CH4_2	JUNCTION	0.01	0.18	174.78	0	00:38	0.18
CH4_3	JUNCTION	0.01	0.19	170.85	0	00:38	0.19
CH4_4	JUNCTION	0.01	0.19	167.97	0	00:38	0.19
CH4_5	JUNCTION	0.01	0.18	164.65	0	00:38	0.18
CH4_6	JUNCTION	0.02	0.43	158.65	0	00:38	0.42
CH4_7	JUNCTION	0.02	0.43	158.17	0	00:38	0.42
CH4_8	JUNCTION	0.02	0.43	157.86	0	00:38	0.42
CH4_9	JUNCTION	0.02	0.43	157.42	0	00:38	0.42
CH4_10	JUNCTION	0.02	0.43	156.82	0	00:38	0.42
CH4_11	JUNCTION	0.02	0.43	155.60	0	00:38	0.42
CH4_12	JUNCTION	0.02	0.43	155.14	0	00:38	0.42
CH4_13	JUNCTION	0.02	0.43	154.29	0	00:38	0.42
CH4_14	JUNCTION	0.02	0.43	153.93	0	00:38	0.42
CH4_15	JUNCTION	0.02	0.32	152.64	0	00:38	0.32
CH4_16	JUNCTION	0.03	0.47	152.13	0	00:40	0.47
CH4_17	JUNCTION	0.03	0.47	151.86	0	00:40	0.47
CH4_18	JUNCTION	0.03	0.47	150.90	0	00:40	0.47
CH4_19	JUNCTION	0.03	0.47	150.69	0	00:40	0.47
CH4_20	JUNCTION	0.03	0.47	150.12	0	00:40	0.47
CH4_21	JUNCTION	0.03	0.47	149.77	0	00:40	0.47
CH4_22	JUNCTION	0.04	0.43	149.45	0	00:40	0.43
CH4_23	JUNCTION	0.03	0.36	147.68	0	00:42	0.36
CH4_24	JUNCTION	0.03	0.36	146.32	0	00:42	0.36
CH4_25	JUNCTION	0.02	0.34	143.25	0	00:42	0.34
CH4_26	JUNCTION	0.03	0.45	141.33	0	00:42	0.45
CH4_27	JUNCTION	0.03	0.45	140.39	0	00:42	0.45
CH4_28	JUNCTION	0.04	0.50	139.58	0	00:42	0.49
CH4_29	JUNCTION	0.05	0.50	139.06	0	00:42	0.49
CH4_30	JUNCTION	0.06	0.61	138.52	0	00:43	0.60
CH4_31	JUNCTION	0.06	0.61	138.27	0	00:43	0.60
CH4_32	JUNCTION	0.06	0.61	138.11	0	00:43	0.60
CH4_33	JUNCTION	0.06	0.61	137.82	0	00:43	0.60
CH4_34	JUNCTION	0.06	0.60	137.59	0	00:43	0.60
CH4_35	JUNCTION	0.06	0.60	137.22	0	00:43	0.60
CH4_36	JUNCTION	0.03	0.36	135.56	0	00:43	0.36

CH4_37	JUNCTION	0.04	0.45	132.10	0	00:43	0.45
CH4_38	JUNCTION	0.06	0.60	131.54	0	00:43	0.60
CH4_39	JUNCTION	0.06	0.60	131.34	0	00:43	0.60
CH4_40	JUNCTION	0.06	0.72	130.32	0	00:43	0.71
CH4_41	JUNCTION	0.06	0.72	130.02	0	00:43	0.71
CH4_42	JUNCTION	0.06	0.72	129.83	0	00:43	0.71
CH4_43	JUNCTION	0.06	0.72	129.54	0	00:43	0.71
CH4_44	JUNCTION	0.06	0.72	129.13	0	00:43	0.71
CH4_45	JUNCTION	0.07	0.80	128.51	0	00:43	0.79
CH4_46	JUNCTION	0.07	0.80	128.20	0	00:43	0.79
CH4_47	JUNCTION	0.07	0.80	127.98	0	00:43	0.79
CH4_48	JUNCTION	0.07	0.80	127.68	0	00:43	0.79
CH4_49	JUNCTION	0.07	0.80	127.56	0	00:43	0.79
CH4_50	JUNCTION	0.07	0.80	126.83	0	00:43	0.79
CH4_51	JUNCTION	0.06	0.71	124.05	0	00:44	0.71
CH4_52	JUNCTION	0.06	0.71	123.59	0	00:44	0.71
CH4_53	JUNCTION	0.05	0.58	122.58	0	00:44	0.58
CH4_54	JUNCTION	0.06	0.69	121.70	0	00:44	0.69
CH4_55	JUNCTION	0.07	0.74	121.26	0	00:44	0.74
CH4_56	JUNCTION	0.08	0.84	121.06	0	00:44	0.83
MH1	JUNCTION	0.04	0.56	184.28	0	00:31	0.56
MH2	JUNCTION	0.04	0.55	179.79	0	00:33	0.55
MH3	JUNCTION	0.04	0.47	170.78	0	00:35	0.47
MH3.1	JUNCTION	0.04	0.47	164.83	0	00:35	0.47
MH3.3	JUNCTION	0.04	0.58	181.28	0	00:38	0.58
MH4	JUNCTION	0.02	0.18	174.16	0	00:46	0.18
MH4.1	JUNCTION	0.03	0.26	163.09	0	00:46	0.26
CH15_1	JUNCTION	0.00	0.00	158.24	0	00:00	0.00
CH15_2	JUNCTION	0.00	0.00	155.91	0	00:00	0.00
CH15_3	JUNCTION	0.03	0.26	155.85	0	00:46	0.26
CH15_4	JUNCTION	0.02	0.19	155.68	0	00:46	0.19
MH5	JUNCTION	0.03	0.33	162.16	0	00:46	0.33
MH6	JUNCTION	0.04	0.17	161.13	0	00:54	0.17
MH7	JUNCTION	0.03	0.34	141.71	0	00:42	0.34
MH8	JUNCTION	0.02	0.33	135.46	0	00:42	0.33

MH9	JUNCTION	0.03	0.25	134.40	0	00:49	0.25
CH4_57	JUNCTION	0.08	0.84	120.85	0	00:44	0.83
CH4_58	JUNCTION	0.08	0.84	120.10	0	00:44	0.83
CH4_59	JUNCTION	0.08	0.84	119.85	0	00:44	0.83
CH4_60	JUNCTION	0.06	0.66	118.96	0	00:44	0.65
MH10	JUNCTION	0.02	0.21	138.24	0	00:43	0.20
MH3.2	JUNCTION	0.04	0.52	155.46	0	00:35	0.52
CH1_PRE	JUNCTION	0.06	0.34	176.63	0	01:55	0.34
CH2_PRE	JUNCTION	0.06	0.34	176.19	0	01:55	0.34
CH3_PRE	JUNCTION	0.04	0.22	172.00	0	01:55	0.22
CH4_PRE	JUNCTION	0.03	0.21	168.82	0	01:55	0.21
CH5_PRE	JUNCTION	0.04	0.23	167.13	0	01:55	0.23
CH6_PRE	JUNCTION	0.06	0.34	165.92	0	01:55	0.34
CH7_PRE	JUNCTION	0.06	0.34	165.73	0	01:55	0.34
CH8_PRE	JUNCTION	0.06	0.34	162.04	0	01:55	0.34
CH9_PRE	JUNCTION	0.06	0.34	161.79	0	01:55	0.34
CH10_PRE	JUNCTION	0.06	0.34	161.56	0	01:55	0.34
CH11_PRE	JUNCTION	0.03	0.18	158.63	0	01:55	0.18
CH13_PRE	JUNCTION	0.09	0.57	130.50	0	01:50	0.57
CH14_PRE	JUNCTION	0.09	0.57	129.97	0	01:50	0.57
CH15_PRE	JUNCTION	0.09	0.57	129.31	0	01:50	0.57
CH17_PRE	JUNCTION	0.01	0.08	173.54	0	01:35	0.08
CH18_PRE	JUNCTION	0.01	0.08	167.40	0	01:35	0.08
CH19_PRE	JUNCTION	0.01	0.11	162.51	0	01:35	0.11
CH20_PRE	JUNCTION	0.02	0.20	158.79	0	01:35	0.20
CH21_PRE	JUNCTION	0.02	0.20	157.47	0	01:35	0.20
CH22_PRE	JUNCTION	0.02	0.18	156.01	0	01:35	0.18
CH23_PRE	JUNCTION	0.02	0.20	153.87	0	01:35	0.20
CH24_PRE	JUNCTION	0.02	0.20	153.31	0	01:35	0.20
CH25_PRE	JUNCTION	0.02	0.18	151.39	0	01:30	0.18
CH26_PRE	JUNCTION	0.02	0.21	150.24	0	01:30	0.21
CH27_PRE	JUNCTION	0.03	0.26	149.12	0	01:30	0.26
CH28_PRE	JUNCTION	0.03	0.26	148.80	0	01:30	0.26
CH29_PRE	JUNCTION	0.03	0.22	144.06	0	01:35	0.22
CH30_PRE	JUNCTION	0.03	0.23	142.03	0	01:35	0.23

CH31_PRE	JUNCTION	0.04	0.33	139.24	0	01:35	0.33
CH32_PRE	JUNCTION	0.04	0.38	138.19	0	01:35	0.38
CH33_PRE	JUNCTION	0.04	0.38	137.22	0	01:35	0.38
CH34_PRE	JUNCTION	0.03	0.31	133.29	0	01:35	0.31
CH35_PRE	JUNCTION	0.05	0.44	129.98	0	01:35	0.44
CH36_PRE	JUNCTION	0.05	0.44	129.32	0	01:35	0.44
CH37_PRE	JUNCTION	0.05	0.49	127.50	0	01:35	0.49
CH38_PRE	JUNCTION	0.05	0.49	127.20	0	01:35	0.49
CH39_PRE	JUNCTION	0.05	0.49	126.46	0	01:35	0.49
CH40_PRE	JUNCTION	0.05	0.44	122.46	0	01:35	0.44
CH41_PRE	JUNCTION	0.05	0.44	121.15	0	01:35	0.44
CH42_PRE	JUNCTION	0.05	0.44	120.34	0	01:35	0.44
CH43_PRE	JUNCTION	0.05	0.44	119.34	0	01:35	0.44
MHOUTPRE0	OUTFALL	0.09	0.57	129.08	0	01:50	0.57
MHOUT0	OUTFALL	0.09	0.79	127.30	0	00:46	0.78
MHOUTPRE1	OUTFALL	0.04	0.34	117.83	0	01:35	0.34
MHOUT1	OUTFALL	0.06	0.66	118.35	0	00:44	0.65
POND1	STORAGE	0.07	1.43	188.37	0	00:31	1.42
POND2	STORAGE	0.07	1.44	183.67	0	00:33	1.44
MINING_PIT	STORAGE	0.89	4.75	133.90	0	00:48	4.74
POND3	STORAGE	0.07	1.48	185.82	0	00:38	1.48
POND4	STORAGE	0.16	1.50	185.39	0	00:46	1.49
POND5	STORAGE	0.09	1.50	167.44	0	00:46	1.50
POND6	STORAGE	0.29	1.48	171.64	0	00:54	1.48
POND7	STORAGE	0.09	1.48	169.26	0	00:42	1.48
POND8	STORAGE	0.09	1.78	148.10	0	00:42	1.77
POND9	STORAGE	0.19	1.76	150.72	0	00:49	1.76
POND10	STORAGE	0.14	1.48	171.80	0	00:43	1.48

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Node Inflow Summary
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Node	Type	Maximum Lateral Inflow CMS	Maximum Total Inflow CMS	Time of Max Occurrence days hr:min	Lateral Inflow Volume 10^6 ltr	Total Inflow Volume 10^6 ltr	Flow Balance Error Percent
CH12_PRE	JUNCTION	8.160	8.160	0 01:45	75.5	75.5	0.000
CH1_1	JUNCTION	0.000	0.000	0 00:00	0	0	0.000 ltr
CH1_2	JUNCTION	0.000	0.000	0 00:00	0	0	0.000 ltr
CH1_3	JUNCTION	0.000	0.000	0 00:00	0	0	0.000 ltr
CH1_4	JUNCTION	0.000	0.000	0 00:00	0	0	0.000 ltr
CH1_5	JUNCTION	0.000	0.000	0 00:00	0	0	0.000 ltr
CH1_6	JUNCTION	0.000	0.000	0 00:00	0	0	0.000 ltr
CH1_7	JUNCTION	0.000	7.418	0 00:32	0	21.9	0.000
CH1_8	JUNCTION	0.000	7.418	0 00:32	0	21.9	0.000
CH1_9	JUNCTION	0.000	7.418	0 00:32	0	21.9	0.000
CH1_10	JUNCTION	0.000	7.418	0 00:32	0	21.9	0.000
CH1_11	JUNCTION	0.000	7.418	0 00:32	0	21.9	0.000
CH1_12	JUNCTION	0.000	7.418	0 00:32	0	21.9	0.000
CH1_13	JUNCTION	0.000	7.418	0 00:32	0	21.9	0.000
CH1_14	JUNCTION	0.000	7.418	0 00:32	0	21.9	0.000
CH1_15	JUNCTION	0.000	7.418	0 00:32	0	21.9	0.000
CH1_16	JUNCTION	0.000	7.418	0 00:32	0	21.9	0.000
CH1_17	JUNCTION	0.000	7.418	0 00:32	0	21.9	0.000
CH1_18	JUNCTION	0.000	7.418	0 00:32	0	21.9	0.000
CH1_19	JUNCTION	0.000	7.418	0 00:32	0	21.9	0.000
CH1_20	JUNCTION	0.000	7.418	0 00:32	0	21.9	0.000
CH1_21	JUNCTION	0.000	7.418	0 00:32	0	21.9	0.000
CH1_22	JUNCTION	0.000	10.922	0 00:46	0	52.5	0.000
CH1_23	JUNCTION	0.000	10.922	0 00:46	0	52.5	0.000
CH1_24	JUNCTION	0.000	10.922	0 00:46	0	52.5	0.000
CH1_25	JUNCTION	0.000	10.922	0 00:46	0	52.5	0.000
CH1_26	JUNCTION	0.000	10.922	0 00:46	0	52.5	0.000
CH2_1	JUNCTION	0.000	0.000	0 00:00	0	0	0.000 ltr
CH2_2	JUNCTION	0.000	0.000	0 00:00	0	0	0.000 ltr
CH2_3	JUNCTION	0.000	0.000	0 00:00	0	0	0.000 ltr

CH2_4	JUNCTION	0.000	0.000	0	00:00	0	0	0.000 ltr
CH2_5	JUNCTION	0.000	0.000	0	00:00	0	0	0.000 ltr
CH2_6	JUNCTION	0.000	7.418	0	00:32	0	21.9	0.000
CH3_1	JUNCTION	0.000	0.000	0	00:00	0	0	0.000 ltr
CH3_2	JUNCTION	0.000	0.000	0	00:00	0	0	0.000 ltr
CH3_3	JUNCTION	0.000	0.000	0	00:00	0	0	0.000 ltr
CH3_4	JUNCTION	0.000	0.000	0	00:00	0	0	0.000 ltr
CH3_5	JUNCTION	0.000	0.000	0	00:00	0	0	0.000 ltr
CH3_6	JUNCTION	0.000	0.000	0	00:00	0	0	0.000 ltr
CH3_7	JUNCTION	0.000	0.000	0	00:00	0	0	0.000 ltr
CH3_8	JUNCTION	0.000	0.000	0	00:00	0	0	0.000 ltr
CH3_9	JUNCTION	0.000	0.000	0	00:00	0	0	0.000 ltr
CH3_10	JUNCTION	0.000	0.000	0	00:00	0	0	0.000 ltr
CH3_11	JUNCTION	0.000	0.000	0	00:00	0	0	0.000 ltr
CH3_12	JUNCTION	0.000	0.000	0	00:00	0	0	0.000 ltr
CH3_13	JUNCTION	0.000	0.000	0	00:00	0	0	0.000 ltr
CH3_14	JUNCTION	0.000	0.000	0	00:00	0	0	0.000 ltr
CH3_15	JUNCTION	0.000	0.000	0	00:00	0	0	0.000 ltr
CH3_16	JUNCTION	0.000	0.000	0	00:00	0	0	0.000 ltr
CH3_17	JUNCTION	0.000	0.000	0	00:00	0	0	0.000 ltr
CH3_18	JUNCTION	0.000	0.000	0	00:00	0	0	0.000 ltr
CH3_19	JUNCTION	0.000	0.000	0	00:00	0	0	0.000 ltr
CH3_20	JUNCTION	0.000	0.000	0	00:00	0	0	0.000 ltr
CH3_21	JUNCTION	0.000	0.000	0	00:00	0	0	0.000 ltr
CH3_22	JUNCTION	0.000	0.000	0	00:00	0	0	0.000 ltr
CH4_1	JUNCTION	0.000	3.713	0	00:38	0	9.94	0.000
CH4_2	JUNCTION	0.000	3.713	0	00:38	0	9.94	0.000
CH4_3	JUNCTION	0.000	3.713	0	00:38	0	9.94	0.000
CH4_4	JUNCTION	0.000	3.713	0	00:38	0	9.94	0.000
CH4_5	JUNCTION	0.000	3.713	0	00:38	0	9.94	0.000
CH4_6	JUNCTION	0.000	3.713	0	00:38	0	9.94	0.000
CH4_7	JUNCTION	0.000	3.713	0	00:38	0	9.94	0.000
CH4_8	JUNCTION	0.000	3.713	0	00:38	0	9.94	0.000
CH4_9	JUNCTION	0.000	3.713	0	00:38	0	9.94	0.000
CH4_10	JUNCTION	0.000	3.713	0	00:38	0	9.94	0.000

CH4_11	JUNCTION	0.000	3.713	0	00:38	0	9.94	0.000
CH4_12	JUNCTION	0.000	3.713	0	00:38	0	9.94	0.000
CH4_13	JUNCTION	0.000	3.713	0	00:38	0	9.94	0.000
CH4_14	JUNCTION	0.000	3.713	0	00:38	0	9.94	0.000
CH4_15	JUNCTION	0.000	3.713	0	00:38	0	9.94	0.000
CH4_16	JUNCTION	0.000	4.466	0	00:40	0	14.7	0.000
CH4_17	JUNCTION	0.000	4.466	0	00:40	0	14.7	0.000
CH4_18	JUNCTION	0.000	4.466	0	00:40	0	14.7	0.000
CH4_19	JUNCTION	0.000	4.466	0	00:40	0	14.7	0.000
CH4_20	JUNCTION	0.000	4.466	0	00:40	0	14.7	0.000
CH4_21	JUNCTION	0.000	4.466	0	00:40	0	14.7	0.000
CH4_22	JUNCTION	0.000	6.264	0	00:42	0	22.9	0.000
CH4_23	JUNCTION	0.000	6.264	0	00:42	0	22.9	0.000
CH4_24	JUNCTION	0.000	6.264	0	00:42	0	22.9	0.000
CH4_25	JUNCTION	0.000	6.264	0	00:42	0	22.9	0.000
CH4_26	JUNCTION	0.000	6.264	0	00:42	0	22.9	0.000
CH4_27	JUNCTION	0.000	6.264	0	00:42	0	22.9	0.000
CH4_28	JUNCTION	0.000	6.264	0	00:42	0	22.9	0.000
CH4_29	JUNCTION	0.000	6.826	0	00:43	0	29.7	0.000
CH4_30	JUNCTION	0.000	6.826	0	00:43	0	29.7	0.000
CH4_31	JUNCTION	0.000	6.826	0	00:43	0	29.7	0.000
CH4_32	JUNCTION	0.000	6.826	0	00:43	0	29.7	0.000
CH4_33	JUNCTION	0.000	6.826	0	00:43	0	29.7	0.000
CH4_34	JUNCTION	0.000	6.826	0	00:43	0	29.7	0.000
CH4_35	JUNCTION	0.000	6.826	0	00:43	0	29.7	0.000
CH4_36	JUNCTION	0.000	6.826	0	00:43	0	29.7	0.000
CH4_37	JUNCTION	0.000	6.826	0	00:43	0	29.7	0.000
CH4_38	JUNCTION	0.000	6.826	0	00:43	0	29.7	0.000
CH4_39	JUNCTION	0.000	9.179	0	00:43	0	37.7	0.000
CH4_40	JUNCTION	0.000	9.179	0	00:43	0	37.7	0.000
CH4_41	JUNCTION	0.000	9.179	0	00:43	0	37.7	0.000
CH4_42	JUNCTION	0.000	9.179	0	00:43	0	37.7	0.000
CH4_43	JUNCTION	0.000	9.179	0	00:43	0	37.7	0.000
CH4_44	JUNCTION	0.000	9.179	0	00:43	0	37.7	0.000
CH4_45	JUNCTION	0.000	11.115	0	00:43	0	44.3	0.000

CH4_46	JUNCTION	0.000	11.115	0	00:43	0	44.3	0.000	
CH4_47	JUNCTION	0.000	11.115	0	00:43	0	44.3	0.000	
CH4_48	JUNCTION	0.000	11.115	0	00:43	0	44.3	0.000	
CH4_49	JUNCTION	0.000	11.115	0	00:43	0	44.3	0.000	
CH4_50	JUNCTION	0.000	12.084	0	00:44	0	50.8	0.000	
CH4_51	JUNCTION	0.000	12.084	0	00:44	0	50.8	0.000	
CH4_52	JUNCTION	0.000	12.084	0	00:44	0	50.8	0.000	
CH4_53	JUNCTION	0.000	12.084	0	00:44	0	50.8	0.000	
CH4_54	JUNCTION	0.000	12.084	0	00:44	0	50.8	0.000	
CH4_55	JUNCTION	0.000	12.084	0	00:44	0	50.8	0.000	
CH4_56	JUNCTION	0.000	12.084	0	00:44	0	50.8	0.000	
MH1	JUNCTION	0.000	3.364	0	00:31	0	11.2	0.000	
MH2	JUNCTION	0.000	3.068	0	00:33	0	10.1	0.000	
MH3	JUNCTION	3.550	3.550	0	00:35	12	12	0.000	
MH3.1	JUNCTION	0.000	3.550	0	00:35	0	12	0.000	
MH3.3	JUNCTION	0.000	2.955	0	00:38	0	9.45	0.000	
MH4	JUNCTION	0.000	0.692	0	00:46	0	4.5	0.000	
MH4.1	JUNCTION	0.000	0.977	0	00:46	0	4.77	0.000	
CH15_1	JUNCTION	0.000	0.000	0	00:00	0	0	0.000	ltr
CH15_2	JUNCTION	0.000	0.000	0	00:00	0	0	0.000	ltr
CH15_3	JUNCTION	0.000	0.977	0	00:46	0	4.77	0.000	
CH15_4	JUNCTION	0.000	0.977	0	00:46	0	4.77	0.000	
MH5	JUNCTION	0.000	1.509	0	00:46	0	7.78	0.000	
MH6	JUNCTION	0.000	0.593	0	00:54	0	6.4	0.000	
MH7	JUNCTION	0.000	1.852	0	00:42	0	7.62	0.000	
MH8	JUNCTION	0.000	1.624	0	00:42	0	6.39	0.000	
MH9	JUNCTION	0.000	0.942	0	00:49	0	6.31	0.000	
CH4_57	JUNCTION	0.000	12.084	0	00:44	0	50.8	0.000	
CH4_58	JUNCTION	0.000	12.084	0	00:44	0	50.8	0.000	
CH4_59	JUNCTION	0.000	12.084	0	00:44	0	50.8	0.000	
CH4_60	JUNCTION	0.000	13.125	0	00:44	0	54.5	0.000	
MH10	JUNCTION	0.000	0.788	0	00:43	0	3.48	0.000	
MH3.2	JUNCTION	0.000	3.550	0	00:35	0	12	0.000	
CH1_PRE	JUNCTION	5.678	5.678	0	01:55	54.3	54.3	0.000	
CH2_PRE	JUNCTION	0.000	5.678	0	01:55	0	54.3	0.000	

CH3_PRE	JUNCTION	0.000	5.678	0	01:55	0	54.3	0.000
CH4_PRE	JUNCTION	0.000	5.678	0	01:55	0	54.3	0.000
CH5_PRE	JUNCTION	0.000	5.678	0	01:55	0	54.3	0.000
CH6_PRE	JUNCTION	0.000	5.678	0	01:55	0	54.3	0.000
CH7_PRE	JUNCTION	0.000	5.678	0	01:55	0	54.3	0.000
CH8_PRE	JUNCTION	0.000	5.678	0	01:55	0	54.3	0.000
CH9_PRE	JUNCTION	0.000	5.678	0	01:55	0	54.3	0.000
CH10_PRE	JUNCTION	0.000	5.678	0	01:55	0	54.3	0.000
CH11_PRE	JUNCTION	0.000	5.678	0	01:55	0	54.3	0.000
CH13_PRE	JUNCTION	0.000	13.764	0	01:50	0	130	0.000
CH14_PRE	JUNCTION	0.000	13.764	0	01:50	0	130	0.000
CH15_PRE	JUNCTION	0.000	13.764	0	01:50	0	130	0.000
CH17_PRE	JUNCTION	2.268	2.268	0	01:35	15.7	15.7	0.000
CH18_PRE	JUNCTION	0.000	2.268	0	01:35	0	15.7	0.000
CH19_PRE	JUNCTION	0.000	2.268	0	01:35	0	15.7	0.000
CH20_PRE	JUNCTION	0.000	2.268	0	01:35	0	15.7	0.000
CH21_PRE	JUNCTION	0.000	2.268	0	01:35	0	15.7	0.000
CH22_PRE	JUNCTION	0.000	2.268	0	01:35	0	15.7	0.000
CH23_PRE	JUNCTION	0.000	2.268	0	01:35	0	15.7	0.000
CH24_PRE	JUNCTION	1.352	3.586	0	01:30	7.74	23.5	0.000
CH25_PRE	JUNCTION	0.000	3.586	0	01:30	0	23.5	0.000
CH26_PRE	JUNCTION	0.000	3.586	0	01:30	0	23.5	0.000
CH27_PRE	JUNCTION	0.000	3.586	0	01:30	0	23.5	0.000
CH28_PRE	JUNCTION	1.686	5.247	0	01:35	13.3	36.8	0.000
CH29_PRE	JUNCTION	0.000	5.247	0	01:35	0	36.8	0.000
CH30_PRE	JUNCTION	0.000	5.247	0	01:35	0	36.8	0.000
CH31_PRE	JUNCTION	1.711	6.958	0	01:35	11.2	48	0.000
CH32_PRE	JUNCTION	0.000	6.958	0	01:35	0	48	0.000
CH33_PRE	JUNCTION	0.000	6.958	0	01:35	0	48	0.000
CH34_PRE	JUNCTION	2.065	9.011	0	01:35	12.9	60.9	0.000
CH35_PRE	JUNCTION	0.000	9.011	0	01:35	0	60.9	0.000
CH36_PRE	JUNCTION	1.631	10.642	0	01:35	10.7	71.6	0.000
CH37_PRE	JUNCTION	0.000	10.642	0	01:35	0	71.6	0.000
CH38_PRE	JUNCTION	0.000	10.642	0	01:35	0	71.6	0.000
CH39_PRE	JUNCTION	1.510	12.153	0	01:35	10.6	82.2	0.000

CH40_PRE	JUNCTION	0.000	12.153	0	01:35	0	82.2	0.000
CH41_PRE	JUNCTION	0.000	12.153	0	01:35	0	82.2	0.000
CH42_PRE	JUNCTION	0.000	12.153	0	01:35	0	82.2	0.000
CH43_PRE	JUNCTION	1.073	13.163	0	01:35	5.82	88	0.000
MHOUTPRE0	OUTFALL	0.000	13.764	0	01:50	0	130	0.000
MHOUT0	OUTFALL	0.000	10.922	0	00:46	0	52.5	0.000
MHOUTPRE1	OUTFALL	0.000	13.163	0	01:35	0	88	0.000
MHOUT1	OUTFALL	0.000	13.125	0	00:44	0	54.5	0.000
POND1	STORAGE	3.883	3.883	0	00:30	11.5	11.5	0.059
POND2	STORAGE	3.680	3.680	0	00:30	10.4	10.4	0.072
MINING_PIT	STORAGE	7.473	10.963	0	00:30	18.6	30.6	0.039
POND3	STORAGE	4.761	4.761	0	00:30	9.94	9.94	0.069
POND4	STORAGE	2.608	2.608	0	00:25	4.77	4.77	0.025
POND5	STORAGE	3.448	3.448	0	00:30	8.2	8.2	0.039
POND6	STORAGE	3.225	3.225	0	00:25	6.81	6.81	0.009
POND7	STORAGE	3.969	3.969	0	00:25	8	8	0.045
POND8	STORAGE	3.228	3.228	0	00:25	6.6	6.6	0.054
POND9	STORAGE	2.958	2.958	0	00:25	6.48	6.48	0.025
POND10	STORAGE	1.997	1.997	0	00:25	3.67	3.67	0.042

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Node Flooding Summary
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No nodes were flooded.

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Storage Volume Summary
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	Average Volume	Avg Pcnt	Evap Pcnt	Exfil Pcnt	Maximum Volume	Max Pcnt	Time of Max Occurrence	Maximum Outflow

Storage Unit	1000 m³	Full	Loss	Loss	1000 m³	Full	days	hr:min	CMS
POND1	0.019	3.5	0.0	0.0	0.508	93.0	0	00:31	3.858
POND2	0.047	4.0	0.0	0.0	1.115	94.5	0	00:33	3.582
MINING_PIT	2.153	13.7	0.0	0.0	14.489	92.0	0	00:48	5.681
POND3	0.121	3.7	0.0	0.0	3.238	98.5	0	00:38	3.713
POND4	0.247	8.0	0.0	0.0	3.073	99.6	0	00:46	0.977
POND5	0.165	5.0	0.0	0.0	3.282	99.9	0	00:46	1.971
POND6	0.724	15.3	0.0	0.0	4.677	98.6	0	00:54	0.855
POND7	0.173	4.7	0.0	0.0	3.639	98.3	0	00:42	2.358
POND8	0.110	4.0	0.0	0.0	2.725	98.4	0	00:42	1.939
POND9	0.328	8.4	0.0	0.0	3.767	97.0	0	00:49	1.131
POND10	0.163	7.7	0.0	0.0	2.077	98.5	0	00:43	1.044

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Outfall Loading Summary
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Outfall Node	Flow Freq Pcnt	Avg Flow CMS	Max Flow CMS	Total Volume 10^6 ltr
MHOUTPRE0	71.41	2.112	13.764	129.819
MHOUT0	99.63	0.612	10.922	52.467
MHOUTPRE1	41.52	2.462	13.163	88.019
MHOUT1	99.63	0.635	13.125	54.459
System	78.05	5.820	34.595	324.763

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Link Flow Summary
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Link	Type	Maximum |Flow| CMS	Time of Max Occurrence days	hr:min	Maximum |Veloc| m/sec	Max/ Full Flow	Max/ Full Depth
LCH1_1	CONDUIT	0.000	0	00:00	0.00	0.00	0.00
LCH1_2	CONDUIT	0.000	0	00:00	0.00	0.00	0.00
LCH1_3	CONDUIT	0.000	0	00:00	0.00	0.00	0.00
LCH1_4	CONDUIT	0.000	0	00:00	0.00	0.00	0.00
LCH1_5	CONDUIT	0.000	0	00:00	0.00	0.00	0.00
LCH1_6	CONDUIT	0.000	0	00:00	0.00	0.00	0.00
LCH1_7	CONDUIT	7.418	0	00:32	1.81	0.66	0.79
LCH1_8	CONDUIT	7.418	0	00:32	1.81	0.66	0.79
LCH1_9	CONDUIT	7.418	0	00:32	3.73	0.22	0.42
LCH1_10	CONDUIT	7.418	0	00:32	3.77	0.22	0.42
LCH1_11	CONDUIT	7.418	0	00:32	3.37	0.26	0.46
LCH1_12	CONDUIT	7.418	0	00:32	3.09	0.30	0.50
LCH1_13	CONDUIT	7.418	0	00:32	2.74	0.36	0.56
LCH1_14	CONDUIT	7.418	0	00:32	1.81	0.66	0.79
LCH1_15	CONDUIT	7.418	0	00:32	3.61	0.23	0.44
LCH1_16	CONDUIT	7.418	0	00:32	3.53	0.24	0.44
LCH1_17	CONDUIT	7.418	0	00:32	1.81	0.66	0.79
LCH1_18	CONDUIT	7.418	0	00:32	1.81	0.66	0.79
LCH1_19	CONDUIT	7.418	0	00:32	3.89	0.21	0.41
LCH1_20	CONDUIT	7.418	0	00:32	3.46	0.25	0.45
LCH1_21	CONDUIT	7.418	0	00:32	11.19	0.04	0.15
LCH1_22	CONDUIT	10.922	0	00:46	2.59	0.69	0.81
LCH1_23	CONDUIT	10.922	0	00:46	2.04	0.98	0.99
LCH1_24	CONDUIT	10.922	0	00:46	2.04	0.98	0.99
LCH1_25	CONDUIT	10.922	0	00:46	2.04	0.98	0.99
LCH1_26	CONDUIT	10.922	0	00:46	2.04	0.98	0.99
LCH2_1	CONDUIT	0.000	0	00:00	0.00	0.00	0.00
LCH2_2	CONDUIT	0.000	0	00:00	0.00	0.00	0.00
LCH2_3	CONDUIT	0.000	0	00:00	0.00	0.00	0.00

LCH2_4	CONDUIT	0.000	0	00:00	0.00	0.00	0.00
LCH2_5	CONDUIT	0.000	0	00:00	0.00	0.00	0.00
LCH2_6	CONDUIT	7.418	0	00:32	2.55	0.40	0.59
LCH3_1	CONDUIT	0.000	0	00:00	0.00	0.00	0.00
LCH3_2	CONDUIT	0.000	0	00:00	0.00	0.00	0.00
LCH3_4	CONDUIT	0.000	0	00:00	0.00	0.00	0.00
LCH3_5	CONDUIT	0.000	0	00:00	0.00	0.00	0.00
LCH3_6	CONDUIT	0.000	0	00:00	0.00	0.00	0.00
LCH3_7	CONDUIT	0.000	0	00:00	0.00	0.00	0.00
LCH3_8	CONDUIT	0.000	0	00:00	0.00	0.00	0.00
LCH3_9	CONDUIT	0.000	0	00:00	0.00	0.00	0.00
LCH3_10	CONDUIT	0.000	0	00:00	0.00	0.00	0.00
LCH3_11	CONDUIT	0.000	0	00:00	0.00	0.00	0.00
LCH3_12	CONDUIT	0.000	0	00:00	0.00	0.00	0.00
LCH3_13	CONDUIT	0.000	0	00:00	0.00	0.00	0.00
LCH3_14	CONDUIT	0.000	0	00:00	0.00	0.00	0.00
LCH3_15	CONDUIT	0.000	0	00:00	0.00	0.00	0.00
LCH3_16	CONDUIT	0.000	0	00:00	0.00	0.00	0.00
LCH3_17	CONDUIT	0.000	0	00:00	0.00	0.00	0.00
LCH3_18	CONDUIT	0.000	0	00:00	0.00	0.00	0.00
LCH3_19	CONDUIT	0.000	0	00:00	0.00	0.00	0.00
LCH3_20	CONDUIT	0.000	0	00:00	0.00	0.00	0.00
LCH3_21	CONDUIT	0.000	0	00:00	0.00	0.00	0.00
LCH3_22	CONDUIT	0.000	0	00:00	0.00	0.00	0.00
LCH4_1	CONDUIT	3.713	0	00:38	4.11	0.07	0.20
LCH4_2	CONDUIT	3.713	0	00:38	3.78	0.07	0.22
LCH4_3	CONDUIT	3.713	0	00:38	3.41	0.09	0.24
LCH4_4	CONDUIT	3.713	0	00:38	3.79	0.07	0.22
LCH4_5	CONDUIT	3.713	0	00:38	5.07	0.05	0.17
LCH4_6	CONDUIT	3.713	0	00:38	1.44	0.33	0.53
LCH4_7	CONDUIT	3.713	0	00:38	1.44	0.33	0.53
LCH4_8	CONDUIT	3.713	0	00:38	1.44	0.33	0.53
LCH4_9	CONDUIT	3.713	0	00:38	1.44	0.33	0.53
LCH4_10	CONDUIT	3.713	0	00:38	1.88	0.22	0.42
LCH4_11	CONDUIT	3.713	0	00:38	1.44	0.33	0.53

LCH4_12	CONDUIT	3.713	0	00:38	1.75	0.25	0.45
LCH4_13	CONDUIT	3.713	0	00:38	1.44	0.33	0.53
LCH4_14	CONDUIT	3.713	0	00:38	2.15	0.18	0.37
LCH4_15	CONDUIT	3.713	0	00:38	2.00	0.20	0.40
LCH4_16	CONDUIT	4.466	0	00:40	1.53	0.40	0.59
LCH4_17	CONDUIT	4.466	0	00:40	2.51	0.19	0.38
LCH4_18	CONDUIT	4.466	0	00:40	1.53	0.40	0.59
LCH4_19	CONDUIT	4.466	0	00:40	1.66	0.35	0.55
LCH4_20	CONDUIT	4.466	0	00:40	1.53	0.40	0.59
LCH4_21	CONDUIT	4.466	0	00:40	1.70	0.34	0.54
LCH4_22	CONDUIT	6.264	0	00:42	3.06	0.23	0.43
LCH4_23	CONDUIT	6.264	0	00:42	2.92	0.25	0.45
LCH4_24	CONDUIT	6.264	0	00:42	3.61	0.18	0.37
LCH4_25	CONDUIT	6.264	0	00:42	3.14	0.22	0.42
LCH4_26	CONDUIT	6.264	0	00:42	2.26	0.37	0.57
LCH4_27	CONDUIT	6.264	0	00:42	2.31	0.36	0.56
LCH4_28	CONDUIT	6.264	0	00:42	2.04	0.43	0.62
LCH4_29	CONDUIT	6.826	0	00:43	2.27	0.42	0.61
LCH4_30	CONDUIT	6.826	0	00:43	1.76	0.61	0.76
LCH4_31	CONDUIT	6.826	0	00:43	1.76	0.61	0.76
LCH4_32	CONDUIT	6.826	0	00:43	1.76	0.61	0.76
LCH4_33	CONDUIT	6.826	0	00:43	1.76	0.61	0.76
LCH4_34	CONDUIT	6.826	0	00:43	1.76	0.61	0.76
LCH4_35	CONDUIT	6.826	0	00:43	3.16	0.25	0.46
LCH4_36	CONDUIT	6.826	0	00:43	4.18	0.16	0.35
LCH4_37	CONDUIT	6.826	0	00:43	2.51	0.36	0.56
LCH4_38	CONDUIT	6.826	0	00:43	1.76	0.61	0.76
LCH4_39	CONDUIT	9.179	0	00:43	3.38	0.36	0.56
LCH4_40	CONDUIT	9.179	0	00:43	1.93	0.82	0.89
LCH4_42	CONDUIT	9.179	0	00:43	1.93	0.82	0.90
LCH4_43	CONDUIT	9.179	0	00:43	1.93	0.82	0.89
LCH4_44	CONDUIT	9.179	0	00:43	2.80	0.48	0.66
LCH4_45	CONDUIT	11.115	0	00:43	2.05	0.66	0.80
LCH4_46	CONDUIT	11.115	0	00:43	2.05	0.67	0.80
LCH4_47	CONDUIT	11.115	0	00:43	2.05	0.66	0.80

LCH4_48	CONDUIT	11.115	0	00:43	2.05	0.66	0.80
LCH4_49	CONDUIT	11.115	0	00:43	2.05	0.48	0.66
LCH4_50	CONDUIT	12.084	0	00:44	4.51	0.17	0.37
LCH4_51	CONDUIT	12.084	0	00:44	2.55	0.39	0.60
LCH4_52	CONDUIT	12.084	0	00:44	3.40	0.26	0.47
LCH4_53	CONDUIT	12.084	0	00:44	3.27	0.57	0.73
LCH4_54	CONDUIT	12.084	0	00:44	2.68	0.76	0.86
LCH4_55	CONDUIT	12.084	0	00:44	2.46	0.58	0.74
LCH4_56	CONDUIT	12.084	0	00:44	2.11	0.52	0.70
LCH3_3	CONDUIT	0.000	0	00:00	0.00	0.00	0.00
LCH4_41	CONDUIT	9.179	0	00:43	1.93	0.82	0.89
LMH1	CONDUIT	3.364	0	00:31	9.92	0.95	0.78
LMH2	CONDUIT	3.068	0	00:33	8.37	0.84	0.70
LMH3	CONDUIT	3.550	0	00:35	14.00	0.87	0.72
LMH3.1	CONDUIT	3.550	0	00:35	12.50	0.77	0.66
LMH3.3	CONDUIT	2.955	0	00:38	7.73	0.88	0.73
LMH4	CONDUIT	0.692	0	00:46	10.13	0.25	0.34
LCH15_1	CONDUIT	0.000	0	00:00	0.00	0.00	0.00
LCH15_2	CONDUIT	0.000	0	00:00	0.00	0.00	0.00
LCH15_3	CONDUIT	0.977	0	00:46	0.90	0.09	0.24
LCH15_4	CONDUIT	0.977	0	00:46	2.43	0.02	0.09
LMH4.1	CONDUIT	0.977	0	00:46	9.05	0.48	0.49
LMH5	CONDUIT	1.509	0	00:46	10.45	0.70	0.61
LMH6	CONDUIT	0.593	0	00:54	10.04	0.21	0.31
LMH7	CONDUIT	1.852	0	00:42	12.32	0.73	0.64
LMH8	CONDUIT	1.624	0	00:42	10.98	0.72	0.63
LMH9	CONDUIT	0.942	0	00:49	9.39	0.43	0.46
LCH4_57	CONDUIT	12.084	0	00:44	3.53	0.51	0.68
LCH4_58	CONDUIT	12.084	0	00:44	2.11	0.72	0.84
LCH4_59	CONDUIT	12.084	0	00:44	2.93	0.67	0.80
LCH4_60	CONDUIT	13.125	0	00:44	3.07	0.70	0.82
LMH10	CONDUIT	0.788	0	00:43	11.25	0.43	0.46
LMH3.2	CONDUIT	3.550	0	00:35	12.64	0.97	0.80
LCH1_PRE	CONDUIT	5.678	0	01:55	2.86	0.22	0.42
LCH2_PRE	CONDUIT	5.678	0	01:55	4.61	0.11	0.27

LMHOUTPRE3	CONDUIT	5.678	0	01:55	5.24	0.09	0.24
LMHOUTPRE4	CONDUIT	5.678	0	01:55	4.92	0.10	0.26
LMHOUTPRE5	CONDUIT	5.678	0	01:55	4.26	0.12	0.29
LMHOUTPRE6	CONDUIT	5.678	0	01:55	2.86	0.22	0.42
LMHOUTPRE7	CONDUIT	5.678	0	01:55	5.32	0.08	0.24
LMHOUTPRE8	CONDUIT	5.678	0	01:55	2.85	0.22	0.42
LMHOUTPRE9	CONDUIT	5.678	0	01:55	2.86	0.22	0.42
LMHOUTPRE10	CONDUIT	5.678	0	01:55	5.70	0.08	0.22
LMHOUTPRE11	CONDUIT	5.678	0	01:55	11.10	0.03	0.12
LMHOUTPRE12	CONDUIT	13.764	0	01:50	3.85	0.54	0.71
LMHOUTPRE13	CONDUIT	13.764	0	01:50	3.85	0.54	0.71
KOUTPRE1	CONDUIT	13.764	0	01:50	3.85	0.54	0.71
LMHOUTPRE16	CONDUIT	8.160	0	01:45	3.23	0.32	0.52
LCH17_PRE	CONDUIT	2.268	0	01:35	5.29	0.03	0.13
LCH18_PRE	CONDUIT	2.268	0	01:35	5.73	0.03	0.12
LCH19_PRE	CONDUIT	2.268	0	01:35	3.98	0.05	0.18
LCH20_PRE	CONDUIT	2.268	0	01:35	2.06	0.15	0.33
LCH21_PRE	CONDUIT	2.268	0	01:35	2.27	0.13	0.30
LCH22_PRE	CONDUIT	2.268	0	01:35	3.20	0.07	0.22
LCH23_PRE	CONDUIT	2.268	0	01:35	2.06	0.15	0.33
LCH24_PRE	CONDUIT	3.586	0	01:30	3.65	0.12	0.29
LCH25_PRE	CONDUIT	3.586	0	01:30	3.59	0.13	0.30
LCH26_PRE	CONDUIT	3.586	0	01:30	2.98	0.17	0.36
LCH27_PRE	CONDUIT	3.586	0	01:30	2.43	0.23	0.43
LCH28_PRE	CONDUIT	5.247	0	01:35	4.98	0.14	0.31
LCH29_PRE	CONDUIT	5.247	0	01:35	4.15	0.18	0.37
LCH30_PRE	CONDUIT	5.247	0	01:35	4.01	0.19	0.38
LCH31_PRE	CONDUIT	6.958	0	01:35	3.56	0.36	0.55
LCH32_PRE	CONDUIT	6.958	0	01:35	3.06	0.46	0.63
LCH33_PRE	CONDUIT	6.958	0	01:35	5.31	0.19	0.39
LCH34_PRE	CONDUIT	9.011	0	01:35	4.93	0.33	0.52
LCH35_PRE	CONDUIT	9.011	0	01:35	3.34	0.59	0.74
LCH36_PRE	CONDUIT	10.642	0	01:35	5.13	0.40	0.59
LCH37_PRE	CONDUIT	10.642	0	01:35	3.54	0.70	0.81
LCH38_PRE	CONDUIT	10.642	0	01:35	3.54	0.70	0.81

LCH39_PRE	CONDUIT	12.153	0	01:35	6.56	0.33	0.53
LCH40_PRE	CONDUIT	12.153	0	01:35	4.54	0.58	0.73
LCH41_PRE	CONDUIT	12.153	0	01:35	4.73	0.55	0.71
LCH42_PRE	CONDUIT	12.153	0	01:35	4.58	0.58	0.73
KOUTPRE0	CONDUIT	13.163	0	01:35	6.56	0.38	0.57
10yr1	ORIFICE	2.008	0	00:31		0.00	
50yr1	ORIFICE	1.356	0	00:31		0.00	
10yr2	ORIFICE	1.682	0	00:33		0.00	
50yr2	ORIFICE	1.386	0	00:33		0.00	
10yrMP	ORIFICE	1.084	0	00:48		0.00	
50yrMP	ORIFICE	2.537	0	00:48		0.00	
10yr3	ORIFICE	1.626	0	00:38		0.00	
50yr3	ORIFICE	1.329	0	00:38		0.00	
10yr4	ORIFICE	0.353	0	00:46		0.00	
50yr4	ORIFICE	0.339	0	00:46		0.00	
10yr5	ORIFICE	1.161	0	00:46		0.00	
50yr5	ORIFICE	0.348	0	00:46		0.00	
10yr6	ORIFICE	0.257	0	00:54		0.00	
50yr6	ORIFICE	0.337	0	00:54		0.00	
10yr7	ORIFICE	1.069	0	00:42		0.00	
50yr7	ORIFICE	0.783	0	00:42		0.00	
10yr8	ORIFICE	1.133	0	00:42		0.00	
50yr8	ORIFICE	0.491	0	00:42		0.00	
10yr9	ORIFICE	0.470	0	00:49		0.00	
50yr9	ORIFICE	0.472	0	00:49		0.00	
10yr10	ORIFICE	0.257	0	00:43		0.00	
50yr10	ORIFICE	0.531	0	00:43		0.00	
100yrWeir1	WEIR	0.494	0	00:31		0.00	
100yrWeir2	WEIR	0.514	0	00:33		0.00	
100yrWeir3	WEIR	0.758	0	00:38		0.00	
100yrWeir4	WEIR	0.284	0	00:46		0.00	
100yrWeir5	WEIR	0.462	0	00:46		0.00	
100yrWeir6	WEIR	0.262	0	00:54		0.00	
100yrWeir7	WEIR	0.506	0	00:42		0.00	
100yrWeir8	WEIR	0.316	0	00:42		0.00	

100yrWeir9	WEIR	0.189	0	00:49	0.00
100yrWeir10	WEIR	0.257	0	00:43	0.00
100yrWeirMP	WEIR	2.061	0	00:48	0.00

****
Conduit Surcharge Summary
****

No conduits were surcharged.

Analysis begun on: Mon Jul 27 09:43:16 2026
Analysis ended on: Mon Jul 27 09:43:17 2026
Total elapsed time: 00:00:01

ANNEXURE H: STORMWATER DRAWINGS

ANNEXURE H1: STORMWATER MANAGEMENT PLAN: 458_04A_SWMP1_REV.P1

ANNEXURE H2: STORMWATER KEY PLAN: 458_04A_K1_REV.P1

ANNEXURE H3: STORMWATER TYPICAL DETAILS: 458_04A_D1_REV.P1

ANNEXURE H4: STORMWATER TYPICAL DETAILS: 458_04A_D2_REV.P1

ANNEXURE H5: STORMWATER GENERAL LAYOUT PLAN: 458_04A_GL1_REV.P3

ANNEXURE H6: STORMWATER GENERAL LAYOUT PLAN: 458_04A_GL2_REV.P1

ANNEXURE H7: STORMWATER LONG SECTIONS: 458_04A_L1_REV.P1

ANNEXURE H8: STORMWATER LONG SECTIONS: 458_04A_L2_REV.P1

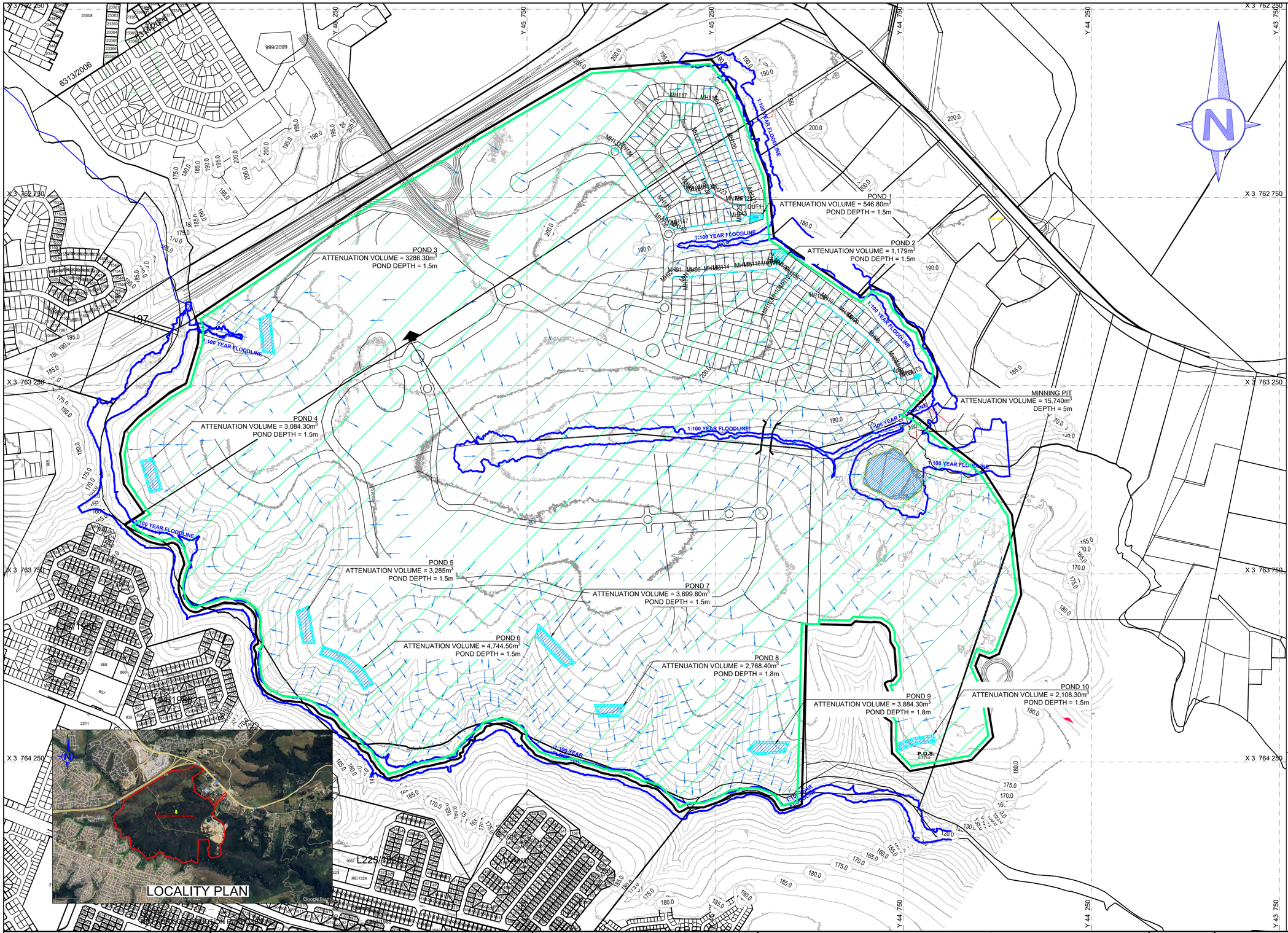
ANNEXURE H9: STORMWATER LONG SECTIONS: 458_04A_L3_REV.P1

ANNEXURE H10: STORMWATER LONG SECTIONS: 458_04A_L4_REV.P1

ANNEXURE H11: STORMWATER LONG SECTIONS: 458_04A_L5_REV.P1

ANNEXURE H12: STORMWATER LONG SECTIONS: 458_04A_L6_REV.P1

ANNEXURE H1: STORMWATER MANAGEMENT PLAN: 458_04A_SWMP1_REV.P1



GENERAL NOTES:

1. MINIMUM REQUIREMENTS ARE INDICATED ON THE DRAWING. THE CONSULTANT / DESIGNER IS RESPONSIBLE AND LIABLE FOR FURTHER DETAILS AND TO ENSURE EFFECTIVE OPERATION AND MAINTENANCE OF THE INSTALLATION.
2. THE SIGNATURE OR INITIALS ON THIS DRAWING OF COE OFFICIAL DOES NOT REMOVE ANY RESPONSIBILITY WHATSOEVER FROM THE CONSULTANT / DESIGNER.
3. THE CONSULTANT / DESIGNER REMAINS RESPONSIBLE TO ENSURE THAT ALL THE GUIDELINES, STANDARD DRAWINGS, STANDARDS AND SPECIFICATIONS OF THE WATER AND SANITATION DEPARTMENT HAVE BEEN MET AND ARE COMPLIED WITH IN THE DESIGN.
4. ALL MATERIAL AND WORKMANSHIP MUST COMPLY WITH THE REQUIREMENTS OF THE LATEST RELEVANT SANS STANDARD.
5. FINAL POSITION OF SERVICES TO BE DETERMINED ON SITE.
6. ALL DIMENSIONS TO BE CHECKED AND APPROVED ON SITE.
7. ALL DIMENSIONS ARE IN m (UNLESS OTHERWISE SPECIFIED).
8. DO NOT SCALE FROM THESE DRAWINGS.
9. CLASS OF CONCRETE UNLESS OTHERWISE SPECIFIED ON DRAWING DETAILS:

REINFORCED	CLASS 30/19
THRUST BLOCKS	CLASS 20/19
BLINDING	CLASS 15/19
FLOOR SCREED	SAND : CEMENT = 3 : 1

10. PRE-CAST CONCRETE RINGS AND COVER SLABS TO COMPLY WITH SANS 1294.
11. JOINTS BETWEEN CONCRETE RINGS AND BETWEEN COVER SLABS AND BETWEEN RINGS AND FLOORS TO BE SEALED WITH BITUMEN SEALANT(APPROVED BY THE DESIGNER).
12. SEWER INSTALLED WITHIN ROAD RESERVE BOUNDARIES MUST BE POSITIONED IN ACCORDANCE WITH THE APPLICABLE SERVICES LAYOUT DRAWINGS.
13. ALL CONSTRUCTION TO BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS, THIRD EDITION 2005 AND THE STANDARD COE DETAIL DRAWINGS.
14. THESE DRAWINGS MUST BE READ IN CONJUNCTION WITH THE ARCHITECTS DRAWINGS (IF APPLICABLE)
15. THESE DRAWINGS MUST BE READ IN CONJUNCTION WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS, SERIES 4.

SPECIFIC NOTES:

1. ALL PIPES TO BE CONCRETE SPIGOT AND SOCKET WITH ROLLING RUBBERRINGS OR SLIDING RUBBER JOINTS OF PIPE CLASS SPECIFIED IN ACCORDANCE WITH SANS 677 LAYED IN CLASS B BEDDING UNDER ROAD SURFACES OR CLASS C BEDDING ELSEWHERE.
2. THE SIGNATURE OR INITIALS ON THIS DRAWING OF ANY MANAGER OF THE TRANSPORT DEPARTMENT, IN NO WAY REMOVES ANY RESPONSIBILITY WHATSOEVER FROM THE CONSULTANT.
3. UNLESS OTHERWISE SHOWN ALL CONCRETE SHALL BE CLASS 25MPa/19mm.
4. CONCRETE FOR BENCHING SHALL BE CLASS 15MPa/38mm OR CLASS 15MPa/19mm.
5. UNLESS OTHERWISE SHOWN OR SPECIFIED ALL EXPOSED CONCRETE SURFACES SHALL HAVE A WOOD FLOAT SURFACE FINISH AND SHALL BE COVERED WITH AN APPROVED CURING COMPOUND WITHIN 24 HOURS OF CASTING
6. ALL CONCRETE EDGES SHALL BE CHAMFERRED 20mm.
7. EXISTING SERVICES THAT ARE INDICATED TO BE "REMOVED" AND ARE SITUATED UNDER FLOOR SLABS SHALL BE DISCONNECTED AND ABANDONED.

LEGEND:

- EXISTING ROAD
- PROPOSED ROAD
- EXISTING STORMWATER
- PROPOSED STORMWATER
- STORMWATER RUNOFF FLOW ARROWS
- USABLE SITE AREA 2 ,982,336 m²

GEORGE
THE CITY FOR ALL REASONS

ROADS AND STORMWATER
DEPARTMENT

AMENDMENTS

REV	DATE	BY	DESCRIPTION
P0	2026-07-12	LLM	PRELIMINARY POND SIZES AND LOCATION FOR NEW TOWN PLANNER LAYOUT
P1	2026-07-27	LLM	PONDS AND PIPES SIZING CHANGED

ROADS AND STORMWATER
APPROVED ON BEHALF OF:

OPERATIONS DIVISION
NAME:..... PROF REG No:.....
SIGNATURE:..... DATE:.....

PROJECTS DIVISION
NAME:..... PROF REG No:.....
SIGNATURE:..... DATE:.....

PLANNING DIVISION
NAME:..... PROF REG No:.....
SIGNATURE:..... DATE:.....

CONSULTING ENGINEERS:
JT EVOLVE
ACTA NON VERBA (PTY) LTD.

DESIGNED
NAME: WF STOKER

DRAWN
NAME: LLM

APPROVED
NAME: W STOKER DATE:.....
PROF REG No: 202101798
SIGNATURE:.....
Digitally signed by Wynand Stoker
DN: cn=Wynand Stoker, ou=JT Evolve (Pty) Ltd, ou=Pr Eng, 202101798, email=wynand@jtevolve.com, c=ZA
Date: 2026.07.31 11:57:44 +02'00'

CONTRACT No.

PROJECT No. 458

SHEET No. 1 OF 1

PAPER SIZE A1

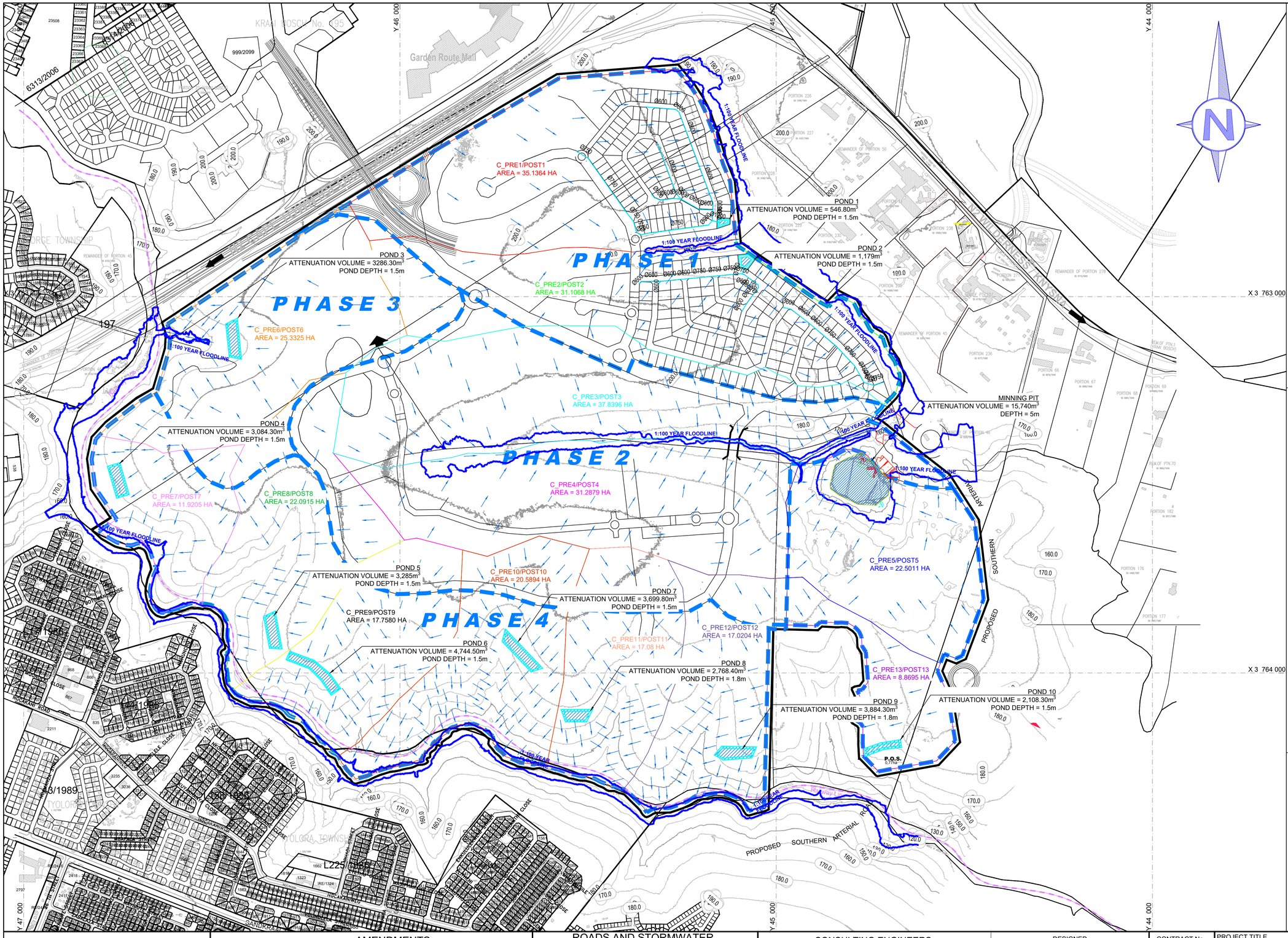
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PROJECT TITLE
GARDEN ROUTE CITY
(PTNS 7, 8, 12 & RE/23 KRAAIBOSCH NO. 195)

DRAWING TITLE
STORMWATER MANAGEMENT PLAN

DRAWING NUMBER 458_04A_SWMP1 P1 REVISION

ANNEXURE H2: STORMWATER KEY PLAN: 458_04A_K1_REV.P1



GENERAL NOTES:

1. MINIMUM REQUIREMENTS ARE INDICATED ON THE DRAWING. THE CONSULTANT / DESIGNER IS RESPONSIBLE AND LIABLE FOR FURTHER DETAILS AND TO ENSURE EFFECTIVE OPERATION AND MAINTENANCE OF THE INSTALLATION.
2. THE SIGNATURE OR INITIALS ON THIS DRAWING OF COE OFFICIAL DOES NOT REMOVE ANY RESPONSIBILITY WHATSOEVER FROM THE CONSULTANT / DESIGNER.
3. THE CONSULTANT / DESIGNER REMAINS RESPONSIBLE TO ENSURE THAT ALL THE GUIDELINES, STANDARD DRAWINGS, STANDARDS AND SPECIFICATIONS OF THE WATER AND SANITATION DEPARTMENT HAVE BEEN MET AND ARE COMPLIED WITH IN THE DESIGN.
4. ALL MATERIAL AND WORKMANSHIP MUST COMPLY WITH THE REQUIREMENTS OF THE LATEST RELEVANT SANS STANDARD.
5. FINAL POSITION OF SERVICES TO BE DETERMINED ON SITE.
6. ALL DIMENSIONS TO BE CHECKED AND APPROVED ON SITE.
7. ALL DIMENSIONS ARE IN m (UNLESS OTHERWISE SPECIFIED).
8. DO NOT SCALE FROM THESE DRAWINGS.
9. CLASS OF CONCRETE UNLESS OTHERWISE SPECIFIED ON DRAWING DETAILS:

REINFORCED	CLASS 30/19
THRUST BLOCKS	CLASS 20/19
BLINDING	CLASS 15/19
FLOOR SCREED	SAND : CEMENT = 3 : 1

10. PRE-CAST CONCRETE RINGS AND COVER SLABS TO COMPLY WITH SANS 1294.
11. JOINTS BETWEEN CONCRETE RINGS AND BETWEEN COVER SLABS AND BETWEEN RINGS AND FLOORS TO BE SEALED WITH BITUMEN SEALANT(APPROVED BY THE DESIGNER).
12. SEWER INSTALLED WITHIN ROAD RESERVE BOUNDARIES MUST BE POSITIONED IN ACCORDANCE WITH THE APPLICABLE SERVICES LAYOUT DRAWINGS.
13. ALL CONSTRUCTION TO BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS, THIRD EDITION 2005 AND THE STANDARD COE DETAIL DRAWINGS.
14. THESE DRAWINGS MUST BE READ IN CONJUNCTION WITH THE ARCHITECTS DRAWINGS (IF APPLICABLE)
15. THESE DRAWINGS MUST BE READ IN CONJUNCTION WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS, SERIES 4.

SPECIFIC NOTES:

1. ALL PIPES TO BE CONCRETE SPIGOT AND SOCKET WITH ROLLING RUBBERRINGS OR SLIDING RUBBER JOINTS OF PIPE CLASS SPECIFIED IN ACCORDANCE WITH SANS 677 LAYED IN CLASS B BEDDING UNDER ROAD SURFACES OR CLASS C BEDDING ELSEWHERE.
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3. ALL DIMENSIONS MUST BE CHECKED AND APPROVED ON SITE.
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5. THESE DRAWINGS MUST BE READ IN CONJUNCTION WITH THE ARCHITECTS DRAWINGS.(IF APPLICABLE)
6. THESE DRAWINGS MUST BE READ IN CONJUNCTION WITH THE STANDARD SPECIFICATION FOR MUNICIPAL CIVIL ENGINEERING WORKS.
7. THE SIGNATURE OR INITIALS ON THIS DRAWING OF ANY MANAGER OF THE TRANSPORT DEPARTMENT, IN NO WAY REMOVES ANY RESPONSIBILITY WHATSOEVER FROM THE CONSULTANT.
8. THE CONSULTANT REMAINS RESPONSIBLE TO ENSURE THAT ALL THE GUIDELINES, STANDARDS DRAWINGS, STANDARDS AND SPECIFICATIONS OF THE TRANSPORT DEPARTMENT HAVE BEEN MET AND ARE COMPLIED WITH.
9. FINAL POSITION OF SERVICE TO BE DETERMINED ON SITE
10. UNLESS OTHERWISE SHOWN ALL CONCRETE SHALL BE CLASS 25MPa/19mm.
11. CONCRETE FOR BENCHING SHALL BE CLASS 15MPa/38mm OR CLASS 15MPa/19mm.
12. UNLESS OTHERWISE SHOWN OR SPECIFIED ALL EXPOSED CONCRETE SURFACES SHALL HAVE A WOOD FLOAT SURFACE FINISH AND SHALL BE COVERED WITH AN APPROVED CURING COMPOUND WITHIN 24 HOURS OF CASTING
13. ALL CONCRETE EDGES SHALL BE CHAMFERRED 20mm.
14. EXISTING SERVICES THAT ARE INDICATED TO BE "REMOVED" AND ARE SITUATED UNDER FLOOR SLABS SHALL BE DISCONNECTED AND ABANDONED

LEGEND:

- EXISTING STORMWATER
- PROPOSED STORMWATER
- 100 YEAR FLOODLINE
- 50 YEAR FLOODLINE

GEORGE
THE CITY FOR ALL REASONS

ROADS AND STORMWATER
DEPARTMENT

AMENDMENTS

REV	DATE	BY	DESCRIPTION
P0	2024-12-04	MGP	ISSUED FOR COMMENTS / APPROVAL
P1	2026-07-28	LLM	TOWNPLANNER LAYOUT CHANGED

ROADS AND STORMWATER

APPROVED ON BEHALF OF:

OPERATIONS DIVISION
NAME:..... PROF REG No:.....
SIGNATURE:..... DATE:.....

PROJECTS DIVISION
NAME:..... PROF REG No:.....
SIGNATURE:..... DATE:.....

PLANNING DIVISION
NAME:..... PROF REG No:.....
SIGNATURE:..... DATE:.....

CONSULTING ENGINEERS:

JT EVOLVE
ACTA NON VERBA (PTY) LTD.

DESIGNED
NAME: W JACOBS

DRAWN
NAME: MGP

APPROVED
NAME: W STOKER DATE:.....
PROF REG No: 202101798
SIGNATURE:.....
Digitally signed by Wynand Stoker
DN: cn=Wynand Stoker, o=JT Evolve (Pty) Ltd, ou=Pr Eng:, 202101798, email=wynand@jtevolve.co.za, c=ZA
Date: 2026.07.31 11:57:10 +02'00'

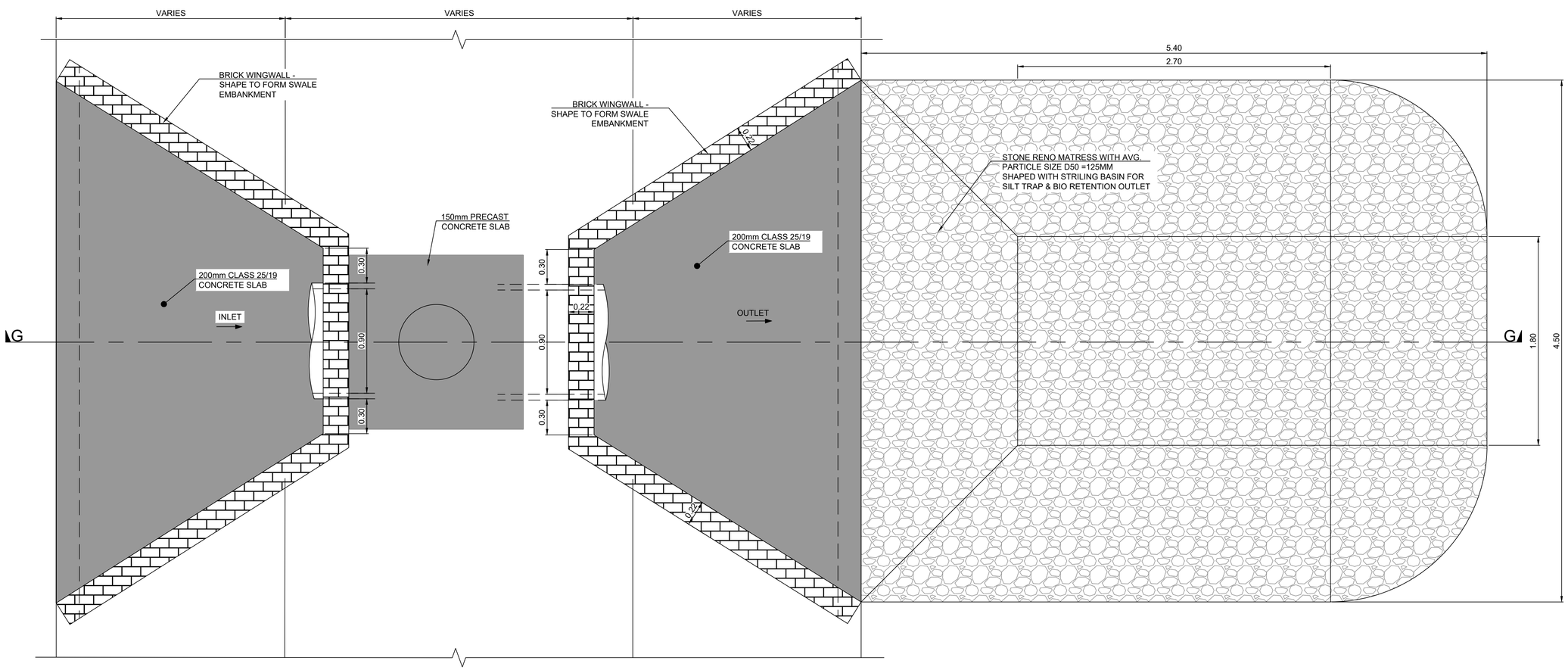
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PROJECT No.	458
SHEET No.	1 OF 1
PAPER SIZE	A1
SCALE	1:5 000

PROJECT TITLE
GARDEN ROUTE CITY
(PTNS 7, 8, 12 & RE/23 KRAAIBOSCH NO. 195)

DRAWING TITLE
STORMWATER
CATCHMENTS
KEY PLAN

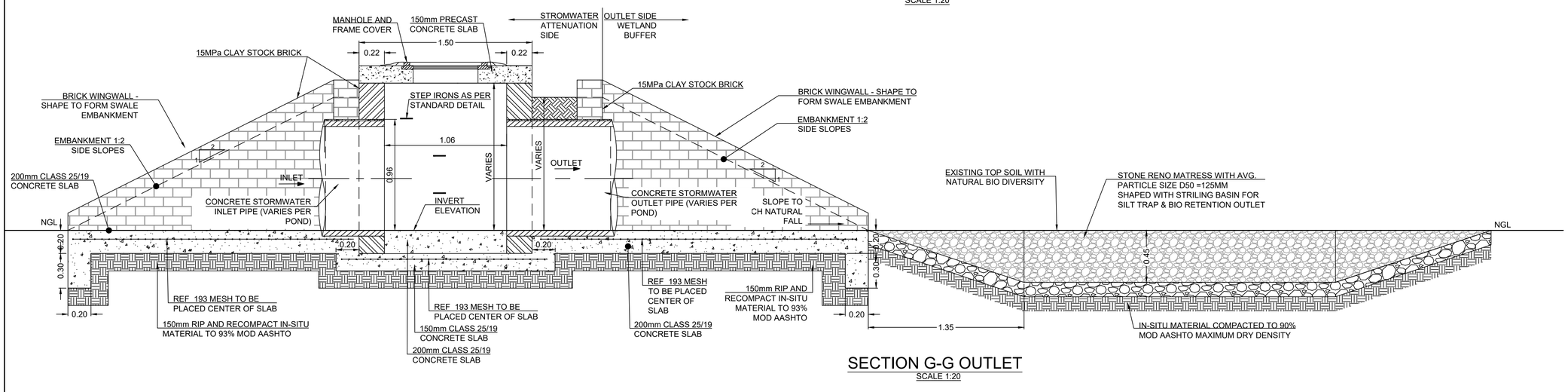
DRAWING NUMBER 458_04A_K1 P1 REVISION

ANNEXURE H3: STORMWATER TYPICAL DETAILS: 458_04A_D1_REV.P1



TOP VIEW OF POND OUTLET STRUCTURE

SCALE 1:20



SECTION G-G OUTLET

SCALE 1:20

GENERAL NOTES:

1. MINIMUM REQUIREMENTS ARE INDICATED ON THE DRAWING. THE CONSULTANT / DESIGNER IS RESPONSIBLE AND LIABLE FOR FURTHER DETAILS AND TO ENSURE EFFECTIVE OPERATION AND MAINTENANCE OF THE INSTALLATION.
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REINFORCED	CLASS 30/19
THRUST BLOCKS	CLASS 20/19
BLINDING	CLASS 15/19
FLOOR SCREED	SAND : CEMENT = 3 : 1

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15. THESE DRAWINGS MUST BE READ IN CONJUNCTION WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS, SERIES 4.

SPECIFIC NOTES:

1. ALL PIPES TO BE CONCRETE SPIGOT AND SOCKET WITH ROLLING RUBBERRINGS OR SLIDING RUBBER JOINTS OF PIPE CLASS SPECIFIED IN ACCORDANCE WITH SANS 677 LAYED IN CLASS B BEDDING UNDER ROAD SURFACES OR CLASS C BEDDING ELSEWHERE.
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6. THESE DRAWINGS MUST BE READ IN CONJUNCTION WITH THE STANDARD SPECIFICATION FOR MUNICIPAL CIVIL ENGINEERING WORKS.
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13. ALL CONCRETE EDGES SHALL BE CHAMFERRED 20mm.
14. EXISTING SERVICES THAT ARE INDICATED TO BE "REMOVED" AND ARE SITUATED UNDER FLOOR SLABS SHALL BE DISCONNECTED AND ABANDONED

LEGEND:

GEORGE
THE CITY FOR ALL REASONS

ROADS AND STORMWATER DEPARTMENT

AMENDMENTS

REV	DATE	BY	DESCRIPTION
P1	2026-07-28	LLM	ISSUED FOR COMMENTS AND APPROVAL

ROADS AND STORMWATER

APPROVED ON BEHALF OF:

OPERATIONS DIVISION
NAME:..... PROF REG No:.....
SIGNATURE:..... DATE:.....

PROJECTS DIVISION
NAME:..... PROF REG No:.....
SIGNATURE:..... DATE:.....

PLANNING DIVISION
NAME:..... PROF REG No:.....
SIGNATURE:..... DATE:.....

CONSULTING ENGINEERS:

JT EVOLVE
ACTA NON VERBA (PTY) LTD.

DESIGNED
NAME: W STOKER

DRAWN
NAME: LLM

APPROVED
NAME: W STOKER DATE:.....
PROF REG No: 202101798
SIGNATURE:..... Digitally signed by Wynand Stoker DN: cn=Wynand Stoker, o=JT Evolve (Pty) Ltd, ou=Pr Eng, 202101798, email=wynandj@jtevolve.com, c=ZA Date: 2026.07.31 11:56:01 +02'00'

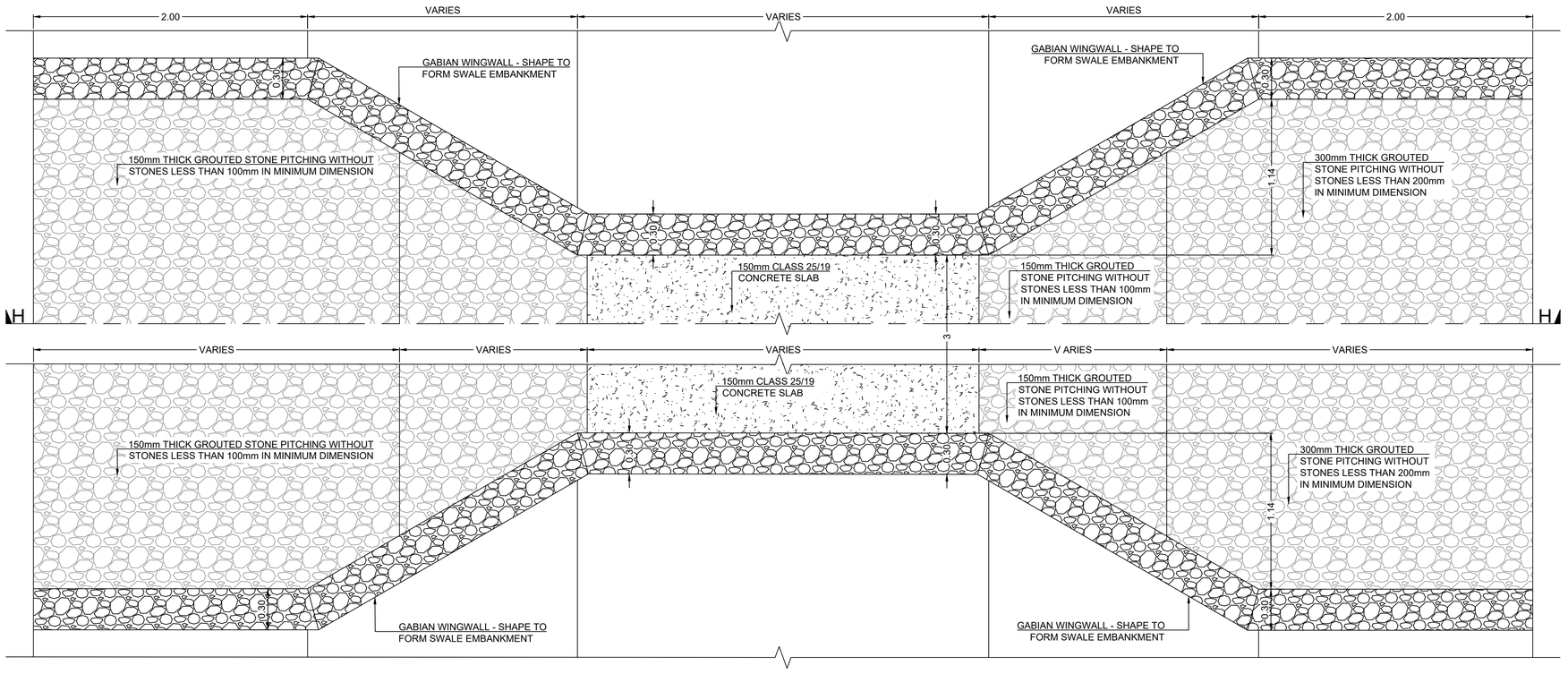
CONTRACT No.	
PROJECT No.	458
SHEET No.	1 OF 2
PAPER SIZE	A1
SCALE	1:20

PROJECT TITLE
GARDEN ROUTE CITY
(PTNS 7,8,12 & RE/23 KRAAIBOSCH NO.195)

DRAWING TITLE
STORMWATER TYPICAL DETAIL

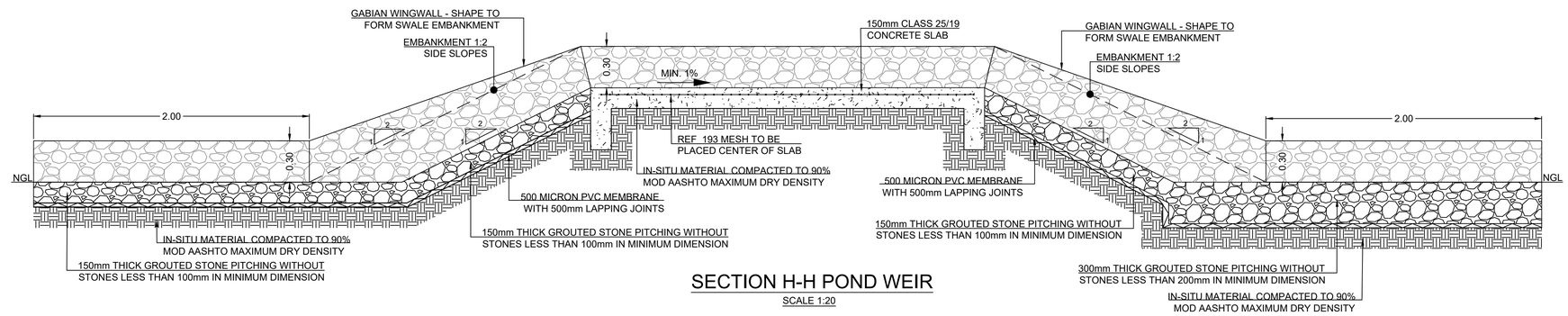
DRAWING NUMBER 458_04A_D1 P1 REVISION

ANNEXURE H4: STORMWATER TYPICAL DETAILS: 458_04A_D2_REV.P1



TOP VIEW OF A POND WEIR

SCALE 1:20



SECTION H-H POND WEIR

SCALE 1:20

GENERAL NOTES:

1. MINIMUM REQUIREMENTS ARE INDICATED ON THE DRAWING. THE CONSULTANT / DESIGNER IS RESPONSIBLE AND LIABLE FOR FURTHER DETAILS AND TO ENSURE EFFECTIVE OPERATION AND MAINTENANCE OF THE INSTALLATION.
2. THE SIGNATURE OR INITIALS ON THIS DRAWING OF COE OFFICIAL DOES NOT REMOVE ANY RESPONSIBILITY WHATSOEVER FROM THE CONSULTANT / DESIGNER.
3. THE CONSULTANT / DESIGNER REMAINS RESPONSIBLE TO ENSURE THAT ALL THE GUIDELINES, STANDARD DRAWINGS, STANDARDS AND SPECIFICATIONS OF THE WATER AND SANITATION DEPARTMENT HAVE BEEN MET AND ARE COMPLIED WITH IN THE DESIGN.
4. ALL MATERIAL AND WORKMANSHIP MUST COMPLY WITH THE REQUIREMENTS OF THE LATEST RELEVANT SANS STANDARD.
5. FINAL POSITION OF SERVICES TO BE DETERMINED ON SITE.
6. ALL DIMENSIONS TO BE CHECKED AND APPROVED ON SITE.
7. ALL DIMENSIONS ARE IN m (UNLESS OTHERWISE SPECIFIED).
8. DO NOT SCALE FROM THESE DRAWINGS.
9. CLASS OF CONCRETE UNLESS OTHERWISE SPECIFIED ON DRAWING DETAILS:

REINFORCED	CLASS 30/19
THRUST BLOCKS	CLASS 20/19
BLINDING	CLASS 15/19
FLOOR SCREED	SAND : CEMENT = 3 : 1

10. PRE-CAST CONCRETE RINGS AND COVER SLABS TO COMPLY WITH SANS 1294.
11. JOINTS BETWEEN CONCRETE RINGS AND BETWEEN COVER SLABS AND BETWEEN RINGS AND FLOORS TO BE SEALED WITH BITUMEN SEALANT(APPROVED BY THE DESIGNER).
12. SEWER INSTALLED WITHIN ROAD RESERVE BOUNDARIES MUST BE POSITIONED IN ACCORDANCE WITH THE APPLICABLE SERVICES LAYOUT DRAWINGS.
13. ALL CONSTRUCTION TO BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS, THIRD EDITION 2005 AND THE STANDARD COE DETAIL DRAWINGS.
14. THESE DRAWINGS MUST BE READ IN CONJUNCTION WITH THE ARCHITECTS DRAWINGS (IF APPLICABLE)
15. THESE DRAWINGS MUST BE READ IN CONJUNCTION WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS, SERIES 4.

SPECIFIC NOTES:

1. ALL PIPES TO BE CONCRETE SPIGOT AND SOCKET WITH ROLLING RUBBERRINGS OR SLIDING RUBBER JOINTS OF PIPE CLASS SPECIFIED IN ACCORDANCE WITH SANS 677 LAYED IN CLASS B BEDDING UNDER ROAD SURFACES OR CLASS C BEDDING ELSEWHERE.
2. DO NOT SCALE FROM THESE DRAWINGS.
3. ALL DIMENSIONS MUST BE CHECKED AND APPROVED ON SITE.
4. ALL CONSTRUCTION TO BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR MUNICCIPAL CIVIL ENGINEERING WORKS,THIRD EDITION 2005 AND STANDARD COE DETAIL DRAWINGS.
5. THESE DRAWINGS MUST BE READ IN CONJUNCTION WITH THE ARCHITECTS DRAWINGS.(IF APPLICABLE)
6. THESE DRAWINGS MUST BE READ IN CONJUNCTION WITH THE STANDARD SPECIFICATION FOR MUNICIPAL CIVIL ENGINEERING WORKS.
7. THE SIGNATURE OR INITIALS ON THIS DRAWING OF ANY MANAGER OF THE TRANSPORT DEPARTMENT, IN NO WAY REMOVES ANY RESPONSIBILITY WHATSOEVER FROM THE CONSULTANT.
8. THE CONSULTANT REMAINS RESPONSIBLE TO ENSURE THAT ALL THE GUIDELINES, STANDARDS DRAWINGS, STANDARDS AND SPECIFICATIONS OF THE TRANSPORT DEPARTMENT HAVE BEEN MET AND ARE COMPLIED WITH.
9. FINAL POSITION OF SERVICE TO BE DETERMINED ON SITE
10. UNLESS OTHERWISE SHOWN ALL CONCRETE SHALL BE CLASS 25MPa/19mm.
11. CONCRETE FOR BENCHING SHALL BE CLASS 15MPa/38mm OR CLASS 15MPa/19mm.
12. UNLESS OTHERWISE SHOWN OR SPECIFIED ALL EXPOSED CONCRETE SURFACES SHALL HAVE A WOOD FLOAT SURFACE FINISH AND SHALL BE COVERED WITH AN APPROVED CURING COMPOUND WITHIN 24 HOURS OF CASTING
13. ALL CONCRETE EDGES SHALL BE CHAMFERRED 20mm.
14. EXISTING SERVICES THAT ARE INDICATED TO BE "REMOVED" AND ARE SITUATED UNDER FLOOR SLABS SHALL BE DISCONNECTED AND ABANDONED

LEGEND:

GEORGE
THE CITY FOR ALL REASONS

ROADS AND STORMWATER DEPARTMENT

AMENDMENTS

REV	DATE	BY	DESCRIPTION
P1	2026-07-28	LLM	ISSUED FOR COMMENTS AND APPROVAL

ROADS AND STORMWATER

APPROVED ON BEHALF OF:

OPERATIONS DIVISION
NAME:..... PROF REG No:.....
SIGNATURE:..... DATE:.....

PROJECTS DIVISION
NAME:..... PROF REG No:.....
SIGNATURE:..... DATE:.....

PLANNING DIVISION
NAME:..... PROF REG No:.....
SIGNATURE:..... DATE:.....

CONSULTING ENGINEERS:
JT EVOLVE
ACTA NON VERBA (PTY) LTD.

DESIGNED
NAME: W STOKER

DRAWN
NAME: LLM

APPROVED
NAME: W STOKER DATE:.....
PROF REG No: 202101798
SIGNATURE:.....
Digitally signed by Wynand Stoker
DN: cn=Wynand Stoker, o=JT Evolve (Pty) Ltd, ou=Pr Eng, email=wstoker83@mweb.com, c=ZA
Date: 2026.07.31 11:54:39 +02'00'

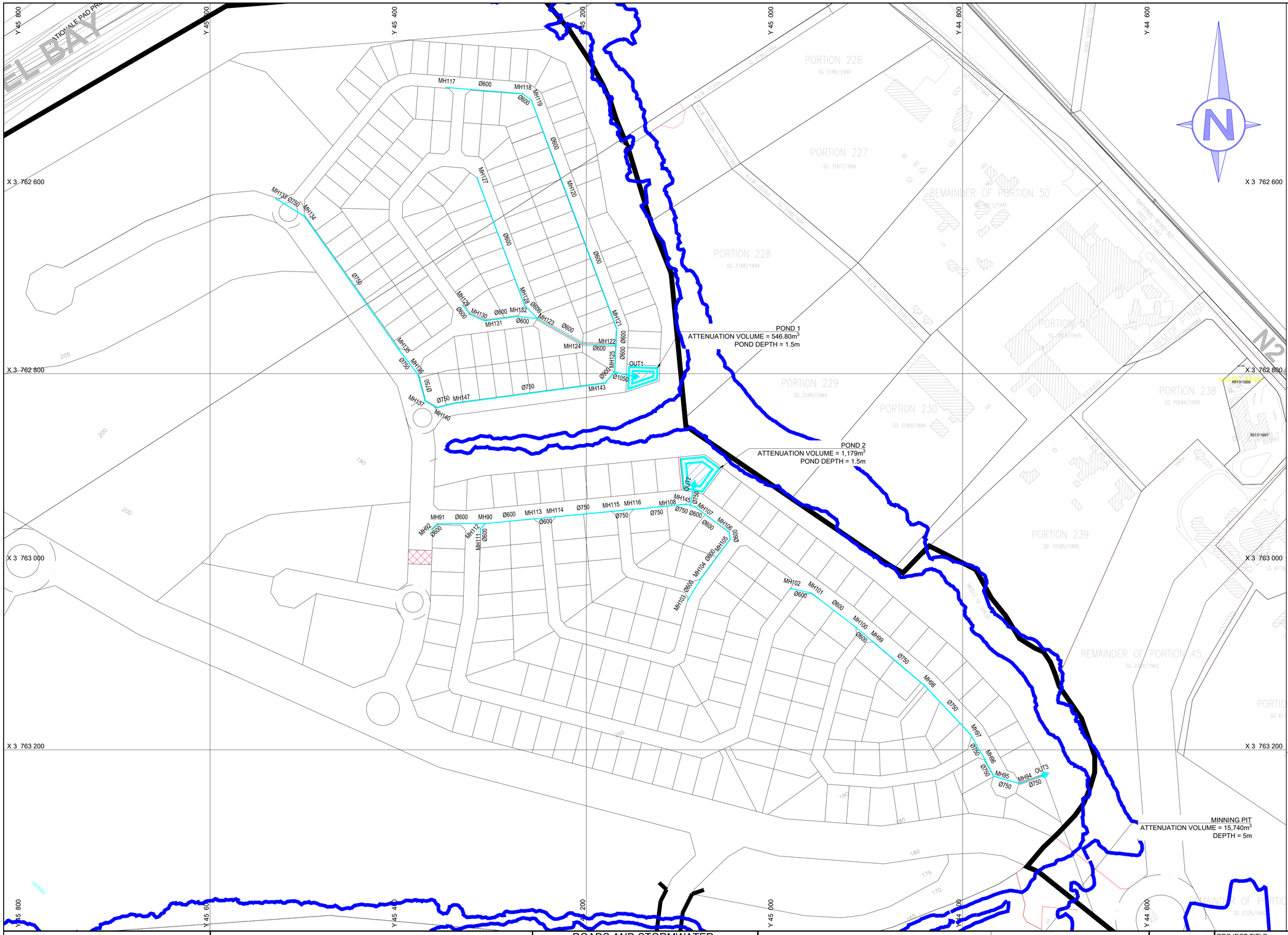
CONTRACT No.	
PROJECT No.	458
SHEET No.	2 OF 2
PAPER SIZE	A1
SCALE	1:20

PROJECT TITLE
GARDEN ROUTE CITY
(PTNS 7,8,12 & RE/23 KRAAIBOSCH NO. 195)

DRAWING TITLE
STORMWATER
TYPICAL
DETAIL

DRAWING NUMBER 458_04A_D2 P1 REVISION

ANNEXURE H5: STORMWATER GENERAL LAYOUT PLAN: 458_04A_GL1_REV.P3



GENERAL NOTES:

1. MINIMUM REQUIREMENTS ARE INDICATED ON THE DRAWING. THE CONSULTANT / DESIGNER IS RESPONSIBLE AND LIABLE FOR FURTHER DETAILS AND TO ENSURE EFFECTIVE OPERATION AND MAINTENANCE OF THE INSTALLATION.
2. THE SIGNATURE OR INITIALS ON THIS DRAWING OF COE OFFICIAL DOES NOT REMOVE ANY RESPONSIBILITY WHATSOEVER FROM THE CONSULTANT / DESIGNER.
3. THE CONSULTANT / DESIGNER REMAINS RESPONSIBLE TO ENSURE THAT ALL THE GUIDELINES, STANDARD DRAWINGS, STANDARDS AND SPECIFICATIONS OF THE WATER AND SANITATION DEPARTMENT HAVE BEEN MET AND ARE COMPLIED WITH IN THE DESIGN.
4. ALL MATERIAL AND WORKMANSHIP MUST COMPLY WITH THE REQUIREMENTS OF THE LATEST RELEVANT SANS STANDARD.
5. FINAL POSITION OF SERVICES TO BE DETERMINED ON SITE.
6. ALL DIMENSIONS TO BE CHECKED AND APPROVED ON SITE.
7. ALL DIMENSIONS ARE IN m (UNLESS OTHERWISE SPECIFIED).
8. DO NOT SCALE FROM THESE DRAWINGS.
9. CLASS OF CONCRETE UNLESS OTHERWISE SPECIFIED ON DRAWING DETAILS:

REINFORCED	CLASS 30/19
THRUST BLOCKS	CLASS 20/19
BLINDING	CLASS 15/19
FLOOR SCREED	SAND : CEMENT = 3 : 1

10. PRE-CAST CONCRETE RINGS AND COVER SLABS TO COMPLY WITH SANS 1294.
11. JOINTS BETWEEN CONCRETE RINGS AND BETWEEN COVER SLABS AND BETWEEN RINGS AND FLOORS TO BE SEALED WITH BITUMEN SEALANT(APPROVED BY THE DESIGNER).
12. SEWER INSTALLED WITHIN ROAD RESERVE BOUNDARIES MUST BE POSITIONED IN ACCORDANCE WITH THE APPLICABLE SERVICES LAYOUT DRAWINGS.
13. ALL CONSTRUCTION TO BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS, THIRD EDITION 2005 AND THE STANDARD COE DETAIL DRAWINGS.
14. THESE DRAWINGS MUST BE READ IN CONJUNCTION WITH THE ARCHITECTS DRAWINGS (IF APPLICABLE)
15. THESE DRAWINGS MUST BE READ IN CONJUNCTION WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS, SERIES 4.

SPECIFIC NOTES:

1. ALL PIPES TO BE CONCRETE SPIGOT AND SOCKET WITH ROLLING RUBBERRINGS OR SLIDING RUBBER JOINTS OF PIPE CLASS SPECIFIED IN ACCORDANCE WITH SANS 677 LAYED IN CLASS B BEDDING UNDER ROAD SURFACES OR CLASS C BEDDING ELSEWHERE.
2. DO NOT SCALE FROM THESE DRAWINGS.
3. ALL DIMENSIONS MUST BE CHECKED AND APPROVED ON SITE.
4. ALL CONSTRUCTION TO BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR MUNICCIPAL CIVIL ENGINEERING WORKS,THIRD EDITION 2005 AND STANDARD COE DETAIL DRAWINGS.
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6. THESE DRAWINGS MUST BE READ IN CONJUNCTION WITH THE STANDARD SPECIFICATION FOR MUNICIPAL CIVIL ENGINEERING WORKS.
7. THE SIGNATURE OR INITIALS ON THIS DRAWING OF ANY MANAGER OF THE TRANSPORT DEPARTMENT, IN NO WAY REMOVES ANY RESPONSIBILITY WHATSOEVER FROM THE CONSULTANT.
8. THE CONSULTANT REMAINS RESPONSIBLE TO ENSURE THAT ALL THE GUIDELINES, STANDARDS DRAWINGS, STANDARDS AND SPECIFICATIONS OF THE TRANSPORT DEPARTMENT HAVE BEEN MET AND ARE COMPLIED WITH.
9. FINAL POSITION OF SERVICE TO BE DETERMINED ON SITE
10. UNLESS OTHERWISE SHOWN ALL CONCRETE SHALL BE CLASS 25MPa/19mm.
11. CONCRETE FOR BENCHING SHALL BE CLASS 15MPa/38mm OR CLASS 15MPa/19mm.
12. UNLESS OTHERWISE SHOWN OR SPECIFIED ALL EXPOSED CONCRETE SURFACES SHALL HAVE A WOOD FLOAT SURFACE FINISH AND SHALL BE COVERED WITH AN APPROVED CURING COMPOUND WITHIN 24 HOURS OF CASTING
13. ALL CONCRETE EDGES SHALL BE CHAMFERRED 20mm.
14. EXISTING SERVICES THAT ARE INDICATED TO BE "REMOVED" AND ARE SITUATED UNDER FLOOR SLABS SHALL BE DISCONNECTED AND ABANDONED

LEGEND:

- EXISTING STORMWATER
- PROPOSED STORMWATER
- 100 YEAR FLOODLINE
- PROPOSED WETLAND BUFFER

GEORGE
THE CITY FOR ALL REASONS

ROADS AND STORMWATER
DEPARTMENT

AMENDMENTS

REV	DATE	BY	DESCRIPTION
P0	2024-12-04	MGP	ISSUED FOR COMMENTS / APPROVAL
P1	2026-07-09	MGP	TOWNPLANNER LAYOUT CHANGED
P2	2026-07-27	MGP	PIPE SIZE CHANGED
P3	2026/07/29	MGP	STRUCTURE NAME ADDED

ROADS AND STORMWATER

APPROVED ON BEHALF OF:

OPERATIONS DIVISION
NAME:..... PROF REG No:.....
SIGNATURE:..... DATE:.....

PROJECTS DIVISION
NAME:..... PROF REG No:.....
SIGNATURE:..... DATE:.....

PLANNING DIVISION
NAME:..... PROF REG No:.....
SIGNATURE:..... DATE:.....

CONSULTING ENGINEERS:

JT EVOLVE
ACTA NON VERBA (PTY) LTD.

DESIGNED
NAME: W STOKER

DRAWN
NAME: MGP

APPROVED
NAME: W JACOBS DATE:.....
PROF REG No: 202403261
SIGNATURE:.....
Digitally signed by Wynand Stoker
DN: cn=Wynand Stoker, o=JT Evolve (Pty) Ltd, ou=Pr Eng., 202101796, email=wynand@jtevolve.co.za, c=ZA
Date: 2026.07.31 11:54:14 +02'00'

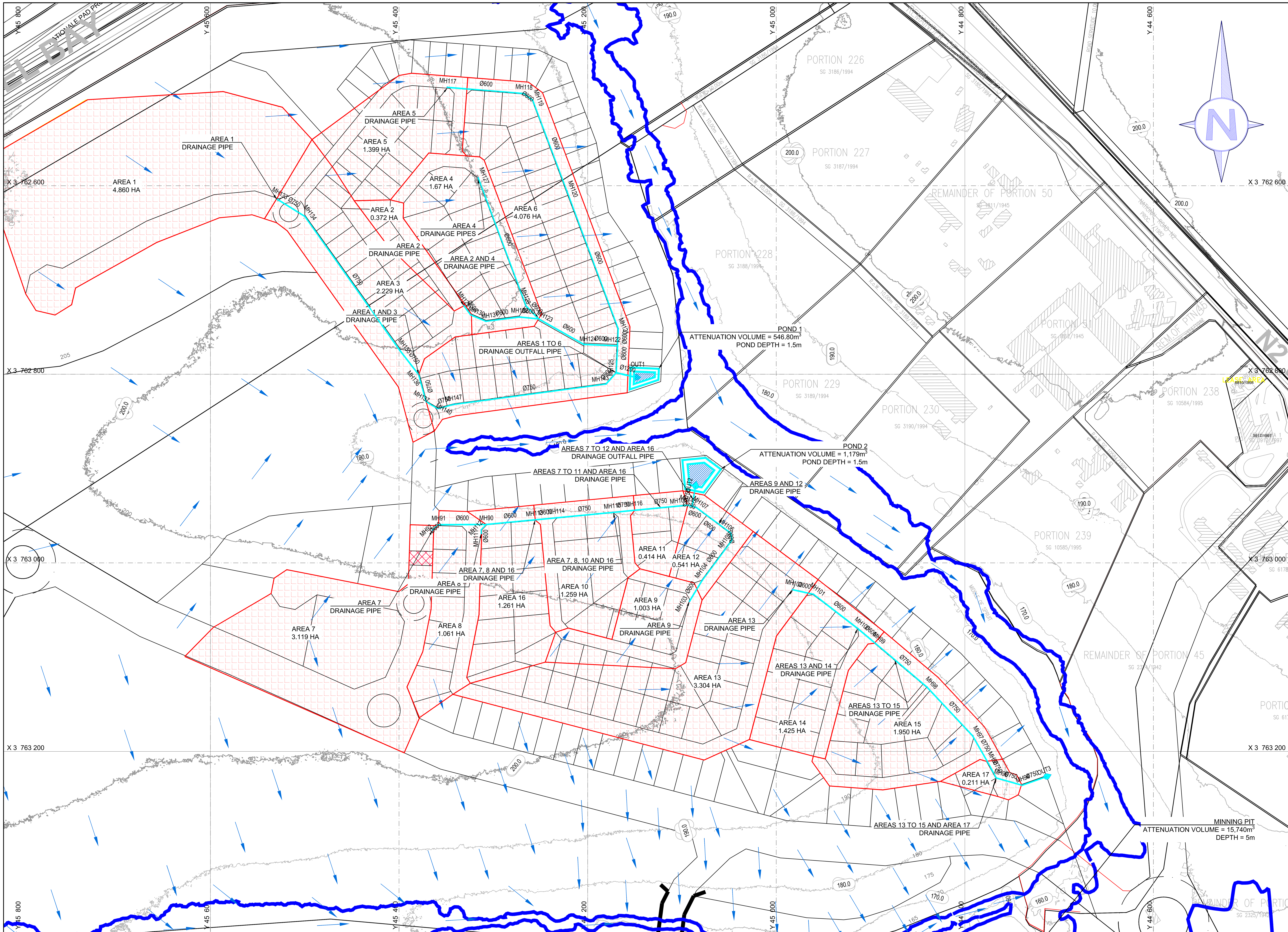
CONTRACT No.	
PROJECT No.	458
SHEET No.	1 OF 2
PAPER SIZE	A1
SCALE	1:2 000

PROJECT TITLE
GARDEN ROUTE CITY
(PTNS 7, 8, 12 & RE/23 KRAAIBOSCH NO. 195)

DRAWING TITLE
STORMWATER
GENERAL LAYOUT
PLAN

DRAWING NUMBER 458_04A_GL1 P3 REVISION

ANNEXURE H6: STORMWATER GENERAL LAYOUT PLAN: 458_04A_GL2_REV.P1



GENERAL NOTES:

1. MINIMUM REQUIREMENTS ARE INDICATED ON THE DRAWING. THE CONSULTANT / DESIGNER IS RESPONSIBLE AND LIABLE FOR FURTHER DETAILS AND TO ENSURE EFFECTIVE OPERATION AND MAINTENANCE OF THE INSTALLATION.
2. THE SIGNATURE OR INITIALS ON THIS DRAWING OF COE OFFICIAL DOES NOT REMOVE ANY RESPONSIBILITY WHATSOEVER FROM THE CONSULTANT / DESIGNER.
3. THE CONSULTANT / DESIGNER REMAINS RESPONSIBLE TO ENSURE THAT ALL THE GUIDELINES, STANDARD DRAWINGS, STANDARDS AND SPECIFICATIONS OF THE WATER AND SANITATION DEPARTMENT HAVE BEEN MET AND ARE COMPLIED WITH IN THE DESIGN.
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5. FINAL POSITION OF SERVICES TO BE DETERMINED ON SITE.
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7. ALL DIMENSIONS ARE IN m (UNLESS OTHERWISE SPECIFIED).
8. DO NOT SCALE FROM THESE DRAWINGS.
9. CLASS OF CONCRETE UNLESS OTHERWISE SPECIFIED ON DRAWING DETAILS:

REINFORCED	CLASS 30/19
THRUST BLOCKS	CLASS 20/19
BLINDING	CLASS 15/19
FLOOR SCREED	SAND : CEMENT = 3 : 1

10. PRE-CAST CONCRETE RINGS AND COVER SLABS TO COMPLY WITH SANS 1294.
11. JOINTS BETWEEN CONCRETE RINGS AND BETWEEN COVER SLABS AND BETWEEN RINGS AND FLOORS TO BE SEALED WITH BITUMEN SEALANT(APPROVED BY THE DESIGNER).
12. SEWER INSTALLED WITHIN ROAD RESERVE BOUNDARIES MUST BE POSITIONED IN ACCORDANCE WITH THE APPLICABLE SERVICES LAYOUT DRAWINGS.
13. ALL CONSTRUCTION TO BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS, THIRD EDITION 2005 AND THE STANDARD COE DETAIL DRAWINGS.
14. THESE DRAWINGS MUST BE READ IN CONJUNCTION WITH THE ARCHITECTS DRAWINGS (IF APPLICABLE)
15. THESE DRAWINGS MUST BE READ IN CONJUNCTION WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS, SERIES 4.

SPECIFIC NOTES:

1. ALL PIPES TO BE CONCRETE SPIGOT AND SOCKET WITH ROLLING RUBBERRINGS OR SLIDING RUBBER JOINTS OF PIPE CLASS SPECIFIED IN ACCORDANCE WITH SANS 677 LAYED IN CLASS B BEDDING UNDER ROAD SURFACES OR CLASS C BEDDING ELSEWHERE.
2. DO NOT SCALE FROM THESE DRAWINGS.
3. ALL DIMENSIONS MUST BE CHECKED AND APPROVED ON SITE.
4. ALL CONSTRUCTION TO BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR MUNICCIPAL CIVIL ENGINEERING WORKS,THIRD EDITION 2005 AND STANDARD COE DETAIL DRAWINGS.
5. THESE DRAWINGS MUST BE READ IN CONJUNCTION WITH THE ARCHITECTS DRAWINGS.(IF APPLICABLE)
6. THESE DRAWINGS MUST BE READ IN CONJUNCTION WITH THE STANDARD SPECIFICATION FOR MUNICIPAL CIVIL ENGINEERING WORKS.
7. THE SIGNATURE OR INITIALS ON THIS DRAWING OF ANY MANAGER OF THE TRANSPORT DEPARTMENT, IN NO WAY REMOVES ANY RESPONSIBILITY WHATSOEVER FROM THE CONSULTANT.
8. THE CONSULTANT REMAINS RESPONSIBLE TO ENSURE THAT ALL THE GUIDELINES, STANDARDS DRAWINGS, STANDARDS AND SPECIFICATIONS OF THE TRANSPORT DEPARTMENT HAVE BEEN MET AND ARE COMPLIED WITH.
9. FINAL POSITION OF SERVICE TO BE DETERMINED ON SITE
10. UNLESS OTHERWISE SHOWN ALL CONCRETE SHALL BE CLASS 25MPa/19mm.
11. CONCRETE FOR BENCHING SHALL BE CLASS 15MPa/38mm OR CLASS 15MPa/19mm.
12. UNLESS OTHERWISE SHOWN OR SPECIFIED ALL EXPOSED CONCRETE SURFACES SHALL HAVE A WOOD FLOAT SURFACE FINISH AND SHALL BE COVERED WITH AN APPROVED CURING COMPOUND WITHIN 24 HOURS OF CASTING
13. ALL CONCRETE EDGES SHALL BE CHAMFERRED 20mm.
14. EXISTING SERVICES THAT ARE INDICATED TO BE "REMOVED" AND ARE SITUATED UNDER FLOOR SLABS SHALL BE DISCONNECTED AND ABANDONED.

LEGEND:

- ROAD
- EXISTING STORMWATER LINE
- EXISTING CONNECTION POINTS
- PROPOSED STORMWATER PIPE
- PROPOSED STORMWATER MANHOLE
- PROPOSED STORMWATER KI's
- PROPOSED STORMWATER INLET
- PROPOSED STORMWATER OUTLET
- STORMWATER RUNOFF FLOW ARROWS
- 100 YEAR FLOODLINE

GEORGE
THE CITY FOR ALL REASONS

ROADS AND STORMWATER DEPARTMENT

AMENDMENTS

REV	DATE	BY	DESCRIPTION
P0	2024-12-04	MGP	ISSUED FOR COMMENTS / APPROVAL
P1	2026-07-30	LLM	PIPES SUB CATCHMENT AREAS SHOWN

ROADS AND STORMWATER
APPROVED ON BEHALF OF:

OPERATIONS DIVISION
NAME:...................................... PROF REG No:......................
SIGNATURE:...................................... DATE:......................

PROJECTS DIVISION
NAME:...................................... PROF REG No:......................
SIGNATURE:...................................... DATE:......................

PLANNING DIVISION
NAME:...................................... PROF REG No:......................
SIGNATURE:...................................... DATE:......................

CONSULTING ENGINEERS:

JT EVOLVE
ACTA NON VERBA (PTY) LTD.

DESIGNED
NAME: W JACOBS

DRAWN
NAME: MGP

APPROVED
NAME: W STOKER DATE:
PROF REG No: 202101798
Digitally signed by Wynand Stoker
DN: cn=Wynand Stoker, o=JT Evolve (Pty) Ltd, ou=Pr Eng.: 202101798, email=wynand@jtevolve.com, c=ZA
Date: 2026.07.31 11:53:48 +02'00'
SIGNATURE:

CONTRACT No.

PROJECT No.
458

SHEET No.
2 OF 2

PAPER SIZE
A1

SCALE
1:1 000

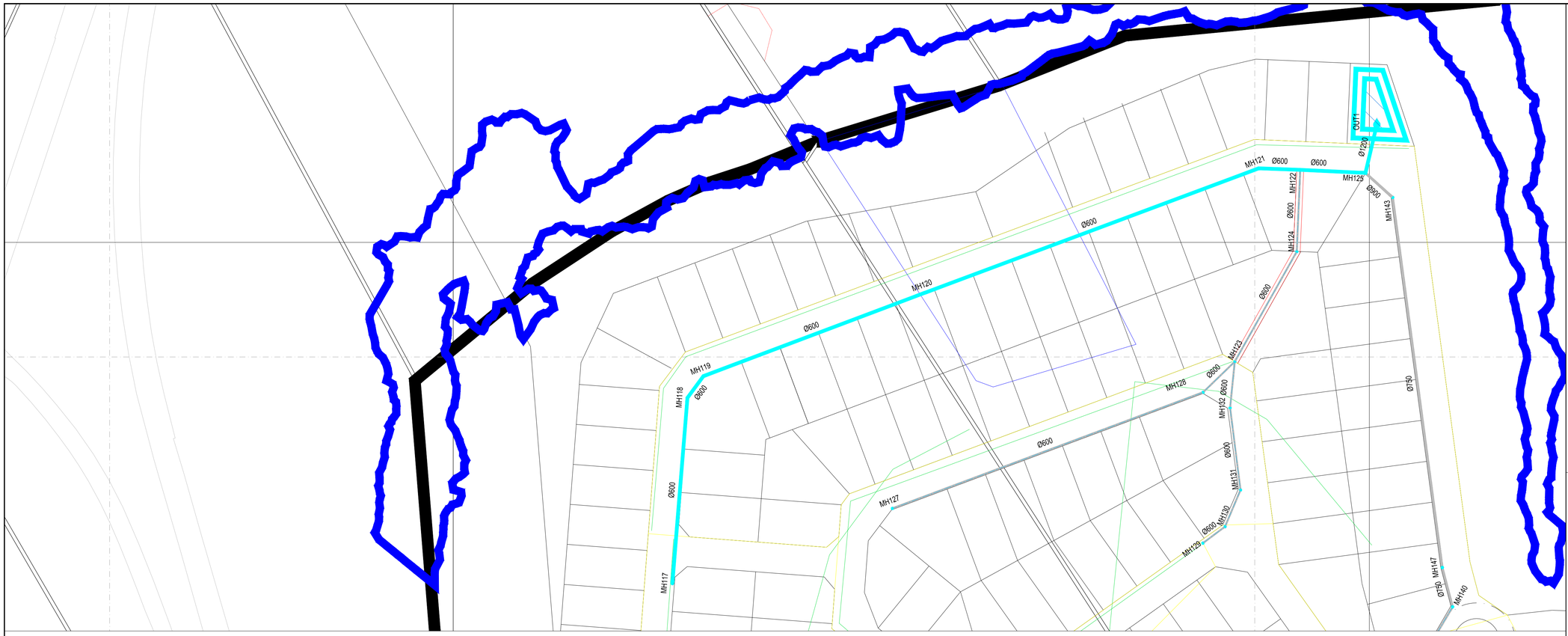
PROJECT TITLE
GARDEN ROUTE CITY
(PTNS 7, 8, 12 & RE/23 KRAAIBOSCH NO. 195)

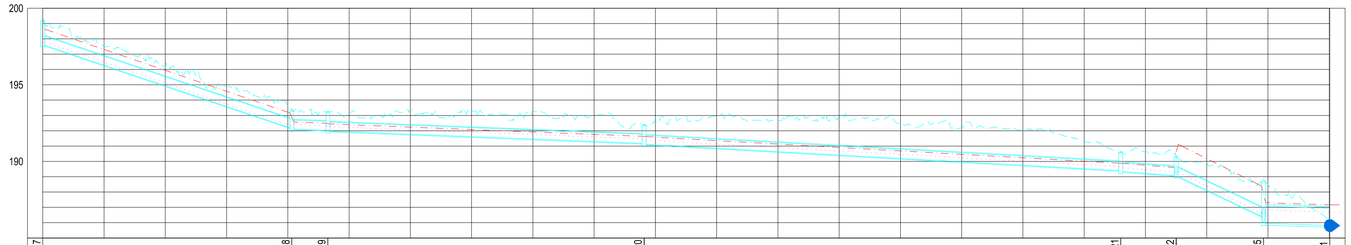
DRAWING TITLE
STORMWATER
GENERAL LAYOUT
PLAN

DRAWING NUMBER
458_04A_GL2

P1
REVISION

ANNEXURE H7: STORMWATER LONG SECTIONS: 458_04A_L1_REV.P1





SCALES:
Horizontal 1:1000
Vertical 1:200

DATUM 185.000

			MH117	MH118	MH119	MH120	MH121	MH122	MH125	OUT1
REFERENCE				Ø600 75D	Ø600 75D	Ø600 75D	Ø600 75D	Ø600 75D	Ø600 75D	Ø1200 100D
DISTANCE (m)			0.000	81.325	93.083	196.324	351.921	370.032	398.550	420.189
GROUND LEVEL			199.232	193.346	193.221	192.361	190.565	190.311	188.732	186.238
PIPE INVERT LEVEL			197.630	192.161	192.111 / 192.032	191.176	191.126	189.400	189.350 / 189.076	186.354 / 185.957	185.812
SLOPE / LENGTH				6.73% 1:14.9 81.33m	0.67% 1:149.9 11.76m	0.78% 1:128.1 103.24m	1.11% 1:90.1 155.60m	1.51% 1:66.1 18.11m	9.54% 1:10.5 28.52m	0.67% 1:149.3 21.64m
HYDRAULICS	DESIGN	Q(m3/s)		0.24	0.24	0.24	0.24	0.24	0.59	2.52
		V(m/s)		4.1	1.8	1.9	2.1	2.4	6.0	3.1
	MAX. (0.8D)	Q(m3/s)		1.46	0.46	0.50	0.59	0.69	1.73	2.64
		V(m/s)		6.3	2.0	2.2	2.6	3.0	7.5	3.1

LONGSECTION MH117 - MH126
FROM 0.000 TO 420.189

GENERAL NOTES:

1. MINIMUM REQUIREMENTS ARE INDICATED ON THE DRAWING. THE CONSULTANT / DESIGNER IS RESPONSIBLE AND LIABLE FOR FURTHER DETAILS AND TO ENSURE EFFECTIVE OPERATION AND MAINTENANCE OF THE INSTALLATION.
2. THE SIGNATURE OR INITIALS ON THIS DRAWING OF COE OFFICIAL DOES NOT REMOVE ANY RESPONSIBILITY WHATSOEVER FROM THE CONSULTANT / DESIGNER.
3. THE CONSULTANT / DESIGNER REMAINS RESPONSIBLE TO ENSURE THAT ALL THE GUIDELINES, STANDARD DRAWINGS, STANDARDS AND SPECIFICATIONS OF THE WATER AND SANITATION DEPARTMENT HAVE BEEN MET AND ARE COMPLIED WITH IN THE DESIGN.
4. ALL MATERIAL AND WORKMANSHIP MUST COMPLY WITH THE REQUIREMENTS OF THE LATEST RELEVANT SANS STANDARD.
5. FINAL POSITION OF SERVICES TO BE DETERMINED ON SITE.
6. ALL DIMENSIONS TO BE CHECKED AND APPROVED ON SITE.
7. ALL DIMENSIONS ARE IN m (UNLESS OTHERWISE SPECIFIED).
8. DO NOT SCALE FROM THESE DRAWINGS.
9. CLASS OF CONCRETE UNLESS OTHERWISE SPECIFIED ON DRAWING DETAILS:

REINFORCED	CLASS 30/19
THRUST BLOCKS	CLASS 20/19
BLINDING	CLASS 15/19
FLOOR SCREED	SAND : CEMENT = 3 : 1

10. PRE-CAST CONCRETE RINGS AND COVER SLABS TO COMPLY WITH SANS 1294.
11. JOINTS BETWEEN CONCRETE RINGS AND BETWEEN COVER SLABS AND BETWEEN RINGS AND FLOORS TO BE SEALED WITH BITUMEN SEALANT(APPROVED BY THE DESIGNER).
12. SEWER INSTALLED WITHIN ROAD RESERVE BOUNDARIES MUST BE POSITIONED IN ACCORDANCE WITH THE APPLICABLE SERVICES LAYOUT DRAWINGS.
13. ALL CONSTRUCTION TO BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS, THIRD EDITION 2005 AND THE STANDARD COE DETAIL DRAWINGS.
14. THESE DRAWINGS MUST BE READ IN CONJUNCTION WITH THE ARCHITECTS DRAWINGS (IF APPLICABLE)
15. THESE DRAWINGS MUST BE READ IN CONJUNCTION WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS, SERIES 4.

SPECIFIC NOTES:

1. ALL PIPES TO BE CONCRETE SPIGOT AND SOCKET WITH ROLLING RUBBERRINGS OR SLIDING RUBBER JOINTS OF PIPE CLASS SPECIFIED IN ACCORDANCE WITH SANS 677 LAYED IN CLASS B BEDDING UNDER ROAD SURFACES OR CLASS C BEDDING ELSEWHERE.
2. DO NOT SCALE FROM THESE DRAWINGS.
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8. THE CONSULTANT REMAINS RESPONSIBLE TO ENSURE THAT ALL THE GUIDELINES, STANDARDS DRAWINGS, STANDARDS AND SPECIFICATIONS OF THE TRANSPORT DEPARTMENT HAVE BEEN MET AND ARE COMPLIED WITH.
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13. ALL CONCRETE EDGES SHALL BE CHAMFERRED 20mm.
14. EXISTING SERVICES THAT ARE INDICATED TO BE "REMOVED" AND ARE SITUATED UNDER FLOOR SLABS SHALL BE DISCONNECTED AND ABANDONED.

LEGEND:

- EXISTING STORMWATER
- PROPOSED STORMWATER
- 100 YEAR FLOODLINE
- 50 YEAR FLOODLINE

GEORGE
THE CITY FOR ALL REASONS

ROADS AND STORMWATER
DEPARTMENT

AMENDMENTS

REV	DATE	BY	DESCRIPTION
P0	2024-12-04	MGP	ISSUED FOR COMMENTS / APPROVAL
P1	2026/07/29	MGP	TOWNPLANER LAYOUT CHANGED

ROADS AND STORMWATER
APPROVED ON BEHALF OF:

OPERATIONS DIVISION
NAME:..... PROF REG No:.....
SIGNATURE:..... DATE:.....

PROJECTS DIVISION
NAME:..... PROF REG No:.....
SIGNATURE:..... DATE:.....

PLANNING DIVISION
NAME:..... PROF REG No:.....
SIGNATURE:..... DATE:.....

CONSULTING ENGINEERS:
JT EVOLVE
ACTA NON VERBA (PTY) LTD.

DESIGNED
NAME: W JACOBS

DRAWN
NAME: MGP

APPROVED
NAME: W JACOBS DATE:.....
PROF REG No: 202403261
SIGNATURE:..... Digitally signed by Wynand Stoker DN: cn=Wynand Stoker, o=JT Evolve (Pty) Ltd, ou=Pr Eng 20210107006, email=wynand@jtevolve.co.za, c=ZA Date: 2026.07.31 11:53:20 +02'00'

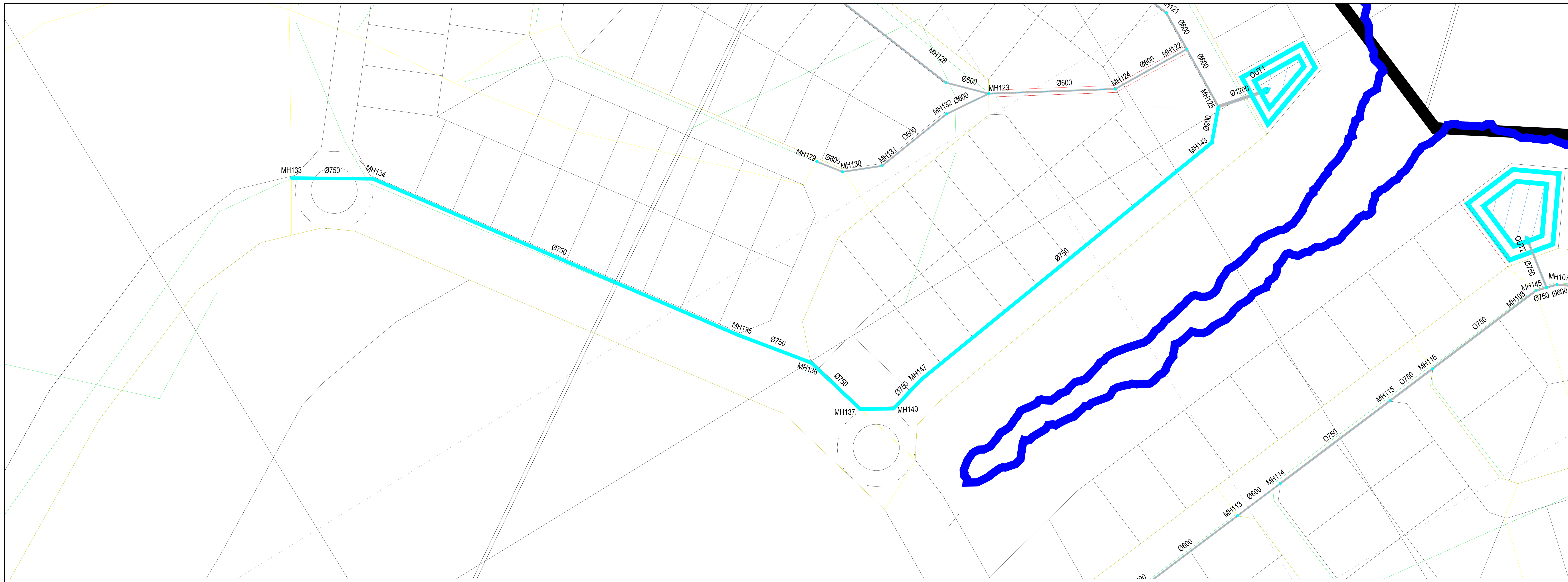
CONTRACT No.	
PROJECT No.	458
SHEET No.	1 OF 6
PAPER SIZE	A1
SCALE	1:1000

PROJECT TITLE
GARDEN ROUTE CITY
(PTNS 7, 8, 12 & RE/23 KRAAIBOSCH NO. 195)

DRAWING TITLE
STORMWATER
LONGITUDINAL
SECTION

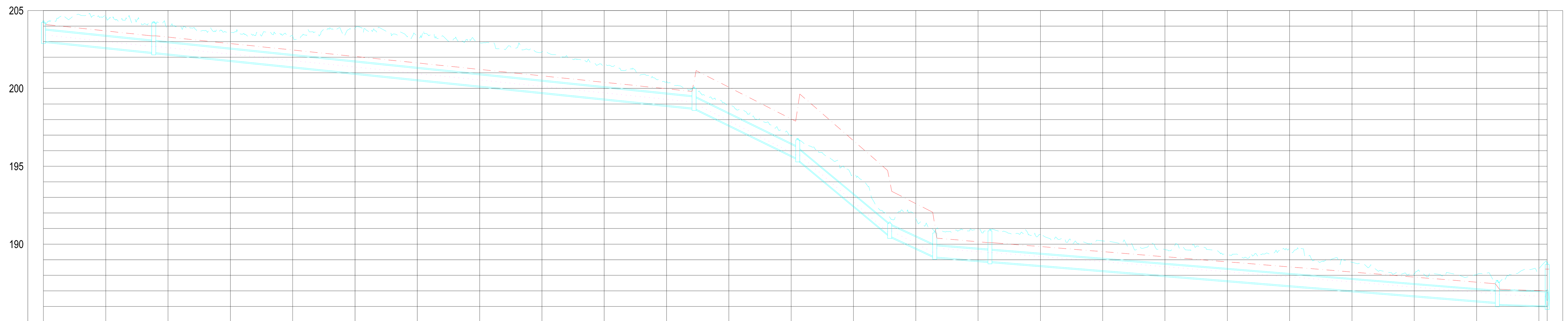
DRAWING NUMBER 458_04A_L1 P1 REVISION

ANNEXURE H8: STORMWATER LONG SECTIONS: 458_04A_L2_REV.P1



SCALES:
Horizontal 1:1000
Vertical 1:200

DATUM 185.000



REFERENCE	MH133	MH134	MH135	MH136	MH137	MH140	MH147	MH143	MH125
DISTANCE (m)	0.000	35.376	208.848	242.112	271.629	286.094	303.806	466.685	482.678
GROUND LEVEL	204.282	204.229	200.034	196.733	191.730	190.820	190.950	187.666	188.732
PIPE INVERT LEVEL	203.030	202.302 / 202.302	198.732 / 198.732	195.481 / 195.431	190.521 / 190.521	189.175 / 189.175	188.888 / 188.888	186.249 / 186.135	186.028

REFERENCE	SLOPE / LENGTH	HYDRAULICS DESIGN Q(m3/s)	DESIGN V(m/s)	MAX. (0.8D) Q(m3/s)	MAX. (0.8D) V(m/s)
Ø750 100D	2.06% 1:48.6 35.38m	0.84	3.6	1.39	4.0
Ø750 100D	2.06% 1:48.6 173.47m	0.84	3.6	1.39	4.0
Ø750 100D	9.77% 1:10.2 33.26m	0.84	6.5	3.03	8.7
Ø750 100D	16.64% 1:6.0 29.52m	1.22	8.8	3.95	11.4
Ø750 100D	9.30% 1:10.8 14.46m	1.22	7.1	2.95	8.5
Ø750 100D	1.62% 1:61.7 17.71m	1.22	3.6	1.23	3.6
Ø750 100D	1.62% 1:61.7 162.88m	1.22	3.6	1.23	3.6
Ø900 50D	0.67% 1:149.3 15.99m	1.22	2.6	1.46	2.7

LONGSECTION MH133 - MH138
FROM 0.000 TO 482.678

GENERAL NOTES:

1. MINIMUM REQUIREMENTS ARE INDICATED ON THE DRAWING. THE CONSULTANT / DESIGNER IS RESPONSIBLE AND LIABLE FOR FURTHER DETAILS AND TO ENSURE EFFECTIVE OPERATION AND MAINTENANCE OF THE INSTALLATION.
2. THE SIGNATURE OR INITIALS ON THIS DRAWING OF COE OFFICIAL DOES NOT REMOVE ANY RESPONSIBILITY WHATSOEVER FROM THE CONSULTANT / DESIGNER.
3. THE CONSULTANT / DESIGNER REMAINS RESPONSIBLE TO ENSURE THAT ALL THE GUIDELINES, STANDARD DRAWINGS, STANDARDS AND SPECIFICATIONS OF THE WATER AND SANITATION DEPARTMENT HAVE BEEN MET AND ARE COMPLIED WITH IN THE DESIGN.
4. ALL MATERIAL AND WORKMANSHIP MUST COMPLY WITH THE REQUIREMENTS OF THE LATEST RELEVANT SANS STANDARD.
5. FINAL POSITION OF SERVICES TO BE DETERMINED ON SITE.
6. ALL DIMENSIONS TO BE CHECKED AND APPROVED ON SITE.
7. ALL DIMENSIONS ARE IN m (UNLESS OTHERWISE SPECIFIED).
8. DO NOT SCALE FROM THESE DRAWINGS.
9. CLASS OF CONCRETE UNLESS OTHERWISE SPECIFIED ON DRAWING DETAILS:

REINFORCED	CLASS 30/19
THRUST BLOCKS	CLASS 20/19
BLINDING	CLASS 15/19
FLOOR SCREED	SAND : CEMENT = 3 : 1

10. PRE-CAST CONCRETE RINGS AND COVER SLABS TO COMPLY WITH SANS 1294.
11. JOINTS BETWEEN CONCRETE RINGS AND BETWEEN COVER SLABS AND BETWEEN RINGS AND FLOORS TO BE SEALED WITH BITUMEN SEALANT(APPROVED BY THE DESIGNER).
12. SEWER INSTALLED WITHIN ROAD RESERVE BOUNDARIES MUST BE POSITIONED IN ACCORDANCE WITH THE APPLICABLE SERVICES LAYOUT DRAWINGS.
13. ALL CONSTRUCTION TO BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS, THIRD EDITION 2005 AND THE STANDARD COE DETAIL DRAWINGS.
14. THESE DRAWINGS MUST BE READ IN CONJUNCTION WITH THE ARCHITECTS DRAWINGS (IF APPLICABLE)
15. THESE DRAWINGS MUST BE READ IN CONJUNCTION WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS, SERIES 4.

SPECIFIC NOTES:

1. ALL PIPES TO BE CONCRETE SPIGOT AND SOCKET WITH ROLLING RUBBERRINGS OR SLIDING RUBBER JOINTS OF PIPE CLASS SPECIFIED IN ACCORDANCE WITH SANS 677 LAYED IN CLASS B BEDDING UNDER ROAD SURFACES OR CLASS C BEDDING ELSEWHERE.
2. DO NOT SCALE FROM THESE DRAWINGS.
3. ALL DIMENSIONS MUST BE CHECKED AND APPROVED ON SITE.
4. ALL CONSTRUCTION TO BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR MUNICCIPAL CIVIL ENGINEERING WORKS,THIRD EDITION 2005 AND STANDARD COE DETAIL DRAWINGS.
5. THESE DRAWINGS MUST BE READ IN CONJUNCTION WITH THE ARCHITECTS DRAWINGS.(IF APPLICABLE)
6. THESE DRAWINGS MUST BE READ IN CONJUNCTION WITH THE STANDARD SPECIFICATION FOR MUNICIPAL CIVIL ENGINEERING WORKS.
7. THE SIGNATURE OR INITIALS ON THIS DRAWING OF ANY MANAGER OF THE TRANSPORT DEPARTMENT, IN NO WAY REMOVES ANY RESPONSIBILITY WHATSOEVER FROM THE CONSULTANT.
8. THE CONSULTANT REMAINS RESPONSIBLE TO ENSURE THAT ALL THE GUIDELINES, STANDARDS DRAWINGS, STANDARDS AND SPECIFICATIONS OF THE TRANSPORT DEPARTMENT HAVE BEEN MET AND ARE COMPLIED WITH.
9. FINAL POSITION OF SERVICE TO BE DETERMINED ON SITE
10. UNLESS OTHERWISE SHOWN ALL CONCRETE SHALL BE CLASS 25MPa/19mm.
11. CONCRETE FOR BENCHING SHALL BE CLASS 15MPa/38mm OR CLASS 15MPa/19mm.
12. UNLESS OTHERWISE SHOWN OR SPECIFIED ALL EXPOSED CONCRETE SURFACES SHALL HAVE A WOOD FLOAT SURFACE FINISH AND SHALL BE COVERED WITH AN APPROVED CURING COMPOUND WITHIN 24 HOURS OF CASTING
13. ALL CONCRETE EDGES SHALL BE CHAMFERRED 20mm.
14. EXISTING SERVICES THAT ARE INDICATED TO BE "REMOVED" AND ARE SITUATED UNDER FLOOR SLABS SHALL BE DISCONNECTED AND ABANDONED.

LEGEND:

- EXISTING STORMWATER
- PROPOSED STORMWATER
- 100 YEAR FLOODLINE
- 50 YEAR FLOODLINE

GEORGE THE CITY FOR ALL REASONS

ROADS AND STORMWATER DEPARTMENT

AMENDMENTS

REV	DATE	BY	DESCRIPTION
P0	2024-12-04	MGP	ISSUED FOR COMMENTS / APPROVAL
P1	2026/07/29	MGP	TOWNPLANER LAYOUT CHANGED

ROADS AND STORMWATER
APPROVED ON BEHALF OF:

OPERATIONS DIVISION
NAME:............................ PROF REG No:....................
SIGNATURE:............................ DATE:....................

PROJECTS DIVISION
NAME:............................ PROF REG No:....................
SIGNATURE:............................ DATE:....................

PLANNING DIVISION
NAME:............................ PROF REG No:....................
SIGNATURE:............................ DATE:....................

CONSULTING ENGINEERS:

JT EVOLVE
ACTA NON VERBA (PTY) LTD.

DESIGNED
NAME: W JACOBS

DRAWN
NAME: MGP

APPROVED
NAME: W JACOBS DATE:
PROF REG No: 202403261
Digitally signed by Wynand Stoker DN: cn=Wynand Stoker, o=JT Evolve (Pty) Ltd, ou=Pr Eng.: 202101798, email=wynand@jtevolve.com, c=ZA Date: 2026.07.31 11:52:58 +02'00'
SIGNATURE:

CONTRACT No.

PROJECT No. 458

SHEET No. 2 OF 6

PAPER SIZE A1

SCALE 1:1000

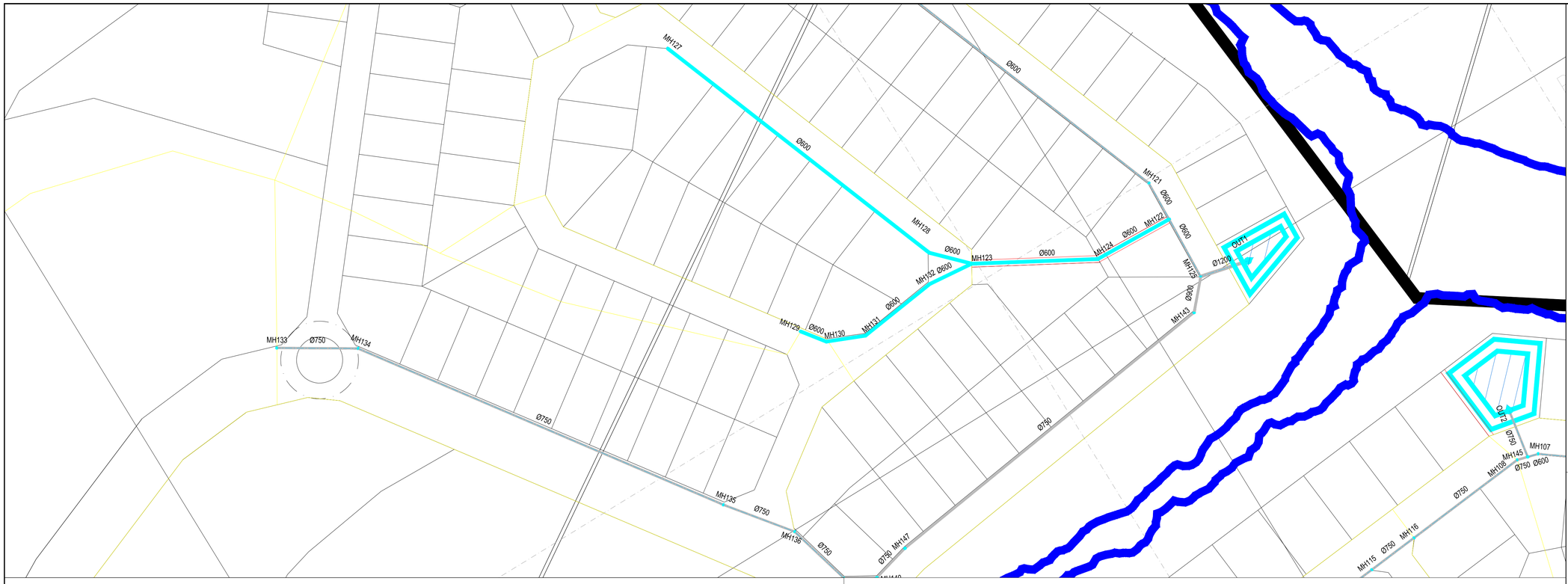
PROJECT TITLE
GARDEN ROUTE CITY
(PTNS 7, 8, 12 & RE/23 KRAAIBOSCH NO. 195)

DRAWING TITLE
STORMWATER LONGITUDINAL SECTION

DRAWING NUMBER 458_04A_L2

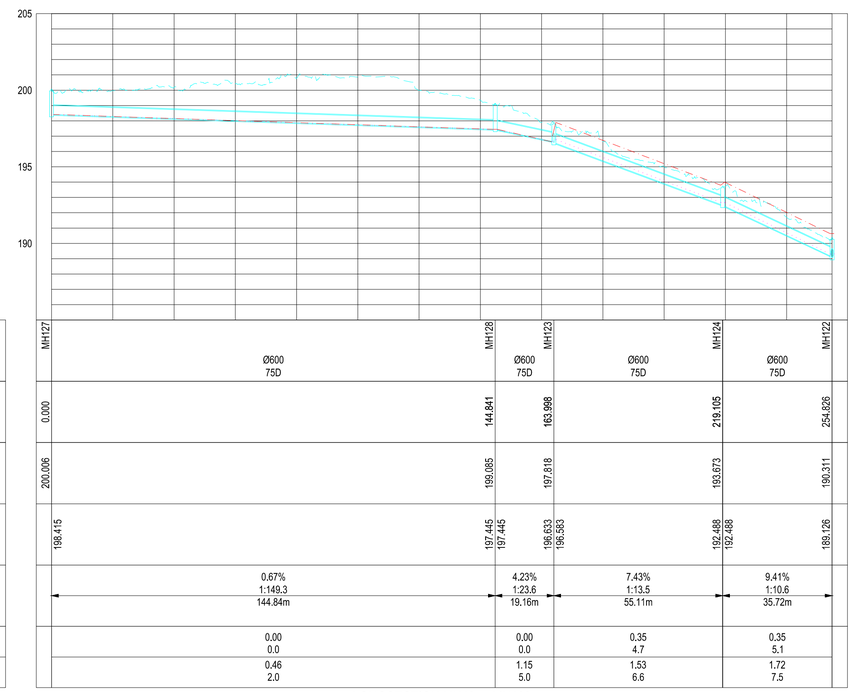
P1 REVISION

ANNEXURE H9: STORMWATER LONG SECTIONS: 458_04A_L3_REV.P1



SCALES:
Horizontal 1:1000
Vertical 1:200

DATUM 185.000

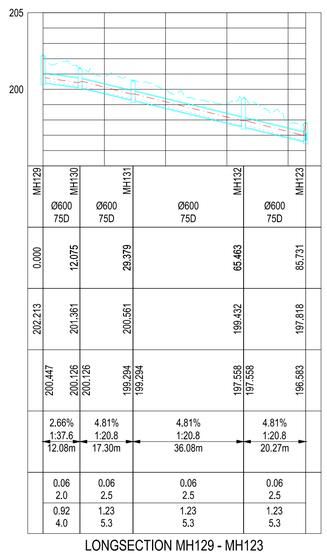


REFERENCE		MH127	Ø600 75D		MH128	Ø600 75D	MH123	Ø600 75D		MH124	Ø600 75D	MH122
DISTANCE (m)		0.000			144.841		163.998			219.105		254.826
GROUND LEVEL		200.006			199.085		197.618			193.673		190.311
PIPE INVERT LEVEL		198.415			197.445	197.445	196.633	196.583		192.488	192.488	189.126
SLOPE / LENGTH			0.67% 1:149.3 144.84m			4.23% 1:23.6 19.16m		7.43% 1:13.5 55.11m			9.41% 1:10.6 35.72m	
HYDRAULICS	DESIGN Q(m3/s) V(m/s)		0.00 0.0			0.00 0.0		0.35 4.7			0.35 5.1	
	MAX. (0.8D) Q(m3/s) V(m/s)		0.46 2.0			1.15 5.0		1.53 6.6			1.72 7.5	

LONGSECTION MH127 - MH122
FROM 0.000 TO 254.826

SCALES:
Horizontal 1:1000
Vertical 1:200

DATUM 195.000



REFERENCE		MH129	Ø600 75D		MH130	Ø600 75D	MH131	Ø600 75D		MH132	Ø600 75D	MH123
DISTANCE (m)		0.000			12.075		29.379			65.463		85.731
GROUND LEVEL		202.213			201.361		200.561			199.432		197.818
PIPE INVERT LEVEL		200.447			200.126	200.126	199.294	199.294		197.558	197.558	196.583
SLOPE / LENGTH			2.66% 1:37.6 12.08m			4.81% 1:20.8 17.30m		4.81% 1:20.8 36.08m			4.81% 1:20.8 20.27m	
HYDRAULICS	DESIGN Q(m3/s) V(m/s)		0.06 2.0			0.06 2.5		0.06 2.5			0.06 2.5	
	MAX. (0.8D) Q(m3/s) V(m/s)		0.92 4.0			1.23 5.3		1.23 5.3			1.23 5.3	

LONGSECTION MH129 - MH123
FROM 0.000 TO 85.731

GENERAL NOTES:

1. MINIMUM REQUIREMENTS ARE INDICATED ON THE DRAWING. THE CONSULTANT / DESIGNER IS RESPONSIBLE AND LIABLE FOR FURTHER DETAILS AND TO ENSURE EFFECTIVE OPERATION AND MAINTENANCE OF THE INSTALLATION.
2. THE SIGNATURE OR INITIALS ON THIS DRAWING OF COE OFFICIAL DOES NOT REMOVE ANY RESPONSIBILITY WHATSOEVER FROM THE CONSULTANT / DESIGNER.
3. THE CONSULTANT / DESIGNER REMAINS RESPONSIBLE TO ENSURE THAT ALL THE GUIDELINES, STANDARD DRAWINGS, STANDARDS AND SPECIFICATIONS OF THE WATER AND SANITATION DEPARTMENT HAVE BEEN MET AND ARE COMPLIED WITH IN THE DESIGN.
4. ALL MATERIAL AND WORKMANSHIP MUST COMPLY WITH THE REQUIREMENTS OF THE LATEST RELEVANT SANS STANDARD.
5. FINAL POSITION OF SERVICES TO BE DETERMINED ON SITE.
6. ALL DIMENSIONS TO BE CHECKED AND APPROVED ON SITE.
7. ALL DIMENSIONS ARE IN m (UNLESS OTHERWISE SPECIFIED).
8. DO NOT SCALE FROM THESE DRAWINGS.
9. CLASS OF CONCRETE UNLESS OTHERWISE SPECIFIED ON DRAWING DETAILS:

REINFORCED	CLASS 30/19
THRUST BLOCKS	CLASS 20/19
BLINDING	CLASS 15/19
FLOOR SCREED	SAND : CEMENT = 3 : 1

10. PRE-CAST CONCRETE RINGS AND COVER SLABS TO COMPLY WITH SANS 1294.
11. JOINTS BETWEEN CONCRETE RINGS AND BETWEEN COVER SLABS AND BETWEEN RINGS AND FLOORS TO BE SEALED WITH BITUMEN SEALANT(APPROVED BY THE DESIGNER).
12. SEWER INSTALLED WITHIN ROAD RESERVE BOUNDARIES MUST BE POSITIONED IN ACCORDANCE WITH THE APPLICABLE SERVICES LAYOUT DRAWINGS.
13. ALL CONSTRUCTION TO BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS, THIRD EDITION 2005 AND THE STANDARD COE DETAIL DRAWINGS.
14. THESE DRAWINGS MUST BE READ IN CONJUNCTION WITH THE ARCHITECTS DRAWINGS (IF APPLICABLE)
15. THESE DRAWINGS MUST BE READ IN CONJUNCTION WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS, SERIES 4.

SPECIFIC NOTES:

1. ALL PIPES TO BE CONCRETE SPIGOT AND SOCKET WITH ROLLING RUBBERRINGS OR SLIDING RUBBER JOINTS OF PIPE CLASS SPECIFIED IN ACCORDANCE WITH SANS 677 LAYED IN CLASS B BEDDING UNDER ROAD SURFACES OR CLASS C BEDDING ELSEWHERE.
2. DO NOT SCALE FROM THESE DRAWINGS.
3. ALL DIMENSIONS MUST BE CHECKED AND APPROVED ON SITE.
4. ALL CONSTRUCTION TO BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR MUNICCIPAL CIVIL ENGINEERING WORKS,THIRD EDITION 2005 AND STANDARD COE DETAIL DRAWINGS.
5. THESE DRAWINGS MUST BE READ IN CONJUNCTION WITH THE ARCHITECTS DRAWINGS.(IF APPLICABLE)
6. THESE DRAWINGS MUST BE READ IN CONJUNCTION WITH THE STANDARD SPECIFICATION FOR MUNICIPAL CIVIL ENGINEERING WORKS.
7. THE SIGNATURE OR INITIALS ON THIS DRAWING OF ANY MANAGER OF THE TRANSPORT DEPARTMENT, IN NO WAY REMOVES ANY RESPONSIBILITY WHATSOEVER FROM THE CONSULTANT.
8. THE CONSULTANT REMAINS RESPONSIBLE TO ENSURE THAT ALL THE GUIDELINES, STANDARDS DRAWINGS, STANDARDS AND SPECIFICATIONS OF THE TRANSPORT DEPARTMENT HAVE BEEN MET AND ARE COMPLIED WITH.
9. FINAL POSITION OF SERVICE TO BE DETERMINED ON SITE
10. UNLESS OTHERWISE SHOWN ALL CONCRETE SHALL BE CLASS 25MPa/19mm.
11. CONCRETE FOR BENCHING SHALL BE CLASS 15MPa/38mm OR CLASS 15MPa/19mm.
12. UNLESS OTHERWISE SHOWN OR SPECIFIED ALL EXPOSED CONCRETE SURFACES SHALL HAVE A WOOD FLOAT SURFACE FINISH AND SHALL BE COVERED WITH AN APPROVED CURING COMPOUND WITHIN 24 HOURS OF CASTING
13. ALL CONCRETE EDGES SHALL BE CHAMFERRED 20mm.
14. EXISTING SERVICES THAT ARE INDICATED TO BE "REMOVED" AND ARE SITUATED UNDER FLOOR SLABS SHALL BE DISCONNECTED AND ABANDONED

LEGEND:

- EXISTING STORMWATER
- PROPOSED STORMWATER
- 100 YEAR FLOODLINE
- 50 YEAR FLOODLINE

GEORGE
THE CITY FOR ALL REASONS

ROADS AND STORMWATER
DEPARTMENT

AMENDMENTS

REV	DATE	BY	DESCRIPTION
P0	2024-12-04	MGP	ISSUED FOR COMMENTS / APPROVAL
P1	2026/07/29	MGP	TOWNPLANER LAYOUT CHANGED

ROADS AND STORMWATER

APPROVED ON BEHALF OF:

OPERATIONS DIVISION
NAME:..... PROF REG No:.....
SIGNATURE:..... DATE:.....

PROJECTS DIVISION
NAME:..... PROF REG No:.....
SIGNATURE:..... DATE:.....

PLANNING DIVISION
NAME:..... PROF REG No:.....
SIGNATURE:..... DATE:.....

CONSULTING ENGINEERS:

JT EVOLVE
ACTA NON VERBA (PTY) LTD.

DESIGNED
NAME: W JACOBS

DRAWN
NAME: MGP

APPROVED
NAME: W JACOBS DATE:.....
PROF REG No: 202403261
SIGNATURE:.....

Digitally signed by Wynand Stoker
DN: cn=Wynand Stoker, o=IT Engineering(168.isu.ff-Eng-3021017), email=wynand@jtevolve.com, c=ZA
Date: 2026.07.31 11:52:40 +02'00'

CONTRACT No.

PROJECT No. 458

SHEET No. 3 OF 6

PAPER SIZE A1

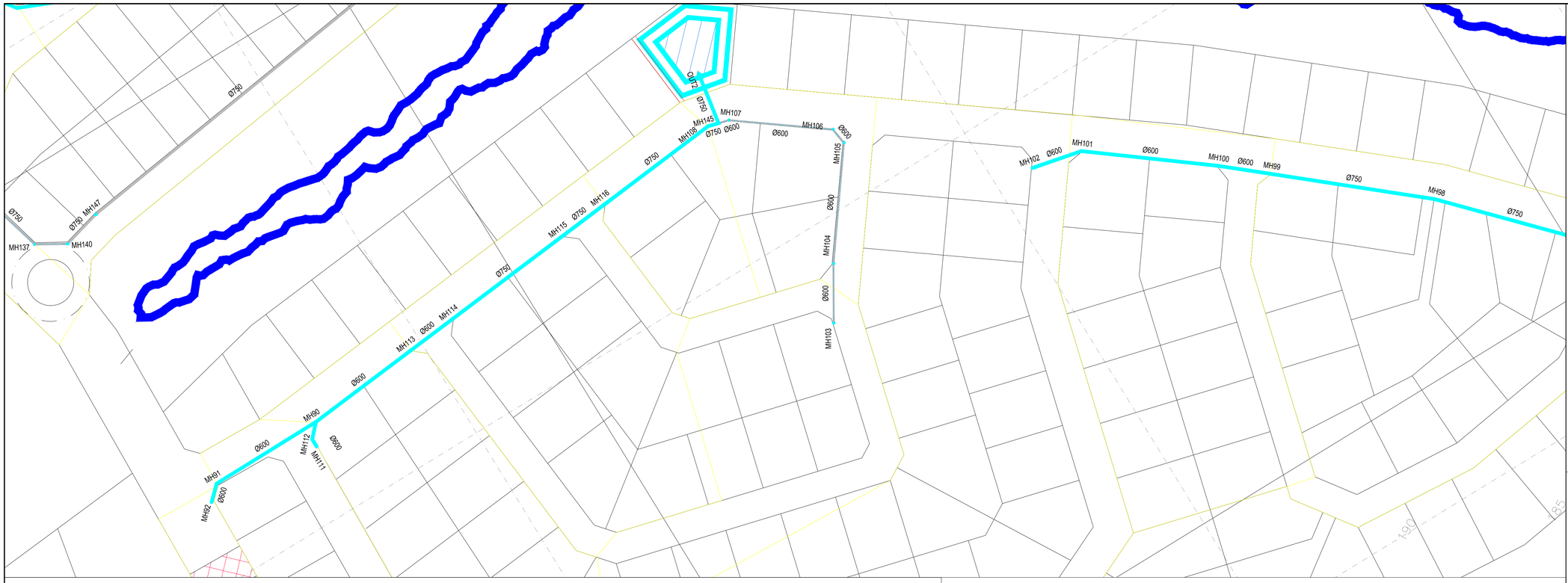
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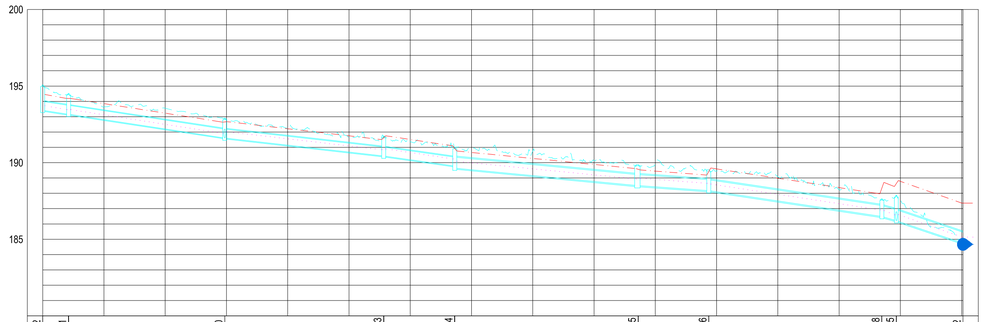
PROJECT TITLE
GARDEN ROUTE CITY
(PTNS 7, 8, 12 & RE/23 KRAAIBOSCH NO. 195)

DRAWING TITLE
STORMWATER
LONGITUDINAL
SECTION

DRAWING NUMBER 458_04A_L3 P1 REVISION

ANNEXURE H10: STORMWATER LONG SECTIONS: 458_04A_L4_REV.P1



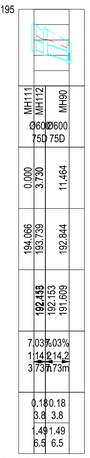


SCALES:
Horizontal 1:1000
Vertical 1:200

DATUM 180.000

			MH92	MH91		MH90		MH113		MH114		MH115		MH116		MH108	MH145	OUT2
REFERENCE				Ø600 75D		Ø600 75D		Ø600 75D		Ø750 100D		Ø750 100D		Ø750 100D		Ø750 100D	Ø750 100D	
DISTANCE (m)			0.000	8.464		59.449		111.322		134.516		194.399		217.466		273.950	278.685	300.431
GROUND LEVEL			195.017	194.467		192.844		191.669		190.947		189.805		189.473		187.581	187.855	184.747
PIPE INVERT LEVEL			193.415	193.158		191.609		190.434		190.434		188.497		188.304		188.172	188.172	184.747
SLOPE / LENGTH				3.04% 1:32.9 8.46m		3.04% 1:32.9 50.99m		2.26% 1:44.2 51.88m		2.83% 1:35.3 23.18m		1.92% 1:52.1 59.88m		1.44% 1:69.5 23.07m		2.98% 1:33.5 56.48m	5.75% 1:17.4 4.74m	6.75% 1:14.8 21.75m
HYDRAULICS	DESIGN	Q(m3/s)		0.54		0.54		0.72		0.94		0.94		0.94		1.16	1.32	1.50
		V(m/s)		3.8		3.8		3.6		4.1		3.6		3.2		4.5	6.0	6.6
	MAX. (0.8D)	Q(m3/s)		0.98		0.98		0.84		0.94		1.34		1.16		1.67	2.32	2.52
		V(m/s)		4.2		4.2		3.7		4.1		3.9		3.3		4.8	6.7	7.2

LONGSECTION MH92 - MH110
FROM 0.000 TO 300.431



SCALES:
Horizontal 1:1000
Vertical 1:200

DATUM 190.000

			MH111	MH112	MH90
REFERENCE			Ø600 75D	Ø600 75D	
DISTANCE (m)			0.000	3.750	11.464
GROUND LEVEL			194.066	193.739	192.844
PIPE INVERT LEVEL			192.145	192.145	191.609
SLOPE / LENGTH			7.03% 1:14.2 3.75m	3.03% 1:33.0 7.71m	
HYDRAULICS	DESIGN	Q(m3/s)	0.18	0.18	
		V(m/s)	3.8	3.8	
	MAX. (0.8D)	Q(m3/s)	1.49	1.49	
		V(m/s)	6.5	6.5	

LONGSECTION MH111 - MH90
FROM 0.000 TO 11.464

GENERAL NOTES:

1. MINIMUM REQUIREMENTS ARE INDICATED ON THE DRAWING. THE CONSULTANT / DESIGNER IS RESPONSIBLE AND LIABLE FOR FURTHER DETAILS AND TO ENSURE EFFECTIVE OPERATION AND MAINTENANCE OF THE INSTALLATION.
2. THE SIGNATURE OR INITIALS ON THIS DRAWING OF COE OFFICIAL DOES NOT REMOVE ANY RESPONSIBILITY WHATSOEVER FROM THE CONSULTANT / DESIGNER.
3. THE CONSULTANT / DESIGNER REMAINS RESPONSIBLE TO ENSURE THAT ALL THE GUIDELINES, STANDARD DRAWINGS, STANDARDS AND SPECIFICATIONS OF THE WATER AND SANITATION DEPARTMENT HAVE BEEN MET AND ARE COMPLIED WITH IN THE DESIGN.
4. ALL MATERIAL AND WORKMANSHIP MUST COMPLY WITH THE REQUIREMENTS OF THE LATEST RELEVANT SANS STANDARD.
5. FINAL POSITION OF SERVICES TO BE DETERMINED ON SITE.
6. ALL DIMENSIONS TO BE CHECKED AND APPROVED ON SITE.
7. ALL DIMENSIONS ARE IN m (UNLESS OTHERWISE SPECIFIED).
8. DO NOT SCALE FROM THESE DRAWINGS.
9. CLASS OF CONCRETE UNLESS OTHERWISE SPECIFIED ON DRAWING DETAILS:

REINFORCED	CLASS 30/19
THRUST BLOCKS	CLASS 20/19
BLINDING	CLASS 15/19
FLOOR SCREED	SAND : CEMENT = 3 : 1

10. PRE-CAST CONCRETE RINGS AND COVER SLABS TO COMPLY WITH SANS 1294.
11. JOINTS BETWEEN CONCRETE RINGS AND BETWEEN COVER SLABS AND BETWEEN RINGS AND FLOORS TO BE SEALED WITH BITUMEN SEALANT(APPROVED BY THE DESIGNER).
12. SEWER INSTALLED WITHIN ROAD RESERVE BOUNDARIES MUST BE POSITIONED IN ACCORDANCE WITH THE APPLICABLE SERVICES LAYOUT DRAWINGS.
13. ALL CONSTRUCTION TO BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS, THIRD EDITION 2005 AND THE STANDARD COE DETAIL DRAWINGS.
14. THESE DRAWINGS MUST BE READ IN CONJUNCTION WITH THE ARCHITECTS DRAWINGS (IF APPLICABLE)
15. THESE DRAWINGS MUST BE READ IN CONJUNCTION WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS, SERIES 4.

SPECIFIC NOTES:

1. ALL PIPES TO BE CONCRETE SPIGOT AND SOCKET WITH ROLLING RUBBERRINGS OR SLIDING RUBBER JOINTS OF PIPE CLASS SPECIFIED IN ACCORDANCE WITH SANS 677 LAYED IN CLASS B BEDDING UNDER ROAD SURFACES OR CLASS C BEDDING ELSEWHERE.
2. DO NOT SCALE FROM THESE DRAWINGS.
3. ALL DIMENSIONS MUST BE CHECKED AND APPROVED ON SITE.
4. ALL CONSTRUCTION TO BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR MUNICCIPAL CIVIL ENGINEERING WORKS,THIRD EDITION 2005 AND STANDARD COE DETAIL DRAWINGS.
5. THESE DRAWINGS MUST BE READ IN CONJUNCTION WITH THE ARCHITECTS DRAWINGS.(IF APPLICABLE)
6. THESE DRAWINGS MUST BE READ IN CONJUNCTION WITH THE STANDARD SPECIFICATION FOR MUNICIPAL CIVIL ENGINEERING WORKS.
7. THE SIGNATURE OR INITIALS ON THIS DRAWING OF ANY MANAGER OF THE TRANSPORT DEPARTMENT, IN NO WAY REMOVES ANY RESPONSIBILITY WHATSOEVER FROM THE CONSULTANT.
8. THE CONSULTANT REMAINS RESPONSIBLE TO ENSURE THAT ALL THE GUIDELINES, STANDARDS DRAWINGS, STANDARDS AND SPECIFICATIONS OF THE TRANSPORT DEPARTMENT HAVE BEEN MET AND ARE COMPLIED WITH.
9. FINAL POSITION OF SERVICE TO BE DETERMINED ON SITE
10. UNLESS OTHERWISE SHOWN ALL CONCRETE SHALL BE CLASS 25MPa/19mm.
11. CONCRETE FOR BENCHING SHALL BE CLASS 15MPa/38mm OR CLASS 15MPa/19mm.
12. UNLESS OTHERWISE SHOWN OR SPECIFIED ALL EXPOSED CONCRETE SURFACES SHALL HAVE A WOOD FLOAT SURFACE FINISH AND SHALL BE COVERED WITH AN APPROVED CURING COMPOUND WITHIN 24 HOURS OF CASTING
13. ALL CONCRETE EDGES SHALL BE CHAMFERRED 20mm.
14. EXISTING SERVICES THAT ARE INDICATED TO BE "REMOVED" AND ARE SITUATED UNDER FLOOR SLABS SHALL BE DISCONNECTED AND ABANDONED

LEGEND:

- EXISTING STORMWATER
- PROPOSED STORMWATER
- 100 YEAR FLOODLINE
- 50 YEAR FLOODLINE

GEORGE
THE CITY FOR ALL REASONS

ROADS AND STORMWATER
DEPARTMENT

AMENDMENTS

REV	DATE	BY	DESCRIPTION
P0	2024-12-04	MGP	ISSUED FOR COMMENTS / APPROVAL
P1	2026/07/29	MGP	TOWNPLANER LAYOUT CHANGED

ROADS AND STORMWATER
APPROVED ON BEHALF OF:

OPERATIONS DIVISION
NAME:..... PROF REG No:.....
SIGNATURE:..... DATE:.....

PROJECTS DIVISION
NAME:..... PROF REG No:.....
SIGNATURE:..... DATE:.....

PLANNING DIVISION
NAME:..... PROF REG No:.....
SIGNATURE:..... DATE:.....

CONSULTING ENGINEERS:
JT EVOLVE
ACTA NON VERBA (PTY) LTD.

DESIGNED
NAME: W JACOBS

DRAWN
NAME: MGP

APPROVED
NAME: W JACOBS DATE:.....
PROF REG No: 202403261
SIGNATURE:.....
Digitally signed by Wynand Stoker
DN: cn=Wynand Stoker, o=JT Evolve (Pty) Ltd, ou=Pr Eng | 2021017 98, email=wynand@jtevolve.com, c=ZA
Date: 2026.07.31 11:52:21 +02'00'

CONTRACT No.

PROJECT No. 458

SHEET No. 4 OF 6

PAPER SIZE A1

SCALE 1:1000

PROJECT TITLE
GARDEN ROUTE CITY
(PTNS 7, 8, 12 & RE/23 KRAAIBOSCH NO. 195)

DRAWING TITLE
STORMWATER
LONGITUDINAL
SECTION

DRAWING NUMBER 458_04A_L4 P1 REVISION

ANNEXURE H11: STORMWATER LONG SECTIONS: 458_04A_L5_REV.P11