



**ESTABLISHMENT OF SBK WOMEN'S UNIVERSITY SUB-CAMPUS AT PISHIN
CONSTRUCTION OF EXTERNAL DEVELOPMENT
PACKAGE - 04**



**BILL OF QUANTITIES
(VOL-III)**

OCTOBER, 2021



GRAND SUMMARY OF COST

**ESTABLISHMENT OF SBK WOMEN'S UNIVERSITY SUB CAMPUS PISHIN
BALOCHISTAN**

EXTERNAL DEVELOPMENT WORKS (PACKAGE-4)

BILL OF QUANTITIES

S/N	DESCRIPTION	AMOUNT (Rs.)
A	SCHEDULED ITEMS	
1	• ROAD WORK	65,770,540
2	• WATER DISTRIBUTION SYSTEM	6,905,728
3	• SEWERAGE SYSTEM	13,227,830
4	• 0.5 CUSEC TUBEWELL (1-Nos.)	5,462,699
5	• EXTERNAL ELECTRICAL WORK	21,896,043
6	• BOUNDARY WALL, MAIN GATE, RECEPTION OFFICE & SECURITY OFFICE, SECURITY HUTS	83,149,271
	SUB TOTAL (A) SCHEDULE ITEMS	196,412,109
	%AGE ABOVE / BELLOW ON CSR 2018 BALOCHISTAN :	
	NET TOTAL (A) SCHEDULED ITEMS:	
B	NON-SCHEDULED ITEMS	
1	• ROAD WORK	
2	• WATER DISTRIBUTION SYSTEM	
3	• SEWERAGE SYSTEM	
4	• 0.5 CUSEC TUBEWELL (1-Nos.)	
5	• EXTERNAL ELECTRICAL WORK	
6	• ELECTRICAL WORK SECURITY HUTS	
	• ELECTRICAL WORK SECURITY OFFICE	
	NET TOTAL (B) NON SCHEDULED ITEMS:	
	GRAND TOTAL (A+B) :	
	INCLUSION OF PREVAILING TAXES (BSTS) @ 15% :	
	FINAL CONTRACT AMOUNT:	
	IN WORDS :	

ESTABLISHMENT OF SBK WOMEN'S UNIVERSITY SUB CAMPUS PISHIN BALOCHISTAN

EXTERNAL DEVELOPMENT ROAD WORKS - PACKAGE 04

BILL OF QUANTITIES

GENERAL

All items of civil works described under title "Description" unless specifically indicated otherwise, shall be deemed to be read in terms of supply, storing, protecting, making, assembling, installing, applying, laying, fixing, testing, clearing etc. of the same inclusive of but not limited to all materials, labor, tools, plants equipment, appliances etc. as required for the completion and maintenance of the civil work as per drawings, specifications, and / or as directed by the Engineer in charge.

S. No	CRS(2018) Reference	Description of Works	Quantity	Unit	Rate (PKR)	Amount (PKR)
B1-01	SEC21-10a-p183	Preparation and compaction up to 95% modified AASHTO of natural ground up to a depth of 8" (20mm) in ordinary soil.	392,804.960	ft²	1.850	726,689.18
B1-02	SEC21-10b-p183	Clearing and grubbing (removal) of roots including scarifying natural ground up to 8" (20mm) depth and disposal of roots.	392,804.960	ft²	1.350	530,286.70
B1-03	SEC21-11-p183	Preparation of subgrade over top of compacted embankment to at least 95% modified AASHTO maximum dry density with required dressing including cutting to required grade, camber and side slopes and disposal of surplus material within a lead of 90m	129,097.896	ft³	4.350	561,575.85
B1-04	SEC21-9-1-P183	Compaction of earthen embankments to full depth and width below sub-grade level by mechanical means in layers not exceeding 8" (200mm) in depth at optimum moisture content including watering and mixing by mechanical means. The sub-grade embankments shall be compacted to at least 95% modified AASHTO maximum dry density for their full depth and width.	301,228.424	ft³	5.900	1,777,247.70
B1-05	SEC3-8b-p25	Earthwork excavation in open cutting from 5ft. to 10 ft (1.5m to 3 m) depth for storm water channels, drains in open area, roads, streets lanes and shoring to protect existing works, shuttering and timbering the trenches dressed to designed level and dimension, trimming from trenches, backfilling and disposal of surplus excavated material up to 100 ft (30 m) including dressing,	150,614.212	ft³	7.250	1,091,953.04
B1-06	SEC3-4b-p23	Borrow pit excavation depth up to 10 ft. (3 m) undressed lead up to 100 ft. (30m) B) Ordinary soil	-	ft³	6.450	-
B1-07	SEC3-8D-p25	Earthwork excavation in open cutting from 5ft. to 10 ft (1.5m to 3 m) depth for storm water channels, drains in open area, roads, streets lanes and shoring to protect existing works, shuttering and timbering the trenches dressed to designed level and dimension, trimming from trenches, backfilling and disposal of surplus excavated material up to 100 ft (30 m) including dressing, b) shingle or gravel	150,614.212	ft³	10.750	1,619,102.78
S. No	CSR (2018) Reference	Description of Works	Quantity	Unit	Rate (PKR)	Amount (PKR)
B2-01	SEC21-15c-p18	Providing and laying Granular sub base using Crushed Stone Aggregate of approved thickness to required grade and camber including watering compacting with mechanical means and with all lead and lift. (compacted thickness to be measured) (including royalty of Quarry).	109,909.847	ft³	44.200	4,858,015.22
B2-02	SEC1-p1	Subsequent carriage of gravel and crushed stone aggregate. (Lead 100 Km)	109,909.847	ft³	39.039	4,290,743.03
B2-03	SEC21-17-1-p18	Providing and laying graded aggregate base course of crushed stone of approved quality, including placing, mixing, spreading, watering and compacting base course to required depth, camber and grade to achieve 100% max. modified AASHTO dry density conforming to AASHTO specifications T -180, with mechanical means and with all lead and lift. (Carriage of crushed stone is included in the rate, within 5km of Project premises).	109,909.847	ft³	44.750	4,918,465.64
B2-04	SEC1-p1	Subsequent carriage of gravel and crushed stone aggregate. (Lead 100 Km)	109,909.847	ft³	49.614	5,453,039.66
S. No	CSR (2018) Reference	Description of Works	Quantity	Unit	Rate (PKR)	Amount (PKR)

ESTABLISHMENT OF SBK WOMEN'S UNIVERSITY SUB CAMPUS PISHIN BALOCHISTAN
EXTERNAL DEVELOPMENT ROAD WORKS - PACKAGE 04
BILL OF QUANTITIES

GENERAL

All items of civil works described under title "Description" unless specifically indicated otherwise, shall be deemed to be read in terms of supply, storing, protecting, making, assembling, installing, applying, laying, fixing, testing, clearing etc. of the same inclusive of but not limited to all materials, labor, tools, plants equipment, appliances etc. as required for the completion and maintenance of the civil work as per drawings, specifications, and / or as directed by the Engineer in charge.

S. No	CRS(2018) Reference	Description of Works	Quantity	Unit	Rate (PKR)	Amount (PKR)
B3-01	SEC21-23-1-p186	Providing and applying prime coat of liquid asphalt (cut back) of any approved grade using asphalt (cut back) including cleaning and brooming of road surface. (a) 1.07 kg. per sq.m.	215,163.160	ft²	21.050	4,529,184.52
B3=02	SEC21-32c-p18	Providing and laying hot-mix bituminous concrete in road pavement laid with mechanical paver and mixed in central mixing plant in required thickness and density, rolled hot with different types of rollers complete as per specifications and job-mix formula and design in single layer (c) 2" (50 mm) thick	215,163.160	ft²	122.600	26,379,003.42
S. No	CSR (2018) Reference	Description of Works	Quantity	Unit	Rate (PKR)	Amount (PKR)
B5-01	SEC21-60b-p19	Providing and laying road kerb of precast cement concrete 24"x6"x12" (600mm x150mm x300mm) using crushed aggregate, formwork and its removal, compacting and curing laid in cement. (ii) Road kerb of precast cement concrete 1:3:6 mortar 1:4 & cement plaster 1:4 neatly finished including cost of excavation, backfilling of excavated stuff & its disposal within 30m	27,204.540	ft	233.800	6,360,421.45
S. No	CSR (2018) Reference	Description of Works	Quantity	Unit	Rate (PKR)	Amount (PKR)
B6-02	SEC17-49-1-P1	Painting traffic lane 5"(125 mm) wide, with road marking enamel wide with reflective chlorinated rubber (CR) paint including glass	28,601.500	ft	93.520	2,674,812.28
		Total "A"(Schedule items) C/o to Summary of Cost:				65,770,540.45
B6-01	NS	Providing and fixing of "CAT EYES" on Roads complete in all respects as per approved drawing, specifications and directed by the Engineer Incharge.	5,440.908	No.		
		Total "B"(Non Schedule items) C/o to Summary of Cost:				

ESTABLISHMENT OF SBK WOMEN'S UNIVERSITY SUB CAMPUS PISHIN BALOCHISTAN

BILL OF QUANTITIES

EXTERNAL WORKS (WATER DISTRIBUTION SYSTEM "PACKAGE-4")

Item No.	REF. Nos CH/ITEM	Description of Items	Unit	Qty	Rate (Rs.)	Amount (Rs.)
		<u>Schedule Items</u>				
		<u>Water Supply System</u>				
1	3-70(a)/P-41	Excavation of trenches for water supply pipe lines upto 5 ft. (1.5m) depth from ground level, including trimming, dressing sides, levelling the beds of trenches to correct grade and cutting pits for joints, etc. complete in all respects including cost of back filling. i) Ordinary soil				
		90mm dia Hdpe	Cft	76,885.560	6.030	463,619.927
		110mm dia Hdpe	Cft	10,950.960	6.030	66,034.289
2	3-14(a)/P-27	Rehandling of earthwork a) Lead upto a single throw of Kassi, phaorah or shovel	Cft	52,701.912	2.100	110,674.015
3	3-24(a)/P-28	Manual (Maximum Area 250 Sft) Compaction of earthwork a) Mixing, moisturing earth to optimum moisture content in layers for compaction.	Cft	52,701.912	0.800	42,161.530
4	11-61-1/P-102	Supplying and filling sand under floor or plugging in wells with lead upto 800 ft (250m)	Cft	43,918.260	36.650	1,609,604.229
5	23-63(a)/P-205	Providing chambers 30" x 18" x 56" as per approved design for sluice valve 3" to 12" dia. with 18" dia. C.I. cover and frame weighing 88.9 Kg. fixed in 4" thick R.C.C. 1:2:4 slab with re-steel 5 lbs./cu.ft and 9" thick burnt brick masonry walls in 1:6 cement sand mortar, 6" thick cement concrete 1:3:6 in foundation, 1" thick concrete 1:2:4 flooring, 1/2" thick plaster in 1:3 cement sand mortar to all inner wall surfaces, including providing and fixing C.I. foot rest at every 12" beyond 30" depth including curing, excavation, back filling and disposal of surplus earth.	Each	25.000	25,202.000	630,050.000
6	27-31/P-240	Providing and fixing fire hydrants standard pattern 3" (75mm) dia. Inlet and 2.5" (65mm) dia screw outlet. BSS quality and weight, cost of Jointing material is included.	Each	4.000	858.510	3,434.040
7	27-32/P-240	Providing and fixing air valve 2.5" (65 mm) inner dia. of BSS quality and weight, cost of Jointing material is included. b) Double	Each	2.000	24,210.140	48,420.280
1	27-47	Providing, laying, cutting, jointing, testing and disinfecting PPRC pipes conforming to ISO 4427, PN-20, complete in all respects with specials and valves etc. including all fittings, connections and jointing material				
	IX	90mm dia	Rft	12,814.260	253.310	3,245,980.201
	X	110mm dia	Rft	1,825.160	375.720	685,749.115
		Total "A"(Schedule items) C/o to Summary of Cost:				6,905,727.625
		<u>Non Schedule Items</u>				
		<u>Water Supply System</u>				
2	NS	Providing and installing ball valves of following nominal dia, Scon/Kitz make or approved Equivalent, including jointing, fitting, painting, testing, complete in all respects to match with PPR and PE pipes of following diameters.				
		90mm dia	Nos.	16.000		
		110mm dia	Nos.	1.000		

ESTABLISHMENT OF SBK WOMEN'S UNIVERSITY SUB CAMPUS PISHIN BALOCHISTAN

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EXTERNAL WORKS (WATER DISTRIBUTION SYSTEM "PACKAGE-4")

Item No.	REF. Nos CH/ITEM	Description of Items	Unit	Qty	Rate (Rs.)	Amount (Rs.)
		Washout				
		90 mm	Nos.	2.000		
		<u>TANKS</u>				
3		Providing and constructing of Reinforced cement concrete with minimum cube strength of 3750 psi at 28 days using 3/4" maximum nominal size graded margalla crushed stone aggregate and Lawerence pur sand , including the cost of reinforcing steel , water stop, under ground water tanks of following capacities with manhole covers, cowled vent, inlet and outlet pipework. Water tank shall be provided with terrazzo finish from inside on walls and base slab. Location and size of Tanks shown on drawings, complete in all respect				
		a) O.H.W.T	P/gal	30,000.000		
		Total "B"(Non Schedule items) C/o to Summary of Cost:				

ESTABLISHMENT OF SBK WOMEN'S UNIVERSITY SUB CAMPUS PISHIN BALOCHISTAN

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EXTERNAL WORKS(SEWERAGE SYSTEM "PACKAGE -4")

Item No.	REF. Nos CH/ITEM	Description of Items	Unit	Qty	Rate (Rs.)	Amount (Rs.)
		Schedule Items				
		Sewerage System				
1		Excavation in open cutting for sewers and manholes as shown in drawings, dressing to correct sections and dimensions according to templates and levels and removing surface water in all types of soil except rock (i) The rate includes back filling after laying of sewer, which is payable separately. (ii) The rate for close/open shuttering & timbering will be as per item No. 3-43 & 3-44 where actually used at site.				
	3-42-A/P-31	A) Upto 5 ft. (1.5 m) depth ii) Ordinary soil	Cft	197,694.000	2.900	573,312.600
	3-42-B/P-31	B) Below 5 ft. to 10 ft. (1.5 m to 3.0 m) depth ii) Ordinary soil	Cft	98,847.000	4.400	434,926.800
2	3-14(a)/P-27	Rehandling of earthwork a) Lead upto a single throw of Kassi, phaorah or shovel	Cft	237,232.800	2.100	498,188.880
3	25-1-b/P-212	Providing and laying cement concrete pipes moulded with cement concrete 1:1.5:3 with spigot socket or collar joint as specified in trenches to correct alignment and grade, jointing with jointing materials including cutting pipes where necessary, finishing and testing. b) R.C.C pipe with bell & spigot or tongued & grooved joint conforming to ASTM C-76 class II wall B or BS 3911 Part I class M including cost of reinforcement.				
		i) 9" (225 mm) inner dia.	Rft	11,469.500	297.100	3,407,588.450
		ii) 12" (300 mm) inner dia.	Rft	1,094.100	405.700	443,876.370
		iii) 15" (375 mm) inner dia.	Rft	616.000	483.300	297,712.800
4	11-61-1/P-102	Supplying and filling sand under floor or plugging in wells, with lead upto 800 ft (250m)	Cft	23,723.280	36.650	869,458.212
	5-1-1/P-49	Dry ramming brick/ stone ballast 1-1/2" to 2" (40mm to 50mm) gauge	Cft	9,884.700	44.450	439,374.915
5	25-6(a)/P-214	Providing manhole type 'A' size 24" x 18" (inside dimensions) as per approved design and specifications complete for 4" to 12" dia pipes upto 4 ft. (1.2 m) depth with 16" dia. Concrete Cover fixed in 4" thick RCC 1:2:4 slab (with 5 lbs per Cu.ft. or 80 kg/Cu.m of steel), burnt brick masonry walls 9" (225 mm) thick set in 1:3 cement sand mortar, 6" thick 1:3:6 cement concrete in foundation, 4" av. thickness 1:2:4 cement concrete in benching and 1/2" (13mm) thick cement sand plaster in 1:3 to all inside wall surfaces, channels and benching including making requisite number of main and branch channels but excluding the cost of excavation, back filling and disposal of excavated stuff.	Each	100.000	12,811.700	1,281,170.000
6	25-6(a)/P-214	Providing manhole type 'B' size 36" x 30" (inside dimensions) x 48" deep as per approved design and specifications complete for 4" to 12" dia. pipe 4ft to 7'-6" depth with 18" dia (inside) Concrete Cover fixed in 6" thick RCC 1:2:4 slab with 5 lbs. per Cu.ft steel and brick masonry walls set in 1:3 cement sand mortar, 6" thick 1:3:6 cement concrete foundation, 4" av. thick 1:2:4 cement concrete in benching and 1/2" (13mm) thick cement plaster in 1:3 cement sand mortar, to all inner wall surfaces, channels and benching including providing and making requisite number of main and branch channels but excluding the cost of excavation, back filling, disposal of excavated stuff	Each	55.000	21,057.100	1,158,140.500

ESTABLISHMENT OF SBK WOMEN'S UNIVERSITY SUB CAMPUS PISHIN BALOCHISTAN

BILL OF QUANTITIES

EXTERNAL WORKS(SEWERAGE SYSTEM "PACKAGE -4")

Item No.	REF. Nos CH/ITEM	Description of Items	Unit	Qty	Rate (Rs.)	Amount (Rs.)
7	25-6(a)/P-214	Providing manhole type 'C' size 36" x 30" (inside dimensions) x 7.5 ft deep as per approved design and specifications complete for 4" to 12" dia. pipe 7'-6" to 12 ft depth with 18" dia (inside) Concrete Cover fixed in 6" thick RCC 1:2:4 slab with 5 lbs per Cu.ft steel and brick masonry walls set in 1:3 cement sand mortar, 6" thick 1:3:6 cement concrete foundation, 4" av. thick 1:2:4 cement concrete in benching and 1/2" (13 mm) thick cement plaster in 1:3 cement sand mortar, to all inner wall surfaces, channels and benching including providing and making requisite number of main and branch channels but excluding the cost of excavation, back filling, disposal of excavated stuff.	Each	100.000	38,240.800	3,824,080.000
Total "A"(Schedule items) C/o to Summary of Cost:						13,227,829.527
Non Schedule Items						
DISPOSAL STATION						
1		Providing and constructing Disposal Station of Reinforced cement concrete with minimum cube strength of 3750 psi at 28 days using 3/4" maximum nominal size graded margalla crushed stone aggregate and Lawerence pur sand , including the cost of Submercible pump, reinforcing steel , water stop, dispoal tanks of following capacities with manhole covers, cowed vent, inlet and outlet pipework. Disposal tank shall be provided with terrazzo finish from inside on walls and base slab. Location and size of Disposal station shown on drawings, complete in all respect.	Job	1.000		
Total "B"(Non Schedule items) C/o to Summary of Cost:						

ESTABLISHMENT OF SBK WOMEN'S UNIVERSITY SUB CAMPUS PISHIN BALOCHISTAN

BILL OF QUANTITIES

EXTERNAL WORKS 0.5 CUSEC TUBE WELL (PACKAGE-4)

Item No.	REF. Nos CH/ITEM	Description of Items	Unit	Qty	Rate (Rs.)	Amount (Rs.)
		Schedule Items				
1	27-7	Drilling of boring/pilling in all types of soil except shingle, gravel and rock.				
		From ground level upto 250 ft. (75 m) below ground level i) 15" to 18" (375 mm to 450 mm) inner dia.	Rft	250.000	1,920.762	480,190.549
		Exceeding 250 ft (75 m.) depth below ground level i) 15" to 18" (375 mm to 450 mm) inner dia.	Rft	750.000	2,496.997	1,872,747.713
2	27-10-1/P-230	Furnishing sample for water from bore hole	Per Set of 2 Bottle	6.000	105.250	631.500
3	27-13/P-231	Providing and installing uPVC strainer in tubewell bore hole including sockets and solvent registered with PSQCA of the nominal inner diameter. mm) wall thickness	Rft	900.000	1,363.100	1,226,790.000
4	27-36	Providing and installing uPVC bail or end plug of approved make registered with PSQCA. a) 8" (200 mm) inner dia	Each	2.000	1,242.450	2,484.900
5	27-21/P-234	Shrouding with graded pea gravel 3/8" to 1/8" (10 mm to 3mm) around tubewell bore hole.	Cft	2,685.000	252.400	677,694.000
6	27-19/P-234	Providing and Installing uPVC blind pipe of approved make registered with PSQCA in tubewell bore hole and/or laying, cutting, jointing, testing and disinfecting uPVC pipe lines in trenches. a) 3" i/d (75 mm)	Rft	300.000	172.150	51,645.000
7	27-09-1/P-230	Providing box 48"x 30"x 9" (1.2m x 0.75m x 0.23m) of deodar wood planks with compartment 4" x 4" (100mm x 100mm) including locking arrangement for preserving strata samples from borehole and painted with two coats of paint. The top and bottom of the box to be of 1/2" (12mm) planks, sides and compartments to be of 1/4" (6mm) planks.	Each	1.000	47,070.150	47,070.150
8	27-20/P-234	Testing and development of tubewell of size 6" (150 mm) inner dia. And above continuously a) Upto 1.5 cusecs (0.0425 cumec) discharge	Job	1.000	132,044.950	132,044.950
9	27-18	Providing and Installing uPVC blind pipe of approved make registered with PSQCA in tubewell bore hole and/or laying, cutting, jointing, testing and disinfecting uPVC pipe lines in trenches.				
		i) 10" i/d, 6mm thick	Rft	1,000.000	971.400	971,400.000
		Total "A"(Schedule items) C/o to Summary of Cost:				5,462,698.762
		Non Schedule Items				
10	NS	provide and install Fiber blind pipe. Joint, reducer (where necessary) make in tubewell bore hole, including jointing complete in all respect. (a) 8" i/d, 1/4" thick	Rft	120.000		
11	NS	Grouting of top 50 ft of angular space between bore and pump housing casing with 1:1 cement sand mortar complete in all respect as per drawings and specifications(Sanitary seal)	Rft	50.000		
12	NS	take soil sapmles one No. each at every 10ft depth or from each strata as per direction of engineer incharge including submission of analysis and log of borehole as per Specification.	No.	100.000		
13	NS	Test water Sample for human consumption at the time of development and testing (D&T), including cost of determination following (Results to be quoted in mg/l) as per specification of section-	No.	2.000		
		(I) p ^H				
		(II) Conductivity (Microhms)				
		(III) "P" Alkalinity (CaCO ₃)				
		(IV) "M" Alkalinity				
		(V) Total hardness(CaCO ₃)				
		(VI) Ccalcuim Hardness (CaCO ₃)				

ESTABLISHMENT OF SBK WOMEN'S UNIVERSITY SUB CAMPUS PISHIN BALOCHISTAN

BILL OF QUANTITIES

EXTERNAL WORKS 0.5 CUSEC TUBE WELL (PACKAGE-4)

Item No.	REF. Nos CH/ITEM	Description of Items	Unit	Qty	Rate (Rs.)	Amount (Rs.)
		(VII) Magnesium Hardness (MgCo ₃)				
		(VII) Magnesium Hardness (MgCo ₃)				
		(IX) Floride as (F)				
		(X) Sulphate (SO ₄)				
		(XI) Nitrate as (SO ₄)				
		XII) Iron (Fe) Suspended iron & Dissolved iron				
		XIII) Silica				
		(XIV) Turbidity				
		(XV) Total Solids				
		(XVI) Suspended Solids				
		XVII) Sodium (NA)				
		XVIII) BOD				
		XIX) Micro Biological Contamination (Coliforms)				
		PUMP, MOTOR AND DISCHARGE LINE				
14	NS	Providing Installing and Commisiion of Submersible Pump for tubewell, "KSB" or equivalent make having dischrage 0.5 cfs against total head 220 feet Coulumn setting 120ft. The material construction of the pump (bowl, chamber, Pump shaft & impeller) should be in (Stainless Steel) M.S bore cover plate, Sluice, Non Return valves, Bend, air valves, lowering clamps, 10HP water cooled Submersible motor, 3x380v, voltage tolerance +/- 10%, 2 pole, IP 68, motor jacket, civil foundation for pump, suitable length of power and dry running cable from motor to motor control panel along with Motor Control unit consiting of (Metalic Box, Breaker, ammeter, volt meter, Magnetic contactor, on/off switch, electornic over current relay, EVR, indication relay etc.) and power wiring from main panel board to pump motor control unit suitable for above motor, complete in all respects including testing and commisssioning as directed by the Engineer incharge including testing and warranty for proper operation for the maintenance periodn	No.	1.000		
15	NS	Providind fixing, installing and testing supply well including drilling of borehole for well, in all type of soil and piping (housing, filter and blinde) along whith local pump and motor. Complete in all respect.	Job	1.000		
		Total "B"(Non Schedule items) C/o to Summary of Cost:				

ESTABLISHMENT OF SBK WOMEN'S UNIVERSITY SUB CAMPUS PISHIN BALOCHISTAN

BILL OF QUANTITIES

EXTERNAL ELECTRIFICATION (PACKAGE-4)

Item No.	REF. Nos CH/ITEM	Description of Items	Unit	Qty	Rate (Rs.)	Amount (Rs.)
A		SCHEDULE ITEM-A				
A.01		Trench				
i	Ch. #3, item # 44	Excavation of trenches for water supply pipe lines upto 5 ft. (1.5m) depth from ground level, including trimming, dressing sides, levelling the beds of trenches to correct grade and cutting pits for joints, etc. complete in all respects including cost of back filling. Shingle and Gravel 3500x2x4 = 28000 Cft (For HT Cables) 12000x1.5x3 = 108945 Cft (For LT Cables)	Cft	82000.000	9.530	781,460.000
A.02		L.T. Power Cables				
		Supply at site, installation, testing and commissioning of PVC insulated armoured copper conductor cable 600 / 1000 Volt grade in prelaidd conduits / trenches to be installed as per routes shown on drawings including cost of all necessary materials, connections, identification tags, cables lugs properly crimped at both ends for the following sizes complete in all respects. Actual length of cables to be installed shall be practically measured at site by the Contractor, duly authenticated by the employers electrical engineer before placing the order with the manufacturer, however, approximate length of cables are shown herewith. Payments shall be made as per actual length installed.make Pakistan Cable, Newage Cable, Fast Cable or eqv..				
a)		PVC insulated, PVC sheathed 4 core 660/1100 volt grade cable, armoured with G.I. wire 16 SWG.				
i)	Item 30-35	Supply and install 25 sq.mm, 3.5 core, PVC insulated and sheathed multicore, 600/1000V cable with copper conductor directly clipped on surface of wall, column, beam, ceiling, etc. for power wiring. (From Transformer / MPB to DBs.)	Rft	1350.000	666.200	899,370.000
ii)	Item 30-35	Supply and install 10 sq.mm cable PVC insulated single core 600/1000V.cable with copper conductor in already concealed PVC conduit.	Rft	111640.000	70.700	7,892,948.000
b)		single core PVC insulated, PVC sheathed copper conductor, 660/1100 volts grade cable Circuit Protective Conductor (CPC)				
i)	Item 30-34	Supply and install 6 sq.mm cable PVC insulated single core 600/1000V.cable with copper conductor in already concealed PVC conduit.	Rft	33210.000	42.650	1,416,406.500
c)		Supply and erection of PVC insulated, PVC sheathed 3 core, 660/1100 volt copper conductor cable for service ditto connection, in prelaidd pipe/G.I. wire / trenches, etc. (rate for cable only)				
i)	Item 30-32	Supply and install 2.5 sq.mm PVC insulated single core 600/1000V.cable with copper conductor in already concealed PVC conduit.	Rft	24675.000	19.300	476,227.500
A.03		Supply and erection of PVC pipe for wiring recessed in walls, including inspection boxes, pull boxes, hooks, cutting jharries, and repairing surface, etc., complete with all specials.				
i)	Item 30-23	Supply and installation of 1.25" (30mm) dia PVC concealed conduit including all accessories such as bends, elbows etc.	Rft	24210.000	31.050	751,720.500
i)	Item 30-25	Supply and installation of 2" (50mm) dia PVC concealed conduit including all accessories such as bends, elbows etc.	Rft	1350.000	54.100	73,035.000
A.02		H.T. Power Cables				
	Item 30-110	Supply, install, connect, test and commission 3 core 95 Sq.mm 11 KV, cross link polythene insulated shielded, armoured and PVC jacketted cable for connecting transformers to HT panel complete in all respect.	Rft	3500.000	2744.250	9,604,875.000

ESTABLISHMENT OF SBK WOMEN'S UNIVERSITY SUB CAMPUS PISHIN BALOCHISTAN

BILL OF QUANTITIES

EXTERNAL ELECTRIFICATION (PACKAGE-4)

Item No.	REF. Nos CH/ITEM	Description of Items	Unit	Qty	Rate (Rs.)	Amount (Rs.)
		Total "A"(Schedule items) C/o to Summary of Cost:				21,896,042.500
B		NON SCHEDULE ITEM-B				
		11 KV WAPDA GRID PANEL				
		Supply, installation and energizing of HT Grid Panel factory fabricated & tested, manufactured by (SIMENS / AREVA / PEL / FICO make only) consists of 12 SWG mild steel sheet fabricated floor mounted free standing 1-cubical, indoor type (IP-54) totally enclosed with hinged front doors. The panel designed suitable for 11 KV 3-phase, (3-wire) 50 Hz AC system, high conductivity, hard drawn electrolytic copper bus bars of adequate current carrying capacity and short circuit rating copper interconnections, internal wiring and cable termination arrangements using HT Raychem Heat Shrinkable Termination Kit (German) for 3 core HT Armoured cable of appropriate size as per WAPDA specifications (P-44:96) and finished with RAL-7032 powder coating baked. Equipped with following components (All components used should be from WAPDA approved list)				
B.01		Components 1 No. 11KV VCB 630A 17.5KV 25KA with drawout type (Make Hyundai / Ekv) 1 No. Electronics IDMT/S/C, O/C, E/F Relay/TEST Block (Make Areva/GE) 3 Nos. 11KV Current Transformers (Make FICO) 400:200/5A For Protection 3 Nos. 11KV Current Transformers (Make FICO) 400:200/5A For Metering 3 Nos. Voltage Transformer 11KV/110V (Make FICO) 1 No. Ampere Meter 0-100/400A (Make Lumel / Frer) 1 No. Ampere Selector Switch 4-position (Make GGT/Merz) 1 No. Volt Meter 96x96 0-15KV (Make Lumel / Frer) 1 No. Volt Selector Switch 4-position (Make GGT/Merz) 2 Nos. Push Button 25MM For VCB (Make Telemecanique) 4 Nos. Indication Lamp 25MM 110VAC/110VDC (Make Telemecanique) 1 No. 6A Control MCB TP 6KA (Make ABB/GE) 4 Nos. 6A Control MCB DP 6KA (Make ABB/GE) 1 No. Auxiliary Contact 2NO+2NC (Make ABB/GE) 1 No. Auxiliary Contact 2NO+2NC (Make ABB/GE) 1 No. DC supervision Relay (Make E-Lab) 3 Nos. Surge Arrester 5 To 15kv (Make Chint) 15 Set 11kv Insulator for Fitting Arrangement Bus Bar (Make Jeorjordan) 1 Set Control & CTs Terminal Block (Make Kelmsion/Wiland) 126 Cft 10/12SWG Powder Painted 01-Cubicles. Size 7'.2"x3'x6' each 230 Kg 2500A Electrolytic Copper bus bar for main & link. Size as per WAPDA standred 3x2x100x10MM Main Bus Bar as Per P-44:96 8 Nos. 1-1/2" Fibre glass insulator for bus bar mounting 1 L/S Wiring, wiring cables, thibmles, sleeves, cable tray and other wiring accessories. Complete in all respect as per satisfaction of the Engineer Incharge.	Each	1.000		
B.02	Appendix ' c' Page No-1	11 KV WAPDA METERING PANEL				

ESTABLISHMENT OF SBK WOMEN'S UNIVERSITY SUB CAMPUS PISHIN BALOCHISTAN

BILL OF QUANTITIES

EXTERNAL ELECTRIFICATION (PACKAGE-4)

Item No.	REF. Nos CH/ITEM	Description of Items	Unit	Qty	Rate (Rs.)	Amount (Rs.)
		Supply , installation , and energizing of HT Metering Panel factory fabricated & tested, manufacture by SIEMENS, PEL, PEMPAK ,FICO MAKE only, consist of 12 SWG mild steel sheet fabricated floor mounted free standing one cubical indoor type (I.P 54) total enclosed with hinged front doors, the panel designe suitable for 11KV three phase 50 Hz AC system, high conductivity, hard drawn electrolytic copper bus bars of adequate curren carrng capacity and short circuit raiting copper interconnections, internal wiring and cables, termination arrangements, using HT Raychem Heat Shrinkable termination kit German for 3 core HT Armoured cable of appropriate size as per wapda spacification and fineshed with RAL- 7032 powder coating baked. Equiped with following compnents (All components used should be from WAPDA approved list).				
		1 No. 11KV VCB 630 Amps 17.5 KV 25 KA with drawout type. (Make Hyndai or Equ.) 1 No. Electronics IDMT/S/C, O/C, E/F Relay / TEST Block. (Make Areva or Micro or Equ.) 3 Nos. 11 KV current transformers.(Make FICO or Equ.) 400:200 /5A for protection. 3 Nos. 11 KV current transformers. (Make FICO or Equ.) 400:200 /5A for metering. 3 Nos. Voltage transformer 11kv/110 V.(Make FICO or Equ.) 1 No. Ampere meter 0-100/400A. (Make Lumel or Frer) 1 No. Ampere selector switch 4-position.(Make Merz or Bretler) 1 No. Voltmeter 96x96 0-15 KV. (Make Lumel or Frer) 1 No. Volt selector switch 4-position.(Make Merz or Bretler) 2 Nos. Push button 25mm for VCB. (Make Telemecanique) 4 Nos. Indication Lamp 25mm 110 VAC/110 VDC. (Make Telemecanique) 1 No. 6A control MCB TP 6KA (Make ABB or GE) 2 Nos. 6A control MCB DP 6KA. (Make ABB or GE) 1 No. Auxiliary Contact 2NO+2NC (Make ABB or GE) 1 No. Auxiliary Contact 2NO+2NC (Make ABB or GE) 1 No. Capacitor Trip Unit. (Make E-Lab) 9 Set 11KV insulator for fitting arangement Bus Bar (Make Jeorjordan) 1 Set Control and CTs terminal Block. (Make Kelmsion/ Wiland) 126 Cft 10/12 SWG Powder Painted 01- Cubical Size 7'2"x3'x6' Each 90 Kg 2500A Electrolytic copper bus bar for main & link size as per wapda stander 3x2x100x10mm main bus bar as per P-44:96 4 Nos. 1-1/2" fiber glass insulator for bus bar mounting. 1 L/S Wiring, wiring cables, Thimbels, Sleeves, Cable Tray or other wiring Accessories.				
	Appendix ' c' Page No-2	complete in all respect, as per satisfaction of the Engineer Incharge.	Each	1.000		
		HT. CONSUMER/PROTECTION PANEL				
		Supply , installation , testing and commissioning of HT consumer / protection panel factory fabricated and tested, manufacture by SIEMENS, PEL, PEMPAK ,FICO MAKE only, consist of 12 SWG mild steel sheet fabricated floor mounted free standing one cubical indoor type (I.P 54) total enclosed with hinged front doors, the panel designe suitable for 11KV three phase 50 Hz AC system, high conductivity, hard drawn electrolytic copper bus bars of adequate curren carrng capacity and short circuit raiting copper interconnections, internal wiring and cables, termination arrangements, using HT Raychem Heat Shrinkable termination kit German for 3 core HT Armoured cable of appropriate size as per wapda spacification and fineshed with RAL- 7032 powder coating baked. Equiped with following compnents (All components used should be from WAPDA approved list).				

ESTABLISHMENT OF SBK WOMEN'S UNIVERSITY SUB CAMPUS PISHIN BALOCHISTAN

BILL OF QUANTITIES

EXTERNAL ELECTRIFICATION (PACKAGE-4)

Item No.	REF. Nos CH/ITEM	Description of Items	Unit	Qty	Rate (Rs.)	Amount (Rs.)
B.03	Appendix ' c ' Page No-3	1 No. 11KV VCB 630 Amps 17.5 KV 25 KA complete.(Make Hyundai/Equ) 1 No. Electronics IDMT/S/C, O/C, E/F Relay.(Make Areva/GE) 3 Nos. 11 KV current transformers.(Make FICO) as per suitable rating for protection. 3 Nos. Voltage transformer 11kv/110 V. (Make FICO) 1 No. Ampere meter 0-100/400A.(Make Lumel) 1 No. Ampere selector switch 4-position.(Make GGT/Merz) 1 No. Voltmeter 96x96 0-15 KV (Make Lumel) 1 No. Volt selector switch 4-position.(Make GGT/Merz) 2 Nos. Push button 25mm for VCB.(Make Telemecanique) 4 Nos. Indication Lamp 25mm 110 VAC/110 VDC.(Make Telemecanique) 1 No. 6A control MCB TP 6KA (Make GE/ABB) 2 Nos. 6A control MCB DP 6KA (Make GE/ABB) 1 No. Auxiliary Contact 2NO+2NC (Make GE/ABB) 1 No. Auxiliary Contact 2NO+2NC (Make GE/ABB) 1 No. Capacitor Trip Unit. (Make Chint) 9 Sets 11KV insulator full fitting arrangement Bus Bar.(Make Jeorjordan) 1 Set Control and CTs terminal Block. (Make Kelmsion) 126 Cft 10/12 SWG Powder Painted 01- Cubical Size 7.2"x3'x6' Each 90 Kg 630A Electrolytic copper bus bar for main & link size as per wapda stander 40 Nos. 1-1/2" fiber glass insulator for bus bar mounting. 1 L/S Wiring, wiring cables, Thimbels, Sleeves, Cable Tray or other wiring Accessories.	Each	1.000		
B.06		Pole Mounted Transformer				
		Supply, insatllation, commissioning and testing of Oil cooled type Step down Pole Mounted Power Transformer 11/0.415 kV, to be installed on pre prepared Pad, including with following:- lifting hooks, thermometers, LT & HT bushing, tap changer, imported double float buchholz relay, 2 earthing terminals, roller wheels, connecting terminals for cables M.S box on transformer in order to cover completely L.T side, all necessary materials required for connections on H.T & L.T side, rated voltage 11000/415/230 V impedance 6.25% or as specified by ICE system earth: Delta / Star, neutral solidly earthed, complete in all respects. Make PEL, Transfo Power, Sky Power, or approved Eqv. Including cost of Foundation.				
i)	Appendix ' c ' Page No-8	100 kVA For Student Hostel Admin Building Café, MPH External PH Works	Each	4.000		
ii)	Appendix ' c ' Page No-9	200 kVA For Academic Block. Faculty Hostel. Library Building	Each	3.000		
B.08		15 KV H.T cables				
		Supply at work, laying, testing and commissioning of following 15 KV HT XLPEcables, directly in already excavated trenches or through RCC/PVC pipes (already installed at road crossing), including cable binding tis for single core cables, as per specifications, standards provided in the given drawings & to the approval of the consultant / Engineer. including cable binding ties as per specifications, standards, and drawings and to the of the Consultant . Make Pakistan Cables, Newage Cables or eqv.				
	Appendix ' c ' Page No-11	240 MM ² AL/XLPE/AWA/PVC 15 KV single core aluminium cable	Mtr	750.000		
B.09		HT TERMINATION KITS				

ESTABLISHMENT OF SBK WOMEN'S UNIVERSITY SUB CAMPUS PISHIN BALOCHISTAN

BILL OF QUANTITIES

EXTERNAL ELECTRIFICATION (PACKAGE-4)

Item No.	REF. Nos CH/ITEM	Description of Items	Unit	Qty	Rate (Rs.)	Amount (Rs.)
		Supply at work, installation testing & commissioning of following HT terminations kits, Raychem /3-M/Cellpack for cables laid under works in above Item , including cable glands and miscellaneous material and installations as per requirements specifications and standards and to the approval of the Consultant .				
	Appendix ' c' Page No-12	a. For 240 MM2 AL/XLPE/AWA/PVC 15 KV single core cable	Each	15.000		
	Appendix ' c' Page No-13	b. For 95 mm2 AL/XLPE/AWA/PVC 11 KV 3 Core Cable	Each	14.000		
B.11		<u>ALLIED INSTALLATIONS</u>				
i	Appendix ' c' Page No-14	Supply at works and installation of HT & LT cable Markers as per specifactions, drawings nad to the approval of the consultant/ Engineer.	Each	50.000		
ii	Appendix ' c' Page No-15	Construction of block masonry manholes of size 2' x 2' x 2'-6" deep with 4" thick RCC removable slab for PVC pipes to incoming cables complete in all respects as desired by the Engineer.	Each	25.000		
iii	Appendix ' c' Page No-16	Supply and installation of warning tape,laying above the PCC Pipe, complete in all respect, as approved by the Engineer Incharge.	Rft	3500.000		
iv	Appendix ' c' Page No-17	Supply and installtion of vertical rising angle iron frame consisting 2-Angle iron 2x2x1/4" about 8-ft to 8-ft long welded with 2' long cross T 1-1/2"x1-1/2" @ 12" c/c grouted in floor / wall with nuts bolts rowal plug etc complete in all respect	Each	10.000		
B.12		<u>PCC ROAD CROSSING SLEEVE</u>				
	Appendix ' c' Page No-18	Supply at work, laying, testing and commissioning of PCC Road Crossing Sleeve Ductincluding including cost of excavation,brick work in foundation, PCC 1:2:4, Marking Tape, UPVC 4" dia pipe (C-Class), UPVC Spacer, back filling and compaction for cables and crossing, shown in drawings as per site requirement and approval of the Consultant . * subject to actual site work	Nos.	8.000		
		<u>Street Light System</u>				
B.13		<u>STREET LIGHT OCTAGONAL CONICAL POLES</u>				
		Supply , Installation, testing and commissioning of Fancy Road Light pole, Octagonal Conical Shaped Hot Dip Galvanized including pole base plate /terminal boxes ,Earth point and as per Technical specification, drawings and to the approval of the consultant /The Engineer. Make Bashir Pipe, Jamal Pipe or Eqv.				
i	Appendix ' c' Page No-19	a. 10 M Long, Double Arm Pole, including foundation	Each	5.000		
ii	Appendix ' c' Page No-20	a. 10 M Long, Single Arm Pole, including foundation	Each	189.000		
iii	Appendix ' c' Page No-21	a. 10 M Long, Top Ring Pole, including foundation	Each	3.000		
iv	Appendix ' c' Page No-22	a. Street Light Arm and all fixing arrangements.	Each	30.000		
B.14		<u>POLE BASE CONNECTION BOXES</u>				
		Supply , Installation, testing and commissioning of Pole Base Connection Boxes complete comprising 2-NO.circuit breakers (MCB 6A,)connectors, nut & bolts etc; as per drawings, specification, complete in all respects and to the approval of the Consultant/The Engineer: Make TechnoBuild Engineering, PEL, Siemens.				
	Appendix ' c' Page No-23	a. Connection Box	Each	197.000		
B.15		<u>STREET LIGHT CONTROL PANEL</u>				

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BILL OF QUANTITIES

EXTERNAL ELECTRIFICATION (PACKAGE-4)

Item No.	REF. Nos CH/ITEM	Description of Items	Unit	Qty	Rate (Rs.)	Amount (Rs.)
		Supply ,installation testing & commissioning of Road Light Control Panel 16 SWG sheet steel construction with IP 43 protection class, canopy, door, locking arrangement with MCCB magnetic contactor relay. Photo cell, control switches and monitoring switches etc including provision of brick masonry foundation with PCC 3" Thick top pad, as per drawing, and approval of the consultant/the Engineer Detail is as under. Manufactured by any one of the manufacturers Siemens, PEL, TechnoBuild Engineering.				
		Incoming 1-60 A MCCB TP RC:16KA				
		outgoing 6-30A MCB TP RC:6KA				
	Appendix ' c' Page No-24		Each	4.000		
B.16		STREET LIGHT FIXTURES				
		Supply, instalation, testing and commissioning of LED road light with imported chip , campitble imported driver with IP 66 rating , built in Aluminium Alloy + lens housing , input voltage AC 85-285V Frequency 50-60 Hz , beam angle 140° LED Life span 60000 Hours, colour Warm white 3000K ,as per specifications and to the approval of the Consultant/ The Engineer, Make Philips, SunLight, Smarrt LED, Luminare Lighting, or eqv.				
i	Appendix ' c' Page No-25	i) LED Street light 100W	Each	229.000		
ii	Appendix ' c' Page No-26	ii) LED Flood light 100W	Each	24.000		
iii	Appendix ' c' Page No-27	iii) LED Bollard Light	Each	35.000		
B.17		Earthing System				
i		<u>Earthing System - Bore Type</u>				
		Drilling of earth bore 3" (75mm) dia 80 to 90 ft. deep (24000 to 27000mm) or up to permanent water table, back filling, ramming, complete in all respect. Earthing bores shall be made at 8ft. away from foundation and distance between earth bore shall not be less than 10ft.				
	Appendix ' c' Page No-28	Bores for earthing body	No	24.000		
ii		<u>G.I. Pipe</u>				
	Appendix ' c' Page No-29	Supply at site and installation of G.I pipe 50mm dia. 14 SWG to be installed in premade bore, all G.I pipe accessories like tees, bends, sockets etc: G.I pipe shall be connected to tinned copper spike as per detail shown on drawing, complete in all respects. Length of pipe shall depend upon the depth of the bore. Payment shall be made as per actual length installed.	Rft	2160.000		
iii		<u>Tinned Copper Spike</u>				
	Appendix ' c' Page No-30	Supply at site, installation of tinned copper spike make NBI to be manufactured as per detail shown on drawing. Spike shall be installed at bottom of G.I pipe, all G.I nuts and bolts, complete in all respect.	Nos	24.000		
iv		<u>Copper Conductor</u>				

ESTABLISHMENT OF SBK WOMEN'S UNIVERSITY SUB CAMPUS PISHIN BALOCHISTAN

BILL OF QUANTITIES

EXTERNAL ELECTRIFICATION (PACKAGE-4)

Item No.	REF. Nos CH/ITEM	Description of Items	Unit	Qty	Rate (Rs.)	Amount (Rs.)
	Appendix ' c' Page No-31	Supply at site, installation and connections of earthing leads consisting of stranded electrolytic copper conductor of purity 99.9%, 70mm sq. to be installed in prelaid G.I pipe and connected to tinned copper spike and to test link in man hole and from test link to desired location as per detail shown or as per the instructions of the engineer. 2 Earthing leads shall be installed in G.I pipe, including cost of G.I nuts, bolts, washers, all necessary accessories, complete in all respects. Joints of copper conductor with G.I pipe shall be covered with 3 coats of bitumen. Payment shall be made as per actual length installed.	Rft	4320.000		
v		Earth Connecting Points (ECP)				
	Appendix ' c' Page No-32	Supply at site and installation of earth connecting points made of tinned copper plate of size 12" long x 3" wide x 1/2" thick to be installed as and where shown on drawings, complete with fixing arrangement, G.I nuts, bolts, washers, lugs, 1/2" dia. holes to facilitate connections of Incoming copper strips / copper conductors and outgoing circuit protective conductor (CPC).	Nos	24.000		
vi		Man Hole for Earthing				
	Appendix ' c' Page No-33	Construction of man hole 18" x 18" x 24" deep with 9" thick brick wall with cement mortar, internal plaster 1:4, RCC 4" thick man hole cover with lifting hooks and the following words written with paint on manhole cover "EARTHING PIT", complete in all respects. Man holes shall be made on all earthing bores.	Nos	24.000		
B.18		HT OVERHEAD NETWORK				
		Supply , Installation, testing and commissioning of followings HT Overhead Network Items, As per WAPDA Sepecifications, Complete in all respect, as approved by the Engineer Incharge				
18.1	Appendix ' c' Page No-34	H.T Structure 45' with Foundation	Nos	30.000		
18.2	Appendix ' c' Page No-35	11KV STEEL x-ARMS WITH BRACES	Nos	36.000		
18.3	Appendix ' c' Page No-36	Pin insulators	Nos	108.000		
18.4	Appendix ' c' Page No-37	Disc insulators	Nos	15.000		
18.5	Appendix ' c' Page No-38	Insulators Pin	Nos	108.000		
18.6	Appendix ' c' Page No-39	Dead End clamp for ACSR Osprey	Nos	35.000		
18.7	Appendix ' c' Page No-40	Eye Nut	Nos	35.000		
18.8	Appendix ' c' Page No-41	Double Arming Bolt (510X20MM)	Nos	35.000		
18.9	Appendix ' c' Page No-42	Anchor Shackles	Nos	35.000		
18.10	Appendix ' c' Page No-43	P.G Connector T-220	Nos	105.000		
18.11	Appendix ' c' Page No-44	Danger Plate With Fitting	Nos	30.000		
18.12	Appendix ' c' Page No-45	Barbed Wire	Kg	150.000		
18.13	Appendix ' c' Page No-46	Nut & Bults 5/8 x 2"	Nos	72.000		
18.14	Appendix ' c' Page No-47	Nut & Bults 5/8 x 10"	Nos	30.000		
18.15	Appendix ' c' Page No-48	Round Warshers	Nos	72.000		
18.16	Appendix ' c' Page No-48	Square Warshers	Nos	140.000		
18.17	Appendix ' c' Page No-49	Stay Assembly Complete	Nos	70.000		
18.18	Appendix ' c' Page No-50	Stay Strip	Nos	70.000		

ESTABLISHMENT OF SBK WOMEN'S UNIVERSITY SUB CAMPUS PISHIN BALOCHISTAN

BILL OF QUANTITIES

EXTERNAL ELECTRIFICATION (PACKAGE-4)

Item No.	REF. Nos CH/ITEM	Description of Items	Unit	Qty	Rate (Rs.)	Amount (Rs.)
18.19	Appendix ' c' Page No-51	Stay Wire 10mm	Kg	700.000		
18.20	Appendix ' c' Page No-52	Earthing Unit complete	Nos	174.000		
18.21	Appendix ' c' Page No-53	ACSR osprey conductor	Mtr	10500.000		
18.22	Appendix ' c' Page No-54	All Allum: Ant conductor	Mtr	2500.000		
18.23	Appendix ' c' Page No-55	P.G Conector T-110	Nos	100.000		
18.24	Appendix ' c' Page No-56	Spool Insulator	Nos	120.000		
18.25	Appendix ' c' Page No-57	D-Shackle	Nos	120.000		
		Total "B"(Schedule items) C/o to Summary of Cost:				

ESTABLISHMENT OF SBK WOMEN'S UNIVERSITY SUB CAMPUS PISHIN BALOCHISTAN

BOUNDARY WALL (PACKAGE-4)

BILL OF QUANTITIES

CIVIL WORKS

Item #	S.I #	Description of Items	Unit	Qty	Rate (Rs.)	Amount (Rs.)
Government of Balochistan Composite Schedule of Rates Version 2018						
		A-SCHEDULE ITEMS				
1	3-46-a	Levelling and dressing the ground by cutting and filling of earth in depth upto 6 inches including consolidating in ordinary soil of plane area	Sft	68250.000	1.200	81,900.000
		EARTH WORK				
2	3-21(b)	Excavation in foundation of buildings and bridges including layout, dressing, refilling around structures with excavated earth, watering & ramming lead upto 100 ft. (30m) & lift upto 5 ft. (1.5m) B) Machinery iv) Shingle or gravel	Cft	71080.800	10.250	728,578.200
		PLAIN CONCRETE				
		FOUNDATION FOR BUILDINGS INCLUDING RAFTS, S ETC				
3	5- 5c	Providing and laying Ratio 1: 4: 8 plain machine mixed cement concrete using coarse sand and crushed aggregate having maximum size upto 1-1/2" (38mm) & down gauge in foundation including levelling, compacting and curing.	Cft	4709.906	185.350	872,981.123
		REINFORCED CONCRETE				
4	5-8c	Providing and laying 1:2:4 cement concrete using approved coarse sand and crushed aggregate 3/4" (19mm) & down gauge in foundation including leveling, compacting and curing.	Cft	12411.000	247.200	3,067,999.200
5	5-12c	Providing and laying in 1:2:4 Raft, Footing situ cement concrete using approved coarsesand and crushed aggregate having maximum size upto 3/4" (19mm) and down gauge in foundation including formwork using woodenbraces and without wall ties, compaction, curing and removal of formwork	Cft	3208.275	263.900	846,663.773
		COLUMNS AND PILLARS				
6	5-15b	Providing and laying in situ cement concrete 1 : 1.5 : 3 using approved coarse sand and crushed aggregate 3/4" (19mm) and down gauge in pillars and columns of any shape in super structure including compacting, curing, cost of form-work & its removal in basement and ground floor (COLUMNS)	Cft	10221.258	359.500	3,674,542.184
		WALLS AND PIERS				
7	5-13-c	Providing & laying in situ 1 : 2 : 4 cement concrete in wall and piers etc, upto 12" (300 mm) in thickness using approved coarse sand & crushed aggregate 3/4" (19mm) & down gauge including compacting, curing, cost of formwork and its removal in basement and ground floor	Cft	850.500	277.750	236,226.375
		BEAMS AND LINTELS				
6		Providing and laying 1:2:4 cement concrete using approved coarse sand and crushed aggregate 3/4" (19mm) and down gauge in Plinth beams, lintels and cantilevers of required shape or section including formwork and its removal compacting and curing.				

	5-49(a)		Cu.ft.	17062.500	296.200	5,053,912.500
8	5-16a	Providing and laying 1:2:4 cement concrete using approved coarsesand and crushed aggregate 3/4" (19mm) and down gauge in beams, lintels and cantilevers of required shape or section including formworkand its removal compacting and curing in basement and ground floor (BEAMS)	Cft	12796.875	318.350	4,073,885.156
		SLAB				
9	5-17-bi	Providing and laying 1:2:4 cement concrete using approved coarse sand and crushed aggregate 3/4" (19mm) and down gauge in slabs including formwork and its removal, compacting and curing Above 6" (150 mm) upto 12" (300 mm) thickness	Cft	916.650	299.250	274,307.513
		STEEL REINFORCEMENT				
10	5-65a	Providing, fabricating and laying deformed Grade 60 steel reinforcement (deformed bar) for all kinds of R.C.C work in foundation, plinth and ground floor including the cost of straightening ,removal of rust, cutting, bending, binding, wastage and providing such over-laps as are not shown on the drawings. The cost of binding wire and cement concrete spacer blocks or chairs for binding and holding the reinforcement in position is inclusive upto 15 ft. (5m)height	Ton	176.192	128365.800	22,617,064.158
		SOLID BLOCK MASONRY				
11		Providing and laying 1:3:6 cement concrete block masonry using Coarse Sand and Approved crushed aggregate 3/4" (19mm) and down gauge in ground floor super-structure including scaffolding, raking out joints and curing in cement sand 1:4				
	9-7-c-ii	8" thick Solid Block	Cft	78706.652	233.750	18,397,679.920
		FINISHING				
12	15-3-iii	1/2 inch (13mm) thick 1 : 4 cement plaster using Coarse Sand on walls and columns in basement, plinth and ground floor including making edges, corners and curing.	Sft	293486.288	22.950	6,735,510.298
13	17-69	Supply & Applying weather resistant paint oating such as ICI weather shield,Berger eather coat or equivalent to interior or exterior walls or ceiling including supplying all labour, materials, scaffoldings and removal of debris etc. @ tleast 3.50 litre per 10	Sft	146743.144	31.800	4,666,431.971
		IRON, STEEL WORKS				
14	28-35-1	Providing and fixing M.S. Tees, angles and flat including riveting, fixing with gusset plates, bolts, hoisting and erecting in position in steel trusses, frames and towers of any approved design.	Kg	10253.356	144.650	1,483,147.922
15	28-85 a	Providing and fixing GI Razor wire fencing with 4 horizontal wires Spiral Type 12 SWG Sprial Wire and 26 SWG Lipping Blade 3" Pitch with four Horizontal Wire 20 SWG. (Single)	R.ft	13650.000	174.550	2,382,607.500
16	21-75	Providing and laying open jointed pipe with collar of class "C" or equivalent and fixing in trenches over prepared bed including cutting, wastage, with all lead and lift.				
	a	4" (100 mm) dia R.C.C pipe	R.ft.	100.000	124.750	12,475.000

	b	6" (150mm) dia R.C.C pipe	R.ft.	100.000	140.700	14,070.000
17	21-76	Providing and fixing R.C.C. pipe of class "C" or equivalent in trenches including cutting, wastage, fitting and jointing, with maxphalt composition and cement mortar 1 : 1 and testing with water including all lead and lift.				
	b	12" (300 mm) dia R.C.C pipe	R.ft.	100.000	333.950	33,395.000
		Total Schedule Items-A :				75,253,377.793

ESTABLISHMENT OF SBK WOMEN'S UNIVERSITY SUB CAMPUS PISHIN BALOCHISTAN

MAIN GATE,RECEPTION OFFICE AND SECURITY OFFICE(PACKAGE-4)

BILL OF QUANTITIES

CIVIL WORKS

Item. #	S.I #	Description of Items	Unit	Qty	Rate (Rs.)	Amount (Rs.)
Government of Balochistan Composite Schedule of Rates Version 2018						
		A-SCHEDULE ITEMS				
1	3-46-a	Levelling and dressing the ground by cutting and filling of earth in depth upto 6 inches including consolidating in ordinary soil of plane area	Sft	2949.656	1.200	3,539.588
		EARTH WORK				
2	3-21(b)	Excavation in foundation of buildings and bridges including layout, dressing, refilling around structures with excavated earth, watering & ramming lead upto 100 ft. (30m) & lift upto 5 ft. (1.5m) B) Machinery ii) Ordinary soil	Cft	3628.010	6.850	24,851.866
3	3-16 a	Filling, watering and ramming earth under floors with surplus earth from foundation, etc.	Cft	2418.673	3.800	9,190.958
		ANTITERMITE				
4	3-69-1	Spraying anti-termite liquid mixed with water in the ratio of 1:40.	Sft	3705.798	9.750	36,131.529
		PLAIN & REINFORCED CONCRETE				
		FOUNDATION FOR BUILDINGS INCLUDING RAFTS, S ETC				
5	CH:5- 5c	Providing and laying Ratio 1: 4: 8 plain machine mixed cement concrete using coarse sand and crushed aggregate having maximum size upto 1-1/2" (38mm) & down gauge in foundation including levelling, compacting and curing.				
		Under Foundation	Cft	210.995	185.350	39,107.923
6	CH:5-12(a)	Providing and laying in 1:2:4 Raft, Footing situ cement concrete using approved coarsesand and crushed aggregate having maximum size upto 3/4" (19mm)and down gauge in foundation including formwork using woodenbraces and without wall ties, compaction, curing and removal of formwork	Cft	321.300	263.900	84,791.070
		COLUMNS AND PILLARS				
7		Providing and laying in situ cement concrete 1 : 1.5 : 3 using approved coarse sand and crushed aggregate 3/4" (19mm) and down gauge in pillars and columns of any shape in super structure including compacting,curing, cost of form-work & its removal in basement and ground floor				
		COLUMNS				
	CH:5-15b	Ground Floor	Cft	654.568	359.500	235,317.363
	CH:5-15 b+c	First Floor	Cft	213.884	375.400	80,292.141
		BEAMS AND LINTELS				
8		Providing and laying 1:2:4 cement concrete using approved coarsesand and crushed aggregate 3/4" (19mm) and down gauge in beams,lintels and cantilevers of required shape or section including formworkand its removal compacting and curing in basement and ground floor				
		BEAMS				
	5-16a	Ground Floor	Cft	156.870	318.350	49,939.565
	5-16 a+b	First Floor	Cft	79.538	333.300	26,509.849
		LINTELS				
	5-16a	Ground Floor	Cft	37.820	318.350	12,039.915
9		Providing and laying 1:2:4 cement concrete using approved coarse sand and crushed aggregate 3/4" (19mm) and down gauge in slabs including formwork and its removal, compacting and curing Upto 6" (150 mm) thickness				
		SLABS				
	5-17ai	Ground Floor	Cft	636.120	327.300	208,201.923
	5-17aii	First Floor	Cft	955.350	343.150	327,828.353

		STEEL REINFORCEMENT				
10		Providing, fabricating and laying deformed Grade 60 steel reinforcement (deformed bar) for all kinds of R.C.C work in foundation, plinth and ground floor including the cost of straightening ,removal of rust, cutting, bending, binding, wastage and providingsuch over-laps as are not shown on the drawings. The cost of bindingwire and cement concrete spacer blocks or chairs for binding and holding the reinforcement in position is inclusive upto 15 ft. (5m)height				
	5-65a	Ground Floor	Tonne	8.791	130426.050	1,146,592.970
	5-65-a+f	First Floor	Tonne	2.453	132559.750	325,195.918
		DAMP PROOF COURSE AND WATER PROOFING				
11	8-8(1)	Providing damp proof course on vertical surface with 3/4" (19 mm) thick cement plaster 1:3 mixed with any approved water proofing agent including curing and providing a layer of polythene sheet 0.13mm thick (500 gauge), but excluding the cost of water proofing agent.	Sft	330.000	40.100	13,233.000
12	8-5(a)	Providing and laying 1-1/2" (25.4 mm) thick damp proof course with 1:2:4cement concrete Coarse Sand and crushed aggregate 1/2" (13mm) anddown gauge including applying a coat of hot bitumen 80/100 orequivalent using 1.71 Kg per sq.m. and laying single layer of polythene sheet 0.13 mm thick (500 gauge) on damp proof course, including cleaning surface and spraying	Sft	149.600	72.350	10,823.578
13	8-18-a	Providing and laying 1:2:4 cement concrete using Coarse Sand and crushed aggregate 3/4" (19mm) and down gauge in terraces 3" (75 mm) average thickness to required slope in panels including formwork, consolidation, finishing, curing, painting the surface with plastic bitumen No.4 at the rate of 0.73 Kg per Sq.m. blinded with sand at the rate of 0.006 Cu.m. per Sq.m. on ground floor roof.	Sft	849.656	87.800	74,599.819
14	8-20-a	Providing and laying Single Layer polythene sheet 0.13 mm thick on roof for water proofing laid as per instructions of the Engineer in ground floor.	Sft	849.656	12.350	10,493.255
		SOLID BLOCK MASONRY				
15	9-3-c-iii	Providing and laying 1:2:4 cement concrete block masonry using Coarse Sand and Approved crushed aggregate 3/4" (19mm) & down gauge in foundation, basement and plinth including scaffolding, raking out joints and curing. 8" THICK	Cft	1541.621	243.600	375,538.799
	9-3-a-iii +9-9-1	4 "THICK	Cft	120.000	297.460	35,695.200
16		Providing and laying 1:2:4 cement concrete block masonry using Coarse Sand and Approved crushed aggregate 3/4" (19mm) and down gauge in ground floor super-structure including scaffolding, raking out joints and curing in cement sand 1:4 8" THICK				
	9-8-c-iii	Ground Floor	Cft	1475.696	253.100	373,498.698
	9-8-a-iii +9-9-1	4"THICK	Cft	283.500	308.630	87,496.605
	9-8-a-iii +9-9-1+ 9-12-1	First Floor	Cft	97.500	392.750	38,293.125
		ROOFING				
17	13-10-1	Providing Khurras on roof 24" x 24" x 2" (600mm x 600mm x 50mm) size including water proofing admixture @ 2 % of cement content or as otherwise advised by manufacturer	Each	2.000	675.900	1,351.800
18	13-11-1	Providing bottom khurras of brick masonry in cement sand mortar 1:6, size 48"x24"x 1.5" (1250mmx 600mmx 38mm) over 3inches (75mm) thick cement concrete 1:4:8 including water proofing admixture @ 2 % of cement content or as otherwise advised by manufacturer	Each	2.000	1169.450	2,338.900

19	13-60-a	Providing and fixing P.V.C rain water down pipe with mild steel clamps, bolts and nuts fixed in cement concrete 1:2:4. a) 3" (75 mm) dia.	Rft	30.000	198.500	5,955.000
20	13-62-a	Providing and fixing P.V.C bend of any degree for rain water down pipe with M.S. clamps bolts and nuts in cement concrete 1:2:4. a) 3" (75 mm) dia.	Each	2.000	1319.600	2,639.200
21	13-63-a	Providing and fixing PVC offset of any degree for rain-water down pipe on walls with M.S. clamps, bolts and nuts in cement concrete 1:2:4. a) 3" (75 mm) dia.	Each	2.000	1319.600	2,639.200
		FLOORING				
22	14-1-b	Providing and laying hand mixed cement concrete bed under floors using graded Crushed Aggregate upto 1-1/2" (37 mm) and down gauge complete with leveling, ramming, watering and curing. b) 1 : 4 : 8	Cft	262.266	145.650	38,198.975
23	14-2-a-ii	Providing and laying 2" (50mm) nominal thick flooring 1:2:4 cement concrete floor using crushed aggregate 3/4" (19mm) and down gauge in ground floor laid in panels including formwork, consolidation, finishing and curing.				
	14-2-a-ii	Ground Floor	Sft	240.000	52.150	12,516.000
24	14-9 b - 14-10b	Providing and laying 12"x12" Lasbela marble 3/4" thick tiles floor fine dressed on surface without winding in ground floor and laid over 1" (25mm) thick cement sand mortar 1:2 setting tiles with portland cement slurry over cement mortar, jointing and washing the tiles with white cement slurry including curing, rubbing and polishing including the cost of cement mortar				
		Ground Floor	Sft	577.828	227.700	131,571.464
25	14-15-1 - 14-16-2 + 14-24-a	Providing and laying Lasbela marble instead of super white 1" (25mm) thick, marble floor in slab exceeding 12"x12" marble size, fine dressed on surface without winding in ground floor and laid over 1" (25mm) thick cement sand mortar 1:2 setting tiles with portland cement slurry over cement mortar, jointing and washing the tiles with white cement slurry including curing, rubbing and polishing				
		Ground Floor	Sft	152.250	500.900	76,262.025
26	14-22-1	Extra for making nosing of treads as per design and/or as per instructions of the Engineer-in charge including grinding marble/marble chips and polishing etc				
		Ground Floor	Rft	42.000	40.600	1,705.200
27	14-25-a	Providing and laying 1/4" to 3/8" (6mm to 9mm) thick Glazed/Matt tiles of any colour and size in ground floor laid over 1" (25mm) thick cement sand mortar base including jointing and washing the tiles with white cement slurry of matching color by using color pigment and curing				
		Ground Floor	Rft	147.984	182.250	26,970.084
		DADO / SKIRTING				
28	14-54-a-b	Providing and fixing 3/8" (9mm) thick Lasbela marble tiles dressed on the surface in dado/skirting and facing in ground floor over 1/2" (13mm) thick base of cement sand mortar 1:3, setting of tiles in slurry of grey cement over mortar base including filling the joints and washing the tiles with white cement slurry, curing, finishing, grinding, cleaning & polishing				
		Ground Floor	Sft	63.437	133.600	8,475.116
29	14-64-a	Providing and fixing 1/4" to 3/8" (6mm to 9mm) thick Ceramic Glazed/Matt tiles (Prime Quality) of any colour and size, as directed by Engineer-in-Charge in dado/skirting in ground floor over 1/2" (13mm) thick base of cement mortar 1:3, setting of tiles in slurry of grey cement over mortar base including filling the joints and washing the tiles with white cement slurry of matching color, cleaning & curing				
		Ground Floor	Sft	539.138	144.050	77,662.829
		FINISHING				

30	15-1-iii + 15-39-1	Cement plaster using Coarse Sand 1:4 cement mortar ratio on soffits of ceiling, cantilever slabs, sides and soffits of beams, in basement and ground floor including making edges, corners and curing.	Sft	4199.812	31.350	131,664.110
31		1/2 inch (13mm) thick cement plaster using Coarse Sand on walls and columns in basement, plinth and ground floor including making edges, corners and curing. (1 : 4)				
	15-3-iii	Ground Floor	Sft	4797.920	22.950	110,112.264
	15-3-iii +15-6-1	First Floor	Sft	280.000	25.050	7,014.000
32		3/4 inch (19mm) thick cement plaster using Coarse Sand on walls and columns in basement, plinth and ground floor including making edges, corners and curing Ratio (iii) 1:4				
	15-4-iii	Ground Floor	Sft	2124.000	27.450	58,303.800
33	15-45-a	Supply and fixing of National tiles facing strips/chequered tiles on the plastered surface on exterior faces of building including labour, scaffoldings and removal of debris etc. a) Glazed strip tiles (Gate External Finish)	Sft	1664.250	126.600	210,694.050
		WOOD AND PLACTICS WORK				
34		Providing and fixing 1.5" (38mm) thick pressed veneered Teak wood door shutters fully flushed 5 Ply with First class wood veneering on all faces and sides fixed over deodar wood caved core and frame work of not less than 4" (100mm) wide strips all round with approved brass hinges, tower bolts as required				
	16-11-a-ii	GROUND FLOOR	Sft	134.162	783.200	105,075.678
35		Providing and fixing Chinese locks with brass or specially supplied screws including Door Closers and Floor Hinges of approved design including cutting wood to required shape and size with two operating keys as per direction of the engineer - in- charge.				
	16-66 - b	GROUND FLOOR	Each	7.000	1783.200	12,482.400
36		Providing and fixing approved Chromium plated brass sliding bolts or aldrop bolt of sizes with screws of same metal and G.I. bolts and nuts Brass sliding bolts 10" x 5/8" (250 mm x 16 mm) size				
	16-74-b-ii	GROUND FLOOR	Each	7.000	854.100	5,978.700
37		Making of Kitchen Cabinet 8'x3' make up from Veneer board (MEDIUM DENSITY) Laminated on both sides, and hanging on wall, i/c all hardwares				
	16-92-1	GROUND FLOOR	Sft	38.000	1075.650	40,874.700
		PAINTING AND VARNISHING.				
38		Supply & Applying french or spirit polish of approved make on wood work in ground floor or basement Two coats (@ atleast 1.65 Litre per 10 Sq.m)				
	17-15b	GROUND FLOOR	Sft	268.324	42.550	11,417.186
39	17-7-0	Painting with ICI/Berger or equivalent super gloss synthetic enamel paint in two or more coats as per manufacturer's instructions on steel and iron work over and including the cost of priming coat, surface preparation, removing rust, scales and dust with wire brush in ground floor or basement. (@ atleast 1.25Litre per 10 Sq.m)	Sft	1216.000	26.300	31,980.800
40		Painting with ICI/Berger or equivalent plastic emulsion paint on Wall of approved shade in two or more coats as per manufacturer's instructions on plastered rendered and/or concrete surface over and including the cost of priming coat, surface preparation, dusting, rubbing down smooth, filling cracks, holes removing blisters and other blisters and other imperfections in ground floor or basement. (@ atleast 1.65 Litre per 10 Sq.m)				
	17-8-1	GROUND FLOOR	Sft	725.812	31.900	23,153.407

41		Painting with ICI/Berger or equivalent plastic emulsion paint on Wall of approved shade in two or more coats as per manufacturer's instructions on plastered rendered and/or concrete surface over and including the cost of priming coat, surface preparation, dusting, rubbing down smooth, filling cracks, holes removing blisters and other blisters and other imperfections in ground floor or basement. (@ atleast 1.65 Litre per 10 Sq.m)				
	17-8-1	GROUND FLOOR	Sft	3745.920	31.900	119,494.848
42		Supply & Applying weather resistant paint coating such as ICI weather shield, Berger weather coat or equivalent to interior or exterior walls or ceiling including supplying all labour, materials, scaffoldings and removal of debris etc. @ atleast 3.50 litre per 10				
	17-69-1	Ground Floor	Sft	5454.000	31.800	173,437.200
		IRON, STEEL AND ALUMINIUM WORKS				
43		Providing and fixing fully glazed partly fixed and partly hung or sliding aluminium windows (Deluxe model - 1.6mm) of anodized champagne or approved color of Prime, Chawal, Alcop, Pakistan Cable or any approved section as approved by Engineer Incharge including aluminium fittings, local tinted glass, lugs, cutting holes and making good the damages to walls. Providing and fixing fixed or sliding fibre wire gauze in aluminium frame as approved by Engineer incharge including aluminium fittings etc.				
	28-26-a+b	Ground Floor	Sft	168.328	1050.050	176,752.816
44		Providing and fixing iron grills with square bars of 3/8" size as per approved design including welding all sides of the section at the junction and fixing with sunk iron screws, painting with two coats of red oxide paint and fixing in masonry/concrete or wood				
	28-28-1	Ground Floor	Sft	133.328	330.600	44,078.237
45		Providing and fixing fully glazed Aluminium swing doors 2.0mm of anodized Champagne or approved color (12 microns) or any approved section including Aluminium fittings, hungs, cutting holes and making good damages to walls. Providing and fixing 5 mm thick Tinted local glass panes in wooden or steel frames of doors, windows and ventilators etc. complete in all respect.				
	28-41-1 +16-86 a-iii	Ground Floor	Sft	35.000	1084.350	37,952.250
46	28-49-a +16-86-a iii	Providing and fixing steel grated single leaf door with 1/16" (1.6mm) thick M.S. sheeting and locking arrangement, angle iron 2"x2"x3/8" frame, middle strip, 1/4" thick gusset plate 3"x3" at each edge and 3/4" M.S square or round bars at 4" c/c including two coats of red oxide paint. a) M.S. sq. bars 3/4" (19 mm) size.	Sft	128.000	885.500	113,344.000
47	28-49b	Providing and fixing steel grated double leaf door with M.S. 1/16" (1.6mm) thick sheet and locking arrangement, angle iron 2"x2"x3/8" frame, middle strip, 1/4" thick gusset plate 3"x3" at each edge and 3/4" M.S square or round bars at 4" c/c including two coats of red oxide paint. a) M.S. sq. bars 3/4" (19 mm) size.	Sft	480.000	992.850	476,568.000
48	28-18-	Providing and fixing M.S. sheet shutters with 2" x 2" x 1/4" angle iron frame as diagonal braces, gun metal roller and pulleys, angle iron top guides fixed to T-iron bottom track fixed in cement concrete 1:2:4 with rag bolts including locking arrangement and handles as per design and instructions of the Engineer incharge.	Kg	1600.000	723.800	1,158,080.000
		TOTAL				7,065,947.247

ESTABLISHMENT OF SBK WOMEN'S UNIVERSITY SUB CAMPUS PISHIN

MAIN GATE,RECEPTION OFFICE AND SECURITY OFFICE (PACKAGE-4)

BILL OF QUANTITIES PUBLIC HEALTH WORKS

S. No	SCH.ITE M	DESCRIPTION OF ITEMS	QUANTITY	UNIT	RATE (RS)	AMOUNT (RS)
1		Providing and Installing uPVC blind pipe of approved make registered with PSQCA in tubewell bore hole and/or laying, cutting, jointing, testing and disinfecting uPVC pipe lines in trenches. (3" (75 mm) inner dia)				
	27-19-a-i	GROUND FLOOR	100.000	RFT	172.150	17,215.000
2		Providing and Installing uPVC blind pipe of approved make registered with PSQCA in tubewell bore hole and/or laying, cutting, jointing, testing and disinfecting uPVC pipe lines in trenches. (4" (100 mm) inner dia)				
	27-19-a-ii	GROUND FLOOR	100.000	RFT	233.050	23,305.000
3		Providing and fixing C.I. floor trap 4" dia. inlet and outlet with C.I. grating floor trap of approved self cleaning design with screwed down grating with or without a vent arm with and including making requisite number of holes in walls, plinth and floor for pipe connection and making good with				
	23-9-b	GROUND FLOOR	7.000	No	1,695.000	11,865.000
4		Providing and fixing export quality glazed earthen ware wash basin 650mm (26") Dark coloured with padestal manufactured by international ceramics ltd ICL Boch Karm Cera or equivalent approved make with single hole chromium plated mixer tap 15mm (.5") pillar tap 2 way deluw stop cocks CI or WI bracketes 150mm (6") built in to walls 40mm (1.5") dia malleable iron or CP brass trap with malleable iron or brass union and making requistes number of hole in walls plinth and floor for pipe connections and making good with approved material including coloured glazed earthen ware pedestal manufactured by ICL/Karam Cera or approved equivalent make				
	23-5-c-i+ 23-5-d-i	GROUND FLOOR	2.000	No	12,467.650	24,935.300
5		Providing and fixing squatting type water closet with integral treads ICL Boch/Karam Cera or approved equivalent make including cost of inlet pipe cistern and lid cistern kit, stop cock deluxe type and other accessories, fittings, brackets, PVC down pipe, rubber rings/washers, making requisite number of holes in walls, plinth and floor for pipe connection and making good with approved material.				
	23-2-a-ii	GROUND FLOOR	2.000	Nos	7,295.400	14,590.800

6		Providing and fixing squatting type W.C. Orisa/Asian/900 with glazed earthen ware 4" (100 mm) trap water closet with integral treads ICL Boch/Karam Cera or approved equivalent make including cost of inlet pipe cistern and lid cistern kit, stop cock deluxe type and other accessories, fittings, brackets, PVC down pipe, rubber rings/washers, making requisite number of holes in walls, plinth and floor for pipe connection and making good with approved material.				
	23-2-a-ii	GROUND FLOOR	2.000	Nos	7,295.400	14,590.800
7		Providing and fixing stainless steel sink Pakistan made with C.I. or W.I brackets 6" built in wall, 1.5" (40 mm) rubber plug,C.P. brass chain, C.P. brass waste, pillar tap 2 way delux, 1.5" dia malleable iron or C.P. brass trap and unions and making requisite number of holes in walls, plinth and floor for pipe connections and making good with approved material. Stainless steel sink 40" x 20" (1000 mm x 500 mm)				
	23-8		1.000	Nos	7,410.000	7,410.000
		Providing and fixing chromimum plated tee stop cock 15mm (.5") of super quality of approved make				
8	23-32-a	GROUND FLOOR	1.000	No	520.550	520.550
		Providing, laying, cutting, jointing, testing and disinfecting PPRC (1/2) dia pipes confirming to ISO 4427, PN-20, complete in all respects with specials and valves etc. including all fittings, connnections and jointing material	Bath x 45			
	27-47-a-i	GROUND FLOOR	600.000	RFT	22.640	13,584.000
9		Providing, laying, cutting, jointing, testing and disinfecting PPRC (3/4) 20mm dia pipes confirming to ISO 4427, PN-20, complete in all respects with specials and valves etc. including all fittings, connections and jointing material	Bath x95			
	27-47-a-ii	GROUND FLOOR	500.000	RFT	30.200	15,100.000
10		Providing, laying, cutting, jointing, testing and disinfecting PPRC pipe 25mm (1") i/dia pipes confirming to ISO 4427, PN-20, complete in all respects with specials and valves etc. including all fittings, connections and jointing material				
	27-47-a-iii	GROUND FLOOR	100.000	RFT	49.860	4,986.000
11		Providing, laying, cutting, jointing, testing and disinfecting PPRC pipe 50mm (2") i/dia pipes confirming to ISO 4427, PN-20, complete in all respects with specials and valves etc. including all fittings, connections and jointing material				
	27-47-a-vi	GROUND FLOOR	100.000	RFT	115.220	11,522.000
12		Providing and fixing chromimum plated bib cock 20mm (.75") of superior quality of approved make				
	23-34-a	GROUND FLOOR	8.000	No	1,131.000	9,048.000
13		Providing and fixing looking glass of belgium glass 600 mm x 450 mm (24" x 18") and chromimum plated screws with 3.2mm thick hard board	3.000			
	23-15-1	GROUND FLOOR	32.000	sft	137.100	4,387.200
14		Providing and fixing approved quality chromium plated towal rail 600 mm x 20 mm (24" x.75") with bracket and screws				
	23-13-a	GROUND FLOOR	2.000	No	1,923.000	3,846.000
		Providing and fixing chromium plated soap dish				
	23-29-a	GROUND FLOOR	2.000	Nos	915.000	1,830.000

15		Supply and fix 35 gallons electric geyser including all accessories and fittings etc.	3Bath=1Geyzer			
	30-123-a	GROUND FLOOR	2.000	Nos	19,260.000	38,520.000
16		Providing and fixing LDPE 500 gallons capacity overhead tank manufactured by Dura or equivalent on top of any floor				
	27-44-b	TOP FLOOR	2.000	No	30,230.400	60,460.800
17		Providing and laying 4" (100 mm) inner dia Plain cement concrete pipe conforming to ASTM C-14 class-II or equivalent. moulded with cement concrete 1:1.5:3 with spigot socket or collar joint as specified in trenches to correct alignment and grade, jointing with jointing materials including cutting pipes where necessary, finishing and testing				
	25-1-a-i		300.000	RFT	63.700	19,110.000
18		Providing and fixing gulley trap with 4" (100mm) outlet , complete with 4" (100mm) thick 1:2:4 cement concrete using 3/4" (19mm) crushed aggregate for bed and kerb, 1/2" (13mm) thick cement plaster 1:3, 12"x12"x18" deep inside dimension chamber with C.I. grating 6"x6" cover and frame 12"x12 Cement concrete gulley trap 6" x 6" x 4" (150 x 150 x 100 mm) with C.I. cover and frame weighing not less than 10 kg.				
	25-2-a		4.000	Each	4,540.200	18,160.800
19		Providing and fixing 1" (25 mm) superior quality C.P. flushing valve of approved make for wash hand basin, sink or shower.				
	23-38-1		2.000	Each	4,005.000	8,010.000
20		Providing and fixing 1.25" (30 mm) dia C.P. bottle trap with union and waste pipe .				
	23-28-1-a		2.000	Each	1,545.000	3,090.000
21		Providing manhole type 'A' size 24" x 18" (inside dimensions) as per approved design and specifications complete for 4" to 12" dia pipes upto 4 ft. (1.2 m) depth with 16" dia. Concrete Cover fixed in 4" thick RCC 1:2:4 slab (with 5 lbs per Cu.ft. or 80 kg/Cu.m of steel), burnt brick masonry walls 9" (225 mm) thick set in 1:3 cement sand mortar, 6" thick 1:3:6 cement concrete in foundation, 4" av. thickness 1:2:4 cement concrete in benching and 1/2" (13mm) thick cement sand plaster in 1:3 to all inside wall surfaces, channels and benching including making requisite number of main and branch channels but excluding the cost of excavation, back filling and disposal of excavated stuff.				
	25-4-a		6.000	Each	12,811.700	76,870.200
		Total Schedule items				402,957.450

ESTABLISHMENT OF SBK WOMEN'S UNIVERSITY SUB CAMPUS PISHIN BALOCHISTAN
SECURITY HUTTS (PACKAGE-4)
BILL OF QUANTITIES
ELECTRICAL WORKS

Sr No.	Item. No.	Description	REF. Nos CH/ITEM	Unit	Estimated Quantity	Rate	Amount
Government of Balochistan Composite Schedule of Rates Version 2018							
A) Schedule Items							
1		Light Circuits.					
	1.2	Light circuit concealed/open wiring with length upto 65 ft. (20m) from					
		Concealed wiring with 3/4" (20 mm) dia. PVC conduit and accessories such as bends, elbows, junction boxes etc.	Item 30-2 (a)	Point	2.000	3,546.600	7,093.200
2		1st Light / Fan Point Controlled By One Switch					
	2.1	Concealed/open wiring from point to switch with length upto 30 ft.					
		Concealed wiring with 3/4" (20 mm) dia. PVC conduit and accessories such as bends, elbows, junction boxes etc.	Item 30-3 (a)	Point	5.000	1,877.300	9,386.500
4		1- 5 Amps Switch Socket					
	4.1	Wiring of 5/13 Amps. socket outlet with 2.5 sq.mm PVC insulated single core copper conductor cable including 3/4" (20mm) dia. PVC conduit, 8.7sq.mm (10SWG) copper wire as earth continuity conductor and wiring accessories such as bends, elbows, junction boxes etc.	Item 30-9	Rft	100.000	69.550	6,955.000
5		Switch & Socket					
	5.1	Description same as in Item 30-129 but with 3 gang switch.	Item 30-131	No.	2.000	1,017.400	2,034.800
	5.4	Supply and install combined 3 pin 5 Amps, 250 Volt switch socket unit including plastic box to be fixed recessed in wall.	Item 30-19	No.	2.000	938.750	1,877.500
2		PVC Pipe					
		Supply and installation of 3/4" (20 mm) dia PVC concealed conduit including all accessories such as bends, elbows etc.	Item 30-21	Rft	50.000	19.700	985.000
		Supply and installation of 1" (25mm) dia PVC concealed conduit including all accessories such as bends, elbows etc.	Item 30-22	Rft	50.000	24.650	1,232.500
		Supply and installation of 1.25" (30mm) dia PVC concealed conduit including all accessories such as bends, elbows etc.	Item 30-23	Rft	50.000	31.050	1,552.500
Total A-(Schedule Items)=							31,117.000
B) Non-Schedule Items.							
1		Wall Bracket Fan					
		Supply and installatin of Wall Bracket Fan, Make Pak Fan, With hanging Arrangement, complete in all respect, as approved by ther Engineer incharge.	Appendix ' c' Page No-1	Each	2		
4		LED Fitting and Fixture					
	a	Supply and inatallation of LED Tube Light make philips or sun light as approved by the Engineer Incharge, Complete in all respect.	Appendix ' c' Page No-2	Each	2		
	c	Supply and inatallation of outdoor LED Wall light IP 65 make philips or sun light as approved by the Engineer Incharge, Complete in all respect.	Appendix ' c' Page No-3	Each	2		
Total B(Non-Schedule Items)=							

ESTABLISHMENT OF SBK WOMEN'S UNIVERSITY SUB CAMPUS PISHIN BALOCHISTAN
SECURITY OFFICE (PACKAGE-4)
BILL OF QUANTITIES
ELECTRICAL WORK

Sr No.	Item. No.	Description	REF. Nos CH/ITEM	Unit	Estimated Quantity	Rate	Amount
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Government of Balochistan Composite Schedule of Rates Version 2018

A) Schedule Items							
1		Light Circuits.					
	1.1	Light circuit concealed/open wiring with length upto 75 ft. (25m) from					
		Concealed wiring with 3/4" (20 mm) dia. PVC conduit and accessories such as bends, elbows, junction boxes etc.	Item 30-1 (a)	Point	1.000	4,433.250	4,433.250
	1.2	Light circuit concealed/open wiring with length upto 65 ft. (20m) from					
		Concealed wiring with 3/4" (20 mm) dia. PVC conduit and accessories such as bends, elbows, junction boxes etc.	Item 30-2 (a)	Point	4.000	3,546.600	14,186.400
2		1st Light Point Controlled By One Switch					
	2.1	Concealed/open wiring from point to switch with length upto 30 ft.					
		Concealed wiring with 3/4" (20 mm) dia. PVC conduit and accessories such as bends, elbows, junction boxes etc.	Item 30-3 (a)	Point	24.000	1,877.300	45,055.200
3		Point to Point Controlled By One Switch					
	3.1	Concealed/open wiring from point to point with length upto 10 ft. (3m) with 3x1.5 Sq.mm PVC insulated single core copper conductor Pakistan Cables, Pioneer, Newage or approved equivalent cables.					
		Concealed wiring with 3/4" (20 mm) dia. PVC conduit and accessories such as bends, elbows, junction boxes etc.	Item 30-4 (a)	Point	25.000	563.200	14,080.000
4		1- 5 Amps Switch Socket					
	4.1	Wiring of 5/13 Amps. socket outlet with 4 sq.mm PVC insulated single core copper conductor cable including 3/4" (20mm) dia. PVC conduit, 8.7sq.mm (10SWG) copper wire as earth continuity conductor and wiring accessories such as bends, elbows, junction boxes etc.	Item 30-9	Rft	600.000	101.950	61,170.000
5		Switch & Socket					
	5.1	Supply and install 1-gang, 5 Amp, 250 Volt., plate type moulded Clipsal/Schneider or equivalent imported switch including appropriate size plastic box to be fixed recessed in wall.	Item 30-129	No.	1.000	729.600	729.600
	5.2	Description same as in Item 30-129 but with 3 gang switch.	Item 30-131	No.	3.000	1,017.400	3,052.200
	5.1	Supply and install with 4 up to 6 gang switch., 5 Amp, 250 Volt., plate type moulded Clipsal/Schneider or equivalent imported switch including appropriate size plastic box to be fixed recessed in wall.	Item 30-132	No.	4.000	1,103.400	4,413.600
	5.4	Supply and install combined 3 pin 5 Amps, 250 Volt switch socket unit including plastic box to be fixed recessed in wall.	Item 30-19	No.	12.000	938.750	11,265.000
	5.5	Supply and install combined 3 pin 15 Amps. switch socket unit including plastic box to be fixed recessed in wall.	Item 30-20	No.	4.000	1,045.000	4,180.000
2		PVC Pipe					
		Supply and installation of 3/4" (20 mm) dia PVC concealed conduit including all accessories such as bends, elbows etc.	Item 30-21	Rft	500.000	19.700	9,850.000
		Supply and installation of 1" (25mm) dia PVC concealed conduit including all accessories such as bends, elbows etc.	Item 30-22	Rft	100.000	24.650	2,465.000
		Supply and installation of 1.25" (30mm) dia PVC concealed conduit including all accessories such as bends, elbows etc.	Item 30-23	Rft	50.000	31.050	1,552.500
		Supply and installation of 1.5" (40mm) dia PVC concealed conduit including all accessories such as bends, elbows etc.	Item 30-24	Rft	50.000	39.850	1,992.500
		Supply and installation of 2" (50mm) dia PVC concealed conduit including all accessories such as bends, elbows etc.	Item 30-25	Rft	200.000	54.100	10,820.000
6		L.T. Power Cables					
	6.1	Supply and install 25 sq.mm, 3.5 core, PVC insulated and sheathed multicore, 600/1000V cable with copper conductor directly clipped on surface of wall, column, beam, ceiling, etc. for power wiring.	Item 30-40	Rft	75.000	666.200	49,965.000
7		Circuit Protective Conductor (CPC)					
	7.1	Supply and install 16 sq.mm cable. PVC insulated single core 600/1000V cable with copper conductor in already concealed PVC conduit.	Item 30-36	Rft	75.000	109.600	8,220.000
9		Ceiling Fans					
		Supply, install, connect Ceiling Fan energy efficient model as approved and rated 3-Star by NEECA with power consumption of less than 80 W+10%	Item 30-107	Each	5.000	5,577.000	27,885.000
10		Exhaust Fans					
		Supply and install 10" (250 mm) sweep exhaust fan including plastic louvers.	Item 30-113	Each	3.000	2,760.000	8,280.000
12		L.T. Switchgear					
		Distribution Board Concealed					
	12.1	DBLP-1B					

	a	Provide, install, test and commission recessed wall mounting type distribution board fabricated from 16 SWG steel sheet, powder coated with approved color back box comprising one incoming MCCBTP/ 60A and outgoing 9 single phase MCB of various capacity having overload & short circuit protection and of 6 KA braking capacity complete with internal wiring earthing, neutral link, termination blocks, phase indicating lights alongwith 500V voltmeter.	Item 30-116(a)	Each	1.000	28,090.200	28,090.200
	b	Extra for installing each number circuit breaker 6 Ampere on same distribution board and bus bar (For outgoing)	Item 30-116(b)	Each	3.000	2,748.000	8,244.000
13		Earthing System					
	13.1	Supply and install pair of earth electrode each comprising 24"x12" (600mmx 3mm) thick copper plate buried 13 ft. (4m) deep underground in upright position in a pit and surrounded by mixture of salt and charcoal (1:3), 12" (300mm) min dia around the plate. The job also includes providing and fixing all accessories such as nuts, bolts, washers, 2x3/0 SWG (2x70mm) copper conductor earthing, lead.	Item 30-91	Job	1.000	60,471.150	60,471.150
	13.2	Construction of 20" x 20" (500mm x 500 mm) square inspection chamber for earth electrodes including medium duty C.I. cover and all associated civil works.	Item 30-97	Job	1.000	7,948.950	7,948.950
14		Telephone System					
	14.1	Supply and install recessed type telephone distribution box suitable for 30 pair including appropriate size 16 SWG sheet steel box with hinged, latched and lockable cover.	Item 30-100	Job	1.000	7,521.550	7,521.550
			Total A-(Schedule Items)=				395,871.100
B) Non-Schedule Items.							
1		Earthing System					
	1.1	Earth Connecting Point					
		Supply, installation of earth connecting points consisting of copper plate 12" long, 2" wide and 1/2" thick to be installed as and where shown on	Appendix ' c' Page No-1	Nos.	1		
2		Telephone System					
	2.1	Telephone Outlet					
		Supply / Erection of Bush made data single socket (RJ-45) including 16 SWG back box of 3"x3" size complete in all respect.	Appendix ' c' Page No-2	Each	4		
	2.2	Telephone Cables					
		Providing & laying multi pairs (Twisted) PVC insulated / underground cable of best quality (siemens, Germany, or Best imported as per approved sample) in pre-laid PVC recessed conduit or fixed cable duct/ Tray as per satisfaction of the Electrical Engineer.					
	a	4-5 Pair Cable CAT-6/UG/PVC (0.6 mm sq) (From DP to each Room)	Appendix ' c' Page No-3	Rft	1250		
4		LED Fitting and Fixture					
	a	Supply and inatallation of LED Down Light 15 Watts make philips or sun light as approved by the Engineer Incharge, Complete in all respect.	Appendix ' c' Page No-4	Each	15		
	b	Supply and inatallation of LED Down Light 12 Watts make philips or sun light as approved by the Engineer Incharge, Complete in all respect.	Appendix ' c' Page No-5	Each	20		
	c	Supply and inatallation of LED Down Light 7 Watts make philips or sun light as approved by the Engineer Incharge, Complete in all respect.	Appendix ' c' Page No-6	Each	3		
	d	Supply and inatallation of indoor LED Wall light make philips or sun light as approved by the Engineer Incharge, Complete in all respect.	Appendix ' c' Page No-7	Each	3		
	e	Supply and inatallation of outdoor LED Wall light IP 65 make philips or sun light as approved by the Engineer Incharge, Complete in all respect.	Appendix ' c' Page No-8	Each	4		
	f	Supply and inatallation of LED Gate Lights make philips or sun light as approved by the Engineer Incharge, Complete in all respect.	Appendix ' c' Page No-9	Each	2		
	g	Supply and inatallation of 100 Watts Flood Light IP 65 make philips or sun light as approved by the Engineer Incharge, Complete in all respect.	Appendix ' c' Page No-10	Each	2		
	h	Supply and inatallation of Mini Chandelier as approved by the Engineer Incharge, Complete in all respect.	Appendix ' c' Page No-11	Each	1		
			Total B(Non-Schedule Items)=				