



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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Shivaji Nagar-03 - Pipe Measurement

14th RA BILL MEASUREMENTS SW PIPE SHIVAJI NAGAR-03

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Quantity	
		GL	IL	EX.L							
	Part-I										
	DWC PIPE - 200 mm Dia										
	Width of Trench - For Lift 0 to 1.50m- 0.200+0.5=0.700m										
	For Lift 1.5 to 3.00m- 0.200+0.5+0.4=1.100m										
	For Lift 3.0 to 4.5m- 0.200+0.5+0.4+0.4=1.500m										
	RN 1 to RN 2										
	CH0.00	586.820	585.920	585.820			1.000	1.150			
	CH10.50	587.270	586.070	585.970			1.300				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			8.500	0.700	1.150	6.843	0.000	6.843	
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			9.100	0.700	0.100	0.637	0.000	0.637	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							0.923	0.000	0.923	
	Item 12 (b) :-Lowering & Laying of Polyethylene DWC pipe of 200mm Dia	1			9.600			9.600	0.000	9.600	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							6.843			
	Deduction										
	pipe area	1		0.785	9.100	0.200	0.200	0.286			
	soling							0.000			
	PCC							0.000			
	Murrum bedding							0.637			
								0.923			
								Net Qty = A - B			
								5.920	0.000	5.920	
	RN 2 to RN 3										
	CH10.50	587.270	586.070	585.970			1.300	0.975			
	CH21.00	586.720	586.170	586.070			0.650				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			8.500	0.700	0.975	5.801	6.843	12.644	
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			9.100	0.700	0.100	0.637	0.637	1.274	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							0.923	0.923	1.845	
	Item 12 (b) :-Lowering & Laying of Polyethylene DWC pipe of 200mm Dia	1			9.600			9.600	9.600	19.200	



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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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Shivaji Nagar-03 - Pipe Measurement

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		GL	No IL	EX.L	L	B	D		Page	Quantity	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							5.801			
	Deduction										
	pipe area	1		0.785	9.100	0.200	0.200	0.286			
	soling							0.000			
	PCC							0.000			
	Murum bedding							0.637			
								0.923			
	Net Qty = A - B							4.879	5.920	10.798	
	Part-II										
	DWC PIPE - 250 mm Dia										
	Width of Trench -										
	For Lift 0 to 1.50m- 0.250+0.5=0.750m										
	For Lift 1.5 to 3.00m- 0.250+0.5+0.4=1.150m										
	For Lift 3.0 to 4.5m- 0.250+0.5+0.4+0.4=1.550m										
	Old MH to SN 1										
	CH0.00	585.203	583.938	583.838			1.365				
	CH24.50	585.123	583.958	583.858			1.265	1.315			
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			22.900	0.750	0.300	5.153	12.644	17.794	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			22.900	0.750	0.815	13.998	0.000	13.998	
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			22.900	0.750	0.200	3.435	0.000	3.435	
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			23.200	0.750	0.100	1.740	1.274	3.014	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							2.878	1.845	4.724	
	Item 12 (c) :-Lowering & Laying of Polyethylene DWC pipe of 250mm Dia	1			23.700			23.700	0.000	23.700	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							22.585			
	Deduction										
	pipe area	1		0.785	23.200	0.250	0.250	1.138			
	soling							0.000			
	PCC							0.000			
	Murum bedding							1.740			
								2.878			
	Net Qty = A - B							19.707	10.798	30.505	
	SN 1 to SN 2										
	CH24.50	585.123	583.958	583.858			1.265				



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AURANGABAD MUNICIPAL CORPORATION.

(Form No.52)

Measurement Book

Name of work:- Development of Underground Sewerage Collection system for Zone (A to V) and Zone (A to G) - constructing, Erecting, Trenching and Commissioning of Sewerage Treatment Plant based on modern technology at Samsarwadi (Kanchanwadi), Borewadi, Siddharth Garden, Zaini, Patargam, CHCO (Airport), Construction, Erection, Erecting, Testing and Commission of Sewerage pumping stations at Borewadi, Siddharth Garden, Patargam, Galwadi, Zaina, Ward No.10 and CHCO (Airport). Excavating, erecting, laying, joining and testing rising main

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Sheet Page 12 - Pipe Measurement

Date	Particulars of work	DETAILS					Content of arrears	Last measurement		Total Upm Date Quantity
		No	L	B	D	Page		Quantity		
		50	100	150						
	CR24 01	585.168	585.968	585.868			1.300			
	Item No. 1 - Excavation for foundation/pipe trenches in earth soil, soft murrum etc complete									
	(a) For Lift 1 to 1.5m	1			3.600	1.750	1.300	2.591	17.796	19.396
	Item No. 2 - Excavation for foundation/pipe trenches in hard murrum etc complete									
	(a) For Lift 1 to 1.5m	1			3.600	1.750	1.783	5.634	11.958	19.632
	Item No. 4 - Excavation for foundation/pipe trenches in soft soil etc complete									
	(a) For Lift 1 to 1.5m	1			3.600	1.750	1.200	1.441	1.435	4.875
	Item No. 7 - Filling in plinth and floor/ trenches etc complete (loading)	1			11.200	1.750	0.300	0.765	3.014	3.779
	Item No. 11 Transportation of earth Transportation charges including loading & unloading							1.265	4.714	5.989
	Item 12 (a) - Laying & Laying of Polyethylene DMC pipe of 200mm Dia	1			11.700			11.700	23.700	34.400
	Item No. 04 - Filling the excavated trenches									
	Total Excavation							9.234		
	Subtraction									
	pipe etc	1			1.735	11.200	1.250	1.250	0.500	
	soil							1.000		
	fill							1.000		
	Murrum settling							0.765		
								1.265		
								7.969	30.505	38.474
	DN 2 to DN 3									
	CR24 21	585.168	585.968	585.868			1.300			
	CR25 01	585.458	585.998	585.898			1.560	1.430		
	Item No. 1 - Excavation for foundation/pipe trenches in earth soil, soft murrum etc complete									
	(a) For Lift 1 to 1.5m	1			13.300	0.750	0.300	2.993	19.956	22.949
	Item No. 2 - Excavation for foundation/pipe trenches in hard murrum etc complete									
	(a) For Lift 1 to 1.5m	1			13.300	0.750	0.930	9.277	19.632	28.908
	Item No. 4 - Excavation for foundation/pipe trenches in soft soil etc complete									
	(a) For Lift 1 to 1.5m	1			13.300	0.750	0.200	1.995	4.875	6.870
	Item No. 7 - Filling in plinth and floor/ trenches etc complete (loading)	1			13.900	0.750	0.100	1.043	3.779	4.822
	Item No. 11 Transportation of earth Transportation charges including loading & unloading							1.724	5.989	7.714



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AURANGABAD MUNICIPAL CORPORATION.

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Measurement Book

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

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Shivaji Nagar-03 - Pipe Measurement

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 12 (c) :-Lowering & Laying of Polyethylene DWc pipe of 250mm Dia	1			14.400			14.400		34.400	48.800
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							14.264			
	Deduction										
	pipe area	1		0.785	13.900	0.250	0.250	0.682			
	soling							0.000			
	PCC							0.000			
	Murrum bedding							1.043			
								1.724			
	Net Qty = A - B							12.540		38.474	51.013
	SN 3 to SN 4										
	CH51.40	585.458	583.998	583.898			1.560	1.535			
	CH61.20	585.448	584.038	583.938			1.510				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			7.800	0.750	0.300	1.755		22.949	24.704
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			7.800	0.750	1.000	5.850		28.908	34.758
	(b) For Lift 1.5m to 3.0m	1			7.800	0.750	0.035	0.205		0.000	0.205
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			7.800	0.750	0.200	1.170		6.870	8.040
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			8.400	0.750	0.100	0.630		4.822	5.452
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							1.042		7.714	8.756
	Item 12 (c) :-Lowering & Laying of Polyethylene DWc pipe of 250mm Dia	1			8.900			8.900		48.800	57.700
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							8.980			
	Deduction										
	pipe area	1		0.785	8.400	0.250	0.250	0.412			
	soling							0.000			
	PCC							0.000			
	Murrum bedding							0.630			
								1.042			
	Net Qty = A - B							7.938		51.013	58.951
	SN 4 to SN 5										
	CH61.20	585.448	584.038	583.938			1.510	1.510			
	CH71.40	585.468	584.058	583.958			1.510				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										



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Shivaji Nagar-03 - Pipe Measurement

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Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Quantity	
		GL	IL	EX.L							
	(a) For Lift 0 to 1.5m	1			8.200	0.750	0.300	1.845		24.704	26.549
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			8.200	0.750	1.000	6.150		34.758	40.908
	(b) For Lift 1.5m to 3.0m	1			8.200	0.750	0.010	0.062		0.205	0.266
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			8.200	0.750	0.200	1.230		8.040	9.270
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			8.800	0.750	0.100	0.660		5.452	6.112
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							1.092		8.756	9.848
	Item 12 (c) :-Lowering & Laying of Polyethylene DWC pipe of 250mm Dia	1			9.300			9.300		57.700	67.000
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							9.287			
	Deduction										
	pipe area	1		0.785	8.800	0.250	0.250	0.432			
	soling							0.000			
	PCC							0.000			
	Murrum bedding							0.660			
								1.092			
								8.195		58.951	67.146
	Net Qty = A - B										
	SN 5 to SN 6										
	CH71.40	585.468	584.058	583.958			1.510	1.440			
	CH79.20	585.528	584.258	584.158			1.370				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			5.800	0.750	0.300	1.305		26.549	27.854
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			5.800	0.750	0.940	4.089		40.908	44.997
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			5.800	0.750	0.200	0.870		9.270	10.140
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			6.400	0.750	0.100	0.480		6.112	6.592
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							0.794		9.848	10.642
	Item 12 (c) :-Lowering & Laying of Polyethylene DWC pipe of 250mm Dia	1			6.900			6.900		67.000	73.900
	Item No. 30 :- Refilling the excavated trenches ...										



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AURANGABAD MUNICIPAL CORPORATION.

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Shivaji Nagar-03 - Pipe Measurement

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Quantity	
		GL	IL	EX.L							
	Total Excavation=										
	Deduction						6.264				
	pipe area	1									
	soling			0.785	6.400	0.250	0.250	0.314			
	PCC							0.000			
	Murram bedding							0.000			
								0.480			
								0.794			
				Net Qty = A - B				5.470	67.146	72.616	
	SN 6 to SN 7										
	CH79.20	585.528	584.258	584.158			1.370				
	CH86.70	585.528	584.458	584.358			1.170	1.270			
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murram etc complete.										
	(a) For Lift 0 to 1.5m	1			5.500	0.750	0.300	1.238	27.854	29.091	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murram etc complete.										
	(a) For Lift 0 to 1.5m	1			5.500	0.750	0.920	3.795	44.997	48.792	
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			5.500	0.750	0.050	0.206	10.140	10.346	
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			6.100	0.750	0.100	0.458	6.592	7.049	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							0.757	10.642	11.398	
	Item 12 (c) :-Lowering & Laying of Polyethylene DWC pipe of 250mm Dia	1			6.600			6.600	73.900	80.500	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							5.239			
	Deduction										
	pipe area	1						0.299			
	soling			0.785	6.100	0.250	0.250	0.000			
	PCC							0.000			
	Murram bedding							0.458			
								0.757			
				Net Qty = A - B				4.482	72.616	77.098	
	SN 7 to SN 8										
	CH86.70	585.528	584.458	584.358			1.170				
	CH102.30	585.788	584.608	584.508			1.280	1.225			
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murram etc complete.										
	(a) For Lift 0 to 1.5m	1			13.600	0.750	0.300	3.060	29.091	32.151	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murram etc complete.										
	(a) For Lift 0 to 1.5m	1			13.600	0.750	0.875	8.925	48.792	57.717	



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Shivaji Nagar-03 - Pipe Measurement

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.										
	(a) For Lift 0 to 1.5m	1			13.600	0.750	0.050	0.510		10.346	10.856
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			14.200	0.750	0.100	1.065		7.049	8.114
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							1.762		11.398	13.160
	Item 12 (c) :-Lowering & Laying of Polyethylene DWC pipe of 250mm Dia	1			14.700			14.700		80.500	95.200
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							12.495			
	Deduction										
	pipe area	1		0.785	14.200	0.250	0.250	0.697			
	soling							0.000			
	PCC							0.000			
	Murrum bedding							1.065			
								1.762			
								Net Qty = A - B			
								10.733		77.098	87.831
	SN 8 to SN 9										
	CH102.30	585.788	584.608	584.508			1.280				
	CH114.00	585.938	584.658	584.558			1.380	1.330			
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			9.700	0.750	0.300	2.183		32.151	34.334
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			9.700	0.750	0.980	7.130		57.717	64.847
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			9.700	0.750	0.050	0.364		10.856	11.220
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			10.300	0.750	0.100	0.773		8.114	8.887
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							1.278		13.160	14.438
	Item 12 (c) :-Lowering & Laying of Polyethylene DWC pipe of 250mm Dia	1			10.800			10.800		95.200	106.000
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							9.676			
	Deduction										
	pipe area	1		0.785	10.300	0.250	0.250	0.505			
	soling							0.000			
	PCC							0.000			
	Murrum bedding							0.773			



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Measurement Book

Name of work:- Development of Underground Sewerage Collection system for Zone I to VI and Zone Salim Ali. Constructing, Erecting, Testling 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 from Golwadi STP to Nakshtrawadi (Kanchanwadi) STP and Ward No.98 to

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Shivaji Nagar-03 - Pipe Measurement

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Quantity	
		GL	IL	EX.L							
							1.278				
		Net Qty = A - B						8.398	87.831	96.229	
	SN 9 to SN 10										
	CH114.00	585.938	584.658	584.558			1.380				
	CH123.50	586.188	584.818	584.718			1.470	1.425			
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			7.500	0.750	0.300	1.688	34.334	36.021	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			7.500	0.750	1.075	6.047	64.847	70.894	
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			7.500	0.750	0.050	0.281	11.220	11.501	
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			8.100	0.750	0.100	0.608	8.887	9.494	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							1.005	14.438	15.443	
	Item 12 (c) :-Lowering & Laying of Polyethylene DWC pipe of 250mm Dia	1			8.600			8.600	106.000	114.600	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							8.016			
	Deduction										
	pipe area	1		0.785	8.100	0.250	0.250	0.397			
	soling							0.000			
	PCC							0.000			
	Murrum bedding							0.608			
								1.005			
		Net Qty = A - B						7.011	96.229	103.240	
	SN 10 to SN 11										
	CH123.50	586.188	584.818	584.718			1.470				
	CH138.30	586.598	585.298	585.198			1.400	1.435			
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			12.800	0.750	0.300	2.880	36.021	38.901	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			12.800	0.750	1.085	10.416	70.894	81.310	
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			12.800	0.750	0.050	0.480	11.501	11.981	



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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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Shivaji Nagar-03 - Pipe Measurement

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. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			13.400	0.750	0.100	1.005		9.494	10.499
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							1.662		15.443	17.105
	Item 12 (c) :-Lowering & Laying of Polyethylene DWC pipe of 250mm Dia	1			13.900			13.900		114.600	128.500
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							13.776			
	Deduction										
	pipe area	1		0.785	13.400	0.250	0.250	0.657			
	soling							0.000			
	PCC							0.000			
	Murum bedding							1.005			
								1.662			
								Net Qty = A - B		103.240	115.353
	SN 11 to SN 12							12.114			
	CH138.30	586.598	585.298	585.198				1.400			
	CH148.40	586.888	585.578	585.478				1.410			
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murum etc complete.										
	(a) For Lift 0 to 1.5m	1			8.100	0.750	0.300	1.823		38.901	40.724
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murum etc complete.										
	(a) For Lift 0 to 1.5m	1			8.100	0.750	1.055	6.409		81.310	87.719
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			8.100	0.750	0.050	0.304		11.981	12.285
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			8.700	0.750	0.100	0.653		10.499	11.152
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							1.079		17.105	18.185
	Item 12 (c) :-Lowering & Laying of Polyethylene DWC pipe of 250mm Dia	1			9.200			9.200		128.500	137.700
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							8.535			
	Deduction										
	pipe area	1		0.785	8.700	0.250	0.250	0.427			
	soling							0.000			
	PCC							0.000			
	Murum bedding							0.653			
								1.079			
								Net Qty = A - B		115.353	122.809
	SN 12 to SN 13							7.456			
	CH148.40	586.888	585.578	585.478				1.410			



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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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Shivaji Nagar-03 - Pipe Measurement

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Quantity	
		GL	IL	EX.L							
	CH159.10	586.918	585.598	585.498			1.420				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			8.700	0.750	0.300	1.958	40.724	42.681	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			8.700	0.750	1.065	6.949	87.719	94.668	
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			8.700	0.750	0.050	0.326	12.285	12.611	
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			9.300	0.750	0.100	0.697	11.152	11.849	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							1.154	18.185	19.338	
	Item 12 (c) :-Lowering & Laying of Polyethylene DWVC pipe of 250mm Dia	1			9.800			9.800	137.700	147.500	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							9.233			
	Deduction										
	pipe area	1		0.785	9.300	0.250	0.250	0.456			
	soling							0.000			
	PCC							0.000			
	Murrum bedding							0.697			
								1.154			
								8.079	122.809	130.888	
	SN 13 to SN 14										
	CH159.10	586.918	585.598	585.498			1.420				
	CH168.80	586.968	585.718	585.618			1.350	1.385			
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			7.700	0.750	0.300	1.733	42.681	44.414	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			7.700	0.750	1.035	5.977	94.668	100.645	
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			7.700	0.750	0.050	0.289	12.611	12.900	
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			8.300	0.750	0.100	0.622	11.849	12.472	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							1.030	19.338	20.368	



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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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Shivaji Nagar-03 - Pipe Measurement

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 12 (c) :-Lowering & Laying of Polyethylene DWC pipe of 250mm Dia	1			8.800			8.800		147.500	156.300
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							7.998			
	Deduction										
	pipe area	1		0.785	8.300	0.250	0.250	0.407			
	soling							0.000			
	PCC							0.000			
	Murrum bedding							0.622			
								1.030			
								6.969		130.888	137.857
	Net Qty = A - B										
	SN 1 to SN 14										

11th R A BILL MEASUREMENTS SW PIPE SHIVAJI NAGAR-03 (MANHOLE TO PROPERTY CONNECTION)

Sr. No.	Manhole No.	Chainage	No. of Connciti	Dia of Pipe	Length in Mtr	Depth	Remark		
1	SN 1	CH24.50	1	160mm	6.000	0.600			
			2	160mm	6.000	0.600			
2	SN 8	CH102.30	1	160mm	3.900	0.600			
			1	160mm	5.000	0.600			
3	SN 9	CH114.00	2	160mm	5.350	0.600			
			3	160mm	4.000	0.600			
4	SN 10	CH123.50	1	160mm	3.700	0.600			
5	SN 11	CH138.30	1	160mm	3.800	0.600			
6	SN 12	CH148.40	1	160mm	3.800	0.600			
7	SN 13	CH159.10	1	160mm	3.400	0.600			
8	SN 14	CH168.80	1	160mm	4.900	0.600			
Total Length					49.850	0.600			
Average Depth of Excavation					0.700				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.								
	(a) For Lift 0 to 1.5m	1		49.850	0.660	0.700	23.031	44.414	67.444
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.								
	(a) For Lift 0 to 1.5m	1		49.850	0.660	0.000	0.000	100.645	100.645
	(b) For Lift 1.5m to 3.0m	1		49.850	0.660	0.000	0.000	0.266	0.266
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.								
	(a) For Lift 0 to 1.5m	1		49.850	0.660	0.000	0.000	12.900	12.900
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)								
	(a) For Lift 0 to 1.5m	1		49.850	0.660	0.100	3.290	12.472	15.762
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading						4.292	20.368	24.660
	Item 12 (b) :-Lowering & Laying of Polyethylene DWC pipe of 200mm Dia								19.200



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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 Vencture)

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

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Shivaji Nagar-03 - Pipe Measurement

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 12 (c) :-Lowering & Laying of Polyethylene DWC pipe of 250mm Dia									156.300	
	Extra Item No.9.6 :- (b) Lowering & Laying of PVC pipe of 160mm Dia	1			49.850		49.850		0.000	49.850	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=						23.031				
	Deduction										
	pipe area	1		0.785	49.850	0.160	0.160	1.002			
	soling							0.000			
	PCC							0.000			
	Murum bedding							3.290			
								4.292			
							Net Qty = A - B	18.739	137.857	156.596	



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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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Shivaji Nagar-03 - Meas.Chember

12th R A BILL MEASUREMENTS OF CHEMBERS SHIVAJI NAGAR-03

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Qty.	
		GL	IL	EX.L							
	Excavation of Chamber - For 0.9 dia chamber up to 1.5 mt depth - 0.9*0.5+0.3+0.3=2m										
	Bredth for chember up to 1.5m=2 X 2=4m										
Part-1	RN 1										
	CH0.00	586.820	585.920	585.670			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			0.785	4.000	1.150	3.611	0.000	3.611	
	Item No. : 11 Transportation of earth Transportation charges							1.428	0.000	1.428	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation(A)=							3.611			
	Deduction										
	Brick work	1		0.785	1.160	1.160	0.900	0.951			
	soling							0.000			
	PCC	1		0.785	1.560	1.560	0.250	0.478			
	Murrum bedding							0.000			
	Total (B)							1.428			
	Net Qty = A - B							2.183	0.000	2.183	
	RN 2										
	CH10.50	587.270	586.070	585.820			1.450				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	4.000	1.450	4.553	3.611	8.164	
	Item No. : 11 Transportation of earth Transportation charges							1.745	1.428	3.173	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation(A)=							4.553			
	Deduction										
	Brick work	1		0.785	1.160	1.160	1.200	1.268			
	soling							0.000			
	PCC	1		0.785	1.560	1.560	0.250	0.478			
	Murrum bedding							0.000			
	Total (B)							1.745			
	Net Qty = A - B							2.808	2.183	4.991	
	RN 3										
	CH21.00	586.720	586.170	585.920			0.800				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	4.000	1.450	4.553	8.164	12.717	



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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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Shivaji Nagar-03 - Meas.Chember

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Qty.	
		GL	IL	EX.L							
	Item No. : 11 Transportation of earth Transportation charges							1.059		3.173	4.232
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation(A)=							4.553			
	Deduction										
	Brick work	1		0.785	1.160	1.160	0.550	0.581			
	soling							0.000			
	PCC	1		0.785	1.560	1.560	0.250	0.478			
	Murum bedding							0.000			
	Total (B)							1.059			
								Net Qty = A - B			
								3.494	4.991	8.485	
Part - II	SN 1										
	CH24.50	585.123	583.958	583.708			1.415				
	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	4.000	0.300	0.942		12.717	13.659
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	4.000	0.915	2.873		0.000	2.873
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	4.000	0.200	0.628		0.000	0.628
	Item No. : 11 Transportation of earth Transportation charges							1.708		4.232	5.940
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation(A)=							4.443			
	Deduction										
	Brick work	1		0.785	1.160	1.160	1.165	1.231			
	soling							0.000			
	PCC	1		0.785	1.560	1.560	0.250	0.478			
	Murum bedding							0.000			
	Total (B)							1.708			
								Net Qty = A - B			
								2.735	8.485	11.220	
	SN 2										
	CH36.10	585.168	583.968	583.718			1.450				
	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	4.000	0.300	0.942		13.659	14.601
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	4.000	0.950	2.983		2.873	5.856
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	4.000	0.200	0.628		0.628	1.256



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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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Shivaji Nagar-03 - Meas.Chember

Date	Particulars of work	DETAILS					Content of arrears	Last measurement		Total Upto Date Quantity
		GL	No IL	EX.L	L	B		D	Page	
	Item No. : 11 Transportation of earth Transportation charges							1.745	5.940	7.685
	Item No. 30 :- Refilling the excavated trenches ...									
	Total Excavation(A)=							4.553		
	Deduction									
	Brick work	1		0.785	1.160	1.160	1.200	1.268		
	soling							0.000		
	PCC	1		0.785	1.560	1.560	0.250	0.478		
	Murum bedding							0.000		
	Total (B)							1.745		
	Net Qty = A - B							2.808	11.220	14.028
	SN 3									
	CH51.40	585.458	583.998	583.748			1.710			
	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	4.000	0.300	0.942	14.601	15.543
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murum etc complete.									
	(a) For Lift 0 to 1.5m	1			0.785	4.000	1.000	3.140	5.856	8.996
	(b) For Lift 1.5m to 3.0m	1			0.785	4.000	0.210	0.659	0.000	0.659
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.									
	(a) For Lift 0 to 1.5m	1			0.785	4.000	0.200	0.628	1.256	1.884
	Item No. : 11 Transportation of earth Transportation charges							2.020	7.685	9.705
	Item No. 30 :- Refilling the excavated trenches ...									
	Total Excavation(A)=							5.369		
	Deduction									
	Brick work	1		0.785	1.160	1.160	1.460	1.542		
	soling							0.000		
	PCC	1		0.785	1.560	1.560	0.250	0.478		
	Murum bedding							0.000		
	Total (B)							2.020		
	Net Qty = A - B							3.350	14.028	17.377
	SN 4									
	CH61.20	585.448	584.038	583.788			1.660			
	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	4.000	0.300	0.942	15.543	16.485
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murum etc complete.									
	(a) For Lift 0 to 1.5m	1			0.785	4.000	1.000	3.140	8.996	12.136
	(b) For Lift 1.5m to 3.0m	1			0.785	4.000	0.160	0.502	0.659	1.162
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.									
	(a) For Lift 0 to 1.5m	1			0.785	4.000	0.200	0.628	1.884	2.512



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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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Shivaji Nagar-03 - Meas.Chember

Date	Particulars of work	DETAILS					Content of arrears	Last measurement		Total Upto Date Quantity
		GL	No IL	EX.L	L	B		D	Page	
	Item No. : 11 Transportation of earth Transportation charges						1.967		9.705	11.672
	Item No. 30 :- Refilling the excavated trenches ...									
	Total Excavation(A)=						5.212			
	Deduction									
	Brick work	1		0.785	1.160	1.160	1.410	1.489		
	soling							0.000		
	PCC	1		0.785	1.560	1.560	0.250	0.478		
	Murrum bedding							0.000		
	Total (B)						1.967			
				Net Qty = A - B						
	SN 5						3.245		17.377	20.623
	CH71.40	585.468	584.058	583.808			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	4.000	0.300	0.942	16.485	17.427
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.									
	(a) For Lift 0 to 1.5m	1			0.785	4.000	1.000	3.140	12.136	15.276
	(b) For Lift 1.5m to 3.0m	1			0.785	4.000	0.160	0.502	1.162	1.664
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.									
	(a) For Lift 0 to 1.5m	1			0.785	4.000	0.200	0.628	2.512	3.140
	Item No. : 11 Transportation of earth Transportation charges						1.967		11.672	13.639
	Item No. 30 :- Refilling the excavated trenches ...									
	Total Excavation(A)=						5.212			
	Deduction									
	Brick work	1		0.785	1.160	1.160	1.410	1.489		
	soling							0.000		
	PCC	1		0.785	1.560	1.560	0.250	0.478		
	Murrum bedding							0.000		
	Total (B)						1.967			
					Net Qty = A - B					
	SN 6						3.245		20.623	23.868
	CH79.20	585.528	584.258	584.008			1.520			
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.									
	(a) For Lift 0 to 1.5m	1			0.785	4.000	0.300	0.942	17.427	18.369
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.									
	(a) For Lift 0 to 1.5m	1			0.785	4.000	1.000	3.140	15.276	18.416
	(b) For Lift 1.5m to 3.0m	1			0.785	4.000	0.020	0.063	1.664	1.727
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.									
	(a) For Lift 0 to 1.5m	1			0.785	4.000	0.200	0.628	3.140	3.768



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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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Shivaji Nagar-03 - Meas.Chamber

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Qty.	
		GL	IL	EX.L							
	Item No. : 11 Transportation of earth Transportation charges							1.819		13.639	15.458
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation(A)=							4.773			
	Deduction										
	Brick work	1		0.785	1.160	1.160	1.270	1.341			
	soling							0.000			
	PCC	1		0.785	1.560	1.560	0.250	0.478			
	Murrum bedding							0.000			
	Total (B)							1.819			
		Net Qty = A - B								23.868	26.822
	SN 7										
	CH86.70	585.528	584.458	584.208				1.320			
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	4.000	0.300	0.942		18.369	19.311
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	4.000	0.970	3.046		18.416	21.462
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	4.000	0.050	0.157		3.768	3.925
	Item No. : 11 Transportation of earth Transportation charges							1.608		15.458	17.066
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation(A)=							4.145			
	Deduction										
	Brick work	1		0.785	1.160	1.160	1.070	1.130			
	soling							0.000			
	PCC	1		0.785	1.560	1.560	0.250	0.478			
	Murrum bedding							0.000			
	Total (B)							1.608			
		Net Qty = A - B								26.822	29.359
	SN 8										
	CH102.30	585.788	584.608	584.358				1.430			
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	4.000	0.300	0.942		19.311	20.253
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	4.000	1.080	3.391		21.462	24.853
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	4.000	0.050	0.157		3.925	4.082



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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

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Shivaji Nagar-03 - Meas.Chember

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Qty.	
		GL	IL	EX.L							
	Item No. : 11 Transportation of earth Transportation charges						1.724		17.066	18.790	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation(A)=						4.490				
	Deduction										
	Brick work	1		0.785	1.160	1.160	1.180	1.246			
	soling							0.000			
	PCC	1		0.785	1.560	1.560	0.250	0.478			
	Murrum bedding							0.000			
	Total (B)							1.724			
								2.766	29.359	32.128	
	Net Qty = A - B										
	SN 9										
	CH114.00	585.938	584.658	584.408			1.530				
	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	4.000	0.300	0.942	20.253	21.195	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	4.000	1.150	3.611	24.853	28.464	
	(b) For Lift 1.5m to 3.0m	1			0.785	4.000	0.030	0.094	1.727	1.821	
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	4.000	0.050	0.157	4.082	4.239	
	Item No. : 11 Transportation of earth Transportation charges							1.830	18.790	20.620	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation(A)=							4.804			
	Deduction										
	Brick work	1		0.785	1.160	1.160	1.280	1.352			
	soling							0.000			
	PCC	1		0.785	1.560	1.560	0.250	0.478			
	Murrum bedding							0.000			
	Total (B)							1.830			
								2.975	32.125	35.100	
	Net Qty = A - B										
	SN 10										
	CH123.50	586.188	584.818	584.568			1.620				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	4.000	0.300	0.942	21.195	22.137	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	4.000	1.150	3.611	28.464	32.075	
	(b) For Lift 1.5m to 3.0m	1			0.785	4.000	0.120	0.377	1.821	2.198	
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	4.000	0.050	0.157	4.239	4.396	



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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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Shivaji Nagar-03 - Meas.Chember

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Qty.	
GL	IL	EX.L									
	Item No. : 11 Transportation of earth Transportation charges							1.925	20.620	22.544	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation(A)=							5.087			
	Deduction										
	Brick work	1		0.785	1.160	1.160	1.370	1.447			
	soling							0.000			
	PCC	1		0.785	1.560	1.560	0.250	0.478			
	Murrum bedding							0.000			
	Total (B)							1.925			
								3.162	35.100	38.262	
	SN 11										
	CH138.30	586.598	585.298	585.048			1.550				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	4.000	0.300	0.942	22.137	23.079	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	4.000	1.150	3.611	32.075	35.686	
	(b) For Lift 1.5m to 3.0m	1			0.785	4.000	0.050	0.157	2.198	2.355	
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	4.000	0.050	0.157	4.396	4.553	
	Item No. : 11 Transportation of earth Transportation charges							1.851	22.544	24.395	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation(A)=							4.867			
	Deduction										
	Brick work	1		0.785	1.160	1.160	1.300	1.373			
	soling							0.000			
	PCC	1		0.785	1.560	1.560	0.250	0.478			
	Murrum bedding							0.000			
	Total (B)							1.851			
								3.016	38.262	41.278	
	SN 12										
	CH148.40	586.888	585.578	585.328			1.560				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	4.000	0.300	0.942	23.079	24.021	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	4.000	1.150	3.611	35.686	39.297	
	(b) For Lift 1.5m to 3.0m	1			0.785	4.000	0.060	0.188	2.355	2.543	
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	4.000	0.050	0.157	4.553	4.710	



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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

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Shivaji Nagar-03 - Meas.Chamber

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Up to Date Quantity
		No			L	B	D		Page	Qty.	
		GL	IL	EX.L							
	Item No. : 11 Transportation of earth Transportation charges							1.861		24.395	26.256
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation(A)=							4.898			
	Deduction										
	Brick work	1		0.785	1.160	1.160	1.310	1.384			
	soling							0.000			
	PCC	1		0.785	1.560	1.560	0.250	0.478			
	Murrum bedding							0.000			
	Total (B)							1.861			
		Net Qty = A - B							3.037	41.278	44.315
	SN 13										
	CH159.10	586.918	585.598	585.348			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	4.000	0.300	0.942		24.021	24.963
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	4.000	1.150	3.611		39.297	42.908
	(b) For Lift 1.5m to 3.0m	1			0.785	4.000	0.070	0.220		2.543	2.763
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	4.000	0.050	0.157		4.710	4.867
	Item No. : 11 Transportation of earth Transportation charges							1.872		26.256	28.128
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation(A)=							4.930			
	Deduction										
	Brick work	1		0.785	1.160	1.160	1.320	1.394			
	soling							0.000			
	PCC	1		0.785	1.560	1.560	0.250	0.478			
	Murrum bedding							0.000			
	Total (B)							1.872			
		Net Qty = A - B							3.058	44.315	47.373
	SN 14										
	CH168.80	586.968	585.718	585.468			1.500				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	4.000	0.300	0.942		24.963	25.905
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	4.000	1.150	3.611		42.908	46.519
	(b) For Lift 1.5m to 3.0m	1			0.785	4.000	0.000	0.000		2.763	2.763
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	4.000	0.050	0.157		4.867	5.024



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AURANGABAD MUNICIPAL CORPORATION.

(From No.52)

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

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

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Shivaji Nagar-03 - Meas.Chember

Date	Particulars of work	DETAILS					Content of arrears	Last measurment		Total Upto Date Quantity	
		No			L	B		D	Page		Qty.
		GL	IL	EX.L							
	Item No. : 11 Transportation of earth Transportation charges						1.798		28.128	29.926	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation(A)=						4.710				
	Deduction										
	Brick work	1		0.785	1.160	1.160	1.250	1.320			
	soling							0.000			
	PCC	1		0.785	1.560	1.560	0.250	0.478			
	Murram bedding							0.000			
	Total (B)						1.798				
							Net Qty = A - B		47.373	50.285	



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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 Venture)

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

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Shivaji Nagar-03 - Manhole Details

11th R A BILL MEASUREMENTS								
Branch Sewer at Shivaji Nagar-03								
Extra Item No. : 02 Providing and constructing on sewer BBM manhole 0.9 m dia at bottom and 0.5 m dia at top and up to a depth of 1.5'M								
Sr.No.	Chainage	MH No	MTL	IL	Depth	Depth Difference than 1.5 m	Total Difference	Rebate/Add for Excess height (per 30 cm)
1	CH 0.00	RN 1	586.820	585.920	0.900	-0.600	-4.855	-16.183 ✓
2	CH 10.50	RN 2	587.270	586.070	1.200	-0.300		
3	CH 21.00	RN 3	586.720	586.170	0.550	-0.950		
4	CH 24.50	SN 1	585.123	583.958	1.165	-0.335		
5	CH 36.10	SN 2	585.168	583.968	1.200	-0.300		
6	CH 51.40	SN 3	585.458	583.998	1.460	-0.040		
7	CH 61.20	SN 4	585.448	584.038	1.410	-0.090		
8	CH 71.40	SN 5	585.468	584.058	1.410	-0.090		
9	CH 79.20	SN 6	585.528	584.258	1.270	-0.230		
10	CH 86.70	SN 7	585.528	584.458	1.070	-0.430		
11	CH 102.30	SN 8	585.788	584.608	1.180	-0.320		
12	CH 114.00	SN 9	585.938	584.658	1.280	-0.220		
13	CH 123.50	SN 10	586.188	584.818	1.370	-0.130		
14	CH 138.30	SN 11	586.598	585.298	1.300	-0.200		
15	CH 148.40	SN 12	586.888	585.578	1.310	-0.190		
16	CH 159.10	SN 13	586.918	585.598	1.320	-0.180		
17	CH 168.80	SN 14	586.968	585.718	1.250	-0.250		
Total								-16.183 ✓



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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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Shivaji Nagar-03 Quantity Node Abstract

14th R A BILL MEASUREMENTS

Branch Sewer at Shivaji Nagar-03

SR NO	Description	MB/PG	ITEM 1		ITEM 2		ITEM 4		ITEM 7	ITEM 11	ITEM 12			ITEM 13		ITEM 30	EIRL 2 Full Rate	EIRL 2.a Rebate	EIRL 9.5 160mm	EIRL 9.6 160mm
			0-1.5	0-1.5	0-1.5	0-1.5	200mm	250mm			200mm	250mm	200mm	250mm						
1	For Pipe		67.444	100.645	0.266	12.900	15.762	24.660	19.200	156.300	19.200	156.300	156.300	156.596						
2	For Manhole		25.905	46.519	2.763	5.024	29.926	54.586	19.200	156.300	19.200	156.300	50.285	17.000	(16.183)					
	Total		93.349	147.164	3.029	17.924	15.762	54.586	19.200	156.300	19.200	156.300	206.881	17.000	(16.183)					49.850



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