

Combine BOQ						
Name of road - DP Road near BJ Patel Hospital and 13.40m DP Oswal Compound Road						
Sr.No.	Item Code No.	Description	Combined Qty	Unit	Rate	Total Amount
1	R3-RW-3-22	Removing the paver blocks of any thickness, size & colour from carriage way or footpath & transporting the same to ward depot or any where in BMC limit. The paver blocks shall be stacked neatly at specified locations etc. complete as specified and as directed by the Engineer.	0.00	Sqm	193.00	0.00
2	R3-CS-EW-16	Excavation over areas for basements, roads, land/plot developement in soft/ disintegrated rock, sand stone, 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.	28274.00	Cum	419.00	11846806.00
3	R3-CS-EW-4	Excavation by chiseling by manual operations, pneumatic breaker, hammer, drilling, compressor breaker, jack hammer etc. for foundations, substructures,	8662.00	Cum	1347.00	11667714.00
4	R3-SWD-35	Cutting down existing cement / lime concrete works by any means in pavement, bedding below foundation, coping, walls arches, stone, brick pavement coping etc. of any thickness of any height / depth above or below ground level etc. complete, as specified & as directed by Engineer in- Charge.	6.00	Cum	1703.00	10218.00
5	R3-SWD-45	Supplying and providing rubble soling with blue trap stones of approved quality and laying hand set dry rubble packing 25 cm. thick to required level and grade, camber including filling in the interstices with 60 mm. metal and small stone chips, etc. and thoroughly rammed, consolidated, etc.as specified & as directed by Engineer in Charge.	1781.00	Cum	2469.00	4397289.00
6	R3-RW-10-22	P/L ready mix cement concrete M-15cc having avg compressive strength 18.5 Mpa for foundation / encasement / pavement / cradle including form of 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 .)	2607.00	Cum	6017.00	15686319.00
7	R3-RW-10-24	Supply & mixing sand, metal, GRAVELLY SAND, corresponded to CLASS II/ CLASS III GRADING of TABLE 100.1 of MCGM road specifications for roadworks	287.00	Cum	660.00	189420.00
8	R3-SWD-25	Providing and placing in position controlled cement Ready Mix Concrete of M-25 grade in raft slab by using ordinary portland cement including curing by any	729.00	Cum	6706.00	4888674.00
9	R3-SWD-30	Providing and placing in position controlled Ready Mix Concrete of M-25 grade in walls, deck slab above or below ground level at any height/depth by using ordinary portland cement including curing by any means, as specified & as directed by Engineer-in-Charge. (Reinforcement and form work will be paid separately).	1237.00	Cum	9006.00	11140422.00
10	R3-SWD-178	Providing & placing in position controlled Ready Mix Concrete of grade M- 40 in raft slab by using Ordinary Portland Cement including transportation to site anywhere in Mumbai including curing by any means etc. complete as directed by Engineer in Charge. (Reinforcement & Formwork shall be paid separately).	49.00	Cum	7691.00	376859.00
11	R3-SWD-179	Providing & placing in position controlled Ready Mix Concrete of grade M- 40 in walls and deck slab above or below ground level at any height / depth by using Ordinary Portland Cement including Transportation anywhere in Mumbai including curing by any means etc complete as directed by Engineer in Charge. (Reinforcement & Formwork shall be paid separately).	100.00	Cum	10031.00	1003100.00
12	R3-RW-10-06	Providing & laying R.C.C. running beam in M-40 cement concrete including required formwork mixing, compacting & curing, etc. complete reinforced	315.00	Mtr	1586.00	499590.00
13	R3-RW-10-29	Providing & laying M-40 C.C. avg. compressive strength 45 MPa and avg. flexural strength of 5.0 MPa (As per IRC15-2002.N. 1.6) procured from M.C.G.M. approved R.M.C. plant including use of approved make plasticizer/retarder & Contractors water with ice flake sand transported by transit mixer and placing at work site. Compacting finishing, initial curing by approved curing compound & Contractors water and tar ring	3104.00	Cum	7962.00	24714048.00
14	R3-CS-CW-64-a	Centering and Wooden (Marine plywood) shuttering including strutting, propping, beacing, bolting, wedging, casting, striking, etc. and removal of form for : (Note: props shall consist of well designed adequately braced Foundations, footings, bases of columns, rafts, pilecap	5397.00	Sqm	427.00	2304519.00

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15	R3-CS-CW-64-b	Centering and Wooden (Marine plywood) shuttering including strutting, propping, beacing, bolting, wedging, casting, striking, etc. and removal of form for : (Note: props shall consist of well designed adequately braced Walls (any thickness) including attached butteresses,retaining wall, shear wall, diaphragm wall , Columns, Pillars, Piers, Posts and Struts, etc.	13034.00	Sqm	909.00	11847906.00
16	R3-RW-10-44	Providing and fixing of cement concrete Kerb Stone of various grades of size: 500mm width x 325 height x 165mm thick (Half Batter, Bull Nose / Full Batter) manufactured in wet press vacuum dewatering technology plant / equivalent with face pimple finish for high visibility with excellent quality and finish and edges perfect and sharp. Grade – M-25. Including excavation in any soil except rock, laying a leveling course of M 15 grade RMC 100mm. thick, to required slope (inclusive of form work) jointing in C.M.1:2 proportion flush to concrete surface, painting exposed surface with one coat of primer and two coats of 1st grade road marking paint in the yellow/white/black or any shade as directed.(Kerbstones shall be procured from MCGM registered agencies).	2397.00	Rmt	1123.00	2691831.00
17	R3-RW-10-45	Providing and fixing of Water Dished Channel size : 600 x 300 x 80mm, M-40 grade manufactured in vacuum wet press technology plant with excellent finish and sharp edges 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 (Watertables shall be procured from MCGM registered agencies).	0.00	Rmt	805.00	0.00
18	R3-RW-7-32	P/F, M-25 Grade Precast Frame & Cover 1150X1150X150 MM	481.00	No	3658.00	1759498.00
19	R3-RW-10-15	Providing & constructing cement vatas in cm 1:10 at 0.6m * 0.6m c / c admeasuring 0.09m at bottom, 0.04m at top & 0.075m deep & maintaining the same throughout 14 days curing & removing the same thereafter as directed.	14150.00	Sqm	75.00	1061250.00
20	R3-RW-8-02	P/L 250mm dia. R.C.C. hume pipes, NP2 class, jointing, filletting 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	398.00	Rmt	868.00	345464.00
21	R3-SE-5-9-E	Providing, Laying and Jointing HDPE pipes of PE-80 grade and PN-6class with butt joints etc.complete as specified and directed- 315 mmdia. (OD)."	10327.00	Rmt	4769.00	49249463.00
22	R3-CS-CW-35-c	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, pardies, 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. Thermo-Mechanically Treated steel bars. (Fe 500 D)	264.00	MT	80080.00	21141120.00
23	R3-RW-1-13	Levelling, watering & rolling by vibratory roller weighing not less than 10 tonnes & preparing the ground to the required grade & camber etc.complete as specified as directed by the Engineer as per road specifications for Roadwork	13989.00	Sqm	12.00	167868.00
24	R3-RW-2-21	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 murum surface & compacting with 10 tonne vibratory roller to achieve desired density including all material, labour, machinery, lighing barricating to all lifts & lead maintenance of diversion etc. complete (metal gradation from 75mm to 75mm micron as per MCGM Road Specifications clause no 210)	2666.00	Cum	2702.00	7203532.00
25	R3-RW-2-20	Providing & laying, spreading & compacting graded crushed stone agreegate 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 to100mm(compacted thickness each)with sensor paver finisher on prepared subbase & compacting with vibratory roller (10 tonne) to achieve desired density including lighing, guarding barricating & 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 MCGM Road Specifications clause no.240).	150.00	Cum	3338.00	500700.00
26	R3-RW-5-19	Providing and applying PRIME COAT with CATIONIC BITUMEN EMULSION (SS) @ 7 to 12 Kg. of 10Sqmt. over prepared surface to receive bituminous mix by applying PRIMER with mechanical spray bitumen, including cleaning of road surface etc. completed, as directed.For Low 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 New Road Specifications Clause No. 313, curing as per 313.5)	1334.00	Sqm	79.00	105386.00

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27	R3-RW-5-22	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 New Road Specifications Clause No. 314 , curing as per 314.3.4)	1334.00	Sqm	39.00	52026.00
28	R3-RW-5-24	Providing and applying TACK COAT with CATIONIC BITUMEN EMULSION (RS) @ 0.25 to 0.30 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 GRANULAR SURFACES Treated with PRIMER (Clause No. 314)	1459.00	Sqm	41.00	59819.00
29	R3-RW-5-45	P/L hot Premix Dense bituminous macadam with 4.50% bitumen content of grade 60-70 to the required line,level,and camber rolling with 10/12 M.T.power ,vibratory roller & sensor paver etc. complete as specified and as directed to thickness of 50 mm. with antistripping agent at1.00%by weight of bitumen using grading II of "MORTH"(As per new Road Specification clause no.354)	1334.00	Sqm	775.00	1033850.00
30	R3-RW-5-04	P/LMINIMUM 30 mm hot Premix Bituminous concrete with6.00% of VG-30 grade bitumen using new material any where as directed including Rolling with 10 MT Pneumatic, power & vibratory roller & using sensor paver to the required grades, level, camber with line filler of 2% by weight & antistripping agent @ 1% of bitumen content by weight etc. complete.(As per prevailing MCGM specification for Roadworks clause no.364)	1334.00	Sqm	579.00	772386.00
31	R3-HE-2-16	removing or existing MS frame and cover and replacing it with new MS frame and cover with its complete assembly including supply and fixing of the same etc complete as directed and specified by Engineer In charge. The MS plate used for the cover shall be 20 mm thick. The new MS cover shall have anti skid arrangement. The anti skid arrangement shall be provided by welding 4mm thick MS flats of specified width and 300 mm center to center. 300x300 mm = 23Kg 300x600 mm = 47 Kg 600x900 mm = 138 Kg 600x1200 mm = 186 Kg 900x1200 mm = 281 Kg 1200x1500 mm = 465 Kg 1500x1800 mm = 694 Kg Note : (1) Rebate for old removed MS frame and cover is considered in this item. (2) Tolerance of +/- 5% of mentioned standard weights shall be acceptable	0.00	Rs/KG	86.00	0.00
32	HE-7-3-a	15 mm	0.00	Rmt	165.00	0.00
33	HE-7-3-b	20 mm	0.00	Rmt	183.00	0.00
34	HE-7-3-c	25 mm	0.00	Rmt	221.00	0.00
35	HE-7-3-d	32 mm	0.00	Rmt	244.00	0.00
36	HE-7-3-e	40 mm	0.00	Rmt	321.00	0.00
37	HE-7-3-f	50 mmm	0.00	Rmt	356.00	0.00
38	R3-RT-16-32	Providing and applying hot applied thermoplastic road marking material with glass beads extremely high skid resistance 2.5mm thick with primer coat (tack coat) for binding on cement concrete road/paver blocks 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 centre line and other lane marking continuous for intermittent 10cm or 15cm width and also pedestrian crossings stripes as well as s 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./MORTH specification in white/yellow colour. work complete as per specifications and as directed by the Engineer.	795.00	Sqm	955.00	759225.00
39	R3-RW-10-33	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 panting 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.	6292.00	Rmt	501.00	3152292.00
40	R3-RW-5-58	P/L, mastic asphalt 40mm thick with 10/20 grade bitumen including producing the same at computerised batch mix plant, transporting the same to site by means of mastic cookers, laying the same without mastic paver and including all necessary tools, labours & barricading,spreading of aggregates as antiskid measures by means over newly laid mastic asphalt as per prevailing MCGM specification clause no. 365 of 'Road work' as directed by Engineer in charge (Note: The material specifications / gradation & content shall be as specified in the relevant I.S. Codes)	1334.00	Sqm	2323.00	3098882.00

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41	R3-RT-16-34	Supplying / Fixing of Retro reflective road studs conforming to ASTM D. 4280 designated 'H', Two way Reflective markers in any colour inclusive of fixing on any road surface with the use of adhesive as per specifications etc. complete anywhere in Greater Mumbai as directed by the Engineer	1141.00	Each	433.00	494053.00
42	R3-RW-6-05	Raising or lowering rectangular manholes to there quired level upto 30cm. Including all materials, formwork, brick work and with 16cm. Thick M-15C.C. coping under frame & cover of manhole including curring etc. complete, as specified and as directed.	6.00	Each	2803.00	16818.00
43	R3-SWD-146	Supplying and fixing 1.20m x 0.90m internal size of rectangular C.I. air-tight cover and frame weighing minimum 910 kg of material grade of min. FG 150 conforming to IS 210:2009 and specification no SP-SWD-3 with the grade designation of HD 20 conforming to IS 1726:1991.including testing as per CL 10 and inspection as per CL.11 of IS 1726:1991, as per specification as per Standard Specification no SP-SWD-3, etc. complete, as specified and as directed by Engineer in Charge.	16.00	No	112002.00	1792032.00
44	R3-SWD-158	Extra for providing locking arrangement to C.I.Circular /rectangular manhole frame & cover over and above the rate of providing and fixing C.I. Circular/ rectangular frame and cover.	137.00	Each	967.00	132479.00
45	R3-RT-16-01	Providing, fabrication and fixing M.S. railing of 10 Gauge, 40mm X 40mm square pipe railing with 18mm X18 mm square intermediate support, 65mm X 65mm square main supports with M.S. pedestal (base-1type) and M.S. cap- (type-1) including cutting, welding, riveting, oil painting with navy blue colour or any other approved colour shade as directed and fixing in cement concrete foundation as shown vide Sr.No. 2f-A1 in catalogue of Street Furniture (Vol.1) published by M.C.G.M. including removal of surplus material/debris and restoring damaged portion of footpath etc. as directed. (Without advertisement panel) work complete as per specifications and as directed by the Engineer	0.00	Rmt	8599.00	0.00
46	R3-RW-5-47	P/L hot Premix Dense bituminous macadam with 4.50% bitumen content of grade VG-30 to the required line,level,and camber rolling with 10/12 M.T.power ,vibratory roller & sensor paver etc. complete as specified and as directed with antistripping agent at 1%by weight of bitumen using grading II of "MORTH"(As per prevailing MCGM specification for Roadwork clause no.354	57.00	Cum	15497.00	883329.00
47	R3-RW-6-03	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) coping under frame and cover of manhole, including curing etc. complete as specified and as directed.	39.00	Each	1435.00	55965.00
48	R3-RT-16-14	Circular Steel Bollards : Providing, fabricating and fixing circular Steel Bollards of 100mm dia circular Steel Pipe (of type 3F-A-1) as per the design incorporated in the Catalogue of Street Furniture (Vol-II). Published by MCGM, made of 10 Guage, 304 quality material with minimum nickel content not less than 10% (laboratory testing certificate shall be provided for used material) with steel pedestal and steel cap as per designs (3F-A1), (3F-A1.1), (3FA1.2) and (3F-A1-3) suitable to match the design adopted for surrounding railing including cutting, welding, riveting, polishing. The foundation shall either be with base plate of 200 x 200 x 6mm thick, 16 mm dia J Bolts or embedding pipe in foundation by providing 20mm Dia x 6 nos holdfasts embedded in 1:2:4 concrete as shown in drawing (3F-A1.1). inclusive of making good the damage portion of footpath with matching pavers blocks, tiles removing debris etc. complete as per specifications and as directed by the Engineer.	0.00	No	19147.00	0.00
49	R3-SWD-145	Supplying and fixing 0.56m internal dia circular C.I. air-tight cover and frame weighing Between weighing minmum 208kg of material grade of min. FG 150 conforming to IS 210:2009 and specification no SP-SWD-3 with the grade designation of HD 20 conforming to IS 1726:1991.including testing as per CL 10 and inspection as per CL.11 of IS 1726:1991,as per specification as per Standard Specification no SP-SWD-3 etc. complete, as specified and as directed	18.00	NOS	26073.00	469314.00
50	R3-RW-7-19	Transplantation of existing trees of girth of all dia. including uprooting and shifting of the tree and placing in pits of suitable size and after transplanting, removal of excavated earth to desired location, filling the pit with red earth, manure, watering etc. complete with all leads, lifts,including maintenance for 3 years. The item also includes back filling of the trench taken for exposing the root system of the tree proposed to be transplanted etc. complete as directed by Engineer-in-charge.	110.00	NOS	7242.00	796620.00
51	R3-RW-7-21	Cutting down of trees having diameter above150 mm upto 300mm.	16.00	Each	4117.00	65872.00
52	R3-RW-7-22	Cutting down of trees having diameter above 300 mm upto 450mm.	18.00	Each	7852.00	141336.00
53	R3-RW-7-23	Cutting down of trees having diameter above 450mm upto 600mm.	8.00	Each	10902.00	87216.00
54	R3-RW-7-24	Cutting down of trees having diameter above 600 mm upto 900mm.	10.00	Each	15477.00	154770.00
55	R3-RW-7-25	Cutting down of trees having diameter above 900 mm upto 1200mm.	12.00	Each	20279.00	243348.00

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56	R3-RT-16-43	Providing, Fabricating, Erecting on site Cautionary Boards as per Cautionary Sign Drawing No C1 Vertical poles shall be Hot dip galvanised pipe of 65 NB, 3mm Wall thickness. Signage plaque (box) shall be of size 600mm triangle. The box shall be pasted with micro prismatic grade retro reflective sheeting conforming to Type XI standards of IRC 67:2022. The retro reflective sheeting used on the signs shall consist of white sheeting having a smooth outer surface which has the property of retro reflection over its entire surface. It shall be weather resistant and exhibit colour fastness. A certificate of having the sheeting tested as per ASTM D 4956 from international and Govt. of India laboratory along with three years outdoor weathering to be submitted. The message (legends, letters, numerals, logos etc) along with the boards to be digitally printed on latex of equivalent platform using ink approved by the sheeting manufacturer conforming to UL 2801 and UL 2818. The digitally printed sheeting should be over laminated using UV clear overlay film The retro reflective sheeting along with digital printing, ink and over laminate should be warranted for 10 years as per IRC 67 2022 clause 6.8 and 6.9. The vertical pipe shall be fixed to the ground by means of properly designed foundation of size 600mmx600mmx600mm below ground & 450mmx450mmx200mm above ground. Complete as per the specification and directed by the Engineer In Charge.	0.00	NOS	14384.00	0.00
57	R3-RT-16-44	Providing and fixing rumblers of rubberised material.	0.00	MTR	1472.00	0.00
58	R3-HE-8-25	Removing of existing S.P. fire hydrants and replacing them with new SP fire hydrants with its complete assembly including supplying and jointing the same with spun yarn, molten lead, including caulking 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.	0.00	Nos	13362.00	0.00
59	R3-RT-16-09	Providing, fabricating and erecting on site Street Name Board (of type 2S-A-1 and 2S-F) as per the design incorporated in the catalogue of street Furniture (Volume-II). Published by M.C.G.M., Vertical pole shall be Hot dip galvanised M.S. Square pipe of size 75mm x 75mm x 3.5mm thick Signage plaque (box) shall be of size 900mm x 600mm made of Hot dip galvanised M.S. angle frame of size 50mm x 50mm x 6 mm thick covered with 4mm thk aluminum composite panel on both sides, The box shall be pasted with MICRO PRISMATIC GRADE retro reflective base sheets on both sides conforming to Type XI standards of I.R.C. 67 2012 CODE. Letters or borders to be pasted using transparent electro cuttable film. The reflective of sheet shall have guarantee of 10 years. The reflection count shall not be less than 80% of its original reflection after 10 years. The vertical pole shall be fixed to the ground by means of properly designed foundation of size 750mm x 750mm x 900mm.	8.00	Nos	23843.00	190744.00
60	R3-RW-4-03	Removing existing kerb stones, cleaning off old mortar, carting away up to a distance of 2 K.M. and stacking the same as directed by the Engineer.	315.00	Rmt	42.00	13230.00
61	R3-RW-4-08	Removing existing water tables/cleaning off old mortar & carting away to the distance of 2 K.M. and stacking the same as directed by Engineer.	0.00	Rmt	42.00	0.00
62	R3-RW-10-07	Cutting of construction & dummy joints of M-35 C.C. & above slab by mechanical means within 10 to 16 hrs. of casting of bay/slab as directed. A) transverse dummy joints 100mm deep or 1/3 thickness of concrete pavement & 6 mm wide.	13940.00	Rmt	84.00	1170960.00
63	R3-RW-10-08	Cutting of construction & dummy joints of M-35 C.C. & above slab by mechanical means within 10 to 16 hrs. of casting of bay/slab as directed. B) Longitudinal construction joints 100mm deep or 1/3rd thickness of slab & 6 mm wide	12791.00	Rmt	84.00	1074444.00
64	R3-RW-10-09	Providing & fixing in position premoulded asphalt filler 12mm thick conforming to I.S. 1838 of 1983 for placing of the expansion joint, around manholes & water entrances, etc put to the required depth & 25mm below the camber, etc. complete as directed.	849.00	Sqm	364.00	309036.00
65	R3-RW-10-10	Providing & placing 5mm thick thermocol in dummy & construction joints immediately after cutting of joints & removing the same before dressing of dummy & construction joints etc. complete, as directed.	1339.00	Sqm	88.00	117832.00
66	R3-RW-10-12	Providing & fixing in position mild steel in tie bars of 12mm dia 55cm long & 45cm C/C whenever directed including handling, wrapping with paper for half length, fixing straightening, wastage etc. complete in all respect as directed.	5.00	MT	70944.00	354720.00
67	R3-RW-10-07	Dressing of M-35 & above new C.C. pavement, dummy, transverse, longitudinal & expansion joints with hot rubberised sealing compound conforming to IS 1834-1984 after proper cleaning with compressed air, applying required primer & providing a layer of lime powder over hot sealing compound etc. complete as directed. A) Sealing 6mm wide dummy/transverse joints with a depth of 100mm/1/3rd thickness of concrete pavement.	13940.00	Rmt	84.00	1170960.00
68	R3-RW-10-08	Dressing of M-35 & above new C.C. pavement, dummy, transverse, longitudinal & expansion joints with hot rubberised sealing compound conforming to IS 1834-1984 after proper cleaning with compressed air, applying required primer & providing a layer of lime powder over hot sealing compound etc. complete as directed. B) Sealing of 6mm wide longitudinal joint with depth of 100mm or 1/3rd thickness of concrete pavement.	12791.00	Rmt	84.00	1074444.00

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69	R3-RW-10-21	Dressing of M-35 & above new C.C. pavement,dummy,transverse,longitudinal & expansion joints with hot rubberised sealing compound conforming to IS 1834-1984 after proper cleaning with compressed air,applying required primer & providinga layer of lime powder over hot sealing compound etc. complete as directed.C) Sealing of 25mm wide expansion joints with avg. depth of 12mm.	429.00	Rmt	73.00	31317.00
70	R3-RW-10-23	P/L R.M.C. M-10 C.C. having avg. compressive strength 13.5 Mpa in foundation/encasement/pavement with or without chequered design including formwork, mixing in batching plant, placing vibrating with plate or needle vibrator, curing etc. complete as directed by the Engineer. C/s. has to make his own arrangement for water for curing with Hessian cloth etc. & will not be paid separately.(MINIMUM CEMENT CONTENT 220 Kg/m ³ .)	300.00	Cum	5703.00	1710900.00
71	R3-RW-10-14	Providing & laying waterproof paper of 40 GSM including overlap (to be not less than 10cm)etc. complete as specified as directed.	13989.00	Sqm	41.00	573549.00
72	R3-RW-10-13	Providing & fixing in position M.S. dowel bars of 32mm dia 55cm long & 30cm C/C whenever directed including handling, fixing, etc. complete(no extra payment will be made for applying bitumen & grease to dowel bars).	8.00	MT	99657.00	797256.00
73	R3-RW-10-11	Providing & fixing high density polythene pipe of approved quality to fit around the dowel bars of 32mm dia at the end of expansion joints,fully greased inside, cotton waste the pipe around the dowel bars & the pipe duly capped at the end as directed.(H.D.P. pipe shall be 30cm in length) As shown in the drawing.	1591.00	Each	31.00	49321.00
74	R3-CS-CW-35-a	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, pardies, 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.	0.17	Each	98314.00	16713.00
75	R3-RW-10-35	Extra & over for providing and using special admixtures/ plasticizers to achieve required crushing & Average flexural strength 5.0 Mpa of M40 grade concrete in 7 days. NOTE :THIS ITEM SHOULD BE OPRATED ONLY AFTER SPECIFIC SANCTION OF DIR(E.S.& P.).NOTE:FOR SPECIAL ADMIXUERES ITEMSSUCH AS ELKEM MICROSILICA, POLYPROPYLENE FIBER, BSF GLANIUM SKY,EARLY STRENGTH SUPER PLASTYSIZER, STEEL FIBER REINFORCEMENT ETC. ORIGINAL CHALAN SHOULD BE PRODUCED , FAILING WHICH NO PAYMENT TO BE MADE.	399.00	Cum	623.00	248577.00
76	R3-SWD-176-A	Providing & Fixing 1.20m X 0.60m clear internal size of M.S. Galvanised hinged type grating and frame (weighing minimum 130 kg) of grade HD20, with minimum 75 microns zinc coating by hot dipped galvanising the MS grating and frame as per IS 2629. (The contractor shall furnish the certificate of galvanising from the Galvaniser.) incuding testing ,inspection of material sample and finished product as per IS standards and as per Standard Specification no SP-SWD-3 and as per standard drawing , etc complete as specified & as directed by Engineer in-Charge.	0.00	Nos	20958.00	0.00
77	R3-HE-8-13	Supplying & fixing on chambers, 90 cms. x 60 cms.C.I. rectangular, heavy frame and cover weighing between 259 kg.to 289 kg etc. complete in all respect and etc. complete in all respect and as directed by Engineer In Charge.	122.00	Each	37222.00	4541084.00
78	R3-RW-10-40	Providing and fixing pre-cast Central Median divider Type-I of R.M.C. in M-20 C.C. on Road as per drawing, finished neatly, compacting, curing, with form work, etc, including bedding of R.M.C. of M-10 C.C, 15 cm thick, filling of joints in C.M. 1:2 & painting the exposed surface with 3 coat of road marking paint, Grade-I of approved colour and quality including required excavation in C.C., asphalt etc, and removing the same any where in City & Sub limit, levelling the same as specified and as directed by the Engineer. (Note:-Every 10 dividers shall have 40 mm. dia. hole along the center line of divider at formation level of road to drain off rain water / excess water.)	158.00	Rmt	1807.00	285506.00
79	R3-SWD-44	Providing and laying Brick masonry in cement mortar 1:3 for manholes with 12 mm thick plaster (in cement mortar 1:1) both inside and outside face as specified & as directed by Engineer in Charge.	146.00	Cum	13810.00	2016260.00
80	R3-RW-10-57	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 manufacturers specification of any approved brand of colour hardener @ 3.5 kgs / m2 including floating of colour hardened over concrete surface with different types of floaters, including application of release agent @ of 0.15 kgs/m2, stamping over the concrete surface with stamping tools; including cleaning of surface with water and cutting of finished concrete; including application of two coats of acrylic based sealer for finishing. Colour hardener 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 sqm per one litre coat, including cost of skilled manpower, cutting machine, sprayer and all tools tackles for all activities; complete smooth & finish as per direction of Engineer -In -Charge	2277.00	Sqm	265.00	603405.00

Sr.No.	Item Code No.	Description	Combined Qty	Unit	Rate	Total Amount
81	R3-RW-10-28	Providing and laying Dry Lean Concrete base including providing coarse and fine aggregate to the specified gradation using minimum cement content 150 kg/cum of concrete with OPC 43 grade cement, mixing of concrete as per approved design mix using mechanised batch mix plant of appropriate capacity, transporting and laying with self propelled paver with electronic sensor device and compacting with vibratory roller of minimum 80- 100 KN static weight to give desired compacted density and average compressive strength of 10 MPa at 7 days and curing with liquid curing compound and sprinkling water and covering with moist hessian cloth or ponding of water for 7 days including providing construction joints, including all material, labour, machinery with all leads and lifts etc. complete as specified and as directed by the Engineer. B) Laying by paver with electronic sensor device	2100.00	Cum	5183.00	10884300.00
82	R3-SE-5-1-b	Providing & laying stoneware pipes of SP2 class including jointing with CM(1:1), filleting etc. complete as specified & directed. -230mm dia	80.00	Mtr	1113.00	89040.00
83	R3-RW-7-37	To carry out total station survey of the road with reference to existing co-ordinate system by establishing control stations by establishing temporary bench mark from permanent bench mark, marking centre line of the road by nails, carrying out detailed levelling, plotting cross sections longitudinally at 20 mtr. intervals with levels at every 4 mtr. cross distance, preparing drawings on Auto cad to the scale of 1:500 and supplying 2 hard copies and 1 soft copy in C.D. form.. etc. complete upto 18.3 mtr wide road.	3.00	upto 500 m	12000.00	36000.00
84	R3-SWD-25	Providing and placing in position controlled cement Ready Mix Concrete of M-25 grade in raft slab by using ordinary portland cement including curing by any means,as specified & as directed by Engineer-in- Charge. (Reinforcement and form work will be paid separately).	1031.00	Cum	6706.00	6913886.00
85	R3-SWD-153-A	Constructing cofferdam of puddle bags with clay etc. as specified & as directed by Engineer-in-Charge	18.00	Cum	6940.00	124920.00
86	R3-RT-16-07	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 50km/hrs. work complete as per specifications and as directed by the Engineer.	32.00	Each	1668.00	53376.00
87	R3-RT-15-05	Providing, casting, fixing (anywhere in city or suburban limit) precast type 1 (both side taper dividers in C.C.M 25 as per drg. No. EET&C/Gen/013/03/ty dt. 11.12.03 (revised on 15-06-2006) including fixing the dividers on site in C.M 1:2 for cushioning and jointing, curing, painting the exposed surface with road marking paint grade I (Conforming to IS-164) in two coats of approved colour, including excavation in road portion and removing excavated material as per direction any where in city or suburban limit, cleaning the site etc as directed by engineer, The rate is inclusive of all lift and leads, transportation required for the work	1041.00	MTR	1568.00	1632288.00
88	CE4-18-96-1-FA2-RS	Providing and laying tactile paving (for visually impaired persons) conforming to IS: 15622, of approved make in all colours and shades for outdoor floors such as footpath, courtyard, multimodal locations etc.- Size- 300 x 300 x 9.8mm, with water absorption less than 0.5% laid on 20mm thick base of cement mortar 1:4 (1 cement 4 course sand), in all shapes & patterns, including grouting the joints with white cement mixed with matching pigments etc. Complete as per direction of Engineer in-Charge (CPWD)	720.00	Sqm	4670.00	3362400.00
89	R3-CS-PS-192-a	Making soak pit 2.5 m diameter 3.0 metre deep with 45 x 45 cm dry brick honey comb shaft with bricks and S.W. drain pipe 100 mm diameter, 1.8 m long complete as per standard design. With common burnt clay F.P.S. (non modular) bricks of class designation 3.5	11.00	each	44903.00	493933.00
90	R3-RW-1-08	P/L earth work in embankments & /or filling low-lying grounds in layers not exceeding 25cm. In loose thickness & compacting each layer with a 10/12 tonnes power roller including levelling, watering, etc. complete in conformity with a required lines, grades & cross sections (Lab C.B.R. in soaked conditions shall not be less than 4) etc. including cleaning & grubbing the ground (The contractor should take note of the site conditions pertaining to creek lands under reference & should note that nothing extra whatsoever will be paid like diversion of water, the protective measures that may be necessary to be carried out to protect the embankment P/L a top layer of earth of 15cm. Compacted thickness 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 New	23869.00	Cum	1237.00	29525953.00
91	R3-RW-1-09	Preparing stabilised soil base 15cm. Compacted thickness including excavation adding the required sand, lime or other suitable material mixed & laid complete in regular lines to confirm with the required grade, camber & cross section, rolling etc. complete as specified & as directed. (C.B.R. under soaked condition shall not be less than 10) with soil available on site	5154.00	Cum	1265.00	6519810.00
92	R3-RW-1-12		0.00	Sqm	198.00	0.00

Sr.No.	Item Code No.	Description	Combined Qty	Unit	Rate	Total Amount
93	R3-SE-1-1	Excavation in all types of soils (for sewerage works),such as Earth, Marine clay, Marshy land, Running sand, Garbage, Slush, Murum, Rock boulders etc as directed by the engineer. The rate includes dewatering, backfilling, removing the rank vegetation and removing the excavated materials within a lead of 150M as directed including levelling, ramming,etc complete, and measured from the edge of cutting including all lifts and stacking in layers and removing the surplus excavated materials as directed for lift upto 2M(Records to be maintained properly).The rate also includes supporting public utilities such as cables,drains,pipe water mains, but shall not include the cost of shoring etc as specified and directed. 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.	3140.00	Cum	610.00	1915400.00
94	R3-SE-1-1-a	-do-do- as per item R3-SE-1-1 for lift from 2m to 4.0m	1330.00	Cum	838.00	1114540.00
95	R3-SE-1-1-j	Extra over above for item no. R3-SE-1-1 to R3-SE-1-1 i for relevant lift of excavation in soft/ disintegrated rock, road carriageway,sand stone, stiff clay, gravel, cobblestone, hard laterite, water bound macadam, wet mix macadam, asphalt mix carpet of any type, pitching, soling, paths and hardcore, lime concrete, plain cement concrete, stone masonry and all types of brick/ block masonry below ground level	1570.00	Cum	349.00	547930.00
96	R3-SE-1-1-u	Extra over above for item no. R3-SE-1-1 to R3-SE-1-1 i for relevant lift of excavation in hard rock and reinforced concrete by chiseling for sewerage works by manual operations, pneumatic breaker, hammer, driller, compressor breaker, etc. including dressing/trimming the sides, leveling of bottoms	1450.00	Cum	1800.00	2610000.00
97	R3-SE-1-1-ae	Extra over above for item no. R3-SE-1-1 to R3-SE-1-1 i for relevant lifts of excavation in hard rock and reinforced concrete by splitter machine	1450.00	Cum	5020.00	7279000.00
98	R3-SE-1-4	Providing and removing close shoring and strutting in the trenches/ pits for all depths as per specifications/ drawings and or as directed by Engineer-in-charge by including walling, struts, open poling boards, horizontal sheeting, runners, dog spikes by using timber etc. complete.	2130.00	sq.m	768.00	1635840.00
99	R3-SE-1-5	Leaving shoring in trenches. (New or old) including dog spikes.	430.00	sq.m	1443.00	620490.00
100	R3-CS-MW-3-b	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 3.5 and above in superstructure above plinth level upto floor five level in all shapes and sizes in:Cement mortar 1:4 (1 cement : 4 coarse sand)	20.00	Cum	10698.00	213960.00
101	R3-CS-MW-18	Uncoursed rubble masonry with hard stone in foundation and plinth including levelling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20mm nominal size) upto plinth level with : Cement mortar 1:6 (1 cement : 6 coarse sand).	20.00	Cum	5083.00	101660.00
102	R3-SE-4-4	-do- -do- with approved water proofing compound in a proportion as specified by the manufacturer's per bag of cement.	40.00	sq.m	455.00	18200.00
103	R3-SE-5-1-a	Providing & laying stoneware pipes of SP2 class including jointing with CM(1:1), filleting etc. complete as specified & directed.-150mm dia	350.00	m	680.00	238000.00
104	R3-SE-5-11-a	Providing, Laying and Jointing Double Wall Corrugated (DWC) PE pipes of SN 8 class with R/R joint with PE coupler as per ISO21138-3 complete as specified and directed.-160 mm dia (OD)	40.00	m	656.00	26240.00
105	R3-SE-5-8-a	Providing and laying R.C.C. Pipes (NP3 Class) with rubber rings jointing etc. complete as specified and directed.-300mm dia	920.00	m	1962.00	1805040.00
106	R3-SE-6-2-b	Extra for above manhole per metre depth above 2.3M and upto 5 M including safety chain and extra C.I. steps on other side of benching-do-do-	35.00	m.depth	32071.00	1122485.00
107	R3-SE-6-2-c	Do- -do- above 5 M & upto 9 M -do- -do-	18.00	m.depth	45432.00	817776.00
108	R3-SE-7-1	Providing 150 mm dia stoneware pipes of SP2 class in vertical drop of 0.6M including 150 mm dia stone ware pipe fixed in brick masonry of the manhole at required level & providing 150 mm dia stone ware right angled bend, 150 mm x 150 mm x 150 mm S.W. double tee junction including cutting, jointing & filleting as per detailed specifications, encased in half brick thick masonry in cement mortar (1:3) all round the pipes double tee, bend and extra brick work below bend upto the foundation of the manhole and tapering portion of the manhole, plastering the exposed surfaces after raking out the joints of the masonry to a depth of 20 mm in C.M. (1:2) 20 mm thick and neat cement rendering so as to give a smooth surface, including plugging the openings etc. complete as directed and as per drawing in Dy.Ch.E.(S.P.) P&D's office.	70.00	No	5237.00	366590.00
109	R3-SE-7-3	Do- -do- 300 mm dia stone ware pipe of SP2 class in vertical drop of 0-6m -do- -do- as per item R3-SE-7-1	8.00	No	13812.00	110496.00
110	R3-SE-7-3-a	Extra over above per additional metre depth -do- -do as per above item.	3.00	m.depth	7679.00	23037.00
111	R3-SE-9-1	Providing R.C.C. Spun vent shaft 7.3M in height embedded in M15 cement concrete Including flue chamber etc. complete without excavation.The height of the vent shaft to be measured from its bottom upto the top as per the drawing and as specified and directed	7.00	No	45961.00	321727.00
112	R3-SE-12-10	Cutting down masonry work in lime or cement mortar plaster etc. complete	5.00	Cum	610.00	3050.00
113	R3-CS-MW-22	Coursed rubble masonry (first sort) with hard stone in foundation and plinth with :Cement mortar 1:6	20.00	Cum	6216.00	124320.00
114	R3-SE-12-14	-do--do- 10 H.P. -do- -do-	10.00	Per shift	3220.00	32200.00

Sr.No.	Item Code No.	Description	Combined Qty	Unit	Rate	Total Amount
115	R3-SWD-15-A	Providing and laying RMC (Ready Mixed Concrete) M-15 grade Plain cement concrete in foundation including boxing, curing by any means, etc. complete as specified and/or as directed by Engineer-in-Charge.	5.00	Cum	6002.00	30010.00
116	R3-SWD-36	Cutting down completely RCC slab, walls, beams, columns, arches, piles, pile caps of any thickness and or size of any height / depth by any means below or above ground level including cutting down steel reinforcement, removing and stacking them properly as directed etc. complete, as specified & as directed by Engineer-in-Charge.	5.00	Cum	2491.00	12455.00
117	R3-SE-12-7	230 mm to 300 mm dia -do- -do-	1.00	No	486.00	486.00
118	SO-MS-23-3	Fabricaton of Stainless Steel grill	35.00	No	9150.00	320250.00
119	R3-SE-13-3	Excavation to form horizontal bore manually for installing 1200mm(ID) RCC sewer line by pipe jacking method for maximum drive length of 30 m, to correct grade and alignment in any type of strata including marshy land, soft clay, murum, rock and/ or boulders of any strength and hardness. Item includes dewatering, safety arrangements, ventilation in bore etc. but excluding muck disposal from shaft site complete as per specifications and as directed by the Engineer.	30.00	Rmt	89737.00	2692110.00
120	R3-SE-13-4	Approved 1200 mm diameter mild steel (M.S) pipe (16mm thickness)	30.00	Rmt	77727.00	2331810.00
121	R3-SE-13-5	Grouting in annular spaces for between carrier and casing pipe with cement mortar (1:3) including necessary additive, equipment etc complete as per specification and as directed by Engineer	31.00	Cum	7424.00	230144.00
122	R3-SE-5-9-f	Providing, Laying and Jointing HDPE pipes of PE-80 grade and PN-6 class with butt joints etc. complete as specified and directed-355 mm dia (OD)	30.00	Rmt	6028.00	180840.00
Total Amount in Rs.						301892869.00