

N/W

Construction of Precast R.C.C cable trench of size 750 mm x750mm, length approx. 1100 Meter from Flexible Electronics building to GSMST building_Stretch-1.

Estimate ID : RA,CA-53

SLNo	Description	Qty	Unit	Rate	Amount
1	Carriage of Materials				
1.1	By Mechanical Transport including loading,unloading and stacking				
1.1.1	Earth Lead - 5	888	cum	326.68	290092.00
	Sub-Total				290092.00
2	EARTH WORK				
2.1	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, for all lift, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.				
2.1.1	All kinds of soil.	1430	cum	260.30	372229.00
2.2	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.	540	cum	196.00	105840.00
2.3	Supplying and filling in plinth with sand under floors, including watering, ramming, consolidating and dressing complete.	36	cum	2123.75	76455.00
2.4	Surface dressing of the ground including removing vegetation and in- equalities not exceeding 15 cm deep and disposal of rubbish, lead up to 50 m and lift up to 1.5 m.				
2.4.1	All kinds of soil	720	sqm	34.15	24588.00
2.5	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.	750	sqm	17.60	13200.00
	Sub-Total				592312.00
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	1:4:8 (1 Cement : 4 coarse sand (zone-III) derived from natural sources: 8 graded stone aggregate 40 mm nominal size derived from natural sources)	171	cum	6812.00	1164852.00
	Sub-Total				1164852.00
4	REINFORCED CEMENT CONCRETE				
4.1	Reinforced cement concrete work in beams, suspended floors, roofs having slope up to 15 degree landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases above plinth level up to floor five level, excluding the cost of centering, shuttering, finishing and reinforcement with 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).	11	cum	11505.50	126561.00
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.	2000	kg	107.85	215700.00
	Sub-Total				342261.00
5	MASONRY WORK				
5.1	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:				
5.1.1	Cement mortar 1:6(1 cement :6 coarse sand)	42	cum	7132.25	299555.00
	Sub-Total				299555.00
6	STEEL WORK				
6.1	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.				
6.1.1	In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works	10	kg	172.60	1726.00
	Sub-Total				1726.00
7	FLOORING				
7.1	Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement, including cement slurry, but excluding the cost of nosing of steps etc. complete.				
7.1.1	40 mm thick with 20 mm nominal size stone aggregate	60	sqm	614.20	36852.00
	Sub-Total				36852.00
8	FINISHING				

8.1	12 mm cement plaster of mix:				
8.1.1	1:6 (1 cement: 6 coarse sand)	150	sqm	343.65	51548.00
8.2	15 mm cement plaster on rough side of single or half brick wall of mix:				
8.2.1	1:6(1 cement: 6 coarse sand)	120	sqm	395.35	47442.00
8.3	Neat cement punning.	270	sqm	79.95	21587.00
	Sub-Total				120577.00
9	Dismantling and Demolishing				
9.1	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charge.				
9.1.1	Nominal concrete 1:4:8 or leaner mix (including equivalent design mix)	67.5	cum	1503.60	101493.00
9.2	Dismantling 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 :				
9.2.1	bituminous road	6.75	sqm	428.50	2892.00
9.3	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.	47	cum	263.95	12406.00
	Sub-Total				116791.00
10	ROAD WORK				

10.1	Providing and laying design mix cement concrete of M-30 grade, in roads/ taxi tracks/ runways, using cement content as per design mix, using coarse sand and graded stone aggregate of 40 mm nominal size in appropriate proportions as per approved & specified design criteria, providing dowel bars with sleeve/ tie bars wherever required, laying at site, spreading and compacting mechanically by using needle and surface vibrators, levelling to required slope/ camber, finishing with required texture, including steel form work with sturdy M.S. channel sections, curing, making provision for contraction/ expansion, construction & longitudinal joints (10 mm wide x 50 mm deep) by groove cutting machine, providing and filling joints with approved joint filler and sealants, complete all as per direction of Engineer- in-charge (Item of joint fillers, sealants, dowel bars with sleeve/ tie bars to be paid separately). Note:- Cement content considered in M-30 is @ 340 kg/cum. Excess/ less cement used as per design mix is payable/ recoverable separately.				
10.1.1	Cement concrete manufactured in automatic batching plant (RMC plant) including transportation to site in transit mixer	9.5	cum	11098.45	105435.00
10.2	Taking out existing kerb stones of all types from footpath/ central verge, including removal of mortar etc., disposal of unserviceable material to the dumping ground, for which payment shall be made separately and stacking of serviceable material within 50 metre lead as per direction of Engineer-in-Charge.	17.5	metre	39.35	689.00
10.3	Laying old cement concrete interlocking paver blocks of any design/ shape laid in required line, level, curvature, colour and pattern over and including 50 mm thick compacted bed of coarse sand, filling the joints with fine sand etc. all complete as per the direction of Engineer-in-charge. (Old CC paver blocks shall be supplied by the department free of cost).	360	sqm	402.95	145062.00

10.4	Laying at or near ground level old kerb stones of all types in position to the required line, level and curvature, jointed with cement mortar 1:3 (1 cement : 3 coarse sand), including making joints with or without grooves (thickness of joints, except at sharp curve, shall not be more than 5 mm), including making drainage opening wherever required etc. complete as per direction of Engineer-in-charge. (Length of finished kerb edging shall be measured for payment). (Old kerb stones shall be supplied by the department free of cost)	17.5	metre	109.45	1915.00
	Sub-Total				253101.00
11	MISCELLANEOUS				
11.1	Providing, hoisting and fixing factory made U shaped RCC cable trench of inner size 750 mmx 750 mm with base and wall thickness 100 mm of suitable length with removable precast RCC covers of 150 mm thickness i/c setting in cement mortar 1:3 (1 cement:3 coarse sand), cost of required centering, shuttering, cost of reinforcement (approx 1.5% of RCC) with ready mixed or batch design mix cement concrete of M25 grade of reinforced cement concrete work, using coarse aggregate and fine aggregate derived from natural sources, portland pozzolana/ Ordinary portland /portland slag cement, admixtuers in recommended proportions as per IS:9103 to accelerate / retard setting of concrete to improve durability and workability without impairing strength, including curing as per direction of the Engineer-in-Charge. The contractor shall transport the said precast trench and cover slab to work site, the transportation charge shall be in scope of contractor. The contractor may use crane or any vehicle for erection of said precast trench and cover slab, the said expenditure shall be in scope of the contractor. The contractor shall take all precautionary measure during the execution of work, any damage to IITK property shall be recovered from the contractor.	1050	Meter	12888.95	13533398.00
11.2	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 Engineer-in- Charge) in required slope and alignment including testing of joints as per direction of Engineer-in-Charge complete in all respect: DN 110	350	Meter	588.75	206063.00

	Sub-Total				13739461.00
	Total				16957580.00
	Modified Estimated Cost after using correction factor on DSR 2023 on account of GST @ 0.973 * 3218119 = 3131230				16870691.00
	Say				16870691.00