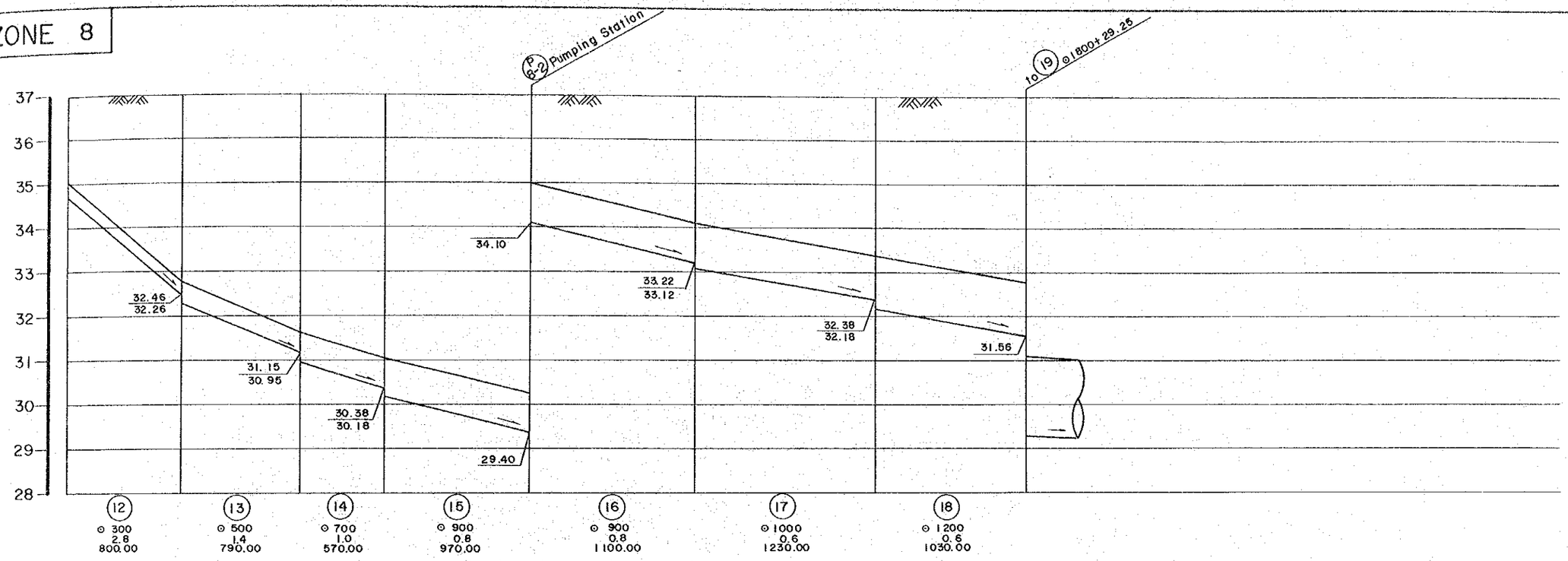
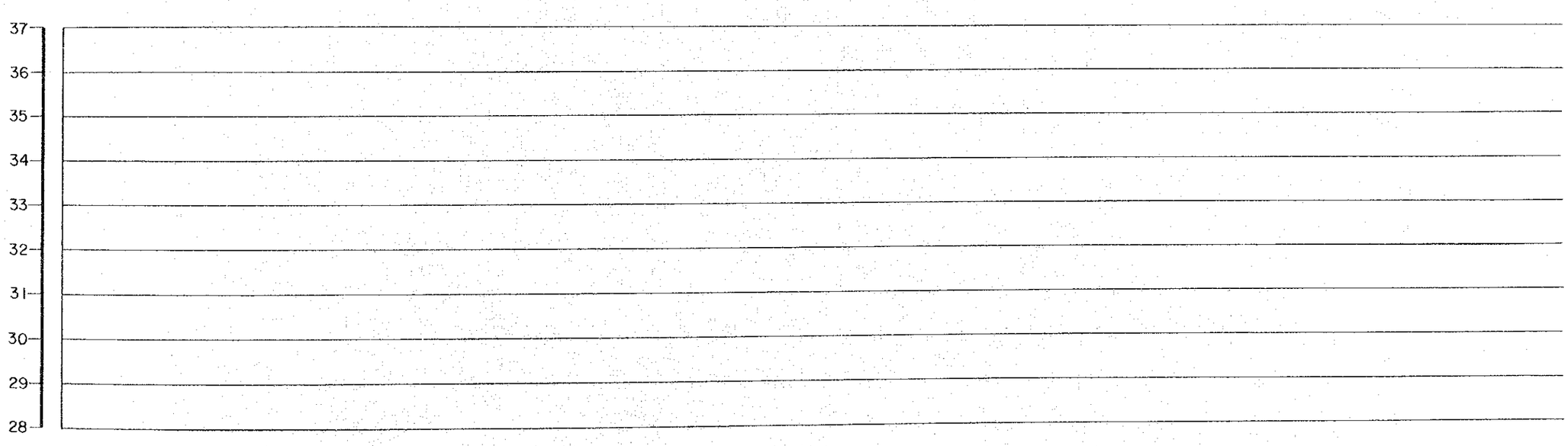
ZONE 8





LEGEND

(5) SEWER NO.
⊙ 1,000 DIAMETER (mm)
0.8 SLOPE (‰)
200 LENGTH (m)

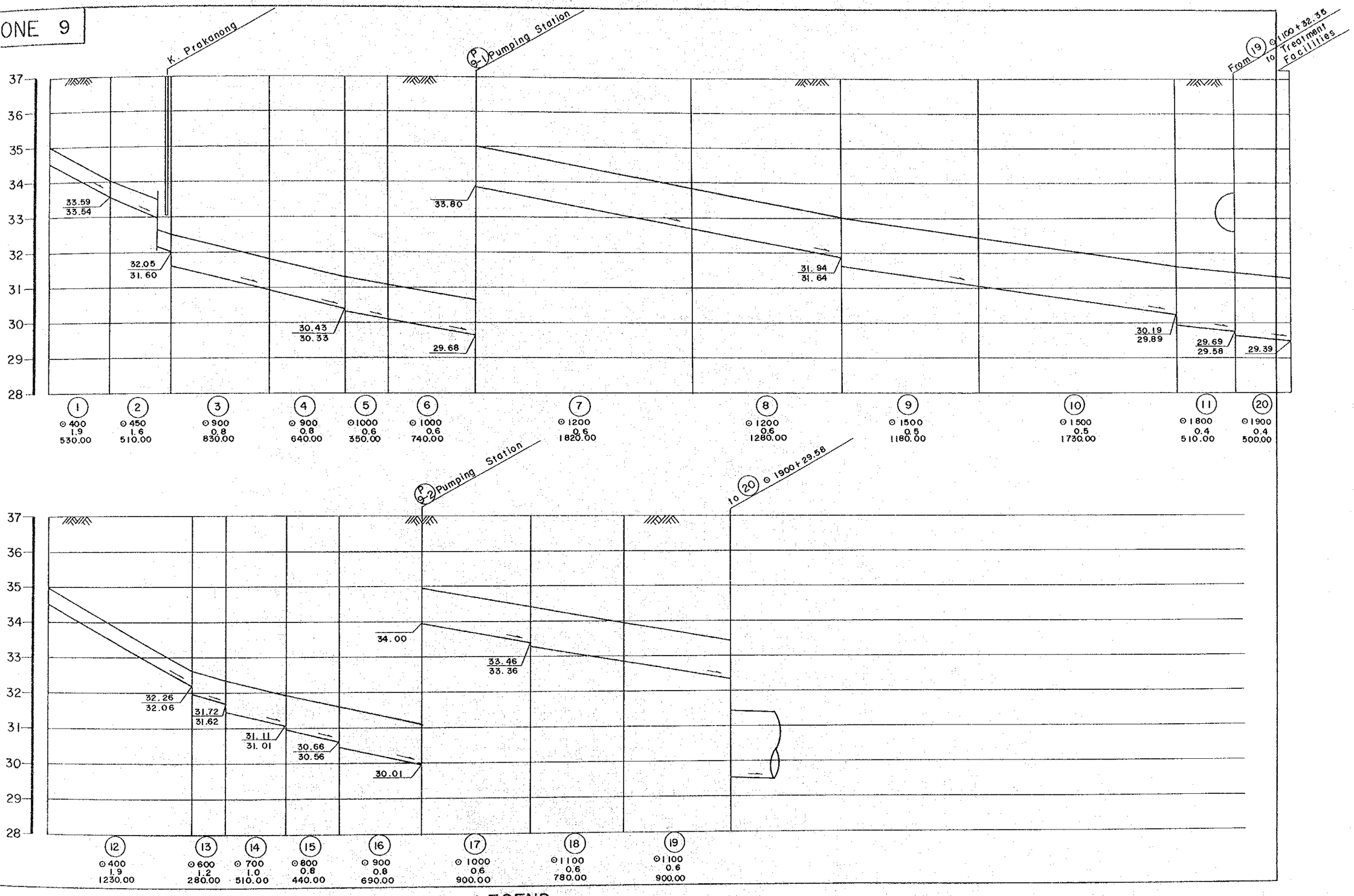
29.00 / 28.50 INVERT ELEVATION

ELEVATIONS IN METERS
M.S.L. 35.03

SEWERAGE SYSTEM PROFILE

SCALE VERTICAL 1:100
HORIZONTAL 1:30,000

ZONE 9



LEGEND

(5) SEWER NO.
@1,000 DIAMETER (mm)
0.8 SLOPE (‰)
200 LENGTH (m)

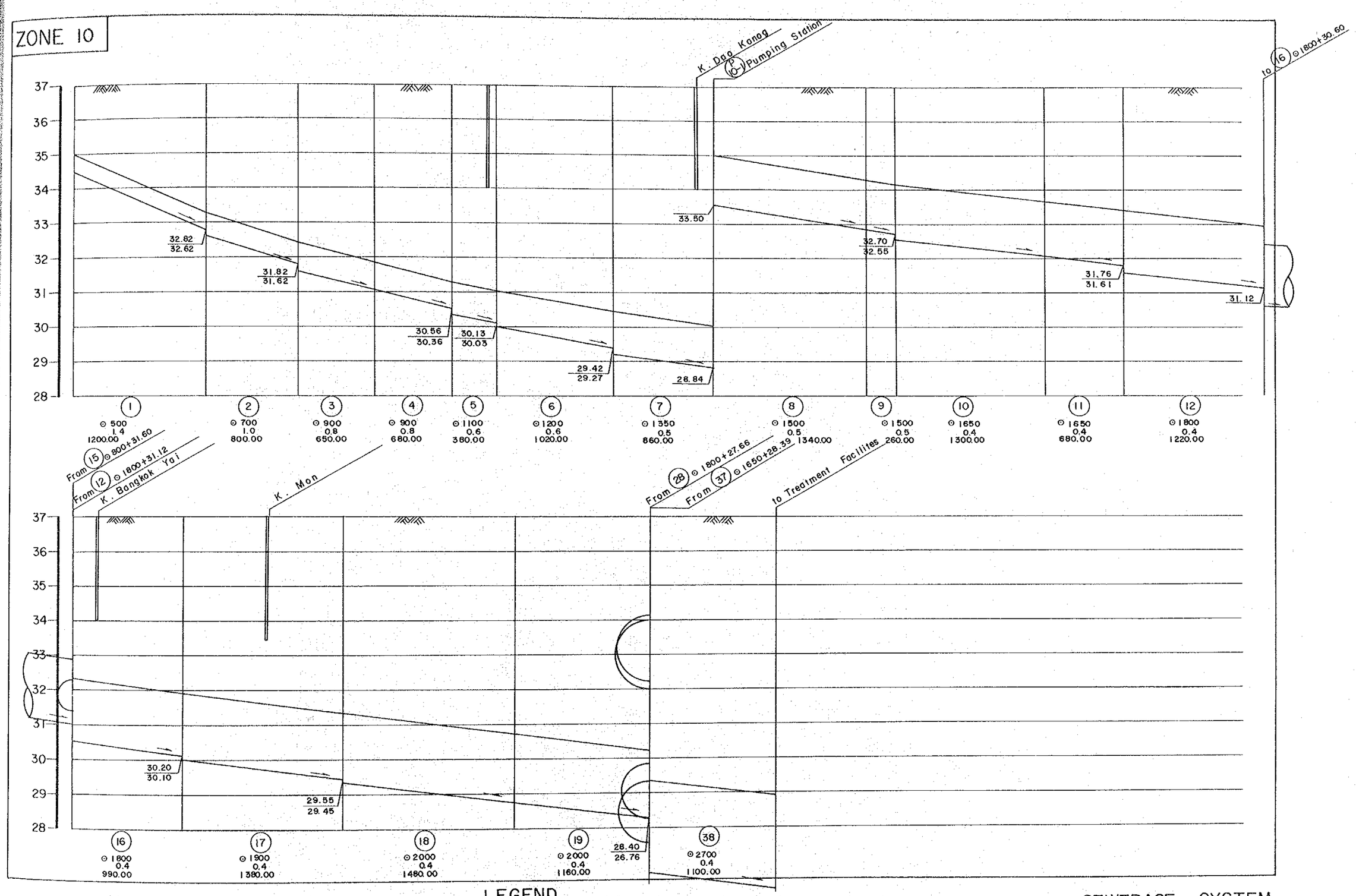
29.00 / 28.50 INVERT ELEVATION

ELEVATIONS IN METERS
M.S.L. 35.03

SEWERAGE SYSTEM PROFILE

SCALE VERTICAL 1:100
HORIZONTAL 1:30,000

ZONE 10



LEGEND

(5) SEWER NO.
⊙1,000 DIAMETER (mm)
0.8 SLOPE (‰)
200 LENGTH (m)

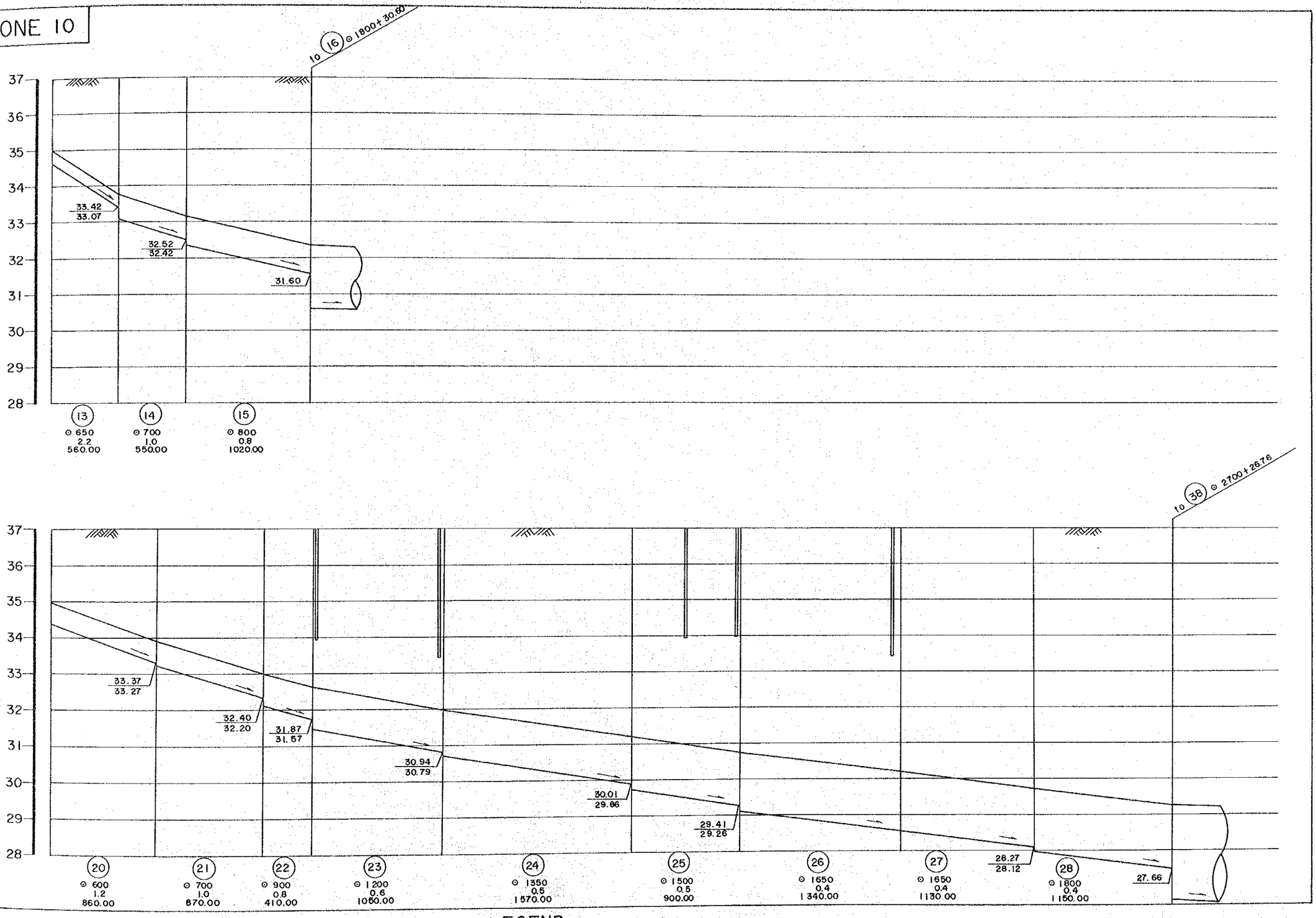
29.00/28.50 INVERT ELEVATION

ELEVATIONS IN METERS
M.S.L. 35.03

SEWERAGE SYSTEM PROFILE

SCALE VERTICAL 1:100
HORIZONTAL 1:30,000

ZONE 10



LEGEND

(5) SEWER NO.
⊙ 1,000 DIAMETER (mm)
0.8 SLOPE (‰)
200 LENGTH (m)

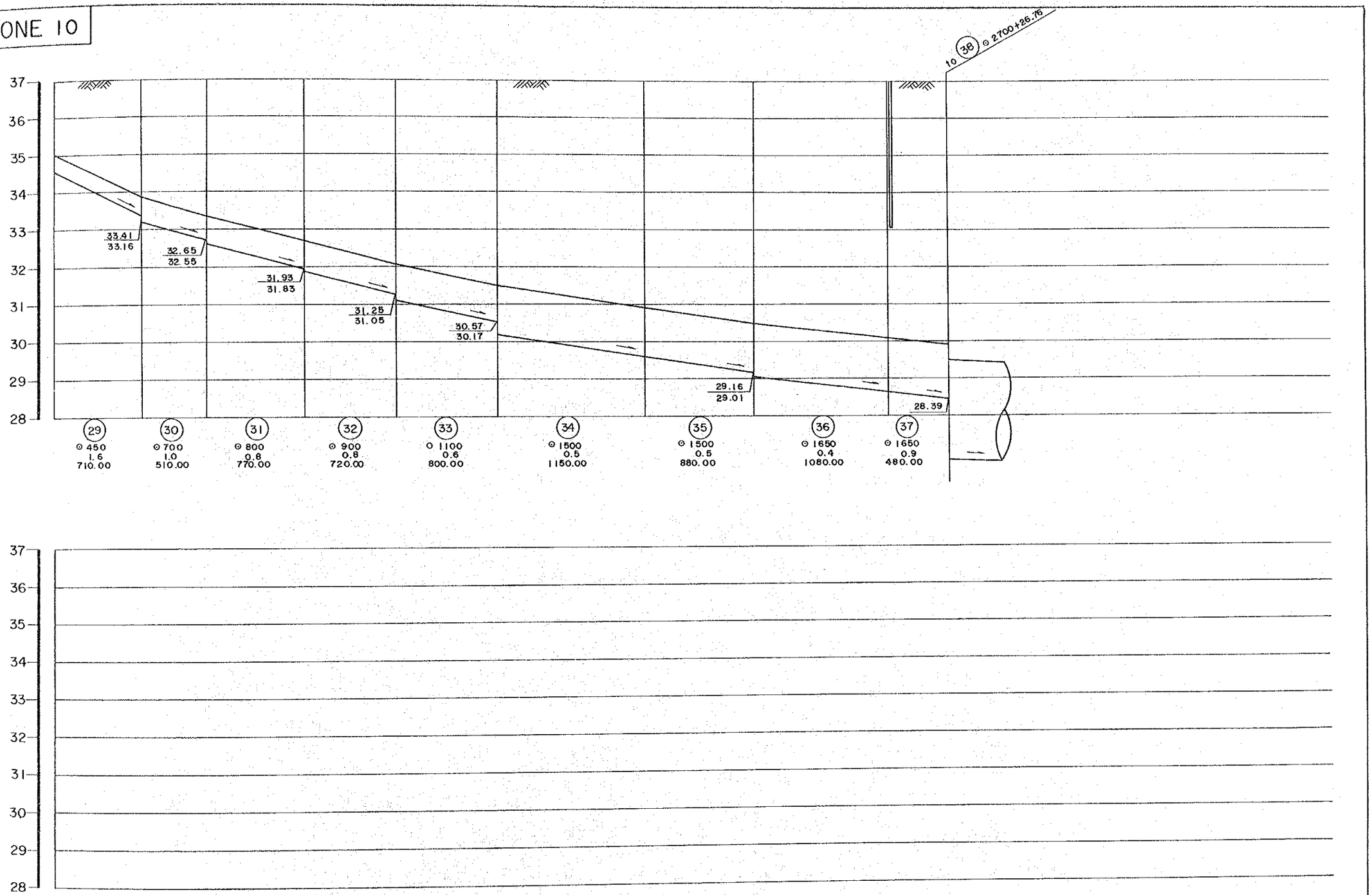
29.00 / 28.50 INVERT ELEVATION

ELEVATIONS IN METERS
M.S.L. 35.03

SEWERAGE SYSTEM PROFILE

SCALE VERTICAL 1:100
HORIZONTAL 1:30,000

ZONE 10



LEGEND

(5) SEWER NO.
@ 1,000 DIAMETER (mm)
0.8 SLOPE (‰)
200 LENGTH (m)

29.00 / 28.50 INVERT ELEVATION

ELEVATIONS IN METERS
M.S.L. 35.03

SEWERAGE SYSTEM PROFILE

SCALE VERTICAL 1:100
HORIZONTAL 1:30,000

3. COMPUTATION FOR DESIGN OF SANITARY SEWERS

Name of Zone	Area (ha)			Population Density	Population	Unit Flow		
	Residential	Commercial	Total			Per Capita	Commercial	Infiltration
ZONE I	3,020	380	3,400	300 persons/ha	1018,700 persons	201 l/c/d	116 m^3/ha/d	7.6 m^3/ha/d

No. of Sewers	Area by Land Use: Residential Area Increment	Residential Area Total	Commercial Area Increment	Commercial Area Total	Area Increment	Area Total	Total Population	Domestic Wastewater Flow: Residential (Ave.)	Commercial (Ave.)	Total	Peaking Factor	Peak Flow	Other Flow: Industrial	Infiltration	Total Design Flow	Designed Sewer: Diameter	Length	Slope	Velocity (Full)	Capacity (Full)	Ground Surface Elevation	Sewer Invert Elevation	Remarks
	ha	ha	ha	ha	ha	ha	persons	m^3/s	m^3/s	m^3/s		m^3/s	m^3/s	m^3/s	m^3/s	mm	m	‰	m/s	m^3/s	m	m	
(1)	30.12		3.15		33.27		9,980	0.023	0.004	0.027	4.0	0.108		0.003	0.111	⊙ 500	1000.00	1.4	0.62	0.122		34.50	
																						33.10	
(2)	84.98	115.10	44.79	47.94	129.77	163.04	48.910	0.114	0.064	0.178	2.8	0.498		0.014	0.512	⊙1100	620.00	0.6	0.69	0.656		32.50	
																						32.13	
(3)	46.50	161.60	32.01	79.95	78.51	241.55	72.470	0.169	0.107	0.276	2.6	0.718		0.021	0.739	⊙1200	1120.00	0.6	0.73	0.828		32.03	
																						31.36	
	to	(6)																					
(4)	20.27				20.27		6,080	0.014		0.014	4.6	0.064		0.002	0.066	⊙ 400	1600.00	1.9	0.63	0.079		34.60	
																						31.56	
(5)	112.70	132.97	3.61		116.31	136.58	40,970	0.095	0.005	0.100	3.2	0.320		0.012	0.332	⊙ 900	800.00	0.8	0.70	0.444		31.06	
																						30.42	
(6)	134.46	429.03	44.05	127.61	178.51	556.64	166,990	0.388	0.171	0.559	2.3	1.286		0.049	1.335	⊙1500	1220.00	0.5	0.78	1.370		29.82	
																						29.21	
(P1)																							Pumping Station
(7)	504.40	933.43		127.61	504.40	1061.04	318,310	0.741	0.171	0.912	2.1	1.915		0.093	2.008	⊙1900	1840.00	0.4	0.81	2.301		33.10	
																						32.36	
(8)	323.14	1256.57		127.61	323.14	1384.18	415,250	0.966	0.171	1.137	2.0	2.274		0.122	2.396	⊙2000	1550.00	0.4	0.84	2.639	37.00	30.90	
																						30.28	
(9)	189.97	1446.54		127.61	189.97	1574.15	472,250	1.099	0.171	1.270	2.0	2.540		0.138	2.678	⊙2100	1320.00	0.4	0.87	3.005		30.18	
																						29.65	
	to	(73)																					
(10)	2.43				2.43		730	0.002		0.002	4.8	0.010		0.001	0.011	⊙ 200	265.00	4.5	0.61	0.019		34.80	
																						33.61	
(11)	7.40	9.83			7.40	9.83	2,950	0.007		0.007	4.8	0.034		0.001	0.035	⊙ 300	300.00	2.8	0.63	0.044		33.51	
																						32.67	
(12)	21.10	30.93			21.10	30.93	9,280	0.022		0.022	4.2	0.092		0.003	0.095	⊙ 450	610.00	1.6	0.62	0.099		32.52	
																						31.54	
(13)	22.33	53.26			22.33	53.26	15,980	0.037		0.037	3.8	0.141		0.005	0.146	⊙ 600	240.00	1.2	0.65	0.184		31.39	
																						31.10	
(14)	0.00	53.26			0.00	53.26	15,980	0.037		0.037	3.8	0.147		0.005	0.152	⊙ 600	50.00	1.2	0.65	0.184		31.10	
																						31.04	
(15)	11.50	64.76			11.50	64.76	19,430	0.045		0.045	3.6	0.162		0.006	0.168	⊙ 600	170.00	1.2	0.65	0.184		31.04	
																						30.84	
(16)	6.42	71.18			6.42	71.18	21,350	0.050		0.050	3.5	0.175		0.006	0.181	⊙ 600	120.00	1.2	0.65	0.184		30.84	
																						30.70	
(17)	25.64	96.82			25.64	96.82	29,050	0.068		0.068	3.3	0.224		0.009	0.233	⊙ 700	360.00	1.0	0.66	0.254		30.60	
																						30.24	

Name of Zone	Area (ha)			Population Density	Population	Unit Flow		
	Residential	Commercial	Total			Per Capita	Commercial	Infiltration
ZONE I	3,020	380	3,400	300 persons/ha	1018,700 persons	201 l/c/d	116 m^3/ha/d	7.6 m^3/ha/d

No. of Sewers	Area by Land Use: Residential Area Increment	Residential Area Total	Commercial Area Increment	Commercial Area Total	Area Increment	Area Total	Total Population	Domestic Wastewater Flow: Residential (Ave.)	Commercial (Ave.)	Total	Peaking Factor	Peak Flow	Other Flow: Industrial	Infiltration	Total Design Flow	Designed Sewer: Diameter	Length	Slope	Velocity (Full)	Capacity (Full)	Ground Surface Elevation	Sewer Invert Elevation	Remarks
	ha	ha	ha	ha	ha	ha	persons	m^3/s	m^3/s	m^3/s		m^3/s	m^3/s	m^3/s	m^3/s	mm	m	‰	m/s	m^3/s	m	m	
(18)	10.97	107.79			10.97	107.79	32,340	0.075		0.075	3.3	0.248		0.009	0.257	⊙ 800	200.00	0.8	0.65	0.324		30.14	
																						29.98	
(19)	34.94	142.73			34.94	142.73	42,820	0.100		0.100	3.2	0.320		0.013	0.333	⊙ 900	400.00	0.8	0.70	0.444		29.88	
																						29.56	
(20)	0.00	142.73			0.00	142.73	42,820	0.100		0.100	3.2	0.320		0.013	0.333	⊙ 900	50.00	0.8	0.70	0.444		29.56	
																						29.52	
(21)	11.64	154.37			11.64	154.37	46,310	0.108		0.108	3.1	0.335		0.014	0.349	⊙ 900	360.00	0.8	0.70	0.444		29.52	
																						29.23	
	to (29)																						
(22)	3.86				3.86		1,160	0.003		0.003	4.8	0.014		0.001	0.015	⊙ 200	235.00	4.5	0.61	0.019		34.80	
																						33.74	
(23)	7.39	11.25			7.39	11.25	3,380	0.008		0.008	4.8	0.038		0.001	0.039	⊙ 300	200.00	2.8	0.63	0.044		33.64	
																						33.08	
(24)	6.96	18.21			6.96	18.21	5,460	0.013		0.013	4.7	0.061		0.002	0.063	⊙ 400	160.00	1.9	0.63	0.079		32.98	
																						32.68	
(25)	74.29	92.50			74.29	92.50	27,750	0.065		0.065	3.4	0.221		0.008	0.229	⊙ 700	620.00	1.0	0.66	0.254		32.38	
																						31.76	
(26)	0.00	92.50			0.00	92.50	27,750	0.065		0.065	3.4	0.221		0.008	0.229	⊙ 700	100.00	1.0	0.66	0.254		31.76	
																						31.66	
(27)	24.19	116.69			24.19	116.69	35,010	0.082		0.082	3.2	0.262		0.010	0.272	⊙ 800	520.00	0.8	0.65	0.324		31.56	
																						31.14	
(28)	65.28	181.97			65.28	181.97	54,590	0.127		0.127	3.0	0.381		0.016	0.397	⊙ 900	510.00	0.8	0.70	0.444		31.04	
																						30.63	
(29)	18.42	354.76			18.42	354.76	106,430	0.248		0.248	2.7	0.670		0.031	0.701	⊙1200	490.00	0.6	0.73	0.828		28.93	
																						28.64	
(30)	0.00	354.76			0.00	354.76	106,430	0.248		0.248	2.7	0.670		0.031	0.701	⊙1200	50.00	0.6	0.73	0.828		28.64	
																						28.34	
(P 1-2)																							Pumping Station
(31)	38.32	393.08			38.32	393.08	117,920	0.274		0.274	2.6	0.712		0.035	0.747	⊙1200	750.00	0.6	0.73	0.828		33.80	
																						33.35	
	to (40)																						
(32)	5.29				5.29		1,590	0.004		0.004	4.8	0.019		0.001	0.020	⊙ 250	250.00	3.5	0.62	0.031		34.75	
																						33.88	
(33)	6.48	11.77			6.48	11.77	3,530	0.008		0.008	4.8	0.038		0.001	0.039	⊙ 300	480.00	2.8	0.63	0.044		33.83	
																						32.49	
(34)	17.55	29.32			17.55	29.32	8,800	0.020		0.020	4.2	0.084		0.003	0.087	⊙ 450	355.00	1.6	0.62	0.099		32.34	
																						31.77	

37.00

Name of Zone	Area (ha)			Population Density	Population	Unit Flow		
	Residential	Commercial	Total			Per Capita	Commercial	Infiltration
ZONE 1	3,020	380	3,400	300 persons/ha	1018,700 persons	201 l/c/d	116 m^3/ha/d	7.6 m^3/ha/d

No. of Sewers	Area by Land Use: Residential Area Increment	Residential Area Total	Commercial Area Increment	Commercial Area Total	Area Increment	Area Total	Total Population	Domestic Wastewater Flow: Residential (Ave.)	Commercial (Ave.)	Total	Peaking Factor	Peak Flow	Other Flow: Industrial	Infiltration	Total Design Flow	Designed Sewer: Diameter	Length	Slope	Velocity (Full)	Capacity (Full)	Ground Surface Elevation	Sewer Invert Elevation	Remarks
	ha	ha	ha	ha	ha	ha	persons	m^3/s	m^3/s	m^3/s		m^3/s	m^3/s	m^3/s	m^3/s	mm	m	‰	m/s	m^3/s	m	m	
(35)	34.41	63.73			34.41	63.73	19,120	0.044		0.044	3.6	0.158		0.006	0.164	⊙ 600	540.00	1.2	0.65	0.184		31.62	
																						30.97	
(36)	3.34	67.07			3.34	67.07	20,120	0.047		0.047	3.6	0.169		0.006	0.175	⊙ 600	640.00	1.2	0.65	0.184		30.97	
																						30.20	
(P I-3)																							Pumping Station
(37)	4.94	72.01			4.94	72.01	21,600	0.050		0.050	3.5	0.175		0.006	0.181	⊙ 600	175.00	1.2	0.65	0.184		34.40	
																						34.18	
(38)	24.15	96.16			24.15	96.16	28,850	0.067		0.067	3.3	0.221		0.008	0.229	⊙ 700	465.00	1.0	0.66	0.254		34.08	
																						33.62	
(39)	33.23	129.39			33.23	129.39	38,820	0.090		0.090	3.2	0.288		0.011	0.299	⊙ 800	455.00	0.8	0.65	0.324		33.52	
																						33.15	
(40)	94.76	617.23			94.76	617.23	185,170	0.431		0.431	2.4	1.034		0.054	1.088	⊙1500	180.00	0.5	0.78	1.370		32.45	
																						32.36	
(41)	0.00	617.23			0.00	617.23	185,170	0.431		0.431	2.4	1.034		0.054	1.088	⊙1500	50.00	0.5	0.78	1.370		32.00	
																						31.98	
(42)	14.59	631.82			14.59	631.82	189,550	0.441		0.441	2.4	1.058		0.056	1.114	⊙1500	440.00	0.5	0.78	1.370		31.98	
																						31.76	
(43)	80.73	712.55			80.73	712.55	213,770	0.497		0.497	2.4	1.193		0.063	1.256	⊙1500	900.00	0.5	0.78	1.370		31.76	
																						31.31	
	to (58)																				37.00		
(44)	2.50				2.50		750	0.002		0.002	4.8	0.010		0.001	0.011	⊙ 200	190.00	4.5	0.61	0.019		34.80	
																						33.95	
(45)	8.65	11.15			8.65	11.15	3,350	0.008		0.008	4.8	0.038		0.001	0.039	⊙ 300	380.00	2.8	0.63	0.044		33.85	
																						32.79	
(46)	34.58	45.73			34.58	45.73	13,720	0.032		0.032	3.9	0.125		0.004	0.129	⊙ 600	355.00	1.2	0.65	0.184		32.49	
																						32.06	
(47)	27.34	73.07			27.34	73.07	21,920	0.051		0.051	3.5	0.179		0.006	0.185	⊙ 700	195.00	1.0	0.66	0.254		31.96	
																						31.77	
(48)	19.97	93.04			19.97	93.04	27,910	0.065		0.065	3.4	0.221		0.008	0.229	⊙ 700	395.00	1.0	0.66	0.254		31.77	
																						31.38	
(49)	20.36	113.40			20.36	113.40	34,020	0.079		0.079	3.3	0.261		0.010	0.271	⊙ 800	300.00	0.8	0.65	0.324		31.28	
																						31.04	
(P I-4)																							Pumping Station
																						34.20	
(50)	23.85	137.25			23.85	137.25	41,180	0.096		0.096	3.2	0.307		0.012	0.319	⊙ 800	400.00	0.8	0.65	0.324		33.88	
																						33.78	
(51)	36.20	173.45			36.20	173.45	52,040	0.121		0.121	3.0	0.363		0.015	0.378	⊙ 900	95.00	0.8	0.70	0.444		33.70	

Name of Zone	Area (ha)			Population Density	Population	Unit Flow		
	Residential	Commercial	Total			Per Capita	Commercial	Infiltration
ZONE I	3,020	380	3,400	300 persons/ha	1018,700 persons	201 l/c/d	116 m^3/ha/d	7.6 m^3/ha/d

No. of Sewers	Area by Land Use: Residential Area Increment	Residential Area Total	Commercial Area Increment	Commercial Area Total	Area Increment	Area Total	Total Population	Domestic Wastewater Flow: Residential (Ave.)	Commercial (Ave.)	Total	Peaking Factor	Peak Flow	Other Flow: Industrial	Infiltration	Total Design Flow	Designed Sewer: Diameter	Length	Slope	Velocity (Full)	Capacity (Full)	Ground Surface Elevation	Sewer Invert Elevation	Remarks
	ha	ha	ha	ha	ha	ha	persons	m^3/s	m^3/s	m^3/s		m^3/s	m^3/s	m^3/s	m^3/s	mm	m	‰	m/s	m^3/s	m	m	
(52)	0.00	173.45			0.00	173.45	52,040	0.121		0.121	3.0	0.363		0.015	0.378	⊙ 900	50.00	0.8	0.70	0.444		33.70	
																						33.66	
(53)	5.31	178.76			5.31	178.76	53,630	0.125		0.125	3.0	0.375		0.016	0.391	⊙ 900	240.00	0.8	0.70	0.444		33.66	
																						33.47	
(54)	19.53	198.29			19.53	198.29	59,490	0.138		0.138	3.0	0.414		0.017	0.431	⊙ 900	60.00	0.8	0.70	0.444		33.47	
																						33.42	
(55)	121.14	319.43			121.14	319.43	95,830	0.223		0.223	2.7	0.602		0.028	0.630	⊙1 100	385.00	0.6	0.69	0.656		33.22	
																						32.99	
(56)	0.00	319.43			0.00	319.43	95,830	0.223		0.223	2.7	0.602		0.028	0.630	⊙1 100	40.00	0.6	0.69	0.656		32.99	
																						32.97	
(57)	49.34	368.77			49.34	368.77	110,630	0.257		0.257	2.6	0.668		0.032	0.700	⊙1 200	910.00	0.6	0.73	0.828		32.87	
																						32.32	
(58)	79.13	1 160.45			79.13	1 160.45	348,140	0.810		0.810	2.1	1.701		0.102	1.803	⊙1 800	50.00	0.4	0.78	1.992		31.01	
																						30.99	
(59)	7.57	1 168.02			7.57	1 168.02	350,410	0.815		0.815	2.1	1.821		0.103	1.815	⊙1 800	330.00	0.4	0.78	1.992		30.99	
																						30.86	
(60)	74.25	1 242.27			74.25	1242.27	372,680	0.867		0.867	2.1	1.821		0.109	1.930	⊙1 800	480.00	0.4	0.78	1.992		30.86	
																					37.00	30.67	
(61)	77.75	1 320.02	3.08		80.83	1323.10	396,930	0.923	0.004	0.927	2.1	1.947		0.116	2.063	⊙1 900	550.00	0.4	0.81	2.301		30.57	
																						30.35	
(62)	27.78	1 347.80	37.89	40.97	65.67	1388.77	416,630	0.969	0.055	1.024	2.1	2.150		0.122	2.272	⊙1 900	340.00	0.4	0.81	2.301		30.35	
																						30.21	
(63)	32.67	1 380.47		40.97	32.67	1421.44	426,430	0.992	0.055	1.047	2.1	2.199		0.125	2.324	⊙2000	560.00	0.4	0.84	2.639		30.11	
																						29.89	
	to	(71)																					
(64)	0.00		5.33		5.33		1,600	0.004	0.007	0.011	4.8	0.053		0.001	0.054	⊙ 350	380.00	2.2	0.62	0.059		34.60	
																						33.76	
(65)	0.25	0.25	1.70	7.03	1.95	7.28	2,184	0.005	0.009	0.014	4.6	0.064		0.001	0.065	⊙ 400	435.00	1.9	0.63	0.079		33.71	
																						32.88	
(66)	0.00	0.25	39.05	46.08	39.05	46.33	13,900	0.032	0.062	0.094	3.2	0.301		0.004	0.305	⊙ 800	470.00	0.8	0.65	0.324		32.48	
																						32.10	
(67)	0.00	0.25	41.45	87.53	41.45	87.78	26,330	0.061	0.118	0.179	2.8	0.501		0.008	0.509	⊙1 000	540.00	0.6	0.65	0.509		31.90	
																						31.58	
(68)	0.00	0.25	40.93	128.46	40.93	128.71	38,610	0.090	0.172	0.262	2.6	0.681		0.011	0.692	⊙1 200	30.00	0.6	0.73	0.828		31.38	
																						31.36	
(69)	0.00	0.25	50.07	178.53	50.07	178.78	53,630	0.125	0.240	0.365	2.5	0.913		0.016	0.929	⊙1 350	935.00	0.5	0.72	1.034		31.21	
																						30.74	
(70)	53.90	54.15	30.32	208.85	84.22	263.00	78,900	0.184	0.280	0.464	2.3	1.067		0.023	1.090	⊙1 500	120.00	0.5	0.78	1.370		30.59	
																						30.53	

Name of Zone	Area (ha)			Population Density	Population	Unit Flow		
	Residential	Commercial	Total			Per Capita	Commercial	Infiltration
ZONE I	3,020	380	3,400	300 persons/ha	1018,700 persons	201 l/c/d	116 m^3/ha/d	7.6 m^3/ha/d

No of Sewers	Area by Land Use				Area		Total Population	Domestic Wastewater Flow					Other Flow		Total Design Flow	Designed Sewer							Remarks
	Residential Area		Commercial Area					Residential (Ave.)	Commercial (Ave.)	Total	Peaking Factor	Peak Flow	Industrial	Infiltration		Diameter	Length	Slope	Velocity (Full)	Capacity (Full)	Ground Surface Elevation	Sewer Invert Elevation	
	Increment	Total	Increment	Total	Increment	Total																	
	ha	ha	ha	ha	ha	ha	persons	m^3/s	m^3/s	m^3/s		m^3/s	m^3/s	m^3/s	m^3/s	mm	m	‰	m/s	m^3/s	m	m	
(71)	47.48	1482.10	2.57	252.39	50.05	1734.49	520,350	1.211	0.339	1.550	2.0	3.100		0.153	3.253	⊙2200	485.00	0.4	0.90	3.402		29.59	
																						29.41	
(72)	91.36	1573.46		252.39	91.36	1825.85	547,760	1.274	0.339	1.613	1.9	3.065		0.161	3.226	⊙2200	860.00	0.4	0.90	3.402	37.00	29.41	
																						29.07	
(73)	0.00	3020.00		380.00	0.00	3400.00	1020,000	2.373	0.510	2.883	1.8	5.189		0.299	5.488	⊙2700	40.00	0.4	1.03	5.874		28.57	
																						28.55	
	to	Treatment	Facilities																				

Name of Zone	Area (ha)			Population Density	Population	Unit Flow		
	Residential	Commercial	Total			Per Capita	Commercial	Infiltration
ZONE 2	2,030	1,570	3,600	229 persons/ha	823,800 persons	201 l/c/d	116 m^3/ha/d	7.6 m^3/ha/d

No. of Sewers	Area by Land Use: Residential Area Increment	Residential Area Total	Commercial Area Increment	Commercial Area Total	Area Increment	Area Total	Total Population	Domestic Wastewater Flow: Residential (Ave.)	Commercial (Ave.)	Total	Peaking Factor	Peak Flow	Other Flow: Industrial	Infiltration	Total Design Flow	Designed Sewer: Diameter	Length	Slope	Velocity (Full)	Capacity (Full)	Ground Surface Elevation	Sewer Invert Elevation	Remarks
	ha	ha	ha	ha	ha	ha	persons	m^3/s	m^3/s	m^3/s		m^3/s	m^3/s	m^3/s	m^3/s	mm	m	‰	m/s	m^3/s	m	m	
①	29.53		0.00		29.53		6,760	0.016		0.016	4.4	0.070		0.003	0.073	⊙ 400	270.00	1.9	0.63	0.079		34.60	
																						34.09	
②	34.51	64.04	0.00		34.51	64.04	14,670	0.034		0.034	3.8	0.129		0.006	0.135	⊙ 600	230.00	1.2	0.65	0.184		33.89	
																						33.61	
③	118.30	182.34	0.00		118.30	182.34	41,760	0.097		0.097	3.2	0.310		0.016	0.326	⊙ 900	190.00	0.8	0.70	0.444		33.31	
																						33.16	
④	80.15	262.49	1.92		82.07	264.41	60,550	0.141	0.003	0.144	2.9	0.418		0.023	0.441	⊙ 900	425.00	0.8	0.70	0.444		33.16	
																						32.82	
⑤	249.01	511.50	39.05	40.97	288.06	552.47	126,520	0.294	0..055	0.349	2.4	0.838		0.049	0.887	⊙1350	160.00	0.5	0.72	1.034		32.37	
																						32.29	
⑥	1.48	512.98	2.50	43.47	3.98	556.45	127,430	0.296	0.058	0.354	2.4	0.850		0.049	0.899	⊙1350	225.00	0.5	0.72	1.034		32.15	
																						32.02	
⑦	3.69	516.67	3.12	46.59	6.81	563.26	128,990	0.300	0.063	0.363	2.4	0.871		0.050	0.921	⊙1350	245.00	0.5	0.72	1.034		32.02	
																						31.88	
⑧	108.46	625.13	16.43	63.02	124.89	688.15	157,590	0.367	0.085	0.452	2.3	1.040		0.061	1.101	⊙1500	280.00	0.5	0.78	1.370		31.73	
																						31.59	
⑨	13.31	638.44	6.28	69.30	19.59	707.74	162,070	0.377	0.093	0.470	2.3	1.081		0.062	1.143	⊙1500	370.00	0.5	0.78	1.370		31.59	
																						31.41	
⑩	8.50	646.94	5.12	74.42	13.62	721.36	165,190	0.384	0.100	0.484	2.3	1.113		0.063	1.176	⊙1500	300.00	0.5	0.78	1.370		31.41	
																						31.26	
	to	⑳																					
⑪	4.97		0.00		4.97		1,140	0.003		0.003	4.8	0.014		0.001	0.015	⊙ 200	510.00	4.5	0.61	0.019		34.80	
																						32.51	
⑫	6.21	11.18	0.00		6.21	11.18	2,560	0.006		0.006	4.8	0.029		0.001	0.030	⊙ 250	300.00	3.5	0.62	0.031		32.46	
																						31.41	
⑬	11.92	23.10	0.00		11.92	23.10	5,290	0.012		0.012	4.7	0.056		0.002	0.058	⊙ 350	260.00	2.2	0.62	0.059		31.31	
																						30.74	
⑭	15.11	38.21	0.00		15.11	38.21	8,750	0.020		0.020	4.2	0.084		0.003	0.087	⊙ 450	390.00	1.6	0.62	0.099		30.64	
																						30.02	
⑮	38.73	76.94	0.00		38.73	76.94	17,620	0.041		0.041	3.7	0.152		0.007	0.159	⊙ 600	210.00	1.2	0.65	0.184		29.87	
																						29.62	
⑯	55.29	132.23	0.00		55.29	132.23	30,280	0.070		0.070	3.3	0.231		0.012	0.243	⊙ 700	150.00	1.0	0.66	0.254		29.52	
																						29.37	
P 2-1																							Pumping Station
⑰	12.73	144.96	0.00		12.73	144.96	33,200	0.077		0.077	3.3	0.254		0.013	0.267	⊙ 800	430.00	0.8	0.65	0.324		34.20	
																						33.86	
⑱	81.27	226.23	0.00		81.27	226.23	51,810	0.121		0.121	3.0	0.363		0.020	0.383	⊙ 900	280.00	0.8	0.70	0.444		33.76	
																						33.53	

37.00

Name of Zone	Area (ha)			Population Density	Population	Unit Flow		
	Residential	Commercial	Total			Per Capita	Commercial	Infiltration
ZONE 2	2,030	1,570	3,600	229 persons/ha	823,800 persons	201 l/c/d	116 m^3/ha/d	7.6 m^3/ha/d

No. of Sewers	Area by Land Use: Residential Area Increment	Residential Area Total	Commercial Area Increment	Commercial Area Total	Area Increment	Area Total	Total Population	Domestic Wastewater Flow: Residential (Ave.)	Commercial (Ave.)	Total	Peaking Factor	Peak Flow	Other Flow: Industrial	Infiltration	Total Design Flow	Designed Sewer: Diameter	Length	Slope	Velocity (Full)	Capacity (Full)	Ground Surface Elevation	Sewer Invert Elevation	Remarks
	ha	ha	ha	ha	ha	ha	persons	m^3/s	m^3/s	m^3/s		m^3/s	m^3/s	m^3/s	m^3/s	mm	m	‰	m/s	m^3/s	m	m	
(19)	14.69	240.92	2.45		17.14	243.37	55,730	0.130	0.003	0.133	2.9	0.386		0.021	0.407	⊙ 900	430.00	0.8	0.70	0.444		33.53	
																						33.19	
(20)	46.64	934.50	24.14	101.01	70.78	1035.51	237,130	0.552	0.136	0.688	2.1	1.445		0.091	1.536	⊙1650	570.00	0.4	0.74	1.580		31.11	
																						30.88	
(21)	6.94	941.44	6.22	107.23	13.16	1048.67	240,150	0.559	0.144	0.699	2.1	1.468		0.092	1.560	⊙1650	365.00	0.4	0.74	1.580		30.88	
																						30.73	
(22)	31.06	972.50	4.42	111.65	35.48	1084.15	248,270	0.578	0.150	0.728	2.1	1.529		0.095	1.624	⊙1800	280.00	0.4	0.78	1.992		30.58	
																						30.47	
(23)	76.57	1049.07	9.73	121.38	86.30	1170.45	268,030	0.624	0.163	0.787	2.1	1.653		0.103	1.756	⊙1800	40.00	0.4	0.78	1.992		30.47	
																						30.46	
(24)	34.88	1083.95	27.48	148.86	62.36	1232.81	282,310	0.657	0.200	0.857	2.1	1.800		0.108	1.908	⊙1800	265.00	0.4	0.78	1.992		30.46	
																						30.35	
	to	(35)																					
(25)	5.43				5.43		1,240	0.003		0.003	4.8	0.014		0.001	0.015	⊙ 200	270.00	4.5	0.61	0.019	37.00	34.80	
																						33.59	
(26)	6.19	11.62			6.19	11.62	2,660	0.006		0.006	4.8	0.029		0.001	0.030	⊙ 250	235.00	3.5	0.62	0.031		33.54	
																						32.72	
(27)	24.65	36.27			24.65	36.27	8,310	0.019		0.019	4.3	0.082		0.003	0.085	⊙ 450	380.00	1.6	0.62	0.099		32.52	
																						31.91	
(28)	12.11	48.38			12.11	48.38	11,080	0.026		0.026	4.0	0.104		0.004	0.108	⊙ 500	210.00	1.4	0.62	0.122		31.86	
																						31.57	
(29)	21.56	69.94			21.56	69.94	16,020	0.037		0.037	3.8	0.141		0.004	0.145	⊙ 600	320.00	1.2	0.65	0.184		31.47	
																						31.09	
(30)	9.36	79.30			9.36	79.30	18,160	0.042		0.042	3.7	0.155		0.007	0.162	⊙ 600	230.00	1.2	0.65	0.184		31.09	
																						30.81	
(31)	26.15	105.45			26.15	105.45	24,150	0.056		0.056	3.4	0.190		0.009	0.199	⊙ 700	160.00	1.0	0.66	0.254		30.71	
																						30.55	
(P 2-2)																							Pumping Station
(32)	27.07	132.52			27.07	132.52	30,350	0.071		0.071	3.3	0.234		0.012	0.246	⊙ 700	410.00	1.0	0.66	0.254		34.30	
																						33.89	
(33)	27.34	159.86			27.34	159.86	36,610	0.085		0.085	3.2	0.272		0.014	0.286	⊙ 800	375.00	0.8	0.65	0.324		33.79	
																						33.49	
(34)	14.71	174.57			14.71	174.57	39,980	0.093		0.093	3.2	0.298		0.015	0.313	⊙ 800	555.00	0.8	0.65	0.324		33.49	
																						33.05	
(35)	3.33	1261.85		148.86	3.33	1410.71	323,050	0.752	0.200	0.952	2.0	1.904		0.124	2.028	⊙1900	425.00	0.4	0.81	2.301		30.25	
																						30.08	
	to	(53)																					

Name of Zone	Area (ha)			Population Density	Population	Unit Flow		
	Residential	Commercial	Total			Per Capita	Commercial	Infiltration
ZONE 2	2,030	1,570	3,600	229 persons/ha	823,800 persons	201 l/c/d	116 m^3/ha/d	7.6 m^3/ha/d

No. of Sewers	Area by Land Use: Residential Area Increment	Residential Area Total	Commercial Area Increment	Commercial Area Total	Area Increment	Area Total	Total Population	Domestic Wastewater Flow: Residential (Ave.)	Commercial (Ave.)	Total	Peaking Factor	Peak Flow	Other Flow: Industrial	Infiltration	Total Design Flow	Designed Sewer: Diameter	Length	Slope	Velocity (Full)	Capacity (Full)	Ground Surface Elevation	Sewer Invert Elevation	Remarks
	ha	ha	ha	ha	ha	ha	persons	m^3/s	m^3/s	m^3/s		m^3/s	m^3/s	m^3/s	m^3/s	mm	m	‰	m/s	m^3/s	m	m	
(36)	0.00		5.40		5.40		1,240	0.003	0.007	0.001	4.8	0.005		0.001	0.006	⊙ 200	520.00	4.5	0.61	0.019		34.80	
																						32.46	
(37)	0.00		6.54	11.94	6.54	11.94	2,730	0.006	0.016	0.022	4.2	0.092		0.001	0.093	⊙ 450	255.00	1.6	0.62	0.099		32.21	
																						31.80	
(38)	0.00		7.91	19.85	7.91	19.85	4,550	0.011	0.027	0.038	3.7	0.141		0.002	0.143	⊙ 600	120.00	1.2	0.65	0.184		31.65	
																						31.51	
(39)	0.00		2.48	22.33	2.48	22.33	5,110	0.012	0.030	0.042	3.6	0.151		0.002	0.153	⊙ 600	30.00	1.2	0.65	0.184		31.51	
																						31.47	
(40)	0.00		20.98	43.31	20.98	43.31	9,920	0.023	0.058	0.081	3.2	0.259		0.004	0.263	⊙ 800	530.00	0.8	0.65	0.324		31.27	
																						30.85	
(41)	0.00		0.00	43.31	0.00	43.31	9,920	0.023	0.058	0.081	3.2	0.259		0.004	0.263	⊙ 800	90.00	0.8	0.65	0.324		30.85	
																						30.78	
(42)	0.00		14.06	57.37	14.06	57.37	13,140	0.031	0.077	0.108	3.1	0.335		0.005	0.340	⊙ 900	455.00	0.8	0.70	0.444		30.68	
																						30.32	
(43)	0.00		12.38	69.75	12.38	69.75	15,970	0.037	0.094	0.131	3.0	0.393		0.006	0.399	⊙ 900	30.00	0.8	0.70	0.444		30.32	
																						30.30	
(44)	0.00		9.53	79.28	9.53	79.28	18,160	0.042	0.106	0.148	2.9	0.429		0.007	0.436	⊙ 900	390.00	0.8	0.70	0.444		30.30	
																					37.00	29.99	
(P 2-3)																							Pumping Station
(45)	0.00		13.47	92.75	13.47	92.75	21,240	0.049	0.125	0.174	2.8	0.487		0.008	0.495	⊙1 000	170.00	0.6	0.65	0.509		34.00	
																						33.90	
(46)	0.00		9.39	102.14	9.39	102.14	23,390	0.054	0.137	0.191	2.8	0.535		0.009	0.544	⊙1 100	225.00	0.6	0.69	0.656		33.80	
																						33.67	
(47)	0.00		24.45	126.59	24.45	126.59	28,990	0.067	0.170	0.237	2.6	0.616		0.011	0.627	⊙1 100	160.00	0.6	0.69	0.656		33.67	
																						33.57	
(48)	0.00		0.00	126.59	0.00	126.59	28,990	0.067	0.170	0.237	2.6	0.616		0.011	0.627	⊙1 100	50.00	0.6	0.69	0.656		33.57	
																						33.54	
(49)	2.45		1.08	127.67	3.53	130.12	29,800	0.069	0.171	0.240	2.6	0.624		0.012	0.636	⊙1 100	570.00	0.6	0.69	0.656		33.54	
																						33.20	
(50)	8.88	11.33	1.75	129.42	10.63	140.75	32,230	0.075	0.174	0.249	2.6	0.647		0.012	0.659	⊙1 200	30.00	0.6	0.73	0.828		33.10	
																						33.08	
(51)	4.70	16.03	1.03	130.45	5.73	146.48	33,540	0.078	0.175	0.253	2.6	0.658		0.013	0.671	⊙1 200	1100.00	0.6	0.73	0.828		33.08	
																						32.42	
(52)	68.33	84.36	25.36	155.81	93.69	240.17	55,000	0.128	0.209	0.337	2.4	0.809		0.021	0.830	⊙1 350	410.00	0.5	0.72	1.034		32.27	
																						33.07	
(53)	3.50	1349.71	2.46	307.13	5.96	1656.84	379,420	0.883	0.412	1.295	2.0	2.590		0.146	2.736	⊙2 100	80.00	0.4	0.87	3.005		29.88	
																						29.85	
(54)	55.94	1405.65	0.00	307.13	55.94	1712.78	392,230	0.912	0.412	1.324	1.9	(2.590) 2.516		0.151	2.741	⊙2 100	905.00	0.4	0.87	3.005		29.85	
																						29.49	

Name of Zone	Area (ha)			Population Density	Population	Unit Flow		
	Residential	Commercial	Total			Per Capita	Commercial	Infiltration
ZONE 2	2,030	1,570	3,600	229 persons/ha	823,800 persons	201 l/c/d	116 m^3/ha/d	7.6 m^3/ha/d

No. of Sewers	Area by Land Use: Residential Area Increment	Residential Area Total	Commercial Area Increment	Commercial Area Total	Area Increment	Area Total	Total Population	Domestic Wastewater Flow: Residential (Ave.)	Commercial (Ave.)	Total	Peaking Factor	Peak Flow	Other Flow: Industrial	Infiltration	Total Design Flow	Designed Sewer: Diameter	Length	Slope	Velocity (Full)	Capacity (Full)	Ground Surface Elevation	Sewer Invert Elevation	Remarks
	ha	ha	ha	ha	ha	ha	persons	m^3/s	m^3/s	m^3/s		m^3/s	m^3/s	m^3/s	m^3/s	mm	m	‰	m/s	m^3/s	m	m	
	to	(162)																					
(55)	0.00		1.86		1.86		430	0.001	0.002	0.003	4.8	0.014		0.001	0.015	⊙ 200	160.00	4.5	0.61	0.091		34.80	
																						34.08	
(56)	0.00		4.46	6.32	4.46	6.32	1,450	0.003	0.008	0.011	4.8	0.053		0.001	0.054	⊙ 350	320.00	2.2	0.62	0.059		33.93	
																						33.23	
(57)	0.00		3.56	9.88	3.56	9.88	2,260	0.005	0.013	0.018	4.3	0.077		0.001	0.078	⊙ 400	170.00	1.9	0.63	0.079		33.18	
																						32.86	
(58)	0.00		16.11	25.99	16.11	25.99	5,950	0.014	0.035	0.049	3.5	0.172		0.002	0.174	⊙ 600	470.00	1.2	0.65	0.184		32.66	
																						32.10	
(59)	0.00		14.32	40.31	14.32	40.31	9,230	0.021	0.054	0.075	3.3	0.248		0.004	0.252	⊙ 700	420.00	1.0	0.66	0.254		32.00	
																						31.58	
(60)	0.00		6.68	46.99	6.68	46.99	10,760	0.025	0.063	0.088	3.2	0.282		0.004	0.286	⊙ 800	50.00	0.8	0.65	0.324		31.48	
																						31.44	
(61)	0.00		10.23	57.22	10.23	57.22	13,100	0.030	0.077	0.107	3.1	0.332		0.005	0.337	⊙ 900	500.00	0.8	0.70	0.444		31.34	
																						30.94	
(62)	0.00		17.59	74.81	17.59	74.81	17,130	0.040	0.100	0.140	3.0	0.420		0.007	0.427	⊙ 900	530.00	0.8	0.70	0.444		30.94	
																						30.52	
(63)	0.00		15.48	90.29	15.48	90.29	20,680	0.048	0.121	0.169	2.9	0.490		0.008	0.498	⊙1000	220.00	0.6	0.65	0.509		30.42	
																						30.29	
	to	(90)																					
(64)	0.00		1.96		1.96		450	0.001	0.003	0.004	4.8	0.019		0.001	0.020	⊙ 250	220.00	3.5	0.62	0.031		34.75	
																						33.98	
(65)	0.00		2.85	4.81	2.85	4.81	1,100	0.003	0.006	0.009	4.8	0.043		0.001	0.044	⊙ 300	140.00	2.8	0.63	0.044		33.93	
																						33.54	
(66)	0.00		5.88	10.69	5.88	10.69	2,450	0.006	0.014	0.020	4.2	0.084		0.001	0.085	⊙ 450	150.00	1.6	0.62	0.099		33.39	
																						33.15	
(67)	0.00		5.13	15.82	5.13	15.82	3,620	0.008	0.021	0.029	3.9	0.113		0.001	0.114	⊙ 500	160.00	1.4	0.62	0.122		33.10	
																						32.88	
(68)	0.00		8.05	23.87	8.05	23.87	5,470	0.013	0.032	0.045	3.6	0.162		0.002	0.164	⊙ 600	110.00	1.2	0.65	0.184		32.78	
																						32.65	
(69)	0.00		7.25	31.12	7.25	31.12	7,130	0.017	0.042	0.059	3.4	0.201		0.003	0.204	⊙ 700	550.00	1.0	0.66	0.254		32.55	
																						32.00	
(70)	0.00		33.23	64.35	33.23	64.35	14,740	0.034	0.086	0.120	3.1	0.372		0.006	0.378	⊙ 900	520.00	0.8	0.70	0.444		31.80	
																						31.38	
	to	(87)																					
(71)	0.00		9.83		9.83		2,250	0.005	0.013	0.018	4.3	0.077		0.001	0.078	⊙ 400	480.00	1.9	0.63	0.079		34.60	
																						33.69	

37.00

Name of Zone	Area (ha)			Population Density	Population	Unit Flow		
	Residential	Commercial	Total			Per Capita	Commercial	Infiltration
ZONE 2	2,030	1,570	3,600	229 persons/ha	823,800 persons	201 l/c/d	116 m^3/ha/d	7.6 m^3/ha/d

No. of Sewers	Area by Land Use: Residential Area Increment	Residential Area Total	Commercial Area Increment	Commercial Area Total	Area Increment	Area Total	Total Population	Domestic Wastewater Flow: Residential (Ave.)	Commercial (Ave.)	Total	Peaking Factor	Peak Flow	Other Flow: Industrial	Infiltration	Total Design Flow	Designed Sewer: Diameter	Length	Slope	Velocity (Full)	Capacity (Full)	Ground Surface Elevation	Sewer Invert Elevation	Remarks
	ha	ha	ha	ha	ha	ha	persons	m^3/s	m^3/s	m^3/s		m^3/s	m^3/s	m^3/s	m^3/s	mm	m	‰	m/s	m^3/s	m	m	
(72)	0.00		5.83	15.66	5.83	15.66	3,590	0.008	0.021	0.029	3.9	0.113		0.001	0.114	⊙ 500	455.00	1.4	0.62	0.122		33.59	
																						32.95	
(73)	0.00		28.01	43.67	28.01	43.67	10,000	0.023	0.058	0.081	3.2	0.259		0.004	0.263	⊙ 800	365.00	0.8	0.65	0.324		32.65	
																						32.36	
(74)	0.00		13.94	57.61	13.94	57.61	13,190	0.031	0.077	0.108	3.1	0.335		0.005	0.340	⊙ 900	145.00	0.8	0.70	0.444		32.26	
																						32.14	
(75)	0.00		12.77	70.38	12.77	70.38	16,120	0.038	0.094	0.132	3.0	0.396		0.006	0.402	⊙ 900	100.00	0.8	0.70	0.444		32.14	
																						32.06	
(76)	0.00		27.93	98.31	27.93	98.31	22,510	0.052	0.132	0.184	2.8	0.515		0.009	0.524	⊙1100	370.00	0.6	0.69	0.656		31.86	
																						31.64	
(77)	0.00		15.36	113.67	15.36	113.67	26,030	0.061	0.153	0.214	2.7	0.578		0.010	0.588	⊙1100	320.00	0.6	0.69	0.656		31.64	
																						31.45	
(78)	0.00		0.00	113.67	0.00	113.67	26,030	0.061	0.153	0.214	2.7	0.578		0.010	0.588	⊙1100	100.00	0.6	0.69	0.656		31.45	
																						31.39	
	to (85)																						
(79)	0.00		6.88		6.88		1,580	0.004	0.009	0.013	4.7	0.061		0.001	0.062	⊙ 400	270.00	1.9	0.63	0.079	37.00	34.60	
																						34.09	
(80)	0.00		1.54	8.42	1.54	8.42	1,930	0.004	0.011	0.015	4.5	0.068		0.001	0.069	⊙ 400	400.00	1.9	0.63	0.079		34.09	
																						33.33	
(81)	0.00		15.91	24.33	15.91	24.33	5,570	0.013	0.033	0.046	3.6	0.166		0.002	0.168	⊙ 600	340.00	1.2	0.65	0.184		33.13	
																						32.72	
(82)	0.00		23.25	47.58	23.25	47.58	10,900	0.025	0.064	0.089	3.2	0.285		0.004	0.289	⊙ 800	645.00	0.8	0.65	0.324		32.52	
																						32.00	
(83)	0.00		17.17	64.75	17.17	64.75	14,830	0.035	0.087	0.122	3.0	0.366		0.006	0.372	⊙ 900	80.00	0.8	0.70	0.444		31.90	
																						31.84	
(84)	0.00		19.13	83.88	19.13	83.88	19,210	0.045	0.113	0.158	2.9	0.458		0.007	0.465	⊙1000	270.00	0.6	0.65	0.509		31.74	
																						31.58	
(85)	0.00		8.43	205.98	8.43	205.98	47,170	0.110	0.277	0.387	2.4	0.929		0.018	0.947	⊙1350	150.00	0.5	0.72	1.034		31.14	
																						31.07	
(86)	0.00		52.06	258.04	52.06	258.04	59,090	0.137	0.346	0.483	2.3	1.111		0.023	1.134	⊙1650	95.00	0.4	0.74	1.580		30.77	
																						30.72	
(87)	0.00		14.66	337.05	14.66	337.05	77,180	0.180	0.453	0.633	2.2	1.393		0.030	1.423	⊙1800	40.00	0.4	0.78	1.992		30.63	
																						30.46	
(88)	0.00		13.98	351.03	13.98	351.03	80,390	0.187	0.471	0.658	2.2	1.448		0.031	1.479	⊙1800	430.00	0.4	0.78	1.992		30.46	
																						30.29	
(89)	0.00		14.40	365.43	14.40	365.43	83,680	0.195	0.491	0.686	2.2	1.509		0.032	1.541	⊙1800	940.00	0.4	0.78	1.992		30.29	
																						29.91	
(90)	0.00		4.88	460.60	4.88	460.60	105,480	0.245	0.618	0.863	2.1	1.812		0.041	1.853	⊙1900	190.00	0.4	0.81	2.301		29.39	
																						29.34	

Name of Zone	Area (ha)			Population Density	Population	Unit Flow		
	Residential	Commercial	Total			Per Capita	Commercial	Infiltration
ZONE 2	2,030	1,570	3,600	229 persons/ha	823,800 persons	201 l/c/d	116 m^3/ha/d	7.6 m^3/ha/d

No. of Sewers	Area by Land Use: Residential Area Increment	Residential Area Total	Commercial Area Increment	Commercial Area Total	Area Increment	Area Total	Total Population	Domestic Wastewater Flow: Residential (Ave.)	Commercial (Ave.)	Total	Peaking Factor	Peak Flow	Other Flow: Industrial	Infiltration	Total Design Flow	Designed Sewer: Diameter	Length	Slope	Velocity (Full)	Capacity (Full)	Ground Surface Elevation	Sewer Invert Elevation	Remarks
	ha	ha	ha	ha	ha	ha	persons	m^3/s	m^3/s	m^3/s		m^3/s	m^3/s	m^3/s	m^3/s	mm	m	‰	m/s	m^3/s	m	m	
(91)	0.00		0.00	460.60	0.00	460.60	105,480	0.245	0.618	0.863	2.1	1.812		0.041	1.853	⊙1900	40.00	0.4	0.81	2.301		29.31	
																						29.29	
(92)	0.00		12.56	473.16	12.56	473.16	108,350	0.252	0.635	0.887	2.1	1.863		0.042	1.905	⊙1900	430.00	0.4	0.81	2.301		29.29	
																						29.12	
(93)	0.00		44.79	517.95	44.79	517.95	118,610	0.276	0.695	0.971	2.1	2.039		0.046	2.085	⊙2000	400.00	0.4	0.84	2.639		29.02	
																						28.86	
(94)	0.00		23.01	540.96	23.01	540.96	123,880	0.288	0.726	1.014	2.0	2.028		0.048	2.076	⊙2000	410.00	0.4	0.84	2.639		28.86	
																						28.70	
(95)	0.00		14.66	555.62	14.66	555.62	127,240	0.296	0.746	1.042	2.0	2.084		0.049	2.133	⊙2000	355.00	0.4	0.84	2.639		28.70	
																						28.56	
(96)	0.00		85.14	640.76	85.14	640.76	146,730	0.341	0.860	1.201	2.0	2.402		0.056	2.458	⊙2100	60.00	0.4	0.87	3.005		28.46	
																						28.44	
(P2-4)	0.00		105.17	745.93	105.17	745.93	170,820	0.397	1.001	1.398	1.9	2.656		0.066	2.722								Pumping Station
																						32.80	
(97)	0.00		0.00	745.93	0.00	745.93	170,820	0.397	1.001	1.398	1.9	2.656		0.066	2.722	⊙2200	105.00	0.4	0.90	3.402		32.76	
																					37.00	32.76	
(98)	0.00		11.99	757.92	11.99	757.92	173,560	0.404	1.018	1.422	1.9	2.702		0.067	2.769	⊙2200	335.00	0.4	0.90	3.402		32.63	
																						30.92	
(99)	0.00		22.15	780.07	22.15	780.07	178,640	0.416	1.047	1.463	1.9	2.780		0.069	2.849	⊙2200	290.00	0.4	0.90	3.402		30.80	
																						30.80	
(100)	0.00		11.41	791.48	11.41	791.48	181,250	0.422	1.063	1.485	1.9	2.822		0.070	2.892	⊙2200	175.00	0.4	0.90	3.402		30.73	
																						30.73	
(101)	0.00		22.12	813.60	22.12	813.60	186,310	0.433	1.092	1.525	1.9	2.898		0.072	2.970	⊙2200	160.00	0.4	0.90	3.402		30.67	
																						30.67	
(102)	0.00		32.61	846.21	32.61	846.21	193,780	0.451	1.136	1.587	1.9	3.015		0.074	3.089	⊙2200	475.00	0.4	0.90	3.402		30.48	
	to (111)																						
(103)	0.00		3.04		3.04		700	0.002	0.004	0.006	4.8	0.029		0.001	0.030	⊙ 250	330.00	3.5	0.62	0.031		34.75	
																						33.60	
(104)	0.00		2.18	5.22	2.18	5.22	1,200	0.003	0.007	0.010	4.8	0.048		0.001	0.049	⊙ 350	95.00	2.2	0.62	0.059		33.50	
																						33.29	
(105)	0.00		6.47	11.69	6.47	11.69	2,680	0.006	0.016	0.022	4.2	0.092		0.001	0.093	⊙ 450	180.00	1.6	0.62	0.099		33.19	
																						32.90	
(106)	0.00		7.53	19.22	7.53	19.22	4,400	0.010	0.026	0.036	3.8	0.137		0.002	0.139	⊙ 600	200.00	1.2	0.65	0.184		32.75	
																						32.51	
(107)	0.00		10.05	29.27	10.05	29.27	6,700	0.016	0.039	0.055	3.5	0.193		0.003	0.196	⊙ 700	240.00	1.0	0.66	0.254		32.41	
																						32.17	
(108)	0.00		10.61	39.88	10.61	39.88	9,130	0.021	0.054	0.075	3.3	0.248		0.004	0.252	⊙ 700	400.00	1.0	0.66	0.254		32.17	
																						31.77	

Name of Zone	Area (ha)			Population Density	Population	Unit Flow		
	Residential	Commercial	Total			Per Capita	Commercial	Infiltration
ZONE 2	2,030	1,570	3,600	229 persons/ha	823,800 persons	201 l/c/d	116 m^3/ha/d	7.6 m^3/ha/d

No. of Sewers	Area by Land Use: Residential Area Increment	Residential Area Total	Commercial Area Increment	Commercial Area Total	Area Increment	Area Total	Total Population	Domestic Wastewater Flow: Residential (Ave.)	Commercial (Ave.)	Total	Peaking Factor	Peak Flow	Other Flow: Industrial	Infiltration	Total Design Flow	Designed Sewer: Diameter	Length	Slope	Velocity (Full)	Capacity (Full)	Ground Surface Elevation	Sewer Invert Elevation	Remarks
	ha	ha	ha	ha	ha	ha	persons	m^3/s	m^3/s	m^3/s		m^3/s	m^3/s	m^3/s	m^3/s	mm	m	‰	m/s	m^3/s	m	m	
(109)	0.00		11.02	50.90	11.02	50.90	11,660	0.027	0.068	0.095	3.2	0.304		0.004	0.308	⊙ 800	75.00	0.8	0.65	0.324		31.67	
																						31.61	
(110)	0.00		11.77	62.67	11.77	62.67	14,350	0.033	0.084	0.117	3.1	0.363		0.006	0.369	⊙ 900	585.00	0.8	0.70	0.444		31.51	
																						31.04	
(111)	0.00		0.00	908.88	0.00	908.88	208,130	0.484	1.220	1.704	1.9	3.238		0.080	3.318	⊙ 2300	30.00	0.4	0.92	3.831		30.38	
																						30.37	
(112)	83.45	83.45	15.28	924.16	98.73	1007.61	230,740	0.537	1.241	1.778	1.9	3.378		0.089	3.467	⊙ 2300	555.00	0.4	0.92	3.831		30.37	
																						30.15	
(113)	42.75	126.20	17.83	941.99	60.58	1068.19	244,620	0.568	1.265	1.833	1.8	(3.378) 3.299		0.091	3.469	⊙ 2300	380.00	0.4	0.92	3.831		30.15	
																						30.00	
(114)	49.05	175.25	22.06	964.05	71.11	1139.30	260,900	0.607	1.294	1.901	1.8	3.422		0.097	3.519	⊙ 2300	500.00	0.4	0.92	3.831		30.00	
																						29.80	
(115)	8.82	184.07	16.09	980.14	24.91	1164.21	266,600	0.620	1.316	1.936	1.8	3.485		0.100	3.585	⊙ 2400	420.00	0.4	0.95	3.291		29.70	
																						29.53	
	to	(150)																					
(116)	0.00		3.87		3.87		890	0.002	0.005	0.007	4.8	0.034		0.001	0.035	⊙ 300	320.00	2.8	0.63	0.044	37.00	34.70	
																						33.80	
(117)	0.00		8.03	11.90	8.03	11.90	2,730	0.006	0.016	0.022	4.2	0.092		0.001	0.093	⊙ 450	255.00	1.6	0.62	0.099		33.65	
																						33.24	
(118)	0.00		8.60	20.50	8.60	20.50	4,690	0.011	0.028	0.039	3.7	0.144		0.002	0.146	⊙ 600	320.00	1.2	0.65	0.184		33.09	
																						32.71	
(119)	0.00		12.60	33.10	12.60	33.10	7,580	0.018	0.044	0.062	3.4	0.211		0.003	0.214	⊙ 700	320.00	1.0	0.66	0.254		32.61	
																						32.29	
(120)	0.00		4.79	37.89	4.79	37.89	8,680	0.020	0.051	0.071	3.3	0.234		0.003	0.237	⊙ 700	280.00	1.0	0.66	0.254		32.29	
																						32.01	
(121)	0.00		44.86	82.75	44.86	82.75	18,950	0.044	0.111	0.155	2.9	0.450		0.007	0.457	⊙ 1000	470.00	0.6	0.65	0.509		31.71	
																						31.43	
(122)	0.00		29.78	112.53	29.78	112.53	25,770	0.060	0.151	0.211	2.8	0.591		0.010	0.601	⊙ 1100	500.00	0.6	0.69	0.656		31.33	
																						31.03	
	to	(131)																					
(123)	0.00		4.23		4.23		970	0.002	0.005	0.007	4.8	0.034		0.001	0.035	⊙ 300	330.00	2.8	0.63	0.044		34.70	
																						33.78	
(124)	0.00		6.99	11.22	6.99	11.22	2,570	0.006	0.015	0.026	4.2	0.008		0.001	0.089	⊙ 450	310.00	1.6	0.62	0.099		33.63	
																						33.13	
(125)	0.00		5.70	16.92	5.70	16.92	3,870	0.009	0.023	0.032	3.9	0.125		0.001	0.126	⊙ 600	210.00	1.2	0.65	0.184		32.98	
																						32.73	
(126)	0.00		16.39	33.31	16.39	33.31	7,630	0.018	0.045	0.063	3.4	0.214		0.003	0.217	⊙ 700	240.00	1.0	0.66	0.254		32.63	
																						32.39	