



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. :- 177

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

1 of 1

Azad Chowk to Central Naka R MANHOLE

14th R A BILL MEASUREMENTS

Sewer at Azad Chowk to Central Naka

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/Add for Excess height (per 50 cm)
1	CH 39.00	AC 8.1	592.350	588.790	3.560	-1.440	-11.865	-23.730
2	CH 70.20	AC 8.2	593.780	589.815	3.965	-1.035		
3	CH 99.20	AC 8.3	594.280	591.000	3.280	-1.720		
4	CH 135.70	AC 8.4	594.400	591.850	2.550	-2.450		
5	CH 166.90	AC 8.5	594.400	592.000	2.400	-2.600		
6	CH 231.80	AC 8.7	595.050	592.670	2.380	-2.620		
							Total	-23.730

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 198.10	AC 8.6	594.300	592.340	1.960	-0.040	-0.315	-0.630
2	CH 293.10	AC 8.8	595.750	593.575	2.175	0.175		
3	CH 324.30	AC 8.9	596.460	594.135	2.325	0.325		
4	CH 378.30	AC 8.10	596.680	594.485	2.195	0.195		
5	CH 411.05	AC 8.11	597.210	595.685	1.525	-0.475		
6	CH 429.85	AC 8.12	597.890	596.085	1.805	-0.195		
7	CH 438.65	AC 8.13	597.990	596.290	1.700	-0.300		
							Total	-0.630



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Azad Chowk to Central Naka & Quantity Note Abstract

19th RA BILL MEASUREMENTS

Branch Sewer - Azad Chowk to Central Naka

SR NO	Description	ITEM 1		ITEM 2		ITEM 4		ITEM 6			ITEM 7	ITEM 11	ITEM 17 400mm	ITEM 21 upto 2 m	ITEM 21 Rebate	ITEM 23 2-5 m	ITEM 23.1 Rebate	ITEM 30	EBRL 9.3	
		0-1.5	1.5-3.0	0-1.5	1.5-3.0	0-1.5	1.5-3.0	3-4.5	0-1.5	1.5-3.0									3-4.5	300mm
1	For Pipe	479.661	190.345	357.390	167.347	78.627	158.708	15.480	83.088	51.915	98.189	191.381	421.250					1,399.99	30,000	
2	For Manhole	62.305	38.022	45.366	25.917	13.896	19.468	2.412	15.635	18.930	79.927	79.927		7.000	(0.630)	6.00	(23.730)	164.631		
	Total	541.966	228.367	402.746	193.264	92.524	178.176	17.892	98.723	70.846	96.189	270.308	421.250	7.000	(0.630)	6.00	(23.730)	1,564.62	30,000	

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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.

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

1 of 12

Aurangpura 600mm RCC - Aurangpura-600mm

10th RA BILL MEASUREMENTS BRANCH SEWER AT "AURANGPURA (Bhaji Mandi)"

Date	Particulars of work	DETAILS					Content of arrears	Last measurement		Total Upto Date Quantity	
		No			L	B		D	Page		Quantity
		GL	IL	EX.L							
	Branch Sewer-600mm Dia - Juna Bazar										
	Width of trench- For Bottom Lift 0.00-1.50m- 0.6+0.17+0.17+0.5=1.44m										
	From Bottom Lift 1.50-3.00m- 0.6+0.17+0.17+0.5+0.4=1.84m										
	From Bottom Lift 3.00-4.50m- 0.6+0.17+0.17+0.5+0.4+0.4 = 2.24m										
	From Bottom Lift 4.50-6.0m- 0.6+0.17+0.17+0.5+0.4+0.4 = 2.64m										
	ABM 8 to ABM 9										
	CH272.20	568.705	562.373	562.173			6.532				
	CH300.70	568.535	562.555	562.355			6.180				
	Item No. 1 :- Excavation for foundation/pipe trenches in all types of soil & soft murrum etc										
	(a) For Lift 0 to 1.5m	1			25.450	3.040	1.500	116.052	0.000	116.052	
	(b) For Lift 1.5m to 3.0m	1			25.450	2.640	1.500	100.782	0.000	100.782	
	(c) For Lift 3.0m to 4.5m	1			25.450	2.240	1.500	85.512	0.000	85.512	
	(d) For Lift 4.5m to 6.0m	1			25.450	1.840	0.400	18.731	0.000	18.731	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(d) For Lift 4.5m to 6.0m	1			25.450	1.840	0.900	42.145	0.000	42.145	
	Item No. 4:- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(d) For Lift 4.5m to 6.0m	1			25.450	1.840	0.200	9.366	0.000	9.366	
	Extra Item No. 5 (g):- Excavation for foundation/pipe trenches in soft rock etc complete.										
	For Lift 6.0m to 7.5m	1			25.450	1.440	0.100	3.665	0.000	3.665	
	Item No. 5 :- Excavation for foundation/pipe trenches in Hard rock etc complete.										
	(c) For Lift 6.0m to 7.5m	1			25.450	1.440	0.256	9.382	0.000	9.382	
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)										
		1			25.450	1.440	0.200	7.330	0.000	7.330	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							19.175	0.000	19.175	
		1						27.500	0.000	27.500	
	Item No 17 (d) :- Lowering & Laying RCC NP3 class pipe of 600mm Dia										
		1			27.500			27.500			
	Item No 30 :- Refilling the excavated trenches ...							385.635			
	Total Excavation = A =										
	Deduction				0.785	25.450	0.770	0.770	11.85		
	pipe area	1.00							0.00		
	soling								0.00		
	PCC								7.33		
	Murrum bedding								19.17		
	Total = B										



Sd/- Murrum



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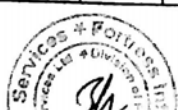
Page No. :-

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

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Aurangpura 600mm RCC - Aurangpura-600mm

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Quantity	
		GL	IL	EX.L							
		Net Qty = A - B						366.46		0.000	366.46
	CH300.70	568.535	562.555	562.355			6.180	5.928			
	CH329.20	568.210	562.735	562.535			5.675				
	Item No. 1 :- Excavation for foundation/pipe trenches in all types of soil & soft murrum etc										
	(a) For Lift 0 to 1.5m	1			26.900	2.640	1.500	106.524	116.052	222.576	
	(b) For Lift 1.5m to 3.0m	1			26.900	2.240	1.500	90.384	100.782	191.166	
	(c) For Lift 3.0m to 4.5m	1			26.900	1.840	1.500	74.244	85.512	159.756	
	(d) For Lift 4.5m to 6.0m	1			26.900	1.440	0.790	30.601	18.731	49.333	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(d) For Lift 4.5m to 6.0m	1			26.900	1.440	0.638	24.714	42.145	66.859	
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			26.900	1.440	0.200	7.747	7.330	15.077	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading	1						20.267	19.175	39.442	
	Item No 17 (d) :- Lowering & Laying RCC NP3 class pipe of 600mm Dia	1			27.500			27.500	27.500	55.000	
	Item No 30 :- Refilling the excavated trenches ...										
	Total Excavation= A=							326.467			
	Deduction										
	pipe area	1.00		0.785	26.900	0.770	0.770	12.52			
	soling							0.00			
	PCC							0.00			
	Murrum bedding							7.75			
	Total = B							20.27			
		Net Qty = A - B						306.20	366.460	672.66	
	ABM 9 to ABM 10										
	CH329.20	568.210	562.735	562.535			5.675	5.413			
	CH354.85	567.765	562.815	562.615			5.150				
	Item No. 1 :- Excavation for foundation/pipe trenches in all types of soil & soft murrum etc										
	(a) For Lift 0 to 1.5m	1			24.050	2.640	1.500	95.238	222.576	317.814	
	(b) For Lift 1.5m to 3.0m	1			24.050	2.240	0.800	43.098	191.166	234.264	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(b) For Lift 1.5m to 3.0m	1			24.050	2.240	0.700	37.710	0.000	37.710	
	(c) For Lift 3.0m to 4.5m	1			24.050	1.840	1.500	66.378	0.000	66.378	
	(d) For Lift 4.5m to 6.0m	1			24.050	1.440	0.460	15.931	66.859	82.789	
	Item No. 5 :- Excavation for foundation/pipe trenches in Hard rock etc complete.										
	(d) For Lift 4.5m to 6.0m	1			24.050	1.440	0.453	15.688	0.000	15.688	
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			24.050	1.440	0.200	6.926	15.077	22.003	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading	1						18.120	39.442	57.562	



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

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Aurangpura 600mm RCC - Aurangpura-600mm

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 17 (d) :- Lowering & Laying RCC NP3 class pipe of 600mm Dia	1			25.000			25.000		55.000	80.000
	Item No 30 :- Refilling the excavated trenches ...										
	Total Excavation= A=							274.043			
	Deduction										
	pipe area	1.00		0.785	24.050	0.770	0.770	11.19			
	soling							0.00			
	PCC							0.00			
	Murum bedding							6.93			
	Total = B							18.12			
	Net Qty = A - B							255.92	672.660	928.58	
	CH354.85	567.765	562.815	562.615							
	CH370.50	567.735	562.885	562.685			5.150	5.100			
	Item No. 1 :- Excavation for foundation/pipe trenches in all types of soil & soft murum etc										
	(a) For Lift 0 to 1.5m	1			14.050	2.640	1.500	55.638	317.814	373.452	
	(b) For Lift 1.5m to 3.0m	1			14.050	2.240	1.500	47.208	234.264	281.472	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murum etc complete.										
	(c) For Lift 3.0m to 4.5m	1			14.050	1.840	1.500	38.778	66.378	105.156	
	(d) For Lift 4.5m to 6.0m	1			14.050	1.440	0.600	12.139	82.789	94.929	
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			14.050	1.440	0.200	4.046	22.003	26.050	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading	1						10.586	57.562	68.147	
	Item No 17 (d) :- Lowering & Laying RCC NP3 class pipe of 600mm Dia	1			15.000			15.000	80.000	95.000	
	Item No 30 :- Refilling the excavated trenches ...										
	Total Excavation= A=							153.763			
	Deduction										
	pipe area	1.00		0.785	14.050	0.770	0.770	6.54			
	soling							0.00			
	PCC							0.00			
	Murum bedding							4.05			
	Total = B							10.59			
	Net Qty = A - B							143.18	928.583	1071.76	
	ABM 10 to ABM 11										
	CH370.50	567.735	562.885	562.685			5.050	4.625			
	CH414.30	566.900	562.900	562.700			4.200				
	Item No. 1 :- Excavation for foundation/pipe trenches in all types of soil & soft murum etc										
	(a) For Lift 0 to 1.5m	1			40.600	2.640	1.200	128.621	373.452	502.073	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murum etc complete.										
	(a) For Lift 0 to 1.5m	1			40.600	2.640	0.300	32.155	0.000	32.155	
	(b) For Lift 1.5m to 3.0m	1			40.600	2.240	0.500	45.472	37.710	83.182	



22/09/2017



AURANGABAD MUNICIPAL CORPORATION.

(From No.52)

Measurement Book

Name of work:- Development of Underground Sewerage Collection system for Zone I to VI and Zone Sahim Ah, 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 Infrastructures Pvt. Ltd. & CECON (India) Pvt. Ltd.

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Aurangpura 600mm RCC - Aurangpura-600mm

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. 4:- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(b) For Lift 1.5m to 3.0m	1			40.600	2.240	1.000	90.944		0.000	90.944
	(c) For Lift 3.0m to 4.5m	1			40.600	1.840	0.400	29.882		0.000	29.882
	Item No. 5:- Excavation for foundation/pipe trenches in Hard rock etc complete.										
	(c) For Lift 3.0m to 4.5m	1			40.600	1.840	1.100	82.174		0.000	82.174
	(d) For Lift 4.5m to 6.0m	1			40.600	1.440	0.125	7.308		15.688	22.996
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			40.600	1.440	0.200	11.693		26.050	37.742
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading	1						30.589		68.147	98.737
	Item No 17 (d) :- Lowering & Laying RCC NP3 class pipe of 600mm Dia	1			42.500			42.500		95.000	137.500
	Item No 30 :- Refilling the excavated trenches ...										
	Total Excavation= A=							416.556			
	Deduction										
	pipe area	1.00		0.785	40.600	0.770	0.770	18.90			
	soling							0.00			
	PCC							0.00			
	Murum bedding							11.69			
	Total = B							30.59			
								Net Qty = A - B			
								385.97		1071.760	1457.73
	ABM 11 to ABM 12										
	CH414.30	566.900	562.900	562.700			4.200	3.900			
	CH443.10	566.350	562.950	562.750			3.600				
	Item No. 1 :- Excavation for foundation/pipe trenches in all types of soil & soft murum etc										
	(a) For Lift 0 to 1.5m	1			25.600	2.240	1.200	68.813		502.073	570.886
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murum etc complete.										
	(a) For Lift 0 to 1.5m	1			25.600	2.240	0.300	17.203		32.155	49.358
	(b) For Lift 1.5m to 3.0m	1			25.600	1.840	0.600	28.262		83.182	111.445
	Item No. 4:- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(b) For Lift 1.5m to 3.0m	1			25.600	1.840	0.900	42.394		90.944	133.338
	Item No. 5 :- Excavation for foundation/pipe trenches in Hard rock etc complete.										
	(c) For Lift 3.0m to 4.5m	1			25.600	1.440	0.900	33.178		82.174	115.352
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			25.600	1.440	0.200	7.373		37.742	45.115
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading	1						19.288		98.737	118.024
	Item No 17 (d) :- Lowering & Laying RCC NP3 class pipe of 600mm Dia	1			27.500			27.500		137.500	165.000



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Book No. :- **184**
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Name of Contractor: A.L. Chitani Infrastructure Dev. Pvt. Ltd. & G.E.C.P.I. (Joint Venture)

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Aurangpura 600mm RCC - Aurangpura-600mm

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Quantity	
		GL	IL	EX.L							
	(a) For Lift 0 to 1.5m	1			29.050	1.840	0.350	18.708		74.536	93.244
	(b) For Lift 1.5m to 3.0m	1			29.050	1.440	0.400	16.733		157.978	174.711
	Item No. 4:- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			29.050	1.840	0.150	8.018		0.000	8.018
	(b) For Lift 1.5m to 3.0m	1			29.050	1.440	0.600	25.099		164.360	189.459
	Item No. 5:- Excavation for foundation/pipe trenches in Hard rock etc complete.										
	(b) For Lift 1.5m to 3.0m	1			29.050	1.440	0.480	20.079		0.000	20.079
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			29.050	1.440	0.200	8.366		53.208	61.574
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading	1						21.887		139.196	161.083
	Item No 17 (d):- Lowering & Laying RCC NP3 class pipe of 600mm Dia	1			30.000			30.000		195.000	225.000
	Item No 30 :- Refilling the excavated trenches ...										
	Total Excavation= A=							142.089			
	Deduction										
	pipe area	1.00		0.785	29.050	0.770	0.770	13.52			
	soling							0.00			
	PCC							0.00			
	Murum bedding							8.37			
	Total = B							21.89			
								Net Qty = A - B		1793.252	1913.45
	CH505.05	565.730	563.070	562.870			2.860	2.530			
	CH533.20	565.130	563.130	562.930			2.200				
	Item No. 1 :- Excavation for foundation/pipe trenches in all types of soil & soft murum etc										
	(a) For Lift 0 to 1.5m	1			26.550	1.840	1.000	48.852		693.576	742.428
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murum etc complete.										
	(a) For Lift 0 to 1.5m	1			26.550	1.840	0.350	17.098		93.244	110.342
	(b) For Lift 1.5m to 3.0m	1			26.550	1.440	0.400	15.293		174.711	190.004
	Item No. 4:- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			26.550	1.840	0.150	7.328		8.018	15.346
	(b) For Lift 1.5m to 3.0m	1			26.550	1.440	0.600	22.939		189.459	212.398
	Item No. 5:- Excavation for foundation/pipe trenches in Hard rock etc complete.										
	(b) For Lift 1.5m to 3.0m	1			26.550	1.440	0.030	1.147		20.079	21.226
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			26.550	1.440	0.200	7.646		61.574	69.221
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading	1						20.003		161.083	181.086



22/07/2023



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. :-

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

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Aurangpura 600mm RCC - Aurangpura-600mm

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 17 (d) :- Lowering & Laying RCC NP3 class pipe of 600mm Dia	1			27.500			27.500		225.000	252.500
	Item No 30 :- Refilling the excavated trenches ...										
	Total Excavation= A=							112.657			
	Deduction										
	pipe area	1.00		0.785	26.550	0.770	0.770	12.36			
	soling							0.00			
	PCC							0.00			
	Murum bedding							7.65			
	Total = B							20.00			
					Net Qty = A - B			92.65		1913.455	2006.11
	ABM 14 to ABM 15										
	CH533.20	565.130	563.130	562.930			2.200	2.200			
	CH561.85	565.200	563.200	563.000			2.200	2.200			
	Item No. 1 :- Excavation for foundation/pipe trenches in all types of soil & soft murum etc										
	(a) For Lift 0 to 1.5m	1			25.720	1.840	1.100	52.057		742.428	794.485
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murum etc complete.										
	(a) For Lift 0 to 1.5m	1			25.720	1.840	0.250	11.831		110.342	122.174
	(b) For Lift 1.5m to 3.0m	1			25.720	1.440	0.400	14.815		190.004	204.819
	Item No. 4:- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			25.720	1.840	0.150	7.099		15.346	22.444
	(b) For Lift 1.5m to 3.0m	1			25.720	1.440	0.300	11.111		212.398	223.509
	Item No. 5 :- Excavation for foundation/pipe trenches in Hard rock etc complete.										
	(b) For Lift 1.5m to 3.0m	1			25.720	1.440	0.000	0.000		21.226	21.226
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			25.720	1.440	0.200	7.407		69.221	76.628
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading	1						19.378		181.086	200.464
	Item No 17 (d) :- Lowering & Laying RCC NP3 class pipe of 600mm Dia	1			27.500			27.500		252.500	280.000
	Item No 30 :- Refilling the excavated trenches ...										
	Total Excavation= A=							96.913			
	Deduction										
	pipe area	1.00		0.785	25.720	0.770	0.770	11.97			
	soling							0.00			
	PCC							0.00			
	Murum bedding							7.41			
	Total = B							19.38			
					Net Qty = A - B			77.53		2006.108	2083.64
	ABM 15 to ABM 16										
	CH561.85	565.200	563.200	563.000			2.200	2.150			
	CH587.85	565.150	563.250	563.050			2.100	2.100			
	Item No. 1 :- Excavation for foundation/pipe trenches in all types of soil & soft murum etc										



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AURANGABAD MUNICIPAL CORPORATION.

(From No.52)

Measurement Book

Book No. : 186

Page No. :-

Name of work:- Development of Underground Sewerage Collection system for Zone I to VI and Zone Salm 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 Infrastructures Pvt. Ltd. & CIDCO (Airport)

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Aurangpura 600mm RCC - Aurangpura-600mm

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Quantity	
		GL	IL	EX.L							
	(a) For Lift 0 to 1.5m	1			23.340	1.840	1.500	64.418		858.904	
	(b) For Lift 1.5m to 3.0m	1			23.340	1.440	0.300	10.083		291.554	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(b) For Lift 1.5m to 3.0m	1			23.340	1.440	0.350	11.763		216.582	
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			23.340	1.440	0.200	6.722		83.350	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading	1						17.585		218.049	
	Item No 17 (d) :- Lowering & Laying RCC NP3 class pipe of 600mm Dia	1			25.000			25.000		305.000	
	Item No 30 :- Refilling the excavated trenches ...										
	Total Excavation= A=							86.265			
	Deduction										
	pipe area	1.00		0.785	23.340	0.770	0.770	10.86			
	soling							0.00			
	PCC							0.00			
	Murrum bedding							6.72			
	Total = B							17.58			
								Net Qty = A - B			
								68.68	2083.643	2152.32	
	ABM 16 to ABM 17										
	CH587.85	565.150	563.250	563.050			2.100	2.050			
	CH613.85	565.100	563.300	563.100			2.000				
	Item No. 1 :- Excavation for foundation/pipe trenches in all types of soil & soft murrum etc										
	(a) For Lift 0 to 1.5m	1			23.340	1.840	1.500	64.418		923.322	
	(b) For Lift 1.5m to 3.0m	1			23.340	1.440	0.200	6.722		298.276	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(b) For Lift 1.5m to 3.0m	1			23.340	1.440	0.350	11.763		228.345	
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			23.340	1.440	0.200	6.722		90.072	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading	1						17.585		235.634	
	Item No 17 (d) :- Lowering & Laying RCC NP3 class pipe of 600mm Dia	1			25.000			25.000		330.000	
	Item No 30 :- Refilling the excavated trenches ...										
	Total Excavation= A=							82.904			
	Deduction										
	pipe area	1.00		0.785	23.340	0.770	0.770	10.86			
	soling							0.00			
	PCC							0.00			
	Murrum bedding							6.72			
	Total = B							17.58			
								Net Qty = A - B			
								65.32	2152.323	2217.64	
	ABM 17 to ABM 18										
	CH613.85	565.100	563.860	563.660			1.440				
	CH639.85	565.290	563.890	563.690			1.600	1.520			



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AURANGABAD MUNICIPAL CORPORATION.

(From No.52)

Measurement Book

Book No. 188

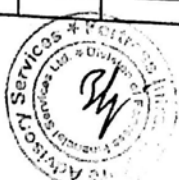
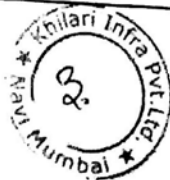
Page No. :-

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

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Aurangpura 600mm RCC - Aurangpura-600mm

Date	Particulars of work	DETAILS						Content of arrears	Last measurement Page	Last measurement Quantity	Total Upto Date Quantity
		No			L	B	D				
		GL	IL	EX.L							
	ABM 19 to ABM 20										
	CH680.85	565.520	563.920	563.720			1.800				
	CH706.35	565.840	563.940	563.740			2.100	1.950			
	Item No. 1 :- Excavation for foundation/pipe trenches in all types of soil & soft murum etc										
	(a) For Lift 0 to 1.5m	1			24.170	1.840	1.500	66.709	1070.861	1137.570	
	(b) For Lift 1.5m to 3.0m	1			24.170	1.440	0.200	6.961	298.276	305.237	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(b) For Lift 1.5m to 3.0m	1			24.170	1.440	0.250	8.701	240.060	248.761	
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			24.170	1.440	0.200	6.961	107.836	114.797	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading	1						18.210	282.105	300.316	
	Item No 17 (d) :- Lowering & Laying RCC NP3 class pipe of 600mm Dia	1			25.000			25.000	395.000	420.000	
	Item No 30 :- Refilling the excavated trenches ...										
	Total Excavation= A=							82.371			
	Deduction										
	pipe area	1.00			0.785	24.170	0.770	0.770	11.25		
	soling							0.00			
	PCC							0.00			
	Murum bedding							6.96			
	Total = B							18.21			
	Net Qty = A - B							64.16	2353.121	2417.28	
	CH706.35	565.840	563.940	563.740			2.100				
	CH731.85	566.110	563.960	563.760			2.350	2.225			
	Item No. 1 :- Excavation for foundation/pipe trenches in all types of soil & soft murum etc										
	(a) For Lift 0 to 1.5m	1			24.170	1.840	1.500	66.709	1137.570	1204.279	
	(b) For Lift 1.5m to 3.0m	1			24.170	1.440	0.500	17.402	305.237	322.640	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(b) For Lift 1.5m to 3.0m	1			24.170	1.440	0.225	7.831	248.761	256.592	
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			24.170	1.440	0.200	6.961	114.797	121.758	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading	1						18.210	300.316	318.526	
	Item No 17 (d) :- Lowering & Laying RCC NP3 class pipe of 600mm Dia	1			25.000			25.000	420.000	445.000	
	Item No 30 :- Refilling the excavated trenches ...										
	Total Excavation= A=							91.943			
	Deduction										
	pipe area	1.00			0.785	24.170	0.770	0.770	11.25		
	soling							0.00			
	PCC							0.00			



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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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Aurangpura 600mm RCC - Aurangpura-600mm

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Quantity	
		GL	IL	EX.L							
	Murum bedding							6.96			
	Total = B							18.21			
	ABM 20 to ABM 21	Net Qty = A - B						73.73	2417.282	2491.01	
	CH731.85	566.110	563.960	563.760			2.350				
	CH757.43	566.530	563.990	563.790			2.740	2.545			
	Item No. 1 :- Excavation for foundation/pipe trenches in all types of soil & soft murum etc										
	(a) For Lift 0 to 1.5m	1			24.110	1.840	1.500	66.544	1204.279	1270.823	
	(b) For Lift 1.5m to 3.0m	1			24.110	1.440	0.500	17.359	322.640	339.999	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murum etc complete.										
	(b) For Lift 1.5m to 3.0m	1			24.110	1.440	0.545	18.922	256.592	275.513	
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			24.110	1.440	0.200	6.944	121.758	128.701	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading	1						18.165	318.526	336.691	
	Item No 17 (d) :- Lowering & Laying RCC NP3 class pipe of 600mm Dia	1			25.000			25.000	445.000	470.000	
	Item No 30 :- Refilling the excavated trenches ...										
	Total Excavation= A=							102.824			
	Deduction										
	pipe area	1.00		0.785	24.110	0.770	0.770	11.22			
	soling							0.00			
	PCC							0.00			
	Murum bedding							6.94			
	Total = B							18.17			
	Net Qty = A - B							84.66	2491.014	2575.67	
	CH757.43	566.530	563.990	563.790			2.740				
	CH780.50	566.910	564.010	563.810			3.100	2.920			
	Item No. 1 :- Excavation for foundation/pipe trenches in all types of soil & soft murum etc										
	(a) For Lift 0 to 1.5m	1			21.610	1.840	1.500	59.644	1270.823	1330.466	
	(b) For Lift 1.5m to 3.0m	1			21.610	1.440	1.100	34.230	339.999	374.229	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murum etc complete.										
	(b) For Lift 1.5m to 3.0m	1			21.610	1.440	0.320	9.958	275.513	285.471	
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			21.610	1.440	0.200	6.224	128.701	134.925	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading	1						16.282	336.691	352.973	
	Item No 17 (d) :- Lowering & Laying RCC NP3 class pipe of 600mm Dia	1			22.500			22.500	470.000	492.500	
	Item No 30 :- Refilling the excavated trenches ...										
	Total Excavation= A=							103.832			
	Deduction										



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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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Aurangpura 600mm RCC 1.5m MH Excavation

12th RA BILL MEASUREMENTS

BRANCH SEWER AT "AURANGPURA (Bhaji Mandi)"

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		GL	No IL	EX.L	L	B	D		Page	Quantity	
	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										
	ABM 9										
	CH329.20	568.210	562.735	562.485			5.725				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	10.240	1.500	12.058	0.000	12.058	
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	1.500	12.058	0.000	12.058	
	(c) For Lift 3.0m to 4.5m	1			0.785	10.240	1.500	12.058	0.000	12.058	
	(d) For Lift 4.5m to 6.0m	1			0.785	10.240	0.790	6.350	0.000	6.350	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(d) For Lift 4.5m to 6.0m	1			0.785	10.240	0.435	3.497	0.000	3.497	
	Item No. : 11 Transportation of earth Transportation charges							19.210	0.000	19.210	
	Item No. 30 :- Refilling the excavated trenches ...							46.020			
	Total Excavation=										
	Deduction										
	Brick work	1		0.785	2.280	2.280	3.475	14.181			
		1		0.785	1.540	1.540	2.000	3.723			
	PCC	1		0.785	2.580	2.580	0.250	1.306			
	Solling	1		0.785	2.580	2.580	0.000	0.000			
								19.210			
	Net Qty = A - B							26.810	0.000	26.810	
	ABM 10										
	CH370.50	567.735	562.885	562.635			5.100				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	10.240	1.500	12.058	12.058	24.115	
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	1.500	12.058	12.058	24.115	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(c) For Lift 3.0m to 4.5m	1			0.785	10.240	1.500	12.058	0.000	12.058	
	(d) For Lift 4.5m to 6.0m	1			0.785	10.240	0.600	4.823	3.497	8.320	
	Item No. : 11 Transportation of earth Transportation charges							16.660	19.210	35.870	
	Item No. 30 :- Refilling the excavated trenches ...							40.996			
	Total Excavation=										
	Deduction										
	Brick work	1		0.785	2.280	2.280	2.850	11.630			
		1		0.785	1.540	1.540	2.000	3.723			
	PCC	1		0.785	2.580	2.580	0.250	1.306			
	Solling	1		0.785	2.580	2.580	0.000	0.000			
								16.660			
	Net Qty = A - B							24.336	26.810	51.146	
	ABM 11										
	CH414.30	566.900	562.900	562.650			4.250				



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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 Salm 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 G.R.P.I pipe line from Golwadi SPS to Nakshtrawadi (Kanchanwadi) STP and Ward No.98 to STP for Aurangabad City.

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Aurangpura 600mm RCC 1.5m MH Excavation

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Up to Date Quantity
		No			L	B	D		Page	Quantity	
		GL	IL	EX.L							
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	10.240	1.200	9.646		24.115	33.761
	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	0.300	2.412		0.000	2.412
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.500	4.019		0.000	4.019
	Item No. 4 :- Excavation for foundation/pipe trenches in soft										
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	1.000	8.038		0.000	8.038
	(c) For Lift 3.0m to 4.5m	1			0.785	10.240	0.400	3.215		0.000	3.215
	ITEM No. 5 :- Excavation for foundation / pipe trenches in laterite rock masses etc complete										
	(c) For Lift 3.0m to 4.5m	1			0.785	10.240	0.850	6.833		0.000	6.833
	Item No. : 11 Transportation of earth Transportation charges							13.191		35.870	49.061
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							34.163			
	Deduction										
	Brick work	1		0.785	2.280	2.280	2.000	8.161			
	PCC	1		0.785	1.540	1.540	2.000	3.723			
	Soling	1		0.785	2.580	2.580	0.250	1.306			
								0.000			
								13.191			
								Net Qty = A - B		51.146	72.118
	ABM 12							20.972			
	CH443.10	566.350	562.950	562.700			3.650				
	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		33.761	43.407
	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	0.300	2.412		2.412	4.823
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.600	4.823		4.019	8.842
	Item No. 4 :- Excavation for foundation/pipe trenches in soft										
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.900	7.235		8.038	15.273
	ITEM No. 5 :- Excavation for foundation / pipe trenches in laterite rock masses etc complete										
	(c) For Lift 3.0m to 4.5m	1			0.785	10.240	0.650	5.225		6.833	12.058
	Item No. : 11 Transportation of earth Transportation charges							10.743		49.061	59.804
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							29.340			
	Deduction										
	Brick work	1		0.785	2.280	2.280	1.400	5.713			
	PCC	1		0.785	1.540	1.540	2.000	3.723			
	Soling	1		0.785	2.580	2.580	0.250	1.306			
								0.000			
								10.743			
	ABM 13							18.597		72.117	90.715



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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 Solwadi SPS to Nakshtrawadi (Kanchanwadi) STP and Ward No.98 to STP for Aurangabad City.

Book No. :-

Page No. :-

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

3 of 4

Aurangpura 600mm RCC 1.5m MH Excavation

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		GL	IL	EXL	L	B	D		Page	Quantity	
	CH474.40	565.910	563.010	562.760			3.150				
	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	1.100	8.842	43.407	52.250	
	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	0.400	3.215	4.823	8.038	
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.900	7.235	8.842	16.077	
	Item No. 4 :- Excavation for foundation/pipe trenches in soft										
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.600	4.823	15.273	20.096	
	ITEM No. 5 :- Excavation for foundation / pipe trenches in laterite rock masses etc complete										
	(c) For Lift 3.0m to 4.5m	1			0.785	10.240	0.150	1.206	12.058	13.263	
	Item No. : 11 Transportation of earth Transportation charges							8.702	59.804	68.507	
	Item No. 30 :- Refilling the excavated trenches ... *										
	Total Excavation=							25.321			
	Deduction										
	Brick work	1		0.785	2.280	2.280	0.900	3.673			
		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			
								8.702			
	Net Qty = A - B							16.619	90.715	107.333	
	ABM 14										
	CH533.20	565.130	563.130	562.880			2.250				
	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	1.000	8.038	52.250	60.288	
	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	0.350	2.813	8.038	10.852	
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.400	3.215	16.077	19.293	
	Item No. 4 :- Excavation for foundation/pipe trenches in soft										
	(a) For Lift 0 to 1.5m	1			0.785	10.240	0.150	1.206	0.000	1.206	
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.350	2.813	20.096	22.909	
	Item No. : 11 Transportation of earth Transportation charges							5.030	68.507	73.536	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							18.086			
	Deduction										
	Brick work	1		0.785	2.280	2.280	0.000	0.000			
		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			
								5.030			
	Net Qty = A - B							13.057	107.333	120.390	
	ABM 21										
	CH780.50	565.910	564.010	563.760			1.150				



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AURANGABAD MUNICIPAL CORPORATION.

(From No.52)

Measurement Book

Name of work:- Execution of Underground Sewerage Collection system for Zone I to VI (Kanchanwadi, Sakin, Ak, construction, Freching, Testing and Commissioning of Sewage Treatment Plant) and execution of RCC technology at Nakhinawadi (Kanchanwadi), Banewadi, Siddharth Garden, Park Road, CHNCC (Airport), Construction, Freching, Testing and Commissioning of Sewerage Collection system of Banewadi, Siddharth Garden, Padegaon, Golwadi, Zalta, Ward No.98 to CHNCC (Airport), Driveway, lowering, laying, joining and testing rising main of sewerage collection system at SPS to Nakhinawadi (Kanchanwadi) SPP and Ward No.98 to SPS to CHNCC (Airport).

Book No. :- 194
Page No. :-

Name of Agency:- M/S Khilar Infrastructure Pvt.Ltd. & GICPL (Joint Venture)

4 of 4

Aurangera 600mm RCC 1.5m MN Excavation

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. 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	60.288	72.346	
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	1.100	8.842	24.115	32.957	
	Item No. 2 - Excavation for foundation / pipe trenches in Hard murrum etc complete.										
	(a) For Lift 1.5m to 3.0m	1			0.785	10.240	0.400	3.215	19.292	22.509	
	(c) For Lift 3.0m to 4.5m	1			0.785	10.240	0.150	1.206	12.058	13.263	
	Item No. : 11 Transportation of earth Transportation charges							8.702	73.536	82.239	
	Item No. 30 - Refilling the excavated trenches ...										
	Total Excavation=							25.321			
	Deduction										
	Brick work	1		0.785	2.280	2.280	0.900	3.673			
		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			
								8.702			
								16.619	120.390	137.009	
	Net Qty = A - B										
	ABM 22										
	CHNCC 30	566.830	564.030	563.780			3.050				
	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	10.240	1.500	12.058	72.346	84.403	
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.800	6.431	32.957	39.388	
	(c) For Lift 3.0m to 4.5m	1			0.785	10.240	0.000	0.000	12.058	12.058	
	(d) For Lift 4.5m to 6.0m	1			0.785	10.240	0.000	0.000	6.350	6.350	
	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	0.000	0.000	10.852	10.852	
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.500	4.019	22.508	26.527	
	(c) For Lift 3.0m to 4.5m	1			0.785	10.240	0.000	0.000	13.263	13.263	
	(d) For Lift 4.5m to 6.0m	1			0.785	10.240	0.000	0.000	8.320	8.320	
	Item No. 4 - Excavation for foundation / pipe trenches in soft										
	(a) For Lift 0 to 1.5m	1			0.785	10.240	0.000	0.000	1.206	1.206	
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.200	1.608	22.909	24.517	
	(c) For Lift 3.0m to 4.5m	1			0.785	10.240	0.050	0.402	3.215	3.617	
	ITEM No. 5 - Excavation for foundation / pipe trenches in laterite rock masses etc complete										
	(c) For Lift 3.0m to 4.5m	1			0.785	10.240	0.000	0.000	13.263	13.263	
	Item No. : 11 Transportation of earth Transportation charges							8.294	82.239	90.533	
	Item No. 30 - Refilling the excavated trenches ...										
	Total Excavation=							24.517			
	Deduction										
	Brick work	1		0.785	2.280	2.280	0.800	3.265			
		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			
								8.294			
	Net Qty = A - B							16.223	137.009	153.232	



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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. :- **195**

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

1 of 3

Aurangpura 600mm RCC 1.2 MH Exc.

12th RA BILL MEASUREMENTS OF CHAMBERS BRANCH SEWER AT "AURANGPURA (Bhaji Mandi)"

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Quantity	
		GL	IL	EX.L							
	BRANCH SEWER AT "AURANGPURA (Bhaji Mandi)"										
	Excavation of Chamber - For 1.20 dia chamber (upto 2.0m depth)- 1.20*0.50*0.5+0.5=2.66m										
	Bredth for chember upto 2m=2.66*2.66=7.075m										
	ABM 15										
	CH561.85	565.200	563.200	562.950			2.250				
	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	1.100	6.11		84.40	90.51
	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	0.250	1.39		10.85	12.24
	(b) For Lift 1.5m to 3.0m	1			0.785	7.075	0.400	2.22		26.53	28.75
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	7.075	0.150	0.83		1.21	2.04
	(b) For Lift 1.5m to 3.0m	1			0.785	7.075	0.350	1.94		24.52	26.46
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							3.448		90.53	93.98
	Item No. 30 :- Refilling the excavated trenches ...							12.496			
	Total Excavation(A)=										
	Deduction							2.69			
	Brick work	1			0.785	1.310	1.310	2.000		0.00	
	Brick work				0.785	1.960	1.960	0.250		0.75	
	PCC	1						0.00			
	Murrum bedding							3.45			
	Total (B)							9.05		153.23	162.28
	Net Qty = A - B										
	ABM 16										
	CH587.85	565.150	563.250	563.000			2.150				
	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		90.51	98.84
	(b) For Lift 1.5m to 3.0m	1			0.785	7.075	0.300	1.67		39.39	41.05
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(b) For Lift 1.5m to 3.0m	1			0.785	7.075	0.350	1.94		28.75	30.69
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							3.313		93.98	97.29
	Item No. 30 :- Refilling the excavated trenches ...							11.941			
	Total Excavation(A)=										
	Deduction							2.56			
	Brick work	1			0.785	1.310	1.310	1.900		0.00	
	Brick work										



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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, CHDCO (Airport), Construction, Erection, Testing and Commission of Sewage pumping stations at Banewadi, Siddharth Garden, Padegaon, Golwadi, Zalta, Ward No.98 and CHDCO (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. :- 196
Page No. :-

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

2 of 3

Aurangpura 600mm RCC 1.2 MH Exc.

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Quantity	
		GL	IL	EX.L							
	PCC	1		0.785	1.960	1.960	0.250	0.75			
	Murram bedding							0.00			
	Total (B)							3.31			
		NetQty = A - B								162.28	170.91
	ABM 17										
	CH613.85	565.100	563.300	563.050			2.050				
	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	98.84	107.17	
	(b) For Lift 1.5m to 3.0m	1			0.785	7.075	0.200	1.11	41.05	42.17	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murram etc complete.										
	(b) For Lift 1.5m to 3.0m	1			0.785	7.075	0.350	1.94	30.69	32.64	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							3.179	97.29	100.47	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation(A)=							11.385			
	Deduction										
	Brick work	1		0.785	1.310	1.310	1.800	2.42			
	Brick work							0.00			
	PCC	1		0.785	1.960	1.960	0.250	0.75			
	Murram bedding							0.00			
	Total (B)							3.18			
		NetQty = A - B								170.91	179.11
	ABM 18										
	CH639.85	565.290	563.890	563.640			1.650				
	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	1.300	7.22	107.17	114.39	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murram etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	7.075	0.200	1.11	12.24	13.35	
	(b) For Lift 1.5m to 3.0m	1			0.785	7.075	0.150	0.83	32.64	33.47	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							2.640	100.47	103.11	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation(A)=							9.164			
	Deduction										
	Brick work	1		0.785	1.310	1.310	1.400	1.89			
	Brick work							0.00			
	PCC	1		0.785	1.960	1.960	0.250	0.75			
	Murram bedding							0.00			
	Total (B)							2.64			
		NetQty = A - B								179.11	185.64
	ABM 19										
	CH680.85	565.520	563.920	563.670			1.850				
	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	1.300	7.22	114.39	121.61	



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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 Ah. Constructing, Erecting, Testing and Commissioning of Sewage Treatment Plant based on modern technology at Nakshrawadi (Kanchanwadi), Banewadi, Siddharth Garden, Zalta, Padegaon, CIDCO (Airport), Construction, Erection, Testing and Commission of Sewage pumping stations at Banewadi, Siddharth Garden, Padegaon, Golwadi, Zalta, Ward No.98 and CIDCO (Airport), Providing, lowering, laying jointing and testing rising main GRP DI pipe line from Golwadi SPS to Nakshrawadi (Kanchanwadi) STP and Ward No.98 to STP for Aurangabad City.

Book No. :-

Page No. :- **198**

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

1 of 1

Aurangpura 600mm RCC MANHOLE

14th R A BILL MEASURMENTS

BRANCH SEWER AT "AURANGPURA (Bhaji Mandi)"

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	M/H No	MTL	IL	Depth	Depth Difference than 5 m	Total Difference	Rebate/Add for Excess height (per 50 cm)
1	CH 329.20	ABM 9	568.210	562.735	5.475	0.475	-11.675	-23.350
2	CH 370.50	ABM 10	567.735	562.885	4.850	-0.150		
3	CH 414.30	ABM 11	566.900	562.900	4.000	-1.000		
4	CH 443.10	ABM 12	566.350	562.950	3.400	-1.600		
5	CH 474.40	ABM 13	565.910	563.010	2.900	-2.100		
6	CH 533.20	ABM 14	565.130	563.130	2.000	-3.000		
7	CH 780.50	ABM 21	566.910	564.010	2.900	-2.100		
8	CH 809.30	ABM 22	566.830	564.030	2.800	-2.200		
Total								-23.350

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 561.85	ABM 15	565.200	563.200	2.000	0.000	-1.150	-2.300
2	CH 587.85	ABM 16	565.150	563.250	1.900	-0.100		
3	CH 613.85	ABM 17	565.100	563.300	1.800	-0.200		
4	CH 639.85	ABM 18	565.290	563.890	1.400	-0.600		
5	CH 680.85	ABM 19	565.520	563.920	1.600	-0.400		
6	CH 731.85	ABM 20	566.110	563.960	2.150	0.150		
Total								-2.300



S. S. S. S.



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. :-

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Aurangabad CIDCO E.C.C. Quantity Book Abstract

12th R.A BILL MEASUREMENTS

Branch Sewer - "AURANGAPURA (Bhaji Mandli)"

SR NO	Description	ITEM 1			ITEM 2			ITEM 4			ITEM 5			ITEM 7	ITEM 11	ITEM 17 600mm upto 2m Full Rate	ITEM 21 upto 2m Rebate Full Rate	ITEM 21.1 Rebate m	ITEM 23.1 Rebate	ITEM 30	EBIL 9 g			
		0-1.5	1.5-3.0	3.0-4.5	4.5-6	0-1.5	1.5-3.0	3.0-4.5	4.5-6	0-1.5	1.5-3.0	3.0-4.5	4.5-6									6-7.5		
1	For Pipe	1,401,172	423,720	158,756	49,333	144,872	303,803	105,156	94,829	22,444	230,882	31,725	9,368	21,226	129,514	22,898	9,382	142,298	372,260	109,673	6,000	2,771.73	202,642	3,665
2	For Manhole	123,945	44,242	12,558	6,350	14,452	27,634	13,263	8,320	2,039	26,461	3,617	5	13,263	13,263	13,263	13,263	13,263	109,673	109,673	6,000	2,771.73	202,642	3,665
	Total	1,525,117	467,962	171,314	55,683	159,324	331,437	118,479	103,149	24,483	257,343	35,342	9,373	21,231	142,778	22,996	9,387	142,298	481,933	109,673	6,000	2,974.41	2,974.41	3,665

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