



AURANGABAD MUNICIPAL CORPORATION.

(From No.52)

Measurement Book

Name of work:- Development of Underground Sewerage Collection system for Zone I to VI and Zone Salim Ali. Constructing, Erecting, Testing and Commissioning of Sewage Treatment Plant based on modern technology at Nakshtrawadi (Kanchanwadi). Banewadi, Siddharth Garden, Zalta, Padegaon, CIDCO (Airport). Construction, Erection, Testing and Commission of Sewage pumping stations at Banewadi, Siddharth Garden, Padegaon, Golwadi, Zalta, Ward No.98 and CIDCO (Airport). Providing, lowering, laying jointing and testing rising main GRP/DI pipe line from Golwadi SPS to Nakshtrawadi (Kanchanwadi) STP and Ward No.98 to STP for Aurangabad City.

Book No. :-
Page No. :- **027**

Name of Agency:- M/s Khilari Infrastructure Pvt.Ltd. & GECPL (Joint Vencture)

Authority No. AMC/Ward B&C/UIDSSMT/2014/184 Date 01.07.2014

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Sewer F 1.5m MH BBM

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Quantity	
		GL	IL	EX.L							
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	10.240	0.150	1.206		21.394	22.599
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.000	0.000		12.058	12.058
	(c) For Lift 3.0m to 4.5m	1			0.785	10.240	0.000	0.000		3.738	3.738
	Item No. 4 :- Excavation for foundation/pipe trenches in soft										
	(a) For Lift 0 to 1.5m	1			0.785	10.240	0.000	0.000		1.125	1.125
	ITEM No. 5 :- Excavation for foundation / pipe trenches in laterite rock masses etc complete										
	(a) For Lift 0 to 1.5m	1			0.785	10.240	0.000	0.000		12.603	12.603
	Item No. : 11 Transportation of earth Transportation charges							7.501		107.259	114.760
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							18.770			
	Deduction										
	Brick work	1		0.785	2.280	2.280	1.043	4.254			
		1		0.785	1.540	1.540	1.043	1.941			
	PCC	1		0.785	2.580	2.580	0.250	1.306			
								7.501			
	Net Qty = A - B							11.268		162.088	173.356



Secretary



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Sewer F-RCC 1.5m MH

17th RA BILL MEASUREMENTS											
Sewer F											
Date	Particulars of work	DETAILS					Content of arrears	Last measurement		Total Upto Date Quantity	
		No			L	B		D	Page		Quantity
		GL	IL	EX.L							
	Excavation of Chamber - For RCC 1.50m dia Manhole - 1.50*0.2+0.2+0.5+0.5=2.90m Breadth for Manhole=2.90*2.90=8.41m										
	F 31	F-700mm									
	CH 1827.60	566.950	563.450	563.100			3.850				
	Item No. 3 :- Excavation for foundation/pipe trenches in slush etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	0.200	1.320	0.000	1.320	
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	1.300	8.582	155.363	163.945	
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	0.300	1.981	80.550	82.531	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	1.200	7.922	12.058	19.980	
	(c) For Lift 3.0m to 4.5m	1			0.785	8.410	0.700	4.621	3.738	8.359	
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(c) For Lift 3.0m to 4.5m	1			0.785	8.410	0.150	0.990	0.000	0.990	
	Item No. : 11 Transportation of earth Transportation charges							11.447	114.760	126.208	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							25.417			
	Deduction										
	Wall	1			0.785	1.900	1.900	3.500	9.918		
	Raft	1			0.785	2.300	2.300	0.250	1.038		
	PCC	1			0.785	2.500	2.500	0.100	0.491		
								11.447			
	Net Qty = A - B							13.970	173.356	187.326	
	F 36	F-600mm									
	CH 2181.90	572.210	568.460	568.110			4.100				
	Item No. 3 :- Excavation for foundation/pipe trenches in slush etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	0.100	0.660	1.320	1.981	
	Item No. 1 :- Excavation for foundation/pipe trenches in earth										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	1.400	9.243	163.945	173.188	
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	1.300	8.582	82.531	91.113	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	0.200	1.320	19.980	21.300	
	(c) For Lift 3.0m to 4.5m	1			0.785	8.410	1.100	7.262	8.359	15.621	
	Item No. : 11 Transportation of earth Transportation charges							12.156	126.208	138.363	



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Page No. :- **029**

Name of Agency:- M/s Khilari Infrastructure Pvt.Ltd. & GECPL (Joint Venture)

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Sewer F-RCC 1.5m MH

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Quantity	
		GL	IL	EX.L							
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=						27.068				
	Deduction										
	Wall	1		0.785	1.900	1.900	3.750	10.627			
	Raft	1		0.785	2.300	2.300	0.250	1.038			
	PCC	1		0.785	2.500	2.500	0.100	0.491			
								12.156			
	Net Qty = A - B							14.912	187.326	202.238	
	F 37										
	CH 2213.10	572.830	569.050	568.700			4.130				
	Item No. 3 :- Excavation for foundation/pipe trenches in slush etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	0.100	0.660	1.981	2.641	
	Item No. 1 :- Excavation for foundation/pipe trenches in earth										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	1.400	9.243	173.188	182.430	
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	1.000	6.602	91.113	97.715	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	0.500	3.301	21.300	24.601	
	(c) For Lift 3.0m to 4.5m	1			0.785	8.410	1.130	7.460	15.621	23.081	
	Item No. : 11 Transportation of earth Transportation charges							12.241	138.363	150.604	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							27.266			
	Deduction										
	Wall	1		0.785	1.900	1.900	3.780	10.712			
	Raft	1		0.785	2.300	2.300	0.250	1.038			
	PCC	1		0.785	2.500	2.500	0.100	0.491			
								12.241			
	Net Qty = A - B							15.025	202.238	217.263	
	F 47										
	CH 2881.00	579.350	574.387	574.037			5.313				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	1.500	9.903	182.430	192.333	
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	1.500	9.903	97.715	107.618	
	(c) For Lift 3.0m to 4.5m	1			0.785	8.410	0.859	5.671	0.080	5.751	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(c) For Lift 3.0m to 4.5m	1			0.785	8.410	0.500	3.301	23.081	26.382	
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(c) For Lift 3.0m to 4.5m	1			0.785	8.410	0.141	0.931	0.990	1.921	
	(d) For Lift 4.5m to 6.0m	1			0.785	8.410	0.813	5.367	0.000	5.367	
	Item No. : 11 Transportation of earth Transportation charges							15.593	150.604	166.197	



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Sewer F-RCC 1.5m MH

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		GL	No IL	EX.L	L	B	D		Page	Quantity	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							35.076			
	Deduction										
	Wall	1		0.785	1.900	1.900	4.963	14.064			
	Raft	1		0.785	2.300	2.300	0.250	1.038			
	PCC	1		0.785	2.500	2.500	0.100	0.491			
								15.593			
	Net Qty = A - B							19.482	217.263	236.745	
	F 48										
	CH 2914.70	579.700	575.265	574.915			4.785				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	1.500	9.903	192.333	202.236	
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	1.500	9.903	107.618	117.520	
	(c) For Lift 3.0m to 4.5m	1			0.785	8.410	0.711	4.694	5.751	10.445	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(c) For Lift 3.0m to 4.5m	1			0.785	8.410	0.700	4.621	26.382	31.003	
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(c) For Lift 3.0m to 4.5m	1			0.785	8.410	0.089	0.588	1.921	2.509	
	(d) For Lift 4.5m to 6.0m	1			0.785	8.410	0.285	1.882	5.367	7.249	
	Item No. : 11 Transportation of earth Transportation charges							14.097	166.197	180.294	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							31.590			
	Deduction										
	Wall	1		0.785	1.900	1.900	4.435	12.568			
	Raft	1		0.785	2.300	2.300	0.250	1.038			
	PCC	1		0.785	2.500	2.500	0.100	0.491			
								14.097			
	Net Qty = A - B							17.493	236.745	254.238	
	F 51										
	CH 3044.60	580.820	578.447	578.097			2.723				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	1.500	9.903	202.236	212.139	
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	0.611	4.034	117.520	121.554	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	0.612	4.040	24.601	28.641	
	Item No. : 11 Transportation of earth Transportation charges							8.254	180.294	188.548	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							17.977			
	Deduction										
	Wall	1		0.785	1.900	1.900	2.373	6.725			
	Raft	1		0.785	2.300	2.300	0.250	1.038			
	PCC	1		0.785	2.500	2.500	0.100	0.491			
								8.254			
	Net Qty = A - B							9.723	254.238	263.961	



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Page No. :-

Name of Agency:- M/s Khilari Infrastructure Pvt.Ltd. & GECPL (Joint Vencture)

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Sewer F-RCC 1.5m MH

Date	Particulars of work	DETAILS					Content of arrears	Last measurement		Total Upto Date Quantity	
		No			L	B		D	Page		Quantity
		GL	IL	EX.L							
F 52											
	CH 3083.30	581.120	578.720	578.370			2.750				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	1.500	9.903	212.139	222.041	
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	1.250	8.252	121.554	129.806	
	Item No. : 11 Transportation of earth Transportation charges							8.330	188.548	196.878	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							18.155			
	Deduction										
	Wall	1			0.785	1.900	2.400	6.801			
	Raft	1			0.785	2.300	2.300	1.038			
	PCC	1			0.785	2.500	2.500	0.491			
								8.330			
	Net Qty = A - B							9.825	263.961	273.786	
F 53											
	CH 3149.50	583.920	579.440	579.090			4.830				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	1.500	9.903	222.041	231.944	
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	1.300	8.582	129.806	138.389	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	0.200	1.320	28.641	29.962	
	(c) For Lift 3.0m to 4.5m	1			0.785	8.410	1.500	9.903	31.003	40.906	
	(d) For Lift 4.5m to 6.0m	1			0.785	8.410	0.330	2.179	0.000	2.179	
	Item No. : 11 Transportation of earth Transportation charges							14.224	196.878	211.102	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							31.887			
	Deduction										
	Wall	1			0.785	1.900	1.900	4.480	12.696		
	Raft	1			0.785	2.300	2.300	0.250	1.038		
	PCC	1			0.785	2.500	2.500	0.100	0.491		
								14.224			
	Net Qty = A - B							17.663	273.786	291.449	
F 57											
	CH 3282.50	584.245	581.325	580.975			3.270				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth										
	(a) For Lift 0 to 1.5m	1			0.785	8.410	1.500	9.903	231.944	241.847	
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	0.620	4.093	138.389	142.482	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(b) For Lift 1.5m to 3.0m	1			0.785	8.410	0.880	5.810	29.962	35.771	
	(c) For Lift 3.0m to 4.5m	1			0.785	8.410	0.270	1.782	40.906	42.689	
	Item No. : 11 Transportation of earth Transportation charges							9.804	211.102	220.906	



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Sewer F-Dewatering

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11th R A BILL MEASUREMENTS							
Sewer "F" - Dewatering							
Sr.No.	Date	Pump Capacity in Hp	No. of Pumps	Time		Total Hrs	Bhp/Hr
				From	To		
F-600mm BALAJI NAGAR							
1	11/05/2016	25	1	10:00	13:00	3:00	75:00:00
		25	1	14:00	15:00	1:00	25:00:00
2	12/05/2016	25	1	10:00	13:00	3:00	75:00:00
		25	1	14:00	16:00	2:00	50:00:00
3	14/05/2016	25	1	11:00	13:00	2:00	50:00:00
		25	1	14:00	16:00	2:00	50:00:00
4	15/05/2016	25	1	10:30	14:30	4:00	100:00:00
5	16/05/2016	25	1	11:00	13:00	2:00	50:00:00
		25	1	14:00	16:30	2:30	62:30:00
6	17/05/2016	25	1	10:00	11:00	1:00	25:00:00
		25	1	14:00	17:00	3:00	75:00:00
7	18/05/2016	25	1	11:00	13:00	2:00	50:00:00
		25	1	14:00	16:30	2:30	62:30:00
8	19/05/2016	25	1	13:00	17:00	4:00	100:00:00
9	20/05/2016	25	1	11:00	13:00	2:00	50:00:00
		25	1	14:00	17:00	3:00	75:00:00
		25	1	12:00	13:00	1:00	25:00:00
10	21/05/2016	25	1	14:00	17:00	3:00	75:00:00
		25	1	13:00	15:00	2:00	50:00:00
11	23/05/2016	25	1	15:30	18:00	2:30	62:30:00
		25	1	10:00	13:00	3:00	75:00:00
12	24/05/2016	25	1	15:00	16:30	1:30	37:30:00
		25	1	11:00	13:00	2:00	50:00:00
13	25/05/2016	25	1	14:00	16:00	2:00	50:00:00
		25	1	9:30	12:30	3:00	75:00:00
14	26/05/2016	25	1	14:30	16:00	1:30	37:30:00
		25	1	10:00	12:00	2:00	50:00:00
15	27/05/2016	25	1	13:00	15:00	2:00	50:00:00
		25	1	11:00	13:00	2:00	50:00:00
16	28/05/2016	25	1	14:30	16:30	2:00	50:00:00
		25	1	12:00	13:00	1:00	25:00:00
17	29/05/2016	25	1	15:00	18:00	3:00	75:00:00
		25	1	15:00	18:00	2:00	50:00:00
18	01/06/2016	25	1	11:00	13:00	2:00	50:00:00
		25	1	14:00	16:00	1:00	25:00:00
19	03/06/2016	25	1	12:00	13:00	3:30	87:30:00
		25	1	14:00	17:30		



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Sewer F-Dewatering

Sr.No.	Date	Pump Capacity in Hp	No.of Pumps	Time		Total Hrs	Bhp/Hr
				From	To		
F-500mm BALAJI NAGAR							
1	13/06/2016	25	1	7:00	8:00	1:00	25:00:00
		25	1	9:30	10:30	1:00	25:00:00
		25	1	14:00	16:00	2:00	50:00:00
2	14/06/2016	25	1	7:30	8:30	1:00	25:00:00
		25	1	9:00	9:30	0:30	12:30:00
		25	1	10:00	10:30	0:30	12:30:00
		25	1	14:00	15:30	1:30	37:30:00
3	15/06/2016	25	1	8:00	9:00	1:00	25:00:00
		25	1	12:00	13:00	1:00	25:00:00
		25	1	14:00	16:00	2:00	50:00:00
4	16/06/2016	25	1	8:00	9:00	1:00	25:00:00
		25	1	12:00	15:00	3:00	75:00:00
5	17/06/2016	25	1	7:30	8:00	0:30	12:30:00
		25	1	9:00	11:00	2:00	50:00:00
		25	1	14:00	15:30	1:30	37:30:00
		25	1	16:00	16:30	0:30	12:30:00
6	18/06/2016	25	1	7:00	9:00	2:00	50:00:00
		25	1	10:00	10:30	0:30	12:30:00
		25	1	13:00	14:00	1:00	25:00:00
7	20/06/2016	25	1	7:00	8:00	1:00	25:00:00
		25	1	10:00	11:30	1:30	37:30:00
		25	1	14:00	15:00	1:00	25:00:00
		25	1	16:00	17:00	1:00	25:00:00
8	21/06/2016	25	1	8:00	10:00	2:00	50:00:00
		25	1	14:00	16:00	2:00	50:00:00
9	22/06/2016	25	1	7:30	8:30	1:00	25:00:00
		25	1	9:00	9:30	0:30	12:30:00
		25	1	14:00	14:30	0:30	12:30:00
		25	1	15:00	16:00	1:00	25:00:00
10	23/06/2016	25	1	7:00	9:00	2:00	50:00:00
		25	1	15:00	17:00	2:00	50:00:00
11	25/06/2016	25	1	7:30	9:00	1:30	37:30:00
		25	1	10:00	11:00	1:00	25:00:00
		25	1	14:00	16:00	2:00	50:00:00
12	26/06/2016	25	1	8:00	9:00	1:00	25:00:00
		25	1	10:00	11:00	1:00	25:00:00
		25	1	15:00	17:30	2:30	62:30:00



f



AURANGABAD MUNICIPAL CORPORATION.

(From No.52)

Measurement Book

Name of work:- Development of Underground Sewerage Collection system for Zone I to VI and Zone Salim Ali, Constructing, Erecting, Testing and Commissioning of Sewage Treatment Plant based on modern technology at Nakshtrawadi (Kanchanwadi), Banewadi, Siddharth Garden, Zalta, Padegaon, CIDCO (Airport), Construction, Erection, Testing and Commission of Sewage pumping stations at Banewadi, Siddharth Garden, Padegaon, Golwadi, Zalta, Ward No.98 and CIDCO (Airport), Providing, lowering, laying jointing and testing rising main GRP/DI pipe line from Golwadi SPS to Nakshtrawadi (Kanchanwadi) STP and Ward No.98 to STP for Aurangabad City.

Book No. :-

Page No. :-

035

Name of Agency:- M/s Khilari Infrastructure Pvt.Ltd. & GECPL (Joint Vencture)

Authority No. AMC/Ward B&C/UIDSSMT/2014/184 Date 01.07.2014

Page 3 of 3

Sewer F-Dewatering

Sr.No.	Date	Pump Capacity in Hp	No.of Pumps	Time		Total Hrs	Bhp/Hr
				From	To		
13	26/06/2016	25	1	8:00	9:00	1:00	25:00:00
		25	1	10:00	11:00	1:00	25:00:00
		25	1	15:00	17:30	2:30	62:30:00
14	27/06/2016	25	1	8:00	11:00	3:00	75:00:00
		25	1	14:00	14:30	0:30	12:30:00
15	28/06/2016	25	1	7:30	8:00	0:30	12:30:00
		25	1	9:00	10:00	1:00	25:00:00
		25	1	14:00	15:00	1:00	25:00:00
16	29/06/2016	25	1	16:00	17:00	1:00	25:00:00
		25	1	8:00	10:00	2:00	50:00:00
		25	1	15:00	17:00	2:00	50:00:00
17	30/06/2016	25	1	7:00	8:30	1:30	37:30:00
		25	1	14:00	15:30	1:30	37:30:00
		25	1	16:00	17:30	1:30	37:30:00
18	01/07/2016	25	1	8:00	9:00	1:00	25:00:00
		25	1	11:00	13:00	2:00	50:00:00
		25	1	16:00	17:00	1:00	25:00:00
19	02/07/2016	25	1	7:00	9:00	2:00	50:00:00
		25	1	10:00	11:00	1:00	25:00:00
		25	1	17:00	17:30	0:30	12:30:00
20	03/07/2016	25	1	7:00	8:00	1:00	25:00:00
		25	1	10:00	11:00	1:00	25:00:00
		25	1	15:00	17:00	2:00	50:00:00
Total						160:30:00	4012:30:00
							4012.500



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AURANGABAD MUNICIPAL CORPORATION.

(From No.52)

Measurement Book

Name of work:- Development of Underground Sewerage Collection system for Zone I to VI and Zone Salim Ali, Constructing, Erecting, Testing and Commissioning of Sewage Treatment Plant based on modern technology at Nakshrawadi (Kanchanwadi), Banewadi, Siddharth Garden, Zalta, Padegaon, CIDCO (Airport), Construction, Erection, Testing and Commission of Sewage pumping stations at Banewadi, Siddharth Garden, Padegaon, Golwadi, Zalta, Ward No.98 and CIDCO (Airport). Providing, lowering, laying jointing and testing rising main GRP DI pipe line from Golwadi SPS to Nakshrawadi (Kanchanwadi) STP and Ward No.98 to STP for Aurangabad City.

Book No. :- **035**

Page No. :-

Name of Agency:- M/s Khilari Infrastructure Pvt.Ltd. & GECPL (Joint Venture)

Authority No. AMC/Ward B&C/UIDSSMT/2014/184 Date 01.07.2014

Sewer F MANHOLE

Page 1 of 2

11th RA BILL MEASUREMENTS

Sewer "F"

SR NO	MB no	Chainage	CHAMBER NUMBER	DETAILS			Rebate up to Depth of 5.0 mtr For per 50 cm	Total Rebate Qty for 50 cm	
				No	MTL	IL			DEPTH
A	Item No. : 23 Providing and constructing on sewer.BBM manhole 1.5 m dia at bottom and 0.5 m dia at top and up to a depth of 5.0 M etc., complete								
1		CH15.60	FSW 1	584.200	581.839	2.361	5.000	-2.64	-49.22
2		CH129.30	FSW 2	584.800	582.040	2.760	5.000	-2.24	
F-500mm Near Ropalekar Hospital									
3		CH3258.80	F56	586.280	581.080	5.200	5.000	0.20	
Branch from F-18 (Eknath nagar-400mm)									
4		CH20.00	F 18.1	561.910	559.810	2.100	5.000	-2.90	
5		CH41.20	F 18.2	561.930	559.885	2.045	5.000	-2.96	
6		CH77.40	F 18.3	562.300	560.000	2.300	5.000	-2.70	
7		CH113.60	F 18.4	562.420	560.362	2.058	5.000	-2.94	
8		CH139.80	F 18.5	562.723	560.442	2.281	5.000	-2.72	
9		CH188.50	F 18.6	563.165	560.965	2.200	5.000	-2.80	
10		CH209.70	F 18.7	563.500	561.415	2.085	5.000	-2.91	
TOTAL								-24.61	-49.22

Extra Item No. 1: Construction of RCC circular Manhole of 1.5m dia & 3.5m depth

Sr.No.	Reference (MB no. & Page no.)	Chainage	MH No	MTL	IL	Depth	Depth Difference than 3.5 m	Total Difference	Rebate/Add for Excess height (per 50 cm)		
600mm Dia											
1		1827.60	F 31	568.350	563.450	4.90	1.40	13.80	27.60		
2		2181.90	F 36	572.660	568.460	4.20	0.70				
3		2213.10	F 37	573.350	569.050	4.30	0.80				
4		2804.80	F 46	579.197	573.697	5.50	2.00				
5		2881.00	F 47	579.587	574.387	5.20	1.70				
6		2914.70	F 48	579.765	575.265	4.50	1.00				
500mm Dia											
7		3044.60	F 51	583.147	578.447	4.70	1.20				
8		3083.30	F 52	583.420	578.720	4.70	1.20				
9		3149.50	F 53	585.240	579.440	5.80	2.30				
10		3282.50	F 57	585.625	581.325	4.30	0.80				
11		3303.70	F 58	585.615	581.415	4.20	0.70				
TOTAL								13.80	27.60		



f



AURANGABAD MUNICIPAL CORPORATION.

(From No.52)

Measurement Book

Name of work:- Development of Underground Sewerage Collection system for Zone I to VI and Zone Salim Ali. Constructing, Erecting, Testing and Commissioning of Sewage Treatment Plant based on modern technology at Nakshtrawadi (Kanchanwadi), Banewadi, Siddharth Garden, Zalta, Padegaon, CIDCO (Airport), Construction, Erection, Testing and Commission of Sewage pumping stations at Banewadi, Siddharth Garden, Padegaon, Golwadi, Zalta, Ward No.98 and CIDCO (Airport), Providing, lowering, laying jointing and testing rising main GRP/DI pipe line from Golwadi SPS to Nakshtrawadi (Kanchanwadi) STP and Ward No. 08 to

Book No. :-

Page No. :- **037**

Sewer F MANHOLE

SR NO	MB No	Chainage	CHAMBER NUMBER	DETAILS			Rebate up to Depth of 2.0 mtr		Total Rebate Qty for 50 cm
				No			For per 50 cm		
				MTL	IL	DEPTH			
A	Item No. : 21 Providing and constructing on sewer.BBM manhole 1.2 m dia at bottom and 0.5 m dia at top and up to a depth of 2.0 M etc., complete								
Branch (Eknath nagar-400mm)									
1		CH192.50	EKN 18	565.630	563.940	1.690	2.000	-0.31	-1.34
2		CH201.00	EKN 19	566.030	564.140	1.890	2.000	-0.11	
3		CH0.00	MH 4	566.100	564.350	1.750	2.000	-0.25	
			TOTAL					-0.67	-1.34

SR NO	MB no	Chainage	CHAMBER NUMBER	DETAILS			Rebate up to Depth of 1.5 mtr		Total Rebate Qty for 30 cm
				No			For per 30 cm		
				MTL	IL	DEPTH			
A	Extra Item No. : 02 Providing and constructing on sewer.BBM manhole 0.9 m dia at bottom and 0.5 m dia at top and up to a depth of 1.5 M etc., complete								
Branch (Eknath nagar-400mm)									
1		CH0.00	MH 3	563.020	561.770	1.250	1.500	-0.25	-0.83
								-0.25	
			TOTAL					-0.83	-0.83

SR NO	MB no	Chainage	CHAMBER NUMBER	DETAILS			Rebate up to Depth of 1.5 mtr		Total Rebate Qty for 30 cm
				No			For per 30 cm		
				MTL	IL	DEPTH			
A	Extra Item No. : 03 Providing and constructing on sewer.BBM manhole 0.9 m x 06 m at bottom and top and up to a depth of 1.5 M etc., complete								
Branch (Eknath nagar-400mm)									
1		CH8.60	EKN 12.1	564.940	563.690	1.250	1.500	-0.25	-52.733
2		CH8.60	EKN 12.2	564.940	563.690	1.250	1.500	-0.25	
3		CH12.00	EKN 14	564.060	563.960	0.100	1.500	-1.40	
4		CH7.00	EKN 11	564.500	564.120	0.380	1.500	-1.12	
5		CH12.80	EKN 12	564.600	564.240	0.360	1.500	-1.14	
6		CH13.20	EKN 13	564.570	564.180	0.390	1.500	-1.11	
7		CH7.30	EKN 8	564.430	564.050	0.380	1.500	-1.12	
8		CH12.60	EKN 9	564.500	564.140	0.360	1.500	-1.14	
9		CH12.50	EKN 10	564.530	564.140	0.390	1.500	-1.11	
10		CH7.60	EKN 6	565.730	565.340	0.390	1.500	-1.11	
11		CH11.60	EKN 7	565.730	565.340	0.390	1.500	-1.11	
12		CH7.20	EKN 2	566.140	565.230	0.910	1.500	-0.59	
13		CH11.40	EKN 4	566.430	566.080	0.350	1.500	-1.15	
14		CH18.40	EKN 5	566.410	566.020	0.390	1.500	-1.11	
15		CH9.00	EKN 1	566.320	565.790	0.530	1.500	-0.97	
16		CH12.00	EKN 3	566.450	566.090	0.360	1.500	-1.14	
			TOTAL					-15.82	-52.733



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AURANGABAD MUNICIPAL CORPORATION.

(From No.52)

Measurement Book

Name of work:- Development of Underground Sewerage Collection system for Zone I to VI and Zone Salim Ali. Constructing, Erecting, Testing and Commissioning of Sewage Treatment Plant based on modern technology at Nakshtrawadi (Kanchanwadi), Banewadi, Siddharth Garden, Zalta, Padegaon, CIDCO (Airport), Construction, Erection, Testing and Commission of Sewage pumping stations at Banewadi, Siddharth Garden, Padegaon, Golwadi, Zalta, Ward No.98 and CIDCO (Airport). Providing, lowering, laying jointing and testing rising main GRP DI pipe line from Golwadi SPS to Nakshtrawadi (Kanchanwadi) STP and Ward No.98 to STP for Aurangabad City.

Book No. :-

033

Page No. :-

Name of Agency:- M/s Khilari Infrastructure Pvt.Ltd. & GECPL (Joint Venture)

Authority No. AMC/Ward B&C/UIDSSMT/2014/184 Date 01.07.2014

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Sewer F-Disposal

14th RA BILL MEASUREMENTS

F Sewer

Item No. 11

Disposal of excavated material including loading the excavated material in trucks / tractors and unloading the same at a distance of 10 KMS as directed by engineer-in-charge.

SR.NO.	Particulars of work	UNIT	DETAILS							Total Qty. Of Disposal
			Chainage		NO	L	B	D	QTY	
			From	To						
1	F-Sewer 900 mm Dia		560.00	895.40						
	Pipe volume	Cum			0.785	335.40	1.100	1.100	318.58	439.32
	Murrum bedding	Cum				335.40	1.800	0.20	120.74	
2	F-Sewer 800 mm Dia		895.40	1206.40						
	Pipe volume	Cum			0.785	311.00	0.990	0.990	239.28	343.77
	Murrum bedding	Cum				311.00	1.680	0.20	104.50	
3	F-Sewer 700 mm Dia		1850.70	1865.70						
	Pipe volume	Cum			0.785	15.00	0.870	0.870	8.91	13.53
	Murrum bedding	Cum				15.00	1.540	0.20	4.62	
Total										796.629



Agarwal
Self For



AURANGABAD MUNICIPAL CORPORATION.

(From No.52)

Measurement Book

Name of work:- Development of Underground Sewerage Collection system for Zone I to VI and Zone Salim Ali. Constructing, Erecting, Testing and Commissioning of Sewage Treatment Plant based on modern technology at Nakshtrawadi (Kanchanwadi), Banewadi, Siddharth Garden, Zalta, Padegaon, CIDCO (Airport). Construction, Erection, Testing and Commission of Sewage pumping stations at Banewadi, Siddharth Garden, Padegaon, Golwadi, Zalta, Ward No 98 and CIDCO (Airport). Providing, lowering, laying jointing and testing rising main GRP DI pipe line from Golwadi SPS to Nakshtrawadi (Kanchanwadi) STP and Ward No.98 to STP for Aurangabad City.

Book No. :- 040

Page No. :-

Name of Agency:- M/s Khilari Infrastructure Pvt.Ltd. & GECPL (Joint Vencture)

Authority No. AMC/Ward B&C/UIDSSMT/2014/184 Date 01.07.2014

SR NO	Description	MB/PG	ITEM 10	ITEM 11	ITEM 17					ITEM 21	ITEM 21.1	ITEM 23	ITEM 23.1	ITEM 28	ITEM 30	EIRL 1		EIRL 1.a	
					400mm	500mm	600mm	700mm	900mm							1000mm	upto 2 m		Rebate
1	For Pipe		4012.50	1506.89	182.50	270.00	385.00	32.50	127.50	32.50					5276.31				
2	For Manhole			230.31							3.00	10.00	-49.22	0.29	314.49	11.00		27.60	
	Total		4012.50	1737.20	182.50	270.00	385.00	32.50	127.50	32.50	3.00	10.00	-49.22	0.29	5590.80	11.00		27.60	



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Sewer F Quantity Node Abstract
2 of 3

Ward B & C BILL MEASUREMENTS
Main Sewer "F"



AURANGABAD MUNICIPAL CORPORATION

(From No.52)

Measurement Book

Name of work:- Development of Underground Sewerage Collection system for Zone I to VI and Zone Salim Ali. Constructing, Erecting, Testing and Commissioning of Sewage Treatment Plant based on modern technology at Nakshtrawadi (Kanchanwadi), Banewadi, Siddharth Garden, Zalta, Padegaon, CIDCO (Airport). Construction, Erection, Testing and Commission of Sewage pumping stations at Banewadi, Siddharth Garden, Padegaon, Golwadi, Zalta, Ward No.98 and CIDCO (Airport). Providing, lowering, laying jointing and testing rising main GRP/DI pipe line from Golwadi SPS to Nakshtrawadi (Kanchanwadi) STP and Ward No.98 to STP for Aurangabad City.

Book No. :-
Page No. :- **041**

Name of Agency:- M/s Khilari Infrastructure Pvt.Ltd. & GECPL (Joint Venture)

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SR NO		Description	MB/PG	Sewer F Quantity Node Abstract											
				17th R A BILL MEASUREMENTS											
Main Sewer "F"															
		EIRL 2		EIRL 3		EIRL 4		EIRL 5		EIRL 8		EIRL 9.1		EIRL 9.2	
		Full Rate	Rebate	Full Rate	Rebate	a	b	a	b	a	b	100mm	150mm	100mm	150mm
												SW Pipe			
										M10 Cement Concrete	Providing & Fixing Paver block				
1		1.00	-0.83	71.72	145.56	217.18	217.18	47.44	30.74	106.76	45.28	55.60		0.000	55.60
2		1.00	-0.83	71.72	145.56	217.18	217.18	47.44	30.74	106.76	45.28	55.60		0.000	55.60
Total															

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AURANGABAD MUNICIPAL CORPORATION.

(From No.52)

Measurement Book

Name of work:- Development of Underground Sewerage Collection system for Zone I to VI and Zone Salim Ali, Constructing, Erecting, Testing and Commissioning of Sewage Treatment Plant based on modern technology at Nakshtrawadi (Kanchanwadi), Banewadi, Siddharth Garden, Zalta, Padegaon, CIDCO (Airport), Construction, Erection, Testing and Commission of Sewage pumping stations at Banewadi, Siddharth Garden, Padegaon, Golwadi, Zalta, Ward No.98 and CIDCO (Airport), Providing, lowering, laying jointing and testing rising main GRP DI pipe line from Golwadi SPS to Nakshtrawadi (Kanchanwadi) STP and Ward No.98 to

Book No. :- **042**
Page No. :-

1 of 4

Jyoti Nagar 400mm

11th RA BILL MEASUREMENTS

Branch Sewer at Jyoti Nagar

Date	Particulars of work	DETAILS					Content of area	Last measurement		TOTAL TO DATE	
		No			L	B		D	Page		Quantity
		GL	IL	EX.L							
	400mm Dia Branch at Jyoti Nagar										
	Width of Trench - For Bottom Lift 0.00-1.50m- 0.4+0.15+0.15+0.5=1.2m										
	From Bottom Lift 1.50m-3.00m- 0.4+0.15+0.15+0.5+0.4=1.6m										
	From Bottom Lift 3.00m-4.50m- 0.4+0.15+0.15+0.5+0.4+0.4=2.0m										
		Recorded from CH148.40 up to MH JN06									
19/04/2016	CH148.40	571.314	568.614	568.414			2.900	2.835			
	CH191.55	571.320	568.750	568.550			2.770				
	Item No. 1 :- Excavation for foundation/pipe trenches in all types of soil & soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			41.550	1.600	1.500	99.720	0.000	99.720	
	(b) For Lift 1.5m to 3.0m	1			41.550	1.200	0.300	14.958	0.000	14.958	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(b) For Lift 1.5m to 3.0m	1			41.550	1.200	1.035	51.605	0.000	51.605	
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			41.550	1.200	0.200	9.972	0.000	9.972	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							19.839	0.000	19.839	
	Item No.17 (a) :- Lowering & Laying RCC NP3 class pipe of 400mm Dia	1			42.500			42.500	0.000	42.500	
	Item No 30 :- Refilling the excavated trenches ...										
	Total Excavation = A							166.283			
	Deduction										
	pipe area	1		0.785	41.550	0.550	0.550	9.87			
	Murrum bedding							9.97			
	Total = B							19.84			
		Net Qty = A - B							146.44	0.000	146.445
	JN06 to JN09										
25/04/2016	CH191.55	571.320	569.050	568.850			2.470	2.598			
	CH215.35	571.676	569.150	568.950			2.726				
	Item No. 1 :- Excavation for foundation/pipe trenches in all types of soil & soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			20.600	1.600	1.500	49.440	99.720	149.160	
	(b) For Lift 1.5m to 3.0m	1			20.600	1.200	0.200	4.944	14.958	19.902	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(b) For Lift 1.5m to 3.0m	1			20.600	1.200	0.898	22.199	51.605	73.804	
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			20.600	1.200	0.200	4.944	9.972	14.916	
	Item No. : 11 Transportation of earth Transportation charges							9.836	19.839	29.674	



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AURANGABAD MUNICIPAL CORPORATION.

(From No.52)

Measurement Book

Book No. :- **044**

Page No. :-

Name of work:- Development of Underground Sewerage Collection system for Zone I to VI and Zone Salim Ali. Constructing, Erecting, Testing and Commissioning of Sewage Treatment Plant based on modern technology at Nakshtrawadi (Kanchanwadi), Banewadi, Siddharth Garden, Zalta, Padegaon, CIDCO (Airport). Construction, Erection, Testing and Commission of Sewage pumping stations at Banewadi, Siddharth Garden, Padegaon, Golwadi, Zalta, Ward No.98 and CIDCO (Airport). Providing, lowering, laying jointing and testing rising main GRP DI pipe line from Golwadi SPS to Nakshtrawadi (Kanchanwadi) STP and Ward No.98 to

3 of 4

Jyoti Nagar 400mm

Date	Particulars of work	DETAILS						Content of area	Last measurement		TOTAL TO DATE
		No			L	B	D		Page	Quantity	
		GL	IL	EX.L							
	Item No. 1 :- Excavation for foundation/pipe trenches in all types of soil & soft murum etc complete.										
	(a) For Lift 0 to 1.5m	1			23.100	1.600	1.400	51.744		175.032	226.776
	(b) For Lift 1.5m to 3.0m	1			23.100	1.200	0.600	16.632		30.990	47.622
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murum etc complete.										
	(b) For Lift 1.5m to 3.0m	1			23.100	1.200	0.510	14.137		76.548	90.685
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			23.100	1.200	0.200	5.544		17.688	23.232
	Item No. : 11 Transportation of earth Transportation charges							11.029		35.189	46.218
	Item No.17 (a) :- Lowering & Laying RCC NP3 class pipe of 400mm Dia	1			25.000			25.000		77.500	102.500
	Item No 30 :- Refilling the excavated trenches ...										
	Total Excavation= A							86.209			
	Deduction										
	pipe area	1		0.785	23.100	0.550	0.550	5.49			
	Murum bedding							5.54			
	Total = B							11.03			
								Net Qty = A - B		75.18	249.229
	JN11 to JN12										
13/05/2016	CH279.15	572.250	570.275	570.075			2.175	2.173			
	CH320.45	572.400	570.430	570.230			2.170				
	Item No. 3 :- Excavation for foundation/pipe trenches in slush etc complete.										
	(a) For Lift 0 to 1.5m	1			38.100	1.600	0.100	6.096		5.544	11.640
	Item No. 1 :- Excavation for foundation/pipe trenches in all types of soil & soft murum etc complete.										
	(a) For Lift 0 to 1.5m	1			38.100	1.600	1.400	85.344		226.776	312.120
	(b) For Lift 1.5m to 3.0m	1			38.100	1.200	0.100	4.572		47.622	52.194
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murum etc complete.										
	(b) For Lift 1.5m to 3.0m	1			38.100	1.200	0.573	26.198		90.685	116.883
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			38.100	1.200	0.200	9.144		23.232	32.376
	Item No. : 11 Transportation of earth Transportation charges							18.191		46.218	64.410
	Item No.17 (a) :- Lowering & Laying RCC NP3 class pipe of 400mm Dia	1			40.000			40.000		102.500	142.500
	Item No 30 :- Refilling the excavated trenches ...										
	Total Excavation= A							122.210			
	Deduction										
	pipe area	1		0.785	38.100	0.550	0.550	9.05			
	Murum bedding							9.14			
	Total = B							18.19			
								Net Qty = A - B		104.02	324.409
											428.427



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AURANGABAD MUNICIPAL CORPORATION.

(From No.52)

Measurement Book

Name of work:- Development of Underground Sewerage Collection system for Zone I to VI and Zone Salim Ali, Constructing, Erecting, Testing and Commissioning of Sewage Treatment Plant based on modern technology at Nakshtrawadi (Kanchanwadi), Banewadi, Siddharth Garden, Zalta, Padegaon, CIDCO (Airport), Construction, Erection, Testing and Commission of Sewage pumping stations at Banewadi, Siddharth Garden, Padegaon, Golwadi, Zalta, Ward No.98 and CIDCO (Airport), Providing, lowering, laying jointing and testing rising main GRP/DI pipe line from Golwadi SPS to Nakshtrawadi (Kanchanwadi) STP and Ward No.98 to STP for Aurangabad City.

Book No. :-

Page No. :- **045**

Name of Agency:- M/s Khilari Infrastructure Pvt.Ltd. & GECPL (Joint Venture)

Authority No. AMC/Ward B&C/UIDSSMT/2014/184 **Date** 01.07.2014

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Jyoti Nagar 400mm

Date	Particulars of work	DETAILS						Content of area	Last measurement		TOTAL TO DATE
		No			L	B	D		Page	Quantity	
		GL	IL	EX.L							
	JN12 to JN13										
18/05/2016	CH320.45	572.400	570.830	570.630			1.770	1.795			
	CH368.60	572.620	571.000	570.800			1.820				
	Item No. 3 :- Excavation for foundation/pipe trenches in slush etc complete.										
	(a) For Lift 0 to 1.5m	1			46.550	1.600	0.100	7.448		11.640	19.088
	Item No. 1 :- Excavation for foundation/pipe trenches in all types of soil & soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			46.550	1.600	1.200	89.376		312.120	401.496
	(b) For Lift 1.5m to 3.0m	1			46.550	1.200	0.000	0.000		52.194	52.194
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			46.550	1.600	0.200	14.896		0.000	14.896
	(b) For Lift 1.5m to 3.0m	1			46.550	1.200	0.295	16.479		116.883	133.361
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			46.550	1.200	0.200	11.172		32.376	43.548
	Item No. : 11 Transportation of earth Transportation charges							22.226		64.410	86.636
	Item No.17 (a) :- Lowering & Laying RCC NP3 class pipe of 400mm Dia	1			47.500			47.500		142.500	190.000
	Item No 30 :- Refilling the excavated trenches ...										
	Total Excavation = A							128.199			
	Deduction										
	pipe area	1		0.785	46.550	0.550	0.550	11.05			
	Murrum bedding							11.17			
	Total = B							22.23			
	Net Qty = A - B							105.97		428.427	534.400



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AURANGABAD MUNICIPAL CORPORATION.

(From No.52)

Measurement Book

Name of work:- Development of Underground Sewerage Collection system for Zone I to VI and Zone Salim Ali. Constructing, Erecting, Testing and Commissioning of Sewage Treatment Plant based on modern technology at Nakshtrawadi (Kanchanwadi), Banewadi, Siddharth Garden, Zalta, Padegaon, CIDCO (Airport), Construction, Erection, Testing and Commission of Sewage pumping stations at Banewadi, Siddharth Garden, Padegaon, Golwadi, Zalta, Ward No.98 and CIDCO (Airport). Providing, lowering, laying jointing and testing rising main

Book No. :- **046**

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Jyoti Nagar BBM 1.5m MH

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11th RA BILL MEASUREMENTS

BRANCH SEWER AT JOYTI NAGAR

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		GL	No		L	B	D		Page	Quantity	
			IL	EX.L							
	Excavation of Chamber - For 1.50m dia Manhole (upto a depth of 2.0m to 5.0m)- 1.50+0.35+0.35+0.5+0.5=3.20m										
	Breadth for Manhole=3.2*3.2=10.24m										
	JN 05										
	CH119.60	571.204	568.554	568.304			2.900				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	10.240	1.500	12.058	0.000	12.058	
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	1.300	10.450	0.000	10.450	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.100	0.804	0.000	0.804	
	Item No. : 11 Transportation of earth Transportation charges							7.682	0.000	7.682	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							23.311			
	Deduction										
	Brick work	1			0.785	2.280	2.280	0.650	2.652		
		1			0.785	1.540	1.540	2.000	3.723		
	PCC	1			0.785	2.580	2.580	0.250	1.306		
	Soling	1			0.785	2.580	2.580	0.000	0.000		
								7.682			
	Net Qty = A - B							15.629	0.000	15.629	
	JN 06										
	CH191.55	571.320	568.750	568.500			2.820				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	10.240	1.500	12.058	12.058	24.115	
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	1.300	10.450	10.450	20.900	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.020	0.161	0.804	0.965	
	Item No. : 11 Transportation of earth Transportation charges							7.356	7.682	15.038	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							22.668			
	Deduction										
	Brick work	1			0.785	2.280	2.280	0.570	2.326		
		1			0.785	1.540	1.540	2.000	3.723		
	PCC	1			0.785	2.580	2.580	0.250	1.306		
	Soling	1			0.785	2.580	2.580	0.000	0.000		
								7.356			
	Net Qty = A - B							15.313	15.629	30.942	



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AURANGABAD MUNICIPAL CORPORATION.

(From No.52)

Measurement Book

Name of work:- Development of Underground Sewerage Collection system for Zone I to VI and Zone Salim Ali. Constructing, Erecting, Testing and Commissioning of Sewage Treatment Plant based on modern technology at Nakhtrawadi (Kanchanwadi), Banewadi, Siddharth Garden, Zalta, Padegaon, CIDCO (Airport), Construction, Erection, Testing and Commission of Sewage pumping stations at Banewadi, Siddharth Garden, Padegaon, Golwadi, Zalta, Ward No.98 and CIDCO (Airport), Providing, lowering, laying jointing and testing rising main from Banewadi SPS to Nakhtrawadi (Kanchanwadi) STP and Ward No.98 to

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Date	Particulars of work	DETAILS						Content of arrear	Last measurement		Total Up to Date Quantity
		No			L	B	D		Page	Quantity	
		GL	IL	EX.L							
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	10.240	1.400	11.254			
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.600	4.823	46.623	57.876	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.								27.974	32.797	
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.625	5.024			
	Item No. : 11 Transportation of earth Transportation charges							6.968	12.950	17.974	
	Item No. 30 :- Refilling the excavated trenches ...								28.652	35.620	
	Total Excavation=							21.905			
	Deduction										
	Brick work	1		0.785	2.280	2.280	0.475	1.938			
	PCC	1		0.785	1.540	1.540	2.000	3.723			
	Soling	1		0.785	2.580	2.580	0.250	1.306			
				0.785	2.580	2.580	0.000	0.000			
	Net Qty = A - B							6.968			
	JN 12							14.937	60.502	75.439	
	CH320.45	572.400	570.430	570.180			2.220				
	Item No. 3 :- Excavation for foundation/pipe trenches in slush etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	10.240	0.100	0.804	2.412	3.215	
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	10.240	1.400	11.254	57.876	69.130	
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.100	0.804	32.797	33.601	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.620	4.984	17.774	22.958	
	Item No. : 11 Transportation of earth Transportation charges							4.974	35.20	40.594	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							17.845			
	Deduction										
	Brick work	1		0.785	2.280	2.280	0.000	0.000			
	PCC	1		0.785	1.540	1.540	1.970	3.668			
	Soling	1		0.785	2.580	2.580	0.250	1.306			
				0.785	2.580	2.580	0.000	0.000			
	Net Qty = A - B							4.974			
	JN 14							12.871	75.439	88.310	
	CH384.70	573.516	571.776	571.526			1.990				
	Item No. 3 :- Excavation for foundation/pipe trenches in slush etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	10.240	0.200	1.608	3.215	4.823	



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