

TATA MEMORIAL CENTRE

Advanced Centre For Treatment, Research And Education In Cancer, Kharghar Node, Navi Mumbai - 410210

## Name of Work

Construction of "Shantilal Shanghvi Pediatric Hematolymphoid Cancer Centre" at ACTREC Kharghar, Navi Mumbai. NIT No:- TMC/ACTREC/ENGG/SSPCC/PT-14/2020 dated 28/08/2020

	SCHEDULE OF QUANTITY				
Sr.	Name of Agency ITEM DESCRIPTION	UNIT	Qty	RATE	AMOUNT
No A	EARTH WORK	UNIT	QLY	NATE	AMOONT
	NOTE:- a. All royalties to be paid by contractor and receipts to be submitted to the client for records.				
	b. Items 2 to be used only when mechanical excavation is practically difficult using JCB / Poclain.				
	c. MPD test will include test each of 3 samples and to be done for each layer of filling irrespective of the height of the filling.				
	d. FOR ALL THE ITEMS IN THIS CATOGORY , Only P.C.C dimensions will be considered for measurements. No additional measurement will be considered for the working space required by the Contractor.				
	e. The tenderer has to read the soil investigation report submitted along with the tender document and make his own assessment of the nature, type, strength and classification of soil/ rock/ murrum. If desired he can take confirmatory bores at desired location.				
	f. Dewatering, shoring, strutting, disposing of excavated material outside the premises, finding the government approved area for disposal, lifting, shifting, transporting to be included in the excavation item itself. No extra payment to be made for the same. Incase the conctractor fails to do so, the same will be done by the client at the contractors risk and cost				
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 lift upto 1.5 m, as directed by Engineer-in- Charge:	Sqm	7995		-
2	Excavation manually in all types of soil, including murrum, soft rock for foundations, wall, columns, plinth beams, basement, raft, ducts, trenches, underground sumps, septic tanks, soak well including shoring $\pounds$ strutting, removing and stacking simultaneously the excavated stuff anywhere within the site area and/or spreading soils in layers for site development. All complete as per specification or as directed. From existing ground level to - up to 1.5 m depth	CuM	259		
3	Excavation mechanically (using excavators like JCB /Poclain/with bucket) in all types of soil, including murrum, soft rock for foundations, wall, columns, plinth beams, basement, raft, ducts, trenches, underground sumps, septic tanks, soak well including shoring and strutting, bailing out water/pumping off water if required, removing and stacking simultaneously the excavated stuff anywhere within the site area and/or spreading soils in layers for site development. All complete as per specification or as directed. From existing ground level to 3.00 m depth		5941		
4	Excavation mechanically (using excavators like JCB /Poclain/with bucket) in all types of soil, including murrum, soft rock for foundations, wall, columns, plinth beams, basement, raft, ducts, trenches, underground sumps, septic tanks, soak well including shoring and strutting, bailing out water/pumping off water if required, removing and stacking simultaneously the excavated stuff anywhere within the site area and/or spreading soils in layers for site development. All complete as per specification or as directed. From 3.00 m to 6.00 m depth		872		
5	Earth work in excavation in hard rocks up to 1.5 m from existing Ground level (GL) without blasting, removal and stacking the excavated rock including all the costs, of tools / plants etc complete as per specification or as directed. Hard rock (blasting prohibited)	CuM	130		
5.1	Do as per item No. 1.04 (a) but for depth exceeding 1.5m to 3.0m.	CuM	65		-
5.2	Do as per item No. 1.04 (a) but for depth exceeding 3.0m.	CuM	872		-

В	CONCRETE / SHUTTERING / REINFORCEMENT / PT WORKS			
	Total for Earth work		36371	Rs.0
11.2	Stages of treatment:(Basement / UGWT) 1st stage: Treatment to soil below raft. 2nd stage: Treatment to soil along the retaining wall. 3rd stage: Treatment of soil along external perimeter of building. 4th stage: Treatment to soil surrounding pipes,wastes and conduits. 5th stage: Treatment to expansion joints.	SqM	175	
	1st stage: Foundation trench / pit 2nd stage: Treatment of top surface of plinth filling before sub-grade is laid in the floor. 3rd stage: Treatment of junction of walls and floors. 4th stage:Treatment to soil along external perimeter of the building. 5th stage:Treatment to soil surrounding pipes,wastes and conduits. 6th stage: Treatment to expansion joints.			
11	Supplying the chemicals & carrying out pre-construction Anti-termite treatment at the various stages of construction as per IS / and as recommended by the chemical manufacturer to safeguard the building against termite including execution and submission of guarantee for a period of 10 years against any subterranean pests infestation. This work is to be got executed through Pest Control (India) Ltd as per their specifications or an approved equivalent specialized agency.(Measurement shall be as per outer dimension of building treated) Stages of treatment:(Frame structure without basement ) its stage: Foundation trench / nit		7994	
10	Disposal of surplus earth etc. from site, outside the premises to an unobjectionable place upto any lead including, royalty, loading at site, transportation, unloading, spreading, etc. all complete as per specification or as directed.	CuM	3455	
9	Providing & laying dry Rubble stone soling of consolidated thickness using good quality of angular or breaking from boulders rubble stones brought from outside, laid vertically hand set & interstices filled with smaller chips, blinded with murum/ approved earth/ stone dust etc. including watering consolidating with mechanical plate compactor and finishing to correct levels as directed & as per specifications. (For huge floor area, VIBRO ROLLER 8-10T should be used for compaction)	C	330	
8	Laying in a compact manner each of 75mm thick consolidated metal soling layer in plinth/foundation/road using available average 60 to 80 mm size stones, including filling in the voids with largest possible stones, covering and levelling the surface with sand/ layer of murum, dry compaction followed by watering topping up with sand / muram and consolidation with mechanical plate compactor etc. all complete as per specification or as directed.(For huge floor area, VIBRO ROLLER 8-10T/ Plate Compactor should be used for compaction)	CuM	85	
7	Providing and laying in a compact manner each of 75mm thick consolidated metal soling layer in plinth/foundation/road using average 60 to 80 mm size stones, including filling in the voids with largest possible stones, covering and levelling the surface with sand/ layer of murum, dry compaction followed by watering topping up with sand / murram and consolidation with mechanical plate compactor etc. all complete as per specification or as directed.(For huge floor area, VIBRO ROLLER 8-10T/ Plate Compactor should be used for compaction)		880	
6.1	Do as per item no. 1.05 (a) but Providing and filling in plinth & superstructure under Floors/ Roads etc with selected earth brought from outside site, including freight, transportation,royalty, loading, unloading, etc. (Note : Each building plinth to have at least one set of test of MDP conducted irrespective of plinth area or for every 500 sqm of compacted area and part there of ).	CuM	2636	
	within site, in layers of 15 cms. to 20 cms. Including watering, ramming consolidating to 15cm thick or so , by manually compaction or using mechanical plate compactor / vibro-roller etc (manual compaction will be permitted under special condition and as per engineer written instruction ), finished to desire levels all as per drawings to get MPD of 95% as per detailed drawings. Including cost of transportation anywhere within site. all complete as per specification or as directed. (Note : Each building plinth to have at least one set of test of MPD conducted irrespective of plinth area or for every 500 sqm of compacted area and part there of ).	CuM	4682	

	<ul> <li>NOTE:-</li> <li>a. All shuttering used for concreting to be of very good quality so as to give good finish. In case there is bulging / minor honey combing the contractor will have to rectify the work at his own cost. The decision as to what constitute minor honey combing is left to the Client's site in charge. The Shuttering work will be treated complete only after all ply / shuttering materials fixed in concrete is removed , shuteering material is removed from the area and the area is cleaned in all respect as required by the client / site in charge.</li> <li>b. The Contractor is entirely responsible for the design of concrete mixes. The design is however, to be approved by the Engineer in charge / Structural Consultant c. Excess/less cement used than specified in this item is payable/recoverable separately.</li> <li>d. Hacking of concrete to be done within 12 hours of Deshuttering.</li> <li>e. All vertical surfaces to be applied with curing compound (Coloured) once hacking is done with No additional measurement/payment will be done for the same.</li> <li>f. For slab / road curing, PVC/LDPE sheet to be laid on the slab surface for the entire curing period and no additional measurement/payment will be done for the same.</li> </ul>			
	g. Centre line for all column at every floor should be marked by Total Station only .			
	h. Post cecking of centre line, face and distance should be done by Total Station only.			
	i, Checking of top level / alignment of slab and other members should be done at every floor			
	<ol> <li>Checking of top level / alignment of slab and other members should be done at every floor with necessary instruments &amp; it should be within the tender specifications.</li> </ol>			
12				
12	Providing & applying a coat of residual petroleum bitumen of grade of VG-10 of approved quality using 1.7kg per square metre after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.	SqM	5235	
13	Providing and laying in position plain cement concrete upto plinth level, with cement content as per approved design mix and manufactured in fully automatic batching plant and transported to site of work in transit mixer for all leads, having continuous agitated mixer, manufactured as per mix design of specified grade for plain cement concrete work, including pumping of R.M.C. from transit mixer to site of laying and curing, including the cost of centering, shuttering and finishing, including cost of curing, admixtures in recommended proportions as per IS : 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer-in-charge.			
	M-15 grade plain cement concrete. ( Min Cementatious content - 240 Kg )	CuM	255	_
		Cum	233	
14	Providing & laying plum concrete using 150mm & down size selected rubble stones placed in concrete M-15 Grade in the proportion of 40% rubble & 60%concrete consolidation, finishing, curing etc. in line, level and plumb, as per item above.	CuM	20	
15	Supplying and placing Ready mixed controlled cement concrete from the approved vendor transported to site of work in transit mixer for all leads having continuous agitated mixer, manufactured as per approved design mix for all RCC Works, cement concrete of following Grades using graded stone aggregates of maximum 20mm nominal size obtained from approved quarry, fine and coarse sand conforming to latest IS : 383 and cement as per approved design mix proportions conforming to latest IS : 456 to manufacture concrete (Normal / High performance / Self Compacting (only where there is congestion of steel )) as required using OPC cement along with binders like GGBFS, micro fines, flyash, etc. in appropriate proportion and controlled water cement ratio using PCE (Polycarboxylatether) based Super plasticizer, viscosity modifying agent, Shrinkage Reducer Admixture, P.P. Fibers, etc. to meet the parameters as specified in the specifications considereing the location of pours excluding Shuttering for all the			
	works to be e same. f. For slab / road curing, PVC/LDPE sheet to be laid on the slab surface for the entire curing period and no additional measurement/payment will be done for the same. waterproofing compound as per manufacturer's specifications) (Mode of measurement : Only the surface area in contact to be considered once for the measurements irrespective of the number of layers applied)ALL SAND TO BE OF PACKED BAG SAND WITH TEST CERTIFICATE.Jote 3 : Through ties will not be allowed for shuttering for all external surfaces exposed to rain and also in water retaining structures.atment between each joint , etc all complete so as to achieve the desired results for Approved Design mix. Also note that the accrediation from QCI is required for the selection of RMC vendor.( Note: The rates to include proper supervision, proper QA/QC of concrete, proper curing, proper temperature control , testing of material / members at various stages , etc all complete as per specifications )			
15.1	works to be e same. f. For slab / road curing, PVC/LDPE sheet to be laid on the slab surface for the entire curing period and no additional measurement/payment will be done for the same. waterproofing compound as per manufacturer's specifications) (Mode of measurement : Only the surface area in contact to be considered once for the measurements irrespective of the number of layers applied)ALL SAND TO BE OF PACKED BAG SAND WITH TEST CERTIFICATE.jote 3 : Through ties will not be allowed for shuttering for all external surfaces exposed to rain and also in water retaining structures.atment between each joint , etc all complete so as to achieve the desired results for Approved Design mix. Also note that the accrediation from QCI is required for the selection of RMC vendor.( Note: The rates to include proper supervision, proper QA/QC of concrete, proper curing, proper temperature control , testing of material / members at various stages , etc all complete as per specifications )	ClivA	53	
<u>15.1</u> 15.2	works to be e same. f. For slab / road curing, PVC/LDPE sheet to be laid on the slab surface for the entire curing period and no additional measurement/payment will be done for the same. waterproofing compound as per manufacturer's specifications) (Mode of measurement : Only the surface area in contact to be considered once for the measurements irrespective of the number of layers applied)ALL SAND TO BE OF PACKED BAG SAND WITH TEST CERTIFICATE.Jote 3 : Through ties will not be allowed for shuttering for all external surfaces exposed to rain and also in water retaining structures.atment between each joint , etc all complete so as to achieve the desired results for Approved Design mix. Also note that the accrediation from QCI is required for the selection of RMC vendor.( Note: The rates to include proper supervision, proper QA/QC of concrete, proper curing, proper temperature control , testing of material / members at various stages , etc all	CuM CuM	53	
15.2 15.3	works to be e same. f. For slab / road curing, PVC/LDPE sheet to be laid on the slab surface for the entire curing period and no additional measurement/payment will be done for the same. waterproofing compound as per manufacturer's specifications) (Mode of measurement : Only the surface area in contact to be considered once for the measurements irrespective of the number of layers applied)ALL SAND TO BE OF PACKED BAG SAND WITH TEST CERTIFICATE.)ote 3 : Through ties will not be allowed for shuttering for all external surfaces exposed to rain and also in water retaining structures.atment between each joint , etc all complete so as to achieve the desired results for Approved Design mix. Also note that the accrediation from QCI is required for the selection of RMC vendor.( Note: The rates to include proper supervision, proper QA/QC of concrete, proper curing, proper temperature control , testing of material / members at various stages , etc all complete as per specifications ) For M-15 grade of concrete (Min Cementatious content - 240 Kg ) For M-20 grade of concrete (Min Cementatious content - 300 Kg )	CuM CuM	20 290	
15.2 15.3 15.4	works to be e same. f. For slab / road curing, PVC/LDPE sheet to be laid on the slab surface for the entire curing period and no additional measurement/payment will be done for the same. waterproofing compound as per manufacturer's specifications) (Mode of measurement : Only the surface area in contact to be considered once for the measurements irrespective of the number of layers applied)ALL SAND TO BE OF PACKED BAG SAND WITH TEST CERTIFICATE.jote 3 : Through ties will not be allowed for shuttering for all external surfaces exposed to rain and also in water retaining structures.atment between each joint , etc all complete so as to achieve the desired results for Approved Design mix. Also note that the accrediation from QCI is required for the selection of RMC vendor.( Note: The rates to include proper supervision, proper QA/QC of concrete, proper curing, proper temperature control , testing of material / members at various stages , etc all complete as per specifications ) For M-15 grade of concrete (Min Cementatious content - 240 Kg ) For M-20 grade of concrete (Min Cementatious content - 300 Kg ) For M-30 grade of concrete (Min Cementatious content - 300 Kg ) For M-30 grade of concrete (Min Cementatious content - 300 Kg )	CuM CuM CuM	20 290 40	
15.2 15.3 15.4 15.5	works to be e same. f. For slab / road curing, PVC/LDPE sheet to be laid on the slab surface for the entire curing period and no additional measurement/payment will be done for the same. waterproofing compound as per manufacturer's specifications) (Mode of measurement : Only the surface area in contact to be considered once for the measurements irrespective of the number of layers applied)ALL SAND TO BE OF PACKED BAG SAND WITH TEST CERTIFICATE.jote 3 : Through ties will not be allowed for shuttering for all external surfaces exposed to rain and also in water retaining structures.atment between each joint , etc all complete so as to achieve the desired results for Approved Design mix. Also note that the accrediation from QCI is required for the selection of RMC vendor.( Note: The rates to include proper supervision, proper QA/QC of concrete, proper curing, proper temperature control , testing of material / members at various stages , etc all complete as per specifications ) For M-15 grade of concrete (Min Cementatious content - 240 Kg ) For M-25 grade of concrete (Min Cementatious content - 300 Kg ) For M-35 grade of concrete (Min Cementatious content - 300 Kg ) For M-35 grade of concrete (Min Cementatious content - 300 Kg )	CuM CuM CuM CuM	20 290	
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16 Supplying and placing Ready mixed controlled cement concrete from the transported to site of work in transit mixer for all leads having continuous manufactured as per approved design mix for all RCC Works, cement concred Grades using graded stone aggregates of maximum 20mm nominal size obtaine quarry, coarse sand conforming to latest IS : 383 and cement as per appr proportions conforming to latest IS : 456 to manufacture concrete (Normal / H / Self Compacting( only where there is congetion of steel ) ) as required us along with binders like GGBFS, micro fines, etc. in appropriate proportion water cement ratio using PCE (Polycarboxylatether) based Super plast modifying agent, Shrinkage Reducer Admixture, P.P Fibers, etc. to meet th specified in the specifications considereing the location of pours excluding Shut works to be done for SuperstrWastage, rolling margins, Burning loss and the C include the same in his rates. 3. The scrap will be the property of the CC order.)rried out by the Finishing Contractor. e. For AAC block work, it is mandotary to roughen the surface before plast satisfaction of client site in charge. CC walls for Water tanks, etcand are to be casted without any vertical con Note2: No additional measurements will be given for cutouts/pockets.Note will not be allowed for shuttering for all external surfaces exposed to rain a retaining structures. NO additional payments will be made for platforms / scaf up of Shuttering holes with cementious non shrink grout using pressure inject tool to achieve complete hole filling (maallowed)	agitated mixer, ete of following d from approved yoed design mix igh performance ing OPC cement and controlled ciczer, viscosity e parameters as tering for all the pontractor has to NTRACTORs the stering upto the istering upto the participation in water plolings for filling
16.1 Upto 10th Floor	
16.1.1         For M-15 grade of concrete (Min Cementatious content - 240 Kg)           16.1.2         For M-20 grade of concrete (Min Cementatious content - 300 Kg)	CuM 15 -
16.1.3 For M-25 grade of concrete (Min Cementatious content - 300 kg)	CuM 55 -
16.1.4 For M-30 grade of concrete (Min Cementatious content - 300 Kg)	CuM 500 -
16.1.5 For M-35 grade of concrete (Min Cementatious content - 300 Kg)	CuM 8080 -
16.1.6 For M-40 grade of concrete (Min Cementatious content - 300 Kg )	CuM 350 -
16.1.7 For M-45 grade of concrete (Min Cementatious content - 300 Kg )	CuM 1920 -
16.2 Above 10th Floor	
16.2.1         For M-15 grade of concrete (Min Cementatious content - 240 Kg)           16.2.2         For M-20 grade of concrete (Min Cementatious content - 300 Kg)	CuM 10 - CuM 5 -
16.2.3 For M-25 grade of concrete (Min Cementatious content - 300 kg)	CuM 20 -
16.2.4 For M-30 grade of concrete (Min Cementatious content - 300 Kg)	CuM 415 -
16.2.5 For M-35 grade of concrete (Min Cementatious content - 300 Kg)	CuM 4499 -
16.2.6 For M-40 grade of concrete (Min Cementatious content - 300 Kg )	CuM 150 -
16.2.7 For M-45 grade of concrete (Min Cementatious content - 300 Kg )	CuM 10 -
17 Providing and admixing Polyalk CP 293 of M/s. Sunanda Speciality Coatir equivalent -migrating, non-nitrite based corrosion inhibiting admixture in manufacturers specifications. The admixture should protect both cathodic and have been accredited by Indian Roads Congress, recommended for use by Transport & Highways and should have a minimum 5 year track record of use in should have evaluated test reports demonstrating a corrosion rate of zero could cycles as per ASTM G 109 when tested from a research institution NBA accredit internationally ranked among top 5 research institutions. PH of adm alkaline in nature, specific gravity of 0.99 - 1.1. The contractor must intimate charge prior to addition in concrete for recording. If the admixture is put in the the batching plant, a written record of the amount of admixture used shall be engineer. The engineer must ensure that the specified dosage of admixture concrete mix as per manufactureres recommendation. (Dosage approx 3 litres item may be operated in Foundations / UGWT / OHWT / TERRACE SLAB / Colu or as decided by the client )	concrete as per anodic sites and anodic sites anodic anod
18 Providing and Supplying and mixing Penetron Admix integral full section crys waterproofing treatment confirming to Type B protection as per BIS 16471 of 2009 Code of Practice for Sub-structure, confirming to ASTM C-39 standard strength of concrete admixtures, and conforms to DIN 1048 part 5 stand impermeable concrete upto min 7 bar hydrostatic pressure and conforms to with head water pressure, has chemical resistance to withstand pH range of bet constant contact as per ASTM C-267-77 ,non toxic as per for B5 6920: Section 2 compatible with potable water to be added into the concrete at all levels at a d by weight of the cementitious contents of the concrete as per manufacturers.	2017 & BS 8102: for compressive ard for ensuring stand upto 70 M ween 3 to 11 in .5 and should be losage rate of 1% Kg 4000 - recommendation
subject to a min of 3kg/m3 and max of 4kg/m3 dosage as per the Mix do manufacturer recomedations. ( The item may be operated in UGWT / OHWT / TERRACE SLAB / LOCATION OF ' FLOOR )	

19	Designing, Providing and erecting in position for form work shuttering & boxing of Class F2 Finish and Class U2 Finish including cutouts/pockets using plywood / props / bracing / scaffolding / ledges and other shuttering materials of approved quality and make to meet tolerance / limits specified for casting concrete elements in vertical, horizontal etc. in all shapes as per drawing including necessary scaffolding, to correct line, level & plumb at all levels & places including engineering, checking, supporting, fixing of concrete grade separators, handling, shifting, stacking, removing, de-shuttering using proper tools , cleaning, oiling using oil based mould releasing agent of Fosroc-Rebol/approved equivalent make, cleaning material, packing to prevent slurry leakage, fixing extra props and Wallers/support member for vertical formwork face for giving extra support wherever required, any other required support for formwork alignment as per the instructions of Engineer-in-charge for Below any depth &LETS AT EACH FLOOR )lant, a written record of the amount of admixture used shall be supplied to the engineer. The engineer must ensure that the specified dosage of admixture is added in the concrete mix as per manufactureres recommendation. (Dosage approx 3 litres per cum) ( The item may be operated in Foundations / UGWT / OHWT / TERRACE SLAB / Columns at all levels or as decided by the clien )cal construction joint. Note2: No additional measurements will be given for cutouts/pockets.Note 3 : Through ties will not be allowed for shuttering for all external surfaces ex	SqM	22855	
20	Designing, Providing and erecting in position for form work shuttering & boxing ( upto 4.2m floor to floor height )of Class F2 Finish and Class U2 Finish including cutouts/pockets using plywood / props / bracing / scaffolding / ledges and other shuttering materials of approved quality and make to meet tolerance / limits specified for casting concrete elements in vertical, horizontal etc. in all shapes as per drawing including necessary scaffolding, to correct line, level & plumb at all levels & places including engineering, checking, supporting, fixing of concrete grade separators, handling, shifting, stacking, removing, de-shuttering using proper tools , cleaning, oiling using oil based mould releasing agent of Fosroc-Rebol/approved equivalent make, cleaning material, tape / packing to prevent slury leakage, fixing extra props and Wallers/support member for vertical formwork face for giving extra support wherever required, any other required support for formwork alignment as per the instructions oLETS AT EACH FLOOR )lant, a written record of the amount of admixture used shall be supplied to the engineer. The engineer must ensure that the specified dosage of admixture is added in the concrete mix as per manufactureres recommendation. (Dosage approx 3 litres per cum) ( The item may be operated in Foundations / UGWT / OHWT / TERRACE SLAB / Columns at all levels or as decided by the client )cal construction joint. Note2: No additional measurements will be given for cutouts/pockets.Note 3 : Through ties will not be allowed for shuttering for all external surfaces exposed to rain and also in water retaining structures. NO additional payments will be made for platforms / scafoldings for filling up of Shuttering holes with cementious non shrink grout using pressure injector or equivalent tool to achieve complete hole filling (manually not allowed)			
20.1	Upto 10th Floor	SqM	45600	-
20.1 20.2	Upto 10th Floor Above 10th Floor	SqM SqM	45600 23802	
20.2	Above 10th Floor Designing, Providing and erecting False staging for form work for additional height of Class F2 Finish and Class U2 Finish for RCC slab, beams, etc. if the form work height is more than 4.2 m for which the steel tubular staging shall be used in the relevant item of centering and shuttering in line, level and plumb, complete as directed; including deshuttering and decentering at all levels (This will be paid if there is no slab / platform in between and intermediate level £ staging is necessary and designed / carried out actually at site with a prior approval of the Engineer). (Only area in plan will be measured for payments) (Note : As per detailed Archtectural dwg this will be considered for Atrium area for Ground & 1st Foor, Connection area between 2 bldgs, Rescue area near the Landing of Staircase)	SqM		-
20.2	Above 10th Floor Designing, Providing and erecting False staging for form work for additional height of Class F2 Finish and Class U2 Finish for RCC slab, beams, etc. if the form work height is more than 4.2 m for which the steel tubular staging shall be used in the relevant item of centering and shuttering in line, level and plumb, complete as directed; including deshuttering and decentering at all levels (This will be paid if there is no slab / platform in between and intermediate level & staging is necessary and designed / carried out actually at site with a prior approval of the Engineer). (Only area in plan will be measured for payments ) (Note : As per detailed Archtectural dwg this will be considered for Atrium area for Ground & 1st Foor, Connection area between 2 bldgs, Rescue area near the Landing of Staircase) Upto 10th Floor	SqM SqM	23802	
20.2	Above 10th Floor Designing, Providing and erecting False staging for form work for additional height of Class F2 Finish and Class U2 Finish for RCC slab, beams, etc. if the form work height is more than 4.2 m for which the steel tubular staging shall be used in the relevant item of centering and shuttering in line, level and plumb, complete as directed; including deshuttering and decentering at all levels (This will be paid if there is no slab / platform in between and intermediate level £ staging is necessary and designed / carried out actually at site with a prior approval of the Engineer). (Only area in plan will be measured for payments) (Note : As per detailed Archtectural dwg this will be considered for Atrium area for Ground & 1st Foor, Connection area between 2 bldgs, Rescue area near the Landing of Staircase)	SqM	23802	
20.2	Above 10th Floor Designing, Providing and erecting False staging for form work for additional height of Class F2 Finish and Class U2 Finish for RCC slab, beams, etc. if the form work height is more than 4.2 m for which the steel tubular staging shall be used in the relevant item of centering and shuttering in line, level and plumb, complete as directed; including deshuttering and decentering at all levels (This will be paid if there is no slab / platform in between and intermediate level & staging is necessary and designed / carried out actually at site with a prior approval of the Engineer). (Only area in plan will be measured for payments ) (Note : As per detailed Archtectural dwg this will be considered for Atrium area for Ground & 1st Foor, Connection area between 2 bldgs, Rescue area near the Landing of Staircase) Upto 10th Floor	SqM SqM	23802	
20.2 21 21.1 21.2	Above 10th Floor Designing, Providing and erecting False staging for form work for additional height of Class F2 Finish and Class U2 Finish for RCC slab, beams, etc. if the form work height is more than 4.2 m for which the steel tubular staging shall be used in the relevant item of centering and shuttering in line, level and plumb, complete as directed; including deshuttering and decentering at all levels (This will be paid if there is no slab / platform in between and intermediate level & staging is necessary and designed / carried out actually at site with a prior approval of the Engineer). (Only area in plan will be measured for payments ) (Note : As per detailed Archtectural dwg this will be considered for Atrium area for Ground & 1st Foor, Connection area between 2 bldgs, Rescue area near the Landing of Staircase) Upto 10th Floor Providing and Grouting the foundation bolts/pockets, base plates with ready mixed non shrink, free flow, self levelling, cementations grout making holes if necessary in concrete including shuttering, curing etc. as per the recommendations of the manufacturer, complete as directed. (	SqM SqM CuM	23802 775 245	
20.2 21 21.1 21.2 22	Above 10th Floor Designing, Providing and erecting False staging for form work for additional height of Class F2 Finish and Class U2 Finish for RCC slab, beams, etc. if the form work height is more than 4.2 m for which the steel tubular staging shall be used in the relevant item of centering and shuttering in line, level and plumb, complete as directed; including deshuttering and decentering at all levels (This will be paid if there is no slab / platform in between and intermediate level & Staging is necessary and designed / carried out actually at site with a prior approval of the Engineer). (Only area in plan will be measured for payments) (Note : As per detailed Archtectural dwg this will be considered for Atrium area for Ground & 1st Foor, Connection area between 2 bldgs, Rescue area near the Landing of Staircase) Upto 10th Floor Above 10th Floor Providing and Grouting the foundation bolts/pockets, base plates with ready mixed non shrink, free flow, self levelling, cementations grout making holes if necessary in concrete including shuttering, curing etc. as per the recommendations of the manufacturer, complete as directed. ( Grout Depth Ranging from 15mm to 100mm ) Providing, fabricating and fixing in position high strength deformed steel bars confirming to IS 1786 for RCC structures as per design of all diameters as per specification including transporting, unloading and incidental charges for handling, decoiling, straightening, curting, cranking, bending, and binding with two strands of annealed aluminium double binding wire in star form of 20 gauge, welding if necessary, authorized laps, etc. complete as directed. (MTES 1.Mode of measurement will be done on the basis of Bar bending schedule which is to be prepared by the contractor. 2. The rates to include wastage, rolling margins, pins , chairs , spacers, coverblocks, binding wires , testing of steel from a third party LAB etc. for which ne the specification as per the corresponding lap length. 4. The scrap will be the property of the	SqM SqM CuM	23802 775 245	
20.2 21 21.1 21.2 22 23	Above 10th Floor Designing, Providing and erecting False staging for form work for additional height of Class F2 Finish and Class U2 Finish for RCC slab, beams, etc. if the form work height is more than 4.2 m for which the steel tubular staging shall be used in the relevant item of centering and shuttering in line, level and plumb, complete as directed; including deshuttering and decentering at all levels (This will be paid if there is no slab / platform in between and intermediate level & staging is necessary and designed / carried out actually at site with a prior approval of the Engineer). (Only area in plan will be measured for payments ) (Note : As per detailed Archtectural dwg this will be considered for Atrium area for Ground & 1st Foor, Connection area between 2 bldgs, Rescue area near the Landing of Staircase) Upto 10th Floor Above 10th Floor Providing and Grouting the foundation bolts/pockets, base plates with ready mixed non shrink, free flow, self levelling, cementations grout making holes if necessary in concrete including shuttering, curing etc. as per the recommendations of the manufacturer, complete as directed. ( Grout Depth Ranging from 15mm to 100mm ) Providing, fabricating and fixing in position high strength deformed steel bars confirming to IS 1786 for RCC structures as per design of all diameters as per specification including transporting, bending, and binding with two strands of annealed aluminium double binding wire in star form of 20 gauge, welding if necessary, authorized laps, etc. complete as directed. (With high Strength of minimum grade Fe 500D TMT bars of approved make for all heights and depths below and above plinth level, etc all complete as per specification or as directed. (NOTES 1.Mode of measurement will be done on the basis of Bar bending schedule which is to be prepared by the contractor. 2. The rates to include wastage, rolling margins, pins , chairs , spacers, coverblocks, binding wires , testing of steel from a third party LAB etc. for which no additional measurement	SqM SqM CuM	23802 775 245 2	

24	Designing, Providing, supplying, installing, profiling, stressing and cement grouting all post tensioning tendons of HT strands confirming to IS 14268-1995, Class II, casting, Barrels, Wedges, and HDPE duct. Supply and execution of Post tensioning work must be carried out by a specialist agency, with their own equipments, accessories and skilled manpower as per approved construction drawings. The rate quoted shall be inclusive of Designs of PT structure & approvals, cost towards execution including of strand, ducts, and supply, fixing, profiling of tendons, stressing, grouting, complete as shown in the drawing and as per specification. The unit rate for Post tensioning shall also be inclusive of all labour, equipment accessories and technical supervision of the post tension system supplier, who will monitor, insure and certify the correctness of the pre-stressing operations and as per specification. Note : It should be approved by the Structural consultant. ONLY THE Theroritical length and Weight of the Strands will be considered for measurement. Measurement for the additional length which is left before prestressing will NOT be considered for payments )			
24.4				
24.1	Upto 10th Floor Above 10th Floor	MT	80	-
24.2	Above 10th Floor	MT	40	-
25	Providing and applying water swellable-bar at starter and all construction joints, Hydroswell HDP 2010 / Polybar 2010, it shall have unrestrained volumetric expansion more than 200% in 30 day, Hydrostatic pressure resistance of 50 meters. It shall be fixed to the concrete using a gun grade hydrophillic adhesive / or mechanically fixed as recommended by manufacturer. (Source : Hydroswell HDP - Maruti Enterprise & Polybar - Besealed Belgium).		200	
	Total for Concrete Work		175442	Rs.0
С	MASONRY WORK			
	NOTE : a. Top junction of masonry and RCC member to filled by mortar with pebble dash to avoid cracks. b. Incase Through stones are not available for Rubble Works, than Header blocks of M10 grade concrete of minimum size of 150 x 150 x wall thk should be precasted and laid as per			
	specification at no extra cost. c.MODE OF MEASUREMENT: ONLY ACTUAL CONSTRUCTION QTYS WILL BE PAID FOR AND NO STANDARD DEDUCTION FORMULES WILL BE APPLICABLE. FOR BOTH MASONRY AND PLASTER WORK			
26	Providing and constructing Brick Masonary upto Highest plinth level by using <b>cement mortar</b> (1: 6) including scaffolding, racking out joints, curing with curing compound etc. in line, level and plumb, All complete as per specification as directed etc. (No holes for scaffolding will be permitted into the brickwork) (Sand to be used as specified in the make list) ALL SAND TO BE OF PACKED BAG SAND WITH TEST CERTIFICATE.)		34	
27	Do as per item No. 26 but for providing and constructing Brick masonry in superstructure at all heights above highest plinth level. (Sand to be used as specified in the make list)ALL SAND TO BE OF PACKED BAG SAND WITH TEST CERTIFICATE.)			
27.1	Upto 10th Floor	CuM	1000	
27.2	Above 10th Floor	CuM	250	-
28	Providing and constructing 115 mm thick brick masonry in partition, ledge walls, etc at all levels using cement Mortar in CM 1:4 (1 part cement and 4 part coarse sand) including RCC patil / stiffeners of size 115mmx75mm of mix 1 : 2 : 4 concrete reinforced with pair of 8mm dia MS bars laid at every 5th course height including Patli, scaffolding, racking out joints, curing etc. in line, level and plumb, All complete as per specification for all height of floor or as directed etc. (Rate includes the cost of MS bars or iron hoop, concrete patlis,). (No holes for scaffolding will be permitted) (Sand to be used as specified in the make list)ALL SAND TO BE OF PACKED BAG SAND WITH TEST CERTIFICATE.)			
28.1	Upto 10th Floor	SqM	5194	
28.2	Above 10th Floor	SqM	1810	
29	Providing and constructing of solid cement concrete block masonry walls at all levels of specified thickness using M-20 grade blocks of approved size, quality in <b>cement mortar 1:6</b> (1part of cement : 6 part of coarse sand ) including Patli, racking joints , scaffolding, curing etc., All complete as per specification at all depths / height ( No holes for scaffolding will be permitted ) (Sand to be used as specified in the make list)ALL SAND TO BE OF PACKED BAG SAND WITH TEST CERTIFICATE.)	CuM	233	

30	Providing and constructing AAC Light weight Block Masonary with 75mm/100mm/150mm/200mm/300mm thick at all levels in by using approved block laying polymer modified adhesive mortar or jointing compound recommeded by the block manufacturer , including 75mm thick Patil / Stiffeners of M-15 Grade at approx every 1000mm -1200mm with 2 nos 8mm steel bars all to be considered in the cost and no separate measurement will be done for steel and patil, also including scaffolding, racking out joints, curing with curing compound etc. in line, level and plumb, All complete as per specification for all height of floor or as directed etc. (Rate includes the cost of stiffners and steel). (No holes for scaffolding will be permitted into the blockwork) (Patli to be done for all the thickness of the blocks )			
30.1	Upto 10th Floor	CuM	3715	-
30.2	Above 10th Floor	CuM	1410	-
31	Providing & constructing random rubble masonry uncoursed, of approved quality quarry dressed stones in <b>cement mortar</b> 1:6 (1 part of cement:6 part of coarse sand), including hammer dressing, racking of joints, doing pointing with cement mortar, double scaffolding, curing etc., in line, level and plumb, all complete as per specification or as directed etc. In foundation / plinth below and upto highest plinth/ground level. (No holes for scaffolding will be permitted into the masonry work) (Sand to be used as specified in the make list).ALL SAND TO BE OF PACKED BAG SAND WITH TEST CERTIFICATE.)	CuM	275	
	Total for Masonry Works		13921	Rs.0
D	FINISHING			
	NOTE: a. For cement plaster, gypsum plaster, POP punning if any excess thickness occurs due to the irregularity of the brick or RCC work, than the same should be made up by applying single coat of rough plaster in the affected for which no extra rates will be paid. b. If the silt content is more than 3% by volume, all sand used for plastering has to be washed using automatic sand washing machine onlyALL SAND TO BE OF PACKED BAG SAND WITH TEST CERTIFICATE.) c. All painting work is suppose to be completed in two coats or more so as to give good finish. In case the finish is not good the contractor will have to rectify the work by additional coat of paint at his own cost. The decision as to what constitute "Good Finish" is left to the site in charge. d. In case there are separate contractors for Plastering work and gypsum punning / POP works, the handover has to be done by having Joint Quality Inspection between the Contractors along with the Client. In case there is a requirement for reworks, the Plaster works contractor needs to repair the same. If the Plaster work contractor is unable to do so then it will be debited from him and the further works will be carried out by the Finishing Contractor. e. For AAC block work, it is mandotary to roughen the surface before plastering upto the satisfaction of client site in charge.			
	<ul> <li>f. The "Kat Kona" work will be done for the entire floor plate and also for the full building from one point at ground level and to be carried till the highest point in totality and not room wise.</li> <li>g. For External Plaster, the Vendor will have to carry out the operation in two stages (from ground to 7th) while the upper slabs RCC work will be still going on , and than the balance upper floors plaster will be done. No Extra payment will be done for repitition of scaffolding. The contractor will fabricate and errect temporary MS Cantilever platform with railing made up of I-</li> </ul>			
	Beams / C chanels / chequred plates with ( red oxide ) using necessary HILTI FASTNERs. THis Platform will be Minimum 2.1m wide and should be capable to hold load of the safety system / Scafolding for the upper floors upto 1200mm beyond the highest level of the structure. The contractor to submit the design for approval before errection. CONTRACTOR TO GIVE A DETAILED DISCRIPTION OF THE METHOD STATEMENT COVERING THIS ITEM AT THE TIME OF QUOTING			
	h.ALL plaster / gypsum plaster related items should be corelated with the Frames of doors and			
	Windows before commencement of work. i.MODE OF MEASUREMENT: ONLY ACTUAL CONSTRUCTION QTYS WILL BE PAID FOR AND NO STANDARD DEDUCTION FORMULES WILL BE APPLICABLE. FOR BOTH MASONRY AND PLASTER WORK			
	j.Wherever Stone / Tile Cladding / Skirting / Dado Jambs / Risers Is To Be Done, Cement Plaster Will Not Be Paid Extra.			
	k. All stone work like CILL / JAMBS / Window and door frames to be done 1st before the start of plaster work.			
	I.Racking out junctions of masonry and concrete, then pointing and grouting using non-shrinking compound, joints grouted by pressing square crushed stone is also a part of the plaster works for which no additional payments will be done.			
	M.Applying chemical adhesive coating over RCC members as a bond coat over and above hacking and over lapping upto 300mm onto the adjoining blockwork is also a part of the plaster activity for which no additional payment will be done.			

32	Providing and applying Internal 12 mm to 15mm thick plain/smooth cement plaster finish at all heights and below highest plinth level in cement mortar using <b>Ready made plaster (as per make</b> <b>list)</b> as per manufacturer specification including 300mm PVC Chicken mesh on both sides of joint, making pattas, bends, grooves, over any bricks or concrete surfaces in single layer as specified smooth finished including preparing the surfaces close hacking of concrete surfaces, <b>curing with curing compound</b> , double scaffolding to the walls, beams, stair, column, pardis, bends, moulds, pattas, grooves etc. in line, level and plumb, all complete as per specification or as directed. (No holes for scaffolding will be permitted into the brickwork)			
32.1	Upto 10th Floor			
32.1.1	a) upto 12 mm cement plaster of mix - 1:4 (1 cement: 4 fine sand)	SqM	27339	-
	b) 15 mm cement plaster on the rough side of full brick wall of mix - 1:4 (1 cement: 4 fine sand)	SqM	27339	
32.2 32.2.1	Above 10th Floor a) upto 12 mm cement plaster of mix - 1:4 (1 cement: 4 fine sand)	SqM	14560	
32.2.2		SqM	14560	-
33	Providing and applying External 18 mm thick sand face cement plaster in two coats at all heights below and above highest plinth level with first coat of 12 mm thickness with cemet mortar, using <b>readymix plaster</b> ( as per make list ) mixed as per manufacturer specifications including roughening by cross hatch line to receive top coat of 6 mm thickness with cement mortar and 10 12mm thick single coat plaster under chajja soffit, including <b>300mm PVC Chicken mesh</b> on both sides of joint, <b>PP fibre, mixing with additional waterproofing compounds</b> including making drip moulds, bends, pattas, grooves (grooves have to be finish with neat cement mixed with waterproofing compound) as per drawing/ details, including double scaffolding , <b>curing with curing compound etc.</b> in line, level and plumb, all complete as per specification or as directed. (No holes for scaffolding will be permitted into the brickwork)			
33.1	Upto 10th Floor	SqM	14845	-
33.2	Above 10th Floor	SqM	8660	-
34	Do as per Item No.32 but for 10 mm to 12mm thick smooth / plain cement plaster to ceiling, finish in single layer in CM using readymix plaster (as per make list) mixed as per manufacturer specifications in line, level and plumb etc. including making pattas, grooves double, scaffolding, curing with curing compound etc. all complete as per specification or as directed. (No holes for scaffolding will be permitted into the brickwork)	SqM	2192	
35	Providing & applying Thermoplastic paint of Asian make or approved equivalent and desire shade on bituminous / concrete surface, including scrubbing of road / kerb surface by wire brush to dislocate the dust from the surface, plotting of points on the carriageway for centerline & edge line marking, pre-marking on Centerlines/Edge line /Kerbline using string & chalk, including Hand propelled machine, the thermoplastic material is to be pre-heated while all the above activities are carried out, The molten thermoplastic material is transferred then from the pre-heater to applicator machine. all complete as manufacturer's specification and as directed.		40	
36	Providing and laying average 52 mm thick IPS flooring with under layer of 40 mm thick Cement concrete 1:2:4 (1 part cement, 2 part coarse sand and 4 part stone aggregate 12.5 mm and down graded) finished smooth with top layer of 12 mm thick mortar in CM 1:2 (1 part cement : 2 part coarse sand ), hardening compound mixed @ 2 litre per 50 kg of cement or as per manufacturer's specifications.and cement slurry @ 2.2 Kg / Sq.M including rubbing/ grinding the top surface to match, including rounding off the junction and corners with floors and walls, necessary construction joints, finishing the top surface smooth / chequered or broom, curing etc. in line, level and plumb, complete as directed.	SqM	940	
37	Do as per item no. 36 but for providing and laying average 62 mm thick IPS flooring with under layer of 50 mm thickness and top layer of 12 mm thickness complete as directed.	SqM	125	
38	Providing and laying (pre-polished to mirror finish ) average 18 mm thick machine cut approved quality Granite stone of required size (length and width of the stone slab), in approved pattern, single piece in cills of uniform colour, texture and pattern over minimum 40mm thick cement mortar 1:3 (1 part cement : 3 part coarse sand) including spreading neat cement slurry at 4.4kg/sqm, filling of joints with white cement / cement mixed with colour pigments to match the shade ,curing, nosing, polishing, grinding, edge polishing, protection of finished surface/edges cleaning the same finally etc. in line, level and plumb, complete as directed. (LENGTH OF STONE TO BE 1.50M TO 2.1M) Basic rates Granite- Rs.1500-1600/SqM BASIC RATES OF MATERIAL : Basic rates means the rates at which the material reaches site including all discounts , taxes, transportation, unloading, where in the rates is finalized based on advance payment , etcThe Basic rates will be adjusted on every RA bill basis: The vendor to provide samples and get the rates as per the deifinition of basic rates approved by the client before he actually places the order.)		<u> </u>	
38.1	Upto 10th Floor	SqM	348	-
38.2	Above 10th Floor	SqM	164	-

39	Providing and laying ( pre-polished to mirror finish ) average 18 mm thick machine cut approved quality Granite stone of required size (length and width of the stone slab), in approved pattern, single piece jambs, soffit with necessary screws / pins / araldite of uniform colour, texture and pattern over average 12-15mm thick cement mortar 1:3 (1 part cement : 3 part coarse sand) with cement paste @ 4.4 Kg/SqM, filling of joints with white cement / cement mixed with colour pigments to match the shade, curing, grinding, polishing, edge polishing, full round nosing, protection of finished surface/edges, cleaning the same finally etc. in line, level and plumb, complete as directed. (LENGTH OF STONE TO BE 1.50M TO 2.1M) Basic rates Granite- Rs.1500-1600/SqM. BASIC RATES OF MATERIAL : Basic rates means the rates at which the material reaches site including all discounts , taxes, transportation, unloading, where in the rates is finalized based on advance payment , etcThe Basic rates will be adjusted on every RA bill basis.THe vendor to provide samples and get the rates as per the deifinition of basic rates approved by the client before he actually places the order.)			
39.1	Upto 10th Floor	SqM	205	
39.2	Above 10th Floor	SqM	106	-
40	Providing and laying (pre-polished to mirror finish) average 18 mm thick machine cut approved			
-+U	quality Spotted Indian marble (Rajnagar 2nd quality) of required size (length and width of the stone slab), in approved pattern, single piece in cills of uniform colour, texture and pattern over average 20 to 40mm thick cement mortar 1:3 (1 part cement : 3 part coarse sand) including spreading neat cement slurry at 4.4kg/sqm, filling of joints with white cement / cement mixed with colour pigments to match the shade, curing, grinding,protection of finished surface/edges cleaning the same finally etc. in line, level and plumb, complete as directed. (LENGTH OF STONE TO BE 1.50M TO 2.1M)			
40.1	1. Upto 10th Floor	SqM	1100	-
40.2	2. Above 10th Floor	SqM	425	-
41	Providing and laying (pre-polished to mirror finish ) average 18 mm thick machine cut approved quality Spotted Indian marble (Rajnagar 2nd quality) of required size (length and width of the stone slab), single piece jamb soffit with necessary screws / pins / araldite of uniform colour, texture and pattern over average 20mm thick cement mortar 1:3 (1 part cement : 3 part coarse sand) with cement paste @ 4.4 Kg/SqM, filling of joints with white cement / cement mixed with colour pigments to match the shade ,curing, grinding, protection of finished surface/edges, cleaning the same finally etc. in line, level and plumb ,complete as directed. (LENGTH OF STONE TO BE 1.50M TO 2.1M)			
41.1	1. Upto 10th Floor	SqM	1390	-
41.2	2. Above 10th Floor	SqM	760	-
				- Rs.0
41.2	2. Above 10th Floor Total for finishing works		760	
	2. Above 10th Floor		760	
41.2	2. Above 10th Floor Total for finishing works	SqM MT	760	
41.2	2. Above 10th Floor     Total for finishing works     STEEL WORK  Supplying, fabricating, assembling, hoisting and fixing in position to alignments & levels as per approved drawings, structural steel work in-built up for pipe racks/mezzanine/columns etc., with booms etc., to detail welded (welding as specified by the structural consultant) / bolted constructions comprising R.S. joists, channels, angles, plates or any MS rolled section including necessary permanent rivets, bolts & nuts, handling straightening, cutting, making holes, shop / site assembly, erection, (including preparation of template) transport to site, storing, etc., and painting with shop/site of epoxy primer coat ( minimu 35 DFT ) of Asian make or approved equivalent and quality etc. at all heights including necessary scaffolding / staging, as required complete as directed. (Payment will be made on the basis of standard section weights for net weight erected in position excluding rivets, temporary bolts, etc., but payment will be made for permanent bolts, nuts and washers.) Fabrication drys bolts mate, and payment will be made for permanent bolts, nuts and washers.) Tebrication drys bolts mate, and payment will be made for permanent bolts, nuts and washers.) Tebrication drys bolts mate, or payment will be made for permanent bolts, nuts and washers.) Tebrication drys bolts de made by the vendor at no extra cost. 2. No seperate measurement will be considered for Wastage, rolling margins,Burning loss and the contractor has to include the same in his rates. 3. The	SqM MT	760	
41.2 E 42	2. Above 10th Floor Total for finishing works STEEL WORK Supplying, fabricating, assembling, hoisting and fixing in position to alignments & levels as per approved drawings, structural steel work in-built up for pipe racks/mezzanine/columns etc., with booms etc., to detail welded (welding as specified by the structural consultant) / bolted constructions comprising R.S. joists, channels, angles, plates or any MS rolled section including necessary permanent rivets, bolts & nuts, handling straightening, cutting, making holes, shop / site assembly, erection, (including preparation of template) transport to site, storing, etc., and painting with shop/site of epoxy primer coat (minimum 35 DFT ) of Asian make or approved equivalent and quality etc. at all heights including necessary scaffolding / staging, as required complete as directed. (Payment will be made on the basis of standard section weights for net weight erected in position excluding rivets, temporary bolts, etc., but payment will be made for permanent bolts, nuts and washers.) Fabrication drgs to be made by the vendor at no extra cost. 2. No seperate measurement will be considered for Wastage, rolling margins,Burning loss and the contractor has to include the same in his rates. 3. The scrap will be the property of the CONTRACTOR Supplying, fabricating, assembling, hoisting and fixing in position to alignments & levels as per approved drawings,steel work in built up tubular (round, square or rectangular hollow tubes etc.) trusses etc., to detail welded (welding as specified by the structural consultant) / bolted including necessary permanent rivets, bolts & nuts, handling straightening, cutting, making holes, shop / site assembly, erection, (including preparation of template) transport to site, storing, etc., and painting with shop/site of epoxy primer coat ( minimum 35 DFT ) of Asian make or approved equivalent and quality etc. at all heights including necessary scaffolding / staging, as required complete as directed. (Payment will	SqM MT	760	

44	Providing, cutting / bending to shape , size & various thicknesses, fixing in position MS chequered plate for covers of trenches, steps, landings, platforms etc. as per drawings / details including bending the edges, grinding them smooth with rounding the sharp edges / corners, painting with one coat of epoxy primer (minimum 35 DFT) of Asian make or approved equivalent etc. complete as specified and as directed. Fabrication drgs to be made by the vendor at no extra cost. 2. No seperate measurement will be considered for Wastage, rolling margins, Burning loss and the contractor has to include the same in his rates. 3. The scrap will be the property of the CONTRACTOR	Kg	5000	
45	Providing, fabricating and fixing in position, grill, steel ladder, Safety MS bars to windows/ ventilator of MS rolled sections as per architect's details including cutting welding, grinding to smooth surface, fixing hold fast of MS sections embedded in concrete M-15 grade, anchor bolts including epoxy primer (minimum 35 DFT) of Asian make or approved equal etc. complete as directed. Fabrication drgs to be made by the vendor at no extra cost. 2. No seperate measurement will be considered for Wastage, rolling margins,Burning loss and the contractor has to include the same in his rates. 3. The scrap will be the property of the CONTRACTOR	Kg	5000	
46	Providing, fabricating and fixing in position, M.S grating of MS rolled sections/flats as per architect's details including cutting welding, grinding to smooth surface, fixing hold fast with HOT DIPPED GALVANISING (120 GSM) etc. complete as directed. Fabrication drgs to be made by the vendor at no extra cost. 2. No seperate measurement will be considered for Wastage, rolling margins,Burning loss and the contractor has to include the same in his rates. 3. The scrap will be the property of the CONTRACTOR	kg	5000	
47	Providing and fixing in position Manual interlocking rolling shutters of approved make of 18 gauge GI flats of concave corrugation with or without perforated holes in one piece construction pressed steel channel guides, 80 mm wide cold rolled, MS Lathe interlocked through entire length and jointed together at the end by end locks mounted on specially designed pipe shaft with bracket including GI top hood cover, flat spring, axles, guide rails, tees, iron pulleys, bearings, handles, arrangements for inside and outside locking, holding-down bolts / MS lugs embedded in CC 1:2:4 including epoxy primer (minimum 35 DFT ) of Asian make or approved equal etc. complete as directed. (Measurements to be considered for payment shall be the clear size of opening). 2. No seperate measurement will be considered for Wastage, rolling margins, Burning loss and the contractor has to include the same in his rates. 3. The scrap will be the property of the CONTRACTOR			
	80x1.25 mm M.S. laths with 1.25 mm thick top cover	SqM	50	
48	Extra for item no. 47 but for providing and fixing in position interlocking partly grilled rolling shutter etc complete as directed. (Measurement under this item shall be made only for grilled portion and deduction will be made for equal measurement under item no 5.06 (a)		10	
49	Providing and fixing in position mechanical device using pinon wheel and worm arrangement with gearbox coupled with a pair of handles to mechanically operate the Rolling shutter from both sides of the opening etc, including painting, greasing, complete as directed.	NOS	3	
50	Providing, fabricating and fixing in position SS railing in mirror polished/satin finish 304 grade stainless steel railing, as per the architect's details / as directed in linear / curvilinear shape for staircases / parapet walls / balconies / yard area , etc using S.S pipes of specified diameter, cutting, welding mitring, fitting the joints, providing suitable specials like bends etc of matching diameter, termination of the open ends in required curvature / profile with fixing blank caps to open ends, fixing the same using plates , anchors , etc, all complete as per drawings, specifications & approved shop drawings and as directed by Engineer In charge. (Note:- No glass panel is to be considered).	Kg	3000	
51	Providing & fixing including / roofing GALVALUME colour coated sheet made out of 0.6mm TCT 550 Mpa cold rolled sheet with hot dip metallic coating of aluminium zinc alloy 150 gm / SqM with 20 microns on top with silicon modified polyester and 5 microns back-up epoxy coating at the bottom having 975/1000 mm cover width with 26 mm high crest at 195/200mm C/C in length as approved by the architect and fixed with necessary suitable imported galvanized carbon steel, self drilling /tapping of Buildex ( Australian ) ITW make or approved equivalent of required diameter and length at every corrugation and stitch screws at every 500mm c/c with proper over laps ( minimum 400mm ) and side laps of one corrogation only in side sheeting. all complete with EPDM sealing washers with sealant of approved make over each screw . Mode of measurement: ONLY LAID AREA WILL BE MEASURED AND PAID FOR .	SqM	600	
52	Providing & Fixing in position 0.50mm TCT (0.45mm BMT) of made out of Coil Galvalume Sheet Roofing Accessories like Ridges, Barge Boards, gutter Flashing, gutter, corner flashings, Junction of Polycarbonate and Metal Sheet, with necessary self drilling screws and with sealant of approved make over each screw. <b>Total Grith upto 600 mm</b> . The Vendor will submit the Shape and size of each flashing for the approval of the consultant for each location. <b>The mode of</b> <b>measurement will be the effective running length of the flashing installed</b> .	RM	200	

53	Providing and laying Poly Carbonate Sheets 2 mm Thick Profile sheets (Lexsun / Palram) fixed by min 40 micron Zinc coated / 25 micron Zinc-Tin alloy coated Hex head self drilling screws(class			
	3-SDST Screws). the mode of measurement will be effective width and actual length of the sheet.	SqM	60	-
	Total For Steel work		48953	De O
	Total For Steel Work		48953	Rs.0
F	MISCELLANEOUS WORK			
	MISCELLANEOUS WORK			
54	Providing & fixing in position PVC pipe sleeves, while concreting or RR Masonary, of appropriate size, correct to levels sealead from both ends using temporary caps / sand /mastic tape, etc ,all complete in beam, slab, column. ( the minimum length of the sleeves will be 100mm )			
54.1	50mm	RM	100	-
54.2	65mm	RM	100	-
54.3	80mm	RM	100	-
54.4	100mm	RM	50	-
54.5	150mm	RM	25	-
54.6	200mm	RM	25	-
55	Making holes of required size and shape in post RCC work at designated locations if not mentioned in the drawings but required by Project Manager including cutting of reinforcement using a core cutter and finishing edges smooth with 1:3 (1 cement : 3 coarse sand) cement mortar and plugging the open spaces around sleeves/ puddle flanges with concrete 1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20mm nominal size) mixed with waterproofing compound and non shrink grout etc. upto 300 mm thickness all complete. (Rate to include water proof compound and non-shrink grout)			
55.1	Upto 10th Floor			
55.1.1		per inch	= 0	
		depth	50	-
55.1.2	75mm dia	per inch depth	400	-
55.1.3	100mm dia	per inch depth	1200	-
55.1.4	150mm dia	per inch depth	2400	-
55.1.5	200mm dia	per inch depth	30	
55.1.6	225mm dia	per inch depth	30	
55.1.7	250mm dia	per inch depth	30	
55.1.8	300mmdia	per inch depth	30	
55.2	Above 10th Floor			
55.2.1	upto 50mm dia	per inch depth	10	-
55.2.2	75mm dia	per inch depth	150	-
55.2.3	100mm dia	per inch depth	300	-
	150mm dia	per inch depth	350	
55.2.5	200mm dia	per inch depth	30	
55.2.6	225mm dia	per inch depth	30	-
55.2.7	250mm dia	per inch depth	30	-
55.2.8	300mmdia	per inch depth	30	
56	Dismantling the RCC beams, slabs, lintels, columns, pardi, walls, platform etc. staircase, tanks, etc at any lift including finishing the broken surface to match with the surroundings, removal and disposal of debries outside site, at any lead at an unobjectionable location with proper Satutory approvals and royalties including cutting the reinforcement/MS inserts stacking the same and handing over to stores / yard within site etc. complete as directed. The reinforcement is the property of the client	CuM	20	
57	Extra for cutting reinforcement bars manually/ by mechanical means in R.C.C. or R.B. work at any lead and lift. (Payment shall be made on the cross sectional area of R.C.C. or R.B. work) as per direction of Engineerin-charge.		100	-
58	Dismantling plain cement concrete in flooring/pavement/ wall foundation at any lead etc. as per instruction and disposing the debris/muck outside the site at at any lead at an unobjectionable location with proper Satutory approvals and royalties , etc. complete as directed.	C	20	-

59	Dismantling / scrapping and removing existing plain / sand faced / grit cement plaster of any thickness from the brick/RCC works including necessary scaffolding at all heights and levels and disposing the debries outside the site at any lead at an unobjectionable location with proper Satutory approvals and royalties etc. complete as directed.		100	
60	Dismantling stone/Brick/AAC/Concrete masonry walls or partition wall plastered or un plastered as per instructions including finishing the broken surface to match with the surroundings, removal and disposal of debries outside the site at any lead at an unobjectionable location with proper Satutory approvals and royalties and stacking stones at site, if any etc. complete as directed.	CuM	100	
61	Dismantling kota stone/ granite/ baroda green / marble / tandoor / shahabad / tiles in floor/dado /skirting etc. with mortar bedding as per instructions including finishing the broken surface to match with the surroundings. Disposing debris/ muck as directed outside the site at any lead at an unobjectionable location with proper Satutory approvals and royalties etc. complete as directed.			
61.1 61.2	For thickness of tiles 10 mm to 25 mm For thickness of tiles above 25 mm and up to 40 mm	SqM SqM	100 100	-
01.2		SqM	100	-
62	Removing & stacking at the place directed, the existing M.S. structural beams, slabs, columns, inserts bracings, handrails chequered plates, Gratings, Roof trusses, monorails, channels, angles, Girders all in MS/CI, hollow pipe sections, etc., including unhoisting / holding the same using appropriate system, cutting by hacksaw or gas cutter with permission complete & as per the instruction of Engineer- in- Charge at any height & depth.		5	
63	Providing and fixing testing & commissioning in position M.S pipes sleeves of length 550 - 700 mm threaded outside with socket coupling for jointing or flanged as directed welded to MS puddle plate 5mm thick all to be hot dipped galvanised (120 GSM) and fixing to main reinforcement for overhead / underground tank.	Ka	500	
64	Providing and laying cement based box type waterproofing treatment of M/s. India Waterproofing Co. or other equivalent approved firm for the lift pits basements, underground water tanks etc. externally consisting of waterproofing treatment over the concrete bedding finished with 25mm av. thick, rough Shahabad / rough Kota stone laid over average 30 mm thk 1:3 CM mixed with waterproofing compound and cement slurry at 4.4 kg / m2 also mixed with waterproofing compound and cement slurry at 4.4 kg / m2 also mixed with waterproofing compound and cement slurry at 4.4 kg / m2 also mixed with waterproofing compound and cement slurry at 4.4 kg / m2 also mixed with waterproofing compound and cement slurry at 4.4 kg / m2 also mixed with waterproofing compound and cement slurry at 4.4 kg / m2 also mixed with waterproofing compound and cement slurry at 4.4 kg / m2 also mixed with waterproofing compound. The joints are than racked and flush pointed with CM 1:2 . A single layer of 25mm thk water proof plaster is than done over the laid stone. The vertical stones are fitted similar to the methodology of fixing dado layer by layer. Each layer is grouted with cement paste. Lastly cement plaster of 25mm thk with waterproofing compound is done & this is continued to side wall upto 300mm above adjacent ground level etc. & covering the treatment with a guarantee for ten years for leakproofness on stamp papers all complete as per specifications & as directed. (Note : The above rates shall be inclusive of Providing and mixing of waterproofing compound as per manufacturer's specifications) (Mode of measurement : Only the surface area in contact to be considered once for the measurements irrespective of the number of layers applied)ALL SAND TO BE OF PACKED BAG SAND WITH TEST CERTIFICATE.)			
64.1	Bottom with Single layer of shahabad stones / rough kota	SqM	150	-
64.2	Sides with Double layer of shahabad stones / rough kota	SqM	150	-
		-		
	Total for Miscellaneous Works		6845	Rs.0
G	ROAD WORKS			
9	RUAD WORKS			
65	Providing and laying RCC of grade M-30 in pavements, roads and kerbs over prepared sub-base in line level maintaining slope including form work using MS channels of required height, compacting with needle / surface vibrator floating the surface smooth providing stripped/broom finish evenly, providing, cutting and filling necessary construction / expansion joints, finishing the same and casting kerbs as per drawing, providing necessary steel reinforcement, curing etc. complete as per the drawing/as directed. (Reinforcement, expansion / construction joint cutting and filling and construction of kerbs shall be measured separately in relevant tender items and paid for)	CuM	150	
66	Extra for providing and mixing hardening compound of approved quality as per manufacturer's specification in cement concrete.	Kg	990	-
	קרבוווינמנוטו ווו נכוווכוונ נטוגויבוב.	-		
67	Providing and laying cast in- situ kerbs / precast kerbs in cement concrete M-20 of approved sample including necessary excavation, cutting the road, laying PCC 1:4:8 (1 part cement 4 part coarse sand 8 part stone aggregate 20/37 mm and down) 100 mm thick, shuttering / moulds for exposed finish, curing as per approved drawing etc. shall be painted with two coats of Dulux Weathershield Max paint over approved primer coat as per manufacturers specification in the approved shade and pattern complete as directed. (Steel reinforcement paid separately) (In case the exposed finish is not good the contractor will cover the same with plaster and no extra payment will be made. No extra payment will be made for Kerbs laid at curves). ( paint cost to be included in the item and no extra cost will be paid for the same.)	RMT	400	

	Grand Total (A+B+C+D+E+F+G)			
	Total for Road works		6145	Rs.0
	Medium shade pigment using 50% white cement 50% Grey cement	SqM	1100	-
73	Providing and laying Chequerred precast cement concrete tiles 22 mm thick in footpath & courtyard, jointed with neat cement slurry mixed with pigment to match the shade of tiles, including rubbing and cleaning etc. complete, on 20 mm thick bed of cement mortar 1:4 (1 cement: 4 coarse sand).			
72	Providing and laying precast standard interlocking pavement stones of M-40 Grade approved quality (PU/RUBBER MOULD FINISH), thickness not less than 80mm with smooth / approved finish and edges duly chamfered in required color and pattern over compacted 50 mm thick natural coarse sand bed to the required line, level and compacting the stones laid by plate vibrator and filling the joints with fine sand etc complete as directed.	SqM	500	
71	Providing & laying 600mm length UPVC pipe with fixed cap sleeve for dowel expansion joint at one end using appropriate lubricant to allow movement of steel of approved make and pressure 6 kg. /sq.cm. in sheathing for dowel / tie bars in concrete pavements as per details and complete as directed. For 25mm dia	Nos	1000	
70	Providing and fixing mild steel dowel/tie bars of approved make including greasing etc. in concrete pavements as per details complete and as directed.	Kg	1000	
68	Providing and fixing Expansion joint filler board of m/s shalitex or approved equivalent of appropriate width of desire thickness is fixed with copper screws on concrete surface before pouring concrete. The width is designed to flush with the external surface except for space required for sealents. The rate includes labour charges for cutting, applying bitumen sealant / paint on the edges, and fixing of board etc., all complete as per the manufacturer's specification and as directed. 12mm Saw Cutting & sealing of Joints: Cutting of Contraction Joints in concrete not less than 3 mm and not more than 25mm in width and 1/3 of the thickness of Pavement Quality Concrete layer but not more than 50mm with saw cutting machine as per MORTH Pavement Quality Concrete specification clause and approved design drawings including Quality Control testing, maintenance and protection and subtom supported with backer rod as directed by the Engineer Top fill upto 15 mm with joint sealant and bottom balance area to be filled with backer rod and silica sand as directed by and to the satisfaction of Engineer-in-Charge.	SqM RMT	5	