



# 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

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ST Colony Thakarenagar, Measurement MB

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Qty.	
		GL	IL	EX.L							
	<b>Deduction of 250mm dia pipe</b>										
	pipe area	1.000		0.785	23.100	0.250	0.250	1.133			
	soling							0.000			
	PCC							0.000			
	Murrum bedding							1.733			
								2.866			
	<b>Net Qty = A - B</b>							48.412	839.450	887.862	
	<b>LA 24.13 21</b>										
	CH460.60	595.375	593.222	593.122			2.253	2.172			
	CH470.80	595.237	593.247	593.147			2.090				
	<b>Item No. 1 :-</b> Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			7.9	1.150	1.500	13.628	610.365	623.993	
	(b) For Lift 1.5m to 3.0m	1			7.9	0.750	0.672	3.982	120.394	124.376	
	<b>Item No. 7 :-</b> Filling in plinth and floors/ trenches etc complete.(bedding)	1			8.5	0.750	0.100	0.637	32.577	33.214	
	<b>Item No. : 11</b> Transportation of earth Transportation charges including loading & unloading							1.055	58.553	59.607	
	<b>Item No. 13 :-</b> (c) Lowering & Laying of Polyethylene DWC pipe of 250mm Dia	1			9.10			9.100	236.050	245.150	
	<b>Item No. 30 :-</b> Refilling the excavated trenches ...										
	<b>Total Excavation=</b>							17.609			
	<b>Deduction of 250mm dia pipe</b>										
	pipe area	1.000		0.785	8.500	0.250	0.250	0.417			
	soling							0.000			
	PCC							0.000			
	Murrum bedding							0.637			
								1.055			
	<b>Net Qty = A - B</b>							16.555	887.862	904.416	
	<b>LA 24.13 22</b>										
	CH470.80	595.237	593.247	593.147			2.090	2.170			
	CH479.90	595.419	593.269	593.169			2.250				
	<b>Item No. 1 :-</b> Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			6.8	1.150	1.500	11.730	623.993	635.723	
	(b) For Lift 1.5m to 3.0m	1			6.8	0.750	0.670	3.417	124.376	127.793	
	<b>Item No. 7 :-</b> Filling in plinth and floors/ trenches etc complete.(bedding)	1			7.4	0.750	0.100	0.555	33.214	33.769	
	<b>Item No. : 11</b> Transportation of earth Transportation charges including loading & unloading							0.918	59.607	60.526	
	<b>Item No. 13 :-</b> (c) Lowering & Laying of Polyethylene DW/C pipe of 250mm Dia	1			8.00			8.000	245.150	253.150	
	<b>Item No. 30 :-</b> Refilling the excavated trenches ...										
	<b>Total Excavation=</b>							15.147			



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ST Colony Thakaregar, Measurment MB

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Qty.	
		GL	IL	EX.L							
	<b>Deduction of 250mm dia pipe</b>										
	pipe area	1.000		0.785	7.400	0.250	0.250	0.363			
	soling							0.000			
	PCC							0.000			
	Murum bedding							0.555			
								<b>0.918</b>			
								<b>14.229</b>	<b>904.416</b>	<b>918.245</b>	
	<b>LA 24.13 23</b>										
	CH479.90	595.419	593.369	593.269			2.150				
	CH492.60	595.310	593.400	593.300			2.010	2.080			
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murum etc complete.										
	(a) For Lift 0 to 1.5m	1			10.4	1.150	1.500	17.940	635.723	653.663	
	(b) For Lift 1.5m to 3.0m	1			10.4	0.750	0.580	4.524	127.793	132.317	
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			11.0	0.750	0.100	0.825	33.769	34.594	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							1.365	60.526	61.890	
	Item No. 13 :- (c)Lowering & Laying of Polyethylene DWC pipe of 250mm Dia	1			11.60			11.600	253.150	264.750	
	Item No. 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation=</b>							<b>22.464</b>			
	<b>Deduction of 250mm dia pipe</b>										
	pipe area	1.000		0.785	11.000	0.250	0.250	0.540			
	soling							0.000			
	PCC							0.000			
	Murum bedding							0.825			
								<b>1.365</b>			
								<b>21.099</b>	<b>918.245</b>		
	<b>LA 24.13 24</b>										
	CH492.60	595.310	593.600	593.500			1.810				
	CH506.70	595.300	593.680	593.580			1.720	1.765			
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murum etc complete.										
	(a) For Lift 0 to 1.5m	1			11.8	1.150	1.500	20.355	653.663	674.018	
	(b) For Lift 1.5m to 3.0m	1			11.8	0.750	0.265	2.345	132.317	134.662	
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			12.4	0.750	0.100	0.930	34.594	35.524	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							1.538	61.890	63.429	
	Item No. 13 :- (c)Lowering & Laying of Polyethylene DWC pipe of 250mm Dia	1			13.00			13.000	264.750	277.750	
	Item No. 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation=</b>							<b>22.700</b>			





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ST Colony Thakarenagar, Measurement MB

Date	Particulars of work	DETAILS					Content of arrears	Last measurement		Total Upto Date Quantity	
		No			L	B		D	Page		Qty.
		GL	IL	EX.L							
	Deduction of 250mm dia pipe										
	pipe area	1.000		0.785	12.400	0.250	0.250	0.608			
	soling							0.000			
	PCC							0.000			
	Murum bedding							0.930			
								1.538			
								21.162	939.744	960.906	
	<b>Net Qty = A - B</b>										
	<b>LA 24.13.03 TO LA 24.13.03.1</b>										
	CH0.00	592.470	591.420	591.320			1.150	1.150			
	CH9.20	592.510	591.460	591.360			1.150				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			7.5	0.750	1.150	6.469	674.018	680.486	
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			7.5	0.750	0.100	0.563	35.524	36.087	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							0.930	63.429	64.359	
	Item No. 13 :- (c)Lowering & Laying of Polyethylene DWC pipe of 250mm Dia	1			8.00			8.000	277.750	285.750	
	Item No. 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation=</b>							6.469			
	Deduction of 250mm dia pipe										
	pipe area	1.000		0.785	7.500	0.250	0.250	0.368			
	soling							0.000			
	PCC							0.000			
	Murum bedding							0.563			
								0.930			
								5.538	960.906	966.445	
	<b>Net Qty = A - B</b>										
	<b>LA 24.13.05 TO LA 24.13.05.1</b>										
	CH0.00	592.660	591.710	591.610			1.050	1.060			
	CH6.40	592.710	591.740	591.640			1.070				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			4.5	0.750	1.060	3.538	680.486	684.024	
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			4.5	0.750	0.100	0.334	36.087	36.420	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							0.552	64.359	64.911	
	Item No. 13 :- (c)Lowering & Laying of Polyethylene DWC pipe of 250mm Dia	1			5.05			5.050	285.750	290.800	
	Item No. 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation=</b>							3.538			
	Deduction of 250mm dia pipe										



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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

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ST Colony Thakarenagar, Measurement MB

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Qty.	
		GL	IL	EX.L							
	pipe area	1.000		0.785	4.450	0.250	0.250	0.218			
	soling							0.000			
	PCC							0.000			
	Murrum bedding							0.334			
								0.552			
								2.986	966.445	969.430	
	<b>LA 24.13.05 TO LA 24.13.05.2</b>										
	CH0.00	592.660	591.775	591.675				0.985			
	CH4.05	592.680	591.780	591.680				1.000	0.993		
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			2.1	0.750	0.993	1.564	684.024	685.588	
	(b) For Lift 1.5m to 3.0m	1			2.1	0.750	0.000	0.000	134.662	134.662	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			2.1	0.750	0.000	0.000	69.911	69.911	
	(b) For Lift 1.5m to 3.0m	1			2.1	0.750	0.000	0.000	134.558	134.558	
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			2.1	0.750	0.000	0.000	11.186	11.186	
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			2.1	0.750	0.100	0.158	36.420	36.578	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							0.261	64.911	65.172	
	Item No. 13 :- (c) Lowering & Laying of Polyethylene DWC pipe of 250mm Dia	1			2.70			2.700	290.800	293.500	
	Item No. 13 :- (d) Lowering & Laying of Polyethylene DWC pipe of 315mm Dia	1								195.450	
	Item No. 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation=</b>							1.564			
	<b>Deduction of 250mm dia pipe</b>										
	pipe area	1.000		0.785	2.100	0.250	0.250	0.103			
	soling							0.000			
	PCC							0.000			
	Murrum bedding							0.158			
								0.261			
								1.303	969.430	970.734	



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ST Colony Thakarenagar, Chamber meas.

### 11th RA BILL MEASUREMENTS OF CHAMBERS ST COLONY THAKARENAGAR

Date	Particulars of work	DETAILS						Content of area	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Qty.	
		GL	IL	EX.L							
	Excavation of Chamber - For 1.20 dia chamber (upto 2.0m depth)-1.20+0.3+0.3+0.5=2.30m Area for chamber upto 2m=2.30*2.30=5.290m										
	Excavation of Chamber - For 1.50m dia Manhole (upto a depth of 2.0m to 5.0m)- 1.50+0.35+0.35+0.3+0.3=2.80m Area for chamber upto =2.8*2.8=7.84m										
	<b>LA 24.13 01</b>										
	<b>CH11.50</b>	592.330	590.900	590.650			1.680				
	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	5.290	0.550	2.284		0.000	2.284
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	5.290	0.950	3.945		0.000	3.945
	(b) For Lift 1.5m to 3.0m	1			0.785	5.290	0.180	0.747		0.000	0.747
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading excavated material for a lead beyond initial lead up to 10km average rate							2.680		0.000	2.680
	Item No. 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation(A)=</b>							6.976			
	Deduction										
	Brick work	1.00		0.785	1.31	1.31	1.430	1.93			
	soling							0.00			
	PCC	1.00		0.785	1.96	1.96	0.25	0.75			
	Murrum bedding							0.00			
	<b>Total (B)</b>							2.68			
	<b>LA 24.13 02</b>							4.30		0.000	4.30
	<b>CH24.50</b>	592.550	590.960	590.710			1.840				
	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	5.290	0.550	2.284		2.284	4.568
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	5.290	0.950	3.945		3.945	7.890
	(b) For Lift 1.5m to 3.0m	1			0.785	5.290	0.340	1.412		0.747	2.159





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ST Colony Thakarenagar, Chamber meas

Date	Particulars of work	DETAILS						Content of area	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 excavated material for a lead beyond initial lead up to 10km average rate							2.896		2.680	5.576	
	Item No. 30 :- Refilling the excavated trenches ...											
	<b>Total Excavation(A)=</b>							<b>7.641</b>				
	<b>Deduction</b>											
	Brick work	1.00		0.785	1.31	1.31	1.590	2.14				
	soling							0.00				
	PCC	1.00		0.785	1.96	1.96	0.25	0.75				
	Murram bedding							0.00				
	<b>Total (B)</b>							<b>2.90</b>				
		<b>Net Qty = A - B</b>								<b>4.296</b>	<b>9.04</b>	
	LA 24.13 03											
	CH37.00	592.470	591.050	590.800			1.670					
	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	5.290	1.100	4.568		4.568	9.136	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.											
	(a) For Lift 0 to 1.5m	1			0.785	5.290	0.400	1.661		7.890	9.551	
	(b) For Lift 1.5m to 3.0m	1			0.785	5.290	0.170	0.706		2.159	2.865	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading excavated material for a lead beyond initial lead up to 10km average rate							2.667		5.576	8.243	
	Item No. 30 :- Refilling the excavated trenches ...											
	<b>Total Excavation(A)=</b>							<b>6.935</b>				
	<b>Deduction</b>											
	Brick work	1.00		0.785	1.31	1.31	1.420	1.91				
	soling							0.00				
	PCC	1.00		0.785	1.96	1.96	0.25	0.75				
	Murram bedding							0.00				
	<b>Total (B)</b>							<b>2.67</b>				
		<b>Net Qty = A - B</b>								<b>4.27</b>	<b>9.041</b>	<b>13.31</b>
	LA 24.13 04											
	CH53.40	592.500	591.180	590.930			1.570					
	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	7.840	1.100	6.770		9.136	15.906	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.											
	(a) For Lift 0 to 1.5m	1			0.785	7.840	0.400	2.462		9.551	12.013	
	(b) For Lift 1.5m to 3.0m	1			0.785	7.840	0.070	0.431		2.865	3.296	



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# AURANGABAD MUNICIPAL CORPORATION.

(From No.52)

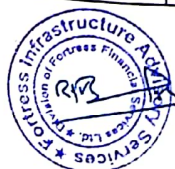
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Date	Particulars of work	DETAILS						Content of area	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Qty.	
		GL	IL	EX.L							
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading excavated material for a lead beyond initial lead up to 10km average rate							4.474		8.243	12.717
	Item No. 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation(A)=</b>										
	<b>Deduction</b>							9.662			
	Brick work	1		0.785	2.280	2.280	0.320	1.306			
		1		0.785	1.540	1.540	1.000	1.862			
	PCC	1		0.785	2.580	2.580	0.250	1.306			
	Soling	1		0.785	2.580	2.580	0.000	0.000			
	<b>Total (B)</b>			0.785	2.580	2.580	0.000	4.474			
								4.474			
	<b>LA 24.13 05</b>							<b>5.19</b>		<b>13.309</b>	<b>18.50</b>
	<b>CH74.65</b>	592.660	591.250	591.000			1.660				
	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	7.840	1.050	6.462		15.906	22.368
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	7.840	0.450	2.769		12.013	14.782
	(b) For Lift 1.5m to 3.0m	1			0.785	7.840	0.160	0.985		3.296	4.281
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading excavated material for a lead beyond initial lead up to 10km average rate							4.841		12.717	17.558
	Item No. 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation(A)=</b>										
	<b>Deduction</b>							10.216			
	Brick work	1		0.785	2.280	2.280	0.410	1.673			
		1		0.785	1.540	1.540	1.000	1.862			
	PCC	1		0.785	2.580	2.580	0.250	1.306			
	Soling	1		0.785	2.580	2.580	0.000	0.000			
	<b>Total (B)</b>			0.785	2.580	2.580	0.000	4.841			
								4.841			
	<b>LA 24.13 06</b>							<b>5.38</b>		<b>18.498</b>	<b>23.87</b>
	<b>CH101.95</b>	593.780	591.440	591.190			2.590				
	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	7.840	1.300	8.001		22.368	30.369
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	7.840	0.200	1.231		14.782	16.013
	(b) For Lift 1.5m to 3.0m	1			0.785	7.840	1.090	6.708		4.281	10.989



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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

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Date	Particulars of work	DETAILS						Content of area	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 excavated material for a lead beyond initial lead up to 10km average rate							7.527		17.558	25.085
	Item No. 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation(A)=</b>							15.940			
	<b>Deduction</b>										
	Brick work	1		0.785	2.280	2.280	0.840	3.428			
	PCC	1		0.785	1.540	1.540	1.500	2.793			
	Soling	1		0.785	2.580	2.580	0.250	1.306			
	<b>Total (B)</b>	1		0.785	2.580	2.580	0.000	0.000			
	<b>Net Qty = A - B</b>							7.527			
	<b>LA 24.13 07</b>							8.41		23.873	32.29
	<b>CH134.95</b>	594.250	591.550	591.300			2.950				
	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	7.840	1.250	7.693		30.369	38.062
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	7.840	0.250	1.539		16.013	17.552
	(b) For Lift 1.5m to 3.0m	1			0.785	7.840	1.450	8.924		10.989	19.918
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading excavated material for a lead beyond initial lead up to 10km average rate							7.886		25.085	32.971
	Item No. 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation(A)=</b>							18.155			
	<b>Deduction</b>										
	Brick work	1		0.785	2.280	2.280	0.700	2.857			
	PCC	1		0.785	1.540	1.540	2.000	3.723			
	Soling	1		0.785	2.580	2.580	0.250	1.306			
	<b>Total (B)</b>	1		0.785	2.580	2.580	0.000	0.000			
	<b>Net Qty = A - B</b>							7.886			
	<b>LA 24.13 08</b>							10.27		32.286	42.56
	<b>CH171.30</b>	594.400	591.690	591.440			2.960				
	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	7.840	1.500	9.232		38.062	47.293
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(b) For Lift 1.5m to 3.0m	1			0.785	7.840	1.460	8.985		19.913	28.898



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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

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Date	Particulars of work	DETAILS						Content of area	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 excavated material for a lead beyond initial lead up to 10km average rate							7.927		32.971	40.898
	Item No. 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation(A)=</b>							<b>18.217</b>			
	<b>Deduction</b>										
	Brick work	1		0.785	2.280	2.280	0.710	2.897			
		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			
	<b>Total (B)</b>							<b>7.927</b>			
								<b>Net Qty = A - B</b>			
	<b>LA 24.13 09</b>							<b>10.29</b>		<b>42.555</b>	<b>52.85</b>
	<b>CH207.90</b>	594.630	591.820	591.570			3.060				
	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	7.840	1.500	9.232		47.293	56.528
	(b) For Lift 1.5m to 3.0m	1			0.785	7.840	0.310	1.908		0.000	1.908
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(b) For Lift 1.5m to 3.0m	1			0.785	7.840	1.250	7.693		28.898	36.591
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading excavated material for a lead beyond initial lead up to 10km average rate							8.335		40.898	49.233
	Item No. 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation(A)=</b>							<b>18.832</b>			
	<b>Deduction</b>										
	Brick work	1		0.785	2.280	2.280	0.810	3.305			
		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			
	<b>Total (B)</b>							<b>8.335</b>			
								<b>Net Qty = A - B</b>			
	<b>LA 24.13 10</b>							<b>10.50</b>		<b>52.845</b>	<b>63.34</b>
	<b>CH244.40</b>	594.850	592.110	591.860			2.990				
	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	7.840	1.500	9.232		56.525	65.756
	(b) For Lift 1.5m to 3.0m	1			0.785	7.840	1.000	6.154		1.908	8.062
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(b) For Lift 1.5m to 3.0m	1			0.785	7.840	0.490	3.016		36.591	39.607



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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. :-

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Date	Particulars of work	DETAILS						Content of area	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Qty.	
		GL	IL	EXL							
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading excavated material for a lead beyond initial lead up to 10km average rate							9.159	49.233	58.392	
	Item No. 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation(A)=</b>							<b>18.402</b>			
	<b>Deduction</b>										
	Brick work	1		0.785	2.280	2.280	1.240	5.060			
		1		0.785	1.540	1.540	1.500	2.793			
	PCC	1		0.785	2.580	2.580	0.250	1.306			
	Soling	1		0.785	2.580	2.580	0.000	0.000			
	<b>Total (B)</b>							<b>9.159</b>			
				<b>Net Qty = A - B</b>				<b>9.24</b>	<b>63.343</b>	<b>72.59</b>	
LA 24.13 11											
CH285.20		594.440	592.160	591.910			2.530				
	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	7.840	1.500	9.232	65.756	74.988	
	(b) For Lift 1.5m to 3.0m	1			0.785	7.840	0.800	4.924	8.062	12.986	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(b) For Lift 1.5m to 3.0m	1			0.785	7.840	0.230	1.416	39.607	41.023	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading excavated material for a lead beyond initial lead up to 10km average rate							7.282	58.392	65.674	
	Item No. 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation(A)=</b>							<b>15.571</b>			
	<b>Deduction</b>										
	Brick work	1		0.785	2.280	2.280	0.780	3.183			
		1		0.785	1.540	1.540	1.500	2.793			
	PCC	1		0.785	2.580	2.580	0.250	1.306			
	Soling	1		0.785	2.580	2.580	0.000	0.000			
	<b>Total (B)</b>							<b>7.282</b>			
				<b>Net Qty = A - B</b>				<b>8.29</b>	<b>72.585</b>	<b>80.87</b>	
LA 24.13 12											
CH306.60		594.320	592.270	592.020			2.300				
	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	7.840	1.250	7.693	74.988	82.681	
	(b) For Lift 1.5m to 3.0m	1			0.785	7.840	0.450	2.769	12.986	15.755	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	7.840	0.150	0.923	17.552	18.475	





**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 ... CIDCO (Airport). Providing, lowering, laying, jointing and testing rising main

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Date	Particulars of work	DETAILS						Content of area	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Qty.	
		GL	IL	EX.L							
	(b) For Lift 1.5m to 3.0m	1			0.785	7.840	0.350	2.154		41.023	43.177
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	7.840	0.100	0.615		0.000	0.615
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading excavated material for a lead beyond initial lead up to 10km average rate							7.009		65.674	72.683
	Item No. 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation(A)=</b>							<b>14.155</b>			
	<b>Deduction</b>										
	Brick work	1		0.785	2.280	2.280	0.850	3.469			
	PCC	1		0.785	1.540	1.540	1.200	2.234			
	Soling	1		0.785	2.580	2.580	0.250	1.306			
	<b>Total (B)</b>			0.785	2.580	2.580	0.000	0.000			
	<b>Net Qty = A - B</b>							<b>7.009</b>			
	<b>LA 24.13 13</b>							<b>7.15</b>		<b>80.874</b>	<b>88.02</b>
	<b>CH321.00</b>	594.460	592.340	592.090			2.370				
	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	7.840	1.250	7.693		82.681	90.374
	(b) For Lift 1.5m to 3.0m	1			0.785	7.840	0.400	2.462		15.755	18.217
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	7.840	0.150	0.923		18.475	19.398
	(b) For Lift 1.5m to 3.0m	1			0.785	7.840	0.470	2.893		43.177	46.069
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	7.840	0.100	0.615		0.615	1.231
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading excavated material for a lead beyond initial lead up to 10km average rate							7.295		72.683	79.978
	Item No. 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation(A)=</b>							<b>14.586</b>			
	<b>Deduction</b>										
	Brick work	1		0.785	2.280	2.280	0.920	3.754			
	PCC	1		0.785	1.540	1.540	1.200	2.234			
	Soling	1		0.785	2.580	2.580	0.250	1.306			
	<b>Total (B)</b>			0.785	2.580	2.580	0.000	0.000			
	<b>Net Qty = A - B</b>							<b>7.295</b>			
	<b>LA 24.13 14</b>							<b>7.29</b>		<b>88.020</b>	<b>95.31</b>
	<b>CH341.40</b>	594.400	592.360	592.110			2.290				



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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

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Date	Particulars of work	DETAILS						Content of area	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			0.785	7.840	1.250	7.693		98.067	98.067
	(b) For Lift 1.5m to 3.0m	1			0.785	7.840	0.400	2.462		18.217	20.679
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	7.840	0.150	0.923		19.398	20.321
	(b) For Lift 1.5m to 3.0m	1			0.785	7.840	0.390	2.400		46.069	48.469
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	7.840	0.100	0.615		1.231	1.846
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading excavated material for a lead beyond initial lead up to 10km average rate							6.968		79.978	86.946
	Item No. 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation(A)=</b>							<b>14.094</b>			
	<b>Deduction</b>										
	Brick work	1		0.785	2.280	2.280	0.840	3.428			
		1		0.785	1.540	1.540	1.200	2.234			
	PCC	1		0.785	2.580	2.580	0.250	1.306			
	Soling	1		0.785	2.580	2.580	0.000	0.000			
	<b>Total (B)</b>							<b>6.968</b>			
	<b>Net Qty = A - B</b>							<b>7.13</b>		<b>95.311</b>	<b>102.44</b>
	LA 24.13 15										
	CH362.00	594.590	592.570	592.320			2.270				
	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	7.840	1.250	7.693		98.067	105.760
	(b) For Lift 1.5m to 3.0m	1			0.785	7.840	0.400	2.462		20.679	23.141
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	7.840	0.150	0.923		20.321	21.244
	(b) For Lift 1.5m to 3.0m	1			0.785	7.840	0.370	2.277		48.469	50.747
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	7.840	0.100	0.615		1.846	2.462
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading excavated material for a lead beyond Initial lead up to 10km average rate							6.887		86.946	93.832
	Item No. 30 :- Refilling the excavated trenches ...										



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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.

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M/s. Khilari Infrastructures Pvt Ltd & GFCPI (Joint Venture)

Date	Particulars of work	DETAILS						Content of area	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Qty.	
		GL	IL	EX.L							
	<b>Total Excavation(A)=</b>						13.970				
	<b>Deduction</b>										
	Brick work	1		0.785	2.280	2.280	0.820	3.346			
		1		0.785	1.540	1.540	1.200	2.234			
	PCC	1		0.785	2.580	2.580	0.250	1.306			
	Soling	1		0.785	2.580	2.580	0.000	0.000			
	<b>Total (B)</b>						6.887				
							<b>Net Qty = A - B</b>	<b>7.08</b>			
	<b>LA 24.13 16</b>								<b>102.437</b>	<b>109.52</b>	
	<b>CH381.40</b>	594.770	592.830	592.580			2.190				
	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	7.840	1.250	7.693	105.760	113.453	
	(b) For Lift 1.5m to 3.0m	1			0.785	7.840	0.400	2.462	23.141	25.602	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	7.840	0.150	0.923	21.244	22.168	
	(b) For Lift 1.5m to 3.0m	1			0.785	7.840	0.290	1.785	50.747	52.531	
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	7.840	0.100	0.615	2.462	3.077	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading excavated material for a lead beyond initial lead up to 10km average rate							6.560	93.832	100.393	
	Item No. 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation(A)=</b>						13.478				
	<b>Deduction</b>										
	Brick work	1		0.785	2.280	2.280	0.740	3.020			
		1		0.785	1.540	1.540	1.200	2.234			
	PCC	1		0.785	2.580	2.580	0.250	1.306			
	Soling	1		0.785	2.580	2.580	0.000	0.000			
	<b>Total (B)</b>						6.560				
							<b>Net Qty = A - B</b>	<b>6.92</b>	<b>109.521</b>	<b>116.44</b>	
	<b>LA 24.13 17</b>										
	<b>CH395.30</b>	594.750	592.950	592.700			2.050				
	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	7.840	1.250	7.693	113.453	121.148	
	(b) For Lift 1.5m to 3.0m	1			0.785	7.840	0.300	1.846	25.602	27.449	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	7.840	0.150	0.923	22.168	23.091	
	(b) For Lift 1.5m to 3.0m	1			0.785	7.840	0.250	1.539	52.531	54.070	



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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 nine line from Golwadi SPS to Nakshtrawadi (Kanchanwadi) STP and Ward No.98 to

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ST Colony Thakarenagar, Chamber meas

Date	Particulars of work	DETAILS						Content of area	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Qty.	
		GL	IL	EX.L							
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	7.840	0.100	0.615		3.077	3.693
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading excavated material for a lead beyond initial lead up to 10km average rate							6.433		100.393	106.825
	Item No. 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation(A)=</b>							<b>12.617</b>			
	<b>Deduction</b>										
	Brick work	1		0.785	2.280	2.280	0.800	3.265			
		1		0.785	1.540	1.540	1.000	1.862			
	PCC	1		0.785	2.580	2.580	0.250	1.306			
	Soling	1		0.785	2.580	2.580	0.000	0.000			
	<b>Total (B)</b>							<b>6.433</b>			
	<b>LA 24.13 18</b>							<b>6.18</b>		<b>116.439</b>	<b>122.62</b>
	<b>CH407.50</b>	595.100	592.980	592.730			2.370				
	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	5.290	1.400	5.814		121.146	126.960
	(b) For Lift 1.5m to 3.0m	1			0.785	5.290	0.870	3.613		27.449	31.061
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	5.290	0.100	0.415		3.693	4.108
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading excavated material for a lead beyond initial lead up to 10km average rate							3.610		106.825	110.435
	Item No. 30 :- Refilling the excavated trenches ...										
	<b>Total Excavation(A)=</b>							<b>9.842</b>			
	<b>Deduction</b>										
	Brick work	1.00		0.785	1.31	1.31	2.120	2.86			
	Soling							0.00			
	PCC	1.00		0.785	1.96	1.96	0.25	0.75			
	Murrum bedding							0.00			
	<b>Total (B)</b>							<b>3.61</b>			
	<b>LA 24.13 19</b>							<b>6.23</b>		<b>122.623</b>	<b>128.85</b>
	<b>CH420.60</b>	595.162	593.060	592.810			2.352				
	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	5.290	1.400	5.814		126.960	132.773
	(b) For Lift 1.5m to 3.0m	1			0.785	5.290	0.852	3.538		31.061	34.599



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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 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

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ST Colony Thakare Nagar, Chamber meas

Date	Particulars of work	DETAILS						Content of area	Last measurement		Total Upto Date Quantity	
		No			L	B	D		Page	Qty.		
		GL	IL	EX.L								
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.											
	(a) For Lift 0 to 1.5m	1			0.785	5.290	0.100	0.415		4.108	4.523	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading excavated material for a lead beyond initial lead up to 10km average rate							3.586		110.435	114.021	
	Item No. 30 :- Refilling the excavated trenches ...											
	<b>Total Excavation(A)=</b>							9.767				
	<b>Deduction</b>											
	Brick work	1.00		0.785	1.31	1.31	2.102	2.83				
	soling							0.00				
	PCC	1.00		0.785	1.96	1.96	0.25	0.75				
	Murrum bedding							0.00				
	<b>Total (B)</b>							3.59				
		<b>Net Qty = A - B</b>										
	<b>LA 24.13 20</b>							<b>6.18</b>	<b>128.855</b>	<b>135.04</b>		
	<b>CH435.80</b>	595.390	593.150	592.900			2.490					
	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	5.290	1.400	5.814		132.773	138.587	
	(b) For Lift 1.5m to 3.0m	1			0.785	5.290	0.990	4.111		34.599	38.711	
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.											
	(a) For Lift 0 to 1.5m	1			0.785	5.290	0.100	0.415		4.523	4.938	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading excavated material for a lead beyond initial lead up to 10km average rate							3.772		114.021	117.792	
	Item No. 30 :- Refilling the excavated trenches ...											
	<b>Total Excavation(A)=</b>							10.340				
	<b>Deduction</b>											
	Brick work	1.00		0.785	1.31	1.31	2.240	3.02				
	soling							0.00				
	PCC	1.00		0.785	1.96	1.96	0.25	0.75				
	Murrum bedding							0.00				
	<b>Total (B)</b>							3.77				
		<b>Net Qty = A - B</b>										
	<b>LA 24.13 21</b>							<b>6.57</b>	<b>135.036</b>	<b>141.60</b>		
	<b>CH460.60</b>	595.375	593.222	592.972			2.403					
	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	5.290	1.400	5.814		138.587	144.401	
	(b) For Lift 1.5m to 3.0m	1			0.785	5.290	0.903	3.750		38.711	42.460	



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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.

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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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ST Colony Thakarenagar, Chamber meas

Date	Particulars of work	DETAILS						Content of area	Last measurement		Total Upto Date Quantity	
		No			L	B	D		Page	Qty.		
		GL	IL	EX.L								
	<b>Item No. 4 :-</b> Excavation for foundation/pipe trenches in soft rock etc complete.											
	(a) For Lift 0 to 1.5m	1			0.785	5.290	0.100	0.415		4.938	5.354	
	<b>Item No. : 11</b> Transportation of earth Transportation charges including loading & unloading excavated material for a lead beyond initial lead up to 10km average rate							3.654		117.792	121.446	
	<b>Item No. 30 :-</b> Refilling the excavated trenches ...											
	<b>Total Excavation(A)=</b>							9.979				
	<b>Deduction</b>											
	Brick work	1.00		0.785	1.31	1.31	2.153	2.90				
	soling							0.00				
	PCC	1.00		0.785	1.96	1.96	0.25	0.75				
	Murrum bedding							0.00				
	<b>Total (B)</b>							3.65				
								<b>Net Qty = A - B</b>		<b>6.32</b>	<b>141.605</b>	<b>147.93</b>
	<b>LA 24.13 22</b>											
	<b>CH470.80</b>	595.237	593.247	592.997			2.240					
	<b>Item No. 1 :-</b> Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.											
	(a) For Lift 0 to 1.5m	1			0.785	5.290	1.500	6.229		144.401	150.630	
	(b) For Lift 1.5m to 3.0m	1			0.785	5.290	0.740	3.073		42.460	45.533	
	<b>Item No. : 11</b> Transportation of earth Transportation charges including loading & unloading excavated material for a lead beyond initial lead up to 10km average rate							3.435		121.446	124.881	
	<b>Item No. 30 :-</b> Refilling the excavated trenches ...											
	<b>Total Excavation(A)=</b>							9.302				
	<b>Deduction</b>											
	Brick work	1.00		0.785	1.31	1.31	1.990	2.68				
	soling							0.00				
	PCC	1.00		0.785	1.96	1.96	0.25	0.75				
	Murrum bedding							0.00				
	<b>Total (B)</b>							3.43				
								<b>Net Qty = A - B</b>		<b>5.87</b>	<b>147.929</b>	<b>153.80</b>
	<b>LA 24.13 23</b>											
	<b>CH479.90</b>	595.419	593.269	593.019			2.400					
	<b>Item No. 1 :-</b> Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.											
	(a) For Lift 0 to 1.5m	1			0.785	5.290	1.500	6.229		150.630	156.859	
	(b) For Lift 1.5m to 3.0m	1			0.785	5.290	0.900	3.737		45.533	49.271	



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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 Nakshirawadi (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

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ST Colony Thakaregnagar, Chamber meas

Date	Particulars of work	DETAILS						Content of area	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 excavated material for a lead beyond initial lead up to 10km average rate							3.650	124.881	128.531	
	Item No. 30 :- Refilling the excavated trenches ...							9.966			
	<b>Total Excavation(A)=</b>										
	<b>Deduction</b>										
	Brick work	1.00		0.785	1.31	1.31	2.150	2.90			
	soling							0.00			
	PCC	1.00		0.785	1.96	1.96	0.25	0.75			
	Murum bedding							0.00			
	<b>Total (B)</b>							3.65			
								<b>Net Qty = A - B</b>	<b>6.32</b>	<b>153.796</b>	<b>160.11</b>
	LA 24.13 24										
	CH492.60	595.310	593.400	593.150			2.160				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	5.290	1.500	6.229	156.859	163.088	
	(b) For Lift 1.5m to 3.0m	1			0.785	5.290	0.660	2.741	49.271	52.012	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading excavated material for a lead beyond initial lead up to 10km average rate							3.327	128.531	131.858	
	Item No. 30 :- Refilling the excavated trenches ...							8.970			
	<b>Total Excavation(A)=</b>										
	<b>Deduction</b>										
	Brick work	1.00		0.785	1.31	1.31	1.910	2.57			
	soling							0.00			
	PCC	1.00		0.785	1.96	1.96	0.25	0.75			
	Murum bedding							0.00			
	<b>Total (B)</b>							3.33			
								<b>Net Qty = A - B</b>	<b>5.64</b>	<b>160.112</b>	<b>165.76</b>
	LA 24.13 25										
	CH506.70	595.300	593.680	593.430			1.870				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	5.290	1.500	6.229	163.088	169.317	
	(b) For Lift 1.5m to 3.0m	1			0.785	5.290	0.370	1.536	52.012	53.548	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading excavated material for a lead beyond initial lead up to 10km average rate							2.936	131.858	134.795	
	Item No. 30 :- Refilling the excavated trenches ...										





# AURANGABAD MUNICIPAL CORPORATION.

(From No.52)

## Measurement Book

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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

Date	Particulars of work	DETAILS						Content of area	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Qty.	
		GL	IL	EX.L							
	<b>Total Excavation(A)=</b>						7.765				
	<b>Deduction</b>										
	Brick work	1.00		0.785	1.31	1.31	1.620	2.18			
	soling							0.00			
	PCC	1.00		0.785	1.96	1.96	0.25	0.75			
	Murrum bedding							0.00			
	<b>Total (B)</b>							2.94			
								<b>Net Qty = A - B</b>	4.83	165.755	170.58
14 of 14	ST Colony Thakarenagar, Chamber meas										
	<b>LA 24.13.07.01</b>										
	<b>CH0.00</b>	592.645	591.595	591.345			1.300				
	<b>Item No. 1 :-</b> Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	5.290	1.300	5.398	169.317	174.715	
	(b) For Lift 1.5m to 3.0m	1			0.785	5.290	0.000	0.000	53.548	53.548	
	<b>Item No. 2 :-</b> Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	5.290	0.000	0.000	23.091	23.091	
	(b) For Lift 1.5m to 3.0m	1			0.785	5.290	0.000	0.000	54.070	54.070	
	<b>Item No. 4 :-</b> Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	5.290	0.000	0.000	5.354	5.354	
	<b>Item No. : 11</b> Transportation of earth Transportation charges including loading & unloading excavated material for a lead beyond initial lead up to 10km average rate							2.168	134.795	136.963	
	<b>Item No. 30 :-</b> Refilling the excavated trenches ...										
	<b>Total Excavation(A)=</b>							5.398			
	<b>Deduction</b>										
	Brick work	1.00		0.785	1.31	1.31	1.050	1.41			
	soling							0.00			
	PCC	1.00		0.785	1.96	1.96	0.25	0.75			
	Murrum bedding							0.00			
	<b>Total (B)</b>							2.17			
								<b>Net Qty = A - B</b>	3.23	170.584	173.81



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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.

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**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

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ST Colony Thakarenagar, chamber

### 12th R A BILL MEASUREMENTS CHAMBER DETAILS

**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

SR NO	Chainage	MH No	MTL	IL	Depth	Depth Difference than 2 m	Total Difference	Rebate/A dd for Excess height
<b>ST COLONY THAKARENAGAR</b>								
1	CH 11.50	LA 24.13 01	592.330	590.900	1.430	-0.570 ✓	-2.225	-4.45 ✓
2	CH24.50	LA 24.13 02	592.550	590.960	1.590	-0.410 ✓		
3	CH37.00	LA 24.13 03	592.470	591.050	1.420	-0.580 ✓		
4	CH407.50	LA 24.13 18	595.100	592.980	2.120	0.120 ✓		
5	CH420.60	LA 24.13 19	595.162	593.060	2.102	0.102 ✓		
6	CH435.80	LA 24.13 20	595.390	593.150	2.240	0.240 ✓		
7	CH460.60	LA 24.13 21	595.375	593.222	2.153	0.153 ✓		
8	CH470.80	LA 24.13 22	595.237	593.247	1.990	-0.010 ✓		
9	CH479.90	LA 24.13 23	595.419	593.269	2.150	0.150 ✓		
10	CH492.60	LA 24.13 24	595.310	593.400	1.910	-0.090 ✓		
11	CH506.70	LA 24.13 25	595.300	593.680	1.620	-0.380 ✓		
12	CH0.00	LA 24.13.07.01	592.645	591.595	1.050	-0.950 ✓		
<b>TOTAL</b>								<b>-4.45</b>

**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 M

Sr.No.	Chainage	MH No	MTL	IL	Depth	Depth Difference than 5 m	Total Difference	Rebate/A dd for Excess height
1	CH 53.40	LA 24.13 04	592.500	591.180	1.320	-3.680 ✓	-39.720	-79.440 ✓
2	CH 74.65	LA 24.13 05	592.660	591.250	1.410	-3.590 ✓		
3	CH 101.95	LA 24.13 06	593.780	591.440	2.340	-2.660 ✓		
4	CH 134.95	LA 24.13 07	594.250	591.550	2.700	-2.300 ✓		
5	CH 171.30	LA 24.13 08	594.400	591.690	2.710	-2.290 ✓		
6	CH 207.90	LA 24.13 09	594.630	591.820	2.810	-2.190 ✓		
7	CH 244.40	LA 24.13 10	594.850	592.110	2.740	-2.260 ✓		
8	CH 285.20	LA 24.13 11	594.440	592.160	2.280	-2.720 ✓		
9	CH 306.60	LA 24.13 12	594.320	592.270	2.050	-2.950 ✓		
10	CH 321.00	LA 24.13 13	594.460	592.340	2.120	-2.880 ✓		
11	CH 341.40	LA 24.13 14	594.400	592.360	2.040	-2.960 ✓		
12	CH 362.00	LA 24.13 15	594.590	592.570	2.020	-2.980 ✓		
13	CH 381.40	LA 24.13 16	594.770	592.830	1.940	-3.060 ✓		
14	CH 395.30	LA 24.13 17	594.750	592.950	1.800	-3.200 ✓		
<b>Total</b>								<b>-79.440</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. :-  
Page No. :- **125**

Name  
Author

Date of Measurement

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ST Colony Thakarenagar, Qty Abstract

**QUANTITY ABSTRACT RA 1<sup>st</sup> ST COLONY THAKARENAGAR**

SR NO	Description	MB/PG	ITEM 1		ITEM 2		ITEM 4	ITEM 7	ITEM 11	ITEM 12		ITEM 13		ITEM 21	ITEM 21.1		ITEM 23	ITEM 23.1		ITEM 30
			0-1.5	1.5-3.0	0-1.5	1.5-3.0				0-1.5	1.5-3.0	250mm	315mm		0-2 m	Rebate		2-5 m	Rebate	
1	For Pipe		685.588	134.662	69.911	134.558	11.186	36.578	65.172	293.500	293.500	195.450	195.450	12.000	-4.450	14.000	-79.440	14.000	-79.440	970.734
2	For Manhole		174.715	53.548	23.091	54.070	5.354		136.963	293.500	293.500	195.450	195.450	12.000	-4.450	14.000	-79.440	14.000	-79.440	173.814
	<b>Total</b>		<b>860.303</b>	<b>188.210</b>	<b>93.002</b>	<b>188.628</b>	<b>16.540</b>	<b>36.578</b>	<b>202.135</b>	<b>293.500</b>	<b>293.500</b>	<b>195.450</b>	<b>195.450</b>	<b>12.000</b>	<b>-4.450</b>	<b>14.000</b>	<b>-79.440</b>	<b>14.000</b>	<b>-79.440</b>	<b>1144.548</b>



*[Handwritten signatures]*