

Punjab Municipal Development Fund Company

Consultancy Services for Detailed Design of Infrastructure sub-projects (Parking Sheds, Parks, Roads, Chowks, etc.) and Resident Supervision in 16 Cities of Punjab

<u>Construction of SWM Parking Area</u> <u>MC Gojra</u>

Detailed Cost Estimate

March 2023



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DETAILED COST ESTIMATE

SWM PARKING AREA (MURIDKE)

COMPARATIVE STATEMENT

Sr. No.	Description	Previous Amount (Rs.)	Revised Amount (Rs)	Difference (Rs.)
1	ADMIN BLOCK			
i	Civil Work	1,009,409	3,541,353	2,531,943
ii	Plumbing Work	230,901	255,372	24,471
iii	Electrical Work	135,923	188,267	52,344
2	SERVANT QUARTER			
i	Civil Work	1,943,757	1,924,170	(19,587)
ii	Plumbing Work	243,818	148,235	(95,584)
iii	Electrical Work	129,668	151,700	22,032
3	WORK SHOP			
i	Civil Work	2,157,456	3,472,543	1,315,087
ii	Plumbing Work	83,208	51,630	(31,577)
iii	Electrical Work	424,106	104,377	(319,729)
	SITTING ROOM			
i	Civil Work	899,666		(899,666)
ii	Plumbing Work	81,606		(81,606)
iii	Electrical Work	114,461		(114,461)
4	PARKING SHEDS			
i	Civil Work	24,132,084	21,483,212	(2,648,872)
ii	Electrical Work	974,268	193,827	(780,441)
5	WASHING PIT	524,756	1,863,003	1,338,248
	GENERATOR PAD	164,984		(164,984)
	PUMP PAD	14,614		(14,614)
	TUBE WELL 0.25CUSEC			
6	EXTERNAL WORK (BOUNDARY WALL + TUFF PVER + LAWN)	7,177,517	9,304,423	2,126,906
7	EJECTOR PUMP		250648.15	250,648
8	EXTERNAL WATER SUPPLY	4,325,195	706,745	(3,618,450)
9	EXTERNAL SEWERAGE SYSTEM		4,231,363	4,231,363
10	SEPTIC TANK	309,431	163,740	(145,691)
11	DRAINAGE SYSTEM		181,206	181,206

DETAILED COST ESTIMATE

SWM PARKING AREA (MURIDKE)

COMPARATIVE STATEMENT

Sr. No.	Description	Previous Amount (Rs.)	Revised Amount (Rs)	Difference (Rs.)
12	SILT HOLDING TANK		221,669	221,669
13	EXTERNAL ELECTRICAL WORK	8,810,461	4,269,731	(4,540,730)
14	DISMANTLING WORK	78,552	78,552	
15	ENVIRONMENTAL HEALTH & SAFETY COST	112,425	112,425	
	Total Rs.	54,078,267	52,898,191	(1,180,076)
	Contingencies @ 2%	1,081,565	1,057,964	(23,602)
	Price Escalation @ 6%		3,173,891	3,173,891
	PRA Charges @ 5%	2,703,913	2,644,910	(59,004)
	Total Amount. Rs.	57,863,746	59,774,956	1,911,210

DETAILED COST ESTIMATE

SWM PARKING AREA (GOJRA)

SUMMARY

		•
Sr. No.	Description	Amount (Rs)
1	ADMIN BLOCK	
i	Civil Work	3,541,353
ii	Plumbing Work	255,372
iii	Electrical Work	188,267
2	SERVANT QUARTER	
i	Civil Work	1,924,170
ii	Plumbing Work	148,235
iii	Electrical Work	151,700
3	WORK SHOP	
i	Civil Work	3,472,543
ii	Plumbing Work	51,630
iii	Electrical Work	104,377
4	PARKING SHED (SIZE 90' x 32')	
i	Civil Work	16,578,669
ii	Electrical Work	112,590
5	PARKING SHED (SIZE 96' x 16')	
i	Civil Work	4,904,543
ii	Electrical Work	81,237
6	WASHING PIT	1,863,003
7	EXTERNAL WORK (PARTITION WALL + TUFF PVER + LAWN)	9,304,423
8	EJECTOR PUMP	250,648
9	EXTERNAL WATER SUPPLY	706,745
10	EXTERNAL SEWERAGE SYSTEM	4,231,363
11	SEPTIC TANK	163,740
12	DRAINAGE SYSTEM	181,206
13	SILT HOLDING TANK	221,669
14	EXTERNAL ELECTRICAL WORK	4,269,731
15	DISMANTLING WORK	78,552

	PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB DETAILED COST ESTIMATE SWM PARKING AREA (GOJRA) SUMMARY							
Sr. No.	Description	Amount (Rs)						
16	ENVIRONMENTAL HEALTH & SAFETY COST	112,425						
	Total Rs.	52,898,191						
	Contingencies @ 2%	1,057,964						
	Price Escalation @ 6%	3,173,891						
	PRA Charges @ 5%	2,644,910						
	Total Amount. Rs.	59,774,956						

DETAILED COST ESTIMATE

ADMIN BLOCK

	CIVIL WORK						
Sr. No.		Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)	
		Schedule Item					
		Excavation					
1	3/21/a/ii	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m)					
		a) By Manual	1000Cft	2.25	10 677 75	24.025	
		ii) in ordinary soil.	1000Cft	2.25	10,677.75	24,025	
		Anti-Termite					
2	26/43	Spraying termite proofing by using liquid FMC/Biflex/Terminex Exin/Ms Hextar or equivalent @ specified suspension concenterate (SC), Mixing Ability-HEXTAR with Ratio (1:250) = 540 Sft or equivalent approved liquid applying with shower and certificate will be provided by the contractor for 10-years complete in all respect as approved by the Engineer Incharge.		3,087.00	9.25	28,555	
3	6/5	Plain Cement Concrete Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):					
		(i) Ratio 1: 4: 8	100 Cft	3.75	28,986.90	108,701	
		Brick work in Foundation					
4	7/4/i	Pacca brick work in foundation and plinth in:-					
		Cement, sand mortar:- Ratio 1:5	100 Cft	14.21	29,326.30	416,727	
		Horizontal D.P.C					
5	6/36	Providing and laying damp proof course of cement concrete 1 : 2 : 4 (using cement, sand and shingle), including bitumen coating :-					
		(a) with one coat bitumen and one coat polythene sheet 500gauge					
		i) 1 ¹ / ₂ " thick (40 mm)	100 Sft	3.35	8,639.45	28,942	
		Vertical D.P.C					
6	6/37	Providing and laying vertical damp proof course with cement sand plaster and bitumen coating:- (a) with one coat of bitumen and one coat of					
		polythene sheet 500 gauge:	100.00		C 2 1 1 0 0	00.050	
		ii) Ratio 1:3 ³ / ₄ " thick (20 mm)	100 Sft	4.46	6,244.80	27,852	

DETAILED COST ESTIMATE

ADMIN BLOCK

	CIVIL WORK							
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)		
		Brick work in Super Structure						
7	7/5	Pacca brick work in ground floor:-						
		i) Cement, sand mortar:- Ratio 1:5	100 Cft	20.61	31,510.10	649,423		
		Concrete Work						
8	6/6	Providing and laying reinforced cement concrete (including prestressed concrete), using coarse sand and screened graded and washed aggregate, in required shape and design, including forms, moulds, shuttering, lifting, compacting, curing, rendering and finishing exposed surface, complete (but excluding the cost of steel reinforcement, its fabrication and placing in position, etc.):-						
		Above foundation						
		(a) (i) Reinforced cement concrete in roof slab, beams, columns lintels, girders and other structural members laid in situ or precast laid in position, or prestressed members cast in situ, complete in all respects:-						
		Type C (nominal mix 1: 2: 4)	P.Cft	513.20	556.50	285,598		
		Steel Work.						
9	6/12/c	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars):-						
		Deformed bars (Grade-60)	100kg	14.67	31,784.50	466,279		
		~ · · · · · · · · · · · · · · · · · · ·						
10	7/30	Sand Filling Supplying and filling sand under floor; or plugging in wells.	100 Cft	7.65	2,943.30	22,516		
		Drisk hallost						
11	6/2	Brick ballast Dry rammed brick or stone ballast, 1 ¹ / ₂ " to 2"(40						
11	0/2	mm to 50 mm) gauge.	100 Cft	2.52	8,891.50	22,407		
12	6/5	Plain Cement Concrete Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):						
		Ratio 1: 2: 4	100 Cft	1.28	38,178.90	48,869		

DETAILED COST ESTIMATE

ADMIN BLOCK

Sr. (Jul; Toba 13 10 13 10 14 10	BI-Annual- 2022 ly to Dec) a Tek Singh 0/42/d 0/42/d	Description Providing and laying superb quality Porcelain glazed tiles flooring of MASTER brand of specified size in approved design, Color and Shade with adhesive / bond over 3/4" thick (1:3)cement plaster i/c the cost of sealer for finishing the joints i/c cutting grinding complete in all respect as approved and directed by the Engineer Incharge. d) (Non-Skid Chequred Tiles) 300mmx300mm Providing and laying superb quality Porcelain glazed tiles of Master brand, skirting/ dado of specified size, Color and Shade with adhesive/ bond over 1/2" thick (1:2)cement plaster i/c the cost of and sealer for finishing the joints, cutting grinding complete in all respect as approved and directed by the Engineer Incharge. a) Full body Glazed Tile (i) 400 mm x 400 mm	Unit Per Sft	Quantity 497.00	Unit Rate (Rs)	Amount (Rs)
14 10		Providing and laying superb quality Porcelain glazed tiles flooring of MASTER brand of specified size in approved design, Color and Shade with adhesive / bond over 3/4" thick (1:3)cement plaster i/c the cost of sealer for finishing the joints i/c cutting grinding complete in all respect as approved and directed by the Engineer Incharge. d) (Non-Skid Chequred Tiles) 300mmx300mm Providing and laying superb quality Porcelain glazed tiles of Master brand, skirting/ dado of specified size, Color and Shade with adhesive/ bond over 1/2" thick (1:2)cement plaster i/c the cost of and sealer for finishing the joints, cutting grinding complete in all respect as approved and directed by the Engineer Incharge. a) Full body Glazed Tile		497.00	211.60	105,165
14 10		Providing and laying superb quality Porcelain glazed tiles flooring of MASTER brand of specified size in approved design, Color and Shade with adhesive / bond over 3/4" thick (1:3)cement plaster i/c the cost of sealer for finishing the joints i/c cutting grinding complete in all respect as approved and directed by the Engineer Incharge. d) (Non-Skid Chequred Tiles) 300mmx300mm Providing and laying superb quality Porcelain glazed tiles of Master brand, skirting/ dado of specified size, Color and Shade with adhesive/ bond over 1/2" thick (1:2)cement plaster i/c the cost of and sealer for finishing the joints, cutting grinding complete in all respect as approved and directed by the Engineer Incharge. a) Full body Glazed Tile		497.00	211.60	105,165
14 10		 glazed tiles flooring of MASTER brand of specified size in approved design, Color and Shade with adhesive / bond over 3/4" thick (1:3)cement plaster i/c the cost of sealer for finishing the joints i/c cutting grinding complete in all respect as approved and directed by the Engineer Incharge. d) (Non-Skid Chequred Tiles) 300mmx300mm Providing and laying superb quality Porcelain glazed tiles of Master brand, skirting/ dado of specified size, Color and Shade with adhesive/ bond over 1/2" thick (1:2)cement plaster i/c the cost of and sealer for finishing the joints, cutting grinding complete in all respect as approved and directed by the Engineer Incharge. a) Full body Glazed Tile 		497.00	211.60	105,165
	0/43/a	Providing and laying superb quality Porcelain glazed tiles of Master brand, skirting/ dado of specified size, Color and Shade with adhesive/ bond over 1/2" thick (1:2)cement plaster i/c the cost of and sealer for finishing the joints, cutting grinding complete in all respect as approved and directed by the Engineer Incharge. a) Full body Glazed Tile		497.00	211.60	105,165
	0/43/a	glazed tiles of Master brand, skirting/ dado of specified size, Color and Shade with adhesive/ bond over 1/2" thick (1:2)cement plaster i/c the cost of and sealer for finishing the joints, cutting grinding complete in all respect as approved and directed by the Engineer Incharge. a) Full body Glazed Tile	Per Sft			
15 1			Per Sft			
15 1		(i) 400 mm x 400 mm	Per Sft			
15 1				46.86	292.75	13,718
15 1		Ceramic Tile				
	10/24	Providing and laying superb quality Ceramic tile floors of Master brand of specified size, Glossy/Matt/Texture of approved Color and Shade as per approved design with adhesive bond, over 3/4" thick (1;2) cement sand plaster i/c the cost of sealer for finishing the joints i/c cutting grinding complete in all respects and as approved and directed by the Engineer Incharge.				
		i) 12"x18"/12"x24"/10"x24" /8"x24"/12"x36"	Per Sft	254.00	240.00	60,960
16 1	10/25	Providing and laying superb quality Ceramic tiles dado of Master brand of specified size, Glossy/Matt/Texture skirting / dado of approved Color and Shade with adhesive bond over1/2" thick (1:2)cement plaster i/c the cost of sealer for finishing the joints i/c cutting grinding complete in all respects as approved and directed by the Engineer Incharge.				
			Per Sft	642.50	292.75	188,092

DETAILED COST ESTIMATE

ADMIN BLOCK

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)		
		Marble						
17	10/47	Providing and laying 3/4" thick full width Prepolished Marble slab for Vanities / Shelves / Treads/Window Cills , having Uniform texture (Spotless) with adhesive bond over 3/4" thick (1:2) cement sand mortor i/c the cost of matching sealer complete in all respects as approved and directed by the Engineer Incharge.						
		i) China Verona	Sft	38.50	412.35	15,875		
		Slab Plaster						
18	11/10/b	Cement plaster 3/8" (10 mm) thick under soffit of R.C.C. roof slabs only, upto 20' height. (Ratio:- 1:3)	100 Sft	7.65	3,708.60	28,371		
		Cement Plaster						
19	11/9	Cement plaster 1:4 upto 20' (6.00 m) height:-						
		3/4" (20 mm) thick	100 Sft	31.56	4,379.60	138,220		
		Pointing						
20	11/18/a	Cement pointing struck joints, on walls, upto 20' (6.00 m) hiehgt:-						
		a) ratio 1:2	100 Sft	14.40	3,518.35	50,664		
21	11/31	Extra cost of labour and material for red oxide pigment in cement pointing to match with the colour of bricks.	100 Sft	14.40	652.50	9,396		
		Distempering						
22	11/23	Distempering:-						
		iii) three coats	100 Sft	39.21	1,295.00	50,777		
		Wooden Door						
23	12/52	P/F 1-1/2" thick solid flush door comprising of 2.5 mm thick Deodar/Ash/Oak ply with grooves , compressed over 2.5 mm thick commercial ply over 1" thick packing wood in style and rails under proper pressure i/c the cost of nails, tower bolt , handles, glue, sawing charges and lacquar polishing to show the grains of ply properly, sand papering and 3/8" thick matching wooden lipping as approved and directed by the Engineer Incharge.						
			Per Sft	158.50	678.55	107,550		

DETAILED COST ESTIMATE

ADMIN BLOCK

	CIVIL WORK					
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
24	25/51	Providing and fixing all types of partly fixed and partly openable glazed anodised/ powder coated aluminium doors, using delux section of M/s Al- Cop or Pakistan Cables, having chowkat frame of size 40 x 100 mm (1½" x 4") and leaf frame of 60x40mm (2½"x1½") wide sections including the cost of ¼" (5 mm) thick imported tinted glass with aluminium triangular gola and rubber gasket to support the glass and leaf edging, using approved standard fittings, locks, 3" (75 mm) wide long handles etc., and hardware any required as approved by the engineer in-charge	Sft	68.00	1,437.60	97,757
25	Rate Analysis	Formica Sheet Providing and fixing Formica sheet on bathroom door as per drawing and design complete in all respect.	Sft	50.00	75.11	3,756
26	12/17	Providing and fixing 2" wide MS/ GI Chowkat singel/double rebate made of 16 SWG MS sheet pressed/welded / supported with M.S. flat 1- 1/4"x1/8" i/c 6"long M.S. Flat 1"x1/8"hold fasts (6- Nos) welded/screwed, punching of lock hole covered with MS Box,coating with antirust paint including filling with cement sand mortar (1:8) and embedding hold fast in cement concrete (1:2:4) ,complete in all respect as approved and directed by Engineer Incharge				
		(ii) 10.50 " wide	Sft	74.81	621.90	46,526
27	12/28	Providing and fixing 3"x4-1/2" chowkat for doors, windows and C. windows, including holdfast, etc. b) Deodar wood	Sft	22.92	825.85	18,926
28	12/53	Providing and laying 24 SWG aluminum kick plate 4" (100 mm) high, fixed with screws 4" (100 mm) centre to centre, on bottom rail of flush doors only of commercial ply.	Rft	20.00	70.00	1,400
29	12/58	 Providing and fixing ornamental wooden architrave 3" x (1¹/₂" tapered to ¹/₄") all along the door frame complete in all respect. b) Deodar wood architrave 	Sft	21.38	96.65	2,066

DETAILED COST ESTIMATE

ADMIN BLOCK

	0.1DI 1 -					
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Lock				
30	12/22	Providing and fixing, approved quality mortice lock.	Each	9.00	771.50	6,944
		Paint				
31	13/5/c	Painting new surface:- Preparing surface and painting of doors and windows any type (including edges):-				
		i) priming coat.	100 Sft	3.17	1,292.00	4,096
		ii)Two coat	100 Sft	3.17	711.40	2,255
		Aluminium Window				
32	25/52	Providing and fitting all types of glazed aluminium windows of anodised/ powder coated partly fixed and partly sliding using delux sections of approved manufacturer having frame size of 100 x 30 mm (4"x1-1/4") and leaf frame sections of 50 x 20 mm (2"x ³ /4"), all of 1.6mm thickness including 5 mm thick imported tinted glass with rubber gasket using approved standard latches, hardware etc., as approved by the Engineer in-charge				
		approved by the Eligneet in-charge	Per Sft	126.50	1,348.40	170,573
33	9/5	Roof Insulation Single layer of tiles 9"x4½"x1½" (225x113x40 mm) laid over 4"(100 mm) earth and 1" (25 mm) mud plaster without Bhoosa, grouted with cement sand 1:3 on top of RCC roof slab, provided with 34 lbs. per %Sft. or 1.72 Kg/Sq.m bitumen coating sand blinded.		8.55	11,317.60	96,765
34	9/45	Providing and Laying Insulation material of Extruded Polystyrene XPS in Rigid Insulation / Foam Board on roof or walls, Density 32-38Kg/M, compressive strength 250-400 kpa, R-value 5 per inch thickness and water obsorption (1% by volume, closed cell type structure) i/c cutting and placing in position. complete in all respect.				
		c) 2" thick	100 Sft	8.55	11,979.55	102,425
	26/37/ii	Supplying and laying polythene sheet over D.P.C.				
35		under floors and on roofs, etc.				

DETAILED COST ESTIMATE

ADMIN BLOCK

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Khurras				
36	9/15	Khuras on roof 2'x2'x6" (600 x 600 x 150 mm)	Each	2.00	855.00	1,710
		Bottom Khuras				
37	9/16	Bottom Khuras of brick masonry in cement mortar 1:6, 4'x2'x4 ¹ / ₂ " (1200x600x113 mm) over 3" (75 mm) cement concrete 1:4:8.	Each	2.00	1,744.00	3,488
38	1/1	Carriage of 100 Cft. (2.83 cu.m) of all materials like stone aggregate, spawl, kankar lime (unslaked), surkhi, etc. or 150 Cft. (4.25 cu.m) of timber, by truck or by any other means owned by the contractor. (crushed stone aggregate and bajri used in concrete items) (Lead 125 Km)	Cft	919.65	76.73	70,562
		Total Rs.				3,541,353

CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Excavation						
1	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m)						
	ii) in ordinary soil.						
	Admin Block wall 9" Thick Wall	1	182.50	3.00	3.00	1,642.50	Cft
	Center wall 4-1/2" Thick Wall	1	81.00	2.50	3.00	607.50	Cft
					Total	2,250.00	Cft
					Total	2.25	%oCf
	Anti-Termite						
2	Spraying termite proofing by using liquid FMC/Biflex/Terminex Exin/Ms Hextar or equivalent @ specified suspension concenterate (SC), Mixing Ability-HEXTAR with Ratio (1:250) = 540 Sft or equivalent approved liquid applying with shower and certificate will be provided by the contractor for 10-years complete in all respect as approved by the Engineer Incharge.						
	Admin Block wall 9" Thick Wall	1	182.50	9.00		1,642.50	Sft
	Center wall 4-1/2" Thick Wall	1	81.00	8.50		688.50	Sft
	Floor	1	36.00	21.00		756.00	Sft
					Total	3,087.00	Sft
	Plain Cement Concrete						
3	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):						
	(i) Ratio 1: 4: 8						
	Admin Block wall 9" Thick Wall	1	182.50	3.00	0.50	273.75	Cft
	Center wall 4-1/2" Thick Wall	1	81.00	2.50	0.50	101.25	Cft
					Total	375.00	Cft
					Total	3.75	%Cft
	Brick work in Foundation						
4	Pacca brick work in foundation and plinth in:-						
	Cement, sand mortar:- Ratio 1:5						

CALCULATION OF QUANTITIES CIVIL WORK

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Admin Block wall 9'' Thick Wall						
	Step - 1	1	182.50	2.250	0.50	205.31	Cft
	Step - 2	1	182.50	1.875	0.50	171.09	Cft
	Step - 3	1	182.50	1.500	0.50	136.88	Cft
	Step - 4	1	182.50	1.125	0.50	102.66	Cft
	Step - 5	1	182.50	0.750	3.00	410.63	Cft
	Center wall 4-1/2" Thick Wall						
	Step - 1	1	81.00	1.875	0.50	75.94	Cft
	Step - 2	1	81.00	1.500	0.50	60.75	Cft
	Step - 3	1	81.00	1.125	0.50	45.56	Cft
	Step - 4	1	81.00	0.750	3.50	212.63	Cft
					Total	1,421.44	Cft
					Total	14.21	%Cft
	Horizontal D.P.C						
5	Providing and laying damp proof course of cement concrete 1 : 2 : 4 (using cement, sand and shingle), including bitumen coating :-						
	(a) with one coat bitumen and one coat polythene						
	sheet 500gauge						
	i) 1½" thick (40 mm)						
	Admin Block wall 9" Thick Wall	2	182.50	0.75		273.75	Sft
	Center wall 4-1/2" Thick Wall	1	81.00	0.75		60.75	Sft
					Total	334.50	Sft
					Total	3.35	%Sft
	Vertical D.P.C						
6	Providing and laying vertical damp proof course with cement sand plaster and bitumen coating:-						
	(a) with one coat of bitumen and one coat of polythene sheet 500 gauge:						
	ii) Ratio 1:3 ³ / ₄ " thick (20 mm)						
	Admin Block wall 9" Thick Wall	1	182.50		2.00	365.00	Sft
	Center wall 4-1/2" Thick Wall	1	81.00		1.00	81.00	Sft
					Total	446.00	Sft
					Total	4.46	%Sft
	Brick work in Super Structure						
7	Pacca brick work in ground floor:-						
	i) Cement, sand mortar:- Ratio 1:5						
	Admin Block wall 9" Thick Wall	1	182.50	0.75	11.00	1,505.63	Cft
	Center wall 4-1/2" Thick Wall	1	81.00	0.75	11.00	668.25	Cft

ADMIN BLOCK

CALCULATION OF QUANTITIES CIVIL WORK

Sr.	[
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Parapet Wall	1	120.00	0.375	2.50	112.50	Cft
	Entrance step	2	10.00	1.00	0.75	15.00	Cft
	D/d Doors and Window						
	D-1	-2	3.50	0.75	7.00	(36.75)	Cft
	D-2	-2	3.00	0.75	7.00	(31.50)	Cft
	D-3	-1	2.50	0.75	7.00	(13.13)	Cft
	D-4	-4	2.50	0.75	5.00	(37.50)	Cft
	DW-1	-1	5.00	0.75	7.00	(26.25)	Cft
	W-1	-3	6.00	0.75	4.00	(54.00)	Cft
	W-2	-1	5.00	0.75	4.00	(15.00)	Cft
	W-3	-1	3.00	0.75	3.50	(7.88)	Cft
	V-1	-6	2.00	0.75	2.00	(18.00)	Cft
					Total	2,061.38	Cft
					Total	20.61	%C
	Concrete Work						
8	Providing and laying reinforced cement concrete						
U	(including prestressed concrete), using coarse sand						
	and screened graded and washed aggregate, in						
	required shape and design, including forms,						
	moulds, shuttering, lifting, compacting, curing,						
	rendering and finishing exposed surface, complete						
	(but excluding the cost of steel reinforcement, its						
	fabrication and placing in position, etc.):-						
	Tablication and placing in position, etc.)						
	Above foundation						
	(a) (i) Reinforced cement concrete in roof slab,						
	beams, columns lintels, girders and other structural						
	members laid in situ or precast laid in position, or						
	prestressed members cast in situ, complete in all						
	respects:-						
	Type C (nominal mix 1: 2: 4)						
	Top Slab	1	37.38	23.00	0.50	429.81	Cft
	Kitchen slab	1	4.50	3.00	0.50	6.75	Cft
	B-1	1	18.00	0.75	1.25	16.88	Cft
	CB-1	1	26.00	0.75	0.75	14.63	Cft
	Doors and window Lintels						
	D-1	2	4.50	0.38	0.75	2.53	Cft
	D-2	2	4.00	0.75	0.75	4.50	Cft
	D-3	1	3.50	0.38	0.75	0.98	Cft
	D-4	4	3.50	0.38	0.75	3.94	Cft
	DW-1	1	10.00	0.75	0.75	5.63	Cft
		<u> </u>			0.70	2.00	01

3

7.00

0.75

0.75

11.81

Cft

W-1

CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	W-2	1	6.00	0.75	0.75	3.38	Cft
	W-3	1	4.00	0.75	0.75	2.25	Cft
	V-1	6	3.00	0.75	0.75	10.13	Cft
					Total	513.20	Cft
	Steel Work.						
9	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars):-						
	Deformed bars (Grade-60)					513.20	Cft
	Top Slab & lintel @ 6 lbs / Cft		6.00		=	3,079.22	lbs/cft
				Total	=	3,079.22	lbs/cft
				Total	=	1,397.10	Kg.
			Add 5%		=	69.86	Kg.
				Total	=	1,467	Kg
					Total	14.67	%kg
	Sand Filling						
10	Supplying and filling sand under floor; or plugging in wells.						
	Floor	1	765.00	1.00	1.00	765.00	Cft
					Total	765.00	Cft
					Total	7.65	%Cft
	Brick ballast						
11	Dry rammed brick or stone ballast, 1 ¹ / ₂ " to 2"(40 mm to 50 mm) gauge.						
	Floor	1	765.00	1.00	0.33	252.45	Cft
					Total	252.45	Cft
					Total	2.52	%Cft
	P.C.C						
12	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):						
	Ratio 1: 2: 4						
	Floor	1	765.00	1.00	0.17	127.50	Cft
					Total	1.28	%Cft

ADMIN BLOCK CALCULATION OF QUANTITIES

C	1						
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Porcelain Tile						
13	Providing and laying superb quality Porcelain						
	glazed tiles flooring of MASTER brand of						
	specified size in approved design, Color and Shade						
	with adhesive / bond over 3/4" thick (1:3)cement						
	plaster i/c the cost of sealer for finishing the joints						
	i/c cutting grinding complete in all respect as						
	approved and directed by the Engineer Incharge.						
	d) (Non-Skid Chequred Tiles) 300mmx300mm	1	497.00	1.00		497.00	Sft
					Total	497.00	Sft
					Total	477.00	bit
14	Providing and laying superb quality Porcelain						
	glazed tiles of Master brand, skirting/ dado of						
	specified size, Color and Shade with adhesive/						
	bond over 1/2" thick (1:2)cement plaster i/c the						
	cost of and sealer for finishing the joints, cutting						
	grinding complete in all respect as approved and						
	directed by the Engineer Incharge.						
	a) Full body Glazed Tile						
	(i) 400 mm x 400 mm	1	142.00	1.00	0.33	46.86	Sft
					Total	46.86	Sft
	Ceramic Tile						
15	Providing and laying superb quality Ceramic tile						
10	floors of Master brand of specified size,						
	Glossy/Matt/Texture of approved Color and Shade						
	as per approved design with adhesive bond, over						
	3/4" thick (1;2) cement sand plaster i/c the cost of						
	sealer for finishing the joints i/c cutting grinding						
	complete in all respects and as approved and						
	directed by the Engineer Incharge.						
	i) 12"x18"/12"x24"/10"x24" /8"x24"/12"x36"	1	254.00	1.00		254.00	Sft
					Total	254.00	Sft
							SIL
16	Providing and laying superb quality Ceramic tiles						
	dado of Master brand of specified size,						
	Glossy/Matt/Texture skirting / dado of approved						
	Color and Shade with adhesive bond over 1/2" thick						
	(1:2)cement plaster i/c the cost of sealer for						
	finishing the joints i/c cutting grinding complete in						
	all respects as approved and directed by the						
	Engineer Incharge.						
				1	1 I		

ADMIN BLOCK

CALCULATION OF QUANTITIES

CIVIL WOR	K

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
110.	D/d						
	D-3	-1	2.50		5.00	(12.50)	Sft
	D-4	-4	2.50		5.00	(50.00)	Sft
					Total	642.50	Sft
	Marble						
17	Providing and laying 3/4" thick full width Prepolished Marble slab for Vanities / Shelves / Treads/Window Cills , having Uniform texture (Spotless) with adhesive bond over 3/4" thick (1:2) cement sand mortor i/c the cost of matching sealer						
	complete in all respects as approved and directed by the Engineer Incharge.						
	i) China Verona						
	W-1	3	6.00	0.75		13.50	Sft
	W-2	1	5.00	0.75		3.75	Sft
	W-3	1	3.00	0.75		2.25	Sft
	V-1	6	2.00	0.75		9.00	Sft
	Kitchen	1	5.00	2.00		10.00	Sft
	Slab Plaster				Total	38.50	Sft
18	Cement plaster 3/8" (10 mm) thick under soffit of R.C.C. roof slabs only, upto 20' height. (Ratio:-1:3)	1	765.00	1.00		765.00	Sft
					Tatal	7.65	0/ 5.64
	Cement Plaster				Total	7.65	%Sft
19	Cement plaster 1:4 upto 20' (6.00 m) height:-						
17	3/4" (20 mm) thick						
	Office Room Walls						
		1	152.00		11.00	1,672.00	Sft
	Toilet Walls						
	Toilet Walls Bath	1	22.00		11.00	242.00	Sft
	Bath	1	22.00 142.00		11.00 11.00	242.00 1,562.00	Sft Sft
	Bath D/d Doors and Window	1	142.00		11.00	1,562.00	Sft
	Bath D/d Doors and Window D-1	1	142.00 3.50		11.00 7.00	1,562.00 (49.00)	Sft Sft
	Bath D/d Doors and Window D-1 D-2	1 -2 -2	142.00 3.50 3.00		11.00 7.00 7.00	1,562.00 (49.00) (42.00)	Sft Sft Sft
	Bath D/d Doors and Window D-1 D-2 D-3	1 -2 -2 -1	142.00 3.50 3.00 2.50		11.00 7.00 7.00 7.00	1,562.00 (49.00) (42.00) (17.50)	Sft Sft Sft Sft
	Bath D/d Doors and Window D-1 D-2 D-3 D-4	1 -2 -2 -1 -4	142.00 3.50 3.00 2.50 2.50		11.00 7.00 7.00 7.00 5.00	1,562.00 (49.00) (42.00) (17.50) (50.00)	Sft Sft Sft Sft Sft
	Bath D/d Doors and Window D-1 D-2 D-3	1 -2 -2 -1	142.00 3.50 3.00 2.50		11.00 7.00 7.00 7.00	1,562.00 (49.00) (42.00) (17.50)	Sft Sft Sft Sft

ADMIN BLOCK

CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	W-3	-1	3.00		3.50	(10.50)	Sft
	V-1	-6	2.00		2.00	(24.00)	Sft
					Total	3,156.00	Sft
					Total	31.56	%Sft
	Pointing						
20	Cement pointing struck joints, on walls, upto 20' (6.00 m) hiehgt:-						
	a) ratio 1:2						
	Outer Walls	1	120.00		12.00	1,440.00	Sft
					Total	14.40	%Sft
21	Extra cost of labour and material for red oxide pigment in cement pointing to match with the colour of bricks.				Total	14.40	%Sft
	Distempering						
22	Distempering:-						
	iii) three coats						
	Office Room						
		1	152.00		11.00	1,672.00	Sft
	Toilet Walls						
		1	22.00		11.00	242.00	Sft
		1	142.00		11.00	1,562.00	Sft
	Slab	1	765.00	1.00		765.00	Sft
	D/d Doors and Window						
	D-1	-2	3.50		7.00	(49.00)	Sft
	D-2	-2	3.00		7.00	(42.00)	Sft
	D-3	-1	2.50		7.00	(17.50)	Sft
	D-4	-4	2.50		5.00	(50.00)	Sft
	DW-1	-1	5.00		7.00	(35.00)	Sft
	W-1	-3	6.00		4.00	(72.00)	Sft
	W-2	-1	5.00		4.00	(20.00)	Sft
	W-3	-1	3.00		3.50	(10.50)	Sft
	V-1	-6	2.00		2.00	(24.00)	Sft
					Total	3,921.00	Sft
					Total	39.21	%Sft
					_ viai	J7,41	/0.511

ADMIN BLOCK CALCULATION OF QUANTITIES

Sr.			- -				
No.	Description	No.	Length	Width	Height	Qty.	Unit
	Wooden Door						
23	P/F 1-1/2" thick solid flush door comprising of 2.5						
	mm thick Deodar/Ash/Oak ply with grooves ,						
	compressed over 2.5 mm thick commercial ply						
	over 1" thick packing wood in style and rails under						
	proper pressure i/c the cost of nails, tower bolt ,						
	handles, glue, sawing charges and lacquar						
	polishing to show the grains of ply properly, sand						
	papering and 3/8" thick matching wooden lipping						
	as approved and directed by the Engineer Incharge.						
	D-1	2	3.50		7.00	49.00	Sft
	D-2	2	3.00		7.00	42.00	Sft
	D-3	1	2.50		7.00	17.50	Sft
	D-4	4	2.50		5.00	50.00	Sft
					Total	158.50	Sft
24	Providing and fixing all types of partly fixed and						
27	partly openable glazed anodised/ powder coated						
	aluminium doors, using delux section of M/s Al-						
	Cop or Pakistan Cables, having chowkat frame of						
	size 40 x 100 mm $(1\frac{1}{2}$ " x 4") and leaf frame of						
	$60x40$ mm ($2\frac{1}{2}x1\frac{1}{2}$ ") wide sections including the						
	cost of ¹ / ₄ " (5 mm) thick imported tinted glass with						
	aluminium triangular gola and rubber gasket to						
	support the glass and leaf edging, using approved						
	standard fittings, locks, 3" (75 mm) wide long						
	handles etc., and hardware any required as						
	approved by the engineer in-charge						
	DW-1	1	8.00		8.50	68.00	Sft

ADMIN BLOCK CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Formica Sheet						
25	Providing and fixing Formica sheet on bathroom door as per drawing and design complete in all respect.						
	D-4	4	2.50		5.00	50.00	Sft
26	Providing and fixing 2" wide MS/ GI Chowkat singel/double rebate made of 16 SWG MS sheet pressed/welded / supported with M.S. flat 1- 1/4"x1/8" i/c 6"long M.S. Flat 1"x1/8"hold fasts (6- Nos) welded/screwed, punching of lock hole covered with MS Box,coating with antirust paint including filling with cement sand mortar (1:8) and embedding hold fast in cement concrete (1:2:4) ,complete in all respect as approved and directed by Engineer Incharge						
	(ii) 10.50 " wide						
	D-1	2	17.50	0.875		30.63	Sft
	D-2	2	17.00	0.875		29.75	Sft
	D-3	1	16.50	0.875		14.44	Sft
					Total	74.81	Sft
27	Providing and fixing 3"x4-1/2" chowkat for doors, windows and C. windows, including holdfast, etc.						
	b) Deodar wood						
	D-4	4	12.50	0.46		22.92	Sft
					Total	22.92	Sft
28	Providing and laying 24 SWG aluminum kick plate 4" (100 mm) high, fixed with screws 4" (100 mm) centre to centre, on bottom rail of flush doors only of commercial ply.	8	2.50			20.00	Rft
29	Providing and fixing ornamental wooden architrave $3" \times (1\frac{1}{2}"$ tapered to $\frac{1}{4}"$) all along the door frame complete in all respect.						
	b) Deodar wood architrave						
	D-1	2	17.50	0.25		8.75	Sft
	D-2	2	17.00	0.25		8.50	Sft
	D-3	1	16.50	0.25	Tetal	4.13	Sft
					Total	21.38	Sft

ADMIN BLOCK CALCULATION OF QUANTITIES

C							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Lock						
30	Providing and fixing, approved quality mortice						
	lock.	9				9.00	Each
	Paint						
31	Painting new surface:-						
	Preparing surface and painting of doors and						
	windows any type (including edges):-						
	i) priming coat.						
	ii)Two coat				Total	3.17	Sft
	Aluminium Window						
32	Providing and fitting all types of glazed aluminium						
	windows of anodised/ powder coated partly fixed						
	and partly sliding using delux sections of approved						
	manufacturer having frame size of 100 x 30 mm						
	(4"x1-1/4") and leaf frame sections of 50 x 20 mm						
	(2"x¾"), all of 1.6mm thickness including 5 mm						
	thick imported tinted glass with rubber gasket						
	using approved standard latches, hardware etc., as						
	approved by the Engineer in-charge						
	W-1	3	6.00		4.00	72.00	Sft
	W-2	1	5.00		4.00	20.00	Sft
	W-3	1	3.00		3.50	10.50	Sft
	V-1	6	2.00		2.00	24.00	Sft
					Total	126.50	Sft
22	Roof Insulation						
33	Single layer of tiles $9"x4\frac{1}{2}"x1\frac{1}{2}"$ (225x113x40 mm) laid over 4"(100 mm) earth and 1" (25 mm)						
	mud plaster without Bhoosa, grouted with cement						
	sand 1:3 on top of RCC roof slab, provided with 34						
	lbs. per %Sft. or 1.72 Kg/Sq.m bitumen coating						
	sand blinded.						
	Roof area	1	37.38	22.88		854.95	Sft
					Total	854.95	Sft
					Total	8.55	%Sft
24	Cumpleting and lowing polytheses that see D.D.C.						
34	Supplying and laying polythene sheet over D.P.C. under floors and on roofs, etc.						
	ii) 500 gauge (.005" thick)				Total	1,710.00	Sft

	PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB ADMIN BLOCK CALCULATION OF QUANTITIES CIVIL WORK							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit	
	Khurras							
35	Khuras on roof 2'x2'x6" (600 x 600 x 150 mm)	2				2.00	Each	
	Bottom Khuras							
36	Bottom Khuras of brick masonry in cement mortar							
	1:6, 4'x2'x4 ¹ / ₂ " (1200x600x113 mm) over 3" (75							
	mm) cement concrete 1:4:8.	2				2.00	Each	

DETAILED COST ESTIMATE

ADMIN BLOCK

		ADMIN BLOCK PLUMBING WORKS				
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Schedule Item				
		Indian W.C				
1	19-4-i	Providing and fitting glazed earthen ware water closet, squatter type (Orisa pattern), combined with foot rest.				
		i) white	Each	2.00	2,218.35	4,437
2	19-3	Providing and fitting one piece Europeon Coupled set of Water Closet (WC) and flushing Cistern of PORTA brand (full size) i/c the cost of CP/rubber connection, thimble, normal seat cover and rawal bolts complete in all respects as approved and directed by the Engineer Incharge.		2.00	19,987.90	39,976
3	19-13-i	Providing and fitting plastic made low down flushing cistern 13.63 litre (3 gallons) capacity, including bracket set, copper connection, etc. complete.				
		i) white	Each	2.00	2,649.35	5,299
4	19-7-i	Providing and fitting glazed earthen ware wash hand basin 56x40 cm (22"x16") including bracket set, waste pipe and waste coupling, etc.				
		i) white, with pedestal	Each	5.00	5,169.95	25,850
5	19-8	Providing and fixing stainless steel sink with drain board, size 120x60 cm (48"x24") including bracket set, waste pipe and waste coupling.		2.00	6,405.30	12,811
6	19-30	Providing and fixing, chromium plated mixing valve, for wash hand basin, sink or shower.	Each	7.00	2,228.75	15,601
7	19-16	Providing and fixing, chromium plated soap dish.	Each	5.00	278.75	1,394
8	19-20	Providing and fixing looking glass 55x40 cm (22"x16") size	Each	5.00	638.15	3,191
0	10.27	Dresiding and fining sharming alsted hill as sh				
9	19-27	Providing and fixing chromium plated bib cock:- i) 2 cm (¾")	Each	4.00	1,015.00	4,060
10	19-28	Providing and fixing chromium plated tee stop cock 15mm (¹ / ₂ ").	Each	14.00	955.00	13,370
11	19-34-i	Providing and fixing, floor trap of cast iron, including concrete chamber all round, and C.I. grating:-				
		i) 10x5 cm (4"x2")	Each	7.00	627.95	4,396

DETAILED COST ESTIMATE

ADMIN BLOCK

		PLUMBING WORKS				
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
12	19-36	Providing and fitting 10 cm (4") gully trap, including cement concrete, cost of PVC grating 15x15 cm (6"x6") and masonry chamber 30x30 cm (12"x12").	Each	2.00	1,096.85	2,194
13	19-35-ii	Providing and fitting "P" trap:-				
10	17 55 11	ii) 10 cm (4") glazed.	Each	9.00	283.15	2,548
						,
14	23-47	PPRC Pipe Providing, laying, testing and commissioning of POLYPROPYLENE RANDOM COPOLYMER (PPRC) water supply pipe made of (Dadex/ Popular /Beta/ BBJ)with specified pressure rating PN (PRESSURE NOMINAL) and conforming to DIN8077-8078 code i/c cost of solvent, specials, making jharries complete in all respect as approved and directedby Engineer Incharge.(Internal / External Diameters mentioned).				
		b) PN-20 pipe				
		(i) (1/2") 20 mm	Rft	50.00	48.10	2,405
		(ii) (3/4") 25 mm	Rft	70.00	66.50	4,655
		(iii) (1") 32 mm	Rft	20.00	106.90	2,138
		(iv) (1-1/4") 40 mm	Rft	25.00	161.30	4,033
		G.I Pipe on Roof				
15	23-23	Providing, laying, 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. iii) Heavy Quality b) ³ / ₄ " i/d (20 mm) 3.25mm thick	Rft	30.00	271.60	8,148
			100	20100	271.00	0,110
16	23/46	Valve Providing and fixing CP heavy duty brass Ball valve				
16	23/40	Providing and fixing CP heavy duty brass Ball valve with CP handle of specified dia meter made of Faisal/ Sonex/ Master best quality or equivalent complete in all respect as approved and directed by the Engineer Incharge.				
		ii) 3/4" dia	Each	1.00	1,434.00	1,434
		iii) 1" dia	Each	1.00	1,674.00	1,674

DETAILED COST ESTIMATE

ADMIN BLOCK

		PLUMBING WORKS				
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		uPVC Pipe				
17	19-47	Providing, fixing, testing and commissioning of μ- PVC (Unplasticized polyvinyl Chloride)Nikasi /waste pipe make of dadex/Popular/Beta/BBJ plain/ socket ended conforming to code EN-1401 of specified SDR (Standard Dimension Ratio)including the cost of specials and Solvents complete in all respect as approved and directed by the Engineer Incharge				
		Type (SDR 41/SN-4)				
		(iii) 2"(60 mm)	Rft	20.00	88.45	1,769
		(v) 4"(110 mm)	Rft	80.00	217.25	17,380
		(vi) 6"(160 mm)	Rft	10.00	420.65	4,207
		HDPE Tank				
18	19/51	Providing and hoisting vertical /horizontal type storage tank of required capacity made of rotationally molded from (HDPE), double ply polyethelene of approved manufacturer i/c cost of making connection for inlet/outlet pipe, float valve i/c all cost of specials & labour complete in all respect as approved and directed by the Engineer Incharge.		500	106 60	52,200
			P.Gln	500	106.60	53,300
		Total Rs. (A)				237,223
19	N.S	Non-Schedule Item Providing and making Manhole 2'x2' internal size including 9" thick brick masonry (1:4), 1/2" th. Plastering (1:3) i/side, benching with PCC 1:2:4 4" th. with cement finish, including manhole cover, complete in all respects.		1.00	18,148.97	18,149
			Luch	1.00	10,140.97	10,149
		Total Rs. (B)				18,149
		Total Amount Rs. (A + B)				255,372

DETAILED COST ESTIMATE

ADMIN BUILDING

ELECTDICAL WODKS

	ELECTRICAL WORKS										
Sr. No.	2nd Bi-Annual- 2022 (July to Jun) T.T. Singh	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)					
		Schodulod Itoms (A)									
1	C-24/3-ii	<u>Scheduled Items (A)</u> Supply and erection of PVC pipe for wiring recessed in walls, including bends, inspection joints, boxes, pull boxes, hook, cutting and repair surface etc. completed with all specified. (20 mm									
		i/d)	Rft.	500.00	81.70	40,850					
2	C-24/3-iii	Supply and erection of PVC pipe for wiring recessed in walls, including bends, inspection joints, boxes, pull boxes, hook, cutting and repair surface etc. completed with all specified. (25 mm i/d)	Rft.	320.00	94.60	30,272					
		1/4)	Kit.	520.00	74.00	30,272					
3	C-24/10a.i	Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only). (3.029)	Rft.	950.00	25.70	24,415					
4	C-24/10a.ii	Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only). (7.029)	Rft.	340.00	21.70	7,378					
	C-24/10a.iii	Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only). (7.036)		260.00	40.75	10,595					
5	C-24/14-i	Supply and erection of M.S. sheet box of 16 SWG, 10 cm (4") deep, with 4.75 mm thick (3/16") bakelite sheet top, for recessed wiring, including making holes for regulators, switches, plugs, etc. (4"x4")	Each	9.00	270.60	2,435					
6	C-24/14-ii	Supply and erection of M.S. sheet box of 16 SWG, 10 cm (4") deep, with 4.75 mm thick (3/16") bakelite sheet top, for recessed wiring, including making holes for regulators, switches, plugs, etc. (7"x4")		2.00	372.35	745					

DETAILED COST ESTIMATE

ADMIN BUILDING

	1	ELECTRICAL WOR				
Sr. No.	2nd Bi-Annual- 2022 (July to Jun) T.T. Singh	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
7	C-24/32-ii	Supply and erection of switches 10/15 Amp. (Recessed Type)	Each	14.00	87.35	1,223
8	C-24/36-ii	Supply and erection of 3 pin switch and Plug combined recessed type (10/15Amps)	Each	14.00	149.80	2,097
9	C-24/43	Supply and erection of tube light, including rod, choke, starter with frame, flexible wire, including connection from ceiling rose, etc., complete				
		(i) Double rod (80 watts) with two chokes and 2 starters.	Each	5.00	2,164.65	10,823
		(ii) Single rod (40 watts) with one choke and one starter.	Each	17	1,221.70	20,769
10	C-24/102/a	Providing and fixing Copper winded Exhaust fan with louver and shutter made of Pak/Younas /G.F.C. i/c the cost of necessary cable and hardware for connection from ceiling rose complete as approved and directed by Engineer Incharge.				
		(a) Plastic body (ii) 12 " dia	Each	5.00	3,133.00	15,665
		Sub Total (A)				167,267
12	N.S	Supply, Installation, testing and commissioning of following size 56" ceiling fan, complete with capacitor, hanging rod, canopy, blades, dimmers nuts and bolts complete in all respect.		3.00	7,000.00	21,000
		Sub Total (B)				21,000
		Sub Total (A+B)				188,267

DETAILED COST ESTIMATE

ADMIN BLOCK

		CIVIL WORK				
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Schedule Item				
1	3/21/a/ii	Excavation Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m)				
		a) By Manual				
		ii) in ordinary soil.	1000Cft	1.22	10,677.75	13,027
		Anti-Termite				
2	26/43	Spraying termite proofing by using liquid FMC/Biflex/Terminex Exin/Ms Hextar or equivalent @ specified suspension concenterate (SC), Mixing Ability-HEXTAR with Ratio (1:250) = 540 Sft or equivalent approved liquid applying with shower and certificate will be provided by the contractor for 10-years complete in all respect as approved by the Engineer Incharge.	Sft	1,636.31	9.25	15,136
3	6/5	Plain Cement ConcreteCement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):				
		(i) Ratio 1: 4: 8	100 Cft	2.04	29,326.30	59,826
		Brick work in Foundation				
4	7/4/i	Pacca brick work in foundation and plinth in:-				
		Cement, sand mortar:- Ratio 1:5	100 Cft	7.64	31,756.30	242,618
		Horizontal D.P.C				
5	6/36	Providing and laying damp proof course of cement concrete 1 : 2 : 4 (using cement, sand and shingle), including bitumen coating :-				
		(a) with one coat bitumen and one coat polythene sheet 500gauge				
		i) 1 ¹ / ₂ " thick (40 mm)	100 Sft	2.04	8,639.45	17,624
		Vertical D.P.C				
6	6/37	Providing and laying vertical damp proof course with cement sand plaster and bitumen coating:- (a) with one coat of bitumen and one coat of				
		polythene sheet 500 gauge: ii) Ratio 1:3 ³ / ₄ " thick (20 mm)	100 Sft	2.72	6,244.80	16,986
			100 510	2.12	0,211.00	10,700

DETAILED COST ESTIMATE

ADMIN BLOCK

CIVIL WORK									
2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)				
	Brick work in Super Structure								
7/5	Pacca brick work in ground floor:-								
	i) Cement, sand mortar:- Ratio 1:5	100 Cft	11.18	31,510.10	352,283				
	Concrete Work								
6/6	and screened graded and washed aggregate, in required shape and design, including forms, moulds, shuttering, lifting, compacting, curing, rendering and finishing exposed surface, complete (but								
	Above foundation								
	members laid in situ or precast laid in position, or								
	Type C (nominal mix 1: 2: 4)	P.Cft	299.26	556.50	166,536				
	Steel Work.								
6/12/c	concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding								
	Deformed bars (Grade-60)	100kg	8.55	31,784.50	271,757				
	Sand Filling								
7/30	Supplying and filling sand under floor; or plugging in wells.	100 Cft	4.15	2,943.30	12,215				
	Dwish hallost								
6/2		100 Cft	1.37	8,891.50	12,181				
	Plain Coment Concrete								
6/5	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):								
	Ratio 1: 2: 4	100 Cft	0.69	38,178.90	26,343				
	2022 (July to Dec) Toba Tek Singh 7/5 6/6 6/6	2nd Bi-Annual- 2022 (July to Dec) Toba Tek Singh Description 7/5 Pacca brick work in ground floor:- i) Cement, sand mortar:- Ratio 1:5 Concrete Work 6/6 Providing and laying reinforced cement concrete (including prestressed concrete), using coarse sand and screened graded and washed aggregate, in required shape and design, including forms, moulds, shuttering, lifting, compacting, curing, rendering and finishing exposed surface, complete (but excluding the cost of steel reinforcement, its fabrication and placing in position, etc.):- Above foundation (a) (i) Reinforced cement concrete in roof slab, beams, columns lintels, girders and other structural members laid in situ or precast laid in position, or prestressed members cast in situ, complete in all respects:- Type C (nominal mix 1: 2: 4) Steel Work. 6/12/c Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars):- Deformed bars (Grade-60)	2nd BI-Annual 2022 (Taby to Dec) Description Unit Brick work in Super Structure 1 7/5 Pacca brick work in ground floor:- i) Cement, sand mortar:- Ratio 1:5 100 Cft Concrete Work 100 Cft 6/6 Providing and laying reinforced cement concrete (including prestressed concrete), using coarse sand and screened graded and washed aggregate, in required shape and design, including forms, moulds, shuttering, lifting, compacting, curing, rendering and finishing exposed surface, complete (but excluding the cost of steel reinforcement, its fabrication and placing in position, etc.):- Above foundation (a) (i) Reinforced cement concrete in roof slab, beams, columns lintels, girders and other structural members laid in situ or precast laid in position, or prestressed members cast in situ, complete in all respects:- 7type C (nominal mix 1: 2: 4) P.Cft Steel Work. 100 6/12/c Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars):- 100 kg Deformed bars (Grade-60) 100 kg Sand Filling 100 Cft Brick ballast 100 Cft Brick ballast 100 Cft Dry rammed brick or stone ballast, 1½" to 2"	2nd B1-Annual 2022 (July to bee) Toka Tck Singh Description Unit Quantity Brick work in Super Structure	2nd BT-Annual- Lap to Brei- Tohn Tek Singh Description Unit Quantity Unit Rate (Rs) Brick work in Super Structure				

DETAILED COST ESTIMATE

ADMIN BLOCK

	CIVIL WORK								
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)			
		Porcelain Tile							
13	10/42/c	Providing and laying superb quality Porcelain glazed tiles flooring of MASTER brand of specified size in approved design, Color and Shade with adhesive / bond over 3/4" thick (1:3)cement plaster i/c the cost of sealer for finishing the joints i/c cutting grinding complete in all respect as approved and directed by the Engineer Incharge.							
		c) (Non-Skid Chequred Tiles) 300mmx300mm	Per Sft	378.56	211.60	80,103			
14	10/43/a	Providing and laying superb quality Porcelain glazed tiles of Master brand, skirting/ dado of specified size, Color and Shade with adhesive/ bond over 1/2" thick (1:2)cement plaster i/c the cost of and sealer for finishing the joints, cutting grinding complete in all respect as approved and directed by the Engineer Incharge.							
		a) Full body Glazed Tile							
		(i) 400 mm x 400 mm	Per Sft	52.31	292.75	15,314			
		Ceramic Tile							
15	10/24	Providing and laying superb quality Ceramic tile floors of Master brand of specified size, Glossy/Matt/Texture of approved Color and Shade as per approved design with adhesive bond, over 3/4" thick (1;2) cement sand plaster i/c the cost of sealer for finishing the joints i/c cutting grinding complete in all respects and as approved and directed by the Engineer Incharge.							
		i) 12"x18"/12"x24"/10"x24" /8"x24"/12"x36"	Per Sft	36.00	240.00	8,640			
16	10/25	Providing and laying superb quality Ceramic tiles dado of Master brand of specified size, Glossy/Matt/Texture skirting / dado of approved Color and Shade with adhesive bond over1/2" thick (1:2)cement plaster i/c the cost of sealer for finishing the joints i/c cutting grinding complete in all respects as approved and directed by the Engineer Incharge.							
		i) 12"x18"/12"x24"/10"x24" /8"x24"/12"x36"	Per Sft	102.50	292.75	30,007			

DETAILED COST ESTIMATE

ADMIN BLOCK

	CIVIL WORK								
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)			
		Marble							
17	10/47	Providing and laying 3/4" thick full width Prepolished Marble slab for Vanities / Shelves / Treads/Window Cills , having Uniform texture (Spotless) with adhesive bond over 3/4" thick (1:2) cement sand mortor i/c the cost of matching sealer complete in all respects as approved and directed by the Engineer Incharge.							
		i) China Verona	Sft	30.13	412.35	12,424			
18	11/10/b	Slab Plaster Cement plaster 3/8" (10 mm) thick under soffit of R.C.C. roof slabs only, upto 20' height. (Ratio:- 1:3)	100 Sft	4.15	3,708.60	15,391			
		Cement Plaster							
19	11/9	Cement plaster 1:4 upto 20' (6.00 m) height:-							
		3/4" (20 mm) thick	100 Sft	18.74	4,379.60	82,074			
		Pointing							
20	11/18/a	Cement pointing struck joints, on walls, upto 20' (6.00 m) hiehgt:-							
		a) ratio 1:2	100 Sft	10.68	3,518.35	37,576			
21	11/31	Extra cost of labour and material for red oxide pigment in cement pointing to match with the colour of bricks.	100 Sft	10.68	652.50	6,969			
		Distempering							
22	11/23	Distempering:-							
		iii) three coats	100 Sft	22.89	1,295.00	29,643			
		Wooden Door							
23	12/52	P/F 1-1/2" thick solid flush door comprising of 2.5 mm thick Deodar/Ash/Oak ply with grooves , compressed over 2.5 mm thick commercial ply over 1" thick packing wood in style and rails under proper pressure i/c the cost of nails, tower bolt , handles, glue, sawing charges and lacquar polishing to show the grains of ply properly, sand papering and 3/8" thick matching wooden lipping as approved and directed by the Engineer Incharge.							
			Per Sft	87.50	678.55	59,373			

DETAILED COST ESTIMATE

ADMIN BLOCK

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Formica Sheet				
24	Rate Analysis	Providing and fixing Formica sheet on bathroom door as per drawing and design complete in all respect.	Sft	17.50	75.11	1,314
25	12/17	Providing and fixing 2" wide MS/ GI Chowkat singel/double rebate made of 16 SWG MS sheet pressed/welded / supported with M.S. flat 1- 1/4"x1/8" i/c 6"long M.S. Flat 1"x1/8"hold fasts (6- Nos) welded/screwed, punching of lock hole covered with MS Box,coating with antirust paint including filling with cement sand mortar (1:8) and embedding hold fast in cement concrete (1:2:4) ,complete in all respect as approved and directed by Engineer Incharge				
		(ii) 10.50 " wide	Sft	59.94	621.90	37,275
26	12/28	Providing and fixing 3"x4-1/2" chowkat for doors, windows and C. windows, including holdfast, etc.				
		b) Deodar wood	Sft	7.56	825.85	6,245
27	12/53	Providing and laying 24 SWG aluminum kick plate 4" (100 mm) high, fixed with screws 4" (100 mm) centre to centre, on bottom rail of flush doors only of commercial ply.	Rft	5.00	70.00	350
28	12/58	Providing and fixing ornamental wooden architrave $3" \times (1\frac{1}{2}"$ tapered to $\frac{1}{4}")$ all along the door frame complete in all respect.				
		b) Deodar wood architrave	Sft	17.13	96.65	1,655

DETAILED COST ESTIMATE

ADMIN BLOCK

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)			
		Lock							
29	12/22	Providing and fixing, approved quality mortice lock.	Each	4.00	771.50	3,086			
		Paint							
30	13/5/c	Painting new surface:- Preparing surface and painting of doors and windows any type (including edges):-							
		i) priming coat.	100 Sft	1.75	1,292.00	2,261			
		ii)Two coat	100 Sft	1.75	711.40	1,245			
		Aluminium Window							
31	25/52	Providing and fitting all types of glazed aluminium windows of anodised/ powder coated partly fixed and partly sliding using delux sections of approved manufacturer having frame size of 100 x 30 mm (4"x1-1/4") and leaf frame sections of 50 x 20 mm (2"x ³ /4"), all of 1.6mm thickness including 5 mm thick imported tinted glass with rubber gasket using approved standard latches, hardware etc., as approved by the Engineer in-charge	Per Sft	82.50	1,348.40	111,243			
32	9/5	Roof Insulation Single layer of tiles 9"x4½"x1½" (225x113x40 mm) laid over 4"(100 mm) earth and 1" (25 mm) mud plaster without Bhoosa, grouted with cement sand 1:3 on top of RCC roof slab, provided with 34 lbs. per %Sft. or 1.72 Kg/Sq.m bitumen coating sand blinded.	100 Sft	5.25	11,317.60	59,417			
33	9/45	Providing and Laying Insulation material of Extruded Polystyrene XPS in Rigid Insulation / Foam Board on roof or walls, Density 32-38Kg/M, compressive strength 250-400 kpa, R-value 5 per inch thickness and water obsorption (1% by volume, closed cell type structure) i/c cutting and placing in position. complete in all respect.							
		c) 2" thick	100 Sft	5.25	11,979.55	62,893			
34	26/37/ii	Supplying and laying polythene sheet over D.P.C. under floors and on roofs, etc.							
		under moors und on rooms, etc.							

DETAILED COST ESTIMATE

ADMIN BLOCK

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Khurras				
35	9/15	Khuras on roof 2'x2'x6" (600 x 600 x 150 mm)	Each	2.00	855.00	1,710
		Bottom Khuras				
36	9/16	Bottom Khuras of brick masonry in cement mortar 1:6, 4'x2'x4 ¹ / ₂ " (1200x600x113 mm) over 3" (75 mm) cement concrete 1:4:8.	Each	2.00	1,744.00	3,488
37	1/1	Carriage of 100 Cft. (2.83 cu.m) of all materials like stone aggregate, spawl, kankar lime (unslaked), surkhi, etc. or 150 Cft. (4.25 cu.m) of timber, by truck or by any other means owned by the contractor. (crushed stone aggregate and bajri used in concrete items) (Lead 125 Km)	Cft	517.40	76.73	39,699
		Total Rs.				1,924,170

CALCULATION OF QUANTITIES CIVIL WORK

Sr.							
No.	Description	No.	Length	Width	Height	Qty.	Unit
	Excavation						
1	Excavation Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m)						
	ii) in ordinary soil.						
	Servant Quarter Wall 9" Thick Wall	1	135.75	3.00	3.00	1,221.75	Cft
					Total	1,221.75	Cft
					Total	1.22	%oCft
	Anti-Termite						
2	Spraying termite proofing by using liquid FMC/Biflex/Terminex Exin/Ms Hextar or equivalent @ specified suspension concenterate (SC), Mixing Ability-HEXTAR with Ratio (1:250) = 540 Sft or equivalent approved liquid applying with shower and certificate will be provided by the contractor for 10-years complete in all respect as approved by the Engineer Incharge.						
	Servant Quarter Wall 9" Thick Wall	1	135.75	9.00		1,221.75	Sft
	Floor	1	24.75	16.75		414.56	Sft
					Total	1,636.31	Sft
	Plain Cement Concrete						
3	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):						
	(i) Ratio 1: 4: 8	1	105 75	2.00	0.50	202.62	<u> </u>
	Servant Quarter Wall 9" Thick Wall	1	135.75	3.00	0.50 Total	203.63	Cft Cft
					Total	203.03	Cit
					Total	2.04	%Cft
	Brick work in Foundation						
4	Pacca brick work in foundation and plinth in:- Cement, sand mortar:- Ratio 1:5						
	Servant Quarter Wall 9'' Thick Wall						
	Step - 1	1	135.75	2.250	0.50	152.72	Cft
	Step - 2	1	135.75	1.875	0.50	127.27	Cft

CALCULATION OF QUANTITIES CIVIL WORK

C	Sm										
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit				
	Step - 3	1	135.75	1.500	0.50	101.81	Cft				
	Step - 4	1	135.75	1.125	0.50	76.36	Cft				
	Step - 5	1	135.75	0.750	3.00	305.44	Cft				
					Total	763.59	Cft				
					Total	7.64	%Cft				
					1000		/0010				
	Horizontal D.P.C										
5	Providing and laying damp proof course of cement										
	concrete $1:2:4$ (using cement, sand and shingle),										
	including bitumen coating :-										
	(a) with one coat bitumen and one coat polythene										
	sheet 500gauge										
	i) 1 ¹ /2" thick (40 mm)										
	Servant Quarter Wall 9" Thick Wall	2	135.75	0.75		203.63	Sft				
					Total	203.63	Sft				
					Total	2.04	%Sft				
	Vertical D.P.C										
6	Providing and laying vertical damp proof course										
	with cement sand plaster and bitumen coating:-										
	(a) with one coat of bitumen and one coat of										
	polythene sheet 500 gauge:										
	ii) Ratio 1:3 ³ / ₄ " thick (20 mm)										
	Servant Quarter Wall 9" Thick Wall	1	135.75		2.00	271.50	Sft				
					Total	271.50	Sft				
					Total	2.72	%Sft				
	Brick work in Super Structure										
7	Pacca brick work in ground floor:-										
	i) Cement, sand mortar:- Ratio 1:5										
	Servant Quarter Wall 9" Thick Wall	1	135.75	0.75	11.00	1,119.94	Cft				
	Parapet Wall	1	89.00	0.375	2.50	83.44	Cft				
	Entrance step	2	10.00	1.00	0.75	15.00	Cft				
	D/d Doors and Window										
	D-1	-2	3.50	0.75	7.00	(36.75)	Cft				
	D-2	-1	3.00	0.75	7.00	(15.75)	Cft				
	D-3	-1	2.50	0.75	7.00	(13.13)	Cft				
	W-1	-2	4.00	0.75	4.00	(24.00)	Cft				
	W-2	-1	3.50	0.75	3.00	(7.88)	Cft				
	V-1	-1	2.00	0.75	2.00	(3.00)	Cft				
					Total	1,117.88	Cft				
					Total	11.18	%Cft				

CALCULATION OF QUANTITIES CIVIL WORK

Sr. Width | Height Description No. Length Unit Oty. No. **Concrete Work** Providing and laying reinforced cement concrete 8 (including prestressed concrete), using coarse sand and screened graded and washed aggregate, in required shape and design, including forms, moulds, shuttering, lifting, compacting, curing, rendering and finishing exposed surface, complete (but excluding the cost of steel reinforcement, its fabrication and placing in position, etc.):-Above foundation (a) (i) Reinforced cement concrete in roof slab. beams, columns lintels, girders and other structural members laid in situ or precast laid in position, or prestressed members cast in situ, complete in all respects:-Type C (nominal mix 1: 2: 4) Top Slab 1 27.25 19.25 0.50 262.28 Cft Kitchen slab 1 6.60 10.00 2.00 0.33 Cft 11.25 B-1 1 12.00 0.75 1.25 Cft Doors and window Lintels D-1 2 4.50 0.75 0.75 5.06 Cft D-2 1 4.00 0.75 0.75 2.25 Cft D-3 1 3.50 0.75 0.75 1.97 Cft W-1 2 0.75 5.00 0.75 5.63 Cft W-2 1 4.50 0.75 0.75 2.53 Cft V-1 1 0.75 0.75 3.00 1.69 Cft 299.26 Total Cft

CALCULATION OF QUANTITIES CIVIL WORK

				-			
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Steel Work.						
9	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars):-						
	Deformed bars (Grade-60)					299.26	Cft
	Top Slab & lintel @ 6 lbs / Cft		6.00		=	1,795.54	lbs/cf
			0.00	Total	=	1,795.54	lbs/cf
				Total	=	814.67	Kg.
			Add 5% V			40.73	Kg.
				Total	=	855	Kg
					Total	8.55	%kg
	Sand Filling						
10	Supplying and filling sand under floor; or plugging in wells.						
	Floor	1	24.75	16.75	1.00	414.56	Cft
					Total	414.56	Cft
					Total	4.15	%Cf
	Brick ballast						
11	Dry rammed brick or stone ballast, $1\frac{1}{2}$ " to 2"(40 mm to 50 mm) gauge.						
	Floor	1	24.75	16.75	0.33	136.81	Cft
					Total	136.81	Cft
					Total	1.37	%Cf
	P.C.C						
12	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):						
	Ratio 1: 2: 4						
	Floor	1	24.75	16.75	0.17	69.09	Cft
					Total	0.69	%Cf
					Iotai	0.07	

CALCULATION OF QUANTITIES
CIVIL WORK

Sr. No. Length Width Height Unit Description Oty. No. **Porcelain Tile** Providing and laying superb quality Porcelain 13 glazed tiles flooring of MASTER brand of specified size in approved design, Color and Shade with adhesive / bond over 3/4" thick (1:3)cement plaster i/c the cost of sealer for finishing the joints i/c cutting grinding complete in all respect as approved and directed by the Engineer Incharge. c) (Non-Skid Chequred Tiles) 300mmx300mm 1 24.75 16.75 414.56 Sft D/d Bathroom Area -1 6.00 6.00 (36.00)Sft Total 378.56 Sft Providing and laying superb quality Porcelain 14 glazed tiles of Master brand, skirting/ dado of specified size, Color and Shade with adhesive/ bond over 1/2" thick (1:2)cement plaster i/c the cost of and sealer for finishing the joints, cutting grinding complete in all respect as approved and directed by the Engineer Incharge. a) Full body Glazed Tile (i) 400 mm x 400 mm 52.31 1 158.50 1.00 0.33 Sft 52.31 Total Sft **Ceramic Tile** Providing and laying superb quality Ceramic tile 15 floors of Master brand of specified size, Glossy/Matt/Texture of approved Color and Shade as per approved design with adhesive bond, over 3/4" thick (1;2) cement sand plaster i/c the cost of sealer for finishing the joints i/c cutting grinding complete in all respects and as approved and directed by the Engineer Incharge. i) 12"x18"/12"x24"/10"x24" /8"x24"/12"x36" 1 6.00 6.00 36.00 Sft Total 36.00 Sft Providing and laying superb quality Ceramic tiles 16 dado of Master brand of specified size, Glossy/Matt/Texture skirting / dado of approved Color and Shade with adhesive bond over1/2" thick (1:2)cement plaster i/c the cost of sealer for finishing the joints i/c cutting grinding complete in all respects as approved and directed by the Engineer Incharge.

CALCULATION OF QUANTITIES CIVIL WORK

Sr.	Description	No.	Length	Width	Height	Qty.	Unit
No.	i) 12"x18"/12"x24"/10"x24" /8"x24"/12"x36"	4	6.00		5.00	120.00	Sft
	D/d		0.00		2.00	120100	bit
	D-3	-1	2.50		7.00	(17.50)	Sft
					Total	102.50	Sft
	Marble						
17	Providing and laying 3/4" thick full width Prepolished Marble slab for Vanities / Shelves / Treads/Window Cills , having Uniform texture (Spotless) with adhesive bond over 3/4" thick (1:2) cement sand mortor i/c the cost of matching sealer complete in all respects as approved and directed by the Engineer Incharge.						
	i) China Verona						
	W-1	2	4.00	0.75		6.00	Sft
	W-2	1	3.50	0.75		2.63	Sft
	V-1	1	2.00	0.75		1.50	Sft
	Kitchen	1	10.00	2.00		20.00	Sft
					Total	30.13	Sft
	Slab Plaster				Total	50.15	510
18	Cement plaster 3/8" (10 mm) thick under soffit of R.C.C. roof slabs only, upto 20' height. (Ratio:-1:3)						
		1	24.75	16.75		414.56	Sft
					Total	4.15	%Sf
	Cement Plaster						
19	Cement plaster 1:4 upto 20' (6.00 m) height:-						
	3/4" (20 mm) thick						
	Servant Quarter Wall 9" Thick Wall	2	135.75		11.00	2,986.50	Sft
	D/d Outer wall outer side	-1	89.00		11.00	(979.00)	Sft
	D/d Doors and Window					(10.00)	
	D-1	-2	3.50		7.00	(49.00)	Sft
	D-2	-1	3.00		7.00	(21.00)	Sft
	D-3	-1	2.50		7.00	(17.50)	Sft
	W-1	-2	4.00		4.00	(32.00)	Sft
	W-2	-1	3.50		3.00	(10.50)	Sft
	V-1	-1	2.00		2.00	(4.00)	Sft
					Total	1,873.50	Sft
					Total	18.74	%Sf
						10,77	/00

CALCULATION OF QUANTITIES CIVIL WORK

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
INO.	Pointing						
20	Cement pointing struck joints, on walls, upto 20' (6.00 m) hiehgt:-						
	a) ratio 1:2						
	Outer Walls	1	89.00		12.00	1,068.00	Sft
					Total	10.68	%Sft
21	Extra cost of labour and material for red oxide pigment in cement pointing to match with the colour of bricks.				Total	10.68	%Sft
	Distempering						
22	Distempering:-						
	iii) three coats Slab + Wall Area				Total	22.89	%Sft
	Wooden Door						
23	P/F 1-1/2" thick solid flush door comprising of 2.5 mm thick Deodar/Ash/Oak ply with grooves , compressed over 2.5 mm thick commercial ply over 1" thick packing wood in style and rails under proper pressure i/c the cost of nails, tower bolt , handles, glue, sawing charges and lacquar polishing to show the grains of ply properly, sand papering and 3/8" thick matching wooden lipping as approved and directed by the Engineer Incharge.						
	D-1	2	3.50		7.00	49.00	Sft
	D-2	1	3.00		7.00	21.00	Sft
	D-3	1	2.50		7.00	17.50	Sft
					Total	87.50	Sft

ADMIN BLOCK CALCULATION OF QUANTITIES CIVIL WORK

CIVIL WORK									
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit		
	Formica Sheet								
24	Providing and fixing Formica sheet on bathroom door as per drawing and design complete in all respect.								
	D-3	1	2.50		7.00	17.50	Sft		
25	Providing and fixing 2" wide MS/ GI Chowkat singel/double rebate made of 16 SWG MS sheet pressed/welded / supported with M.S. flat 1- 1/4"x1/8" i/c 6"long M.S. Flat 1"x1/8"hold fasts (6- Nos) welded/screwed, punching of lock hole covered with MS Box,coating with antirust paint including filling with cement sand mortar (1:8) and embedding hold fast in cement concrete (1:2:4) ,complete in all respect as approved and directed by Engineer Incharge								
	(ii) 10.50 " wide								
	D-1	2	17.50	0.875		30.63	Sft		
-	D-2	1	17.00	0.875		14.88	Sft		
	D-3	1	16.50	0.875		14.44	Sft		
					Total	59.94	Sft		
26	Providing and fixing 3"x4-1/2" chowkat for doors, windows and C. windows, including holdfast, etc.								
	b) Deodar wood								
	D-3	1	16.50	0.46		7.56	Sft		
					Total	7.56	Sft		
27	Providing and laying 24 SWG aluminum kick plate 4" (100 mm) high, fixed with screws 4" (100 mm) centre to centre, on bottom rail of flush doors only								
	of commercial ply.	2	2.50			5.00	Rft		
28	Providing and fixing ornamental wooden architrave 3" x (1 ¹ / ₂ " tapered to ¹ / ₄ ") all along the door frame complete in all respect.								
	b) Deodar wood architrave								
	D-1	2	17.50	0.25		8.75	Sft		
	D-2	1	17.00	0.25		4.25	Sft		
	D-3	1	16.50	0.25		4.13	Sft		
					Total	17.13	Sft		

ADMIN BLOCK CALCULATION OF QUANTITIES CIVIL WORK

CIVIL WORK										
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit			
	Lock									
29	Providing and fixing, approved quality mortice lock.	4				4.00	Each			
	Paint									
30	Painting new surface:- Preparing surface and painting of doors and windows any type (including edges):-									
	i) priming coat.									
	ii)Two coat				Total	1.75	%Sft			
	Aluminium Window									
31	Providing and fitting all types of glazed aluminium windows of anodised/ powder coated partly fixed and partly sliding using delux sections of approved manufacturer having frame size of $100 \times 30 \text{ mm}$ (4"x1-1/4") and leaf frame sections of $50 \times 20 \text{ mm}$ (2"x¾"), all of 1.6mm thickness including 5 mm thick imported tinted glass with rubber gasket using approved standard latches, hardware etc., as approved by the Engineer in-charge									
	W-1	3	4.00		4.00	48.00	Sft			
	W-2	1	3.50		3.00	10.50	Sft			
	V-1	6	2.00		2.00	24.00	Sft			
					Total	82.50	Sft			
32	Roof Insulation Single layer of tiles 9"x4½"x1½" (225x113x40 mm) laid over 4"(100 mm) earth and 1" (25 mm) mud plaster without Bhoosa, grouted with cement sand 1:3 on top of RCC roof slab, provided with 34 lbs. per %Sft. or 1.72 Kg/Sq.m bitumen coating sand blinded.									
	Roof area	1	27.25	19.25		524.56	Sft			
					Total	524.56	Sft			
					Total	5.25	%Sft			
33	Supplying and laying polythene sheet over D.P.C. under floors and on roofs, etc.									
	ii) 500 gauge (.005" thick)				Total	1,050.00	Sft			

	PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB ADMIN BLOCK CALCULATION OF QUANTITIES CIVIL WORK										
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit				
	Khurras										
34	Khuras on roof 2'x2'x6" (600 x 600 x 150 mm)	2				2.00	Each				
	Bottom Khuras										
35	Bottom Khuras of brick masonry in cement mortar 1:6, 4'x2'x4 ¹ / ₂ " (1200x600x113 mm) over 3" (75										
	mm) cement concrete 1:4:8.	2				2.00	Each				

DETAILED COST ESTIMATE

ADMIN BLOCK

	ADMIN BLOCK PLUMBING WORKS									
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)				
		Schedule Item								
		Indian W.C								
1	19-4-i	Providing and fitting glazed earthen ware water closet, squatter type (Orisa pattern), combined with foot rest. i) white		1.00	2,218.35	2,218				
2	19-13-i	Providing and fitting plastic made low down flushing cistern 13.63 litre (3 gallons) capacity, including bracket set, copper connection, etc. complete.								
		i) white	Each	1.00	2,649.35	2,649				
3	19-7-i	Providing and fitting glazed earthen ware wash hand basin 56x40 cm (22"x16") including bracket set, waste pipe and waste coupling, etc.								
		i) white, with pedestal	Each	1.00	5,169.95	5,170				
4	19-8	Providing and fixing stainless steel sink with drain board, size 120x60 cm (48"x24") including bracket set, waste pipe and waste coupling.		1.00	6,405.30	6,405				
		set, waste pipe and waste coupling.	Lacii	1.00	0,405.50	0,405				
5	19-29	Providing and fixing chromium plated shower rose:-								
		ii) 2x15 cm (¾"x6")	Each	1.00	1,195.00	1,195				
6	19-30	Providing and fixing, chromium plated mixing valve, for wash hand basin, sink or shower.	Each	2.00	2,228.75	4,458				
7	19-16	Providing and fixing, chromium plated soap dish.	Each	1.00	278.75	279				
8	19-19-i	Providing and fixing, chromium plated towel rail:-	Each	1.00	478.20	478				
9	19-20	Providing and fixing looking glass 55x40 cm (22"x16") size	Each	1.00	638.15	638				
10	10.07									
10	19-27	Providing and fixing chromium plated bib cock:- i) 2 cm (¾")	Each	4.00	1,015.00	4,060				
11	19-28	Providing and fixing chromium plated tee stop cock 15mm (¹ / ₂ ").	Each	3.00	955.00	2,865				
12	19-34-i	Providing and fixing, floor trap of cast iron, including concrete chamber all round, and C.I. grating:-								
		i) 10x5 cm (4"x2")	Each	3.00	627.95	1,884				

DETAILED COST ESTIMATE

ADMIN BLOCK

		PLUMBING WORKS				
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
13	19-36	Providing and fitting 10 cm (4") gully trap, including cement concrete, cost of PVC grating 15x15 cm (6"x6") and masonry chamber 30x30 cm (12"x12").	Each	2.00	1,096.85	2,194
14	19-35-ii	Providing and fitting "P" trap:- ii) 10 cm (4") glazed.	Each	5.00	283.15	1,416
15	23-47	PPRC Pipe Providing, laying, testing and commissioning of POLYPROPYLENE RANDOM COPOLYMER (PPRC) water supply pipe made of (Dadex/ Popular /Beta/ BBJ)with specified pressure rating PN (PRESSURE NOMINAL) and conforming to DIN8077-8078 code i/c cost of solvent, specials, making jharries complete in all respect as approved and directedby Engineer Incharge.(Internal / External Diameters mentioned).				
		b) PN-20 pipe				
		(i) (1/2") 20 mm	Rft	50.00	48.75	2,438
		(ii) (3/4") 25 mm	Rft	20.00	66.50	1,330
		(iii) (1") 32 mm	Rft	20.00	106.90	2,138
		(iv) (1-1/4") 40 mm	Rft	20.00	161.30	3,226
		G.I Pipe on Roof				
16	23-23	Providing, laying, 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.				
		iii) Heavy Quality b) ¾" i/d (20 mm) 3.25mm thick	Rft	40.00	271.60	10,864
17	23/46	Valve Providing and fixing CP heavy duty brass Ball valve with CP handle of specified dia meter made of Faisal/ Sonex/ Master best quality or equivalent complete in				
		all respect as approved and directed by the Engineer Incharge.				
		ii) 3/4" dia	Each	2.00	1,434.00	2,868

DETAILED COST ESTIMATE

ADMIN BLOCK

		PLUMBING WORKS				
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		uPVC Pipe				
18	19-47	Providing, fixing, testing and commissioning of μ- PVC (Unplasticized polyvinyl Chloride)Nikasi /waste pipe make of dadex/Popular/Beta/BBJ plain/ socket ended conforming to code EN-1401 of specified SDR (Standard Dimension Ratio)including the cost of specials and Solvents complete in all respect as approved and directed by the Engineer Incharge				
		Type (SDR 41/SN-4)				
		(iii) 2"(60 mm)	Rft	20.00	88.45	1,769
		(v) 4"(110 mm)	Rft	40.00	217.25	8,690
		(vi) 6"(160 mm)	Rft	10.00	420.65	4,207
		HDPE Tank				
19	19/51	Providing and hoisting vertical /horizontal type storage tank of required capacity made of rotationally molded from (HDPE), double ply polyethelene of approved manufacturer i/c cost of making connection for inlet/outlet pipe, float valve i/c all cost of specials & labour complete in all respect as approved and directed by the Engineer Incharge.		500	106.60	53,300
			r.uii	500	100.00	55,500
		Total Rs. (A)				130,086
		Non-Schedule Item				
20	N.S	Providing and making Manhole 2'x2' internal size including 9" thick brick masonry (1:4), 1/2" th. Plastering (1:3) i/side, benching with PCC 1:2:4 4" th. with cement finish, including manhole cover,				
		complete in all respects.	Each	1.00	18,148.97	18,149
		Total Rs. (B)				18,149
		Total Amount Rs. (A + B)				148,235

DETAILED COST ESTIMATE

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	STAFF QUARTER ELECTRICAL WORKS										
Sr. No.	2nd Bi-Annual- 2022 (July to Jun) T.T. Singh	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)					
		Scheduled Items (A)									
1	C-24/3-ii	Supply and erection of PVC pipe for wiring recessed in walls, including bends, inspection joints, boxes, pull boxes, hook, cutting and repair surface etc. completed with all specified. (20 mm i/d)		450.00	81.70	36,765					
2	C-24/3-iii	Supply and erection of PVC pipe for wiring recessed in walls, including bends, inspection joints, boxes, pull boxes, hook, cutting and repair surface etc. completed with all specified. (25 mm i/d)		220.00	94.60	20,812					
3	C-24/10a.i	Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only). (3.029)	Rft.	950.00	25.70	24,415					
4	C-24/10a.ii	Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only). (7.029)		340.00	21.70	7,378					
	C-24/10a.iii	Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only). (7.036)		290.00	40.75	11,818					
5	C-24/14-i	Supply and erection of M.S. sheet box of 16 SWG, 10 cm (4") deep, with 4.75 mm thick (3/16") bakelite sheet top, for recessed wiring, including making holes for regulators, switches, plugs, etc. (4"x4")		2.00	270.60	541					
6	C-24/14-ii	Supply and erection of M.S. sheet box of 16 SWG, 10 cm (4") deep, with 4.75 mm thick (3/16") bakelite sheet top, for recessed wiring, including making holes for regulators, switches, plugs, etc. (7"x4")		2.00	372.35	745					

DETAILED COST ESTIMATE

STAFF QUARTER

		ELECTRICAL WOR				
Sr. No.	2nd Bi-Annual- 2022 (July to Jun) T.T. Singh	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
7	C-24/32-ii	Supply and erection of switches 10/15 Amp.				
		(Recessed Type)	Each	4.00	87.35	349
8	C-24/36-ii	Supply and erection of 3 pin switch and Plug combined recessed type (10/15Amps)	Each	9.00	149.80	1,348
9	C-24/43-	Supply and erection of tube light, including rod, choke, starter with frame, flexible wire, including connection from ceiling rose, etc., complete				
		(i) Double rod (80 watts) with two chokes and 2 starters.	Each	3.00	2,164.65	6,494
		(ii) Single rod (40 watts) with one choke and one starter.	Each	17	1,221.70	20,769
10	C-24/102/a	Providing and fixing Copper winded Exhaust fan with louver and shutter made of Pak/Younas /G.F.C. i/c the cost of necessary cable and hardware for connection from ceiling rose complete as approved and directed by Engineer Incharge.				
		(a) Plastic body (ii) 12 " dia	Each	2.00	3,133.00	6,266
		Sub Total (A)				137,700
12	N.S	Supply, Installation, testing and commissioning of following size 56" ceiling fan, complete with capacitor, hanging rod, canopy, blades, dimmers nuts and bolts complete in all respect.		2.00	7,000.00	14,000
		Sub Total (B)				14,000
		Sub Total (A+B)				151,700

DETAILED COST ESTIMATE

WORK SHOP

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Schedule Item				
1	2/21/ //::	Excavation				
1	3/21/a/ii	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m)				
		a) By Manual				
		ii) in ordinary soil.	1000Cft	0.49	10,677.75	5,232
		Anti-Termite				
2	26/43	Spraying termite proofing by using liquid FMC/Biflex/Terminex Exin/Ms Hextar or equivalent @ specified suspension concenterate (SC), Mixing Ability-HEXTAR with Ratio (1:250) = 540 Sft or equivalent approved liquid applying with shower and certificate will be provided by the contractor for 10-years complete in all respect as approved by the Engineer Incharge.				
		approved by the Engineer menarge.	Sft	606.75	9.25	5,612
		Plain Cement Concrete				
3	6/5	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):		0.01	20.000000	22.470
		(i) Ratio 1: 4: 8	100 Cft	0.81	28,986.90	23,479
		Brick work in Foundation				
4	7/4/i	Pacca brick work in foundation and plinth in:-				
		Cement, sand mortar:- Ratio 1:5	100 Cft	4.11	29,326.30	120,531
		Horizontal D.P.C				
5	6/36	Providing and laying damp proof course of cement concrete 1 : 2 : 4 (using cement, sand and shingle), including bitumen coating :-				
		(a) with one coat bitumen and one coat polythene				
		sheet 500gauge i) 1½" thick (40 mm)	100 Sft	0.77	8,639.45	6,652
			100 SIL	0.77	0,037.43	0,032
		Vertical D.P.C				
6	6/37	Providing and laying vertical damp proof course with cement sand plaster and bitumen coating:- (a) with one coat of bitumen and one coat of polythene sheet 500 gauge:				

DETAILED COST ESTIMATE

WORK SHOP

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		ii) Ratio 1:3 3/4 " thick (20 mm)	100 Sft	1.03	6,244.80	6,432
		Brick work in Super Structure				
7	7/5	Pacca brick work in ground floor:-				
		i) Cement, sand mortar:- Ratio 1:5	100 Cft	4.71	31,510.10	148,413
		Concrete Work				
8	6/6	Providing and laying reinforced cement concrete (including prestressed concrete), using coarse sand and screened graded and washed aggregate, in required shape and design, including forms, moulds, shuttering, lifting, compacting, curing, rendering and finishing exposed surface, complete (but excluding the cost of steel reinforcement, its fabrication and placing in position, etc.):-				
		Above foundation				
		(a) (i) Reinforced cement concrete in roof slab, beams, columns lintels, girders and other structural members laid in situ or precast laid in position, or prestressed members cast in situ, complete in all respects:-				
		Type C (nominal mix 1: 2: 4)	P.Cft	80.58	556.50	44,842
		Steel Work.				
9	6/12/c	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars):-				
		Deformed bars (Grade-60)	100kg	2.30	31,784.50	73,104
10	7/30	Sand Filling Supplying and filling sand under floor; or plugging in wells.	100 Cft	1.10	2,943.30	3,238
		Brick ballast				
11	6/2	Dry rammed brick or stone ballast, 1 ¹ / ₂ " to 2"(40 mm to 50 mm) gauge.	100 Cft	0.36	8,891.50	3,201

DETAILED COST ESTIMATE

WORK SHOP

Plain Cement Concrete Image: Compact Concrete Plain Cement Co	Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
compacting, finishing and curing complete (including screening and washing of stone aggregate): Image: Compacting and washing of stone aggregate): Ratio 1: 2: 4 100 Cft 0.18 38,178.90 Porcelain Tile Image: Compacting and laying superb quality Porcelain glazed tiles flooring of MASTER brand of specified size in approved design, Color and Shade with adhesive / bond over 3/4" thick (1:3)cement plaster i/c the cost of scaler for finishing the joints i/c curing grinding complete in all respect as approved and directed by the Engineer Incharge. Image: Compacting Complete in all respect as approved and directed by the Engineer Incharge. 14 10/43/a Providing and laying superb quality Porcelain glazed tiles of Master brand, skirting/ dado of specified size, Color and Shade with adhesive/ bond over 1/2" thick (1:2)cement plaster i/c the cost of and sealer for finishing the joints, curting grinding complete in all respect as approved and directed by the Engineer Incharge. Image: Compacting Complete in all respect as approved and directed by the Engineer Incharge. 15 10/24 Providing and laying superb quality Ceramic tile floors of Master brand of specified size, Glossy/Matt/Texture of approved Color and Shade as per approved design with adhesive bond, over 3/4" thick (1:2) cement sand plaster i/c the cost of scaler for finishing the joints i/c curting grinding complete in all respects and as approved and directed by the Engineer Incharge. Image: Compacting tile			Plain Cement Concrete				
13 10/42/c Procelain Tile Image: Constraint of the system of the s	12	6/5	compacting, finishing and curing complete (including screening and washing of stone				
13 10/42/c Providing and laying superb quality Porcelain glazed tiles flooring of MASTER brand of specified size in approved design, Color and Shade with adhesive / bond over 3/4" thick (1:3)cement plaster i/c the cost of sealer for finishing the joints i/c cutting grinding complete in all respect as approved and directed by the Engineer Incharge. Image: Color and Shade with adhesive / bond over 3/4" thick (1:2)cement plaster i/c the cost of sealer for finishing the joints, i/c cutting grinding superb quality Porcelain glazed tiles of Master brand, skirting/ dado of specified size, Color and Shade with adhesive/ bond over 1/2" thick (1:2)cement plaster i/c the cost of and sealer for finishing the joints, cutting grinding complete in all respect as approved and directed by the Engineer Incharge. Image: Color and Shade with adhesive/ bond over 1/2" thick (1:2)cement plaster i/c the cost of and sealer for finishing the joints, cutting grinding complete in all respect as approved and directed by the Engineer Incharge. Image: Color and Shade with adhesive/ bond over 1/2" thick (1:2)cement plaster i/c the cost of and sealer for finishing the joints, cutting grinding complete in all respect as approved and directed by the Engineer Incharge. Image: Color and Shade with adhesive/ bond over 1/2" thick (1:2)cement plaster i/c the cost of addirected by the Engineer Incharge. Image: Color addirected by the Engineer Incharge. 10 Image: Color addirected by the Engineer Incharge. Image: Color addirected by the E			Ratio 1: 2: 4	100 Cft	0.18	38,178.90	6,872
13 10/42/c Providing and laying superb quality Porcelain glazed tiles flooring of MASTER brand of specified size in approved design, Color and Shade with adhesive / bond over 3/4" thick (1:3)cement plaster i/c the cost of sealer for finishing the joints i/c cutting grinding complete in all respect as approved and directed by the Engineer Incharge. Image: Color and Shade with adhesive / bond over 3/4" thick (1:2)cement plaster i/c the cost of sealer for finishing the joints i/c cutting grinding superb quality Porcelain glazed tiles of Master brand, skirting/ dado of specified size, Color and Shade with adhesive/ bond over 1/2" thick (1:2)cement plaster i/c the cost of and sealer for finishing the joints, cutting grinding complete in all respect as approved and directed by the Engineer Incharge. Image: Color and Shade with adhesive/ bond over 1/2" thick (1:2)cement plaster i/c the cost of and sealer for finishing the joints, cutting grinding complete in all respect as approved and directed by the Engineer Incharge. 14 Image:							
glazed tiles flooring of MASTER brand of specified size in approved design, Color and Shade with adhesive / bond over 3/4" thick (1:3)cement plaster i/c the cost of sealer for finishing the joints i/c cutting grinding complete in all respect as approved and directed by the Engineer Incharge. c) (Non-Skid Chequred Tiles) 300mmx300mm Per Sft 110.44 211.6 14 10/43/a Providing and laying superb quality Porcelain glazed tiles of Master brand, skirting/ dado of specified size, Color and Shade with adhesive/ bond over 1/2" thick (1:2)cement plaster i/c the cost of and sealer for finishing the joints, cutting grinding complete in all respect as approved and directed by the Engineer Incharge. — — a) Full body Glazed Tile — — — 15 10/24 Providing and laying superb quality Ceramic tile floors of Master brand of specified size, Glossy/Matt/Texture of approved Color and Shade as per approved design with adhesive bond, over 3/4" thick (1:2) cement sand plaster i/c the cost of sealer for finishing the joints i/c cutting grinding complete in all respects and as approved and directed by the Engineer Incharge. —							
14 10/43/a Providing and laying superb quality Porcelain glazed tiles of Master brand, skirting/ dado of specified size, Color and Shade with adhesive/ bond over 1/2" thick (1:2)cement plaster i/c the cost of and sealer for finishing the joints, cutting grinding complete in all respect as approved and directed by the Engineer Incharge. Image: Color and Shade with adhesive/ bond over 1/2" thick (1:2)cement plaster i/c the cost of and sealer for finishing the joints, cutting grinding complete in all respect as approved and directed by the Engineer Incharge. Image: Color and Shade with adhesive/ bond over 1/2" thick (1:2)cement plaster i/c the cost of 1/2" thick (1:2) cement sand plaster i/c the cost of 1/2" thick (1:2) cement sand plaster i/c the cost of 1/2" thick (1:2) cement sand plaster i/c the cost of 1/4" thick (1:2) cement sand plaster i/c the cost of sealer for finishing the joints i/c cutting grinding complete in all respects and as approved and directed by the Engineer Incharge. 15 10/24 Providing and laying superb quality Ceramic tile floors of Master brand of specified size, Glossy/Matt/Texture of approved Color and Shade as per approved design with adhesive bond, over 3/4" thick (1:2) cement sand plaster i/c the cost of sealer for finishing the joints i/c cutting grinding complete in all respects and as approved and directed by the Engineer Incharge. Image: Complete in all respects and as approved and directed by the Engineer Incharge.	13	10/42/c	glazed tiles flooring of MASTER brand of specified size in approved design, Color and Shade with adhesive / bond over 3/4" thick (1:3)cement plaster i/c the cost of sealer for finishing the joints i/c cutting grinding complete in all respect as				
glazed tiles of Master brand, skirting/ dado of specified size, Color and Shade with adhesive/ bond over 1/2" thick (1:2)cement plaster i/c the cost of and sealer for finishing the joints, cutting grinding complete in all respect as approved and directed by the Engineer Incharge			c) (Non-Skid Chequred Tiles) 300mmx300mm	Per Sft	110.44	211.6	23,369
(i) 400 mm x 400 mm Per Sft 14.52 292.75 Ceramic Tile Image: Ceramic Tile floors of Master brand of specified size, Glossy/Matt/Texture of approved Color and Shade as per approved design with adhesive bond, over 3/4" thick (1;2) cement sand plaster i/c the cost of sealer for finishing the joints i/c cutting grinding complete in all respects and as approved and directed by the Engineer Incharge. Image: Ceramic Tile floors of Master brand of specified size, Glossy/Matt/Texture of approved Color and Shade as per approved design with adhesive bond, over 3/4" thick (1;2) cement sand plaster i/c the cost of sealer for finishing the joints i/c cutting grinding complete in all respects and as approved and directed by the Engineer Incharge. Image: Ceramic Tile floors and plaster Incharge.	14	10/43/a	glazed tiles of Master brand, skirting/ dado of specified size, Color and Shade with adhesive/ bond over 1/2" thick (1:2)cement plaster i/c the cost of and sealer for finishing the joints, cutting grinding complete in all respect as approved and				
Image: Constraint of the second se			a) Full body Glazed Tile				
15 10/24 Providing and laying superb quality Ceramic tile floors of Master brand of specified size, Glossy/Matt/Texture of approved Color and Shade as per approved design with adhesive bond, over 3/4" thick (1;2) cement sand plaster i/c the cost of sealer for finishing the joints i/c cutting grinding complete in all respects and as approved and directed by the Engineer Incharge.			(i) 400 mm x 400 mm	Per Sft	14.52	292.75	4,251
15 10/24 Providing and laying superb quality Ceramic tile floors of Master brand of specified size, Glossy/Matt/Texture of approved Color and Shade as per approved design with adhesive bond, over 3/4" thick (1;2) cement sand plaster i/c the cost of sealer for finishing the joints i/c cutting grinding complete in all respects and as approved and directed by the Engineer Incharge.							
i) 12"x18"/12"x24"/10"x24" /8"x24"/12"x36" Per Sft 17.00 240.00	15	10/24	Providing and laying superb quality Ceramic tile floors of Master brand of specified size, Glossy/Matt/Texture of approved Color and Shade as per approved design with adhesive bond, over 3/4" thick (1;2) cement sand plaster i/c the cost of sealer for finishing the joints i/c cutting grinding complete in all respects and as approved and				
			i) 12"x18"/12"x24"/10"x24" /8"x24"/12"x36"	Per Sft	17.00	240.00	4,080
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DETAILED COST ESTIMATE

WORK SHOP

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
16	10/25	Providing and laying superb quality Ceramic tiles dado of Master brand of specified size, Glossy/Matt/Texture skirting / dado of approved Color and Shade with adhesive bond over1/2" thick (1:2)cement plaster i/c the cost of sealer for finishing the joints i/c cutting grinding complete in all respects as approved and directed by the Engineer Incharge.				
		i) 12"x18"/12"x24"/10"x24" /8"x24"/12"x36"	Per Sft	70.00	292.75	20,493
		Slab Plaster				
17	11/10/b	Cement plaster 3/8" (10 mm) thick under soffit of R.C.C. roof slabs only, upto 20' height. (Ratio:-1:3)	100 Sft	1.10	3,708.60	4,079
		Cement Plaster				
18	11/9	Cement plaster 1:4 upto 20' (6.00 m) height:- 3/4" (20 mm) thick	100 Sft	6.45	4,379.60	28,248
		Pointing				
19	11/18/a	Cement pointing struck joints, on walls, upto 20' (6.00 m) hiehgt:-				
		a) ratio 1:2	100 Sft	5.64	3,518.35	19,843
20	11/31	Extra cost of labour and material for red oxide pigment in cement pointing to match with the colour of bricks.	100 Sft	5.64	652.50	3,680
		Distempering				
21	11/23	Distempering:-				
		iii) three coats	100 Sft	12.72	1,295.00	16,472
		Wooden Door				
22	12/52	P/F 1-1/2" thick solid flush door comprising of 2.5 mm thick Deodar/Ash/Oak ply with grooves , compressed over 2.5 mm thick commercial ply over 1" thick packing wood in style and rails under proper pressure i/c the cost of nails, tower bolt , handles, glue, sawing charges and lacquar polishing to show the grains of ply properly, sand papering and 3/8" thick matching wooden lipping as approved and directed by the Engineer Incharge.				
			Per Sft	42.00	678.55	28,499

DETAILED COST ESTIMATE

WORK SHOP

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Formica Sheet				
23	Rate Analysis	Providing and fixing Formica sheet on bathroom door as per drawing and design complete in all respect.	Sft	17.50	75.11	1,314
24	12/17	Providing and fixing 2" wide MS/ GI Chowkat singel/double rebate made of 16 SWG MS sheet pressed/welded / supported with M.S. flat 1- 1/4"x1/8" i/c 6"long M.S. Flat 1"x1/8"hold fasts (6- Nos) welded/screwed, punching of lock hole covered with MS Box,coating with antirust paint including filling with cement sand mortar (1:8) and embedding hold fast in cement concrete (1:2:4) ,complete in all respect as approved and directed by Engineer Incharge				
		(ii) 10.50 " wide	Sft	15.31	621.90	9,523
25	12/28	Providing and fixing 3"x4-1/2" chowkat for doors, windows and C. windows, including holdfast, etc.				
		b) Deodar wood	Sft	7.56	825.85	6,245
26	12/53	Providing and laying 24 SWG aluminum kick plate 4" (100 mm) high, fixed with screws 4" (100 mm) centre to centre, on bottom rail of flush doors only of commercial ply.	Rft	5.00	70.00	350
27	12/58	Providing and fixing ornamental wooden architrave 3" x (1 ¹ / ₂ " tapered to ¹ / ₄ ") all along the door frame complete in all respect.				
		b) Deodar wood architrave	Sft	4.38	96.65	423
		Lock				
28	12/22	Providing and fixing, approved quality mortice lock.	Each	2.00	771.50	1,543
29	13/5/c	PaintPainting new surface:-Preparing surface and painting of doors andwindows any type (including edges):-i) priming coat.	100 Sft	0.84	1,292.00	1,085
		ii)Two coat	100 Sft	0.84	711.40	598

DETAILED COST ESTIMATE

WORK SHOP

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Aluminium Window				
30	25/52	Providing and fitting all types of glazed aluminium windows of anodised/ powder coated partly fixed and partly sliding using delux sections of approved manufacturer having frame size of 100 x 30 mm (4"x1-1/4") and leaf frame sections of 50 x 20 mm (2"x ³ /4"), all of 1.6mm thickness including 5 mm thick imported tinted glass with rubber gasket using approved standard latches, hardware etc., as approved by the Engineer in-charge		20.00	1,348.40	26,968
			101510	20.00	1,5 10110	20,500
		Roof Insulation				
31	9/5	Single layer of tiles 9"x4½"x1½" (225x113x40 mm) laid over 4"(100 mm) earth and 1" (25 mm) mud plaster without Bhoosa, grouted with cement sand 1:3 on top of RCC roof slab, provided with 34 lbs. per %Sft. or 1.72 Kg/Sq.m bitumen coating sand blinded.		1.46	11,317.60	16,524
32	9/45	Providing and Laying Insulation material of Extruded Polystyrene XPS in Rigid Insulation / Foam Board on roof or walls, Density 32-38Kg/M, compressive strength 250-400 kpa, R-value 5 per inch thickness and water obsorption (1% by volume, closed cell type structure) i/c cutting and placing in position. complete in all respect.				
		c) 2" thick	100 Sft	1.46	11,979.55	17,490
33	26/37/ii	Supplying and laying polythene sheet over D.P.C. under floors and on roofs, etc.				
		ii) 500 gauge (.005" thick)	Per Sft	292.00	7.85	2,292
34	9/15	Khurras Khuras on roof 2'x2'x6" (600 x 600 x 150 mm)	Each	2.00	855.00	1,710
35	9/16	Bottom Khuras Bottom Khuras of brick masonry in cement mortar 1:6, 4'x2'x4 ¹ / ₂ " (1200x600x113 mm) over 3" (75 mm) cement concrete 1:4:8.	Each	2.00	1,744.00	3,488

DETAILED COST ESTIMATE

WORK SHOP

Sr.	2nd BI-Annual- 2022				Unit Rate	Amount
No.	(July to Dec) Toba Tek Singh	Description	Unit	Quantity	(Rs)	(Rs)
		Shed				
		Excavation				
36	3/21/a/ii	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m)				
		a) By Manual	1000 70			10.041
		ii) in ordinary soil.	1000Cft	1.86	10,677.75	19,861
		Anti-Termite				
37	26/43	Spraying termite proofing by using liquid FMC/Biflex/Terminex Exin/Ms Hextar or equivalent @ specified suspension concenterate (SC), Mixing Ability-HEXTAR with Ratio (1:250) = 540 Sft or equivalent approved liquid applying with shower and certificate will be provided by the contractor for 10-years complete in all respect as approved by the Engineer Incharge.	Sft	818.00	9.25	7,567
		Plain Cement Concrete				
38	6/5	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):				
		(i) Ratio 1: 4: 8	100 Cft	1.16	28,986.90	33,625
		Concrete Work				
39	6/6	Providing and laying reinforced cement concrete (including prestressed concrete), using coarse sand and screened graded and washed aggregate, in required shape and design, including forms, moulds, shuttering, lifting, compacting, curing, rendering and finishing exposed surface, complete (but excluding the cost of steel reinforcement, its fabrication and placing in position, etc.):-				
		In Foundation				
		 (a)(iii) Reinforced cement concrete in slab of rafts / strip foundation, base slab of column and retaining walls; etc and footing beams, other structural members other than those mentioned in 6(a) (i)&(ii) above not requiring form work (i.e. horizontal shuttering) complete in all respects:- 				
		(2) Type C (nominal mix 1: 2: 4)	P.Cft	549.98	457.75	251,751

DETAILED COST ESTIMATE

WORK SHOP

Sr. No.		Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
40	6/12/c	Steel Work. Fabrication of mild steel reinforcement for cement				
40	0/12/0	concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars):-				
		Deformed bars (Grade-60)	100kg	31.44	31,784.50	999,305
41	7/4/:	Brick work in Foundation				
41	7/4/i	Pacca brick work in foundation and plinth in:- Cement, sand mortar:- Ratio 1:5	100 Cft	4.80	29,326.30	140,766
		Cement, sand mortal Katlo 1.5	100 CII	4.00	29,320.30	140,700
		Cement Plaster				
42	11/9	Cement plaster 1:4 upto 20' (6.00 m) height:-				
		3/4" (20 mm) thick	100 Sft	2.03	4,379.60	8,891
<u> </u>		Sand Filling				
43	7/30	Supplying and filling sand under floor; or plugging				
		in wells.	100 Cft	4.80	2,943.30	14,128
		Sub Base Course				
44	18/3/a/	Providing and laying sub-base course of stone				
	(ii)	product of approved quality and grade including,				
	+	placing, mixing, spreading and compaction of sub				
	1/1	base material to required depth, camber and grade to achieve 98% maximum dry density determined				
		according to AASHTO T-180 method-D, including				
		carriage of all material to site of work complete in				
		all respect as per specifications and as directed by				
		the engineer incharge. (Crushed stone aggregate				
		from sargodha querry to site, actual compacted				
		depth shall be considered for payment)				
			100Cft	1.58	18,132.30	28,649

DETAILED COST ESTIMATE

WORK SHOP

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Water Bound Macadam				
45	18/4/a + 1/1	Providing and laying base course of crushed stone (Water Bound Macadam) of approved quality and grade including, placing, mixing, spreading and compaction of base course material to required depth, camber and grade to achieve 100% maximum modified AASHTO dry density, including carriage of all material to site of work complete in all respect as per specifications and as directed by the engineer incharge. (Crushed stone aggregate from sargodha querry to site, actual compacted depth shall be considered for payment)				
			100Cft	1.58	23,137.16	36,557
		Tuff Paver				
46	10/41	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)				
		c) 80-mm thick	Per Sft	480.00	194.90	93,552
47	1/1	Carriage of 100 Cft. (2.83 cu.m) of all materials like stone aggregate, spawl, kankar lime (unslaked), surkhi, etc. or 150 Cft. (4.25 cu.m) of timber, by truck or by any other means owned by the contractor. (crushed stone aggregate and bajri used in concrete items) (Lead 125 Km)	Cft	757.42	76.73	58,115

DETAILED COST ESTIMATE

WORK SHOP

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Parking Shed				
48		Providing, laying and fixing in position Pre- Engineered shed as per drawings and manufacturer's specifications and as directed by Engineer Incharge. This item includes Aluzinc corrugated sheet of 0.5 to 0.6 mm thick (50-60 gm/sqm) fixed with rivet and bolts over GI Purlins 200x6 (OSF) 200 to 500 (Web)X4 200X6 (ISF) as shown in drawing No. ST-14 with approved Colour/ paint fitted with J-Type bolt having length 500 mm as shown in drawing. This item includes all kind of leads, lifts, fitting charges etc. complete in all respect excluding Cost of substructure i.e. foundation. Approval of manufacturer must be sought from Engineer Incharge prior to placement of order.	Sft	480.00	2,270.00	1,089,600
		Total Rs.				3,472,543

CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Excavation						
1	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m)						
	ii) in ordinary soil.						
	Office wall 9" Thick Wall	1	47.00	3.00	3.00	423.00	Cft
	Center wall 4-1/2" Thick Wall	1	8.63	2.50	3.00	64.69	Cft
					Total	487.69	Cft
					Total	0.49	%oCi
	Anti-Termite						
2	Spraying termite proofing by using liquid FMC/Biflex/Terminex Exin/Ms Hextar or equivalent @ specified suspension concenterate (SC), Mixing Ability-HEXTAR with Ratio (1:250) = 540 Sft or equivalent approved liquid applying with shower and certificate will be provided by the contractor for 10-years complete in all respect as approved by the Engineer Incharge.						
	Office wall 9" Thick Wall	1	47.00	9.00		423.00	Sft
	Center wall 4-1/2" Thick Wall	1	8.63	8.50		73.31	Sft
	Floor	1	7.75	14.25		110.44	Sft
					Total	423.00 64.69 487.69 0.49 423.00 73.31	Sft
	Plain Cement Concrete						
3	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):						
	(i) Ratio 1: 4: 8						
	Office wall 9" Thick Wall	1	47.00	3.00	0.50		Cft
	Center wall 4-1/2" Thick Wall	1	8.63	2.50	0.50		Cft
					Total	81.28	Cft
					Total	0.81	%Cf
	Brick work in Foundation						
4	Pacca brick work in foundation and plinth in:-						
	Cement, sand mortar:- Ratio 1:5						-

CALCULATION OF QUANTITIES CIVIL WORK

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
1100	Office wall 9'' Thick Wall						
	Step - 1	1	47.00	2.250	0.50	52.88	Cft
	Step - 2	1	47.00	1.875	0.50	44.06	Cft
	Step - 3	1	47.00	1.500	0.50	35.25	Cft
	Step - 4	1	47.00	1.125	0.50	26.44	Cft
	Step - 5	1	47.00	0.750	5.50	193.88	Cft
	Center wall 4-1/2" Thick Wall						
	Step - 1	1	8.63	1.875	0.50	8.09	Cft
	Step - 2	1	8.63	1.500	0.50	6.47	Cft
	Step - 3	1	8.63	1.125	0.50	4.85	Cft
	Step - 4	1	8.63	0.750	6.00	38.81	Cft
					Total	410.72	Cft
					Total	4.11	%Cft
							/0010
	Horizontal D.P.C						
5	Providing and laying damp proof course of cement						
	concrete 1 : 2 : 4 (using cement, sand and shingle),						
	including bitumen coating :-						
	(a) with one coat bitumen and one coat polythene						
	sheet 500gauge						
	i) 1 ¹ / ₂ " thick (40 mm)						
	Office wall 9" Thick Wall	2	47.00	0.75		70.50	Sft
	Center wall 4-1/2" Thick Wall	1	8.63	0.75		6.47	Sft
					Total	76.97	Sft
					Total	0.77	%Sft
	Vertical D.P.C						
6	Providing and laying vertical damp proof course						
Ũ	with cement sand plaster and bitumen coating:-						
	(a) with one coat of bitumen and one coat of						
	polythene sheet 500 gauge:						
	ii) Ratio 1:3 ³ / ₄ " thick (20 mm)						
	Office wall 9" Thick Wall	1	47.00		2.00	94.00	Sft
	Center wall 4-1/2" Thick Wall	1	8.63		1.00	8.63	Sft
		-	0.00		Total	102.63	Sft
					Total	1.03	%Sft
					I Utdl	1.05	70.511
	Brick work in Super Structure						
7	Pacca brick work in ground floor:-						
	i) Cement, sand mortar:- Ratio 1:5						
	Office wall 9" Thick Wall	1	47.00	0.75	11.00	387.75	Cft
	Center wall 4-1/2" Thick Wall	1	8.63	0.75	11.00	71.16	Cft

WORK SHOP CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Parapet Wall	1	47.00	0.38	2.50	44.06	Cft
	Entrance step	2	10.00	1.00	0.75	15.00	Cft
	D/d Doors and Window						
	D-1	-1	3.50	0.75	7.00	(18.38)	Cft
	D-2	-1	2.50	0.75	7.00	(13.13)	Cft
	W-1	-1	4.00	0.75	4.00	(12.00)	Cft
	V-1	-1	2.00	0.75	2.00	(3.00)	Cft
					Total	471.47	Cft
					Total	4.71	%Cft
	Concrete Work						
8	Providing and laying reinforced cement concrete (including prestressed concrete), using coarse sand and screened graded and washed aggregate, in required shape and design, including forms, moulds, shuttering, lifting, compacting, curing, rendering and finishing exposed surface, complete (but excluding the cost of steel reinforcement, its fabrication and placing in position, etc.):-						
	Above foundation (a) (i) Reinforced cement concrete in roof slab, beams, columns lintels, girders and other structural members laid in situ or precast laid in position, or prestressed members cast in situ, complete in all						
	respects:- Type C (nominal mix 1: 2: 4)						
	Top Slab	1	9.25	15.75	0.50	72.84	Cft
	Doors and window Lintels	T	7.23	15.15	0.50	72.04	CII
	D-1	1	4.50	0.38	0.75	1.27	Cft
	D-2	1	3.50	0.75	0.75	1.97	Cft
	W-1	1	5.00	0.75	0.75	2.81	Cft
	V-1	1	3.00	0.75	0.75	1.69	Cft
					Total	80.58	Cft
					IULAI	00.00	CII

CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Steel Work.						
9	Fabrication of mild steel reinforcement for cement						
	concrete, including cutting, bending, laying in						
	position, making joints and fastenings, including						
	cost of binding wire and labour charges for binding						
	of steel reinforcement (also includes removal of rust from bars):-						
	Deformed bars (Grade-60)					80.58	Cft
	Top Slab & lintel @ 6 lbs / Cft		6.00		=	483.47	lbs/cft
				Total	=	483.47	lbs/cft
				Total	=	219.36	Kg.
			Add 5% V	Wastage.	=	10.97	Kg.
				Total	=	230	Kg
					Total	2.30	%kg
	Sand Filling						
10	Supplying and filling sand under floor; or plugging						
10	in wells.						
	Floor	1	7.75	14.25	1.00	110.44	Cft
					Total	110.44	Cft
					Total	1.10	%Cft
	Brick ballast						
11	Dry rammed brick or stone ballast, $1\frac{1}{2}$ " to 2"(40)						
11	mm to 50 mm) gauge.						
	Floor	1	7.75	14.25	0.33	36.44	Cft
					Total	36.44	Cft
					Total	0.36	%Cft
	P.C.C						
12	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone						
	aggregate): Ratio 1: 2: 4						
	Floor	1	7.75	14.25	0.17	18.41	Cft
						0.40	0.100
					Total	0.18	%Cft

CALCULATION OF QUANTITIES

		1		-			
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Porcelain Tile						
13	Providing and laying superb quality Porcelain glazed tiles flooring of MASTER brand of specified size in approved design, Color and Shade with adhesive / bond over 3/4" thick (1:3)cement plaster i/c the cost of sealer for finishing the joints i/c cutting grinding complete in all respect as approved and directed by the Engineer Incharge.						
	c) (Non-Skid Chequred Tiles) 300mmx300mm	1	7.75	14.25		110.44	Sft
					Total	110.44	Sft
14	Providing and laying superb quality Porcelain glazed tiles of Master brand, skirting/ dado of specified size, Color and Shade with adhesive/ bond over 1/2" thick (1:2)cement plaster i/c the cost of and sealer for finishing the joints, cutting grinding complete in all respect as approved and directed by the Engineer Incharge.						
	a) Full body Glazed Tile						
	(i) 400 mm x 400 mm	1	44.00	1.00	0.33	14.52	Sft
					Total	14.52	Sft
	Ceramic Tile						
15	Providing and laying superb quality Ceramic tile floors of Master brand of specified size, Glossy/Matt/Texture of approved Color and Shade as per approved design with adhesive bond, over 3/4" thick (1;2) cement sand plaster i/c the cost of sealer for finishing the joints i/c cutting grinding complete in all respects and as approved and directed by the Engineer Incharge.						
	i) 12"x18"/12"x24"/10"x24" /8"x24"/12"x36"	1	4.25	4.00		17.00	Sft
					Total	17.00	Sft
16	Providing and laying superb quality Ceramic tiles dado of Master brand of specified size, Glossy/Matt/Texture skirting / dado of approved Color and Shade with adhesive bond over1/2" thick (1:2)cement plaster i/c the cost of sealer for finishing the joints i/c cutting grinding complete in all respects as approved and directed by the Engineer Incharge. i) 12"x18"/12"x24"/10"x24" /8"x24"/12"x36"						

WORK SHOP CALCULATION OF QUANTITIES

Sr.	Description	No.	Length	Width	Height	Qty.	Unit
No.	-		_	Wittin			
	Washroom	1	14.00		5.00	70.00	Sft
					Total	70.00	Sft
	Slab Plaster						
17	Cement plaster 3/8" (10 mm) thick under soffit of R.C.C. roof slabs only, upto 20' height. (Ratio:-1:3)						
		1	7.75	14.25		110.44	Sft
					Total	1.10	%Sft
	Cement Plaster						
18	Cement plaster 1:4 upto 20' (6.00 m) height:-						
	3/4" (20 mm) thick						
	Office wall 9" Thick Wall	1	47.00		11.00	517.00	Sft
	Center wall 4-1/2" Thick Wall	2	8.63		11.00	189.75	Sft
	D/d Doors and Window						
	D-1	-1	3.50		7.00	(24.50)	Sft
	D-2	-1	2.50		7.00	(17.50)	Sft
	W-1	-1	4.00		4.00	(16.00)	Sft
	V-1	-1	2.00		2.00	(4.00)	Sft
					Total	644.75	Sft
					Total	6.45	%Sf
	Pointing						
19	Cement pointing struck joints, on walls, upto 20' (6.00 m) hiehgt:-						
	a) ratio 1:2						
	Outer Walls	1	47.00		12.00	564.00	Sft
					Total	5.64	%Sf
20	Extra cost of labour and material for red oxide pigment in cement pointing to match with the						
	colour of bricks.				Total	5.64	%Sf
	Distempering						
21	Distempering:-						
	iii) three coats		47.00		11.00	1.024.02	
	Office wall 9" Thick Wall	2	47.00		11.00	1,034.00	Sft
	Center wall 4-1/2" Thick Wall	2	8.63	1407	11.00	189.75	Sft
	Slab	1	7.75	14.25		110.44	Sft
	D/d Doors and Window D-1	-1	3.50		7.00	(24.50)	Sft
			4 50	1			N##

WORK SHOP CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	W-1	-1	4.00		4.00	(16.00)	Sft
	V-1	-1	2.00		2.00	(4.00)	Sft
					Total	1,272.19	Sft
					Total	12.72	%Sft
	Wooden Door						
22	P/F 1-1/2" thick solid flush door comprising of 2.5 mm thick Deodar/Ash/Oak ply with grooves , compressed over 2.5 mm thick commercial ply over 1" thick packing wood in style and rails under proper pressure i/c the cost of nails, tower bolt , handles, glue, sawing charges and lacquar polishing to show the grains of ply properly, sand papering and 3/8" thick matching wooden lipping as approved and directed by the Engineer Incharge.						
	D-1	1	3.50		7.00	24.50	Sft
	D-2	1	2.50		7.00	17.50	Sft
					Total	42.00	Sft

WORK SHOP CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Formica Sheet						
23	Providing and fixing Formica sheet on bathroom door as per drawing and design complete in all respect.						
	D-2	1	2.50		7.00	17.50	Sft
24	Providing and fixing 2" wide MS/ GI Chowkat singel/double rebate made of 16 SWG MS sheet pressed/welded / supported with M.S. flat 1- 1/4"x1/8" i/c 6"long M.S. Flat 1"x1/8"hold fasts (6- Nos) welded/screwed, punching of lock hole covered with MS Box,coating with antirust paint including filling with cement sand mortar (1:8) and embedding hold fast in cement concrete (1:2:4) ,complete in all respect as approved and directed by Engineer Incharge						
	(ii) 10.50 " wide						
	D-1	1	17.50	0.875		15.31	Sft
					Total	15.31	Sft
25	Providing and fixing 3"x4-1/2" chowkat for doors, windows and C. windows, including holdfast, etc.						
	b) Deodar wood						
	D-2	1	16.50	0.46		7.56	Sft
					Total	7.56	Sft
26	Providing and laying 24 SWG aluminum kick plate 4" (100 mm) high, fixed with screws 4" (100 mm) centre to centre, on bottom rail of flush doors only of commercial ply.	2	2.50			5.00	Rft
27	Providing and fixing ornamental wooden architrave $3" \times (1\frac{1}{2}"$ tapered to $\frac{1}{4}")$ all along the door frame complete in all respect.	·					
	b) Deodar wood architrave						
	D-1	1	17.50	0.25		4.38	Sft
					Total	4.38	Sft

CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Lock						
28	Providing and fixing, approved quality mortice						
	lock.	2				2.00	Each
	Doint						
29	Paint Painting new surface:-						
29	Preparing surface and painting of doors and						
	windows any type (including edges):-						
	i) priming coat.						
	ii)Two coat				Total	0.84	Sft
					10141	0.04	511
	Aluminium Window						
30	Providing and fitting all types of glazed aluminium						
	windows of anodised/ powder coated partly fixed						
	and partly sliding using delux sections of approved						
	manufacturer having frame size of 100 x 30 mm						
	(4"x1-1/4") and leaf frame sections of 50 x 20 mm						
	(2"x¾"), all of 1.6mm thickness including 5 mm						
	thick imported tinted glass with rubber gasket						
	using approved standard latches, hardware etc., as						
	approved by the Engineer in-charge						
	W-1	1	4.00		4.00	16.00	Sft
	V-1	1	2.00		2.00	4.00	Sft
					Total	20.00	Sft
	Roof Insulation						
31	Single layer of tiles 9"x41/2"x11/2" (225x113x40						
	mm) laid over 4"(100 mm) earth and 1" (25 mm)						
	mud plaster without Bhoosa, grouted with cement						
	sand 1:3 on top of RCC roof slab, provided with 34						
	lbs. per %Sft. or 1.72 Kg/Sq.m bitumen coating sand blinded.						
		1	0.05	15.75		145.00	
	Roof area	1	9.25	15.75	Total	145.69 145.69	Sft Sft
					Total	145.09	SIL
					Total	1.46	%Sf
32	Supplying and laying polythene sheet over D.P.C. under floors and on roofs, etc.						
	ii) 500 gauge (.005" thick)				Total	292.00	Sft
	Khurras						
33	Khuras on roof 2'x2'x6" (600 x 600 x 150 mm)	2				2.00	Each

WORK SHOP CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Dettern Vlerner						
34	Bottom Khuras Bottom Khuras of brick masonry in cement mortar 1:6, 4'x2'x4 ¹ / ₂ " (1200x600x113 mm) over 3" (75 mm) cement concrete 1:4:8.					2.00	Each
						2.00	Luch
35	Excavation Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m)						
	ii) in ordinary soil.						
	Columns	2	13.00	13.00	4.00	1,352.00	Cft
	Workshop Pit	1	20.00	4.75	5.33	506.35	Cft
					Total	1,858.35	Cft
					Total	1.86	%oCi
	Anti-Termite						
36	Spraying termite proofing by using liquid FMC/Biflex/Terminex Exin/Ms Hextar or equivalent @ specified suspension concenterate (SC), Mixing Ability-HEXTAR with Ratio (1:250) = 540 Sft or equivalent approved liquid applying with shower and certificate will be provided by the contractor for 10-years complete in all respect as approved by the Engineer Incharge.						
	Floor	1	15.00	32.00		480.00	Sft
	Columns	2	13.00	13.00		338.00	Sft
					Total	818.00	Sft
						01000	
•-	Plain Cement Concrete						
37	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):						
	(i) Ratio 1: 4: 8						
	Columns	2	13.00	13.00	0.25	84.50	Cft
	Workshop Pit	1	20.00	4.75	0.33	31.35	Cft
					Total	115.85	Cft

CALCULATION OF QUANTITIES

Sr.		NT	T (1	****	TT • T		TT • :
No.	Description	No.	Length	Width	Height	Qty.	Unit
	Concrete Work						
38	Providing and laying reinforced cement concrete						
	(including prestressed concrete), using coarse sand						
	and screened graded and washed aggregate, in						
	required shape and design, including forms,						
	moulds, shuttering, lifting, compacting, curing,						
	rendering and finishing exposed surface, complete						
	(but excluding the cost of steel reinforcement, its						
	fabrication and placing in position, etc.):-						
	In Foundation						
	(a)(iii) Reinforced cement concrete in slab of rafts /						
	strip foundation, base slab of column and retaining						
	walls; etc and footing beams, other structural						
	members other than those mentioned in						
	6(a) (i)&(ii) above not requiring form work (i.e.						
	horizontal shuttering) complete in all respects:-						
	Columns	2	12.00	12.00	1.50	432.00	Cft
	Workshop Pit	1	20.00	4.75	0.33	31.35	Cft
	Columns	2	3.00	1.50	7.75	69.75	Cft
	Plinth beam	1	15.00	0.75	1.50	16.88	Cft
					Total	549.98	Cft
	Steel Work.						
39	Fabrication of mild steel reinforcement for cement						
	concrete, including cutting, bending, laying in						
	position, making joints and fastenings, including						
	cost of binding wire and labour charges for binding						
	of steel reinforcement (also includes removal of						
	rust from bars):-						
	Deformed bars (Grade-60)					549.98	Cft
	Columns @ 12 lbs / Cft		12.00		=	6,600	lbs/cft
				Total	=	6,600	lbs/cft
			A 11 CO/ X	Total	=	2,994	Kg.
			Add 5% V	Ŭ	=	150 3,144	Kg. Kg
				Total			
					Total	31.44	%kg
	Brick work in Foundation						
40	Pacca brick work in foundation and plinth in:-						
	Cement, sand mortar:- Ratio 1:5	1	15.00	1 1 2 7	4.50	007.01	0.5
		1	45.00	1.125	4.50	227.81	Cft
					Total	2.28	%Cft

CALCULATION OF QUANTITIES CIVIL WORK

Sr.							
No.	Description	No.	Length	Width	Height	Qty.	Unit
	Cement Plaster						
41	Cement plaster 1:4 upto 20' (6.00 m) height:-						
	3/4" (20 mm) thick	1	45.00		4.50	202.50	Sft
					Total	2.03	%Sft
	Sand Filling						
42	Supplying and filling sand under floor; or plugging in wells.						
	Shed	1	15.00	32.00	1.00	480.00	Cft
					Total	480.00	Cft
					Total	4.80	%Ci
	Sub Base Course						
	product of approved quality and grade including, placing, mixing, spreading and compaction of sub base material to required depth, camber and grade to achieve 98% maximum dry density determined according to AASHTO T-180 method-D, including carriage of all material to site of work complete in all respect as per specifications and as directed by the engineer incharge. (Pit run or bed run gravel from sargodha querry to site, actual compacted depth shall be considered for payment)						
	Shed	1	15.00	32.00	0.33	158.40	Cft
					Total	1.58	%Ci
	Water Bound Macadam						
44	Providing and laying base course of crushed stone (Water Bound Macadam) of approved quality and grade including, placing, mixing, spreading and compaction of base course material to required depth, camber and grade to achieve 100% maximum modified AASHTO dry density, including carriage of all material to site of work complete in all respect as per specifications and as directed by the engineer incharge. (Crushed stone aggregate from sargodha querry to site, actual compacted depth shall be considered for payment)						
	Shed	1	15.00	32.00	0.33	158.40	Cft

WORK SHOP

CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
					Total	1.58	%Cft
45	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)						
	Shed	1	15.00	32.00		480	Sft
	Parking Shed						
46	Providing, laying and fixing in position shed as per drawings, manufacturer's specifications and as directed by Engineer Incharge. This item includes Aluzinc corrugated sheet of 0.5 to 0.6 mm thick fixed with rivet and bolts over Purlins and truss frame of 50X50X4.75 mm with approved Colour/ paint supported with Steel Hexagonal / round shaped Columns size 200 to 300 mm diameter fitted with J-Type bolt having length 450 to 500 mm and not less than 38mm diameter. This item includes all kind of leads, lifts, fitting charges etc. complete in all respect excluding Cost of substructure i.e. foundation. Approval of manufacturer must be sought prior to placing order.						
		1	15.00	32.00		480	Sft

DETAILED COST ESTIMATE

WORK SHOP

	1	PLUMBING WORKS				
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Qty.	Unit Rate (Rs)	Amount (Rs)
		Schedule Item				
		Indian W.C				
1	19-4-i	Providing and fitting glazed earthen ware water closet, squatter type (Orisa pattern), combined with foot rest.				
		i) white	Each	1.00	2,218.35	2,218
2	19-13-i	Providing and fitting plastic made low down flushing cistern 13.63 litre (3 gallons) capacity, including bracket set, copper connection, etc. complete.				
		i) white	Each	1.00	2,649.35	2,649
3	19-7-i	Providing and fitting glazed earthen ware wash hand basin 56x40 cm (22"x16") including bracket set, waste pipe and waste coupling, etc.				
		i) white, with pedestal	Each	1.00	5,169.95	5,170
4	19-30	Providing and fixing, chromium plated mixing valve, for wash hand basin, sink or shower.	Each	1.00	2,228.75	2,229
5	19-16	Providing and fixing, chromium plated soap dish.	Each	1.00	278.75	279
6	19-20	Providing and fixing looking glass 55x40 cm (22"x16") size	Each	1.00	638.15	638
7	19-27	Providing and fixing chromium plated bib cock:-				
		i) 2 cm (³ / ₄ ")	Each	1.00	1,015.00	1,015
8	19-28	Providing and fixing chromium plated tee stop cock 15mm (1/2").	Each	3.00	955.00	2,865
9	19-34-i	Providing and fixing, floor trap of cast iron, including concrete chamber all round, and C.I. grating:-				
		i) 10x5 cm (4"x2")	Each	1.00	627.95	628
10	19-36	Providing and fitting 10 cm (4") gully trap, including cement concrete, cost of PVC grating $15x15$ cm (6" w 6") and measure chember 20 $x20$ cm (12" w 12")		1.00	1.000.05	1 005
		(6"x6") and masonry chamber 30x30 cm (12"x12").	Each	1.00	1,096.85	1,097
11	19-35-ii	Providing and fitting "P" trap:-				
		ii) 10 cm (4") glazed.	Each	2.00	283.15	566

DETAILED COST ESTIMATE

WORK SHOP

		PLUMBING WORKS				
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Qty.	Unit Rate (Rs)	Amount (Rs)
		PPRC Pipe				
12	23-47	Providing, laying, testing and commissioning of POLYPROPYLENE RANDOM COPOLYMER (PPRC) water supply pipe made of (Dadex/ Popular /Beta/ BBJ) with specified pressure rating PN (PRESSURE NOMINAL) and conforming to DIN8077- 8078 code i/c cost of solvent, specials, making jharries complete in all respect as approved and directedby Engineer Incharge. (Internal / External Diameters mentioned).				
		b) PN-20 pipe	Dft	40.00	49.10	1.024
		(i) (1/2") 20 mm (ii) (3/4") 25 mm	Rft Rft	40.00	48.10 66.50	1,924 1,663
			KIt	23.00	00.50	1,005
13	23/46	Valve Providing and fixing CP heavy duty brass Ball valve with CP handle of specified dia meter made of Faisal/ Sonex/ Master best quality or equivalent complete in all respect as approved and directed by the Engineer Incharge.				
		ii) 3/4" dia	Each	2.00	1,434.00	2,868
		uPVC Pipe				
14	19-47	Providing, fixing, testing and commissioning of µ-PVC (Unplasticized polyvinyl Chloride)Nikasi /waste pipe make of dadex/Popular/Beta/BBJ plain/ socket ended conforming to code EN-1401 of specified SDR (Standard Dimension Ratio)including the cost of specials and Solvents complete in all respect as approved and directed by the Engineer Incharge				
		Type (SDR 41/SN-4)				
		(iii) 2"(60 mm) (v) 4"(110 mm)	Rft Rft	10.00 30.00	88.45 217.25	885 6,518
		Total Rs. (A)				33,211
		Non-Schedule Item				
15	N.S	Providing and making Manhole 2'x2' internal size including 9" thick brick masonry (1:4), 1/2" th. Plastering (1:3) i/side, benching with PCC 1:2:4 4" th. with cement finish, including manhole cover, complete in all respects.		1.00	18,419.57	18,420
		Total Rs. (B)				18,420
		Total Amount Rs. (A + B)				51,630

DETAILED COST ESTIMATE

WORK SHOP

ELECTRICAL WORKS

Sr. No.	2nd Bi-Annual- 2022 (July to Jun) T.T. Singh	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
		Scheduled Items (A)				
1	C-24/3-ii	Supply and erection of PVC pipe for wiring recessed in walls, including bends, inspection joints, boxes, pull boxes, hook, cutting and repair surface etc. completed with all specified. (20 mm i/d)		200.00	81.70	16,340
2	C-24/3-iii	Supply and erection of PVC pipe for wiring recessed in walls, including bends, inspection joints, boxes, pull boxes, hook, cutting and repair surface etc. completed with all specified. (25 mm i/d)		250.00	94.60	23,650
3	C-24/10a.i	Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only). (3.029)		320.00	25.70	8,224
4	C-24/10a.ii	Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only). (7.029)	Rft.	290.00	21.70	6,293
	C-24/10a.iii	Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only). (7.036)		120.00	40.75	4,890
5	C-24/14-i	Supply and erection of M.S. sheet box of 16 SWG, 10 cm (4") deep, with 4.75 mm thick (3/16") bakelite sheet top, for recessed wiring, including making holes for regulators, switches, plugs, etc. (4"x4")		2.00	270.60	541
6	C-24/32-ii	Supply and erection of switches 10/15 Amp. (Recessed Type)	Each	2.00	87.35	175
7	C-24/36-ii	Supply and erection of 3 pin switch and Plug combined recessed type (10/15Amps)	Each	6.00	149.80	899

DETAILED COST ESTIMATE

WORK SHOP

	1	ELECTRICAL WOR	KS			
Sr. No.	2nd Bi-Annual- 2022 (July to Jun) T.T. Singh	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
8	C-24/43-	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.	Each	3	1,221.70	3,665
		Sub Total (A)				64,677
10	N.S	Supply, Installation, testing and commissioning of following size 56" ceiling fan, complete with capacitor, hanging rod, canopy, blades, dimmers				
		nuts and bolts complete in all respect.	Each	1.00	7,000.00	7,000
11	N.S	Supply, installation and commissioning FLOOD LIGHT BVP151 LED50NW 220240V 50Wwith		2.00	10.000.00	22 700
		all accessories complete in all respects	Each	3.00	10,900.00	32,700
		Sub Total (B)				39,700
		Sub Total (A+B)				104,377

DETAILED COST ESTIMATE

PARKING SHED (SIZE 150' x 32')

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Schedule Item				
		Excavation				
1	3/21/a/ii	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m)				
		a) By Manual				
		ii) in ordinary soil.	1000Cft	4.06	10,677.75	43,352
		Anti-Termite				
2	26/43	Spraying termite proofing by using liquid FMC/Biflex/Terminex Exin/Ms Hextar or equivalent @ specified suspension concenterate (SC), Mixing Ability-HEXTAR with Ratio (1:250) = 540 Sft or equivalent approved liquid applying with shower and certificate will be provided by the contractor for 10-years complete in all respect as approved by the Engineer Incharge.	Sft	5,814.00	9.25	53,780
		Plain Cement Concrete				
3	6/5	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):				
		(i) Ratio 1: 4: 8	100 Cft	2.54	28,986.90	73,627
						,
4	6/6	Concrete Work Providing and laying reinforced cement concrete (including prestressed concrete), using coarse sand and screened graded and washed aggregate, in required shape and design, including forms, moulds, shuttering, lifting, compacting, curing, rendering and finishing exposed surface, complete (but excluding the cost of steel reinforcement, its fabrication and placing in position, etc.):-				
		In Foundation				
		(a)(iii) Reinforced cement concrete in slab of rafts / strip foundation, base slab of column and retaining walls; etc and footing beams, other structural members other than those mentioned in 6(a) (i)&(ii) above not requiring form work (i.e. horizontal shuttering) complete in all respects:-				
		(2) Type B (nominal mix 1: 2: 4)	P.Cft	1,606.50	457.75	735,375
		(-, -)Pe 2 (noniner mix 1, 2, 1)		1,000.00	157.15	, 55,515

DETAILED COST ESTIMATE

PARKING SHED (SIZE 150' x 32')

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Steel Work.				
5	6/12/c	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars):-				
		Deformed bars (Grade-60)	100kg	91.84	31,784.50	2,919,088
6	7/30	Sand Filling Supplying and filling sand under floor; or plugging in wells.	100 Cft	48.00	2,943.30	141,278
		Sub Base Course				
7	18/3/a/ (ii) + 1/1	Providing and laying sub-base course of stone product of approved quality and grade including, placing, mixing, spreading and compaction of sub base material to required depth, camber and grade to achieve 98% maximum dry density determined according to AASHTO T-180 method-D, including carriage of all material to site of work complete in all respect as per specifications and as directed by the engineer incharge. (Pit run or bed run gravel from sargodha querry to site, actual compacted depth shall be considered for payment)				
			100Cft	15.84	18,132.30	287,216
		Water Bound Macadam				
8	18/4/a + 1/1	Providing and laying base course of crushed stone (Water Bound Macadam) of approved quality and grade including, placing, mixing, spreading and compaction of base course material to required depth, camber and grade to achieve 100% maximum modified AASHTO dry density, including carriage of all material to site of work complete in all respect as per specifications and as directed by the engineer incharge. (Crushed stone aggregate from sargodha querry to site, actual compacted depth shall be considered for payment)				
			100Cft	15.84	23,137.16	366,493

DETAILED COST ESTIMATE

PARKING SHED (SIZE 150' x 32')

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Tuff Paver				
9	10/41	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)				
		c) 80-mm thick	Per Sft	4,800.00	194.90	935,520
10	1/1	Carriage of 100 Cft. (2.83 cu.m) of all materials like stone aggregate, spawl, kankar lime (unslaked), surkhi, etc. or 150 Cft. (4.25 cu.m) of timber, by truck or by any other means owned by the contractor. (crushed stone aggregate and bajri used in concrete items) (Lead 125 Km)	Cft	1,654.44	76.73	126,941
		Parking Shed				
11	N.S	Providing, laying and fixing in position Pre- Engineered shed as per drawings and manufacturer's specifications and as directed by Engineer Incharge. This item includes Aluzinc corrugated sheet of 0.5 to 0.6 mm thick (50-60 gm/sqm) fixed with rivet and bolts over GI Purlins 200x6 (OSF) 200 to 500 (Web)X4 200X6 (ISF) as shown in drawing No. ST-14 with approved Colour/ paint fitted with J-Type bolt having length 500 mm as shown in drawing. This item includes all kind of leads, lifts, fitting charges etc. complete in all respect excluding Cost of substructure i.e. foundation. Approval of manufacturer must be sought from Engineer Incharge prior to placement of order.	Sft	4 800 00	2 270 00	10 896 000
			Sft	4,800.00	2,270.00	10,896,000
		Total Rs.				16,578,669

CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit		
	Excavation								
1	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing,								
	refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m)								
	ii) in ordinary soil.								
	Columns	6	13.00	13.00	4.00	4,056.00	Cft		
					Total	4,056.00	Cft		
					Total	4.06	%oCft		
2	Anti-Termite Spraying termite proofing by using liquid								
Z	Spraying termite proofing by using liquid FMC/Biflex/Terminex Exin/Ms Hextar or equivalent @ specified suspension concenterate								
	(SC), Mixing Ability-HEXTAR with Ratio (1:250) = 540 Sft or equivalent approved liquid applying								
	with shower and certificate will be provided by the								
	contractor for 10-years complete in all respect as approved by the Engineer Incharge.								
	Floor	1	150.00	32.00		4,800.00	Sft		
	Columns	6	13.00	13.00		1,014.00	Sft		
					Total	5,814.00	Sft		
					Total	5,014.00	SIL		
	Plain Cement Concrete								
3	Cement concrete plain including placing, compacting, finishing and curing complete								
	(including screening and washing of stone								
	aggregate):								
	(i) Ratio 1: 4: 8								
	Columns	6	13.00	13.00	0.25	253.50	Cft		
					Total	253.50	Cft		
					Total	2.54	%Cft		

CALCULATION OF QUANTITIES

	CIVIL WORK							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit	
	Concrete Work							
4	Providing and laying reinforced cement concrete (including prestressed concrete), using coarse sand and screened graded and washed aggregate, in required shape and design, including forms, moulds, shuttering, lifting, compacting, curing, rendering and finishing exposed surface, complete (but excluding the cost of steel reinforcement, its							
	fabrication and placing in position, etc.):-							
	In Foundation							
	(a)(iii) Reinforced cement concrete in slab of rafts / strip foundation, base slab of column and retaining walls; etc and footing beams, other structural members other than those mentioned in 6(a) (i)&(ii) above not requiring form work (i.e. horizontal shuttering) complete in all respects:-							
	Columns footing	6	12.00	12.00	1.50	1,296.00	Cft	
	Columns	6	3.00	1.50	5.25	141.75	Cft	
	Plinth beam	1	150.00	0.75	1.50	168.75	Cft	
					Total	1,606.50	Cft	
	Steel Work.							
5	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars):-							
	Deformed bars (Grade-60)					1,606.50	Cft	
	Columns @ 12 lbs / Cft		12.00		=	19,278	lbs/cft	
				Total	=	19,278	lbs/cft	
				Total	=	8,747	Kg.	
			Add 5% V			437	Kg.	
				Total	=	9,184	Kg	
	Sond Filling				Total	91.84	%kg	
6	Sand Filling Supplying and filling sand under floor; or plugging in wells.							
	Shed	1	150.00	32.00	1.00	4,800.00	Cft	
		-			Total	4,800.00	Cft	
					Total	48.00	%Cft	

CALCULATION OF QUANTITIES

		-					
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Sub Base Course						
7	Providing and laying sub-base course of stone product of approved quality and grade including, placing, mixing, spreading and compaction of sub base material to required depth, camber and grade to achieve 98% maximum dry density determined according to AASHTO T-180 method-D, including carriage of all material to site of work complete in all respect as per specifications and as directed by the engineer incharge. (Pit run or bed run gravel from sargodha querry to site, actual compacted depth shall be considered for payment)						
	Shed	1	150.00	32.00	0.33	1,584.00	Cft
					Total	15.84	%Cft
	Water Bound Macadam						
8	Providing and laying base course of crushed stone (Water Bound Macadam) of approved quality and grade including, placing, mixing, spreading and compaction of base course material to required depth, camber and grade to achieve 100% maximum modified AASHTO dry density, including carriage of all material to site of work complete in all respect as per specifications and as directed by the engineer incharge. (Crushed stone aggregate from sargodha querry to site, actual compacted depth shall be considered for payment)						
	Shed	1	150.00	32.00	0.33	1,584.00	Cft
					Total	15.84	%Cft
9	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) Shed	1	150.00	32.00		4,800	Sft

PARKING SHED (SIZE 150' x 32') CALCULATION OF QUANTITIES

Parking Shed10Providing, laying and fixing in position Pre- Engineered shed as per drawings and manufacturer's specifications and as directed by Engineer Incharge. This item includes Aluzinc corrugated sheet of 0.5 to 0.6 mm thick (50-60 gm/sqm) fixed with rivet and bolts over GI Purlins 200x6 (OSF) 200 to 500 (Web)X4 200X6 (ISF) as shown in drawing No. ST-14 with approved Colour/ paint fitted with J-Type bolt having length 500 mm as shown in drawing. This item includes all kind of leads, lifts, fitting charges etc. complete in all respect excluding Cost of substructure i.e. foundation. Approval of manufacturer must be sought from Engineer Incharge prior to placement of order.1150.0032.00 4.800 Sft	Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
Engineered shed as per drawings and manufacturer's specifications and as directed by Engineer Incharge. This item includes Aluzinc corrugated sheet of 0.5 to 0.6 mm thick (50-60 gm/sqm) fixed with rivet and bolts over GI Purlins 200x6 (OSF) 200 to 500 (Web)X4 200X6 (ISF) as shown in drawing No. ST-14 with approved Colour/ paint fitted with J-Type bolt having length 500 mm as shown in drawing. This item includes all kind of leads, lifts, fitting charges etc. complete in all respect excluding Cost of substructure i.e. foundation. Approval of manufacturer must be sought from Engineer Incharge prior to placement of order.		Parking Shed						
	10	Engineered shed as per drawings and manufacturer's specifications and as directed by Engineer Incharge. This item includes Aluzinc corrugated sheet of 0.5 to 0.6 mm thick (50-60 gm/sqm) fixed with rivet and bolts over GI Purlins 200x6 (OSF) 200 to 500 (Web)X4 200X6 (ISF) as shown in drawing No. ST-14 with approved Colour/ paint fitted with J-Type bolt having length 500 mm as shown in drawing. This item includes all kind of leads, lifts, fitting charges etc. complete in all respect excluding Cost of substructure i.e. foundation. Approval of manufacturer must be sought from Engineer Incharge prior to placement		150.00	32.00		4,800	Sft

DETAILED COST ESTIMATE

PARKING SHED (SIZE 150' x 32')

ELECTRICAL WORKS

		ELECTRICAL WORK	.S			
Sr. No.	2nd Bi-Annual- 2022 (July to Jun) T.T. Singh	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
		<u>Scheduled Items (A)</u>				
1	C-24/3-iii	Supply and erection of PVC pipe for wiring				
		recessed in walls, including bends, inspection joints,				
		boxes, pull boxes, hook, cutting and repair surface				
		etc. completed with all specified. (25 mm i/d)	Rft.	310.00	94.60	29,326
		eter compreted with an specifical (20 min 10)				
2	C-24/10a.i	Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only). (3.029)		140.00	25.70	3,598
3	$C 24/10_{2}$	Supply and amostion of single core DVC insulated				
5	C-24/10a.m	Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only). (7.029)		600.00	40.75	24,450
4	C-24/14-ii	Supply and erection of M.S. sheet box of 16 SWG, 10 cm (4") deep, with 4.75 mm thick (3/16") bakelite sheet top, for recessed wiring, including making holes for regulators, switches, plugs, etc. $(4"x4")$		2.00	270.60	541
5	C-24/32-ii	Supply and erection of switches 10/15 Amp. (Recessed Type)	Each	2.00	87.35	175
		Sub Total (A)				58,090
6	N.S	Supply, installation and commissioningFLOOD LIGHT BVP151 LED50NW 220,240V 50W with		5.00	10.000	54,500
		all accessories complete in all respects	Each	5.00	10,900	54,500
		Sub Total (B)				54,500
		Sub Total (A+B)				112,590

DETAILED COST ESTIMATE

PARKING SHED (SIZE 96' x 16')

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)		
		Schedule Item						
		Excavation						
1	3/21/a/ii	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m)						
		a) By Manual						
		ii) in ordinary soil.	1000Cft	0.98	10,677.75	10,464		
		Anti-Termite						
2	26/43	Spraying termite proofing by using liquid FMC/Biflex/Terminex Exin/Ms Hextar or equivalent @ specified suspension concenterate (SC), Mixing Ability-HEXTAR with Ratio (1:250) = 540 Sft or equivalent approved liquid applying with shower and certificate will be provided by the contractor for 10-years complete in all respect as approved by the Engineer Incharge.	Sft	1,781.00	9.25	16,474		
		Plain Cement Concrete						
3	6/5	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):						
		(i) Ratio 1: 4: 8	100 Cft	0.61	28,986.90	17,682		
		Concrete Work						
4	6/6	Providing and laying reinforced cement concrete (including prestressed concrete), using coarse sand and screened graded and washed aggregate, in required shape and design, including forms, moulds, shuttering, lifting, compacting, curing, rendering and finishing exposed surface, complete (but excluding the cost of steel reinforcement, its fabrication and placing in position, etc.):-						
		In Foundation						
		(a)(iii) Reinforced cement concrete in slab of rafts / strip foundation, base slab of column and retaining walls; etc and footing beams, other structural members other than those mentioned in 6(a) (i)&(ii) above not requiring form work (i.e. horizontal shuttering) complete in all respects:-						
		(2) Type B (nominal mix 1: 2: 4)	P.Cft	347.94	457.75	159,268		

DETAILED COST ESTIMATE

PARKING SHED (SIZE 96' x 16')

		CIVIL WORK				
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Steel Work.				
5	6/12/c	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars):-				
		Deformed bars (Grade-60)	100kg	19.89	31,784.50	632,194
		Sand Filling				
6	7/30	Supplying and filling sand under floor; or plugging in wells.	100 Cft	15.36	2,943.30	45,209
		Sub Base Course				
7	18/3/a/ (ii) + 1/1	Providing and laying sub-base course of stone product of approved quality and grade including, placing, mixing, spreading and compaction of sub base material to required depth, camber and grade to achieve 98% maximum dry density determined according to AASHTO T-180 method-D, including carriage of all material to site of work complete in all respect as per specifications and as directed by the engineer incharge. (Crushed stone aggregate from sargodha querry to site, actual compacted depth shall be considered for payment)				
			100Cft	5.07	18,132.30	91,931
		Water Bound Macadam				
8	18/4/a + 1/1	Providing and laying base course of crushed stone (Water Bound Macadam) of approved quality and grade including, placing, mixing, spreading and compaction of base course material to required depth, camber and grade to achieve 100% maximum modified AASHTO dry density, including carriage of all material to site of work complete in all respect as per specifications and as directed by the engineer incharge. (Crushed stone aggregate from sargodha querry to site, actual compacted depth shall be considered for payment)		5.07	23,137.16	117,305
		Tuff Paver				
9	10/41	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)				

DETAILED COST ESTIMATE

PARKING SHED (SIZE 96' x 16')

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		c) 80-mm thick	Per Sft	1,536.00	194.90	299,366
10	1/1	Carriage of 100 Cft. (2.83 cu.m) of all materials like stone aggregate, spawl, kankar lime (unslaked), surkhi, etc. or 150 Cft. (4.25 cu.m) of timber, by truck or by any other means owned by the contractor. (crushed stone aggregate and bajri used in concrete items) (Lead 125 Km)		363.99	76.73	27,928
		Parking Shed		505.77	10.15	21,920
11	N.S	Providing, laying and fixing in position Pre- Engineered shed as per drawings and manufacturer's specifications and as directed by Engineer Incharge. This item includes Aluzinc corrugated sheet of 0.5 to 0.6 mm thick (50-60 gm/sqm) fixed with rivet and bolts over GI Purlins 200x6 (OSF) 200 to 500 (Web)X4 200X6 (ISF) as shown in drawing No. ST-14 with approved Colour/ paint fitted with J-Type bolt having length 500 mm as shown in drawing. This item includes all kind of leads, lifts, fitting charges etc. complete in all respect excluding Cost of substructure i.e. foundation. Approval of manufacturer must be sought from Engineer Incharge prior to placement of order.		1,536.00	2,270.00	3,486,720
		Total Amonut Rs.				4,904,543

CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Excavation						
1	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m)						
	ii) in ordinary soil.						
	Columns	5	7.00	7.00	4.00 Total Total	980.00 980.00	Cft Cft %oCft
					10(a)	980.00 980.00 980.00 0.98 0.98 1,536.00 245.00 1,781.00	/00011
	Anti-Termite						
2	Spraying termite proofing by using liquid FMC/Biflex/Terminex Exin/Ms Hextar or equivalent @ specified suspension concenterate (SC), Mixing Ability-HEXTAR with Ratio (1:250) = 540 Sft or equivalent approved liquid applying with shower and certificate will be provided by the contractor for 10-years complete in all respect as approved by the Engineer Incharge.						
	Floor	1	96.00	16.00		1,536.00	Sft
	Columns	5	7.00	7.00		245.00	Sft
					Total	980.00 0.98 0.98 1,536.00 245.00 1,781.00 1,781.00 61.25 61.25 61.25	Sft
	Plain Cement Concrete						
3	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):						
	(i) Ratio 1: 4: 8						
	Columns	5	7.00	7.00	0.25		Cft
					Total	61.25	Cft
					Total	0.61	%Cft

CALCULATION OF QUANTITIES

~		1					
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Concrete Work						
4	Providing and laying reinforced cement concrete						
	(including prestressed concrete), using coarse sand						
	and screened graded and washed aggregate, in						
	required shape and design, including forms,						
	moulds, shuttering, lifting, compacting, curing,						
	rendering and finishing exposed surface, complete						
	(but excluding the cost of steel reinforcement, its						
	fabrication and placing in position, etc.):-						
	In Foundation						
	(a)(iii) Reinforced cement concrete in slab of rafts /						
	strip foundation, base slab of column and retaining						
	walls; etc and footing beams, other structural						
	members other than those mentioned in						
	6(a) (i)&(ii) above not requiring form work (i.e.						
	horizontal shuttering) complete in all respects:-						
	Columns footing	5	6.50	6.50	1.00		Cft
	Columns Plinth Beam	5	1.50	1.50 0.75	5.75		Cft
	Fillui Bealli	1	96.00	0.75	1.00	72.00	Cft
					Total	347.94	Cft
	Steel Work.						
5	Fabrication of mild steel reinforcement for cement						
	concrete, including cutting, bending, laying in						
	position, making joints and fastenings, including						
	cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of						
	rust from bars):-						
	Deformed bars (Grade-60)					347.94	Cft
	Columns @ 12 lbs / Cft		12.00		=	5 64.69 0 72.00 1 347.94 347.94 4,175 4,175 1,894 95 1,989	lbs/cft
				Total	=	4,175	lbs/cft
				Total	=	1,894	Kg.
			Add 5% V		=		Kg.
				Total	=	1,989	Kg
					Total	19.89	%kg
	Sand Filling						
6	Supplying and filling sand under floor; or plugging in wells.						
	Shed	1	96.00	16.00	1.00	1,536.00	Cft
					Total	1,536.00	Cft
					Total	15.36	%Cft

CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Sub Base Course						
7	Sub Base Course Providing and laying sub-base course of stone product of approved quality and grade including, placing, mixing, spreading and compaction of sub base material to required depth, camber and grade to achieve 98% maximum dry density determined according to AASHTO T-180 method-D, including carriage of all material to site of work complete in all respect as per specifications and as directed by the engineer incharge. (Crushed stone aggregate						
	from sargodha querry to site, actual compacted depth shall be considered for payment)						
	Shed	1	96.00	16.00	0.33	506.88	Cft
					Total	5.07	%Cft
	Water Bound Macadam						
8	Providing and laying base course of crushed stone (Water Bound Macadam) of approved quality and grade including, placing, mixing, spreading and compaction of base course material to required depth, camber and grade to achieve 100% maximum modified AASHTO dry density, including carriage of all material to site of work complete in all respect as per specifications and as directed by the engineer incharge. (Crushed stone aggregate from sargodha querry to site, actual compacted depth shall be considered for payment)						
	Shed	1	96.00	16.00	0.33	506.88	Cft
					Total	5.07	%Cft
9	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)						
		i	1	1			

CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Parking Shed						
10	Providing, laying and fixing in position Pre- Engineered shed as per drawings and manufacturer's specifications and as directed by Engineer Incharge. This item includes Aluzinc corrugated sheet of 0.5 to 0.6 mm thick (50-60 gm/sqm) fixed with rivet and bolts over GI Purlins 200x6 (OSF) 200 to 500 (Web)X4 200X6 (ISF) as shown in drawing No. ST-14 with approved Colour/ paint fitted with J-Type bolt having length 500 mm as shown in drawing. This item includes all kind of leads, lifts, fitting charges etc. complete in all respect excluding Cost of substructure i.e. foundation. Approval of manufacturer must be sought from Engineer Incharge prior to placement of order.		96.00	16.00		1,536	Sft
		1	20.00	10.00		1,000	BI

DETAILED COST ESTIMATE

PARKING SHED (SIZE 96' x 16')

		ELECTRICAL WORK	,			
Sr. No.	2nd Bi-Annual- 2022 (July to Jun) T.T. Singh	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
		Scheduled Items (A)				
1	C-24/3-iii	Supply and erection of PVC pipe for wiring recessed in walls, including bends, inspection joints, boxes, pull boxes, hook, cutting and repair surface etc. completed with all specified. (25 mm i/d)	Rft.	250.00	94.60	23,650
					,	
2	C-24/10a.i	Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only). (3.029)		120.00	25.70	3,084
3	C-24/10a.iii	Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only). (7.029)		250.00	40.75	10,188
4	C-24/14-i	Supply and erection of M.S. sheet box of 16 SWG, 10 cm (4") deep, with 4.75 mm thick (3/16") bakelite sheet top, for recessed wiring, including making holes for regulators, switches, plugs, etc. (4"x4")		2.00	270.60	541
5	C-24/32-ii	Supply and erection of switches 10/15 Amp. (Recessed Type)	Each	2.00	87.35	175
		Sub Total (A)				37,637
6	N.S	Supply, installation and commissioning FLOOD LIGHT BVP151 LED50NW 220240V 50Wwith all accessories complete in all respects	Each	4.00	10,900.00	43,600
		Sub Total (B)				43,600
		Sub Total (A+B)				81,237

DETAILED COST ESTIMATE

WASHING PIT

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)			
		Excavation							
1	3/21/a/ii	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m)							
		a) By Manual							
		ii) in ordinary soil.	1000Cft	0.94	10,677.75	10,037			
		Sand Filling							
2	7/30	Supplying and filling sand under floor; or plugging in wells.	100Cft	1.26	2,943.30	3,709			
		Plain Cement Concrete							
3	6/5	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):							
		(f) Ratio 1: 2: 4	100 Cft	1.25	38,178.90	47,724			
		(i) Ratio 1: 4: 8	100 Cft	3.21	28,986.90	93,048			
		Brick work in Foundation							
4	7/4/i	Pacca brick work in foundation and plinth in:-							
		Cement, sand mortar:- Ratio 1:4	100 Cft	8.02	30,280.30	242,848			
		Concrete Work							
5	6/6	Providing and laying reinforced cement concrete (including prestressed concrete), using coarse sand and screened graded and washed aggregate, in required shape and design, including forms, moulds, shuttering, lifting, compacting, curing, rendering and finishing exposed surface, complete (but excluding the cost of steel reinforcement, its fabrication and placing in position, etc.):-							
		In Foundation (a)(iii) Reinforced cement concrete in slab of rafts / strip foundation, base slab of column and retaining walls; etc and footing beams, other structural members other than those mentioned in 6(a) (i)&(ii) above not requiring form work (i.e. horizontal shuttering) complete in all respects:-							
		(2) Type C (nominal mix 1: 2: 4)	P.Cft	541.04	457.75	247,660			

DETAILED COST ESTIMATE

WASHING PIT CIVIL WORK

					-	
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Above foundation				
		(a) (i) Reinforced cement concrete in roof slab, beams, columns lintels, girders and other structural members laid in situ or precast laid in position, or prestressed members cast in situ, complete in all respects:-				
		(3) Type C (nominal mix 1: 2: 4)	P.Cft	281.70	556.50	156,766
		Steel Work.				
6	6/12/c	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars):-				
		Deformed bars (Grade-60)	100kg	24.68	31,784.50	784,508
		Plaster				
7	11/8/b	Cement plaster 1:3 upto 20' (6.00 m) height:-				
		b) ¹ /2" (13 mm) thick	100 Sft	2.83	3,424.50	9,691
		Mosaic flooring				
8	10/22/a	1 ¹ / ₂ "(40 mm) thick mosaic flooring, consisting of ¹ / ₂ "(13 mm) mosaic topping of one part of cement and marble powder in the ratio of 3:1 and two parts of marble chips, laid over 1"(25 mm) thick floor of 1:2:4 cement concrete, including rubbing and polishing complete with finishing :-				
		(a) using grey cement	100 Sft	1.05	19,573.00	20,552
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DETAILED COST ESTIMATE

WASHING PIT

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Mosaic dado or skirting				
9	10/37	Mosaic dado or skirting with one part of cement and marble powder in the ratio of 3:1 and two parts of marble chips, laid over 1/2"(13 mm) thick cement plaster 1:3, including rubbing and polishing, complete with finishing:				
		(a) using grey cement:				
		ii) ¹ / ₂ "(13 mm) thick	100 Sft	2.83	20,965.90	59,333
		M.S Grating				
10	18/23	Providing and fixing M.S Grating comprising of Angle Iron frame size 1.50" x 1.50" x 3/16" and 1/2" square bars duly welded @ 4" c/c, including painting charges etc complete in all respect.	Sft	60.00	1,663.25	99,795
11	1/1	Carriage of 100 Cft. (2.83 cu.m) of all materials like stone aggregate, spawl, kankar lime (unslaked), surkhi, etc. or 150 Cft. (4.25 cu.m) of timber, by truck or by any other means owned by the contractor. (crushed stone aggregate and bajri used in concrete items) (Lead 125 Km)	Cft	1,138.22	76.73	87,333
						1.0/2.002
		Total Amount Rs.				1,863,003

CALCULATION OF QUANTITIES

a							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Excavation						
1	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m)						
	ii) in ordinary soil.						
	Washing Pit	1	37.50	10.17	2.00	762.75	Cft
	Drain	1	60.00	2.00	1.50	180.00	Cft
					Total	0.94	%oCft
2	Supplying and filling sand under floor; or plugging in wells.	1	37.50	10.17	0.33	125.85	Cft
					Total	1.26	%Cft
	Plain Cement Concrete						
3	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):						
	(f) Ratio 1: 2: 4 For Plinth	1	100.00	5.00	0.25	125.00	Cft
					Total	1.25	%Cft
	(i) Ratio 1: 4: 8						
	Washing Pit	1	37.50	10.17	0.33	125.85	Cft
	For Plinth	1	100.00	5.00	0.33	165.00	Cft
	Drain	1	60.00	2.00	0.25	30.00	Cft
					Total	3.21	%Cft
	Brick work in Foundation						
4	Pacca brick work in foundation and plinth in:- Cement, sand mortar:- Ratio 1:4 Washing Pit						
	Step - 1	1	13.00	1.875	0.50	12.19	Cft
	Step - 2	1	13.00	1.500	0.50	9.75	Cft
	Step - 3	1	13.00	1.125	5.50	80.44	Cft
	Side walls	2	20.00	3.500	3.50	490.00	Cft
		2	15.00	3.500	2.00	210.00	Cft
					Total	802.38	Cft
			1				1

CALCULATION OF QUANTITIES

Sr.	Description	N	Longth	XX/2.141-	Height	04	T T **
No.	Description	No.	Length	Width	Height	Qty.	Uni
	Concrete Work						
5	Providing and laying reinforced cement concrete						
	(including prestressed concrete), using coarse sand						
	and screened graded and washed aggregate, in						
	required shape and design, including forms, moulds,						
	shuttering, lifting, compacting, curing, rendering and						
	finishing exposed surface, complete (but excluding						
	the cost of steel reinforcement, its fabrication and						
	placing in position, etc.):-						
	In Foundation						
	(a)(iii) Reinforced cement concrete in slab of rafts /						
	strip foundation, base slab of column and retaining						
	walls; etc and footing beams, other structural						
	members other than those mentioned in 6(a) (i)&(ii)						
	above not requiring form work (i.e. horizontal						
	shuttering) complete in all respects:-						
	(2) Type C (nominal mix 1: 2: 4)						
	Washing Pit RCC Slab	1	36.00	9.50	1.50	513.00	Cf
	Drain	1	60.00	1.42	0.33	28.04	Cf
					Tatal	541.04	Cf
					Total	541.04	Cf
	Above foundation						
	(a) (i) Reinforced cement concrete in roof slab,						
	beams, columns lintels, girders and other structural						
	members laid in situ or precast laid in position, or						
	prestressed members cast in situ, complete in all						
	respects:-						
	(3) Type C (nominal mix 1: 2: 4)						
	Washing Pit on Walls	2	36.00	3.50	1.00	252.00	Cft
	Drain	2	60.00	0.33	0.75	29.70	Cft
					Total	281.70	Cft
	Steel Work.						
6	Fabrication of mild steel reinforcement for cement						
	concrete, including cutting, bending, laying in						
	position, making joints and fastenings, including cost						
	of binding wire and labour charges for binding of						
	steel reinforcement (also includes removal of rust						
	from bars):-						
	Deformed bars (Grade-60)				Total	823	Cf
	Total Concrete 3kg/cft		3			2,468	Kg
					Total	24.68	%K

CALCULATION OF QUANTITIES CIVIL WORK

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Plaster						
7	Cement plaster 1:3 upto 20' (6.00 m) height:-						
	b) ¹ / ₂ " (13 mm) thick						
	Wall	1	15.00		5.50	82.50	Sft
	Side Wall	2	20.00		3.50	140.00	Sft
		2	15.00		2.00	60.00	Sft
					Total	282.50	Sft
					Total	2.83	%Sft
	Mosaic flooring						
8	1 ¹ / ₂ "(40 mm) thick mosaic flooring, consisting of ¹ / ₂ "(13 mm) mosaic topping of one part of cement and marble powder in the ratio of 3:1 and two parts of marble chips, laid over 1"(25 mm) thick floor of 1:2:4 cement concrete, including rubbing and polishing complete with finishing :-						
	(a) using grey cement	1	35.00	3.00		105.00	Sft
					Total	1.05	%Sft
	Mosaic dado or skirting						
9	Mosaic dado or skirting with one part of cement and marble powder in the ratio of 3:1 and two parts of marble chips, laid over ¹ / ₂ "(13 mm) thick cement plaster 1:3, including rubbing and polishing, complete with finishing:						
		1	15.00		5.50	82.50	Sft
		2	20.00		3.50	140.00	Sft
		2	15.00		2.00	60.00	Sft
					Total	282.50	Sft
					Total	2.83	%Sft

DETAILED COST ESTIMATE

EXTERNAL WORK

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		PARTITION WALL				
		Excavation				
1	3/21/a/ii	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m)				
		a) By Manual				
		ii) in ordinary soil.	1000Cft	0.51	10,677.75	5,446
		Anti-Termite				
2	26/43	Spraying termite proofing by using liquid FMC/Biflex/Terminex Exin/Ms Hextar or equivalent @ specified suspension concenterate (SC), Mixing Ability-HEXTAR with Ratio (1:250) = 540 Sft or equivalent approved liquid applying with shower and certificate will be provided by the contractor for 10-years complete in all respect as approved by the Engineer Incharge				
		Incharge.	Sft	542.00	9.25	5,014
		Plain Cement Concrete				
3	6/5	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):				
		(i) Ratio 1: 4: 8	100 Cft	0.85	28,986.90	24,494
		Brick work in Foundation				
4	7/4/i	Pacca brick work in foundation and plinth in:-				
		Cement, sand mortar:- Ratio 1:5	100 Cft	3.64	29,326.30	106,748
		Horizontal D.P.C				
5	6/36	Providing and laying damp proof course of cement concrete 1 : 2 : 4 (using cement, sand and shingle), including bitumen coating :-				
		(a) with one coat bitumen and one coat polythene sheet 500gauge				
		i) 1½" thick (40 mm)	100 Sft	0.40	8,639.45	3,456

DETAILED COST ESTIMATE

EXTERNAL WORK

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Vertical D.P.C				
6	6/37	Providing and laying vertical damp proof course with cement sand plaster and bitumen coating:-				
		(a) with one coat of bitumen and one coat of polythene sheet 500 gauge:				
		ii) Ratio 1:3 ³ / ₄ " thick (20 mm)	100 Sft	0.67	6,459.70	4,328
		Brick work in Super Structure				
7	7/5	Pacca brick work in ground floor:-				
		i) Cement, sand mortar:- Ratio 1:5	100 Cft	2.81	31,510.10	88,543
		Cement Plaster				
8	11/9	Cement plaster 1:4 upto 20' (6.00 m) height:-				
		3/4" (20 mm) thick	100 Sft	3.56	4,379.60	15,591
0	11/10/	Pointing				
9	11/18/a	Cement pointing struck joints, on walls, upto 20' (6.00 m) hiehgt:-				
		a) ratio 1:2	100 Sft	3.52	3,518.35	12,385
10	11/31	Extra cost of labour and material for red oxide pigment in cement pointing to match with the colour of bricks.	100 Sft	3.52	652.50	2 207
		colour of blicks.	100 SIt	5.32	032.30	2,297
		Distempering				
11	11/23	Distempering:-				
		iii) three coats	100 Sft	3.20	1,295.00	4,144
12	1/1	Carriage of 100 Cft. (2.83 cu.m) of all materials like stone aggregate, spawl, kankar lime (unslaked), surkhi, etc. or 150 Cft. (4.25 cu.m) of timber, by truck or by any other means owned by the contractor. (crushed stone aggregate and bajri used in concrete items) (Lead 125 Km)				
			Cft	80.08	76.73	6,144
		Total Rs. "A"				278,589

DETAILED COST ESTIMATE

EXTERNAL WORK

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Tuff Paver				
		Borrow Earth				
13	3/5/i + 3/17	Earthwork in ordinary soil for embankment including ploughing and mixing with blade grade or disc harrow or other suitable equipment and compaction by mechanical means at optimum moisture content and dressing to designed section, complete in all respects:- 90% to 95% maximum modified dry density as				
		determined according to AASHTO T-180 method- D including Transportation of earth.	1000Cft	33.68	17,222.30	580,047
		Sub Base Course				
14	18/3/a/ (ii) + 1/1	Providing and laying sub-base course of stone product of approved quality and grade including, placing, mixing, spreading and compaction of sub base material to required depth, camber and grade to achieve 98% maximum dry density determined according to AASHTO T-180 method-D, including carriage of all material to site of work complete in all respect as per specifications and as directed by the engineer incharge. (Pit run or bed run gravel from sargodha querry to site, actual compacted depth shall be considered for payment)		83.74	18,132.30	1,518,399
			100Cit	85.74	18,132.30	1,318,399
		Water Bound Macadam				
15	18/4/a + 1/1	Providing and laying base course of crushed stone (Water Bound Macadam) of approved quality and grade including, placing, mixing, spreading and compaction of base course material to required depth, camber and grade to achieve 100% maximum modified AASHTO dry density, including carriage of all material to site of work complete in all respect as per specifications and as directed by the engineer incharge. (Crushed stone aggregate from sargodha querry to site, actual compacted depth shall be considered for payment)				
	1	1	1			

DETAILED COST ESTIMATE

EXTERNAL WORK

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Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)	
		Tuff Paver					
16	10/41	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)					
		c) 80-mm thick	Per Sft	25,375.00	189.25	4,802,219	
		Kerb Stone					
17	6/52	Providing and fixing precast Edge Kerb Stone					
17	0/32	(4"to 6" thick), of 3500 PSI Compressive Strength, embeded in PCC 1:2:4 over lean concrete 1:4:8 etc complete in all respect.					
		b) With Painting					
		(i) 14" high	Rft	300.00	516.90	155,070	
18	3/32	Turfing slopes of banks or lawns with grass sods including ploughing, laying, setting and watering (Turf got from within a distance of 5 miles (8 Km.) and maintenance for 15 days).	100 Sft	19.00	1,715.45	32,594	
			100 Sit	19.00	1,715.45	32,394	
		Total Rs. "B"				9,025,834	
		Total Rs. "A+B"				9,304,423	

EXTERNAL WORK CALCULATION OF QUANTITIES

Sr.	Description	Na	Longth	W/: J4h	Hatakt	04	T
No.	Description	No.	Length	Width	Height	Qty.	Unit
	PARTITION WALL						
	Excavation						
1	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m)						
	ii) in ordinary soil.						
	Boundary wall	1	40.00	3.00	3.00	360.00	Cft
	Boundary wall Columns	4	3.50	3.50	3.00	147.00	Cft
					Total	507.00	Cft
					Total	0.51	%oCft
	Anti-Termite						
2	Spraying termite proofing by using liquid FMC/Biflex/Terminex Exin/Ms Hextar or equivalent @ specified suspension concenterate (SC), Mixing Ability-HEXTAR with Ratio (1:250) = 540 Sft or equivalent approved liquid applying with shower and certificate will be provided by the contractor for 10-years complete in all respect as approved by the Engineer Incharge.						
	Boundary wall	1	40.00	9.00		360.00	Sft
	Boundary wall Columns	4	3.50	9.50		133.00	Sft
		4	3.50	3.50		49.00	Sft
					Total	542.00	Sft
	Plain Cement Concrete						
3	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate): (i) Ratio 1: 4: 8						
	Boundary wall	1	40.00	3.00	0.50	60.00	Cft
	Boundary wall Columns	4	3.50	3.50	0.50	24.50	Cft
					Total	84.50	Cft
					Total	0.85	%Cft
	Puisk work in Foundation						
4	Brick work in Foundation Pacca brick work in foundation and plinth in:-						
4	Cement, sand mortar:- Ratio 1:5						

CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Boundary wall						
	Step - 1	1	40.00	2.625	0.50	52.50	Cft
	Step - 2	1	40.00	2.250	0.50	45.00	Cft
	Step - 3	1	40.00	1.875	0.50	37.50	Cft
	Step - 4	1	40.00	1.500	0.50	30.00	Cft
	Step - 5	1	40.00	1.125	0.50	22.50	Cft
	Step - 6	1	40.00	0.750	3.50	105.00	Cft
	Boundary wall Columns						
	Step - 1	4	3.00	3.00	0.50	18.00	Cft
	Step - 2	4	2.63	2.63	0.50	13.78	Cft
	Step - 3	4	2.25	2.25	0.50	10.13	Cft
	Step - 4	4	1.88	1.88	0.50	7.03	Cft
	Step - 5	4	1.50	1.50	0.50	4.50	Cft
	Step - 6	4	1.13	1.13	3.50	17.72	Cft
					Total	363.66	Cft
					Total	3.64	%Cft
	Horizontal D.P.C						
5	Providing and laying damp proof course of cement concrete 1 : 2 : 4 (using cement, sand and shingle), including bitumen coating :-						
	(a) with one coat bitumen and one coat polythene sheet 500gauge						
	i) 1 ¹ / ₂ " thick (40 mm)						
	Boundary wall	1	40.00	0.75		30.00	Sft
	Boundary wall Columns	8	1.13	1.13		10.13	Sft
					Total	40.13	Sft
					Total	0.40	%Sft
	Vertical D.P.C						
6	Providing and laying vertical damp proof course with cement sand plaster and bitumen coating:-						
	(a) with one coat of bitumen and one coat of polythene sheet 500 gauge:						
	ii) Ratio 1:3 ³ / ₄ " thick (20 mm)						
	Boundary wall	1	40.00		1.50	60.00	Sft
	Boundary wall Columns	4	1.13		1.50	6.75	Sft
	· · · · · · · · · · · · · · · · · · ·	•			Total	66.75	Sft
					1		

CALCULATION OF QUANTITIES CIVIL WORK

Sr.							
No.	Description	No.	Length	Width	Height	Qty.	Unit
	Brick work in Super Structure						
7	Pacca brick work in ground floor:-						
	i) Cement, sand mortar:- Ratio 1:5						
	Boundary wall	1	40.00	0.75	8.00	240.00	Cft
	Boundary wall Columns	4	1.13	1.13	8.00	40.50	Cft
					Total	280.50	Cft
					Total	2.81	%Cft
	Cement Plaster						
8	Cement plaster 1:4 upto 20' (6.00 m) height:-						
	3/4" (20 mm) thick						
	Boundary wall	1	40.00		8.00	320.00	Sft
	Boundary wall Columns	4	1.13		8.00	36.00	Sft
					Total	356.00	Sft
					Total	3.56	%Sft
	Pointing						
9	Cement pointing struck joints, on walls, upto $20'$						
	(6.00 m) hiehgt:-						
	a) ratio 1:2 Outer Walls	1	40.00		8.00	320.00	66
		1 4	1.13		8.00 7.00	320.00	Sft
	Boundary wall Columns	4	1.15		Total	351.50	Sft Sft
					Total	331.30	SIL
					Total	3.52	%Sft
10	Extra cost of labour and material for red oxide						
10	pigment in cement pointing to match with the colour						
	of bricks.				Total	3.52	%Sft
	Distempering						
11	Distempering:-						
	iii) three coats						
	Boundary wall	1	40.00		8.00	320.00	Sft
					Total	320.00	Sft
					Total	3.20	%Sft

CALCULATION OF QUANTITIES

~							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Tuff Paver						
	Borrow Earth						
12	Earthwork in ordinary soil for embankment						
	including ploughing and mixing with blade grade or						
	disc harrow or other suitable equipment and compaction by mechanical means at optimum						
	moisture content and dressing to designed section,						
	complete in all respects:-						
	90% to 95% maximum modified dry density as						
	determined according to AASHTO T-180 method-D						
	including Transportation of earth.		Area				
	Total Area	1	33,675	1.00	1.00	33,675	Cft
					Total	33.68	%oCft
	Sub Base Course						
13	Providing and laying sub-base course of stone						
10	product of approved quality and grade including,						
	placing, mixing, spreading and compaction of sub						
	base material to required depth, camber and grade to						
	achieve 98% maximum dry density determined						
	according to AASHTO T-180 method-D, including carriage of all material to site of work complete in all						
	respect as per specifications and as directed by the						
	engineer incharge. (Pit run or bed run gravel from						
	sargodha querry to site, actual compacted depth shall						
	be considered for payment)						
		1	25,375	1.00	0.33	8,373.75	Cft
					Total	83.74	%Cft
	Water Bound Macadam						
14	Providing and laying base course of crushed stone						
11	(Water Bound Macadam) of approved quality and						
	grade including, placing, mixing, spreading and						
	compaction of base course material to required						
	depth, camber and grade to achieve 100% maximum						
	modified AASHTO dry density, including carriage						
	of all material to site of work complete in all respect as per specifications and as directed by the engineer						
	incharge. (Crushed stone aggregate from sargodha						
	querry to site, actual compacted depth shall be						
	considered for payment)						
		1	25,375	1.00	0.33	8,373.75	Cft
					Total	83.74	0/_ (^f+
					Total	ð 3. /4	%Cft

CALCULATION OF QUANTITIES CIVIL WORK

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Tuff Paver						
15	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)						
	c) 80-mm thick	1	25,375	1.00		25,375	Sft
16	Providing and fixing precast Edge Kerb Stone (4"to 6" thick), of 3500 PSI Compressive Strength, embeded in PCC 1:2:4 over lean concrete 1:4:8 etc complete in all respect.						
	b) With Painting						
	(i) 14" high	1	300			300	Rft
17	Turfing slopes of banks or lawns with grass sods including ploughing, laying, setting and watering (Turf got from within a distance of 5 miles (8 Km.) and maintenance for 15 days).		1,900	1.00		1,900	Sft
					Total	19.00	%Sft

DETAILED COST ESTIMATE

EJECTOR PUMP

	1	EJECTOR PUMI	2			
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Ejector Pump				
1	23/45/ii	P/F Ejector Pump of specified Suction and Delivery heads, coupled with Single Phase Seimen Electric Motor of required rating for water supply i/c the cost of connection charges, necessary wire, PVC pipes etc complete in all respect as approved and directed by the Engineer				
		Incharge. ii) G-IV (2-1/2"x2") with 2.5 HP Electric Motor, 38-Mtr Suction and 38 M delivery head	Each	1.00	17,905.90	17,906
		Boring				
2	23/1	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:-				
		c) 5" (125 mm) i/d	Rft	100.00	581.05	58,105
3	23/2	Boring for tubewell in all types of soil except shingle, gravel & rock, from a depth of 100.1 ft. to 200 ft. (30 to 60 m) below ground level, including sinking and withdrawing of casing pipe, complete:-				
		a) 5" (125 mm) i/d	Rft	100.00	973.80	97,380
4	23/16	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.				
		b) 4" i/d (100 mm)	Rft	50.00	483.60	24,180
5	23/17	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.				
		b) 1½" i/d (40 mm)	Rft	200.00	158.25	31,650
		c) 2" i/d (50 mm)	Rft	70.00	230.00	16,100
6	23/11	Providing and installing, P.V.C. strainer B.S.S. Class 'B', in tubewell bore hole, including sockets and solvents, etc. complete:-				
		a) 3" i/d (75 mm)	Rft	30.00	174.70	5,241

DETAILED COST ESTIMATE

EJECTOR PUMP

		EJECTOR PUMI				
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
7	23/14	Providing and installing P.V.C. Bail/End plug, in				
		tubewell bore hole:-				
		a) B.S.S. Class `B'				
		i) 3" i/d (75 mm)	Rft	1.00	86.25	86
		Total Amount Rs.				250,648

		EXTERNAL WTER SUP	PLY			
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Excavation				
1	3/44	Excavation of trenches in all kinds of soil, except cutting rock, for watersupply pipelines upto 5 ft. (1.5 m) depth from ground level, including trimming, dressing sides, leveling the beds of trenches to correct grade and cutting pits for joints, etc. complete in all respects.		3.64	7,622.75	27,747
		HDPE Pipe				
2	23-43	Providing, laying, cutting, jointing, testing and disinfecting High Density Polyethylene Pipe (HDPE-100) working presure pipe, Beta/ Dadex/Popular/ IIL or equivalent including the cost of specials, in trenches, as approved & directed by the engineer incharge, complete in all respects				
		c) PN-10 (SDR-17)				
		3) 40 mm	Rft	370.00	53.10	19,647
		4) 50 mm	Rft	150.00	78.65	11,798
		Valve				
3	23/46	Providing and fixing CP heavy duty brass Ball valve with CP handle of specified dia meter made of Faisal/ Sonex/ Master best quality or equivalent complete in all respect as approved and directed by the Engineer Incharge.				
		v) 1-1/2" dia	Each	2.00	2,130.00	4,260
		vi) 2" dia	Each	2.00	2,550.00	5,100
		Under Ground Water Tank				
		Excavation				
4	3/21/a/ii	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m)				
		a) By Manual				
		ii) in ordinary soil.	1000Cft	0.89	10,677.75	9,503
		Plain Cement Concrete				
5	6/5	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):				
		(i) Ratio 1: 4: 8	100 Cft	0.42	28,986.90	12,174
	1			52		,- '

		EXTERNAL WTER SUP	PLY			
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Concrete Work				
6	6/6	Providing and laying reinforced cement concrete (including prestressed concrete), using coarse sand and screened graded and washed aggregate, in required shape and design, including forms, moulds, shuttering, lifting, compacting, curing, rendering and finishing exposed surface, complete (but excluding the cost of steel reinforcement, its fabrication and placing in position, etc.):-				
		In Foundation				
		(a)(iii) Reinforced cement concrete in slab of rafts / strip foundation, base slab of column and retaining walls; etc and footing beams, other structural members other than those mentioned in 6(a) (i)&(ii) above not requiring form work (i.e. horizontal shuttering) complete in all respects:-				
		(3) Type C (nominal mix 1: 2: 4)	P.Cft	85.28	457.75	39,035
		(a) (i) Reinforced cement concrete in roof slab, beams, columns lintels, girders and other structural members laid in situ or precast laid in position, or prestressed members cast in situ, complete in all respects:-				
		Type C (nominal mix 1: 2: 4)	P.Cft	278.09	556.50	154,758
7	6/12/c	Steel Work. Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars):-				
		Deformed bars (Grade-60)	100kg	10.90	31,784.50	346,484
		DOG MALLA				
8	21/16	RCC Manhole Cover Providing and fixing 6" thick R.C.C. manhole cover with tee shaped C.I. frame of 22" I/d (frame weighing 37.324 Kg. or one maund as per Standard Drawing STD/PD No. 6, of 1977,				
		complete in all respect.	Each	1.00	15,106.30	15,106
L	I			1		

DETAILED COST ESTIMATE EXTERNAL WTER SUPPLY

		EXTERNAL WTER SUP				
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Angle Iron Step				
9	21/13	Providing and fixing 1 ¹ / ₄ "x1 ¹ / ₄ "x3/16" (31x31x5 mm) angle iron step, in manhole chambers, including carriage and setting the same in work to correct lines and levels.	Each	6.00	590.60	3,544
10	1/1	Carriage of 100 Cft. (2.83 cu.m) of all materials like stone aggregate, spawl, kankar lime (unslaked), surkhi, etc. or 150 Cft. (4.25 cu.m) of timber, by truck or by any other means owned by the contractor. (crushed stone aggregate and bajri used in concrete items) (Lead 125 Km)	Cft	359.57	76.73	27,589
		Dump				
11	N.S	Pump Providing, installing, Fixing and commisioning of reciprocating pump with a capacity of 30 USGPM against a total head of 90 ft Cast Iron, Cylinder & Piston Rod in S.S., Crank Shaft in super finish S.G. Iron, Gland Nut in Brass and abrasion proof silently working Valves fitted on easily Feat accessible S.S., ABS or Cast Iron Valve Plate with Brass Seats, All Gaskets are in Rubber and Rocker Rail in Galvanized Mild Steel with Insulation Bushes complete system installed upto satisfaction of engineer in charge, complete in all respects	Each	1.00	30,000	30,000
		Total Rs				706,745

DETAILED COST ESTIMATE

EXTERNAL WTER SUPPLY

	EXTERNAL W	FER S	UPPLY				[
Sr. No.	Description	No	Length	Width	Height	Qty.	Unit
	Excavation						
1	Excavation of trenches in all kinds of soil, except cutting rock, for watersupply pipelines upto 5 ft. (1.5 m) depth from ground level, including trimming, dressing sides, leveling the beds of trenches to correct grade and cutting pits for joints, etc. complete in all respects.						
	Water supply Pipe	1	520.00	2.00	3.50	3,640.00	Cft
					Total	3.64	%oCft
	PPRC Pipe						
2	Providing, laying, cutting, jointing, testing and disinfecting High Density Polyethylene Pipe (HDPE- 100) working presure pipe, Beta/ Dadex/Popular/ IIL or equivalent including the cost of specials, in trenches, as approved & directed by the engineer incharge, complete in all respects						
	c) PN-10 (SDR-17)						
	3) 40 mm	1	370.00			370.00	Rft
	4) 50 mm	1	150.00			150.00	Rft
	Valve						
3	Providing and fixing CP heavy duty brass Ball valve with CP handle of specified dia meter made of Faisal/ Sonex/ Master best quality or equivalent complete in all respect as approved and directed by the Engineer Incharge. v) 1-1/2" dia	2				2.00	Nos.
	vi) 2" dia	2				2.00	Nos.
	Under Ground Water Tank						
4	Excavation Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m) a) By Manual						
	ii) in ordinary soil.	1	12.33	10.33	7.00	890.95	Cft
				<u> </u>	Total	0.89	%oCft
	Plain Cement Concrete	No Length Width Height Qty. Unitable I<					
5	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):						
	(i) Ratio 1: 4: 8	1	12.33	10.33	0.33	42.00	Cft
					Total	0.42	%Cft
	1						

DETAILED COST ESTIMATE EXTERNAL WTER SUPPLY

	EXTERNAL W	IEKS	UPPLY				
Sr. No.	Description	No	Length	Width	Height	Qty.	Unit
	Concrete Work						
6	Providing and laying reinforced cement concrete (including prestressed concrete), using coarse sand and screened graded and washed aggregate, in required shape and design, including forms, moulds, shuttering, lifting, compacting, curing, rendering and finishing exposed surface, complete (but excluding the cost of steel reinforcement, its fabrication and placing in						
	position, etc.):-						
	In Foundation						
	(a)(iii) Reinforced cement concrete in slab of rafts / strip foundation, base slab of column and retaining walls; etc and footing beams, other structural members other than those mentioned in $6(a)$ (i)&(ii) above not requiring form work (i.e. horizontal shuttering)						
	complete in all respects:-	1	10.00	10.22	0.67	05.00	
	(3) Type C (nominal mix 1: 2: 4)	1	12.33	10.33	0.67	85.28	Cft
	(a) (i) Reinforced cement concrete in roof slab, beams, columns lintels, girders and other structural members laid in situ or precast laid in position, or prestressed members cast in situ, complete in all respects:-						
	Type C (nominal mix 1: 2: 4)						
	Walls	1	38.66	0.67	8.00	207.24	Cft
	Top Slab	1	11.33	9.33	0.67	70.85	Cft
					Total	278.09	Cft

EXTERNAL WT	ER SUPPLY
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Sr. No.	Description	No	Length	Width	Height	Qty.	Unit
	Steel Work.						
7	Fabrication of mild steel reinforcement for cement						
	concrete, including cutting, bending, laying in position,						
	making joints and fastenings, including cost of binding						
	wire and labour charges for binding of steel						
	reinforcement (also includes removal of rust from						
	bars):-						
	Deformed bars (Grade-60) (3 kg/cft)				Total	1,090.10	Kg
	RCC Manhole Cover						
8	Providing and fixing 6" thick R.C.C. manhole cover						
	with tee shaped C.I. frame of 22" I/d (frame weighing						
	37.324 Kg. or one maund as per Standard Drawing						
	STD/PD No. 6, of 1977, complete in all respect.						
		1				1.00	Nos
	Angle Iron Step						
9	Providing and fixing 11/4"x11/4"x3/16" (31x31x5 mm)						
	angle iron step, in manhole chambers, including						
	carriage and setting the same in work to correct lines						
	and levels.	6				6.00	Nos.

		EXTERNAL SEWERAGE SY	STEM			
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Excavation				
1	3/42	Earth work excavation in open cutting for sewers and manholes as shown in drawing including shuttering of wooden vertical planks, struts and beams, dressing to correct section and dimension according to templates and levels and removing surface water in all types of soil except shingle, gravel and rock. i) 0 ft. to 7.0 ft. (0 to 2.10 m) depth		3.50	11,740.40	41,091
		Sand Filling				
2	21/24	Providing and laying sand under and around the sewer pipe, including leveling, manual compaction, complete in all respect.	100Cft	10.00	3,789.85	37,899
		uPVC Pipe				
3	19/48	Providing, fixing, testing and commissioning of μ -PVC (Unplasticized Polyvinyl Chloride) sewerage pipe make of Dadex /Popular/Beta or equivalent, plain /socket ended conforming to code EN-1401 of specified SDR (Standard Dimension Ratio) including the cost of specials and Solvents complete in all respect as approved and directed by the Engineer Incharge.				
		a) Type (SDR 34/SN-8)	DC	200.00	1 1 4 2 5 5	242.065
		i) 6" dia 150mm ii) 8" dia 200 mm	Rft Rft	300.00	1,143.55 1,722.65	343,065 172,265
4	N.S Rate Analysis	Providing and making Manhole 2'x2' internal size including 9" thick brick masonry (1:4), 1/2" th. Plastering (1:3) i/side, benching with PCC 1:2:4 4" th. with cement finish, including manhole cover, complete in all respects.		7.00	18,148.97	127,043
		PENSTOCK GATE				
5	N.S	 Providing and fixing Penstock gate of following specifications: (1) Gate Size 4'-2" x 4'-2" (1250 mm x 1250 mm) (2) Forward and reverse manual operated with gear (3) Gate spindle of stainless steel (4) Frame of gate shall be made of stainless steel 	Each	2.00	1,755,000	3,510,000
		Total Rs				4,231,363

EXTERNAL S	SEWERAGE	SYSTEM
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Sr. No.	Description	No	Length	Width	Height	Qty.	Unit
	Excavation						
1	Earth work excavation in open cutting for sewers and manholes as shown in drawing including shuttering of wooden vertical planks, struts and beams, dressing to correct section and dimension according to templates and levels and removing surface water in all types of soil except shingle, gravel and rock. i) 0 ft. to 7.0 ft. (0 to 2.10 m) depth						
	uPVC pipe	1	400.00	2.50	3.50	3,500.00	Cft
					Total	3.50	%oCft
	Sand Filling						
2	Providing and laying sand under and around the sewer pipe, including leveling, manual compaction, complete in all respect.						
		1	400.00	2.50	1.00	1,000.00	Cft
					Total	10.00	%Cft
	uPVC Pipe						
3	Providing, fixing, testing and commissioning of μ -PVC (Unplasticized Polyvinyl Chloride) sewerage pipe make of Dadex /Popular/Beta or equivalent, plain /socket ended conforming to code EN-1401 of specified SDR (Standard Dimension Ratio) including the cost of specials and Solvents complete in all respect as approved and directed by the Engineer Incharge.						
	a) Type (SDR 34/SN-8)						
	i) 6" dia 150mm	1	300.00			300.00	Rft
	ii) 8" dia 200 mm	1	100.00			100.00	Rft
4	Providing and making Manhole 2'x2' internal size including 9" thick brick masonry (1:4), 1/2" th. Plastering (1:3) i/side, benching with PCC 1:2:4 4" th. with cement finish, including manhole cover, complete in all respects.	7				7.00	Nos.

DETAILED COST ESTIMATE

SEPTIC TANK CIVIL WORK

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Excavation				
1	3/42	Earth work excavation in open cutting for sewers and manholes as shown in drawing including shuttering of wooden vertical planks, struts and beams, dressing to correct section and dimension according to templates and levels and removing surface water in all types of soil except shingle, gravel and rock. i) 0 ft. to 7.0 ft. (0 to 2.10 m) depth	1000Cft	0.33	11,740.40	3,874
2	6/5	Plain Cement Concrete Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):				
		(f) Ratio 1: 2: 4	100 Cft	0.08	38,178.90	3,054
		(i) Ratio 1: 4: 8	100 Cft	0.27	28,986.90	7,826
		Brick work				
3	7/7/i	Pacca brick work other than building upto 10ft. (3 m)				
		Ratio 1:3 Concrete Work	100 Cft	2.28	32,796.10	74,775
4	6/6	Providing and laying reinforced cement concrete (including prestressed concrete), using coarse sand and screened graded and washed aggregate, in required shape and design, including forms, moulds, shuttering, lifting, compacting, curing, rendering and finishing exposed surface, complete (but excluding the cost of steel reinforcement, its fabrication and placing in position, etc.):-				
		(a) (i) Reinforced cement concrete in roof slab, beams, columns lintels, girders and other structural members laid in situ or precast laid in position, or prestressed members cast in situ, complete in all respects:-				
		Type C (nominal mix 1: 2: 4)	P.Cft	16.88	556.50	9,391

DETAILED COST ESTIMATE

SEPTIC TANK CIVIL WORK

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Steel Work.				
5	6/12/c	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars):-				
		Deformed bars (Grade-60)	100kg	0.42	31,784.50	13,409
		Cement Pointing				
6	11/18/a	Cement pointing struck joints, on walls, upto 20' (6.00 m) hiehgt:-				
		a) ratio 1:2	100Sft	2.64	3,518.35	9,288
		RCC Manhole Cover				
7	21/16	Providing and fixing 6" thick R.C.C. manhole cover with tee shaped C.I. frame of 22" I/d (frame weighing 37.324 Kg. or one maund as per Standard Drawing STD/PD No. 6, of 1977, complete in all respect.	Each	2.00	15,106.30	30,213
		Angle Iron Step				
8	21/13	Providing and fixing 1 ¹ / ₄ "x1 ¹ / ₄ "x3/16" (31x31x5 mm) angle iron step, in manhole chambers, including carriage and setting the same in work to correct lines and levels.	Each	14.00	590.40	8,266
9	1/1	Carriage of 100 Cft. (2.83 cu.m) of all materials like stone aggregate, spawl, kankar lime (unslaked), surkhi, etc. or 150 Cft. (4.25 cu.m) of timber, by truck or by any other means owned by the contractor. (crushed stone aggregate and bajri used in concrete items) (Lead 125 Km)	Cft	47.48	76.73	3,643
					, 0.10	3,013
		Total Amount Rs.				163,740

SEPTIC TANK CALCULATION OF QUANTITIES

CIVIL WORK

	CIVIL WORK										
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit				
	Excavation										
1	Earth work excavation in open cutting for sewers and manholes as shown in drawing including shuttering of wooden vertical planks, struts and beams, dressing to correct section and dimension according to templates and levels and removing surface water in all types of soil except shingle, gravel and rock.										
	i) 0 ft. to 7.0 ft. (0 to 2.10 m) depth										
	Septic tank	1	8.50	5.50	7.00 Total	327.25 327.25	Cft Cft				
					Total	0.33	%oCft				
	Plain Cement Concrete										
2	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):										
	(f) Ratio 1: 2: 4	3	1.75	3.00	0.50	7.88	Cft				
					Total	7.88	Cft				
					Total	0.08	%Cft				
	(*) D-4-1. 4. 9										
	(i) Ratio 1: 4: 8 Septic tank	3	1.75	3.00	0.33	5.25	Cft				
	Outer Wall	1	24.00	2.00	0.33	16.00	Cft				
	Baffle wall	2	6.00	1.50	0.33	6.00	Cft				
			0.00	1.50	Total	27.25	Cft				
					Total	0.27	%Cft				
	Brick work										
3	Pacca brick work other than building upto 10ft. (3 m)										
	Ratio 1:3										
	Outer wall	1	24.00	1.88	0.50	22.50	Cft				
		1	24.00	1.50	0.50	18.00	Cft				
		1	24.00	1.13	0.50	13.50	Cft				
		1	24.00	0.75	8.00	144.00	Cft				
	Baffle wall	2	3.00	1.13	0.50	3.38	Cft				
		2	3.00	0.75	6.00 Total	27.00	Cft				
					Total	228.38	Cft				
					Total	2.28	%Cft				

SEPTIC TANK CALCULATION OF QUANTITIES

CIVIL WORK

		UNI	1				
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Concrete Work						
4	Providing and laying reinforced cement concrete (including prestressed concrete), using coarse sand and screened graded and washed aggregate, in required shape and design, including forms, moulds, shuttering, lifting, compacting, curing, rendering and finishing exposed surface, complete (but excluding the cost of steel reinforcement, its fabrication and placing in position, etc.):-						
	(a) (i) Reinforced cement concrete in roof slab, beams, columns lintels, girders and other structural members laid in situ or precast laid in position, or prestressed members cast in situ, complete in all respects:-						
	Type C (nominal mix 1: 2: 4)	1	7.50	4.50	0.50	16.88	Cft
	Steel Work.						
5	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars):-						
	Deformed bars (Grade-60)		2.50 kg/	cft		42.19	Kg
					Total	0.42	%Kg
	Cement Pointing						
6	Cement pointing struck joints, on walls, upto 20' (6.00 m) hiehgt:-						
	a) ratio 1:2	1	24.00		8.00	192.00	Sft
		4	3.00		6.00	72.00	Sft
					Total	264.00	Sft
					Total	2.64	%Sft
	RCC Manhole Cover						
7	Providing and fixing 6" thick R.C.C. manhole cover with tee shaped C.I. frame of 22" I/d (frame weighing 37.324 Kg. or one maund as per Standard Drawing STD/PD No. 6, of 1977, complete in all respect.					2.00	Nac
		2				2.00	Nos.

	PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB SEPTIC TANK CALCULATION OF QUANTITIES CIVIL WORK									
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit			
8	Angle Iron Step Providing and fixing 1 ¹ /4"x1 ¹ /4"x3/16" (31x31x5 mm) angle iron step, in manhole chambers, including carriage and setting the same in work to correct lines and levels.					14.00	Nos.			

DETAILED COST ESTIMATE EXTERNAL DARINAGE SYSTEM

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Excavation				
1	3/42	Earth work excavation in open cutting for sewers and manholes as shown in drawing including shuttering of wooden vertical planks, struts and beams, dressing to correct section and dimension according to templates and levels and removing surface water in all types of soil except shingle, gravel and rock. i) 0 ft. to 7.0 ft. (0 to 2.10 m) depth		0.88	11,740.40	10,273
		Sand Filling				
2	21/24	Providing and laying sand under and around the sewer pipe, including leveling, manual compaction, complete in all respect.		2.50	3,789.85	9,475
		uPVC Pipe				
3	19/48	Providing, fixing, testing and commissioning of μ - PVC (Unplasticized Polyvinyl Chloride) sewerage pipe make of Dadex /Popular/Beta or equivalent, plain /socket ended conforming to code EN-1401 of specified SDR (Standard Dimension Ratio) including the cost of specials and Solvents complete in all respect as approved and directed by the Engineer Incharge.				
		a) Type (SDR 34/SN-8)				
		i) 6" dia 150mm ii) 8" dia 200 mm	Rft Rft	50.00 50.00	1,143.55 1,722.65	57,178 86,133
4	N.S Rate Analysis	Providing and making Manhole 2'x2' internal size including 9" thick brick masonry (1:4), 1/2" th. Plastering (1:3) i/side, benching with PCC 1:2:4 4" th. with cement finish, including manhole cover, complete in all respects.		1.00	18,148.97	18,149
		Total Rs				181,206

EXTERNAL DARINAGE SYSTEM	
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Sr. No.	Description	No	Length	Width	Height	Qty.	Unit
	Excavation						
1	Earth work excavation in open cutting for sewers and manholes as shown in drawing including shuttering of wooden vertical planks, struts and beams, dressing to correct section and dimension according to templates and levels and removing surface water in all types of soil except shingle, gravel and rock. i) 0 ft. to 7.0 ft. (0 to 2.10 m) depth						
	uPVC pipe	1	100.00	2.50	3.50	875.00	Cft
					Total	0.88	%oCft
	Sand Filling						
2	Providing and laying sand under and around the sewer pipe, including leveling, manual compaction, complete in all respect.						
		1	100.00	2.50	1.00	250.00	Cft
					Total	2.50	%Cft
	uPVC Pipe						
3	Providing, fixing, testing and commissioning of μ -PVC (Unplasticized Polyvinyl Chloride) sewerage pipe make of Dadex /Popular/Beta or equivalent, plain /socket ended conforming to code EN-1401 of specified SDR (Standard Dimension Ratio) including the cost of specials and Solvents complete in all respect as approved and directed by the Engineer Incharge.						
	a) Type (SDR 34/SN-8)						
	i) 6" dia 150mm	1	50.00			50.00	Rft
	ii) 8" dia 200 mm	1	50.00			50.00	Rft
4	Providing and making Manhole 2'x2' internal size including 9" thick brick masonry (1:4), 1/2" th. Plastering (1:3) i/side, benching with PCC 1:2:4 4" th. with cement finish, including manhole cover, complete in all respects.	1				1.00	Nos.

	T	SILT HOLDING TAN	K			
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		SILT HOLDING TANK				
		Excavation				
1	3/42	Earth work excavation in open cutting for sewers and manholes as shown in drawing including shuttering of wooden vertical planks, struts and beams, dressing to correct section and dimension according to templates and levels and removing surface water in all types of soil except shingle, gravel and rock. i) 0 ft. to 7.0 ft. (0 to 2.10 m) depth	1000Cft	0.32	11,740.40	3,757
		Plain Cement Concrete				
2	6/5	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):				
		(f) Ratio 1: 2: 4	100 Cft	0.05	38,178.90	1,909
		(i) Ratio 1: 4: 8	100 Cft	0.13	28,986.90	3,768
		Concrete Work				
3	6/6	Providing and laying reinforced cement concrete (including prestressed concrete), using coarse sand and screened graded and washed aggregate, in required shape and design, including forms, moulds, shuttering, lifting, compacting, curing, rendering and finishing exposed surface, complete (but excluding the cost of steel reinforcement, its fabrication and placing in position, etc.):-				
		(a) (i) Reinforced cement concrete in roof slab, beams, columns lintels, girders and other structural members laid in situ or precast laid in position, or prestressed members cast in situ, complete in all respects:-				
		Type C (nominal mix 1: 2: 4)	P.Cft	127.13	556.50	70,745
		Steel Work.				
4	6/12/c	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars):-				
		Deformed bars (Grade-60)	100kg	3.81	31,784.50	121,218

SILT HOLDING TANK											
Sr. 2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)						
	C.I Cover										
5 19/40	Supply and fitting of cast iron manhole cover with frame, etc. complete. iii) 60 cm (24") dia	F . 1	1.00	2.051.15	2.051						
		Each	1.00	2,051.15	2,051						
	Angle Iron Step										
6 21/13	Providing and fixing 1 ¹ / ₄ "x1 ¹ / ₄ "x3/16" (31x31x5 mm) angle iron step, in manhole chambers, including carriage and setting the same in work to correct lines and levels.		5.00	500.40	2.052						
	correct lines and levels.	Each	5.00	590.40	2,952						
	C.I Vent Pipe										
7 23/21	Providing, laying, cutting, jointing, testing and disinfecting cast iron pipe line (BS-2035) in trenches, with flanged and flanged joints, complete in all respects:-										
	a) 3" (75 mm) i/d	Rft	5.00	1,148.00	5,740						
8 1/1	Carriage of 100 Cft. (2.83 cu.m) of all materials like stone aggregate, spawl, kankar lime (unslaked), surkhi, etc. or 150 Cft. (4.25 cu.m) of timber, by truck or by any other means owned by the contractor. (crushed stone aggregate and bajri used in concrete items) (Lead 125 Km)	Cft	124.19	76.73	9,529						
	Total Da				221,669						
			used in concrete items) (Lead 125 Km) Cft	used in concrete items) (Lead 125 Km) Cft 124.19	used in concrete items) (Lead 125 Km) Cft 124.19 76.73						

DETAILED COST ESTIMATE

EXTERNAL WORKS

	EXTERNAL PLUMBING						
Sr. No.	Description	No	Length	Width	Height	Qty.	Unit
	SILT HOLDING TANK						
	Excavation						
1	Earth work excavation in open cutting for sewers and manholes as shown in drawing including shuttering of wooden vertical planks, struts and beams, dressing to correct section and dimension according to templates and levels and removing surface water in all types of soil except shingle, gravel and rock. i) 0 ft. to 7.0 ft. (0 to 2.10 m) depth						
		1	8.00	5.00	8.00	320.00	Cft
					Total	0.32	%oCft
	Plain Cement Concrete						
2	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):						
	(f) Ratio 1: 2: 4	1	6.00	3.00	0.25	4.50	Cft
					Total	0.05	%Cft
	(i) Ratio 1: 4: 8	1	8.00	5.00	0.33	13.20	Cft
					Total	0.13	%Cft
	Concrete Work						
3	Providing and laying reinforced cement concrete (including prestressed concrete), using coarse sand and screened graded and washed aggregate, in required shape and design, including forms, moulds, shuttering, lifting, compacting, curing, rendering and finishing exposed surface, complete (but excluding the cost of steel reinforcement, its fabrication and placing in position, etc.):-						
	(a) (i) Reinforced cement concrete in roof slab, beams, columns lintels, girders and other structural members laid in situ or precast laid in position, or prestressed members cast in situ, complete in all respects:-						
	Type C (nominal mix 1: 2: 4)						
	Walls	1	21.00	0.75	7.00	110.25	Cft
	Top Slab	1	7.50	4.50	0.50	16.88	Cft
					Total	127.13	Cft
	Steel Work.						

	PUNJAB CITIES P DETAILED DESIGN OF INFRASTRUCTU SUPERVISION IN 16 (DETAILED COS EXTERNAL PLUMBING	URE SU CITIES T EST WOR	UB-PROJE S OF PUNJ TIMATE RKS	CTS AN	D RESIDI	ENTS	
Sr. No.	Description	No	Length	Width	Height	Qty.	Unit
4	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars):-						
	Deformed bars (Grade-60) (3 kg/cft)				Total	381.38	Kg
	C.I Cover						
5	Supply and fitting of cast iron manhole cover with frame, etc. complete. iii) 60 cm (24") dia	1				1.00	Nos
	Angle Iron Step						
6	Providing and fixing 1 ¹ / ₄ "x1 ¹ / ₄ "x3/16" (31x31x5 mm) angle iron step, in manhole chambers, including carriage and setting the same in work to correct lines and levels.	5				5.00	Nos.

DETAILED COST ESTIMATE

DISMANTLING WORK CIVIL WORK

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Staff Quarter (Size 56 x 15 ft)				
		Dismantling				
1	4/13	Dismantling brick work in lime or cement mortar.	100Cft	13.58	4,317.45	58,626
2	4/20	Dismantling cement concrete reinforced, separating reinforcement from concrete, cleaning and straightening the same	100Cft	4.20	18,285.70	76,800
3	4/32	a) Removing door with chowkat.	No.	1.00	438.00	438
4	4/32	b) Removing windows and sky lights with chowkat.	No.	2.00	341.50	683
5	4/19	c) Dismantling cement concrete 1:2:4 plain.	100Cft	1.70	11,174.60	18,997
		Sub Total (A)				155,543
с		Deduction				
		Deduction of used bricks from original quantity.	1000 No.	18.33	(4,200.00)	(76,992)
		Sub Total (B)				(76,992)
		Grand Total (A+B)				78,552

CALCULATION OF QUANTITIES

CIVIL WORK

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Staff Quarter (Size 56 x 15 ft)						
	Dismantling						
1	Dismantling brick work in lime or cement mortar.						
		1	142	0.75	11.00	1,171.50	Cft
		1	142	1.13	0.50	79.88	Cft
		1	142	1.50	0.50	106.50	Cft
					Total	1,357.88	Cft
					Total	13.58	%Cft
2	Dismantling cement concrete reinforced, separating reinforcement from concrete, cleaning and straightening the same						
		1	56.00	15.00	0.50	420.00	Cft
					Total	4.20	%Cft
3	a) Removing door with chowkat.	1				1.00	No
4	b) Removing windows and sky lights with chowkat.	2				2.00	No
-	c) Dismantling cement concrete 1:2:4 plain.	1	40.00	17.00	0.25	170.00	Cft
5							

	EXTERNAL ELECTRICAL WORKS									
Sr. No.	2nd Bi-Annual- 2022 (July to Jun) T.T. Singh	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)				
		Scheduled Items (A)								
1	2/21	Excavation								
1	3/21	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m)								
		a) By Manual								
		ii) in ordinary soil.	1000Cft	3.29	10,677.75	35,173				
2	6/6	RCC Foundation for Poles Providing and laying reinforced cement concrete (including prestressed concrete), using coarse sand and screened graded and washed aggregate, in required shape and design, including forms, moulds, shuttering, lifting, compacting, curing, rendering and finishing exposed surface, complete (but excluding the cost of steel reinforcement, its fabrication and placing in position, etc.):-								
		(a)(iii) Reinforced cement concrete in slab of rafts / strip foundation, base slab of column and retaining walls; etc and footing beams, other structural members other than those mentioned in 6(a) (i)&(ii) above not requiring form work (i.e. horizontal shuttering) complete in all respects:-								
		(3) Type C (nominal mix 1: 2: 4)	Cft	144.00	536.00	77,184				
3	6/12/b	Steel Work Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars):-								
		('b) Deformed bars (Grade-40)	100Kg	3.60	15,948.50	57,415				
4	24/13b.iii	Supply and erection of 3 core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only). (7.029)		1,100.00	105.15	115,665				

		EXTERNAL ELECTRICAL W	ORKS			
Sr. No.	2nd Bi-Annual- 2022 (July to Jun) T.T. Singh	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
5	24/6i	Supply and erection PVC pipe for recessed wiring (main and sub-main) purpose, including bends, specials, etc. in floor, wall or trenches:-				
		i) 50 mm i/d	Rft	1,850.00	185.85	343,823
6	24/12	Supply and erection of single core PVC insulated, PVC sheathed copper conductor, 660/1100 volts grade cable, in prelaid G.I. pipe/M.S. conduits/PVC pipe/G.I. wire/trenches, etc (rate for cable only):-				
		ii) 6 mm sq (7/0.044")	Rft	20.00	117.70	2,354
		iv) 16 mm sq (7/0.064")	Rft	100.00	173.95	17,395
7	24/13	Supply and erection of copper conductor cables for service connection, in prelaid pipe/G.I. wire / trenches, etc. (rate for cable only):-				
		a) PVC insulated, PVC sheathed twin core, 250/440 volts.				
		v) 7/1.12 mm (7/0.044")		2,550.00	160.20	408,510
		b) PVC insulated, PVC sheathed 3 core, 600/1000 volt cable:-				
		 v) 7/1.12 mm (7/0.044") c) PVC insulated, PVC sheathed 4 core, 660/1100 volt non armoured cable:- 	Rft	140	246.85	34,559
		vi) 10 mm (7/0.052")	Rft	160.00	523.85	83,816
		vii) 16mm (7/0.064")	Rft	110.00	642.90	70,719
8	24/68	Supplying,installation testing and commissioning of Octagonal shape electric street light pole, made of hot dipped 4.5 mm thick (7 SWG) galvanized steel ,tappered from 225 mm at bottom to 100 mm at top,with 1500 mmx60 mm dia. arm for luminaire installation, duly G.I.welded with 470x470x20 mm base plate with the help of 4 no triangular stiffeners 100x350x20 mm of GI sheet,with built in junction box with shutter,i/c the cost of nuts & J-rag bolts, duly fixed in prelaid concrete foundation, foundation will be paid additionally as approved and directed by the Engineer Incharge.				
		a) Single Arm (i) 10 mtr height	Each	0.00	############	056.062
		b) Double Arm	Each	9.00	##########	956,062
		(i) 10 mtr height	Each	3.00	##########	329,613

EXTERNAL ELECTRICAL WORKS										
Sr. No.	2nd Bi-Annual- 2022 (July to Jun) T.T. Singh	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)				
9	24/69	Supplying, installation and commissioning of LED Cobra-head Luminaries of specified wattage and lumens conforming to IP 65, Philips/Osram/Thorn with corrosion resistant die casted aluminum housing, silicon gas kit, thermally hardened glass complete with LED drivers, surge protection i/c the cost of all accessories/components required for proper operation, fully flexible for future upgradation and easy replacements for maintenance purposes,bucket elevator charges as approved and directed by the Engineer Incharge.								
		c) 120 Lm/Watt								
		(vi) 120 Watt with 14400 Lumens	Each	15.00	53,295.00	799,425				
10	24/77	Supply and erection of electric energy meter, including meter testing fee, etc. b) three phase, 4 wires:								
		iii) 3x80 Amp, 400 volts	Each	1.00	14,659.25	14,659				
11	24/86	Suppling,Installation and comissioning of MCB (Miniature Circuit Breaker) of specified rating made of LEGRAND FRANCE/ GE U.S.A / SCHNEIDER GERMANY /SIEMEN GERMAN/TERASAKI JAPAN/ ABB SWITZERLAND in prelaid DBs and Panels i/c the cost of screwes,necessary wire complete in all respect as approved and directed by the Engineer Incharge. a) Single Pole								
		(ii) 6-40 Amp (6 KA)								
		DB admin block DBworkshop,Shed-01 &02 DB EXT	Each Each Each	17.00 12.00 -	1,101.75 1,101.75 1,101.75	18,730 13,221 -				
		DB-QURTER	Each	12.00	1,101.75	13,221				
		b) Double Pole (ii) 6-40 Amp (6 KA)								
		DB admin block and shed-1 DB Shed-1,&2 DB EXT	Each Each	1.00 2.00	3,351.75 3,351.75	3,352 6,704				
		DB EXT DB-QURTER	Each Each	6.00	3,351.75 3,351.75	20,111				
		MPB	Each	-	3,351.75	-				
		c) Tripple Pole			,					

		EXTERNAL ELECTRICAL W	ORKS			
Sr. No.	2nd Bi-Annual- 2022 (July to Jun) T.T. Singh	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
<u> </u>		(iii) 6-63 Amp (10 KA)	F 1	12.00	0.422.00	100 (20
		MPB & All DBs	Each	13.00	8,433.00	109,629
13	24/90	P/F wall mounted DB (Distribution Board) made with 16SWG Sheet (Recessded/Surface mounted Type), Powder coated Paint, i/c the cost of Lock, Indication lights,Thimble, Copper Comb, Wiring, Netural & Earth Bar, Door Earthing, Digital Voltmeter, Digital Ammeter,Volt Selector Switch,Ammeter selector switch,Current Transformers and Controles Complete in all respect as approved and directed by the Engineer Incharge (Breakers will be Paid Separately).				
		(a) 6" deep				
		(i) 20~60A				
		DB admin block	Cft	1.50	18,634.45	27,952
		DBworkshop,Shed-01 &02	Cft	1.50	18,634.45	27,952
		DB EXT	Cft	1.50	18,634.45	27,952
		DB-QURTER	Cft	2.50	18,634.45	46,586
15	24/105/iii	Supply, insatllation, commissioning and testing of oil cooled type, Step down Power Transformer of specified rating,11/0.415 kV, i/c the cost of lifting hooks, thermometers, LT & HT bushing 5-steps, tap changer, imported double float buchholz relay, 2 earthing terminals, roller wheels, connecting terminals for cables M.S box on transformer in order to cover complete L.T side, all necessary materials required for connections on H.T & L.T side, rated voltage 11000/415/240 V impedance 6.25% or as specified by WAPDA/IEC system earth: Delta / Star, neutral solidly earthed, i/c Wapda testing charges, complete in all respects made of PEL, Siemens, as approved and directed by the Engineer Incharge (ii) 25 KVA		1.00	329,487.70	329,488
16	24/70	Earthing of iron clad/aluminum switches, etc. with G.I. wire No. 8 SWG in G.I. pipe 15 mm ($\frac{1}{2}$ ") dia, recessed or on surface of wall and floor, complete with 1.5 metre long G.I. pipe, 50 mm (2") dia with reducing socket 4 to 5 metre below ground level, and 2 metre away from building plinth.	Job	3.00	9,592.65	28,778

		DETAILED COST ESTIMA EXTERNAL ELECTRICAL W				
Sr. No.	2nd Bi-Annual- 2022 (July to Jun) T.T. Singh	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
17	24/72	Bonding to earth with wire on surface, including cost of wire, clamps, thimbles, etc. a) G.I. wire:				
		i) 8 SWG	Per Rft.	100.00	23.25	2,325
		Sub Total Scheduled Item	ns: (A)			4,022,369
18	N.S Rate Analysis	Providing and making Manhole 2'x2' internal size including 9" thick brick masonry (1:4), 1/2" th. Plastering (1:3) i/side, benching with PCC 1:2:4 4" th. with cement finish, including manhole cover, complete in all respects.	Each	8.00	18,148.97	145,192
19	N.S.	Supply, installation, testing, and comissioning of following equipment to be installed in already made DB Box for motor including cost of all necessary accessories i.e: contactors, relay, indication lights, with ON/OFF push button complete in all respects.				
		i) Direct of Line (DOL) Starter for 3HP Motor	Set	1.00	45,110	45,110
		ii) Direct of Line (DOL) Starter for 5HP Motor	Set	1.00	57,060	57,060
		Total Cost (Part B)			Rs.	247,362
		Grand Total (Part A + Part B)			Rs.	4,269,731

DETAILED COST ESTIMATE

ENVIRONMENTAL HEALTH & SAFETY COST

Sr No	Description	Unit	Quantity	Unit Rate	Amount Rs.	
INO				(Rs.)	KS.	
	Labor Safety					
1	Face Masks (3 PLY)	Nos	10.00	700.00	7,000	
2	Safety Gum Shoes	Nos	15.00	1,350.00	20,250	
3	Hand Gloves	Nos	15.00	245.00	3,675	
4	First Aid Box					
	(Including essential Medicine)	Nos	1.00	5,000.00	5,000	
5	Safety Hard Helmets MSA	Nos	15.00	2,000.00	30,000	
6	Safety Goggles	Nos	15.00	550.00	8,250	
7	Reflective Safety Vests	Nos	15.00	550.00	8,250	
				Sub Total	82,425	
	Working Site Safety					
1	Reflective Safety Signs Boards	Nos	2.00	10,000.00	20,000	
2	Reflective Safety Barricading Tape	Nos	2.00	1,500.00	3,000	
3	Fire Extinguishers DCP	Nos	1.00	7,000.00	7,000	
				Sub Total	30,000	
	Total Amount (Rs)				112,425	

RATE ANALYSIS

Carriage of 100 Cft. (2.83 cu.m) of all materials like stone aggregate, spawl, kankar lime (unslaked), surkhi, etc. or 150 Cft. (4.25 cu.m) of timber, by truck or by any other means owned by the contractor. (crushed stone aggregate and bajri used in concrete items) (Lead 125 Km)

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Lead (Km)	Qty	Rate (Rs)	Amount (Rs.)
1	1/1	Carriage of 100 cft of all materials like stone aggregate spawl kanker lime surkhi etc or 150 cft of timber by truck or by any other means owned by the contratcor.					
	-	1st KM	100 Cft	1	1	299.40	299
		2nd KM	100 Cft	1	1	145.25	145
		3rd KM	100 Cft	1	1	116.85	117
		4th KM	100 Cft	1	1	85.30	85
	-	5th KM	100 Cft	1	1	80.20	80
	-	6th KM	100 Cft	1	1	79.00	79
		7th KM	100 Cft	1	1	74.25	74
		8th KM	100 Cft	1	1	73.50	74
	-	9th KM	100 Cft	1	1	69.55	70
	-	10th KM	100 Cft	1	1	65.70	66
		From 11 km to 200 km	100 Cft	115	1	57.25	6,584
		Total.					7,672.75
		Total Amount per 100 Cft					7,672.75
		Total Cost for Per Cft					76.73

	DETA	PUNJAB CITIES PROC AILED DESIGN OF INFRASTRUCTURE SUPERVISION IN 16 CITI	SUB-F	PROJEC		O RESIDENTS	5				
	EARTH WORK LEAD CHART RATE ANALYSIS										
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Lead	Unit.	Qty	Rate (Rs)	Amount (Rs)				
1	3/5/i	Earthowrk in ordinary soil for embankments lead upto 100 ft. (30 m), including ploughing and mixing with blade grade or disc harrow or other suitable equipment, and compaction by mechanical means at optimum moisture content and dressing to designed section, complete in all respects:- i) 95% to 100% maximum modified AASHO dry density.	1	1000Cft	1	9,527.90	9,527.90				
2	3/17a.b.c	Carriage									
		upto ¼ mile (400 m). for every 330 ft. (100 m) additional lead or part thereof, beyond ¼ mile (400 m) upto one mile. (1.6 Km.)	1	1000 Cft 1000 Cft	1	4,248.00	4,248.00				
		for every ¼ mile (400 m) additional lead or part thereof, beyond one mile (1.6 Km.) upto 5 mile (8 Km). for every ½ mile (800 m) additional lead or part thereof, beyond 5 miles (8 Km).	8.5	1000 Cft 1000 Cft	1	338.40 320.35	2,876.40				
		Total Amount I,000 (Rs.).					17,222.30				
		Total Amount Per Cft					17.22				

RATE ANALYSIS

DescriptionProviding and laying sub-base course of stone product of approved quality and grade including, placing, mixing, spreading and
compaction of sub base material to required depth, camber and grade to achieve 98% maximum dry density determined according
to AASHTO T-180 method-D, including carriage of all material to site of work complete in all respect as per specifications and as
directed by the engineer incharge. (Crushed stone aggregate from sargodha querry to site, actual compacted depth shall be
considered for payment)

	h Stone						
CIUSI							
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Lead (Km)	Qty	Rate (Rs)	Amount (Rs)
1		Material					
	18-3 a(ii)	ii) Crushed stone aggregate.	100 Cft	1	1	8,925.00	8,925.00
2		Carriage					
	-	1st KM	100 Cft	1	1.2	299.40	359.28
		2nd KM	100 Cft	1	1.2	145.25	174.30
		3rd KM	100 Cft	1	1.2	116.85	140.22
		4th KM	100 Cft	1	1.2	85.30	102.36
	1 /1	5th KM	100 Cft	1	1.2	80.20	96.24
	1/1	6th KM	100 Cft	1	1.2	79.00	94.80
		7th KM	100 Cft	1	1.2	74.25	89.10
		8th KM	100 Cft	1	1.2	73.50	88.20
		9th KM	100 Cft	1	1.2	69.55	83.46
		10th KM	100 Cft	1	1.2	65.70	78.84
		From 11 km to 200 km	100 Cft	115.00	1.2	57.25	7,900.50
		Total.					18,132.30
		Total Amount per 100 Cft					18,132.30
		Total Cost for Per Cft					181.32

RATE ANALYSIS

Providing and laying base course of crushed stone (Water Bound Macadam) of approved quality and grade including, placing, mixing, spreading and compaction of base course material to required depth, camber and grade to achieve 100% maximum modified AASHTO dry density, including carriage of all material to site of work complete in all respect as per specifications and as directed by the engineer incharge. (Crushed stone aggregate from sargodha querry to site, actual compacted depth shall be considered for payment)

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	Unit	Lead (Km)	Qty	Rate (Rs)	Amount (Rs.)
1	18/4(a)	Crushed stone	100 Cft		1	13,776.40	13,776
2	_	Carriage of 100 cft of all materials like stone aggregate spawl kanker lime surkhi etc or 150 cft of timber by truck or by any other means owned by the contratcor.					
		1st KM	100 Cft	1	1.22	299.40	365
		2nd KM	100 Cft	1	1.22	145.25	177
	1/1	3rd KM	100 Cft	1	1.22	116.85	143
		4th KM	100 Cft	1	1.22	85.30	104
		5th KM	100 Cft	1	1.22	80.20	98
		6th KM	100 Cft	1	1.22	79.00	96
		7th KM	100 Cft	1	1.22	74.25	91
		8th KM	100 Cft	1	1.22	73.50	90
		9th KM	100 Cft	1	1.22	69.55	85
		10th KM	100 Cft	1	1.22	65.70	80
		From 11 km to 200 km	100 Cft	115.00	1.22	57.25	8,032
		Total.					23,137.16
		Total Amount per 100 Cft					23,137.16
		Total Cost for Per Cft					231.37

		1	R	ATE AN	ALYS	IS		1		
Mar	nhole Construc	tion 2 x 2 Ft							Unit	Each
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Toba Tek Singh	Description	No.	Length	Width	Height	Qty	Unit	Rate (Rs)	Amount (Rs)
1		Excavation.								
	3-42-i	(0 to 7 feet depth)	1	3.50	3.50	3.00	36.75	1000 Cft	11,740.40	431.46
2	6-3-b	Cement concrete brick or stone ballast (1:4:8)	1	3.50	3.50	0.33	4.04	100 Cft	24,796.45	1,002.40
3	6-5-f	Base slab	1	3.50	3.50	0.25	3.06	100 Cft	38,178.90	1,169.23
4	6-6-(a)(i)	Top ring Beam Ratio 1:2:4	1	3.500	3.50	0.33	4.04	100 Cft	556.50	2,249.65
5	6/12 (c)	Steel work		3.00 kg	per cft		14.15	kg	31,784.50	4,497.11
6	7-7-i	Brick Work Ratio 1:3 Step - 1	1	11.00	0.75	2.00	16.50	100 Cft	32,796.10	5,411.36
7	11-8-c	3/4" thick Plaster Ratio 1:3 (External)	1	11.00		2.00	22.00	100 Sft	4,589.85	1,009.77
8	11-18-a	Cement pointing struck joints, on walls (1:2) (Internal)	1	8.00		2.00	16.00	100 Sft	3,518.35	562.94
9	13-9-i	Bitumen Coating on External Plaster	1	11.00		2.00	22.00	100 Sft	2,148.00	472.56
10	19-40-ii	Supply and fitting of cast iron manhole cover ii) 45 cm (18") dia	1				1.00	Each	1,342.50	1,342.50
								Grai	nd Total.	18,149

RATE ANALYSIS

Description										

Providing, laying and fixing in position Pre-Engineered shed as per drawings and manufacturer's specifications and as directed by Engineer Incharge. This item includes Aluzinc corrugated sheet of 0.5 to 0.6 mm thick (50-60 gm/sqm) fixed with rivet and bolts over GI Purlins 200x6 (OSF) 200 to 500 (Web)X4 200X6 (ISF) as shown in drawing No. ST-14 with approved Colour/ paint fitted with J-Type bolt having length 500 mm as shown in drawing. This item includes all kind of leads, lifts, fitting charges etc. complete in all respect excluding Cost of substructure i.e. foundation. Approval of manufacturer must be sought from Engineer Incharge prior to placement of order.

	-						Unit.	Per Sft
Pof	Datail				Unit	t Rate (Brit	ish Syste	em) per Sft
Ku	Detail			Qty		Rate Per Unit		Amount (Rs.)
	Area 1 Sft							
	Material							
MR	Supply of PEB Shed			1	Sft	1,890.00	Sft	1,890
							Total.	1,890
	Contractor's Profit	20	%					378
	Total							2,268
	ITEM RATES							
	Composite rate Per Sft						Rs.	2,270
	Ref MR	Area 1 Sft Material MR Supply of PEB Shed MR Contractor's Profit Contractor's Profit Contractor's Profit Image: Total Image: Tet market state	Area 1 Sft	Area 1 Sft ////////////////////////////////////	Image: Material stress of the stress of t	RefDetail $Q \downarrow y$ Image: Area 1 SftImage: MaterialImage: Area 1 SftImage: Area 1 SftImage: Area 1 SftImage: Area 1 SftImage: MaterialImage: Area 1 SftImage: Area 1 SftImage: Area 1 SftImage: Area 1 SftImage: MaterialImage: Area 1 SftImage: Area 1 SftImage: Area 1 SftImage: Area 1 SftImage: MaterialImage: Area 1 SftImage: Area 1 SftImage: Area 1 SftImage: Area 1 SftImage: MaterialImage: Area 1 SftImage: Area 1 SftImage: Area 1 SftImage: Area 1 SftImage: MaterialImage: Area 1 SftImage: Area 1 SftImage: Area 1 SftImage: Area 1 SftImage: MaterialImage: Area 1 SftImage: Area 1 SftImage: Area 1 SftImage: Area 1 SftImage: MaterialImage: Area 1 SftImage: Area 1 SftImage: Area 1 SftImage: Area 1 SftImage: MaterialImage: Area 1 SftImage: Area 1 SftImage: Area 1 SftImage: Area 1 SftImage: MaterialImage: Area 1 SftImage: Area 1 SftImage: Area 1 SftImage: Area 1 SftImage: MaterialImage: Area 1 SftImage: Area 1 SftImage: Area 1 SftImage: Area 1 SftImage: MaterialImage: Area 1 SftImage: Area 1 SftImage: Area 1 SftImage: Area 1 SftImage: MaterialImage: Area 1 SftImage: Area 1 SftImage: Area 1 SftImage: Area 1 SftImage: MaterialImage: Area 1 SftImage:	RefDetail Qty Rate PerImage: Ref stress of the stres	Ref Image: constraint of the section

Rate Analysis for 3.50' x 7' = 24.50 Sft

Sr.	Ref	Detail				Unit I	Rate (British S	ystem) pe	r Sft
No.	Input Rate	Detail			Qty	<i>.</i>	Rate Per U	nit (Rs.)	Amount (Rs.)
<u>A</u>	12.014	<u>Material</u> Formica sheet (8' x 4') (Rate - 1400 Per Sheet) Size 3.50' x 7' = 24.50			24.50 24.50	Sft Sft			
р		Wastage 5% Total	5	%	1.23 25.73	Sft Sft	43.75	P. Sft Total	1,125.47 1,125.47
<u>B</u> 1	12.039	Fitting Glue (Bottle) Best Quality			0.50	Kg	200.00	Kg	100.00
<u>C</u>		Labour						Total	100.00
<u>c</u>	LB-029 LB-024	Carpenters Skilled Cooly			0.10 0.10	Nos No	1400.00 1400.00	P. Day P. Day	140.00 140.00
		Total							280.00
		Sundries Total	10	%					28.00 308.00
		Contractor's profit	20	%			Total (A+	- B + C)	1,533.47 306.69
		Total for 24.50 Sft.							1,840.16
		Rate Per Sft							75.11
		<u>Item Rates</u> Composite Rate Per Sft Composite Rate Per Sqm						Rs. Rs.	75.11 808.18

Description				

Supply, installation, testing, and comissioning of following equipment to be installed in already made DB Box for motor including cost of all necessary accessories i.e. contactors, relay, indication lights, with ON/OFF push button complete in all respects.

							Unit.	Each				
Dof	of Detail				Unit Rate (British System) per Each							
Kei	Detan			Qty		Rate Per Unit		Amount (Rs.)				
	<u>Material</u>											
MR	i) Direct of Line (DOL) Starter for 5HP Motor			1.00	No.	44,600	No.					
							Total.	44,600				
	Carriage & Installation Charges							2,945				
							Total.	47,545				
	Contractor's Profit on item No. (1&2)	20	%					9,509				
	Total							57,054				
	ITEM RATES											
	Composite rate Per Each						Rs.	57,060				
	Ref MR	Material MR i) Direct of Line (DOL) Starter for 5HP Motor MR i) Direct of Line (DOL) Starter for 5HP Motor Carriage & Installation Charges Carriage & Installation Charges Contractor's Profit on item No. (1&2) Total ITEM RATES	Material	Material Image: Contractor's Profit on item No. (1&2) Image: Contractor's Profit on item No. (1&2) Image: Contractor's Profit on item No. (1&2) Image: Contractor's Profit on item No. (1&2) Image: Contractor's Profit on item No. (1&2) Image: Contractor's Profit on item No. (1&2) Image: Contractor's Profit on item No. (1&2) Image: Contractor's Profit on item No. (1&2) Image: Contractor's Profit on item No. (1&2) Image: Contractor's Profit on item No. (1&2) Image: Contractor's Profit on item No. (1&2) Image: Contractor's Profit on item No. (1&2) Image: Contractor's Profit on item No. (1&2) Image: Contractor's Profit on item No. (1&2) Image: Contractor's Profit on item No. (1&2) Image: Contractor's Profit on item No. (1&2) Image: Contractor's Profit on item No. (1&2) Image: Contractor Section Sectin Section Section Sectin Section Secting Sectin Section Section Se	Ref Detail Q Image: Constraint of the probability of	RefDetail $QUty$ MaterialIIMRMaterialIIi) Direct of Line (DOL) Starter for 5HP MotorIII	RefDetail $Q + y$ Rate PerMaterialInInInInInInInMRi) Direct of Line (DOL) Starter for 5HP MotorInInInInInInMRi) Direct of Line (DOL) Starter for 5HP MotorInInInInInInInMRi) Direct of Line (DOL) Starter for 5HP MotorIn <td>RefDetail</td>	RefDetail				

RATE ANALYSIS

Description							
Supply installation testing and comissioning of following	eauin	ment	to he	instal	lled in alread	v made D	B Box for motor

Supply, installation, testing, and comissioning of following equipment to be installed in already made DB Box for motor including cost of all necessary accessories i.e. contactors, relay, indication lights, with ON/OFF push button complete in all respects.

								Unit.	Each		
Sr.	Ref	Detail			Unit Rate (British System) per Each						
No.	KU				Qty		Rate Per Unit		Amount (Rs.)		
1	MR	Material i) Direct of Line (DOL) Starter for 3HP Mot	or		1.00	No.	33,500	No.			
								Total.	33,500		
2		Carriage & Installation Charges							2,230		
								Total.	35,730		
		Contractor's Profit on item No. (1&2)	20	%					7,146		
		Total							45,106		
		ITEM RATES									
		Composite rate Per Each						Rs.	45,110		

		RATI	E ANAI	LYS	IS				
)escri	ption								
		lation, testing and commissioning of followers nuts and bolts complete in all respect.	wing Flo	ood I	Light, c	comple	ete with capa		
								Unit.	Each
Sr.	Ref	Detail				Unit	Rate (Britis	sh Syste	m) per Each
No.	Ku	Detail		1	Q	ty	Rate Per	Unit	Amount (Rs.)
		<u>Material</u>							
1	MR	Flood Light			1.00	No.	5,525	No.	8,800
								Total.	8,800
2		Carriage & Installation Charges							276.25
								Total.	9,076
		Contractor's Profit on item No. (1&2)	20	%					1,815
		Total							10,892
		ITEM RATES							
		Composite rate Per Each						Rs.	10.891
		Say						Rs.	10,900

RATE	ANAI	YSIS
	T BT AT BT	

Descri	iption								
		lation, testing and commissioning of follow s, dimmers nuts and bolts complete in all re		56"	ceilin	g fan, o	complete wi	ith capaci	itor, hanging roc
								Unit.	Each
Sr.	Ref	Detail		1		Unit F	Rate (Britis	h System	ı) per Each
No.	Kei	Detail				ty	Rate Per	Unit	Amount (Rs.)
		<u>Material</u>							
1	MR	Ceiling Fan			1.00	No.	5,525	No.	5,525
								Total.	5,525
2		Carriage & Installation Charges							276.25
								Total.	5,801
		Contractor's Profit on item No. (1&2)	20	%					1,160
		Total							6,962
		ITEM RATES							
		Composite rate Per Each						Rs.	6,961
		Say						Rs.	7,000

		RATE	ANAL	YSIS	5				
Description									
(1) Ga (2) Fo (3) Ga	ate Size a rward an ate spind	fixing Penstock gate of following specifica 4'-2" x 4'-2" (1250 mm x 1250 mm) nd reverse manual operated with gear lle of stainless steel gate shall be made of stainless steel	ations:						
	1	1						Unit.	Each
Sr.	Ref	Detail		Unit Rate (British System) per Each					
No.					Qty		Rate Per Unit		Amount (Rs.)
		Material							
1	MR	Penstock Gate			1.00	No.	1,462,500	No.	1,462,500
								Total.	1,462,500
								Total.	1,462,500
		Contractor's Profit	20	%					292,500
		Total							1,755,000
		ITEM RATES							
		Composite rate Per Each						Rs.	1,755,000
		Say						Rs.	1,755,000