

Continued from MB 4548/199



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. :- **001**
Page No. :-

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

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Sewer F-Eknath Nagar- 400mm-MB

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.17 (a) :- Lowering & Laying RCC NP3 class pipe of 400mm Dia	1			22.50		22.500		140.000	162.500	
	Item No 30 :- Refilling the excavated trenches ...										
	Total Excavation = A						72.885				
	Deduction										
	pipe area	1		0.785	21.50	0.550	5.11				
	Murrum bedding						5.16				
	Total = B						10.27				
							62.62		5147.121	5209.740	
	Net Qty = A - B										
	F 18.6										
	CH188.50	563.165	561.350	561.150		2.01	2.150				
	CH209.70	563.500	561.415	561.215		2.29					
	Item No. 3 :- Excavation for foundation/pipe trenches in slush etc complete.										
	(a) For Lift 0 to 1.5m	1			18.00	1.600	0.000	0.000	60.995	60.995	
	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			18.00	1.600	1.350	38.880	2799.299	2838.179	
	(b) For Lift 1.5m to 3.0m	1			18.00	1.200	0.650	14.040	1724.552	1738.592	
	(c) For Lift 3.0m to 4.5m	1			18.00	1.200	0.000	0.000	184.150	184.150	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			18.00	1.600	0.150	4.320	44.337	48.657	
	(b) For Lift 1.5m to 3.0m	1			18.00	1.200	0.000	0.000	430.690	430.690	
	(c) For Lift 3.0m to 4.5m	1			18.00	1.200	0.000	0.000	485.115	485.115	
	(d) For Lift 4.5m to 6.0m	1			18.00	1.200	0.000	0.000	49.816	49.816	
	Item No. 4:- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			18.00	1.600	0.000	0.000	19.173	19.173	
	(c) For Lift 3.0m to 4.5m	1			18.00	1.200	0.000	0.000	61.720	61.720	
	(d) For Lift 4.5m to 6.0m	1			18.00	1.200	0.000	0.000	33.680	33.680	
	Item No. 5 :- Excavation for foundation/pipe trenches in Hard rock etc complete.										
	(c) For Lift 3.0m to 4.5m	1			18.00	1.200	0.000	0.000	3.395	3.395	
	(d) For Lift 4.5m to 6.0m	1			18.00	1.200	0.000	0.000	9.387	9.387	
	Item No. 7 :- Filling in plinth and floors/ trenches etc	1			18.00	1.200	0.200	4.320	265.097	269.417	
	Item No. : 11 Transportation of earth Transportation charges including							8.594	696.570	705.164	
	Item No.17 (a) :- Lowering & Laying RCC NP3 class pipe of 400mm Dia	1			20.00			20.000	162.500	182.500	
	Item No 30 :- Refilling the excavated trenches ...										
	Total Excavation = A						57.240				
	Deduction										
	pipe area	1		0.785	18.00	0.550	4.27				
	Murrum bedding						4.32				
	Total = B						8.59				
							48.65		5209.740	5258.386	



Ajay Sarda



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. :- 002
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 - Cross Connections F-900..

17th RA BILL MEASUREMENTS

E-sewer

SW PIPE Connections :-Cross Connections of 150mm Dia SW Pipes made at the time of laying of Storm Water Line -900mm Dia of Pipe.

Sr. No	Manhole No.	No. of Connectio	Dia of Pipe	Depth	Length in Mtr	Page	Quantity	Total Upto Date
1	MH No.2	1	150mm	0.600	3.500		0.000	3.500
		1	150mm	0.600	4.000		0.000	4.000
2	MH No.3	1	150mm	0.600	3.000		0.000	3.000
		1	150mm	0.600	3.600		0.000	3.600
3	MH No.5	1	150mm	0.600	3.600		0.000	3.600
		1	150mm	0.600	2.400		0.000	2.400
		1	150mm	0.600	3.000		0.000	3.000
4	MH No.6	1	150mm	0.600	4.200		0.000	4.200
		1	150mm	0.600	2.400		0.000	2.400
		1	150mm	0.600	4.200		0.000	4.200
5	MH No.8	1	150mm	0.600	3.600		0.000	3.600
		1	150mm	0.600	3.000		0.000	3.000
		1	150mm	0.600	2.600		0.000	2.600
		1	150mm	0.600	5.000		0.000	5.000
		1	150mm	0.600	4.000		0.000	4.000
		1	150mm	0.600	3.500		0.000	3.500
Total Length								55.600

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Quantity	
		GL	IL	EX.L							
	MH No.1 to MH No.8										
	Average Depth of Excavation						0.600				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			55.600	0.690	0.600	23.018	0.000	23.018	
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			55.600	0.690	0.100	3.836	0.000	3.836	
	Item No. : 11 Transportation of earth Transportation charges including							5.098	0.000	5.098	
	Extra Item No. 9.2(b) :-Lowering laying and jointing SW pipes in	1			55.600			55.600	0.000	55.600	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							23.018			
	Deduction										
	pipe area	1		0.785	55.600	0.170	0.170	1.261			
	soling							0.000			
	PCC							0.000			
	Murrum bedding							3.836			
								5.098			
	Net Qty = A - B							17.921	0.000	17.921	



Signature
Sacr Eng



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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 BBS For Concrete work

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17th R A BILL MEASUREMENTS

CONCRETE WORK At BALAJI NAGAR(F-LINE-600mm Dia)

Sr. No.	Description	Dia of Bar	Spacings	Nos	No of members	Total Nos	cut length	Lap length	overall cutting length	8mm(MT)	10mm(MT)
At BALAJI NAGAR(F-LINE-600mm Dia)											
A	Nalla Slab (4.60m x 1.30m x 0.15m)										
1	Main Bars # 10@150mm c/c	10.00	0.15	32.00	1.00	32.00	1.48	0.00	47.36	0.000	0.029
2	Distribution Bars # 8 @ 150mm c/c	8.00	0.15	10.00	1.00	10.00	4.78	0.00	47.80	0.019	0.000
B	A-Slab (3.53m x 2.12m x 0.20m)										
1	Main Bars # 10 @ 150mm c/c	10.00	0.15	25.00	1.00	25.00	2.40	0.00	60.00	0.000	0.037
2	Distribution Bars # 10 @ 150mm c/c	10.00	0.15	16.00	1.00	16.00	3.81	0.00	60.96	0.000	0.038
C	B-Slab (1.97 m x Avg 0.77mx0.20m)										
1	Main Bars # 10 @ 150mm c/c	10.00	0.15	15.00	1.00	15.00	0.73	0.00	10.95	0.000	0.007
2	Distribution Bars # 10 @ 150mm c/c	10.00	0.15	12.00	1.00	12.00	0.94	0.00	11.28	0.000	0.007
D	Vertical Wall -(5.90 m x 0.92 m)										
1	Vertical Bars # 10 @ 150mm c/c	10.00	0.15	41.00	1.00	41.00	1.00	0.00	41.00	0.000	0.025
2	Horizontal Bars # 8 @ 150mm c/c	8.00	0.15	8.00	1.00	8.00	5.98	0.00	47.84	0.019	0.000
										0.038	0.144
										0.181	
Work at F-Branch -400mm EKNATH NAGAR.											
A	For RCC Slab										
1	# 10 @ 150 C/C at Bottom Along Length	10.00	0.15	11.00	1.00	11.00	7.68	0.00	84.48	0.000	0.052
2	# 10 @ 150 C/C at Bottom Along Width	10.00	0.15	51.00	1.00	51.00	1.68	0.00	85.68	0.000	0.053
										0.000	0.105
										0.105	



Ayan Singh



AURANGABAD MUNICIPAL CORPORATION.

(From No.52)

Measurement Book

Book No. :- 004
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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.

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 BBM Work

11th RA BILL MEASURMENTS									
SEWER "F"									
Date	Particulars of work	DETAILS				Content of arrears	Last measurement		Total Upto Date Quantity
		No	L	B	D		Page	Quantity	
A (work In between MH No. F47 to F48)									
	Extra Item :4(a) - Construction of Brick work of 230mm thk. for manhole etc complete.								
	(a) Wall	1	6.000	0.230	2.500	3.450		0.000	3.450
	Extra Item :4(b) - 12mm thk. Internal Plaster for manhole etc complete.								
	(a) Wall	1	6.000		2.500	15.000		0.000	15.000
	Extra Item :4(c) - 20mm thk. External Plaster for manhole etc complete.								
	(a) Wall	1	6.000		2.500	15.000		0.000	15.000
	Extra Item :5(a) - Providing Rubble Soling in 15 to 20cm thick layer.								
		1	6.000	0.700	0.200	0.840		0.000	0.840
	Extra Item :5(b) - Providing & Casting M15 Grade PCC for manhole etc complete.								
	PCC	2	6.000	0.700	0.100	0.840		0.000	0.840
	Extra Item :5(c):- Construction of UCR Masonary Work in 1:6								
		1	6.000	0.600	2.500	9.000		0.000	9.000
B (work In between MH No. F47 to F48)									
	Extra Item :5(a) - Providing Rubble Soling in 15 to 20cm thick layer.								
		1	13.400	0.700	0.150	1.407		0.840	2.247
	Extra Item :5(b) - Providing & Casting M15 Grade PCC for manhole etc complete.								
	PCC	2	13.400	0.700	0.100	1.876		0.840	2.716



J



AURANGABAD MUNICIPAL CORPORATION.

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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

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Sewer F BBM Work

Extra Item :5 (c):- Construction of UCR Masonary Work in 1:6								
	1	13.400	0.600	2.500	20.100		9.000	29.100
c F-800mm (for Durga Road to usmanpura Road Crossing between Manhole F 22 to F 23)								
Extra Item :5(a) - Providing Rubble Soling in 15 to 20cm thick layer.								
	1	8.000	3.000	0.300	7.200		0.000	7.200
	1	8.500	2.500	0.300	6.375		2.247	8.622
								15.822
Extra Item :5(b) - Providing & Casting M15 Grade PCC for manhole etc complete.								
	PCC	1	8.000	3.000	0.075	1.800	0.000	1.800
	PCC	1	8.500	2.500	0.050	1.063	2.716	3.779
								5.579
Extra item no.:-8 (b) Providing and fixing of paver blocks.								
	1	8.000	3.000		24.000		0.000	24.000
	1	8.500	2.500		21.250		0.000	21.250
	1	0.250	0.125		0.031		0.000	0.031
								45.281
D F-600mm Near Shalaka Apartment(Sahakar Nagar)								
Extra Item :4(a) - Construction of Brick work of 230mm thk. for manhole etc complete.								
	(a) Long Wall	1	9.000	0.300	1.100	2.970	3.450	6.420
	(b) Long Wall	1	5.000	0.300	1.400	2.100	0.000	2.100
	Deduction	4	0.500	0.300	0.400	0.240	0.000	-0.240
	Deduction	3	1.000	0.300	0.300	0.270	0.000	-0.270
								8.010
Extra Item :4(b) - 12mm thk. Internal Plaster for manhole etc complete.								
	(a) Long Wall	1	9.000		1.100	9.900	15.000	24.900
	(b) Long Wall	1	5.000		1.400	7.000	0.000	7.000
	Deduction	4	0.500		0.400	0.800	0.000	-0.800
	Deduction	3	1.000		0.300	0.900	0.000	-0.900
								30.200



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AURANGABAD MUNICIPAL CORPORATION.

(From No.52)

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Book No. :- 006

Page No. :-

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

Authority No. AMC/Ward B&C/UIDSSM1/2014/184 Date 01.07.2014

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Sewer FBBM Work

Extra Item :4(c) - 20mm thk. External Plaster for manhole etc complete.								
(a) Long Wall	1	9.000		1.100	9.900		15.000	24.900
(b) Long Wall	1	5.000		1.400	7.000		0.000	7.000
Deduction	4	0.500		0.400	0.800		0.000	-0.800
Deduction	3	1.000		0.300	0.900		0.000	-0.900
								30.200
Extra Item :5(a) - Providing Rubble Soling in 15 to 20cm thick layer.								
	1	7.500	6.200	0.300	13.950		15.822	29.772
								29.772
Extra Item :5(b) - Providing & Casting M15 Grade PCC for manhole etc complete.								
PCC	1	7.800	6.200	0.100	4.836		5.579	10.415
								10.415
Extra Item :5(c):- Construction of UCR Masonry Work in 1:6								
	2	9.000	0.500	1.500	13.500		29.100	42.600
Deduction	8	0.785	1.243	0.500	3.904		0.000	-3.904
								38.696
ITEM NO. 17 :-Lowering, laying and jointing in proper grade and alignment R.C.C. pipes with collar joints in C.M. 1:1								
h)1000mm	2	7.500			15.000		0.000	15.000
E F-Sewer (UCR work for Retaining Wall of culvert Near MSCB office)								
Extra Item :5(c):- Construction of UCR Masonry Work in 1:6								
1)	1	6.000	2.000	0.500	6.000		38.696	44.696
2)	1	3.800	1.900	0.400	2.888		0.000	2.888
								47.584
Extra Item :5(b) - Providing & Casting M15 Grade PCC for manhole etc complete.								
Coping	1	6.000	2.000	0.100	1.200		10.415	11.615
								11.615



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Book No. :- 007

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 BBM Work

F F-Sewer (work for Nalla Retaining Wall Near Rathi Tower)									
Extra Item :4(a) - Construction of Brick work of 230mm thk. for manhole etc complete.									
(a)Wall	1	6.700	0.150	1.400	1.407			8.010	9.417
(b)Wall	1	9.500	0.230	2.000	4.370			0.000	4.370
(c)Wall	1	0.450	0.230	1.750	0.181			0.000	0.181
(d)Wall	1	12.100	0.230	2.700	7.514			0.000	7.514
(e)Wall	1	2.700	0.230	0.800	0.497			0.000	0.497
									21.979
Extra Item :4(b) - 12mm thk. Internal Plaster									
(a)Wall	1	6.700		1.400	9.380			30.200	39.580
(b)Wall	1	9.500		2.000	19.000			0.000	19.000
(c)Wall	1	0.450		1.750	0.788			0.000	0.788
(d)Wall	1	12.100		2.700	32.670			0.000	32.670
(e)Wall	1	2.700		0.800	2.160			0.000	2.160
									94.198
Extra Item :4(c) - 20mm thk. External Plaster									
(a) Wall	1	6.700		1.400	9.380			30.200	39.580
(b) Wall	1	0.000		0.000	0.000			0.000	0.000
(c)Wall	1	0.450		1.750	0.788			0.000	0.788
(d)Wall	1	12.100		2.700	32.670			0.000	32.670
(e)Wall	1	2.700		0.800	2.160			0.000	2.160
									75.198
Extra Item :5(b) - Providing & Casting M15 Grade PCC for manhole etc complete.									
PCC	1	4.100	1.550	0.100	0.636			11.615	12.250
									12.250
Extra Item :5(c):- Construction of UCR Masonary Work in 1:6									
1)	1	3.000	1.700	0.600	3.060			47.584	50.644
2)	1	9.500	0.500	0.500	2.375			0.000	2.375
3)	1	1.000	0.450	0.500	0.225			0.000	0.225
4)	1	12.100	0.500	0.500	3.025			0.000	3.025
									56.269



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Book No. :- 008

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

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Sewer F BBM Work

G	F-Sewer (Work at Ranganath Abhyasika)							
	Extra Item :4(a) - Construction of Brick work of 230mm thk. etc complete.							
	(a)Wall	1	4.250	0.150	0.750	0.478	21.979	22.457
	(b)Wall	1	4.250	0.230	0.700	0.684	0.000	0.684
	(c)Wall	1	4.000	0.150	1.700	1.020	0.000	1.020
	(d)Wall	1	4.000	0.230	0.450	0.414	0.000	0.414
	(e)Wall	1	3.930	0.230	2.950	2.667	0.000	2.667
	(f)Wall	1	2.520	0.230	1.700	0.985	0.000	0.985
	(g)Wall	1	1.450	0.230	2.550	0.850	0.000	0.850
	(h)Wall	1	0.700	0.150	1.000	0.105	0.000	0.105
	(i)Wall	1	5.500	0.150	0.400	0.330	0.000	0.330
	(j)Wall	1	1.600	0.150	0.500	0.120	0.000	0.120
								29.633
	Extra Item :4(b) - 12mm thk. Internal Plaster etc complete.							
	(a) Wall	1	4.250		0.750	3.188	94.198	97.385
	(b) Wall	1	4.250		0.700	2.975	0.000	2.975
	(c)Wall	1	4.000		1.700	6.800	0.000	6.800
	(d)Wall	1	4.000		0.450	1.800	0.000	1.800
	(e)Wall	1	3.930		2.950	11.594	0.000	11.594
	(f)Wall	1	2.520		1.700	4.284	0.000	4.284
	(g)Wall	1	1.450		2.550	3.698	0.000	3.698
	(h)Wall	1	0.700		1.000	0.700	0.000	0.700
	(i)Wall	1	5.500		0.400	2.200	0.000	2.200
	(j)Wall	1	1.600		0.500	0.800	0.000	0.800
								132.235
	Extra Item :4(c) - 20mm thk. External Plaster etc complete.							
	(f)Wall	1	2.520		1.700	4.284	0.000	4.284
	(g)Wall	1	1.450		2.550	3.698	0.000	3.698
	(h)Wall	1	0.700		1.000	0.700	0.000	0.700
	(i)Wall	1	5.500		0.400	2.200	0.000	2.200
	(j)Wall	1	1.600		0.500	0.800	0.000	0.800
								86.879
	Extra Item :5(a) - Providing Rubble Soling in 15 to 20cm thick layer.							
		1	3.400	1.700	0.075	0.434	29.772	30.206
								30.206
	Extra Item :5(b) - Providing & Casting M15 Grade PCC for manhole etc complete.							
	PCC	1	3.400	1.700	0.100	0.578	12.250	12.828
								12.828





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. :- **009**

Page No. :-

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

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Sewer F BBM Work

H F-Sewer 400mm --Work at Shreya nagar (Rangnath Abhyasika)(between JN06 to JN09)								
ITEM NO. 17 :-Lowering, laying and jointing in proper grade and alignment R.C.C. pipes with collar joints in C.M. 1:1								
h)1000mm	5	2.500				12.500	15.000	27.500
Extra Item :5(a) - Providing Rubble Soling in 15 to 20cm thick layer.								
	1	10.400	3.500	0.300	10.920		30.206	41.126
Extra Item :5(b) - Providing & Casting M15 Grade PCC for manhole etc complete.								
PCC	1	10.400	3.500	0.100	3.640		12.828	16.468
								16.468
Extra Item :5(c):- Construction of UCR Masonary Work in 1:6								
1)	1	3.200	0.550	1.800	3.168		56.269	59.437
2)	1	3.000	0.500	2.000	3.000		0.000	3.000
Deduction	1	0.785	1.690	0.550	0.730		0.000	-0.730
								61.708
I F-Sewer --Work Near Rose Garden Apartment.								
Extra Item :4(a) - Construction of Brick work of 230mm thk. for manhole etc complete.								
(a)Wall	1	2.000	0.300	1.000	0.600		29.633	30.233
(b)Wall	1	37.000	0.300	1.850	20.535		0.000	20.535
								50.768
Extra Item :4(c) - 20mm thk. External Plaster for manhole etc complete.								
(a) Wall	1	2.000		1.000	2.000		86.879	88.879
(b) Wall	1	37.000		1.850	68.450		0.000	68.450
								157.329
Extra Item :5(b) - Providing & Casting M15 Grade PCC for manhole etc complete.								
PCC	1	30.000	2.200	0.100	6.600		16.468	23.068
								23.068
Extra Item :5(c):- Construction of UCR Masonary Work in 1:6								
	1	37.000	0.500	1.500	27.750		61.708	89.458
								89.458



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AURANGABAD MUNICIPAL CORPORATION.

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Measurement Book

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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

Sewer F BBM Work

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At BALAJI NAGAR(F-LINE- 600mm Dia)								
Item No: 27								
Providing and laying in situ Cement Concrete of trap/granite /quartzite/gneiss								
1	Nalla Slab	1	4.600	1.300	0.150	0.897	0.000	0.897
	A-Slab	1	3.530	2.120	0.200	1.497	0.000	1.497
2	B-Slab(1/2 X B X H)	0.5	1.540	1.970	0.200	0.303	0.000	0.303
3	Vertical Wall	1	5.900	0.920	0.100	0.543	0.000	0.543
Item No. 28 STEEL REINFORCEMENT								
Providing and fixing in position steel bar reinforcement of various								
1	Slab (size 10.60mx1.37m)					0.181	MT	0.000
								0.181
K F-Sewer -- Culvert and compound wall construction Near Rose Garden,								
ITEM NO. 17 :-Lowering, laying and jointing in proper grade and alignment R.C.C. pipes with collar joints in C.M. 1:1								
	h)1000mm	2	2.500			5.000		27.500
Extra Item :4(a) - Construction of Brick work of 230mm thk. for manhole etc complete.								
	(a)Wall	1	31.500	0.300	1.900	17.955		50.768
Extra Item :4(c) - 20mm thk. External Plaster for manhole etc complete.								
	(a) Wall	1	31.500		1.900	59.850		157.329
Extra Item :5(a) - Providing Rubble Soling in 15 to 20cm thick layer.								
		1	5.400	3.900	0.300	6.318		41.126
Extra Item :5(b) - Providing & Casting M15 Grade PCC for manhole etc complete.								
	PCC	1	5.400	3.900	0.100	2.106		0.000
	PCC	1	25.000	1.480	0.100	3.700		0.000
	PCC	1	20.000	0.800	0.100	1.600		0.000
	Coping	2	5.300	0.500	0.050	0.265		23.068
								30.739



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AURANGABAD MUNICIPAL CORPORATION.

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Page No. :-

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

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Sewer F BBM Work

Extra Item :5 (c):- Construction of UCR Masonary Work in 1:6										
	For Culvert	2	5.300	0.500	2.000	10.600		89.458	100.058	
	Deduction	4	0.785	1.690	0.500	2.653		0.000	-2.653	
	For UCR	1	29.500	0.500	0.600	8.850		0.000	8.850	
									106.254	
L F-Sewer Branch-400mm Dia-- culvert and compound wall construction Near Rose Garden,										
	ITEM NO. 17 :-Lowering, laying and jointing in proper grade and alignment R.C.C. pipes with collar joints in C.M. 1:1									
	h)1000mm	Reference coming from Above							32.500	32.500
	ITEM No. 28:-Providing and fixing in position steel bar reinforcement of various diameters for RCC piles caps									
		Quantity taken from BBS of Slab				0.105		0.181	0.287	
	ITEM No. 6:-Providing and laying in situ Cement Concrete of trap/granite /quartzite/gneiss metal for									
		1	7.400	1.400	0.200	2.072		3.240	5.312	
	Extra Item :4(a) - Construction of Brick work of 230mm thk. for manhole etc complete.									
	(a)Wall	2	7.400	0.225	0.900	2.997		68.723	71.720	
	Extra Item :4(b) - 12mm thk. Internal Plaster for manhole etc complete.									
	(a) Wall	2	7.400		0.900	13.320		132.235	145.555	
	Extra Item :4(c) - 20mm thk. External Plaster for manhole etc complete.									
	(a) Wall	Reference coming from Above							217.179	217.179
	Extra Item :5(a) - Providing Rubble Soling in 15 to 20cm thick layer.									
	Reference coming from Above								47.444	47.444



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AURANGABAD MUNICIPAL CORPORATION.

(From No.52)

Measurement Book

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Book No. :- **012**
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Name of Agency:- M/s Khilari Infrastructure Pvt.Ltd. & GECPL (Joint Vencture)

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Sewer F BBM Work

Extra Item :5(b) - Providing & Casting M15 Grade PCC for manhole etc complete.									
	Reference comming from Above							30.739	30.739
Extra Item :5(c):- Construction of UCR Masonary Work in 1:6									
	1	1.400	0.400	0.900	0.504			106.254	106.758
Extra item no.:-8 (b) Providing and fixing of paver blocks.									
	Reference comming from Above							45.281	45.281



Agarwal
S.P.E.R.Y



AURANGABAD MUNICIPAL CORPORATION.

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Book No. :- **013**
Page No. :-

Sewer F 0.9x0.6 MH BBM

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17th RA BILL MEASUREMENTS BBM CHEMBER AT EKNATHNAGAR

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 0.9 mt. * 0.6 mt. square chamber up to Depth of 2.0 mt.- 0.9+0.5+0.3+0.3=2.0m & 0.6+0.5+0.6=1.7										
	EKN 12.1										
	CH8.60	564.940	563.690	563.440			1.500				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			2.000	1.700	0.200	0.680		0.680	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			2.000	1.700	0.300	1.020		1.020	
	Item No. 5 :- Excavation for foundation/pipe trenches in Hard rock etc complete.										
	(a) For Lift 0 to 1.5m	1			2.000	1.700	1.000	3.400		3.400	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							2.445		2.445	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation(A)=							5.100			
	Deduction										
	Brick work	1.00		1	1.40	1.10	1.250	1.93			
	PCC	1.00		1	1.60	1.30	0.25	0.52			
	Total (B)							2.45			
	Net Qty = A - B							2.66	0.00	2.66	
	EKN 12.2										
	CH8.60	564.940	563.690	563.440			1.500				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			2.000	1.700	0.200	0.680		1.360	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			2.000	1.700	0.300	1.020		2.040	
	Item No. 5 :- Excavation for foundation/pipe trenches in Hard rock etc complete.										
	(a) For Lift 0 to 1.5m	1			2.000	1.700	1.000	3.400		6.800	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							2.445		4.890	



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AURANGABAD MUNICIPAL CORPORATION.

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Measurement Book

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Book No. :-

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Sewer F 0.9x0.6 MH BBM

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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(A)=						5.100				
	Deduction										
	Brick work	1.00		1	1.40	1.10	1.250	1.93			
	PCC	1.00		1	1.60	1.30	0.25	0.52			
	Total (B)						2.45				
							Net Qty = A - B	2.66	2.66		
	EKNC 14										
	CH12.00	564.060	563.960	563.710			0.350				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			2.000	1.700	0.350	1.190	1.360		
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			2.000	1.700	0.000	0.000	2.040		
	Item No. 5 :- Excavation for foundation/pipe trenches in Hard rock etc complete.										
	(a) For Lift 0 to 1.5m	1			2.000	1.700	0.000	0.000	6.800		
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							0.674	4.890		
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation(A)=						1.190				
	Deduction										
	Brick work	1.00		1	1.40	1.10	0.100	0.15			
	PCC	1.00		1	1.60	1.30	0.25	0.52			
	Total (B)						0.67				
							Net Qty = A - B	0.52	5.31		
	EKNC 11										
	CH7.00	564.500	564.120	563.870			0.630				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			2.000	1.700	0.630	2.142	2.550		
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							1.105	5.564		
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation(A)=						2.142				
	Deduction										
	Brick work	1.00		1	1.40	1.10	0.380	0.59			
	PCC	1.00		1	1.60	1.30	0.25	0.52			
	Total (B)						1.11				
							Net Qty = A - B	1.04	5.83		
									6.86		



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AURANGABAD MUNICIPAL CORPORATION.

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Book No. :-

016

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Sewer F 0.9x0.6 MH BBM

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Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Quantity	
		GL	IL	EX.L							
	EKNC 9										
	CH12.60	564.500	564.140	563.890			0.610				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			2.000	1.700	0.610	2.074	11.084	13.158	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							1.074	9.969	11.044	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation(A)=							2.074			
	Deduction										
	Brick work	1.00		1	1.40	1.10	0.360	0.55			
	PCC	1.00		1	1.60	1.30	0.25	0.52			
	Total (B)							1.07			
		Net Qty = A - B								9.95	10.95
	EKNC 10										
	CH12.50	564.530	564.140	563.890			0.640				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			2.000	1.700	0.640	2.176	13.158	15.334	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							1.121	11.044	12.164	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation(A)=							2.176			
	Deduction										
	Brick work	1.00		1	1.40	1.10	0.390	0.60			
	PCC	1.00		1	1.60	1.30	0.25	0.52			
	Total (B)							1.12			
		Net Qty = A - B								10.95	12.01
	EKNC 6										
	CH7.60	565.730	565.340	565.090			0.640				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc										
	(a) For Lift 0 to 1.5m	1			2.000	1.700	0.640	2.176	15.334	17.510	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							1.121	12.164	13.285	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation(A)=							2.176			
	Deduction										
	Brick work	1.00		1	1.40	1.10	0.390	0.60			
	PCC	1.00		1	1.60	1.30	0.25	0.52			
	Total (B)							1.12			
		Net Qty = A - B								12.01	13.07



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AURANGABAD MUNICIPAL CORPORATION.

(From No.52)

Measurement Book

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Book No. :- **017**
Page No. :-

Sewer F 0.9x0.6 MH BBM

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Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Quantity	
		GL	IL	EX.L							
	EKNC 7										
	CH11.60	565.730	565.340	565.090			0.640				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			2.000	1.700	0.640	2.176	17.510	19.686	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							1.121	13.285	14.406	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation(A)=							2.176			
	Deduction										
	Brick work	1.00		1	1.40	1.10	0.390	0.60			
	PCC	1.00		1	1.60	1.30	0.25	0.52			
	Total (B)							1.12			
	Net Qty = A - B							1.06	13.07	14.12	
	EKNC 2										
	CH7.20	566.140	565.230	564.980			1.160				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			2.000	1.700	0.260	0.884	19.686	20.570	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			2.000	1.700	0.500	1.700	2.040	3.740	
	Item No. 5 :- Excavation for foundation/pipe trenches in Hard rock etc complete.										
	(a) For Lift 0 to 1.5m	1			2.000	1.700	0.400	1.360	6.800	8.160	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							1.921	14.406	16.327	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation(A)=							3.944			
	Deduction										
	Brick work	1.00		1	1.40	1.10	0.910	1.40			
	PCC	1.00		1	1.60	1.30	0.25	0.52			
	Total (B)							1.92			
	Net Qty = A - B							2.02	14.12	16.14	
	EKNC 4										
	CH11.40	566.430	566.080	565.830			0.600				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			2.000	1.700	0.600	2.040	20.570	22.610	



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

Book No. :-

018

Page No. :-

Sewer F 0.9x0.6 MH BBM

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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. : 11 Transportation of earth Transportation charges including loading & unloading							1.059		16.327	17.386
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation(A)=							2.040			
	Deduction										
	Brick work	1.00		1	1.40	1.10	0.350	0.54			
	PCC	1.00		1	1.60	1.30	0.25	0.52			
	Total (B)							1.06			
		Net Qty = A - B							0.98	16.14	17.12
	EKNC 5										
	CH18.40	566.410	566.020	565.770				0.640			
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			2.000	1.700	0.640	2.176		22.610	24.786
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							1.121		17.386	18.507
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation(A)=							2.176			
	Deduction										
	Brick work	1.00		1	1.40	1.10	0.390	0.60			
	PCC	1.00		1	1.60	1.30	0.25	0.52			
	Total (B)							1.12			
		Net Qty = A - B							1.06	17.12	18.18
	EKNC 1										
	CH9.00	566.320	565.790	565.540				0.780			
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			2.000	1.700	0.780	2.652		24.786	27.438
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							1.336		18.507	19.843
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation(A)=							2.652			
	Deduction										
	Brick work	1.00		1	1.40	1.10	0.530	0.82			
	PCC	1.00		1	1.60	1.30	0.25	0.52			
	Total (B)							1.34			
		Net Qty = A - B							1.32	18.18	19.50
	EKNC 3										
	CH12.00	566.450	566.090	565.840				0.610			
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc										
	(a) For Lift 0 to 1.5m	1			2.000	1.700	0.610	2.074		27.438	29.512



J



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. **019**

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

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

Sewer F 0.9x0.6 MH BBM

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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			2.000	1.700	0.000	0.000		3.740	3.740
	Item No. 5 :- Excavation for foundation/pipe trenches in Hard rock etc complete.										
	(a) For Lift 0 to 1.5m	1			2.000	1.700	0.000	0.000		8.160	8.160
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							1.074		19.843	20.917
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation(A)=							2.074			
	Deduction										
	Brick work	1.00		1	1.40	1.10	0.360	0.55			
	PCC	1.00		1	1.60	1.30	0.25	0.52			
	Total (B)							1.07			
					Net Qty = A - B					19.50	20.49



Jejaan
Secretary



AURANGABAD MUNICIPAL CORPORATION.

(From No.52)

Measurement Book

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Book No. :-

020

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 0.9m MH BBM

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17th RA BILL MEASUREMENTS

F- Sewer

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Quantity	
		GL	IL	EX.L							
	EKNATH NAGAR --BBM Manhole										
	Excavation of Chamber - For 0.9 mt. * 06 mt. square chamber up to Depth of 2.0 mt.- 0.9+0.5+0.3+0.3=2.0m										
	Bredth for Square chamber up to Depth of 2m= 2 * 2=4m										
	MH 3										
	CH0.00	563.020	561.770	561.520			1.500				
	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	4.000	0.700	2.198		29.512	31.710
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	4.000	0.800	2.512		3.740	6.252
	Item No. 5 :- Excavation for foundation/pipe trenches in Hard rock etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	4.000	0.000	0.000		8.160	8.160
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							1.798		20.917	22.715
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation(A)=							4.710			
	Deduction										
	Brick work	1.00		0.785	1.16	1.16	1.250	1.32			
	PCC	1.00		0.785	1.56	1.56	0.25	0.48			
	Total (B)							1.80			
	Net Qty = A - B							2.91		20.49	23.41



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AURANGABAD MUNICIPAL CORPORATION.

(From No.52)

Measurement Book

022

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.

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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

Sewer F 1.2m MH BBM

Page 2 of 2

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. 5 :- Excavation for foundation/pipe trenches in Hard rock etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	7.075	0.400	2.222		10.382	12.603
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							3.300		25.746	29.046
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation(A)=							11.885			
	Deduction										
	Brick work	1.00		0.785	1.31	1.31	1.890	2.55			
	PCC	1.00		0.785	1.96	1.96	0.25	0.75			
	Total (B)							3.30			
		Net Qty = A - B						8.59		31.15	39.74
	MH 4										
	CH0.00	566.100	564.350	564.100			2.000				
	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	7.075	0.700	3.888		38.375	42.262
	(b) For Lift 1.5m to 3.0m	1			0.785	7.075	0.500	2.777		5.998	8.775
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	7.075	0.800	4.443		11.806	16.249
	Item No. 5 :- Excavation for foundation/pipe trenches in Hard rock etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	7.075	0.000	0.000		12.603	12.603
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							3.111		29.046	32.157
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation(A)=							11.108			
	Deduction										
	Brick work	1.00		0.785	1.31	1.31	1.750	2.36			
	PCC	1.00		0.785	1.96	1.96	0.25	0.75			
	Total (B)							3.11			
		Net Qty = A - B						8.00		39.74	47.73



J



AURANGABAD MUNICIPAL CORPORATION.

(From No.52)

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Book No. :-
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Sewer F 1.5m MH BBM

12th R A BILL MEASUREMENTS

F-Sewer

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 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 Area for Manhole=3.2*3.2=10.24m										
	FSW 1	Storm water line-900MM Dia									
	CH 15.60	584.200	581.839	581.589			2.611				
	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	1.330	10.691			
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	1.110	8.923	42.262	52.953	
	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	0.100	0.804	16.249	17.053	
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	10.240	0.070	0.563	0.000	0.563	
	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							8.321	32.157	40.479	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							20.980			
	Deduction										
	Brick work	1		0.785	2.280	2.280	1.180	4.817			
		1		0.785	1.540	1.540	1.180	2.198			
	PCC	1		0.785	2.580	2.580	0.250	1.306			
								8.321			
								12.659	47.732	60.391	
	FSW 2	Storm water line-900MM Dia									
	CH 129.30	584.800	582.040	581.790			3.010				
	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	1.330	10.691	52.953	63.645	
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	1.500	12.058	17.698	29.755	
	(c) For Lift 3.0m to 4.5m	1			0.785	10.240	0.010	0.080	0.000	0.080	
	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	0.100	0.804	17.053	17.857	
	Item No. 4 :- Excavation for foundation/pipe trenches in soft										
	(a) For Lift 0 to 1.5m	1			0.785	10.240	0.070	0.563	0.563	1.125	



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AURANGABAD MUNICIPAL CORPORATION.

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Book No. :- 024

Page No. :-

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

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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. : 11 Transportation of earth Transportation charges							9.507	40.479	49.985	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							24.196			
	Deduction										
	Brick work	1		0.785	2.280	2.280	1.380	5.631			
		1		0.785	1.540	1.540	1.380	2.569			
	PCC	1		0.785	2.580	2.580	0.250	1.306			
								9.507			
		Net Qty = A - B							14.689	60.391	75.080
	F56	F-500mm Near Ropalekar Hospital									
	CH 3258.80	584.295	581.080	580.830			3.465				
	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	1.360	10.932	63.645	74.577	
	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	0.140	1.125	17.857	18.982	
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	1.500	12.058	0.000	12.058	
	(c) For Lift 3.0m to 4.5m	1			0.785	10.240	0.465	3.738	0.000	3.738	
	Item No. : 11 Transportation of earth Transportation charges							10.859	49.985	60.844	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							27.853			
	Deduction										
	Brick work	1		0.785	2.280	2.280	1.607	6.560			
		1		0.785	1.540	1.540	1.607	2.993			
	PCC	1		0.785	2.580	2.580	0.250	1.306			
								10.859			
		Net Qty = A - B							16.994	75.080	92.074
	F 18.1	Eknath Nagar- 400mm									
	CH 20.00	561.910	559.810	559.560			2.350				
	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	74.577	86.634	
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.850	6.833	29.755	36.588	
	Item No. : 11 Transportation of earth Transportation charges							7.546	60.844	68.390	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							18.890			
	Deduction										
	Brick work	1		0.785	2.280	2.280	1.050	4.285			
		1		0.785	1.540	1.540	1.050	1.955			
	PCC	1		0.785	2.580	2.580	0.250	1.306			
								7.546			
		Net Qty = A - B							11.344	92.074	103.419



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AURANGABAD MUNICIPAL CORPORATION.

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Sewer F 1.5m MH BBM

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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 18.2											
CH 41.20		561.930	559.885	559.635			2.295				
	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	86.634	98.692	
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.795	6.391	36.588	42.979	
	Item No. : 11 Transportation of earth Transportation charges							7.382	68.390	75.773	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							18.448			
	Deduction										
	Brick work	1			0.785	2.280	2.280	1.022	4.173		
		1			0.785	1.540	1.540	1.022	1.904		
	PCC	1			0.785	2.580	2.580	0.250	1.306		
								7.382			
	Net Qty = A - B							11.066	103.419	114.484	
F 18.3											
CH 77.40		562.300	560.000	559.750			2.550				
	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	98.692	110.750	
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	1.050	8.440	42.979	51.419	
	Item No. : 11 Transportation of earth Transportation charges							8.140	75.773	83.913	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							20.498			
	Deduction										
	Brick work	1			0.785	2.280	2.280	1.150	4.693		
		1			0.785	1.540	1.540	1.150	2.141		
	PCC	1			0.785	2.580	2.580	0.250	1.306		
								8.140			
	Net Qty = A - B							12.358	114.484	126.842	
F 18.4											
CH 113.60		562.420	560.362	560.112			2.308				
	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	110.750	122.807	
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.808	6.495	51.419	57.914	
	Item No. : 11 Transportation of earth Transportation charges							7.421	83.913	91.334	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							18.553			
	Deduction										
	Brick work	1			0.785	2.280	2.280	1.029	4.199		
		1			0.785	1.540	1.540	1.029	1.916		
	PCC	1			0.785	2.580	2.580	0.250	1.306		
								7.421			
	Net Qty = A - B							11.132	126.842	137.973	



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