

Project Name: Manglore Smart City
1.1 Grand Summary for Under Ground Drainage Zone 4

Sl. No.	Description	Cost In INR
1	Under Ground Drainage	39118345
	Total Cost	3,91,18,345
	Add Contingency @ 3%	11,73,550
	Add Utility Shifting @ 10%	39,11,834
	Add Amount for Taxes as applicable	15,64,734
	Administrative charges & Tender Premium @ 10%	39,11,834
	For Misc.Work	2,69,703
	Grand Total	4,99,50,000

Assistant Executive engineer
MSCL Mangaluru

Superintendent Engineer
MCC

Managing Director
MSCL Mangaluru

Name of the Work :- Mangalore Smart City
1.2 BOQ of UNDERGROUND DRAINAGE for Zone 4

BOQ item No.	Specification	Unit	Quantity	Rate	Amount	Remarks
	UNDERGROUND DRAINAGE					
1	KSRRB 300-49.Scarifying Bituminous course 50mm to 75 mm thick with along with premix carpet/surface dressing by manual means without disturbing the base including cost of all labours and stacking of the debris materials including cost of all labour charges complete as per specifications. MORTH /Chapter 3 KSRRB SI No.19.55,Pg No.147	Sqm	12361.75	63.84	7,89,174	
2	KSRRB 300-45.Scarifying stone metal crust 50mm to 100 mm thick with pick axes along with premix carpet/surface dressing and stacking of old serviceable materials by manual means including cost of all labours charges complete as per specifications. MORTH /Chapter 3 KSRRB SI No.19.51,Pg No.147	Sqm	12361.75	56.00	6,92,258	
3	Earthwork excavation for pipeline trenches (Except building work) including barricading depositing on bank with all lead including danger lighting and using sight rails and boning rods including shoring, strutting, bailing out water at every 100 meters wherever necessary as directed in the following Strata KUWSDB SR 15-16, SI No 1, Pg No 5					
	do in all soils mixed mixed with boulders of 30 cms size upto an exclusive of disintegrated rock D182					
	0 to 2mtr depth	Cum	15796.53	196.00	30,96,120	
4	Earthwork excavation for pipeline trenches (Except building work) including barricading depositing on bank with all lead including danger lighting and using sight rails and boning rods including shoring, strutting, bailing out water at every 100 meters wherever necessary as directed in the following Strata KUWSDB SR 15-16, SI No ii, Pg No 5					
	do in disintegrated rock, soft rock, soft shale and medium hard rock comprising of lime stone, sand stone hard shale, schiest, fissured rock without resorting to blasting					
	2 to 4mtr depth	Cum	1357.69	495.04	6,72,112	
5	Providing course sand bedding for the pipeline trenches including watering and consolidation by punners etc., complete with all lead and lift (In black cotton and rock reaches) KUWSDB 15-16, Pg No 17, SI No.6	Cum	4031.97	1809.92	72,97,548	

BOQ item No.	Specification	Unit	Quantity	Rate	Amount	Remarks
6	Supplying Unplasticised PVC pipes confirming to IS 15328:2003 with latest amendments ended with integral sockets with ISI mark and conveying to worksite,rolling and lowering into trenches,Laying true to line and level and perfect linking at joints,testing and commissioning,including loading and unloading at both destinations and cuts of pipes wherever necessary including jointing of UPVC Pipes (with cost of elastomeric sealing rings) and specials (excluding cost of specials) with jointing of approved type,with all labour with all lead and lift including encasing the pipe alround to a depth of not less than 15cms with soft gravel or selected earth available from the excavation etc.,complete and giving necessary hydraulic test to the required pressure as per ISS (Contractor will make his own arrangements for procuring water for testing) KUWSDB,Pg No 205 and 207,SI No 4					
a	Supply and laying of PVC- U Pipes as per IS 15328 SN 4 - Ring tite:	Rmt	4483.00	849.40	38,07,860	
7	Supplying Unplasticised PVC pipes confirming to IS 15328:2003 with latest amendments ended with integral sockets with ISI mark and conveying to worksite,rolling and lowering into trenches,Laying true to line and level and perfect linking at joints,testing and commissioning,including loading and unloading at both destinations and cuts of pipes wherever necessary including jointing of UPVC Pipes (with cost of elastomeric sealing rings) and specials (excluding cost of specials) with jointing of approved type,with all labour with all lead and lift including encasing the pipe alround to a depth of not less than 15cms with soft gravel or selected earth available from the excavation etc.,complete and giving necessary hydraulic test to the required pressure as per ISS (Contractor will make his own arrangements for procuring water for testing) KUWSDB,Pg No 207 and 207,SI No b1					
	Supply and laying of PVC- U Pipes as per IS 15328 SN 8 - Ring tite: 110mm	Rmt	5400.00	338.96	18,30,384	
8	Construction of RCC Manhole chambers of 1:1.5:3 proportion using form vibrators of standard type with barricading,danger lighting and using of sight rails and boning rods wherever necessary,shoring,strutting wherever required using ordinary port land cement,using 1:1.5:3 proportion RCC with 20mm and down graded jelly,well graded sand and steel of approved quality 200mm thick top concrete slab having wall thickness and raft thickness as in approved drawing,benching concrete with 1:6 slope towards the central drain finished smooth,including fixing and grouting of pipes,including conveying to work spot supply and fixing SFRC manhole cover and frame(Heavy Duty) conforming to IS : 12592 with latest amendments,on a bed of CC 1:2:4 supplying and fixing of minimum mm thick encapsulated MS Square footstepsStaggered at 300mm apart as detailed in Technical specifications including sand bedding wherever required disposal of surplus earth,watering,curing,engraving,manhole number with flow direction on the inner cylindrical surface etc,Complete including cost of reinforcement steel and fabrication charges and also cost and conveyance of all the materialslabour with all lead and lifts for various diameters and depth noted below: as per specifications,drawing and as directed by the Engineer inclusive of earth work excavation in					
a	0.9 Meter Dia Manhole	Nos	55.00	26050.90	14,32,799	
b	1.2 Meter Dia Manhole	Nos	120.00	38384.55	46,06,146	
c	1.5 meter Dia Manhole	Nos	9.00	67928.90	6,11,360	
9	Refilling Pipeline Trenches and foundation with selected available earth from trench excavation and foundation including watering,consolidation in layers of 15cms.,thick including disposing off the surplus earth with all lead and lift. KUWSDB Pg No 15,SI No 2	Cum	8004.17	66.08	5,28,915	

BOQ item No.	Specification	Unit	Quantity	Rate	Amount	Remarks
10	Carting of excavated earth of all types upto adistance mentioned below and re-carting back to the same site by vehicle including loading,unloading charges for to and fro,with all lifts and labour,HOM of machinary etc,complete after obtaining the approval of the Chief Engineer. e) 4.0 to 5.0 Km KUWSDB Pg No.15,SI No.3	Cum	9081.43	315.84	28,68,280	
11	KSRRB M400-6.2. Constriction of Granular Sub-base by Providing Close graded cushed stone aggregates of granite /trap/basalt material spreading in uniform layers with motor grader on prepared surface, mixing by mix in place method by rotavator at OMC, and compacting with vibratory power roller to achieve the desired density, complete as per specifications. B. By mix in place Method For grading II material KSRB Pg No.155,20.5.2	cum	1847.27	1576.96	29,13,068	
12	KSRRB M400-Wet Mix macadam KSRRB M400-17. Providing, laying, spreading and compacting cushed stone aggregates of granite/trap/ basalt to wet mix macadam specification including per mixing the material with water at OMC in Mechanical mix plant carriage of mixed material by tipper to site, laying in uniform layers with paver in sub- base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specification. MORTH Specification NO.406 KSRB Pg No 158,20.18	Cum	3078.78	1868.16	57,51,655	
13	KSRRB M500-6. Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications. MORTH Specification No. 502 KSRB Pg No.161,SI No:21.6	Sqm	12315.12	29.12	3,58,616	
14	KSRRB 500-30.Providing and laying 20mm thick mix seal surfacing Type A on prepared surface as wearing course with specified graded crushed aggregates of 5.6mm and 11.2mm size 0.027um/sqm premixed with bituminous binder at 2.20 kg/sqm,in hotmix plant 40/60 tonne,trnsporting the mixed materials in tipper and laying with mechanical paver finisher to required level and grade,rolling with power roller 8-10 tonne,excluding cost of tack coat including cost of all materials,labours,HOM of machineries complete as per speifications MORTH clause NO.512 using VG-30 (60/70 grade) KSRRB Pg No.166,SI No. 21.36 (Revised Rate)	Sqm	12315.12	151.20	18,62,047	
Total					3,91,18,345	
Assistant Executive Engineer MSCL Mangaluru				Superintendent Engineer MCC		

Name of the Work :- Mangalore Smart City
1.30 Measurement Sheet of UNDERGROUND DRAINAGE

SI.No.	Description of Work	Unit	No	L	B	D	Qty
1	KSRRB 300-49.Scarifying Bituminous course 50mm to 75 mm thick with along with premix carpet/surface dressing by manual means without disturbing the base including cost of all labours and stacking of the debris materials including cost of all labour charges complete as per specifications. MORTH /Chapter 3 KSRRB SI No.19.55.Pg No.147						
	Only for Pipe portion trench						
	Profile 1 (Nellikai Road)						
	MH 2210 to MH2209	Sqm	1	323.62	1.40		453.07
	Profile 2 (Bunder Road)						
	MH 1271 to MH 2235	Sqm	1	0.00	1.40		0.00
	Profile 3 (Mission Street Road)						
	MH 1202 to MH 941	Sqm	1	246.20	1.40		344.68
	Profile 4(Market,Bibi Alabi and Kandak)						
	MH 1260 to MH 2087	Sqm	1	779.90	1.40		1091.86
	Profile 5 (Maidan Cross Road)						
	MH 1011 to MH 2046	Sqm	1	104.40	1.40		146.16
	Profile 6 (Central Market Road)						
	MH 2058 to MH 1261	Sqm	1	107.90	1.40		151.06
	Profile 7 (Maidan 3rd Cross Road)						
	MH 2062 to MH 2069	Sqm	1	148.50	1.40		207.90
	Profile 8 (Nellikai Road)						
	MH 2074 to MH 2072	Sqm	1	130.30	1.40		182.42
	Profile 9 (Jewellery lane Road)						
	MH 1251 to MH 2453	Sqm	1	188.00	1.40		263.20
	Profile 10						
	MH 308 to MH 1943	Sqm	1	100.40	1.40		140.56
	Profile 11						
	MH 147 to MH 1970	Sqm	1	30.00	1.40		42.00
	Profile 12						
	MH 273 to MH 1978	Sqm	1	30.60	1.40		42.84
	Profile 13 (Jewellery lane Road)						
	MH 1990 to MH 2028	Sqm	1	160.50	1.40		224.70
	Profile 14(Bhavanthi Street Road)						
	MH 894 to MH 895	Sqm	1	0.00	1.40		0.00
	Profile 15 (Central Market Road)						
	MH 896 to MH 859	Sqm	1	181.50	1.40		254.10
	Profile 16 (Maidan 1st Cross Road)						
	MH 764 to MH 765	Sqm	1	70.20	1.40		98.28
	Profile 17 (Central Market Road)						
	MH 1959 to MH 859	Sqm	1	126.10	1.40		176.54
	Profile 18 (Gouri Mutt Street)						
	MH 1135 to MH 2007	Sqm	1	204.10	1.40		285.74
	Profile 19 (Gouri Mutt Road)						
	MH 78 to MH 1999	Sqm	1	20.30	1.40		28.42
	Profile 20(Gouri Mutt Road)						
	MH 570 to MH 2003	Sqm	1	51.10	1.40		71.54
	Profile 21(Gouri Mutt Road)						
	MH 168 to MH 2006	Sqm	1	28.10	1.40		39.34
	Profile 22 (Bhavanthi Street Road)						
	MH 136 to MH 2009	Sqm	1	0.00	1.40		0.00
	Profile 23						
	MH 742 to MH 743	Sqm	1	67.20	1.40		94.08
	Profile 24						
	MH 271 to MH 2012	Sqm	1	28.60	1.40		40.04
	Profile 25 (MPT Road)						
	MH 993 to MH 1053	Sqm	1	216.84	1.40		303.58
	Profile 26 (MPT Cross Road)						
	MH 762 to MH 2138	Sqm	1	93.12	1.40		130.37
	Profile 27 (MPT Cross Road)						
	MH 982 TO MH 2398	Sqm	1	399.10	1.40		558.74
	Profile 28 (Jodumutt Road)						
	MH 786 TO MH 787	Sqm	1	72.40	1.40		101.36

Sl.No.	Description of Work	Unit	No	L	B	D	Qty
	Profile 29 (Bhavanthi Street Road)						
	MH 894 TO MH 895	Sqm	1	0.00	1.40		0.00
	Profile 30 (Cross Road)						
	MH 678 TO MH 695	Sqm	1	70.20	1.40		98.28
	Profile 31 (Raghavendra and Mukyaprana Temple Road)						
	MH 2020 to MH 1090	Sqm	1	0.00	1.40		0.00
	Profile 32 (Raghavendra Mutt Cross Road)						
	MH 967 to MH 2157	Sqm	1	184.70	1.40		258.58
	Profile 33 (Nellikai Cross Road)						
	MH 940 to MH 2221	Sqm	1	94.60	1.40		132.44
	Profile 34 (Raghavendra Mutt Road)						
	MH 766 to MH 767	Sqm	1	62.80	1.40		87.92
	Profile 35 (Cross Road)						
	MH 2159 to MH 364	Sqm	1	14.40	1.40		20.16
	Profile 36 (Mukyaprana Temple Road)						
	MH 2167 to MH 2164	Sqm	1	26.80	1.40		37.52
	Profile 37 (MPT Cross Road)						
	MH 2399 to MH 2405	Sqm	1	119.80	1.40		167.72
	Only for Manhole portion						
	Profile 1 (Nellikai Road)						
	MH 2210 to MH2209	Sqm	13	2.00	2.00		52.00
	Profile 2 (Bunder Road)						
	MH 1271 to MH 2235	Sqm	0	2.00	2.00		0.00
	Profile 3 (Mission Street Road)						
	MH 1202 to MH 941	Sqm	8	2.00	2.00		32.00
	Profile 4(Market,Bibi Alabi and Kandak)						
	MH 1260 to MH 2087	Sqm	31	2.00	2.00		124.00
	Profile 5 (Maidan Cross Road)						
	MH 1011 to MH 2046	Sqm	5	1.70	1.70		14.45
	Profile 6 (Central Market Road)						
	MH 2058 to MH 1261	Sqm	6	1.70	1.70		17.34
	Profile 7 (Maidan 3rd Cross Road)						
	MH 2062 to MH 2069	Sqm	5	1.70	1.70		14.45
	Profile 8 (Nellikai Road)						
	MH 2074 to MH 2072	Sqm	5	2.00	2.00		20.00
	Profile 9 (Jewellery lane Road)						
	MH 1251 to MH 2453	Sqm	8	2.00	2.00		32.00
	Profile 10						
	MH 308 to MH 1943	Sqm	5	2.00	2.00		20.00
	Profile 11						
	MH 147 to MH 1970	Sqm	1	1.70	1.70		2.89
	Profile 12						
	MH 273 to MH 1978	Sqm	1	1.70	1.70		2.89
	Profile 13 (Jewellery lane Road)						
	MH 1990 to MH 2028	Sqm	7	1.70	1.70		20.23
	Profile 14(Bhavanthi Street Road)						
	MH 894 to MH 895	Sqm	0	1.70	1.70		0.00
	Profile 15 (Central Market Road)						
	MH 896 to MH 859	Sqm	9	2.00	2.00		36.00
	Profile 16 (Maidan 1st Cross Road)						
	MH 764 to MH 765	Sqm	3	1.70	1.70		8.67
	Profile 17 (Central Market Road)						
	MH 1959 to MH 859	Sqm	4	1.70	1.70		11.56
	Profile 18 (Gouri Mutt Street)						
	MH 1135 to MH 2007	Sqm	8	2.00	2.00		32.00
	Profile 19 (Gouri Mutt Road)						
	MH 78 to MH 1999	Sqm	1	1.70	1.70		2.89
	Profile 20(Gouri Mutt Road)						
	MH 570 to MH 2003	Sqm	2	2.00	2.00		8.00
	Profile 21(Gouri Mutt Road)						
	MH 168 to MH 2006	Sqm	1	1.70	1.70		2.89
	Profile 22 (Bhavanthi Street Road)						
	MH 136 to MH 2009	Sqm	0	1.70	1.70		0.00
	Profile 23						
	MH 742 to MH 743	Sqm	3	1.70	1.70		8.67
	Profile 24						
	MH 271 to MH 2012	Sqm	1	1.70	1.70		2.89
	Profile 25 (MPT Road)						
	MH 993 to MH 1053	Sqm	6	2.30	2.30		31.74
	MH 993 to MH 1053	Sqm	3	2.30	2.30		15.87

Sl.No.	Description of Work	Unit	No	L	B	D	Qty
	Profile 26 (MPT Cross Road)						
	MH 762 to MH 2138	Sqm	5	2.00	2.00		20.00
	Profile 27 (MPT Cross Road)						
	MH 982 TO MH 2398	Sqm	12	2.00	2.00		48.00
	MH 982 TO MH 2398	Sqm	2	2.00	2.00		8.00
	Profile 28 (Jodumutt Road)						
	MH 786 TO MH 787	Sqm	3	1.70	1.70		8.67
	Profile 29 (Bhavanthi Street Road)						
	MH 894 TO MH 895	Sqm	0	1.70	1.70		0.00
	Profile 30 (Cross Road)						
	MH 678 TO MH 695	Sqm	4	2.00	2.00		16.00
	Profile 31 (Raghavendra and Mukyaprana Temple Road)						
	MH 2020 to MH 1090	Sqm	0	2.30	2.30		0.00
	Profile 32 (Raghavendra Mutt Cross Road)						
	MH 967 to MH 2157	Sqm	7	1.70	1.70		20.23
	Profile 33 (Nellikai Cross Road)						
	MH 940 to MH 2221	Sqm	5	1.70	1.70		14.45
	Profile 34 (Raghavendra Mutt Road)						
	MH 766 to MH 767	Sqm	3	2.00	2.00		12.00
	Profile 35 (Cross Road)						
	MH 2159 to MH 364	Sqm	1	1.70	1.70		2.89
	Profile 36 (Mukyaprana Temple Road)						
	MH 2167 to MH 2164	Sqm	1	1.70	1.70		2.89
	Profile 37 (MPT Cross Road)						
	MH 2399 to MH 2405	Sqm	5	2.00	2.00		20.00
	For House Hold Connection	Sqm	900	6.00	1.00		5400.00
		Sqm				Total	12361.75
2	KSRRB 300-45.Scarifying stone metal crust 50mm to 100 mm thick with pick axes along with premix carpet/surface dressing and stacking of old serviceable materials by manual means including cost of all labours charges complete as per specifications. MORTH /Chapter 3 KSRRB SI No.19,51,Pg No.147						
	Only for Pipe Portion Trench						
	Profile 1 (Nellikai Road)						
	MH 2210 to MH2209	Sqm	1	323.62	1.4		453.07
	Profile 2 (Bunder Road)						
	MH 1271 to MH 2235	Sqm	1	0.00	1.4		0.00
	Profile 3 (Mission Street Road)						
	MH 1202 to MH 941	Sqm	1	246.20	1.4		344.68
	Profile 4(Market,Bibi Alabi and Kandak)						
	MH 1260 to MH 2087	Sqm	1	779.90	1.4		1091.86
	Profile 5 (Maidan Cross Road)						
	MH 1011 to MH 2046	Sqm	1	104.40	1.4		146.16
	Profile 6 (Central Market Road)						
	MH 2058 to MH 1261	Sqm	1	107.90	1.4		151.06
	Profile 7 (Maidan 3rd Cross Road)						
	MH 2062 to MH 2069	Sqm	1	148.50	1.4		207.90
	Profile 8 (Nellikai Road)						
	MH 2074 to MH 2072	Sqm	1	130.30	1.4		182.42
	Profile 9 (Jewellery lane Road)						
	MH 1251 to MH 2453	Sqm	1	188.00	1.4		263.20
	Profile 10						
	MH 308 to MH 1943	Sqm	1	100.40	1.4		140.56
	Profile 11						
	MH 147 to MH 1970	Sqm	1	30.00	1.4		42.00
	Profile 12						
	MH 273 to MH 1978	Sqm	1	30.60	1.4		42.84
	Profile 13 (Jewellery lane Road)						
	MH 1990 to MH 2028	Sqm	1	160.50	1.4		224.70
	Profile 14(Bhavanthi Street Road)						
	MH 894 to MH 895	Sqm	1	0.00	1.4		0.00
	Profile 15 (Central Market Road)						
	MH 896 to MH 859	Sqm	1	181.50	1.4		254.10
	Profile 16 (Maidan 1st Cross Road)						
	MH 764 to MH 765	Sqm	1	70.20	1.4		98.28
	Profile 17 (Central Market Road)						

Sl.No.	Description of Work	Unit	No	L	B	D	Qty
	MH 1959 to MH 859	Sqm	1	126.10	1.4		176.54
	Profile 18 (Gouri Mutt Street)						
	MH 1135 to MH 2007	Sqm	1	204.10	1.4		285.74
	Profile 19 (Gouri Mutt Road)						
	MH 78 to MH 1999	Sqm	1	20.30	1.4		28.42
	Profile 20(Gouri Mutt Road)						
	MH 570 to MH 2003	Sqm	1	51.10	1.4		71.54
	Profile 21(Gouri Mutt Road)						
	MH 168 to MH 2006	Sqm	1	28.10	1.4		39.34
	Profile 22 (Bhavanthi Street Road)						
	MH 136 to MH 2009	Sqm	1	0.00	1.4		0.00
	Profile 23						
	MH 742 to MH 743	Sqm	1	67.20	1.4		94.08
	Profile 24						
	MH 271 to MH 2012	Sqm	1	28.60	1.4		40.04
	Profile 25 (MPT Road)						
	MH 993 to MH 1053	Sqm	1	216.84	1.4		303.58
	Profile 26 (MPT Cross Road)						
	MH 762 to MH 2138	Sqm	1	93.12	1.4		130.37
	Profile 27 (MPT Cross Road)						
	MH 982 TO MH 2398	Sqm	1	399.10	1.4		558.74
	Profile 28 (Jodumutt Road)						
	MH 786 TO MH 787	Sqm	1	72.40	1.4		101.36
	Profile 29 (Bhavanthi Street Road)						
	MH 894 TO MH 895	Sqm	1	0.00	1.4		0.00
	Profile 30 (Cross Road)						
	MH 678 TO MH 695	Sqm	1	70.20	1.4		98.28
	Profile 31 (Raghavendra and Mukyaprana Temple Road)						
	MH 2020 to MH 1090	Sqm	1	0.00	1.4		0.00
	Profile 32 (Raghavendra Mutt Cross Road)						
	MH 967 to MH 2157	Sqm	1	184.70	1.4		258.58
	Profile 33 (Nellikai Cross Road)						
	MH 940 to MH 2221	Sqm	1	94.60	1.4		132.44
	Profile 34 (Raghavendra Mutt Road)						
	MH 766 to MH 767	Sqm	1	62.80	1.4		87.92
	Profile 35 (Cross Road)						
	MH 2159 to MH 364	Sqm	1	14.40	1.4		20.16
	Profile 36 (Mukyaprana Temple Road)						
	MH 2167 to MH 2164	Sqm	1	26.80	1.4		37.52
	Profile 37 (MPT Cross Road)						
	MH 2399 to MH 2405	Sqm	1	119.80	1.4		167.72
	Only for Manhole portion						
	Profile 1 (Nellikai Road)						
	MH 2210 to MH2209	Sqm	13	2.00	2.00		52.00
	Profile 2 (Bunder Road)						
	MH 1271 to MH 2235	Sqm	0	2.00	2.00		0.00
	Profile 3 (Mission Street Road)						
	MH 1202 to MH 941	Sqm	8	2.00	2.00		32.00
	Profile 4(Market,Bibi Alabi and Kandak)						
	MH 1260 to MH 2087	Sqm	31	2.00	2.00		124.00
	Profile 5 (Maidan Cross Road)						
	MH 1011 to MH 2046	Sqm	5	1.70	1.70		14.45
	Profile 6 (Central Market Road)						
	MH 2058 to MH 1261	Sqm	6	1.70	1.70		17.34
	Profile 7 (Maidan 3rd Cross Road)						
	MH 2062 to MH 2069	Sqm	5	1.70	1.70		14.45
	Profile 8 (Nellikai Road)						
	MH 2074 to MH 2072	Sqm	5	2.00	2.00		20.00
	Profile 9 (Jewellery lane Road)						
	MH 1251 to MH 2453	Sqm	8	2.00	2.00		32.00
	Profile 10						
	MH 308 to MH 1943	Sqm	5	2.00	2.00		20.00
	Profile 11						
	MH 147 to MH 1970	Sqm	1	1.70	1.70		2.89
	Profile 12						

Sl.No.	Description of Work	Unit	No	L	B	D	Qty
	MH 273 to MH 1978	Sqm	1	1.70	1.70		2.89
	Profile 13 (Jewellery lane Road)						
	MH 1990 to MH 2028	Sqm	7	1.70	1.70		20.23
	Profile 14(Bhavanthi Street Road)						
	MH 894 to MH 895	Sqm	0	1.70	1.70		0.00
	Profile 15 (Central Market Road)						
	MH 896 to MH 859	Sqm	9	2.00	2.00		36.00
	Profile 16 (Maidan 1st Cross Road)						
	MH 764 to MH 765	Sqm	3	1.70	1.70		8.67
	Profile 17 (Central Market Road)						
	MH 1959 to MH 859	Sqm	4	1.70	1.70		11.56
	Profile 18 (Gouri Mutt Street)						
	MH 1135 to MH 2007	Sqm	8	2.00	2.00		32.00
	Profile 19 (Gouri Mutt Road)						
	MH 78 to MH 1999	Sqm	1	1.70	1.70		2.89
	Profile 20(Gouri Mutt Road)						
	MH 570 to MH 2003	Sqm	2	2.00	2.00		8.00
	Profile 21(Gouri Mutt Road)						
	MH 168 to MH 2006	Sqm	1	1.70	1.70		2.89
	Profile 22 (Bhavanthi Street Road)						
	MH 136 to MH 2009	Sqm	0	1.70	1.70		0.00
	Profile 23						
	MH 742 to MH 743	Sqm	3	1.70	1.70		8.67
	Profile 24						
	MH 271 to MH 2012	Sqm	1	1.70	1.70		2.89
	Profile 25 (MPT Road)						
	MH 993 to MH 1053	Sqm	6	2.30	2.30		31.74
	MH 993 to MH 1053	Sqm	3	2.30	2.30		15.87
	Profile 26 (MPT Cross Road)						
	MH 762 to MH 2138	Sqm	5	2.00	2.00		20.00
	Profile 27 (MPT Cross Road)						
	MH 982 TO MH 2398	Sqm	12	2.00	2.00		48.00
	MH 982 TO MH 2398	Sqm	2	2.00	2.00		8.00
	Profile 28 (Jodumutt Road)						
	MH 786 TO MH 787	Sqm	3	1.70	1.70		8.67
	Profile 29 (Bhavanthi Street Road)						
	MH 894 TO MH 895	Sqm	0	1.70	1.70		0.00
	Profile 30 (Cross Road)						
	MH 678 TO MH 695	Sqm	4	2.00	2.00		16.00
	Profile 31 (Raghavendra and Mukyaprana Temple Road)						
	MH 2020 to MH 1090	Sqm	0	2.30	2.30		0.00
	Profile 32 (Raghavendra Mutt Cross Road)						
	MH 967 to MH 2157	Sqm	7	1.70	1.70		20.23
	Profile 33 (Nellikai Cross Road)						
	MH 940 to MH 2221	Sqm	5	1.70	1.70		14.45
	Profile 34 (Raghavendra Mutt Road)						
	MH 766 to MH 767	Sqm	3	2.00	2.00		12.00
	Profile 35 (Cross Road)						
	MH 2159 to MH 364	Sqm	1	1.70	1.70		2.89
	Profile 36 (Mukyaprana Temple Road)						
	MH 2167 to MH 2164	Sqm	1	1.70	1.70		2.89
	Profile 37 (MPT Cross Road)						
	MH 2399 to MH 2405	Sqm	5	2.00	2.00		20.00
	For House Hold Connection	Sqm	900	6.00	1.00		5400.00
		Sqm				Total	12361.75

SI.No.	Description of Work	Unit	No	L	B	D	Qty
3	Earthwork excavation for pipeline trenches (Except building work) including barricading depositing on bank with all lead including danger lighting and using sight rails and boning rods including shoring, strutting, bailing out water at every 100 meters wherever necessary as directed in the following Strata KUWSDB SR 15-16, SI No 1, Pg No 5						
i)	do in all soils mixed mixed with boulders of 30 cms size upto an exclusive of disintegrated rock D182						
a	0 to 2 mtr Depth (for 1.4m Width)						
	Profile 1 (Nellikai Road)						
	MH 2210 to MH2209	Cum	1	323.62	1.4	1.42	642.04
	Profile 2 (Bunder Road)						
	MH 1271 to MH 2235	Cum	1	0.00	1.4	0.00	0.00
	Profile 3 (Mission Street Road)						
	MH 1202 to MH 941	Cum	1	246.20	1.4	1.47	507.25
	Profile 4(Market,Bibi Alabi and Kandak)						
	MH 1260 to MH 2087	Cum	1	779.90	1.4	1.30	1419.42
	Profile 5 (Maidan Cross Road)						
	MH 1011 to MH 2046	Cum	1	104.40	1.4	1.30	189.86
	Profile 6 (Central Market Road)						
	MH 2058 to MH 1261	Cum	1	107.90	1.4	1.38	207.83
	Profile 7 (Maidan 3rd Cross Road)						
	MH 2062 to MH 2069	Cum	1	148.50	1.4	1.43	297.71
	Profile 8 (Nellikai Road)						
	MH 2074 to MH 2072	Cum	1	130.30	1.4	1.50	273.08
	Profile 9 (Jewellery lane Road)						
	MH 1251 to MH 2453	Cum	1	188.00	1.4	1.41	370.17
	Profile 10						
	MH 308 to MH 1943	Cum	1	100.40	1.4	1.50	210.84
	Profile 11						
	MH 147 to MH 1970	Cum	1	30.00	1.4	1.49	62.37
	Profile 12						
	MH 273 to MH 1978	Cum	1	30.60	1.4	1.50	64.26
	Profile 13 (Jewellery lane Road)						
	MH 1990 to MH 2028	Cum	1	160.50	1.4	1.50	337.05
	Profile 14(Bhavanthi Street Road)						
	MH 894 to MH 895	Cum	1	0.00	1.4	0.00	0.00
	Profile 15 (Central Market Road)						
	MH 896 to MH 859	Cum	1	181.50	1.4	1.41	359.08
	Profile 16 (Maidan 1st Cross Road)						
	MH 764 to MH 765	Cum	1	70.20	1.4	1.46	143.00
	Profile 17 (Central Market Road)						
	MH 1959 to MH 859	Cum	1	126.10	1.4	1.28	225.99
	Profile 18 (Gouri Mutt Street)						
	MH 1135 to MH 2007	Cum	1	204.10	1.4	1.49	425.93
	Profile 19 (Gouri Mutt Road)						
	MH 78 to MH 1999	Cum	1	20.30	1.4	1.50	42.63
	Profile 20(Gouri Mutt Road)						
	MH 570 to MH 2003	Cum	1	51.10	1.4	1.50	107.31
	Profile 21(Gouri Mutt Road)						
	MH 168 to MH 2006	Cum	1	28.10	1.4	1.50	59.01
	Profile 22 (Bhavanthi Street Road)						
	MH 136 to MH 2009	Cum	1	0.00	1.4	0.00	0.00
	Profile 23						
	MH 742 to MH 743	Cum	1	67.20	1.4	1.50	140.96
	Profile 24						
	MH 271 to MH 2012	Cum	1	28.60	1.4	1.50	60.06
	Profile 25 (MPT Road)						
	MH 993 to MH 1053	Cum	1	216.84	1.4	1.47	446.03
	Profile 26 (MPT Cross Road)						
	MH 762 to MH 2138	Cum	1	93.12	1.4	1.50	195.55
	Profile 27 (MPT Cross Road)						
	MH 982 TO MH 2398	Cum	1	399.10	1.4	1.46	817.44
	Profile 28 (Jodumutt Road)						
	MH 786 TO MH 787	Cum	1	72.40	1.4	1.50	152.04
	Profile 29 (Bhavanthi Street Road)						
	MH 894 TO MH 895	Cum	1	0.00	1.4	0.00	0.00

Sl.No.	Description of Work	Unit	No	L	B	D	Qty
	Profile 30 (Cross Road)						
	MH 678 TO MH 695	Cum	1	70.20	1.4	1.46	143.24
	Profile 31 (Raghavendra and Mukyaprana Temple Road)						
	MH 2020 to MH 1090	Cum	1	0.00	1.4	0.00	0.00
	Profile 32 (Raghavendra Mutt Cross Road)						
	MH 967 to MH 2157	Cum	1	184.70	1.4	1.40	361.64
	Profile 33 (Nellikai Cross Road)						
	MH 940 to MH 2221	Cum	1	94.60	1.4	1.28	169.65
	Profile 34 (Raghavendra Mutt Road)						
	MH 766 to MH 767	Cum	1	62.80	1.4	1.50	131.88
	Profile 35 (Cross Road)						
	MH 2159 to MH 364	Cum	1	14.40	1.4	1.50	30.24
	Profile 36 (Mukyaprana Temple Road)						
	MH 2167 to MH 2164	Cum	1	26.80	1.4	1.40	52.66
	Profile 37 (MPT Cross Road)						
	MH 2399 to MH 2405	Cum	1	119.80	1.4	1.31	219.04
							8865.28
b	0 to 2 mtr Depth (for 0.80m Width)						
	Profile 1 (Nellikai Road)						
	MH 2210 to MH2209	Cum	1	323.62	0.80	0.27	69.58
	Profile 2 (Bunder Road)						
	MH 1271 to MH 2235	Cum	1	0	0.80	0.00	0.00
	Profile 3 (Mission Street Road)						
	MH 1202 to MH 941	Cum	1	246.2	0.80	0.47	92.85
	Profile 4(Market,Bibi Alabi and Kandak)						
	MH 1260 to MH 2087	Cum	1	779.9	0.80	0.00	0.00
	Profile 5 (Maidan Cross Road)						
	MH 1011 to MH 2046	Cum	1	104.4	0.80	0.00	0.00
	Profile 6 (Central Market Road)						
	MH 2058 to MH 1261	Cum	1	107.9	0.80	0.00	0.00
	Profile 7 (Maidan 3rd Cross Road)						
	MH 2062 to MH 2069	Cum	1	148.5	0.80	0.36	42.57
	Profile 8 (Nellikai Road)						
	MH 2074 to MH 2072	Cum	1	130.3	0.80	0.44	45.61
	Profile 9 (Jewellery lane Road)						
	MH 1251 to MH 2453	Cum	1	188	0.80	0.00	0.00
	Profile 10						
	MH 308 to MH 1943	Cum	1	100.4	0.80	0.46	37.27
	Profile 11						
	MH 147 to MH 1970	Cum	1	30	0.80	0.00	0.00
	Profile 12						
	MH 273 to MH 1978	Cum	1	30.6	0.80	0.13	3.18
	Profile 13 (Jewellery lane Road)						
	MH 1990 to MH 2028	Cum	1	160.5	0.80	0.38	48.79
	Profile 14(Bhavanthi Street Road)						
	MH 894 to MH 895	Cum	1	0	0.80	0.00	0.00
	Profile 15 (Central Market Road)						
	MH 896 to MH 859	Cum	1	181.5	0.80	0.25	36.78
	Profile 16 (Maidan 1st Cross Road)						
	MH 764 to MH 765	Cum	1	70.2	0.80	0.11	6.18
	Profile 17 (Central Market Road)						
	MH 1959 to MH 859	Cum	1	126.1	0.80	0.00	0.00
	Profile 18 (Gouri Mutt Street)						
	MH 1135 to MH 2007	Cum	1	204.1	0.80	0.40	65.08
	Profile 19 (Gouri Mutt Road)						
	MH 78 to MH 1999	Cum	1	20.3	0.80	0.11	1.73
	Profile 20(Gouri Mutt Road)						
	MH 570 to MH 2003	Cum	1	51.1	0.80	0.34	13.80
	Profile 21(Gouri Mutt Road)						
	MH 168 to MH 2006	Cum	1	28.1	0.80	0.25	5.70
	Profile 22 (Bhavanthi Street Road)						
	MH 136 to MH 2009	Cum	1	0	0.80	0.00	0.00
	Profile 23						
	MH 742 to MH 743	Cum	1	67.2	0.80	0.29	15.32
	Profile 24						
	MH 271 to MH 2012	Cum	1	28.6	0.80	0.02	0.56

Sl.No.	Description of Work	Unit	No	L	B	D	Qty
	Profile 25 (MPT Road)						
	MH 993 to MH 1053	Cum	1	216.84	0.80	0.44	76.17
	Profile 26 (MPT Cross Road)						
	MH 762 to MH 2138	Cum	1	93.12	0.80	0.49	36.65
	Profile 27 (MPT Cross Road)						
	MH 982 TO MH 2398	Cum	1	399.1	0.80	0.46	146.87
	Profile 28 (Jodumutt Road)						
	MH 786 TO MH 787	Cum	1	72.4	0.80	0.46	26.64
	Profile 29 (Bhavanthi Street Road)						
	MH 894 TO MH 895	Cum	1	0	0.80	0.00	0.00
	Profile 30 (Cross Road)						
	MH 678 TO MH 695	Cum	1	70.2	0.80	0.40	22.37
	Profile 31 (Raghavendra and Mukyaprana Temple Road)						
	MH 2020 to MH 1090	Cum	1	0	0.80	0.00	0.00
	Profile 32 (Raghavendra Mutt Cross Road)						
	MH 967 to MH 2157	Cum	1	184.7	0.80	0.39	58.22
	Profile 33 (Nellikai Cross Road)						
	MH 940 to MH 2221	Cum	1	94.6	0.80	0.00	0.00
	Profile 34 (Raghavendra Mutt Road)						
	MH 766 to MH 767	Cum	1	62.8	0.80	0.34	17.08
	Profile 35 (Cross Road)						
	MH 2159 to MH 364	Cum	1	14.4	0.80	0.18	2.06
	Profile 36 (Mukyaprana Temple Road)						
	MH 2167 to MH 2164	Cum	1	26.8	0.80	0.00	0.00
	Profile 37 (MPT Cross Road)						
	MH 2399 to MH 2405	Cum	1	119.8	0.80	0.14	13.34
							884.40
c	0 to 2 mtr Depth (Manhole)						
	Profile 1 (Nellikai Road)						
	MH 2210 to MH2209	Cum	13	2	2	1.69	87.66
	Profile 2 (Bunder Road)						
	MH 1271 to MH 2235	Cum	0	2	2	0.00	0.00
	Profile 3 (Mission Street Road)						
	MH 1202 to MH 941	Cum	8	2.00	2.00	1.94	62.18
	Profile 4(Market,Bibi Alabi and Kandak)						
	MH 1260 to MH 2087	Cum	31	2	2	1.66	205.81
	Profile 5 (Maidan Cross Road)						
	MH 1011 to MH 2046	Cum	5	1.7	1.7	1.30	18.77
	Profile 6 (Central Market Road)						
	MH 2058 to MH 1261	Cum	6	1.7	1.7	1.38	23.86
	Profile 7 (Maidan 3rd Cross Road)						
	MH 2062 to MH 2069	Cum	5	1.7	1.7	1.79	25.87
	Profile 8 (Nellikai Road)						
	MH 2074 to MH 2072	Cum	5	2.00	2.00	1.93	38.69
	Profile 9 (Jewellery lane Road)						
	MH 1251 to MH 2453	Cum	8	2.00	2.00	1.41	45.01
	Profile 10						
	MH 308 to MH 1943	Cum	5	2.00	2.00	1.96	39.28
	Profile 11						
	MH 147 to MH 1970	Cum	1	1.7	1.7	1.49	4.29
	Profile 12						
	MH 273 to MH 1978	Cum	1	1.7	1.7	1.63	4.71
	Profile 13 (Jewellery lane Road)						
	MH 1990 to MH 2028	Cum	7	1.7	1.7	1.87	37.90
	Profile 14(Bhavanthi Street Road)						
	MH 894 to MH 895	Cum	0	1.7	1.7	0.00	0.00
	Profile 15 (Central Market Road)						
	MH 896 to MH 859	Cum	9	2	2	1.67	59.99
	Profile 16 (Maidan 1st Cross Road)						
	MH 764 to MH 765	Cum	3	1.7	1.7	1.57	13.57
	Profile 17 (Central Market Road)						
	MH 1959 to MH 859	Cum	4	1.7	1.7	1.28	14.80
	Profile 18 (Gouri Mutt Street)						
	MH 1135 to MH 2007	Cum	8	2.0	2.0	1.89	60.45
	Profile 19 (Gouri Mutt Road)						
	MH 78 to MH 1999	Cum	1	1.7	1.7	1.61	4.64
	Profile 20(Gouri Mutt Road)						

Sl.No.	Description of Work	Unit	No	L	B	D	Qty
	MH 570 to MH 2003	Cum	2	2.0	2.0	1.84	14.70
	Profile 21(Gouri Mutt Road)						
	MH 168 to MH 2006	Cum	1	1.7	1.7	1.75	5.07
	Profile 22 (Bhavanthi Street Road)						
	MH 136 to MH 2009	Cum	0	1.7	1.7	0.00	0.00
	Profile 23						
	MH 742 to MH 743	Cum	3	1.7	1.7	1.78	15.46
	Profile 24						
	MH 271 to MH 2012	Cum	1	1.7	1.7	1.52	4.41
	Profile 25 (MPT Road)						
	MH 993 to MH 1053	Cum	6	2.3	2.3	1.91	60.57
	MH 993 to MH 1053	Cum	3	2.3	2.3	1.91	30.29
	Profile 26 (MPT Cross Road)						
	MH 762 to MH 2138	Cum	5	2	2	1.99	39.84
	Profile 27 (MPT Cross Road)						
	MH 982 TO MH 2398	Cum	12	2.00	2.00	1.92	92.30
	MH 982 TO MH 2398	Cum	2	2.00	2.00	1.92	15.38
	Profile 28 (Jodumutt Road)						
	MH 786 TO MH 787	Cum	3	1.7	1.7	1.96	16.99
	Profile 29 (Bhavanthi Street Road)						
	MH 894 TO MH 895	Cum	0	1.7	1.7	0.00	0.00
	Profile 30 (Cross Road)						
	MH 678 TO MH 695	Cum	4	2.00	2.00	1.86	29.69
	Profile 31 (Raghavendra and Mukyaprana Temple Road)						
	MH 2020 to MH 1090	Cum	0	2.30	2.30	0.00	0.00
	Profile 32 (Raghavendra Mutt Cross Road)						
	MH 967 to MH 2157	Cum	7	1.70	1.70	1.79	36.26
	Profile 33 (Nellikai Cross Road)						
	MH 940 to MH 2221	Cum	5	1.70	1.70	1.28	18.51
	Profile 34 (Raghavendra Mutt Road)	Cum					
	MH 766 to MH 767	Cum	3	2.00	2.00	1.84	22.08
	Profile 35 (Cross Road)	Cum					
	MH 2159 to MH 364	Cum	1	1.70	1.70	1.68	4.85
	Profile 36 (Mukyaprana Temple Road)	Cum					
	MH 2167 to MH 2164	Cum	1	1.70	1.70	1.40	4.06
	Profile 37 (MPT Cross Road)	Cum					
	MH 2399 to MH 2405	Cum	5	2.00	2.00	1.45	28.90
							1186.85
	For House Hold Connection	Cum	900	6.00	1.00	0.9	4860.00
	Total Qty	Cum					15796.53
4	Earthwork excavation for pipeline trenches (Except building work) including barricading depositing on bank with all lead including danger lighting and using sight rails and boning rods including shoring, strutting, bailing out water at every 100 meters wherever necessary as directed in the following Strata KUWSDB SR 15-16, Sl No ii, Pg No 5						
i)	do in disintegrated rock, soft rock, soft shale and medium hard rock comprising of lime stone, sand stone hard shale, schiest, fissured rock without resorting to blasting						
a	2 to 4 mtr Depth (for 0.80m Width)						
	Profile 1 (Nellikai Road)						
	MH 2210 to MH2209	Cum	1	323.62	0.80	0.00	0.00
	Profile 2 (Bunder Road)						
	MH 1271 to MH 2235	Cum	1	0	0.80	0.00	0.00
	Profile 3 (Mission Street Road)						
	MH 1202 to MH 941	Cum	1	246.2	0.80	0.49	95.53
	Profile 4(Market, Bibi Alabi and Kandak)						
	MH 1260 to MH 2087	Cum	1	779.9	0.80	0.00	0.00
	Profile 5 (Maidan Cross Road)						
	MH 1011 to MH 2046	Cum	1	104.4	0.80	0.00	0.00
	Profile 6 (Central Market Road)						
	MH 2058 to MH 1261	Cum	1	107.9	0.80	0.00	0.00
	Profile 7 (Maidan 3rd Cross Road)						
	MH 2062 to MH 2069	Cum	1	148.5	0.80	0.00	0.00
	Profile 8 (Nellikai Road)						

Sl.No.	Description of Work	Unit	No	L	B	D	Qty
	MH 2074 to MH 2072	Cum	1	130.3	0.80	0.21	22.24
	Profile 9 (Jewellery lane Road)						
	MH 1251 to MH 2453	Cum	1	188	0.80	0.00	0.00
	Profile 10						
	MH 308 to MH 1943	Cum	1	100.4	0.80	0.27	21.28
	Profile 11						
	MH 147 to MH 1970	Cum	1	30	0.80	0.00	0.00
	Profile 12						
	MH 273 to MH 1978	Cum	1	30.6	0.80	0.00	0.00
	Profile 13 (Jewellery lane Road)						
	MH 1990 to MH 2028	Cum	1	160.5	0.80	1.00	127.91
	Profile 14(Bhavanthi Street Road)						
	MH 894 to MH 895	Cum	1	0	0.80	0.00	0.00
	Profile 15 (Central Market Road)						
	MH 896 to MH 859	Cum	1	181.5	0.80	0.00	0.00
	Profile 16 (Maidan 1st Cross Road)						
	MH 764 to MH 765	Cum	1	70.2	0.80	0.00	0.00
	Profile 17 (Central Market Road)						
	MH 1959 to MH 859	Cum	1	126.1	0.80	0.00	0.00
	Profile 18 (Gouri Mutt Street)						
	MH 1135 to MH 2007	Cum	1	204.1	0.80	0.15	23.68
	Profile 19 (Gouri Mutt Road)						
	MH 78 to MH 1999	Cum	1	20.3	0.80	0.00	0.00
	Profile 20(Gouri Mutt Road)						
	MH 570 to MH 2003	Cum	1	51.1	0.80	0.35	14.19
	Profile 21(Gouri Mutt Road)						
	MH 168 to MH 2006	Cum	1	28.1	0.80	0.00	0.00
	Profile 22 (Bhavanthi Street Road)						
	MH 136 to MH 2009	Cum	1	0	0.80	0.00	0.00
	Profile 23						
	MH 742 to MH 743	Cum	1	67.2	0.80	0.00	0.00
	Profile 24						
	MH 271 to MH 2012	Cum	1	28.6	0.80	0.00	0.00
	Profile 25 (MPT Road)						
	MH 993 to MH 1053	Cum	1	216.84	0.80	1.22	211.62
	Profile 26 (MPT Cross Road)						
	MH 762 to MH 2138	Cum	1	93.12	0.80	1.10	82.12
	Profile 27 (MPT Cross Road)						
	MH 982 TO MH 2398	Cum	1	399.1	0.80	0.81	259.22
	Profile 28 (Jodumutt Road)						
	MH 786 TO MH 787	Cum	1	72.4	0.80	1.22	70.81
	Profile 29 (Bhavanthi Street Road)						
	MH 894 TO MH 895	Cum	1	0	0.80	0.00	0.00
	Profile 30 (Cross Road)						
	MH 678 TO MH 695	Cum	1	70.2	0.80	0.14	7.86
	Profile 31 (Raghavendra and Mukyaprana Temple Road)						
	MH 2020 to MH 1090	Cum	1	0	0.80	0.00	0.00
	Profile 32 (Raghavendra Mutt Cross Road)						
	MH 967 to MH 2157	Cum	1	184.7	0.80	0.11	16.25
	Profile 33 (Nellikai Cross Road)						
	MH 940 to MH 2221	Cum	1	94.6	0.80	0.00	0.00
	Profile 34 (Raghavendra Mutt Road)						
	MH 766 to MH 767	Cum	1	62.8	0.80	0.13	6.29
	Profile 35 (Cross Road)						
	MH 2159 to MH 364	Cum	1	14.4	0.80	0.00	0.00
	Profile 36 (Mukyaprana Temple Road)						
	MH 2167 to MH 2164	Cum	1	26.8	0.80	0.00	0.00
	Profile 37 (MPT Cross Road)						
	MH 2399 to MH 2405	Cum	1	119.8	0.80	0.00	0.00
							959.00
b	2 to 4 mtr Depth (Manhole)						
	Profile 1 (Nellikai Road)						
	MH 2210 to MH2209	Cum	13	2	2	0.25	13.00
	Profile 2 (Bunder Road)						
	MH 1271 to MH 2235	Cum	0	2	2	0.25	0.00
	Profile 3 (Mission Street Road)						

Sl.No.	Description of Work	Unit	No	L	B	D	Qty
	MH 1202 to MH 941	Cum	8	2	2	0.74	23.52
	Profile 4(Market,Bibi Alabi and Kandak)						
	MH 1260 to MH 2087	Cum	31	2	2	0.51	63.24
	Profile 5 (Maidan Cross Road)						
	MH 1011 to MH 2046	Cum	5	1.7	1.7	0.25	3.61
	Profile 6 (Central Market Road)						
	MH 2058 to MH 1261	Cum	6	1.7	1.7	0.25	4.34
	Profile 7 (Maidan 3rd Cross Road)						
	MH 2062 to MH 2069	Cum	5	1.7	1.7	0.25	3.61
	Profile 8 (Nellikai Road)						
	MH 2074 to MH 2072	Cum	5	2	2	0.46	9.27
	Profile 9 (Jewellery lane Road)						
	MH 1251 to MH 2453	Cum	8	2	2	0.25	8.00
	Profile 10						
	MH 308 to MH 1943	Cum	5	2	2	0.52	10.30
	Profile 11						
	MH 147 to MH 1970	Cum	1	1.7	1.7	0.25	0.72
	Profile 12						
	MH 273 to MH 1978	Cum	1	1.7	1.7	0.25	0.72
	Profile 13 (Jewellery lane Road)						
	MH 1990 to MH 2028	Cum	7	1.7	1.7	1.25	25.21
	Profile 14(Bhavanthi Street Road)						
	MH 894 to MH 895	Cum	0	1.7	1.7	0.25	0.00
	Profile 15 (Central Market Road)						
	MH 896 to MH 859	Cum	9	2	2	0.25	9.00
	Profile 16 (Maidan 1st Cross Road)						
	MH 764 to MH 765	Cum	3	1.7	1.7	0.25	2.17
	Profile 17 (Central Market Road)						
	MH 1959 to MH 859	Cum	4	1.7	1.7	0.25	2.89
	Profile 18 (Gouri Mutt Street)						
	MH 1135 to MH 2007	Cum	8	2	2	0.40	12.64
	Profile 19 (Gouri Mutt Road)						
	MH 78 to MH 1999	Cum	1	1.7	1.7	0.25	0.72
	Profile 20(Gouri Mutt Road)						
	MH 570 to MH 2003	Cum	2	2	2	0.60	4.78
	Profile 21(Gouri Mutt Road)						
	MH 168 to MH 2006	Cum	1	1.7	1.7	0.25	0.72
	Profile 22 (Bhavanthi Street Road)						
	MH 136 to MH 2009	Cum	0	1.7	1.7	0.25	0.00
	Profile 23						
	MH 742 to MH 743	Cum	3	1.7	1.7	0.25	2.17
	Profile 24						
	MH 271 to MH 2012	Cum	1	1.7	1.7	0.25	0.72
	Profile 25 (MPT Road)						
	MH 993 to MH 1053	Cum	6	2.3	2.3	1.47	46.66
	MH 993 to MH 1053	Cum	3	2.3	2.3	1.47	23.33
	Profile 26 (MPT Cross Road)						
	MH 762 to MH 2138	Cum	5	2	2	1.35	27.05
	Profile 27 (MPT Cross Road)						
	MH 982 TO MH 2398	Cum	12	2	2	1.06	50.97
	MH 982 TO MH 2398	Cum	2	2	2	1.06	8.50
	Profile 28 (Jodumutt Road)						
	MH 786 TO MH 787	Cum	3	1.7	1.7	1.47	12.77
	Profile 29 (Bhavanthi Street Road)						
	MH 894 TO MH 895	Cum	0	1.7	1.7	0.25	0.00
	Profile 30 (Cross Road)						
	MH 678 TO MH 695	Cum	4	2	2	0.39	6.24
	Profile 31 (Raghavendra and Mukyaprana Temple Road)						
	MH 2020 to MH 1090	Cum	0	2.3	2.3	0.25	0.00
	Profile 32 (Raghavendra Mutt Cross Road)						
	MH 967 to MH 2157	Cum	7	1.7	1.7	0.36	7.28
	Profile 33 (Nellikai Cross Road)						
	MH 940 to MH 2221	Cum	5	1.7	1.7	0.25	3.61
	Profile 34 (Raghavendra Mutt Road)						
	MH 766 to MH 767	Cum	3	2	2	0.38	4.50
	Profile 35 (Cross Road)						
	MH 2159 to MH 364	Cum	1	1.7	1.7	0.25	0.72

Sl.No.	Description of Work	Unit	No	L	B	D	Qty
	Profile 36 (Mukyaprana Temple Road)						
	MH 2167 to MH 2164	Cum	1	1.7	1.7	0.25	0.72
	Profile 37 (MPT Cross Road)						
	MH 2399 to MH 2405	Cum	5	2	2	0.25	5.00
							398.70
		Cum				Total	1357.69
5	Providing course sand bedding for the pipeline trenches including watering and consolidation by punners etc.,complete with all lead and lift (In black cotton and rock reaches) KUWSDB 15-16,Pg No 17,SI No.6						
	Vol of sand Boxing						
	Profile 1 (Nellikai Road)						
	MH 2210 to MH2209	Cum	1	323.62	0.80	0.6	155.34
	Profile 2 (Bunder Road)						
	MH 1271 to MH 2235	Cum	1	0	0.80	0.6	0.00
	Profile 3 (Mission Street Road)						
	MH 1202 to MH 941	Cum	1	246.2	0.80	0.6	118.18
	Profile 4(Market,Bibi Alabi and Kandak)						
	MH 1260 to MH 2087	Cum	1	779.9	0.80	0.6	374.35
	Profile 5 (Maidan Cross Road)						
	MH 1011 to MH 2046	Cum	1	104.4	0.80	0.6	50.11
	Profile 6 (Central Market Road)						
	MH 2058 to MH 1261	Cum	1	107.9	0.80	0.6	51.79
	Profile 7 (Maidan 3rd Cross Road)						
	MH 2062 to MH 2069	Cum	1	148.5	0.80	0.6	71.28
	Profile 8 (Nellikai Road)						
	MH 2074 to MH 2072	Cum	1	130.3	0.80	0.6	62.54
	Profile 9 (Jewellery lane Road)						
	MH 1251 to MH 2453	Cum	1	188	0.80	0.6	90.24
	Profile 10						
	MH 308 to MH 1943	Cum	1	100.4	0.80	0.6	48.19
	Profile 11						
	MH 147 to MH 1970	Cum	1	30	0.80	0.6	14.40
	Profile 12						
	MH 273 to MH 1978	Cum	1	30.6	0.80	0.6	14.69
	Profile 13 (Jewellery lane Road)						
	MH 1990 to MH 2028	Cum	1	160.5	0.80	0.6	77.04
	Profile 14(Bhavanthi Street Road)						
	MH 894 to MH 895	Cum	1	0	0.80	0.6	0.00
	Profile 15 (Central Market Road)						
	MH 896 to MH 859	Cum	1	181.5	0.80	0.6	87.12
	Profile 16 (Maidan 1st Cross Road)						
	MH 764 to MH 765	Cum	1	70.2	0.80	0.6	33.70
	Profile 17 (Central Market Road)						
	MH 1959 to MH 859	Cum	1	126.1	0.80	0.6	60.53
	Profile 18 (Gouri Mutt Street)						
	MH 1135 to MH 2007	Cum	1	204.1	0.80	0.6	97.97
	Profile 19 (Gouri Mutt Road)						
	MH 78 to MH 1999	Cum	1	20.3	0.80	0.6	9.74
	Profile 20(Gouri Mutt Road)						
	MH 570 to MH 2003	Cum	1	51.1	0.80	0.6	24.53
	Profile 21(Gouri Mutt Road)						
	MH 168 to MH 2006	Cum	1	28.1	0.80	0.6	13.49
	Profile 22 (Bhavanthi Street Road)						
	MH 136 to MH 2009	Cum	1	0	0.80	0.6	0.00
	Profile 23						
	MH 742 to MH 743	Cum	1	67.2	0.80	0.6	32.26
	Profile 24						
	MH 271 to MH 2012	Cum	1	28.6	0.80	0.6	13.73
	Profile 25 (MPT Road)						
	MH 993 to MH 1053	Cum	1	216.84	0.80	0.6	104.08
	Profile 26 (MPT Cross Road)						
	MH 762 to MH 2138	Cum	1	93.12	0.80	0.6	44.70
	Profile 27 (MPT Cross Road)						
	MH 982 TO MH 2398	Cum	1	399.1	0.80	0.6	191.57
	Profile 28 (Jodumutt Road)						

Sl.No.	Description of Work	Unit	No	L	B	D	Qty
	MH 786 TO MH 787	Cum	1	72.4	0.80	0.6	34.75
	Profile 29 (Bhavanthi Street Road)						
	MH 894 TO MH 895	Cum	1	0	0.80	0.6	0.00
	Profile 30 (Cross Road)						
	MH 678 TO MH 695	Cum	1	70.2	0.80	0.6	33.70
	Profile 31 (Raghavendra and Mukyaprana Temple Road)						
	MH 2020 to MH 1090	Cum	1	0	0.80	0.6	0.00
	Profile 32 (Raghavendra Mutt Cross Road)						
	MH 967 to MH 2157	Cum	1	184.7	0.80	0.6	88.66
	Profile 33 (Nellikai Cross Road)						
	MH 940 to MH 2221	Cum	1	94.6	0.80	0.6	45.41
	Profile 34 (Raghavendra Mutt Road)						
	MH 766 to MH 767	Cum	1	62.8	0.80	0.6	30.14
	Profile 35 (Cross Road)						
	MH 2159 to MH 364	Cum	1	14.4	0.80	0.6	6.91
	Profile 36 (Mukyaprana Temple Road)						
	MH 2167 to MH 2164	Cum	1	26.8	0.80	0.6	12.86
	Profile 37 (MPT Cross Road)						
	MH 2399 to MH 2405	Cum	1	119.8	0.80	0.6	57.50
	For House Hold Connection	Cum	900	6	0.55	0.23	683.10
	Total						2834.59
	Pipe Deduction				Area (pi*r*r)		
	For Pipe line (200mm dia pipe)						
	Profile 1 (Nellikai Road)						
	MH 2210 to MH 2209	Cum	-1	323.62	0.031		-10.16
	Profile 2 (Bunder Road)						
	MH 1271 to MH 2235	Cum	-1	0	0.031		0.00
	Profile 3 (Mission Street Road)						
	MH 1202 to MH 941	Cum	-1	246.2	0.031		-7.73
	Profile 4(Market,Bibi Alabi and Kandak)						
	MH 1260 to MH 2087	Cum	-1	779.9	0.031		-24.49
	Profile 5 (Maidan Cross Road)						
	MH 1011 to MH 2046	Cum	-1	104.4	0.031		-3.28
	Profile 6 (Central Market Road)						
	MH 2058 to MH 1261	Cum	-1	107.9	0.031		-3.39
	Profile 7 (Maidan 3rd Cross Road)						
	MH 2062 to MH 2069	Cum	-1	148.5	0.031		-4.66
	Profile 8 (Nellikai Road)						
	MH 2074 to MH 2072	Cum	-1	130.3	0.031		-4.09
	Profile 9 (Jewellery lane Road)						
	MH 1251 to MH 2453	Cum	-1	188	0.031		-5.90
	Profile 10						
	MH 308 to MH 1943	Cum	-1	100.4	0.031		-3.15
	Profile 11						
	MH 147 to MH 1970	Cum	-1	30	0.031		-0.94
	Profile 12						
	MH 273 to MH 1978	Cum	-1	30.6	0.031		-0.96
	Profile 13 (Jewellery lane Road)						
	MH 1990 to MH 2028	Cum	-1	160.5	0.031		-5.04
	Profile 14(Bhavanthi Street Road)						
	MH 894 to MH 895	Cum	-1	0	0.031		0.00
	Profile 15 (Central Market Road)						
	MH 896 to MH 859	Cum	-1	181.5	0.031		-5.70
	Profile 16 (Maidan 1st Cross Road)						
	MH 764 to MH 765	Cum	-1	70.2	0.031		-2.20
	Profile 17 (Central Market Road)						
	MH 1959 to MH 859	Cum	-1	126.1	0.031		-3.96
	Profile 18 (Gouri Mutt Street)						
	MH 1135 to MH 2007	Cum	-1	204.1	0.031		-6.41
	Profile 19 (Gouri Mutt Road)						
	MH 78 to MH 1999	Cum	-1	20.3	0.031		-0.64
	Profile 20(Gouri Mutt Road)						
	MH 570 to MH 2003	Cum	-1	51.1	0.031		-1.60
	Profile 21(Gouri Mutt Road)						

SI.No.	Description of Work	Unit	No	L	B	D	Qty
	MH 168 to MH 2006	Cum	-1	28.1	0.031		-0.88
	Profile 22 (Bhavanthi Street Road)						
	MH 136 to MH 2009	Cum	-1	0	0.031		0.00
	Profile 23						
	MH 742 to MH 743	Cum	-1	67.2	0.031		-2.11
	Profile 24						
	MH 271 to MH 2012	Cum	-1	28.6	0.031		-0.90
	Profile 25 (MPT Road)						
	MH 993 to MH 1053	Cum	-1	216.84	0.031		-6.81
	Profile 26 (MPT Cross Road)						
	MH 762 to MH 2138	Cum	-1	93.12	0.031		-2.92
	Profile 27 (MPT Cross Road)						
	MH 982 TO MH 2398	Cum	-1	399.1	0.031		-12.53
	Profile 28 (Jodumutt Road)						
	MH 786 TO MH 787	Cum	-1	72.4	0.031		-2.27
	Profile 29 (Bhavanthi Street Road)						
	MH 894 TO MH 895	Cum	-1	0	0.031		0.00
	Profile 30 (Cross Road)						
	MH 678 TO MH 695	Cum	-1	70.2	0.031		-2.20
	Profile 31 (Raghavendra and Mukyaprana Temple Road)						
	MH 2020 to MH 1090	Cum	-1	0	0.031		0.00
	Profile 32 (Raghavendra Mutt Cross Road)						
	MH 967 to MH 2157	Cum	-1	184.7	0.031		-5.80
	Profile 33 (Nellikai Cross Road)		0				
	MH 940 to MH 2221	Cum	-1	94.6	0.031		-2.97
	Profile 34 (Raghavendra Mutt Road)						
	MH 766 to MH 767	Cum	-1	62.8	0.031		-1.97
	Profile 35 (Cross Road)						
	MH 2159 to MH 364	Cum	-1	14.4	0.031		-0.45
	Profile 36 (Mukyaprana Temple Road)						
	MH 2167 to MH 2164	Cum	-1	26.8	0.031		-0.84
	Profile 37 (MPT Cross Road)						
	MH 2399 to MH 2405	Cum	-1	119.8	0.031		-3.76
	For House Hold connection	Cum	-900	6	0.009		-51.29
	Total Ded						-192.04
	For Manhole side						
	Profile 1 (Nellikai Road)						
	MH 2210 to MH2209	Cum	13	2.00	2.00	1.94	100.66
	Profile 2 (Bunder Road)						
	MH 1271 to MH 2235	Cum	0	2.00	2.00	0.25	0.00
	Profile 3 (Mission Street Road)						
	MH 1202 to MH 941	Cum	8	2.00	2.00	2.68	85.70
	Profile 4(Market,Bibi Alabi and Kandak)						
	MH 1260 to MH 2087	Cum	31	2.00	2.00	2.17	269.05
	Profile 5 (Maidan Cross Road)						
	MH 1011 to MH 2046	Cum	5	1.70	1.70	1.55	22.38
	Profile 6 (Central Market Road)						
	MH 2058 to MH 1261	Cum	6	1.70	1.70	1.63	28.19
	Profile 7 (Maidan 3rd Cross Road)						
	MH 2062 to MH 2069	Cum	5	1.70	1.70	2.04	29.48
	Profile 8 (Nellikai Road)						
	MH 2074 to MH 2072	Cum	5	2.00	2.00	2.40	47.96
	Profile 9 (Jewellery lane Road)						
	MH 1251 to MH 2453	Cum	8	2.00	2.00	1.66	53.01
	Profile 10						
	MH 308 to MH 1943	Cum	5	2.00	2.00	2.48	49.58
	Profile 11						
	MH 147 to MH 1970	Cum	1	1.70	1.70	1.74	5.01
	Profile 12						
	MH 273 to MH 1978	Cum	1	1.70	1.70	1.88	5.43
	Profile 13 (Jewellery lane Road)						
	MH 1990 to MH 2028	Cum	7	1.70	1.70	3.12	63.11
	Profile 14(Bhavanthi Street Road)						
	MH 894 to MH 895	Cum	0	1.70	1.70	0.25	0.00

Sl.No.	Description of Work	Unit	No	L	B	D	Qty
	Profile 15 (Central Market Road)						
	MH 896 to MH 859	Cum	9	2.00	2.00	1.92	68.99
	Profile 16 (Maidan 1st Cross Road)						
	MH 764 to MH 765	Cum	3	1.70	1.70	1.82	15.74
	Profile 17 (Central Market Road)						
	MH 1959 to MH 859	Cum	4	1.70	1.70	1.53	17.69
	Profile 18 (Gouri Mutt Street)						
	MH 1135 to MH 2007	Cum	8	2.00	2.00	2.28	73.09
	Profile 19 (Gouri Mutt Road)						
	MH 78 to MH 1999	Cum	1	1.70	1.70	1.86	5.37
	Profile 20(Gouri Mutt Road)						
	MH 570 to MH 2003	Cum	2	2.00	2.00	2.43	19.48
	Profile 21(Gouri Mutt Road)						
	MH 168 to MH 2006	Cum	1	1.70	1.70	2.00	5.79
	Profile 22 (Bhavanthi Street Road)						
	MH 136 to MH 2009	Cum	0	1.70	1.70	0.25	0.00
	Profile 23						
	MH 742 to MH 743	Cum	3	1.70	1.70	2.03	17.63
	Profile 24						
	MH 271 to MH 2012	Cum	1	1.70	1.70	1.77	5.13
	Profile 25 (MPT Road)						
	MH 993 to MH 1053	Cum	6	2.30	2.30	3.38	107.23
	MH 993 to MH 1053	Cum	3	2.30	2.30	3.38	53.61
	Profile 26 (MPT Cross Road)						
	MH 762 to MH 2138	Cum	5	2.00	2.00	3.34	66.89
	Profile 27 (MPT Cross Road)						
	MH 982 TO MH 2398	Cum	12	2.00	2.00	2.98	143.27
	MH 982 TO MH 2398	Cum	2	2.00	2.00	2.98	23.88
	Profile 28 (Jodumutt Road)						
	MH 786 TO MH 787	Cum	3	1.70	1.70	3.43	29.76
	Profile 29 (Bhavanthi Street Road)						
	MH 894 TO MH 895	Cum	0	1.70	1.70	0.25	0.00
	Profile 30 (Cross Road)						
	MH 678 TO MH 695	Cum	4	2.00	2.00	2.25	35.93
	Profile 31 (Raghavendra and Mukyaprana Temple Road)						
	MH 2020 to MH 1090	Cum	0	2.30	2.30	0.25	0.00
	Profile 32 (Raghavendra Mutt Cross Road)						
	MH 967 to MH 2157	Cum	7	1.70	1.70	2.15	43.55
	Profile 33 (Nellikai Cross Road)						
	MH 940 to MH 2221	Cum	5	1.70	1.70	1.53	22.12
	Profile 34 (Raghavendra Mutt Road)						
	MH 766 to MH 767	Cum	3	2.00	2.00	2.22	26.58
	Profile 35 (Cross Road)						
	MH 2159 to MH 364	Cum	1	1.70	1.70	1.93	5.57
	Profile 36 (Mukyaprana Temple Road)						
	MH 2167 to MH 2164	Cum	1	1.70	1.70	1.65	4.78
	Profile 37 (MPT Cross Road)						
	MH 2399 to MH 2405	Cum	5	2.00	2.00	1.70	33.90
							1585.55
				Area= $\pi * r * r$			
	Ded Manhole portion (Avg Circumference (0.9+0.45/2)=0.675m)	Cum	-55	0.36		1.50	-29.51
	Ded Manhole portion (Avg Circumference (1.2+0.6/2)=0.9m)	Cum	-120	0.64		1.80	-137.34
	Ded Manhole portion (Avg Circumference (1.5+0.75/2)=1.125m)	Cum	-9	0.99		3.28	-29.28
	Total Deduction Qty	Cum	-1				-388.17
	Total Net Qty	Cum				Net Total	4031.97

Sl.No.	Description of Work	Unit	No	L	B	D	Qty
6	Supplying Unplasticised PVC pipes conforming to IS 15328:2003 with latest amendments ended with integral sockets with ISI mark and conveying to worksite,rolling and lowering into trenches,Laying true to line and level and perfect linking at joints,testing and commissioning,including loading and unloading at both destinations and cuts of pipes wherever necessary including jointing of UPVC Pipes (with cost of elastomeric sealing rings) and specials (excluding cost of specials) with jointing of approved type,with all labour with all lead and lift including encasing the pipe around to a depth of not less than 15cms with soft gravel or selected earth available from the excavation etc.,complete and giving necessary hydraulic test to the required pressure as per ISS (Contractor will make his own arrangements for procuring water for testing) KIJWSDB Pg.No 205 and 207 Sl.No 4						
	Supply and laying of PVC- U Pipes as per IS 15328 SN 4 -Ring title:						
	Profile 1 (Nellikai Road)						
	MH 2210 to MH2209	Rmt	1	323.62			323.62
	Profile 2 (Bunder Road)						
	MH 1271 to MH 2235	Rmt	1	0			0.00
	Profile 3 (Mission Street Road)						
	MH 1202 to MH 941	Rmt	1	246.2			246.20
	Profile 4(Market,Bibi Alabi and Kandak)						
	MH 1260 to MH 2087	Rmt	1	779.9			779.90
	Profile 5 (Maidan Cross Road)						
	MH 1011 to MH 2046	Rmt	1	104.4			104.40
	Profile 6 (Central Market Road)						
	MH 2058 to MH 1261	Rmt	1	107.9			107.90
	Profile 7 (Maidan 3rd Cross Road)						
	MH 2062 to MH 2069	Rmt	1	148.5			148.50
	Profile 8 (Nellikai Road)						
	MH 2074 to MH 2072	Rmt	1	130.3			130.30
	Profile 9 (Jewellery lane Road)						
	MH 1251 to MH 2453	Rmt	1	188			188.00
	Profile 10						
	MH 308 to MH 1943	Rmt	1	100.4			100.40
	Profile 11						
	MH 147 to MH 1970	Rmt	1	30			30.00
	Profile 12						
	MH 273 to MH 1978	Rmt	1	30.6			30.60
	Profile 13 (Jewellery lane Road)						
	MH 1990 to MH 2028	Rmt	1	160.5			160.50
	Profile 14(Bhavanthi Street Road)						
	MH 894 to MH 895	Rmt	1	0			0.00
	Profile 15 (Central Market Road)						
	MH 896 to MH 859	Rmt	1	181.5			181.50
	Profile 16 (Maidan 1st Cross Road)						
	MH 764 to MH 765	Rmt	1	70.2			70.20
	Profile 17 (Central Market Road)						
	MH 1959 to MH 859	Rmt	1	126.1			126.10
	Profile 18 (Gouri Mutt Street)						
	MH 1135 to MH 2007	Rmt	1	204.1			204.10
	Profile 19 (Gouri Mutt Road)						
	MH 78 to MH 1999	Rmt	1	20.3			20.30
	Profile 20(Gouri Mutt Road)						
	MH 570 to MH 2003	Rmt	1	51.1			51.10
	Profile 21(Gouri Mutt Road)						
	MH 168 to MH 2006	Rmt	1	28.1			28.10
	Profile 22 (Bhavanthi Street Road)						
	MH 136 to MH 2009	Rmt	1	0			0.00
	Profile 23						
	MH 742 to MH 743	Rmt	1	67.2			67.20
	Profile 24						
	MH 271 to MH 2012	Rmt	1	28.6			28.60
	Profile 25 (MPT Road)						
	MH 993 to MH 1053	Rmt	1	216.84			216.84
	Profile 26 (MPT Cross Road)						
	MH 762 to MH 2138	Rmt	1	93.12			93.12

Sl.No.	Description of Work	Unit	No	L	B	D	Qty
9	Carting of excavated earth of all types upto a distance mentioned below and re-carting back to the same site by vehicle including loading,unloading charges for to and fro,with all lifts and labour,HOM of machinery etc,complete after obtaining the approval of the Chief Engineer. e) 4.0 to 5.0 Km KUWSDB Pg No.15,SI No.3						
a	Excavation Qty (SI No 8 a)	Cum	1				17154.23
b	Deduction						
	Refilled Excavated Soil Qty (SI No. 8)	Cum	-1				-8004.17
	Total Qty	Cum					9150.06
	Deduct 0.75% Wastage during loading	Cum	-1				-68.63
	Net Qty	Cum					9081.43
10	KSRRB M400-6.2. Constriction of Granular Sub-base by Providing Close graded crushed stone aggregates of granite /trap/basalt material spreading in uniform layers with motor grader on prepared surface, mixing by mix in place method by rotavator at OMC, and compacting with vibratory power roller to achieve the desired density, complete as per specifications. B. By mix in place Method For grading II material KSRB Pg No.155,20.5.2						
	Bituminous Road						
	Only for Pipe portion trench						
	Profile 1 (Nellikai Road)						
	MH 2210 to MH2209	Cum	1.00	323.62	1.40	0.15	67.96
	Profile 2 (Bunder Road)						
	MH 1271 to MH 2235	Cum	1.00	0.00	1.40	0.15	0.00
	Profile 3 (Mission Street Road)						
	MH 1202 to MH 941	Cum	1.00	246.20	1.40	0.15	51.70
	Profile 4(Market,Bibi Alabi and Kandak)						
	MH 1260 to MH 2087	Cum	1.00	779.90	1.40	0.15	163.78
	Profile 5 (Maidan Cross Road)						
	MH 1011 to MH 2046	Cum	1.00	104.40	1.40	0.15	21.92
	Profile 6 (Central Market Road)						
	MH 2058 to MH 1261	Cum	1.00	107.90	1.40	0.15	22.66
	Profile 7 (Maidan 3rd Cross Road)						
	MH 2062 to MH 2069	Cum	1.00	148.50	1.40	0.15	31.19
	Profile 8 (Nellikai Road)						
	MH 2074 to MH 2072	Cum	1.00	130.30	1.40	0.15	27.36
	Profile 9 (Jewellery lane Road)						
	MH 1251 to MH 2453	Cum	1.00	188.00	1.40	0.15	39.48
	Profile 10						
	MH 308 to MH 1943	Cum	1.00	100.40	1.40	0.15	21.08
	Profile 11						
	MH 147 to MH 1970	Cum	1.00	30.00	1.40	0.15	6.30
	Profile 12						
	MH 273 to MH 1978	Cum	1.00	30.60	1.40	0.15	6.43
	Profile 13 (Jewellery lane Road)						
	MH 1990 to MH 2028	Cum	1.00	160.50	1.40	0.15	33.71
	Profile 14(Bhavanthi Street Road)						
	MH 894 to MH 895	Cum	1.00	0.00	1.40	0.15	0.00
	Profile 15 (Central Market Road)						
	MH 896 to MH 859	Cum	1.00	181.50	1.40	0.15	38.12
	Profile 16 (Maidan 1st Cross Road)						
	MH 764 to MH 765	Cum	1.00	70.20	1.40	0.15	14.74
	Profile 17 (Central Market Road)						
	MH 1959 to MH 859	Cum	1.00	126.10	1.40	0.15	26.48
	Profile 18 (Gouri Mutt Street)						
	MH 1135 to MH 2007	Cum	1.00	204.10	1.40	0.15	42.86
	Profile 19 (Gouri Mutt Road)						
	MH 78 to MH 1999	Cum	1.00	20.30	1.40	0.15	4.26
	Profile 20(Gouri Mutt Road)						
	MH 570 to MH 2003	Cum	1.00	51.10	1.40	0.15	10.73
	Profile 21(Gouri Mutt Road)						
	MH 168 to MH 2006	Cum	1.00	28.10	1.40	0.15	5.90

Sl.No.	Description of Work	Unit	No	L	B	D	Qty
	Profile 22 (Bhavanthi Street Road)						
	MH 136 to MH 2009	Cum	1.00	0.00	1.40	0.15	0.00
	Profile 23						
	MH 742 to MH 743	Cum	1.00	67.20	1.40	0.15	14.11
	Profile 24						
	MH 271 to MH 2012	Cum	1.00	28.60	1.40	0.15	6.01
	Profile 25 (MPT Road)						
	MH 993 to MH 1053	Cum	1.00	216.84	1.40	0.15	45.54
	Profile 26 (MPT Cross Road)						
	MH 762 to MH 2138	Cum	1.00	93.12	1.40	0.15	19.56
	Profile 27 (MPT Cross Road)						
	MH 982 TO MH 2398	Cum	1.00	399.10	1.40	0.15	83.81
	Profile 28 (Jodumutt Road)						
	MH 786 TO MH 787	Cum	1.00	72.40	1.40	0.15	15.20
	Profile 29 (Bhavanthi Street Road)						
	MH 894 TO MH 895	Cum	1.00	0.00	1.40	0.15	0.00
	Profile 30 (Cross Road)						
	MH 678 TO MH 695	Cum	1.00	70.20	1.40	0.15	14.74
	Profile 31 (Raghavendra and Mukyaprana Temple Road)						
	MH 2020 to MH 1090	Cum	1.00	0.00	1.40	0.15	0.00
	Profile 32 (Raghavendra Mutt Cross Road)						
	MH 967 to MH 2157	Cum	1.00	184.70	1.40	0.15	38.79
	Profile 33 (Nellikai Cross Road)						
	MH 940 to MH 2221	Cum	1.00	94.60	1.40	0.15	19.87
	Profile 34 (Raghavendra Mutt Road)						
	MH 766 to MH 767	Cum	1.00	62.80	1.40	0.15	13.19
	Profile 35 (Cross Road)						
	MH 2159 to MH 364	Cum	1.00	14.40	1.40	0.15	3.02
	Profile 36 (Mukyaprana Temple Road)						
	MH 2167 to MH 2164	Cum	1.00	26.80	1.40	0.15	5.63
	Profile 37 (MPT Cross Road)						
	MH 2399 to MH 2405	Cum	1.00	119.80	1.40	0.15	25.16
	Only for Manhole portion						
	Profile 1 (Nellikai Road)						
	MH 2210 to MH2209	Cum	13.00	2.00	2.00	0.15	7.80
	Profile 2 (Bunder Road)						
	MH 1271 to MH 2235	Cum	0.00	2.00	2.00	0.15	0.00
	Profile 3 (Mission Street Road)						
	MH 1202 to MH 941	Cum	8.00	2.00	2.00	0.15	4.80
	Profile 4(Market,Bibi Alabi and Kandak)						
	MH 1260 to MH 2087	Cum	31.00	2.00	2.00	0.15	18.60
	Profile 5 (Maidan Cross Road)						
	MH 1011 to MH 2046	Cum	5.00	1.70	1.70	0.15	2.17
	Profile 6 (Central Market Road)						
	MH 2058 to MH 1261	Cum	6.00	1.70	1.70	0.15	2.60
	Profile 7 (Maidan 3rd Cross Road)						
	MH 2062 to MH 2069	Cum	5.00	1.70	1.70	0.15	2.17
	Profile 8 (Nellikai Road)						
	MH 2074 to MH 2072	Cum	5.00	2.00	2.00	0.15	3.00
	Profile 9 (Jewellery lane Road)						
	MH 1251 to MH 2453	Cum	8.00	2.00	2.00	0.15	4.80
	Profile 10						
	MH 308 to MH 1943	Cum	5.00	2.00	2.00	0.15	3.00
	Profile 11						
	MH 147 to MH 1970	Cum	1.00	1.70	1.70	0.15	0.43
	Profile 12						
	MH 273 to MH 1978	Cum	1.00	1.70	1.70	0.15	0.43
	Profile 13 (Jewellery lane Road)						
	MH 1990 to MH 2028	Cum	7.00	1.70	1.70	0.15	3.03
	Profile 14(Bhavanthi Street Road)						
	MH 894 to MH 895	Cum	0.00	1.70	1.70	0.15	0.00
	Profile 15 (Central Market Road)						
	MH 896 to MH 859	Cum	9.00	2.00	2.00	0.15	5.40
	Profile 16 (Maidan 1st Cross Road)						
	MH 764 to MH 765	Cum	3.00	1.70	1.70	0.15	1.30
	Profile 17 (Central Market Road)						

Sl.No.	Description of Work	Unit	No	L	B	D	Qty
	MH 1959 to MH 859	Cum	4.00	1.70	1.70	0.15	1.73
	Profile 18 (Gouri Mutt Street)						
	MH 1135 to MH 2007	Cum	8.00	2.00	2.00	0.15	4.80
	Profile 19 (Gouri Mutt Road)						
	MH 78 to MH 1999	Cum	1.00	1.70	1.70	0.15	0.43
	Profile 20(Gouri Mutt Road)						
	MH 570 to MH 2003	Cum	2.00	2.00	2.00	0.15	1.20
	Profile 21(Gouri Mutt Road)						
	MH 168 to MH 2006	Cum	1.00	1.70	1.70	0.15	0.43
	Profile 22 (Bhavanthi Street Road)						
	MH 136 to MH 2009	Cum	0.00	1.70	1.70	0.15	0.00
	Profile 23						
	MH 742 to MH 743	Cum	3.00	1.70	1.70	0.15	1.30
	Profile 24						
	MH 271 to MH 2012	Cum	1.00	1.70	1.70	0.15	0.43
	Profile 25 (MPT Road)						
	MH 993 to MH 1053	Cum	6.00	2.30	2.30	0.15	4.76
	MH 993 to MH 1053	Cum	3.00	2.30	2.30	0.15	2.38
	Profile 26 (MPT Cross Road)						
	MH 762 to MH 2138	Cum	5.00	2.00	2.00	0.15	3.00
	Profile 27 (MPT Cross Road)						
	MH 982 TO MH 2398	Cum	12.00	2.00	2.00	0.15	7.20
	MH 982 TO MH 2398	Cum	2.00	2.00	2.00	0.15	1.20
	Profile 28 (Jodumutt Road)						
	MH 786 TO MH 787	Cum	3.00	1.70	1.70	0.15	1.30
	Profile 29 (Bhavanthi Street Road)						
	MH 894 TO MH 895	Cum	0.00	1.70	1.70	0.15	0.00
	Profile 30 (Cross Road)						
	MH 678 TO MH 695	Cum	4.00	2.00	2.00	0.15	2.40
	Profile 31 (Raghavendra and Mukyaprana Temple Road)						
	MH 2020 to MH 1090	Cum	0.00	2.30	2.30	0.15	0.00
	Profile 32 (Raghavendra Mutt Cross Road)						
	MH 967 to MH 2157	Cum	7.00	1.70	1.70	0.15	3.03
	Profile 33 (Nellikai Cross Road)						
	MH 940 to MH 2221	Cum	5.00	1.70	1.70	0.15	2.17
	Profile 34 (Raghavendra Mutt Road)						
	MH 766 to MH 767	Cum	3.00	2.00	2.00	0.15	1.80
	Profile 35 (Cross Road)						
	MH 2159 to MH 364	Cum	1.00	1.70	1.70	0.15	0.43
	Profile 36 (Mukyaprana Temple Road)						
	MH 2167 to MH 2164	Cum	1.00	1.70	1.70	0.15	0.43
	Profile 37 (MPT Cross Road)						
	MH 2399 to MH 2405	Cum	5.00	2.00	2.00	0.15	3.00
	For House Hold Connection	Cum	900.00	6.00	1.00	0.15	810.00
				Area (Pi*r*r)			
	Ded Manhole cover-0.45m	Cum	-55.00	0.16		0.15	-1.31
	Ded Manhole cover - 0.60m	Cum	-120.00	0.28		0.15	-5.09
	Ded Manhole cover - 0.75m	Cum	-9.00	0.44		0.15	-0.60
		Cum				Total	1847.27
11	KSRRB M400- Wet Mix macadam KSRRB M400-17. Providing, laying, spreading and compacting crushed stone aggregates of granite/trap/basalt to wet mix macadam specification including per mixing the material with water at OMC in Mechanical mix plant carriage of mixed material by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specification. MORTH Specification NO.406 KSRRB Pr. No. 158 of 18						
	Only for Pipe portion trench						
	Profile 1 (Nellikai Road)						
	MH 2210 to MH2209	Cum	1	323.62	1.4	0.25	113.27
	Profile 2 (Bunder Road)						
	MH 1271 to MH 2235	Cum	1	0	1.4	0.25	0.00

Sl.No.	Description of Work	Unit	No	L	B	D	Qty
	Profile 3 (Mission Street Road)						
	MH 1202 to MH 941	Cum	1	246.2	1.4	0.25	86.17
	Profile 4(Market,Bibi Alabi and Kandak)						
	MH 1260 to MH 2087	Cum	1	779.9	1.4	0.25	272.97
	Profile 5 (Maidan Cross Road)						
	MH 1011 to MH 2046	Cum	1	104.4	1.4	0.25	36.54
	Profile 6 (Central Market Road)						
	MH 2058 to MH 1261	Cum	1	107.9	1.4	0.25	37.77
	Profile 7 (Maidan 3rd Cross Road)						
	MH 2062 to MH 2069	Cum	1	148.5	1.4	0.25	51.98
	Profile 8 (Nellikai Road)						
	MH 2074 to MH 2072	Cum	1	130.3	1.4	0.25	45.61
	Profile 9 (Jewellery lane Road)						
	MH 1251 to MH 2453	Cum	1	188	1.4	0.25	65.80
	Profile 10						
	MH 308 to MH 1943	Cum	1	100.4	1.4	0.25	35.14
	Profile 11						
	MH 147 to MH 1970	Cum	1	30	1.4	0.25	10.50
	Profile 12						
	MH 273 to MH 1978	Cum	1	30.6	1.4	0.25	10.71
	Profile 13 (Jewellery lane Road)						
	MH 1990 to MH 2028	Cum	1	160.5	1.4	0.25	56.18
	Profile 14(Bhavanthi Street Road)						
	MH 894 to MH 895	Cum	1	0	1.4	0.25	0.00
	Profile 15 (Central Market Road)						
	MH 896 to MH 859	Cum	1	181.5	1.4	0.25	63.53
	Profile 16 (Maidan 1st Cross Road)						
	MH 764 to MH 765	Cum	1	70.2	1.4	0.25	24.57
	Profile 17 (Central Market Road)						
	MH 1959 to MH 859	Cum	1	126.1	1.4	0.25	44.14
	Profile 18 (Gouri Mutt Street)						
	MH 1135 to MH 2007	Cum	1	204.1	1.4	0.25	71.44
	Profile 19 (Gouri Mutt Road)						
	MH 78 to MH 1999	Cum	1	20.3	1.4	0.25	7.11
	Profile 20(Gouri Mutt Road)						
	MH 570 to MH 2003	Cum	1	51.1	1.4	0.25	17.89
	Profile 21(Gouri Mutt Road)						
	MH 168 to MH 2006	Cum	1	28.1	1.4	0.25	9.84
	Profile 22 (Bhavanthi Street Road)						
	MH 136 to MH 2009	Cum	1	0	1.4	0.25	0.00
	Profile 23						
	MH 742 to MH 743	Cum	1	67.2	1.4	0.25	23.52
	Profile 24						
	MH 271 to MH 2012	Cum	1	28.6	1.4	0.25	10.01
	Profile 25 (MPT Road)						
	MH 993 to MH 1053	Cum	1	216.84	1.4	0.25	75.89
	Profile 26 (MPT Cross Road)						
	MH 762 to MH 2138	Cum	1	93.12	1.4	0.25	32.59
	Profile 27 (MPT Cross Road)						
	MH 982 TO MH 2398	Cum	1	399.1	1.4	0.25	139.69
	Profile 28 (Jodumutt Road)						
	MH 786 TO MH 787	Cum	1	72.4	1.4	0.25	25.34
	Profile 29 (Bhavanthi Street Road)						
	MH 894 TO MH 895	Cum	1	0	1.4	0.25	0.00
	Profile 30 (Cross Road)						
	MH 678 TO MH 695	Cum	1	70.2	1.4	0.25	24.57
	Profile 31 (Raghavendra and Mukyaprana Temple Road)						
	MH 2020 to MH 1090	Cum	1	0	1.4	0.25	0.00
	Profile 32 (Raghavendra Mutt Cross Road)						
	MH 967 to MH 2157	Cum	1	184.7	1.4	0.25	64.65
	Profile 33 (Nellikai Cross Road)						
	MH 940 to MH 2221	Cum	1	94.6	1.4	0.25	33.11
	Profile 34 (Raghavendra Mutt Road)						
	MH 766 to MH 767	Cum	1	62.8	1.4	0.25	21.98
	Profile 35 (Cross Road)						
	MH 2159 to MH 364	Cum	1	14.4	1.4	0.25	5.04
	Profile 36 (Mukyaprana Temple Road)						

Sl.No.	Description of Work	Unit	No	L	B	D	Qty
	MH 2167 to MH 2164	Cum	1	26.8	1.4	0.25	9.38
	Profile 37 (MPT Cross Road)						
	MH 2399 to MH 2405	Cum	1	119.8	1.4	0.25	41.93
	Only for Manhole portion						
	Profile 1 (Nellikai Road)						
	MH 2210 to MH2209	Cum	13	2	2	0.25	13.00
	Profile 2 (Bunder Road)						
	MH 1271 to MH 2235	Cum	0	2	2	0.25	0.00
	Profile 3 (Mission Street Road)						
	MH 1202 to MH 941	Cum	8	2	2	0.25	8.00
	Profile 4(Market,Bibi Alabi and Kandak)						
	MH 1260 to MH 2087	Cum	31	2	2	0.25	31.00
	Profile 5 (Maidan Cross Road)						
	MH 1011 to MH 2046	Cum	5	1.7	1.7	0.25	3.61
	Profile 6 (Central Market Road)						
	MH 2058 to MH 1261	Cum	6	1.7	1.7	0.25	4.34
	Profile 7 (Maidan 3rd Cross Road)						
	MH 2062 to MH 2069	Cum	5	1.7	1.7	0.25	3.61
	Profile 8 (Nellikai Road)						
	MH 2074 to MH 2072	Cum	5	2	2	0.25	5.00
	Profile 9 (Jewellery lane Road)						
	MH 1251 to MH 2453	Cum	8	2	2	0.25	8.00
	Profile 10						
	MH 308 to MH 1943	Cum	5	2	2	0.25	5.00
	Profile 11						
	MH 147 to MH 1970	Cum	1	1.7	1.7	0.25	0.72
	Profile 12						
	MH 273 to MH 1978	Cum	1	1.7	1.7	0.25	0.72
	Profile 13 (Jewellery lane Road)						
	MH 1990 to MH 2028	Cum	7	1.7	1.7	0.25	5.06
	Profile 14(Bhavanthi Street Road)						
	MH 894 to MH 895	Cum	0	1.7	1.7	0.25	0.00
	Profile 15 (Central Market Road)						
	MH 896 to MH 859	Cum	9	2	2	0.25	9.00
	Profile 16 (Maidan 1st Cross Road)						
	MH 764 to MH 765	Cum	3	1.7	1.7	0.25	2.17
	Profile 17 (Central Market Road)						
	MH 1959 to MH 859	Cum	4	1.7	1.7	0.25	2.89
	Profile 18 (Gouri Mutt Street)						
	MH 1135 to MH 2007	Cum	8	2	2	0.25	8.00
	Profile 19 (Gouri Mutt Road)						
	MH 78 to MH 1999	Cum	1	1.7	1.7	0.25	0.72
	Profile 20(Gouri Mutt Road)						
	MH 570 to MH 2003	Cum	2	2	2	0.25	2.00
	Profile 21(Gouri Mutt Road)						
	MH 168 to MH 2006	Cum	1	1.7	1.7	0.25	0.72
	Profile 22 (Bhavanthi Street Road)						

Sl.No.	Description of Work	Unit	No	L	B	D	Qty
	MH 136 to MH 2009	Cum	0	1.7	1.7	0.25	0.00
	Profile 23						
	MH 742 to MH 743	Cum	3	1.7	1.7	0.25	2.17
	Profile 24						
	MH 271 to MH 2012	Cum	1	1.7	1.7	0.25	0.72
	Profile 25 (MPT Road)						
	MH 993 to MH 1053	Cum	6	2.3	2.3	0.25	7.94
	MH 993 to MH 1053	Cum	3	2.3	2.3	0.25	3.97
	Profile 26 (MPT Cross Road)						
	MH 762 to MH 2138	Cum	5	2	2	0.25	5.00
	Profile 27 (MPT Cross Road)						
	MH 982 TO MH 2398	Cum	12	2	2	0.25	12.00
	MH 982 TO MH 2398	Cum	2	2	2	0.25	2.00
	Profile 28 (Jodumutt Road)						
	MH 786 TO MH 787	Cum	3	1.7	1.7	0.25	2.17
	Profile 29 (Bhavanthi Street Road)						
	MH 894 TO MH 895	Cum	0	1.7	1.7	0.25	0.00
	Profile 30 (Cross Road)						
	MH 678 TO MH 695	Cum	4	2	2	0.25	4.00
	Profile 31 (Raghavendra and Mukyaprana Temple Road)						
	MH 2020 to MH 1090	Cum	0	2.3	2.3	0.25	0.00
	Profile 32 (Raghavendra Mutt Cross Road)						
	MH 967 to MH 2157	Cum	7	1.7	1.7	0.25	5.06
	Profile 33 (Nellikai Cross Road)						
	MH 940 to MH 2221	Cum	5	1.7	1.7	0.25	3.61
	Profile 34 (Raghavendra Mutt Road)						
	MH 766 to MH 767	Cum	3	2	2	0.25	3.00
	Profile 35 (Cross Road)						
	MH 2159 to MH 364	Cum	1	1.7	1.7	0.25	0.72
	Profile 36 (Mukyaprana Temple Road)						
	MH 2167 to MH 2164	Cum	1	1.7	1.7	0.25	0.72
	Profile 37 (MPT Cross Road)						
	MH 2399 to MH 2405	Cum	5	2	2	0.25	5.00
	For House Hold Connection	Cum	900.00	6.00	1.00	0.25	1350.00
				Area (Pi*r*r)			
	Ded Manhole cover-0.45m	Cum	-55.00	0.159		0.25	-2.19
	Ded Manhole cover - 0.60m	Cum	-120.00	0.283		0.25	-8.48
	Ded Manhole cover - 0.75m	Cum	-9.00	0.442		0.25	-0.99
		Cum				Total	3078.78
12	KSRRB M500-6. Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications. MORTH Specification No. 502 KSRB Pg No.161,Sl No:21.6						
	Only for Pipe portion trench						
	Profile 1 (Nellikai Road)						
	MH 2210 to MH2209	Sqm	1	323.62	1.4		453.07
	Profile 2 (Bunder Road)						
	MH 1271 to MH 2235	Sqm	1	0	1.4		0.00
	Profile 3 (Mission Street Road)						
	MH 1202 to MH 941	Sqm	1	246.2	1.4		344.68
	Profile 4(Market,Bibi Alabi and Kandak)						
	MH 1260 to MH 2087	Sqm	1	779.9	1.4		1091.86
	Profile 5 (Maidan Cross Road)						
	MH 1011 to MH 2046	Sqm	1	104.4	1.4		146.16
	Profile 6 (Central Market Road)						
	MH 2058 to MH 1261	Sqm	1	107.9	1.4		151.06
	Profile 7 (Maidan 3rd Cross Road)						
	MH 2062 to MH 2069	Sqm	1	148.5	1.4		207.90
	Profile 8 (Nellikai Road)						
	MH 2074 to MH 2072	Sqm	1	130.3	1.4		182.42
	Profile 9 (Jewellery lane Road)						

Sl.No.	Description of Work	Unit	No	L	B	D	Qty
	MH 1251 to MH 2453	Sqm	1	188	1.4		263.20
	Profile 10						
	MH 308 to MH 1943	Sqm	1	100.4	1.4		140.56
	Profile 11						
	MH 147 to MH 1970	Sqm	1	30	1.4		42.00
	Profile 12						
	MH 273 to MH 1978	Sqm	1	30.6	1.4		42.84
	Profile 13 (Jewellery lane Road)						
	MH 1990 to MH 2028	Sqm	1	160.5	1.4		224.70
	Profile 14(Bhavanthi Street Road)						
	MH 894 to MH 895	Sqm	1	0	1.4		0.00
	Profile 15 (Central Market Road)						
	MH 896 to MH 859	Sqm	1	181.5	1.4		254.10
	Profile 16 (Maidan 1st Cross Road)						
	MH 764 to MH 765	Sqm	1	70.2	1.4		98.28
	Profile 17 (Central Market Road)						
	MH 1959 to MH 859	Sqm	1	126.1	1.4		176.54
	Profile 18 (Gouri Mutt Street)						
	MH 1135 to MH 2007	Sqm	1	204.1	1.4		285.74
	Profile 19 (Gouri Mutt Road)						
	MH 78 to MH 1999	Sqm	1	20.3	1.4		28.42
	Profile 20(Gouri Mutt Road)						
	MH 570 to MH 2003	Sqm	1	51.1	1.4		71.54
	Profile 21(Gouri Mutt Road)						
	MH 168 to MH 2006	Sqm	1	28.1	1.4		39.34
	Profile 22 (Bhavanthi Street Road)						
	MH 136 to MH 2009	Sqm	1	0	1.4		0.00
	Profile 23						
	MH 742 to MH 743	Sqm	1	67.2	1.4		94.08
	Profile 24						
	MH 271 to MH 2012	Sqm	1	28.6	1.4		40.04
	Profile 25 (MPT Road)						
	MH 993 to MH 1053	Sqm	1	216.84	1.4		303.58
	Profile 26 (MPT Cross Road)						
	MH 762 to MH 2138	Sqm	1	93.12	1.4		130.37
	Profile 27 (MPT Cross Road)						
	MH 982 TO MH 2398	Sqm	1	399.1	1.4		558.74
	Profile 28 (Jodumutt Road)						
	MH 786 TO MH 787	Sqm	1	72.4	1.4		101.36
	Profile 29 (Bhavanthi Street Road)						
	MH 894 TO MH 895	Sqm	1	0	1.4		0.00
	Profile 30 (Cross Road)						
	MH 678 TO MH 695	Sqm	1	70.2	1.4		98.28
	Profile 31 (Raghavendra and Mukyaprana Temple Road)						
	MH 2020 to MH 1090	Sqm	1	0	1.4		0.00
	Profile 32 (Raghavendra Mutt Cross Road)						
	MH 967 to MH 2157	Sqm	1	184.7	1.4		258.58
	Profile 33 (Nellikai Cross Road)						
	MH 940 to MH 2221	Sqm	1	94.6	1.4		132.44
	Profile 34 (Raghavendra Mutt Road)						
	MH 766 to MH 767	Sqm	1	62.8	1.4		87.92
	Profile 35 (Cross Road)						
	MH 2159 to MH 364	Sqm	1	14.4	1.4		20.16
	Profile 36 (Mukyaprana Temple Road)						
	MH 2167 to MH 2164	Sqm	1	26.8	1.4		37.52
	Profile 37 (MPT Cross Road)						
	MH 2399 to MH 2405	Sqm	1	119.8	1.4		167.72
	Only for Manhole portion						
	Profile 1 (Nellikai Road)						
	MH 2210 to MH2209	Sqm	13	2	2		52.00
	Profile 2 (Bunder Road)						
	MH 1271 to MH 2235	Sqm	0	2	2		0.00
	Profile 3 (Mission Street Road)						
	MH 1202 to MH 941	Sqm	8	2	2		32.00
	Profile 4(Market,Bibi Alabi and Kandak)						
	MH 1260 to MH 2087	Sqm	31	2	2		124.00

Sl.No.	Description of Work	Unit	No	L	B	D	Qty
	Profile 5 (Maidan Cross Road)						
	MH 1011 to MH 2046	Sqm	5	1.7	1.7		14.45
	Profile 6 (Central Market Road)						
	MH 2058 to MH 1261	Sqm	6	1.7	1.7		17.34
	Profile 7 (Maidan 3rd Cross Road)						
	MH 2062 to MH 2069	Sqm	5	1.7	1.7		14.45
	Profile 8 (Nellikai Road)						
	MH 2074 to MH 2072	Sqm	5	2	2		20.00
	Profile 9 (Jewellery lane Road)						
	MH 1251 to MH 2453	Sqm	8	2	2		32.00
	Profile 10						
	MH 308 to MH 1943	Sqm	5	2	2		20.00
	Profile 11						
	MH 147 to MH 1970	Sqm	1	1.7	1.7		2.89
	Profile 12						
	MH 273 to MH 1978	Sqm	1	1.7	1.7		2.89
	Profile 13 (Jewellery lane Road)						
	MH 1990 to MH 2028	Sqm	7	1.7	1.7		20.23
	Profile 14(Bhavanthi Street Road)						
	MH 894 to MH 895	Sqm	0	1.7	1.7		0.00
	Profile 15 (Central Market Road)						
	MH 896 to MH 859	Sqm	9	2	2		36.00
	Profile 16 (Maidan 1st Cross Road)						
	MH 764 to MH 765	Sqm	3	1.7	1.7		8.67
	Profile 17 (Central Market Road)						
	MH 1959 to MH 859	Sqm	4	1.7	1.7		11.56
	Profile 18 (Gouri Mutt Street)						
	MH 1135 to MH 2007	Sqm	8	2	2		32.00
	Profile 19 (Gouri Mutt Road)						
	MH 78 to MH 1999	Sqm	1	1.7	1.7		2.89
	Profile 20(Gouri Mutt Road)						
	MH 570 to MH 2003	Sqm	2	2	2		8.00
	Profile 21(Gouri Mutt Road)						
	MH 168 to MH 2006	Sqm	1	1.7	1.7		2.89
	Profile 22 (Bhavanthi Street Road)						
	MH 136 to MH 2009	Sqm	0	1.7	1.7		0.00
	Profile 23						
	MH 742 to MH 743	Sqm	3	1.7	1.7		8.67
	Profile 24						
	MH 271 to MH 2012	Sqm	1	1.7	1.7		2.89
	Profile 25 (MPT Road)						
	MH 993 to MH 1053	Sqm	6	2.3	2.3		31.74
	MH 993 to MH 1053	Sqm	3	2.3	2.3		15.87
	Profile 26 (MPT Cross Road)						
	MH 762 to MH 2138	Sqm	5	2	2		20.00
	Profile 27 (MPT Cross Road)						
	MH 982 TO MH 2398	Sqm	12	2	2		48.00
	MH 982 TO MH 2398	Sqm	2	2	2		8.00
	Profile 28 (Jodumutt Road)						
	MH 786 TO MH 787	Sqm	3	1.7	1.7		8.67
	Profile 29 (Bhavanthi Street Road)						
	MH 894 TO MH 895	Sqm	0	1.7	1.7		0.00
	Profile 30 (Cross Road)						
	MH 678 TO MH 695	Sqm	4	2	2		16.00
	Profile 31 (Raghavendra and Mukyaprana Temple Road)						
	MH 2020 to MH 1090	Sqm	0	2.3	2.3		0.00
	Profile 32 (Raghavendra Mutt Cross Road)						
	MH 967 to MH 2157	Sqm	7	1.7	1.7		20.23
	Profile 33 (Nellikai Cross Road)						
	MH 940 to MH 2221	Sqm	5	1.7	1.7		14.45
	Profile 34 (Raghavendra Mutt Road)						
	MH 766 to MH 767	Sqm	3	2	2		12.00
	Profile 35 (Cross Road)						
	MH 2159 to MH 364	Sqm	1	1.7	1.7		2.89
	Profile 36 (Mukyaprana Temple Road)						
	MH 2167 to MH 2164	Sqm	1	1.7	1.7		2.89
	Profile 37 (MPT Cross Road)						

Sl.No.	Description of Work	Unit	No	L	B	D	Qty
	MH 2399 to MH 2405	Sqm	5	2	2		20.00
	For House Hold Connection	Sqm	900.00	6.00	1.00		5400.00
				Area (Pi*r*r)			
	Ded Manhole cover-0.45m	Sqm	-55	0.159			-8.74
	Ded Manhole cover - 0.60m	Sqm	-120	0.283			-33.91
	Ded Manhole cover - 0.75m	Sqm	-9	0.442			-3.97
		Sqm				Total	12315.12
13	KSRRB 500-30.Providing and laying 20mm thick mix seal surfacing Type A on prepared surface as wearing course with specified graded crushed aggregates of 5.6mm and 11.2mm size 0.027um/sqm premixed with bituminous binder at 2.20 kg/sqm,in hotmix plant 40/60 tonne,transporting the mixed materials in tipper and laying with mechanical paver finisher to required level and grade,rolling with power roller 8-10 tonne,excluding cost of tack coat including cost of all materials,labours,HOM of machineries complete as per specifications MORTH clause NO.512 using VG-30 (60/70 grade) KSRRB Pg No.166.SI No. 21.36 (Revised Rate)						
	Only for Pipe portion trench						
	Profile 1 (Nellikai Road)						
	MH 2210 to MH2209	Sqm	1	323.62	1.4		453.07
	Profile 2 (Bunder Road)						
	MH 1271 to MH 2235	Sqm	1	0	1.4		0.00
	Profile 3 (Mission Street Road)						
	MH 1202 to MH 941	Sqm	1	246.2	1.4		344.68
	Profile 4(Market,Bibi Alabi and Kandak)						
	MH 1260 to MH 2087	Sqm	1	779.9	1.4		1091.86
	Profile 5 (Maidan Cross Road)						
	MH 1011 to MH 2046	Sqm	1	104.4	1.4		146.16
	Profile 6 (Central Market Road)						
	MH 2058 to MH 1261	Sqm	1	107.9	1.4		151.06
	Profile 7 (Maidan 3rd Cross Road)						
	MH 2062 to MH 2069	Sqm	1	148.5	1.4		207.90
	Profile 8 (Nellikai Road)						
	MH 2074 to MH 2072	Sqm	1	130.3	1.4		182.42
	Profile 9 (Jewellery lane Road)						
	MH 1251 to MH 2453	Sqm	1	188	1.4		263.20
	Profile 10						
	MH 308 to MH 1943	Sqm	1	100.4	1.4		140.56
	Profile 11						
	MH 147 to MH 1970	Sqm	1	30	1.4		42.00
	Profile 12						
	MH 273 to MH 1978	Sqm	1	30.6	1.4		42.84
	Profile 13 (Jewellery lane Road)						
	MH 1990 to MH 2028	Sqm	1	160.5	1.4		224.70
	Profile 14(Bhavanthi Street Road)						
	MH 894 to MH 895	Sqm	1	0	1.4		0.00
	Profile 15 (Central Market Road)						
	MH 896 to MH 859	Sqm	1	181.5	1.4		254.10
	Profile 16 (Maidan 1st Cross Road)						
	MH 764 to MH 765	Sqm	1	70.2	1.4		98.28
	Profile 17 (Central Market Road)						
	MH 1959 to MH 859	Sqm	1	126.1	1.4		176.54
	Profile 18 (Gouri Mutt Street)						
	MH 1135 to MH 2007	Sqm	1	204.1	1.4		285.74
	Profile 19 (Gouri Mutt Road)						
	MH 78 to MH 1999	Sqm	1	20.3	1.4		28.42
	Profile 20(Gouri Mutt Road)						
	MH 570 to MH 2003	Sqm	1	51.1	1.4		71.54
	Profile 21(Gouri Mutt Road)						
	MH 168 to MH 2006	Sqm	1	28.1	1.4		39.34
	Profile 22 (Bhavanthi Street Road)						
	MH 136 to MH 2009	Sqm	1	0	1.4		0.00

Sl.No.	Description of Work	Unit	No	L	B	D	Qty
	Profile 23						
	MH 742 to MH 743	Sqm	1	67.2	1.4		94.08
	Profile 24						
	MH 271 to MH 2012	Sqm	1	28.6	1.4		40.04
	Profile 25 (MPT Road)						
	MH 993 to MH 1053	Sqm	1	216.84	1.4		303.58
	Profile 26 (MPT Cross Road)						
	MH 762 to MH 2138	Sqm	1	93.12	1.4		130.37
	Profile 27 (MPT Cross Road)						
	MH 982 TO MH 2398	Sqm	1	399.1	1.4		558.74
	Profile 28 (Jodumutt Road)						
	MH 786 TO MH 787	Sqm	1	72.4	1.4		101.36
	Profile 29 (Bhavanthi Street Road)						
	MH 894 TO MH 895	Sqm	1	0	1.4		0.00
	Profile 30 (Cross Road)						
	MH 678 TO MH 695	Sqm	1	70.2	1.4		98.28
	Profile 31 (Raghavendra and Mukyaprana Temple Road)						
	MH 2020 to MH 1090	Sqm	1	0	1.4		0.00
	Profile 32 (Raghavendra Mutt Cross Road)						
	MH 967 to MH 2157	Sqm	1	184.7	1.4		258.58
	Profile 33 (Nellikai Cross Road)						
	MH 940 to MH 2221	Sqm	1	94.6	1.4		132.44
	Profile 34 (Raghavendra Mutt Road)						
	MH 766 to MH 767	Sqm	1	62.8	1.4		87.92
	Profile 35 (Cross Road)						
	MH 2159 to MH 364	Sqm	1	14.4	1.4		20.16
	Profile 36 (Mukyaprana Temple Road)						
	MH 2167 to MH 2164	Sqm	1	26.8	1.4		37.52
	Profile 37 (MPT Cross Road)						
	MH 2399 to MH 2405	Sqm	1	119.8	1.4		167.72
	Only for Manhole portion						
	Profile 1 (Nellikai Road)						
	MH 2210 to MH2209	Sqm	13	2	2		52.00
	Profile 2 (Bunder Road)						
	MH 1271 to MH 2235	Sqm	0	2	2		0.00
	Profile 3 (Mission Street Road)						
	MH 1202 to MH 941	Sqm	8	2	2		32.00
	Profile 4(Market,Bibi Alabi and Kandak)						
	MH 1260 to MH 2087	Sqm	31	2	2		124.00
	Profile 5 (Maidan Cross Road)						
	MH 1011 to MH 2046	Sqm	5	1.7	1.7		14.45
	Profile 6 (Central Market Road)						
	MH 2058 to MH 1261	Sqm	6	1.7	1.7		17.34
	Profile 7 (Maidan 3rd Cross Road)						
	MH 2062 to MH 2069	Sqm	5	1.7	1.7		14.45
	Profile 8 (Nellikai Road)						
	MH 2074 to MH 2072	Sqm	5	2	2		20.00
	Profile 9 (Jewellery lane Road)						
	MH 1251 to MH 2453	Sqm	8	2	2		32.00
	Profile 10						
	MH 308 to MH 1943	Sqm	5	2	2		20.00
	Profile 11						
	MH 147 to MH 1970	Sqm	1	1.7	1.7		2.89
	Profile 12						
	MH 273 to MH 1978	Sqm	1	1.7	1.7		2.89
	Profile 13 (Jewellery lane Road)						
	MH 1990 to MH 2028	Sqm	7	1.7	1.7		20.23
	Profile 14(Bhavanthi Street Road)						
	MH 894 to MH 895	Sqm	0	1.7	1.7		0.00
	Profile 15 (Central Market Road)						
	MH 896 to MH 859	Sqm	9	2	2		36.00
	Profile 16 (Maidan 1st Cross Road)						
	MH 764 to MH 765	Sqm	3	1.7	1.7		8.67
	Profile 17 (Central Market Road)						
	MH 1959 to MH 859	Sqm	4	1.7	1.7		11.56
	Profile 18 (Gouri Mutt Street)						

Sl.No.	Description of Work	Unit	No	L	B	D	Qty
	MH 1135 to MH 2007	Sqm	8	2	2		32.00
	Profile 19 (Gouri Mutt Road)						
	MH 78 to MH 1999	Sqm	1	1.7	1.7		2.89
	Profile 20(Gouri Mutt Road)						
	MH 570 to MH 2003	Sqm	2	2	2		8.00
	Profile 21(Gouri Mutt Road)						
	MH 168 to MH 2006	Sqm	1	1.7	1.7		2.89
	Profile 22 (Bhavanthi Street Road)						
	MH 136 to MH 2009	Sqm	0	1.7	1.7		0.00
	Profile 23						
	MH 742 to MH 743	Sqm	3	1.7	1.7		8.67
	Profile 24						
	MH 271 to MH 2012	Sqm	1	1.7	1.7		2.89
	Profile 25 (MPT Road)						
	MH 993 to MH 1053	Sqm	6	2.3	2.3		31.74
	MH 993 to MH 1053	Sqm	3	2.3	2.3		15.87
	Profile 26 (MPT Cross Road)						
	MH 762 to MH 2138	Sqm	5	2	2		20.00
	Profile 27 (MPT Cross Road)						
	MH 982 TO MH 2398	Sqm	12	2	2		48.00
	MH 982 TO MH 2398	Sqm	2	2	2		8.00
	Profile 28 (Jodumutt Road)						
	MH 786 TO MH 787	Sqm	3	1.7	1.7		8.67
	Profile 29 (Bhavanthi Street Road)						
	MH 894 TO MH 895	Sqm	0	1.7	1.7		0.00
	Profile 30 (Cross Road)						
	MH 678 TO MH 695	Sqm	4	2	2		16.00
	Profile 31 (Raghavendra and Mukyaprana Temple Road)						
	MH 2020 to MH 1090	Sqm	0	2.3	2.3		0.00
	Profile 32 (Raghavendra Mutt Cross Road)						
	MH 967 to MH 2157	Sqm	7	1.7	1.7		20.23
	Profile 33 (Nellikai Cross Road)						
	MH 940 to MH 2221	Sqm	5	1.7	1.7		14.45
	Profile 34 (Raghavendra Mutt Road)						
	MH 766 to MH 767	Sqm	3	2	2		12.00
	Profile 35 (Cross Road)						
	MH 2159 to MH 364	Sqm	1	1.7	1.7		2.89
	Profile 36 (Mukyaprana Temple Road)						
	MH 2167 to MH 2164	Sqm	1	1.7	1.7		2.89
	Profile 37 (MPT Cross Road)						
	MH 2399 to MH 2405	Sqm	5	2	2		20.00
	For House Hold Connection	Sqm	900.00	6.00	1.00		5400.00
				Area (Pi*r*r)			
	Ded Manhole cover-0.45m	Sqm	-55	0.159			-8.74
	Ded Manhole cover - 0.60m	Sqm	-120	0.283			-33.91
	Ded Manhole cover - 0.75m	Sqm	-9	0.442			-3.97
		Sqm				Total	12315.12

Assistant Executive Engineer
MSCL Mangaluru

Name of the Work :- Mangalore Smart City
1.4 Rate Analysis of Underground Drainage Zone 4

RATE ANALYSIS - UnderGround Drainage Zone 4

1	KSRRB 300-49.Scarifying Bituminous course 50mm to 75 mm thick with along with premix carpet/surface dressing by manual means without disturbing the base including cost of all labours and stacking of the debris materials including cost of all labour charges complete as per specifications. MORTH /Chapter 3 KSRRB SI No.19.55,Pg No.147			
	Basic rate		57.00	
	Add 12% For area weightage (Mangalore City)		6.84	
		Rate	63.84	Sqm
2	KSRRB 300-45.Scarifying stone metal crust 50mm to 100 mm thick with pick axes along with premix carpet/surface dressing and stacking of old serviceable materials by manual means including cost of all labours charges complete as per specifications. MORTH /Chapter 3 KSRRB SI No.19.51,Pg No.147			
	Basic rate		50.00	
	Add 12% For area weightage		6.00	
		Rate	56.00	Sqm
3	Earthwork excavation for pipeline trenches (Except building work) including barricading depositing on bank with all lead including danger lighting and using sight rails and boning rods including shoring, strutting, bailing out water at every 100 meters wherever necessary as directed in the following Strata KUWSDB SR 15-16,SI No 1,Pg No 5			
	do in all soils mixed mixed with boulders of 30 cms size upto an exclusive of disintegrated rock D182			
	0 to 2mtr depth			
	Basic rate		175	
	Add 12% For area weightage		21	
		Rate	196.00	Cum
4	Earthwork excavation for pipeline trenches (Except building work) including barricading depositing on bank with all lead including danger lighting and using sight rails and boning rods including shoring, strutting, bailing out water at every 100 meters wherever necessary as directed in the following Strata KUWSDB SR 15-16,SI No ii,Pg No 5			
	do in disintegrated rock,soft rock,soft shale and medium hard rock comprising of lime stone,sand stone hard shale,schiest,fissured rock without resorting to blasting			
	2 to 4mtr depth			
	Basic rate		442.00	
	Add 12% For area weightage		53.04	
		Rate	495.04	Cum

5	Providing course sand bedding for the pipeline trenches including watering and consolidation by punners etc.,complete with all lead and lift (In black cotton and rock reaches) KUWSDB 15-16,Pg No 17,SI No.6			
	Basic rate		1616.00	
	Add 12% For area weightage		193.92	
		Rate	1809.92	Cum
6	Supplying Unplasticised PVC pipes confirming to IS 15328:2003 with latest amendments ended with integral sockets with ISI mark and conveying to worksite,rolling and lowering into trenches,Laying true to line and level and perfect linking at joints,testing and commissioning,including loading and unloading at both destinations and cuts of pipes wherever necessary including jointing of UPVC Pipes (with cost of elastomeric sealing rings) and specials (excluding cost of specials) with jointing of approved type,with all labour with all lead and lift including encasing the pipe around to a depth of not less than 15cms with soft gravel or selected earth available from the excavation etc.,complete and giving necessary hydraulic test to the required pressure as per ISS (Contractor will make his own arrangements for procuring water for testing) KUWSDB,Pg No 205 and 207,SI No 4			
	Supply and laying of PVC- U Pipes as per IS 15328 SN 4 -Ring tite:			
	Basic Material Rate		799.00	
	Labour Rate		45	
	Add 12% For area weightage For labour		5.4	
		Rate	849.40	Rmt
7	Supplying Unplasticised PVC pipes confirming to IS 15328:2003 with latest amendments ended with integral sockets with ISI mark and conveying to worksite,rolling and lowering into trenches,Laying true to line and level and perfect linking at joints,testing and commissioning,including loading and unloading at both destinations and cuts of pipes wherever necessary including jointing of UPVC Pipes (with cost of elastomeric sealing rings) and specials (excluding cost of specials) with jointing of approved type,with all labour with all lead and lift including encasing the pipe around to a depth of not less than 15cms with soft gravel or selected earth available from the excavation etc.,complete and giving necessary hydraulic test to the required pressure as per ISS (Contractor will make his own arrangements for procuring water for testing) KUWSDB,Pg No 207 and 207,SI No b1			
	Supply and laying of PVC- U Pipes as per IS 15328 SN 8 -Ring tite: 110mm			
	Basic rate Material Rate		302.00	
	Labour Rate		33	
	Add 12% For area weightage For labour		3.96	
		Rate	338.96	Rmt

8	Construction of RCC Manhole chambers of 1:1.5:3 proportion using form vibrators of standard type with barricading,danger lighting and using of sight rails and boning rods wherever necessary,shoring,strutting wherever required using ordinary port land cement,using 1:1.5:3 proportion RCC with 20mm and down graded jelly,well graded sand and steel of approved quality 200mm thick top concrete slab having wall thickness and raft thickness as in approved drawing,benching concrete with 1:6 slope towards the central drain finished smooth,including fixing and grouting of pipes,including conveying to work spot supply and fixing SFRC manhole cover and frame(Heavy Duty) conforming to IS : 12592 with latest amendments,on a bed of CC 1:2:4 supplying and fixing of minimum mm thick encapsulated MS Square footstepsStaggered at 300mm apart as detailed in Technical specifications including sand bedding wherever required disposal of surplus earth,watering,curing,engraving,manhole number with flow direction on the inner cylindrical surface etc,Complete including cost of reinforcement steel and fabrication charges and also cost and conveyance of all the materialslabour with all lead and lifts for various diameters and depth noted below: as per specifications,drawing and as directed by the Engineer inclusive of earth work excavation in all type of soil. Non SOR Item (Rate Analysis Attached)			
a	0.9 Meter Dia Manhole			
	Basic rate		26050.8973	
		Rate	26050.90	Nos
b	1.2 Meter Dia Manhole			
	Basic rate		38384.551	
		Rate	38384.55	Nos
c	1.5 meter Dia Manhole			
	Basic rate		67928.8963	
		Rate	67928.90	Nos
9	Refilling Pipeline Trenches and foundation with selected available earth from trench excavation and foundation including watering,consolidation in layers of 15cms.,thick including disposing off the surplus earth with all lead and lift. KUWSDB Pg No 15,SI No 2			
	Basic Rate		59.00	
	Add 12% For Area weightage		7.08	
		Rate	66.08	Cum
10	Carting of excavated earth of all types upto adistance mentioned below and re-carting back to the same site by vehicle including loading,unloading charges for to and fro,with all lifts and labour,HOM of machinary etc,complete after obtaining the approval of the Chief Engineer. e) 4.0 to 5.0 Km KUWSDB Pg No.15,SI No.3			
	Basic Rate		282.00	
	add 12% For Area weightage		33.84	
		Rate	315.84	Cum

11	KSRRB M400-6.2. Constriction of Granular Sub-base by Providing Close graded crushed stone aggregates of granite /trap/basalt material spreading in uniform layers with motor grader on prepared surface, mixing by mix in place method by rotavator at OMC, and compacting with vibratory power roller to achieve the desired density, complete as per specifications. B. By mix in place Method For grading II material KSRB Pg No.155,20.5.2			
	Basic Rate		1408	
	Add 12% For Area weightage		168.96	
		Rate	1576.96	Cum
12	KSRRB M400-Wet Mix macadam KSRRB M400-17. Providing, laying, spreading and compacting crushed stone aggregates of granite/trap/ basalt to wet mix macadam specification including per mixing the material with water at OMC in Mechanical mix plant carriage of mixed material by tipper to site, laying in uniform layers with paver in sub- base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specification. MORTH Specification NO.406 KSRB Pg No 158,20.18			
	Basic Rate		1668	
	Add 12% For Area weightage		200.16	
		Rate	1868.16	Cum
13	KSRRB M500-6. Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications. MORTH Specification No. 502 KSRB Pg No.161,SI No:21.6			
	Basic Rate		26.00	
	Add 12% For Area weightage		3.12	
		Rate	29.12	Sqm
14	KSRRB 500-30.Providing and laying 20mm thick mix seal surfacing Type A on prepared surface as wearing course with specified graded crushed aggregates of 5.6mm and 11.2mm size 0.027um/sqm premixed with bituminous binder at 2.20 kg/sqm,in hotmix plant 40/60 tonne,transporting the mixed materials in tipper and laying with mechanical paver finisher to required level and grade,rolling with power roller 8-10 tonne,excluding cost of tack coat including cost of all materials,labours,HOM of machineries complete as per specifications MORTH clause NO.512 using VG-30 (60/70 grade) KSRRB Pg No.166,SI No. 21.36 (Revised Rate)			
	Basic Rate		135.00	
	Add 12% For Area weightage		16.20	
		Rate	151.20	Sqm

Assistant Executive Engineer
MSCL Mangaluru

Superintendent Engineer
MCC

Mangalore Smart City : Maidan Road
1.5 Rate Analysis for RCC Circular Manhole chamber (1.2m Dia)

PCC =0.15m, Raft=0.3m, Wall=0.2m, Cover slab=0.2m

	Description	Unit	Qty	Basic Rate/Unit	Area Weightage (12%)	Final Rate/Unit	Amount	Remarks
1	KSRB 4-1.6 ; Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.69 cum and fine aggregates @ 0.459cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, ncluding cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.12, I.No. 4.6 of PWD SR 2016-17)	Cum	0.486	5441.00	652.92	6093.92	2961.65	
2	KSRB 4.2.1 : Providing and laying in position reinforced cement concrete of Design mix M25 with OPC cement @ 340kgs, with 20mm and down size graded granite metal coarse aggregates @0.70 cum and fine aggregates @ 0.47cum, with super plasticisers @ 3 liters confirming to is 9103-1999 reaffirmed-2008 at machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in foundation for footings, pedestals, retaining walls, return walls, walls (any thickness) including attached pilasters, columnpillars, posts, struts, buttresses, bed blocks, anchor blocks & plinths etc., including cost of all materials, labour, HOM of machinery, curing, complete but excluding cost of reinforcement as per specifications. Specification No. KBS 4.1, 4.6 (Pg No.13,SI No.4.10)	Cum	0.867	6221.00	746.52	6967.52	6040.84	
3	KSRB 4.2.1 : Providing and laying in position reinforced cement concrete of Design mix M25 with OPC cement @ 340kgs, with 20mm and down size graded granite metal coarse aggregates @0.70 cum and fine aggregates @ 0.47cum, with super plasticisers @ 3 liters confirming to is 9103-1999 reaffirmed-2008 at machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in foundation for footings, pedestals, retaining walls, return walls, walls (any thickness) including attached pilasters, columnpillars, posts, struts, buttresses, bed blocks, anchor blocks & plinths etc., including cost of all materials, labour, HOM of machinery, curing, complete but excluding cost of reinforcement as per specifications. Specification No. KBS 4.1, 4.6 (Pg No.13,SI No.4.10)	Cum	1.017	6221.00	746.52	6967.52	7088.48	
4	KSRB 4.2.7 : Providing and laying in position reinforced cement concrete of design mix M25 with OPC cement @ 340kgs, with 20mm and down size graded granite metal coarse aggregates @0.70cum and fine aggregates @ 0.47cum, with superplasticiser @3lts confirming to IS9103-1999 Reaffirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in ground floor level for roof slabs, staircase, lintles and beams retaining walls, return walls, walls (any thickness) including attached pilasters, columns, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window cills, fillets etc., including cost of all materials, labour, HOM of machinery, curing, complete but excluding cost of reinforcement as per specifications. Specification No. KBS 4.1, 4.6 KSRB;Pg No.13,SI No 4.12	Cum	0.057	6367.00	764.04	7131.04	403.05	
5	KSRB 4-6.1 : Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for foundations, footings, bases of columns for mass concrete including cost of all materials, labour complete as per specificalitons. Specification No. KBS 4.6.2 (Pg No 15,SI No.4.28)	Cum	2.040	231.00	27.72	258.72	527.79	
6	KSRB 4-6.4 : Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for vertical surface such as walls at any thickness, including attached pilasters, buttresses, plinth cills and string courses cost of all materials, labour complete as per specifications. Specification No. KBS 4.6.2 (Pg No 15,SI No.4.31)	Cum	5.087	293.00	35.16	328.16	1669.28	

1.2 mDia

Descriptions	Unit	Nos	L	B	D	Qty
PCC	Cum	1	1.8	1.8	0.15	0.486
Foundation	Cum	1	1.7	1.7	0.3	0.867
RCC Wall	Cum	1	2.826	0.2	1.8	1.017
Cover Slab	Cum	1	0.2826		0.2	0.057
Foundation and slab Shuttering Work	Sqm	2	3.4		0.3	2.04
Wall Shuttering Work	Sqm	1	2.826		1.8	5.09

	Description	Unit	Qty	Basic Rate/Unit	Area Weightage (12%)	Final Rate/Unit	Amount	Remarks
7	KSRB 4.9.2 :Providing T.M.T steel reinforcement for RCC work including straightening,cutting,bending,hooking,placing in position,lapping and/or welding wherever required,tying with binding wire and anchoring to thr adjoining members wherever necessary complete as per design (laps,hooks and wastage shall not be measured and paid) cost of materials,labour,HOM of machinery complete as per specifications.Specification No. KBS4.6.3. do with TMT bars Fe500	MT	0.170	60607.00	7272.84	67879.84	11511.90	
8	Supply and fixing Heavy duty SFRC frame and cover conforming to IS 12592:(Part 1)-1988 and IS 12592: (Part-II)-1991 with latest amendment ,including cutting slabs to the required size for the opening and fixing the cover in CC 1:2:4 and CM 1:3 plastering 20mm thick to all exposed faces,curing for 10 days with all lead and lift etc.,complete KUWSDB Pg No 93 & 95,SI No : 22	Each	1.000	1775.00	213.00	1988.00	1988.00	
9	KSRB 12-6.1 : Providing 20mm square M.S footrest and fixing in manhole with M 10 cement concrete block of 20x20x10cms, using 20mm and down size metal of size including cost of materials, labour charges, curing complete as per specifications. Specification No. KBS 12.4.6 KSRB,Pg No 73,SI No:11.44	Each	6.00	246.00	29.52	275.52	1653.12	
10	KSRB 4-1.1: Providing and laying in position plain cement concrete of mix 1:2:4 with OPC cement @ 240kgs, with 40mm and down size graded granite metal coarse aggregates @0.878cum and fine aggregates @ 0.459cum machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2 KSRB-Pg No.12,SI No.4.1	Cum	0.18	5213.00	625.56	5838.56	1050.94	
	Total Cost						34895.05	
	Add barricading,danger lighting and using of sight rails and boning rods wherever necessary,shoring,strutting @ 10%						3489.505	
	Total Cost For 1 Manhole for 1.2m Dia						38384.55	

Assistant Executive Engineer
MSCL Mangaluru

Descriptions	Unit	Nos	L	B	D	Qty
Steel	MT	1	1.8844	90 Kg/cum		0.17
SFRC Manhole cover	Nos	1				1
Square Footrest	Nos	6				6
Benching Concrete	Cum	1	1	1.2	0.15	0.18

Superintending Engineer
MCC

Description	Unit	Qty	Basic Rate/Unit	Area Weightage (12%)	Final Rate/Unit	Amount	Remarks
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Manglore Smart City : Maidan Road
1.5 Rate Analysis for RCC Circular Manhole chamber (0.9 m Dia)

PCC =0.15m, Raft=0.3m, Wall=0.2m, Cover slab=0.2m

Description	Unit	Qty	Basic Rate/Unit	Area Weightage (12%)	Rate/Unit	Amount	Remarks
1 KSRB 4-1.6 ; Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.69 cum and fine aggregates @ 0.459cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.12, I.No. 4.6 of PWD SR 2016-17)	Cum	0.338	5441.00	652.92	6093.92	2056.70	
2 KSRB 4.2.1 : Providing and laying in position reinforced cement concrete of Design mix M25 with OPC cement @ 340kgs, with 20mm and down size graded granite metal coarse aggregates @0.70 cum and fine aggregates @ 0.47cum, with super plasticisers @ 3 liters confirming to is 9103-1999 reaffirmed-2008 at machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in foundation for footings, pedestals, retaining walls, return walls, walls (any thickness) including attached pilasters, columnspillers, posts, struts, buttresses, bed blocks, anchor blocks & plinths etc., including cost of all materials, labour, HOM of machinery, curing, complete but excluding cost of reinforcement as per specifications. Specification No. KBS 4.1, 4.6 (Pg No.13,SI No.4.10)	Cum	0.588	6221.00	746.52	6967.52	4096.90	
3 KSRB 4.2.1 : Providing and laying in position reinforced cement concrete of Design mix M25 with OPC cement @ 340kgs, with 20mm and down size graded granite metal coarse aggregates @0.70 cum and fine aggregates @ 0.47cum, with super plasticisers @ 3 liters confirming to is 9103-1999 reaffirmed-2008 at machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in foundation for footings, pedestals, retaining walls, return walls, walls (any thickness) including attached pilasters, columnspillers, posts, struts, buttresses, bed blocks, anchor blocks & plinths etc., including cost of all materials, labour, HOM of machinery, curing, complete but excluding cost of reinforcement as per specifications. Specification No. KBS 4.1, 4.6 (Pg No.13,SI No.4.10)	Cum	0.636	6221.00	746.52	6967.52	4430.30	
4 KSRB 4.2.7 : Providing and laying in position reinforced cement concrete of design mix M25 with OPC cement @ 340kgs, with 20mm and down size graded granite metal coarse aggregates @0.70cum and fine aggregates @ 0.47cum, with superplasticiser @3lts confirming to IS9103-1999 Reaffirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in ground floor level for roof slabs, staircase, lintles and beams retaining walls, return walls, walls (any thickness) including attached pilasters, columns, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window cills, fillets etc., including cost of all materials, labour, HOM of machinery, curing, complete but excluding cost of reinforcement as per specifications. Specification No. KBS 4.1, 4.6 KSRB;Pg No.13,SI No 4.12	Cum	0.032	6367.00	764.04	7131.04	226.71	
5 KSRB 4-6.1 : Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for foundations, footings, bases of columns for mass concrete including cost of all materials, labour complete as per specifications. Specification No. KBS 4.6.2 (Pg No 15,SI No.4.28)	Cum	1.680	231.00	27.72	258.72	434.65	

Descriptions	Unit	Nos	L	B	D	Qty
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0.9m Dia

Descriptions	Unit	Nos	L	B	D	Qty
PCC	Cum	1	1.5	1.5	0.15	0.3375
Foundation	Cum	1	1.4	1.4	0.3	0.588
RCC Wall	Cum	1	2.1195	0.2	1.5	0.63585
Cover Slab	Cum	1	0.158963		0.2	0.03179
Foundation and slab Shuttering Work	Sqm	2	2.8		0.3	1.68

	Description	Unit	Qty	Basic Rate/Unit	Area Weightage (12%)	Final Rate/Unit	Amount	Remarks
6	KSRB 4-6.4 : Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for vertical surface such as walls at any thickness, including attached pilasters, buttresses, plinth cills and string courses cost of all materials, labour complete as per specifications. Specification No. KBS 4.6.2 (Pg No 15,SI No.4.31)	Cum	3.179	293.00	35.16	328.16	1043.30	
7	KSRB 4.9.2 :Providing T.M.T steel reinforcement for RCC work including straightening,cutting,bending,hooking,placing in position,lapping and/or welding wherever required,tying with binding wire and anchoring to thr adjoining members wherever necessary complete as per design (laps,hooks and wastage shall not be measured and paid) cost of materials,labour,HOM of machinery complete as per specifications.Specification No. KBS4.6.3. do with TMT bars Fe500	MT	0.110	60607.00	7272.84	67879.84	7476.73	
8	Supply and fixing Heavy duty SFRC frame and cover conforming to IS 12592:(Part 1)-1988 and IS 12592: (Part-II)-1991 with latest amendment ,including cutting slabs to the required size for the opening and fixing the cover in CC 1:2:4 and CM 1:3 plastering 20mm thick to all exposed faces,curing for 10 days with all lead and lift etc.,complete KUWSDB Pg No 93 & 95,SI No : 22	Each	1.000	1775.00	213.00	1988.00	1988.00	
9	KSRB 12-6.1 : Providing 20mm square M.S footrest and fixing in manhole with M 10 cement concrete block of 20x20x10cms, using 20mm and down size metal of size including cost of materials, labour charges, curing complete as per specifications. Specification No. KBS 12.4.6 KSRB,Pg No 73,SI No:11.44	Each	5.00	246.00	29.52	275.52	1377.60	
10	KSRB 4-1.1: Providing and laying in position plain cement concrete of mix 1:2:4 with OPC cement @ 240kgs, with 40mm and down size graded granite metal coarse aggregates @0.878cum and fine aggregates @ 0.459cum machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2 KSRB-Pg No.12,SI No.4.1	Cum	0.09	5213.00	625.56	5838.56	551.74	
	Total Cost						23682.63	
	Add barricading,danger lighting and using of sight rails and boning rods wherever necessary,shoring,strutting @ 10%						2368.263	
	Total Cost For 1 Manhole for 0.9m Dia						26050.90	

Assistant Executive Engineer
MSCL Mangaluru

Descriptions	Unit	Nos	L	B	D	Qty
Wall Shuttering Work	Sqm	1	2.1195		1.5	3.18
Steel	MT	1	1.22385	90 Kg/cum		0.110
SFRC Manhole cover	Nos	1				1
Square Footrest	Nos	5				5
Benching Concrete	Cum	1	0.7	0.9	0.15	0.0945

Superintending Engineer
MCC

Description	Unit	Qty	Basic Rate/Unit	Area Weightage (12%)	Final Rate/Unit	Amount	Remarks
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Mangalore Smart City : Maidan Road
1.5 Rate Analysis for RCC Circular Manhole chamber (1.5m Dia)

PCC =0.15m,Raft=0.3m,Wall=0.2m,Cover slab=0.2m

Description	Unit	Qty	Basic Rate/Unit	Area Weightage (12%)	Rate/Unit	Amount	Remarks
1 KSRB 4-1.6 ; Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.69 cum and fine aggregates @ 0.459cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.12, I.No. 4.6 of PWD SR 2016-17)	Cum	0.662	5441.00	652.92	6093.92	4031.13	
2 KSRB 4.2.1 : Providing and laying in position reinforced cement concrete of Design mix M25 with OPC cement @ 340kgs, with 20mm and down size graded granite metal coarse aggregates @0.70 cum and fine aggregates @ 0.47cum, with super plasticisers @ 3 liters confirming to is 9103-1999 reaffirmed-2008 at machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in foundation for footings, pedestals, retaining walls, return walls, walls (any thickness) including attached pilasters, columnspillers, posts, struts, buttresses, bed blocks, anchor blocks & plinths etc., including cost of all materials, labour, HOM of machinery, curing, complete but excluding cost of reinforcement as per specifications. Specification No. KBS 4.1, 4.6 (Pg No.13,SI No.4.10)	Cum	1.200	6221.00	746.52	6967.52	8361.02	
3 KSRB 4.2.1 : Providing and laying in position reinforced cement concrete of Design mix M25 with OPC cement @ 340kgs, with 20mm and down size graded granite metal coarse aggregates @0.70 cum and fine aggregates @ 0.47cum, with super plasticisers @ 3 liters confirming to is 9103-1999 reaffirmed-2008 at machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in foundation for footings, pedestals, retaining walls, return walls, walls (any thickness) including attached pilasters, columnspillers, posts, struts, buttresses, bed blocks, anchor blocks & plinths etc., including cost of all materials, labour, HOM of machinery, curing, complete but excluding cost of reinforcement as per specifications. Specification No. KBS 4.1, 4.6 (Pg No.13,SI No.4.10)	Cum	2.314	6221.00	746.52	6967.52	16121.36	
4 KSRB 4.2.7 : Providing and laying in position reinforced cement concrete of design mix M25 with OPC cement @ 340kgs, with 20mm and down size graded granite metal coarse aggregates @0.70cum and fine aggregates @ 0.47cum, with superplasticiser @3lts confirming to IS9103-1999 Reaffirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in ground floor level for roof slabs, staircase, lintles and beams retaining walls, return walls, walls (any thickness) including attached pilasters, columns, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window cills, fillets etc., including cost of all materials, labour, HOM of machinery, curing, complete but excluding cost of reinforcement as per specifications. Specification No. KBS 4.1, 4.6 KSRB;Pg No.13,SI No 4.12	Cum	0.088	6367.00	764.04	7131.04	629.76	
4 KSRB 4-6.1 : Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for foundations, footings, bases of columns for mass concrete including cost of all materials, labour complete as per specifications. Specification No. KBS 4.6.2 (Pg No 15,SI No.4.28)	Cum	2.400	231.00	27.72	258.72	620.93	
5 KSRB 4-6.4 : Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for vertical surface such as walls at any thickness, including attached pilasters, buttresses, plinth cills and string courses cost of all materials, labour complete as per specifications. Specification No. KBS 4.6.2 (Pg No 15,SI No.4.31)	Cum	11.569	293.00	35.16	328.16	3796.46	

Descriptions	Unit	Nos	L	B	D	Qty
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1.5m Dia

Descriptions	Unit	Nos	L	B	D	Qty
PCC	Cum	1	2.1	2.1	0.15	0.6615
Foundation	Cum	1	2	2	0.3	1.2
RCC Wall	Cum	1	3.5325	0.2	3.275	2.31379
Cover Slab	Cum	1	0.441563		0.2	0.08831
Foundation and slab Shuttering Work	Sqm	2	4		0.3	2.4
Wall Shuttering Work	Sqm	1	3.5325		3.275	11.57

	Description	Unit	Qty	Basic Rate/Unit	Area Weightage (12%)	Final Rate/Unit	Amount	Remarks
6	KSRB 4.9.2 :Providing T.M.T steel reinforcement for RCC work including straightening,cutting,bending,hooking,placing in position,lapping and/or welding wherever required,tying with binding wire and anchoring to thr adjoining members wherever necessary complete as per design (laps,hooks and wastage shall not be measured and paid) cost of materials,labour,HOM of machinery complete as per specifications.Specification No. KBS4.6.3. do with TMT bars Fe500 KSRB Pg No: 17,SI No:4.46.2	MT	0.316	60607.00	7272.84	67879.84	21466.38	
7	Supply and fixing Heavy duty SFRC frame and cover conforming to IS 12592:(Part 1)-1988 and IS 12592: (Part-II)-1991 with latest amendment ,including cutting slabs to the required size for the opening and fixing the cover in CC 1:2:4 and CM 1:3 plastering 20mm thick to all exposed faces,curing for 10 days with all lead and lift etc.,complete KUWSDB Pg No 93 & 95,SI No : 22	Each	1.000	1775.00	213.00	1988.00	1988.00	
8	KSRB 12-6.1 : Providing 20mm square M.S footrest and fixing in manhole with M 10 cement concrete block of 20x20x10cms, using 20mm and down size metal of size including cost of materials, labour charges, curing complete as per specifications. Specification No. KBS 12.4.6 KSRB,Pg No 73,SI No:11.44	Each	11.00	246.00	29.52	275.52	3030.72	
9	KSRB 4-1.1: Providing and laying in position plain cement concrete of mix 1:2:4 with OPC cement @ 240kgs, with 40mm and down size graded granite metal coarse aggregates @0.878cum and fine aggregates @ 0.459cum machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2 KSRB-Pg No.12,SI No.4.1	Cum	0.29	5213.00	625.56	5838.56	1707.78	
Total Cost							61753.54	
Add barricading,danger lighting and using of sight rails and boning rods wherever necessary,shoring,strutting @ 10%							6175.354	
Total Cost For 1 Manhole for 1.5m Dia							67928.90	

Assistant Executive Engineer
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Descriptions	Unit	Nos	L	B	D	Qty
Steel	MT	1	3.513788	90 Kg/cum		0.316
SFRC Manhole cover	Nos	1				1
Square Footrest	Nos	11				11
Benching Concrete	Cum	1	1.3	1.5	0.15	0.2925

Superintending Engineer
MCC