

BRIHANMUMBAI MUNICIPAL CORPORATION
Resurfacing of Roads in D Ward Zone-I in City Division.

Combined BOQ

Sr.No.	Item Code No.	Description	Unit	Rate	Total Qty	Amount
1	R2-CS-EW-1	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/ 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.	Cu.Mt.	307.00	245.00	75,215.00
2	R2-CS-EW-16	Excavation over areas for basements, roads, land/plot development 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. 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.	Cu.Mt.	343.00	5,491.00	18,83,413.00
3	R2-RW-2-20	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	Cu.Mt.	2,937.00	3,613.00	106,11,381.00
4	R2-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	Cum	2,547.00	1,331.00	33,90,057.00
5	R2-RW-10-50	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	Rmt .	1,116.00	101.00	1,12,716.00

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6	R2-RW-4-02	Removing & resetting kerb stones in 1:2 C.M. on new R.M.C.M-20C.C. bed 15 cm, thick including filling the joints with 1:2 C.M. pointing, curing etc. complete.	Rmt .	351.00	4,833.00	16,96,383.00
7	R2-RW-7-17	Providing and 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 the satisfaction of Engineer in charge etc. complete	R.Mt.	50.00	6,873.00	3,43,650.00
8	R2-RW-10-51	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	Rmt .	799.00	2,376.00	18,98,424.00
9	R2-RW-4-07	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.	Rmt .	398.00	3,726.00	14,82,948.00
10	R2-RW-5-20	Providing and applying PRIME COAT with CATIONIC BITUMEN EMULSION (SS) @ 7 to 12 Kg. of 10 Sqmt. over prepared surface to receive bituminous mix by applying PRIMER with mechanical spray bitumen, including cleaning of road surface	Sqm	57.00	31,429.00	17,91,453.00
11	R2-RW-5-23	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	Sqm	33.00	83,252.00	27,47,316.00
12	R2-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	Sqm	35.00	83,252.00	29,13,820.00
13	R2-RW-7-09	Milling upto 60 mm depth asphaltic surface by using milling machine including transportation anywhere as directed. NOTE: For further passes of 60 mm or part thereof, same rate will be applicable.	Sqm	77.00	1,50,774.00	116,09,598.00

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14	R2-RW-5-50	P/L hot PremixDense 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	Cu.m	8,797.00	1,454.00	127,90,838.00
15	R2-RW-5-48	P/L hot PremixDense 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 to thickness of 50 mm.	Sqm	440.00	83,257.00	366,33,080.00
16	R2-RW-5-04	P/L MINIMUM 30 mm hot Premix Bituminous concrete with 6.00% 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	Sqm	339.00	72,264.00	244,97,496.00
17	R2-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.	Each	1,151.00	435.00	5,00,685.00
18	R2-RW-6-04	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.	Each	801.00	656.00	5,25,456.00
19	R2-RW-6-05	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 cc coping under frame & cover of manhole including curing etc. complete as specified and as directed.	Each	2,297.00	609.00	13,98,873.00
20	R2-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	Sq.Mt.	727.00	213.00	1,54,851.00

Sr.No.	Item Code No.	Description	Unit	Rate	Qty	Amount
21	R2-RT-16-33	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	Sq.Mt.	662.00	4,412.00	29,20,744.00
22	R2-CS-MW-1-a	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 3.5 and above in foundation and plinth in:Cement mortar 1:3 (1 cement : 3 coarse sand)	Cu.Mt.	6,031.00	242.00	14,59,502.00
23	R2-SWD-58	Providing 20 mm thick cement plaster in cement mortar 1:2 including neat cement rendering (without water proofing compound) as specified & as directed by Engineer in Charge.	Sq.Mt.	376.00	980.00	3,68,480.00
24	R2-SWD-145	Supplying and fixing 0.56m internal dia circular C.I. airtightcover and frame weighing Between weighingminimum 208kg of material grade of min. FG 150conforming to IS 210:2009 and specification no SP-SWD-3 with the grade designation of HD 20 conforming to IS1726:1991 including testing as per CL 10 and	EA	23096.00	80.00	18,47,680.00
25	R2-SWD-146	Supplying and fixing 1.20m x 0.90m internal size ofrectangular C.I. air-tight cover and frame weighingminimum 910 kg of material grade of min. FG 150conforming to IS 210:2009 and specification no SP-SWD-3 with the grade designation of HD 20 conforming to IS1726:1991 including testing as per CL 10 and	EA	94200.00	51.00	48,04,200.00
26	R2-SWD-148	Supplying and fixing 0.90m x 0.60m internal size ofrectangular C.I. air-tight cover and frame weighingminimum 270 of material grade of min. FG 150conforming to IS 210:2009 and specification no SP-SWD-3 with the grade designation of HD 20 conforming to IS1726:1991including testing as per CL 10 and	EA	31371.00	112.00	35,13,552.00
27	R2-SWD-175	Providing & Fixing 0.60m X 0.50m clear internal size of M.S. Galvanised hinged type grating and frame (weighing minimum 71 kg) 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.) including testing ,inspection of	Each	9328	18	1,67,904.00
28	R2-RW-10-26	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	Cu.Mt.	6,893.00	923.00	63,62,239.00

Sr.No.	Item Code No.	Description	Unit	Rate	Qty	Amount
29	R2-RW-10-60	Providing and fixing of the precast kerbstone of height 325mm, base width 165mm, top width 115mm min M20 grade RMC supplied through MCGM approved plant or concrete mixed with use of weigh batch mixer as detailed in drawing No. Dy.Ch.E./Rds/93/E.S. of 17/8/2005, excavation in any soil except rock, laying and leveling course of M-	Rmt .	605.00	3,745.00	22,65,725.00
30	R2-RW-10-61	Providing and fixing of the precast tapered water table of thickness varying from 105 to 125mm, 300mm width in M-20 grade RMC (Supplied through MCGM approved plant) or concrete mixed with use of weigh batch mixer as detailed in drawing No. Dy.Ch.E./Rds/94/E.S. dated 17.8.2005 inclusive of excavation in any soil except rock, laying of file	Rmt .	471.00	11,491.00	54,12,261.00
31	R2-SWD-169	Providing & Fixing 0.60m X 0.50m clear internal size of M.S. Galvanised hinged type grating and frame (weighing minimum 71 kg) 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.) including testing	EA	9,441.00	281.00	26,52,921.00
32	R2-RW-3-22	Removing the paver blocks of any thickness, size & colour from carriageway or footpath & transporting the same toward depot or any where in MCGM limit. The paver blocks shall be stacked neatly at specified location etc. complete as specified and as directed by the Engineer.	Sq.Mt.	157.00	5,906.00	9,27,242.00
33	R2-RW-10-55	Excavation in Reinforced OR pavement grade concrete M-20 & above by using modern machinery (poclain with rock breaker, etc.) including with stacking of excavated material within 150 m radius etc complete upto any depth as specified & as directed, by the Engineer.	Cu.Mt.	1,525.00	0.00	0.00
34	R2-RW-10-33	Providing & laying M-40 C.C. avg. compressive strength 45 MPa and avg. flexural strength of 5.0 MPa (As per IRC 15-2002.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 flakes and transported by RW-10-33 transit mixer and placing at work site.	Cu.Mt.	7,968.00	0.00	0.00
35	R2-RW-5-63	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 with mastic paver and including all necessary tools, labours & barricading, spreading of aggregates as antiskid measures by means over	Sqm	1,660.00	11,163.00	185,30,580.00
36	R2-RW-10-29	P/L R.M.C. M -20 C.C. Having having avg. compressive strength 24 Mpa procured from M.C.G.M. approved RMC plant including used of approved make plasticizer /retarder & transported by transit mixer & placing at work site ,compacting ,finishing curing etc. by contractors water & tarring the sides from work with hot	Cu.Mt.	7,055.00	5.00	35,275.00

Sr.No.	Item Code No.	Description	Unit	Rate	Qty	Amount
37	R2-RW-10-63	Providing and applying and finishing the top surface of M-20 concrete with stamp/stencil.....	Sq.Mt.	436.00	0.00	0.00
38	R2-RW-10-39	Extra over above RW-10-33 M-40 C.C. and Avg. Flexural Strength of 5.0 MPa in 7 days procured from M.C.G.M. approved R.M.C. plant including use of Microsilica, (MCGM Registration manufacturer) superplasticizer and fiber, transported by transit mixer and placing at work site. Compacting finishing, initial curing by approved curing compound Contractors water and	Cu.M	1,067.00	0.00	0.00
39	R2-RW-3-11	Providing & fixing 80 mm thick interlocking unishape concrete pavers (monolithic- single layer precast concrete blocks) of gray cement coloured in the carriageway having average crushing strength 50N/sq.m.m. as per technical specification, placed on average compacted thickness of 25mm, uniformly graded river sand	Sq.Mt	871.00	4,004.00	34,87,484.00
40	R2-RW-10-27	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. Contractors has to make his own arrangement of	Cu.M	6,452.00	89.00	5,74,228.00
41	R2-RW-3-20	Providing & Fixing in the carriageway interlocking 100 mm thick grey cement concrete unishape pavers in Red (Terra Cotta), Black, Brown or any colour unishape (monolithic-single layer precast concrete blocks) with pigment @ 3% by weight of cement	Sq.Mt	1,213.00	0.00	0.00
42	R2-RW-10-31	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 and	Cu.Mt.	4,562.00	0.00	0.00
43	CE4-18-96.1-FA2	Providing and laying tactile block of yellow colour conforming to IS 13801 of size 300x300x60 mm on pedestrian kerb ramp as shown in the drawing and directed by the architect. The tile should be subjected to a pressure of not less than 14N/Sq.m.	Sq.Mt	4,422.00	0.00	0.00
43	R2-RW-7-18	Providing applying Yellow & Black roadmarking paint grade-I in 3- including single coat of approved brand primer after cleaning of old surface of any type divider with brushing by wire brush as per relevant I. S. codes to satisfaction of Engineer in charge etc. complete	Sq.Mt	166.00	0.00	0.00

