including all mounting accessories etc. complete in all respects				
		a. 12"x12" floor mount, sheet steel (Epoxy powder painted GI) pull box	3	Nos.	35000	105000
		b. 12"x12" ceiling mount PVC pull box	3	Nos.	35000	105000



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Tender # CWI/15/24-25

S.No.	CSR-24 Govt. of Sindh	Description	Qty.	Unit	Rate (PKR.)	Amount (PKR.)
	6	Providing and fixing 16SWG (powder painted) sheet steel furniture boxes (technology box) with cover and provision for outlets (A, B, C types etc.) / floor boxes, without socket outlets but including all mounting accessories etc. complete in all respects.				
		a. Furniture outlet box consisting of 1x 13A, 3 Pin Duplex switch socket outlet 1x 5A, 3 Pin switch socket outlet 1x dual port RJ45 outlet	3	Nos.	17500	52500
		Total Cost of Wiring Accessories			Rs.	459,900
		LIGHT FIXTURES <u>Particular Notes:</u> a) See pricing preambles / General Instructions. b) Fluorescent fixtures should be compatible with and fit exactly into the false ceiling c) All lamps shall be warm white (4000K) unless otherwise stated or instructed by Architect / Consultant d) Ballast shall be of electronic type as indicated e) All light fixtures including emergency and exit lights shall be LED type f) All light fixtures shall be rated at minimum 35000 operating hours Providing and Fixing of following light fixtures as per fixture schedule or equivalent light fixture as approved by consultant installed on surface or on false ceiling or pendant mounted, with all accessories such as lamps, lamp holders, ballast, starters, capacitors, LED drivers as applicable, etc. and all relevant installation material as approved by the Engineer, complete in all respects				
	1	Fixture type "A": Surface / Recessed type LED Downlight fixture including 12W LED lamp (warm white)	28	Nos.	5600	156,800
		Fixture type "C": Surface mounting Flood Light fixture including 100W LED Lamp	4	Nos.	3500	14,000
		Total Cost of Light Fixtures:			Rs.	170,800
		STRUCTURED CABLING SYSTEM <u>Particular Notes:</u> a) See pricing preambles / General Instructions. b) All components, materials and equipment shall meet or exceed the relevant Category requirements of EIA/TIA Standard 568A/B c) Contractor shall coordinate and follow recommendations of Voice / Data equipment supplier				
		DATA CABLING SYSTEM Providing and fixing of following type of wiring with 4 pair CAT6 UTP cable in appropriate size class B PVC conduit rigid / flexible, clipped to the surface, or concealed in structure or in already-laid trunking, including cutting, chasing, making good, including termination at both ends, sheet steel back-box etc. and all accessories etc. complete in all respects as follows:				
	1	Cat6 LS0H UTP cable (plenum rated) from Data Patch Panel to Cat6 RJ45 outlet (23 AWG)	27	Nos.	10500	283,500
	2	Supply and Installation of (imported, Velocity, Contch, Toten, Taiwan etc.) 19" 9U Data Rack (600mmx800mm) with mesh front door including 1 Fan tray, 2 fixed and 1 sliding tray and all mounting accessories etc. (50% of the cabinet space shall be kept empty to install active networking hardware).	3	Nos.	17500	52,500

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S.No.	CSR-24 Govt. of Sindh	Description	Qty.	Unit	Rate (PKR.)	Amount (PKR.)
3		Supply, installation and connecting up of following type Cat6 multiport (RJ45) jack patch panels including sleeve type labelling and all mounting accessories etc. complete in all respects				
		a. 24 Port Patch Panel, including rear cable mangement	3	Nos.	10500	31500
		b. Front Cable Management	3	Nos.	17500	52500
4		Providing and fixing following type shuttered communication outlet including sleeve type labelling, identification tags and all accessories etc. complete in all respects.				
		a. Single Port, Cat6 RJ45 outlet	11	Nos.	10500	115500
		b. Dual Port, Cat6 RJ45 outlet	13	Nos.	10500	136500
5		Supply, installation and connecting up of Cat6 patch cords with RJ45/RJ45 plugs as follows;				
		a. 1.0 m long	11	Nos.	3500	38500
		b. 2.0 m long	13	Nos.	5600	72800
6		Supply, installation and connecting up of Rack mount 3 way power extension strip.	3	Nos.	5600	16800
7		Testing and Commissioning, including labelling of Data / Voice network and providing owner/consultant witnessed fluke test report (two copies, bounded) etc. complete in all respects.	1	Job	70000	70000
		VOICE CABLING SYSTEM				
8		Providing and fixing of following type of wiring in already laid raceway including termination at both ends, sheet steel back-box, and all accessories etc. complete in all respects as follows;				
		5 pair Cat5e cable from FTCL Cabinet to DeMarc block / TJB				
		a. [Length mentioned is approximate only. Exact length to be confirmed as per site]	35	Rft	700	24500
		b. 5 pair Cat5e cable from PABX - TJB	20	Rft	700	14000
9		Providing and fixing of following type of TJB / Main Cross Connect / MDF / IDF including wheather resistant sheet steel / PVC back-box, and all accessories etc. complete in all respects as follows;				
		a. TJB 50 pair (110 type IDC wiring blocks) wall mounted (PVC enclosure)	1	No.	24500	24500
		b. 05 pair building entrance protector (gas tube based) installed in TJB Guard (Mandatory requirement)	1	No.	17500	17500
10		Providing and connecting up of factory made patch cords (non-plenum) as follows;				
		a. 2 pair Cat5e 110-110 type plugs, 0.6m	2	Nos.	17500	35000
		b. 4 pair Cat5e 110-RJ45 type	2	Nos.	17500	35000
		FIBER OPTIC / INFRASTRUCTURE NETWORK				
11		Providing, laying and connecting up of following type of fiber optic cable in already laid raceway including termination at both ends, and all accessories etc. complete in all respects as follows;				
		a. 6 strand 9/125um OS-1 semi armoured single mode fiber optic cable	130	Rft	700	91000
14		Supply, installation and connecting up of following type multiport fiber optic patch panels including labelling and all mounting accessories etc. complete in all respects				
		a. 12 Port FO Patch Panel, including mangement tray	3	Nos.	10500	31500
15		Providing, fixing and connecting up of following type fiber optic connectors with pigtails, including splicing labelling and all mounting accessories etc. complete in all respects				
		a. Singlernode 1 mtr. SC Pigtail	3	Nos.	3500	10500



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16		Supply and connecting up of following type of fiber optic patch cords				
		a. Simplex SC - LC (or as applicable) 1 mtr. Fiber Patch Cord	3	Nos.	3500	10,500
17		Testing and Commissioning, including labelling of entire fiber optic network and providing owner/consultant witnessed OTDR test report (two copies, bounded) etc. complete in all respects.	1	Job	35000	35,000
		Total Cost of Structure Cabling:			Rs.	1,199,100
		EARTHING SYSTEM				
		Particular Notes: a) See pricing preambles / General Instructions. b) All earth pits shall be individually tested for value $\leq 1 \Omega$ hm.				
1		Providing, fixing and commissioning of earth test point at various locations, including isolators, nuts bolts washers and all mounting accessories with green colored heat shrink sleeves, as follows;				
		a. Providing and fixing of tinned copper earth bar 12" long, 1" wide and 1/2" thick in Electric closet for system / genset earthing etc.	3	Nos.	10,500	31,500
		b. Providing and fixing of tinned copper earth bar 8" long, 1" wide and 1/2" thick in Server and UPS Rooms for rack earthing.	3	Nos.	17,500	52,500
2		Equipotential bonding of all DB's racks, UPS, etc with 1C x 4 sqmm Cu/PVC cable connected to nearest earth test point including lugs, washers bolts etc. complete in all respects. Cable already covered in other section. Only services to be considered	1	Job	70,000	70,000
		Total Cost of Earthing System:			Rs.	154,000
		UPS / STABILIZED POWER SYSTEM				
		Particular Notes: a) See pricing preambles / General Instructions.				
1		Supply, installation and commissioning of following type / size of Uninterruptible Power Supply (UPS) system, with minimum backup time of 15 minutes with maintenance free lead acid batteries, including all mounting accessories etc. complete in all respects				
		a. 5kVA 1"ln/1"out floor mount UPS (Eaton, APC or Equivalent)	1	No.	210,000	210,000
		Total Cost of Miscellaneous Items			Rs.	210,000
		SWITCHGEAR				
		Particular Notes: a) See pricing preambles / General Instructions. b) Short-circuit ratings to IEC 947-2, Icu/Ics at 400V c) All components (ELCBs, Contactors etc.) are to be provided with backup protection d) DBs of Incoming size 100A or less may be provided with cascading e) Vendor shall be responsible for getting the DB's verified by consultant / 3rd party prior to dispatch to site. Cost of factory inspection including air travel, lodging, per diem charges shall be borne by the contractor				

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1		Supply, installing, testing & commissioning of following distribution boards (made of 16 SWG sheet steel) with hinged doors and locks, including bus bars of tin plated copper conductor for phases, neutral and ground, of short circuit rating as mentioned below and all TP MCCBs shall also have minimum ultimate interrupting capacities (Icu) as mentioned in the drawings or more (All circuit breakers will be having co-ordination and selectivity properties for this system) , with proper brass glands for incoming cables. All DBs are Flush / surface Mounted type and of suitable dimensions to fit in the location / space shown on drawings. The contractor shall take the dimensions of the site, prepare the shop drawing of DB / Panel and approval from the Consultant before manufacturing) and with following configuration (Maximum current density of each Phase, Neutral and Earth bus bar shall not be more than 1.5 Amp per sq. mm & arrangement / connections of bus bar will be as required. All of the MCCBs & MCCBs will be having thermal as well as magnetic short circuit releases).				
		a. MDB-IBA-G (Wall Mounted)	1	No.	140,000	140,000
		b. DB-IBA-G-01 (Wall Mounted)	1	No.	140,000	140,000
		c. DB-IBA-G-01 (Wall Mounted)	1	No.	140,000	140,000
		Total Cost of Switchgear:			Rs.	420,000
1		CCTV SYSTEM (IP) <u>Particular Notes:</u> a) See pricing preambles / General Instructions. b) Video retention to be min 45 day at 25fps, HDD capacity to be configured accordingly Wiring for CCTV System from camera to recording equipment in Server / Security room with following / manufacturers recommended cable in appropriate size PVC conduit including all accessories etc. complete in all respects. From IP camera to appropriate floor patch panel in IT Rack (MDF / IDF) with Cat 6 UTP LSZH cable (23 AWG)				
		Refixing and connecting up of following CCTV Cameras including mounting and all accessories, complete in all respects.	16	Nos.	10500	168,000
		4 MP (smoked dome type) IP Camera [cameras to be project series and not commercial series]	16	Nos.	6300	100,800
		Refixing and connecting up of NVR (raid capable) 16CH with recording of atleast 30 days for the above mentioned cameras also having frame rate and other specifications as mentioned on the drawing or instructed by the consultant, including system configuration and licenses for 3 concurrent sessions. (2x8TB HDD or higher as per recording requirement)	1	No.	80,500	80,500
		Providing and fixing of 24 port POE switch, including system configuration etc. complete in all respects	1	No.	24,500	24,500
		Providing, fixing and connecting up of 32" LCD Monitor in Security Room	1	No.	59,500	59,500
		Testing and Commissioning of CCTV system including training of owner's personnel in the operation and maintenance of the equipment (All operation and maintenance manuals shall be submitted in triplicate).	1	Job	70,000	70,000
		Total Cost of IP C.C.T.V. System:			Rs.	503,200
TOTAL OF ELECTRICAL					Rs.	4,209,800
TOTAL OF NON-SCHEDULE ITEMS					Rs.	5,684,700
TOTAL OF (A + B)					Rs.	5,975,798



**REHABILITATION OF EXISTING METALLED ROAD
FROM MASKAN GATE TO PHARMACY INTERSECTION
AT KARACHI UNIVERSITY**

**BILL OF QUANTITIES
UNDER GROUND WATER TANK**

S.No.	CSR-24 Govt. of Sindh	Description	Qty	Unit	Rate (PKR.)	Amount (PKR.)
(A) SCHEDULE ITEMS						
1	Vol-III, Part-I, Ch.#1 Items #5, Page-15	EXCAVATION FOR FOUNDATION Earth work excavation in irrigation channels, drains etc, dressed to designed section grades and profiles excavated material disposed off and dressed within 50 ft. (15 metre) lead a. Ordinary Soil b. Hard Soil	630.00 630.00	Cft. Cft.	7.92 10.14	4,989.60 6,388.20
2	Vol-III, Part-I, Ch.#4 Items #5, Page-24-25	LEAN CONCRETE Cement concrete plain including placing compacting, finishing and curing complete (including screining and washing at stone aggregate without shuttering. i. Ratio: 1:3 :6 ii. Ratio: 1: 1 1/2 :3	31.00 15.00	Cft. Cft.	388.67 502.17	12,048.77 7,532.55
3	Vol-III, Part-I, Ch.#4 Items #6, Page-25	REINFORCED CEMENT CONCRETE Reinforced cement concrete work including all labour and material except the cost of steel reinforcement and its labour for bending and binding which will be paid separately. This rate also includes all kinds of forms moulds lifting shuttering curing rendering and finishing the exposed surface (including screining and washing of shingle) a. Bottom Slab(28 Mpa) b. Wall(28 Mpa) c. Top Slab(28 Mpa)	105.00 255.00 80	Cft. Cft. Cft.	717.59 717.59 717.59	75,346.95 182,985.45 57,407.20
4	Vol-III, Part-I, Ch.#9 Items #11(c), Page-52	PLASTER Cement plaster 1:4 upto 12' height. (c) 3/4" thick	340	Sft	53.82	18,298.80
5	Vol-III, Part-I, Ch.#11 Items #9, Page-63	Bitumen coating Bitumen coating to plastered or cement concrete surface.	1000	Sft	21.83	21,830.00
6	Vol-III, Part-I, Ch.#4 Items #8, Page-26	STEEL REINFORCEMENT Fabrication of deformed steel reinforcement for cement concrete including cutting, bending, laying in position, making joints and fastenings including cost of binding wire (also includes removal of rust from bars.) a. Deformed bar i. Grade-60	19.68	Cwt	18934.02	372,621.51
7	Vol-III, Part-I, Ch.#4 Items #7(i), Page-25	Water Proofing P/Applying Hi Bond (Sealer) water proofing polymer Modified comontitions slurries (WPMCS) to be used as water proofing, anticorrosion, weater resistance or curring membranc for fresh concrete having thickness upto 2mm in two coats upto 20' height testured or trowel finish grey or coloured l/c preparing the surface for application aas directed by Engineer Incharge.	405.00	Sft	56.71	22,967.55
TOTAL OF SCHEDULE ITEMS					Rs.	782,416.58
Premium / Rebate on Schedule Items: (-) (-28%)					Rs.	219,076.64
TOTAL OF SCHEDULE ITEMS WITH PREMIUM / REBATE					Rs.	563,339.94



**REHABILITATION OF EXISTING METALLED ROAD
FROM MASKAN GATE TO PHARMACY INTERSECTION
AT KARACHI UNIVERSITY**

Tender # CW/15/24-25

BILL OF QUANTITIES

UNDER GROUND WATER TANK

S.No.	CSR-24 Govt. of Sindh	Description	Qty.	Unit	Rate (PKR)	Amount (PKR)
(B) NON-SCHEDULE ITEMS						
8	N.S	M.S RUNGS Providing fabricating and fixing of 20mm (3/4") dia G.I ladder/rungs in U.G water tank as shown in drawing painting with rust proof paint etc, complete in all respect as per specifications & relevant approved drawings, all works to the entire satisfaction and as directed by the Engineer	10	Nos.	5600	56,000
9	N.S	Swellable Bar Providing and fixing for construction joint in concrete, provide swellable bar approved as wall thickness, providing key in concrete and cost of the material and labor etc. complete in all respects as per standard specification, drawing and entire satisfaction of the Engineer.	40	Rft	3500	140,000
TOTAL OF NON-SCHEDULE ITEMS					Rs.	196,000
TOTAL OF (A + B)					Rs.	759,340



**REHABILITATION OF EXISTING METALLED ROAD
FROM MASKAN GATE TO PHARMACY INTERSECTION
AT KARACHI UNIVERSITY**

BILL OF QUANTITIES

SEPTIC TANK & SOAK PIT

S.No.	CSR-24 Govt. of Sindh	Description	Qty.	Unit	Rate (PKR.)	Amount (PKR.)
(A) SCHEDULE ITEMS						
1	Vol-III, Part-I, Ch.#1 Items #5, Page-15	EXCAVATION FOR FOUNDATION Earth work excavation in irrigation channels, drains etc, dressed to designed section grades and profiles excavated material disposed off and dressed within 50 ft. (15 metre) lead				
	a.	Ordinary Soil	1034.25	Cft.	7.92	8,191.26
	b.	Hard Soil	1034.25	Cft.	10.14	10,487.30
2		Stone Filling				
		Dry rammed brick or stone ballast 1 1/2" to 2" gauge	440	Cft.	104.97	46,186.80
3	Vol-III, Part-I, Ch.#4 Items #2, Page-24	Lean Concret Cement concrete plain including placing compacting, finishing and curing complete (including screining and washing at stone aggregate without shuttering.				
	i.	Ratio. 1:3 :6	42.00	Cft.	388.67	16,324.14
	ii.	Ratio. 1: 1 1/2 :3	15.00	Cft.	502.17	7,532.55
4	Vol-III, Part-I, Ch.#4 Items #6, Page-25	REINFORCED CEMENT CONCRETE Reinforced cement concrete work including all labour and material except the cost of steel reinforcement and its labour for bending and binding which will be paid separately. This rate also includes all kinds of forms moulds lifting shuttering curing rendering and finishing the exposed surface (including screening and washing of shingle)				
	a	Bottom Slab	105.00	Cft.	717.59	75,346.95
	b	Wall	255.00	Cft.	717.59	182,985.45
	c	Top Slab	94.67	Cft.	717.59	67,931.85
5	Vol-III, Part-I, Ch.#9 Items #11(c), Page-52	PLASTER Cement plaster 1:4 upto 12' height. (c) 3/4" thick	340	Sft	53.82	18,298.80
6	Vol-III, Part-I, Ch.#11 Items #9, Page-63	Bitumen coating Bitumen coating to plastered or cement concrete surface.	1000	Sft	21.83	21,830.00
7	Vol-III, Part-I, Ch.#4 Items #8, Page-26	STEEL REINFORCEMENT Fabrication of deformed steel reinforcement for cement concrete including cutting, bending, laying in position, making joints and fastenings including cost of binding wire (also includes removal of rust from bars.)				
	a.	Deformed bar				
	i.	Grade-60	19.69	Cwt	18934.02	372,716.93
8	Vol-III, Part-I, Ch.#4 Items #7(i), Page-25	Water Proffing P/Applying Hi Bond (Sealer) water proofing polymer Modified comontitions slurries (WPMCS) to be used as water proofing, anticorrosion, weater resistance or curring membranc for fresh concrete having thickness upto 2mm in two coats upto 20" height testured or trowel finish grey or coloured l/c preparing the surface for application aas directed by Engineer Inchare.	405.00	Sft	56.71	22,967.55
TOTAL OF SCHEDULE ITEMS					Rs.	850,799.58
Premium / Rebate on Schedule Items					Rs.	238.224
TOTAL OF SCHEDULE ITEMS WITH PREMIUM / REBATE					Rs.	851,037.80



**REHABILITATION OF EXISTING METALLED ROAD
FROM MASKAN GATE TO PHARMACY INTERSECTION
AT KARACHI UNIVERSITY**

Tender # CW/15/2A-25

BILL OF QUANTITIES

SEPTIC TANK & SOAK PIT

S.No.	CSR-24 Govt. of Sindh	Description	Qty.	Unit	Rate (PKR.)	Amount (PKR.)
(B) NON-SCHEDULE ITEMS						
9	N.S	M.S RUNGS Providing fabricating and fixing of 20mm (3/4") dia G.I ladder/rungs in U.G water tank as shown in drawing painting with rust proof paint etc. complete in all respect as per specifications & relevant approved drawings, all works to the entire satisfaction and as directed by the Engineer.	10	Nos.	5600	56,000
10	N.S	Swellable Bar Providing and fixing for construction joint in concrete, provide swellable bar approved as wall thickness, providing key in concrete and cost of the material and labor etc. complete in all respects as per standard specification, drawing and entire satisfaction of the Engineer.	40	Rft	3500	140,000
11	N.S	BLOCK MASONARY Providing and laying 1:3:6 Cement concrete solid Block masonry wall above 6" in thickness set with open joints	770.00	Cft.	350	269,500
TOTAL OF NON-SCHEDULE ITEMS					Rs.	465,500
TOTAL OF (A + B)					Rs.	1,078,075.70



Gross Total Amount for this Project	95,154,669
Add 15 % SRB ON Gross Total Amount	14,273,200
Grand Total Amount Including SRB	109,427,870

Grand Total Amount in Words:

Rupees: One Hundred Nine Million Four hundred Twenty Seven
Thousand Eight hundred & Seventy Rupees only

