

**AW-237 :- Resurfacing of Various Roads in Asphalt mecadam in R/South, R/Central & R/North wards in Zone-VII of Western Suburbs Division.**

Sr. No.	Schedule Item No.	Description	Rate	Per	Total Qty	Amount
1	R2-RW-7-10	Milling upto 75 mm 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 60 mm depth.)	82	Square Meter	58892	4829144
2	R2-RW-5-20	Providing and applying PRIME COAT with CATIONIC BITUMEN EMULSION (SS) @ 7 to 12Kg. 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 Low Porosity surface & the primed surface shall be allowed to cure for at least 24hours or any other higher period, as is found to be necessary to allowall the moisture or volatiles to evaporate before any subsequent bituminous surface treatment or mixi slaid(As per New Road Specifications Clause No. 313, curing as per 313.5)-	57	Square Meter	58892	3356844
3	R2-RW-5-23	Providing and applying TACK COAT with CATIONIC BITUMEN EMULSION (RS) @ 0.2 to 0.25Kg. 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 volatile shave 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,curingas per 314.3.4)-	33	Square Meter	58892	1943436
4	R2-RW-5-25	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 DRY & HUNGRY BITUMINOUS SURFACES (As per New Road Specifications Clause No. 314)-	35	Square Meter	58892	2061220
5	R2-RW-5-44	P/L hot Premix Dense bituminous macadam with 4.50% bitumen content of grade VG-40 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 at 1% by weight of bitumen using grading II of "MORTH"( As per prevailing MCGM specifications for Roadworks clause no.354)	450	Square Meter	58892	26501400
6	R2-RW-5-40	P/L hot premix Bituminous concrete with 6.00% of bitumen grade VG-40, surface coat by mix design as per MORTH to the compacted thickness of 40 mm, using new material to the required line, level and camber rolling with power vibratory roller & sensor paver, etc. Complete as specified and as directed with lime filler 2% by weight and antistripping agent @ 1% of bitumen by weight etc.complete (As per prevailing MCGM specifications for Roadworks clause no.364)	450	Square Meter	58892	26501400
7	R2-RW-6-03	Raising or lowering circular manholes to the required level upto 20cm. Including all material, form work etc.with 16cm.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	1151	Each	278	319978
8	R2-RW-6-04	Raising or lowering water entrances ,hydrant key box/sluiibox/gully trap chambers to the required level,upto20cm.including all materials,curingetc. complete as specified and as directed.	801	Each	1274	1020474
9	R2-RW-6-05	Raising or lowering rectangular manholes to the required level upto 30cm. Including all materials, form work, brick work and with 16 cm.thick M-15 C.C. coping under frame & cover of manhole including curring etc.complete, as specified and as directed.	2297	Each	121	277937

Sr. No.	Schedule Item No.	Description	Rate	Per	Total Qty	Amount
10	R2-HE-7-2-a	---Do-----15 mm dia.	168	Running Meter	800	134400
11	R2-HE-7-2-b	---Do-----20 mm dia.	174	Running Meter	800	139200
12	R2-HE-7-2-c	---Do-----25 mm dia.	265	Running Meter	800	212000
13	R2-HE-7-2-d	---Do-----32 mm dia.	316	Running Meter	800	252800
14	R2-HE-7-2-e	---Do-----40 mm dia.	388	Running Meter	800	310400
15	R2-HE-7-2-f	---Do-----50 mm dia.	481	Running Meter	800	384800
16	R2-CS-PS-90-a	Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc 15 mm dia	199	Running Meter	800	159200
17	R2-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 50 km/hrs.	1241	Nos	169	209729
18	R2-RT-16-34	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 NOS 427 complete as directed by the engineer.'	427	Each	8135	3473645
19	R2-RW-10-37	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.	471.07	Running Meter	1723	811653.61
20	R2-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 then 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.	343	Cubic Meter	960	329280

Sr. No.	Schedule Item No.	Description	Rate	Per	Total Qty	Amount
21	R2-RW-2-21	Providing & laying, spreading & compacting specified crushed stone in granular subbase course including premixing the material in mechanical mixer (pugmill or approved type), spreading of mixed material in uniform layer of 100 mm 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 75 mm to 75 mm micron as per MCGM Road Specifications clause no.210).	2547	Cubic Meter	102	259794
22	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 (pugmill) carriage of mix material by tipper to site laying in uniform layer of 75 mm to 100 mm (compacted thickness each) with sensor paver finisheron prepared subbase & compacting with vibratory roller (10tonne) 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 53 mm to 75 mm micron as per MCGM Road Specifications clause no.240).	2937	Cubic Meter	960	2819520
23	R2-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.	32	Running Meter	11673	373536
24	R2-RW-10-51	Providing and fixing of Water Dished Channel size: 600 x 300 x 80 mm, 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 M15 grade RMC 100 mm thick or required slope, (inclusive of form work) jointing in 1:2 cement mortar proportion flush to concrete surfaces as directed. (Water tables shall be procured from MCGM registered agencies).	799	Meter	11673	9326727
25	R2-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 MCGM limit. The paver blocks shall be stacked neatly at specified locations etc. complete as specified and as directed by the Engineer.	157	Square Meter	4794	752658
26	R2-RW-3-11	Providing & fixing 80 mm thick interlocking unishape concrete pavers (monolithic- single layer precast concrete blocks) in grey cement in the carriageway having average crushing strength of not less than 50N/mm2 as per technical specifications and IS Code 15658:2006,placed on average compacted thickness of 25 mm, well graded sand cushioning uniformly compacted with proper capacity mechanical compactor with the proper level, grade and camber etc. complete as specified and as directed by the Engineer.	871	Square Meter	4794	4175574
27	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 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.	662	Square Meter	9438	6247956

Sr. No.	Schedule Item No.	Description	Rate	Per	Total Qty	Amount
28	R2-SWD-175	Supply of 0.60m X 0.50m clear internal size of M.S. Galvanised hinged type grating and frame (weighing minimum 71 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.) including testing ,inspection of material sample and finished product as per IS standards and as per Standard Specification no SP-SWD-3 and as per drawing (Dwg No. MCGM/SWD/2013-03), etc complete as specified & as directed by Engineer in Charge.	9328	Each	142	1324576
29	R2-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).	9569	Cubic Meter	10	95690
30	R2-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)	76770	M.T.	1.5	115155
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