

MUNICIPAL CORPORATION OF GREATER MUMBAI

WORK ORDER



Vendor Address & Code	23967
DEV ENGINEERS 307, JALARAM BUSINESS CENTER GANJAWALA GANJAWALA LANE, NEAR CHAMUNDA CIRCLE BORIVALI (W) GANJAWALA MUMBAI 400092 Tel: 022 28945556	

Delivery Address/Storage Loc	9090/0001

PAN	AAKFD8486D
GSTIN	27AAKFD8486D1Z3
UIN	
Place of Supply	MAHARASHTRA(27)
Registered	Yes
Reverse Charge	Yes/No

PO No	4100077864
WBS Element	RT1-21-016.001
PO Date	24.05.2022
PO Currency	INR
Ref Contract No	3900145913
Sanction No	2551
MCGM GSTIN	27AAALM0042L3Z4

Header Text:

AC-175 :- Restoration and Improvement of B.G. Kher Road in Mastic and allied Work in 'D' Ward in Zone-I, City Division.

SAC Code: 995421

NO	Activity No	Rate	Curr	Unit	Est. Qty	Est. Amount
1	R2-WSP-1-1	60.00	INR	SQM	2,300.000	138,000.00
	Clearing the land of all vegetation, stumps, removal of roots, cutting and disposal of the trees upto 30 cms. in girth.					
2	R2-CS-EW-1	307.00	INR	CUM	7,820.000	2,400,740.00
	Excavation for foundations, substructures, basements, tanks, sumps, walls, chambers, manholes, trenches, poles, pits & general building works in all types of soils, vegetable earth, soft murum, running sand, shingle, turf clay, loam, peat, ash, shale, slag, chalk, garbage, muddy/ marshy/ slushy soil, marine clay, reclaimed land etc. for depths/lifts upto 1.5M measured from the ground level, including dressing/ trimming the sides, leveling and ramming of bottoms, manual dewatering, removing rank vegetation, backfilling in layers not more than 200mm thickness, watering, consolidating, compacting to achieve not less than 97% Modified Proctor density conforming to relevant IS, stacking the selected material in measurable heaps for future use within owners space or disposing within an initial lead of 150m as directed, loading, unloading, leveling excluding shoring, strutting etc. complete as directed by Engineer in Charge. Note: 1) The rate includes the handling/supporting the existing utilities such as cables, drains, pipes, water mains etc. 2) It also includes the royalty and other taxes applicable if any. For more details refer General Notes.					
3	R2-CS-EW-2-A	71.00	INR	CUM	1,120.000	79,520.00
	Extra over above item CS EW 1 for lift from 1.5m to 3.0m.					
4	R2-CS-EW-2-B	106.00	INR	CUM	410.000	43,460.00
	Extra over above item CS EW 1 for lift from 3.0m to 4.5m					

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5	R2-CS-EW-2-C	171.00	INR	CUM	320.000	54,720.00
	Extra over above item CS EW 1 for lift from 4.5m to 6.0m					
6	R2-CS-EW-2-D	236.00	INR	CUM	230.000	54,280.00
	Extra over above item CS EW 1 for lift from 6.0m to 7.5m					
7	R2-CS-EW-2-E	301.00	INR	CUM	140.000	42,140.00
	Extra over above item CS EW 1 for lift from 7.5m to 9.0m					
8	R2-CS-EW-2-F	365.00	INR	CUM	10.000	3,650.00
	Extra over above item CS EW 1 for lift from 9.0m to 10.5m					
9	R2-CS-EW-3	500.00	INR	CUM	540.000	270,000.00
	Excavation for foundation, substructures, basements, tanks, sumps, walls, chambers, manholes, trenches, poles, pits & general building works in soft/ disintegrated rock, sand stone, stiff clay, gravel, cobblestone, hard laterite, water bound macadam, wet mix macadam, asphalt mix carpet of anytype, pitching, soling, paths and hardcore, lime concrete, plain cement concrete, stone masonry and all types of brick/ block masonry below ground level, rock boulders, etc. for depths/ lifts upto 1.5M measured from the ground level, including dressing/ trimming the sides, leveling of bottoms, manual dewatering, removing rank vegetation, backfilling in layers not more than 200mm thickness, watering, consolidating, compacting to achieve not less than 97% Modified Proctor density conforming to relevant IS, stacking in measurable heaps for future use within owners space or disposing within an initial lead of 150m as directed, loading, unloading, leveling excluding shoring, strutting etc. complete as directed by Engineer-in-Charge. Note: 1) The rate includes the handling/supporting the existing utilities such as cables, drains, pipes, water mains etc. 2) It also includes the royalty and other taxes if any.					
10	R2-CS-EW-4	1,054.00	INR	CUM	1,460.000	1,538,840.00
	Excavation by chiseling by manual operations, pneumatic breaker, hammer, drilling, compressor breaker, jack hammer etc. for foundations, substructures, basements, tanks, sumps, walls, chambers, manholes, poles, pits & general building works in hard rock, reinforced concrete, Bituminous macadam for depths/lifts upto 1.5M, including dressing/trimming the sides, leveling of bottoms, manual dewatering, removing rank vegetation, backfilling in layers not more than 200mm thickness, watering, consolidating, compacting to achieve not less than 97% Modified Proctor density conforming to relevant IS, stacking in measurable heaps for future use within owners space or disposing within an initial lead of 150m as directed, unloading, leveling excluding shoring, strutting etc. complete as directed by Engineer-in-Charge, loading. Note: 1) The rate includes the handling/supporting the existing utilities such as cables, drains, pipes, water mains etc. 2) It also includes the royalty and other taxes if any.					

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NO	Activity No	Rate	Curr	Unit	Est. Qty	Est. Amount
11	R2-CS-EW-18	3,007.00	INR	CUM	500.000	1,503,500.00
	Excavation by using splitters over areas for basements, roads, land/plot developement etc. in hardrock, reinforced concrete, Bituminous macadam for all depths/lifts, including manual dewatering,filling the selected excavated earth at the locations as directed, in layers not more than 200mmthickness, watering, consolidating, compacting to achieve not less then 97% Modified Proctor densityconforming to relevant IS, stacking the selected material in measurable heaps for future use withinowners space or disposing within an initial lead of 150m as directed, loading, unloading, levelingexcluding shoring, strutting etc. complete as directed by Engineer-in-Charge.Note:1) The rate includes the handling/supporting the existing utilities such as cables, drains, pipes,water mains etc.2) It also includes the royalty and other taxes if any.					
12	R2-CS-EW-7-A	127.00	INR	CUM	440.000	55,880.00
	Extra over the items CS EW 03 to CS EW 06 for lift from 1.5m to 3.0m.					
13	R2-CS-EW-7-B	227.00	INR	CUM	140.000	31,780.00
	Extra over the items CS EW 03 to CS EW 06 for lift from 3m to 4.5m.					
14	R2-CS-EW-7-C	327.00	INR	CUM	90.000	29,430.00
	Extra over the items CS EW 03 to CS EW 06 for lift from 4.5m to 6.0m.					
15	R2-CS-EW-7-D	427.00	INR	CUM	50.000	21,350.00
	Extra over the items CS EW 03 to CS EW 06 for lift from 6.0m to 7.5m.					
16	R2-CS-EW-7-E	528.00	INR	CUM	60.000	31,680.00
	Extra over the items CS EW 03 to CS EW 06 for lift from 7.5m to 9.0m.					
17	R2-CS-EW-7-F	628.00	INR	CUM	10.000	6,280.00
	Extra over the items CS EW 03 to CS EW 06 for lift from 9.0m to 10.5m.					
18	R2-CS-EW-13	715.00	INR	SQM	150.000	107,250.00
	Providing and removing open or closed shoring and strutting in the trenches/ pits for all depths as per specifications/ drawings and or asdirected by Engineer in charge by including walling, struts,open poling boards, horizontal sheeting, runners, dog spikes by usingtimber etc. complete. Ref. rate of item SE 1 4					

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NO	Activity No	Rate	Curr	Unit	Est. Qty	Est. Amount
19	R2-CS-EW-16	343.00	INR	CUM	4,770.000	1,636,110.00
	Excavation over areas for basements, roads, land/plot developement in soft/ disintegrated rock, sandstone, stiff clay, gravel, cobblestone, hard laterite, water bound macadam, wet mix macadam, pitching, soling, paths and hardcore, lime concrete, plain cement concrete, stone masonry and all types of brick/ block masonry below ground level, rock boulders, etc. for all depths/lifts including manual dewatering, filling the selected excavated earth at the locations as directed, in layers not more than 200mm thickness, watering, consolidating, compacting to achieve not less than 97% Modified Proctor density conforming to relevant IS, stacking the selected material in measurable heaps for future use within owners space or disposing within an initial lead of 150m as directed, loading, unloading, leveling excluding shoring, strutting etc. complete as directed by Engineer-in-Charge. Note: 1) The rate includes the handling/supporting the existing utilities such as cables, drains, pipes, water mains etc. 2) It also includes the royalty and other taxes if any.					
20	R2-CS-DD-5-B	1,393.00	INR	CUM	520.000	724,360.00
	Demolishing stone rubble masonry manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge : In cement mortar					
21	R2-RW-7-10	82.00	INR	SQM	1,230.000	100,860.00
	Milling upto 75mm depth Asphaltic surface by using milling machine including transportation anywhere as directed. (This item should be operated only when the milling in a single pass is required to be done more than 60mm Depth.)					
22	R2-RW-1-01	180.00	INR	SQM	110.000	19,800.00
	Scarifying the existing bituminous road surface to a depth of 15 cm removing, including transportation any where & bringing the existing road to proper grade, level & camber & as per super elevation, rolling with 10/12 Tonnes power roller & binding the scarified layer with stone dust/grit/ sand, watering, brushing, rolling, etc. complete as specified as directed by the Engineer.					
23	R2-RW-1-05	9.27	INR	SQM	1,540.000	14,275.80
	Levelling, watering and rolling to 95% Standard Proctor Density with a power roller weighing not less than 10 tonnes and preparing the ground to the required grade and camber as specified as directed by the Engineer.					

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NO	Activity No	Rate	Curr	Unit	Est. Qty	Est. Amount
24	R2-RW-1-09	1,535.00	INR	CUM	4,050.000	6,216,750.00
	P/L a top layer of 15cm. compacted thickness of earth, rolling with 10/12 tonne power roller, watering etc. complete in conformity with the lines, grades & cross sections & camber super elevation (Lab C.B.R. in soaked condition shall not be less than 10) including clearing & grubbing the ground etc. complete (including stabilisation if necessary.) as per prevailing MCGM specification for Roadworks clause no. 151.0					
25	R2-RW-2-21	2,547.00	INR	CUM	1,330.000	3,387,510.00
	Providing & laying, spreading & compacting specified crushed stone in granular subbase course including premixing the material in mechanical mixer (pug mill or approved type), spreading of mixed material in uniform layer of 100mm to 75mm (compacted thickness each) with motor grader or paver on prepared surface & compacting with 10 tonne vibratory roller to achieve desired density including all material, labour, machinery, lighting barricading to all lifts & lead maintenance of diversion etc. complete (metal gradation from 75mm to 75 micron as per prevailing MCGM specification for Roadwork clause no. 210).					
26	R2-RW-2-20	2,937.00	INR	CUM	2,110.000	6,197,070.00
	Providing & laying, spreading & compacting graded crushed stone aggregate to wet mix macadam satisfaction including premixing the material with water to OMC in mechanical mix (pug mill) carriage of mix material by tipper to site laying in uniform layer of 75mm to 100mm (compacted thickness each) with sensor paver finisher on prepared subbase & compacting with vibratory roller (10 tonne) to achieve desired density including lighting, guarding barricading & maintenance of diversion etc. as directed by the Engineer, (Rebate for not using sensor paver should be taken, (metal gradation from 53mm to 75mm micron as per prevailing MCGM specification for Roadwork clause no. 240)).					
27	R2-RW-5-22	72.00	INR	SQM	7,620.000	548,640.00
	Providing and applying PRIME COAT with CATIONIC BITUMEN EMULSION (SS) @ 12 to 15 Kg. of 10 Sqmt. over prepared surface to receive bituminous mix by applying PRIMER with mechanical spray bitumen, including cleaning of road surface etc. completed, as directed For High Porosity surface & the primed surface shall be allowed to cure for at least 24 hours or any other higher period, as is found to be necessary to allow all the moisture or volatiles to evaporate before any subsequent bituminous surface treatment or mix is laid (As per prevailing MCGM specification for Roadwork Clause No. 313, curing as per 313.5)					

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NO	Activity No	Rate	Curr	Unit	Est. Qty	Est. Amount
28	R2-RW-5-23	33.00	INR	SQM	7,620.000	251,460.00
	Providing and applying TACK COAT with CATIONIC BITUMEN EMULSION (RS) @0.2 to 0.25 Kg. of Sq.mt. over prepared surface to receive bituminous mix by applying TACK COAT with mechanical spray bitumen, including cleaning of road surface etc. completed, as directed for NORMAL BITUMINOUS SURFACES & the tack coat shall be left to cure until all the volatiles have evaporated before any subsequent construction is started, which is indicated by change in colour from brown to black (As per prevailing MCGM specification for Roadwork Clause No.314, curing as per 314.3.4)					
29	R2-RW-5-48	440.00	INR	SQM	7,620.000	3,352,800.00
	P/L hot Premix Dense bituminous macadam with 4.5% bitumen content of grade VG-30 to the required line, level, and camber rolling with 10/12M.T. power, vibratory roller & sensor paver etc. complete as specified and as directed to thickness of 50 mm. with anti stripping agent at 1% by weight of bitumen using grading II of "MORTH" (per prevailing MCGM specification for Roadwork clause no.354)					
30	R2-RW-5-50	8,797.00	INR	CUM	2.000	17,594.00
	P/L hot Premix Dense bituminous macadam with 4.5% bitumen content of grade VG-30 to the required line, level, and camber rolling with 10/12M.T. power, vibratory roller & sensor paver etc. complete as specified and as directed to the required thickness with anti stripping agent at 1% by weight of bitumen using grading II of "MORTH" (As per prevailing MCGM specification for Roadwork clause no.354).					
31	R2-RW-5-33	985.00	INR	SQM	7,620.000	7,505,700.00
	P/L Mastic Asphalt 40 mm. thick as per I.S. code No. 5317/2002. (As per prevailing MCGM specification for Roadwork Clause No. 365)					
32	R2-RT-16-33	662.00	INR	SQM	500.000	331,000.00
	Providing and applying hot applied thermoplastic road marking material with glass beads extremely high skid resistance 2.5mm thick without primer coat (tack coat) on asphalt road surface. All labour materials with special aggregates etc, as specified in B.S. part-I & II 1989 and carrying out the marking on any road on center line and other lane marking continuous for intermittent 10cm or 15cm width and also pedestrian crossings stripes as well as spraying further quality of glass beads of type II uniformly into a mono layer on to the hot paint line in quick succession of the paint spraying operation @ 250gms per sq.mt. area as directed and as per B.S./M.O.S.T. specification in White /Yellow colour.					
33	R2-RT-16-07	1,241.00	INR	NOS	5.000	6,205.00
	Arrow marking for Route direction straight or right or left or straight & right or straight or left & lettering as per design in white or traffic yellow as specified and directed for speed limit upto 50 km/hrs.					

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NO	Activity No	Rate	Curr	Unit	Est. Qty	Est. Amount
34	R2-RT-16-34	427.00	INR	NOS	250.000	106,750.00
	Supplying/ fixing of Two Way Raised Pavement Markers made of polycarbonate moulded body and reflective panels with micro prismatic lens capable of providing total internal reflection of the light entering the lens face and shall support a load of 13635 kg tested in accordance to ASTM D 4280 Type H and complying to Specifications of Category A of MORTH Circular No RW/NH/33023/10-97 - DO III Dt 11.06. 1997 . The minimum reflective area of 13 SqCm on NOS side and the slope to the base shall be 35 +/- 5 degree. Fixing will be without nails but by using epoxy resin based adhesive as per manufacturer's recommendation including site clearance etc and complete as directed by the engineer.'					
35	R2-CS-EW-26	2,231.00	INR	CUM	660.000	1,472,460.00
	"Providing & Laying dry stone Rubble Soling with average 230 mm size hard stone set in regular lines, handpacked and interstices thoroughly filled with small chips including filling in with good quality murum brought from outside, compacting with iron rammers, watering, sand spreading 12mm thk. layer of grit on top etc complete as directed by Engineer In Charge. (Note: The rate includes the royalty and other taxes if any)"					
36	R2-CS-CW-2-A-2	6,764.00	INR	CUM	300.000	2,029,200.00
	Providing & laying in position ready mixed PCC, using flyash & cement content as per approved design mix from Eng. in charge & flyash conforming to grade I of IS 3812 (Pt-1) only be used as part replacement of OPC as per IS 456 & uniform blending with cement is to be ensured in accordance with clauses 5.2 and 5.2.1 of IS 456-2000 in the items of RMC & manufactured in fully automatic batching plant & transported to site of work in transit mixer for all leads, having continuous agitated mixer, manufactured as per mix design of specified grade for PCC, incl. pumping of R.M.C. from transit mixer to site of laying & curing, incl. cost of centering, shuttering & finishing, incl. cost of curing, admixtures in recommended proportions as per IS 9103 to accelerate/retard setting of concrete, improve workability without impairing strength & durability as per direction of Eng. in charge. All works upto plinth level. M-15 grade plain cement concrete (cement content considered @ 240 kg/cum).					
37	R2-RW-10-29	7,055.00	INR	CUM	80.000	564,400.00
	P/L R.M.C. M-20 C.C. having avg. compressive strength 24 Mpa procured from M.C.G.M. approved R.M.C. plant including use of approved plasticizer/retarder & transported by transit mixer & placing at worksite, compacting, finishing curing etc. by contractor's water & tarring the sides of from work with hot bitumen as specified & directed by the Engineer. (MINIMUM CEMENT CONTENT 260 Kg/m ³ .)					

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NO	Activity No	Rate	Curr	Unit	Est. Qty	Est. Amount
38	R2-RW-10-63	436.00	INR	SQM	1,730.000	754,280.00
	Extra Over Item of stencil concrete above M-20 in footpath :Providing, applying and finishing the top surface of M-20 concrete with stamp/stencil of approved pattern and colour, in accordance with manufacturer's specification of any approved brand of colourhardener @ of 3.5kg/sq.m, including floating of colour hardened over concrete surface with different types of floaters; including application of release agent @ of 0.15 kgs/sq.m, stamping over the concrete surface with stamping tools; including cleaning of surface with water and cutting off finished concrete; including application of two coats of acrylic based sealer for finishing. Colourhardener and release agent shall be tested for abrasion resistance for a depth of wear, should not be more than 0.025 mm. Coverage of sealer should not be more than 6.5 sq.m. per one litre coat; including cost of skilled manpower, cutting machine, sprayer and all tools tackies for all activities; complete smooth & finish as per direction of Engineer-In-Charge					
39	R2-CS-CW-7-A	7,515.00	INR	CUM	600.000	4,509,000.00
	Providing&laying in position ready mixed design mix M20gr cement concrete for RCC work, using cement content as per appd design mix, incl. pumping of concrete to site of laying&cost of centering, shuttering, finishing & excl. rfmt, inc. admixtures in recom. proportions as per IS 9103 to accelerate, retard setting of concrete, improve workability without impairing strength & durability as per direction of Eng. in charge. Mix design as per particular spec shall be got approved by Eng. in Charge before execution of item. Rate shall include cost of all specified materials & operations at all levels & ht, incl. cost of centering, shuttering & excl. rfmt which shall be paid under relevant item. (Note Cement content considered in this item is @300 kg/cum as per IS 456 table showing min. cement content. No extra will be paid nor any amt will be recovered on acc. of variation of cement in mix design as per specs for controlled concrete). All works (incl. Centering&Shuttering) Foundations, footings, bases of columns, rafts, pile cap					

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NO	Activity No	Rate	Curr	Unit	Est. Qty	Est. Amount
40	R2-CS-CW-7-B	10,518.00	INR	CUM	600.000	6,310,800.00
	Providing&laying in positionreadymixeddesignmix M20gr cement concretefor RCC work,using cement content as per appd designmix,incl.pumping ofconcretetosite of laying&cost of centering,shuttering,finishing & excl.rfmt, inc.admixtures in recom. proportions asper IS9103 toaccelerate,retard setting ofconcrete,improveworkabilitywithoutimpairing strength&durability as perdirectionof Eng.incharge.Mixdesign as perparticular spec shall be got approved by Eng.inChargebefore execution of item.Rate shall includecostofallspecifiedmaterial&operationat all levels & ht,incl.cost ofcentering,shuttering& excl.rfmt whichshallbepaid under relvt. item.(Note Cementcontentconsidered in this item is @300 kg/cumas per IS456 table showingmin.cementcontent.No extra will be paid nor any amt will recovered on acc.of variation of cement in mixdesign asper specs for controlledconcrete).All works(incl.Centering&Shuttering) Walls incl.attachedbutereses,retainingwall,shearwall,diaphragmwall,trench,pit walls					
41	R2-CS-CW-7-C	11,790.00	INR	CUM	230.000	2,711,700.00
	Providing&laying in positionreadymixeddesignmix M20gr cement concretefor RCC work,using cement content as per appd designmix,incl.pumping ofconcretetosite of laying&cost of centering,shuttering,finishing & excl.rfmt, inc.admixtures in recom. proportions asper IS9103 toaccelerate,retard setting ofconcrete,improveworkabilitywithoutimpairing strength&durability as perdirectionof Eng.incharge.Mixdesign as perparticular spec shall be got approved by Eng.inChargebefore execution of item.Rate shall includecostofallspecifiedmaterial&operationat all levels & ht,incl.cost ofcentering,shuttering& excl.rfmt whichshallbepaid under relvt. item.(Note Cementcontentconsidered in this item is @300 kg/cumas per IS456 table showingmin.cementcontent.No extra will be paid nor any amt will recovered on acc.of variation of cement in mixdesign asper specs for controlledconcrete).All works(incl.Centering&Shuttering) Slabs, Suspended floors,roofs, landings, balconies, canopy and access platform					
42	R2-CS-CW-19	1,064.00	INR	CUM	490.000	521,360.00
	Extra and over for providing richer RMC of M-40 grade cement concreteinstead of M20 (Note :- Cement content considered in this item is @ 360kg/cum as per IS 456 table showing minimum cement content.)					

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43	R2-CS-CW-22-C	9,724.00	INR	CUM	90.000	875,160.00
	Designing, providing & laying in any position, without usage of vibrator, ready mixed design mix Self Compacting Cement Concrete of required grade for Form Finished reinforced cement concrete work in super structure at all floor levels, using cement & flyash, content as required incl. transportation of concrete through transit mixer to site of laying for all leads, all floor levels, pumping of concrete to site of laying but excl. cost of centering, shuttering, incl. admixtures conforming to IS 9103 as per designed proportions to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Eng. in charge. The Mix design as per particular specifications shall be got approved by Engineer-in-Charge before execution of the item. The rate shall include cost of all specified materials and operations, but exclude the cost of centering, shuttering and reinforcement which shall be paid under relevant item. M-40 Grade SCC					
44	R2-CS-CW-30-A	300.00	INR	SQM	20.000	6,000.00
	Centering and shuttering of steel plates with M.S. Angles including strutting, propping etc. and removal of form for : Foundations, footings, bases of columns, rafts, pilecap					
45	R2-CS-CW-30-B	558.00	INR	SQM	170.000	94,860.00
	Centering and shuttering of steel plates with M.S. Angles including strutting, propping etc. and removal of form for : Walls (any thickness) including attached buttresses, retaining wall, shear wall, diaphragm wall etc					
46	R2-BW-3-11	281.00	INR	EA	30.000	8,430.00
	Providing weep holes in Brick masonry/Plain/Reinforced concrete abutment, wing wall/return wall with 100 mm dia PVC pipe, extending through the full width of the structure with slope of 1V : 20H towards drawing face. Complete as per drawing and Technical specifications					
47	R2-CS-CW-35-E	82,356.00	INR	TO	210.000	17,294,760.00
	"Providing and fixing in position steel bars reinforcement of various diameters for R.C.C. pile, pile caps, footings, raft, retaining wall, shear wall, lift wall, foundations, slabs, beams, columns, canopies, staircases, newels, chajjas, lintels, parapets, coping, fins, arches, etc. as per detailed designs, drawings and bar bending schedules, including straightening, cutting, bending, hooking the bars, binding with wires or tack welding, supporting as required etc. all complete at all levels. Corrosion Resistant Steel (500 CRS D)"					

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48	R2-BW-5-3-F	281.00	INR	SQM	1,770.000	497,370.00
	Providing and applying protective paint consisting of two coats of coal tar epoxy paint over one coat of primer of approved quality and make to the external surfaces of concrete structures to be buried under the soil etc. complete as specified and directed.					
49	R2-CS-SS-01	80,088.00	INR	TO	10.000	800,880.00
	Providing, detailing, fabricating and fixing at desired location using hot rolled sections and MS plates of grade Fe 250 as per specifications and approved fabrication drawings (which are to be prepared by Contractor and got approved from Engineer), transporting to site and erecting structural steel members for all heights & at all levels including provision of necessary erection bolts, fixing bolts, nuts, washers, cleats, stiffeners, gussets, base plate, and all necessary fixtures and operations like preheating as per specifications, straightening, bending, cutting, drilling, grinding, machining if specified, welding, grinding and removing the welding burr and preparing surface for painting with wire brush cleaning and applying two coats of epoxy red oxide zinc phosphate primer of 30 microns each and two coats of Epoxy Corrosion Resistant Enamel paint of 30 microns after fabrication including touching up with spray painting after erection etc complete as directed by Engineer In Charge. (The qty. for this item shall be measured for gusset plates, base plates, bolts in M.T.)					
50	R2-SWD-89	48,262.00	INR	EA	2.000	96,524.00
	Providing and constructing stormwater drain brick masonry conical manhole as per standard drawings (Dwg No. MCGM/SWD/2013-02), with 1.50m internal dia at bottom, 0.56 m internal dia at top as per IS 4111: Part 1:1986 Cl.4.9 for a depth 2.30 m built in brick masonry in cement mortar 1:2, 20 mm thick plastering both external and internal faces of walls in cement mortar 1:1 (without waterproofing compound) and neat cement rendering so as to give a smooth surface, including 300 mm thick M-15 grade cement concrete in foundation and in haunches and channels finished smooth with 20 mm thick cement plaster in cement mortar 1:1 and providing & installing approved Co-polymer polypropylene steel reinforced manhole safety step (weighing between 0.8 to 0.9 Kg) at 375 mm c/c, including 75 mm wide vata all round the external portion of the manhole and the foundation concrete in cement mortar 1:1 and supporting the incoming and outgoing pipes with brick masonry wherever necessary, including 300 mm h					

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NO	Activity No	Rate	Curr	Unit	Est. Qty	Est. Amount
51	R2-SWD-90	37,398.00	INR	MTR	1.000	37,398.00
	Extra over item no R2-SWD-89 per meter depth above 2.30m and upto 5.0m including safety chain and extra Co-polymer polypropylene steel reinforced steps on either side of benching, etc complete as specified & as directed by Engineer in Charge.					
52	R2-SWD-182-A	14,504.00	INR	NOS	2.000	29,008.00
	Supplying and fixing 0.56m internal dia D.I. air-tight hinged type cover and frame (weighing minimum 80 kg.) of material grade SG-500/7 as per IS 1865-1991 with grade designation of C250 as per EN-124, specification no SP-SWD-3, including testing and inspection as per guidelines of IS specifications, including fixing with M-30 concrete and locking arrangement etc. complete as specified and as directed. as directed by Engineer in Charge.					
53	R2-SWD-81-A	7,366.00	INR	MTR	30.000	220,980.00
	Description same as item no. SWD-76-A, for Pipe Dia 900 mm (NP3 class)					
54	R2-RW-8-01	454.00	INR	MTR	110.000	49,940.00
	P/L 150mm dia. R.C.C. hume pipes, NP2 class, jointing, filling in 1:1 C.M., including plugging of both the ends with gunny bags, brick masonry in C.M. 1:4 with plaster in C.M. 1:4 & curing etc. complete, as specified as directed.					
55	R2-RW-8-02	640.00	INR	MTR	110.000	70,400.00
	P/L 250mm dia. R.C.C. hume pipes, NP2 class, jointing, filling in 1:1 C.M., including plugging of both the ends with gunny bags, brick masonry in C.M. 1:4 with plaster in C.M. 1:4 & curing etc. complete, as specified as directed					
56	R2-RW-8-03	796.00	INR	MTR	380.000	302,480.00
	P/L 300mm dia. R.C.C. hume pipes, NP2 class, jointing, filling in 1:1 C.M., including plugging of both the ends with gunny bags, brick masonry in C.M. 1:4 with plaster in C.M. 1:4 & curing etc. complete, as specified as directed					
57	R2-RW-10-26	6,893.00	INR	CUM	220.000	1,516,460.00
	P/L ready mix cement concrete M-15cc having avg compressive strength 18.5 Mpa for foundation/ encasement/ pavement/ cradle including formwork, mixing in batching plant, compacting by internal & surface vibrator, curing, finishing etc. complete as specified & as directed by the Engineer. Contractor has to make his own arrangement for water for curing etc. & will not be paid separately for it. (MINIMUM CEMENT CONTENT 240 Kg/m ³ .)					

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NO	Activity No	Rate	Curr	Unit	Est. Qty	Est. Amount
58	R2-SWD-141	17,168.00	INR	EA	10.000	171,680.00
	Constructing double water entrance of internal size 0.60m x 1.20m with cast-in-situ coping in M-20 grade, fixing gratings in M -20 as per standard drawings (Dwg No. MCGM/SWD/2013-13), etc complete as specified and as directed by Engineer in Charge. (excluding excavation, providing and fixing of gratings and frame)					
59	R2-SWD-142	11,641.00	INR	EA	5.000	58,205.00
	Constructing single water entrance of internal size 0.50m x 0.60m with cast-in-situ coping in M-20 grade, fixing of grating in M -20 as per standard drawings (Dwg No. MCGM/SWD/2013-14), etc complete as specified and as directed by Engineer in Charge. (excluding excavation, providing and fixing of gratings and frame)					
60	R2-SWD-133	22,585.00	INR	MTR	20.000	451,700.00
	Constructing row of gratings connected to the water entrance including M-15 C.C. foundation channel, brick masonry 230 mm thick in Cement mortar 1:4, coping in M-20, fixing Ms gratings with frame, R.C.C. runner beams, including finishing the inside with 12 mm thick plaster 1:2. etc. complete as directed by Engineer-in-Charge excluding excavation and as per the drawing available in Dy.Ch.E.(S.W.D.) Citys office (size of gratings 0.60m x 0.50m)					
61	R2-SWD-135-A	642.00	INR	MTR	30.000	19,260.00
	Manufacturing and supplying R.C.C. M-20 precast runners for single and double water entrances in length as per standard drawings (Dwg No. MCGM/SWD/2013-16), etc complete as specified and as directed by Engineer in Charge.					
62	R2-SWD-17-A	16,195.00	INR	CUM	1.500	24,292.50
	Providing and laying RMC (Ready Mixed Concrete) M-25 grade RCC (Reinforced Cement Concrete) work in dhapas, beams and slabs, etc. with reinforcement between 0.8% to 1%, including curing by any means, providing, placing, removing, launching, cleaning, stripping the formwork, finished with cement sand plaster 12 mm thick in 1:2 proportion, etc. complete as directed by Engineer in Charge.					

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NO	Activity No	Rate	Curr	Unit	Est. Qty	Est. Amount
63	R2-SWD-176-A	17,084.00	INR	EA	1,540.000	26,309,360.00
	Providing & Fixing 1.20m X 0.60m clear internal size of M.S. Galvanisedhinged type grating and frame (weighing minimum 130 kg) of gradeHD20, with minimum 75 microns zinc coating by hot dipped galvanising the MS grating and frame as per IS 2629. (The contractor shallfurnish the certificate of galvanising from the Galvaniser.) includingtesting ,inspection of material sample and finished product as per IS standards and as per Standard Specification no SP-SWD-3and as per standard drawing , etc complete as specified & as directedby Engineer in Charge.					
64	R2-CS-SL-13	184.00	INR	KG	6,780.000	1,247,520.00
	Providing and Fixing Decorative / Ornamental grills as per design forcompound wall / Fencing including fabricating the grill using M.S.square / roundbar, flats and angles including painting with one coat of red oxide zinc chromate primer and two coats of syntheticeamel paint of approved colour and brand etc. complete as directed.					
65	R2-RW-3-22	157.00	INR	SQM	560.000	87,920.00
	Removing the paver blocks of any thickness, size & colour from carriageway or footpath & transporting the same to ward depot or any where inMCGM limit. The paver blocks shall be stacked neatly at specified location etc. complete as specified and as directed by theEngineer.					
66	R2-CS-DD-1	1,314.00	INR	CUM	5.000	6,570.00
	Demolishing cement concrete manually/ by mechanical means includingdisposal of material within 50 metres lead as per direction of Engineer- in - charge.					
67	R2-RW-10-60	605.00	INR	MTR	1,410.000	853,050.00
	Providing and fixing of the precast kerb stone of height 325mm., basewidth 165mm., top width 115mm.in M20grade RMCsupplied through MCGMapproved plant or concrete mixed with use of weigh batch mixers as detailed in drawingu/No.Dy.Ch.E./Rds/93/E.S. of17 /8 / 2005,excavation in any soil except rock, laying a leveling course of M 15grade RMC 100mm. thick, to required slope (inclusive of form work) jointing in C.M.1:2 proportion flush to concrete surface, paintingexposed surface with one coat of primer and two coats of 1st grade roadmarking paint in the yellow/white/black or any shade as directed.(Kerbstones shall be procured from MCGM registered agencies).					

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NO	Activity No	Rate	Curr	Unit	Est. Qty	Est. Amount
68	R2-RW-10-61	471.00	INR	MTR	500.000	235,500.00
	Providing and fixing of the precast tapered water table of thickness varying from 105 to 125 mm., 300mm. Width in M 20 grade RMC (Supplied through MCGM approved plant) or concrete mixed with use of weigh batch mixers as detailed in drawing No. DyChE/Rds/94/E.S. dated 17.8.2005 inclusive of excavation in any soil except rock, laying of leveling course of M 15 grade RMC 100mm. thick to required slope, (inclusive of form work) jointing in 1:2 cm. prop. flush to concrete surfaces as directed (Water tables shall be procured from MCGM registered agencies).					
69	R2-RW-4-07	398.00	INR	MTR	90.000	35,820.00
	Removing & resetting water tables 30 cm. wide on a new M-20 cement concrete bed 15 cm. thick including filling in the joints with C.M. 1:2 and cement pointing, curing including removing the old cement bed, curing etc. complete.					
70	R2-RW-7-17	50.00	INR	MTR	50.000	2,500.00
	Providing applying Yellow & Black road marking paint grade -I in 3- coats including single coat of approved brand primer after cleaning of old surface of kerb stone with brushing by wire brush as per relevant I. S. codes to satisfaction of Engineer in charge etc. complete.					
71	R2-RW-6-03	1,151.00	INR	EA	2.000	2,302.00
	Raising or lowering circular manholes to the required level upto 20 cm. including all material, form work etc. with 16 cm. thick cement concrete M-15 (1:2:4) c.c. coping under frame and cover of manhole, including curing etc. complete as specified and as directed.					
72	R2-RW-6-04	801.00	INR	EA	2.000	1,602.00
	Raising or lowering water entrances, hydrant key box/ sluice box/ gully trap chambers to the required level, upto 20 cm. including all materials, curing etc. complete as specified and as directed.					

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NO	Activity No	Rate	Curr	Unit	Est. Qty	Est. Amount
73	R2-CS-PS-169-C-1	22,257.00	INR	EA	20.000	445,140.00
	Constructing brick masonry inspection chamber in cement mortar 1:4 (1cement : 4 coarse sand) with R.C.C. top slab with 1:2:4 mix (1 cement: 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand : 8graded stone aggregate 40 mm nominal size), inside plastering 12 mmthick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concretel:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mmnominal size) finished with a floating coat of neat cement complete as per standard design Inside size 120x90 cm and 90 cm deepincluding C.I. cover with frame (heavy duty) 560 mm internal diameter, total weight of cover and frame to be not less than 208 kg (weight of cover 108 kg and weight of frame 100 kg) :With common burnt clayF.P.S. (non modular) bricks of class designation 3.					
74	R2-RW-6-05	2,297.00	INR	EA	7.000	16,079.00
	Raising or lowering rectangular manholes to the required level upto 30 cm, including all materials, form work, brick work and with 16 cm, thick M-15 C.C. coping under frame & cover of manholeincluding curring etc. complete, as specified and as directed.					
75	R2-HE-8-24	1,452.00	INR	NOS	3.000	4,356.00
	Removing and refixing of existing S.P. fire hydrants for replacing of mouth piece, duck foot bend, Sluice valve, as required as per specifications & drawing but including painting the hydrant, fixing the saddle piece, supplying and jointing the same with spun yarn, molten lead, includingcaulking etc. complete as directed & as specified by Engineer In Charge. (as per IS : 908) Note :1) The new material required, will be paid separately on the basis of weight per kg of material.2) The cost of constructing valve chamber will be ely. 3) Rebate for salvation cost of existingmaterial replaced will be taken at the rate of Rs 25/Kg Basic rate for new material a) CIRs 55 /kg b) DI Rs 161/kg c) MS Rs 84 /kg					
76	R2-HE-8-25	15,104.00	INR	NOS	1.000	15,104.00
	Removing of existing S.P. fire hydrants and replacing them with new SP fire hydrants with itscomplete assembly including supplying and jointing the same with spun yarn, molten lead, includingcaulking etc. complete as directed & as specified by Engineer In Charge. (as per IS : 908). Note :The salvage value for old fire hydrant has been considered on per Kg basis.					
77	R2-RW-7-01	881.00	INR	EA	10.000	8,810.00
	Removing & refixing traffic regulatory boards/busstop boards/street name boards etc. in M-10 cementconcrete, complete as directed.					

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NO	Activity No	Rate	Curr	Unit	Est. Qty	Est. Amount
78	R2-RW-7-02	197.00	INR	EA	1.000	197.00
	Removing traffic regulatory boards/busstop boards with brackets etc., toWard Chowky complete, as directed.					
79	R2-RT-16-08	22,712.00	INR	NOS	4.000	90,848.00
	Providing, fabricating & erecting Street Name Board (type 2S-A-1) asper the design incorporated in the catalogue of street Furniture(Volume-II) Published by M.C.G.M. Vertical pole shall Hot dip galvanised M.S. Square pipe of size 75x75x3.5mm thk. Signage plaque (box)shall be Hot dip galvanised M.S. angle frame covered with 4mm thkaluminum composite panel. The signage plaque shall be fixed to the vertical pole with 40x10mm thk size MS support plate. Both the boxesshall be pasted with MICRO PRISMATIC GRADE retro reflective base sheetson both sides conforming to Type XI standards of I.R.C.67 2012 CODE. Letters or borders to be pasted using transparent electrocuttable film. The reflectivity of sheet shall have guarantee of 10years, the reflection count shall not be less than 80% of its original reflection after 10 years. The vertical pole shall be fixedto the ground by means of a properly designed foundation of size750x750x900mm.					
80	R2-RT-16-15	35,459.00	INR	NOS	4.000	141,836.00
	Providing, fixing & erecting on site Junction Name Board / Chowk (type2S-D), as per the design incorporated in the catalogue of streetFurniture published by M.C.G.M., Vertical pole shall be Hot dipgalvanised M.S. Square pipe of size 100mm x 100mm x 3.5mm thick.Signage plaque (box) shall be of size 900mm x 900mm made of M.S.L angleframe of size 50mm x 50mm x 6mm thick covered with4mm thick aluminum composite panel on both sides, The box shall be pasted with MICROPRISMATIC GRADE retro reflective base sheets on both sides conformingto Type XI standards of R.C. 67 2012 CODE. Letters or borders to be pasted using transparent electro cuttable film. Thereflective of sheet shall have guarantee of10 years. The refectioncount shall not be less than80%of its original reflection after10 years. The vertical pole shall be fixed by means of a properly designedfoundation of size 750mmx750mmx900mm.					

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NO	Activity No	Rate	Curr	Unit	Est. Qty	Est. Amount
81	R2-RT-16-25	6,469.00	INR	NOS	10.000	64,690.00
	Mandatory Board (600mm dia) hanging on pole - Providing, Fabricating, Erecting on site Mandatory & Cautionary Boards (of type 1S-A-3). As per the design incorporated in Street Furniture catalogue volume-II published by M.C.G.M., Signage plaque (box) shall be of size 600mm dia. Mounted on existing electrical pole with GL clamp. The box shall be made of 4mm thick fibre reinforced plastic box covering both sides of pole. The circumferential edge shall be closed with 3 mm thick FRP. The box shall be pasted with MICRO PRISMATIC GRADE retroreflective base sheets on both sides conforming to Type XI standards of I.R.C. 67 2012 CODE. Letters or borders to be pasted on this box using transparent electro cuttable film. The reflectivity of sheet shall have guarantee of 10 years. The reflection count shall not be less than 80% of its original reflection after 10 years shown in the drawing complete as per specification and as directed by the Engineer.					
82	R2-RW-10-37	471.07	INR	MTR	10.000	4,710.70
	Providing and fixing of the precast TREE GUARD KERB of M-20 C.C. of height 230mm., width 100mm., Length 400mm., finished neatly, compacting, curing, formwork etc. including bedding of M-10 C.C. procured from M.C.G.M. approved R.M.C. plant, 10cm. thick, filling of jointing in C.M. 1:2 and painting the exposed surface with 3 coats of road marking paint, Grade I of approved colours and quality including single coat of approved brand primer including excavation in C.C., asphalt etc. as specified and as directed.					
83	R2-RW-7-33	2,235.00	INR	SET	50.000	111,750.00
	Providing & placing in position, levelling, fixing M 25 Grade R.C.C. pre-cast frame of size 1150 x 900 x 150 mm and cover (1 Nos) of size 1000x750x75mm in line & level over storm water drain as per design procured from approved manufacturer etc. Complete.					
84	R2-RW-10-28	1,905.00	INR	CUM	2,360.000	4,495,800.00
	Supply & filling sand, metal GRAVELLY SAND Corresponded to CLASS II/CLASS III GRADING of TABLE 100.1 of MCGM road specifications for road works in trenches upto required depth & watering, ramming etc. complete as directed					
85	R2-RW-7-05	211.00	INR	CUM	20.000	4,220.00
	Cutting down existing stone/ brick masonry compound walls, abutments, piers, wing-walls etc. including stacking the rubble, khandkies etc. in stack, as directed (Actual volume of structure will be paid.)					
86	R2-CS-MW-19	5,429.00	INR	CUM	60.000	325,740.00
	Random rubble masonry with hard stone in superstructure above plinth level, including leveling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20mm nominal size) at window sills, ceiling level and the like. Cement mortar 1:6 (1 cement : 6 coarse sand)					

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NO	Activity No	Rate	Curr	Unit	Est. Qty	Est. Amount
87	R2-CS-MW-35	3,065.00	INR	CUM	60.000	183,900.00
	Providing colcrete masonry with free Municipal rubble for foundations and superstructures in cement and sand grout of 1:3 by weight with stone facing on both sides, including the cost of racking of joints wherever necessary curing etc. complete as directed.					
88	R2-CS-PL-38-B	244.00	INR	SQM	220.000	53,680.00
	Providing raised and cut pointing to block/brick masonry work at all heights and locations in cement mortar 1:2, including raking of joints upto the depth of 15mm, finishing, curing, cleaning the surface etc. complete as directed by Engineer In Charge. In cement mortar 1:2					
89	R2-CS-PL-39	378.00	INR	SQM	1,930.000	729,540.00
	Providing raised and cut pointing to any kind of stone masonry work at all heights and locations in cement mortar 1:2, including raking of joints upto the depth of 20mm, finishing, curing, cleaning the surface etc. complete as directed by Engineer In Charge.					
90	R2-CS-PN-10	203.00	INR	SQM	1,640.000	332,920.00
	Providing and applying first coat of approved Waterproof primer, and two coats of waterproof acrylic based textured exterior paint of an approved make and colour as per manufacturers specifications to textured sand faced or other surfaces, upto 10m height from ground level and at all locations as directed including preparing surfaces for painting by any approved means, scaffolding, cleaning and curing etc. complete as directed by Engineer-in-charge.					
91	R2-CS-PN-8	180.00	INR	SQM	2,600.000	468,000.00
	Providing and applying first single coat of approved primer and two coats of waterproof cement paint of an approved make and colour as per manufacturers specifications to any surface, upto 10m height from ground level and at all locations as directed including preparing surfaces for painting by any approved means, scaffolding, cleaning and curing etc. complete as directed by Engineer-in-charge.					
92	R2-CS-PN-12-A	177.00	INR	SQM	270.000	47,790.00
	Providing and applying first single coat of approved primer and two coats of anti-algal, anti-fungal, exterior paint as specified below of an approved make and colour as per manufacturers specifications to any surface, upto 10m height from ground level and at all locations as directed including preparing surfaces for painting by any approved means, scaffolding, cleaning and curing etc. complete as directed by Engineer-in-charge. By using acrylic based exterior paint					

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NO	Activity No	Rate	Curr	Unit	Est. Qty	Est. Amount
93	R2-CS-EW-11	183.00	INR	CUM	720.000	131,760.00
	"Filling in plinth, floors, trenches, pits with approved excavated materials, murum / good earth in layers not exceeding 200mm including breaking of clods, watering, consolidating each layer in filled up area by rolling and compacting with roller/ plate compactor as required to achieve not less than 97% modified proctor density conforming to relevant IS etc. complete as directed by Engineer In charge. Note: 1) The rate includes the royalty and other taxes if any."					
94	R2-CS-EW-12	1,244.00	INR	CUM	1,680.000	2,089,920.00
	"Filling in plinth, floors, trenches, pits with approved contractor smurum in layers not exceeding 200mm including breaking of clods, watering, consolidating each layer in filled up area by rolling and compacting with roller/ plate compactor as required to achieve not less than 97% modified proctor density conforming to relevant IS etc. complete as directed by Engineer In charge. The rate includes necessary soil testing charges at laboratory & field as per relevant I.S. codes, royalty, octroi and other taxes if any. (Note: Borrow area selected by CONTRACTOR shall be got approved from Engineer In Charge, before executing the work) 1) The rate includes the royalty and other taxes if any."					
95	R2-CS-CW-62	5,901.00	INR	CUM	10.000	59,010.00
	Providing & Laying Plum concrete consisting of 80% P.C.C. mix (1:3:6) and 20% Rubble stone of maximum size of 150 mm laid in layers with ramming consolidating, watering including dewatering cost, seigniorage & conveyance of all materials, labour charges, machine mixing, finishing the surface etc. complete.					
96	R2-CS-EW-28	1,391.00	INR	CUM	20.000	27,820.00
	Providing and laying dry rubble stone packing with Municipal rubble hand set in regular lines, interstices being filled in with small pieces of stones, thoroughly rammed, consolidated and watered complete as directed and specified.					
97	R2-GW-8-7	1,870.00	INR	NOS	7.000	13,090.00
	Removal of easily accessible fallen/dangerous tree having girth below 2' along with the rootstock, dispose off all the tree cutting material out of MCGM jurisdiction by the contractor at designated place					
98	R2-GW-8-8	4,006.00	INR	NOS	7.000	28,042.00
	Removal of easily accessible fallen/dangerous tree having girth between 2' to 5' along with the rootstock, dispose off all the tree cutting material out of MCGM jurisdiction by the contractor at designated place					
99	R2-GW-8-9	14,022.00	INR	NOS	4.000	56,088.00
	Removal of easily accessible fallen/dangerous tree having girth above 5' along with the rootstock, dispose off all the tree cutting material out of MCGM jurisdiction by the contractor at designated place					

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NO	Activity No	Rate	Curr	Unit	Est. Qty	Est. Amount
100	R2-GW-8-10	2,322.00	INR	NOS	11.000	25,542.00
	Removal of non accessible fallen/dangerous tree having girth below 2'alongwith the rootstock,dispose off all the tree cutting material out ofMCGM jurisdiction by the contractor at diesignated place					
101	R2-GW-8-11	8,608.00	INR	NOS	12.000	103,296.00
	Removal of non accessible fallen/dangerous tree having girth between 2'to 5' alongwith the rootstock,dispose off all the tree cutting materialout of MCGM jurisdiction by the contractor at diesignated place					
102	R2-GW-8-12	25,825.00	INR	NOS	5.000	129,125.00
	Removal of non accessible fallen/dangerous tree having girth above5'alongwith the rootstock,dispose off all the tree cutting material outof MCGM jurisdiction by the contractor at diesignated place					
103	R2-GW-8-15	4,337.00	INR	NOS	9.000	39,033.00
	Transplantation of trees below 2' girth at same location, digging ofpit of appropriate size , Pruning of tree , watering to the tree oneday prior to transpanting date, escavatin arround the root zone without desturbing critical root zone area, removal of root ballalongwith Soil ball,tying of jute bag arround root zone, Making slurryof RHE CDM in the pit before transpant, Panting of Removed tree in the prepaired pit , Imidieate watering, watering till 6 Month.Despos off tree cutting material out of MCGm jurisdiction at designatedplace.					
104	R2-GW-8-16	10,088.00	INR	NOS	9.000	90,792.00
	Transplantation of trees between 2' to 5' girth at same location,digging of pit of appropriate size , Pruning of tree , watering to thetree one day prior to transpanting date, escavatin arround theroot zone without desturbing critical root zone area, removal of rootball alongwith Soil ball,tying of jute bag arround root zone, Makingslurry of RHE CDM in the pit before transpant, Panting of Removed tree in the prepaired pit , Imidieate watering, watering till 6Month. Despos off tree cutting material out of MCGm jurisdiction atdesignated place.					
105	R2-GW-8-17	15,125.00	INR	NOS	6.000	90,750.00
	Transplantation of trees above 5' girth at same location, digging ofpit of appropriate size , Pruning of tree , watering to the tree oneday prior to transpanting date, escavatin arround the root zone without desturbing critical root zone area, removal of root ballalongwith Soil ball,tying of jute bag arround root zone, Making slurryof RHE CDM in the pit before transpant, Panting of Removed tree in the prepaired pit , Imidieate watering, watering till 6 Month.Despos off tree cutting material out of MCGm jurisdiction at designatedplace.					

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NO	Activity No	Rate	Curr	Unit	Est. Qty	Est. Amount
106	R2-GW-8-18	6,705.00	INR	NOS	6.000	40,230.00
	Transplantation of trees below 2' girth at distant location, digging of pit of appropriate size at site allotted by site incharge , Pruning of tree , watering to the tree one day prior to transplanting date, excavation around the root zone without disturbing critical root zone area, removal of root ball alongwith Soil ball, tying of jute bag around root zone, Making slurry of RHE CDM in the pit before transplant, Planting of Removed tree in the prepared pit , Immediate watering, watering till 6 Month. Dispose off tree cutting material out of MCGM jurisdiction at designated place.					
107	R2-GW-8-19	14,824.00	INR	NOS	6.000	88,944.00
	Transplantation of trees between 2' to 5' girth at distant location, digging of pit of appropriate size at site allotted by site incharge , Pruning of tree , watering to the tree one day prior to transplanting date, excavation around the root zone without disturbing critical root zone area, removal of root ball alongwith Soil ball, tying of jute bag around root zone, Making slurry of RHE CDM in the pit before transplant, Planting of Removed tree in the prepared pit , Immediate watering, watering till 6 Month. Dispose off tree cutting material out of MCGM jurisdiction at designated place.					
108	R2-GW-8-20	19,861.00	INR	NOS	3.000	59,583.00
	Transplantation of trees above 5' girth at distant location, digging of pit of appropriate size , Pruning of tree , watering to the tree one day prior to transplanting date, excavation around the root zone without disturbing critical root zone area, removal of root ball alongwith Soil ball, tying of jute bag around root zone, Making slurry of RHE CDM in the pit before transplant, Planting of Removed tree in the prepared pit , Immediate watering, watering till 6 Month. Dispose off tree cutting material out of MCGM jurisdiction at designated place.					
109	FA-RW-278-04	2,016.00	INR	MTR	22,950.000	46,267,200.00
	Drilling 115mm diameter anchor holes at 15 degree to horizontal up to specified depths, as per directions of Engineer Incharge in all types all soils/ obstructions, sand, clay, soft rock, hard rock, boulders (at 1.5m X 1.5 m c/c spacing) including temporary steel casing and withdrawal of steel casing after grouting, all plants, tools, labour, etc. complete.					

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110	FA-RW-278-05	12,872.00	INR	CUM	250.000	3,218,000.00
	Grouting 115 mm diameter anchor hole with neat cement grout and non-shrink admixture (cebox100 orequivalent) with maximum water cement ratio of 0.4 by grout pipe from bottom upward under gravitytill uncontaminated grout starts flowing back after cleaning and flushing hole with compressed airincluding providing, supply, transportation, cost of all materials, labour, admixtures, tools,wastage, etc. complete.					
111	FA-RW-278-10	918.00	INR	SQM	3,080.000	2,827,440.00
	Providing and fixing Heavy Zinc and PVC Coated DT Mesh including all equipments, tools, tackles etc.complete as directed and the material details as specified belowMechanically woven hexagonal shaped wire mesh Heavy Zinc + PVC coated DT MeshMesh Size - 100 x 120 mmMesh Wire dia: 2.7mm/ OD 3.7mm (+/- 0.07mm); 260 GSM Zinc Coating on core Wire2 X 25 MTR or 3 X 15 MTR					
112	FA-RW-278-11	760.00	INR	SQM	1,125.000	855,000.00
	Providing and fixing Geogreen Erosion Control Blanket including all equipment, labors, tools andtackles					
113	R2-BW-6-7	4,190.00	INR	SQM	1,300.000	5,447,000.00
	Geotextile Filter (Laying of a geotextile filter between pitching andembankment slopes on which pitching is laid to prevent escape of theembankment material through the voids of the stone pitching/cement concrete blocks as well as to allow free movement of waterwithout creating any uplift head on the pitching.)					
114	R2-CS-SS-02	80,216.00	INR	TO	1.300	104,280.80
	Providing, detailing, fabricating and fixing built up sections at desired location using MS Platesof grade Fe 250 as per specifications and approved fabrication drawings (which are to be prepared byContractor and got approved from Engineer), erecting structural steel members for all heights & atall levels including provision of necessary erection bolts, fixing bolts, nuts, washers, cleats,stiffeners, gussets, base plate, and all necessary operations like preheating as per specifications,straightening, bending, cutting, drilling, grinding, machining if specified, welding, grinding andremoving the welding burr and preparing surface for painting with wire brush cleaning and applyingtwo coats of epoxy red oxide zinc phosphate primer of 30 microns each and two coats of EpoxyCorrosion Resistant Enamel paint of 30 microns after fabrication including touching up with spraypainting after erection etc complete as directed by Engineer In Charge.					

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NO	Activity No	Rate	Curr	Unit	Est. Qty	Est. Amount
115	R2-CS-DD-13-B	1.00	INR	KG	12,000.000	12,000.00
	"Dismantling steel work in single sections including dismembering and stacking within 50 metres lead in: Channels, angles, tees, square bar, flats, tubes"					
116	FA-RW-175-03	15,073.00	INR	NOS	510.000	7,687,230.00
	Providing and fixing steel anchor dowel bars for rock anchoring including drilling holes 115 mm dia in hard rock, providing and placing in position dowel bars of 25 mm dia 6 m in hard rock with hexagonal nut, 200mm* 200mm*10mm size washer plate, coupler for connecting bars and full effectively grouting 115 mm diameter anchor hole with cement mortar grout 1:3 by volume with non-shrink admixture (cebelex 100 or equivalent) & using quartz sand with maximum water cement ratio of 0.4 by grout pipe from bottom upward till uncontaminated grout starts flowing back after cleaning and flushing hole with compressed air including providing, supply, transportation, cost of all materials, labour, admixtures, tools, wastage, etc. complete. (grout shall be filled in the hole first and bars inserted and pressed in drilled hole.)					
117	R2-CS-CH-2	387.00	INR	SQM	3,000.000	1,161,000.00
	Providing and erecting two legged metal tubular scaffolding (cup lock type) of width 1200 to 1500 mm largely free standing using H frames of tubular pipes of minimum 40mm diameter, with base plates fixed or adjustable with necessary clamps, couplers, brackets for projections, joint pins, pulleys and other accessories including steel angle or tubular pipe bracings at adequate intervals, access platforms of metal or timber planks of span not exceeding 1.5 metre centre to centre, horizontal & vertical tubes joint with cup & lock system with M.S. Tubes, M.S. tube chalis, M.S. clamps and staircase system in the scaffolding for working platform etc. and maintaining it in a serviceable condition for execution of work including provision of rubber inserts to pipe ends at point of contact with structure to avoid damage, including access ladders with intermediate platforms. the scaffolding to be suitably braced and anchored to the building using support systems created temporarily at the opening in walls using vertical and horizontal adjustable props on the exterior side of building structure, upto 25 metre height, above ground level. The rate includes provision of high density plastic sheets covering to protect architectural details on the entire building face a nylon net to prevent all debris falling onto the pavement required and the safety platform at ground level covering the pedestrian walkways. etc. complete. (The elevational area of the scaffolding shall be measured for payment purpose. The payment will be made once only for execution of all items for such works.					

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NO	Activity No	Rate	Curr	Unit	Est. Qty	Est. Amount
118	FA-RW-175-02	759.00	INR	SQM	100.000	75,900.00
	Guniting in the proportion of 1:3.5 (C.S.) etc., to an average thickness of 50 mm including removing all loose or cracked stone from the site and roughening the same to prepare them to receive gunitetreatment and as directed, including rendering smooth the gunited surface as in the above items					
119	R2-BW-6-11	4,072.00	INR	CUM	1,950.000	7,940,400.00
	Gabian Structure for Erosion Control, River Training Works and Protection works (Providing and constructing gabain structures for erosion control, river training works and protection works with wire crates of size 2 m x 1 m x 0.3 m each divided into 1m compartments by cross netting, made from 4 mm galvanised steel wire @ 32 kg per 10 sqm having minimum tensile strength of 300 Mpa conforming to IS:280 and galvanizing coating conforming to IS:4826, woven into mesh with double twist, mesh size not exceeding 100 mm x 100 mm, filled with boulders with least dimension of 200 mm, all loose ends to be securely tied with 4 mm galvanised steel wire)					
120	R2-CS-DD-75	47.00	INR	SQM	2,440.000	114,680.00
	Removing or destroying plants etc. growing on walls, drainage pipes, destroying roots by applying approved weedicide & reinstating the wall surface by plaster to the damage surface of the building					
121	R2-CS-CH-1	103.00	INR	SQM	1,740.000	179,220.00
	Gently cleaning the surface of stone masonry and piers with specialized water misting techniques employing air water jet using a fine nozzle sprinkling system calibrated to spray fine mist along the stone surface without over wetting followed up by gentle brushing with soft nylon brushes and removing dirt, dust, bird dropping, grease, oil, algae, fungus, monkey beats, vegetable growth etc. as specified. Gentle surface cleaning may include using water misting and mild pH balanced surfactants as specified for indicated areas to remove the surface dirt, grit accretions by means of water misting and cleaning etc. complete as directed by the Engineer in Charge. (The rate is inclusive of all materials & labours involved except scaffolding).					
122	R2-CS-CH-3	107.00	INR	SQM	1,740.000	186,180.00
	Applying breathable, non-reactive, antifungal, and water repellent Silane/ Siloxane chemical as approved by Archaeological Survey of India/ Engineer-in-charge, of approved brand and manufacture, diluted with solvent mineral Turpentine oil in the ratio of 1:12 (One part of approved chemical : 12 Part of Turpentine oil), on the existing sandstone masonry surface with two or more coats to give uniform application of chemical on the surface, all complete as per direction of Engineer-In-charge (The rate is inclusive of all materials & labours involved except scaffolding).					

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NO	Activity No	Rate	Curr	Unit	Est. Qty	Est. Amount
123	R2-CS-CH-5	217.00	INR	SQM	1,740.000	377,580.00
	Ruled /Flush pointing on White/Red sand stone masonry surface withlime, surkhi and marble dust mortar in the ratio of 1:1.5:1/2 {Onelime: 1.5 surkhi (50% red and 50% light yellow surkhi):1/2 marble dust}. (The rate is inclusive of all materials & labours involvedexcept scaffolding).					
124	R2-CS-CH-6	45.00	INR	SQM	1,740.000	78,300.00
	Providing and applying antifungal wash treatment using 3% solution of sodium pentachlorophenate, of reputed brand and manufacturer, on cleaned sand stone surface at desired locations as per direction of Engineer-in-charge (The rate is inclusive of all materials & labours involved except scaffolding).					
125	FA-RW-175-01	152.00	INR	KG	5,780.000	878,560.00
	Injecting lime grout into stone with organic additives, as per direction of Engineer In-charge. Grouting should be done at required pressures by drilling and inserting 12mm dia PVC multiperforated nipples upto 30mm to 40mm depth, using appropriate sealing around the nipple cutting of nipples after curing, cleaning etc. complete. This item shall be paid on actual consumption of lime used in Kgs.					
126	R2-GW-1-5-A	364.00	INR	NOS	24.000	8,736.00
	Digging of Pit having size 1Mtr.x 1Mtr.x 1Mtr. on soft surface like soil, Murum. Loading and unloading and Transporting Excavated material from site out of Jurisdiction of MCGM Or at site designated by site in charge					
127	R2-GW-7-9	1,058.00	INR	CUM	20.000	21,160.00
	Red hill earth free from grass, stones, rubbles redish in colour pass through 5 mm sieve					
128	R2-GW-7-10	1,055.00	INR	CUM	10.000	10,550.00
	Cow dung Mannure should be brownish in colour free from grass, free from pest and disease immediately treated with pesticide and fungicides after delivery .					
129	R2-GW-7-14	793.00	INR	NOS	24.000	19,032.00
	Filling of Escavated Pit having 1Mtr. X 1Mtr.X 1Mtr. Size with Escavated soil, Red Hill Earth and Cow Dung Mannure in 1:1:1 proportion and plant a tree with Stacking and preparation of Tree Basin for proper Irrigation. Excluding cost of Tree.					
130	R2-GW-5-241	81.00	INR	NOS	3.000	243.00
	Plant should be healthy ,well rooted ,diseased free and free from any pest attack with sufficient moisture around root zone in polybag.					
131	R2-GW-5-282	92.00	INR	NOS	3.000	276.00
	Plant should be healthy ,well rooted ,diseased free and free from any pest attack with sufficient moisture around root zone in polybag.					

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NO	Activity No	Rate	Curr	Unit	Est. Qty	Est. Amount
132	R2-GW-5-248	86.00	INR	NOS	3.000	258.00
	Plant should be healthy ,well rooted ,diseased free and free from anypest attack with sufficient moisture around root zone in pollybag.					
133	R2-GW-5-314	1,208.00	INR	NOS	3.000	3,624.00
	Plant should be healthy ,well rooted ,diseased free and free from anypest attack with sufficient moisture around root zone in pollybag.					
134	R2-GW-5-322	3,220.00	INR	NOS	3.000	9,660.00
	Plant should be healthy ,well rooted ,diseased free and free from anypest attack with sufficient moisture around root zone in pollybag.					
135	R2-GW-5-309	1,208.00	INR	NOS	3.000	3,624.00
	Plant should be healthy ,well rooted ,diseased free and free from anypest attack with sufficient moisture around root zone in pollybag.					
136	R2-GW-5-261	86.00	INR	NOS	3.000	258.00
	Plant should be healthy ,well rooted ,diseased free and free from anypest attack with sufficient moisture around root zone in pollybag.					
137	R2-GW-5-324	776.00	INR	NOS	3.000	2,328.00
	Plant should be healthy ,well rooted ,diseased free and free from anypest attack with sufficient moisture around root zone in pollybag.					
138	R2-GW-7-24	166.00	INR	NPM	290.000	48,140.00
	Watering of tree @12 Lit. Per tree . Weeding, application of Fertilizers and pesticide as and when required, loosening of soil for maintaining the porosity , stacking of tree. Removal of lower side shoots time to time for proper growth of the tree preparation of tree basins in a soil . If any casualty found same should be replaced without extra cost. Top dressing of 5 cm or 2.5 cm twice in a year with Mixture of RHE & CDM in 2:1 proportion, plants should be in healthy condition free from pest, disease attack. Including cost of watering and water.					

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NO	Activity No	Rate	Curr	Unit	Est. Qty	Est. Amount
139	R2-CS-CW-7-D	9,556.00	INR	CUM	50.000	477,800.00
Providing&laying in positionreadymixeddesignmix M20gr cement concretefor RCC work,using cement content as per appd designmix,incl.pumping ofconcretetosite of laying&cost of centering,shuttering,finishing & excl.rfmt, inc.admixtures in recom. proportions asper IS9103 toaccelerate,retard setting ofconcrete,improveworkabilitywithoutimpairing strength&durability as perdirectionof Eng.incharge.Mixdesign as perparticular spec shall be got approved by Eng.inChargebefore execution of item.Rate shall includecostofallspecifiedmaterial&operationat all levels & ht,incl.cost ofcentering,shuttering& excl.rfmt whichshallbepaid under relvt. item.(Note Cementcontentconsidered in this item is @300 kg/cumas per IS456 table showingmin.cementcontent.No extra will be paid nor any amt will recovered on acc.of variation of cement in mixdesign asper specs for controlledconcrete).All works(incl.Centering&Shuttering) Lintels, beams, plinthbeams, girders, floor beam, coping.						
Total Amount						195,744,311.80

	Rebate %	21.9-	152,876,246.29
	Negotiation %	0	152,876,246.29
	Base Amount(Excl. of Tax)		136,496,665.50
	CGST		8,189,799.93
	SGST		8,189,799.93
	UTGST		
	IGST		
	Net Amount(Incl. of Tax)		152,876,265.36

Total Amount in Words:FIFTEEN CRORE TWENTY EIGHT LAKH SEVENTY SIX THOUSAND TWO HUNDRED SIXTY FIVE Rupees THIRTY SIX Paise Only

Authorized Signatory

1. Our Purchase Order No.must appear on all Invoice & correspondence.
2. Your GST Registration Details should be mentioned on all Documents.
3. Kindly submit Invoices in Duplicate alongwith Supplies.

Signature Valid

Digitally Signed By
Manishkumar Morarji Patel
Date : 24.05.2022



Username : MANISHKUMAR MORARJI
PATEL