

Sub: Rate Contract for two years for carrying out General Civil works for present and future projects of RMSG in Odisha, West Bengal, Jharkhand and Bihar.

NIT NO.RMSG/MM&WC/RC/T-03

SUMMARY OF PRICE SCHEDULE

Sr. No.	Price schedule number	Description	WEIGHTAGE OF PRICE SCHEDULE (%)
1	A	Civil Works	98.822
2	B	Earthing work	1.178
Total			100%

Grand Total of price Schedule A to B in figures

Grand total in words

NOTE:

1. ONLY GRAND TOTAL PRICE OF THE COMPLETE PACKAGE TO BE QUOTED.

2. Rate per unit for different items of the Price Schedule shall be derived from the percentage value assigned to that particular item and qty specified in the price schedule.

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ST. NO	DESCRIPTION OF ITEM	UNIT	QTY	UNIT RATE (IN Rs.)	AMOUNT (IN Rs.)	WEIGHTAGE OF TOTAL AMOUNT (%)
PRICE SCHEDULE-A CIVIL WORKS						
100 EARTH WORK						
Earth work In excavation, backfilling and disposal including necessary men/women, materials, equipment, loading, transportation, unloading, dewatering etc as per specification, drawing and as directed by engineer- in-charge for the following.						
101	Earth work in excavation in all types of soil including ash which can be excavated by any means including setting out, levelling, dewatering (but excluding special type of dewatering viz. well point method), shoring & strutting (wherever required), dressing the sides & bottom, all lifts, ramming/compacting the excavated bottom, stacking, disposal of surplus excavated materials within a lead upto 500 m, spreading/levelling of disposed materials etc all complete for following depths below ground level.					
a	Depth from ground level but not exceeding 2 m	CUM	1			0.00219
b	Depth exceeding 2 m but not exceeding 4 m	CUM	1			0.00298
c	Depth exceeding 4 m but not exceeding 6 m	CUM	1			0.00388
d	Depth exceeding 6 m but not exceeding 8 m	CUM	1			0.00571
102 a)	Extra over ST No. 101 for dewatering of ground water by well point method as per IS 9759.	CUM	1			0.00362
103	Earth work in excavation in soft rock (rock without any recovery of excavated materials in the form of hard stone/boulder) including weathered rock which can be excavated by means of crow bar, pick axe, pneumatic rock breaker attachment with excavator machine etc but does not require chiselling or blasting including setting out, levelling, dewatering (wherever required), shoring & strutting (wherever required), dressing the sides & bottom, all lifts, ramming/compacting the excavated bottom, stacking, disposal of surplus excavated materials within a lead upto 500 m, spreading / levelling of disposed materials etc all complete for following depths below ground level.					
a	Depth from ground level but not exceeding 2 m	CUM	1			0.00323
b	Depth exceeding 2 m but not exceeding 4 m	CUM	1			0.00509
c	Depth exceeding 4 m but not exceeding 6 m	CUM	1			0.00606
d	Depth exceeding 6 m but not exceeding 8 m	CUM	1			0.00689
106	Earth work in excavation in hard rock requiring chiselling including wedging, line drilling, pre shearing etc as required, setting out, levelling, deawtering (wherever required), dressing the sides & bottom, all lifts, stacking/disposal of surplus excavated material within a lead upto 500m, spreading / levelling of disposed materials etc all complete for following depths below ground level.					
a	Depth from ground level but not exceeding 2 m	CUM	1			0.01543
b	Depth exceeding 2 m but not exceeding 4 m	CUM	1			0.01624
c	Depth exceeding 4 m but not exceeding 6 m	CUM	1			0.01762
107	Back filling upto any depth below ground level around foundations, plinths, trenches, drains etc to proper grade and level in layers not exceeding 200 mm thickness using/with selected materials from compulsorily excavated soil available within a lead upto 500m and compacted as specified including re-excavation of stacked earth, watering, ramming/compaction by manual/mechanical means, dressing etc all complete.for the following.					
a	Each layer compacted so as to achieve at least 95% maximum dry density as per IS 2720 (Part-VII)	CUM	1			0.00182
b	Each layer compacted so as to achieve at least 90% maximum dry density as per IS 2720 (Part-VII)	CUM	1			0.00182

ST. NO	DESCRIPTION OF ITEM	UNIT	QTY	UNIT RATE (IN Rs.)	AMOUNT (IN Rs.)	WEIGHTAGE OF TOTAL AMOUNT (%)
108	Back filling upto any depth below ground level around foundations, plinths, trenches, drains etc to proper grade and level in layers not exceeding 200 mm thickness using/with selected materials directly from excavation and compacted as specified including watering, ramming/compaction by manual/mechanical means, dressing etc all complete for the following.					
a	Each layer compacted so as to achieve at least 95% maximum dry density as per IS 2720 (Part-VII)	CUM	1			0.00176
b	Each layer compacted so as to achieve at least 90% maximum dry density as per IS 2720 (Part-VII)	CUM	1			0.00176
109	Extra over ST No. 101 and 103 to 107 for carriage of excavated earth/selected materials for every 1 km or part thereof beyond an initial lead of 500m.	/CUM/km	1			0.00079
110	Back filling upto any depth below ground level around foundations, plinths, trenches, drains etc to proper grade and level in layers not exceeding 250 mm thickness using/with approved borrowed soil (borrowed soil to be arranged by the bidder) and compacted as specified including supplying borrowed soil, royalty (if any), watering, ramming/compaction by manual/mechanical means, dressing etc all complete for the following.					
a	Each layer compacted so as to achieve at least 95% maximum dry density as per IS 2720 (Part-VII)	CUM	1			0.00612
b	Each layer compacted so as to achieve at least 90% maximum dry density as per IS 2720 (Part-VII)	CUM	1			0.00617
111	Supplying and filling sand upto any depth under floors, around foundations, plinths etc. in layers not exceeding 250 mm thickness and compacted so as to achieve at least 80% relative density as per IS-2720 (Part-XIV) including spreading, watering, ramming/compaction by manual / mechanical means, dressing, royalty (if any) etc. all complete.	CUM	1			0.01308
200 CONCRETE WORKS						
Providing and placing concrete work including cost of labour, materials and equipment for handling, transportation, batching, mixing, placing, vibrating and curing, (excluding cost of centering, shuttering and reinforcement) with mechanised equipments like batching plant, transit mixer, concrete pump etc. complete as per drawing, specifications and as per direction of engineer in charge for the following.						
201	Concrete of grade M7.5 (1 part cement, 4 part sand, 8 parts of 40 mm graded aggregate by volume) as filling course at any depth below finished floor level, under and around foundations/floors, mass fill etc.	CUM	1			0.06443
202	Concrete of grade M10 (1 part cement, 3 part sand, 6 parts of 40 mm graded aggregate by volume) as lean concrete, levelling course , mud mat under and around foundations/floors at any depth below finished floor level etc.	CUM	1			0.07384
203	Concrete of grade M15 (1 part cement, 2 part sand, 4 parts of 40 mm graded aggregate by volume) as lean concrete, levelling course , mud mat under and around foundations/floors at any depth below finished floor level etc.	CUM	1			0.0872
204	Concrete under floors, paving, plinth protection, pipe encasing etc complete with 20 mm nominal size graded aggregate at any depth below finished floor level for the following grades.					
a	M15 Grade	CUM	1			0.08887
b	M20 Grade	CUM	1			0.09396
205	Providing and laying Design Mix cement concrete conforming to IS:456 & IS 10262-2009 for reinforced concrete works with coarse sand and graded hard stone aggregate of 20mm nominal size in foundations/substructure, grade slab, paving, drains, under floors etc at any level below finished floor level, any shape, position or thickness etc complete including use of plasticizer/ superplasticizer conforming to IS:9103 (latest) to achieve required slump in concrete all complete as per specification & drawing for the following.					
a	M25 Grade	CUM	1			0.10432
b	M30 Grade	CUM	1			0.12492

ST. NO	DESCRIPTION OF ITEM	UNIT	QTY	UNIT RATE (IN Rs.)	AMOUNT (IN Rs.)	WEIGHTAGE OF TOTAL AMOUNT (%)
206	Providing and laying Design Mix cement concrete conforming to IS:456 & IS 10262-2009 for reinforced concrete works with coarse sand and graded hard stone aggregate of 20mm nominal size in superstructure at any level above finished floor level, any shape, position or thickness etc complete including use of plasticizer/ superplasticizer conforming to IS:9103 (latest) to achieve required slump in concrete all complete as per specification & drawing for the following.					
a	M25 Grade	CUM	1			0.10899
b	M30 Grade	CUM	1			0.11999
207	Providing and laying Design Mix cement concrete conforming to IS:456 & IS 10262-2009 for reinforced concrete works of grade M-30 Grade in machine foundations for TG, Gas Turbine, ID/FD/PA fans, BFP, Coal mills at all elevations below/above finished floor level except TG deck and top decks supported over vibration isolation system including addition of suitable plasticizer conforming to IS 9103(latest) to achieve a slump more than 125mm in concrete as per manufacturer's recommendation with 20 mm nominal size graded aggregate in concrete all complete as per specification & drawing.	CUM	1			0.11917
208	Providing and laying Design Mix cement concrete as per IS:456 & IS 10262-2009 of grades mentioned below for reinforced concrete works using graded aggregate in top decks of all machine foundations supported on vibration isolation system (excluding supply and installation of vibration system) and top deck of TG foundation at all levels including addition of suitable plastisizers conforming to IS9103 to achieve a slump more than 125 mm in concrete as per manufacturers recommendation, preperation of scheme for concreting, getting it approved by engineer, labour, materials, equipment, handling, batching, transporting, mixing, pumping, placing, leveling, vibrating, compacting, curing, testing, cleaning and rendering the exposed surface with cement sand mortar to give a smooth and even surface, maintaining and submitting records of concreting, petrographic examination and potential reactivity of aggregate etc. all complete as per specification, drawing and instructions of engineer, including UPV testing as directed by engineer in charge, rectification of the defects in concreting observed by ultra-sonic pulse velocity (UPV) testing by cement/epoxy grout etc, but excluding formwork, staging, reinforcement, embeddments and temperature control of concrete. Payment terms - a) After casting 75% ; b) After receipt of ultrasonic test report - 25%.					
a	M30 grade (with 20mm nominal size graded stone aggregate)	CUM	1			0.12194
b	M35 grade (with 20mm nominal size graded stone aggregate)	CUM	1			0.12822
c	M40 grade (with 20mm nominal size graded stone aggregate)	CUM	1			0.13085
209	Extra over St. No. 205 to 208 for controlling of temperature of fresh concrete to less than 23 degree centigrade using ice, including all related arrangements for providing, storing and mixing of ice with water, cooling of aggregates etc. All complete as per specification, drawing and instruction of engineer in charge.	CUM	1			0.00781
210	Extra over ST Nos. 205 to 207 for conducting UPV test for concrete at all levels including all equipments, making necessary arrangements, staging, submission of report etc. all complete as <u>directed by engineer in charge and as per specification.</u>	CUM	1			0.02328
211	Providing and encasing of structural steel member with concrete using nominal aggregate size of 12.5mm down. Encased member shall be wrapped with welded wire mesh/chicken wire mesh with proper lap etc. complete as per specification for the following grades. (Payment of welded wire mesh, chicken wire mesh shall be made separately)					
a	M20 grade	CUM	1			0.09012
b	M25 grade	CUM	1			0.11621
212	Screed concrete conforming to IS 456 with coarse sand and graded hard stone aggregate 12.5mm/6 mm nominal size on the roof at any level or thickness, drains etc complete as per following.					
a	1:2:4 (1 part cement, 2 part sand, 4 parts of aggregate by volume)	CUM	1			0.10201

ST. NO	DESCRIPTION OF ITEM	UNIT	QTY	UNIT RATE (IN Rs.)	AMOUNT (IN Rs.)	WEIGHTAGE OF TOTAL AMOUNT (%)
b	1:1.5:3 (1 part cement, 1.5 part sand, 3 parts of aggregate by volume)	CUM	1			0.12135
213	Providing and laying Design Mix cement concrete as per IS:456 & IS 10262-2009 for reinforced concrete works using graded aggregate for Concrete in precast works like roof slabs/trench covers, fins, lintels, chajas, beams, columns, wall panels, facias etc.at all levels in all kinds of work including formwork/moulds, curing, rendering the top exposed surface with cement sand mortar (1:3), handling, storing, transpoting, all leads, erection without damage, setting in position with cement sand mortar (1:3), filling the gaps between adjacent precast units with M30 grade concrete or cement sand mortar (1:3) and including making of holes for bolts for fixing, welding etc.complete with graded aggregate (20/12.5/10 mm) and as per specification and drawing for following grades.					
a	M 25 grade	CUM	1			0.16203
b	M 30 grade	CUM	1			0.11224
214	Providing and laying Design Mix cement concrete as per IS:456, IS 3370 & IS 10262 2009 for reinforced concrete works using graded aggregate for Concrete in water retaining/conveying structures including addition of suitable plastisizer cum waterproofing cement additives conforming to IS 9103 latest to achieve a slump more than 125 mm in concrete as per manufacturers recommendation and conforming to limits of permeability as per IS 2545 and specification with 20 mm nominal size graded aggregate for following grades.					
b	M 30 grade	CUM	1			0.12365
215	Dismantling concrete work for all types of structures at all levels including stacking of servicable material to a lead of 500 m and disposal of unservicable material upto a lead of 2 km, cutting of reinforcement, labour, equipment, safety precautions etc all complete as per drawings, specification and instructions of engineer in charge.					
a	Plain cement concrete of all grades	CUM	1			0.03972
b	Reinforced cement concrete of all grades	CUM	1			0.05607
216	Chipping of concrete in reinforced concrete work, cutting pockets, making openings at all levels and according to shapes, disposal of waste materials upto a lead of 2 km as directed by engineer including equipment, safety precautions, making good the broken surface etc all complete as per specification, drawing, instructions of engineer in charge but excluding cutting of reinforcement .	CUDM	1			0.00204
217	Extra over and above St No 216 for cutting of reinforcement , all sizes and types including labour, equipment, return of cut reinforcement to store etc all complete as per specification, drawings and instructions of engineer in charge. Measurement shall be on the cross sectional area of reinforcement cut.	SQCM	1			0.00233
218	Cutting Reinforced concrete with mechanised tools like Core drilling machine etc. for cutting pockets, holes, cores in slab, beam, column or foundation as per direction of engineer in charge.Specialized agency like HILTI etc can be used with permission of Engineer in Charge	CUDM	1			0.00213
300 FORM WORKS						
	Providing, fixing and removing formwork at any elevations for all structures, as per specifications and including all labour, material, scaffoldings and centering complete including pockets etc. complete as per drawing, specifications and as per direction of engineer in charge for the following.					
301	Fairface form work with good quality water proof ply wood of required thickness and smooth surface below finished ground floor level for foundations, footings, base of columns, walls, columns, pilasters, beams, mass concrete, trenches etc.	SQM	1			0.0068
302	Fairface form work with good quality water proof ply wood of required thickness and smooth surface above finished ground floor level for columns, beams, suspended floors, roofs, lintels, cantilevers, staircases, landings, balconies, domes, arches, circular overhead tanks etc. for all heights.	SQM	1			0.00862

ST. NO	DESCRIPTION OF ITEM	UNIT	QTY	UNIT RATE (IN Rs.)	AMOUNT (IN Rs.)	WEIGHTAGE OF TOTAL AMOUNT (%)
303	Fairface Formwork with good quality water proof ply wood of required thickness and smooth surface for TG superstructure (above base raft level) including preparation of scheme, designing, submission and approval of staging drawing with sufficient props, braces and ties at every tier of height of approx. 4m for all heights.	SQM	1			0.02923
304	Providing, fixing and removing formwork in block-outs/pockets and openings (below 0.1 sqm plan area) at all elevations including cutting, formation of all shapes and all other operations required for making the required shape and size all complete as per specification, drawing and instruction of engineer in charge.					
a	Upto 150 mm depth	Each	1			0.00812
b	Pockets of depths more than 150mm and upto 300 mm depth	Each	1			0.00843
c	Pockets of depths more than 300mm and upto 600 mm depth	Each	1			0.01341
d	Pockets of depths more than 600mm and upto 1000 mm depth	Each	1			0.01861
e	Pockets of depths more than 1000mm and upto 1500 mm depth	Each	1			0.02736
305	Fairface plywood with filmface/laminated formwork above finished ground floor level for columns, beams, suspended floors, roofs, lintels, cantilevers, staircases, landings, balconies, domes, arches, circular overhead tanks etc. for all heights where ever specifically mentioned in the drawing.	SQM	1			0.01073
400 REINFORCEMENT						
401	Providing, straightening, cutting, bending, placing in position at any level, binding of mild steel reinforcements conforming to grade 1 of IS:432 part 1 in concrete including cost of reinforcement and binding wire, labour, scaffolding, transportation to & from stores etc. all complete as per specifications & drawings.	MT	1			1.08286
402(a)	Providing, straightening, cutting, bending, placing in position at any level, binding in position of steel reinforcements of TMT steel of grade Fe-500 confirming to IS:1786 including cost of binding wire, labour, scaffolding, transportation to & from stores etc complete all as per specifications, drawings and as directed by Engineer.	MT	1			1.08199
402(b)	Straightening, cutting, bending, placing in position at any level, binding in position of steel reinforcements of TMT steel of grade Fe-500 confirming to IS:1786 including cost of binding wire, labour, scaffolding, transportation to & from stores etc complete all as per specifications, drawings and as directed by Engineer.(reinforcement shall be supplied by BHEL free of cost)	MT	1			0.15872
403	Providing, straightening, cutting, bending, placing in position at any level, binding in position of steel reinforcements of TMT steel of grade Fe-500D confirming to IS:1786 including cost of binding wire, labour, scaffolding, transportation to & from stores etc complete all as per specifications, drawings and as directed by Engineer.	MT	1			1.09583
406	Providing, straightening cutting, bending, placing in position at any level, binding of mild steel reinforcements in brickwork including cost of reinforcement and binding wire, labour, scaffolding etc. complete all as per specifications & drawings.	MT	1			1.08567
500 WATER PROOFING WORKS						
501	Providing roof water treatment as following, including all material, labour, equipments, transportation, handling etc. all complete. i)providing and laying polymerised mastic over the rcc roof as a primary coat. ii)Application of high solid content liquid applied urethanebase elastomeric water proofing membrane over primary coat. iii)provide run off gradient not less than 1:100 for the roof with screed concrete M15 or cement mortar(1:4) over elastomeric water proofing membranewith 25 mm thick cement mortar(1:4) topping. iv)Wearing course at top shall consist of 25 mm thick PCC (M15) cast in panels reinforced with 0.56 mm diameter galvanised chicken mesh & sealing of joints using sealing compound /elastometric water proofing membrane. All complete as per customer specifications	SQM	1			0.00905

ST. NO	DESCRIPTION OF ITEM	UNIT	QTY	UNIT RATE (IN Rs.)	AMOUNT (IN Rs.)	WEIGHTAGE OF TOTAL AMOUNT (%)
516	providing and making making 45x45cm khurras with minimum 30mm of 1:2:4 PCC over PVC sheet of 1m x1mx400 micron thk. & finished with 12 mm thick 1:3 cement sand plaster etc. all complete as per approved drawings, directions of engineer in charge and customer specifications.	each	1			0.00279
517	Providing and laying 24 / 20 SWG Chicken wire mesh to slope in panels not exceeding 6 sq.m area over roof slab, encasing of steel structures etc. all complete as per customer specifications.	SQM	1			0.00388
518	Providing gola 75x75 mm in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 stone aggregate 10mm and down gauge) including finishing with cement mortar 1:3 (1 cement : 3 fine sand) as per standard design :In 75x75mm deep chase	RM	1			0.00214
600 JOINTS AND FILLERS						
Joints & fillers including all labour, material, equipment, transportation, handling etc at any level as per specification, drawings and as directed by engineer - in - charge.						
601	Supplying & installation of bitumen impregnated fibre board conforming to IS 1838 as joint filler at joints in concrete including nailing, coating of both faces with coal tar pitch/bitumin etc. all complete.					
b	20 mm wide joints.	SQM	1			0.0287
c	25 mm wide joints	SQM	1			0.03509
602	Providing and applying polysulphide based sealant conforming to IS:12118 in expansion joints in concrete including cleaning of joints, raking out groove, application of primer, scaffolding etc. all complete for following size grooves:					
a	12mm X 25mm	RM	1			0.00314
b	20mmX25mm	RM	1			0.00492
c	25mmX25mm	RM	1			0.00869
603	Supplying and filling in position hot applied bitumin sealing compound (Grade A) conforming to IS 1834 including cleaning, mixing, heating, pouring/injecting sealing compound in gaps in joints including application of primer etc. all complete.					
a	10mm X 40mm	RM	1			0.00026
b	12mm X 25mm	RM	1			0.0002
c	20mmX25mm	RM	1			0.00033
604	Supplying and filling in position hot applied bitumin sealing compound (Grade B) conforming to IS 1834 including cleaning, mixing, heating, pouring/injecting sealing compound in gaps in joints including application of primer etc. all complete.					
a	10mm X 40mm	RM	1			0.00022
b	12mm X 25mm	RM	1			0.00018
c	20mmX25mm	RM	1			0.00029
606	Providing and fixing PVC water stops in joints conforming to IS 12200 & IS 15058 all complete for the following:					
a	150 mm wide and 8 mm thick	RM	1			0.00658
b	230 mm wide and 8 mm thick	RM	1			0.00906
c	150 mm wide and 6 mm thick	RM	1			0.00518
d	230 mm wide and 6 mm thick	RM	1			0.01582
700 MS EMBEDMENTS						
Embedments including all labour, material, equipment, transportation, handling etc. at any level as per specification, drawings and as directed by engineer - in - charge.						
701	Supply, fabricating and fixing of mild steel embedments, inserts, pipe sleeves, angle pieces, rungs of various diameters, plates of dimensions as required etc. including welding, bolting, cutting, drilling, scaffolding, setting etc. all complete.	MT	1			1.51557
702	Same as above with BHEL supplied material free of cost including loading, transportation, unloading etc. all complete from BHEL store to plant site.	MT	1			0.47672

ST. NO	DESCRIPTION OF ITEM	UNIT	QTY	UNIT RATE (IN Rs.)	AMOUNT (IN Rs.)	WEIGHTAGE OF TOTAL AMOUNT (%)
703	Fixing of embedments, inserts, pipe sleeves, angle pieces, anchor bolts of various diameters, plates of dimensions as required etc. including scaffolding, setting in position, transportation from BHEL site stores to work spot etc. all complete.	MT	1			0.31974
704	Supply, Fabrication, transportation, delivery at site and erection, installation and alignment of mild steel foundation bolt assembly conforming to IS:2062 and grade 1 of IS:432 in concrete along with nuts, lock nuts (as per IS:1363, 1364 and IS:3138), washers, anchor plates, stiffner plates, protective tape, pipe sleeves, templates etc. including welding, cutting, grinding, threading, drilling etc. all complete.	MT	1			1.87923
705	Supplying, fabricating, erecting and installing following items in concrete/brickwall for all kind of works, including setting material in concrete, layout, scaffolding, cutting, forming, grinding, drilling, bolting, welding, jointing, testing etc. all complete.					
a	MS pipes of all diameters	Quintal	1			0.19064
b	PVC pipes / conduits of all diameters	Quintal	1			0.3864
d	Expansion fasteners (mechanical galvanised) of HILTI make or equivalent of safe tensile capacity as specified below for brick work with expansion sleeve of A6 polyamide:					
i	Upto 250 kg	Each	1			0.00599
ii	Beyond 250 Kg and upto 500 kg	Each	1			0.0093
iii	Beyond 500 Kg and upto 750 kg	Each	1			0.01501
e	Expansion fasteners (mechanical galvanised) of HILTI make or equivalent of safe tensile capacity as specified below for concrete work with expansion sleeve of stainless steel:					
i	Upto 250 kg	Each	1			0.00709
ii	Beyond 250 Kg and upto 500 kg	Each	1			0.0108
iii	Beyond 500 Kg and upto 750 kg	Each	1			0.01696
800 GROUTING						
Grouting including all labour, material, equipment, roughening surface, cleaning, ramming, curing etc. at any level unless otherwise specified as per specification, drawings and as directed by engineer - in - charge.						
802	Providing & grouting of pocket holes, pipe sleeves under base plates, machinery, pipe supporting structures etc. with mix 1:1 (1 cement :1 sand) using non shrink admixture etc. all Complete.	CUM	1			0.53213
803	Providing & grouting of pocket holes, pipe sleeves and under base plate of structural steel work/ machinery/ pipe supporting structures including roughening of surface, cleaning, ramming, curing etc. all complete with mix 1:1:2 (1 cement : 1 coarse sand : 2 aggregate of 6 mm down graded stonechips) using non shrink admixture. (Cost of all material and cleaning the pocket by compressed air shall be in the scope of the contractor).	CUM	1			0.31667
804	Providing & grouting of pocket holes, pipe sleeves and under base plates of structural steel work/ machinery/ pipe supporting structures including roughening of surface, cleaning, ramming, curing etc. all complete with ConbextraGP-1 or equivalent . (Cost of all material and cleaning of the pockets by compressed air shall be in the scope of the contractor).	CUM	1			1.16456
805	Providing & grouting of pocket holes, pipe sleeves and under base plates of structural steel work/ machinery/ pipe supporting structures including roughening of surface, cleaning, ramming, curing, etc. all complete with Conbextra GP-2 or equivalent . (Cost of all material and cleaning of the pockets by compressed air shall be in the scope of the contractor).	CUM	1			1.29319
900 DOORS, WINDOWS, VENTILATORS, LOUVERS						
Doors, windows, ventilators, louvers, roof ventilators, rolling shutters, partitions including all labour, material, equipments, transportation, handling, preparation of working drawings etc. at any level as per specification, drawings and as directed by engineer - in - charge.						

ST. NO	DESCRIPTION OF ITEM	UNIT	QTY	UNIT RATE (IN Rs.)	AMOUNT (IN Rs.)	WEIGHTAGE OF TOTAL AMOUNT (%)
903	Providing, fitting and fixing solid core flush door shutter as per IS 2202 part II, 35mm thick homogenous particle board bonded with BWP type phenolformaldehyde synthetic resin, partial board core conforming to IS 3087 type I, 35x12 mm thick teakwood beading all around including preparation of working drawings. godrej or equivalent make mortice lock with handles on both sides, approved ISI mark anodised fittings like door stopper, 300mm long tower bolts, 16x300mm long aldrops, 125mm long handles on both sides etc. butt hinges, sliding bolt, knobs, (all fittings shall be anodised aluminium color dyed), finish synthetic paint over primer, screws etc. all complete as per drawing, specification and instruction of engineer in charge. with commercial faces and teak wood edges. (Finish painting paid separately)	SQM	1			0.08367
904	Providing and fixing single or double steel door shutters with 45mm thk flush design shutter comprising of two outer sheets of 18 gauge steel sheets rigidly connected and reinforced inside with continuous vertical 20 gauge stiffeners, spot welded in position at not more than 150mm on centres including void filled with mineral wool (density as per specification), all fittings, Godrej or equivalent make mortice lock with handle on both sides, shop and final painting etc all complete.	SQM	1			0.12685
905	Providing and fixing single or double steel door shutters with 18 gauge M.S. sheets shutter presenting a flush surface on the outside and inside stiffened with semitubular edge and central stiffening rail which shall convey the lock including fixtures, Godrej or equivalent make mortice lock with handle on both sides, shop and final painting etc all complete.	SQM	6			0.65554
906	Providing and fixing anodized extruded aluminium doors (single or double shutter) conforming to IS:1948, IS:1949 fabricated from extruded sections of HINDALCO/JINDAL or equivalent make having minimum 3mm wall thickness as per IS:1285, IS:733 and anodized and electro color coating of required shade as per IS 1868 (minimum anodized coating of grade AC15). fixed with rawl plugs, expansion fasteners, SS screws / fixing clips necessary filling of gaps at Junctions, at top, bottom & sides with required PVC / neoprene felt for bi-metallic protection etc. Glazing shall be clear float glass of 6mm thickness including snap fit type beading, concealed screws, fixtures, Godrej or equivalent make Mortice lock with handle on both sides, etc all complete. Aluminium section shall be smooth, free of stains, straight, mitred & jointed mechanically wherever required. (Glazing shall be paid separately)	SQM	1			0.11917
907	Providing and fixing fire proof steel doors (single or double shutter) with panic devices shall be 45mm thk flush design comprising of two outer sheets of 18 gauge steel sheets rigidly connected and reinforced inside with continuous vertical 20 gauge stiffeners, spot welded in position at not more than 150mm on centers including all fittings, shop painting with approved post office/signal red color fire resistant paint and mineral wool insulation (64 kg/cum density) complete and shall be fire proof as per IS:3614, TAC requirements and as per specification. Minimum ratings shall be 2 Hrs	SQM	1			0.32088
908	Providing and fixing steel windows/ventilator with steel sections as per IS:1038, IS:1361 & IS:7452 latest revision including all fittings, metal beadings, hold fasts, shop and final painting, glazing etc. all complete. (Glazing shall be paid separately)					
a	openable type	SQM	1			0.06087
b	fixed type	SQM	1			0.05833

ST. NO	DESCRIPTION OF ITEM	UNIT	QTY	UNIT RATE (IN Rs.)	AMOUNT (IN Rs.)	WEIGHTAGE OF TOTAL AMOUNT (%)
909	Providing and fixing anodised aluminium work of Jindal, Hindalco or other equivalent approved make for door frames, windows, ventilators, partitions, railing etc with extruded standard tubular and other sections including all fittings & fixtures and accessories of approved make conforming to IS733 and IS1285, anodised and electro color dyed to required shade according to IS 1868 (minimum anodic coating of grade AC15), fixed with rawl plugs, expansion fasteners, SS screws or with fixing clips, including necessary filling of gaps at junctions, at top, bottom and sides with required PVC/neoprene felt for bi-metallic protection etc.including preparation of working drawings, aluminium cleat angle, aluminium snap-on-beading for glazing/panelling, stair case tread nosing, with all fittings and fixtures (like tower bolts, handles, door stopper with rubber shoes, 'L' drops, stays, floor springs, hydraulic door closures etc.), CP brass/stainless steel screws, providing and fixing hinges/pivots, and making provision for fixing of fitting wherever required including cost of PVC/neoprene gasket, all complete as per drawing, specification and instructions of engineer in charge (Glazing and panelling shall be paid seperately).Weight of aluminium section only shall be measure.	Kg	1			0.00992
911	Providing and fixing of door closers as per IS 3564 ,of approved make & quality all complete of following type :					
a	Over head hydraulic door closures	Each	1			0.03353
b	Floor mounted Hydraulic door closers	Each	1			0.05707
912	Providing and fixing pressed steel frames fabricated from 16 gauge M.S sheet mortised, reinforced drilled and tapped for hinges and locks bolts strikes, hold fasts adjustable floor anchors, floor tiles/weather bars ,paintings etc all complete as per specifications.	Kg	1			0.00241
913	Providing and fixing in position rolling shutter of hot rolled double dipped galvanised steel lath section of 18 SWG tested mild steel strips at 75mm rolling centres interlocked together through their entire length and jointed together at the end by end locks mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation including wire springs, top cover, primer & shop coats of approved enamel paint etc, all complete as per IS 6248 and specification of approved make of following types: The bottom lath shall be coupled to a lock plate fabricated from 3mm thick galvanised steel plate and securely rivetted with stiffening angles.(partly coiled and lath/full lath).					
a	Hand Operated	SQM	1			0.06829
b	Mechanically Operated	SQM	1			0.08428
c	Electrically operated	SQM	1			0.14329
915	Providing, fixing and fitting of glazing of first grade class in steel/aluminium/wooden frames, where ever required, cleaning after fixing including hardware, gaskets, clips, beadings etc. all complete.					
a	4 mm thick clear sheet glass	SQM	1			0.00996
b	4 mm thick clear float glass	SQM	1			0.01159
c	5.5 mm thick clear float glass	SQM	1			0.01624
d	6 mm thick wired glass	SQM	1			0.01626
e	6mm thick Polycarbonate sheet multi (twin) wall fire retardant and ultra violet resistant with sealed open edges.	SQM	1			0.04593
f	4 mm thick ground glass	SQM	1			0.01233
g	6 mm thick tinted heat reflecting type float glass	SQM	1			0.02839
h	6 mm thick clear toughened safety glass	SQM	1			0.03752
i	Two nos. 6 mm thick clear toughened float glass hermetically sealed and separated by 12 mm thick air gap for thermal insulation (only single elevation area to be measured)	SQM	1			0.06339
j	Two nos. 6 mm thick tinted toughened float glass hermetically sealed and separated by 12 mm thick air gap for thermal insulation (only single elevation area to be measured)	SQM	1			0.06475

ST. NO	DESCRIPTION OF ITEM	UNIT	QTY	UNIT RATE (IN Rs.)	AMOUNT (IN Rs.)	WEIGHTAGE OF TOTAL AMOUNT (%)
k	One outer 6mm thick tinted heat-reflecting type float glass and one inner 6mm thick plain float glass hermetically sealed and seperated by 12 mm thick gap for thermal insulation (only single elevation area to be measured).	SQM	1			0.05982
l	6 mm thick laminated glass	SQM	1			0.02642
916	Supplying and fixing weather stripping of approved make and quality to doors as per instructions of engineer in charge and specification complete.	RM	1			0.005
917	Providing and fixing 12 mm thick BWP particle board , decorative veneer (prelaminated) on both sides, as panels in aluminium framed door shutter, fixed with necessary snap-on-beading etc. all complete (excluding aluminium works).	SQM	1			0.03908
918	Providing and fixing steel louvered window with ISMC 100 frame all round including verticals with 18G pressed steel louvers, painting etc. all complete.	SQM	1			0.06587
919	Providing and fixing 1 mm thk. MS sheet sliding shutters with frame and diagonal braces of 50X50X6 angle iron, 3 mm MS gusset plates at junction and corners, 25 mm dia pulley, 50X50X6 angle and T-iron guide at the top and bottom respectively including painting etc. all complete.	SQM	1			0.12181
920	Roof skylight structure for atrium with 6mm thick Polycarbonate sheet multi (twin) wall fire retardant and ultra violet resistant with sealed open edges for sky light for approved shape like dome, pyramidal etc. Joints are properly sealed with sealent, screws with pvc cap, self tapping screws, epdm rubber gasket.etc all complete as per detailed drawing and specification.	SQM	1			0.0404
923	Supply and placing in position suitable grill for all windows and ventilators on ground floor of all buildings.					
a	Steel	kgs	1			0.00163
b	Aluminium	kgs	1			0.00602
925	Dismantling all tupe of doors, windows and clerestory windows (steel ,aluminium, wood etc) shutter including chowkhats, architrave, holdfasts etc. complete and stacking upto lead of 1km as directed by engineer in charge					
a	Of area 3 sq. metres and below	SQM	1			0.00211
b	Of area beyond 3 sq. metres	SQM	1			0.00289
1000 BRICKWORK						
Brickwork masonry including all labour, material, equipment, transportation, handling,						
1001	Providing brick work in cement mortar 1:6 (1 part cement 6 parts coarse sand) in walls, chambers etc. in thickness varying from 230mm to 460mm at all depths, places and positions below plinth including raking out joints, curing, scaffolding etc. complete excluding plastering and painting.					
a	Using fly ash lime bricks confirming to IS 12894 with crushing strength of 75 kg/cm2	CUM	1			0.06307
c	Using burnt clay bricks of class designation 7.5 of nominal dimension	CUM	1			0.07788
d	Using burnt clay bricks of class designation 5.0 of nominal dimension	CUM	1			0.07195
1002	Providing brick work in cement mortar 1:6 (1 cement 6 coarse sand) in walls, chambers etc. in thickness 230mm at all heights, places and position above plinth including raking out joints, curing, scaffolding etc complete excluding plastering and painting.					
a	Using fly ash lime bricks confirming to IS 12894 with crushing strength of 75 kg/cm2	CUM	1			0.08161
c	Using burnt clay bricks of class designation 7.5 of nominal dimension	CUM	1			0.08492
d	Using burnt clay bricks of class designation 5.0 of nominal dimension	CUM	1			0.07496

ST. NO	DESCRIPTION OF ITEM	UNIT	QTY	UNIT RATE (IN Rs.)	AMOUNT (IN Rs.)	WEIGHTAGE OF TOTAL AMOUNT (%)
1003	Providing brick work in cement mortar 1:4 (1 cement 4 coarse sand) in partition walls , chambers etc. in thickness 115mm at all heights, places and position above or below plinth/graded level including providing two nos. 6 mm diameter MS bars at every third layer, raking out joints, curing, scaffolding etc complete excluding plastering and painting as per specification.					
a	Using fly ash lime bricks confirming to IS 12894 with crushing strength of 75 kg/cm2	SQM	1			0.01167
c	Using burnt clay bricks of class designation 7.5 of nominal dimension	SQM	1			0.01389
d	Using burnt clay bricks of class designation 5.0 of nominal dimension	SQM	1			0.01281
1004	Providing brick soling including spreading of earth, ramming, watering including 25mm thick cushion of sand complete but excluding excavation and disposal of surplus earth (excavation and disposal of surplus earth shall be measured under applicable item). Using brick on edge.					
a	Using fly ash lime bricks confirming to IS 12894 with crushing strength of 75 kg/cm2	SQM	1			0.00643
c	Using burnt clay bricks of class designation 7.5 of nominal dimension	SQM	1			0.00634
d	Using burnt clay bricks of class designation 5.0 of nominal dimension	SQM	1			0.00588
1005	Providing brick soling including spreading of earth, ramming, watering including 25mm thick cushion of sand complete but excluding excavation and disposal of surplus earth (excavation and disposal of surplus earth shall be measured under applicable item.).- Using flat bricks.					
a	Using fly ash lime bricks confirming to IS 12894 with crushing strength of 75 kg/cm2	SQM	1			0.00551
c	Using burnt clay bricks of class designation 7.5 of nominal dimension	SQM	1			0.00454
d	Using burnt clay bricks of class designation 5.0 of nominal dimension	SQM	1			0.00386
1006	Breaking of existing brick work at all levels including plastering, removing the rubbish up to a distance of 500 m including transportation, loading, unloading etc. all complete as directed by the engineer.	CUM	1			0.01883
1007	Providing and encasing of structural steel member with masonry work around flanges, webs etc. and filling the gap between steel and masonry by minimum 12mm thick mortar. Encased member shall be wrapped with chicken wire mesh with 50mm lap etc. complete as per specification. (Chicken wire mesh to paid separately)	CUM	1			0.06982
1009	Making openings in existing brick wall or partition wall including making good the broken edges/surface with cement mortar etc. complete.	CUM	1			0.02523
1011	Filling existing brick wall/ partition wall opening at all level including making good the broken edges/surface with cement mortar, painting, finishing to match with existing finishing, scaffolding/supporting at any level, removal of debris upto a lead of 1 km including loading, unloading, transportation etc. all complete.	SQM	1			0.01459
1012	Providing and filling brick bats in soak pits all complete.	CUM	1			0.02352
1100 DAMP PROOF COURSE						
Damp proof course including all labour, material, equipment, transportation, handling, shuttering, centering, curing etc at any level as per specification, drawings and as directed by engineer - In - charge.						
1101	Providing Damp Proof Course 40mm thick 1:1.5:3 concrete (10mm and down graded aggregate) with 2% of approved admixture of water proofing compound all complete. Two layers of hot bitumen coating 85/25 grade as per IS:702 @ 1.7Kg./sqm shall be applied one before & one after the DPC.	SQM	1			0.00836
1200 CEMENT MORTAR PLASTER						
Cement mortar plaster including making grooves wherever required including all labour, material, scaffolding, curing etc at any level as per specification, drawings and as directed by engineer - In - charge.						

ST. NO	DESCRIPTION OF ITEM	UNIT	QTY	UNIT RATE (IN Rs.)	AMOUNT (IN Rs.)	WEIGHTAGE OF TOTAL AMOUNT (%)
1201	Providing 18mm thick plaster in two layers outside the building/boundary wall in cement mortar 1:6 on walls, finished to a smooth finish including providing 3mmx3mm size grooves at junctions of two dissimilar materials all complete.	SQM	1			0.00334
1202	Providing 12mm thick plaster inside the building/boundary wall in cement mortar 1:6 on walls finished to a smooth finish as per specification all complete.	SQM	1			0.00252
1203	Providing 12mm thick plaster in cement mortar 1:6 on walls with rough finish all complete.	SQM	1			0.00241
1204	Providing 6mm thick plaster on ceiling in cement mortar 1:4 finished to a smooth all complete.	SQM	1			0.00235
1205	Providing 12mm thick plaster in walls, drains/culverts with a paste of neat cement @ 1kg/sqm and rubbed smooth with trowel etc. all complete.	SQM	1			0.00272
1206	Providing and making decorative plaster of all types and design on walls, ceilings, arcs, columns with various thickness upto 18 mm including finishing all complete.	SQM	1			0.00513
1207	Forming groove of uniform size from 12X12 mm upto 20X15 mm in plastered surface as per approved pattern, using wooden battens nailed to the under layer, including removal of wooden battens, repair of the edges of plaster panel and finishing the groove etc. complete as per specification, drawing and the instructions of engineer in charge.	RM	1			0.0007
1208	Providing drip course on plastered surface at all elevations for all type of work such as chajjas, parapet, projections etc. including scaffolding, finishing etc. complete with all labour, tools and plants as per specification, drawing and instructions of engineer in charge.	RM	1			0.00053
1209	Providing and laying encasement to box type steel beams at all levels with lath plaster 50 mm nominal thickness with cement plaster (1:4) over chicken wire mesh including all labour, materials, equipment, handling, transporting, mixing, placing, leveling, curing and cleaning, finishing the exposed surfaces etc including centering and shuttering all complete as per specification, drawing and instructions of enginner in charge (chicken wire mesh to be paid separately)	SQM	1			0.00612
1210	Ruled pointing in masonry in CM 1:3 (1 cement and 3 fine sand) including raking out joints, curing etc. complete.	SQM	1			0.0016
1300 FINISHES TO CONCRETE / PLASTERED SURFACES						
Finishes, painting to concrete, plastered surfaces including all labour, material, equipment, surface preparation, scaffolding etc. at any level as per specification, drawings and as directed by engineer - in - charge.						
1301	Two or more coats of white wash/ colour wash as per IS 627 of approved brand and manufacture to give an even shade including a priming coat as per specifications.	SQM	1			0.00035
1302	Two or more coats of Exterior masonry paint (water or solvent base) of special resins, adhesives and additives mixed with fine, hard stone aggregate and suitable pigment. The paint shall be applied on a coat of primer over dried, prepared plaster surface as manufacturers guidlines. The final finished coating shall be fungus resistant, UV resistant, water repellant, alkali resistant and extremely durable with color fastness as per specification.	SQM	1			0.00237
1303	Providing and applying two or more coats of oil bound destemper as per IS 428 of approved brand, shade and manufacture to give smooth, hard, durable & glossy finish over a coat of primer over prepared plaster surface as per manufacturers guideline.	SQM	1			0.00165
1304	Two or more coats of acrylic distemper of approved brand and manufacture to give an even shade including a priming coat with distemper primer complete.	SQM	1			0.00165
1305	Providing and applying two or more coats of acrylic emulsion paint as per IS 5411 of approved brand, shade and manufacture to give smooth, hard, durable & glossy finish over a coat of primer over prepared plaster surface as per manufacturers guideline.	SQM	1			0.00261

ST. NO	DESCRIPTION OF ITEM	UNIT	QTY	UNIT RATE (IN Rs.)	AMOUNT (IN Rs.)	WEIGHTAGE OF TOTAL AMOUNT (%)
1306	Providing and applying 2 or more coats of acid/alkali resistant paint of approved brand and colour to floors, walls and ceiling including preparation of surface to receive paint, providing and applying bitumen primer conforming to IS 158 complete all as per manufacturer's recommendations and as approved by engineer, at all heights above or below grade level, complete as per specifications.	SQM	1			0.00691
1307	Two or more coats of fire resistant transparent paint as per IS 162 on all woodwork over french polish as per IS 348 or flat oil paint as per IS 137 of approved grade and manufacture to give an even shade as per specifications.	SQM	1			0.00869
1308	Two or more coats of black anti-corrosive bitumastic painting of approved brand and manufacture to give an even shade complete.	SQM	1			0.00314
1309	Two or more coats of synthetic enamel paint of approved make made from synthetic resins and drying oil with rutile titanium dioxide and other selected pigments to give smooth, hard, durable & glossy finish to all interior and exterior surfaces complete.	SQM	1			0.00197
1310	Providing and applying 3 coats of water proof cement paint of approved make and color on exterior surface at all heights including material, labour, scaffolding, curing etc including primer coat complete as per specification.	SQM	1			0.00125
1311	Providing and applying resin bonded granular textured finish, for external applications shall consist of crushed stone/quartz chips of .5 mm to 2.5 mm size and of approved natural color/shade and bonded with synthetic resins, adhesives and additives altogether in a single pack mix, applied on cured and dried plaster surface with a dry film thickness of minimum 2 mm. The final finish shall have UV resistance, fungus, bacterial resistance properties all complete with grooves filled with poly sulfide sealant of matching color and shade as per specification/drawing/approval of engineer in charge.	SQM	1			0.00974
1312	Providing and applying 2 mm thick plaster of paris punning on walls including preparation of surface, staging, etc. to achieve a smooth even surface all complete as per specification and as directed by Engineer.	SQM	1			0.00149
1313	Providing and applying ready made Epoxy Paint over areas other than steel structure with suitable pigments of approved shade as per specification and direction of Engineer. The epoxy paint shall be a two pack material and shall be resistant to water, splash, spillage & acidic environment. The epoxy paint coating shall be of 150micron thickness over epoxy primer.	SQM	1			0.00759
1315	Providing and applying two or more coats of Acrylic based weather coat paint of approved brand and manufacture and required shade over one coat of primer after necessary cleaning/ washing, preparing the surface using coir brush/ wire brush, sand paper, including filling of cracks with putty wherever required etc. all complete to give smooth, hard, durable & glossy finish over a coat of primer over prepared plaster surface as per manufacturers guidelines. The final finished coating shall be fungus resistant, UV resistant, water repellant and extremely durable with color fastness as per specification.	SQM	1			0.00283
1400 FLOORING AND SKIRTING						
Flooring and skirting at any level including base layer, labour, material, equipments, transportation, handling, curing, polishing etc. at any level as per specification, drawings and as directed by engineer - in - charge.						
1401	Providing and laying 50 mm thick heavy duty cement concrete in flooring with metallic hardener pigmented topping 12mm thick uniform graded treated iron particles in flooring. Under layer of 38mm thick cement concrete mix 1:2:4 (1 cement: 2 sand : 4 stone aggregates 12.5mm well graded) and top layer of 12mm thick metallic concrete of mix 1:2 (1 cement hardner mix with approved quality metallic hardening compound :2 stone aggregate 6mm nominal size) by volume including cement slurry, rounding off edges, aluminium strips etc. all complete for following (Quoted item rate shall be inclusive of providing glass joint strips):	SQM	1			0.0086
1405	Providing and laying 50 mm thick floor finish with 25mm thk Terrazo Tiles including cement mortar bedding of 1:3 (1 cement : 3 sand) with neat cement slurry etc. all complete.	SQM	1			0.01483

ST. NO	DESCRIPTION OF ITEM	UNIT	QTY	UNIT RATE (IN Rs.)	AMOUNT (IN Rs.)	WEIGHTAGE OF TOTAL AMOUNT (%)
1406	Providing and laying polished Kota stone 18mm to 20mm thk in flooring . Under bed shall average 30mm thk of 1 cement : 2 sand : 4 stone aggregates by volume and brought to proper level. The kota stone slabs/tiles laid over under bed, pressed and tapped down with wooden mallet to the proper level, lifted and pressed again with thick cement slurry spread over the surface with fine joint finished including pigments, curing, grinding, granite polishing etc. all complete.	SQM	1			0.02208
1407	Providing and laying polished Kota stone 14mm to 16mm thk in flooring . Under bed shall average 35mm thk of 1 cement : 2 sand : 4 stone aggregates by volume and brought to proper level. The kota stone slabs/tiles laid over under bed, pressed and tapped down with wooden mallet to the proper level, lifted and pressed again with thick cement slurry spread over the surface with fine joint finished including pigments, curing, grinding, granite polishing etc. all complete.	SQM	1			0.02142
1408	Providing polished Kota stone 18mm to 20mm thk in skirting projecting 6mm from adjacent plaster including cutting brickwall upto the required depth, edging, finishing etc. all complete.	SQM	1			0.02146
1409	Providing polished Kota stone 14mm to 16mm thk in skirting projecting 6mm from adjacent plaster including cutting brickwall upto the required depth, edging, finishing etc. all complete.	SQM	1			0.02137
1412	Providing and laying 18-20mm thick polished Granite stone of approved color and texture in flooring with brass/ stainless steel strips. Under bed shall average 30mm thk of 1 cement : 2 sand : 4 stone aggregate by volume and brought to proper level. The granite stone slabs/tiles laid over under bed, pressed and tapped down with wooden mallet to the proper level, lifted and pressed again with thick cement slurry spread over the surface with fine joint finished including pigments, curing, grinding, granite polishing etc. all complete.	SQM	1			0.07511
1413	Providing and laying 14 to 16mm thick polished Granite stone of approved color and texture in flooring with brass/ stainless steel strips. Under bed shall average 35mm thk of 1 cement : 2 sand : 4 stone aggregate by volume and brought to proper level. The granite stone slabs/tiles laid over under bed, pressed and tapped down with wooden mallet to the proper level, lifted and pressed again with thick cement slurry spread over the surface with fine joint finished including pigments, curing, grinding, granite polishing etc. all complete.	SQM	1			0.04623
1416	Providing and laying vitrified ceramic tiles of polished variety of size 600x600 from reputed / approved manufacturer, complete including underbed of cement mortar 1:3 with neat cement slurry etc. all complete for following					
a	7mm thick tiles In flooring	SQM	1			0.02668
b	10mm thick tiles In flooring	SQM	1			0.03572
c	7mm thick tiles In skirting and dado upto specific height	SQM	1			0.02609
d	10mm thick tiles In skirting and dado upto specific height	SQM	1			0.03812
1417	Providing and laying vitrified ceramic tiles of matt finish of size 600x600mm from reputed / approved manufacturer including underbed of cement mortar 1:3 with neat cement slurry etc. all complete for following.					
a	7mm thick tiles In flooring	SQM	1			0.02561
b	10mm thick tiles In flooring	SQM	1			0.03002
c	7mm thick tiles In skirting and dado upto specific height	SQM	1			0.02543
d	10mm thick tiles In skirting and dado upto specific height	SQM	1			0.03155
1420	Providing and laying Heavy Duty dust pressed Ceramic Tiles of 7mm thick of reputed manufacturer of approved finish shade and colour including underbed of cement mortar 1:3 with neat cement slurry etc. all complete.					
a	300X300 mm	SQM	1			0.02122
b	600X600 mm	SQM	1			0.02328

ST. NO	DESCRIPTION OF ITEM	UNIT	QTY	UNIT RATE (IN Rs.)	AMOUNT (IN Rs.)	WEIGHTAGE OF TOTAL AMOUNT (%)
1421	Providing and laying Heavy Duty dust pressed (grade-5) Ceramic Tiles (Matt Finish) of size 600x600mm(approved size) and 7mm thick of reputed / approved manufacturer (Kajaria,jhonson, Spartek or equivalent) of approved finish, shade and colour. The tiles shall be scratch resistance of minimum 5 on Mohr's scale and shall have a bending strength of 350 Kg./sqm,with Under bed shall average 43mm thk of 1 cement : 2 sand : 4 stone aggregates by volume and brought to proper level including cement mortar all complete.	SQM	1			0.02385
1422	Providing & fixing Acid / Alkali resistant (Chemical resistant) tiles conforming to IS:4457 in flooring/Dado and shall be laid over bitumastic lining of min 12mm thick (to be laid in layers of 6mm each). The tiles shall be applied with 6mm thick Potassium Silicate bedding mortar as per IS:4441, 4443 & 4832 and including preparation of surface, application of bitumen primer, curing etc. all complete for following thicknesses. The tiles should be abrasion resistant & durable.					
a	20mm thick	SQM	1			0.05385
1427	Providing and fixing glazed ceramic tiles of approved color and design of size 200x300mm / 300x300mm in dado of approved size , projecting 6mm uniformly from adjacent plaster or wall finish. The mix for underbed plaster shall consist of 1part cement and 3 parts sand by weight. fairly moist but firm, tiles shall be pressed over under bed by applying cement slurry including pigments, curing etc all complete for following thicknesses:					
a	5mm thick	SQM	1			0.01527
b	7mm thick	SQM	1			0.01777
1428	Providing and laying 3mm thick antistatic PVC flooring / skirting of approved shade,as per IS:3462 and laying as per IS:5318 all complete.	SQM	1			0.01679
1432	Providing and fixing removable raised/false access flooring with system.bearing floor panels supported on G.I. rectangular stinger frame workand G.I. Pedestal etc. all complete, as per the architectural drawings,as specified and as directed by Engineer-in-charge consisting of : a) P roviding at required spacing to form modular framework, pedestalsmade out of GI tube of thickness minimum 2 mm and 50 mm outerdiameter, fully welded on to the G.I. Base plate of size125mmx125mmx3mm at the bottom of the pedestal tube, G.I. pedestal head of size 100mmx100mmx3.5 mm welded with GI fully threaded stud 16mm outer diameter with two GI Check nuts screwed on the stud for level adjustment upto 50mm, locking and stabilizing the pedestal headin position at the required level. The pedestals shall be fixed to thesubfloor (base) through base plate using epoxy based adhesive ofapproved make or the machine screw with rawl plug. b) S tringers system in all steel construction hot dipped galvanized ofrectangular size 570x20x30x0.80mm thick having holes at both endsfor securing the stringers on to the pedestal head using fully threaded screws ensuring maximum lateral stability in all directions, the grid formed by the pedestal and stinger assembly shall receive the floor panel, this system shall provide adequate solid, rigid support for access floor panel, the system shall provide a minimum clear uninterrupted clearance between the bottom of the floor for electrical conduits and wiring etc. all complete as per the architectural drawings, as specified and as directed by the Engineer-in-charge.					

ST. NO	DESCRIPTION OF ITEM	UNIT	QTY	UNIT RATE (IN Rs.)	AMOUNT (IN Rs.)	WEIGHTAGE OF TOTAL AMOUNT (%)
	contd... c) Providing and fixing Access Floor panel of 600x600x32 mm mediumgrade Filled Steel anti static high pressure Laminate vinyl tiles/ PVC floor/ composite panel of type USF-1500 of unittile or approved equal with UDL of 2025 kg/sqm. Access Floor panel shall be steel welded construction with an enclosed bottom pan with uniform pattern of 64 hemispherical cones. The top and bottom plates of Steel Gauges: top 0.6 mm and bottom 0.7 mm fused spot welded together (minimum 64 welds in each dome and 20 welds along each flange). The panel should be Corroresist epoxy coated for lifetime rust protection and cavity formed by the top and bottom plate is filled with Pyrogrip noncombustible Portland cementitious core mixed with lightweight foaming compound. The access floor shall be factory finished with Anti-static High Pressure laminate with Non Warp technology upto 1mm thickness for superior adhesion and Surface flatness within 0.75mm.The panel is to withstand a Concentrated Load of 363 kgs applied on area 25mm x 25mm without collapse in the centre of the panel which is placed on four steel blocks. The panel will withstand and Uniformly Distributed Load (UDL) minimum 2025 kg/sqm and an impact load of 50kg all complete as per the approved manufacturers specification and as per the direction of Engineer-in-charge. All specification must be printed on the side of the panel to ensure the quality of the product.					
c	1000mm depth & above up to 1400 mm	SQM	1			0.07543
1435	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).Light shade using white cement.	sqm	1			0.01352
1500 ROOFING / SIDE CLADDING						
Roofing / side cladding work including all labour, material, equipment, transportation, handling, scaffolding, laps, hooks, washers, corner pieces etc. at any level as per specification, drawings and as directed by engineer - in - charge.						
1501	Designing, providing and fixing permanently color coated galvanised MS troughed metal sheet decking plate of approved colour and conforming to class3 of IS 14246 over roof purlins for cast-in-situ roof slab as per relevant IS code and specification. Bare metal thickness of deck plate shall be minimum 0.7mm with minimum trough depth of 44 mm having minimum yield strength of 250 MPa and shall serve as permanent shuttering to the roof slab 100mm thick measured over crest of metal decking & shall have adequate strength to support weight of green concrete and imposed loads of min 150 kg/sqm during construction between purlins as per manufacturer's recommendations/ calculations/ test certificates for approval including fixing of plates to purlins, side lapping, end lapping etc. all complete for below mentioned spans. The sheet shall be permanently coated with silicon modified polyester paint of minimum 20 micron DFT on exposed surface (facing operating floor) and minimum 7 micron on other face over epoxy primer applied over hot dipped galvanising @ 275 gm/sqm including fixing of sheet to purlin with self drilling white zinc plated heat treated carbon steel screws of minimum 5.6 mm dia @ 260mm c/c in the trough and stich screws between two adjacent sheets and sealing with epoxy sealant. Measurement of profile sheeting shall be of the plan area of roof covered by MS trough metal decking.					
a	Span Upto 1800mm	SQM	1			0.02802
b	Span Exceeding 1800mm and upto 2500 mm	SQM	1			0.03638
1502	Providing and fixing shear connectors of mild steel studs having 16mm dia and minimum 75 mm projected length above purlin passing through metal decking as per relevant IS codes and specification.	QUINTA L	1			0.1556

ST. NO	DESCRIPTION OF ITEM	UNIT	QTY	UNIT RATE (IN Rs.)	AMOUNT (IN Rs.)	WEIGHTAGE OF TOTAL AMOUNT (%)
1503	Designing, providing and fixing External sheet of Permanent colour coated metal cladding with troughed M.S. sheets of 0.6mm bare metal thickness having minimum yield strength 250 MPa and zinc-aluminium alloy coating not less than 275 gm/sqm total on both sides including fixing to supports / rails by concealed fixing system, corrosion resistant self tapping / self drilling type fasteners with suitable cap, flashing etc. all complete. The exposed face of the sheet shall be permanently colour coated with Polyfluro Vinyl Coating (PVF2) of minimum dry film thickness (DFT) 20 microns over suitable primer. Inner face of the sheet shall be provided with suitable pre-coating of minimum DFT 7 microns over suitable primer. The permanent colour coated sheet shall meet the general requirements of IS : 14246 and shall conform to class 3 for the durability.	SQM	1			0.0303
1504	Designing, providing and fixing External sheet of Permanent colour coated metal cladding with high strength tensile steel sheet 0.5mm bare metal thickness having minimum yield strength 350 MPa and zinc-aluminium alloy coating not less than 275 gm/sqm total on both sides including fixing to supports / rails by concealed fixing system, corrosion resistant self tapping / self drilling type fasteners with suitable cap, flashing etc. all complete. The exposed face of the sheet shall be permanently colour coated with Polyfluro Vinyl Coating (PVF2) of minimum dry film thickness (DFT) 20 microns over suitable primer. Inner face of the sheet shall be provided with suitable pre-coating of minimum DFT 7 microns over suitable primer. The permanent colour coated sheet shall meet the general requirements of IS : 14246 and shall conform to class 3 for the durability.	SQM	1			0.02627
1505	Designing, providing and fixing Inner sheet of Permanent colour coated metal cladding with troughed M.S. sheets of 0.6mm bare metal thickness having minimum yield strength 250 MPa and zinc-aluminium alloy coating not less than 275 gm/sqm total on both sides of both sheets including fixing to supports / rails by concealed fixing system, corrosion resistant self tapping / self drilling type fasteners with suitable cap, flashing etc. all complete. The exposed surface of the sheet shall be permanently colour coated with silicon modified polyester paint of minimum dry film thickness (DFT) 20 microns over suitable primer. Other face of the sheet shall be provided with suitable pre-coating of minimum DFT 7 microns over suitable primer. The permanent colour coated sheet shall meet the general requirements of IS : 14246 and shall conform to class 3 for the durability. The sheet shall be fixed directly to side runners and Z spacers as per IS : 277. The sheet shall be fixed at the rate not more than 1500mm center to center to hold the insulation and external sheeting.	SQM	1			0.02846
1506	Providing and fixing insulation of resin bonded mineral wool of 50 mm nominal thickness conforming to IS 8183 having a density of 32 kg/cum glass wool or 48 kg/cum for rock wool, for cladding/under deck insulation including application of glue and tying with lacing wire, for glass/rock wool as per manufacturer's recommendations.	SQM	1			0.01064
1507	Providing and fixing insulation of resin bonded mineral wool of 50 mm nominal thickness conforming to IS 8183 having a density of 32 kg/cum glass wool or 48 kg/cum for rock wool, for cladding/under deck insulation including wrapping in black polythene black supported over weld mesh 75X75X1.6 MM dia to hold in position and application of glue & tying with lacing wire, for glass/rock wool as per manufacturer's recommendation.	SQM	1			0.01172
1508	Providing and installing under deck insulation using minimum 0.05 mm thick aluminium foil on exposed surface followed by 0.56 mm dia and 25 mm mesh GI wire netting, fixed at various elevations with rawl plugs including clips but excluding cost of insulation.	SQM	1			0.00959
1510	Providing and fixing 1 mm thick corrugated/semicorrugated G.I. sheet in roofs, cladding of minimum galvanisation of 275 gsm total on both sides with minimum 150mm overlapping, 8 dia G.I. hook bolts or 'J' Bolts and nuts @305 mm c/c along with G.I. and bitumen washers including cutting of sheets for opening etc. all complete.	SQM	1			0.03296
1600 FALSE CEILING						
False ceiling including all labour, material, equipment, transportation, handling,						

ST. NO	DESCRIPTION OF ITEM	UNIT	QTY	UNIT RATE (IN Rs.)	AMOUNT (IN Rs.)	WEIGHTAGE OF TOTAL AMOUNT (%)
1606	Providing and Fixing 12mm thick Gypsum board plain/perforated false ceiling tiles(600x600mm) of India Gypsum or equivalent make in plan or elevation with aluminium grid, metal suspension system, anchor fastener adjustable hangers etc. including two or more coats of acrylic emulsion paint of approved colour to give an even shade with smooth finish all complete.as per architectural design and detail.metal suspension system as per ASTM C-635 shall be hot dipped M.S.galvanized (grade 180 as per IS :277) nominal size of T-section shall be 24 x 38 mm or 24 x 25 mm cross runners. 24mm wide exposed flange surface shall be permanently color coated.suspension system shall be as per manufacturer's specification supported over movement platform.The work to be complete as per specifications, drawings and direction of engineer.(Materials for structural platform grid for movement made up of MS Channels/ Beams / Angles shall be supplied by BHEL and shall be paid under ST No 2301)	SQM	1			0.02276
1608	Providing and Fixing Under deck insulation provided on the ceiling (underside of roof slab) and underside of floor slab of air - conditioned areas depending upon the functional.requirements. This under deck insulation shall consist of 50 mm thick mineral wool insulation mat conforming 10 IS: 8183 having a density of 32 kg/cum for glass wool or 48 kg/cum for rock-wool, backed with 0.05mm thick aluminium foil and 24G x 25 mm mesh wire netting and shall be fixed to the ceiling with .14G wire ties.	SQM	1			0.0244
1700 RAIN WATER DOWN TAKE PIPES						
Rain water down take pipes including all labour, material, transportation, 2 coats of approved paint over one primary coat, fixtures, accessories etc at any level as per specification, drawings and as directed by engineer - in - charge.						
1701	Providing and fixing HCl down take pipes of 100 mm dia. with water tight lead joint, fixing clamps etc. all complete.	RM	1			0.02431
1702	Providing and fixing galvanised MS down take pipes of 100 mm dia- Medium quality as per IS:1239(part-I) / IS:3589 all complete.	RM	1			0.02822
1703	Providing and fixing HCl down take pipes of 150mm dia with water tight lead joint etc. all complete.	RM	1			0.03945
1704	Providing and fixing galvanised MS down take pipes of 150 mm dia- Medium quality as per IS:1239(part-I) all complete.	RM	1			0.04103
1705	Providing and fixing UPVC down take pipes of 110mm diameter- Class 3 as per IS:4985 all complete.	RM	1			0.01297
1706	Providing and fixing UPVC down take pipes of 160mm diameter- Class 3 as per IS:4985 all complete.	RM	1			0.01828
1707	Providing and fixing GI down take pipes conforming to IS:1239 /IS:3589 of medium duty all complete for following diameters.					
a	100 mm Dia	RM	1			0.02304
b	150 mm Dia	RM	1			0.03324
c	200 mm Dia	RM	1			0.0504
1708	Providing and fixing HDPE down take pipes conforming to IS:4984 as per specification of following diameters.		1			
a	110 mm Dia	RM	1			0.00764
b	160 mm Dia	RM	1			0.01077
c	200 mm Dia	RM	1			0.01437
1800 MISCELLANEOUS WORKS						
Miscellaneous works including all labour, material, equipment etc. at any level unless otherwise specified as per specification, drawings and as directed by engineer - in - charge.						

ST. NO	DESCRIPTION OF ITEM	UNIT	QTY	UNIT RATE (IN Rs.)	AMOUNT (IN Rs.)	WEIGHTAGE OF TOTAL AMOUNT (%)
1801	Providing and Filling in trenches, plinths, area paving and other underground structures with graded stone aggregate of size range 63 mm to 45 mm in layers not exceeding 230 mm in thickness including breaking of stone boulders to required sizes, filling the interstices with selected sand and compacting to 85 % of original volume of stone stack for all lifts etc. all complete. Payment shall be made for the measurement of the volume of the compacted fill.	CUM	1			0.02912
1803	Anti termite chemical treatment of soil with Chlorpyrifos/Lindane E.C. 20% with 1% concentration conforming to IS:8944 and as per IS 6313 all complete. (Plinth area of building at ground floor only shall be measured for payment)	SQM	1			0.00162
1808	Providing and fixing aluminium strips minimum 18 SWG thk and 300mm wide over expansion joints with minimum lap of 50mm length including brass / aluminium screws, rawl plugs etc. all complete.	Kg	1			0.01018
1810	Providing, laying and fixing rails and guide rails in concrete for transformer, rail track including cutting of rails, joining of rails, anchoring lugs etc all complete.	MT	1			1.81248
1811	Providing and fixing weep holes in Drains consisting of 100 mm dia HDPE pipe sleeves with single side covering for the pipe mouth with galvanised welded wire fabric of 20 mm sq. opening covered with 40 mm downgraded aggregates in 300 X 300 mm sq. and 300 mm deep size all complete.	Each	1			0.01709
1815	Providing and fixing GI rungs in concrete/brick walls having zinc coating of minimum 900 g/sqm etc. all complete.	Kg	1			0.00224
1817	Providing and fixing HDPE pipes in concrete/ brick work of following sizes including cutting, fixing and levelling in position etc. all complete.					
a	Upto 75 mm dia	RM	1			0.00634
b	100 mm dia	RM	1			0.00724
c	150 mm dia	RM	1			0.01185
d	200 mm dia	RM	1			0.01911
1822	Cutting of groove of 10mm X 40mm size with groove cutting machine in concrete paving all complete.	RM	1			0.00072
1824	Supply & fixing expanded metal steel sheet conforming to IS:412. Size of mesh shall be 10mmX40mm with strands of 2.5mm width and 1mm thickness to the structural steel for facilitating fireproofing works.	SQM	1			0.0079
1825	Supply and laying approved quality Stone aggregate 40mm size in transformer yards.	CUM	1			0.02785
1827	Supply and laying fire clay refractory brick work with fire clay mortar conforming to IS: 6 & 195 including curing etc. all complete on tank pads & in building walls.	CUM	1			0.12606
1828	Dismantling old existing reinforced/non-reinforced brickwork/blockwork/stone masonry work in mud/lime/ cement mortar at any level including clearing/cleaning, stacking the serviceable materials at plant site and disposal of unserviceable materials within a lead upto 1km all complete.	CUM	1			0.01745
1829	Dismantling old existing plain/re-inforced concrete work at any level including clearing/cleaning, stacking the serviceable materials at plant site and disposal of unserviceable materials within a lead upto 1km all complete.	CUM	1			0.05185
1830	Dismantling old existing structural steel work at any level including plates, bolts, cutting rivets, welding, dismembering and stacking the dismantled materials within a lead upto 1km etc all complete.	MT	1			0.21491
1831	Sprinkling of water by water tanker fitted with perforated GI pipe (portable tanker minimum 3000 litre capacity) for roads and miscellaneous area within plant boundary, for dust suppression and reduction of suspended material at site for day to day work, as directed by BHEL site engineer (water for this purpose shall be provided by BHEL free of cost and utilisation of machine will be in terms of Tank- hour put in actual use for water sprinkling).	Tank/HR	1			0.00485

ST. NO	DESCRIPTION OF ITEM	UNIT	QTY	UNIT RATE (IN Rs.)	AMOUNT (IN Rs.)	WEIGHTAGE OF TOTAL AMOUNT (%)
1833	Supply & fixing FRP (fibre reinforced plastic) sheets 2 mm thick including GI hooks/ J or L bolts, nuts, washers, bitumen washers etc. complete including overlap 100mm.	SQM	1			0.01907
1852	Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead					
a	Of area 3 sq. metres and below	each	1			0.00211
b	Of area beyond 3 sq. metres	each	1			0.00289
1853	Dismantling aluminium/ Gypsum partitions, doors, windows, fixed glazing and false ceiling/ false flooring including disposal of unserviceable surplus material and stacking of serviceable material with in 50 meters lead as directed by Engineer-in-charge	SQM	1			0.00033
2000 FENCING AND GATES						
Fencing and gates including all labour, material, equipment etc at any level as per specification, drawings and as directed by engineer - in - charge.						
2001	Supplying and erecting in position 2.4 m high PVC coated gavanised chain linked fencing of minimum 8 gauge (including PVC coating) of mesh size 75mm x 75mm. The diameter of the hot dip galvanised steel wire for chain link fencing excluding PVC coating shall not be less than 12 gauge. GI barbed wire fencing of height of 600 mm confirming to IS 298 at top of chain link fencing shall be provided with 4 strands of barbed wire hot dip galvanised wire of 12G comprising of 2 ply of wires with barbs of 16G spaced at 100mm. Cost to include for GI hook bolts, rings & washers, hot dip galvanised tension wires, 25X6 mm GI flat stretcher bar at end posts, accessories etc. all complete. (Structural post shall be separately under item 2007)	RM Sqm	1			0.03783
2002	Supplying and erecting in position 2.4 m high gavanised chain linked fencing conforming to IS 2761 of 10G hot dip galvanised steel wires woven in the form of zig zag mesh giving an opening size of 50 mm square. GI barbed wire fencing of height of 600 mm confirming to IS 298 at top of chain link fencing shall be provided with 4 strands of barbed wire hot dip galvanised wire of 12G comprising of 2 ply of wires with barbs of 16G spaced at 100mm. Cost to include for GI hook bolts, rings & washers, hot dip galvanised tension wires, 25X6 mm GI flat stretcher bar at end posts, accessories etc. all complete. (Structural post shall be separately under ST No. 2007)	RM	1			0.03862
2007	Supply and fixing of hot dip galvanised mild steel posts for fencing. Rate of zinc coating shall not be less than 710 g/m2 on steel posts.	MT	1			2.09682
2008	Supply, fabrication and fixing of mild steel posts for fencing including painting etc all complete.	MT	1			1.56674
2009	Supply, fabrication and installing in position and testing galvanised MS Gates out of channels, joists, angles, flats, plates, pipes, welded steel wire mesh & sheets including stiffeners, bracings, fabricated hinges, MS Aldrops with locking arrangement, tempered steel pivot, guide track of MS Tee, bronze aluminium ball bearing arrangements, castor wheels, paintings etc. all complete.	MT	1			2.12085
2010	Supply, fabrication and installing in position and testing MS Gates out of channels, joists, angles, flats, plates, pipes, welded steel wire mesh & sheets including stiffeners, bracings, fabricated hinges, MS Aldrops with locking arrangement, tempered steel pivot, guide track of MS Tee, bronze aluminium ball bearing arrangements, castor wheels, paintings etc. all complete.	MT	1			2.03409
2100 WATER SUPPLY						
Water supply work including men, material, equipment etc. at any level as per specification, drawings and as directed by engineer - in - charge.						

ST. NO	DESCRIPTION OF ITEM	UNIT	QTY	UNIT RATE (IN Rs.)	AMOUNT (IN Rs.)	WEIGHTAGE OF TOTAL AMOUNT (%)
2101	Providing and fixing in position tested heavy duty type chromium plated (CP) brass long neck bib cocks including sockets, union, nuts etc all complete - 15mm nominal bore.	EACH	1			0.01663
2102	Providing and fixing in position heavy duty brass stop cock of approved quality including all specials etc all complete - 15mm nominal bore.	EACH	1			0.01433
2103	Providing and fixing in position heavy duty brass full way valve with wheel of approved quality including all specials etc all complete for following sizes:					
a	25mm nominal bore.	EACH	1			0.0257
b	50mm nominal bore.	EACH	1			0.06388
2104	Providing and fixing GI pipes class B medium class conforming to IS:1239 pipes shall be concealed and painted with anticorrosive paint, complete for internal works with GI sockets, unions, elbows, tees, nipples etc and clamps including cutting and making good the walls etc all complete for following sizes:					
a	15 mm nominal bore.	RM	1			0.00571
b	20 mm nominal bore.	RM	1			0.00671
c	25 mm nominal bore.	RM	1			0.0084
2105	Providing and fixing GI pipes class B complete for external work with GI sockets, unions, elbows, tees, nipples etc including trenching & refilling, anti-corrosive paint etc all complete for following sizes:					
a	15 mm nominal bore.	RM	1			0.00647
b	20 mm nominal bore.	RM	1			0.0072
c	25 mm nominal bore.	RM	1			0.009
d	50 mm nominal bore.	RM	1			0.01429
2106	Providing and fixing 610mmx453mmx6mm thk mirror from reputed mirror manufacturer. Mirror shall be mounted with glass adjustable revolving CP brackets with CP screws etc all complete.	EACH	1			0.0206
2107	Providing and fixing 610mmx127mmx6mm thk clear glass with C.P Guard rails and mounted on C.P. brackets etc all complete.	EACH	1			0.01692
2108	Providing and fixing 25 mm diameter stainless steel towel rails (600mm X 25mm) all complete.	EACH	1			0.02032
2109	Providing and fixing 20mm dia chromium plated M.S. pipes wall mounted towel rod with C.P. Brackets etc all complete.	EACH	1			0.0136
2110	Providing and fixing C.P. soap holder mounted with C.P. screws etc all complete.	EACH	1			0.00887
2111	Providing and fixing stainless steel / C.P. liquid soap dispenser . Dispenser shall be round and easily revolving with removable threaded nozzle and mounted on C.P. brackets etc all complete.	EACH	1			0.01354
2112	Providing and fixing glazed vitreous wall mounted paper holder with suitable cover cum cutter fitted with CP screws etc. sll complete.	EACH	1			0.01238
2113	Providing and fixing chromium plated brass shower rose with 15 or 20 mm inlet all complete.	EACH	1			0.0196
2114	Providing & fixing in position P.V.C. water tank of Syntex or approved equivalent including making all necessary inlet & outlet pipes, fixture, ball cocks, valves etc all complete for following capacities. GI pipes shall be paid separately under ST No. 2105.		1			0.01334
a	1000 litres capacity	EACH	1			0.17566
b	2000 litres capacity	EACH	1			0.34662
c	5000 litres capacity	EACH	1			0.88112
2116	Providing and fixing Stainless Steel hand drier as per customer specification.	EACH	1			0.37692
2200 SANITARY WORKS						

ST. NO	DESCRIPTION OF ITEM	UNIT	QTY	UNIT RATE (IN Rs.)	AMOUNT (IN Rs.)	WEIGHTAGE OF TOTAL AMOUNT (%)
Sanitary work including all labour, material, equipment etc. at any level as per specification, drawings and as directed by engineer - in - charge.						
2201	Supply and fixing glazed vitreous china Wash Basin of Size - 550x480mm conforming to IS:2556 part 4 of oval shape with R.S. or C.I. brackets painted white, 15mm chromium plated brass hot & cold faucets with nylon washers, chromium plated brass chain with rubber plug, 32mm chromium plated brass bottle trap and waste of standard pattern, 32mm dia chromium plated brass trap unions, plastic connection pipe with chromium plated nuts, fittings, cutting and making good the walls where required etc all complete.					
a	White	EACH	1			0.10217
b	Colored	EACH	1			0.11716
2204	Providing and fixing colour glazed vitreous china European type water closet conforming to IS:2556 with siphon, open front solid plastic seat and plastic cover, low level 12.5 litre PVC flushing cistern (same colour as WC) with valveless fittings, necessary C.P connections etc all complete.					
a	Floor mounted	EACH	1			0.12747
b	Wall mounted	EACH	1			0.13879
2205	Providing and fixing colour glazed vitreous indian type Orissa pattern (580x440mm) water closet conforming to IS:2556 part 3 with all fittings including foot rests, low level 12.5 litre PVC flushing cistern with valveless fittings, necessary C.P connections etc all complete.	EACH	1			0.11573
2206	Providing and fixing white flat back glazed vitreous china urinals(wall mounted) of size 440x265x355 mm with photo voltaic control flushing system as per IS:2556 (part 6, section 1) with flush pipes, lead pipes, gratings, traps and necessary C.P. fittings etc. all complete.	EACH	1			0.19898
2207	Supply, laying and jointing UPVC pipes of class 3 as per IS:4985 including bends, branches and all other necessary fittings, M.S holder bats/clamps, cutting and making good the walls and floors, jointing, testing etc all complete for following.					
a	75mm dia pipes	RM	1			0.02089
b	110mm dia pipes	RM	1			0.02967
c	160mm dia pipes	RM	1			0.0449
d	200mm dia pipes	RM	1			0.04591
2208	Providing, laying light duty non pressure NP3 class RCC pipes with collars jointed with stiff mixture of cement mortar 1:2 including testing of joints etc all complete for following.					
a	200mm dia	RM	1			0.01729
b	300mm dia	RM	1			0.02675
c	450mm dia	RM	1			0.05179
d	600mm dia	RM	1			0.06116
e	900mm dia	RM	1			0.11667
2209	Providing, laying light duty non pressure NP2 class RCC pipes with collars jointed with stiff mixture of cement mortar 1:2 including testing of joints etc complete for following.					
a	150mm dia	RM	1			0.0131
b	250mm dia	RM	1			0.01576
c	300mm dia	RM	1			0.02161
d	500mm dia	RM	1			0.03232
2211	Providing and fixing C.I Manhole heavy duty cover of size 600mmx450mm including frame from reputed manufacture etc. all complete.	EACH	1			0.121

ST. NO	DESCRIPTION OF ITEM	UNIT	QTY	UNIT RATE (IN Rs.)	AMOUNT (IN Rs.)	WEIGHTAGE OF TOTAL AMOUNT (%)
2212	Providing and fixing circular heavy duty C.I. manhole cover of 600 mm dia with frame etc. all complete.	EACH	1			0.23091
2213	Providing and fixing square mouth S.W Gully trap grade 'A' complete with CI grating, brick masonry chamber and water tight CI cover with 300x300mm (inside). The weight of cover to be not less than 4.53 Kg and frame to be not less than 2.72 Kg etc all complete for following sizes:					
a	100x100mm P or S Type.	EACH	1			0.04272
b	150x100mm P or S Type.	EACH	1			0.0465
c	150x150mm P or S Type.	EACH	1			0.04975
2214	Providing and fixing square mouth S.W Gully trap grade 'A' complete with CI grating, brick masonry chamber and water tight CI cover with 300x300mm (inside). The weight of cover to be not less than 4.53 Kg and frame to be not less than 2.72 Kg etc all complete for following sizes:					
a	100x100mm P or S Type.	EACH	1			0.03051
c	150x150mm P or S Type.	EACH	1			0.03317
2215	Providing and fixing C.I. floor traps with C.P jalli all complete.	EACH	1			0.01602
2216	Providing and fixing heavy duty UPVC floor traps with C.P jalli all complete.	EACH	1			0.01018
2218	Providing and installing approved brand single tap water cooler of 150 L cooling capacity all complete.	EACH	1			1.01666
2219	Providing and fixing white vitreous urinal partitions of size 675x325x85mm all complete.	EACH	1			0.0397
2221	Constructing brick masonry circular type manhole 0.91 m internal dia at bottom and 0.56m dia at top in cement mortar 1:4 (1 cement :4 coarse sand), in side cement plaster 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement, foundation concrete 1:3:6 mix (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size), and making necessary channel in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement, all complete as per standard design...CONTD					
	0.91 m deep with S.F.R.C. cover and frame (heavy duty, HD-20 grade designation) 560 mm internal diameter conforming to I.S. 12592, total weight of cover and frame to be not less than 182 kg., fixed in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including centering, shuttering all complete. (Excavation, foot rests and 12mm thick cement plaster at the external surface shall be paid for separately) :					
a	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	EACH	1			0.13044
2222	Extra depth for circular type manhole 0.91m internal dia (at bottom) beyond 0.91 m to 1.67 m					
a	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	meter	1			0.07228

ST. NO	DESCRIPTION OF ITEM	UNIT	QTY	UNIT RATE (IN Rs.)	AMOUNT (IN Rs.)	WEIGHTAGE OF TOTAL AMOUNT (%)
2223	Constructing brick masonry circular manhole 1.22 m internal dia at bottom and 0.56 m dia at top in cement mortar 1:4 (1 cement :4 coarse sand) inside cement plaster 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement foundation concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size) and making necessary channel in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement, all complete as per standard design contd...					
	1.68 m deep with SFRC Cover and frame (heavy duty HD-20 grade designation) 560 mm internal diameter conforming to I.S. 12592, total weight of cover and frame to be not less than 182 kg. fixed in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including centering, shuttering all complete. (Excavation, foot rests and 12 mm thick cement plaster at the external surface shall be paid for separately)					
a	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	EACH	1			0.24582
2300 STRUCTURAL STEEL						
Structural steel works including all labour, material, equipments, transportation, handling etc. at any level as per specification, drawings and as directed by engineer - in - charge.						
2301	Supply, fabrication and erection of structural steel with mild steel rolled section / built up section / combination of both conforming to IS:2062, pipes conforming to IS:1161/ IS:1239, chequered plate conforming to IS: 3052, mild steel rounds, monorails, stays, safety chains, ladders, MS grating etc. in columns, beams, gantry girders, bunkers, silos, hoppers, roof trusses, portals, laced purlins, space frames, hangers, struts, monorails , galleries, stiffeners, wall beams, sheeting runners, brackets, stub columns, bracings, cleats, trestles, base plates, splice plates, chequered plate flooring, decking and seal plates, steel frame grid over false ceiling, walkway platforms, ladders, stairs, stringers, treads, landings, hand-rails etc including 2 coats of redoxide zinc-chromate primer (one coat at shop and one coat after erection), connection design & preparation of fabrication drgs, collection of steel from stores, fabrication, straightening, cutting, bending, rolling, grinding, machining, drilling, welding, electrodes and other consumables, alignment, erection bolts & nuts (weight of erection bolts, nuts and welds not payable), assembly, edge preparation, preheating (min preheat and interpass temperature of 20° C for welding over 20 mm and upto 40 mm & 66° C for welding over 40 mm and upto 63 mm & 110° C for thickness over 63 mm & use of low hydrogen/ radiogenic electrodes), post heating, testing of welders, inspection of welds, visual inspection, non destructive and special testing, rectification and correction of defective welding works, production test plate, inspection and testing, erection scheme, protection against damage in transit, stability of structures, installation of temporary structures, setting column bases, surface preparation by means of manual or mechanical power tools as per IS:1477 part 1, touch-up painting, rectification, dismantling and removal of all temporary structures (weight of temporary structures not payable), return of surplus / waste steel materials to store etc all complete. Including appointment of a separte agency, approved by BHEL, for review and approval of fabrication drgs, in consultation with BHEL.	MT	1			1.40677

ST. NO	DESCRIPTION OF ITEM	UNIT	QTY	UNIT RATE (IN Rs.)	AMOUNT (IN Rs.)	WEIGHTAGE OF TOTAL AMOUNT (%)
2301A	fabrication and erection of structural steel with mild steel rolled section / built up section / combination of both conforming to IS:2062, pipes conforming to IS:1161/ IS:1239, chequered plate conforming to IS: 3052, mild steel rounds, monorails, stays, safety chains, ladders, MS grating etc. in columns, beams, gantry girders, bunkers, silos, hoppers, roof trusses, portals, laced purlins, space frames, hangers, struts, monorails , galleries, stiffeners, wall beams, sheeting runners, brackets, stub columns, bracings, cleats, trestles, base plates, splice plates, chequered plate flooring, decking and seal plates, steel frame grid over false ceiling, walkway platforms, ladders, stairs, stringers, treads, landings, hand-rails etc including 2 coats of redoxide zinc-chromate primer (one coat at shop and one coat after erection), connection design & preparation of fabrication drgs, collection of steel from stores, fabrication, straightening, cutting, bending, rolling, grinding, machining, drilling, welding, electrodes and other consumables, alignment, erection bolts & nuts (weight of erection bolts, nuts and welds not payable), assembly, edge preparation, preheating (min preheat and interpass temperature of 20 $\circ$ C for welding over 20 mm and upto 40 mm & 66 $\circ$ C for welding over 40 mm and upto 63 mm & 110 $\circ$ C for thickness over 63 mm & use of low hydrogen/ radiogenic electrodes), post heating, testing of welders, inspection of welds, visual inspection, non destructive and special testing, rectification and correction of defective welding works, production test plate, inspection and testing, erection scheme, protection against damage in transit, stability of structures, installation of temporary structures, setting column bases, surface preparation by means of manual or mechanical power tools as per IS:1477 part 1, touch-up painting, rectification, dismantling and removal of all temporary structures (weight of temporary structures not payable), return of surplus / waste steel materials to store etc all complete. Including appointment of a seperate agency, approved by BHEL, for review and approval of fabrication drgs, in consultation with BHEL.(STEEL shall be supplied by BHEL free of cost)	MT	1			0.38502
2302	Extra over ST NO. 2301/2301A for blast cleaning of steel structures to near white metal surface(Sa 2 1/2) and applying epoxy based zinc phosphate primer in coats of minimum 25 micron (DFT) at shop and 25 micron (DFT) after erection, instead of primer coat of red oxide zinc-chromate, including touch-up painting etc all complete.	MT	1			0.08279
2303	Extra over ST NO. 2301/2301A for providing and application of two coats of primer consisting of chemical resistant epoxy resin and hardener (Minimum 1 Kg of primer mix shall be consumed for priming of 4 to 5 m2 area of surface) instead of primer coat of red oxide zinc-chromate, including touch up painting etc. all complete.	MT	1			0.04505
2304	Extra over ST No. 2301/2301A for providing and applying two coats of synthetic enamel paint with minimum 50 micron total dry film thickness (DFT) of approved make and shade to achieve an even shade over steel sections already having primer coats and keeping overall DFT with primer not less than 110 microns including protection and cleaning, scaffolding etc. all complete.	MT	1			0.03544
2306	Providing, laying and clamping of crane rails over the crane girder at all elevations as per IS 3443 including all fixtures, clamps, testings etc. all complete as per drawing and specification.	MT	1			2.42475
2307	Supplying, fabrication, erection and alignment of factory made electroforged galvanised grating units with mild steel (having minimum galvanisation of 610 g/sqm) conforming to IS:2062 in flooring, platforms, drain and trench covers, walk- ways, passages, staircases with edge binding strips and anti-skid nosing in treads etc. including fixing clamps, fittings, fixtures, all taxes, duties, packing, grinding, drilling, welding, edge preparation, etc. all complete.	MT	1			2.45266
2309	Extra over above ST NO. 2301/2307 for finishing the grating units with hot dipped galvanisation @ 610 gm/sqm over blast cleaned steel surfaces instead of painting with two coats of red oxide zinc-chromate primer all complete.	MT	1			0.41552
2310 a)	Providing and fixing in position of permanent mild steel bolts (class 4.6 as per IS : 1367 and grade 'C' as per IS: 1363) and nuts, washers etc. up to and inclusive of 39 mm diameter and upto 300mm long for structural steel work etc all complete.	Quintal	1			0.20511

ST. NO	DESCRIPTION OF ITEM	UNIT	QTY	UNIT RATE (IN Rs.)	AMOUNT (IN Rs.)	WEIGHTAGE OF TOTAL AMOUNT (%)
2310 b)	Taking delivery from BHEL stores, loading, transporting, unloading, storing, handling ,placing, fixing in position of permanent mild steel bolts and nuts, washers etc. of any length for structural steel work etc all complete including labour, handling, equipments and other incidentals (Bolts shall be supplied by BHEL free of cost). All complete as per customer Specifications :	Quintal	1			0.04523
2311	Providing and fixing in positing of high strength structural bolts (of property class 8.8 and product grade `C' as per IS: 1367)</b> and conforming to IS: 3757 and high strength structural hardened and tempered nuts (of property class `8' as per IS:1367) conforming to IS:6623 with hardened and tempered washers as per IS:6649 etc. up to and inclusive of 39 mm diameter and upto 300 mm long for structural steel work etc all complete.	Quintal	1			0.48995
2312	Dismantling of steel structure , lowering of material and carriage of the dismantled material up to field fabrication shop / projects storage including temporary dismantling, cutting, re-welding, supporting, and restoring to correct position all temporarily dismantled members, re-alignment of all adjacent connected members to their correct positions (weight of such adjacent members and temporarily dismantled members not payable), scaffolding, staging, tools & tackles, gas cutting, welding, consumables etc all complete.	MT	1			0.17667
2319	Supply, fabrication and fixing of stainless steel pipe hand railing conforming to SS 409 of 32 mm/40 mm dia including transportation, loading/unloading etc. all complete..	MT	1			3.74135
2320	Supply, fabrication and fixing of GI pipe hand railing (900 mm high) of 32 mm/40 mm dia (Medium Grade) including transportation, loading/unloading, painting etc. all complete..	MT	1			1.88465
2321	Conducting radiography test on welds wherever specified including equipments, measuring devices, gauges, test report etc. all complete.	RM	1			0.0508
2322	Conducting ultasonic test on welds wherever specified including equipments, measuring devices, gauges, test report etc. all complete.	RM	1			0.03338
2323	Conducting ultasonic test on steel plates as per ASTM-A435 or equivalent wherever specified including equipments, measuring devices, gauges, test report etc. all complete.	SQM	1			0.04896
2324	Conducting magnetic particle test on welds wherever specified including equipments, measuring devices, gauges, test report etc. all complete.	RM	1			0.02976
2325	Conducting dye penetration test on welds wherever specified by the engineer including provision of necessary equipments, measuring devices, gauges etc. all complete (over and above the work already specified in the specifications.)	RM	1			0.03081
2326	Painting of steel surfaces embedded in Concrete					
a)	For the portion of steel surfaces embedded in Concrete, the surface shall be prepared by manual Cleaning and provided with Primer Coat of Chlorinated Rubber based Zinc Phosphate Primer of minimum 50 micron Dry Film Thickness (DFT)	MT	1			0.07538
b)	All threaded and other surfaces of foundation bolts and its materials , insulation pins, Anchor channels, Sleeves etc shall be coated with temporary rust preventive fluid and during execution of Civil works, the dried film of coating shall be removed using organic solvents.	MT	1			0.07538
2327	Painting of steel surfaces (other than those embedded in concrete including steel doors, rolling shutters, windows, in all indoor & outdoor structures					

ST. NO	DESCRIPTION OF ITEM	UNIT	QTY	UNIT RATE (IN Rs.)	AMOUNT (IN Rs.)	WEIGHTAGE OF TOTAL AMOUNT (%)
a)	i) All steel surfaces shall be provided with self curing inorganic Zinc Silicate Primer Coat (Solid by Volume 60%) of minimum 75 micron dry film thickness (DFT) apply over blast cleaned surface to near white metal confirming to SA 2 1/2 finish of swedish standard SIS- 05-5900. The primer coat shall be applied in shop immediately after blast cleaning by air less spray technique. ii) Primer coat shall be followed with the application of intermediate coat of polyamide cured pigmented Titanium Dioxide (TiO2) or micaceous iron oxide (MIO) Epoxy based paint (Solid by volume minimum 60%) of minimum 75 micron DFT. This coat shall be applied in shop after an interval of minimum overnight (from the application of primer coat) by airless spray technique. iii) Intermediate coat shall be followed with the application of finished coat of polyamide cured colour pigmented epoxy based paint (solid by volume minimum 60%) of minimum 75 micron DFT. This coat shall be applied after an interval of minimum overnight and maximum indefinite (from the application of intermediate coat) either before erection by airless spray technique or after erection by brush and / or spray. Colour and shade of the coat shall be as approved by the Employer. the finished coat thickness of 75micron can be built up either in single application at shop or in two applications one at shop and the other at site. iv) Finish Coat shall be followed with the application of final finished coat of Polyurethane based colour pigmented paint (solid by volume minimum 40%) of minimum 25 microns DFT. This coat shall be applied within seven (7) days (from the completion of finished coat), after erection by brush and / or spray. Colour and shade of the coat shall be as approved by the Employer.	SQM	1			0.00174
2400 ROAD WORKS						
PROVIDING ROAD WORK INCLUDING SUPPLY OF MATERIAL, COST OF LABOUR, MACHINERY ETC ALL COMPLETE AS PER SPECIFICATION, DRAWING, RELEVANT IRC & IS CODES AND AS DIRECTED BY THE ENGINEER FOR THE FOLLOWING						
2401	Preparation of sub grade by excavating earth to required depth for all types of soil/ rock, dressing to camber and consolidating the base including making good the undulation etc and disposal of surplus earth within plant boundary all complete. Subgrade below road/pavement shall be compacted to 95% of Modified Proctor Density as per IS: 2720 part-VIII and slope of sub-grade shall be same as top of the pavement slope all complete as per CPWD specifications.	CUM	1			0.00377
2403	Providing & laying granular morrum for shoulder including watering, compaction with road roller to required camber etc all complete as per CPWD specifications.	CUM	1			0.0098
2405	Providing & laying water bound macadam base course in two layers of 150mm thickness with stone aggregate 63mm to 40mm size, stone screening and blinding material including screening sorting, spreading to template and consolidation with road roller including carriage, spreading and consolidation of blinding material morrum etc all complete as per CPWD specifications.	SQM	1			0.00829
2424	Dismantling of existing road consisting of premix carpet, curb stone/ brick on edge, bitumen macadam course, WBM, preparing sub grade to receive new WBM including camber consolidation including disposal of debris within a lead of 1 km etc all complete.	SQM	1			0.00452
2500 PILING WORKS						
2501	Mobilisation of two sets of hydraulic rotary piling rigs and accessories capable of pile boring/drilling in all types of strata/installing various size of bored cast in situ RCC piles to project site and demobilisation of the same after completion of piling works etc all complete.	LS	1			22.6897
2502	Mobilisation of two sets of conventional DMC/RMC piling rigs and accessories capable of pile boring/drilling in all types of strata/installing various size of bored cast in situ RCC piles to project site and demobilisation of the same after completion of piling works etc all complete.	LS	1			6.54771

ST. NO	DESCRIPTION OF ITEM	UNIT	QTY	UNIT RATE (IN Rs.)	AMOUNT (IN Rs.)	WEIGHTAGE OF TOTAL AMOUNT (%)
2503	Installation of Bored cast-in-situ RCC vertical pile as per IS 2911 (Part 1 Sec 2) with diameter and length as specified (length to be measured from pile cut-off level to the bottom of pile) using cement concrete grade M25 conforming to IS:456 with 20 mm nominal size stone aggregates with a minimum cement content of 400Kg per cum of concrete including providing all materials (but excluding reinforcement steel for which measurement/payment shall be made separately), boring/drilling in all types of soil, providing bentonite slurry and/or casing for stabilization of pile bore, flushing of pile bore, cleaning, providing plasticizer wherever required, breaking pile head to cut off level and exposing pile reinforcement for embedment in pile cap etc including empty boring from ground level to pile cutoff level etc all complete as per specification, drawing and as directed by the engineer-in-charge for the following.					
b	Pile with 500 mm diameter and 20 m length below cut off level	Each	1			1.20719
d	Pile with 600 mm diameter and 20 m length below cut off level	Each	1			1.55831
2504	Extra over ST. No. 2503 for pile length more than the specified length of 20m below cut off level for the following.					
b	For 500 mm diameter pile	Rm	1			0.04062
c	For 600 mm diameter pile	Rm	1			0.06247
2505	Rebate on ST.No.2503 for pile length less than the specified length of 20m below cut off level for the following.					
b	For 500 mm diameter pile	Rm	1			-0.03456
c	For 600 mm diameter pile	Rm	1			-0.00737
2506	Extra over ST.No.2503 for boring/drilling in rock for a length not exceeding 3 times the diameter of pile, cleaning the pile hole, concreting etc all complete for the following.					
b	For 500 mm diameter pile	Rm	1			0.11558
c	For 600 mm diameter pile	Rm	1			0.09346
2507	Conducting initial load test upto a maximum test load of 2.5 times the safe load capacity on single pile as specified in accordance with IS 2911 (Part-4) including preparation of pile head for testing, necessary excavation, all arrangements of loading, unloading, test equipments/accessories, jacks, recording of results, labour, submission of test report but excluding the cost of installation of pile (installation of pile shall be paid seperately) etc all complete as per specification, drawing and as directed by engineer in-charge for the following.					
a	For vertical compression test by cyclic load method					
ii	500 mm diameter pile	Each	1			2.62206
iii	600 mm diameter pile	Each	1			3.74872
b	For lateral load test					
ii	500 mm diameter pile	Each	1			0.76661
iii	600 mm diameter pile	Each	1			1.07964
c	For tension/uplift test					
ii	500 mm diameter pile	Each	1			0.90712
iii	600 mm diameter pile	Each	1			1.52267
2508	Conducting routine load test on single job pile as specified in accordance with IS 2911 (Part-4) including preparation of pile head for testing, necessary excavation, providing all arrangements of loading, unloading, test equipments/accessories, jacks, recording of results, labour, submission of test report etc but excluding the cost of installation of job pile complete as per specification, drawing and as directed by the engineer-in-charge for the following.					
a	For vertical compression test by maintained load method					
ii	500 mm diameter pile	Each	1			1.83903

ST. NO	DESCRIPTION OF ITEM	UNIT	QTY	UNIT RATE (IN Rs.)	AMOUNT (IN Rs.)	WEIGHTAGE OF TOTAL AMOUNT (%)
iii	600 mm diameter pile	Each	1			2.50146
b	For lateral load test					
ii	500 mm diameter pile	Each	1			0.56533
iii	600 mm diameter pile	Each	1			0.86378
2509	Carrying out pile integrity test on 450mm/500mm/ 600mm/760mm/900mm diameter pile including all arrangements for test, equipments/accessories, materials, labour, submission of test report etc but excluding the cost of installation of job pile all complete as per specification and as directed by the engineer-in-charge.	Each	1			0.02708
2600	OTHER MISCELLANEOUS ITEMS					
2601	Surface dressing of the ground including removing vegetation and in-equalities not exceeding 15 cm deep and disposal of rubbish, lead upto 50 m and lift upto 1.5 m.					
	i) All kinds of soil.	100sqm	1			0.0186
2602	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth upto 30 cm measured at a height of 1 m above ground level and removal of rubbish upto a distance of 50 m outside the periphery of the area cleared.	100sqm	1			0.00958
2603	Clearing grass and removal of the rubbish upto a distance of 50 m outside the periphery of the area cleared.	100sqm	1			0.00491
2604	Felling trees of the girth (measured at a height of 1 m above ground level) including cutting of trunks and branches, removing the roots and stacking of serviceable material and disposal of unserviceable material.					
	i) Beyond 30 cm girth upto and incl. 60 cm girth	each	1			0.00294
	ii) Beyond 60 cm girth upto and incl. 120 cm girth	each	1			0.013
	iii) Beyond 120 cm girth upto and incl. 240 cm girth	each	1			0.06014
	iv) Above 240 cm girth	each	1			0.12062
2605	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :					
	i) 1:5:10(1cement : 5coarse sand : 10 graded stone aggregate 40mm nominal size)	cum	1			0.05977
2606	Applying ready mixed red oxide zinc chromate primer of approved brand and manufacture on steel galvanized iron/steel works.	sqm	1			0.00022
2607	Extra for compaction of earth work in embankment under optimum moisture conditions to give at least 95% of the maximum dry density (proctor density).	cum	1			0.00015
2608	Supplying and stacking at site.:					
	i) 90 mm to 45 mm size stone aggregate.	cum.	1			0.01956
	ii) stone screenings 11.2mm(Type-B) for road work.	cum	1			0.02196
2609	Laying, spreading and compacting stone aggregate of specified sizes to WBM specifications in uniform thickness, hand picking, rolling with 3 wheeled road / vibratory roller 8-10 tonne capacity in stages to proper grade and camber, applying and brooming requisite type of screening / binding material to fill up interstices of coarse aggregate, watering and compacting to the required density .	cum	1			0.00634
2611	Extra for providing and mixing hardening compound of approved quality as per manufacturer's specification in cement concrete.	litre	1			0.00069
2612	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).	cum	1			0.10224
2613	Providing and fixing soil, waste and vent pipes					
	i) 100 dia Sand cast iron S&S pipe as per IS:1729.	meter	1			0.01282

ST. NO	DESCRIPTION OF ITEM	UNIT	QTY	UNIT RATE (IN Rs.)	AMOUNT (IN Rs.)	WEIGHTAGE OF TOTAL AMOUNT (%)
	ii) 75 dia Sand cast iron S&S pipe as per IS:1729.	meter	1			0.01059
2615	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete :					
	i) 150 mm dia RCC pipe	RM	1			0.0052
	ii) 250 mm dia RCC pipe	RM	1			0.007
2614	Providing and filling the joints with spun yarn, cement slurry and cement mortar 1:2 (1 cement : 2 fine sand) in S.C.I./ C.I. Pipes :					
	i) 75 dia pipe	each	1			0.00098
	ii) 100 dia pipe	each	1			0.00116
2616	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931: 15 mm nominal bore	each	1			0.00431
2617	Providing and fixing terminal guard:					
	i) 100mm Sand cast iron S&S as per IS - 1729	each	1			0.00371
	ii) 75 mm Sand cast iron S&S as per IS - 1729	each	1			0.00295
2618	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete :					
	i) 25 mm nominal bore.	Nos.	1			0.00672
2619	Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete:	KG	1			0.0011
2620	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.					
	i) In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works.	KG	1			0.00134
2621	Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railing, staircase railing and similar works, including applying a priming coat of approved steel primer.					
	i) M.S. tube.	KG	1			0.00156
2622	Providing and fixing bolts including nuts and washers complete	KG	1			0.00147
2623	Providing, hoisting and fixing up to floor five level precast reinforced cement concrete in mouldings as in cornices, windows sills etc. including setting in cement mortar 1:3 (1 cement : 3 coarse sand) cost of required centering, shuttering but excluding the cost of reinforcement, with Grade M20 Concrete.	cum	1			0.1477
2636	Providing, laying, cutting & testing NP3 class R.C.C. pipes at road crossing spigot or with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) complete in all respects as per specifications & drawings.					
	i) 200 mm dia RCC pipe	RM	1			0.01729
	ii) 300 mm dia RCC pipe	RM	1			0.02675
	iv) 450 mm dia RCC pipe	RM	1			0.02867
2637	Supplying providing appropriate pasticizer as required for concrete works	kg	1			0.00057
2638	Providing and fixing up to floor five level precast cement concrete solid block, including hoisting and setting in position with cement mortar 1:3 (1 cement : 3 coarse sand), cost of required centering, shuttering complete :					

ST. NO	DESCRIPTION OF ITEM	UNIT	QTY	UNIT RATE (IN Rs.)	AMOUNT (IN Rs.)	WEIGHTAGE OF TOTAL AMOUNT (%)
i	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	cum	1			0.13935
ii	1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)	cum	1			0.12991
2639	Providing and fixing up to floor five level precast cement concrete hollow block, including hoisting and setting in position with cement mortar 1:3 (1 cement : 3 coarse sand), cost of required centering, shuttering complete.					
i	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	cum	1			0.10642
ii	1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)	cum	1			0.10208
2704 (a)	Providing, supplying and fixing anchor bolt with injection adhesive (chemical grouting) of HILTI (RE500) / or equivalent as approved by the Engineer for fixing in wet/Dry conditions of 30 dia. and 505 long. The installation and the setting instructions should be strictly followed as per the manufacturer's recommendations. The rate shall include making required drilling hole, all labour, scaffolding and other incidentals necessary to complete the work as per the drawing and manufacturer's recommendations.	Nos.	1			0.06031
2704 (c)	Providing, supplying and fixing dowel bar with injection adhesive (chemical grouting) of HILTI (RE500) / or equivalent as approved by the Engineer for fixing in wet/Dry conditions of 20 dia and 705 long. The installation and the setting instructions should be strictly followed as per the manufacturer's recommendations. The rate shall include making required drilling hole, all labour, scaffolding and other incidentals necessary to complete the work as per the drawing and manufacturer's recommendations.	Nos.	1			0.00755
					TOTAL	100.00000

Note: In case of deviation in the quantities of items w.r.t. price schedule the payment shall be made on the basis of rates arrived as above

Sub:Rate Contract for two years for carrying out General Civil works for present and future projects of RMSG in Odisha, West Bengal, Jharkhand and Bihar.

NIT NO.RMSG/MM&WC/RC/T-03

PRICE SCHEDULE-B: EARTHING WORKS

Item No.	Description	Unit	Quantity	Unit Rate (In Rs.)	Amount (In Rs.)	WEIGHTAGE OF TOTAL AMOUNT (%)
1	Supplying & Laying & fixing of 65x8mm GI Strip conductor as per specifications and standard practice. The rate shall include the supply & services of 65x8mm thick GI Strip.	RM	1			0.86182
2	Supplying and Laying of earthing mats/rods including risers, transportation from yard stores, loading, unloading, cutting to length, welding, protective painting of joints etc. all complete. (Excavation & Back filling shall be paid separately under respective item of earth work.	MT	1			86.20712
3	Providing Earthing pit as per drawing with charcoal & salt, GI pipes, GI earth electrodes, GI wire, GI strips, brick chamber with covers including associated earthwork etc. all complete	EACH	1			12.93106
						100

Note: In case of deviation in the quantities of items w.r.t. price schedule the payment shall be made on the basis of rates arrived as above

Sub: Rate Contract for two years for carrying out General Civil works for present and future projects of RMSG in Odisha, West Bengal, Jharkhand and Bihar.

NIT NO.RMSG/MM&WC/RC/T-03

ILLUSTRATION FOR ARRIVING AT RATE OF A PARTICULAR ITEM		
A	To calculate unit rate of following items of Price Schedule A	
(i)	Let the price quoted by the bidder for complete package under summary of Prices is	Rs. 5000000
(ii)	As per summary of Prices the weightage of Price Schedule A is	98.822%
(iii)	Hence the value of Price schedule A is	Rs. 4941100
(iv)	As per Price Schedule A the % weightage of following items is	
	101 a	0.00219
	201	0.06443
	301	0.00680
	401	1.08286
	501	0.00905
(v)	Hence the unit rate of items are worked out as	
	101 a	= 0.00219*4941100/100
	201	= 0.06443*4941100/100
	301	= 0.00680*4941100/100
	401	= 1.08286*4941100/100
	501	= 0.00905*4941100/100
		Rs.108.21/Cum
		Rs.3183.55/Cum
		Rs.335.99/Sqm
		Rs.53505.2/MT
		Rs.447.17/Sqm

B	To calculate unit rate of item 1 of Price Schedule B	
(i)	Let the price quoted by the bidder for complete package under summary of Prices is	Rs. 5000000
(ii)	As per summary of Prices the weightage of Price Schedule B is	1.178%
(iii)	Hence the value of Price schedule B is	Rs. 58900
(iv)	As per Price Schedule B the % weightage of item 1 is	0.86182
(v)	Hence the unit rate of item 1 = 0.86182*58900/100	Rs.507.61