

Civil & Sanitary Work Estimate (A) For Construction of the Public Toilet Block at Sambhhota Tibetan School ,Darjeeling. (Unit-1) (Model 'G')

No. Of seat - Male - (W.C. -2 + Urinal -3) & Female - (W.C. -2 + Urinal -2) = Total (W.C. -4 & Urinal -5)
Rate As per PWD Building Works Schedule (Volume 1) With effect from 01.11.2017

Sl. No.	Item Description & Item No.							Quantity	Rate	Unit	Amount (in Rs)
	Details	Side	No.	L	B	H	QNTY.				
1	Earth work in excavation of foundation trenches or drains, in all sorts of soil (including mixed soil but excluding laterite or sandstone) including removing, spreading or stacking the spoils within a lead of 75 m. as directed. The item includes necessary trimming the sides of trenches, levelling, dressing and ramming the bottom, bailing out water as required complete. (a) Depth of excavation not exceeding 1,500 mm. PWD Building Works schedule Page - 1, Item -2.a							34.56	119.27	Cum	4,121.97
	Column		6	1.800	1.800	1.125	21.870				
	Tie Beam		1	28.900	0.350	0.400	4.050				
	Reservior		1	2.400	2.400	1.500	8.640				
							34.560				
2	Single Brick Flat Soling of picked jhama bricks including ramming and dressing bed to proper level and filling joints with local sand. PWD Building Works schedule, Page- 14, Item - 1 (Corri. Page-01, Date-04-06-2018)							66.13	530.40	Sqm	35,075.35
	Column		6	1.200	1.200		8.640				
	Tie Beam		1	28.900	0.250		7.230				
	Floor 1		1	4.350	4.050		17.620				
	Plinth protection		1	21.800	1.200		26.160				
	Steps		1	0.900	2.300		2.070				
	Reservior Base		1	2.100	2.100		4.410				
							66.130				
3	Supplying and laying Polythene Sheet (150gm / sq m.) over damp proof course or below flooring or roof terracing or in foundation or in foundation trenches. PWD Building Works schedule, Page -47, Item -3							32.64	28.80	Sqm	940.03
	Plinth protection		1	21.800	1.200		26.160				
	Front Stair		1	2.300	0.900		2.070				
	Reservior Base		1	2.100	2.100		4.410				
							32.640				
4	(II) Cement concrete with 30 mm down graded shingles excluding shuttering. N.B. Variety In ground floor (a) 1:3:6 proportion [PWD BUILDING WORKS, Page- 35, It. No- 22,II, a)]							11.84	5398.78	Cum	63,921.56
	Column		6	1.200	1.200	0.150	1.300				
	Tie Beam		1	28.900	0.250	0.125	0.900				
	Floor 1		2	4.350	4.050	0.150	5.290				
	Plinth protection		1	21.800	1.200	0.125	3.270				
	Steps		1	0.900	2.300	0.100	0.210				
	Front Stair Top		3	2.300	0.300	0.100	0.210				
	Reservior Base		1	2.100	2.100	0.150	0.660				
							11.840				
5	25mm. thick damp proof course with cement concrete with stone chips (1:1.5:3) [with graded stone aggregate 10 mm nominal size] and admixture of water proofing compound as per manufacturer's specification followed by two coat of polymer based paint, (1st coat after 4 to 5 days of concrete laying and 2 nd coat just before brick masonry work) as directed (cost of water proofing compound & polymer based paint to be paid separately).(Chequering not required over concrete or painted surface). [Note: - Waterproofing as per item 9, polymer based paint as per item 8 (a) of subhead C of Section (C). PWD Building Works schedule, Page -47, Item -1 (Rate Analysis)							6.45	270.00	Sqm	1,741.50
			1	21.750	0.250		5.440				
			1	8.050	0.125		1.010				
							6.450				

Sl. No.	Item Description & Item No.							Quantity	Rate	Unit	Amount (in Rs)
	Details	Side	No.	L	B	H	QNTY.				
6	Brick work with 1st class bricks in cement mortar (1:4) (a) In foundation and plinth PWD Building Works schedule, Page -15, Item-7 a (Rate Analysis)							5.30	8016.68	Cum	42,488.40
	GL 2 PL		1	28.900	0.250	0.600	4.340				
	Front Step-1		1	2.300	0.750	0.150	0.260				
	Front Step-2		1	2.300	0.500	0.150	0.170				
	Front Step-3		1	2.300	0.250	0.150	0.090				
	Platform		1	3.900	0.250	0.450	0.440				
							5.300				
7	Brick work with 1st class bricks in cement mortar (1:4) superstructure, ground floor (b) In PWD Building Works schedule, Page -15, Item-7 b (Rate Analysis)							17.47	8284.28	Cum	144,726.37
	Outer Wall		1	29.800	0.250	2.575	19.180				
	Less Door		-2	1.050	0.250	2.100	-1.100				
	Less Window		-9	0.600	0.250	0.450	-0.610				
							17.470				
8	125 mm. thick brick work with 1st class bricks in cement mortar (1:4) in ground floor. PWD Building Works schedule, Page - 16, Item - 16 (Corri. Page-03, Date-04-06-2018) (Rate Analysis)							26.65	1030.33	Sqm	27,458.29
	Wall		1	8.125		2.750	22.340				
	Less Door		-4	0.750		2.100	-6.300				
	Spring		1	15.350		0.125	1.920				
	Parapet		1	19.300		0.450	8.690				
							26.650				
9	Earth work in filling in foundation trenches or plinth with good earth, in layers not exceeding 150 mm. including watering and ramming etc. layer by layer complete. (Payment to be made on the basis of measurement of finished quantity of work). (a) With earth obtained from excavation of foundation. PWD Building Works schedule, Page - 1, Item -3 a							22.81	77.54	Cum	1,768.69
	2/3rd of Earth work			0.660	34.560		22.810				
10	(A) Filling in foundation or plinth by silver sand in layers not exceeding 150 mm as directed and consolidating the same by thorough saturation with water, ramming complete including the cost of supply of sand. (payment to be made on measurement of finished quantity) PWD Building Works schedule, Page - 2, Item -4.a (Cori 5th)							8.36	1764.73	Cum	14,753.14
			1	4.350	4.050	0.450	7.930				
	Platform		1	1.000	0.950	0.450	0.430				
							8.360				
11	Hire and labour charges for shuttering with centering and necessary staging upto 4 m using approved stout props and thick hard wood planks of approved thickness with required bracing for concrete slabs, beams and columns, lintels curved or straight including fitting, fixing and striking out after completion of works (upto roof of ground floor) (f) 25 mm to 30 mm shuttering without staging in foundation PWD Building Works schedule, Page -42, Item- 36.f							54.13	250.80	Sqm	13,575.80
	Foundation		24	1.200		0.300	8.640				
	Tie Beam		2	28.900		0.350	20.230				
	Pedestal		24	0.400		0.300	2.880				
	Coumn upto GL		24	0.250		0.250	1.500				
	Platform		2	2.500		0.125	0.630				
	Reservior Base		4	2.100		0.150	1.260				
	Reservior Wall		2	6.600		1.200	15.840				
	Reservior Slab Soffit		1	1.500	1.500		2.250				
	Reservior Slab Side		4	1.800		0.125	0.900				
							54.130				
12	Ordinary Cement concrete (mix 1:1.5:3) with graded stone chips (20 mm nominal size) excluding shuttering and reinforcement,if any, in ground floor as per relevant IS codes. a) Pakur Variety /Chandil Variety PWD Building Works schedule, p-26 Item 10 a (Rate Analysis)							16.31	7898.44	Cum	128,823.56

Sl. No.	Item Description & Item No.							Quantity	Rate	Unit	Ammount (in Rs)
	Details	Side	No.	L	B	H	QNTY.				
	Colm foot		6	1.200	1.200	0.200	1.730				
	Hunch		6	0.800	0.800	0.200	0.770				
	Pedestal		6	0.400	0.400	0.300	0.290				
	Column		6	0.250	0.250	4.000	1.500				
	Tie Beam		1	28.900	0.250	0.250	1.810				
	Lintel 125mm thk.		1	8.125	0.125	0.150	0.150				
	Lintel 250mm thk.		1	28.900	0.250	0.200	1.450				
	Chajja for Windows		9	0.900	0.450	0.075	0.270				
	Chajja at Front Enty		1	2.900	0.450	0.075	0.100				
	Slab Beam		1	28.900	0.250	0.175	1.260				
	Slab		1	6.300	5.750	0.125	4.530				
	Wash Basin		2	1.200	0.600	0.075	0.110				
	Reservior Base		1	2.100	2.100	0.150	0.660				
	Reservior Wall		1	6.600	0.150	1.200	1.190				
	Reservior Slab		1	1.800	1.800	0.150	0.490				
							16.310				
13	Hire and labour charges for shuttering with centering and necessary staging upto 4 m using approved stout props and thick hard wood planks of approved thickness with required bracing for concrete slabs, beams and columns, lintels curved or straight including fitting, fixing and striking out after completion of works (upto roof of ground floor) (a) 25 mm to 30 mm thick wooden shuttering as per decision & direction of Engineer-In-Charge. PWD Building Works schedule, Page -42, Item- 36 a							88.82	400.80	Sqm	35,599.06
	Colm foot		6	1.000		3.750	22.500				
	Roof Beam		2	23.850		0.175	8.350				
	Lintel Side		2	37.925		0.150	11.380				
	Lintel btm 250mm Soffit		2	1.000	0.250		0.500				
	Lintel btm 125mm Soffit		4	0.750	0.125		0.380				
	Chajja for Windows Soffit		9	0.900	0.450		3.650				
	Chajja for Windows Face		9	1.800		0.075	1.220				
	Chajja at Front Enty Soffit		1	2.900	0.450		1.310				
	Chajja at Front Enty Side		1	3.800		0.075	0.290				
	slab with b btm		1	6.300	5.750		36.230				
	Slab Side		1	24.100		0.125	3.010				
							88.820				
14	Reinforcement for reinforced concrete work in all sorts of structures including distribution bars, stirrups, binders etc initial straightening and removal of loose rust (if necessary), cutting to requisite length, hooking and bending to correct shape, placing in proper position and binding with 16 gauge black annealed wire at every intersection, complete as per drawing and direction. (a) For works in foundation and upto roof of ground floor/upto 4 m. (i) Tor steel/Mild Steel, (JSW/SHYAM/JSPL/SRMB) PWD Building Works schedule, Page - 43, Item - 40 a.i.1(Corri. 10th Page-01, Date-23-01-2020) (Rate Analysis)							1.728	71762.99	M.T.	124,006.45
			16.310	0.0135	7.850		1.728				
15	Artificial stone in floor, dado, staircase etc with cement concrete (1:2:4) with stone chips, laid in panels as directed with topping made with ordinary or white cement (as necessary) and marble dust in proportion (1:2) including smooth finishing and rounding off corners including raking out joints or roughening of concrete surface and application of cement slurry before flooring..... 25 mm. thick For roofing PWD Building Works schedule, P-48, It-6.ii (Rate Analysis)							36.23	340.83	Sqm	12,348.27
	roof		1	6.300	5.750		36.230				
							36.230				

Sl. No.	Item Description & Item No.							Quantity	Rate	Unit	Amount (in Rs)
	Details	Side	No.	L	B	H	QNTY.				
16	Neat cement punning about 1.5mm thick in wall, dado, window sill, floor etc. NOTE: Cement 0.152 cu m per 100 sq m PWD Building Works schedule, P-192, It. No. 15 (Rate Analysis)							28.32	39.52	Sqm	1,119.21
	Below Plinth		1	19.300		0.600	11.580				
	Front step Side		2	0.375		0.450	0.340				
	Front step Top		3	2.300		0.250	1.730				
	Reservior Base and Slab		3	1.500	1.500		6.750				
	Reservior Wall		1	6.600		1.200	7.920				
							28.320				
17	Labour for Chipping of concrete surface before taking up Plastering work PWD Building Works schedule, P-192, It-1							88.82	21.00	Sqm	1,865.22
	Same as shuttering sl no. 12							88.820			
18	Plaster (to wall, floor, ceiling etc.) with sand and cement mortar including rounding off or chamfering corners as directed and raking out joints including throating, nosing and drip course, scaffolding/staging where necessary (Ground floor). [Excluding cost of chipping over concrete surface] (i) With 1:4 cement mortar (c) 15 mm thick plaster PWD Building Works schedule, P-189, It-1(ii)(b) 3rd corrigenda & addenda) (Rate Analysis)							133.31	207.35	Sqm	27,641.83
	Outer wall		1	19.300		4.025	77.680				
	on Iner 250mm Wall		1	24.900		0.775	19.300				
	on Iner 125mm Wall		2	8.125		0.775	12.590				
	Less Front Entry		-2	1.050		2.100	-4.410				
	Less Door		-4	0.750		2.100	-6.300				
	Parapet wall		1	19.300		1.025	19.780				
	Reservior Base and Slab		3	1.500	1.500		6.750				
	Reservior Wall		1	6.600		1.200	7.920				
							133.310				
19	Plaster (to wall, floor, ceiling etc.) with sand and cement mortar including rounding off or chamfering corners as directed and raking out joints including throating, nosing and drip course, scaffolding/staging where necessary (Ground floor) [Excluding cost of chipping over concrete surface] (ii) With 1:4 cement mortar (c) 10 mm thick plaster PWD Building Works schedule, P-189 It- No. 1 (ii)(c) (Rate Analysis)							47.64	164.28	Sqm	7,826.30
	Slab bottom		1	6.300	5.750		36.230				
	Chajja for Windows Soffit & Top		18	0.900	0.450		7.290				
	Chajja for Windows Face		9	1.800		0.075	1.220				
	Chajja at Front Entry Soffit & Top		2	2.900	0.450		2.610				
	Chajja at Front Entry Face		1	3.800		0.075	0.290				
							47.640				
20	Supplying, fitting and fixing fibre reinforced polymer (FRP) Composite door frame as per approved section with glass fibre reinforced plastic moulded skins and a special sandwich core, so as to impart monolithic composite structure as per approved technology of Department of Science and Technology (DST) to satisfy IS: 4020 door testing performance criteria. (i) 66mm x 90mm PWD Building Works schedule, P-115, It - 3 (i)							19.80	624.00	Mtr	12,355.20
			4	4.950			19.800				
							19.800				
21	Supplying, fitting & fixing fibre reinforced polymer (FRP) Composite door shutters as per approved design with glass fibre reinforced plastic moulded skins and a special sandwich core, so as to impart monolithic composite structure as per approved technology of Department of Science and Technology (DST) to satisfy IS:4020 door testing performance criteria. In ground floor. ii) 25 mm thick P-125, It- 14(ii)							5.57	3241.20	Sqm	18,053.48
			4	2.034	0.684		5.570				
							5.570				

Sl. No.	Item Description & Item No.							Quantity	Rate	Unit	Amount (in Rs)	
	Details	Side	No.	L	B	H	QNTY.					
22	Anodised aluminium barrel / tower / socket bolt (full covered) of approved manufactured from extruded section conforming to I S. 204/74 fitted and fixed with cadmium plated screws (vii) 225mm long x 10mm dia. bolt PWD Building Works schedule, P-144, It No. 26 (vii)							8.00	102.00	Each	816.00	
			4	2.000			8.000					
23	Iron butt hinges of approved quality fitted and fixed with steel screws, with ISI mark. (viii) 100mm X 75mm X 3.50mm. PWD Building Works schedule, P-140, It No. -5 (viii)							16.00	79.20	Each	1,267.20	
			4	4.000			16.000					
24	Anodised aluminium decorative handle (hexagonal / fluted) of approved quality fitted and fixed complete. (i) 150mm plate x 10mm dia rod x 12mm hexagonal/fluted PWD Building Works schedule, Page -146 Item no-31,(i)							8.00	130.80	Each	1,046.40	
			4	2.000			8.000					
25	Iron hasp bolt of approved quality fitted and fixed complete (oxidised) with 16mm dia rod with concrete bolt and round fitting. b)250mm long. PWD Building Works schedule, Page -141 Item no-10 b)							4.00	195.60	Each	782.40	
			4	1.000			4.000					
26	(A) Supplying Aluminium casted body hydraulic door closer as per I.S.I. SOR, PWD, P- 244, I - 13(a)							4.00	768.00	Each	3,072.00	
			4	1.000			4.000					
27	Rendering the Surface of walls and ceiling with White Cement base WATER PROOF wall putty of approved make & brand.(1.5 mm thick) In Ground Floor PWD Building Works schedule, PWD, P- 198, I - 5							180.95	146.40	Sqm	26,491.08	
	Same as Plaster Item - Plaster											
							180.950					
28	(b) Priming one coat on timber or plastered surface with synthetic oil bound primer of approved quality including smoothening surfaces by sand papering etc. PWD Building Works schedule, Page -200 Item no- 1 (b)							180.95	45.60	Sqm	8,251.32	
	Same as Plaster Item - Plaster											
							180.950					
29	(A) Painting with best quality synthetic enamel paint of approved make and brand including smoothening surface by sand papering etc. including using of approved putty etc. on the surface, if necessary : Page -200 Item no- 1 (b) (a) On timber or plastered surface : With super gloss (hi-gloss) - (iv) Two coats (with any shade except white) PWD Building Works schedule, Page -200 Item no- 2(A)(a)(iv)							180.95	98.40	Sqm	17,805.48	
	Same as Plaster Item - Plaster											
							180.950					
30	Collapsible gate with 40mm x 40mm x 6mm Tee as top and bottom guide rail, 20mm x 10mm x 2mm vertical channels 100mm apart in fully stretched position 20mm x 5mm M.S. flats as collapsible bracings properly rivetted and washered including 38mm steel rollers including locking arrangements, fitted and fixed in position with lugs set in cement concrete and including cutting necessary holes, chasing etc. in walls, floors etc. and making good damages complete. In ground floor. P-106 Item-18 (3rd Corrigendum Page No 92)							4.410	5271.60	Sqm	23,247.76	
	gate		2	1.050		2.100	4.410					

Sl. No.	Item Description & Item No.							Quantity	Rate	Unit	Amount (in Rs)
	Details	Side	No.	L	B	H	QNTY.				
31	(a) M.S or W.I. Ornamental grill of approved design joints continuously welded with M.S, W.I. Flats and bars of windows, railing etc. fitted and fixed with necessary screws and lugs in ground floor. (i) Grill weighing above 10 Kg/sq mtr and up to 16 Kg/sq mtr. PWD Building Works schedule, P-104 Item-13 A (i) (3rd Corrigendam Page No 91)							0.56	12343.20	Qntl	6,912.19
	Grill		9	0.600	0.450	0.160	0.390				
	Box for pump		3	0.600	0.600	0.160	0.170				
							0.560				
32	(ii) Grill weighing above 16 Kg/sq mtr and above PWD Building Works schedule, P-104 Item-13 A (ii) (3rd Corrigendam Page No 91)							0.65	12111.60	Qntl	7,872.54
	Railing		1	4.000	0.900	0.180	0.650				
33	a) Priming one coat on steel or other metal surface with synthetic oil bound primer of approved quality including smoothening surfaces by sand papering etc. PWD Building Works schedule, P/200 Item-1(a)							31.50	36.00	Sqm	1,134.00
	gate	2	2	1.200	2.100		10.080				
	Grill	2	9	0.600	0.450		4.860				
	Box for pump	2	3	0.600	0.600		2.160				
	Railing	2	2	4.000	0.900		14.400				
							31.500				
34	(A) Painting with best quality synthetic enamel paint of approved make and brand including smoothening surface by sand papering etc. including using of approved putty etc. on the surface, if necessary : (b) On steel or other metal surface : (iv) Two coats (with any shade except white) PWD Building Works schedule, P-200 Item-2(b)(iv)							31.50	96.00	Sqm	3,024.00
	Same as priming on grill						31.500				
35	Supplying and laying true to line and level vitrified tiles of approved brand (size not less than 600 mm X 600 mm X 10 mm thick) in floor, skirting etc. set in 20 mm sand cement mortar (1:4) and 2 mm thick cement slurry back side of tiles using cement @ 2.91Kg/sqM or using polymerised adhesive (6 mm thick layer applied directly over finished artificial stone floor/Mosaic etc without any backing course) laid after application slurry using 1.75 Kg of cement per sqM below mortar only, joints grouted with admixture of white cement and colouring Pigment to match with colour of tiles / epoxy grout materials of approved make as directed and removal of wax coating of top surface of tiles with warm water and polishing the tiles using soft and dry cloth upto mirror finish complete including the cost of materials, labour and all other incidental charges complete true to the manufacturer's specification and direction of Engineer-in-Charge. (White cement, synthetic adhesive and grout material to be supplied by the contractor) I (I) With application slurry @1.75 kg/Sq.m, 20 mm sand cement mortar (1:4) & 2 mm thick cement slurry at back side of tiles, 0.2 kg/Sq.m white cement for joint filling with pigment. (A) Deep Colour & White PWD Building Works schedule, Page-66 Item-36 (A) (3rd Corrigendam, Page -36)							18.15	2055.60	Sqm	37,309.14
	floor		1	1.850	4.050		7.490				
	floor		1	2.500	4.050		10.130				
			2	1.050	0.250		0.530				
							18.150				
36	Supplying, fitting & fixing 1st quality Ceramic tiles in walls and floors to match with the existing work & 4 nos. of key stones (10mm) fixed with araldite at the back of each tile & finishing the joints with white cement mixed with colouring oxide if required to match the colour of tiles including roughening of concrete surface, if necessary or by synthetic adhesive & grout materials etc. B) Wall b) Area of each tile above 0.09 Sq.m ii) Other than Coloured decorative including white PWD Building Works schedule, page-64, Item:35 (B.) (b) (ii) (3rd Corrigendam, Page 36)							73.88	1426.80	Sqm	105,411.98
	Inner		1	42.750	2.100		89.780				
	Less Door		-8	0.750	1.950		-11.700				
			-2	1.000	2.100		-4.200				
							73.880				

Sl. No.	Item Description & Item No.							Quantity	Rate	Unit	Amount (in Rs)
	Details	Side	No.	L	B	H	QNTY.				
37	a) 25 mm thick Tiles as per IS: 1237-2012 for footpath,ramp,staircase of public building(over 25 mm thick (Avg) Cement mortar (1:3) & Cement Slurry @ 4.4 kg/Sq.m at back side of Block. Cement for Mortar & Slurry to be supplied by Department) (ii) Coloured Decorative PWD Building Works schedule, page-74, Item:48(a)-ii (3rd Corrigendam ,Page 37)							45.19	1098.00	Sqm	49,618.62
	Open Space		1	21.800	1.200		26.160				
	Ramp		1	2.750	1.200		3.300				
			1	2.750	0.225		0.620				
	Platform		1	1.950	1.200		2.340				
	Front steps		3	2.350	0.300		2.120				
			3	0.900	0.225		0.610				
							35.150				
38	Supplying, fitting & fixing granite slabs 15mm to 18 mm. thick with uniform texture & without decorative veins in columns, wall, facia, rise etc. with 15 mm thick [avg] cement mortar (1:2) including making suitable arrangements to hold the stones properly by brass / copper hooks including pointing in cement mortar (1:2) (1 white cement : 2 marble dust) with admixture of pigment matching the stone shades all complete as per direction of the Engineer-in-charge including cost of all materials, labours, scaffolding, staging, curing and roughening of concrete surface complete. [Using cement slurry at back side of granite @ 4.4 kg/sq m & white cement slurry for joint filling @ 1.8 kg/sq.m] In ground floor (a) Area of each Granite slab 0.6 to 1.0 Square meter. PWD Building Works schedule, page-63, Item:33(a)- (3rd Corrigendam ,Page 37)							3.83	4428.00	Sqm	16,959.24
	For Wash Basin		2	2.550	0.750		3.830				
39	Supplying, fitting and fixing 18 mm thick marble partition slab with chawk doongri marble square cut, both sides polished with two front corners rounded and edges polished. Sanitary and plumbing work schedule P-81, It-13							2.16	1711.20	Sqm	3,696.19
			3	1.200		0.600	2.160				
40	Supplying profiles of required section made of Aluminium Alloy Extrusions conforming to IS: 732-1983 and IS: 1285- 1975; Anodized (with required film thickness and specified colour / natural) matt finished conforming to IS: 1868-1983 for fabrication of composit door, sliding & casement windows, partitions, formed of basic sections of any ISI embossed / certified make and brand as per direction of Engineer - In- Charge. (Payment will be made on finished length of the work). (A) In 10-12 Micron thickness Anodizing film l) Natural white h) Louvered window. i) Top, bottom and side member. PWD Building Works schedule, PWD, P-233, I- 1(h) i							18.90	229.20	M	4,331.88
			9	2.100			18.900				
41	ii) Louvered Section.							16.20	820.80	M	13,296.96
			27	0.600			16.200				
42	iii) Cleat angle (Non-anodized).							14.58	328.80	M	4,793.90
			27	0.540			14.580				

Sl. No.	Item Description & Item No.							Quantity	Rate	Unit	Amount (in Rs)
	Details	Side	No.	L	B	H	QNTY.				
43	Labour charge for fabrication and installation of composite door, window, partitions made from anodized extruded alloy aluminium sections for the following units:- (A) Glazed aluminium sliding windows made of extruded and anodized alloy aluminium sections, fabrications, including cutting to proper shape and size, drilling and aligning of window shutter frame fitted with in built locking arrangements, sliding rollers and other necessary fittings, fixture, adhesives and joineries along with extruded neoprene or EPDM gasketing in between window frame and masonry work (walls, column, beam lintels etc.) as well as between glass and shutter frame for fixing glass and Polysulphide sealant and in between shutter and window frame where necessary including cutting to requisite size and fixing glass as per drawing, specification and direction of EIC. The rate includes the hire charge of all tools and plants, including all incidental charges, adhesive, joineries such as screw, cleat angle etc. but excluding the cost of extruded aluminium sections, glass, neoprene / EPDM gasket, locking arrangement and rollers. v) Louvered window PWD Building Works schedule SOR, PWD, P-239, J-2 (v)							2.43	730.00	Sqm	1,773.90
			9	0.600	0.450		2.430				
44	Supplying bubble free float glass of approved make and brand conforming to IS: 2835-1987. iv) 5mm thick coloured / tinted / smoke glass. PWD Building Works schedule, P-243, I-9							2.43	702.00	Sq.M.	1,705.86
			9	0.600	0.450		2.430				
45	Painting block letters or digits in Black Japan or any approved paint as per direction. e) Size above 7.5 cm and upto 10 cm. PWD Building Works schedule, P-268, It-17(e)							650.00	14.40	Each	9,360.00
46	Supply and Fixing of 2 mm Polyvinyl glow sign board made of 22 SWG GI sheet box with 1"X1" aluminum channel for fixing the vinyl board after necessary cutting the letter as required & s/f LED tube light fittings along with all accessories UDMA Electrical shdule P-14, It NO. 4							15.00	495.00	Sq.F.	7,425.00
			1	5.000	3.000		15.000				
47	Supplying and Planting of different plant / trees (Supplying well grown plants bushy and healthy, minimum height as specified i.e. exposed height including all leads & lift, carriage, handling, manuring, applying presticide and fertilizer etc. . i) Furcaria variegated 10-12 leaves in height 20-30cm in earthen pots of size 25cm. PWD Building Works schedule, Page -261, It- 9 (i)							12	194.40	Each	2,332.80
48	x) Ficus blakii (F. Vivicon) well branched (Bushy) of height 120cm - 135 cm in earthen pot of size 30cm PWD Building Works schedule, Page -261, It- 9 (x)							9	224.40	Each	2,019.60
49	xxvi) Areca Palm 4 - 5 suckers of height 90 cm to 105 cm in earthen pots of size 25 cm. PWD Building Works schedule, Page -261, It- 9 (xxvi)							6	152.40	Each	914.40
50	Supplying, fitting and fixing Anglo-Indian W.C. in white glazed vitreous china ware of approved make complete in position with necessary bolts, nuts etc. a) With 'P' trap (with vent) PWD S&P Schedule, page-79, item no -3 (a)							2	3724.80	Each	7,449.60
51	Supplying, fitting and fixing Closet seat of approved make with lid and C.P. hinges, rubber buffer and brass screws complete. (b) Anglo Indian (i) Plastic (hallow type) White PWD S&P Schedule, page-81,item no 10.b.i							2	582.00	Each	1,164.00
52	Supplying, fitting and fixing Shallow water closet Indian pattern (I.P.W.C.) of approved make in white vitreous chinaware in position (excluding cost of concrete for fixing). (i) 580 mm long PWD S&P Schedule, page-79,item no -1 (i)							2	1167.60	Each	2,335.20
53	Supplying, fitting and fixing Flat back urinal (half stall urinal) in white vitreous chinaware of approved make in position with brass screws on 75 mm X 75 mm X 75 mm wooden blocks complete X 280 mm X 340 mm (ii) 470 mm PWD S&P Schedule, page.80,item no-6/(ii)							3	1134.00	Each	3,402.00

Sl. No.	Item Description & Item No.							Quantity	Rate	Unit	Amount (in Rs)
	Details	Side	No.	L	B	H	QNTY.				
54	Supplying, fitting and fixing Squating plate with integral flushing in white vitreous chinaware of approved make in cement concrete (6:3:1) with jhama chips complete. (Payment of concrete will be paid separately). (i) 450 mm X 350 mm PWD S&P Schedule, (P - 80, Item No - 7 ,							2	1057.20	Each	2,114.40
55	Supplying, fitting and fixing 10 litre P.V.C. low-down cistern conforming to I.S. specification with P.V.C fittings complete, C.I brackets including two coats of painting to bracket etc. PWD S&P Schedule, Page No.-36 Item No.-2,							4	1218.00	Nos	4,872.00
56	Supplying, fitting and fixing 32 mm dia. Flush Pipe of approved make with necessary fixing materials and clamps complete. i) Polythene Flush Pipe PWD S&P Schedule, Page no 81. Item no 11(i)							4	186.00	Each	744.00
57	Supplying, fitting and fixing urinal flush pipe fittings of approved brand. (a) C.P. urinal flush pipe fittings range of one S&P Schedule, S.P.81, item-12/a							PWD 5	496.80	Each	2,484.00
58	Supplying, fitting and fixing white vitreous china best quality approved make wash basin with C.I. brackets on 75 mm X 75 mm wooden blocks, C.P. waste fittings of 32 mm dia., mending good all damages and painting the brackets with two coats of approved paint. (ii) 550 mm X 400 mm size PWD S&P Schedule, P-41, It 2 (ii)							2	2649.60	Each	5,299.20
59	Supplying, fitting and fixing approved brand P.V.C. CONNECTOR white flexible, with both ends coupling with heavy brass C.P. nut, 15 mm dia., (iii) 600 mm long PWD S&P Schedule, Page No.-43 Item No.-9-iii PWD,							5	128.40	Each	642.00
60	Supplying, fitting and fixing approved brand 32 mm dia P.V.C. waste pipe, with PVC coupling at one end fitted with necessary clamps. (iv) 1050 mm long each PWD S&P Schedule, Page No.-43 Item No. 10-iv							2	109.20	Each	218.40
61	(f) Hand Shower (Health Faucet) with Imtr Flexible Tube with Wall Hook (Equivalent to Code No. 573 & Model - ALLIED of Jaquar or similar). PWD S&P Schedule, Page No.-3 Item No.- 3 f,							4	1501.20	Each	6,004.80
62	(a) (i) Chromium plated Bib Cock short body (Equivalent to Code No. 511 & Model - Tropical / Sumthing Special of ESSCO or similar brand). PWD S&P Schedule, Page No.-6 Item No.-7-a-i							7	646.80	Each	4,527.60
63	(b) (i) Chromium plated Stop Cock (Equivalent to Code No. 513(A) & 513(B) & Model - Tropical / Sumthing Special of ESSCO or similar PWD S&P Schedule, Page No.-6 Item No.-7-b-i							5	591.60	Each	2,958.00
64	Supplying, fitting and fixing shower of approved brand and make. (ii) Chromium plated round shower with revolving joint (Equivalent to Code No. 541(N) & Model - Tropical / Sumthing Special of ESSCO or similar brand). PWD S&P Schedule, Page No.-3 Item No.-3- a-ii							2	432.00	Each	864.00
65	(iii) Chromium plated shower arm 240 mm long (Equivalent to Code No. 536(A) & Model - Tropical / Sumthing Special of ESSCO or similar brand). Page No.-3 Item No.-3-a-(iii), PWD, VOL-II, 2017-18							2	370.80	Each	741.60
66	Chromium plated angular Stop Cock with wall flange (Equivalent to Code No. 5053 & Model - Florentine of Jaquar or similar brand). PWD S&P Schedule, Page No.-6 Item No.-7-d-i,							8	978.00	Each	7,824.00
67	Supplying, fitting and fixing pillar cock of approved make. a) (i) CP Pillar Cock - 15 mm. (Equivalent to Code No. 507 & Model - Tropical / Sumthing Special of ESSCO or similar brand). (P. No. - 45, Item. No. - 19(a)i, Pwd Sanitary Plumbing Schedule 2017)							4	666.00	Each	2,664.00

Sl. No.	Item Description & Item No.							Quantity	Rate	Unit	Amount (in Rs)
	Details	Side	No.	L	B	H	QNTY.				
68	Supplying, fitting and fixing PVC pipes of approved make of Schedule 80 (medium duty) conforming to ASTM D - 1785 and threaded to match with GI Pipes as per IS : 1239 (Part - I) with all necessary accessories, specials viz - socket, bend, tee, union, cross, elbo, nipple, long screw, reducing socket, reducing tee, short piece etc. fitted with holder bats clamps, including cutting pipes, making threads, fitting, fixing etc. complete in all respect including cost of all necessary fittings as required, jointing materials and two coats of painting with approved paint in any position above ground. (Payment will be made on the centre line measurements of total pipe line including all specials. No separate payment will be made for accessories, specials. Payment for painting will be made separately) (a) For Exposed Work PVC Pipes, 25 mm Page No.-12 Item No.-19-i(a), PWD, VOL-II, 2017-18							30	212.40	Mtr	6,372.00
69	(a) (a) For Exposed Work PVC Pipes, 15 mm Page No -12 Item No -19-i(a), PWD, VOL-II, 2017-18							15	121.20	Mtr	1,818.00
70	(b) For Concealed Work PVC Pipes, 15 mm Page No.-12 Item No.-19-i(b), PWD, VOL-II, 2017-18							15	164.40	Mtr	2,466.00
71	Supplying and fitting fixing of gunmetal wheel valve of approved brand and make tested to 21 Kg per sq. cm. 25 mm dia(E5) PWD S&P Schedule, P-5 It-5,vii),							2	933.60	Each	1,867.20
72	Supplying P.V.C. water storage tank of approved quality with closed top with lid (Black) - Multilayer (b) 1000 litre capacity S&P Schedule, page.37,item no-6 (b) PWD							2	6153.60	Each	12,307.20
73	Labour for hoisting plastic water storage tank. (i) Upto 1500 litre capacity. (a) Upto 1st story from G.L. PWD S&P Schedule, page 37,item no-10 (i)(a)							2	96.00	Each	192.00
74	Labour for punching hole in plastic water storage tank upto 50 mm dia. PWD S&P Schedule, (P. No - 38, Item. No. - 13							4	19.00	Each	76.00
75	Supply of UPVC pipes (B Type) & fittings conforming to IS-13592-1992 (A) (i) Single Socketed 3 Meter Length, (b) 110 mm PWD S&P Schedule, Page No.-68 Item No. 23,(A)(i)(b)							30	350.40	Mtr	10,512.00
76	(B) Fittings (i) Coupler, (b) 110 mm							15	102.00	Each	1,530.00
77	(ii) Plain Tee, (b) 110 mm							12	102.00	Each	1,224.00
78	(iii) Door Tee, (b) 110 mm							10	234.00	Each	2,340.00
79	ix) Bend 45°, (b) 110 mm							10	106.80	Each	1,068.00
80	xi) Door Bend (T.S.), (b) 110 mm							7	176.40	Each	1,234.80
81	xvi) Pipe Clip, (b) 110 mm							50	25.20	Each	1,260.00
82	xvii) W.C. Connector (150 mm long) 125 X 110(W/WC Ring) 75 mm							8	170.40	Each	1,363.20
83	xxx) Plain Floor Trap with Top tile & Strainer 75 mm							6	172.80	Each	1,036.80
84	L) Rubber Ring, (b) 110 mm							30	20.40	Each	612.00
85	C) Rubber Lubricant 500 ML							2	224.40	500 ML	448.80
86	D) Solvent Cement 250 ML							2	123.60	250 ML	247.20

Sl. No.	Item Description & Item No.							Quantity	Rate	Unit	Amount (in Rs)
	Details	Side	No.	L	B	H	QNTY.				
87	Labour for fitting and fixing U.P.V.C pipes for above ground work including cost of jointing materials etc. fitting and fixing all necessary specials, cutting pipes, cutting holes in total pipeline including specials (B) Under ground, (ii) 110 mm dia PWD S&P Schedule, (P. - 74, Item. No. - 24 (B)							30	84.00	Mtr	2,520.00
88	Supplying, fitting & fixing UPVC pipes A- Type and fittings conforming to IS:13592-1992 with all necessary clamps nails, including making holes in walls, floor etc. cutting trenches in any soil through masonry concrete structures etc if necessary and mending good damages including jointing with jointing materials (Spun Yarn, Valamoid/Bitumen/M-Seal etc) complete. A) UPVC Pipes: (i) 75 mm. Dia. (P. - 212, Item No. - 21 (A)(i) , (B),(c),(i) & (B), (d),(i), Pwd volume-i, 2017)							30	237.60	Mtr	7,128.00
89	B) UPVC Fittings: c) Bend 87.5 degree (i) 75 mm. Dia.							6	106.80	Mtr	640.80
90	B) UPVC Fittings: d) Shoe (i) 75 mm. Dia.							4	98.40	Mtr	393.60
91	Constructing Inspection pit of inside measurement 600mm X 600mm X upto 600mm (depth) with 250 mm thick 1st. class brick work in cement mortar (1:4) on all sides, bottom of the pit consisting of 100 mm thick cement concrete (1:3:6) with stone chips over a layer of jhama brick flat soling, 15 mm thick (1:4) cement plaster to inside walls and out-side walls upto G.L. and 20 mm thick (1:4) plaster to bottom of the pit, providing necessary invert with cement concrete (1:3:6) with stone chips as per direction, neat cement finishing to entire internal surfaces, top of the pit covered with 100 mm thick R.C.C. slab (1:1.5:3) with stone chips and necessary reinforcements upto 1% and shuttering including 6 mm thick cement plaster (1:4) in all external surfaces of the slab and one 560 mm dia. R.C.C. manhole cover of approved make supplied, fitted and fixed in the slab with necessary fittings, necessary earthwork in excavation in all sorts of soil, filling sides of the pit with earth and removing spoils after work complete in all respect with all costs of labour and materials. i) With Pakur variety (Other than SAIL/TATA/RINL). PWD S&P Schedule, S.P.87,Item No-1(i), 7th Corrigenda Volume ii							3	9276.13	Each	27,828.40
92	Construction of septic tank of different capacities as per approved drawing with 1st class brick work in cement mortar (1:4) including two 560 mm dia. R.C.C. manhole cover (heavy type) of approved make supplied, fitted and fixed in the 100mm thick R.C.C (1:1.5:3) top slab with necessary fittings, 20mm thick cement plaster (4 : 1) with neat cement finish to the internal surfaces and 15 mm thick cement plaster (4 : 1) to outside wall upto 200 mm below G.L floor finished with 25 mm thick grey artificial stone over 100 mm thick R.C.C(1:1.5:3) bottom slab including supplying, fitting and fixing all necessary specials, fittings, S.W. tees, C.I. foot rest etc. including excavation earth in all sorts of soil, shoring, hauling out and pumping out water as necessary, ramming, dressing the bed and refilling the sides of the tanks with earth, removing spoils, filling up the chamber with clear water, removing foreign materials from the chamber and including constructing attached inspection pit as per approved drawing and connecting all necessary pipes, joints etc. with internal plaster work and artificial stone flooring is to be done with admixture of water proofing compound @ 0.5% by weight of cement with all costs of labour and materials. (iv) For 30 users A) With Pakur variety. (JSW/JSPL/SHYAM/SRMB/ELECTROSTEEL/SSL) PWD S&P Schedule, S.P. 88,Item No-3(iv)(A) 7th Corrigenda Volume ii							1	79838.34	Each	79,838.34
93	Construction of circular soak well 2.5 metre deep in all types of sandy soils with dry brick work upto 1.6 metre from the bottom having 150 mm intermediate cement brick work (1:4) band all round and cement brick work (1:4) upto 0.90 metre from top with 20mm thick cement plastering (1:4) to inside face upto the depth of cement brick work, 15mm thick cement plaster (1:4) on outer face from top of the well upto G.L. and 6 mm thick cement plaster (1:4) on top of the R.C.C. cover slab including filling bottom 1.00 metre of inside of the well with brick metal (50 mm to 63 mm size) including R.C.C. cover slab of 100 mm thick with cement conc (1:1.5:3) with stone chips with necessary reinforcement and shuttering including one 560 mm dia. R.C.C. manhole cover (heavy type) of approved make supplied, fitted and fixed in the cover slab with necessary fittings, making necessary arrangements for pipe connections, excavation of well including shoring, dewatering and removing the excess earth from the premises as per direction complete in all respect with all costs of labour and materials. With 250 mm thick dry brick work and 250 mm thick cement brick work (1:6) and 1.00m inside dia. (Other than SAIL/TATA/RINL) No-4 7th Corrigenda Volume ii S.P. 89,Item							1	22739.68	Each	22,739.68
94	Supplying, fitting and fixing towel rail with two brackets. (a) C.P. over brass (ii) 25 mm dia. and 600 mm long PWD S&P Schedule, p No 82 I No- 22 (a)(ii)							6	516.00	Each	3,096.00

Sl. No.	Item Description & Item No.							Quantity	Rate	Unit	Amount (in Rs)
	Details	Side	No.	L	B	H	QNTY.				
95	Supplying, fitting and fixing cast iron raised rain proof tank cover 500 mm dia. with locking arrangements (weighing not less than 12 kg). PWD S&P Schedule, . page-37,item no -8							1	1515.60	Each	1,515.60
96	Supplying, fitting and fixing bevelled edged mirror 5.5 mm thick silver red as per I.S. 3438 / 1965 together with brass C.P. hinges (ii) 600 mm X 450 mm PWD S&P Schedule, P-81, It-15(ii)							2	580.80	Each	1,161.60
97	Supplying, fitting and fixing soap holder (b) Fibre glass Sanitary and plumbing work schedule P-82, It-18(b)							6	69.60	Each	417.60
98	Supplying, fitting and fixing porcelain toilet paper holder of approved make with wooden spindle as necessary (i) Roll type size 250 mm X 125 mm (A5) Sanitary & Plumbing works p No 83 I No- 23 9i)							6	351.60	Each	2,109.60
99	Supplying, fitting and fixing glass shelf with aluminium guard rails (a) Ordinary type with 5.5 mm sheet glass (i) 450 mm X 125 mm Sanitary and plumbing work schedule P-81, It-16(a)(i)							6	409.20	Each	2,455.20
Sub Total Of (A)										1,339,009.94	
								Add S.G.S.T. @	9%		120,510.89
								Add C.G.S.T. @	9%		120,510.89
Cost Of Civil & Sanitary Work										1,580,031.72	
								Add L.W.C. @	1%		15,800.32
Total payable Amount Including L.W.C.										1,595,832.04	
								Add Contengency @3%			47,400.95
Total payable Amount Including L.W.C. and contengency										1,643,232.99	
Say Rs.										1,643,233.00	

Niketa Chakraborty

Sub- Assistant Engineer
Darjeeling Municipality

Prasanta Das

MUNICIPAL ENGINEER
Darjeeling Municipality
Darjeeling

[Signature]
Chairman
Darjeeling Municipality
Darjeeling

May be Vetted

[Signature]
23/05/2025
Junior Engineer
Darjeeling Sub Division, M.E. Dte. Darjeeling Sub Division, M.E.Dte.
Govt. Of West Bengal

May be Vetted

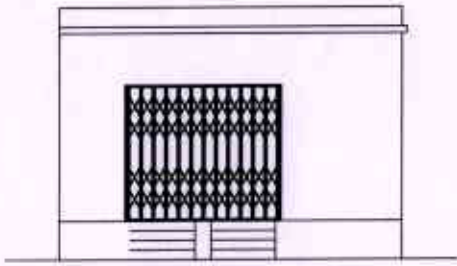
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24/05/25
Assistant Engineer

Darjeeling Sub Division, M.E.Dte.
Govt. Of West Bengal

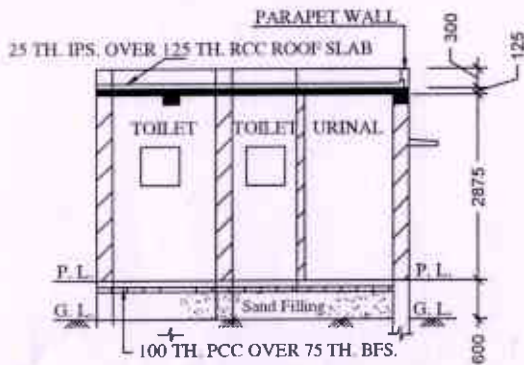
Vetted

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26/05/25
Executive Engineer
Siliguri Division, M.E.Dte
Govt. of West Bengal

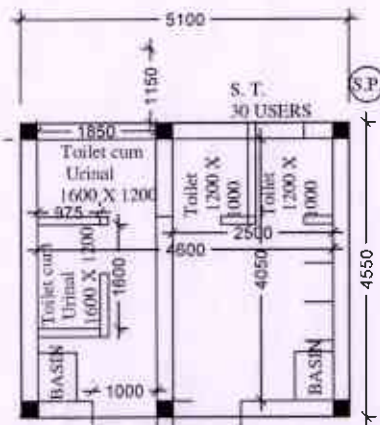
MODEL DRAWING FOR CONSTRUCTION OF C. T./P.T.
TOILET SEATS 4 Nos URINAL 5 Nos
MODEL NO. - G



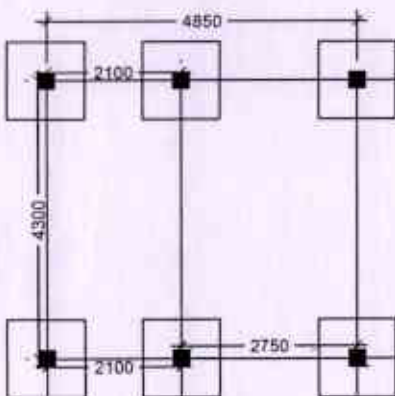
FRONT ELEVATION



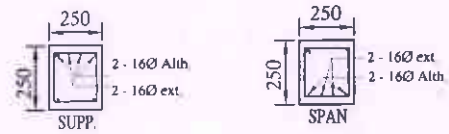
SECTION - 'A - A'



PLAN

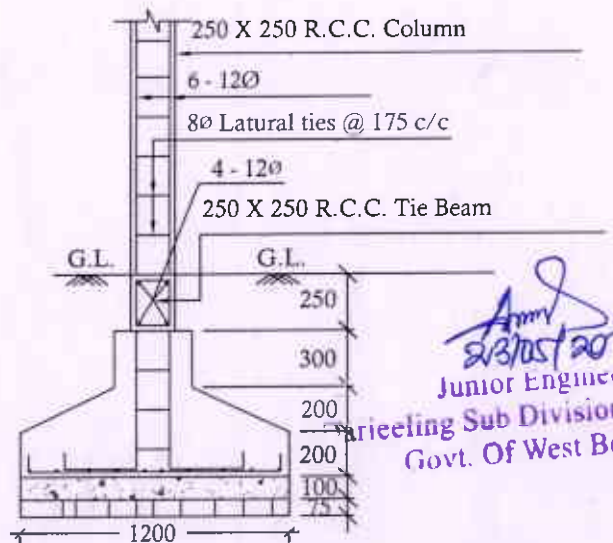


LAYOUT PLAN



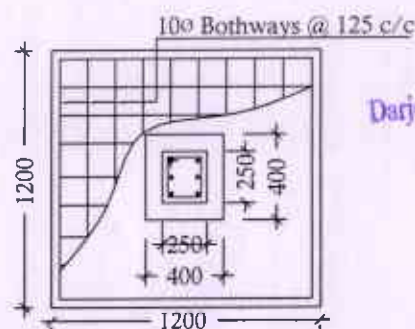
Details Of R.C.C Roof Slab & Beam

(SCALE - 1 : 25)



DETAILS OF R. C. C COLUMN

(SCALE - 1 : 25)



Assistant Engineer
Darjeeling Sub Division, M.E.Dt.
Govt. Of West Bengal

Executive Engineer
Siliguri Division, M.E.Dt.
Govt. of West Bengal

Nikhil Chatterjee
Sub-Assistant Engineer
Darjeeling Municipality

Prasanta
MUNICIPAL ENGINEER
Darjeeling Municipality
Darjeeling

Chandran
Darjeeling Municipality
Darjeeling

Sambhota Tibetan School ,Ward No-31 (Unit-1) (Model 'G')

**ESTIMATE FOR HIGH HILL SLOPE PROTECTION R.C.C CANTILEVER RETAINING WALL OF 4.50m HEIGHT
(For Model 'G')**

As Per PWD Schedule of Rates Volume I: Building Works With effect from 01.11.2017 and Volume III: Road & Bridge Works 2018 With effect from 30.08.2018 [Incorporation of GST Act, 2017 & All addenda & Corrigenda of SOR, Upto 14.03.2023]

Estimate No:

Sl. no	PWD (W.B.), Schedule of Rates Ref.	Description of work	Quantity	Unit	Rate (Rs.-Ps.)	Amount (Rs.-Ps)
1	Road & Bridge Works 2017 Page-284 It-12.01.1.a.(iv)	Earth work in excavation of foundation of structures as per drawing and technical specification, including setting out, removing, spreading or stacking of spoils within a lead of 150 m. as directed and including trimming the sides of the trenches, leveling, dressing and ramming the bottom, and backfilling with approved material complete as per direction of the Engineer-in-Charge . I. In all sorts of soil excluding marshy soil & rocks (soft or hard) by manual means. a) upto 3 m depth (iv) Without pumping out water and shoring	26.847	Cum	114.00	3,060.56
2	Building works 2017 Page no-229, Item no-12 + Rate Analysis	Supplying and laying 150 mm to 200 mm boulder soling including rough dressing hand packing and ramming down small pieces and preparing the bed to proper level and filling up all joints with sandy clay or earth.	26.60	Sqm	240.80	6,405.28
3	Building works 2017 Page no-24, Item no-4.b + 3rd corrigenda + Rate Analysis	Ordinary cement concrete (mix 1:2:4) with graded stone chips (20 mm nominal size) excluding shuttering and reinforcement, if any, in ground floor as per relevant IS codes. (b) River bazree	2.660	Cum	6,186.32	16,455.61
4	Building Works-2017 Page-26 It-10.(ii) + Rate analysis	Ordinary Cement concrete (mix 1:1.5:3) with graded stone chips (20 mm nominal size) excluding shuttering and reinforcement if any, in ground floor as per relevant IS codes. (i) N.B variety stone aggregate	18.717	Cum	6,998.57	130,992.23
5	Building works Page No 322 Item No 18.05	Hire and labour charges for Shuttering with or without staging upto 4.0 m height using approved stout props with wooden planks/ply wood/steel sheet plate with required bracing for any kind of plain or reinforced concrete works in all sorts of minor structure including culvert, box culvert, crossdrain etc. The rate is inclusive of fitting, fixing and striking out after completion of work as per specification and direction. (b) Where staging is not required.	90.70	Sqm	214.00	19,409.80
6	Building works 2017 Page no-43, Item no-a.(i) II + 10th corrigenda & addenda	Reinforcement for reinforced concrete work in all sorts of structures including distribution bars, stirrups, binders etc initial straightening and removal of loose rust (if necessary), cutting to requisite length, hooking and bending to correct shape, placing in proper position and binding with 16 gauge black annealed wire at every intersection, complete as per drawing and direction. (a) For works in foundation and upto roof of ground floor /upto 4 m (i) Tor steel/Mild Steel (JSW/SHYAM/JSPL/SRMB)	2.129	MT	71,762.99	152,783.41
7	Road & Bridge Works Page-297, Item-13.03	Providing weep holes in Brick masonry / Plain / Reinforced concrete abutment, wing wall / return wall with 100 mm dia AC pipe, extending through the full width of the structure with slope of 1V:20H towards drawing face. Complete as per drawing and Technical specifications.	26	Each	117.00	3,042.00

**ESTIMATE FOR HIGH HILL SLOPE PROTECTION R.C.C CANTILEVER RETAINING WALL OF 4.50m HEIGHT
(For Model 'G')**

As Per PWD Schedule of Rates Volume I: Building Works With effect from 01.11.2017 and Volume III: Road & Bridge Works 2018 With effect from 30.08.2018 [Incorporation of GST Act, 2017 & All addenda & Corrigenda of SOR, Upto 14.03.2023]

Estimate No:

Sl. no	PWD (W.B.), Schedule of Rates Ref.	Description of work	Quantity	Unit	Rate (Rs.-Ps.)	Amount (Rs.-Ps)
8	Road & Bridge Works Page no-285 Item no-12.02	Earthwork in filling in foundation trenches with good earth in layers not exceeding 15cm. including watering and ramming layer by layer complete with earth obtained from excavation of foundation or from fresh excavation of land arranged by Department within a lead of 150 m.	10.992	Cum	92.00	1,011.26
Total Cost of works=						333,160.15
18% GST						59,968.83
Cost of Civil works excluding labour welfare cess but including GST						393,128.98
Labour Welfare cess @ 1%						3,931.29
Cost of Civil works including labour welfare cess and GST						397,060.27
3% Contingencies						11,793.87
Grand Total						408,854.14
Say						408,854.00

Nikhil Chatterjee

Sub- Assistant Engineer
Darjeeling Municipality

Trivanta

MUNICIPAL ENGINEER
Darjeeling Municipality
Darjeeling

Chairman
Darjeeling Municipality
Darjeeling

May be Vetted

[Signature]
23/05/2025
Darjeeling Sub Division, M.E.Dtc
Govt. Of West Bengal

May be Vetted

[Signature]
Assistant Engineer
Darjeeling Sub Division, M.E.Dtc.
Govt. Of West Bengal

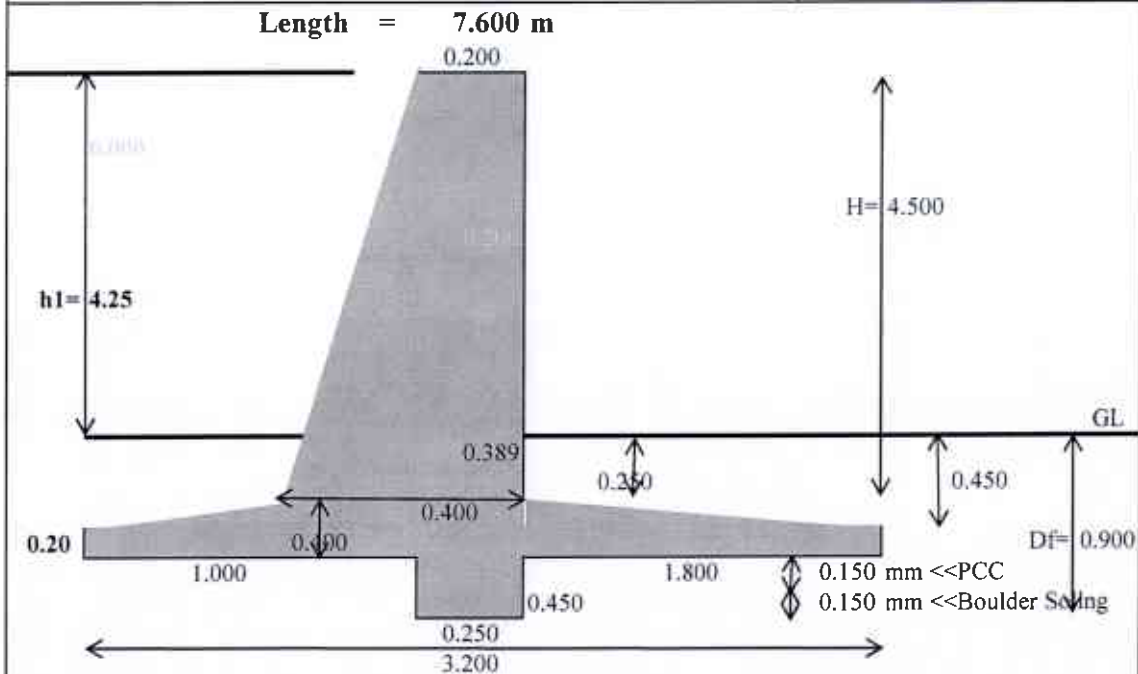
Vetted

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Executive Engineer
Siliguri Division, M.E.Dtc
Govt. of West Bengal

Calculation of RCC Cantilever 4m Height Wall

Length of the wall (L)=	7.600	m
Stem Height of the wall (H)=	4.500	m
Depth of The Foundation (Df)=	0.900	m
Wall Stem Thickness at Top (t1)=	0.200	
Wall Stem Thickness at base (t2)=	0.400	m
Base Slab Thickness at end (d1)=	0.200	m
Base Slab Thickness near stem (d2)=	0.400	
Toe Projection (b1)=	1.000	m
Heel Projection (b2)=	1.800	m
Base Width of Wall (B)=	3.200	m
Depth of Shear Key (d2)=	0.450	m
Thickness of Shear Key (h3)=	0.250	m

Excavation Projection=	0.300	m
Soling Projection=	0.150	m
P.C.C Projection=	0.150	m



Sl No	Description	No	Length	Width	Height/ Thickness	Qty	Unit		
1	E/W in Cutting								
			0 to 3M Height	1	7.600	3.500	0.900	23.940	Cum
				1	7.600	0.850	0.450	2.907	Cum
					Total Qty=	26.847	Cum		
2	Boulder Soling								
				1	7.600	3.500		26.60	Sqm
3	PCC (1:2:4)								
				1	7.600	3.500	0.100	2.660	Cum
4	RCC (1:1.5:3)								
			Upto 4.0M						
			Shear Key	1	7.600	0.250	0.450	0.855	Cum
			Base Raft	1	7.600	0.400	0.400	1.216	Cum
			Toe Side	1	7.600	1.000	0.300	2.280	Cum
			Heel Side	1	7.600	1.800	0.300	4.104	Cum
			Stem upto GL	1	7.600	0.395	0.250	0.750	Cum
			Stem Gl to 4.0m Height	1	7.600	0.295	4.250	9.512	Cum
							Total Qty=	18.717	Cum
5	Shuttering								
			Upto 4.0M						
			Shear Key	1	7.600	0.250	0.550	8.64	Sqm
	Base Raft	1	7.600	0.400	0.400	6.40	Sqm		

Niketan Chakraborty
Sub-Assistant Engineer
Darjeeling Municipality

Prasanna Kumar
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Sl No	Description	No	Length	Width	Height/ Thickness	Qty	Unit
	Toe Side	1	7.600	1.000	0.300	2.28	Sqm
	Heel Side	1	7.600	1.800	0.300	2.28	Sqm
	Stem upto GL	1	7.600	0.395	0.250	4.00	Sqm
	Stem Gl to 4.0m Height	1	7.600	0.295	4.250	67.10	Sqm
					Total Qty=	90.70	Sqm
6	Reinforcement						
	Sub-Structure		@ of 1.5% of Conc. Vol. 9.205 Cum			1.0840	MT
	Super-Structure		#REF!			1.045	MT
					Total Qty=	2.1290	MT
7	Weep Hole						
	C/C Horizontal		1.20	M C/C			
	C/C Vertical S		1.00	M C/C			
					Total Qty=	26	Nos
8	E/W in Filling						
	Excavated Qty					26.847	Cum
	Deduction:						
	Boulder Soling	-1	7.60	3.50	0.150	-3.990	Cum
	PCC (1:2:4)	-1	7.600	3.500	0.100	-2.660	Cum
	Shear Key	-1	7.600	0.250	0.450	-0.855	Cum
	Base Raft	-1	7.600	0.400	0.400	-1.216	Cum
	Toe Side	-1	7.600	1.000	0.300	-2.280	Cum
	Heel Side	-1	7.600	1.800	0.300	-4.104	Cum
	Stem upto GL	-1	7.600	0.395	0.250	-0.750	Cum
					Total Qty=	10.992	Cum

Nikhil Chakraborty

Sub-Assistant Engineer
Darjeeling Municipality

Prasanna Kumar

MUNICIPAL ENGINEER
Darjeeling Municipality
Darjeeling

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Arindam
23/03/2025
Junior Engineer

Darjeeling Sub Division, M.E. Div.
Govt. Of West Bengal

(Signature)
26/03/25
Assistant Engineer

Darjeeling Sub Division, M.E. Div.
Govt. Of West Bengal