



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. :- 130

Page No. :-

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

1 of 8

13th Branch Sewer at roshan gate to VIP hall DWC-300mm

14th RA BILL MEASUREMENTS

Branch Sewer of "C" at Roshan Gate to VIP Function Hall

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Quantity	
		GL	IL	EX.L							
	DWC - 315 mm Dia										
	Width of Trench -										
	For Lift 0 to 1.50m- 0.315+0.5=0.815m										
	For Lift 1.5 to 3.00m- 0.315+0.5+0.4=1.215m										
	For Lift 3.0 to 4.5m- 0.315+0.5+0.4+0.4=1.615m										
	Connection From Old Manhole to New Manhole at CH 648.20										
	CH0.00	594.100	592.000	591.900			2.200	2.200			
	CH6.00	594.100	592.000	591.900			2.200				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			4.400	1.215	1.100	5.881	462.116	467.997	
	(b) For Lift 1.5m to 3.0m	1			4.400	0.815	0.700	2.510	209.394	211.904	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			4.400	1.215	0.300	1.604	212.149	213.753	
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			4.400	1.215	0.100	0.535	98.694	99.229	
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			4.400	0.815	0.100	0.359	69.788	70.147	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							0.701	136.076	136.777	
	Item No. 13 :- (d) Lowering & Laying of Polyethylene DWC pipe of 315mm Dia	1			5.000			5.000	0.000	5.000	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							10.529			
	pipe area	1.00						0.343			
	Murrum bedding			0.785	4.400	0.315	0.315	0.359			
								0.701			
								9.828	1449.637	1459.465	
	Paramveer Abdul Hamid Galli No. 4										
	Branch From Manhole RG 8.15.13 at CH 566.30										
	RG 8.15.13.00										
02/09/2016	CH0.00	593.270	591.070	590.970			2.300	1.925			
	CH16.50	592.660	591.210	591.110			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			14.200	0.815	1.000	11.573	467.997	479.570	
	(b) For Lift 1.5m to 3.0m	1			14.200	0.815	0.425	4.919	211.904	216.823	



Signature



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11th Branch Sewer at roshan gate to VIP hall DWC-300mm

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Quantity	
		GL	IL	EX.L							
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.				14.200	0.815	0.300	3.472		213.753	217.225
	(a) For Lift 0 to 1.5m	1									
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.				14.200	0.815	0.200	2.315		99.228	101.543
	(a) For Lift 0 to 1.5m	1									
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			14.700	0.815	0.100	1.198		70.146	71.344
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							2.304		136.778	139.082
	Item No. 13 :- (d)Lowering & Laying of Polyethylene DWC pipe of 315mm Dia	1			15.300			15.300		5.000	20.300
	Item No. 30 :- Refilling the excavated trenches ...							22.278			
	Total Excavation=	1.00		0.785	14.200	0.315	0.315	1.106			
	pipe area							1.198			
	Murrum bedding							2.304			
								19.974		1459.464	1479.438
	RG 8.15.13.01							1.550			
05/09/2016	CH16.50	592.660	591.210	591.110				1.355			
	CH30.90	592.300	591.240	591.140				1.160			
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.				12.000	0.815	0.905	8.851		479.570	488.421
	(a) For Lift 0 to 1.5m	1									
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.				12.000	0.815	0.300	2.934		217.225	220.159
	(a) For Lift 0 to 1.5m	1									
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.				12.000	0.815	0.150	1.467		101.543	103.010
	(a) For Lift 0 to 1.5m	1									
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			13.000	0.815	0.100	1.060		71.344	72.404
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							1.994		139.082	141.076
	Item No. 13 :- (d)Lowering & Laying of Polyethylene DWC pipe of 315mm Dia	1			13.500			13.500		20.300	33.800
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							13.252			
	pipe area	1.00		0.785	12.000	0.315	0.315	0.935			
	Murrum bedding							1.060			
								1.994			



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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, CHCO (Airport), Construction, Erection, Testing and Commission of Sewage pumping stations at Banewadi, Siddharth Garden, Padegaon, Golwadi, Zalta, Ward No.08 and CHCO (Airport), Providing, lowering, laying jointing and testing rising main CRP DI pipe line from Golwadi SPS to Nakshtrawadi (Kanchanwadi) STP and Ward No.98 to STP for Aurangabad City.

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11th Branch Sewer at roshan gate to VIP hall DWC-300mm

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Up to Date Quantity
		No			L	B	D		Page	Quantity	
		GL	IL	EXL				Net Qty = A - B			
	RG 8.15.13.02							11.258		1479.438	1490.696
08/09/2016	CH30.90	592.300	591.240	591.140			1.160	1.040			
	CH43.10	592.170	591.350	591.250			0.920				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			9.800	0.815	0.940	7.508		488.421	495.929
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			9.800	0.815	0.100	0.799		220.159	220.957
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			10.800	0.815	0.100	0.880		72.404	73.284
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							1.644		141.076	142.719
	Item No. 13 :- (d)Lowering & Laying of Polyethylene DWC pipe of 315mm Dia	1			11.300			11.300		33.800	45.100
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							8.306			
	pipe area	1.00		0.785	9.800	0.315	0.315	0.763			
	Murrum bedding							0.880			
								1.644			
								6.663		1490.696	1497.359
	RG 8.15.13.03										
10/09/2016	CH43.10	592.170	591.350	591.250			0.920	0.965			
	CH46.90	592.260	591.350	591.250			1.010				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			1.400	0.815	0.865	0.987		495.929	496.916
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			1.400	0.815	0.100	0.114		220.957	221.071
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			2.400	0.815	0.100	0.196		73.284	73.480
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							0.305		142.719	143.024
	Item No. 13 :- (d)Lowering & Laying of Polyethylene DWC pipe of 315mm Dia	1			2.900			2.900		45.100	48.000
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							1.101			
	pipe area	1.00		0.785	1.400	0.315	0.315	0.109			
	Murrum bedding							0.196			



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Name of Agent:- M/s. K. K. Infratechnology Pvt. Ltd. & CEODI (Joint Venture)

19th Branch Sewer at roshan gate to VIP hall DWC-300mm

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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							
							0.305				
							0.796	1497.359	1498.155		
							Net Qty = A - B				
	RG 8.15.13.04						1.010				
12/09/2016	CH46.90	592.260	591.350	591.250			0.980				
	CH56.10	592.220	591.370	591.270			0.950				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			6.800	0.815	0.880	4.877	496.916	501.793	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			6.800	0.815	0.100	0.554	221.072	221.626	
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			7.800	0.815	0.100	0.636	73.480	74.115	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							1.165	143.024	144.189	
	Item No. 13 :- (d)Lowering & Laying of Polyethylene DWC pipe of 315mm Dia	1			8.300			8.300	48.000	56.300	
	Item No. 30 :- Refilling the excavated trenches ...							5.431			
	Total Excavation=	1.00		0.785	6.800	0.315	0.315	0.530			
	pipe area							0.636			
	Murrum bedding							1.165			
							4.266	1498.155	1502.421		
							Net Qty = A - B				
	RG 8.15.13.05						0.950				
14/09/2016	CH56.10	592.220	591.370	591.270			0.960				
	CH63.50	592.240	591.370	591.270			0.970				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			5.000	0.815	0.860	3.505	501.793	505.297	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			5.000	0.815	0.100	0.408	221.626	222.033	
	Item No. 7 :- Filling in plinth and floors/ trenches etc	1			6.000	0.815	0.100	0.489	74.115	74.604	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							0.878	144.189	145.068	
	Item No. 13 :- (d)Lowering & Laying of Polyethylene DWC pipe of 315mm Dia	1			6.500			6.500	56.300	62.800	
	Item No. 30 :- Refilling the excavated trenches ...							3.912			
	Total Excavation=	1.00		0.785	5.000	0.315	0.315	0.389			
	pipe area							0.489			
	Murrum bedding							0.489			



28/9/2016



AURANGABAD MUNICIPAL CORPORATION.

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19th Branch Sewer at roshan gate to VIP hall DWC-300mm

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									
		Net Qty = A - B						0.878			
	RG 8.15.13.06							3.034		1502.421	1505.455
17/09/2016	CH63.50	592.240	591.370	591.270			0.970				
	CH64.90	592.420	591.370	591.270			1.150	1.060			
	Item No. 13 :- (d) Lowering & Laying of Polyethylene DWC pipe of 315mm Dia	1			0.500			0.500		62.800	63.300
	Item No. 30 :- Refilling the excavated trenches ...										
		Net Qty = A - B						0.000		1505.455	1505.455
	RG 8.15.13.07										
19/09/2016	CH64.90	592.420	591.370	591.270			1.150				
	CH81.20	592.540	591.440	591.340			1.200	1.175			
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			13.900	0.815	1.075	12.178		505.297	517.45
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			13.900	0.815	0.100	1.133		222.033	223.56
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			14.900	0.815	0.100	1.214		74.604	75.89
	Item No. 11 Transportation of earth Transportation charges including loading & unloading							2.297		145.068	147.35
	Item No. 13 :- (d) Lowering & Laying of Polyethylene DWC pipe of 315mm Dia	1			15.400			15.400		63.300	78.70
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							13.311			
	pipe area	1.00			0.785	13.900	0.315	0.315	1.083		
	Murrum bedding							1.214			
								2.297			
		Net Qty = A - B						11.014		1505.455	1516.469
	RG 8.15.13.08										
21/09/2016	CH81.20	592.540	591.440	591.340			1.200				
	CH92.20	592.710	591.480	591.380			1.330	1.265			
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			8.600	0.815	1.165	8.165		517.475	525.21
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			8.600	0.815	0.100	0.701		223.166	223.67
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			9.600	0.815	0.100	0.782		75.819	76.40



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

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

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12th Branch Sewer at roshan gate to VIP hall DWC-300mm

Date	Particulars of work	DETAILS						Content of arrears	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Quantity	
		GL	IL	EX.L							
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							1.452		147.365	148.817
	Item No. 13 :- (d) Lowering & Laying of Polyethylene DWC pipe of 315mm Dia	1			10.100			10.100		78.700	88.800
	Item No. 30 :- Refilling the excavated trenches ...							8.866			
	Total Excavation=							0.670			
	pipe area	1.00		0.785	8.600	0.315	0.315	0.782			
	Murram bedding							1.452			
								7.414		1516.469	1523.883
	Net Qty = A - B										
	RG 8.15.13.09										
23/09/2016	CH92.20	592.710	591.480	591.380			1.330	1.350			
	CH102.10	592.800	591.530	591.430			1.370				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murram etc complete.										
	(a) For Lift 0 to 1.5m	1			7.500	0.815	1.250	7.641		525.641	533.281
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murram etc complete.										
	(a) For Lift 0 to 1.5m	1			7.500	0.815	0.100	0.611		223.867	224.478
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			8.500	0.815	0.100	0.693		76.601	77.294
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							1.277		148.817	150.094
	Item No. 13 :- (d) Lowering & Laying of Polyethylene DWC pipe of 315mm Dia	1			9.000			9.000		88.800	97.800
	Item No. 30 :- Refilling the excavated trenches ...							8.252			
	Total Excavation=							0.584			
	pipe area	1.00		0.785	7.500	0.315	0.315	0.693			
	Murram bedding							1.277			
								6.975		1523.883	1530.858
	Net Qty = A - B										
	RG 8.15.13.10										
27/09/2016	CH102.10	592.800	591.530	591.430			1.370	1.370			
	CH107.30	592.880	591.610	591.510			1.370				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murram etc complete.										
	(a) For Lift 0 to 1.5m	1			2.800	0.815	1.270	2.898		533.281	536.180
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murram etc complete.										
	(a) For Lift 0 to 1.5m	1			2.800	0.815	0.100	0.228		224.478	224.706



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13th Branch Sewer at roshan gate to VIP hall DWC-300mm

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. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			3.800	0.815	0.100	0.310		77.294	77.604
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							0.528		150.094	150.622
	Item No. 13 :- (d)Lowering & Laying of Polyethylene DWC pipe of 315mm Dia	1			4.300			4.300		97.800	102.100
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							3.126			
	pipe area	1.00		0.785	2.800	0.315	0.315	0.218			
	Murrum bedding							0.310			
								0.528			
								2.599		1530.858	1533.457
	Net Qty = A - B										
	Laying and Removing DWC 315mm Dia at CH 566.30 from manhole RG 8.15.13 (to old mh connection)										
30/08/2016	CH0.00							2.300			
	CH11.00										
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			8.600	1.215	1.000	10.449		536.180	546.629
	(b) For Lift 1.5m to 3.0m	1			8.600	0.815	0.800	5.607		216.823	222.400
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			8.600	1.215	0.300	3.135		224.706	227.841
	(b) For Lift 1.5m to 3.0m	1			8.600	0.815	0.000	0.000		177.526	177.526
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			8.600	1.215	0.200	2.090		103.010	105.000
	(b) For Lift 1.5m to 3.0m	1			8.600	0.815	0.000	0.000		109.890	109.890
	(c) For Lift 3.0m to 4.5m	1			8.600	0.815	0.000	0.000		21.336	213.336
	Item No. 5 :- Excavation for foundation/pipe trenches in Hard rock etc complete.										
	(b) For Lift 1.5m to 3.0m	1			8.600	0.815	0.000	0.000		46.530	46.530
	(c) For Lift 3.0m to 4.5m	1			8.600	0.815	0.000	0.000		165.864	165.864
	(d) For Lift 4.5m to 6.0m	1			8.600	0.815	0.000	0.000		82.213	82.213
	Item No. 7 :- Filling in plinth and floors/ trenches etc complete.(bedding)	1			9.600	0.815	0.100	0.782		77.604	78.386
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							1.452		150.622	152.078
	Item No. 13 :- (d)Lowering & Laying of Polyethylene DWC pipe of 315mm Dia	1			10.100			10.100		102.100	112.178
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							21.281			
	pipe area	1.00		0.785	8.600	0.315	0.315	0.670			



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AURANGABAD MUNICIPAL CORPORATION.

(From No.52)

Measurement Book

Book No. :- 137

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.

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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1st Branch Sewer at roshan gate to VIP hall DWC-300mm

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						0.782				
							1.452				
Net Qty = A - B							19.828		1533.456	1553.285	
	Item No. : 35 Shifting of Existing Utilities Length considered up to 400 mm including all and as directed by Engineer In-Charge				0.112		0.112		0.304	0.416	



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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.

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11th Branch Sewer at roshan gate to VIP hall Manhole Excavation

11th R A BILL MEASUREMENTS

Branch Sewer of "C" at Roshan Gate to VIP Function Hall

Date	Particulars of work	DETAILS						Content of area	Last measurement		Total Upto Date Quantity
		GL	No IL	EX.L	L	B	D		Page	Quantity	
	Excavation of Chamber - For 2.00m dia Manhole (upto a depth of 2.0m to 5.0m)- 2.00+0.45+0.45+0.5+0.5=3.90m										
	Breadth for Manhole=3.90*3.90=15.21m										
	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										
	Excavation of Chamber - For 1.20 dia chamber (upto 2.0m depth)-1.20+0.50+0.5+0.5=2.70m										
	Area for chamber upto 2m=2.70 X 2.70=7.29m										
	Excavation of Chamber - For 0.9 dia chamber up to 1.5 mt depth - 0.9+0.5+0.5+0.5=2.40m										
	Breadth for chamber up to 1.5m=2.40 X 2.40=5.76m										
	RG 8.15.06										
	CH259.05	593.500	587.630	587.130			6.370				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	15.210	0.700	8.358		0.000	8.358
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	15.210	0.700	8.358		0.000	8.358
	(b) For Lift 1.5m to 3.0m	1			0.785	15.210	0.100	1.194		0.000	1.194
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	15.210	0.100	1.194		0.000	1.194
	(b) For Lift 1.5m to 3.0m	1			0.785	15.210	0.700	8.358		0.000	8.358
	ITEM No. 5 :- Excavation for foundation / pipe trenches in laterite rock masses etc complete										
	(b) For Lift 1.5m to 3.0m	1			0.785	15.210	0.700	8.358		0.000	8.358
	(c) For Lift 3.0m to 4.5m	1			0.785	15.210	1.500	17.910		0.000	17.910
	(d) For Lift 4.5m to 6.0m	1			0.785	15.210	1.500	17.910		0.000	17.910
	(e) For Lift 6.0m to 7.5m	1			0.785	15.210	0.370	4.418		0.000	4.418
	Item No. : 11 Transportation of earth Transportation charges							38.413		0.000	38.413
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavations=							76.057			
	Deduction										
	Brick work	1			0.785	2.980	2.980	3.261		22.735	
		1			0.785	2.780	2.780	1.304		7.913	
		1			0.785	1.790	1.790	1.304		3.281	
	PCC	1			0.785	3.380	3.380	0.300		2.690	



Handwritten signature and date



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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11th Branch Sewer at roshan gate to VIP hall Manhole Excavation

Date	Particulars of work	DETAILS						Content of area	Last measurement		Total Upto Date Quantity
		GL	IL	EX.L	L	B	D		Page	Quantity	
	Soling	1		0.785	3.380	3.380	0.200	1.794			
								38.413			
				Net Qty = A - B				37.644			
	RG 8.15.08	1.5m Dia									
	CH340.60	594.355	589.475	589.025					0.000	37.644	
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.						5.330				
	(a) For Lift 0 to 1.5m	1			0.785	10.240	0.600	4.823		8.358	13.181
	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	0.600	4.823		8.358	13.181
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.900	7.235		1.194	8.429
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	10.240	0.300	2.412			
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.600	4.823		1.194	3.606
	(c) For Lift 3.0m to 4.5m	1			0.785	10.240	0.700	5.627		8.358	13.181
	ITEM No. 5 :- Excavation for foundation / pipe trenches in laterite rock masses etc complete									0.000	5.627
	(c) For Lift 3.0m to 4.5m	1			0.785	10.240	0.800	6.431		17.910	24.340
	(d) For Lift 4.5m to 6.0m	1			0.785	10.240	0.830	6.672		17.910	24.582
	Item No. : 11 Transportation of earth Transportation charges							17.827		38.413	56.240
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							42.845			
	Deduction										
	Brick work	1		0.785	2.280	2.280	2.880	11.753			
	PCC	1		0.785	1.540	1.540	2.000	3.723			
	Soling	1		0.785	2.580	2.580	0.250	1.306			
				0.785	2.580	2.580	0.200	1.045			
				Net Qty = A - B				17.827			
	RG 8.15.10	1.5m Dia									
	CH392.90	593.540	590.185	589.735			3.805		37.644	62.661	
	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	0.900	7.235		13.181	20.419
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.800	6.431		0.000	6.431
	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		13.181	15.592
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.700	5.627		8.429	14.055
	(c) For Lift 3.0m to 4.5m	1			0.785	10.240	0.805	6.471		0.000	6.471
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	10.240	0.300	2.412		3.606	6.017
	Item No. : 11 Transportation of earth Transportation charges							11.604		56.240	67.845
	Item No. 30 :- Refilling the excavated trenches ...										



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AURANGABAD MUNICIPAL CORPORATION.

(From No.52)

Measurement Book

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

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11th Branch Sewer at roshan gate to VIP hall Manhole Excavation

Date	Particulars of work	DETAILS						Content of area	Last measurement		Total upto Date Quantity
		No			L	B	D		Page	Quantity	
		GL	IL	EXL							
	Total Excavations										
	Deduction						30.586				
	Brick work	1		0.785	2.280	2.280	1.355	5.529			
		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	0.200	1.045			
								11.604			
								18.982	62.661	81.643	
	RG B.15.11										
	CH442.70										
	1.5m Dia	593.220	590.380	589.930			3.290				
	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	0.900	7.235	20.415	27.650	
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.700	5.627	6.431	12.058	
	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	15.592	18.004	
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.800	6.431	14.055	20.486	
	(c) For Lift 3.0m to 4.5m	1			0.785	10.240	0.290	2.331	6.471	8.802	
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	10.240	0.300	2.412	6.017	8.429	
	Item No. : 11 Transportation of earth Transportation charges							9.503	67.845	77.347	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							26.446			
	Deduction										
	Brick work	1		0.785	2.280	2.280	0.840	3.428			
		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	0.200	1.045			
								9.503			
								16.944	81.643	98.587	
	RG B.15.12										
	CH486.50										
	1.5m Dia	593.150	590.520	590.070			3.080				
	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	0.900	7.235	27.650	34.885	
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.800	6.431	12.058	18.488	
	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	18.004	20.415	
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.700	5.627	20.486	26.113	
	(c) For Lift 3.0m to 4.5m	1			0.785	10.240	0.080	0.643	8.802	9.445	
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	10.240	0.300	2.412	8.429	10.840	
	Item No. : 11 Transportation of earth Transportation charges							8.646	77.347	85.991	
	Item No. 30 :- Refilling the excavated trenches ...										



Signature



AURANGABAD MUNICIPAL CORPORATION.

(From No.52)

Measurement Book

Name of work:- Development of Underground Sewerage Collection system for Zone 1 to V1 and Zone Salim 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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1.5m Branch Sewer at roshan gate to VIP hall Manhole Excavation

Date	Particulars of work	DETAILS						Content of area	Last measurement		Total Upto Date Quantity
		GL	No IL	EXL	L	B	D		Page	Quantity	
	Total Excavation=										
	Deduction							24.758			
	Brick work	1		0.785	2.280	2.280	0.630	2.571			
		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	0.200	1.045			
								8.646			
								16.113	98.587	114.699	
	RG 8.15.13		1.5m Dia								
	CH566.30	593.270	590.670	590.220			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	0.900	7.235	34.885	42.119	
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.800	6.431	18.488	24.919	
	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	20.415	22.827	
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.700	5.627	26.113	31.740	
	(c) For Lift 3.0m to 4.5m	1			0.785	10.240	0.050	0.402	9.445	9.847	
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	10.240	0.300	2.412	10.840	13.252	
	Item No. : 11 Transportation of earth Transportation charges							8.523	85.993	94.516	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							24.517			
	Deduction										
	Brick work	1		0.785	2.280	2.280	0.600	2.448			
		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	0.200	1.045			
								8.523			
								15.994	114.699	130.693	
	RG 8.15.14		1.5m Dia								
	CH603.10	593.670	590.990	590.540			3.130				
	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	42.119	50.158	
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.800	6.431	24.919	31.350	
	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	0.300	2.412	22.827	25.239	
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.700	5.627	31.740	37.367	
	(c) For Lift 3.0m to 4.5m	1			0.785	10.240	0.130	1.045	9.847	10.892	
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	10.240	0.200	1.608	13.252	14.859	
	Item No. : 11 Transportation of earth Transportation charges							8.850	94.516	103.366	
	Item No. 30 :- Refilling the										
	Total Excavation=							25.160			



Signature



AURANGABAD MUNICIPAL CORPORATION

(From No.52)

Measurement Book

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11th Branch Sewer at roshan gate to VIP hall Manhole Excavation

Date	Particulars of work	DETAILS						Content of area	Last measurement		Total Upto Date Quantity
		GL	No IL	EXL	L	B	D		Page	Quantity	
	Deduction										
	Brick work	1		0.785	2.280	2.280	0.680	2.775			
	PCC	1		0.785	1.540	1.540	2.000	3.723			
	Soling	1		0.785	2.580	2.580	0.250	1.306			
				0.785	2.580	2.580	0.200	1.045			
	RG 8.15.15							8.850			
	CH634.40		1.5m Dia	Net Qty = A - B				16.311			
		593.830	591.263	590.813					130.693	147.004	
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1									
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	1.100	8.842	50.158	59.000	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.				0.785	10.240	0.900	7.235	31.350	38.584	
	(a) For Lift 0 to 1.5m	1									
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.300	2.412			
	(c) For Lift 3.0m to 4.5m	1			0.785	10.240	0.600	4.823	25.239	27.650	
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.				0.785	10.240	0.017	0.137	37.367	42.190	
	(a) For Lift 0 to 1.5m	1							10.892	11.029	
	Item No. : 11 Transportation of earth Transportation charges				0.785	10.240	0.100	0.804	14.859	15.663	
	Item No. 30 :- Refilling the excavated trenches ...							8.389	103.366	111.754	
	Total Excavation=										
	Deduction							24.252			
	Brick work	1		0.785	2.280	2.280	0.567	2.314			
	PCC	1		0.785	1.540	1.540	2.000	3.723			
	Soling	1		0.785	2.580	2.580	0.250	1.306			
				0.785	2.580	2.580	0.200	1.045			
								8.389			
	RG 8.15.16							15.863			
	CH648.20		1.5m Dia	Net Qty = A - B				15.863			
		594.100	591.376	590.926					147.004	162.867	
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1									
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	1.100	8.842	59.000	67.842	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.				0.785	10.240	0.900	7.235	38.584	45.819	
	(a) For Lift 0 to 1.5m	1									
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.300	2.412	27.650	30.062	
	(c) For Lift 3.0m to 4.5m	1			0.785	10.240	0.600	4.823	42.190	47.013	
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.				0.785	10.240	0.174	1.399	11.029	12.427	
	(a) For Lift 0 to 1.5m	1									
	Item No. : 11 Transportation of earth Transportation charges				0.785	10.240	0.100	0.804	15.663	16.467	
	Item No. 30 :- Refilling the excavated trenches ...							9.029	111.754	120.784	
	Total Excavation=										
	Deduction							25.514			



A. S. Dnyan



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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11th Branch Sewer at roshan gate to VIP hall Manhole Excavation

Date	Particulars of work	DETAILS						Content of area	Last measurement		Total Upto Date Quantity
		No			L	B	D		Page	Quantity	
		GL	IL	EXL							
	Brick work	1		0.785	2.280	2.280	0.724	2.954			
		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	0.200	1.045			
								9.029			
								16.485	162.867	179.352	
	RG 8.15.17										
	1.5m Dia										
	CH698.50	594.510	591.820	591.370			3.140				
	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	67.842	76.684	
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	1.000	8.038	45.819	53.857	
	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	30.062	32.473	
	(b) For Lift 1.5m to 3.0m	1			0.785	10.240	0.500	4.019	47.013	51.032	
	(c) For Lift 3.0m to 4.5m	1			0.785	10.240	0.140	1.125	12.427	13.553	
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	10.240	0.100	0.804	16.467	17.271	
	Item No. : 11 Transportation of earth Transportation charges							8.890	120.784	129.674	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation=							25.241			
	Deduction										
	Brick work	1		0.785	2.280	2.280	0.690	2.816			
		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	0.200	1.045			
								8.890			
								16.350	179.352	195.702	
	RG 8.15.13.01										
	0.9m Dia										
	CH16.50	592.660	591.210	590.960			1.700				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	5.760	1.000	4.522	76.684	81.206	
	(b) For Lift 1.5m to 3.0m	1			0.785	5.760	0.200	0.904	53.857	54.762	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	5.760	0.300	1.356	32.473	33.830	
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	5.760	0.200	0.904	17.271	18.175	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							2.141	129.674	131.816	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation(A)=							7.687			
	Deduction										
	Brick work	1.00		0.785	1.200	1.200	1.450	1.639			



S. S. Sanyal



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)

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19th Branch Sewer at roshan gate to VIP hall Manhole Excavation

Date	Particulars of work	DETAILS						Content of area	Last measurement		Total Upto Date Quantity	
		GL	No IL	EX.L	L	B	D		Page	Quantity		
	PCC	1.00		0.785	1.600	1.600	0.250	0.502				
	Total (B)							2.141				
								5.545		195.702	201.247	
	RG 8.15.13.02	0.9m Dia										
	CH30.90	592.300	591.240	590.990				1.310				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.											
	(a) For Lift 0 to 1.5m	1			0.785	5.760	0.860	3.889		81.206	85.094	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.											
	(a) For Lift 0 to 1.5m	1			0.785	5.760	0.300	1.356		33.830	35.186	
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.											
	(a) For Lift 0 to 1.5m	1			0.785	5.760	0.150	0.678		18.175	18.853	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							1.701		131.816	133.516	
	Item No. 30 :- Refilling the excavated trenches ...											
	Total Excavation(A)=							5.923				
	Deduction											
	Brick work	1.00		0.785	1.200	1.200	1.060	1.198				
	PCC	1.00		0.785	1.600	1.600	0.250	0.502				
	Total (B)							1.701				
								4.223		201.247	205.470	
	RG 8.15.13.03	0.9m Dia										
	CH43.10	592.170	591.350	591.100				1.070				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.											
	(a) For Lift 0 to 1.5m	1			0.785	5.760	0.970	4.386		85.094	89.480	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.											
	(a) For Lift 0 to 1.5m	1			0.785	5.760	0.100	0.452		35.186	35.638	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							1.429		133.516	134.946	
	Item No. 30 :- Refilling the excavated trenches ...											
	Total Excavation(A)=							4.838				
	Deduction											
	Brick work	1.00		0.785	1.200	1.200	0.820	0.927				
	PCC	1.00		0.785	1.600	1.600	0.250	0.502				
	Total (B)							1.429				
								3.409		205.470	208.878	
	RG 8.15.13.04	0.9m Dia										
	CH46.90	592.260	591.350	591.100				1.160				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.											
	(a) For Lift 0 to 1.5m	1			0.785	5.760	1.060	4.793		89.480	94.273	



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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 Nakshirwadi (Kanchanwadi), Banewadi, Siddharth Garden, Zalta, Padegam, CIDCO (Airport), Construction, Erection, Testing and Commission of Sewage pumping stations at Banewadi, Siddharth Garden, Padegam, Golwadi, Zalta, Ward No 98 and CIDCO (Airport). Providing, lowering, laying jointing and testing rising main GRP/DI pipe line from Golwadi SP to Nakshirwadi (Kanchanwadi) STP and Ward No 98 to STP for Aurangabad City.

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12th Branch Sewer at roshan gate to VIP hall Manhole Excavation

Date	Particulars of work	DETAILS					Content of area	Last measurement		Total upto Date Quantity	
		GL	No		L	B		D	Page		Quantity
			IL	EXL							
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	5.760	0.100	0.452	35.638	36.090	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							1.531	134.946	136.477	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation(A)=							5.245			
	Deduction										
	Brick work	1.00		0.785	1.200	1.200	0.910	1.029			
	PCC	1.00		0.785	1.600	1.600	0.250	0.502			
	Total (B)							1.531			
								Net Qty = A - B			
	RG B.15.13.05		0.9m Dia					3.714	208.878	212.592	
	CH56.10	592.220	591.370	591.120			1.100				
	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	5.760	1.000	4.522	94.273	98.795	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	5.760	0.100	0.452	36.090	36.543	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							1.463	136.477	137.940	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation(A)=							4.974			
	Deduction										
	Brick work	1.00		0.785	1.200	1.200	0.850	0.961			
	PCC	1.00		0.785	1.600	1.600	0.250	0.502			
	Total (B)							1.463			
								Net Qty = A - B	212.592	216.103	
	RG B.15.13.06		0.9m Dia					3.511			
	CH63.50	592.240	591.370	591.120			1.120				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	5.760	1.020	4.612	98.795	103.407	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	5.760	0.100	0.452	36.543	36.995	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							1.486	137.940	139.426	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation(A)=							5.064			
	Deduction										
	Brick work	1.00		0.785	1.200	1.200	0.870	0.983			
	PCC	1.00		0.785	1.600	1.600	0.250	0.502			
	Total (B)							1.486			
								Net Qty = A - B	216.103	219.681	



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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, 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 Nakshirawadi (Kanchanwadi) STP and Ward No.98 to S.P. for Aurangabad City.

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11th Branch Sewer at roshan gate to VIP hall Manhole Excavation

Date	Particulars of work	DETAILS						Content of area	Last measurement		Total Upto Date Quantity
		GL	No IL	EX.L	L	B	D		Page	Quantity	
RG B.15.13.07		0.9m Dia									
CH64.90		592.420	591.370	591.120			1300				
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	5.760	1.200	5.426		103.407	108.833
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	5.760	0.100	0.452		36.995	37.447
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							1.689		139.426	141.115
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation(A)=							5.878			
	Deduction										
	Brick work	1.00		0.785	1.200	1.200	1.050	1.187			
	PCC	1.00		0.785	1.600	1.600	0.250	0.502			
	Total (B)							1.689			
								Net Qty = A - B			
RG B.15.13.08		0.9m Dia									
CH81.20		592.540	591.440	591.190			1.350			219.681	223.870
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	5.760	1.250	5.652		108.833	114.485
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	5.760	0.100	0.452		37.447	37.899
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							1.746		141.115	142.861
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation(A)=							6.104			
	Deduction										
	Brick work	1.00		0.785	1.200	1.200	1.100	1.243			
	PCC	1.00		0.785	1.600	1.600	0.250	0.502			
	Total (B)							1.746			
								Net Qty = A - B			
RG B.15.13.09		0.9m Dia									
CH92.20		592.710	591.480	591.230			1.480			223.870	228.228
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	5.760	1.380	6.240		114.485	120.725
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	5.760	0.100	0.452		37.899	38.351
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							1.893		142.861	144.754



S. S. D. D. D.



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) Hanewadi, Siddharth Garden, Zalta, Padegaon, CIDCO (Airport), Construction, Erection, Testing and Commission of Sewage pumping stations at Hanewadi, Siddharth Garden, Padegaon, Golwadi, Zalta, Ward No.98 and CIDCO (Airport), Providing, lowering, laying jointing and testing rising main (RPDI) pipe line from Golwadi SPS to Nakshtrawadi (Kanchanwadi) STP and Ward No.98 to

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11th Branch Sewer at restan gate to VIP hall Manhole Excavation

Date	Particulars of work	DETAILS						Content of area	Last measurement		Total Upto Date Quantity
		No							Page	Quantity	
		GL	IL	EXL	L	B	D				
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation(A)=										
	Deduction										
	Brick work							6.692			
	PCC	1.00		0.785	1.200	1.200	1.230	1.390			
	Total (B)	1.00		0.785	1.600	1.600	0.250	0.502			
								1.893			
	RG 8.15.13.10							4.799			
	CH102.10	592.800	591.530	591.280					228.728	231.628	
	Item No. 1 :- Excavation for foundation/pipe trenches in earth soils, Soft murrum etc complete.						1.520				
	(a) For Lift 0 to 1.5m	1			0.785	5.760	1.420	6.421	120.725	127.145	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	5.760	0.100	0.452	38.351	38.803	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							1.938	144.754	146.692	
	Item No. 30 :- Refilling the excavated trenches ...										
	Total Excavation(A)=										
	Deduction							6.873			
	Brick work	1.00		0.785	1.200	1.200	1.270	1.436			
	PCC	1.00		0.785	1.600	1.600	0.250	0.502			
	Total (B)							1.938			
								4.935	233.028	237.962	
	RG 8.15.13.11										
	CH107.30	592.880	591.610	591.360			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	5.760	1.420	6.421	127.145	133.566	
	(b) For Lift 1.5m to 3.0m	1			0.785	5.760	0.000	0.000	54.762	54.762	
	Item No. 2 :- Excavation for foundation/pipe trenches in Hard murrum etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	5.760	0.100	0.452	38.803	39.255	
	(b) For Lift 1.5m to 3.0m	1			0.785	5.760	0.000	0.000	51.032	51.032	
	(c) For Lift 3.0m to 4.5m	1			0.785	5.760	0.000	0.000	13.553	13.553	
	Item No. 4 :- Excavation for foundation/pipe trenches in soft rock etc complete.										
	(a) For Lift 0 to 1.5m	1			0.785	5.760	0.000	0.000	18.853	18.853	
	(b) For Lift 1.5m to 3.0m	1			0.785	5.760	0.000	0.000	13.181	13.181	
	(c) For Lift 3.0m to 4.5m	1			0.785	5.760	0.000	0.000	5.627	5.627	
	Item No. 5 :- Excavation for foundation/pipe trenches in Hard rock etc complete.										
	(b) For Lift 1.5m to 3.0m	1			0.785	5.760	0.000	0.000	8.358	8.358	
	(c) For Lift 3.0m to 4.5m	1			0.785	5.760	0.000	0.000	24.340	24.340	
	(d) For Lift 4.5m to 6.0m	1			0.785	5.760	0.000	0.000	24.582	24.582	
	(e) For Lift 6.0m to 7.5m	1			0.785	5.760	0.000	0.000	4.418	4.418	
	Item No. : 11 Transportation of earth Transportation charges including loading & unloading							1.938	146.692	148.630	



Signature