

**Punjab Rural Sustainable Water Supply & Sanitation Project (PRSWSSP), Cluster South-I (Rojhan) (PHASE-II)
, District Rajanpur**

Multi-village Scheme-1, Multi-village Scheme-2, Multi-village Scheme-3

Dera Dildar (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5,Catchment-6,Catchment-7,Catchment-8),Chak Karia (Catchment-1,Catchment-2,Basti Silachi),Dera Jiwan Khas (Catchment-1),Miranpur (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5),Badli (Catchment-1),Kotla Gulsher (Catchment-1,Catchment-2,Catchment-3),Badli Chak Ladh (Catchment-1,Catchment-2),Kaheeri (Catchment-1,Catchment-2)

Main Summary

Sr. No.	Description	Amount (PKR)
1	Water Supply Scheme	0
2	Sanitation (Covered Drain) Scheme	0
3	Street Soling and Tuff Pavers	0
4	ESMP Cost	0
5	Employer / Engineer's Facilities	0
	Total Cost (1+2+3+4+5)	0
	PRA 5%	0
	Total Cost	0
	Cost in Million	0.00

Punjab Rural Sustainable Water Supply & Sanitation Project (PRSWSSP), Cluster South-I (Rojhan) (PHASE-II) , District Rajanpur

Water Supply Scheme

Multi-village Scheme-1, Multi-village Scheme-2, Multi-village Scheme-3

Dera Dildar (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5,Catchment-6,Catchment-7,Catchment-8),Chak Karia (Catchment-1,Catchment-2,Basti Silachi),Dera Jiwan Khas (Catchment-1),Miranpur (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5),Badli (Catchment-1),Kotla Gulsher (Catchment-1,Catchment-2,Catchment-3),Badli Chak Ladh (Catchment-1,Catchment-2),Kaheeri (Catchment-1,Catchment-2)

Cost Summary

Sr. No.	Description	Amount (PKR)
1	Water Supply Scheme	
1.1	Boring and Conversion into Tube-well (03-Nos)	0
1.2	Construction of Pump House with Control Panel Room & Toilet (03-Nos)	0
1.3	Providing and fixing of Pumping Machinery including Hypo-Chlorinator & Allied Work	0
1.4	Electrification for Tube well Pump Room (03-Nos)	0
1.5	Flood Protection (03 Nos)	0
1.6	Boundary Wall of Solar System (03- Nos)	0
1.7	Laying of Pipe Network (Rising Main, Distribution Pipe line & Water Connection) - 253,765 ft	0
1.8	Construction of Valve Chamber (76 No.)	0
1.9	Construction of Stand Post / LLR including Civil & Plumbing Works / Electrical Works (27-Nos)	0
	Total	0

Punjab Rural Sustainable Water Supply & Sanitation Project (PRSWSSP), Cluster South-I (Rojhan) (PHASE-II) , District Rajanpur

Water Supply Scheme

Multi-village Scheme-1, Multi-village Scheme-2, Multi-village Scheme-3

Dera Dildar (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5,Catchment-6,Catchment-7,Catchment-8),Chak Karia (Catchment-1,Catchment-2,Basti Silachi),Dera Jiwan Khas (Catchment-1),Miranpur (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5),Badli (Catchment-1),Kotla Gulsher (Catchment-1,Catchment-2,Catchment-3),Badli Chak Ladh (Catchment-1,Catchment-2),Kaheeri (Catchment-1,Catchment-2)

1.1 Engineer's Estimate for Boring and Conversion into Tube-well 03 Nos

Sr. No.	MRS Ref.	Description	Unit	Quantity	Rate (PKR)	Amount (PKR)
1	Ch-23, It-2	Direct Rotary/ Reverse Rotary drilling of bore for tubewells, in all types of soil except shingle, gravel and rock: a) from ground level to 250 ft. (75 m) below ground level: i) 15" to 18" (375 to 450 mm) i/d	Rft	550.00		
2	Ch-23, It-5	Furnishing sample of water from bore hole.	Set	6.00		
3	Ch-23, It-10	Providing and installing Fiber glass Reinforced Polypropylene (FRP) blank pipe of specified wall thickness having slot size of 0.9 mm to 1.10 mm in Tubewell bore hole i/c the cost of male / female coupling with Nylone Strip, studs complete in all respect as approved and directed by the Engineer Incharge.				
		vi) 10"dia (6.35mm thickness)	Rft	390.00		
4	Ch-23, It-9	Providing and installing Fiberglass Reinforced Polypropylene (FRP) strainer of specified wall thickness having slot size of 0.9 mm to 1.10 mm in Tubewell borehole i/c the cost of male/female coupling with Nylone Strip, studs complete in all respect as approved and directed by the Engineer Incharge.				
		v) 10" inch dia (6.35 mm thickness)	Rft	130.00		
5	Ch-23, It-10	Providing and installing Fiber glass Reinforced Polypropylene (FRP) bail plug of specified wall thickness having slot size of 0.9 mm to 1.10 mm in Tubewell bore hole i/c the cost of male / female coupling with Nylone Strip, studs complete in all respect as approved and directed by the Engineer Incharge.				
		vi) 10"dia (6.35mm thickness)	Rft	30.00		
6	Ch-23, It-17	Shrouding with graded pea gravel 3/8" to 1/8" (10 to 3 mm), around tubewell in bore hole.	Cft	674.35		
7	Ch-23, It-13	Providing and installing P.V.C. blind pipe, B.S.S. Class 'B', in tubewell bore hole, including sockets and solvents and jointing with strainer, etc. complete. 3" i/d (75 mm)	Rft	360.00		
8	NS	Chemical, Physical and Arsenic Analysis of water from approved Water Testing Lab.	Each	6.00		
9	NS	Providing / fixing M.S Centralizer.	Each	36.00		
10	Ch-23, It-31	Providing & mixing Bentonite clay / powder have swelling factor of 1200% for lining /seal and plug earthen boreholes / ponds in the specified ratio conforming to IS:6186 for stabilization of soil as specified by the designer etc complete in all respect	Per Kg	36.46		
11	NS	A supply well is provided to store water required for the drilling operations of the tubewell bore. This ensures continuous water availability during boring. The work includes complete drilling of the tubewell bore using rotary/reverse rotary methods, along with installation of M.S. pipes, strainers, pump, and engine. All activities are carried out completely in all respects	Each	3.00		
12	NS	Geophysical logging of bore (self potential resistivity Both short normal and Gama) complete in all respect.	Job	3.00		
13	Ch-23, It-16	Testing and developing of tubewell of size 6" (150 mm) i/d and above continuously. i) up to 1.5 cs. discharge	Hrs.	216.00		
Total - Cost 03 Nos of Tube well						0

Punjab Rural Sustainable Water Supply & Sanitation Project (PRSWSSP), Cluster South-I (Rojhan) (PHASE-II) , District Rajanpur
Water Supply Scheme

Multi-village Scheme-1, Multi-village Scheme-2, Multi-village Scheme-3

Dera Dildar (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5,Catchment-6,Catchment-7,Catchment-8),Chak Karia (Catchment-1,Catchment-2,Basti Silachi),Dera Jiwan Khas (Catchment-1),Miranpur (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5),Badli (Catchment-1),Kotla Gulsher (Catchment-1,Catchment-2,Catchment-3),Badli Chak Ladh (Catchment-1,Catchment-2),Kaheeri (Catchment-1,Catchment-2)

1.2 Engineer's Estimate for Construction of Pump House with Control Panel Room & Toilet (03-Nos)

Sr. No.	MRS Ref.	Description	Unit	Quantity	Rate (PKR)	Amount (PKR)
1	Ch-3, It-21	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling in layers around structure with excavated earth, watering and ramming lead 'up to one chain (30 m) and lift up to 5 ft. (1.5 m) 1) By Manual a) Depth up to 5ft (1.5m) ii) in ordinary soil.	1000cft	2.14		
2	Ch-6, It-3	Cement concrete brick or stone ballast 1½ " to 2" (40 mm to 50 mm) gauge, in foundation and plinth:- (d) Ratio 1: 6: 12 (b) Ratio 1: 4: 8	100Cft 100Cft	4.02 1.64		
3	Ch-6, It-5	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate) : (f) Ratio 1: 2: 4	100Cft	1.24		
4	Ch-7, It-4	Pacca brick work in foundation and plinth in: i) Cement, sand mortar: Ratio 1:5	100Cft	9.32		
5	Ch-6, It-37	Providing and laying damp proof course of cement concrete 1:2: 4(using cement, sand and shingle), including bitumen coating: (b) with 2 coats of bitumen: ii) 2" thick (50 mm)	100Sft	1.51		
6	Ch-3, It-15	Filling, watering and ramming earth under floors: i) With surplus earth from foundation, etc.	1000Cft	4.59		
7	Ch-10, It-3	Supplying and filling sand under floor; or plugging in wells.	100Cft	1.59		
8	Ch-7, It-5	Pacca brick work in ground floor: i) Cement, sand mortar: Ratio 1:5	100Cft	16.09		
9	Ch-11, It-8	Cement plaster 1:3 up to 20' (6.00 m) height: b) 1/2" (13 mm) thick	100Sft	32.16		
10	Ch-11, It-12	Cement plaster 3/8" (10 mm) thick under soffit of R.C.C. roof slabs only, upto 20' height . b) 1:3	100Sft	5.17		
11	Ch-11, It-26	White washing: a) new surface: iii) three coats	100Sft	54.36		
12	Ch-11, It-18	Cement pointing struck joints, on walls, up to 20' (6.00 m) height:- a) ratio 1:2	100Sft	18.54		
13	Ch-11, It-19	Extra cost of labour and material for red oxide pigment in cement pointing to match with the colour of bricks.	100Sft	18.54		
14	Ch-11, It-24	Preparing surface and painting with Distemper 3coats	100Sft	32.16		

Punjab Rural Sustainable Water Supply & Sanitation Project (PRSWSSP), Cluster South-I (Rojhan) (PHASE-II) , District Rajanpur
Water Supply Scheme

Multi-village Scheme-1, Multi-village Scheme-2, Multi-village Scheme-3

Dera Dildar (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5,Catchment-6,Catchment-7,Catchment-8),Chak Karia (Catchment-1,Catchment-2,Basti Silachi),Dera Jiwan Khas (Catchment-1),Miranpur (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5),Badli (Catchment-1),Kotla Gulsher (Catchment-1,Catchment-2,Catchment-3),Badli Chak Ladh (Catchment-1,Catchment-2),Kaheeri (Catchment-1,Catchment-2)

1.2 Engineer's Estimate for Construction of Pump House with Control Panel Room & Toilet (03-Nos)

Sr. No.	MRS Ref.	Description	Unit	Quantity	Rate (PKR)	Amount (PKR)
15	Ch-10, It-46(i) -17.65 deduction for matt finishes	Porcelain Tile Providing and laying superb quality Porcelain glazed tiles flooring of MASTER brand of specified size in approved design, Color and Shade with adhesive/ bond over 3/4"thick (1:3) cement plaster i/c the cost of sealer for finishing the joints i/c cutting grinding complete in all respect as approved and directed by the Engineer Incharge. a) Full body Glazed tiles (i) 300 mm x 600 mm	Per Sft.	474.060		
16	Ch-6, It-6	Providing and laying reinforced cement concrete (including prestressed concrete), using Ordinary Portland Cement / Sulphate resisting cement / Slag cement as may be required; coarse sand and screened graded and washed aggregate, in required shape and design, including forms, moulds, shuttering, lifting, compacting, curing, rendering and finishing exposed surface, complete (but excluding the cost of steel reinforcement, its fabrication and placing in position, etc.): (a) Reinforced cement concrete in roof slab, beams, columns lintels, girders and other structural members laid in situ or precast laid in position, or prestressed members cast in situ, complete in all respects: (3) Type C (nominal mix 1: 2: 4)	Cft	593.80		
17	Ch-6, It-12	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars): (b) Deformed bars (i) (Grade-60)	100Kg	14.45		
18	Ch-25, It-61	P/F Iron door comprising of specified leaves made of 1-1/4" x1-1/4" x3/16" MS angle iron for leaf frame, diagonal and horizontal braces duly welded with MS. sheet 18-SWG i/c the cost of sliding bolt, tower bolt and painting 3-coats but excluding the cost of Chowkat complete in all respect as approved and directed by the Engineer incharge.(ii) Double Leaf	Sft	252.00		
19	Ch-12, It-15	Providing and fixing mild steel chowkat of doors, windows, C.window, etc. including holdfast, making and threading holes for hinges, etc. complete:- a) M.S. angle iron 1½"x 1½"x ¼" (40x40x6 mm) welded with M.S. flat 2"x ¼" (50 mm x 6 mm)	Sft	360.00		
20	Ch-25, It-42	Providing and fixing steel windows using M.S. sheet (16 SWG) moulded tubular pipe 1½"x1½" (40x40mm) for frame and 1¼"x1¼" (30x30mm) for leaves including M.S. square bars ¼"x¼" (6x6 mm) welded around each panel of frame, 5 mm thick glass panes fixed with double M.S. square tubular pipe 3/8"x3/8" (10x10mm) (22 SWG) beading with U' shaped rubber lining, brass fitting, holdfast, including painting three coats complete in all respects. a) For openable panels fixed with wire gauze 24 SWG, 12x12 mesh and glass panes ¼" (6 mm) thick.	Sft	108.00		

Punjab Rural Sustainable Water Supply & Sanitation Project (PRSWSSP), Cluster South-I (Rojhan) (PHASE-II) , District Rajanpur
Water Supply Scheme

Multi-village Scheme-1, Multi-village Scheme-2, Multi-village Scheme-3

Dera Dildar (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5,Catchment-6,Catchment-7,Catchment-8),Chak Karia (Catchment-1,Catchment-2,Basti Silachi),Dera Jiwan Khas (Catchment-1),Miranpur (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5),Badli (Catchment-1),Kotla Gulsher (Catchment-1,Catchment-2,Catchment-3),Badli Chak Ladh (Catchment-1,Catchment-2),Kaheeri (Catchment-1,Catchment-2)

1.2 Engineer's Estimate for Construction of Pump House with Control Panel Room & Toilet (03-Nos)

Sr. No.	MRS Ref.	Description	Unit	Quantity	Rate (PKR)	Amount (PKR)
21	NS	Providing and fixing MS cover fabricated from 3/8" thick MS plate (size 2.75' x 2.75') with stiffeners and embedded MS angle frame, Angle iron 1"-1/4" X 1"-1/4" X 1/8" including cutting, welding, grinding, red oxide primer and enamel paint, complete in all respect	Each	3.00		
22	Ch-9, It-15	Khuras on roof 2'x2'x6" (600 x 600 x 150 mm)	Each	3.00		
23	Ch-9, It-14	Khassi pernalas in cement, sand mortar 1:2, 12" (300mm) outside width finished smooth with a floating coat of neat cement.	Rft	37.50		
24	Ch-9, It-16	Bottom Khuras of brick masonry in cement mortar 1:6, 4'x2'x4 1/2" (1200x600x113 mm) over 3" (75 mm) cement concrete 1:4:8.	Each	3.00		
25	Ch-9, It-5	Single layer of tiles 9"x4 1/2"x1 1/2" (225x113x40 mm) laid over 4" (100 mm) earth and 1" (25 mm) mud plaster without Bhoosa, grouted with cement sand 1:3 on top of RCC roof slab, provided with 34 lbs. Per %Sft. or 1.72 Kg/Sq.m bitumen coating sand blinded.	100Sft	9.14		
26	Ch-25, It-10	Fabrication of heavy steel work, with angle, tees, flat iron round iron and sheet iron for making trusses, girders, tanks, etc., including cutting, drilling, revitting, handling, assembling and fixing, but excluding erection in position.	100Kg	5.55		
27	Ch-1, It-1	Carriage of 100 Cft. (2.83 cu.m) of all materials like stone aggregate, spawl, kankar lime (unslaked), surkhi, etc. or 150 Cft. (4.25 cu.m) of timber, by truck or by any other means owned by the contractor. (crushed stone aggregate and bajri used in concrete items) (Lead 198 Km)	Cft	809.86		
28	Ch-23, It-52	Providing and fixing Chain Pulley Block of 5 ton capacity with 5 meter length of chain, as per required specifications complete in all respect and as approved by the Engineer Incharge.	Each	3.00		
		Plumbing Works				
29	Ch-19, It-37	Providing and fixing cas tiron soil pipe with cement caulked joint: :ii) 4" i.d	Per ft.	8.00		
30	Ch-19, It-36	Providing and fitting, 4" Gully Trap ,including cement concrete, cost of PVC grating (6"x6") and masonry chamber (12" x 12")	Each	40.00		
31	Ch-19, It-27	Providing and fixing chromium plated bib cock:- ii) 1.5 cm (1/2")	Each	8.00		
32	Ch-19, It-4	Providing and fitting glazed earthen ware water closet, squatter type (Orisa pattern), combined with foot rest. ii) Coloured	Each	4.00		
33	Ch-19, It-13	Providing and fitting plastic made low down flushing cistern 13.63 litre (3 gallons) capacity, including bracket set, copper connection, etc. complete. ii) coloured	Each	4.00		
34	Ch-19, It-57 (7)	Providing and fixing 1.5cm (1/2") dia connection, including check nuts, etc.-: i) plastic rubber connection	No	8.00		

Punjab Rural Sustainable Water Supply & Sanitation Project (PRSWSSP), Cluster South-I (Rojhan) (PHASE-II) , District Rajanpur
Water Supply Scheme

Multi-village Scheme-1, Multi-village Scheme-2, Multi-village Scheme-3

Dera Dildar (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5,Catchment-6,Catchment-7,Catchment-8),Chak Karia (Catchment-1,Catchment-2,Basti Silachi),Dera Jiwan Khas (Catchment-1),Miranpur (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5),Badli (Catchment-1),Kotla Gulsher (Catchment-1,Catchment-2,Catchment-3),Badli Chak Ladh (Catchment-1,Catchment-2),Kaheeri (Catchment-1,Catchment-2)

1.2 Engineer's Estimate for Construction of Pump House with Control Panel Room & Toilet (03-Nos)

Sr. No.	MRS Ref.	Description	Unit	Quantity	Rate (PKR)	Amount (PKR)
35	Ch-19, It-47	Providing, fixing, testing and commissioning of μ -PVC (Unplasticized Polyvinyl Chloride) Nikasi/ SWV pipe, Dadex / Popular / Beta or approved equivalent manufacturer, plain / Bell Ended / Z-Joints conforming to BS4514/BS5255-EN1329 including the cost of specials and Solvents complete in all respects, as per drawings & specifications and or as approved and directed by the Engineer Incharge. (vi) 160 mm	Rft	200.00		
36	Ch-19, It-49	Providing, fixing, testing and commissioning of μ -PVC (Unplasticized polyvinyl Chloride) Nikasi/ waste pipe Fittings make of Dadex/ Popular/ Beta or equivalent, conforming to code EN-1329 including the cost of Solvents complete in all respect as approved and directed by the Engineer Incharge a) P-Trap (i) 4" dia	No	8.00		
37	Ch-19, It-51	Providing and hoisting vertical/ horizontal type storage tank of required capacity made of rotationally molded from (HDPE), double ply polyethylene of approved manufacturer i/c cost of making connection for inlet/outlet pipe, float valve i/c all cost of specials & labour complete in all respect as approved and directed by the Engineer Incharge.	Per Gallon	2000.000		
38	Ch-23, It-33	Providing, laying, testing and commissioning of POLYPROPYLENE RANDOM COPOLYMER (PPRC) water supply pipe (Dadex /Popular/Beta or approved equivalent manufacturer, with specified pressure rating PN (PRESSURE NOMINAL) and conforming to DIN 8077-8078 code i/c cost of solvent, specials, making jharries complete in all respect as approved and directed by Engineer Incharge. (Internal/External Diameters mentioned).				
		b) PN-20 pipe				
		ii) 25 mm	Rft	500.0		
		iv) 40 mm	Rft	240.0		
39	Ch-23, It-42	Providing and fixing heavy duty Gate valve of specified diameter and material for pressure rating PN-16 mde of Crane (USA), Hatersly (UK), Scon (Pakistan) or approved equivalent manufacturer, i/c the cost of all accessories flanges, nut/bolt and gasket where required complete in all respect as approved and directed by the Engineer Incharge.				
		(a) Brass Threaded Valves				
		(iii) 1" dia	Each	4.0		
		(iv) 1-1/2" dia	Each	4.0		
40	Ch-23, It-45	Supply & installation of heavy duty Brass PN-16 air Vents of specified size provided at the highest points (Pipe Risers) to expel air as approved and directed by the Engineer Incharge				
		(a) Automatic				
		(iii) 1" Dia	Each	8.0		
Total - Cost 03 Nos of Pump House with Control Panel Room & Toilet						0

Punjab Rural Sustainable Water Supply & Sanitation Project (PRSWSSP), Cluster South-I (Liaquatpur) (PHASE-I) , District Rahim Yar Khan
Water Supply Scheme

Multi-village Scheme-1, Multi-village Scheme-2, Multi-village Scheme-3

Dera Dildar (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5,Catchment-6,Catchment-7,Catchment-8),Chak Karia (Catchment-1,Catchment-2,Basti Silachi),Dera Jiwan Khas (Catchment-1),Miranpur (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5),Badli (Catchment-1),Kotla Gulsher (Catchment-1,Catchment-2,Catchment-3),Badli Chak Ladh (Catchment-1,Catchment-2),Kaheeri (Catchment-1,Catchment-2)

1.3 Engineer's Estimate for Providing and fixing of Pumping Machinery including Hypo-Chlorinator & Allied Work

Sr. No.	MRS Ref.	Description	Unit	Quantity	Rate (PKR)	Amount (PKR)
1	NS	Supplying, installing, testing and commissioning of submersible water supply pump set of approved make, complete in all respects as per specifications and direction of the Engineer Incharge. The pump set shall have the following specifications: Flow: 0.30 Cusec Head: 200 ft Setting Depth: 70 ft Motor Rating: 15 HP 3×400V, 50 Hz, 2 Pole, Submersible IP68 motor, Insulation class F Motor:15 KW/20HP/2 Pole Speed:2900 RPM Motor Control Unit (MCU): MCU (Motor Control Unit) consisting of MCCB, Over/Under voltage relay, Phase reversal relay, Volt meter, Ampere meter, EVR, Volt Selector Switch, Ampere Selector Switch, Current Transformer,Over load relay, indicating lights for all above relays, on/off push buttons. VFD Motor Control Unit with Dry running Protection relay , Circuit Breaker, DC SPD, AC SPD, DC Change Over Switch, Auto Start Stop with Any input, Self-diagnostic and Self Protection, Dry Run Protection, Digital Controls with Complete Protective Functions, Ground Fault Monitoring, AC Short Circuit Protection, Under/Over Voltage and Over/Current Protection, Reverse current Blocking, –10 to 40 °C, Remote Monitoring and MPPT, Water Level Detection, Pressure Level Detection, A/M Selector Switch, etc. All contained in lockable cabinet complete in all respects. Accessoires: Cable Termination Kit, MS Flanged Riser Pipes 70 ft 3", Schedule 40, Sluice Valve, Non-return Valve, MS Nipple, MS Bend, Bore cover plate, Installation clamp, Gaskets, Nut & Bolts, Drop Cable 3×6 mm² 90 ft length with cable connector & clamps, Electrode and Electrode wire 90 ft and other necessary fittings	Each	1		
2	NS	Supplying, installing, testing and commissioning of submersible water supply pump set of approved make, complete in all respects as per specifications and direction of the Engineer Incharge. The pump set shall have the following specifications: Flow: 0.25 Cusec Head: 180 ft Setting Depth: 70 ft Motor Rating: 10 HP 3×400V, 50 Hz, 2 Pole, Submersible IP68 motor, Insulation class F Motor:10 KW/20HP/2 Pole Speed:2900 RPM Motor Control Unit (MCU): MCU (Motor Control Unit) consisting of MCCB, Over/Under voltage relay, Phase reversal relay, Volt meter, Ampere meter, EVR, Volt Selector Switch, Ampere Selector Switch, Current Transformer,Over load relay, indicating lights for all above relays, on/off push buttons. VFD Motor Control Unit with Dry running Protection relay , Circuit Breaker, DC SPD, AC SPD, DC Change Over Switch, Auto Start Stop with Any input, Self-diagnostic and Self Protection, Dry Run Protection, Digital Controls with Complete Protective Functions, Ground Fault Monitoring, AC Short Circuit Protection, Under/Over Voltage and Over/Current Protection, Reverse current Blocking, –10 to 40 °C, Remote Monitoring and MPPT, Water Level Detection, Pressure Level Detection, A/M Selector Switch, etc. All contained in lockable cabinet complete in all respects. Accessoires: Cable Termination Kit, MS Flanged Riser Pipes 70 ft 3", Schedule 40, Sluice Valve, Non-return Valve, MS Nipple, MS Bend, Bore cover plate, Installation clamp, Gaskets, Nut & Bolts, Drop Cable 3×6 mm² 90 ft length with cable connector & clamps, Electrode and Electrode wire 90 ft and other necessary fittings	Each	1		

**Punjab Rural Sustainable Water Supply & Sanitation Project (PRSWSSP), Cluster South-I (Liaquatpur) (PHASE-I) , District Rahim Yar Khan
Water Supply Scheme**

Multi-village Scheme-1, Multi-village Scheme-2, Multi-village Scheme-3

Dera Dildar (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5,Catchment-6,Catchment-7,Catchment-8),Chak Karia (Catchment-1,Catchment-2,Basti Silachi),Dera Jiwan Khas (Catchment-1),Miranpur (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5),Badli (Catchment-1),Kotla Gulsher (Catchment-1,Catchment-2,Catchment-3),Badli Chak Ladh (Catchment-1,Catchment-2),Kaheeri (Catchment-1,Catchment-2)

1.3 Engineer's Estimate for Providing and fixing of Pumping Machinery including Hypo-Chlorinator & Allied Work

Sr. No.	MRS Ref.	Description	Unit	Quantity	Rate (PKR)	Amount (PKR)
3	NS	Supplying, installing, testing and commissioning of submersible water supply pump set of approved make, complete in all respects as per specifications and direction of the Engineer Incharge. The pump set shall have the following specifications: Flow: 0.25 Cusec Head: 150 ft Setting Depth: 70 ft Motor Rating: 10 HP 3×400V, 50 Hz, 2 Pole, Submersible IP68 motor, Insulation class F Motor:10 KW/20HP/2 Pole Speed:2900 RPM Motor Control Unit (MCU): MCU (Motor Control Unit) consisting of MCCB, Over/Under voltage relay, Phase reversal relay, Volt meter, Ampere meter, EVR, Volt Selector Switch, Ampere Selector Switch, Current Transformer,Over load relay, indicating lights for all above relays, on/off push buttons. VFD Motor Control Unit with Dry running Protection relay , Circuit Breaker, DC SPD, AC SPD, DC Change Over Switch, Auto Start Stop with Any input, Self-diagnostic and Self Protection, Dry Run Protection, Digital Controls with Complete Protective Functions, Ground Fault Monitoring, AC Short Circuit Protection, Under/Over Voltage and Over/Current Protection, Reverse current Blocking, –10 to 40 °C, Remote Monitoring and MPPT, Water Level Detection, Pressure Level Detection, A/M Selector Switch, etc. All contained in lockable cabinet complete in all respects. Accessoires: Cable Termination Kit, MS Flanged Riser Pipes 70 ft 3", Schedule 40, Sluice Valve, Non-return Valve, MS Nipple, MS Bend, Bore cover plate, Installation clamp, Gaskets, Nut & Bolts, Drop Cable 3×6 mm² 90 ft length with cable connector & clamps, Electrode and Electrode wire 90 ft and other necessary fittings	Each	1		
4	NS	Providing and fixing Electromagnetic Flow meter of specified dia as per Delivery Size in Pump House complete in all respect. Typically of Following Specification: Line Size: 6", DN150 Flanged, RF ANSI 150# Flow range: 32 ~ 320 m³/h Liner Material: PTFE Electrode Material: 316L Stainless Steel Body Material: Carbon Steel Power Supply: 220 VAC Output: 4 ~ 20mA Protection Class: IP68 Accuracy: Class –II (OIML R49/ISO4064) ISO 9001 Certified manufacturer	Each	3.00		
5	NS	Supply and fixing of hypo-chlorinator Dosing Pump: Modal:AKL800NH0000 Flow: 10L/Hour Pressure 10 Bar Stroke: 300/1' Consumption 40W Power Supply: 100-240VAC Seals: FPM Head Material: PVDF Suction Discharge 4mm*6mm Tank: 70 Liter Material HDPE.	Each	3.00		
6	Ch-23, It-12	Providing and installing M.S. blind pipe socketed/welded joint, M.S. reducer (where necessary), in tubewell bore hole, including jointing/welding with strainer, etc. complete: e) 6" i/d, 3/16" (150 mm i/d 5 mm) thick g) 8" i/d, 3/16" (200 mm i/d 5 mm) thick	Rft	200.00		
7	Ch-23, It-37b	Providing and fixing, air valve 2½ (65mm) dia of B.S.S. quality and weight (complete with jointing material). b) double	Each	3.00		
Total - Cost of Pumping Machinery including Hypo-Chlorinator & Allied Work						0

Water Supply Scheme

Multi-village Scheme-1, Multi-village Scheme-2, Multi-village Scheme-3

Dera Dildar (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5,Catchment-6,Catchment-7,Catchment-8),Chak Karia (Catchment-1,Catchment-2,Basti Silachi),Dera Jiwan Khas (Catchment-1),Miranpur (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5),Badli (Catchment-1),Kotla Gulsher (Catchment-1,Catchment-2,Catchment-3),Badli Chak Ladh (Catchment-1,Catchment-2),Kaheeri (Catchment-1,Catchment-2)

1.4 Engineer's Estimate for Electrification for Tube well Pump Room (03-Nos)

Sr. No.	MRS Ref.	Description	Unit	Quantity	Rate (PKR)	Amount (PKR)
1	Ch-24, It-(9(a-ii)+3(iii)/24+16(i)/24+ 34(ii)/24)	Wiring of light or fan point from switch to the point with 3 x 1.5 sqmm PVC insulated single core cables in PVC pipes concealed in walls, columns and slabs including accessories, PVC box, 10 Amp. gang switch 1 or 2 way as required, one for each light or fan and installed as in specifications.	Each	6.00		
2	Ch-24, It-(9(a-iii)+3(iii))	Circuit wiring from MCBs board to gang switches board with 3 x 2.5 sqmm PVC insulated single core cables in appropriate size PVC conduit.	Each	2.00		
3	Ch-24, It-(9(a-iii)+3(iii))	The same as item No. 1.1 but from one light point to another light point.	Each	1.00		
4	Ch-24, It-(9(a-iv)+16(ii)+38(i)+3(iii))	5 Amp 2/3 pin universal flush mounting switch socket unit away from switch board and wired with 3 x 4 sqmm single core cable from nearest circuit available in PVC concealed conduits or trunking including all conduit accessories as required complete in all respect.	Each	2.00		
5	Ch-24, It-(9(a-iii)+3(iii))	The same as item No.1.4 but wiring from one socket to another socket with 3 x 2.5 sqmm single core cable	Each	1.00		
6	Ch-24, It-(9(a-v)+3(iii)+38(ii)+16(ii))	The same as item No. 1.4 but wiring of 15/20A, 3-pin flush mounting switch socket unit wired with 3 x 6 sqmm single core cable wires starting from D.B.	Each	1.00		
7	Ch-24, It-(12 - C(Viii))	Supply and erection of copper conductor cables for service connection, in prelaid pipe/G.I. wire/trenches, etc. PVC insulated, PVC sheathed 4 core, 600/1000 volt non armoured cable-25 mm (19/0.052")	Rft	100.00		
8	Ch-24, It-8(c-vi)	Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only)450/750 volts, PVC insulated: 10 mm sq (7/0.052")	Rft	100.00		
9	Ch-24, It-8(c-vii)	Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only)450/750 volts, PVC insulated: 16 mm sq (7/0.064")	Rft	100.00		
10	Ch-24, It-97(b-iii)	Providing and fixing cable tray with straight flange fabricated with perforated G.I. Sheet of specified guage,size and depth duly supported on painted brackets of MS angle iron of 1-1/2"x1-1/2"x3/16" and MS patti of 1-1/2"x3/16" size @ 3 ft C/C, hangers i/c the cost of hardwares as approved and directed by the Engineer Incharge.(ii) 6"x3"	Rft	25.00		

Water Supply Scheme

Multi-village Scheme-1, Multi-village Scheme-2, Multi-village Scheme-3

Dera Dildar (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5,Catchment-6,Catchment-7,Catchment-8),Chak Karia (Catchment-1,Catchment-2,Basti Silachi),Dera Jiwan Khas (Catchment-1),Miranpur (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5),Badli (Catchment-1),Kotla Gulsher (Catchment-1,Catchment-2,Catchment-3),Badli Chak Ladh (Catchment-1,Catchment-2),Kaheeri (Catchment-1,Catchment-2)

1.4 Engineer's Estimate for Electrification for Tube well Pump Room (03-Nos)

Sr. No.	MRS Ref.	Description	Unit	Quantity	Rate (PKR)	Amount (PKR)
11	N.S	Light Fixture Type LED Batten Ceiling/surface mounted, 18W complete in all respect with allied accessories make Philips, GE,Pierlite or approved equivalent. The fitting shall be approved by the Engineer.	Each	4.00		
12	N.S	Wall bracket Light Fixture Type LED 12W energy saving lamp with holder and complete in all respect with allied accessories make Philips, GE, Pierlite or approved equivalent. The fitting shall be approved by the Engineer.	Each	2.00		
13	Ch-24, It-103	Providing and fixing Pakistan Energy Label NEECA approved Copper winded wall bracket Fan i/c the cost of necessary cable and hardware for connection as approved and directed by Engineer Incharge.(ii) 18 " dia	Each	2.00		
14	Ch-24, It-102(a-ii)	Providing and fixing Copper winded Exhaust fan with louver and shutter made of Pak/Younas/G.F.C. i/c the cost of necessary cable and hardware for connection from ceiling rose complete as approved and directed by Engineer Incharge. (a) Plastic body (ii) 12 " dia	Each	1.00		
15	Ch-24, It-3(a-vii)	Supply and erection PVC pipe for recessed wiring (main and sub-main) purpose, including bends, specials, etc. in floor, wall or trenches:100 mm dia (Class-B)	Rft.	100.00		
16	Ch-24, It-90(a-i)	P/F wall mounted DB (Distribution Board) made with 16SWG Sheet (Recessed/Surf ace mounted Type), Powder coated Paint, i/c the cost of Lock, Indication lights,Thimble, Copper Comb, Wiring, Netural & Earth Bar, Door Earthing, Digital Voltmeter,Digital Ammeter,Volt Selector Swi tch,Ammeter selector switch,Current Transformers and Controles Complete in all respect as approved and directed by the Engineer Incharge (Breakers wi l l be Pai d Separatel y). 1 No. 30 Amps (Adj.) MCCB TP, RC=25kA, Icu=100%Ics 2 Nos. outgoing 20A, MCB, SP, RC=10 kA 4 Nos. outgoing 10A, MCB, SP, RC=10 kA 3 Nos. Spare 10/20A, MCB, SP, RC=10 kA Indication lights, push buttons, digital ammeter with selector switch, digital voltmeter with selector switch, Panel box SWG 16 powder coated RAL colour 7032, IP class 44 and with all accessories.	Each	1.00		

Water Supply Scheme

Multi-village Scheme-1, Multi-village Scheme-2, Multi-village Scheme-3

Dera Dildar (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5,Catchment-6,Catchment-7,Catchment-8),Chak Karia (Catchment-1,Catchment-2,Basti Silachi),Dera Jiwan Khas (Catchment-1),Miranpur (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5),Badli (Catchment-1),Kotla Gulsher (Catchment-1,Catchment-2,Catchment-3),Badli Chak Ladh (Catchment-1,Catchment-2),Kaheeri (Catchment-1,Catchment-2)

1.4 Engineer's Estimate for Electrification for Tube well Pump Room (03-Nos)

Sr. No.	MRS Ref.	Description	Unit	Quantity	Rate (PKR)	Amount (PKR)
17	Ch-24, It-92(a)	P/F floor mounted ATS (Auto Transfer Switch) panel board , fabricarted with 14S WG M.S sheet (Indoor Type) duly painted with 100 microns powder coated paint in approved colour , front access ,extendable,insulation class of 600 volts IP-44, incoming & outgoing connections from bottom with flexible copper cable suitable for 415 VAC, 3-phase 4 wire, 50 HZ TPN&E system having rated service, short circuit breaking capacity at 400VAC conforming to IEC-947-2 to accomodate given no of circuit components, instruments & accessories,assembled & wired with Electrolitic Copper bus bars at 50 deg and cables duly cleaned down to bare shining metal phosphate, manual change Over i/c the cost of Lock, Indication lights, Brass glands, Netural & Earth bar, thimbles, Digital volt meter/ Amp meter, Selector switch, Current transformers, Controles, Channels, Copper bus bars of specified capacity ,Relays, Door Earthing, complete in all respects as approved and directed by the Engineer Incharge. (Breakers wil be paid additionally) LV Switchgear Panel/Main Panel Board of 14 SWG, IP class 54/44 & RAL 7032 including I/C and O/G following electrical items, foundation/base frame with all installation and operational accessories as per site requirements, as per tender specifications and drawings and as directed by the Engineer.MPB 01 No. 50 Amps TP (adj.) MCCB, RC= 25 kA, Icu=100%lcs 01 No. VSS (07 position) 01 No. 0-600 Volts AC DIGITAL Voltmeter 03 Nos. 50/5 Amps Current Transformers 01 No. ASS (R-Y-B-OFF) 01 No. 0-50 Amps AC DIGITAL Ammeter 06 Nos. RYB and ON OFF TRIP LED indication lights 14 SWG steel sheet Panel RAL 7032, IP= 54/44 and all other accessories, OUTGOING 01 No. 25 Amp MCCB TP, RC=25kA , Icu=100%lcs (For 10 HP Motor) "01 No. 25 Amp MCCB TP, (Adj.) RC=25kA, Icu=100%lcs (For Staff Building)" 01 No. 32 Amp MCB DP, RC=10kA (For DB-OHWT) 01 No. 32 Amp MCCB TP, RC=25kA , Icu=100%lcs (For PFI) 01 No. (Spare) 32 Amp MCCB TP, (Adj.) RC=25kA, Icu=100%lcs 01 No. (Spare) 25 Amp MCCB TP, (Adj.) RC=25kA, Icu=100%lcs 01 No. (Space) 63 Amp., MCCB TP, (Adj.) RC=25kA, Icu=100%lcs 01 No. Panel light with limit switch 02 Nos. Exhaust fan 6" (copper) & Louver 8" sweep with thermostat relay and all accessories etc. Electrolytic copper bus bar with electrical grade PVC mountings 3 for each, nuts, bolts and washers, control MCB etc. (100 Amps. R+Y+B N, 50 Hz, 415 V, AC) All other accessories required for completion of the quality works including Cable gland and lugs etc. Contractor shall submit the genuine certificate from the manufacturer/authorized agent clear by indicating the project name make/model/rating of MCCB, MCB, magnetic contactors, terminal blocks and voltmeters/ ammeter along with warranties.	No.	1		
18	Ch-24, It-111	Earth point comprising of 10 ft. 5/8" dia. (16 mm dia) copper coated M.S. rods driven in ground near each lighting control panel. The earthing rods shall be completed with fixing clamps etc.	No.	1.00		
19	Ch-24, It-93(ii)	14 SWG steel sheet clad IP 54 colour RAL 7032 powder coated power factor improvement panel (PFI) including Cu busbar, heavy duty incoming and outgoing circuit breaker to capacitor, magnetic contactors, continuous digital p.f controller, on & off pushbuttons etc. complete with all components/ accessories as per specifications and drawings. PFI - 100 kVAR	No.	1.00		
Total Amount for one (01) Tube Well						0
Total Amount for four (03) Tube Well						0

Multi-village Scheme-1, Multi-village Scheme-2, Multi-village Scheme-3

1.5 Engineering Estimate for Flood Protection (03 Nos)						
Sr. No.	MRS Ref.	Description	Unit	Quantity	Rate (PKR)	Amount (PKR)
1	Ch-3, It-5	Earthwork in ordinary soil for embankments lead upto 100 ft. (30 m), including ploughing and mixing with blade grade or disc harrow or other suitable equipment, and compaction by mechanical means at optimum moisture content and dressing to designed section, complete in all respects:-i) 95% to 100% maximum modified AASHTO dry density b) in ordinary soil.	1000cft	446.95		
2	Ch-3, It-17	Transportation of earth all types when the total distance, including the lead covered in the item of work, is more than 1000 ft. (300 m) a) Upto ¼ mile (400 m)	1000Cft	446.95		
		For every 330 ft. (100 m) additional lead or part thereof, beyond ¼ mile (400 m) upto one mile. (1.6 Km.)	1000Cft	446.95		
3	Ch-3, It-15	Filling, watering and ramming earth ii) with new earth excavated from outside	1000Cft	446.95		
4	Ch-16, It-30	Providing and laying stone or spawl filling:-b) on slope	100Cft	446.16		
5	Ch-16, It-29	Providing and laying stone pitching, for top layer only:- a) one slope	100Cft	719.29		
		b) on level	100Cft	1,529.76		
6	Ch-1,It-1	"Carriage of 100 Cft. (2.83 cu.m) of all materials like stone aggregate, spawl , kankar lime (unslaked), surkhi , etc. or 150 Cft. (4.25 cu.m) of timber, by truck or by any other means owned by the contractor. Lead From approved quarry up to 198 KM"	100 Cft	2,695.22		
7	Ch-1,It-17	Due to river access issues, stones are first unloaded from truck at an accessible point, then reloaded onto a trolley tractor to reach the site for stone pitching work. Hire charges of:- ii) tractor with troll	100 Cft	2,695.22		
Total 3 Nos of Flood Protection for Tube well						0

Punjab Rural Sustainable Water Supply & Sanitation Project (PRSWSSP), Cluster South-I (Rojhan) (PHASE-II) , District Rajanpur

Water Supply Scheme

Multi-village Scheme-1, Multi-village Scheme-2, Multi-village Scheme-3

Dera Dildar (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5,Catchment-6,Catchment-7,Catchment-8),Chak Karia (Catchment-1,Catchment-2,Basti Silachi),Dera Jiwan Khas (Catchment-1),Miranpur (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5),Badli (Catchment-1),Kotla Gulsher (Catchment-1,Catchment-2,Catchment-3),Badli Chak Ladh (Catchment-1,Catchment-2),Kaheeri (Catchment-1,Catchment-2)

1.6 Engineering Estimate for Boundary Wall of Solar System (03- Nos)

Sr. No.	MRS Ref.	Description	Unit	Quantity	Rate (PKR)	Amount (PKR)
1	Ch-3, It-21	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling in layers around structure with excavated earth, watering and ramming lead 'up to one chain (30 m) and lift up to 5 ft. (1.5 m) 1) By Manual a) Depth up to 5ft (1.5m) ii) in ordinary soil.	1000cft	7.37		
2	Ch-6, It-3	Cement concrete brick or stone ballast 1½ " to 2" (40 mm to 50 mm) gauge, in foundation and plinth:- (d) Ratio 1: 6: 12	100Cft	5.67		
3	Ch-7, It-4	Pacca brick work in foundation and plinth in: i) Cement, sand mortar: Ratio 1:5	100Cft	34.60		
4	Ch-7, It-7	Pacca brick work other than building upto 10ft. (3 m) height. i) cement, sand mortar: Ratio 1:5	100Cft	23.00		
5	Ch-11, It-8	Cement plaster 1:3 up to 20' (6.00 m) height: b) 1/2" (13 mm) thick	100Sft	38.46		
6	Ch-11, It-23	Priming coat of chalk under distemper	100Sft	77.34		
7	Ch-11, It-18	Cement pointing struck joints, on walls, up to 20' (6.00 m) height:- a) ratio 1:2	100Sft	38.88		
8	Ch-13, It-33	Providing and applying weather shield paint of approved quality on external surface of building including preparation of surface, application of primer complete in all respect a) New Surface i) 1st Coat & ii) 2nd Coat	100Sft	77.34		
9	Ch-6, It-6a(3)	Providing and laying reinforced cement concrete (including prestressed concrete), using Ordinary Portland Cement / Sulphate resisting cement / Slag cement as may be required; coarse sand and screened graded and washed aggregate, in required shape and design, including forms, moulds, shuttering, lifting, compacting, curing, rendering and finishing exposed surface, complete (but excluding the cost of steel reinforcement, its fabrication and placing in position, etc.): (a) Reinforced cement concrete in roof slab, beams, columns lintels, girders and other structural members laid in situ or precast laid in position, or prestressed members cast in situ, complete in all respects: (3) Type C (nominal mix 1: 2: 4)	Cft	1,319.57		
10	Ch-6, It-6c(3)	Providing and laying reinforced cement concrete (including prestressed concrete), using Ordinary Portland Cement / Sulphate resisting cement / Slag cement as may be required; coarse sand and screened graded and washed aggregate, in required shape and design, including forms, moulds, shuttering, lifting, compacting, curing, rendering and finishing exposed surface, complete (but excluding the cost of steel reinforcement, its fabrication and placing in position, etc.): (c) Reinforced cement concrete in Pile cap, slab of rafts / strip foundation, base slab of column and retaining walls; etc. and footing beams, other structural members other than those mentioned in 6(a-d) above not requiring form work (i.e. horizontal shuttering) complete in all respects: (3) Type C (nominal mix 1: 2: 4)	Cft	1,027.50		
11	Ch-6, It-12b	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars): (b) Deformed bars (i) (Grade-60)	100Kg	191.68		

Punjab Rural Sustainable Water Supply & Sanitation Project (PRSWSSP), Cluster South-I (Rojhan) (PHASE-II) , District Rajanpur

Water Supply Scheme

Multi-village Scheme-1, Multi-village Scheme-2, Multi-village Scheme-3

Dera Dildar (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5,Catchment-6,Catchment-7,Catchment-8),Chak Karia (Catchment-1,Catchment-2,Basti Silachi),Dera Jiwan Khas (Catchment-1),Miranpur (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5),Badli (Catchment-1),Kotla Gulsher (Catchment-1,Catchment-2,Catchment-3),Badli Chak Ladh (Catchment-1,Catchment-2),Kaheeri (Catchment-1,Catchment-2)

1.6 Engineering Estimate for Boundary Wall of Solar System (03- Nos)

Sr. No.	MRS Ref.	Description	Unit	Quantity	Rate (PKR)	Amount (PKR)
12	Ch-13, It-9	Bitumen coating to plastered or cement concrete surface;-I 14lbs. Per 100 Sft. (6.35 Kg per Sq.m)	100Sft	14.58		
13	Ch-25, It-30	Making and fixing steel grated door with 1/16" thick (1.5mm) sheeting, including angle iron frame 2"x2"x3/8"(50x50x10 mm) and 3/4" (20 mm) square bars 4" (100 mm)centre to centre, with locking arrangement.	Sft	216.00		
14	Ch-13, It-5	Painting new surface: c) Preparing surface and painting of doors and windows any type (including edges): i) priming coat. ii) each subsequent coat of paint.	100Sft	10.08		
15	Ch-1, It-1	Carriage of 100 Cft. (2.83 cu.m) of all materials like stone aggregate, spawl, kankar lime (unslaked), surkhi, etc. or 150 Cft. (4.25 cu.m) of timber, by truck or by any other means owned by the contractor. (crushed stone aggregate and bajri used in concrete items) (Lead 198 Km)	Cft	2,065.42		
16	Ch-3, It-15	Filling, watering and ramming earth under floors: ii) With new earth excavated from outside,	1000Cft	5.05		
17	Ch-03 , It - 17	Transportation of earth all types when the total distance, including the lead covered in the item of work, is more than 1000 ft. (300 m) a) upto 1/4 mile (400 m). b) for every 330 ft. (100 m) additional lead or part thereof, beyond 1/4 mile (400 m) upto one mile. (1.6 Km.)	1000 Cft	5.05		
18	Ch-10, It-4	Providing, laying, watering and ramming brick or stone ballast 1 1/2" to 2"(40 mm to 50 mm) gauge mixed with 25% sand, for floor foundation, complete in all respects.	100 Cft.	36.30		
19	Ch-10, It-43	Providing and laying Tuff Pavers, having 7000 PSI, crushing strength of approved manufacturer, over 2" to 3" sand cushion i/c grouting with sand in joints i/c finishing to require slope . complete in all respect.(50% Grey / 50% Coloured) b) 60-mm thick	Per Sft	11,001.0		
20	Ch-25, It-75	Providing and fixing anti climb high security galvanized razor cut wire fencing having double sharp four U-shaped pointed 0.5 mm thick (22mmx15 mm barbs) spaced @ 33 mm c/c clad over 2.5 mm dia high tensile Core wire making coil fencing of specified diameter @ 4" c/c fixed on 2'-3" high M/S angle iron post 1 1/2"x1 1/2"x3/16"embedded in base of PCC (1:2:4) (4"x4"x9") @ 4' apart i/c the cost of 2 No. bars 3/8" dia welded horizontally with angle iron posts , binding wire, painting of posts, etc. complete in all respects as pproved and directed by the Engineer incharge. (ii) 18 " diameter	Rft	648.00		
21	Ch-3, It-9	Earthwork excavation in irrigation channels, drains, etc. to designed section, grades and profiles, excavated material disposed-off and dressed within 100 ft. (30 m) lead: (Drain-Type-I) i) Ordinary	1000 Cft	10.35		
22	Ch-6, It-3	Cement concrete brick or stone ballast 1 1/2 " to 2" (40 mm to 50 mm) gauge, in foundation and plinth: (d) Ratio 1: 6:12	100 Cft	9.52		
23	Ch -20 It - 3	Pacca brick on edge, laid in reimbursement, in cement, sand mortar, on sides of drains and on other works where required. All joints to be completely filled and struck flush: b) Ratio 1:5	100Sft	38.09		

Punjab Rural Sustainable Water Supply & Sanitation Project (PRSWSSP), Cluster South-I (Rojhan) (PHASE-II) , District Rajanpur

Water Supply Scheme

Multi-village Scheme-1, Multi-village Scheme-2, Multi-village Scheme-3

Dera Dildar (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5,Catchment-6,Catchment-7,Catchment-8),Chak Karia (Catchment-1,Catchment-2,Basti Silachi),Dera Jiwan Khas (Catchment-1),Miranpur (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5),Badli (Catchment-1),Kotla Gulsher (Catchment-1,Catchment-2,Catchment-3),Badli Chak Ladh (Catchment-1,Catchment-2),Kaheeri (Catchment-1,Catchment-2)

1.6 Engineering Estimate for Boundary Wall of Solar System (03- Nos)

Sr. No.	MRS Ref.	Description	Unit	Quantity	Rate (PKR)	Amount (PKR)
24	Ch-.20 lt - 6	Constructing Punjab Standard Drains. of cement concrete 1:2 ½ :5, with cement concrete bedding ratio 1:6:12, complete, laid to lines, grades, slopes and shapes, rendering exposed surface of concrete with 1:1 cement, sand mortar, ¼" (6 mm) thick, as per Engineer's drawing (excluding excavation): a) Type I	Per Rft	2,539.00		
25	NS	Construction of House Connection Chamber (2' x 2'), complete in all respects as per drawings, specifications & instructions of the Engineer. The unit rate includes but not limited to excavation, required compaction, crushed stone, PCC (1:6:12), PCC (1:2:4), brick masonry in 1:3 C/S mortar, 1/2" thick 1:4 C/S plaster on inner & Outer sides, RCC Slab 4" Thick, finishing in the internal and external surface of brick masonry etc.	Each	3.00		
		Total - 1.6 Each				0

Punjab Rural Sustainable Water Supply & Sanitation Project (PRSWSSP), Cluster South-I (Rojhan) (PHASE-II) , District Rajanpur

Water Supply Scheme

Multi-village Scheme-1, Multi-village Scheme-2, Multi-village Scheme-3

Dera Dildar (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5,Catchment-6,Catchment-7,Catchment-8),Chak Karia (Catchment-1,Catchment-2,Basti Silachi),Dera Jiwan Khas (Catchment-1),Miranpur (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5),Badli (Catchment-1),Kotla Gulsher (Catchment-1,Catchment-2,Catchment-3),Badli Chak Ladh (Catchment-1,Catchment-2),Kaheeri (Catchment-1,Catchment-2)

1.7 Engineer's Estimate for Laying of Pipe Network (Rising Main, Distribution Pipe line & Water Connection) - 253,765 ft

Sr. No.	MRS Ref.	Description	Unit	Quantity	Rate (PKR)	Amount (PKR)
1	Ch-4, It -19	Dismantling cement concrete 1:2:4 plain.	100Cft	6.25		
2	Ch-4, It -29	Dismantling brick or flagged flooring without concrete foundation.	100 Sft	110.00		
3	Ch-4, It -45	Dismantling and removing road metalling	100Cft	10.21		
4	Ch-21, It -8	Restoration of brick pavement on edge, over laid service line, with 2" (50 mm) sand cushion under soling	100 Sft	110.00		
5	Ch-6, It-5	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate) (f) Ratio 1: 2: 4	100 Cft	6.25		
6	Ch-21, It -10	Restoration of metalled road, on laid service line, including compaction a) Carpetted road, with 2" (50 mm) carpet and 10" depth of stone metal for sub-base and base	100 Sft	8.75		
7	Ch-3, It-46	Excavation of trenches in all kinds of soil, except cutting 1000 Cft. rock, for watersupply pipelines/electric cables upto 5 ft. (1.5 m) depth from ground level, including backfilling, trimming, dressing sides, leveling the beds of trenches to correct grade and cutting pits for joints, etc. complete in all respects.	1000Cft	2,255.60		
8	Ch-3, It-24	Compaction of earthwork (soft, ordinary or hard soil) :-	1000 Cft	2,040.59		
9	Ch-23, It-30	Providing ,laying, cutting, jointing, testing and disinfecting High Density Polyethylene Pipe (HDPE-100) working presure pipe conforming to standard ISO4427, PS3580, Beta /Dadex /Popular/ IIL or approved equivalent manufacturer,including the cost of specials ,in trenches, as approved & directed by the engineer incharge, complete in all respects PN-8 (SDR-21)-				
		(3 1/2" -90 mm dia)	Per Rft	144,663.2		
		(4" - 110 mm dia)	Per Rft	61,593.40		
		(6" -160 mm dia)	Per Rft	47,509.00		
10	Ch-21, It-3(a-2)	Providing and laying R.C.C. pipe sewers, moulded with cement concrete 1:1½:3 conforming to ASTM Specification C-76-20, Class II. Wall B, including carriage of pipe from factory to site of work, lowering in trenches to correct alignment and grade, jointing with rubber ring, cutting pipes where necessary, testing, etc., complete. ii) 380 mm (15") i/d	Per Rft	350.00		

Punjab Rural Sustainable Water Supply & Sanitation Project (PRSWSSP), Cluster South-I (Rojhan) (PHASE-II) , District Rajanpur

Water Supply Scheme

Multi-village Scheme-1, Multi-village Scheme-2, Multi-village Scheme-3

Dera Dildar (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5,Catchment-6,Catchment-7,Catchment-8),Chak Karia (Catchment-1,Catchment-2,Basti Silachi),Dera Jiwan Khas (Catchment-1),Miranpur (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5),Badli (Catchment-1),Kotla Gulsher (Catchment-1,Catchment-2,Catchment-3),Badli Chak Ladh (Catchment-1,Catchment-2),Kaheeri (Catchment-1,Catchment-2)

1.7 Engineer's Estimate for Laying of Pipe Network (Rising Main, Distribution Pipe line & Water Connection) - 253,765 ft

Sr. No.	MRS Ref.	Description	Unit	Quantity	Rate (PKR)	Amount (PKR)
11	Ch-6, It-5	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate): (f) Ratio 1: 2: 4	100 Cft	24.37		
12	Ch-1,item-1	Carriage of 100 Cft. (2.83 cu.m) of all materials like stone aggregate, spawl, kankar lime (unslaked), surkhi, etc. or 150 Cft. (4.25 cu.m) of timber, by truck or by any other means owned by the contractor. (crushed stone aggregate and bajri used in concrete items) (Lead 230 Km)	Cft	571.44		
13	Ch-21, It-22	Providing and laying sand under and around the Water Supply pipe, including leveling, manual compaction, complete in all respect.	100Cft	1,885.38		
14	Ch-23, It-12	Providing and installing M.S. blind pipe socketed/welded joint, M.S. reducer (where necessary), in tubewell bore hole, including jointing/welding with strainer, etc. complete:				
		e) 6" i/d, 3/16" (150 mm i/d 5 mm) thick	Rft	200.00		
15	N.S	Thrust boring under live railway track for laying 6-inch dia MS Casing Pipe (minimum 8mm thickness) using a hydraulic auger boring machine, including excavation/shoring of thrust and reception pits, dewatering, structural welding, laser alignment tracking, and track safety monitoring. Item includes supplying and pulling a 4-inch dia HDPE Carrier Pipe (PN-16) inside the casing, complete with heavy-duty casing spacers (every 1.5m), rubber end-seals, and pressure testing, all complete as per Pakistan Railway specifications and approval of the Engineer.	Rft	150.00		
Total - 1.7						-

Punjab Rural Sustainable Water Supply & Sanitation Project (PRSWSSP), Cluster South-I (Rojhan) (PHASE-II) , District Rajanpur

Water Supply Scheme

Multi-village Scheme-1, Multi-village Scheme-2, Multi-village Scheme-3

Dera Dildar (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5,Catchment-6,Catchment-7,Catchment-8),Chak Karia (Catchment-1,Catchment-2,Basti Silachi),Dera Jiwan Khas (Catchment-1),Miranpur (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5),Badli (Catchment-1),Kotla Gulsher (Catchment-1,Catchment-2,Catchment-3),Badli Chak Ladh (Catchment-1,Catchment-2),Kaheeri (Catchment-1,Catchment-2)

1.9 Engineer's Estimate for Construction of Stand Post / LLR including Civil & Plumbing Works / Electrical Works (27-Nos)

Sr. No.	MRS Ref.	Description	Unit	Quantity	Rate (PKR)	Amount (PKR)
1	Ch-3, It-21	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling in layers around structure with excavated earth, watering and ramming lead 'up to one chain (30 m) and lift up to 5 ft. (1.5 m) 1) By Manual a) Depth up to 5ft (1.5m) ii) in ordinary soil.	1000 Cft	0.513		
2	Ch-3, It-15	Earth Filling in ordinary soil lead up 30m with compaction upto required 90% modified AATSHO dry density complete in all respects as approved by the Engineer Incharge.	1000Cft	1.010		
3	Ch-6, It-3	Cement concrete brick or stone ballast 1½ " to 2" (40 mm to 50 mm) gauge, in foundation and plinth:- (d) Ratio 1: 4: 8	100Cft	2.818		
4	Ch-6, It-5	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate)				
		(l) Ratio 1: 4: 8	100 Cft	0.470		
		(f) Ratio 1: 2: 4	100 Cft	1.173		
5	Ch-7, It-4	Brick work in Foundation Pacca brick work in foundation and plinth in:- Cement, sand mortar:- Ratio 1:5	100Cft	5.901		
6	Ch-7, It-5	Brick work in Super Structure Pacca brick work in ground floor :- i) Cement, sand mortar :- Ratio 1:4	100Cft	5.917		
7	Ch-6, It-37	Providing and laying damp proof course of cement concrete 1:2:4 (using cement, sand and shingle), including bitumen coating: b) with 2 coats of bitumen: ii) 2" thick	100Sft	1.058		
8	Ch-6, It-39	Providing and laying vertical damp proof course with cement sand plaster and bitumen coating:- (b) with 2 coats of bitumen:-ii) Ratio 1:3 b) ¾ " thick (20mm)	100Sft	0.825		
9	Ch-11, It-9	Cement Plaster Cement plaster 1:4 upto 20' (6.00 m) height:- c)1/2" (13 mm) thick	100Sft	6.725		
10	Ch-11, It-18	Cement pointing struck joint, on walls upto 20' height. b) ratio 1:3	100Sft	6.845		
11	Ch-11, It-12	Cement plaster 3/8" (10 mm) thick under soffit of R.C.C. roof slabs only, upto 20' height . b) 1:3	100Sft	1.960		
12	Ch-9, It-5	Single layer of tiles 9"x4½"x1½" (225x113x40 mm) laid over 4"(100 mm) earth and 1" (25 mm) mud plaster without Bhoosa, grouted with cement sand 1:3 on top of RCC roof slab, provided with 34 lbs. Per %Sft. or 1.72 Kg/Sq.m bitumen coating sand blinded.	100Sft	2.403		
13	Ch-6, It- 6	(a) (i) Reinforced cement concrete in roof slab, beams, columns lintels, girders and other structural members laid in situ or precast laid in position, or prestressed members cast in situ, complete in all respects:- (3) Type C (nominal mix 1: 2: 4)	Per Cft	178.614		
14	Ch-6, It-12	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars):- (c) Deformed bars (Grade-60)	100 Kg	6.102		

Punjab Rural Sustainable Water Supply & Sanitation Project (PRSWSSP), Cluster South-I (Rojhan) (PHASE-II) , District Rajanpur

Water Supply Scheme

Multi-village Scheme-1, Multi-village Scheme-2, Multi-village Scheme-3

Dera Dildar (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5,Catchment-6,Catchment-7,Catchment-8),Chak Karia (Catchment-1,Catchment-2,Basti Silachi),Dera Jiwan Khas (Catchment-1),Miranpur (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5),Badli (Catchment-1),Kotla Gulsher (Catchment-1,Catchment-2,Catchment-3),Badli Chak Ladh (Catchment-1,Catchment-2),Kaheeri (Catchment-1,Catchment-2)

1.9 Engineer's Estimate for Construction of Stand Post / LLR including Civil & Plumbing Works / Electrical Works (27-Nos)

Sr. No.	MRS Ref.	Description	Unit	Quantity	Rate (PKR)	Amount (PKR)
15	Ch-10, It-45(i) - 17.60 deduction for matt finishes	Porcelain Tile Providing and laying superb quality Porcelain glazed tiles flooring of MASTER brand of specified size in approved design, Color and Shade with adhesive/ bond over 3/4"thick (1:3) cement plaster i/c the cost of sealer for finishing the joints i/c cutting grinding complete in all respect as approved and directed by the Engineer Incharge. a) Full body Glazed tiles (i) 300 mm x 600 mm	Per Sft.	304.500		
16	Ch-10, It-36(i) - 18.90 deduction for matt finishes	Providing and laying superb quality Porcelain glazed tiles of Master/ Stile brand or approved equivalent manufacturer, skirting/ dado of specified size, Color and Shade with adhesive/ bond over 1/2" thick (1:2) cement plaster i/c the cost of matching sealer for finishing the joints, cutting grinding complete in all respect as approved and directed by the Engineer Incharge. a) Full body Matt tiles	Per Sft.	124.000		
17	Ch-10, It-43	Providing and laying Tuff pavers, having 7000 PSI, crushing strength of approved manufacturer, over 2" to 3" sand cushion i/c grouting with and in joints i/c finishing to require slope. Complete in all respect. (50% Grey / 50% Colored) b) 50-mm thick	Per Sft.	147.250		
18	Ch-11, It-23+24(a-iii)	Preparing surface and painting with Distemper 3coats	100Sft	8.50		
19	Ch-25, It-31	Making and fixing steel grated door with 1/16" thick (1.5mm) sheeting, including angle iron frame 2"x2"x3/8" (50x50x10 mm) and 3/4" (20 mm) square bars 4" (100 mm) centre to centre, with locking arrangement.	Per Sft	49.00		
20	Ch-25, It-42	Providing and fixing steel windows using M.S. sheet (16 SWG) moulded tubular pipe 1 1/2"x1 1/2" (40x40mm) for frame and 1 1/4"x1 1/4" (30x30mm) for leaves including M.S. square bars 1/4"x1/4" (6x6 mm) welded around each panel of frame, 5 mm thick glass panes fixed with double M.S. square tubular pipe 3/8"x3/8" (10x10mm) (22 SWG) beading with U' shaped rubber lining, brass fitting, holdfast, including painting three coats complete in all respects. a) For openable panels fixed with wire gauze 24 SWG, 12x12 mesh and glass panes 1/4" (6 mm) thick.	Sft	10.50		
21	Ch-12, It-15	Providing and fixing mild steel chowkat of doors, windows, C.window, etc. including holdfast, making and threading holes for hinges, etc. complete:- a) M.S. angle iron 1 1/2"x 1 1/2"x 1/4" (40x40x6 mm) welded with M.S. flat 2"x 1/4" (50 mm x 6 mm)	Per Sft	59.50		
22	Ch-9, It-15	Khuras on roof 2'x2'x6" (600 x 600 x 150 mm)	Each	1.00		
23	Ch-1,item-1	Carriage of 100 Cft. (2.83 cu.m) of all materials like stone aggregate, spawl, kankar lime (unslaked), surkhi, etc. or 150 Cft. (4.25 cu.m) of timber, by truck or by any other means owned by the contractor. (crushed stone aggregate and bajri used in concrete items) (Lead 230 Km)	Cft	305.016		
24	Ch-25, It-32	Making and fixing grating in opening, including fixing at site with flat iron 2"x3/8" (50x10 mm) and 3/4" (19 mm) square bars, at 4" (100 mm) centre to centre.	Per Sft	32.160		
25	Ch-13, It-5(d i&ii)	Painting new surface:-Preparing surface and painting guard bars, gates of iron bars, gratings, railing (including standards braces, etc.) and in similar open work Three Coats including priming coat.	100 Sft	1.463		
26	Ch-26, It-44	Supply and Erection of Car Parking Shed consisting of 3 mm thick fiber glass sheet roof (3-layers) fixed / riveted on moulded curved frame of M.S box pipe 1-1/2"x1-1/2"16-SWG supported on trusses of MS angle iron 1-1/2"x1-1/2"x3/16" all around duly supported on M.S sheet 6"x6"x1/4" welded on GI pipe post (Medium Quality) of specified diameter embeded in P:C:C (1:2:4) i/c the cost of excavation,cutting straightening assembling, bending as per design, welding / grinding of joints and painting three coats complete in all respect as approved and directed by the Engineer Incharge. (ii) 3" dia GI pipe Supports	Per Sft	217.000		
27	N.S	MS ladder including painting as per drawings.	Rft	14.00		

Punjab Rural Sustainable Water Supply & Sanitation Project (PRSWSSP), Cluster South-I (Rojhan) (PHASE-II) , District Rajanpur

Water Supply Scheme

Multi-village Scheme-1, Multi-village Scheme-2, Multi-village Scheme-3

Dera Dildar (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5,Catchment-6,Catchment-7,Catchment-8),Chak Karia (Catchment-1,Catchment-2,Basti Silachi),Dera Jiwan Khas (Catchment-1),Miranpur (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5),Badli (Catchment-1),Kotla Gulsher (Catchment-1,Catchment-2,Catchment-3),Badli Chak Ladh (Catchment-1,Catchment-2),Kaheeri (Catchment-1,Catchment-2)

1.9 Engineer's Estimate for Construction of Stand Post / LLR including Civil & Plumbing Works / Electrical Works (27-Nos)

Sr. No.	MRS Ref.	Description	Unit	Quantity	Rate (PKR)	Amount (PKR)
		Electrical Works				
28	Ch-24, It-3	Supply and erection of PVC pipe for wiring including inspection boxes, pull boxes, hooks, and repairing surface, etc., complete with all specials.Recessed in walls i/c making jharries iii) 25 mm i/d	Rft	44.000		
29	Ch-24, It-8	Supply and erection of single core PVC insulated, PVC sheathed copper conductor, 250/440 volts grade cable (BSS-2004), in prelaidd PVC pipes/M.S. conduit/G.I. pipe/ wooden strip batten/wooden casing and capping/ trenches, etc. (rate for cable only):-				
		i) 3/0.74 mm (3/0.029") (P+N+E) for Point Wiring	Rft	132.000		
		iii) 7/0.74 mm (7/0.029") (P+N+E) for Circuit Wiring	Rft	110.000		
30	Ch-24, It-105	P/F PVC double layer Switch kit Face plate with specified switch holes i/c the cost of switches / sockets / dimmer made of Hi-Life / Bush / Schenider, screws complete as approved and directed by the Engineer Incharge.a) One Way Gang Switch (Small) (ii) 02 Gang	Each	2.000		
31	Ch-24, It-106 (i)	Supply, installation, testing & commissioning of 16 SWG Sheet steel powder coated back boxes with earth terminal, recessed in wall, includingaccessories, complete in all respect as per specifications and as approved by Engineer Small 3"x3"	Each	2.000		
32	Ch-24, It-65	Supply and erection of pole mounted street light, holders,shade and glass, etc., for fitting 125/250 watts mercury vapour lamp (excluding cost of lamps):Philips design	Each	2.000		
33	Ch-24, It-66	Supply and fitting of mercury vapour lamp, complete with choke set. 125 watt lamp	Each	2.000		
34	N.S	Light Fixture Type LED Batten Ceiling/surface mounted, 18W complete in all respect with allied accessories make Philips, GE,Pierlite or approved equivalent. The fitting shall be approved by the Engineer.	Each	4.00		
35	N.S	Wall bracket Light Fixture Type LED 12W energy saving lamp with holder and complete in all respect with allied accessories make Philips, GE, Pierlite or approved equivalent. The fitting shall be approved by the Engineer.	Each	2.00		
		Plumbing Work				
36	Ch-9,it-20	Cast iron rain water downpipe fixed in position, excluding heads and shoes, but including painting and clamps, etc:- 4" dia (100 mm) cast iron down pipe	Rft	33.00		
37	Ch-9,it-21	Rain water down pipe cast iron head fixed in place, including cost of clamp holdfast and painting	Each	4.00		
38	Ch-9,it-22	Shoes, bends or offsets for cast iron rain water down pipe, including fixing and painting.	Each	4.00		
39	Ch-23,it-33b	Providing, laying, testing and commissioning of POLYPROPYLENE RANDOM COPOLYMER (PPRC) water supply pipe (Dadex /Popular/ Beta or approved equivalent manufacturer, with specified pressure rating PN (PRESSURE NOMINAL)and conforming to DIN 8077-8078 code i/c cost of solvent, specials,making jharries complete in all respect as approved and directed by Engineer Incharge.(Internal/External Diameters mentioned). b) PN-20 pipe				
		PPRC Pipe 40 mm dia	Rft	46.00		
		PPRC Pipe 32 mm dia	Rft	50.00		

Punjab Rural Sustainable Water Supply & Sanitation Project (PRSWSSP), Cluster South-I (Rojhan) (PHASE-II) , District Rajanpur

Water Supply Scheme

Multi-village Scheme-1, Multi-village Scheme-2, Multi-village Scheme-3

Dera Dildar (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5,Catchment-6,Catchment-7,Catchment-8),Chak Karia (Catchment-1,Catchment-2,Basti Silachi),Dera Jiwan Khas (Catchment-1),Miranpur (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5),Badli (Catchment-1),Kotla Gulsher (Catchment-1,Catchment-2,Catchment-3),Badli Chak Ladh (Catchment-1,Catchment-2),Kaheeri (Catchment-1,Catchment-2)

1.9 Engineer's Estimate for Construction of Stand Post / LLR including Civil & Plumbing Works / Electrical Works (27-Nos)

Sr. No.	MRS Ref.	Description	Unit	Quantity	Rate (PKR)	Amount (PKR)
40	Ch-23,it-30	Providing, laying, cutting, jointing, testing and disinfecting High Density Polyethylene Pipe (HDPE-100) working pressure pipe conforming to standard ISO 4427, PS 3580, Beta/ Dadex/ Popular/ IIL or approved equivalent manufacturer, including the cost of specials, in trenches, as approved & directed by the engineer incharge, complete in all respects. 3" (90mm) PN-10 (SDR-17)	Rft	10.00		
41	19/27-ii.	Providing and fixing chromium plated bib cock:- ii) 1.5 cm (1/2").	Each	8.00		
42	23/14-a-b	Providing, laying, cutting, jointing, testing and disinfecting PVC/ uPVC pipe line with working pressure pipe, in trenches, including specials (PS-3051=BS-3505), complete in all respects:- a) Class-B (6 bar) b) 4" i/d (100 mm)	Rft	15.00		
43	Ch-19, It-51	Providing and hoisting vertical/ horizontal type storage tank of required capacity made of rotationally molded from (HDPE), double ply polyethelene of approved manufacturer i/c cost of making connection for inlet/outlet pipe, float valve i/c all cost of specials & labour complete in all respect as approved and directed by the Engineer Incharge.	Per Gallon	1000		
Total - 1.9						-
Total 27 No. of Stand Post						0

Sanitation Scheme

Dera Dildar (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5,Catchment-6,Catchment-7,Catchment-8),Chak Karia (Catchment-1,Catchment-2,Basti Silachi),Dera Jiwan Khas (Catchment-1),Miranpur (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5),Badli (Catchment-1),Kotla Gulsher (Catchment-1,Catchment-2,Catchment-3),Badli Chak Ladh (Catchment-1,Catchment-2),Kaheeri (Catchment-1,Catchment-2)

Cost Summary

Sr. No.	Description	Amount (PKR)
2	Sanitation Scheme	
2.1	Covered Drain	0
2.2	SepticTank- (31-Nos) & Sokage Pit- (6-Nos)	0
	Total	0

Sanitation Scheme

Dera Dildar (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5,Catchment-6,Catchment-7,Catchment-8),Chak Karia (Catchment-1,Catchment-2,Basti Silachi),Dera Jiwan Khas (Catchment-1),Miranpur (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5),Badli (Catchment-1),Kotla Gulsher (Catchment-1,Catchment-2,Catchment-3),Badli Chak Ladh (Catchment-1,Catchment-2),Kaheeri (Catchment-1,Catchment-2)

2.1 Engineer's Estimate for Covered Drain

Sr. No.	MRS Ref.	Description	Unit	Quantity	Rate (PKR)	Amount (PKR)
1	Ch-4, It -19	Dismantling cement concrete 1:2:4 plain.	100Cft	25.67		
2	Ch-6, It-5	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate) (f) Ratio 1: 2: 4	100 Cft	33.64		
3	Ch-4, It -45	Dismantling and removing road metaling	100Cft	27.72		
4	Ch-21, It -10	Restoration of metaled road, on laid service line, including compaction				
		Carpeted Road, with 2" (50 mm) carpet and 10" depth of stone metal for sub-base and base	100 Sft	11.88		
		Black Topped Road with two coats of surfacing & 10"(250 mm) depth of stone metal, for sub base & base.	100 Sft	11.88		
5	Ch-8, It-3+Ch-1,item-1	Providing and laying sub-base course of stone product of approved quality and grade, including placing, mixing, spreading and compaction of sub-base material to required depth, camber, grade to achieve 100% maximum modified AASHO dry density, including carriage of all material to site of work except gravel and aggregate. i) Pit run or bed run gravel. Granular filling Note: *The quoted rate for granular material shall be deemed to include the cost of transportation from the approved quarry to the site of work.	100Cft	47.50		
6	Ch-4, It -8	Dismantling storm watre drain including base concrete	100Cft	159.51		
7	Ch-3, It-46	Excavation of trenches in all kinds of soil, except cutting 1000 Cft.rock, for Sewer pipelines/electric cables upto 5 ft. (1.5 m) depth from ground level, including backfilling, trimming, dressing sides,leveling the beds of trenches to correct grade and cuttingpits for joints, etc. complete in all respects.	1000Cft	25.50		
8	Ch-3, It-9	Earthwork excavation in irrigation channels, drains, etc. to designed section, grades and profiles, excavated material disposed-off and dressed within 100 ft. (30 m) lead: i) Ordinary	1000 Cft	342.30		
9	Ch-6, It-3	Cement concrete brick or stone ballast 1½ " to 2" (40 mm to 50 mm) gauge, in foundation and plinth: (d) Ratio 1: 6:12	100 Cft	277.56		
10	Ch-7, It-4	Pacca brick work in foundation and plinth in: Cement, sand mortar: Ratio 1:3	100 Cft	1,518.52		
11	Ch -20 It - 3	Pacca brick on edge, laid in reimbursement, in cement, sand mortar, on sides of drains and on other works where required. All joints to be completely filled and struck flush: b) Ratio 1:5	100Sft	1,074.63		
12	Ch -11 It - 8	Cement plaster 1:3 upto 20' (6.00 m) height: b) ½" (13 mm) thick	100Sft	2,556.39		
13	Ch-.20 It - 6	Constructing Punjab Standard Drains. of cement concrete 1:2 ½ :5, with cement concrete bedding ratio 1:6:12, complete, laid to lines, grades, slopes and shapes, rendering exposed surface of concrete with 1:1 cement, sand mortar, ¼" (6 mm) thick, as per Engineer's drawing (excluding excavation): a) Type I	Per Rft	68,459		
14	Ch-.20 It- 6	Constructing Punjab Standard Drains. of cement concrete 1:2 ½ :5, with cement concrete bedding ratio 1:6:12, complete, laid to lines, grades, slopes and shapes, rendering exposed surface of concrete with 1:1 cement, sand mortar, ¼" (6 mm) thick,(excluding excavation) as per engineer in charge. b) Type II	Per Rft	3,183		

Sanitation Scheme

Dera Dildar (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5,Catchment-6,Catchment-7,Catchment-8),Chak Karia (Catchment-1,Catchment-2,Basti Silachi),Dera Jiwan Khas (Catchment-1),Miranpur (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5),Badli (Catchment-1),Kotla Gulsher (Catchment-1,Catchment-2,Catchment-3),Badli Chak Ladh (Catchment-1,Catchment-2),Kaheeri (Catchment-1,Catchment-2)

2.1 Engineer's Estimate for Covered Drain

Sr. No.	MRS Ref.	Description	Unit	Quantity	Rate (PKR)	Amount (PKR)
15	Ch-6, It-12	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars):				
		(a) Plain bars * For Drain Slab	100Kg	122.26		
		('c) Deformed bars (Grade-60) *For Road Crossing	100Kg	252.16		
16	Ch-6, It-6	Providing and laying reinforced cement concrete (including prestressed concrete), using Ordinary Portland Cement / Sulphate resisting cement / Slag cement as may be required; coarse sand and screened graded and washed aggregate, in required shape and design, including forms, moulds, shuttering, lifting, compacting, curing, rendering and finishing exposed surface, complete (but excluding the cost of steel reinforcement, its fabrication and placing in position, etc.):				
		(a) Reinforced cement concrete in roof slab, beams, columns lintels, girders and other structural members laid in situ or precast laid in position, or prestressed members cast in situ, complete in all respects: (2) Type B (nominal mix 1: 1.5: 3)	Cft	16,854.18		
17	Ch-24, It-3	Supply and erection of PVC pipe for Drain Slab Condiut complete with all respect: iii)25 mm i/d	Per Rft	8,375.05		
18	NS	RPC Drain Cover Manufactured with 100% Recycled Plastic Composite Material, 50 mm (2") thick with clear opening size 450mm x 900mm and RPC Drain frame having with average breaking load capacity of 4 Ton . Type-I	Each	5,704.88		
19	NS	RPC Drain Cover Manufactured with 100% Recycled Plastic Composite Material, 50 mm (2") thick with clear opening size 762mm x 900mm and RPC Drain frame having with average breaking load capacity of 4 Ton. Type-II	Each	265.28		
20	Ch-1,item-1	Carriage of 100 Cft. (2.83 cu.m) of all materials like stone aggregate, spawl, kankar lime (unslaked), surkhi, etc. or 150 Cft. (4.25 cu.m) of timber, by truck or by any other means owned by the contractor. (crushed stone aggregate and bajri used in concrete items) (Form Sahkhi Sarwar Quarry)	Cft	14,157.51		
21	NS	Construction of House Connection Chamber (2' x 2'), complete in all respects as per drawings, specifications & instructions of the Engineer. The unit rate includes but not limited to excavation, required compaction, crushed stone, PCC (1:6:12), PCC (1:2:4), brick masonry in 1:3 C/S mortar, 1/2" thick 1:4 C/S plaster on inner & Outer sides, RCC Slab 4" Thick, finishing in the internal and external surface of brick masonry etc.	Each	500.00		
22	Ch-19, It-47	Providing, fixing, testing and commissioning of μ -PVC (Unplasticized Polyvinyl Chloride) Nikasi/ SWV pipe, Dadex / Popular / Betaor approved equivalent manufacturer, plain / Bell Ended / Z-Joints conforming to BS4514/BS5255-EN1329 including the cost of specials and Solvents complete in all respects, as per drawings & specifications and or as approved and directed by the Engineer Incharge. (v) 110 mm	Rft	7,500.00		
23	Ch-21, It-22	Providing and laying sand under and around the Water Supply pipe, including leveling, manual compaction, complete in all respect.	100Cft	16.88		
Total						0

**Punjab Rural Sustainable Water Supply & Sanitation Project (PRSWSSP), Cluster South-I (Rojhan) (PHASE-II) ,
District Rajanpur**

Sanitation Scheme

Dera Dildar (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5,Catchment-6,Catchment-7,Catchment-8),Chak Karia (Catchment-1,Catchment-2,Basti Silachi),Dera Jiwan Khas (Catchment-1),Miranpur (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5),Badli (Catchment-1),Kotla Gulsher (Catchment-1,Catchment-2.2 Engineer's Estimate for SepticTank- (31-Nos) & Sokage Pit- (6-Nos)

	MRS-Ref	Description	Unit	Qty	Unit Rate	Amount Rs.
A		SepticTank				
1	Ch-3, It-21	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling in layers around structure with excavated earth, watering and ramming lead upto one chain (30 m)lift upto 5 ft (1.5m). 2) a) By Excavator ii) Ordinary soil a) Lift up to 5 ft (1.5 m) b) Lift from 5ft (1.5m) to 15 ft (4.5 m):-				
			1000 Cft	43.5		
			1000 Cft	52.8		
2	Ch-21, It-4	Lowering of sub-soil water table, by installation of tubewells along sewer line and pumping out water, for excavation in open cutting below sub-soil water level, concreting, curing,laying and jointing pipes, filling haunches, etc. till the completion of sewer line, including disposal of pumped out water:-) 0-5 ft. (0 to 1520 mm) below SSWL * This rate is applicable only if the water table is encountered at 5 ft during excavation; otherwise, it shall not apply	1000 Cft	52.8		
3	Ch-6, It-5(i)	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):Ratio 1:4:8	100 Cft	22.29		
		Providing and laying reinforced cement concrete (including prestressed concrete), using Ordinary Portland Cement / Sulphate resisting cement / Slag cement as may be required; coarse sand and screened graded and washed aggregate, in required shape and design, including forms, moulds, shuttering, lifting, compacting, curing, rendering and finishing exposed surface, complete (but excluding the cost of steel reinforcement, its fabrication and placing in position, etc.):-				
4	Ch-6, It-6	(c) Reinforced cement concrete in Pile cap, slab of rafts / strip foundation, base slab of column and retaining walls; etc and footing beams, other structural members other than those mentioned in 6(a-d) above not requiring form work (i.e. horizontal shuttering) complete in all respects:- Type B (nominal mix 1: 1.5: 3)	Per Cft	6165.5		
5		(a)(ii) Reinforced cement concrete in retaining/ Shear walls laid in situ or precast laid in position, or prestressed members castin situ (Formwork on both sides), complete in all respects:(b) Type B (nominal mix 1:1-1/2:3)(ii) More Than 9" thick (Avg)	Per Cft	15365.3		

**Punjab Rural Sustainable Water Supply & Sanitation Project (PRSWSSP), Cluster South-I (Rojhan) (PHASE-II) ,
District Rajanpur**

Sanitation Scheme

Dera Dildar (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5,Catchment-6,Catchment-7,Catchment-8),Chak Karia (Catchment-1,Catchment-2,Basti Silachi),Dera Jiwan Khas (Catchment-1),Miranpur (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5),Badli (Catchment-1),Kotla Gulsher (Catchment-1,Catchment-2.2 Engineer's Estimate for SepticTank- (31-Nos) & Sokage Pit- (6-Nos)

	MRS-Ref	Description	Unit	Qty	Unit Rate	Amount Rs.
6		(a) (i) Reinforced cement concrete in roof slab, beams, columns lintels, girders and other structural members laid in situ or precast laid in position, or prestressed members cast in situ, complete in all respects:- Type B (nominal mix 1:1.5: 3)	Per Cft	4110.4		
7	Ch-6, It-12b(i)	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars): (c) Deformed bars (Grade-60)	100 Kg	984.7		
8	Ch-1, It-1	Carriage of 100 Cft. (2.83 cu.m) of all materials like stone aggregate, spawl, kankar lime (unslaked), surkhi, etc. or 150 Cft. (4.25 cu.m) of timber, by truck or by any other means owned by the contractor. (crushed stone aggregate and bajri used in concrete items) (Form Sahkhi Sarwar Quarry)	Per Cft	23650.9		
9	Ch-19, It-48	Providing,fixing,testing and commissioning of µPVC (Unplasticized PolyvinylChloride) sewerage pipe make of Dadex/Popular/Betaor approved equivalent manufacturer,plain/socket ended conforming to code EN-1401 of specified SDR(Standard Dimension Ratio)including the cost of specials and Solvents complete in all respect as approved and directed by the Engineer Incharge. Type (SDR 34/SN-8) 6" dia 150mm	Rft	1,550.00		
10	Ch-23, It-14	Providing, laying, cutting, jointing, testing and disinfecting PVC/ uPVC pipe line with working pressure pipe, in trenches, including specials (PS-3051=BS-3505), complete in all 'respects:- a) Class-B (6 bar)				
		e) 8" i/d (200 mm)	Rft	1800.0		
11	Ch-13, It-9 (ii)	Bitumen coating to plastered or cement concrete surface;- I 14lbs. Per 100 Sft. (6.35 Kg per Sq.m)	100Sft	166.90		
12	Ch-21, It-11	Providing and fixing 1¼"x1¼"x3/16" (31x31x5 mm) angle iron step, in manhole chambers, including carriage and setting the same in work to correct lines and levels.	each	510.0		

**Punjab Rural Sustainable Water Supply & Sanitation Project (PRSWSSP), Cluster South-I (Rojhan) (PHASE-II) ,
District Rajanpur**

Sanitation Scheme

Dera Dildar (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5,Catchment-6,Catchment-7,Catchment-8),Chak Karia (Catchment-1,Catchment-2,Basti Silachi),Dera Jiwan Khas (Catchment-1),Miranpur (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5),Badli (Catchment-1),Kotla Gulsher (Catchment-1,Catchment-2.2 Engineer's Estimate for SepticTank- (31-Nos) & Sokage Pit- (6-Nos)

	MRS-Ref	Description	Unit	Qty	Unit Rate	Amount Rs.
13	Ch-6, It-32	Providing and embedding 10" (250mm) wide PVC water stopper in expansion joints of RCC structures (Retaining walls, water tanks, Slabs) complete in all respect. Chargeii) 10" wide 10 mm thick	Rft	2203		
14	Ch-23, It-18	Providing, laying, cutting, jointing, testing and disinfecting cast iron pipe line (BS-2035/4622) in trenches, including cost of materials, such as lead, yarn, etc.complete in all respects:- b) With Flanged and Flanged Joints 4" Dia (Vent Pipe)	Rft	186.0		
15	NS	Providing and fixing of RPC Manhole Cover Manufactured with 100% Recycled Plastic Composite Material, 650 mm (26"dia) with clear opening size 600 mm (24" Dia) and RPC manhole frame having Dia meter 790 mm (31.1") with average breaking load capacity of 10 Ton and weight including frame of 50 kg (Minimum).	Each	62.0		
16	NS	Supplying, installing, testing and commissioning of submersible waste water pump set of approved make, complete in all respects as per specifications and direction of the Engineer Incharge. The pump set shall have the following specifications: Flow: 0.15 Cusec Head: 25-30 ft Motor Rating: 2 HP 3×420V, 50 Hz, 2 Pole, Submersible IP68 motor, Insulation class F Motor:1.5 KW/2HP/2 Pole Speed:2900 RPM Motor Control Unit (MCU): MCU (Motor Control Unit) consisting of MCCB, Over/Under voltage relay, Phase reversal relay, Volt meter, Ampere meter, EVR, Volt Selector Switch, Ampere Selector Switch, Current Transformer,Over load relay, indicating lights for all above relays, on/off push buttons. VFD Motor Control Unit with Dry running Protection relay , Circuit Breaker, DC SPD, AC SPD, DC Change Over Switch, Auto Start Stop with Any input, Self-diagnostic and Self Protection, Dry Run Protection, Digital Controls with Complete Protective Functions, Ground Fault Monitoring, AC Short Circuit Protection, Under/Over Voltage and Over/Current Protection, Reverse current Blocking, –10 to 40 °C, Remote Monitoring and MPPT, Water Level Detection, Pressure Level Detection, A/M Selector Switch, etc. All contained in lockable cabinet complete in all respects. Accessoires: Submersible Tail Cable ,G.I Lifting Chain,Duck Foot Bend, and other necessary fittings	Each	25.0		

**Punjab Rural Sustainable Water Supply & Sanitation Project (PRSWSSP), Cluster South-I (Rojhan) (PHASE-II) ,
District Rajanpur**

Sanitation Scheme

Dera Dildar (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5,Catchment-6,Catchment-7,Catchment-8),Chak Karia (Catchment-1,Catchment-2,Basti Silachi),Dera Jiwan Khas (Catchment-1),Miranpur (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5),Badli (Catchment-1),Kotla Gulsher (Catchment-1,Catchment-2.2 Engineer's Estimate for SepticTank- (31-Nos) & Sokage Pit- (6-Nos)

	MRS-Ref	Description	Unit	Qty	Unit Rate	Amount Rs.
17	NS	Construction of Chamber (2' x 2'), complete in all respects as per drawings, specifications & instructions of the Engineer. The unit rate includes but not limited to excavation, required compaction, crushed stone, PCC (1:6:12), PCC (1:2:4), brick masonry in 1:3 C/S mortar, 1/2" thick 1:4 C/S plaster on inner & Outer sides, finishing in the internal and external surface of brick masonry etc.	Each	25.0		
18	Ch-23, It-30	Providing ,laying, cutting, jointing, testing and disinfecting High Density Polyethylene Pipe (HDPE-100) working presure pipe conforming to standard ISO4427, PS3580, Beta /Dadex /Popular/ IIL or approved equivalent manufacturer,including the cost of specials ,in trenches, as approved & directed by the engineer incharge, complete in all respects a) PN-8 (SDR-21)-63 mm	Per ft	6250.0		
19	Ch-3, It-9	Earthwork excavation in irrigation channels, drains, etc. to designedsection, grades and profiles, excavated material disposed dressed within 100 ft. (30 m) lead	1000 Cft	15.0		
20	Ch-26, It-46	Providing and fixing hot dipped Galvanized Iron chainlink mesh/fence of 2"x2"mesh made of wire of specified guage, with the help of 1"x1/8" GI patti, GI.clamps and screws, i/c the cost of 3 nos 8 SWG GI tie wires penetrated through mesh at top,middle and bottom, fixed on vertical posts of 2" diameter GI pipes (medium quality) erected @ 8 ft C/C duly embeded in PCC(1:2:4) etc.complete in all respect as approved and directed by the Engineer Incharge. ii) 10 SWG	Per Sft	7600.0		
Sub-Total (A)						0

**Punjab Rural Sustainable Water Supply & Sanitation Project (PRSWSSP), Cluster South-I (Rojhan) (PHASE-II) ,
District Rajanpur**

Sanitation Scheme

Dera Dildar (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5,Catchment-6,Catchment-7,Catchment-8),Chak Karia (Catchment-1,Catchment-2,Basti Silachi),Dera Jiwan Khas (Catchment-1),Miranpur (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5),Badli (Catchment-1),Kotla Gulsher (Catchment-1,Catchment-2.2 Engineer's Estimate for SepticTank- (31-Nos) & Sokage Pit- (6-Nos)

	MRS-Ref	Description	Unit	Qty	Unit Rate	Amount Rs.
B		Soakage Well-6 Nos				
1	Ch-22, It-1	Excavation of well in dry upto 20'(6 metre) below ground level, and disposal of soil within one chain (30 metre) a) in ordinary soil or sand :	1000 Cft	15.46		
2		i) from 0' to 5' (o to 1.5 m) depth				
3		ii) from 5.1' to 10' (1.5 to 3.0 metre) depth	1000 Cft	15.46		
4		iii) from 10.1' to 15' (3.0 to 4.5 metre) dept	1000 Cft	18.80		
5		iv) from 15.1' to 20' (4.5 metre to 6.0 metre) depth	1000 Cft	6.68		
5	Ch-6, It-5(i)	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):Ratio 1:4:8	100 Cft	6.96		
6	Ch-6, It-6c(3)	Providing and laying reinforced cement concrete (including prestressed concrete), using Ordinary Portland Cement / Sulphate resisting cement / Slag cement as may be required; coarse sand and screened graded and washed aggregate, in required shape and design, including forms, moulds, shuttering, lifting, compacting, curing, rendering and finishing exposed surface, complete (but excluding the cost of steel reinforcement, its fabrication and placing in position, etc.): (c) Reinforced cement concrete in Pile cap, slab of rafts / strip foundation, base slab of column and retaining walls; etc. and footing beams, other structural members other than those mentioned in 6(a-d) above not requiring form work (i.e. horizontal shuttering) complete in all respects: (3) Type C (nominal mix 1: 2: 4)	Cft	462.99		
7	Ch-6, It-6a(3)	(a) Reinforced cement concrete in roof slab, beams,columns lintels, girders and other structural members laid I in situ or precast laid in position, or prestressed members cast in situ, complete in all respects: (3) Type C (nominal mix 1: 2: 4)	Cft	975.46		
8	Ch-7, It-5i	Pacca brick work in ground floor: i) Cement, sand mortar: Ratio 1:3	100Cft	61.80		
9	Ch-7, It-10	Extra for pacca brick work in steining of wells or any other circular masonry.	100Cft	61.80		
10	Ch-6, It-2	Dry rammed brick or stone ballast, 1½" to 2"(40 mm to 50 mm) gauge.	100Cft	57.73		
11	Ch-21, It-21	Providing and laying crushed stone aggregate of 1/4"to1-1/2" guage under and around the sewer pipe, including leveling, manual compaction, complete in all respects.	100Cft	57.73		
12	Ch-10, It-3	Supplying and filling sand under floor; or plugging in wells.	100Cft	41.37		

**Punjab Rural Sustainable Water Supply & Sanitation Project (PRSWSSP), Cluster South-I (Rojhan) (PHASE-II) ,
District Rajanpur**

Sanitation Scheme

Dera Dildar (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5,Catchment-6,Catchment-7,Catchment-8),Chak Karia (Catchment-1,Catchment-2,Basti Silachi),Dera Jiwan Khas (Catchment-1),Miranpur (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5),Badli (Catchment-1),Kotla Gulsher (Catchment-1,Catchment-2.2 Engineer's Estimate for SepticTank- (31-Nos) & Sokage Pit- (6-Nos)

	MRS-Ref	Description	Unit	Qty	Unit Rate	Amount Rs.
13	Ch-6, It-12b(i)	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars): (c) Deformed bars (Grade-60)	100Kg	31.61		
14	NS	Providing and fixing of RPC Manhole Cover Manufactured with 100% Recycled Plastic Composite Material, 650 mm (26"dia) with clear opening size 600 mm (24" Dia) and RPC manhole frame having Dia meter 790 mm (31.1") with average breaking load capacity of 10 Ton and weight including frame of 50 kg (Minimum).	Each	8.00		
15	Ch-19, It-47	Providing, fixing, testing and commissioning of µ-PVC (Unplasticized Polyvinyl Chloride) Nikasi/ SWV pipe, Dadex / Popular / Betaor approved equivalent manufacturer, plain / Bell Ended / Z-Joints conforming to BS4514/BS5255-EN1329 including the cost of specials and Solvents complete in all respects, as per drawings & specifications and or as approved and directed by the Engineer Incharge. (v) 6" i/d 160 mm	Rft	200.00		
16	Cha-1, item-1	Carriage of 100 Cft. (2.83 cu.m) of all materials like stone aggregate, spawl, kankar lime (unslaked), surkhi, etc. or 150 Cft. (4.25 cu.m) of timber, by truck or by any other means owned by the contractor. (crushed stone aggregate and bajri used in concrete items) (Form Sahkhi Sarwar Quarry)	Cft	1,925.40		
Sub-Total (B)						0
Total (A+B)						0

Punjab Rural Sustainable Water Supply & Sanitation Project (PRSWSSP), Cluster South-I (Liaqatpur) (PHASE-I) , District Rahim Yar Khan

Multi-village Scheme-1, Multi-village Scheme-2, Multi-village Scheme-3

Dera Dildar (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5,Catchment-6,Catchment-7,Catchment-8),Chak Karia (Catchment-1,Catchment-2,Basti Silachi),Dera Jiwan Khas (Catchment-1),Miranpur (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5),Badli (Catchment-1),Kotla Gulsher (Catchment-1,Catchment-2,Catchment-3),Badli Chak Ladh (Catchment-1,Catchment-2),Kaheeri (Catchment-1,Catchment-2)

3 Engineer's Estimate for Street Soling and Tuff Pavers

Sr. No.	MRS Ref.	Description	Unit	Quantity	Rate (PKR)	Amount (PKR)
1	Ch-4, It -29	Dismantling brick or flagged flooring without concrete foundation.	100 Sft	1,220.76		
2	Ch-21, It -9	Restoration of flat brick pavement sand grouted, over 2"(50 mm) thick dry sand cushion, under soling on laid service line.	100 Sft	1,220.76		
3	Ch-03 , It -5(i)	Earthwork in ordinary soil for embankments lead up to 100 ft. (30 m), including ploughing, mixing and compaction by mechanical means at optimum moisture content and dressing to designed section, complete in all respects ii) 90% maximum modified AASHTO dry density.	1000 Cft	1,944.73		
4	Ch-03 , It -17(a,b)	Transportation of earth all types when the total distance, including the lead covered in the item of work, is more than 1000 ft. (300 m) a) upto ¼ mile (400 m). b) for every 330 ft. (100 m) additional lead or part thereof, beyond ¼ mile (400 m) upto one mile. (1.6 Km.)	1000 Cft	1,944.73		
5	Ch- 18 It - 20	Providing and laying dry brick pavement/soling in streets or sand grouted, laid in proper camber, including watering, compaction of bed to proper camber, for the purpose of measurement and sand cushion.	100 Cft	5,493.41		
6	Ch-10, It-43 b	Providing and laying Tuff Pavers, having 7000 PSI, crushing strength of approved manufacturer, over 2" to 3" sand cushion i/c grouting with sand in joints i/c finishing to require slope . complete in all respect.(50% Grey / 50% Coloured) b) 60-mm thick	Per Sft	16,790.40		
7	Ch- 18 It -3 (a-ii) + Carriage	a) Providing and laying sub-base course of stone product of approved quality and grade, including placing, mixing, spreading and compaction of sub-base material to required depth, camber, grade to achieve 100% maximum modified AASHO dry density, including carriage of all material to site of work except gravel and aggregate. ii) Crushed stone aggregate	100 Cft	41.98		
8	Ch-10, It-43 b	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate): (f) Ratio 1: 2: 4	100 Cft	10.49		
9	Ch-1, It-1	Carriage of 100 Cft. (2.83 cu.m) of all materials like stone aggregate, spawl, kankar lime (unslaked), surkhi, etc. or 150 Cft. (4.25 cu.m) of timber, by truck or by any other means owned by the contractor. (crushed stone aggregate and bajri used in concrete items) (Form Sahkhi Sarwar Quarry)	Cft	923.47		
Total						0

**Punjab Rural Sustainable Water Supply & Sanitation Project (PRSWSSP), Cluster South-I (Rojhan) (PHASE-II)
, District Rajanpur**

Multi-village Scheme-1, Multi-village Scheme-2, Multi-village Scheme-3

Dera Dildar (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5,Catchment-6,Catchment-7,Catchment-8),Chak Karia (Catchment-1,Catchment-2,Basti Silachi),Dera Jiwan Khas (Catchment-1),Miranpur (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5),Badli (Catchment-1),Kotla Gulsher (Catchment-1,Catchment-2,Catchment-3),Badli Chak Ladh (Catchment-1,Catchment-2),Kaheeri (Catchment-1,Catchment-2)

Bill No. 04: EPM

Sr. No.	Ref	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
1	NS	Medical screening for workers (HIV screening, CBC, Hep. BsAg, HCV antibodies, LFTs, RFTs, e.t.c.	Persons	240		
2	NS	Tarpaulins (High Quality water proof PVC)	Sft	144		
3	NS	Water sprinkling through tank mounted on tractor	Per Trip	240		
4	NS	First Aid Kit (pain killers, eyewash solution, antibiotic ointment, thermometer, plasters, sterile gauze dressings, sterile eye dressings, triangular bandages, crepe rolled bandages, safety pins, disposable sterile gloves and tweezers)	Each	8		
5	NS	Fire alarm (Signal Transmission: Wired Alarm, Working Principle: Manual Alarm Button)	No	16		
6	NS	DCP Fire extinguishers (6 kg) in case of fire (The material of the cylinder is steel. The extinguishing agent is mono ammonium phosphate and ammonium sulfate powder and the discharge time of the agent is 13 seconds)	No	8		
7	NS	CO2 Fire extinguishers (6 kg discharge time of the agent is 13 seconds).	No	8		
8	NS	Warning/Safety Signs (Weatherproof Pvc or Plastic or aluminum sign:reflective print:standardized colors and pictograms (danger,caution,mandatory)	No	200		
9	NS	Green Mesh (Green safety netting for site periphery: 50% shading:UV-stabilized HDPE Material.	Sft	1600		
10	NS	Safety Cones (UV-resistant PVC or rubber material:at least 28 to 36 inches in height : orange Color with reflective collars minimum 4 inch reflective band for day and night	Each	96		
11	NS	Safety jackets (Fluorescent yellow/orange :retro-reflective strips:breathable mesh fabric:secure velcro or zipper closure,provided in appropit size are required by staff	Each	240		
12	NS	Safety Harness Belt(Renowned brand)	Each	24		

Sr. No.	Ref	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
13	NS	Ear plugs (corded Reusable silicon Earplugs)	Each	160		
14	NS	Helmets (PE shell with vents Lining; material: Plastic Chin strap included; Adjust head size by ratchet knob)	Each	240		
15	NS	Safety shoes (Renowned brand)	Each	280		
16	NS	Protective goggles (Anti-fog, Anti scratch, Poly-carbonate Scratch and impact resistant, side protection sheet)	Each	80		
17	NS	Gloves (made up of nylon, polyurethane with ironclad)	Each	400		
18	NS	Dust Mask (N-95)	Each	800		
19	NS	Handling of hazardous material (Store all hazardous materials properly, separate incompatibles, and store in ventilated, dry, cool areas)	3 time Per Villages	24		
20	NS	Handling of solid waste (storage, collection, transportation, treatment, utilization, processing, and final disposal of solid wastes)	4 time Per Villages	24		
21	NS	Air Quality Monitoring, As per the paramters and methodology defined by Punjab EPA (Quarterly in every village)	Each	24		
22	NS	Groundwater Quality Testing as per all the parameters and methodology defined by Punjab EPA (Quarterly in every village)	Each	24		
23	NS	Surface Water Quality Testing as per all the parameters and methodology defined by Punjab EPA (Quarterly in every Revenue village)	Each	24		
24	NS	Waste Water Quality Testing as per all the parameters and methodology defined by Punjab EPA (Quarterly in every Revenue village)	Each	24		
25	NS	Noise level monitoring as per the methodology defined by Punjab EPA (Quarterly in every village)	Each	24		
TOTAL AMOUNT						-

**Punjab Rural Sustainable Water Supply & Sanitation Project (PRSWSSP), Cluster South-I (Rojhan)
(PHASE-II) , District Rajanpur**

Multi-village Scheme-1, Multi-village Scheme-2, Multi-village Scheme-3

Dera Dildar (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5,Catchment-6,Catchment-7,Catchment-8),Chak Karia (Catchment-1,Catchment-2,Basti Silachi),Dera Jiwan Khas (Catchment-1),Miranpur (Catchment-1,Catchment-2,Catchment-3,Catchment-4,Catchment-5),Badli (Catchment-1),Kotla Gulsher (Catchment-1,Catchment-2,Catchment-3),Badli Chak Ladh (Catchment-1,Catchment-2),Kaheeri (Catchment-1,Catchment-2)

BILL NO. 5: EMPLOYER/ENGINEER'S FACILITIES

Sr. No.	Description	Unit	Quantity	Rate (PKR)	Amount (PKR)
<i>The following items shall be provided complete in all respects and in accordance with the special provision of the bidding document and up to the satisfaction of The Engineer / The Employer. Rates for below given items are to be filled-in by the Contractor however, payment will be made as per actual bills in accordance with special provisions.</i>					
1	Providing and maintaining site offices (portable air condition (1,5 ton AC) cabin containers lined with win board size 20'x8'x8.5' with toilet & kitchen, all-time availability of water and electricity) for the entire duration of the project to the Employer and the Engineer. It includes office tables, chairs, water dispenser, electric heater, steel almirah for document storage, etc complete with all respect. After completion of the project these containers and all accessories will be the property of PRMSC	Nos	1		
2	Providing 01 Nos office boy in accordance with the special provisions of the bidding document and up to the satisfaction of the Employer/Engineer.	Per month	20		
3	Providing and maintaining the Cost of Utility Services (Electricity, Water, Gas, etc.) for the 01 Nos offices for the entire duration of the Project.	Per month	20		
4	Complete Surveying instruments including Total Station (02Nos) with tribach (5 seconds), automatic level complete, aluminum telescopic tripod, prism with rod, leveling staff and steel measuring tapes (02 No's each) for the use of Employer and the Engineer.	Per month	20		
Total Amount					0