

N/W Construction of Boundary wall around GSMST complex and other allied works such as soil filling and storm water drainage lines in softscape areas.

Estimate ID : RG GSMT (BW2)

SLNo	Description	Qty	Unit	Rate	Amount
1	Carriage of Materials				
1.1	By Mechanical Transport including loading,unloading and stacking				
1.1.1	Lime, moorum, building rubbish Lead - 2	10650	cum	196.66	2094429.00
	Sub-Total				2094429.00
2	EARTH WORK				
2.1	Earth work in surface excavation not exceeding 30 cm in depth but exceeding 1.5 m in width as well as 10 sqm on plan including getting out and disposal of excavated earth upto 50 m and lif upto 1.5 m, as directed by Engineer-in-Charge:				
2.1.1	All kinds of soil	35500	sqm	129.85	4609675.00
2.2	Earth work in excavation by mechanical means (Hydraulic excavator)/ manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and for all lift, as directed by Engineer-in-charge.				
2.2.1	All kinds of soil	7860	cum	177.50	1395150.00
2.3	Excavating trenches by mechanical / manual means of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, for all depth, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m:				
2.3.1	All kinds of soil				
2.3.1.	Pipes, cables etc. exceeding 80 mm dia. but not exceeding 300 mm dia	1000	metre	352.15	352150.00
2.4	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 and for all lif.	6120	cum	196.00	1199520.00
2.5	Excavating, supplying, stacking and filling of local earth (including royalty) by mechanical transport upto a lead of 5km also including ramming and watering of the earth in layers not exceeding 20 cm in foundation trenches, plinth, sides of foundation etc. complete for all lift.	56650	cum	700.50	39683325.00

2.6	Extra for every additional lift of 1.5 m or part thereof in excavation / banking excavated or stacked materials.				
2.6.1	All kinds of soil	495	cum	126.80	62766.00
2.7	Supplying and filling in plinth with sand under floors, including watering, ramming, consolidating and dressing complete.	60	cum	2123.75	127425.00
2.8	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth up to 30 cm measured at a height of 1 m above ground level and removal of rubbish up to a distance of 50 m outside the periphery of the area cleared.	45000	sqm	17.60	792000.00
2.9	Supplying and laying 230 mm thick soling using rubble of size up to 230 mm or hardcore in two layers of 150 mm thick, using oversize aggregate up to 65 mm size, each below foundations, roads and in plinth including blinding layer of grit/stone sand, watering, compacting using mechanical rammers etc. complete.	695	cum	2300.00	1598500.00
	Sub-Total				49820511.00
3	CEMENT CONCRETE (CAST IN SITU)				
3.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :				
3.1.1	1:3:6 (1 Cement : 3 coarse sand (zone-III) derived from natural sources : 6 graded stone aggregate 20 mm nominal size derived from natural sources)	410	cum	7294.70	2990827.00
3.2	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets, sunken floor etc., up to floor five level, excluding the cost of centering, shuttering and finishing:				
3.2.1	1:1.5:3 (1 cement : 1.5 coarse sand (zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources).	275	cum	10357.55	2848326.00
3.3	Centering and shuttering including strutting, propping etc. and removal of form work for:				
3.3.1	Retaining walls, return walls, walls (any thickness) including attached pilasters, buttresses, plinth and string courses fillets, kerbs and steps etc.	985	sqm	842.50	829863.00
	Sub-Total				6669016.00

4	REINFORCED CEMENT CONCRETE				
4.1	Centering and shuttering including strutting, propping etc. and removal of form for				
4.1.1	Foundations, footings, bases of columns, etc. for mass concrete	2435	sqm	392.15	954885.00
4.1.2	Lintels, beams, plinth beams, girders, bressumers and cantilevers	1065	sqm	736.40	784266.00
4.1.3	Columns, Pillars, Piers, Abutments, Posts and Struts	1825	sqm	961.30	1754373.00
4.2	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level.				
4.2.1	Thermo-Mechanically Treated bars of grade Fe-500D or more.	95850	kg	107.85	10337423.00
4.3	Providing and laying in position ready mixed or site batched design mix cement concrete for reinforced cement concrete work; using coarse aggregate and fine aggregate derived from natural sources, Portland Pozzolana / Ordinary Portland /Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering, finishing and reinforcement as per direction of the engineer-in-charge, for the following grades of concrete.: Note: Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the specified minimum cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement.				
4.3.1	All works upto plinth level				
4.3.1.1	Concrete of M25 grade with minimum cement content of 330 kg /cum	1395	cum	9504.75	13259126.00
4.3.2	All works above plinth level upto floor V level				
4.3.2.1	Concrete of M25 grade with minimum cement content of 330 kg /cum	15	cum	9860.40	147906.00
4.4	Add for using extra cement in the items of design mix over and above the specified cement content therein.	440	quintal	733.50	322740.00
	Sub-Total				27560719.00
5	MASONRY WORK				

5.1	Brick work with common burnt clay selected F.P.S. (non modular) bricks of class designation 7.5 in exposed brick work including making horizontal and vertical grooves 10 mm wide 12 mm deep complete in cement mortar 1:6 (1 cement: 6 coarse sand)				
5.1.1	From ground level upto plinth level	515	cum	7361.35	3791095.00
5.1.2	Above plinth level upto floor V level	300	cum	9439.75	2831925.00
	Sub-Total				6623020.00
6	STEEL WORK				
6.1	Steel work in built up tubular (round, square or rectangular hollow tubes etc.) trusses etc., including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete.				
6.1.1	Hot finished welded type tubes	8000	kg	194.40	1555200.00
6.2	Steel work welded in built up sections/ framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required.				
6.2.1	In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works	24100	kg	172.60	4159660.00
	Sub-Total				5714860.00
7	FINISHING				
7.1	12 mm cement plaster of mix:				
7.1.1	1:6(1 cement: 6 fine sand)	1560	sqm	333.35	520026.00
7.2	15 mm cement plaster on rough side of single or half brick wall of mix:				
7.2.1	1:6(1 cement: 6 coarse sand)	3190	sqm	395.35	1261167.00
7.3	6 mm cement plaster of mix:				
7.3.1	1:3(1 cement :3 fine sand)	1260	sqm	300.45	378567.00
7.4	Pointing on brick work or brick flooring with cement mortar 1:3 (1 cement : 3 fine sand):				
7.4.1	Flush / Ruled/ Struck or weathered pointing	1490	sqm	257.35	383452.00
7.5	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade:				
7.5.1	New work (Two or more coats applied @ 1.43 ltr/10 sqm over and including priming coat of exterior primer applied @ 0.90 litre/10 sqm)	7500	sqm	171.10	1283250.00
7.6	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade :				
7.6.1	Two or more coats on new work	1010	sqm	155.90	157459.00
	Sub-Total				3983921.00
8	Dismantling and Demolishing				

8.1	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charge.				
8.1.1	Nominal concrete 1:3:6 or richer mix (including equivalent design mix)	5	cum	2434.25	12171.00
8.1.2	Nominal concrete 1:4:8 or leaner mix (including equivalent design mix)	5	cum	1503.60	7518.00
8.2	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of Engineer - in- charge.	15	cum	3551.25	53269.00
8.3	Extra for cutting reinforcement bars manually/ by mechanical means in R.C.C. or R.B. work (Payment shall be made on the cross sectional area of R.C.C. or R.B. work) as per direction of Engineer-in-charge.	25	sqm	1147.20	28680.00
8.4	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge.				
8.4.1	In cement mortar	4	cum	2060.20	8241.00
8.5	Dismantling steel work manually/ by mechanical means in built up sections without dismembering and stacking within 50 metres lead as per direction of Engineer-in-charge.	40	kg	3.85	154.00
8.6	Dismantling precast concrete or stone slabs in walls, partition walls etc. including stacking within 50 metres lead :				
8.6.1	Thickness above 40 mm up to 75 mm	350	sqm	433.55	151743.00
8.7	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all lifts involved.	40	cum	263.95	10558.00
	Sub-Total				272334.00
9	ROAD WORK				

9.1	Providing and laying C.C. pavement of mix M-25 with ready mixed concrete from batching plant. The ready mixed concrete shall be laid and finished with screed board vibrator , vacuum dewatering process and finally finished by floating, brooming with wire brush etc. complete as per specifications and directions of Engineer-in-charge. (The panel shuttering work shall be paid for separately). (Note:- Cement content considered in this item is @ 330 kg/cum. Excess/ less cement used as per design mix is payable/ recoverable separately).	5	cum	9823.80	49119.00
	Sub-Total				49119.00
10	WATER SUPPLY				
10.1	Cutting holes up to 15x15 cm in R.C.C. floors and roofs for passing drain pipe etc. and repairing the hole after insertion of drain pipe etc. with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), including finishing complete so as to make it leak proof.	50	each	452.00	22600.00
	Sub-Total				22600.00
11	DRAINAGE				
11.1	Extra for depth beyond 45 cm of brick masonry chamber :				
11.1.1	For 455x610 mm size				
11.1.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	25	metre	6117.00	152925.00
	Sub-Total				152925.00
12	MISCELLANEOUS				
12.1	Making Spikes in MS Grill	5150	Each	13.40	69010.00
12.2	Extra lead per Km for transporting soil brought from outside beyond 5 km up to 20 km	56650	Cum	13.20	747780.00
12.3	Providing, Laying and jointing of HDPE pipe (PN 6 Class-PE 100 grade:IS 14333) by suitable method e.g. butt fusion, electrofusion or any other method approved by EIC to required slope and alignment including testing of joints complete in all respect as per direction of Engineer-In-Charge : DN 160	1000	Meter	865.10	865100.00

12.4	Constructing brick masonry chamber chamber with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) including SFRC horizontal grating with frame, having 500 x450 mm clear opening & cover size 570 x520 mm : R.C.C. top slab with 1:1.5:3 mix (1 cement : 1.5 fine sand : 3 graded stone aggregate 20 mm nominal size), foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand), finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete as per standard design:				
12.4.1	Inside dimensions 455x610 mm and 45 cm deep :				
12.4.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	120	each	6937.90	832548.00
	Sub-Total				2514438.00
	Total				105477892.00
	Modified Estimated Cost after using correction factor on DSR 2023 on account of GST @ 0.973 * 101364954 = 98628100				102741038.00