



BID SCHEDULE.

3/6

Name of work: **Rehabilitation / Improvement of Rural water Supply scheme in Chak No. 4/D, Chak No. 13/D & Chak No. 21/GH Tehsil Kabirwala District Khanewal.**

Approx: Cost: **50.923 Million**

Earnest Money: **2.5461 Million**

Time Limit: **36-Months.**

Rates: **MRS, 2nd BI-Annual period (1st July 2021 to 31 December 2021 District Khanewal).**

Sr. No	Ref of Chap No	MRS Item No	DESCRIPTION OF ITEMS	QTY.	Unit	Rate	Amount	RATE QUOTED BY THE CONTRACTOR
			Source Investigation (5-Nos).					
1			Electric Resistivity Survey.	5 Jobs	P.Job	50000.00	250,000/-	
2	23	1-e	Boring for tubewell in all types of soil except shingle and rock, from ground level to 100 ft. (30 m) depth, including sinking and withdrawing of casing pipe, complete	600.00 Rft	P.Rft	879.25	527,550/-	
3	23	8	Furnishing samples of water from bore hole.	20.00 Rft	P.Job	170.70	3,414/-	
4			Testing of strata and water samples from P.H.E. Department laboratory complete with all charges.	20.00 Rft	P.Job	1500.00	30,000/-	810,964/-
			Tube Well (3-Nos).					
1	23	5-a-i	Direct rotary/reverse rotary drilling of bore for tubewell in all types of soil except shingle gravel and rock.	360.00 Rft	P.Rft	576.75	207,630/-	
2	23	8	Furnishing samples of water from bore hole	6 Nos	Each	170.70	1,024/-	
3		N.S	Providing and installing fiber glass strainer in tube well bore holes including sockets, specials sockets, specials socket studs etc.complete (i/c bail plug). 10" dia 5.5mm thick	75.00 Rft	P.Rft	4000.00	300,000/-	
4	23	14-k	Providing and installing MS blind pipe socket / welded joints M.S. reducer (where necessary) in tube well bore hole including jointing welding with strainer etc. complete.	285.00 Rft	P.Rft	4092.00	1,166,220/-	
5	23	18	Shrouding with graded pea gravel 3/8" to 1/8" dia. around tubewell in borehole.	269.40 Cft	P.Cft	102.65	27,654/-	
6		N.S	Testing and developing for tube well with turbine of same discharge till the water is sand free, i/c transportation of machinery and P.O.L. charges complete in all respect.	3 Jobs	P.Job	25000.00	75,000/-	
7		N.S	Conducting well logging (SPR & SP logging) of tube well bore hole. Prior to conversation into tube well upto the required depth at site, completing of data and preparation of lithology chart, complete in all respect rate i/c transportation of logger etc.	3 Jobs	P.Job	25000.00	75,000/-	
8		N.S	Testing of strata and water samples from PHE Department Laboratory complete with all charges.	6 Nos	Each	1500.00	9,000/-	
9		N.S	Providing and fixing MS well cap on tubewell	3 Nos	Each	1500.00	4,500/-	
10	23	7	Providing strong substantially built box of deodar wood 4'x2'x9"with compartments with lock& locking arrangement for preserving sample of strata from bore hole.	3 Nos	Each	16063.00	48,189/-	1,914,217/-
			Pump House 12'x12' (4-Nos).					
1	3	21-b	Excavation in foundation of building, bridges & other structures, including dagbelling, dressing, refilling around structures with excavated earth, watering and ramming lead upto one chain 100 ft. and lift upto 5 ft. in ordinary soil.	826.89 Cft	1,000 Cft	8078.40	6,680/-	
2	6	3-d	Cement concrete brick or stone ballast 1.5" to 2" gauge in foundation and plinth ratio 1:6:12.	429.96 Cft	100 Cft	12331.50	53,021/-	
3	7	4-i	1st class brick working cement (1:5) plinth and foundation.	945.00 Cft	100 Cft	20821.85	196,766/-	
4	6	33-b-i	P/L damp proof course of cement concrete 1:2:4 (1 1/2" thick) (using cement, sand and shingle), i/c bitumen coating with 2 coats of bitumen.	177.18 Sft	100 Sft	6003.55	10,637/-	
5	7	5-(i)	1st class brick work in (1:5) cement sand mortar super structure including striking of joints.	2,016.66 Cft	100 Cft	22471.85	453,181/-	
6	3	15-i	Filling, watering, and ramming earth under floors with surpulas earth from foundation etc.	708.00 Cft	1,000 Cft	3867.60	2,738/-	

Sr. No	Ref of MRS		DESCRIPTION OF ITEMS	QTY.	Unit	Rate	Amount	RATE QUOTED BY THE CONTRACTOR
	Chap No	Item No						
7	7	30	Supplying and filling sand under floor or plugging in well.	204.00 Cft	100 Cft	2239.00	4,568/-	
8	11	9-b	Cement plaster 1 : 4 upto 20 ft. height	1,908.00 Sft	100 Sft	2310.70	44,088/-	
9	10	15-i	P/L topping of cement concrete '1:2:4 including surface finishing and dividing in panels © 3 inch thick.	432.00 Sft	100 Sft	7743.10	33,450/-	
10	6	6-a-3	P/L reinforced cement concrete (including prestressed concrete), using course sand and screened graded and washed aggregate in required shape and design including forms, moulds, shuttering, lifting, compacting, curing, rendering and finishing exposed surfaces, complete (but excluding the cost of steel reinforcement, its fabrication and placing in position etc.) (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 respect. (3) (C) Type C (nominal mix 1:2:4).	443.24 Cft	P.Cft	414.00	183,501/-	
11	6	9-b	Fabrication of mild steel reinforcement for cement concrete, i/c cutting, bending, laying in position, making joints and fastening, i/c cost of binding wire and labour charges for binding of steel reinforcement, (also includes removal of rust from bars) (b) deformed bars).	1,357.52 Kgs	100 Kg	19989.85	271,366/-	
12	12	51	Providing and fixing panelled door of M.S. sheet, with forged door leaves of M.S. sheet 22 SWG fitted in hollow frame chowkat 3"x4½" (75 mmx113 mm) made of M.S. sheet 18 SWG filled with plain cement concrete 1:3:6 etc. complete with all fittings and hammer painting, including carriage to site and fixing in position.	84.00 Sft	P.Sft	532.50	44,730/-	
13	25	41-b-v	Providing and fixing steel windows with openable glazed panels using beam section for frame '11/2"x1"x 5/8" x1/8" z section for leaves ¾" x 1" x 3/3" x 1/8" T-section sashes 1" x 1" x 1/8" with glass5mm thick panes, wooden screed for glazing embedded over a thin layer of putty duly screwed with leaves brass fittings, holdfast, duly painted, complete in all respects, including all cost of material and labour etc. as per approved design and as directed by the engineer-in-charge.i/c wire gauge 22 SWG 5mm thick glass panel.	96.00 Sft	P.Sft	636.00	61,056/-	
14	12	54	Providing and fixing M.S. flat ½"x1/8" grill including ¾" x 1/8" M.S. flat frame, in windows of approved design, including painting three coats, complete in all respects	96.00 Sft	P.Sft	316.95	30,427/-	
15	11	18-a+31	Cement pointing 1:2 struck joint on walls upto 20 ft. height. i/c cost of red oxide pigment.	2,043.00 Sft	100 Sft	3013.25	61,561/-	
16	9	5	Single layer of tiles 9"x41/2"x1-1/2" 4 inch earth and 1 inch. mud plaster without laid over bhoosa grouted with cement sand '1 :3 on top of RCC. roof slab providing with 34 lbs bitumen coating sand blinded.	576.00 Sft	100 Sft	7910.00	45,562/-	
17	11	23-a+iii	Distempering on wall new surface 3 coats.	2,880.00 Sft	100 Sft	782.50	22,536/-	
18	13	32-a (a)-i-ii	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 (2 coats) New.	2,223.00 Sft	100 Sft	3116.00	69,269/-	
19	13	32-a (b)	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. Old	741.00 Sft	100 Sft	1034.00	7,662/-	
20	13	5-c	Preparing surface and painting of doors and windows any type (including edges):- 3 coats.	224.00 Sft	100 Sft	1941.75	4,350/-	
21	9	14	Khassi parnalas in cement sand mortar 1 : 2 outside 12inch width finished smooth with a floating coat of neat cement.	56.00 Rft	P.Rft	130.10	7,286/-	

Sr. No	Ref of Chap No	MRS Item No	DESCRIPTION OF ITEMS	QTY.	Unit	Rate	Amount	RATE QUOTED BY THE CONTRACTOR
22	9	16	Bottom khurras of brick masonry in cement sand mortar 1:6 4ft x2ft x41/2inch over 3 inch cement concrete 1:4:8	8 Nos	Each	1003.20	8,026/-	
23	9	15	Khurras on roof 2' x 2' x 6".	8 Nos	Each	604.90	4,839/-	
24	7	5-i	Pacca brick work in ground floor cement sand mortar 1:5	58.52 Cft	100 Cft	22471.85	13,151/-	
25	N.S		P/F R.S. joist best quality china made, i/c 3 coats of paint. 8 in. x 4in minimum thickness 5mm.	56.00 Rft	P.Rft	1200.00	67,200/-	
26	6	3-d	Cement concrete 1:6:12 under apron.	293.64 Cft	100 Cft	12331.50	36,210/-	
27	10	9	Brick on edge flooring laid in 1:6 cement sand mortar over a bed of 3/4" C.S. mortar 1:6.	783.00 Sft	100 Sft	9213.60	72,142/-	
28	24	13-c (vi)	Supply and erection of four 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.	200.00 Rft	P.Rft	274.85	54,970/-	
29	24	3-v	Supply and erection of PVC pipe for wiring recessed in walls, including inspection boxes, pull boxes, hooks, cutting jharries, and repairing surface, etc., complete with all specials.	64.00 Rft	P.Rft	108.50	6,944/-	
30	24	3	Supply and erection of PVC pipe for wiring recessed in walls, including inspection boxes, pull boxes, hooks, cutting jharries, and repairing surface, etc., complete with all specials.					
			(i) 20mm i/d.	128.00 Sft	P.Sft	61.05	7,814/-	
			(ii) 25mm i/d.	48.00 Sft	P.Sft	70.50	3,384/-	
30	24	11	Supply and erection of single core PVC insulated, PVC sheathed copper conductor, 250/440 volts grade cable (BSS-2004), in prelaid PVC pipes / M.S. conduit / G.I. pipe / wooden strip batten / wooden casing and capping / trenches, etc.					
		i	7/0.029"	352.00 Rft	P.Rft	20.90	7,357/-	
		ii	3/0.029"	112.00 Rft	P.Rft	13.65	1,529/-	
31	24	16	Supply and erection of teak wood board, 4.5 cm (1 3/4") thick. (i) (7"x4")	8 Nos	Each	108.15	865/-	
32	24	30	Supply and erection of ceiling rose, bakelite.	16 Nos	Each	46.90	750/-	
33	24	49	Supply and erection of 3/8" (10 mm) dia M.S. bar fan hook, placed at the time of casting of slab	4 Nos	Each	49.45	198/-	
34	24	43-ii	Supply and erection of tube light, including rod, choke, starter with frame, flexible wire, including connection from ceiling rose, etc., complete. (ii) single rod (40 watts) with one choke and one starter.	8 Nos	Each	785.55	6,284/-	
35	24	31-ii	Supply and erection of switches 5 Amp. piano type.	44 Nos	Each	43.40	1,910/-	
36	24	36-ii	Supply and erection of 3 pin switch and plug combined, recessed type. (ii) 10/15 Amp.	4 Nos	Each	106.75	427/-	
37	N.S		S/E of Ceiling fan 56" size, (GFC, Asia, Pak Fan).	4 Nos	Each	5000.00	20,000/-	1,928,434/-
			Rising Main & Distribution System.					
1	4	29	Dismantling brick or flagged flooring without concrete foundation.	21962.00 Sft.	100 Sft.	650.75	142,918/-	
2	3	44	Excavation of trenches for water supply pipe line in all kinds of soil except cutting rock for water supply pipe lines upto 5 ft depth from ground level including trimming dressing the sides, leveling the beds of trenches to correct grade and cutting pits for joints etc. complete in all respect. (HDPE Pipe)	656,783.00 Cft	1,000 Cft	5755.20	3,779,918/-	
3	23	26	P/L cutting jointing testing and disinfecting Pipe line of Class-B working pressure with jointing material etc. complete.					
			4" i/d PVC Pipe	12,147.00 Rft	P.Rft	318.30	3,866,390/-	
			3" i/d PVC Pipe	17,623.00 Rft	P.Rft	208.90	3,681,445/-	
4	23	42-b (iv)	P/L cutting, jointing, testing and disinfecting High Density Polyethylene Pipe (HDPE-100) working presure pipe in trenches. complete in all respects:					

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			160 mm (PN-8)	27,346.00 Rft	P.Rft	387.55	10,597,942/-	
			160 mm (PN-8)	22,000.00 Rft	P.Rft	387.55	8,526,100/-	
			125 mm (PN-8)	3,600.00 Rft	P.Rft	239.70	862,920/-	
5	23	42-b (iv)	P/F high quality Ployethylene HDPE pipe specials tee, bend end cape, reducing tee, flang, adaptor, etc. complete in all respects.					
			Equal tee 160 mm	4 Nos	Each	6521.90	26,088/-	
			Equal tee 125 mm	1 No	Each	5424.25	5,424/-	
			Reducer 160mm x 125mm	1 No	Each	3105.35	3,105/-	
			Reducer 160mm x 110mm	2 Nos	Each	3079.75	6,160/-	
			Reducer 125mm x 110mm	2 Nos	Each	2332.15	4,664/-	
			Reducer 125mm x 90mm	1 No	Each	2332.15	2,332/-	
			Reducer 160mm x 90mm	2 Nos	Each	3079.75	6,160/-	
			Bend 160mm	20 Nos	Each	5025.50	100,510/-	
			Bend 125mm	2 Nos	Each	4501.10	9,002/-	
			Flang adaptor 160mm	5 Nos	Each	2855.35	14,277/-	
			Flang adaptor 110mm	4 Nos	Each	1247.35	4,989/-	
			Flang adaptor 90mm	1 No	Each	872.95	873/-	
6	23	28-b (i)	P/F cast iron special of BSS class "B" (such as bend, tee cross collar, reducer, tail piece, flanged spigot, cap, flanged socket, taper, angle branch, plug etc.) for cast iron pipe line, complete (3" to 6" (75 to 150 mm) i/d.	1,421.00 Kgs	P.Kg	110.50	157,021/-	
7	23	34-a	P/fitting C.I. Flanges on pipes, i/c urning, threading, facing and fitting, etc. complete in all respects. (3" to 6" (75 to 150 mm) i/d.	342.00 Kgs	P.Kg	129.80	44,392/-	
8	23	40-a (b)	Providing and installing PVC tapered core, BSS, (i) Class "B" working pressure.					
			4"i/d PVC Pipe	10 Nos	Each	188.80	1,888/-	
			3"i/d PVC Pipe	4 Nos	Each	164.00	656/-	
9	23	38-i	Providing and installing PVC tees, BSS, (i) Class "B" Working pressure.					
			4"i/d PVC Pipe	18 Nos	Each	1140.15	20,523/-	
			3"i/d PVC Pipe	47 Nos	Each	663.00	31,161/-	
10	23	37-i	Providing and installing PVC bends, BSS, (i) Class "B" Working pressure.					
			4"i/d PVC Pipe	1 No	Each	404.80	405/-	
			3"i/d PVC Pipe	12 Nos	Each	248.00	2,976/-	
11	23	23-i (a)	Providing and installing PVC Bail / End Plug, in tubewell bore hole.					
			3"i/d PVC Pipe	15 Nos	Each	66.15	992/-	
12	23	33-b	P/F air valve 2 1/2"i/d of BSS quality and weight (complete with jointing material).	38 Nos	Each	8022.60	304,859/-	
13	23	30	P/F sluice valve of BSS quality and weight, Class "B", for cast iron pipe line, and asbestos cement pipe line (i/c cost of jointing mertail).					
			6"i/d PVC Pipe	4 Nos	Each	18751.00	75,004/-	
			4"i/d PVC Pipe	4 Nos	Each	9491.95	37,968/-	
14	3	13-a	Back filling of trenches by re-handling of earth lead upto a single throw of kassi phaorah compaction, ramming of earth etc. complete in all respect.	525,426.00 Cft	1,000 Cft	1914.00	1,005,665/-	
15	23	41	Making connection for new water supply lines with the running main, i/c excavation of trench and refilling, complete, but excluding cost of pipe and specials, etc.	20 Nos	Each	2227.50	44,550/-	
16	23	36-ii	P/L cutting jointing testing and disinfecting G.I Pipe line in trenches with flanged joints using G.I pipe of BSS 1387 - 1967 complete in all respects	100.00 Rft	P.Rft	1643.50	164,350/-	
17	18	19	Resoling of bricks on edge soling i/c preparation of bed sand couison and sand grouted in proper camber complete in all respect (Labour Rate).	4664.73 Sft.	100 Sft.	4327.95	201,887/-	
18	18	19	P/L dry brick pavement / soling in streets or roads etc. sand grouted laid in proper camber i/c preparation, watering, compacting of bed to proper camber & sand cushion.	3197.67 Sft.	100 Sft.	17518.35	560,179/-	
19	21	10	D/d Cost of Old Bricks Bats (-)	3109.82 Sft.	100 Sft.	-2200.00	-68,416/-	34,227,275/-

Sr. No	Ref of Chap No	MRS Item No	DESCRIPTION OF ITEMS	QTY.	Unit	Rate	Amount	RATE QUOTED BY THE CONTRACTOR
			Pumping Machinery (2-Nos).					
1			Supply, installation and testing of Vertical Turbine Pumping Unit (Approved Manufacture) made, capable to give a discharge of 0.25 cusec of clear water against a total dynamic head of 250 feet with 80 feet column pipe directly coupled with Vertical 3-Phase 15 BHP Electric Motor 380/440 Volt squirrel cage Hallow Shaft with following Technical Data and accessories complete in all respect.					
			(I) Technical DATA					
		a)	Type	Shallow Well Vertical Turbine Pump.				
		b)	Discharge	0.25 Cusec				
		c)	Head	250 Ft.				
		d)	BHP	15 BHP				
		e)	Column Pipe	80 Ft.				
		f)	MCU (Motor Control Unit) for 15 BHP Motor with Main Circuit Breaker (Terrasaki), Connector (Siemens), Timer with Base (Taiwan made), Timer Relay (Green Power / OCR), Phase Failure Relay, CT, Volt & Ampere Selector Switches, Indicator Lights, etc. Complete in all respect.					
			Completed Set.	2 Nos	Each	1160000.00	2,320,000/-	
			(II) Accessories					
		1	Supplying of tool kit comprising of following items.					
		i.	China Spanner Set.					
		ii.	China Screw wrench 12" size.					
		iii.	China insulated pliers 8" size.					
		iv.	China screw driver set.					
		v.	Hexa with funner.					
		vi.	Electric Tester					
		vii.	Hammer 1.50 kg with wooden handle.					
2	24	19	S/E of iron/ aluminium clad 500 Volts main switch 400 Amps. With tripple pole and neutral links and HRC fuses on angle iron board with 3 mm thick M.S. sheet covereing including bonding to earth with necessary flexible pipe and thimbles complete.	1 No	Each	17366.95	17,367/-	
3		N.S	P/F chain pully block 5 ton capacity with 5-meter chain complete in all respect.	1 No	Each	18000.00	18,000/-	2,355,367/-
			Conditions:-					
		1	Minimum efficiency of pumps shall not be less than 75% and gross efficiency of pumping set (Pump & Motor) shall not be less than 60%.					
		2	2-Year un-conditional full warranty be provided at the time of submitting tender.					
		3	Date of warranty will be started when the scheme is commissioned.					
		4	Physical test for efficiecy pump test bed of manufacturer before supplied.					
		5	The Contractor will install Machinery under suppervision of the manufacturer representative.					
		6	Contractor must mention the name of single approved manufacturer at the time of submitting the tender for which he is quoting the rates otherwise the contractor will be boud to install the machinery as per direction of Engineer Incharge.					
		7	The MCU will be certified for capability by the manufacturer of Pumping Machinery.					
			Further conditions for Pumping Machinery.					
			Contractor shall submit the following information in their technical submittal for pumping machinery for approval from S.E. PHE Circle Multan.					
		i)	Pumps performance Curves / System Head Curves.					
		ii)	Detailed technical specification of Pumping Machinery based on international standards for Pump and Motors.					
		iii)	Operation and Maintenance manual of Pumping Machinery.					
		iv)	Installation manual of Pumping Machinery.					
		v)	List of spare parts.					
		vi)	Complete Schematic Diagram of Pumping Equipment.					
		vii)	The Engineer incharge shall mention above information in bidding documents.					

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			Pumping Machinery (2-Nos).					
1			Supply, installation and testing of Vertical Turbine Pumping Unit (Approved Manufacture) made, capable to give a Discharge of 0.25 cusec of clear water against a total Dynamic Head of 275 feet with 80 feet Column Pipe directly coupled with Vertical 3-Phase 15 BHP Electric Motor 380/440 Volt Squirrel Cage Hallow Shaft with following Technical Data and accessories complete in all respect.					
			(I) Technical DATA					
		a)	Type	Shallow Well Vertical Turbine Pump.				
		b)	Discharge	0.25 Cusec				
		c)	Head	275 Ft.				
		d)	BHP	15 BHP				
		e)	Column Pipe	80 Ft.				
		f)	MCU (Motor Control Unit) for 30 BHP Motor with Main Circuit Breaker (Terrasaki), Connector (Siemens), Timer with Base (Taiwan made), Timer Relay (Green Power / OCR), Phase Failure Relay, CT, Volt & Ampere Selector Switches, Indicator Lights, etc. Complete in all respect.					
			Completed Set.	2 Nos	Each	1130000.00	2,260,000/-	
			(II) Accessories					
		1	Supplying of tool kit comprising of following items.					
		i.	China Spanner Set.					
		ii.	China Screw wrench 12" size.					
		iii.	China insulated pliers 8" size.					
		iv.	China screw driver set.					
		v.	Hexa with funner.					
		vi.	Electric Tester					
		vii.	Hammer 1.50 kg with wooden handle.					
2	24	19	S/E of iron/ aluminium clad 500 Volts main switch 400 Amps. With tripple pole and neutral links and HRC fuses on angle iron board with 3 mm thick M.S. sheet covereing including bonding to earth with necessary flexible pipe and thimbles complete.	2 Nos	Each	17366.95	34,734/-	
3	N.S		P/F chain pully block 5 ton capacity with 5-meter chain complete in all respect.	2 Nos	Each	18000.00	36,000/-	2,330,734/-
			Conditions:-					
		1	Minimum efficiency of pumps shall not be less than 75% and gross efficiency of pumping set (Pump & Motor) shall not be less than 60%.					
		2	2-Year un-conditional full warranty be provided at the time of submitting tender.					
		3	Date of warranty will be started when the scheme is commissioned.					
		4	Physical test for effciency pump test bed of manufacturer before supplied.					
		5	The Contractor will install Machinery under supervision of the manufacturer representative.					
		6	Contractor must mention the name of single approved manufacturer at the time of submitting the tender for which he is quoting the rates otherwise the contractor will be boud to install the machinery as per direction of Engineer Incharge.					
		7	The MCU will be certified for capability by the manufacturer of Pumping Machinery.					
			Further conditions for Pumping Machinery.					
			Contractor shall submit the following information in their technical submittal for pumping machinery for approval from S.E. PHE Circle Multan.					
		i)	Pumps performance Curves / System Head Curves.					
		ii)	Detailed technical specification of Pumping Machinery based on international standards for Pump and Motors.					
		iii)	Operation and Maintenance manual of Pumping Machinery.					
		iv)	Installation manual of Pumping Machinery.					
		v)	List of spare parts.					
		vi)	Complete Schematic Diagram of Pumping Equipment.					
		vii)	The Engineer incharge shall mention above information in bidding documents.					

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			Hype Chlorinators (4-Nos).					
2	24	19	P/F of CHEM-TECH USA Series 100 Model 030 Chemical Metering Pump (Hypo Chlorinator), positive displacement type. Capacity: 0-30 Gallons / Day at 100 PSI Max, injection pressure fitted with 1/60 HP, Air-Cooled Heavy duty Electric Motor, 220v, 50hz, Single Phase AC Thru Life-Time lubricated gear train with suction tubing 4 ft, Discharge Tubing 8 ft, Foot Valve and strainer assy with weight 1-No, back check valve assy 1-No, operation manual 1-No complete in all respect.	4 Nos	Each	40000.00	160,000/-	160,000/-
			Solar System for 15-BHP Motor (2-Jobs).					
1			P/F Solar pannel Trina, Jinko (China Made or equivalent) etc complete in all respect, i/c all taxes and contractor profit. With 5 Year warranty.	39,600 Watt	P.Watt	60.00	2,376,000/-	
2			P/F 2"x2" sq. pipe 16 Swg Stand for solar pannel foundation plate 1.5' x1.5' x28mm with 8Nos. Net bolt 4.5ft log, flanges 8" to 10" dia 16mm thick 2Nos. 8" Degree plate 1No., Qanchi plate 12" x14" 1No. with PCC foundation 4'x4'x5' etc for 1No.pannel complete in all respect, i/c all taxes and contractor profit.	8 Nos	Each	45000.00	360,000/-	
3			P/F inverter Drive 12-16 KVA capacity, INVT (China Made or equivalent) etc complete in all respect, i/c all taxes and contractor profit. With 06 months warranty.	2 No	Each	85000.00	170,000/-	
4			P/F Pannel Box with breaker and change over require size etc complete in all respect, i/c all taxes and contractor profit.	2 No	Each	30000.00	60,000/-	
5			P/F 2KVA UPS, Solor max, Crown, Huawe (China Made or equivalent) and 2 Nos, Batteries 175 Amp (AGS, OSAKA, EXIDE) etc. complete in all respect, i/c all taxes and contractor profit.	2 Job	P.Job	110000.00	220,000/-	
6			P/F Locking arrangement with angle iron 1/2"x1/2" x1/4" etc complete in all respect, i/c all taxes and contractor profit.	8 Nos	Each	15000.00	120,000/-	
7			P/L cutting, jointing, testing and disinfecting G.I. pipeline in trenches, with socket joints, using G.I. pipes of B.S.S. 1387-1967 complete in all respects, with specials and valves etc complete.					
			4" dia G.I.Pipe	96.00 Rft	P.Rft	1395.95	134,011/-	
			3" dia G.I.Pipe	24.00 Rft	P.Rft	982.05	23,569/-	
			6" dia G.I.Pipe	40.00 Rft	P.Rft	2060.10	82,404/-	
8			P/F copper connector cable (required size) from solar pannel to panel box and inverter drive etc. complete in all respect, i/c all taxes and contractor profit.	8 Nos	Each	12500.00	100,000/-	3,645,984/-
			Sluice Valve Chamber 3'X3' (46 Nos).					
1	3	21 (b)	Excavation in foundation of building, bridges & other structures, including dagbelling, dressing, refilling around structures with excavated earth, watering and ramming lead upto one chain 100 ft. and lift upto 5 ft. in ordinary soil.	5750.00 Cft.	1000 Cft.	8078.40	46,451/-	
2	6	3 (d)	Cement conc. Brick or stone ballast 1 1/2" to 2" gauge in foundation and plinth. (1:6:12)	575.00 Cft.	100 Cft.	12331.50	70,906/-	
3	7	4 (i)	1st Class brick work in (1:5) cement mortar in plinth and foundation.	2070.00 Cft.	100 Cft.	20821.85	431,012/-	
4	11	9 (b)	Cement plaster 1:4 upto 20 ft. height (b) 1/2" thick.	2,484.00 Sft	100 Sft	2310.70	57,398/-	
5	6	5-f	PCC (1:2:4) i/c placing, laying, finishing, curing etc: complete.	103.50 Sft	100 Sft	25119.60	25,999/-	
6	6	6-a (iii)	P/L reinforced cement concrete (i/c prestressed concrete), using course sand and screened graded and washed aggregate in required shape and design i/c forms, moulds, shuttering, lifting, compacting, curing, rendering and finishing exposed surfaces, complete (but excluding the cost of steel reinforcement, its fabrication and placing in position etc.) (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 respect. (3) (C) Type C (nominal mix 1: 2: 4).	465.750 Cft	P.Cft	414.00	192,821/-	
7	6	9-b	Fabrication of mild steel reinforcement for cement concrete, i/c cutting, bending, laying in position, making joints and fastening i/c cost of binding wire and labour charges for binding of steel reinforcement, (also includes removal of rust from bars) (b) deformed bars).	1,426.46 Kgs	100 Kg	19989.85	285,147/-	1,109,734/-

Sr. No	Ref of MRS		DESCRIPTION OF ITEMS	QTY.	Unit	Rate	Amount	RATE QUOTED BY THE CONTRACTOR
	Chap No	Item No						
			Boundary Wall with Gate (214 Rft)					
1	3	21 (b)	Excavation in foundation of building etc; and other structure i/c re filling around structure & watering and ramming lift upto 5' in ordinary soil.	915.00 Cft.	1000 Cft.	8078.40	7,392/-	
2	6	3 (d)	Cement conc. Brick or stone ballast 1 1/2" to 2" gauge in foundation and plinth. (1:6:12)	227.00 Cft.	100 Cft.	12331.50	27,993/-	
3	7	7 & 4	Pacca brick work other than building up to 10' height.					
			(in (1:4) c/s mortar)	880.00 Cft.	100 Cft.	22195.20	195,318/-	
			(In (1:5) c/s mortar.)	1317.00 Cft.	100 Cft.	21638.40	284,978/-	
4	6	6-a-ii (iii)	P/L reinforced cement concrete (i/c prestressed concrete), using course sand and screened graded and washed aggregate in required shape and design i/c forms, moulds, shuttering, lifting, compacting, curing, rendering and finishing exposed surfaces, complete (but excluding the cost of steel reinforcement, its fabrication and placing in position etc.) (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 respect. (3) (C) Type C (nominal mix 1: 2: 4).	104.000 Cft	P.Cft	302.95	31,507/-	
5	6	9-b	Fabrication of mild steel reinforcement for cement concrete, i/c cutting, bending, laying in position, making joints and fastening i/c cost of binding wire and labour charges for binding of steel reinforcement, (also includes removal of rust from bars) (b) deformed bars).	296.00 Kgs	100 Kg	19989.85	59,170/-	
6	3	33-b (i)	1/1/2" thick D.P.C. of PCC (1:2:4) with two coats of bitumen sand blinded complete.	159.00 Cft.	100 Cft.	6003.55	9,546/-	
7	11	9-b	1/2" thick cement plaster (1:4) upto 20' height.	2783.00 Cft.	100 Cft.	2310.70	64,307/-	
8	11	18-a 31	Cement pointing 1:2 struck joint on walls upto 20 ft. height. i/c cost of red oxide pigment.	960.00 Cft.	100 Cft.	3013.25	28,927/-	
9	25	30	P/F steel grated door complete with locking arrangement, angle iron 2"x2"x3/8" flat & 3/4" square bar @ 4" c/c.	70.00 Sft	P.Sft	1250.40	87,528/-	
10	13	5-c (i) (ii)	Preparing surface and painting 3 coats to guard bars, gates, grating etc. complete.	140.00 Sft.	100 Sft.	1941.75	2,718/-	
11	3	1b+17 a+17b x12	Earth work excavation undressed lead upto a single throw of kassi pahorah or shavel in ordinary soil transportation of earth all types when the total distance work i/c the lead covered in the item of its more than 1000' additional lead or part thereof beyond 1/2 mile upto one mile dressing & levelling earth work to designed section etc. complete in all respect.	1750.00 Cft.	1000 Cft.	7371.40	12,900/-	
12	18	19	P/L dry brick pavement sand grouted complete.	364.00 Cft.	100 Cft.	17518.35	63,767/-	876,049/-
Total							49,358,759/-	

Note:-

- Any item not included in above BOQ / DNIT and to be carried out at site will be paid according to **MRS, 2nd BI-Annual period (1st July 2021 to 31 December 2021 District Khanewal)**.
- Any omission or error therein shall be referred for interpolation / correction and decision of the competent authority which will be final in this respect.
Lowest contractor has to deposit performance security in the shape of Deposit at call in the name of undersigned, If the rates quoted by him are less than 5% of the estimated amount he has to deposit additional performance security of the lesser amount within (14) days after date of opening of tenders as per Finance Department Notification No.Ro (Tech) FD 1-2-2010 Dated: 04 -09- 2012, failing which the tenders will be rejected without serving any notice and the earnest money will be credited into Govt: account.
- Work would be completed as per schedule of completion period.
- All new amendments, Notifications will be applicable on this Bid.

Contractor

Executive Engineer
Public Health Engg: Division
Khanewal



BID SCHEDULE

2/6

Name of Work: **Extension and Improvement of Sewerage Scheme Sarai Sidhu (RCC Sewer, Tuff Tile, Brick Pavement, Pucca Sullage Carrier, Pumping Machinery) Tehsil Kabirwala, District Khanewal.**

Estimated Cost Rs: **44,595,243/-**

Time Limit (12- Months)

Ernst: Money Rs: **2,229,762/-**

Sr. No	Chap No.	Item No.	Description of Items	Qty	Unit	Rate	Amount	Rate quoted by the Contractor
R.C.C SEWER.								
1	4	29	Dismantling brick or flagged flooring without concrete foundation.	2580.00 Sft.	100 Sft.	650.75	16,789/-	
2	4	45	Dismantling and removing road metalling.	4328.00 Cft.	100 Cft.	1531.20	66,270/-	
3	4	31-a	Disjoining RCC Pipes inside the trench and dismantling and removing the pipes from the trench and stacking them outside.	400.00 Rft.	P.Rft	25.35	10,140/-	
4	3	42	Earthwork excavation in open cutting for sewer and man holes as shown in drawings i/c shuttering and timbering, dressing to correct section and dimension according to templates and levels, and removing surface water, in all type of soil except shingle.					
			0-7' Depth	123256.00 Cft.	1,000 Cft.	6683.30	823,757/-	
			7-15' Depth	78367.00 Cft.	1,000 Cft.	11245.20	881,253/-	
			Above 15' Depth	1733.00 Cft.	1,000 Cft.	14307.60	24,795/-	
5			Supply and fixing of plain kikar wood for timbering and bracing (left over shutring) such as wood shuttering, cross, struts wallies etc to be left in sewer trench after laying the sewer and providing and fixing steel parts of karries i.e strip and rods etc. For safety of adjoining public property and existing sewer.	1991.60 Cft.	P.Cft	1693.00	3,371,779/-	
6	7	30	Supplying and filling sand under floor; or plugging in wells.	3956.00 Cft.	100 Cft.	2239.00	88,575/-	
6	21	3	Providing and laying R.C.C. pipe sewer, moulded with cement concrete 1: 1½: 3 conforming to ASTM specification C – 76 – 79. Class II, Wall B, i/c carriage of pipe from factory to site of work, lowering in trenches to correct alignment and grade, jointing with rubber ring, etc complete in all respect.					
			12"i/d	1,630.00 Rft	P.Rft	546.65	891,040/-	
			15"i/d	300.00 Rft	P.Rft	686.25	205,875/-	
			21"i/d	380.00 Rft	P.Rft	1045.65	397,347/-	
			24"i/d	2,420.00 Rft	P.Rft	1305.70	3,159,794/-	
7			Providing & laying crush bajri 3/8" to 1" gauge under bed of sewer.	16347.00 Cft.	P.Cft	122.00	1,994,334/-	
8	3	13 (a)	Rehandling of earthwork lead up to a single throw of kassi, phaorah or shovel etc complete.	162685.00 Cft.	1000 Cft.	1914.00	311,379/-	
9	21	12-c	Restoration of metalled road, on laid service, i/c compaction, black topped road, with two coats of surfacing and 10" depth of stone metal, for sub base and base.	4328.00 Sft.	100 Sft.	5091.50	220,360/-	
10	21	10	Restoration of brick pavement on edge, over laid service line, with 2" sand cushion under.	2580.00 Sft.	100 Sft.	4007.20	103,386/-	
11	3	1b+17a+17b x12	Earth work excavation undressed lead upto a single throw of kassi pahorah or shavel in ordinary soil transportation of earth all types when the total distance work i/c the lead covered in the item of its more than 1000' additional lead or part thereof beyond 1/2 mile upto one mile.	40671.00 Cft.	1000 Cft.	7371.40	299,802/-	
12			Dewatering / By Pass Arrangement of Existing Sewage Water to the suitable point	120.00 Hours	P.Hour	981.00	117,720/-	#####
GULLY GRATTING CHAMBER 12"x12" (13-Nos.)								
1	3	42	Earthwork excavation in open cutting for sewers and manholes as shown in drawings i/c shuttering and timbering, dressing to correct section and dimensions according to templates and levels, and removing surface water, in all types of soil except shingle, gravel and rock:- (0 ft. to 7.0 ft. depth).	1,007.52 Cft	1,000 Cft	6683.30	6,734/-	
2	21	1-ii & iii	P/L R.C.C. pipe, moulded with cement concrete 1:1½:3, with spigot socket or collar joint, etc. including cost of reinforcement, conforming to B.S. 5911: Part I: 1981, Class "L" including carriage of pipe from factory to site of work, lowering in trenches to correct alignment and grade, jointing, cutting pipes where necessary, finishing and testing, etc., complete					
			(6" i/d RCC Pipe).	120 Rft	P.Rft	220.95	26,514/-	
			(9" i/d RCC Pipe).	48 Rft	P.Rft	427.60	20,525/-	
3	21	7-b	Constructing Gully Grating chamber, 12"x12", (300x300 mm) complete in all respects: with C.I. gully trap, weighing 81 lbs. (36.75 Kg.) frame hinged safety type.	13 Nos	Each	3318.30	43,138/-	
4	3	13 (a)	Rehandling of earthwork lead up to a single throw of kassi, phaorah or shovel etc complete.	480.00 Cft.	1000 Cft.	1914.00	919/-	

Sr. No	Chap No.	Item No.	Description of Items	Qty	Unit	Rate	Amount	Rate quoted by the Contractor
5	7	30	Sand filling under floor or bedding.	326.01 Cft	100 Cft	2239.00	7,299/-	
6	6	9-b	Fabrication of mild steel reinforcement for cement concrete, i/c cutting, bending, laying in position, making joints and fastenings, i/c cost of binding wire and labour charges for bending of steel reinforcement (also includes removal of rust from bars) Deformed bars. (Grade 40)	19.40 Kgs	100 Kg	19989.85	3,878/-	
7	6	6 (a) (i) (3-c)	P/L reinforced cement concrete (i/c pre stressed concrete), using coarse sand and screened graded and washed aggregate, in required shape and design, i/c 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, complete. (a) (I). Reinforced cement concrete in roof slab, beams, columns, lintels, girders and other structural members laid in situ or pre cast laid in position, or pre stressed members cast in situ, complete in all respect. Type C (nominal mix 1: 2 : 4).	5.60 Cft.	P.Cft	414.00	2,318/-	111,325/-
			CONSTRUCTION OF MANHOLE CHAMBERS. (43-Nos.)					
1	3	42	Earth work excavation in open cutting for sewer and man holes as shown in drawing i/c shuttering and timbering, dressing to correct section and dimensions according to templates and levels, and removing surface water, in all type of soil except shingle, gravel and					
			0' to 7' Depth	7681.00 Cft.	1000 Cft.	6683.30	51,334/-	
			7' to 15' Depth	4306.00 Cft.	1000 Cft.	11245.20	48,422/-	
			Below 15' Depth	404.00 Cft.	1000 Cft.	14307.60	5,780/-	
2	6	3-d	Cement concrete brick or stone ballast 1 1/2" to 2" gauge(1:6:12),in foundation and plinth.	1254.65 Cft.	100 Cft.	12331.50	154,717/-	
3	7	7-i	Pacca brick work in 1:3 cement sand mortar other Than building upto 10 ft: height. add Extra for pacca brick work in steining of wells or any other circular masonry.	6042.06 Cft.	100 Cft.	25032.25	1,512,464/-	
4	6	5-f	Cement concrete plain 1:2:4 i/c placing, compacting, finishing, and curing complete i/c screening and washing of stone aggregate.	539.69 Cft.	100 Cft.	25119.60	135,568/-	
5	11	8-b	Cement plaster 1/2" thick 1:3 upto 20 ft; height.	7767.76 Sft.	100 Sft.	2414.90	187,584/-	
6	21	9	Extra for making and finishing benching floor Work in manhole chamber with 1/8" thick cement Finish.	632.42 Sft.	100 Sft.	2052.90	12,983/-	
7	21	13	P/F 1-1/4"x1-1/4"x3/16" thick angle Iron step in manhole chamber i/c carriage and setting the same in work to correct lines & levels.	336 Nos.	Each	396.65	133,274/-	
8	21	15-a	P/F 6" thick RCC manhole cover With T-shaped G.I. frame 22" i/d frame weighting 37.324 Kg or one mound as per standard drawing STD/PD No. 6 of 1977 complete in all respect.	43 Nos.	Each	11444.65	492,120/-	#####
			SCREENING CHAMBER (1-No).					
1	22	1-a	Excavation of well in dry in ordinary soil upto 20' below ground level, and disposal of soil with in one chain.					
			0' to 5' Depth	2269.00 Cft.	1000 Cft.	5688.40	12,907/-	
			5' to 10' Depth	2269.00 Cft.	1000 Cft.	5941.05	13,480/-	
2	22	8-b	Providing, making and laying 1:2:4. RCC well curb in position, using coarse sand, i/c all kinds of form, moulds, curing, shuttering, rendering and finishing the exposed surface, (i/c screening and washing of aggregate.)	236.94 Cft.	P.Cft	528.90	125,318/-	
3	22	9	Providing and fixing structural steel for cutting edge, with angle iron 3"x3"x3/8".	212.50 Kgs	100 Kg	19315.95	41,046/-	
4	22	2-a	Dry sinking of well in ordinary soil i/c loading and removing excavated material with in one chain.					
			10' to 15' Depth	1391.00 Cft.	1000 Cft.	30624.00	42,598/-	
			15' to 20' Depth	857.00 Cft.	1000 Cft.	38280.00	32,806/-	
5	7	7-i	Pacca brick work 1:3 cement sand mortar other then building up to 10 Ft height.	629.33 Cft.	100 Cft.	23030.40	144,937/-	
6	7	7-i+10	Pacca brick work 1:3 cement sand mortar other then building up to 10 Ft height (semi circle portion).	595.32 Cft.	100 Cft.	25032.25	149,022/-	
			10 to 20' height (Rectangular portion)	263.90 Cft.	100 Cft.	24046.80	63,460/-	
			(Semi Circle Portion)	243.72 Cft.	100 Cft.	26048.65	63,486/-	
7	6	6(a) (i) (3)	P/L reinforced cement concrete (i/c pre stressed concrete), using coarse sand and screened graded and washed aggregate, in required shape and design, i/c 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, complete. (a) (I). Reinforced cement concrete in roof slab, beams, columns, lintels, girders and other structural members laid in situ or pre cast laid in position, or pre stressed members cast in situ, complete in all respect. Type C (nominal mix 1: 2 : 4).	62.67 Cft.	P.Cft	414.00	25,945/-	

Sr. No	Chap No.	Item No.	Description of Items	Qty	Unit	Rate	Amount	Rate quoted by the Contractor
		ii	(a) (II) Reinforcement cement concrete in slab of rafts / strip foundation, base slab of column and retaining walls, etc. and other structural member, complete in all respect. (1:2:4)	550.49 Cft.	P.Cft	302.95	166,771/-	
8	6	9-b	Fabrication of mild steel reinforcement for cement concrete, i/c cutting, bending, laying in position, making joints and fastenings, i/c cost of binding wire and labour charges for bending of steel reinforcement (also includes removal of rust from bars) Deformed bars. (Grade 40)	2,316.59 Kgs	100 Kg	19989.85	463,083/-	
9	21	15-a	P/F 6" thick RCC manhole cover With T-shaped G.I. frame 22" i/d frame weighting 37.324 Kg or one mound as per standard drawing STD/PD No. 6 of 1977 complete in all respect.	4 Nos.	Each	11444.65	45,779/-	
10	6	35 (b) (iii)	P/L ¾" thick vertical damp proof course with 1:2 cement sand plaster and 2 coats of bitumen.	997.00 Sft.	100 Sft.	4972.00	49,571/-	
11	11	7-b	Cement plaster ½" thick 1:3 upto 20 ft; height.	1364.34 Sft.	100 Sft.	2673.60	36,477/-	
12	11	18 a)+ 31)	Cement pointing struck joints on wall upto 20' height ratio 1:2 i/c extra cost of labour and material for red oxide pigment in cement pointing to match with the colour of bricks.	159.49 Sft.	100 Sft.	3013.25	4,806/-	
13	21	13	P/F 1 ¼"x1 ¼" x3/16" angle iron step in manhole chamber i/c carriage and setting the same in work, to correct lines and level.	24 Nos.	Each	396.65	9,520/-	
14	10	9	Brick on edge flooring, laid in 1: 6 cement mortar, over a bed of ¾" thick cement mortar (1:6).	221.15 Sft.	100 Sft.	9213.60	20,376/-	
15	6	3-d	Cement concrete brick or stone ballast 1- 1/2" to 2" gauge in foundation and plinth.(1:6:12).					
		i	Rectangular Portion	82.93 Cft.	100 Cft.	12331.50	10,227/-	
		ii	Semi Circle Portion	430.48 Cft.	100 Cft.	29783.60	128,212/-	
16	6	5 (c)+ 17)	Cement concrete plain 1:1½ : 3, i/c placing, compacting, finishing and curing complete (i/c screening and washing of stone aggregate):	70.58 Cft.	100 Cft.	33090.80	23,355/-	
17	25	10+11	Fabrication of heavy steel work, with angle, tees, flat iron, round iron, & sheet iron for making trusses, girders, tanks, etc, i/c cutting, drilling, rebitting, handling, assembling and fixing, i/c erection in position.	1,101.54 Kgs	100 Kg	21917.20	241,427/-	
18		N.S	P/F pen stock as per site requirement, made of 1.25" thick C.I sheet with both sides brass lining of 1/8" thick and (1.5"i/d) i/d non magnet stain less steel threaded spindle (stem rod) upto required length (app:18 ft) with P/F U channels 3"x3"x3/8 size i/c of C.I stock head & wheel driven with tress bushes etc complete in all respect.	2 Nos.	Each	261125.00	522,250/-	
19	3	42	Earth work excavation in open cutting for sewer and man holes as shown in drawings i/c shuttering and timbering, dressing to correct section and dimension according to templates and levels, and removing surface water, in all type of soil except shingle, gravel and rock.					
			0-7' Depth	963.00 Cft.	1,000 Cft.	6683.30	6,436/-	
			7-15' Depth	1101.00 Cft.	1,000 Cft.	11245.20	12,381/-	
			Above 15' Depth	241.00 Cft.	1,000 Cft.	14307.60	3,448/-	
20			P/L crush bajri 3/8" to 1" gauge under bed of sewer.	149.00 Cft.	P.Cft	122.00	18,178/-	
			Providing and laying R.C.C. pipe sewer, molded with cement concrete 1: 1½: 3 conforming to ASTM specification C – 76 – 79. Class II, Wall B, i/c carriage of pipe from factory to site of work, lowering in trenches to correct alignment and grade, jointing with rubber ring, cutting pipe where necessary, testing, etc. complete.	32.00 Rft.	P.Rft	1550.55	49,618/-	
21	3	13 (a)	Rehandling of earthwork lead up to a single throw of kassi, phaorah or shovel etc complete.	1844.00 Cft.	1000 Cft.	1914.00	3,529/-	
22	18	13	Providing and fixing G.I. pipe railing, as per standard drawing. of 3 rows of pipe.	55.00 Rft.	P.Rft	1326.80	72,974/-	#####
			COLLECTING TANK {2-Nos}.					
1	22	1-a	Excavation of well in dry in ordinary soil upto 20' below ground level, and disposal of soil with in one chain.					
			0' to 5' Depth	6838.00 Cft.	1000 Cft.	5688.40	38,897/-	
			5' to 10' Depth	6838.00 Cft.	1000 Cft.	5941.05	40,625/-	
2	22	8-b	Providing, making and laying 1:2:4. RCC well curb in position, using coarse sand, i/c all kinds of form, moulds, curing, shuttering, rendering and finishing the exposed surface, (i/c screening and washing of aggregate.)	467.52 Cft.	P.Cft	528.90	247,271/-	
3	22	9	P/F structural steel for cutting edge, with angle iron 3"x3"x3/8".	400.57 Kgs	100 Kg	19315.95	77,374/-	
4	22	2-a	Dry sinking of well in ordinary soil i/c loading and removing excavated material with in one chain.					
			10' to 15' Depth	3143.00 Cft.	1000 Cft.	30624.00	96,251/-	
			15' to 20' Depth	3143.00 Cft.	1000 Cft.	38280.00	120,314/-	
			20' to 25' Depth	1886.00 Cft.	1000 Cft.	45936.00	86,635/-	
5	7	7-i+10	Pacca brick work 1:3 cement sand mortar other then building up to 10 Ft height.					

Sr. No	Chap No.	Item No.	Description of Items	Qty	Unit	Rate	Amount	Rate quoted by the Contractor
			0' to 10' height	1945.66 Cft.	100 Cft.	25032.25	487,042/-	
	7	7 (i)+10+8	10' to 20' height	1368.39 Cft.	100 Cft.	26048.65	356,447/-	
6	6	6(a) (i) (3)	P/L reinforced cement concrete (i/c pre stressed concrete), using coarse sand and screened graded and washed aggregate, in required shape and design, i/c 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, complete. (a) (i). Reinforced cement concrete in roof slab, beams, columns, lintels, girders and other structural members laid in situ or pre cast laid in position, or pre stressed members cast in situ, complete in all respect. Type C (nominal mix 1 : 2 : 4).	1339.40 Cft.	P.Cft	414.00	554,512/-	
7	6	9-b	Fabrication of mild steel reinforcement for cement concrete, i/c cutting, bending, laying in position, making joints and fastenings, i/c cost of binding wire and labour charges for bending of steel reinforcement (also includes removal of rust from bars) Deformed bars. (Grade 40)	3,941.17 Kgs	100 Kg	19989.85	787,834/-	
8	6	35 (b) (iii)	P/L ¾" thick vertical damp proof course with 1:2 cement sand plaster and 2 coats of bitumen.	2248.72 Sft.	100 Sft.	4972.00	111,806/-	
9	11	7-b	Cement plaster ½" thick 1:3 upto 20 ft; height.	1885.80 Sft.	100 Sft.	2673.60	50,419/-	
	11	7 (b)+28	20' to 30' height	330.02 Cft.	100 Cft.	2985.40	9,852/-	
10	11	18 a)+31)	Cement pointing struck joints on wall upto 20' height ratio 1:2 i/c extra cost of labour and material for red oxide pigment in cement pointing to match with the colour of bricks.	325.29 Sft.	100 Sft.	3013.25	9,802/-	
11	21	13	P/F 1 ¼"x1¼" x3/16" angle iron step in manhole chamber i/c carriage and setting the same in work, to correct lines and level.	72 Nos.	Each	396.65	28,559/-	
12	10	9	Brick on edge flooring, laid in 1: 6 cement mortar, over a bed of ¾" thick cement mortar (1:6).	396.02 Sft.	100 Sft.	9213.60	36,488/-	
13	6	3-d	Cement concrete brick or stone ballast 1-1/2" to 2" gauge in foundation and plinth.(1:6:12).	141.75 Cft.	100 Cft.	12331.50	17,480/-	
14	6	5 (f)+17	Cement concrete plain 1 : 2 : 4, i/c placing, compacting , finishing and curing complete (i/c screening and washing of stone aggregate). i/c extra labour for skipping concrete in wells.	1085.12 Cft.	100 Cft.	29783.60	323,188/-	
15	6	5 (c)+17)	Cement concrete plain 1:1½ : 3, i/c placing, compacting, finishing and curing complete (i/c screening and washing of stone aggregate):	176.79 Cft.	100 Cft.	33090.80	58,501/-	
16	18	13	Providing and fixing G.I. pipe railing, as per standard drawing. of 3 rows of pipe.	101.00 Rft.	P.Rft	1326.80	134,007/-	#####
			PUMPING CHAMBER (1-No).					
1	22	1-a	Excavation of well in dry in ordinary soil upto 20' below ground level, and disposal of soil with in one chain.					
			0' to 5' Depth	4676.00 Cft.	1000 Cft.	5688.40	26,599/-	
			5' to 10' Depth	4676.00 Cft.	1000 Cft.	5941.05	27,780/-	
2	22	8-b	Providing, making and laying 1:2:4. RCC well curb in position, using coarse sand, i/c all kinds of form, moulds, curing, shuttering, rendering and finishing the exposed surface, (i/c screening and washing of aggregate.)	301.08 Cft.	P.Cft	528.90	159,241/-	
3	22	9	P/F structural steel for cutting edge, with angle iron 3"x3"x3/8".	306.13 Kgs	100 Kg	19315.95	59,132/-	
4	7	7-i+10	Pacca brick work 1:3 cement sand mortar other then building up to 10 Ft height.					
			0' to 10' height	1552.99 Cft.	100 Cft.	25032.25	388,748/-	
	7	7 (i)+10+8	10' to 20' height	841.54 Cft.	100 Cft.	26048.65	219,210/-	
5	6	35 (b) (iii)	P/L ¾" thick vertical damp proof course with 1:2 cement sand plaster and 2 coats of bitumen.	1,382.86 Sft	100 Sft.	4972.00	68,756/-	
6	22	2-a	Dry sinking of well in ordinary soil i/c loading and removing excavated material with in one chain.					
			10' to 15' Depth	2455.00 Cft.	1000 Cft.	30624.00	75,182/-	
			15' to 20' Depth	2455.00 Cft.	1000 Cft.	38280.00	93,977/-	
7	6	5 (f)+17	Cement concrete plain 1 : 2 : 4, i/c placing, compacting , finishing and curing complete (i/c screening and washing of stone aggregate). i/c extra labour for skipping concrete in wells.	1386.28 Cft.	100 Cft.	29783.60	412,884/-	
8	7	7-i+10	Pacca brick work 1:3 cement sand mortar other then building up to 10 Ft height. (0' to 10' height)	726.65 Cft.	100 Cft.	25032.25	181,897/-	

Sr. No	Chap No.	Item No.	Description of Items	Qty	Unit	Rate	Amount	Rate quoted by the Contractor
9	6	6(a) (i) (3)	P/L reinforced cement concrete (i/c pre stressed concrete), using coarse sand and screened graded and washed aggregate, in required shape and design, i/c 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, complete. (a) (I). Reinforced cement concrete in roof slab, beams, columns, lintels, girders and other structural members laid in situ or pre cast laid in position, or pre stressed members cast in situ, complete in all respect. Type C (nominal mix 1: 2 : 4).	458.52 Cft.	P.Cft	414.00	189,827/-	
		ii	(a) (II) Reinforcement cement concrete in slab of rafts / strip foundation, base slab of column and retaining walls, etc. and other structural member, complete in all respect. (1:2:4)	839.18 Cft.	P.Cft	302.95	254,230/-	
10	6	6 (b) (3)	Providing and laying reinforced cement concrete (i/c pre stressed concrete), using coarse sand and screened graded and washed aggregate, in required shape and design, i/c 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, complete. (b) Precast reinforced cement concrete and prestressed reinforced cement concrete in columns, beams, lintels, stair cases, shelves, etc. (3) Type C (nominal mix 1:2:4).	42.66 Cft.	P.Cft	359.50	15,336/-	
11	6	9-b	Fabrication of mild steel reinforcement for cement concrete, i/c cutting, bending, laying in position, making joints and fastenings, i/c cost of binding wire and labour charges for bending of steel reinforcement (also includes removal of rust from bars) Deformed bars. (Grade 40)	3,611.51 Kgs	100 Kg	19989.85	721,935/-	
12	25	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.	35.00 Sft	P.Sft	1425.95	49,908/-	
13	25	41-b (v)	Providing and fixing steel windows with openable glazed panels, using beam section for frame 1 1/2"x1"x5/8"x1/8" (40x25x16x3 mm), Z-section for leaves 3/4"x1"x3/4"x1/8" (20x25x20x3 mm), T-section sashes 1"x1"x1/8" (25x25x3 mm), glass panes, wooden screed for glazing embedded over a thin layer of putty duly screwed with leaves, brass fittings, holdfast, duly painted, complete in all respects, including all cost of material and labour, etc. as per approved design and as directed by the Engineer-in-charge:- (b) fixed with wire gauze, 22 SWG. glass pane 5 mm thick.	36.00 Sft	P.Sft	636.00	22,896/-	
14	12	54	Providing and fixing M.S. flat 1/2"x1/8" (13mm x 3mm) grill including 3/4" x 1/8" (20 mmx3 mm) M.S. flat frame, in windows of approved design, including painting three coats, complete in all respects.	36.00 Sft	P.Sft	316.95	11,410/-	
15	9	5	Single layer of tiles 9" x 1 1/2" x 1 1/2" laid over 4" earth and 1" mud plaster with out bhoosa grouted with cement sand 1:3 on top of RCC roof cement RCC provided work 34 LBS bitumen coating sand grouted.	314.00 Sft	100 Sft.	7910.00	24,837/-	
16	9	14	Khassi parnalas in cement, sand mortar 1:2, 12" (300 mm) outside width finished smooth with a floating coat of neat cement.	30.00 Rft.	P.Rft	130.10	3,903/-	
17	9	15	Khurras on roof 2'x2'x6".	2 Nos.	Each	604.90	1,210/-	
18	9	16	Bottom khurras or brick masonry in cement mortar 1:6:4" x2"x4" over 3" cement concrete 1:4:8	2 Nos.	Each	1003.20	2,006/-	
19	6	5 (c)+ 17)	Cement concrete plain 1:1 1/2 : 3, i/c placing, compacting, finishing and curing complete (i/c screening and washing of stone aggregate):	157.15 Cft.	100 Cft.	33090.80	52,002/-	
20	11	7-b	Cement plaster 1/2" thick 1:3 upto 20 ft; height.	1,173.73 Sft	100 Sft.	2673.60	31,381/-	
	11	7 (b)+ 28	20' to 30' height	707.18 Cft.	100 Cft.	2985.40	21,112/-	
21	11	18 a)+ 31)	Cement pointing struck joints on wall upto 20' height ratio 1:2 i/c extra cost of labour and material for red oxide pigment in cement pointing to match with the colour of bricks.	769.00 Sft	100 Sft.	3013.25	23,172/-	
22	11	25 (a)+iii	White washing new surface three costs. (Ch.No. 11, Item.No. 25(a)(iii))	2,216.00 Sft	100 Sft.	449.90	9,970/-	
23	13	5-c	Painting of new surface, preparing surface and painting of doors and windows any type, three coat.	178.00 Sft	100 Sft.	1941.75	3,456/-	
24	10	9	Brick on edge flooring, laid in 1: 6 cement mortar, over a bed of 3/4" thick cement mortar (1:6).	238.00 Sft	100 Sft.	9213.60	21,928/-	
25	6	3-d	Cement concrete brick or stone ballast 1-1/2" to 2" gauge in foundation and plinth.(1:6:12).	72.00 Cft.	100 Cft.	12331.50	8,879/-	

Sr. No	Chap No.	Item No.	Description of Items	Qty	Unit	Rate	Amount	Rate quoted by the Contractor
26	25	39	Providing and fixing stair railing of 2½" (63 mm) i/d G.I. pipe, welded with 5/8"x5/8" (16x16 mm) square M.S. bars 2'-9" (838 mm) high, fixed in each step, complete in all respects, including painting, polishing three coats.	87.80 Rft.	P.Rft	1188.90	104,385/-	
27	25	10+11	Fabrication of heavy steel work, with angle, tees, flat iron, round iron, & sheet iron for making trusses, girders, tanks, etc. i/c cutting, drilling, rebitting, handling, assembling and fixing, i/c erection in position.	343.91 Kgs	100 Kg	21917.35	75,376/-	
28	3	13 (a)	Rehandling of earthwork lead up to a single throw of kassi, phaorah or shovel etc complete.	7131 Cft.	1000 Cft.	1914.00	13,649/-	#####
			OUT FALL CHAMBER {2-Jobs}.					
1	22	1-a	Excavation of well in dry in ordinary soil upto 20' below ground level, and disposal of soil with in one chain.					
			0' to 5' Depth	576.00 Cft.	1000 Cft.	5688.40	3,277/-	
2	6	3-d	Cement concrete brick or stone ballast 1-1/2" to 2" gauge in foundation and plinth.(1:6:12).	144.00 Cft.	100 Cft.	12331.50	17,757/-	
3	7	7-i	Pacca brick work other than building upto 10ft. (3m) height. cement, sand mortar:- Ratio 1:5.	560.00 Cft.	100 Cft.	21638.40	121,175/-	
4	6	5-f	Cement concrete plain 1:2:4 i/c placing, compacting, finishing, and curing complete i/c screening and washing of stone aggregate.	98.00 Cft.	100 Cft.	25119.60	24,617/-	
5	11	8-b	Cement plaster ½" thick 1:3 upto 20 ft; height.	842.00 Sft	100 Sft.	2414.90	20,333/-	187,160/-
			PUMPING MACHINERAY					
1			Providing, installing and testing of centrifugal sullage pumping unit (Approved manufacturer of HUD & PHED) capable to give a discharge of 2.00 cusec of sullage water against a total dynamic head of 60 feet directly coupled with horizontal 3 phase 25 BHP electric motor (Siemens make) 380/440 volt 1450 RPM with following technical data and accessories complete in all respect.					
I			Technical DATA					
a)			Type	Centrifugal sullage pumping set.				
b)			Discharge	2.00 Cusec				
c)			Head	60 Ft. (Sixty feet)				
d)			BHP	25 BHP				
e)			MCU (Motor Control Unit) for 15 BHP motor with following accessories.	1 No.				
II			Accessories					
a)			Supplying of tool kit comprising of one china spanner set , one china screw wrench of 12" size, one china insulated pliers 8" size and one china screw driver set.	1-Job.				
b)			S/F star delta starter ASD 10 i/c circuit breaker etc.	1 No.				
c)			S/F metallic board 4' x 3' made of 1/16" thick MS sheet with 1-1/2"x 1-1/2"x3/16" angle iron frame grouted on the wall of pump house and duly painted in smoke colour.	1 No.				
d)			S/F iron clad 3-phase main switch China/Feco 0-500 volts.	1 No.				
e)			S/F phase indicator i/c cost of brass holder bulb 0 volt and its wiring complete in all respect	1 Job				
f)			S/F of volt meter 0-500 volts China made	3 Nos.				
g)			S/F ampere meter 0-200 Amp: China made	3 Nos.				
h)			S/F power wiring of suitable size PVC sheathed insulated wire from energy meter to main switch to starter inflexible PVC pipe in suitable diameter with brass end connectors.	1 Job				
i)			S/F Kit Kat fuses 0 to 500 volts on board China made	3 Nos.				
j)			S/F power feeder from starter to motor with suitable size single core cable enclosed in suitable diameter GI medium quality with flexible PVC pipe motor and starter ends along with brass end connectors i/c cost of power wire single core suitable size electric pole to main switch in side the pump house complete in all respect.	1 Job				
k)			Earthing of motor and other equipment with GI wire No. 8 SWG in GI. pipe 15mm (1/2") dia recessed or on surface of wall and floor complete 1.50 meter below SSWL. with minimum 5 meter depth and 2 meter away from the plinth of pump house complete in all respect.	1 Job				
l)			S/F 10" i/d 1/4" thick M.S/C.I pipe with specials, i/c sluice valves for suction and delivery end, non return valve(as specified by the manufacturer) for connection of machinery with common suction & delivery pipe, complete in all respect.	1 Job				
m)			S/F base plate of channel 3"x3"size, 1/4" thick of suitable size properly grouted in foundation i/c nuts and bolts complete in all respect.	1 Job				

Sr. No	Chap No.	Item No.	Description of Items	Qty	Unit	Rate	Amount	Rate quoted by the Contractor
n)			Preparing of surface and painting of pipe and specials with gray colour 3coat. Complete in all respect.	1 Job				
o)			PCC (1:2:4) foundation of pump and motor as per manufacture's specification with stain less steel nuts and bolt complete in all respect	1 Job				
p)			P/F in position pressure gauge 0 to 150 lbs.	1 No.				
q)			S/F brass foot valve of 10" i/d as per BSS on delivery end complete in all respect.	1 No.				
r)			Internal electrification of pump house with 16 mm dia PVC pipe 250/440 volts PVC installed 3 / 0.029" wire, 3 No. round block of shallow wood one shallow wood board of 12" x 14" size one 9" long swan neck plain brass / steel oxidized (lamp holder on wall type / pole type) with brass holder water tight reflectors with brass holder, 2 No. tube light 40 Watt, on two pins 10/15 ampere and one set earthing as standard specifications etc. complete in all respect.	1 Job				
s)			Supplying of test report from MEPCO (WAPDA) by the approved contractors.	1 No.				
			Complete Set	2 Sets.	Each	#####	2,300,000/-	
			Conditions					
i)			The Minimum efficiency of pumping machinery shall not be less than 75% and the minimum efficiency of motor shall not be less than 80%.					
ii)			Two years un conditioned full warranty shall be provided by the contractor/manufacturer.					
iii)			The efficiency of pumping machinery shall be Physical test at Test bed of manufacture before actual dispatch to site.					
iv)			The contractor will install the machinery under supervision of the manufacture representative.					
v)			The pumping machinery including MCU shall be installed by the contractor under supervision of manufacturer,s representative with certificate from manufacturer regarding capability of MCU.					
vi)			The Date of warranty will be started when the scheme is commissioned.					
vii)			The contractor must mention the name of approved manufacturer at the time of submitting the tender.Otherwise the contractor will be bound to install the machinery as per drection of engineer incharge.					
2	24	13-d (v)	S/F copper conductor cable for serving connection 37/0.103" PVC insulated, sheathed, 660/1100 volts single core cables armored with GI wire for supporting service pipe with stay from energy meter erected by WAPDA pole to main switch installed inside the Pump House.	20 Meters.	P.Meter	2946.90	58,938/-	
3	24	19	S/E of Iron / Alluminium Clad 500 Volts main switch 400 Amps. with tripple pole and neutral links and HRC fuses on angle iron board with 3 mm thick M.S. sheet covereing i/c bonding to earth with neccasy flexible pipe and thimbles complete.	2 Nos.	Each	17366.95	34,734/-	
4	N.S		P/F chain pully block 5 ton capacity with 5 meter chain complete in all respect.	1 No.	Each	25000.00	25,000/-	#####
			NOTE:-					
		1	Contractor shall provide technical data sheet of pumping machinery from the approved manufacturer of HUD & PHED indicating characteristic curves, i.e. Head, capacity and combined efficiency of pump and motor.					
		2	Design of automization of pumping machinery for disposal works.					
			INTER CONNECTION (1-Job).					
1	3	42	Earthwork excavation in open cutting for sewer and man holes as shown in drawings i/c shuttering and timbering, dressing to correct section and dimension according to templates and levels, and removing surface water, in all type of soil except shingle.					
			0-7' Depth	1008.00 Cft.	1,000 Cft.	6683.30	6,737/-	
			7-15' Depth	1152.00 Cft.	1,000 Cft.	11245.20	12,954/-	
			Below 15' Depth	1296.00 Cft.	1,000 Cft.	14307.60	18,543/-	

Sr. No	Chap No.	Item No.	Description of Items	Qty	Unit	Rate	Amount	Rate quoted by the Contractor
2	21	3	P/L cutting, threading, jointing testing of D.I pipe of 12" & 10" i/d for suction and delivery pipe in horizontal/vertical position inside and outside the pumping chamber at required depth and alignment rate includes the cost of carriage of any type from market to workshop to disposal works and lowering into pumping chamber i/c cost T & P and chain pully block etc. Rate further includes the cost of jointing material such as nut, bolts & rubber sheets and painting in black japan paint complete in all respects to the entire satisfaction of engineer.					
			15"i/d D.I Pipe	100.00 Rft.	P.Rft	13966.50	1,396,650/-	
3	23	34	Providing and fitting C.I. flanges on pipes, including turning, threading, facing and fitting, etc. complete in all respects (8"i/d to 12"i/d).	128.00 Kgs	P.Kg	110.45	14,138/-	
4	4	13	Dismantling brick work in lime or cement mortar.	49.75 Cft.	100 Cft.	3253.80	1,619/-	
5	4	20	Dismantling cement concrete reinforced, separating reinforcement from concrete, cleaning and straightening the same.	16.00 Cft.	100 Cft.	13780.80	2,205/-	
6	N.S		Restoration of dismantled hole after laying of sewer 27" i/d inside the hole cement sand mortar 1:2 completely finishing as desire by engineer charge complete in all respect.	4 Job.	P.Job	5222.50	20,890/-	
7	23	29-ii	P/F cast iron specials of B.S.S. Class 'B' (such as bend, tee, cross collar, reducer, tail piece, flanged socket, flanged spigot, cap, taper, angle branch, plug, etc.) for Asbestos cement pipe line, with comet joint and rubber ring, complete.	500.00 Kgs	P.Kg	105.35	52,675/-	
8	23	30	P/F sluice valve of B.S.S. quality and weight, Class 'B', for cast iron pipe line, and Asbestos cement pipe line (including cost of jointing material).	2 Nos.	Each	88520.70	177,041/-	
9	3	13 (a)	Back filling of trenches by re-handling of earth lead upto a single throw of kassi phaorah compaction , ramming of earth etc. complete in all respect.	2764.80 Cft.	1000 Cft.	1914.00	5,292/-	#####
			PACCA SULLAGE CARRIER (500 Rft).					
1	3	10-i	Earth work excavation in irrigation channels drains etc. to designed section grades and profiles excavated material disposed off within 50'.	4,500.00 Cft	1,000 Cft	6151.20	27,680/-	
2	6	3(d)	Cement concrete 1:6:12 brick ballast 1/2" to 2" gauge.	1,375.00 Cft	100 Cft	12331.50	169,558/-	
3	7	7-(l)	Pacca brick work in 1:3 cement sand mortar other than building upto 10 ft: height.	3,562.50 Cft	100 Cft	23030.40	820,458/-	
4	6	5(f)	PCC 1:2:4 i/c placing, finishing curing etc. complete.	441.25 Cft	100 Cft	25119.60	110,840/-	
5	11	9-(b)	1/2" thick cement plaster in 1:4 20' height.	4,250.00 Sft	100 Sft	2310.70	98,205/-	#####
			FORCE MAIN (14"i/d) 3000 Rft					
1	3	44	Excavation of trenches for water supply pipe line in all kinds of soil except cutting rock for water supply pipe lines upto 5 ft depth from ground level including trimming dressing the sides, leveling the beds of trenches to correct grade and cutting pits. (14"i/d HDPE Pipe).	60,000.00 Cft	1,000 Cft	5755.20	345,312/-	
2	23	42-b (ix)	P/L cutting, jointing, testing and disinfecting High Density Polyethylene Pipe (HDPE-100) working pressure pipe in trenches. complete in all respects (PN-20 (SDR-9) 355 mm. (14"i/d HDPE Pipe).	3,000.00 Rft	P.Rft	3705.15	#####	
3	3	13-a	Rehandling of earthwork: (a) Lead upto a single throw of Kassi, phaorah or shovel.	48,000.00 Cft	1,000 Cft	1914.00	91,872/-	
4	23	29-ii	P/F cast iron specials of B.S.S. Class 'B' (such as bend, tee, cross collar, reducer, tail piece flanged socket, flanged spigot, cap, taper, angle branch plug, etc) for Asbestos cement pipe line, with comet joint and rubber ring, complete (8"i/d to 18"i/d).	1,595.00 Kgs	P.Kg	105.35	168,033/-	
5	23	30	P/F sluice valve of B.S.S. quality and weight, Class 'B', for cast iron pipe line, and Asbestos cement pipe line (including cost of jointing material) 16"i/d.	1 No.	Each	88520.70	88,521/-	
6	7	30	Supplying and filling sand under floor or plugging in well. (For back filling on pipes).	18,121.00 Cft	100 Cft	2239.00	405,729/-	
7			P/F Non Return valve 14" dia BSS Quality China Made. TUFF TILE (2400 Sft)	1 No.	Each	125000.00	125,000/-	#####
1	4	46	Dismantling and removing road pavement i/c screening and stacking of by products upto one chain lead.	849.60 Cft	100 Cft	2044.15	17,367/-	
2	7	4-i	Pacca brick work in foundation & plinth ratio (1:5) cement sand mortar.	65.63 Cft	100 Cft	20821.85	13,665/-	

Sr. No	Chap No.	Item No.	Description of Items	Qty	Unit	Rate	Amount	Rate quoted by the Contractor
3	3	(1b+17a+17bx12)	Earth work excavation undressed lead upto a single throw of kassi pahorah or shavel in o/s transportation of earth all types when the total distance work i/c the lead covered in the item of its more than 1000' additional lead or part thereof beyond 1/2 mile upto one mile dressing & levelling earth work to designed section etc. complete in all respect.	1,200.00 Cft	1,000 Cft	7371.40	8,846/-	
4	18	3-ii	P/L sub-base course of stone product it to of approved quality and grade, i/c placing, mixing, spreading and compaction of sub-base material to required depth, camber, grade to achieve 100% maximum modified AASHO dry density, i/c carriage of all material to site of work except gravel and aggregate.	1,200.00 Cft	100 Cft	11049.50	132,594/-	
5	10	43-b	P/L 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 slop complete in all respects. (50% Grey / 50% coloured (60mm).	2,400.00 Sft	P.Sft	111.30	267,120/-	
RAISING OF MANHOLE (5-Nos.)								
6	4	19-c	Dismantalling PCC 1:2:4	15.20 Cft	100 Cft	8421.60	1,280/-	
7	7	7-i	Pacca brick work in 1:3 cement sand mortar other than building upto 10' ft height (raising of manhole)	22.81 Cft	100 Cft	23030.40	5,253/-	
8	7	10	Extra for pacca brick work in steining of walls or any other circular masonry.	22.81 Cft	100 Cft	2001.85	457/-	
9	6	5-f	Cement concrete plain 1:2:4 i/c placing, compacting, finishing and curing complete i/c screening and washing of stone aggregate.	15.20 Cft	100 Cft	25119.60	3,818/-	
10	11	8-b	Cement plaster 1/2" thick 1:3 upto 20ft height	39.25 Sft	100 Sft	2414.90	948/-	
11	21	15-c	P/F 6" thick RCC manhole cover With T-shaped G.I. frame 22" i/d frame weighting 37.324 Kg or one mound as per standard drawing STD/PD No. 6 of 1977 complete in all respect	5 Nos	Each	449.35	2,247/-	
12			Dismantling and relaying of tuff paver i/c 2" sand cushion and 1" sand grouting etc. complete in all respects.	11,700.00 Sft	P.Sft	31.00	362,700/-	
13			D/d of old Bricks (-)	11894.00 Nos.	1000 Nos.	-2200.00	-26,167/-	13,546/-
BRICK PAVEMENT (2304.12 Cft).								
1	3	(1b+17a+17bx12)	Earth work excavation undressed lead upto a single throw of kassi pahorah or shavel in o/s transportation of earth all types when the total distance work i/c the lead covered in the item of its more than 1000' additional lead or part thereof beyond 1/2 mile upto one mile dressing & levelling earth work to designed section etc. complete in all respect.	5,064.00 Cft	1,000 Cft	7371.40	37,329/-	
2	18	19	P/L dry brick pavement / soling in streets or roads etc. sand grouted laid in proper camber i/c preparation, watering, compacting of bed to proper camber & sand cushion.	2,304.12 Cft	100 Cft	17518.35	403,644/-	440,973/-
Total							44,595,243/-	

Note:-

- Any item not included in above and to be carried out at site will be paid according to **MRS of 1st BI-ANNUAL PERIOD (1st-Jan-2021 to 30th June, 2021) DISTRICT Khanewal.**
- Any omission or error therein shall be referred for interpolation and decision to the competent authority which will be final in this respect.
- Lowest contractor has to deposit performance security in the shape of Deposit call in the name of undersigned, If the rates quoted by him are less than the estimated amount, within seven days after date of opening of tenders as per Finance Department Notification No.Ro (Tech) FD 1-2-2010 Dated 04.09.2012 at the following rates, failing which the tenders will be rejected with out serving any notice, The amount of the performance security will be equal to the difference of the estimated amount and the amount quoted by the contractor.
- Work would be completed as per schedule of progress / Bar Chart.
- All new amendments, Notifications will be applicable on this Bid.

Contractor

Executive Engineer

Sr. No	Chap No.	Item No.	Description of Items	Qty	Unit	Rate	Amount	Rate quoted by the Contractor
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Public Health Engg: Division
Khanewal



BID SCHEDULE.

1/6

Name of work: **Installation of 30 Water Filtration Plants in Ucs No. 1, 2, 3, 4, 5, 7, 8,9 ,10 ,11, 12, 13, 14, 16, 17, 18, 19, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 38, 40 Tehsil Kabirwala District Khanewal.**

Approx: Cost: **71,507,876/-**

Earnest Money: **3,575,394/-**

Time Limit: **30.06.2022**

Rates: **MRS, 2nd BI-Annual period (1st July 2021 to 31 December 2021 District Khanewal).**

Sr. No	Ref of MRS		DESCRIPTION OF ITEMS	QTY.	Unit	Rate	Amount	RATE QUOTED BY THE CONTRACTOR
	Chap No	Item No						
Installation of Water Pump (20-Nos.)								
1	23	1-d	Boring for tube well in all types of Soil except shingle & rock from ground level to 100ft depth including sinking & with drawing of casing pipe complete 6" dia	3,000.00 Rft	P.Rft	439.65	1,318,950/-	
2	23	2-b	Boaring for tubewell in all types of soil except shingle & rock from a depth of 100 ft to 200 ft below ground level including sinbing & with drawing of sasing pipe complete 6" dia.	1,500.00 Rft	P.Rft	737.35	1,106,025/-	
3	23	15-b	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.	1,500.00 Rft	P.Rft	350.05	525,075/-	
4	23	12-c	Providing and installing P.V.C. strainer B.S.S. Class `D', in tubewell bore hole, including sockets and solvent, etc. complete:-	900.00 Rft	P.Rft	97.60	87,840/-	
5	23	16-c	Providing and installing P.V.C. blind pipe, B.S.S. Class `D', in tubewell bore hole, including sockets and solvents and jointing with strainer, etc. complete.	2,100.00 Rft	P.Rft	167.05	350,805/-	
6	23	13-ii-c	Providing and installing P.V.C. Bail/End plug, in tubewell bore hole:- (ii) B.S.S. Class `D'.	30 Nos	Each	69.80	2,094/-	
7	23	16-b	Providing and installing P.V.C. blind pipe, B.S.S. Class `D', in tubewell bore hole, including sockets and solvents and jointing with strainer, etc. complete.	1,500.00 Rft	P.Rft	115.00	172,500/-	
8	23	16-a	Providing and installing P.V.C. blind pipe, B.S.S. Class `D', in tubewell bore hole, including sockets and solvents and jointing with strainer, etc. complete.	1,500.00 Rft	P.Rft	94.20	141,300/-	
9	(N.S)		Providing and Fixing golda matic pump G-II injector type with 2 BHP electric motor with suction and delivery pipe 1"x1/4" Include all taxes.	30 Nos	Each	20000.00	600,000/-	
10	(N.S)		Providing and Fixing PVC water Tank of approved quality made 500 gallons capacity i/c all taxes.	60 Nos	Each	30000.00	1,800,000/-	
11	23	22-ii C&E	P/L cutting jointing & disinfecting G.1 pipe of B.S.S 1/2" dia 3.25 mm thick Medium quality.					
			1" dia.	960.00 Rft	P.Rft	227.05	217,968/-	
			1 1/2" dia.	750.00 Rft	P.Rft	327.80	245,850/-	
12	(N.S)		M/F M.S Sheet 18-SWG and angle iron for 1-1/2"x1-1/2"x1/4" with grill as required shape and painting size (3.50x2.33x3) with lock & locking arrangements.	30 Nos	Each	5000.00	150,000/-	6,718,407/-
Plant Room 14' X 12' with Veranda (20-Nos.).								
1	3	21-B	Excavation in foundation of building bridges and other structure i/c dagbelling dressing, refilling, around structure with excavated earth watering and ramming lead upto one chain 100' and lift upto 5' in o/s.	27,405.00 Cft	1,000 Cft	8078.40	221,389/-	
2	6	3-e	Cement Concrete brick or Stone blast. (1:6:18) Complete in all respect.	9,765.00 Cft	100 Cft	11180.70	1,091,795/-	
3	7	4-i	P/L B.B in masonry with 15 mm thick joint with cement sand mortar 1:5 in foundation and plinth complete in all respect as specified.	22,011.30 Cft	100 Cft	20821.85	4,583,160/-	
4	6	33-b-i	P/L 1 1/2" thick damp proof course of cement concrete 1:2:4 using cement sand and single including bitumen of coating (B) with two coat of bitumen.	1,327.50 Sft	100 Sft	6003.55	79,697/-	
5	7	5-(i)	Pacca Brick Work in ground floor in cemen sand mortar (1:6) etc Complete in all respect.	15,474.30 Cft	100 Cft	22471.85	3,477,361/-	
6	6	6-a-3-c	P/L reinforced cement concrete i/c prestressed concrete using course and screened graded washed aggregate in required shape and design i/c form moulds shuterring, lifting, compaction, curing, rendraing, finishing exposed surfaces complete but excluding the cost of steel reinforcement its fabrication and placing in position (a) Reinforce cement concreting roofs slabs beams columns lintles girders and other structure members laide in situes or recost laide in position or prestressed members cost in situe complete in all respect 3 C type C nominal mix 1:2:4.	6,363.00 Cft	P.Cft	414.00	2,634,282/-	

Sr. No	Ref of MRS		DESCRIPTION OF ITEMS	QTY.	Unit	Rate	Amount	RATE QUOTED BY THE CONTRACTOR
	Chap No	Item No						
7	6	9-B	Fabrication of mild steel inforcement for cement concrete including cutting bending laying in position making joints and fastning including cost of binding wire and labour charges for binding of steel inforcement (also include removal of rust from deformed bars)	19,436.40 Kgs	100 Kg	19989.85	3,885,307/-	
8	3	15-i	Filling watering and raming earth under floor with earth surplus from foundation takeing 2/3 Qty of Item No.1.	18,361.50 Cft	1,000 Cft	3867.60	71,015/-	
9	3	15-ii	Filling Watering and raming earth under floor with new earth excavated from out side lead upto 1 mile.	26,820.00 Cft	1,000 Cft	7509.20	201,397/-	
10	10	3	P/L watering and ramming brick ballast 1½" to 2" thick gauge mixed with 25% sand for floor foundation Complete in all respect.	4,200.00 Cft	100 Cft	4685.70	196,799/-	
11	6	5-f	Cement Concrete plain 1:2:4 i/c placing, compacting, finishing, and curing complete i/c screening and washing of stone aggregate.	2,190.00 Sft	100 Sft	25119.60	550,119/-	
12	10	25	P/L floor of approved colour glazed tile 1/4" laid in white cement and pigeut on abel of 3/4" thick c.Morter (1:2) complete in all respect.	14,970.00 Sft	100 Sft	17734.30	2,654,825/-	
13			P/L sub-base course of stone product of approved quality and grade, i/c placing, mixing, spreading and compaction of sub-base material to required depth, camber, grade to achieve 100% maximum modified AASHO dry density, i/c carriage of all material to site of work except gravel and aggregate.	18,060.00 Cft	100 Cft	11049.50	1,995,540/-	
14	7	4-i	Pacca brick work in foundation & plinth ratio (1:5) cement sand mortar.	2,178.00 Cft	100 Cft	20821.85	453,500/-	
15	10	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) (60 mm).	36,120.00 Sft	P.Sft	111.30	4,020,156/-	
16	12	49-i	P/F 1½" (40 mm) thick hollow flush door and windows with commercial ply (3 ply) on both faces of deodar wood shutter frame 1¼" (30 mm) thick and partial wood braces at about 3" (75 mm) apart and deodar wood lipping 1½"x3/8" (40 mmx10 mm) fixed with M.S. chowkat (frame) i/c chromium plated fittings, etc. complete in all respects (without sliding bolt or lock). (i) M.S. angle iron 1½" x 1½" x ¼", welded (40 mm x 40 mm x 6mm) with M.S. flat 2" x ¼" (50 mm x 6 mm).	840.00 Sft	P.Sft	532.50	447,300/-	
17	25	42-a	P/F steel window using M.S sheet moulded with tubler pipe 1½"x 1½" for frame 1¼" x 1¼" for leaves i/c M.S square bars 16SWG 1/4" x 1/4" welded arround each pannel of frame 5mm thick glass panes fixed with double M.S tubler pipe 3/8"x3/8" bedding with U-shaped rubber lining bras filling hold fast i/c painting three coasts a) for openable panels fixed with wire gauge 12x12 meches & glass pane 1/4" thick.	960.00 Sft	P.Sft	416.55	399,888/-	
18	13	5-c	Painting new surface (i) (c) preparing surface & painting of doors & windows any type-3 coats.	1,680.00 Sft	100 Sft	1941.75	32,621/-	
19	11	9-b	Cement plaster 1:4 upto 20ft.height (b) 1/2" thick.					
		A	Room Side Internal.	21,375.00 Sft	100 Sft	2310.70	493,912/-	
		B	Room / Veranda.	8,400.00 Sft	100 Sft	2634.95	221,336/-	
20	11	18-b	Cement pointing struck joints on walls 1:3	21,808.50 Sft	100 Sft	2394.00	522,095/-	
21	13	32-a	P/Applying weather shield paint of approved quality on external surface of building i/c preparation of surface, application of primer complete in all respects	47,529.90 Sft	100 Sft	3116.00	1,481,032/-	
22	9	5	Single Layer of Tiles 9"x4½"x1½" laid over 4" earth & 1" mud plaster without bhoosa grouted with cement sand (1:3) on top of RCC roof slab provided with 34Lbs bitumen Coating sand blinded.	8,400.00 Sft	100 Sft	7910.00	664,440/-	
23	9	21+22	Rain water down pipe of Cast Iron fixed in position including heads & shoes and painting & clumps etc.	600 Rft	P.Rft	977.35	586,410/-	
24	25	30	Making and Fixing steel grated doors, complete with locking arrangement, angle iron frame 2"x2"x3/8" (50x50x10mm) and 3/4" (20 mm) square bars 4" (100 mm) centre to centre.	1,440.00 Sft	P.Sft	1250.40	1,800,576/-	
25	25	32	Making and Fixing grating in opening, i/c fixing at site with flat iron 2"x2"x3/8" (50x50x10mm) and 3/4" (19 mm) square bars 4" (100 mm) centre to centre.	4,320.00 Sft	P.Sft	619.30	2,675,376/-	

Sr. No	Ref of MRS		DESCRIPTION OF ITEMS	QTY.	Unit	Rate	Amount	RATE QUOTED BY THE CONTRACTOR
	Chap No	Item No						
26	13	5-d	Painting new surface (preparing surface & painting guards bars, gates of iron bars, grating, railing (i/c standards, braces, etc.) and in similar open work.	8,520.00 Sft	100 Sft	1303.30	111,041/-	
27	9	15	P/F Marble inauguration plate size (2'x2-1/2) i/c cost by lettering and nuts and bolts etc. complete.	30 Jobs	P.Job	10000.00	300,000/-	35,852,370/-
Electrification Installation (30-Jobs).								
1	24	3-iii	Supply & erection of PVC pip for wiring recessed in walls including inspection box pull box, hooks, cutting, jhans & repairing surface etc complete in all respect. 25 mm i/d.	1,650.00 Rft	P.Rft	70.50	116,325/-	
2	24	11 - i.iii.v	S/E single core PVC insulated copper conductor cable in prelaidd pvc pipe(rate of cable only) complete in all respect.					
			3/0.029"	4,200.00 Rft	P.Rft	13.65	57,330/-	
			7/0.029"	2,700.00 Rft	P.Rft	20.90	56,430/-	
			7/0.044"	1,650.00 Rft	P.Rft	39.10	64,515/-	
3	24	19	S/Erection of iron/alluminium clad 500 volt main switches with triple pole and neutral link and HRC fuses on angle iron board with 3mm (1/8") thick M.S sheet covering i/c bonding to earth with necessary flexible pipe and thimbles.	30 Nos	Each	3728.25	111,848/-	
4	24	14-iii	Supply & Erection of M.S sheet box of 16 SWG (4") deep with 3/16" thick bakelite sheet top for recessed wiring i/c making holes for regulator swithces plug etc.	90 Nos	Each	350.85	31,577/-	
5	24	14-i	Supply & Erection of MS Sheet (4"x4") ceiling rose bakelite.	120 Nos	Each	197.70	23,724/-	
6	24	33	Supply & Erection of switches 5 AMP piano Type.	600 Nos	Each	43.40	26,040/-	
7	24	33	S/E of 3 Pin switches and plug combined complete in all respect.	30 Nos	Each	89.90	2,697/-	
8	N.S		S/E of Energy Sawyer i/c connection from ceiling rose etc. complete 12 watt with holder.	120 Nos	Each	550.00	66,000/-	556,485/-
Water Filtration Plant (R.O) (26-Nos.)								
Treated Water Capacity 1000 Lit / Hour								
Type "RO" Plants for TDS and Bacteriological Removal								
Supplying ,installing,testing and commissioning Reverse Osmosis (RO) Plant for Tubidity, TDS (upto 5000 ppm) and Bacteriological Removal, of 1000lit per hour capacity including Carriage loading unloading charges, inclusive of all Taxes and Transportation charges to the site of work, conforming to standard specifications of water filtration plants approved by HUD & PHED Govt: of Punjab. The Detailed of Specification along with following equipment and accessories properly mounted in the Frame/Skid. are given as below.								
Reverse Osmosis System								
Product water output				Up to 250 Liter per Hour				
Working pressure				120 to 175 PSI				
Feed water type				The output is rated at 25-degree				
Product water type				Up to 99.9 percent salt rejection				
Recovery				40-50 percent				
Feed water quality				up to 2500 ppm TDS				
Treated Water without Dosing				20-30				
Treated Water with dosing				180-250				
Membrane housing				FRP				
Salt rejection				99.99%				
Index								
Particulars				Size/Mode	Qty.	Brand	Country	
	1	Low Pressure Feed Pump		CR-8-4	1	KSB	Germany	
	2	Multi-Media Sand Filter		13*54 (2.5")	2	Painter	USA	
	3	Manual Valve		1 Inches	1	ROHS	Taiwan	
	4	Gravel Media		-	80 KG	Taiwan	Taiwan	
	5	Silica Sand & Brown Sand		-	100 KG	Pakistan	Taxila	
	6	Activated Carbon		-	25 KG	EZ	USA	
	7	Cartridge Assembly		BBJ-20-5m	1	C.CK	Taiwan	
	8	Cartridge Assembly		BBJ-20-1m	1	C.CK	Taiwan	
	9	Cartridge		PPY-5 Micro	1	Aqua Guard PI	Taiwan	
	10	Cartridge		PPY-1Micron	1	Aqua Guard PI	Taiwan	

Sr. No	Ref of MRS		DESCRIPTION OF ITEMS	QTY.	Unit	Rate	Amount	RATE QUOTED BY THE CONTRACTOR
	Chap No	Item No						
		11	Reverse Osmosis Frame	SS Skid	1	-	China	
		12	High Pressure Pump & Motor	CR-4-160	1	KSB	Germany	
		13	Reverse Osmosis ASME Approved Housing	8*40	1	PAL- Euro Tec	Taiwan	
		14	Reverse Osmosis Membrane	8*40	1	Euro Tech / Film Tech	USA / Taiwan	
		15	High Pressure Concentrate Valve	SS	1	KITZ	Japan	
		16	Pressure Gauge	2.5"	2	Taiwan	Taiwan	
		17	High Pressure Switch	Grey	1	Taiwan	Taiwan	
		18	Online Flowmeter	14 GPM	2	LZT	Taiwan	
		19	Online TDS Meter	Taiwan	1	Creat	Taiwan	
		20	Dosing Pump (Anti-Scale)	5/7.	4	Etatron	Italy	
		21	Online Flushing System	SOV 3/4"	1	-	Japan	
		22	Control Panel	M.S	1	-	-	
		23	UV Panel Box	-	1	-	-	
		24	All Fittings	UPVC	-	ERA	Taiwan	
		25	Cartridge	PPF-0.5 Micron	1	Aqua Guard Plus	Taiwan	
		26	Water Tanks	-	2	Aqua Guard	Pakistan	
		27	UF Membrane	-	1	GE	China	
			DETAIL OF ACCESSORIES					
		1	LOW PRESSURE FEED PUMP.					
			Low pressure feed pump stainless steel. Heavy-duty and corrosion resistant with heavy-duty industrials.					
			Make	KSB				
			Material	Stainless Steel				
			Model	CRN-8-4				
			Qty.	1				
			Max. Pressure	80 psi				
		2	MULTI-MEDIA FILTER:					
			A FRP vessel containing silica sand, anthracite it removes the silt, dust, rust and invisible suspended particles and other chemical substances from raw water.					
			Size	13" x 54"				
			Back Wash	3-Way Valve (Manual)				
		(2.1)	MEDIA					
			Media In Multi-Media Filters)	Silica Sand Brown Sand				
		3	ACTIVATED CARBON FILTER					
			A FRP vessel containing granular activated carbon					
			Size	13" x 54"				
			Back Wash	3-Way Valve (Manual)				
		(3.1)	MEDIA:					
			Media (In Activated Carbon Filters)	Carbon				
		4	CARTRIDGE ASSEMBLY					
			An assembly of cartridge of 5 micron used as pre-filtration removes sand, silt, dust, fungus and invisible suspended particles up to 5-micron according to international standards and W.H.O. (World Health Organization)					
			Size	20"				
			Cartridge	BBJ				
			Filtration Precision	5-micron				
		5	CARTRIDGE ASSEMBLY					
			An assembly of cartridge of 1-micron used as pre-filtration removes sand, silt, dust, fungus and invisible suspended particles up to 1-micron according to international standards and W.H.O. (World Health Organization)					
			Size	20"				
			Cartridge	BBJ				
			Filtration Precision	1-micron				
		6	REVERSE OSMOSIS (RO) FRAME					
			Skid	Model Steel				
		7	HIGH PRESSURE PUMP AND MOTOR					
			High pressure multi-stage pump stainless steel. Heavy-duty and corrosion resistant with heavy-duty industrials					
			Make	KSB				
			Material	Stainless Steel				
			Model	CRN-4-160				
			Quantity	1				
		8	REVERSE OSMOSIS ASME APPROVED HOUSING					

Sr. No	Ref of MRS		DESCRIPTION OF ITEMS	QTY.	Unit	Rate	Amount	RATE QUOTED BY THE CONTRACTOR
	Chap No	Item No						
			Heavy-duty Reverse Osmosis pressure vessel housing is made of FRP tested and certified by "American Society of Mechanical Engineers" ASME and boiler association of USA also recommended.					
			Material	FRP				
			Size	8" x 40"				
			Stage	1S				
			Quantity	1				
		9	REVERSE OSMOSIS MEMBRANES					
			The Reverse Osmosis membranes are top quality R.O membranes. Thin film composite TFC, FDA approved.					
			Size	8" x 40"				
			Type	Spiral Wound				
			Quantity	1				
			HIGH PRESSURE CONCENTRATE VALVE					
			Heavy-duty high-pressure regulator is corrosion resistant. Pre adjusted at factory. This high-pressure valve can be adjusted to maintain the desire high pressure out of the pressure pump and into the R.O membranes.					
			Material	Stainless Steel				
			Quantity	1				
		10	PRESSURE GUAGES					
			Stainless steel low- and high-pressure gauges, low pressure in 2.5" diameter and high pressure also in 2.5" diameter is used.					
			Quantity	2				
		11	HIGH PRESSURE SWITCHES					
			Between high pressure pump and vessels					
		12	ONLINE FLOWMETER:					
			Two online, panel mounted flow-meters are provided. One flow meter for permeate and other for rejected water.					
			Quantity	2				
		13	ONLINE TDS METER					
			This instrument is a combined control instrument of a Reverse Osmosis monitor and online conductivity instrument. It can perform the operation test status control and online monitoring of water quality, conductivity-combining PLC and conductivity monitor.					
			Quantity	1				
		14	ONLINE DOSING PUMP					
			One dosing pump is provided for the system.					
			Make	Etatron, Italy				
			Model	PKX MA/AL				
			Capacity	5 LPH				
			Diagram	PTFE				
			Pump Head	Polyethylene				
			Nipples	Polyethylene / uPVC				
			Filters	Polyethylene / uPVC				
			Pipe Size	3/8"				
			Power Supply	220V, AC, 50-60Hz				
			Quantity	1				
			Chemical Tank	01 (80Liters)				
		15	ONLINE FLUSHING SYSTEM					
			Online flushing system is available here in the system for the completion of R.O.					
		16	UF MEMBRANE					
			Ultrafiltration (UF) is used to remove essentially all colloidal particles (0.01 to 1.0 microns) from water and some of the largest dissolved contaminants.					
			Complete set including all taxes and contractor profit complete in all respect.	26 Nos.	Each	970000.00	25,220,000/-	25,220,000/-
			Water Filtration Plant (U.F) (4-Nos.)					
			Supplying, installing and testing of water Ultra Filtration plant 1000 Lit / Hour capacity conforming to standard specifications. Complete in all respect with necessary itemes as detailed below .					
		1	CHLORINATION PUMP					
			Specifications					
			QTY	01 No.				
			Make	Italy				
			Pressure	4 bar/5 litter				

Sr. No	Ref of MRS		DESCRIPTION OF ITEMS	QTY.	Unit	Rate	Amount	RATE QUOTED BY THE CONTRACTOR
	Chap No	Item No						
			Capacity	80 Liters				
			Material	P.E				
		2	PRESSURE SAND FILTER (PRE FILTRATION)					
			Specifications					
			Flow rate	1000/Lit/Hour				
			Maximum Pressure	150 Psi				
			Operating Pressure:	> 90Psi				
			Material Tank	Stainless steel vessel 3mm thick (Argon welded) conforming to 316 ASTM specification .				
			Standard	NSF (USA)				
			Size	13"x54"				
			Filtration Media	Glass Grain USA.				
			Filter Media Density	> 2.50gm/cm ³				
			Specific Gravity	> 2.50gm.cm ³				
			Bulk density	80 to 85 lb/ft ³				
			Effective size	from 0.30 mm to 1.80 mm				
			Co-efficient of Uniformity	1.45 to 1.60				
			Estimated Sphericity	0.30 to 0.50				
			porosity	Typically 48%				
			Physical Specification	Amorphous soda lime of glass				
			Media size	0.50 to 1.00mm				
			Suspended Solid Removal range	1 to 5 um				
			Backwash	Sami auto multi port valve				
			Mesh	Steel mesh				
		3	DIRT CUTTER (5 Micron) CARTRIDGE FILTERS. (JUMBO SEDIMENT FILTER)					
			Specifications					
			Flow rate	1000/Lit/Hour				
			Micron rating	5 Micron				
			Operating Pressure:	> 90 Psi				
			Type of cartridge used	Polypropylene				
			Dia Of Cartridge	4"				
			Housing Dia	7"				
			Size	20"				
			Inlet and Outlet.	1"				
			Housing Length	24"				
			Housing Material	Polypropylene				
			Quantity.	1No.				
			Water tap and accessories	1 No				
		4	DIRT CUTTER (1 Micron) CARTRIDGE FILTERS. (JUMBO SEDIMENT FILTER)					
			Specifications					
			Flow rate	1000/Lit/Hour				
			Micron rating	1 Micron				
			Operating Pressure:	> 90 Psi				
			Type of cartridge used	Polypropylene				
			Dia Of Cartridge	4"				
			Housing Dia	7"				
			Quantity	1No.				
			Operating Pressure:	> 90 Psi				
			Size	20"				
			Inlet and Outlet.	1"				
			Housing Length	24"				
			Housing Material	Polypropylene				
		5	ACTIVATED CARBON FILTRATION					
			Specifications					
			Flow rate	1000/Lit/Hour				
			Maximum Pressure	150Psi				
			Operating Pressure:	> 90Psi				
			Material Tank	Stainless steel vessel 3mm thick (Argon welded) conforming to 316 ASTM specification.				
			Standard	NSF (USA)				
			Size	13"x54"				

Sr. No	Ref of MRS		DESCRIPTION OF ITEMS	QTY.	Unit	Rate	Amount	RATE QUOTED BY THE CONTRACTOR
	Chap No	Item No						
			Filtration Media(Raw material)					
			Granular Activated Carbon Coconut Shell based Srilanka/ USA/ TAIWAN.					
			Bulk density	5gm/cm ³				
			Ash content	0.05				
			Surface Area	800 m ² /gm				
			Backwash	Automatic through PLC system				
		6	DIRT CUTTER (1 Micron) CARTRIDGE FILTERS. (JUMBO SEDIMENT FILTER)					
			Specifications					
			Flow rate	1000/Lit/Hour				
			Micron rating	1 Micron				
			Operating Pressure:	> 90 Psi				
			Type of cartridge used	Polypropylene				
			Dia Of Cartridge	4"				
			Housing Dia	7"				
			Quantity	1No.				
			Operating Pressure:	> 90 Psi				
			Size	20"				
			Inlet and Outlet.	1"				
			Housing Length	24"				
			Housing Material	Polypropylene				
		7	ULTRA FILTRATION					
			Specifications					
			UF modules Stainless Steel Pressure booster pump.	2 Nos.				
			Type of membranes	Multi bore, pentair (USA)/ INGE (Germany)/Taiwan etc.				
			Material of membranes	Polyethersulfone (PES)				
			Cleaning system of membranes	Automatic self-cleaning				
			Sealing of Membranes	Certified epoxy resin, without any negative health effects.				
			Material of casing	PVC-U,S/S 316 L				
			Bacteria removal efficiency	99.9999% (log 6)				
			Viruses removal efficiency	99.99% (log 4)				
		8	PIPING AND FITTINGS. AS PER SITE REQUIREMENT					
		9	Filtered Water Storage tank, 300 Gallons with big stand	QTY 1 No				
		10	Water tapes with necessary with pipe fitting .					
		11	Any other necessary for water purification plant					
		12	Water testing charges					
			Complete set	4 Nos.	Each	500000.00	2,000,000/-	2,000,000/-
			Surface Drain Type-1 (304 Rft)					
1	3	7-i	Earthwork excavation in Open cutting upto 5' depth for storm water channels, drains, sullage drains etc surplus excavated material disposed off and dressed with in 50 ft. lead.	177.08 Cft	1,000 Cft	6811.90	1,206/-	
2	6	3-d	Cement concrete brick or stone ballast 1½" to 2" gauge in foundation and plinth ratio '1:6:12	114.00 Cft	100 Cft	12331.50	14,058/-	
3	7	4-i	Pacca brick work in foundation & plinth ratio (1:5) cement sand mortar.	114.00 Cft	100 Cft	20821.85	23,737/-	
4	20	3-b	Pacca brick on edge laid in reinbursement on sides of drains all joints to be completely filled and struck iflush (1:5).	456.00 Sft	100 Sft	9482.40	43,240/-	
5	20	6-a	Construction of Punjab standard drain of cement concrete (1:2:5:5) with cement concrete bedding ratio (1:6:12) complete laid etc. complete in all respect.	304 Rft	P.Rft	122.80	37,331/-	
6	6	6-3-c	P/L reinforced cement concrete (i/c prestressed concrete), using coarse sand and screened graded and washed aggregate, in required shape and design i/c 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) (l). Reinforced cement concrete in roof slab, beams, columns, lintels, girders and other structural members laid in situ or pre cast laid in position, or pre-stressed members cast in situ, complete in all respect. 1:2:4	116.50 Cft	P.Cft	414.00	48,231/-	

Sr. No	Ref of MRS		DESCRIPTION OF ITEMS	QTY.	Unit	Rate	Amount	RATE QUOTED BY THE CONTRACTOR
	Chap No	Item No						
7	6	9-b	Fabrication of mild steel reinforcement for cement concrete, i/c cutting, bending, laying in position, making joints and fastening i/c cost of binding wire and labour charges for binding of steel reinforcement, (also includes removal of rust from bars) (b) deformed bars).	356.49 Kgs	100 Kg	19989.85	71,262/-	239,065/-
Pacca Sullage Carrier (1.50'x1.5' = 800 Rft)								
1	3	10-i	Earthwork excavation in irrigation channels, drains, etc, to disigned section, grades and profiles, excavated material disposed off and dressed within 50 ft. (15 m) lead in o/s.	2,400.00 Cft	1,000 Cft	6151.20	14,763/-	
2	6	3-d	Cement concrete brick or stone ballast 1½" to 2" gauge in foundation and plinth ratio '1:6:12	792.00 Cft	100 Cft	12331.50	97,665/-	
3	7	4-i	Pacca brick work in foundation & plinth ratio (1:5) cement sand mortar.	1,200.00 Cft	100 Cft	20821.85	249,862/-	
4	6	5(f)	PCC 1:2:4 i/c placing, finishing curing etc. complete.	392.00 Cft	100 Cft	25119.60	98,469/-	
5	11	9-(b)	Cement plaster ½" thick 1:4 .	2,000.00 Sft	100 Sft	2310.70	46,214/-	
6	6	6-3-c	P/L reinforced cement concrete (i/c prestressed concrete), using coarse sand and screened graded and washed aggregate, in required shape and design i/c 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) (I).Reinforced cement concrete in roof slab, beams, columns, lintels, girders and other structural members laid in situ or pre cast laid in position, or pre stressed members cast in situ, complete in all respect.	345.00 Cft	P.Cft	414.00	142,830/-	
7	6	9-b	Fabrication of mild steel reinforcement for cement concrete, i/c cutting, bending, laying in position, making joints and fastening, i/c cost of binding wire and labour charges for binding of steel reinforcement, (also includes removal of rust from bars) (b) deformed bars).	1,055.700 Kgs	100 Kg	19989.85	211,033/-	860,836/-
GULLY GRATTING CHAMBER 12"x12" (3-Nos.)								
1	3	42	Earthwork excavation in open cutting for sewers and manholes as shown in drawings i/c shuttering and timbering, dressing to correct section and dimensions according to templates and levels, and removing surface water, in all types of soil except shingle, gravel and rock: (0 ft. to 7.0 ft. depth).	864.00 Cft	1,000 Cft	6683.30	5,774/-	
2	21	7-a	Constructing gully grating chamber, 12"x12", (300x300 mm) complete in all respects: with C.I. gully trap, weighing 81 lbs. (36.75 Kg.) frame hinged safety type.	3 Nos	Each	7609.55	22,829/-	
3	21	1-iii	Providing and laying R.C.C. pipe, moulded with cement concrete 1:1½:3, with spigot socket or collar joint, etc. including cost of reinforcement, conforming to B.S. 5911: Part I: 1981, Class "L" including carriage of pipe from factory to site of work, lowering in trenches to correct alignment and grade, jointing, cutting pipes where necessary, finishing and testing, etc., complete (9" i/d).	72 Rft	P.Rft	427.60	30,787/-	
4	3	13-a	Rehandling of earth work.	691.20 Cft	1,000 Cft	1914.00	1,323/-	60,713/-
Total							71,507,876/-	

Note:-

- Any item not included in above BOQ / DNIT and to be carried out at site will be paid according to **MRS, 2nd BI-Annual period (1st July 2021 to 31 December 2021 District Khanewal)**.
- Any omission or error therein shall be referred for interpolation / correction and decision of the competent authority which will be final in this respect.
Lowest contractor has to deposit performance security in the shape of Deposit at call in the name of undersigned, If the rates quoted by him are less than 5% of the estimated amount he has to deposit additional performance security of the lesser amount within (14) days after date of opening of tenders as per Finance Department Notification No.Ro (Tech) FD 1-2-2010 Dated: 04 -09- 2012, failing which the tenders will be rejected without serving any notice and the earnest money will be credited into Govt: account.
- Work would be completed as per schedule of completion period.
- All new amendments, Notifications will be applicable on this Bid.

Contractor

Executive Engineer
Public Health Engg: Division
Khanewal