

## ABSTRACT OF COST

NAME OF WORK : Renovation of Vice Principal's Residence One block - 04 unit in the Campus of Netarhat Residential School, Netarhat

S. No.	Item of Work	Amount (Rs.)
01.	Estimate for Renovation of Vice Principal's Residence	1220667.00
02.	Water Supply & Sanitary Works	66509.00
03.	Internal Electrification	44148.00
	Total	1331323.00
	Add GST 18%	239638.00
	Total	1570961.00
	Add Labour Cess @ 1%	15709.00
	Total	1586670.00
	Say	1586700.00

## Annexure - I

Cost Estimate For Renovation of Vice Principal Residence (4 Unit)											
SL. NO	ITEM NO.	DESCRIPTION OF ITEM	NOS.	LENGTH	WIDTH	HEIGHT / DEPTH (M)	MF	TOTAL QUANTITY	UNIT	Rate	Amount
				(M)	(M)					Rs.	Rs.
1	5.10.7	<b>Dismantling old plaster</b> and pointing in cement or lime and raking out joints to 15 mm. depth, watering and disposal of unserviceable materials with all leads all complete as per direction of E/I.									
		<b>External Plaster</b>									
		Ground Floor									
		Outer Building Length Ground Floor	1	340.000	Length	14.000		4760.00			
		Outer Building Length First Floor	1	300.000	Length	12.000		3600.00			
		Terrace Parapet Wall	1	300.000	Length	6.833		2049.99			
		Mumty Room Wall	2	11.750		9.000		211.50			
			2	15.000		9.000		270.00			
								<b>10891.49</b>	SFT		
		Total External Plaster					<b>A</b>	<b>1012.22</b>	SQM		
		<b>Internal Plaster</b>									
		<b>Ground Floor Lvl.</b>									
		Room-1	2	11.333	11.000	12.000	1	1071.98			
		Room-2	4	12.167	11.000	12.000	1	2224.03			
		Varndah	2	11.000	6.500	12.000	1	840.00			
		Dining Hall+ Drawing	2	15.000	29.000	12.000	1	2112.00			
		Staircase	1	10.000	22.250	12.000	1	774.00			
		Kitchen	2	8.000	11.000	12.000	1	912.00			
		Toilet	2	8.333	5.333	12.000	1	655.97			
		Garage	2	12.167	17.333	12.000	1	1416.00			
		Deduction									
		RS	-2	10.000		7.000	1	-140.00			
		D1	-3	3.500		7.000	1	-73.50			
		D2	-8	3.000		7.000	1	-168.00			
		D3	-2	2.500		7.000	1	-35.00			
		W	-2	2.000		4.000		-16.00			
		w1	-5	3.000		4.000		-60.00			
		W3	-10	5.000		4.000	1	-200.00			
		V	-2	2.000		2.000	1	-8.00			
								<b>9305.48</b>	SFT		
		Total Ground Internal Plaster						<b>864.82</b>	<b>A</b>		
		<b>First Floor Lvl.</b>									
		Room-1	2	11.333	11.000	12.000	1	1071.98			
		Room-2	4	12.167	11.000	12.000	1	2224.03			
		Balcony	2	11.000	6.500	12.000	1	840.00			
		Dining Hall+ Drawing	2	15.000	29.000	12.000	1	2112.00			
		Staircase	1	10.000	22.250	12.000	1	774.00			
		Kitchen	2	8.000	11.000	12.000	1	912.00			
		Toilet	2	8.333	5.333	12.000	1	655.97			
		Deduction									
		D1	-3	3.500		7.000	1	-73.50			
		D2	-8	3.000		7.000	1	-168.00			
		D3	-2	2.500		7.000	1	-35.00			
		W	-2	2.000		4.000		-16.00			
		w1	-5	3.000		4.000		-60.00			
		W3	-10	5.000		4.000	1	-200.00			
		V	-2	2.000		2.000	1	-8.00			





9	5.10.10	<b>Taking down old door and window shutters</b> including stacking serviceable materials within 15M. lead and disposal of unserviceable materials with all leads all complete as per direction of E/I.										
		Door Shutter						6.00				
		Total						<b>6.00</b>	Each	45.12		<b>270.72</b>
10	5.4.1	Supplying, fitting and fixing good quality, well dressed and well seasoned <b>sal wood work in chaukhat in doors, windows, skylight, fanlights and ceiling windows openings</b> , including wedge over clamps all complete including application of two coats of wood preservative of approved quality on the surface butting walls and lintels all complete as per building specification and direction of E/I										
		<b>Ground Floor</b>										
		D1	1	5.250	0.075	0.125	1	0.049				
		D2	1	5.100	0.075	0.125	1	0.048				
		D3	1	4.950	0.075	0.125	1	0.046				
		<b>First Floor</b>										
		D1	1	5.250	0.075	0.125	1	0.049				
		D2	1	5.100	0.075	0.125	1	0.048				
		D3	1	4.950	0.075	0.125	1	0.046				
		Total						<b>0.287</b>	CUM	66,362.06		<b>19,037.62</b>
11	5.4.38	Supplying, fitting and fixing 35 mm thick single leaf solid core type non decorative flush shutters with all fittings all complete as per building specification and direction of E/I.										
		<b>Ground Floor</b>										
		D1	1	1.050		2.100	1	2.205				
		D2	1	0.900		2.100	1	1.890				
		D3	1	0.750		2.100	1	1.575				
		<b>First Floor</b>										
		D1	1	1.050		2.100	1	2.205				
		D2	1	0.900		2.100	1	1.890				
		D3	1	0.750		2.100	1	1.575				
		Total						<b>11.340</b>	SQM	1,614.12		<b>18,304.12</b>
12	5.8.31	Providing two coat of synthetic enamel paint over old wooden surface of approved shade preparing the surface after cleaning removing dirt										
		Door & Window area										
		<b>Ground Floor</b>										
		D1	3	3.500		7.000	1	73.500				
		D2	8	3.000		7.000	1	168.000				
		D3	2	2.500		7.000	1	35.000				
		<b>First Floor</b>										
		D1	3	3.500		7.000	1	73.500				
		D2	8	3.000		7.000	1	168.000				
		D3	2	2.500		7.000	1	35.000				
		Total						<b>553.00</b>	SFT			

		2 side Door polishing woodend surface.	2.4					1327.2			
		Total						<b>123.35</b>	SQM	120.82	<b>14,902.63</b>
13	5.8.45	Providing two coats of <b>synthetic enamel paint</b> of approved shade and make over <b>steel surface</b> including cleaning the surface thoroughly, scaffolding and taxes all complete as per building specification and direction of E/I.							MF		
		Ground Floor Lvl.									
		W	2	2.000		4.000	1.5	24.00			
		W1	5	3.000		4.000	1.5	90.00			
		W3	10	5.000		4.000	1.5	300.00			
		V	2	2.000		2.000	1.5	12.00			
		AT VERANDAH	2	11.000		4.000	1.5	132.00			
		RS	2	10.000		7.000	2.2	308.00			
								<b>866.00</b>	SFT		
		First Floor Lvl.									
		W	2	2.000		4.000	1.5	24.00			
		W1	5	3.000		4.000	1.5	90.00			
		W3	10	5.000		4.000	1.5	300.00			
		V	2	2.000		2.000	1.5	12.00			
		AT BALCONY	2	11.000		4.000	1.0	88.00			
								<b>514.00</b>	SFT		
								<b>1380.00</b>	SFT		
		Total						128.25	SQM	66.04	<b>8,469.63</b>
14	5.4.57.1	supplying fitting & fixing glass panes including supplying putty, beads, nails -do-do- complete job	100	1.000	1.000			100	SFT		
			1					<b>9.29</b>	SQM	488.53	<b>4,538.44</b>

15	5.12.1	<p>Water proofing for old and New Roof Slab :- Providing and laying water proofing treatment on roof slab by applying two Component, factory designed, ready to use, acrylic modified flexble material brush, roller or spray for water proofing coating per manufacturer Specifications with following steps :-(a)surface preparation .-Providing and cleaning of concrete surface to remove dust, oil, grease including removal of existing (loose paint / coating, and cement laitance by cleaning with compressed air water jet including all materials, labour, tools complete. Ponding test to be done after plugging all outlets and to be checked from soffit to identify seepage leakage. On identification of seepage cement grouting to be done with non shrink expanding admixture of Sika India Pvt.L td.) MYK Schomberg / Dr Fixiti/ Fosroc or equivalent. Providing and repairing of all Corner and joints such as those between the parapet wall and the roof slab etc shall be chamfered with 150mm X 150 mm fillet of mortar (Cement: sand - 1:4) admixed with acrylic pc? lymer of Sika/ Fosroc/MYK Schomberg/Dr 1:4) admixed with acrylic polymer of Sika/ Fosroc/MYK Schomberg/Dr Fixit or equivalent.,Befor 'Chamfering a prime coat shall be given with the slurry of acrylic polymer Repairing surface irregularities, damaged concretein base slab, dead cracks if any, with an acrylic polymer modified repair mortar-including a coat of bonding agent of the same with cement slurry including all material, labour, tools complete.(b)1st Coat :- Apply 1st coat of two component acrylic modified, ready to use, flexible cementitious material on surface saturated dry roof and inside wall of Parapet.Wall upto 600 mm by brush or roller . After 1st coat of application , 45 gsm of Fibre glass cloth to lay when the first layer is still green. 1st coat should be applied @1.50 kg/Sqmt/coat. For the purpose of measurement-11609-1'e entire treated surface will be measured." (c) 2nd Coat :-To apply the 2nd coat of two component acrylic modified ready to use, flexible cementitious material right angle to the 1st. coat over the glass fibre laid surface: 2nd coat- ,should be applied @ 0.7 Sqmt/coat. For the purpose of measurement the entire treated surface will be measured." After three days of drying the 2nd coat , the rain water outlets to be plugged and ponding test to be done for 48 hours to identify seepage, leakage from soffit and if found necessary rectification to be done as per satisfaction of E/C. The waterproof coating to be protected from damage before screed over it. Water proofing Brand:- Sika Topseal 109hi / Fosroc Brushbond RFXI Dr. Fixit Pidiffin 2K / MYK Aquafin TG . Product Performance - Chemical Base Part A: Acrylic copolymer, Part B: Specially graded cementitious powder - Density 1.6 kg/l (mixed density) at +27°C Tensile Strength -2 Nimm2 after 28 days (with Fibre cloth) (According to ASTM D 2370) Pullout Bond Siren th -2 fl/mm2 concrete failure Accordin' to ISO4624) Slant-Shear Bond Strength -4 Nimm2 (According to FIP 5.15) Elongation at Break -35% Without Fibre Cloth and 20% with Fibre Cloth (According to ASTM D 2370) (d) )Protection of treated surface with PCG :- The treated surface should be covered with 25mm/50mm F'CC of M-20 grade (1.1.5:3). with proper slope ( 1:120) towards the rain outlets in alternate panels of 2 mt x 2 mt keeping 6 mm gap between the</p>													
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18	12.41.2 /DSR	Providing & fixing on wall face unplastised rigid PVC rain water pipes conforming to IS 13592 Type A including jointing with seal ring conforming to IS 5382 leaving 10mm gap for thermal expansion. Single socketed pipes. 110mm dia										
			10	7.800				78.000		319.75		
		Total						<b>78.000</b>	M	277.10		<b>21,614.09</b>
19	12.42/ DSR	Providing & fixing on wall face unplastised- PVC moulded fittings/accessories for unplastised - Rigid PVC rain water pipes conforming to IS 13592 Type A including jointing with seal ring conforming to IS 5382 leaving 10mm gap for thermal expansion										
	12.42.5 .2	Bend -110 mm						20.000	NOS	114.39		<b>2,287.89</b>
	12.42.6 .2	Shoe - 110mm						20.000	NOS	100.49		<b>2,009.71</b>
	12.42.1 .2	Coupler- 110mm						10.000	NOS	103.95		<b>1,039.52</b>
20	12.43.2 /DSR	Providing and fixing unplastised - PVC pipe clips of approved design to unplastised - PVC rain water pipes by means of 50x50x50 mm hard wood plgs, screwed with M.S. screws of required length including cutting brick work and fixing in cement mortar 1:4 (1 cement : 4 coarse sand) and making good the wall etc. complete.										
								<b>60.000</b>	NOS	268.22		<b>16,093.25</b>
21	5.10.33	Providing 250mm. wide brick drain in cement mortar (1:6) with av. 250mm. clear depth and 250mm. apron including cost of earthwork involved with 75 mm. ~ cement concrete (1:4:8) over one brick designation 75A flat soling in proper grade and slope at the base, the drain duly plastered in C.M.(1:3) with punning over exposed surface all complete as per building specification and direction of E/I.										
		Total						<b>20.00</b>	Meter	1,445.77		<b>28,915.40</b>
22	5.3.8	Making plinth protection 50 mm thick of cement concrete 1:3:6 (1 cement: 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) over 75mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand, including finishing the top smooth.										
		Total area till Brick Drain	1	30.000	1.000			<b>30.00</b>				
		Total						<b>30.00</b>	Sqm	351.75		<b>10,552.50</b>
23	5.2.14	Providing designation 75 B brick work in C.M.(1 :6) in superstructure with approved quality of clean coarse sand of F.M. 2 to2.5 including providing 10 mm thick mortar joints cost of screening materials , scaffolding , raking out joints to 15mm depth curing, taxes and royalty all complete as per building specification and direction of E/I.										
		Parapet wall	1	54.870	0.250	1.050	1	14.403				
		Total						<b>14.403</b>	CUM	5,244.08		<b>75,532.45</b>



## Annexure - II

(vice principal residence)GOVT. OF JHARKHAND						
ABSTRACT OF QTY. & DETAIL ESTIMATES						
THE RATES OF ITEMS ARE BASED ON S.O.R. 2022 and D.S.R.2021						
SANITARY & WATER SUPPLY WORKS						
Sl. No.	Item No.	Description	Qty.	Unit	Rate	Amount
1	3.2.2 (i) (b)	Supplying, fitting and fixing 40 mm high vitreous white glazed earthen ware E.W.C. with "p" trap of Parry Hindustan or any other I.S.S. make including supplying & fixing 15 litres C.I. mosquito proof low down flushing cistern of approved make with complete fittings with C.I. handle and R.S. or bracket with telescopic flush pipe with brass coupling and plumbers joints spindle stop cock of approved quality weight not less than 450 grms. , 15 mm P.V.C. alathene pipe 45 cm long with brass coupling at both ends and white/ black plastic solid state seal and lead of commander/ cuckoo or other I.S.S. make with hinges or screw etc. painting pipe and cistern etc. with 2 coats of approved paint over a coat of red oxide primer etc. all complete as per specification and direction of E/I. (A) With "P" trap (a)12.5 lit. low level P.V.C. cistern	2	EACH	4,786.86	9,573.72
2	3.1.5.1	Providing and fixing C.P. brass bib cock of approved conforming to IS 8931 : 15 mm nominal bore	4	EACH	354.59	1,418.36
3	DSR 18.51.1	Providing and fixing <b>C.P.brass long body bib cock</b> of approved quality conforming to standard and weight not less than 690gms.:15 mm nominal bore.	4	EACH	613.92	2,455.67
4	DSR 18.65	Providing and fixing <b>PTMT Soap Dish Holder</b> having length of 138 mm breadth 102 mm, height of 75mm with concealed fitting arrangements, Weighing not less than 106 gms.	4	EACH	83.85	335.38
5	DSR 18.53.1	Providing and fixing <b>C.P. brass angle valve</b> for basin mixer and gysar points of approved quality conforming to IS 8931 15mm nominal bore, approved brand C.P. fittings.	4	EACH	433.62	1,734.47
6	DSR 18.75.1	Providing and fixing <b>C.P. extention Nipples</b> 15mm size with 12" BSP threads, 70mm length and 30 mm breadth and weight not less than 18gms	10	EACH	37.31	373.08
7	DSR 17.28.2.1	Providing And fixing <b>32 mm waste pipe for sink or wash basin</b> including P.V.C. waste fittings complete.	6	EACH	90.43	542.59
8	DSR 18.8	Providing and fixing Chlorinated Polyvinyl Chloride ( <b>CPVC</b> ) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings including fixing the pipe with clamps at 1.00 m spacing. This includes joining of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of E/I. (Approved Brand - ASTRAL/ SUPREME)				
9		<b>Concealed work</b> including cutting chases and making good the wall etc..				
10	a) 18.8.1	15mm dia	10	METER	406.23	4,062.30
11	b) 18.8.2	20mm dia	20	METER	438.71	8,774.20
12	3.3.8 JSR	Supplying and materials with labour for construction <b>inspection chamber</b> of designation class 75b brick deep 600x450 internal diamention having 250mm wall thickness in cement mortar(1:6)including 12mm cement plaster (1:4)with punning on inside and cement plaster (1:6)with 600x450mm G.I. cover with frame (weight not less than 36k.g)in foundation and refilling all complete as per specification and direction of E/I.	2	EACH	8,636.35	17,272.70
13	3.1.6	Providing and fixing <b>C.P. brass Stop Cock (concealed) of standard designand of approved make</b> conforming to IS 8931 15mm nominal bore, approved brand C.P. fittings.	4	EACH	177.40	709.60
14	DSR 17.72	Providing and fixing PTMT <b>towel ring</b> trapezoidal shape 215 mm long, 200 mm wide with minimum distances of 37 mm from wall face with concealed fittings arrangement of approved quality and colour, weighing not less than 88 gms.	4	EACH	177.40	709.59

15	<b>M079 page no.31</b>	Providing and placing up polyethylene water storage tank IS mark with cover.	2000	per Litre	7.76	<b>15,520.00</b>
15	<b>3.1.21 JSR</b>	Providing and fixing <b>c.p. towel rail</b> complete with brackets fixed to wooden cleats with c.p.brass screws with concealed fitting arrangement of approved qualite colour and make.(Mark or equipment)	4	EACH	664.82	<b>2,659.28</b>
16	<b>DSR 18.64</b>	Providing and fixing PTMT/ C.P. swivelling <b>shower</b> ,15mm nominal size, 95mm long, 65mm dia. of approved quality, color & make weighing not less than 40 gms with approximate 80 holes of 1.2 mm dia.	4	EACH	91.99	<b>367.97</b>
<b>Total for 1 Building</b>						<b>66,508.92</b>
say						<b>66509</b>

## Annexure - III

### Estimate For Repair of Vice Principal Residence

The rate of items are based on schedule of rate Energy Deppt. W.e.f. 28<sup>th</sup> July-2022

			Qty.	Unit	Rate	Amount
1	1.3	Wiring for lig/fan point/exhaust fan point/call bell point with 1.5 sq mm FR PVC insulated copper conductor single core cable in surface/recessed conduit				
	1.3.1	Group –A	12	Point	607.00	7284.00
2	1.23	S/F Piano type switch/socket:-				
		Supplying and fixing following piano type switch/socket on the existing switch box/ cover including connections etc. as required.				
	1.23.1	5/6 amps, one way switch	12	Each	32.00	384.00
	1.23.4	3 pin 5/6 amps, socket outlet	12	Each	43.00	516.00
	1.23.3	15/16 amps, one way switch	12	Each	92.00	1104.00
	1.23.5	15/16 amps, 6 pin socket outlet	12	Each	90.00	1080.00
3	1.7	Wiring for circuit submain wiring along with earth wire with the following sizes of PVC insulated copper conductor single core cable in surface of recessed PVC conduit as reqd.				
A	1.7.1	2 x 1.5 sq mm + 1x 1.5 sq mm earth wire	10	Mtr.	147.00	1470.00
B	1.7.2	2 x 2.5 sq mm + 1x 2.5 sq mm earth wire	10	Mtr.	196.00	1960.00
C	1.7.4	2 x 6 sq mm + 1x 6 sq mm earth wire	10	Mtr.	351.00	3510.00
4	1.25	S/F modular type stepped tube electronic fan regulator on the existing plate switch box including connection but excluding modular plate etc as required	8	Each	293.00	2344.00
5	1.22.7	S/F metal box of 180 x 100 x 60 mm deep on surface/recessed with suitable size of phenolic laminated sheet cover in front including providing and fixing 6 pin 5/6 and 15/16 amp socket outlet and 15/16	12	Each	215.00	2580.00
6	1.34	S/F brass batton/Angle holder including connection etc. as reqd.	12	Each	59.00	708.00
7	1.33	S/F 3 point 5 Amp ceiling rose on the existing junction Box wooden block including connection etc. as reqd.	8	Each	45.00	360.00
8	9.5.2	20/22 watt LED Tube Light	4	Each	628.00	2512.00
9	2.8	S/F the following way single pole and neutral sheet steel M.C.B.D.B consumer unit 240 V on surface/recess				
	2.8.4	2+8 way	4	Each	841.00	3364.00
10	2.11	S/F 'B' series S.P. MCB:-				
		Supply and fixing 6 amps to 32 amps rating 240 volts, 'B' series, miniature circuit breaker suitable for lighting				
	2.11.1	6/32 amps, single pole, "B" series	4	Each	244.00	976.00
11	2.12	S/F 'C' series MCB:-				
		Supply and fixing following, 240 volts, 'C' series, miniature circuit breaker suitable for inductive loads of				
	2.12.3	6/32 amps, SPN	4	Each	443.00	1772.00

	2.12.10	50/63 amps, DP		4	Each	1308.00	5232.00
12	9.4.1	supply of 48" (1200 mm) ceiling fan Bajaj/Crompton or any other approved make etc without regulator		4	Each	1748.00	6992.00
<b>Sub-Total Rs.</b>							<b>44148.00</b>