

BRIHANMUMBAI MUNICIPAL CORPORATION

Subject:-		P/L 600 mm dia. R.C. NP3 class pipe Sewer line to connect existing 600mm dia. sewer line to 1800mm dia Micro sewer near sahakar nagar at service road of Eastern Express Highway, Chembur in M/West Ward.				
Sr. No.	Schedule Item No.	Description	Total Qty	Unit	Rate	Total Cost
1	R2-SE-1-1	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 / marshy / slushy soil, marine clay, reclaimed land etc. for depths/lifts upto 2.0 M 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 200 mm thickness, watering, consolidating, compacting to achieve not less than 97% Modified Proctor density conforming to relevant I-S, stacking the selected material in measurable heaps for future use within owners space or disposing within an initial lead of 150 m 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.	100.00	CuM	468.00	46800.00
2	R2-SE-1-1-a	do-do- as per item R2-SE-1-1 for lift from 2m to 4m.	90.00	CuM	638.00	57420.00
3	R2-SE-1-1-b	-do-do- as per item R2-SE-1-1 for lift from 4.0m to 6m	90.00	CuM	868.00	78120.00
4	R2-SE-1-1-c	do-do- for lift from 6.0m to 8m	30.00	CuM	1036.00	31080.00
5	R2-SE-1-1-d	do-do- for lift from 8.0m to 10m	20.00	CuM	1233.00	24660.00
6	R2-SE-1-1-e	do-do- for lift from 10m to 11m	10.00	CuM	1360.00	13600.00
7	R2-SE-1-1-j	Extra over above for item no. R2-SE-1-1 to R2-SE-1-1-a 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	40.00	CuM	429.00	17160.00
8	R2-SE-1-1-u	Extra over above for item no.R2-SE-1-1 to R2-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, drill, compress or breaker, etc. including dressing/trimming the sides, leveling of bottoms,	110.00	CuM	2100.00	231000.00
9	R2-SE-1-1-ae	Extra over above for item no.R2-SE-1-1 to R2-SE-1-1-if or relevant lifts of excavation in hard rock and reinforced concrete by splitter machine	110.00	CuM	4970.00	546700.00
10	R2-SE-1-4-b	Providing and removing closed 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.	20.00	CuM	8586.00	171720.00
11	R2-SE-1-5-a	Leaving shoring in trenches. (New or old) including dog spikes.	10.00	CuM	15561.00	155610.00
12	R2-RW-10-27	Providing & laying M 10 c.c. For foundation / bedding including boxing, curing etc. complete as specified and as directed.	10.00	CuM	6452.00	64520.00
13	R2-RW-10-26	-do -do- M 15 c.c. For full encasement or cradle -do- -do-	10.00	CuM	6893.00	68930.00
14	R2-CS-MW-1-b	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in: Cement mortar 1:4 (1 cement : 4 coarse sand)	10.00	CuM	5807.00	58070.00
15	R2-CS-MW-1-c	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in: Cement mortar 1:3 (1 cement : 3 coarse sand)	10.00	CuM	5584.00	55840.00
16	R2-SE-4-3	Providing 20 mm thick cement plaster in cement mortar 1:2 including neat cement rendering. (without water proofing compound)	10.00	CuM	376.00	3760.00
17	R2-SE-4-9	Providing 20 mm thick cement plaster in cement mortar 1:1 including neat cement rendering. (without water proofing compound).	10.00	CuM	436.00	4360.00
18	R2-SE-5-8-f	Providing and laying R.C.C. 600mm dia Pipes (NP3 Class) with rubber rings jointing etc. complete as specified and directed.	15.00	m	4132.00	61980.00
19	R2-SE-7-14	Do- -do- 630 mm dia HDPE pipes of PE-80 grade and PN-6 class in vertical drop of 1.2M -do- -do- as in item No.SE-7-4	1.00	no.	193961.00	193961.00
20	R2-SE-7-14-a	Extra over above per additional metre depth -do- -do- as per above item	2.00	MD	22644.00	45288.00
21	R2-SE-6-2-b	Constructing on sewer brick masonry conical manhole 1.5 M. dia. at bottom and 0.56 M dia. at top including C.I. Extra.Heavy Duty circular air tight frame and cover etc. complete as per description in item No.SE-6-1 depth upto 2.3 M.	1.00	No.	90305.00	90305.00
22	R2-SE-6-2-c	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 benchingdo-do	3.00	MD	34099.00	102297.00
23	R2-SE-6-2-d	Do- -do- above 5 M & upto 9 M -do- -do-	1.00	MD	48097.00	48097.00
24	R2-RW-1-18	Levelling, watering & rolling by vibratory roller IDD-22 weighing not less than	50.00	Sq m	19.00	950.00
25	R2-RW-10-28	Supply & filling sand, metal GRAVELLY SAND Corresponded to CLASS II/	20.00	CuM	1905.00	38100.00
26	R2-RW-2-21	Providing & laying, spreading & compacting specified crushed stone in	10.00	CuM	2547.00	25470.00
27	R2-RW-2-22	Rebate for not using motor grader / paver for laying of Granular Sub base in	10.00	CuM	-93.00	-930.00
28	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	10.00	CuM	2937.00	29370.00
29	R2-RW-5-45	P/L hot Premix Dense bituminous macadam with 4.50% bitumen content of	50.00	Sq m	676.00	33800.00

30	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 40mm, 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 anti stripping agent @ 1% of bitumen by weight etc. complete (As per prevailing MCGM specifications for Roadworks clause no 364)	50.00	Sq m	450.00	22500.00	
31	R2-RW-5-20	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	50.00	Sq m	57.00	2850.00	
32	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 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	50.00	Sq m	33.00	1650.00	
33	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 etc.completed, as directed for DRY & HUNGRY BITUMINOUS SURFACES (As per prevailing MCGM specifications for Roadworks Clause No. 314)	50.00	Sq m	35.00	1750.00	
34	R2-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	Sq m	6764.00	33820.00	
35	R2-RW-3-11	Providing & fixing 80 mm thick interlocking unishape concrete pavers (monolithic- single layer precast concrete blocks) in grey cement in the	10.00	SqM	871.00	8710.00	
36	R2-SE-12-13	Pumping out water from drainage trenches by 5 H.P. pump per shift of 8 hours.	20.00	Shifts	1995.00	39900.00	
37	R2-SE-12-14	Pumping out water from drainage trenches by 10 H.P. pump per shift of 8 hours.	20.00	Shifts	2394.00	47880.00	
38	R2-RW-7.37	(a) To carry out total station survey of the road with reference to existing co-ordinate system by establishing control stations by establishing temporary	1.00	upto 500	20182.50	20182.50	
					Total Estimated cost =	Rs.	2477280.50
					Say	Rs.	24,77,281.00

sd/-

S.E.(S.P.)P&D, ES

sd/-

A.E.(S.P.)P&D, ES

sd/-

E.E.(S.P.)P&D, ES