



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 CRPDI line from Colaba CDC to Nakshtrawadi (Kanchanwadi) STP and Ward No.08 to

Book No. :- 019
Page No. :-

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Mayur Park, 250mm DWC Pipe

17th R A BILL MEASUREMENTS PIPE Mayur Park

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Qty.	
		GL	IL	EX.L							
	DWC PIPE - 250 mm Dia	Near Super Thirty English School									
	Width of Trench - For Lift 0 to 1.50m- 0.250+0.5=0.750m										
	For Lift 1.5 to 3.00m- 0.250+0.5+0.4=1.150m										
	For Lift 3.0 to 4.5m- 0.250+0.5+0.4+0.4=1.550m										
19/11/14	MJM 0 to MJM 1										
	CH0.00	605.370	604.300	604.200			1.170	1.190			
	CH17.00	605.620	604.510	604.410			1.210				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			15.600	0.750	1.190	13.923	0.000	13.923	
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			15.900	0.750	0.100	1.193	0.000	1.193	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							1.973	0.000	1.973	
	Item 13 (c) :-Lowering & Laying of DWC pipe of 250mm Dia	1			16.400			16.400		16.400	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							13.923			
	Deduction										
	pipe area	1		0.785	15.900	0.250	0.250	0.780			
	soling							0.000			
	PCC							0.000			
	Murrum bedding							1.193			
								1.973			
								Net Qty = A - B	0.00	11.950	
25/9/14	MJM 1 to MJM 2										
	CH17.00	605.620	604.510	604.410			1.210	1.275			
	CH33.80	605.900	604.660	604.560			1.340				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			15.400	0.750	1.275	14.726	13.923	28.649	
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			15.700	0.750	0.100	1.178	1.193	2.370	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							1.948	1.973	3.920	
	Item 13 (c) :-Lowering & Laying of DWC pipe of 250mm Dia	1			16.200			16.200	16.400	32.600	



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Mayur Park, 250mm DWC Pipe

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Qty.	
		GL	IL	EX.L							
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			22.600	0.750	0.100	1.695		3.503	5.198
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							2.804		5.794	8.598
	Item 13 (c) :-Lowering & Laying of DWC pipe of 250mm Dia	1			23.100			23.100		48.200	71.300
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							49.630			
	Deduction										
	pipe area	1		0.785	22.600	0.250	0.250	1.109			
	soling							0.000			
	PCC							0.000			
	Murrum bedding							1.695			
								2.804			
								Net Qty = A - B		37.23	84.056
	MH 1 to MH 2										
	Road Crossing Connection										
	Near MP School										
	CH0.00	604.105	601.245	601.145				2.960			
	CH8.50	604.125	601.350	601.250				2.875		2.918	
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			7.100	1.150	1.400	11.431		76.811	88.242
	(b) For Lift 1.5m to 3.0m	1			7.100	0.750	1.418	7.551		10.645	18.195
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			7.100	1.150	0.100	0.817		2.599	3.416
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			7.100	0.750	0.100	0.533		5.198	5.730
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							0.881		8.598	9.478
	Item 13 (c) :-Lowering & Laying of DWC pipe of 250mm Dia	1			7.600			7.600		71.300	78.900
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							19.798			
	Deduction										
	pipe area	1		0.785	7.100	0.250	0.250	0.348			
	soling							0.000			
	PCC							0.000			
	Murrum bedding							0.533			
								0.881			
								Net Qty = A - B		84.06	102.973
	MH 1 to MH 2										
	Road Crossing Connection										
	Near Maroti Nagar										
	CH0.00	603.425	600.065	599.965				3.460			
	CH18.00	603.430	600.365	600.265				3.165		3.312	



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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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Mayur Park, 250mm DWC Pipe

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Qty.	
		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			16.600	1.550	1.400	36.022		88.242	124.264
	(b) For Lift 1.5m to 3.0m	1			16.600	1.150	1.500	28.635		18.195	46.830
	(c) For Lift 3.0m to 4.5m	1			16.600	0.750	0.312	3.884		0.000	3.884
	Item No: 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			16.600	1.550	0.100	2.573		3.416	5.989
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			16.600	1.550	0.000	0.000		2.599	2.599
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			16.600	0.750	0.100	1.245		5.730	6.975
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							2.059		9.478	11.538
	Item 13 (c) :- Lowering & Laying of DWC pipe of 250mm Dia	1			17.100			17.100		78.900	96.000
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							71.114			
	Deduction										
	pipe area	1		0.785	16.600	0.250	0.250	0.814			
	soling							0.000			
	PCC							0.000			
	Murrum bedding							1.245			
								2.059			
								69.055		102.97	172.028



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Mayur Park, 300mm RCC Pipe

19th RA Bill Measurements Pipe Mayur Park Jijau Mata Chowk

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Qty.	
		GL	IL	EX.L							
	RCC PIPE - 300 mm Dia										
	Width of Trench -										
	For Lift 0 to 1.50m- 0.300+0.08+0.08+0.5=0.96m										
	For Lift 1.5 to 3.00m- 0.300+0.08+0.08+0.5+0.4=1.36 m										
	For Lift 3.0 to 4.5m- 0.300+0.5+0.08+0.08+0.4+0.4=1.76m										
	MH 197 to MH 197.1										
	CH0.00	604.250	602.040	601.840			2.410	2.250			
	CH28.50	604.620	602.730	602.530			2.090				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			25.840	1.360	1.500	52.714	124.264	176.977	
	(b) For Lift 1.5m to 3.0m	1			25.840	0.960	0.750	18.605	46.830	65.435	
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			25.840	0.960	0.100	2.481	6.975	9.456	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							5.410	11.538	16.948	
	Extra Item 9.4 (c) :-Lowering & Laying of RCC NP3 Class pipe of 300mm Dia	1			27.500			27.500	25.000	52.500	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							71.318			
	Deduction										
	pipe area	1		0.785	25.840	0.380	0.380	2.929			
	soling							0.000			
	PCC							0.000			
	Murrum bedding							2.481			
								5.410			
	Net Qty = A - B							65.909	172.028	237.937	
	MH 197.1 to MH 197.2										
	CH28.50	604.830	602.950	602.750			2.080	2.060			
	CH47.00	604.980	603.140	602.940			2.040				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			15.840	1.360	1.500	32.314	176.977	209.291	
	(b) For Lift 1.5m to 3.0m	1			15.840	0.960	0.560	8.516	65.435	73.951	
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			15.840	0.960	0.100	1.521	9.456	10.976	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							3.316	16.948	20.264	



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Mayur Park 1.2 MH Exc.

17th RA BILL MEASUREMENTS OF CHEMBERS Mayur Park Ijjau Mata Chowk

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Qty.	
		GL	IL	EX.L							
	Branch Sewer at Mayur Park Ijjau Mata Chowk										
	Excavation of Chamber - For 1.20 dia chamber (upto 2.0m depth)- 1.20+0.50+0.5+0.5=2.66m										
	Bredth for chamber upto 2m=2.66*2.66=7.075m										
	MH-197										
	CH0.00	604.250	602.040	601.790			2.460				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc										
	(a) For Lift 0 to 1.5m	1			0.785	7.075	1.500	8.33	0.00	8.33	
	(b) For Lift 1.5m to 3.0m	1			0.785	7.075	0.960	5.33	0.00	5.33	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							0.000	0.00	0.00	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation(A)=							13.663			
	Deduction										
	Brick work	1			0.785	1.31	1.31	0.00			
	Brick work							0.00			
	PCC	1			0.785	1.96	1.96	0.00			
	Murrum bedding							0.00			
	Total (B)							0.00			
					Net Qty = A - B			13.66	0.00	13.66	
	MH-197.1										
	CH28.50	604.620	602.730	602.480			2.140				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc										
	(a) For Lift 0 to 1.5m	1			0.785	7.075	1.500	8.33	8.33	16.66	
	(b) For Lift 1.5m to 3.0m	1			0.785	7.075	0.640	3.55	5.33	8.89	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							3.300	0.00	3.30	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation(A)=							11.885			
	Deduction										
	Brick work	1			0.785	1.31	1.31	1.890	2.55		
	Brick work							0.00			
	PCC	1			0.785	1.96	1.96	0.250	0.75		
	Murrum bedding							0.00			
	Total (B)							3.30			
					Net Qty = A - B			8.59	13.66	22.25	
	MH-197.2										
	CH47.00	604.980	603.140	602.890			2.090				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc										
	(a) For Lift 0 to 1.5m	1			0.785	7.075	1.500	8.33	16.66	24.99	
	(b) For Lift 1.5m to 3.0m	1			0.785	7.075	0.590	3.28	8.89	12.16	



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Mayur Park 1.2 MH Exc.

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Qty.	
		GL	IL	EX.L							
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							3.233		3.30	6.53
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation(A)=							11.608			
	Deduction										
	Brick work	1		0.785	1.31	1.31	1.840	2.48			
	Brick work							0.00			
	PCC	1		0.785	1.96	1.96	0.250	0.75			
	Murram bedding							0.00			
	Total (B)							3.23			
		Net Qty = A - B							8.37	22.25	30.62
	MH-197.3										
	CH63.00	604.890	603.460	603.210			1.680				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murram etc										
	(a) For Lift 0 to 1.5m	1			0.785	7.075	1.500	8.33		24.99	33.32
	(b) For Lift 1.5m to 3.0m	1			0.785	7.075	0.180	1.00		12.16	13.16
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							2.680		6.53	9.21
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation(A)=							9.331			
	Deduction										
	Brick work	1		0.785	1.31	1.31	1.430	1.93			
	Brick work							0.00			
	PCC	1		0.785	1.96	1.96	0.250	0.75			
	Murram bedding							0.00			
	Total (B)							2.68			
		Net Qty = A - B							6.65	30.62	37.27
	MH-197.4										
	CH81.50	605.240	603.820	603.570			1.670				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murram etc										
	(a) For Lift 0 to 1.5m	1			0.785	7.075	1.500	8.33		33.32	41.65
	(b) For Lift 1.5m to 3.0m	1			0.785	7.075	0.170	0.94		13.16	14.11
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							2.667		9.21	11.88
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation(A)=							9.275			
	Deduction										
	Brick work	1		0.785	1.31	1.31	1.420	1.91			
	Brick work							0.00			
	PCC	1		0.785	1.96	1.96	0.250	0.75			
	Murram bedding							0.00			
	Total (B)							2.67			
		Net Qty = A - B							6.61	37.27	43.88



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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

Date of Measurement	Particulars of Work	Details					Last Measurement		Total up to Date
		No.	L	B	D	Contains of Arrears	Page No.	Quantity	

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Mayur Park MANHOLE

11th R A BILL MEASUREMENTS **Sewer at Mayur Park Jijau Mata Chowk**

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 M

Sr.No.	Chainage	MH No	MTL	IL	Depth	Depth Difference than 2 m	Total Difference	Rebate/Add for Excess height (per 50 cm)
1	CH 0.00	MH-197	604.250	602.040	2.210	0.210	-1.210	-2.420
2	CH 28.50	MH-197.1	604.620	602.730	1.890	-0.110		
3	CH 47.00	MH-197.2	604.980	603.140	1.840	-0.160		
4	CH 63.00	MH-197.3	604.890	603.460	1.430	-0.570		
5	CH 81.50	MH-197.4	605.240	603.820	1.420	-0.580		
Total								-2.420



Signature



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

Ant

Date
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rem

Mayur Park Quantity Node Abstract

13th R A BILL MEASUREMENTS

Branch Sewer - Mayur Park Jijau Mata Chowk

SR NO	Description	ITEM 1		ITEM 2	ITEM 4	ITEM 7	ITEM 11	ITEM 12		ITEM 13	ITEM 21	ITEM 21.1	ITEM 30	EIRL 9.3		EIRL 9.4	
		0-1.5	1.5-3.0					3.0-4.5	0-1.5					250mm	250mm	300mm	300mm
1	For Pipe	273.840	80.142	3.884	2.599	14.138	27.158	96.000	96.000	96.000			339.30	107.500	107.500	107.50	
2	For Manhole	41.654	14.107				11.880				5.000	(2.420)	43.881				
Total		315.494	94.249	3.884	2.599	14.138	39.038	96.000	96.000	96.000	5.000	(2.420)	383.18	107.500	107.500	107.50	

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(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. :- 031
Page No. :-

Sewer M-Branch at Chikhalthana 400mm Dia

Page 1 of 2

17th RA BILL MEASUREMENTS

Sewer at Chikhalthana

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 of Sewer M at Chikhalthana										
	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										
	CKT 14										
	CH404.30	571.725	568.510	568.310			3.415	3.398			
	CH435.50	571.810	568.630	568.430			3.380				
	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			28.000	2.000	1.200	67.200	0.000	67.200	
	(b) For Lift 1.5m to 3.0m	1			28.000	1.600	1.500	67.200	0.000	67.200	
	(c) For Lift 3.0m to 4.5m	1			28.000	1.200	0.398	13.373	0.000	13.373	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murum etc complete.										
	(a) For Lift 0 to 1.5m	1			28.000	2.000	0.150	8.400	0.000	8.400	
	Item No. 4:- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			28.000	2.000	0.150	8.400	0.000	8.400	
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)										
	(a) For Lift 0 to 1.5m	1			29.000	1.200	0.200	6.960	0.000	6.960	
	Item No. : 11 Transportation of earth Transportation charges							13.846	0.000	13.846	
	Item No.17 (a) :- Lowering & Laying RCC NP3 class pipe of 400mm Dia										
	(a) For Lift 0 to 1.5m	1			30.000			30.000	0.000	30.000	
	Item No 30 :- Refilling the excavated trenches ...										
	Total Excavation= A							164.573			
	Deduction										
	pipe area	1		0.785	29.000	0.550	0.550	6.986			
	soling							0.000			
	PCC							0.000			
	Murum bedding							6.960			
	Total = B							13.846			
	Net Qty = A - B							150.726	0.000	150.726	
	CKT 15										
	CH435.50	571.810	568.630	568.430			3.380	3.333			
	CH461.70	571.815	568.730	568.530			3.285				
	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			23.000	2.000	1.200	55.200	67.200	122.400	
	(b) For Lift 1.5m to 3.0m	1			23.000	1.600	1.500	55.200	67.200	122.400	
	(c) For Lift 3.0m to 4.5m	1			23.000	1.200	0.333	9.191	13.373	22.564	



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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 Nakshurawadi (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 Nakshurawadi (Kanchanwadi) STP and Ward No.98 to STP for Aurangabad City.

Book No. :- 63?

Page No. :-

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

Sewer M-Branch at Chikalthana 1.5m MH Excavation

Page 1 of 2

12th RA BILL MEASUREMENTS Sewer at Chikalthana

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										
	Breadth for Manhole=3.2*3.2=10.24m										
	CKT 15										
	CH435.50	571.810	568.630	568.180			3.630				
	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	1.200	9.646	0.000	9.646	
	(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	0.630	5.064	0.000	5.064	
	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	0.000	1.206	
	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	0.150	1.206	0.000	1.206	
	Item No. : 11 Transportation of earth Transportation charges							11.800	0.000	11.800	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							29.179			
	Deduction										
	Brick work	1			0.785	2.280	2.280	1.590	6.488		
		1			0.785	1.540	1.540	1.590	2.960		
	PCC	1			0.785	2.580	2.580	0.250	1.306		
	Soling	1			0.785	2.580	2.580	0.200	1.045		
								11.800			
	Net Qty = A - B							17.380	0.000	17.380	
	CKT 16										
	CH461.70	571.815	568.730	568.280			3.535				
	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	1.200	9.646	9.646	19.292	
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	1.500	12.058	12.058	24.115	
	(c) For Lift 3.0m to 4.5m	1			0.785	10.240	0.535	4.301	5.064	9.365	
	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	1.206	2.412	
	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	0.150	1.206	1.206	2.412	



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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. :- **033**

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

Date of Measurement	Particulars of Work	Details					Last Measurement		Total up to Date
		No.	L	B	D	Contents of Arrears	Page No.	Quantity	
1	2	3	4	5	6	7	8	9	10

Sewer M-Branch at Chikalhana 1.5m MH Excavation

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. : 11 Transportation of earth Transportation charges						11.518		11.800	23.317	
	Item No. 30 :- Refilling the excavated trenches ...						28.416				
	Total Excavation=										
	Deduction										
	Brick work	1		0.785	2.280	2.280	1.543	6.295			
		1		0.785	1.540	1.540	1.543	2.872			
	PCC	1		0.785	2.580	2.580	0.250	1.306			
	Soling	1		0.785	2.580	2.580	0.200	1.045			
							11.518				
							16.898		17.380	34.278	
				Net Qty = A - B							



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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. **034**
Page No. :-

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

Date of Measurement	Particulars of Work	Details					Last Measurement		Total up to Date
		No.	L	B	D	Contents of Arrears	Page No.	Quantity	
1	2	3	4	5	6	7	8	9	10

Sewer M-Branch at Chikalthana MANHOLE

Page 1 of 1

12th R A BILL MEASUREMENTS

Sewer at Chikalthana

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 2 to 5.0 M

Sr.No.	Chainage	MH No	MTL	IL	Depth	Depth Difference than 5 m	Total Difference	Rebate/Add for Excess height (per 50 cm)
1	435.50	CKT 15	571.810	568.630	3.18	-1.82	-3.74	-7.47 ✓
2	461.70	CKT 16	571.815	568.730	3.09	-1.91		



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AURANGABAD MUNICIPAL CORPORAT
(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
Authori

Date of Measurement	
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Sewer M-Branch at Chikhalthana Quantity Node Abstract

11th R A BILL MEASUREMENTS

Branch Of Sewer M - Chikhalthana

SR NO	Description	MB/PG	ITEM 1			ITEM 4	ITEM 7	ITEM 11	ITEM 17	ITEM 21	ITEM 21.1		ITEM 30
			0-1.5	1.5-3.0	3.0-4.5						0-1.5	Rebate	
1	For Pipe		122.400	122.400	22.564	15.300	12.720	25.306	55.000			272.658	
2	For Manhole		19.292	24.115	9.365	2.412		23.317		2.000	(7.470)	34.278	
	Total		141.692	146.515	31.928	17.712	12.720	48.623	55.000	2.000	-7.470	306.936	



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AURANGABAD MUNICIPAL CORPORATION.

(From No.52)

Measurement Book

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Book No. :- 033

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Chikalthan-2 - Meas. SW Pipe

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Quantity	
GL	IL	EX.L									
								1.579			
		Net Qty = A - B						8.661	11.414	20.075	
	CK 3 to CK 4										
	CH35.50	591.455	590.575	590.475			0.980	1.015			
	CH43.60	591.525	590.575	590.475			1.050				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			6.100	0.740	1.015	4.582	22.052	26.634	
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			6.700	0.740	0.100	0.496	2.316	2.812	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							0.750	3.505	4.256	
	Extra Item 9.2 (c) :-Lowering & Laying of Polyethylene SW pipe of 200mm Dia	1			7.200			7.200	32.800	40.000	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							4.582			
	Deduction										
	pipe area	1		0.785	6.700	0.220	0.220	0.255			
	soling							0.000			
	PCC							0.000			
	Murrum bedding							0.496			
								0.750			
		Net Qty = A - B						3.831	20.075	23.906	
	CK 4 to CK 5										
	CH43.60	591.525	590.575	590.475			1.050	0.980			
	CH54.20	591.385	590.575	590.475			0.910				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			8.600	0.740	0.980	6.237	26.634	32.870	
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			9.200	0.740	0.100	0.681	2.812	3.493	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							1.030	4.256	5.286	
	Extra Item 9.2 (c) :-Lowering & Laying of Polyethylene SW pipe of 200mm Dia	1			9.700			9.700	40.000	49.700	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							6.237			
	Deduction										
	pipe area	1		0.785	9.200	0.220	0.220	0.350			
	soling							0.000			



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