

Table 5.1: Montagu Existing Stormwater Drainage System Details

Node Reference		Conduit Description	Conduit Description	Conduit Details					Peak Flow Rates (m ³ /s)			
Upstream Node	Downstream Node			Length (m)	Slope (m/m)	Depth / Diameter (m)	Width (m)	Side Slopes (vert : horizontal)	1 in 5yr	1 in 10yr	1 in 50 yr	1 in 100yr
JUNC-100-01	JUNC-79-02	PARABOLIC	Overland Channel	98.3	0.06835	1.000	10	0	0.43	0.74	1.39	1.68
JUNC-100-02	JUNC-100-01	PARABOLIC	Overland Channel	98.39	0.12102	1.000	10	0	0.35	0.58	1.11	1.35
JUNC-100-03	JUNC-100-02	PARABOLIC	Overland Channel	26.83	0.0518	1.000	5	0	0.35	0.59	1.12	1.35
JUNC-100-04	JUNC-100-03	RECT_OPEN	Rectangular channel / Overflow conduit	62.98	0.0071	0.250	10	0	0.09	0.31	0.83	1.07
JUNC-100-04	JUNC-100-03	CIRCULAR	Pipe	60.39	0.0074	0.400	0	0	0.26	0.27	0.28	0.29
JUNC-10-01	JUNC-1-11	PARABOLIC	Overland Channel	23.84	0.46833	1.000	10	0	0.43	0.99	2.82	3.56
JUNC-10-02	JUNC-10-01	CIRCULAR	Pipe	16.6	0.00096	0.300	0	0	0.00	0.00	0.00	0.00
JUNC-101-01	JUNC-82-03	CIRCULAR	Pipe	21.42	0.11	0.300	0	0	0.21	0.31	0.30	0.30
JUNC-101-01	JUNC-82-03	RECT_OPEN	Rectangular channel / Overflow conduit	22.43	0.09426	0.250	10	0	0.00	0.00	0.21	0.31
JUNC-1-02	OUT-1-01	PARABOLIC	Natural Channel	125.42	0.01278	5.000	300	0	435.64	690.92	1635.04	2263.71
JUNC-102-01	JUNC-82-04	RECT_OPEN	Rectangular channel / Overflow conduit	121.27	0.08982	0.250	10	0	0.18	0.93	2.96	3.78
JUNC-102-01	JUNC-82-04	CIRCULAR	Pipe	119.91	0.10247	0.300	0	0	0.31	0.31	0.31	0.31
JUNC-102-02	JUNC-102-01	RECT_OPEN	Rectangular channel / Overflow conduit	61.64	0.05508	0.250	10	0	0.16	0.73	2.52	3.23
JUNC-102-02	JUNC-102-01	CIRCULAR	Pipe	59.49	0.0319	0.300	0	0	0.24	0.24	0.24	0.24
JUNC-102-03	JUNC-102-02	CIRCULAR	Pipe	24.8	0.05452	0.300	0	0	0.22	0.24	0.22	0.23
JUNC-102-03	JUNC-102-02	RECT_OPEN	Rectangular channel / Overflow conduit	25.83	0.01433	0.250	10	0	0.27	0.85	2.64	3.35
JUNC-102-04	JUNC-102-03	CIRCULAR	Pipe	8.5	0.12208	0.300	0	0	0.33	0.34	0.34	0.34
JUNC-102-04	JUNC-102-03	RECT_OPEN	Rectangular channel / Overflow conduit	9.31	0.11132	0.250	10	0	0.07	0.65	2.44	3.15
JUNC-102-05	JUNC-102-04	PARABOLIC	Natural Channel	31.62	0.18194	1.000	5	0	0.43	0.98	2.76	3.48
JUNC-102-06	JUNC-102-05	PARABOLIC	Natural Channel	77.16	0.01154	1.000	5	0	0.00	0.00	0.00	0.00
JUNC-1-03	JUNC-1-02	PARABOLIC	Natural Channel	43.16	0.01045	5.000	75	0	263.60	415.61	980.90	1356.69
JUNC-103-01	JUNC-82-05	CIRCULAR	Pipe	13.26	0.14556	0.300	0	0	0.28	0.28	0.28	0.28
JUNC-103-01	JUNC-82-05	RECT_OPEN	Rectangular channel / Overflow conduit	15.01	0.07214	0.250	10	0	0.03	0.17	0.44	0.57
JUNC-1-04	JUNC-1-03	PARABOLIC	Natural Channel	351.31	0.00965	5.000	75	0	263.17	415.01	979.84	1355.33

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JUNC-104-01	JUNC-96-03	RECT_OPEN	Rectangular channel / Overflow conduit	43.91	0.05874	0.250	10	0	0.08	0.52	1.73	2.20
JUNC-104-01	JUNC-96-03	TRIANGULAR	Channel	43.52	0.05927	0.300	0.6	0	0.35	0.35	0.35	0.35
JUNC-104-02	JUNC-104-01	RECT_OPEN	Rectangular channel / Overflow conduit	14.93	0.08544	0.250	10	0	0.06	0.36	1.33	1.68
JUNC-104-02	JUNC-104-01	CIRCULAR	Pipe	13.1	0.09748	0.250	0	0	0.20	0.20	0.20	0.20
JUNC-104-03	JUNC-104-02	RECT_OPEN	Rectangular channel / Overflow conduit	129.64	0.12055	0.250	10	0	0.00	0.00	0.98	1.34
JUNC-104-03	JUNC-104-02	TRIANGULAR	Channel	127.01	0.12309	0.300	0.6	0	0.25	0.54	0.54	0.54
JUNC-1-05	JUNC-1-04	PARABOLIC	Natural Channel	103.59	0.00965	5.000	75	0	263.08	414.86	979.57	1354.97
JUNC-105-01	JUNC-100-01	PARABOLIC	Natural Channel	13.92	0.0658	1.000	5	0	0.10	0.19	0.32	0.38
JUNC-105-02	JUNC-105-01	RECT_OPEN	Rectangular channel / Overflow conduit	21.58	0.04253	0.250	10	0	0.00	0.00	0.00	0.00
JUNC-105-02	JUNC-105-01	CIRCULAR	Pipe	20.1	0.04567	0.400	0	0	0.10	0.19	0.32	0.38
JUNC-1-06	JUNC-1-05	PARABOLIC	Natural Channel	268.37	0.00965	5.000	75	0	262.64	414.10	977.93	1352.79
JUNC-1-07	JUNC-1-06	PARABOLIC	Natural Channel	493.78	0.00965	5.000	75	0	262.49	413.84	977.19	1351.64
JUNC-1-08	JUNC-1-07	PARABOLIC	Natural Channel	37.75	0.00964	5.000	75	0	262.38	413.64	976.73	1351.01
JUNC-1-09	JUNC-1-08	PARABOLIC	Natural Channel	13.09	0.08719	5.000	75	0	262.11	413.35	976.34	1350.49
JUNC-1-10	JUNC-1-09	RECT_CLOSED	3 No. off Box Culvert	17.63	0.00925	1.200	1.2	0	42.98	46.01	48.82	49.21
JUNC-1-10	JUNC-1-09	RECT_CLOSED	5 No. off Box Culvert	20.64	0.0079	0.600	0.6	0	10.43	11.16	11.84	11.94
JUNC-1-10	JUNC-1-09	RECT_CLOSED	9 No. off Box Culvert	17.1	0.00953	1.200	1.2	0	130.92	140.14	148.70	149.91
JUNC-1-10	JUNC-1-09	PARABOLIC	Natural Channel	15.62	0.01044	3.400	75	0	77.78	216.05	766.98	1139.43
JUNC-11-01	JUNC-1-15	PARABOLIC	Natural Channel	331.75	0.03607	1.500	15	0	3.03	5.56	15.25	19.47
JUNC-11-02	JUNC-11-01	PARABOLIC	Natural Channel	134.13	0.03603	1.500	15	0	2.21	4.11	11.42	14.60
JUNC-11-03	JUNC-11-02	PARABOLIC	Natural Channel	151.07	0.03606	1.500	15	0	1.98	3.83	10.67	13.68
JUNC-11-04	JUNC-11-03	PARABOLIC	Natural Channel	122.77	0.03606	1.500	15	0	1.87	3.70	10.30	13.23
JUNC-11-05	JUNC-11-04	PARABOLIC	Natural Channel	117.53	0.03049	1.500	15	0	0.84	1.72	4.59	5.68
JUNC-11-06	JUNC-11-05	CIRCULAR	Pipe	6.44	0.03107	0.300	0	0	0.36	0.38	0.39	0.39

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JUNC-11-06	JUNC-11-05	RECT_OPEN	Rectangular channel / Overflow conduit	8.77	0.02281	0.500	10	0	0.43	1.29	4.08	5.14
JUNC-11-07	JUNC-11-06	CIRCULAR	Pipe	26.68	0.0075	0.300	0	0	0.10	0.10	0.10	0.10
JUNC-11-07	JUNC-11-06	RECT_OPEN	Rectangular channel / Overflow conduit	30.35	0.00659	0.500	10	0	0.26	0.52	1.13	1.40
JUNC-11-08	JUNC-11-07	CIRCULAR	Pipe	49.38	0.00403	0.300	0	0	0.11	0.11	0.11	0.10
JUNC-11-08	JUNC-11-07	RECT_OPEN	Rectangular channel / Overflow conduit	54.41	0.00366	0.500	10	0	0.29	0.55	1.14	1.40
JUNC-11-09	JUNC-11-08	CIRCULAR	Pipe	50.4	0.00421	0.300	0	0	0.11	0.11	0.10	0.10
JUNC-11-09	JUNC-11-08	RECT_OPEN	Rectangular channel / Overflow conduit	54.38	0.0039	0.500	10	0	0.32	0.60	1.19	1.45
JUNC-1-11	JUNC-1-10	PARABOLIC	Natural Channel	594.32	0.01045	5.000	75	0	262.04	413.20	975.95	1350.00
JUNC-11-10	JUNC-11-09	CIRCULAR	Pipe	10.23	0.00479	0.300	0	0	0.12	0.12	0.11	0.11
JUNC-11-10	JUNC-11-09	RECT_OPEN	Rectangular channel / Overflow conduit	13.69	0.00358	0.500	10	0	0.33	0.60	1.20	1.46
JUNC-1-12	JUNC-1-11	PARABOLIC	Natural Channel	377.3	0.01045	5.000	75	0	262.07	413.23	975.98	1350.03
JUNC-1-13	JUNC-1-12	PARABOLIC	Natural Channel	2131.26	0.0059	5.000	75	0	262.31	413.51	976.36	1350.46
JUNC-1-14	JUNC-1-13	PARABOLIC	Natural Channel	298.65	0.00589	5.000	50	0	259.61	408.62	964.81	1335.05
JUNC-1-15	JUNC-1-14	PARABOLIC	Natural Channel	135.44	0.00591	5.000	50	0	259.43	408.33	964.18	1334.22
JUNC-1-16	JUNC-1-15	PARABOLIC	Natural Channel	1903.31	0.00591	5.000	50	0	259.33	408.13	963.57	1333.34
JUNC-1-17	JUNC-1-16	PARABOLIC	Natural Channel	25332.98	0.05238	5.000	35	0	113.72	173.68	402.59	555.46
JUNC-12-01	JUNC-1-16	PARABOLIC	Natural Channel	4149.7	0.00337	5.000	50	0	200.95	307.28	690.72	944.72
JUNC-12-02	JUNC-12-01	PARABOLIC	Natural Channel	33872.33	0.03788	5.000	20	0	240.86	361.10	771.10	1042.13
JUNC-13-01	JUNC-2-02	PARABOLIC	Natural Channel	392.52	0.0911	1.000	5	0	0.95	2.13	6.22	8.03
JUNC-13-02	JUNC-13-01	PARABOLIC	Natural Channel	39.97	0.01326	1.000	5	0	0.96	2.19	6.46	8.29
JUNC-13-03	JUNC-13-02	CIRCULAR	Pipe	26.66	0.03656	0.300	0	0	0.24	0.25	0.25	0.25
JUNC-13-03	JUNC-13-02	RECT_OPEN	Rectangular channel / Overflow conduit	28.06	0.03473	0.500	10	0	0.71	1.93	6.19	8.04
JUNC-13-04	JUNC-13-03	CIRCULAR	Pipe	28.84	0.11027	0.300	0	0	0.32	0.32	0.32	0.32
JUNC-13-04	JUNC-13-03	RECT_OPEN	Rectangular channel / Overflow conduit	30.34	0.10476	0.500	10	0	0.64	1.86	6.11	7.96

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JUNC-14-01	JUNC-2-02	PARABOLIC	Natural Channel	29.85	0.23439	1.000	5	0	2.37	3.80	7.48	9.18
JUNC-14-02	JUNC-14-01	CIRCULAR	Pipe	103.51	0.00483	0.300	0	0	0.13	0.13	0.14	0.14
JUNC-14-02	JUNC-14-01	RECT_OPEN	Rectangular channel / Overflow conduit	107.09	0.00934	0.500	10	0	1.74	2.80	5.52	6.81
JUNC-14-03	JUNC-14-02	CIRCULAR	Pipe	17.66	0.02832	0.300	0	0	0.16	0.16	0.16	0.16
JUNC-14-03	JUNC-14-02	RECT_OPEN	Rectangular channel / Overflow conduit	20.39	0.02453	0.500	10	0	1.73	2.81	5.52	6.80
JUNC-14-04	JUNC-14-03	CIRCULAR	Pipe	13.41	0.03731	0.300	0	0	0.19	0.19	0.19	0.19
JUNC-14-04	JUNC-14-03	RECT_OPEN	Rectangular channel / Overflow conduit	17.78	0.02813	0.500	10	0	1.70	2.78	5.49	6.76
JUNC-14-05	JUNC-14-04	CIRCULAR	Pipe	83.25	0.00601	0.300	0	0	0.10	0.10	0.10	0.10
JUNC-14-05	JUNC-14-04	RECT_OPEN	Rectangular channel / Overflow conduit	91.68	0.00545	0.500	10	0	1.28	2.06	4.12	5.09
JUNC-14-06	JUNC-14-05	CIRCULAR	Pipe	100.5	0.07447	0.300	0	0	0.26	0.26	0.26	0.26
JUNC-14-06	JUNC-14-05	RECT_OPEN	Rectangular channel / Overflow conduit	107.5	0.06492	0.500	10	0	0.86	1.54	3.14	3.86
JUNC-15-01	JUNC-2-03	PARABOLIC	Natural Channel	21.26	0.35492	1.000	5	0	0.20	0.32	0.68	0.84
JUNC-15-02	JUNC-15-01	CIRCULAR	Pipe	109.02	0.00211	0.300	0	0	0.00	0.00	0.00	0.00
JUNC-15-02	JUNC-15-01	RECT_OPEN	Rectangular channel / Overflow conduit	113.19	0.00203	0.250	10	0	0.00	0.00	0.00	0.00
JUNC-15-03	JUNC-15-02	CIRCULAR	Pipe	36.67	0.02895	0.300	0	0	0.00	0.00	0.00	0.00
JUNC-15-03	JUNC-15-02	RECT_OPEN	Rectangular channel / Overflow conduit	41.92	0.02532	0.250	10	0	0.00	0.00	0.00	0.00
JUNC-16-01	JUNC-2-04	PARABOLIC	Natural Channel	22.33	0.32402	1.000	5	0	1.61	2.60	4.98	6.07
JUNC-16-02	JUNC-16-01	CIRCULAR	Pipe	117.57	0.01276	0.500	0	0	0.46	0.47	0.50	0.51
JUNC-16-02	JUNC-16-01	RECT_OPEN	Rectangular channel / Overflow conduit	123.17	0.01218	0.250	10	0	1.15	2.12	4.48	5.56
JUNC-16-03	JUNC-16-02	CIRCULAR	Pipe	27.79	0.01799	0.500	0	0	0.51	0.51	0.50	0.50
JUNC-16-03	JUNC-16-02	RECT_OPEN	Rectangular channel / Overflow conduit	32.52	0.01538	0.250	10	0	0.78	1.54	3.18	3.95
JUNC-16-04	JUNC-16-03	CIRCULAR	Pipe	30.49	0.01916	0.300	0	0	0.20	0.20	0.20	0.20
JUNC-16-04	JUNC-16-03	RECT_OPEN	Rectangular channel / Overflow conduit	34.04	0.01716	0.250	10	0	1.15	1.90	3.54	4.30
JUNC-16-05	JUNC-16-04	CIRCULAR	Pipe	77.92	0.03242	0.500	0	0	0.68	0.68	0.68	0.68

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JUNC-16-05	JUNC-16-04	RECT_OPEN	Rectangular channel / Overflow conduit	80.79	0.03127	0.250	10	0	0.63	1.37	3.01	3.78
JUNC-17-01	JUNC-2-05	PARABOLIC	Natural Channel	20.63	0.28394	1.000	10	0	2.85	4.53	10.10	12.02
JUNC-17-02	JUNC-17-01	RECT_CLOSED	Closed Channel	4.08	0.07373	0.500	0.5	0	2.10	2.16	2.29	2.32
JUNC-17-02	JUNC-17-01	RECT_OPEN	Rectangular channel / Overflow conduit	5.06	0.05939	0.250	10	0	0.75	2.37	7.82	9.71
JUNC-17-03	JUNC-17-02	RECT_CLOSED	Closed Channel	9.48	0.0211	0.500	0.5	0	1.33	1.33	1.33	1.33
JUNC-17-03	JUNC-17-02	RECT_OPEN	Rectangular channel / Overflow conduit	11.71	0.01708	0.250	10	0	2.06	3.72	9.26	11.11
JUNC-17-04	JUNC-17-03	RECT_CLOSED	Closed Channel	255.06	0.00198	0.500	0.5	0	0.35	0.35	0.35	0.35
JUNC-17-04	JUNC-17-03	RECT_OPEN	Rectangular channel / Overflow conduit	258.2	0.00195	1.000	15	0	2.61	4.29	9.84	11.76
JUNC-17-05	JUNC-17-04	RECT_CLOSED	Closed Channel	10.77	0.0052	0.500	0.5	0	0.34	0.33	0.20	0.19
JUNC-17-05	JUNC-17-04	RECT_OPEN	Rectangular channel / Overflow conduit	15.49	0.00362	0.500	15	0	1.24	1.86	3.23	3.85
JUNC-17-06	JUNC-17-05	RECT_CLOSED	Closed Channel	17.34	0.00525	0.500	0.5	0	0.38	0.38	0.36	0.34
JUNC-17-06	JUNC-17-05	RECT_OPEN	Rectangular channel / Overflow conduit	21.19	0.00429	0.500	10	0	1.16	1.76	3.04	3.65
JUNC-17-07	JUNC-17-06	RECT_CLOSED	Closed Channel	6.67	0.0054	0.500	0.5	0	0.41	0.42	0.44	0.40
JUNC-17-07	JUNC-17-06	RECT_OPEN	Rectangular channel / Overflow conduit	13.15	0.00274	0.250	10	0	1.13	1.73	2.97	3.56
JUNC-17-08	JUNC-17-07	RECT_OPEN	Rectangular channel / Overflow conduit	38.87	0.02156	0.500	10	0	0.81	1.42	2.68	3.25
JUNC-17-08	JUNC-17-07	RECT_CLOSED	Closed Channel	34.05	0.02462	0.500	0.5	0	0.73	0.73	0.73	0.73
JUNC-17-09	JUNC-20-04	RECT_CLOSED	Closed Channel	201.56	0.00245	0.500	0.5	0	0.16	0.17	0.19	0.19
JUNC-17-09	JUNC-17-08	RECT_OPEN	Rectangular channel / Overflow conduit	135.03	0.05479	0.500	10	0	0.00	0.00	0.00	0.07
JUNC-17-09	JUNC-17-08	RECT_CLOSED	Closed Channel	133.56	0.05539	0.500	0.5	0	0.74	0.94	1.26	1.26
JUNC-17-10	JUNC-17-09	RECT_CLOSED	Closed Channel	43.28	0.04709	0.500	0.5	0	0.60	0.78	1.20	1.20
JUNC-17-10	JUNC-17-09	RECT_OPEN	Rectangular channel / Overflow conduit	44.38	0.04592	0.250	10	0	0.00	0.00	0.02	0.38
JUNC-17-11	JUNC-17-10	RECT_CLOSED	Closed Channel	11.65	0.04632	0.500	0.5	0	0.23	0.34	0.47	0.53
JUNC-17-11	JUNC-17-10	RECT_OPEN	Rectangular channel / Overflow conduit	13.02	0.04143	0.250	10	0	0.00	0.00	0.00	0.00
JUNC-17-12	JUNC-17-11	RECT_OPEN	Rectangular channel / Overflow conduit	8.77	0.03937	0.250	10	0	0.00	0.00	0.00	0.00

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JUNC-17-12	JUNC-17-11	RECT_CLOSED	Closed Channel	6.88	0.05021	0.500	0.5	0	0.23	0.34	0.46	0.53
JUNC-17-13	JUNC-17-12	RECT_CLOSED	Closed Channel	113.23	0.00506	0.500	0.5	0	0.23	0.34	0.46	0.47
JUNC-17-13	JUNC-17-12	RECT_OPEN	Rectangular channel / Overflow conduit	119.34	0.0048	0.250	10	0	0.00	0.00	0.01	0.07
JUNC-18-01	JUNC-60-01	CIRCULAR	Pipe	91.79	0.00801	0.300	0	0	0.08	0.08	0.08	0.08
JUNC-18-01	JUNC-60-01	RECT_OPEN	Rectangular channel / Overflow conduit	94.47	0.00778	1.000	15	0	0.11	0.19	15.33	19.47
JUNC-18-01	JUNC-2-06	RECT_OPEN	Rectangular channel / Overflow conduit	283.54	0.0444	0.500	15	0	0.27	0.45	16.09	20.60
JUNC-18-02	JUNC-18-01	CIRCULAR	Pipe	15.68	0.00523	0.300	0	0	0.09	0.09	0.10	0.10
JUNC-18-02	JUNC-18-01	RECT_OPEN	Rectangular channel / Overflow conduit	19.6	0.00418	1.000	15	0	0.42	0.71	1.36	1.67
JUNC-19-01	JUNC-2-07	PARABOLIC	Natural Channel	8.35	0.24618	1.000	10	0	0.40	0.66	1.61	2.12
JUNC-19-02	JUNC-19-01	CIRCULAR	Pipe	133.52	0.002	0.500	0	0	0.28	0.29	0.31	0.32
JUNC-19-02	JUNC-19-01	RECT_OPEN	Rectangular channel / Overflow conduit	134.45	0.00199	0.250	10	0	0.12	0.37	1.30	1.80
JUNC-19-03	JUNC-19-02	CIRCULAR	Pipe	5.59	0.00197	0.300	0	0	0.28	0.28	0.27	0.26
JUNC-19-03	JUNC-19-02	RECT_OPEN	Rectangular channel / Overflow conduit	7.91	0.00139	0.250	10	0	0.40	0.72	1.80	2.34
JUNC-19-04	JUNC-19-03	CIRCULAR	Pipe	18.5	0.002	0.300	0	0	0.16	0.16	0.16	0.16
JUNC-19-04	JUNC-19-03	RECT_OPEN	Rectangular channel / Overflow conduit	20.95	0.00177	0.250	10	0	0.46	0.78	1.83	2.35
JUNC-20-01	JUNC-2-08	PARABOLIC	Natural Channel	33.52	0.18623	1.000	10	0	1.47	2.37	5.45	7.75
JUNC-20-02	JUNC-57-01	RECT_CLOSED	Closed Channel	95.03	0.00413	0.500	0.5	0	0.42	0.41	0.40	0.40
JUNC-20-02	JUNC-20-01	RECT_CLOSED	Closed Channel	252.38	0.00552	0.500	0.5	0	0.37	0.38	0.40	0.41
JUNC-20-02	JUNC-20-01	RECT_OPEN	Rectangular channel / Overflow conduit	255.38	0.00545	0.500	10	0	1.11	1.99	5.05	7.34
JUNC-20-02	JUNC-57-01	RECT_OPEN	Rectangular channel / Overflow conduit	95.69	0.0041	0.250	15	0	1.40	2.56	5.43	5.90
JUNC-20-03	JUNC-20-02	RECT_CLOSED	Closed Channel	16.73	0.03235	0.500	0.5	0	0.87	0.88	0.88	0.86
JUNC-20-03	JUNC-20-02	RECT_OPEN	Rectangular channel / Overflow conduit	18.44	0.02935	0.250	10	0	1.54	2.73	5.90	7.32
JUNC-20-04	JUNC-20-03	RECT_CLOSED	Closed Channel	180.14	0.03325	0.500	0.5	0	0.97	0.98	0.98	0.98
JUNC-20-04	JUNC-20-03	RECT_OPEN	Rectangular channel / Overflow conduit	182.4	0.03284	0.250	10	0	1.56	2.74	5.88	7.33

Table 5.1: Montagu Existing Stormwater Drainage System Details

Node Reference		Conduit Description	Conduit Description	Conduit Details					Peak Flow Rates (m ³ /s)			
Upstream Node	Downstream Node			Length (m)	Slope (m/m)	Depth / Diameter (m)	Width (m)	Side Slopes (vert : horizontal)	1 in 5yr	1 in 10yr	1 in 50 yr	1 in 100yr
JUNC-20-04	JUNC-57-08	RECT_CLOSED	Closed Channel	202.9	-0.01111	0.500	0.5	0	0.51	0.51	0.51	0.51
JUNC-20-05	JUNC-20-04	RECT_CLOSED	Closed Channel	52.02	0.04231	0.500	0.5	0	0.98	0.98	0.98	0.99
JUNC-20-05	JUNC-20-04	RECT_OPEN	Rectangular channel / Overflow conduit	53.77	0.04093	0.250	10	0	0.48	1.30	3.56	4.56
JUNC-20-06	JUNC-20-05	RECT_CLOSED	Closed Channel	9.17	0.0464	0.500	0.5	0	1.11	1.14	1.10	1.07
JUNC-20-06	JUNC-20-05	RECT_OPEN	Rectangular channel / Overflow conduit	10.69	0.03979	0.250	10	0	0.43	1.24	3.51	4.50
JUNC-20-07	JUNC-20-06	RECT_CLOSED	Closed Channel	7.4	0.04315	0.500	0.5	0	0.99	0.99	0.99	0.99
JUNC-20-07	JUNC-20-06	RECT_OPEN	Rectangular channel / Overflow conduit	9.55	0.03342	0.250	10	0	0.22	0.93	2.90	3.75
JUNC-20-08	JUNC-20-07	CIRCULAR	Pipe	61.89	0.0473	0.400	0	0	0.50	0.50	0.50	0.50
JUNC-20-08	JUNC-20-07	RECT_OPEN	Rectangular channel / Overflow conduit	63.49	0.0461	0.250	10	0	0.75	1.46	3.43	4.28
JUNC-20-09	JUNC-20-08	RECT_OPEN	Rectangular channel / Overflow conduit	15.15	0.03897	0.250	10	0	0.76	1.46	3.43	4.28
JUNC-20-09	JUNC-20-08	CIRCULAR	Pipe	12.42	0.04756	0.400	0	0	0.54	0.54	0.51	0.51
JUNC-2-01	JUNC-1-02	RECT_OPEN	Rectangular channel / Overflow conduit	32.62	0.01208	1.000	20	0	0.00	0.00	0.00	0.00
JUNC-2-01	JUNC-1-02	RECT_CLOSED	Closed Channel	30.8	0.01279	2.650	6	0	189.70	300.53	713.94	984.29
JUNC-20-10	JUNC-20-09	RECT_OPEN	Rectangular channel / Overflow conduit	64.53	0.04614	0.250	10	0	0.77	1.40	3.13	3.86
JUNC-20-10	JUNC-20-09	CIRCULAR	Pipe	62.76	0.04744	0.300	0	0	0.24	0.24	0.24	0.24
JUNC-20-11	JUNC-20-10	RECT_OPEN	Rectangular channel / Overflow conduit	23.75	0.04147	0.250	10	0	0.77	1.40	3.13	3.86
JUNC-20-11	JUNC-20-10	CIRCULAR	Pipe	20.87	0.0472	0.300	0	0	0.25	0.25	0.24	0.24
JUNC-20-12	JUNC-20-11	RECT_OPEN	Rectangular channel / Overflow conduit	74.4	0.06652	0.250	10	0	0.47	1.02	2.50	3.11
JUNC-20-12	JUNC-20-11	CIRCULAR	Pipe	71.87	0.06887	0.300	0	0	0.25	0.25	0.25	0.25
JUNC-20-13	JUNC-20-12	RECT_OPEN	Rectangular channel / Overflow conduit	14.87	0.09048	0.250	10	0	0.41	0.97	2.44	3.05
JUNC-20-13	JUNC-20-12	CIRCULAR	Pipe	12.65	0.10653	0.300	0	0	0.32	0.32	0.32	0.31
JUNC-20-14	JUNC-20-13	RECT_OPEN	Rectangular channel / Overflow conduit	10.05	0.05001	0.250	10	0	0.44	0.99	2.46	3.07
JUNC-20-14	JUNC-20-13	CIRCULAR	Pipe	5.54	0.09099	0.300	0	0	0.32	0.32	0.31	0.31
JUNC-20-15	JUNC-20-14	RECT_OPEN	Rectangular channel / Overflow conduit	103.81	0.10414	0.250	10	0	0.42	0.97	2.45	3.06

Table 5.1: Montagu Existing Stormwater Drainage System Details

Node Reference		Conduit Description	Conduit Description	Conduit Details					Peak Flow Rates (m ³ /s)			
Upstream Node	Downstream Node			Length (m)	Slope (m/m)	Depth / Diameter (m)	Width (m)	Side Slopes (vert : horizontal)	1 in 5yr	1 in 10yr	1 in 50 yr	1 in 100yr
JUNC-20-15	JUNC-20-14	CIRCULAR	Pipe	101.57	0.10647	0.300	0	0	0.34	0.34	0.34	0.34
JUNC-20-16	JUNC-20-15	RECT_OPEN	Rectangular channel / Overflow conduit	65.65	0.01633	0.250	10	0	0.28	0.64	1.64	2.02
JUNC-20-17	JUNC-20-16	CIRCULAR	Pipe	13.57	0.10754	0.300	0	0	0.29	0.31	0.31	0.31
JUNC-20-17	JUNC-20-16	RECT_OPEN	Rectangular channel / Overflow conduit	16.18	0.09004	0.250	10	0	0.00	0.35	1.35	1.74
JUNC-20-18	JUNC-20-17	CIRCULAR	Pipe	34.01	0.15545	0.300	0	0	0.29	0.38	0.38	0.38
JUNC-20-18	JUNC-20-17	RECT_OPEN	Rectangular channel / Overflow conduit	35.89	0.14712	0.250	10	0	0.00	0.29	1.29	1.67
JUNC-20-19	JUNC-20-18	CIRCULAR	Pipe	35.58	0.05032	0.300	0	0	0.25	0.26	0.26	0.26
JUNC-20-19	JUNC-20-18	RECT_OPEN	Rectangular channel / Overflow conduit	36.9	0.04851	0.250	10	0	0.04	0.45	1.45	1.84
JUNC-2-02	JUNC-2-01	PARABOLIC	Natural Channel	892.86	0.00245	5.000	250	0	188.96	299.35	711.35	983.04
JUNC-2-03	JUNC-2-02	PARABOLIC	Natural Channel	285.41	0.00246	5.000	250	0	188.91	299.22	710.94	982.59
JUNC-2-04	JUNC-2-03	PARABOLIC	Natural Channel	93.01	0.00245	5.000	250	0	188.92	299.22	710.92	982.59
JUNC-2-05	JUNC-2-04	PARABOLIC	Natural Channel	100.95	0.00246	5.000	250	0	188.88	299.16	710.79	982.42
JUNC-2-06	JUNC-2-05	PARABOLIC	Natural Channel	23.76	0.00244	5.000	250	0	188.63	298.76	709.98	981.43
JUNC-2-07	JUNC-2-06	PARABOLIC	Natural Channel	89.74	0.00245	5.000	250	0	188.61	298.73	709.91	981.35
JUNC-2-08	JUNC-2-07	PARABOLIC	Natural Channel	89.37	0.00246	5.000	250	0	188.60	298.70	709.86	981.28
JUNC-2-09	JUNC-2-08	PARABOLIC	Natural Channel	17.72	0.00243	5.000	250	0	188.51	298.58	709.52	980.87
JUNC-2-10	JUNC-2-09	PARABOLIC	Natural Channel	172.44	0.00245	5.000	250	0	187.49	296.92	705.73	976.09
JUNC-21-01	JUNC-2-09	PARABOLIC	Natural Channel	30.18	0.20617	1.500	10	0	11.73	17.59	52.02	77.27
JUNC-21-02	JUNC-21-01	PARABOLIC	Natural Channel	116.79	0.02439	1.500	10	0	11.61	17.40	51.33	76.29
JUNC-21-03	JUNC-21-02	RECT_CLOSED	Box Culvert	27.83	0.00999	1.200	2.2	0	11.61	17.40	21.02	21.23
JUNC-21-03	JUNC-21-02	RECT_OPEN	Rectangular channel / Overflow conduit	28.76	0.00967	0.500	10	0	0.00	0.00	2.38	10.29
STOR-21-04	JUNC-21-03	RECT_CLOSED	Box Culvert	51.14	0.01001	1.200	2.2	0	11.09	16.99	20.34	20.67
STOR-21-04	JUNC-21-02	RECT_OPEN	Rectangular channel / Overflow conduit	80.5	0.02348	1.000	20	0	0.00	0.00	29.03	56.07
JUNC-21-05	STOR-21-04	PARABOLIC	Natural Channel	99.02	0.00366	4.000	20	0	11.80	23.14	67.71	98.32

Table 5.1: Montagu Existing Stormwater Drainage System Details

Node Reference		Conduit Description	Conduit Description	Conduit Details					Peak Flow Rates (m ³ /s)			
Upstream Node	Downstream Node			Length (m)	Slope (m/m)	Depth / Diameter (m)	Width (m)	Side Slopes (vert : horizontal)	1 in 5yr	1 in 10yr	1 in 50 yr	1 in 100yr
JUNC-21-06	JUNC-21-05	PARABOLIC	Natural Channel	241.65	0.03846	2.000	15	0	12.26	24.28	71.90	97.47
JUNC-21-07	JUNC-21-06	PARABOLIC	Natural Channel	387.4	0.01475	2.000	15	0	9.95	19.01	56.20	76.48
JUNC-2-11	JUNC-2-10	PARABOLIC	Natural Channel	14.89	0.00248	5.000	250	0	187.47	296.89	705.67	976.01
JUNC-2-12	JUNC-2-11	PARABOLIC	Natural Channel	15.33	0.00228	3.000	250	0	179.17	289.02	698.98	969.92
JUNC-2-12	JUNC-2-11	CIRCULAR	6 No. off Pipes	14.18	0.00247	0.600	0	0	9.24	9.24	9.18	9.18
JUNC-2-13	JUNC-2-12	PARABOLIC	Natural Channel	60.45	0.00245	5.000	250	0	187.35	296.71	705.27	975.51
JUNC-2-14	JUNC-2-13	PARABOLIC	Natural Channel	117.36	0.00245	5.000	250	0	187.35	296.70	705.24	975.48
JUNC-2-15	JUNC-2-14	PARABOLIC	Natural Channel	199.48	0.00246	5.000	250	0	187.36	296.70	705.24	975.48
JUNC-2-16	JUNC-2-15	PARABOLIC	Natural Channel	463.29	0.00708	5.000	250	0	183.12	289.17	688.57	954.68
JUNC-2-17	JUNC-2-16	PARABOLIC	Natural Channel	58.58	0.00708	5.000	250	0	182.94	288.87	731.62	959.19
JUNC-2-18	JUNC-2-17	RECT_OPEN	Rectangular channel / Overflow conduit	12.18	0.00657	1.000	30	0	0.00	0.00	16.04	16.77
JUNC-2-18	JUNC-2-17	RECT_CLOSED	Existing Bridge	11.33	0.00706	2.600	7.4	0	182.94	288.87	764.51	1004.53
JUNC-2-19	JUNC-2-18	PARABOLIC	Natural Channel	648.87	0.00708	5.000	250	0	183.03	289.30	687.94	953.34
JUNC-2-20	JUNC-2-19	PARABOLIC	Natural Channel	122.05	0.00708	5.000	250	0	182.77	289.31	686.77	951.94
JUNC-22-01	JUNC-2-10	RECT_OPEN	Rectangular channel / Overflow conduit	15.34	0.39787	1.000	10	0	0.63	1.03	1.98	2.40
JUNC-22-02	JUNC-22-01	CIRCULAR	Pipe	66.25	0.00755	0.400	0	0	0.23	0.24	0.24	0.25
JUNC-22-02	JUNC-22-01	RECT_OPEN	Rectangular channel / Overflow conduit	67.73	0.00738	0.250	10	0	0.39	0.80	1.74	2.16
JUNC-22-03	JUNC-22-02	CIRCULAR	Pipe	65.38	0.04359	0.400	0	0	0.43	0.43	0.43	0.43
JUNC-22-03	JUNC-22-02	RECT_OPEN	Rectangular channel / Overflow conduit	67.83	0.04201	0.250	10	0	0.12	0.43	1.11	1.43
JUNC-22-04	JUNC-22-03	CIRCULAR	Pipe	29.15	0.05246	0.300	0	0	0.27	0.27	0.27	0.27
JUNC-22-04	JUNC-22-03	RECT_OPEN	Rectangular channel / Overflow conduit	32.31	0.04731	0.250	10	0	0.35	0.66	1.33	1.65
JUNC-2-21	JUNC-2-20	PARABOLIC	Natural Channel	196.99	0.00708	5.000	250	0	182.73	289.45	686.62	951.67
JUNC-2-22	JUNC-2-21	PARABOLIC	Natural Channel	58.5	0.00708	5.000	250	0	182.46	288.21	685.58	950.32
JUNC-2-23	JUNC-2-22	PARABOLIC	Natural Channel	144.13	0.00708	5.000	250	0	182.40	287.83	685.39	950.11

Table 5.1: Montagu Existing Stormwater Drainage System Details

Node Reference		Conduit Description	Conduit Description	Conduit Details					Peak Flow Rates (m ³ /s)			
Upstream Node	Downstream Node			Length (m)	Slope (m/m)	Depth / Diameter (m)	Width (m)	Side Slopes (vert : horizontal)	1 in 5yr	1 in 10yr	1 in 50 yr	1 in 100yr
JUNC-2-24	JUNC-2-23	PARABOLIC	Natural Channel	207.63	0.00708	5.000	250	0	182.30	287.72	684.99	949.63
JUNC-2-25	JUNC-2-24	PARABOLIC	Natural Channel	228.12	0.00708	5.000	250	0	181.95	287.15	683.79	948.17
JUNC-2-26	JUNC-2-25	PARABOLIC	Natural Channel	272.72	0.00708	5.000	250	0	180.64	284.93	679.26	942.42
JUNC-2-27	JUNC-2-26	PARABOLIC	Natural Channel	419.94	0.00708	5.000	250	0	180.62	284.88	679.14	942.24
JUNC-2-28	JUNC-2-27	PARABOLIC	Natural Channel	111.91	0.00709	5.000	250	0	179.66	283.33	675.61	937.85
JUNC-2-29	JUNC-2-28	PARABOLIC	Natural Channel	275.29	0.00708	5.000	250	0	179.64	283.35	675.58	937.80
JUNC-2-30	JUNC-2-29	PARABOLIC	Natural Channel	365.55	0.00708	5.000	250	0	178.51	281.88	672.16	933.46
JUNC-23-01	JUNC-2-12	PARABOLIC	Natural Channel	43.42	0.13004	1.000	5	0	2.25	3.99	9.22	11.77
JUNC-23-02	JUNC-23-01	RECT_CLOSED	Closed Channel	239.87	0.01594	0.500	0.5	0	0.59	0.60	0.65	0.66
JUNC-23-02	JUNC-23-01	RECT_OPEN	Rectangular channel / Overflow conduit	242.45	0.01577	0.500	15	0	1.53	3.10	7.81	10.11
JUNC-23-03	JUNC-23-02	RECT_CLOSED	Closed Channel	17.78	0.02183	0.500	0.5	0	0.74	0.75	0.75	0.74
JUNC-23-03	JUNC-57-03	RECT_CLOSED	Closed Channel	29.48	0.00909	0.500	0.5	0	0.64	0.65	0.63	0.63
JUNC-23-03	JUNC-23-02	RECT_OPEN	Rectangular channel / Overflow conduit	20.14	0.01927	0.500	15	0	1.54	3.23	7.98	10.28
JUNC-23-03	JUNC-57-03	RECT_OPEN	Rectangular channel / Overflow conduit	30.7	0.00873	0.250	15	0	1.04	2.17	5.37	6.93
JUNC-23-04	JUNC-23-03	RECT_CLOSED	Closed Channel	10.25	0.00693	0.500	0.5	0	0.75	0.76	0.76	0.78
JUNC-23-04	JUNC-23-03	RECT_OPEN	Rectangular channel / Overflow conduit	12.67	0.0056	0.500	15	0	1.91	3.35	7.82	10.12
JUNC-23-05	JUNC-23-04	RECT_CLOSED	Closed Channel	159.98	0.00153	0.500	0.5	0	0.38	0.38	0.38	0.38
JUNC-23-05	JUNC-23-04	RECT_OPEN	Rectangular channel / Overflow conduit	162.37	0.00151	0.500	15	0	2.17	3.43	7.35	9.38
JUNC-23-06	JUNC-23-05	RECT_CLOSED	Closed Channel	8.78	0.00513	0.500	0.5	0	0.39	0.38	0.36	0.35
JUNC-23-06	JUNC-23-05	RECT_OPEN	Rectangular channel / Overflow conduit	12.11	0.00372	0.500	15	0	2.04	2.93	5.51	6.89
JUNC-23-07	JUNC-23-06	RECT_CLOSED	Closed Channel	7.91	0.00569	0.500	0.5	0	0.37	0.36	0.36	0.36
JUNC-23-07	JUNC-23-06	RECT_OPEN	Rectangular channel / Overflow conduit	10.7	0.00421	0.500	15	0	1.97	2.89	5.50	6.87
JUNC-23-08	JUNC-23-07	RECT_OPEN	Rectangular channel / Overflow conduit	15.86	0.00429	0.500	15	0	1.90	2.83	5.41	6.79
JUNC-23-08	JUNC-23-07	RECT_CLOSED	Closed Channel	12.57	0.00541	0.500	0.5	0	0.37	0.36	0.36	0.36

Table 5.1: Montagu Existing Stormwater Drainage System Details

Node Reference		Conduit Description	Conduit Description	Conduit Details					Peak Flow Rates (m ³ /s)			
Upstream Node	Downstream Node			Length (m)	Slope (m/m)	Depth / Diameter (m)	Width (m)	Side Slopes (vert : horizontal)	1 in 5yr	1 in 10yr	1 in 50 yr	1 in 100yr
JUNC-23-09	JUNC-23-08	RECT_CLOSED	Closed Channel	4.97	0.02717	0.500	0.5	0	0.71	0.74	0.72	0.69
JUNC-23-09	JUNC-23-08	RECT_OPEN	Rectangular channel / Overflow conduit	6.17	0.02189	0.500	10	0	1.26	2.21	4.59	5.69
JUNC-2-31	JUNC-2-30	PARABOLIC	Natural Channel	347.25	0.00708	5.000	250	0	176.31	277.76	664.30	923.52
JUNC-23-10	JUNC-23-09	RECT_CLOSED	Closed Channel	12.78	0.0256	0.500	0.5	0	0.77	0.77	0.76	0.76
JUNC-23-10	JUNC-23-09	RECT_OPEN	Rectangular channel / Overflow conduit	13.5	0.02423	0.250	10	0	1.17	2.12	4.47	5.54
JUNC-23-11	JUNC-23-10	RECT_CLOSED	Closed Channel	161.78	0.02656	0.500	0.5	0	0.85	0.85	0.85	0.86
JUNC-23-11	JUNC-23-10	RECT_OPEN	Rectangular channel / Overflow conduit	163.17	0.02633	0.250	10	0	1.15	2.12	4.44	5.50
JUNC-23-12	JUNC-23-11	RECT_CLOSED	Closed Channel	44.33	0.02638	0.500	0.5	0	0.76	0.77	0.76	0.76
JUNC-23-12	JUNC-23-11	RECT_OPEN	Rectangular channel / Overflow conduit	45.43	0.02574	0.250	10	0	0.11	0.59	1.48	1.91
JUNC-23-13	JUNC-23-12	RECT_OPEN	Rectangular channel / Overflow conduit	26.77	0.02537	0.250	10	0	0.10	0.58	1.46	1.89
JUNC-23-13	JUNC-23-12	RECT_CLOSED	Closed Channel	25.7	0.02643	0.500	0.5	0	0.82	0.84	0.82	0.82
JUNC-23-14	JUNC-23-13	RECT_OPEN	Rectangular channel / Overflow conduit	14.82	0.02389	0.250	10	0	0.34	0.69	1.31	1.62
JUNC-23-14	JUNC-23-13	CIRCULAR	Pipe	13.78	0.0257	0.400	0	0	0.52	0.51	0.52	0.52
JUNC-23-15	JUNC-23-14	CIRCULAR	Pipe	66.36	0.02665	0.400	0	0	0.39	0.39	0.39	0.39
JUNC-23-15	JUNC-23-14	RECT_OPEN	Rectangular channel / Overflow conduit	67.77	0.0261	0.250	10	0	0.35	0.69	1.32	1.63
JUNC-23-16	JUNC-23-15	CIRCULAR	Pipe	9.18	0.02659	0.400	0	0	0.19	0.27	0.31	0.31
JUNC-23-16	JUNC-23-15	RECT_OPEN	Rectangular channel / Overflow conduit	10.27	0.02377	0.250	10	0	0.00	0.00	0.06	0.18
JUNC-23-17	JUNC-23-16	CIRCULAR	Pipe	68.28	0.02628	0.400	0	0	0.19	0.27	0.34	0.34
JUNC-23-17	JUNC-23-16	RECT_OPEN	Rectangular channel / Overflow conduit	70.1	0.0256	0.250	10	0	0.00	0.00	0.03	0.14
JUNC-23-18	JUNC-23-17	CIRCULAR	Pipe	13.31	0.02661	0.400	0	0	0.19	0.27	0.35	0.36
JUNC-23-18	JUNC-23-17	RECT_OPEN	Rectangular channel / Overflow conduit	14.46	0.02449	0.250	10	0	0.00	0.00	0.04	0.15
JUNC-23-19	JUNC-23-18	CIRCULAR	Pipe	9.66	0.02806	0.400	0	0	0.19	0.27	0.36	0.37
JUNC-23-19	JUNC-23-18	RECT_OPEN	Rectangular channel / Overflow conduit	11.1	0.02442	0.250	10	0	0.00	0.00	0.03	0.15
JUNC-2-32	JUNC-2-31	PARABOLIC	Natural Channel	3610.14	0.01262	5.000	250	0	176.90	278.31	664.56	923.59

Table 5.1: Montagu Existing Stormwater Drainage System Details

Node Reference		Conduit Description	Conduit Description	Conduit Details					Peak Flow Rates (m ³ /s)			
Upstream Node	Downstream Node			Length (m)	Slope (m/m)	Depth / Diameter (m)	Width (m)	Side Slopes (vert : horizontal)	1 in 5yr	1 in 10yr	1 in 50 yr	1 in 100yr
JUNC-23-20	JUNC-23-19	RECT_OPEN	Rectangular channel / Overflow conduit	67.57	0.02617	0.250	10	0	0.00	0.00	0.05	0.16
JUNC-23-20	JUNC-23-19	CIRCULAR	Pipe	66.62	0.02655	0.400	0	0	0.19	0.27	0.37	0.37
JUNC-2-33	JUNC-2-32	PARABOLIC	Natural Channel	12006.34	0.00119	5.000	200	0	61.21	104.95	287.99	412.91
JUNC-2-34	JUNC-2-33	PARABOLIC	Natural Channel	16992.02	0.05074	5.000	150	0	0.00	0.00	0.00	0.00
JUNC-24-01	JUNC-2-13	PARABOLIC	Natural Channel	22.94	0.24463	1.000	5	0	0.34	0.44	0.86	1.07
JUNC-24-02	JUNC-24-01	CIRCULAR	Pipe	51.52	0	0.500	0	0	0.34	0.41	0.43	0.44
JUNC-24-02	JUNC-24-01	RECT_OPEN	Rectangular channel / Overflow conduit	52.79	0	0.250	10	0	0.00	0.03	0.42	0.63
JUNC-25-01	JUNC-2-14	PARABOLIC	Natural Channel	24.59	0.21475	1.000	5	0	0.16	0.27	0.47	0.56
JUNC-25-02	JUNC-25-01	TRAPEZOIDAL	Trapezoidal Channel	40.79	0.00934	0.300	0.65	4	0.16	0.27	0.47	0.56
JUNC-26-01	JUNC-2-15	PARABOLIC	Natural Channel	291.45	0.04428	2.000	10	0	6.35	11.50	29.52	39.36
JUNC-26-02	JUNC-26-01	PARABOLIC	Natural Channel	164.49	0.04428	2.000	10	0	5.44	9.80	25.22	33.73
JUNC-26-03	JUNC-26-02	PARABOLIC	Natural Channel	122.11	0.04428	2.000	10	0	5.32	9.62	24.95	33.40
JUNC-26-04	JUNC-26-03	PARABOLIC	Natural Channel	54.41	0.01176	2.000	10	0	5.32	9.62	24.92	33.35
JUNC-26-05	JUNC-26-04	PARABOLIC	Natural Channel	478.81	0.03984	2.000	10	0	5.36	9.71	26.07	34.68
JUNC-26-06	JUNC-26-05	PARABOLIC	Natural Channel	82.89	0.00169	2.000	10	0	3.68	6.97	22.02	29.56
JUNC-26-07	JUNC-26-06	PARABOLIC	Natural Channel	435.21	0.00857	2.000	10	0	3.80	7.09	20.20	27.20
JUNC-27-01	JUNC-2-19	PARABOLIC	Natural Channel	58.49	0.01715	1.500	15	0	3.10	5.23	12.22	15.66
JUNC-27-02	JUNC-27-01	CIRCULAR	Pipe	202.84	0.00415	0.600	0	0	0.51	0.54	0.61	0.61
JUNC-27-02	JUNC-27-01	RECT_OPEN	Rectangular channel / Overflow conduit	203.56	0.00414	1.000	10	0	2.59	4.69	11.53	14.95
JUNC-27-03	JUNC-27-02	CIRCULAR	Pipe	97.08	0.03454	0.500	0	0	0.70	0.70	0.70	0.70
JUNC-27-03	JUNC-27-02	RECT_OPEN	Rectangular channel / Overflow conduit	99.62	0.03366	0.500	10	0	2.01	3.47	7.90	9.98
JUNC-27-04	JUNC-27-03	CIRCULAR	Pipe	26.47	0.03133	0.500	0	0	0.67	0.67	0.67	0.67
JUNC-27-04	JUNC-27-03	RECT_OPEN	Rectangular channel / Overflow conduit	28.59	0.02901	0.500	10	0	1.56	2.78	6.44	8.13
JUNC-27-05	JUNC-27-04	CIRCULAR	Pipe	16.48	0.03078	0.500	0	0	0.67	0.67	0.67	0.67

Table 5.1: Montagu Existing Stormwater Drainage System Details

Node Reference		Conduit Description	Conduit Description	Conduit Details					Peak Flow Rates (m ³ /s)			
Upstream Node	Downstream Node			Length (m)	Slope (m/m)	Depth / Diameter (m)	Width (m)	Side Slopes (vert : horizontal)	1 in 5yr	1 in 10yr	1 in 50 yr	1 in 100yr
JUNC-27-05	JUNC-27-04	RECT_OPEN	Rectangular channel / Overflow conduit	18.91	0.02682	0.500	10	0	1.56	2.78	6.44	8.12
JUNC-27-06	JUNC-27-05	CIRCULAR	Pipe	3.26	0.0313	0.500	0	0	0.65	0.65	0.65	0.65
JUNC-27-06	JUNC-27-05	RECT_OPEN	Rectangular channel / Overflow conduit	4.34	0.02351	0.250	10	0	0.28	0.50	1.35	1.53
JUNC-27-07	JUNC-27-06	TRAPEZOIDAL	Trapezoidal Channel	233.58	0.0221	0.300	0.3	2	0.67	0.67	0.68	0.68
JUNC-27-07	JUNC-70-01	RECT_OPEN	Rectangular channel / Overflow conduit	234.56	0.02175	0.250	10	0	1.23	2.20	5.10	6.42
JUNC-27-08	JUNC-27-07	RECT_OPEN	Rectangular channel / Overflow conduit	4.63	0.02528	0.250	10	0	1.29	2.27	5.22	6.56
JUNC-27-08	JUNC-27-07	CIRCULAR	Pipe	4.04	0.02897	0.500	0	0	1.25	1.26	1.15	1.03
JUNC-27-09	JUNC-27-08	RECT_OPEN	Rectangular channel / Overflow conduit	9.12	0.02973	0.250	10	0	1.26	2.24	5.19	6.53
JUNC-27-09	JUNC-27-08	CIRCULAR	Pipe	8.31	0.03263	0.500	0	0	0.98	0.97	0.93	0.89
JUNC-27-10	JUNC-27-09	RECT_OPEN	Rectangular channel / Overflow conduit	3.44	0.03112	0.250	10	0	1.22	2.20	5.14	6.48
JUNC-27-10	JUNC-27-09	CIRCULAR	Pipe	2.91	0.03679	0.500	0	0	0.97	0.97	0.93	0.89
JUNC-27-11	JUNC-27-10	CIRCULAR	Pipe	20.51	0.03586	0.500	0	0	0.55	0.68	0.68	0.68
JUNC-27-11	JUNC-27-10	RECT_OPEN	Rectangular channel / Overflow conduit	21.56	0.03411	0.250	10	0	0.00	0.21	1.26	1.71
JUNC-27-12	JUNC-27-11	CIRCULAR	Pipe	98.38	0.0191	0.500	0	0	0.55	0.55	0.55	0.55
JUNC-27-12	JUNC-27-11	RECT_OPEN	Rectangular channel / Overflow conduit	100.15	0.01877	0.250	10	0	0.00	0.36	1.39	1.84
JUNC-27-13	JUNC-27-12	CIRCULAR	Pipe	2.87	0.03975	0.500	0	0	0.55	0.77	0.80	0.78
JUNC-27-13	JUNC-27-12	RECT_OPEN	Rectangular channel / Overflow conduit	4.63	0.02463	0.250	10	0	0.00	0.21	1.25	1.70
JUNC-27-14	JUNC-27-13	CIRCULAR	Pipe	9.97	0.03483	0.500	0	0	0.56	0.71	0.71	0.71
JUNC-27-14	JUNC-27-13	RECT_OPEN	Rectangular channel / Overflow conduit	11.07	0.03136	0.250	10	0	0.00	0.24	1.28	1.72
JUNC-27-15	JUNC-27-14	RECT_OPEN	Rectangular channel / Overflow conduit	77.23	0.01466	0.250	10	0	0.04	0.48	1.51	1.95
JUNC-27-15	JUNC-27-14	CIRCULAR	Pipe	75.8	0.01494	0.500	0	0	0.57	0.57	0.57	0.57
JUNC-27-16	JUNC-27-15	RECT_OPEN	Rectangular channel / Overflow conduit	34.43	0.05186	0.250	10	0	0.00	0.15	1.17	1.62
JUNC-27-16	JUNC-27-15	CIRCULAR	Pipe	32.55	0.05486	0.500	0	0	0.65	0.88	0.88	0.88
JUNC-27-17	JUNC-27-16	RECT_OPEN	Rectangular channel / Overflow conduit	7.79	0.04189	0.250	10	0	0.00	0.17	1.18	1.62

Table 5.1: Montagu Existing Stormwater Drainage System Details

Node Reference		Conduit Description	Conduit Description	Conduit Details					Peak Flow Rates (m ³ /s)			
Upstream Node	Downstream Node			Length (m)	Slope (m/m)	Depth / Diameter (m)	Width (m)	Side Slopes (vert : horizontal)	1 in 5yr	1 in 10yr	1 in 50 yr	1 in 100yr
JUNC-27-17	JUNC-27-16	CIRCULAR	Pipe	6.16	0.053	0.500	0	0	0.65	0.91	0.93	0.90
JUNC-28-01	JUNC-2-20	PARABOLIC	Natural Channel	55.66	0.02503	1.500	10	0	1.39	1.88	3.65	4.49
JUNC-28-02	JUNC-28-01	CIRCULAR	Pipe	24.42	0.01163	0.500	0	0	0.72	0.73	0.77	0.78
JUNC-28-02	JUNC-28-01	RECT_OPEN	Rectangular channel / Overflow conduit	30.21	0.0094	0.250	10	0	0.67	1.15	2.88	3.71
JUNC-28-03	JUNC-28-02	RECT_OPEN	Rectangular channel / Overflow conduit	184.37	0.02343	0.250	10	0	0.00	0.29	1.48	2.03
JUNC-28-03	JUNC-28-02	RECT_OPEN	Rectangular channel / Overflow conduit	179.08	0.02524	0.300	0.9	0	0.97	1.02	1.02	1.02
JUNC-28-04	JUNC-28-03	RECT_CLOSED	Closed Channel	21.43	0.03474	0.500	0.5	0	1.04	1.08	1.08	1.07
JUNC-28-04	JUNC-28-03	RECT_OPEN	Rectangular channel / Overflow conduit	23.41	0.0318	0.250	10	0	0.00	0.58	1.68	2.23
JUNC-28-05	JUNC-28-04	RECT_OPEN	Rectangular channel / Overflow conduit	56.61	0.01235	0.250	10	0	0.59	1.04	1.94	2.40
JUNC-28-05	JUNC-28-04	CIRCULAR	Pipe	55.7	0.01255	0.400	0	0	0.31	0.31	0.31	0.31
JUNC-28-06	JUNC-28-05	RECT_OPEN	Rectangular channel / Overflow conduit	34.6	0.00699	0.250	10	0	0.80	1.20	2.10	2.55
JUNC-28-06	JUNC-28-05	CIRCULAR	Pipe	29.53	0.0082	0.300	0	0	0.16	0.16	0.16	0.16
JUNC-28-07	JUNC-28-06	RECT_OPEN	Rectangular channel / Overflow conduit	59.68	0.00794	0.250	10	0	0.49	0.76	1.34	1.64
JUNC-28-07	JUNC-28-06	CIRCULAR	Pipe	56.9	0.00833	0.300	0	0	0.10	0.10	0.10	0.10
JUNC-28-08	JUNC-28-07	RECT_OPEN	Rectangular channel / Overflow conduit	13.51	0.03392	0.250	10	0	0.23	0.50	1.10	1.41
JUNC-28-08	JUNC-28-07	CIRCULAR	Pipe	12.05	0.03804	0.300	0	0	0.18	0.18	0.18	0.18
JUNC-28-08	JUNC-28-07	CIRCULAR	Pipe	12.05	0.03804	0.300	0	0	0.18	0.18	0.18	0.18
JUNC-29-01	JUNC-2-21	PARABOLIC	Natural Channel	91.79	0.00048	2.000	15	0	7.20	11.36	34.42	42.14
JUNC-29-02	JUNC-29-01	RECT_OPEN	Rectangular channel / Overflow conduit	48.67	0.01438	1.000	15	0	0.00	3.09	25.27	33.75
JUNC-29-02	JUNC-29-01	CIRCULAR	Pipe	46.38	0.01509	1.200	0	0	7.22	8.22	8.32	8.22
JUNC-29-03	JUNC-29-02	CIRCULAR	Pipe	150.86	0.03706	1.200	0	0	6.85	8.09	8.12	8.11
JUNC-29-03	JUNC-75-01	RECT_OPEN	Rectangular channel / Overflow conduit	30.62	0.04305	0.500	15	0	0.00	3.03	24.30	32.92
JUNC-29-04	JUNC-29-03	CIRCULAR	Pipe	6.89	0.08037	1.200	0	0	6.85	8.83	9.33	9.47
JUNC-29-04	JUNC-29-03	RECT_OPEN	Rectangular channel / Overflow conduit	7.95	0.04432	0.500	15	0	0.00	2.27	22.89	31.37

Table 5.1: Montagu Existing Stormwater Drainage System Details

Node Reference		Conduit Description	Conduit Description	Conduit Details					Peak Flow Rates (m ³ /s)			
Upstream Node	Downstream Node			Length (m)	Slope (m/m)	Depth / Diameter (m)	Width (m)	Side Slopes (vert : horizontal)	1 in 5yr	1 in 10yr	1 in 50 yr	1 in 100yr
JUNC-29-05	JUNC-29-04	RECT_OPEN	Rectangular channel / Overflow conduit	11.46	0.04052	0.500	15	0	0.00	2.67	23.73	32.34
JUNC-29-05	JUNC-29-04	CIRCULAR	Pipe	10.16	0.04572	1.200	0	0	6.85	8.44	8.55	8.51
JUNC-29-06	JUNC-29-05	CIRCULAR	Pipe	5.15	0.02836	1.200	0	0	6.85	8.48	8.51	8.67
JUNC-29-06	JUNC-29-05	RECT_OPEN	Rectangular channel / Overflow conduit	8.29	0.01761	0.500	15	0	0.00	3.58	23.79	32.15
JUNC-29-07	JUNC-29-06	CIRCULAR	Pipe	58.2	0.04186	1.200	0	0	4.93	6.63	6.64	6.62
JUNC-29-07	JUNC-29-06	RECT_OPEN	Rectangular channel / Overflow conduit	61.15	0.02837	0.500	10	0	0.00	1.23	15.83	21.50
JUNC-29-08	JUNC-29-07	CIRCULAR	Pipe	318.73	0.04405	1.200	0	0	4.70	8.12	8.28	8.34
JUNC-29-08	JUNC-29-07	RECT_OPEN	Rectangular channel / Overflow conduit	322.95	0.04347	0.500	15	0	0.00	0.00	13.80	19.26
JUNC-29-09	JUNC-29-08	CIRCULAR	Pipe	19.71	0.03976	1.200	0	0	4.47	7.86	9.90	9.62
JUNC-29-09	JUNC-29-08	RECT_OPEN	Rectangular channel / Overflow conduit	24.76	0.03164	0.500	15	0	0.00	0.00	13.63	18.91
JUNC-29-10	JUNC-29-09	CIRCULAR	Pipe	93.53	0.00679	1.200	0	0	4.47	6.28	6.30	6.30
JUNC-29-10	JUNC-29-09	RECT_OPEN	Rectangular channel / Overflow conduit	95.9	0.01184	0.500	15	0	0.00	1.59	16.99	22.24
JUNC-29-11	JUNC-29-10	CIRCULAR	Pipe	79.97	0.01274	1.200	0	0	3.00	4.28	4.20	4.15
JUNC-29-11	JUNC-29-10	RECT_OPEN	Rectangular channel / Overflow conduit	83.27	0.01224	0.500	10	0	0.00	1.76	8.90	11.58
JUNC-29-12	JUNC-29-11	RECT_OPEN	Rectangular channel / Overflow conduit	12.81	0.01647	0.500	10	0	0.00	0.27	7.03	9.87
JUNC-29-12	JUNC-29-11	CIRCULAR	Pipe	7.52	0.02807	1.200	0	0	2.97	5.48	5.73	5.61
JUNC-29-13	JUNC-29-12	RECT_OPEN	Rectangular channel / Overflow conduit	57.12	0.02886	0.500	10	0	0.00	0.00	2.37	4.31
JUNC-29-13	JUNC-29-12	CIRCULAR	Pipe	50.29	0.03279	1.200	0	0	2.42	4.64	6.72	6.71
JUNC-29-14	JUNC-29-13	CIRCULAR	Pipe	71.74	0.04736	1.200	0	0	1.70	3.52	7.39	8.33
JUNC-29-14	JUNC-29-13	RECT_OPEN	Rectangular channel / Overflow conduit	76.45	0.04444	0.250	10	0	0.00	0.00	0.00	0.58
JUNC-29-15	JUNC-29-14	CIRCULAR	Pipe	162.22	0.04787	1.200	0	0	1.43	2.79	5.97	7.32
JUNC-29-15	JUNC-29-14	RECT_OPEN	Rectangular channel / Overflow conduit	167.45	0.04637	0.250	10	0	0.00	0.00	0.00	0.00
JUNC-30-01	JUNC-2-22	PARABOLIC	Natural Channel	74.77	0.08283	1.000	10	0	0.74	1.12	2.08	2.53
JUNC-30-02	JUNC-30-01	RECT_OPEN	Pipe	277.59	0.01	0.500	10	0	0.05	0.07	0.12	0.14

Table 5.1: Montagu Existing Stormwater Drainage System Details

Node Reference		Conduit Description	Conduit Description	Conduit Details					Peak Flow Rates (m ³ /s)			
Upstream Node	Downstream Node			Length (m)	Slope (m/m)	Depth / Diameter (m)	Width (m)	Side Slopes (vert : horizontal)	1 in 5yr	1 in 10yr	1 in 50 yr	1 in 100yr
JUNC-30-03	JUNC-30-02	RECT_OPEN	Pipe	13.84	0.01026	0.250	10	0	0.00	0.00	0.00	0.00
JUNC-30-03	JUNC-30-02	CIRCULAR	Pipe	11.8	0.01203	0.300	0	0	0.07	0.10	0.15	0.18
JUNC-3-01	JUNC-1-03	RECT_OPEN	Rectangular channel / Overflow conduit	16.62	0.31172	0.300	10	0	1.14	1.98	5.44	7.42
JUNC-3-02	JUNC-3-01	RECT_CLOSED	Closed Channel	82.31	0.00607	0.500	0.5	0	0.39	0.47	0.50	0.51
JUNC-3-02	JUNC-3-01	RECT_OPEN	Rectangular channel / Overflow conduit	85.95	0.00582	0.500	15	0	0.00	0.27	1.74	2.62
JUNC-3-03	JUNC-3-02	RECT_CLOSED	Closed Channel	138.1	0.00362	0.500	0.5	0	0.39	0.43	0.44	0.44
JUNC-3-03	JUNC-3-02	RECT_OPEN	Rectangular channel / Overflow conduit	143.66	0.00348	0.500	15	0	0.00	0.45	1.94	2.83
JUNC-3-04	JUNC-3-03	RECT_CLOSED	Closed Channel	274.34	0.00182	0.500	0.5	0	0.30	0.29	0.29	0.29
JUNC-3-04	JUNC-3-03	RECT_OPEN	Rectangular channel / Overflow conduit	278.31	0.0018	0.500	15	0	0.10	0.49	1.78	2.52
JUNC-3-05	JUNC-3-04	RECT_OPEN	Rectangular channel / Overflow conduit	235.49	0.00212	0.500	15	0	0.20	0.61	1.89	2.67
JUNC-3-05	JUNC-3-04	RECT_CLOSED	Closed Channel	229.51	0.00218	0.500	0.5	0	0.30	0.30	0.30	0.30
JUNC-3-06	JUNC-3-05	RECT_CLOSED	Closed Channel	12.95	0.03864	0.500	0.5	0	0.01	0.01	0.01	0.01
JUNC-3-06	JUNC-3-05	RECT_OPEN	Rectangular channel / Overflow conduit	13.27	0.07557	0.500	10	0	0.00	0.00	0.00	0.00
JUNC-31-01	JUNC-2-23	PARABOLIC	Natural Channel	122.09	0.00499	2.000	15	0	2.50	4.23	9.27	11.62
JUNC-31-02	JUNC-31-01	RECT_OPEN	Rectangular channel / Overflow conduit	291.33	0.02928	0.500	10	0	2.77	4.65	9.76	12.16
JUNC-31-03	JUNC-31-02	PARABOLIC	Natural Channel	203.49	0.04027	1.000	10	0	1.49	2.66	6.33	8.00
JUNC-31-04	JUNC-31-03	RECT_OPEN	Rectangular channel / Overflow conduit	33.35	0.07496	0.250	10	0	0.00	0.00	0.00	0.00
JUNC-31-04	JUNC-31-03	CIRCULAR	Pipe	31.93	0.07832	0.400	0	0	0.21	0.32	0.52	0.62
JUNC-32-01	JUNC-2-24	PARABOLIC	Natural Channel	158.7	0.00472	1.500	15	0	4.00	7.79	21.57	24.50
JUNC-32-02	JUNC-32-01	RECT_OPEN	Rectangular channel / Overflow conduit	294.18	0.02343	0.500	10	0	4.20	7.99	21.62	24.53
JUNC-32-03	JUNC-32-02	PARABOLIC	Natural Channel	544.46	0.03694	1.500	10	0	4.25	8.08	21.95	29.79
JUNC-32-04	JUNC-32-03	PARABOLIC	Natural Channel	25.74	0.03557	2.000	15	0	0.53	0.77	1.27	1.55
JUNC-32-05	JUNC-32-04	RECT_OPEN	Rectangular channel / Overflow conduit	24.03	0.07696	0.250	10	0	0.00	0.00	0.16	0.42
JUNC-32-05	JUNC-32-04	CIRCULAR	Pipe	22.83	0.08104	0.500	0	0	0.53	0.77	1.12	1.13

Table 5.1: Montagu Existing Stormwater Drainage System Details

Node Reference		Conduit Description	Conduit Description	Conduit Details					Peak Flow Rates (m ³ /s)			
Upstream Node	Downstream Node			Length (m)	Slope (m/m)	Depth / Diameter (m)	Width (m)	Side Slopes (vert : horizontal)	1 in 5yr	1 in 10yr	1 in 50 yr	1 in 100yr
JUNC-32-06	JUNC-32-05	RECT_OPEN	Rectangular channel / Overflow conduit	10.37	0.02682	0.250	10	0	0.20	0.44	1.10	1.37
JUNC-32-06	JUNC-32-05	CIRCULAR	Pipe	8.55	0.03253	0.300	0	0	0.33	0.33	0.33	0.33
JUNC-32-07	JUNC-32-06	RECT_OPEN	Rectangular channel / Overflow conduit	39.17	0.06013	0.250	10	0	0.29	0.53	1.06	1.32
JUNC-32-07	JUNC-32-06	CIRCULAR	Pipe	37.36	0.06305	0.300	0	0	0.26	0.26	0.26	0.26
JUNC-33-01	JUNC-2-24	PARABOLIC	Natural Channel	159.4	0.00213	2.000	15	0	0.72	1.12	2.06	2.93
JUNC-33-02	JUNC-33-01	RECT_OPEN	Rectangular channel / Overflow conduit	287.16	0.02508	0.500	10	0	1.10	1.72	3.12	3.77
JUNC-33-03	JUNC-33-02	PARABOLIC	Natural Channel	282.44	0.04339	1.000	10	0	1.16	1.81	3.23	3.89
JUNC-33-04	JUNC-33-03	RECT_OPEN	Rectangular channel / Overflow conduit	34.61	0.06532	0.250	10	0	0.89	1.55	2.98	3.65
JUNC-33-04	JUNC-33-03	CIRCULAR	Pipe	31.93	0.07083	0.300	0	0	0.28	0.29	0.30	0.30
JUNC-33-05	JUNC-33-04	PARABOLIC	Natural Channel	54.05	0.06057	1.000	5	0	0.71	1.07	1.83	2.19
JUNC-33-06	JUNC-33-05	CIRCULAR	Pipe	7.37	0.05994	0.300	0	0	0.37	0.38	0.39	0.39
JUNC-33-06	JUNC-33-05	RECT_OPEN	Rectangular channel / Overflow conduit	8.6	0.05135	0.250	10	0	0.33	0.69	1.44	1.80
JUNC-33-07	JUNC-33-06	RECT_OPEN	Rectangular channel / Overflow conduit	13.46	0.05215	0.250	10	0	0.47	0.84	1.60	1.96
JUNC-33-07	JUNC-33-06	CIRCULAR	Pipe	11.97	0.05866	0.300	0	0	0.30	0.30	0.30	0.30
JUNC-33-08	JUNC-33-07	RECT_OPEN	Rectangular channel / Overflow conduit	59.67	0.05968	0.250	10	0	0.11	0.24	0.53	0.68
JUNC-33-08	JUNC-33-07	CIRCULAR	Pipe	58.02	0.06139	0.300	0	0	0.24	0.24	0.24	0.24
JUNC-34-01	JUNC-2-27	PARABOLIC	Natural Channel	155.08	0.01871	2.000	50	0	7.55	14.38	38.41	52.08
JUNC-34-02	JUNC-34-01	RECT_OPEN	Rectangular channel / Overflow conduit	24.95	0.0004	0.500	30	0	2.81	9.55	32.96	46.54
JUNC-34-02	JUNC-34-01	CIRCULAR	Pipe	21.8	0.00046	0.750	0	0	4.83	5.13	5.67	5.80
JUNC-34-03	JUNC-34-02	PARABOLIC	Natural Channel	89.69	0.05526	2.000	15	0	7.39	13.71	37.25	50.34
JUNC-34-04	JUNC-34-03	PARABOLIC	Natural Channel	145.75	0.02346	2.000	15	0	6.47	11.83	32.63	44.66
JUNC-34-05	JUNC-34-04	PARABOLIC	Natural Channel	87.59	0.07853	2.000	15	0	6.27	11.51	31.86	44.05
JUNC-34-06	JUNC-34-05	PARABOLIC	Natural Channel	114.12	0.04408	2.000	15	0	6.12	11.18	31.10	43.24
JUNC-34-07	JUNC-34-06	PARABOLIC	Natural Channel	52.7	0.02771	2.000	15	0	6.11	11.18	31.07	43.20

Table 5.1: Montagu Existing Stormwater Drainage System Details

Node Reference		Conduit Description	Conduit Description	Conduit Details					Peak Flow Rates (m ³ /s)			
Upstream Node	Downstream Node			Length (m)	Slope (m/m)	Depth / Diameter (m)	Width (m)	Side Slopes (vert : horizontal)	1 in 5yr	1 in 10yr	1 in 50 yr	1 in 100yr
JUNC-34-08	JUNC-34-07	PARABOLIC	Natural Channel	93.38	0.0075	1.500	5	0	0.26	0.41	0.72	0.88
JUNC-34-09	JUNC-34-08	RECT_OPEN	Rectangular channel / Overflow conduit	13.7	0.00445	0.500	10	0	0.00	0.00	0.24	0.41
JUNC-34-09	JUNC-34-08	CIRCULAR	Pipe	12.32	0.00495	0.300	0	0	0.14	0.21	0.25	0.25
JUNC-34-09	JUNC-34-08	CIRCULAR	Pipe	12.32	0.00495	0.300	0	0	0.14	0.21	0.25	0.25
JUNC-35-01	JUNC-2-29	PARABOLIC	Natural Channel	168.52	0.00766	1.500	30	0	2.09	3.16	5.79	7.28
JUNC-35-02	JUNC-35-01	PARABOLIC	Natural Channel	182.75	0.00805	1.500	20	0	1.78	2.70	4.91	6.22
JUNC-35-03	JUNC-35-02	PARABOLIC	Natural Channel	140.85	0.01148	1.500	20	0	1.50	2.19	3.89	4.90
JUNC-35-04	JUNC-35-03	PARABOLIC	Natural Channel	44.78	0.06562	1.500	20	0	1.28	1.87	3.48	4.34
JUNC-35-05	JUNC-35-04	PARABOLIC	Natural Channel	37.66	0.06562	1.500	20	0	1.14	1.67	3.13	3.88
JUNC-35-06	JUNC-35-05	RECT_CLOSED	Culvert	7.8	0.06359	0.400	0.7	0	0.10	0.14	0.25	0.31
JUNC-35-06	JUNC-35-05	RECT_OPEN	Rectangular channel / Overflow conduit	8.62	0.05752	0.500	10	0	1.05	1.53	2.88	3.58
JUNC-35-07	JUNC-35-06	RECT_CLOSED	Culvert	9.72	0.06216	0.400	0.7	0	0.92	1.21	1.72	1.74
JUNC-35-07	JUNC-35-06	RECT_OPEN	Rectangular channel / Overflow conduit	11.29	0.05349	0.500	10	0	0.00	0.00	0.49	1.01
JUNC-35-08	JUNC-35-07	RECT_CLOSED	Culvert	12.41	0.05625	0.400	0.7	0	0.92	1.21	1.63	1.64
JUNC-35-08	JUNC-35-07	RECT_OPEN	Rectangular channel / Overflow conduit	13.81	0.05054	0.500	10	0	0.00	0.00	0.90	1.44
JUNC-35-09	JUNC-35-08	RECT_CLOSED	Culvert	53.39	0.0339	0.400	0.7	0	0.92	1.18	1.18	1.18
JUNC-35-09	JUNC-35-08	RECT_OPEN	Rectangular channel / Overflow conduit	55.38	0.03268	0.500	10	0	0.00	0.09	1.20	1.74
JUNC-35-10	JUNC-35-09	RECT_CLOSED	Culvert	39.86	0.05397	0.400	0.7	0	0.92	1.31	1.38	1.39
JUNC-35-10	JUNC-35-09	RECT_OPEN	Rectangular channel / Overflow conduit	42.59	0.0505	0.500	10	0	0.00	0.00	1.05	1.53
JUNC-35-11	JUNC-35-10	RECT_CLOSED	Culvert	113.11	0.05325	0.400	0.7	0	0.45	0.66	1.06	1.27
JUNC-35-12	JUNC-35-11	RECT_CLOSED	Culvert	9.71	0.00886	0.400	0.7	0	0.45	0.73	1.06	1.27
JUNC-35-12	JUNC-35-11	RECT_OPEN	Rectangular channel / Overflow conduit	13.9	0.00619	0.250	10	0	0.00	0.00	0.00	0.00
JUNC-35-13	JUNC-35-12	RECT_CLOSED	Culvert	53.29	0.07794	0.400	0.7	0	0.18	0.26	0.41	0.49
JUNC-35-13	JUNC-35-12	RECT_OPEN	Rectangular channel / Overflow conduit	56.75	0.07316	0.250	10	0	0.00	0.00	0.00	0.00

Table 5.1: Montagu Existing Stormwater Drainage System Details

Node Reference		Conduit Description	Conduit Description	Conduit Details					Peak Flow Rates (m ³ /s)			
Upstream Node	Downstream Node			Length (m)	Slope (m/m)	Depth / Diameter (m)	Width (m)	Side Slopes (vert : horizontal)	1 in 5yr	1 in 10yr	1 in 50 yr	1 in 100yr
JUNC-36-01	JUNC-2-29	PARABOLIC	Natural Channel	288.72	0.00626	1.500	15	0	0.54	1.03	5.86	9.29
JUNC-36-02	JUNC-36-01	PARABOLIC	Natural Channel	60.83	0.01675	1.000	15	0	0.57	1.03	6.18	9.80
JUNC-36-03	JUNC-36-02	RECT_OPEN	Rectangular channel / Overflow conduit	30.12	0.00169	0.500	10	0	0.00	0.00	4.84	8.37
JUNC-36-03	JUNC-36-02	RECT_CLOSED	Box Culvert	27.12	0.00188	0.600	0.6	0	0.68	1.03	1.34	1.43
JUNC-36-04	JUNC-36-03	PARABOLIC	Natural Channel	284.87	0.04629	1.000	15	0	0.30	1.50	6.29	8.84
JUNC-36-05	JUNC-36-04	CIRCULAR	Pipe	5.17	0.07487	0.300	0	0	0.30	0.44	0.48	0.48
JUNC-36-05	JUNC-36-04	RECT_OPEN	Rectangular channel / Overflow conduit	6.9	0.05603	0.300	10	0	0.00	1.10	5.97	8.48
JUNC-36-06	JUNC-36-05	CIRCULAR	Pipe	16.66	0.07779	0.300	0	0	0.30	0.32	0.32	0.32
JUNC-36-06	JUNC-36-05	RECT_OPEN	Rectangular channel / Overflow conduit	17.9	0.07237	0.300	10	0	0.00	1.26	6.17	8.69
JUNC-36-07	JUNC-36-06	CIRCULAR	Pipe	5.84	0.06245	0.300	0	0	0.30	0.30	0.31	0.31
JUNC-36-07	JUNC-36-06	RECT_OPEN	Rectangular channel / Overflow conduit	6.88	0.05298	0.300	10	0	0.00	1.29	6.19	8.71
JUNC-36-08	JUNC-36-07	PARABOLIC	Natural Channel	334.32	0.07087	1.000	15	0	0.95	2.01	5.81	7.61
JUNC-37-01	JUNC-2-30	PARABOLIC	Natural Channel	159.74	0.00182	2.000	20	0	11.73	19.35	49.15	78.05
JUNC-37-02	JUNC-37-01	RECT_CLOSED	5 No. off Box Culvert	30.78	0.01625	1.200	1.5	0	11.74	19.37	49.16	59.80
JUNC-37-02	JUNC-37-01	RECT_OPEN	Rectangular channel / Overflow conduit	35.53	0.01407	1.000	20	0	0.00	0.00	0.00	11.30
JUNC-37-03	JUNC-37-02	PARABOLIC	Natural Channel	144.38	0.00277	2.000	25	0	11.52	18.98	48.31	67.10
JUNC-37-04	JUNC-37-03	RECT_OPEN	Rectangular channel / Overflow conduit	21.07	0.00475	1.000	10	0	0.00	0.00	4.36	24.66
JUNC-37-04	JUNC-37-03	CIRCULAR	Pipe	18.18	0.0055	1.650	0	0	11.53	22.58	44.47	47.64
JUNC-37-05	JUNC-37-04	PARABOLIC	Natural Channel	345.7	0.0533	2.000	10	0	11.86	18.91	48.70	68.32
JUNC-38-01	JUNC-2-30	PARABOLIC	Natural Channel	260.39	0.00457	2.000	10	0	0.00	0.01	0.27	0.34
JUNC-39-01	JUNC-2-32	PARABOLIC	Natural Channel	23234.58	0.02059	5.000	50	0	169.26	254.85	566.18	769.22
JUNC-40-01	JUNC-2-33	PARABOLIC	Natural Channel	12643.82	0.00459	5.000	200	0	185.82	284.94	656.76	903.55
JUNC-4-01	JUNC-1-04	PARABOLIC	Natural Channel	257.92	0.03269	1.000	10	0	1.24	2.60	6.88	8.72
JUNC-4-02	JUNC-4-01	PARABOLIC	Natural Channel	274.85	0.06655	1.000	10	0	0.92	2.02	5.60	7.12

Table 5.1: Montagu Existing Stormwater Drainage System Details

Node Reference		Conduit Description	Conduit Description	Conduit Details					Peak Flow Rates (m ³ /s)			
Upstream Node	Downstream Node			Length (m)	Slope (m/m)	Depth / Diameter (m)	Width (m)	Side Slopes (vert : horizontal)	1 in 5yr	1 in 10yr	1 in 50 yr	1 in 100yr
JUNC-4-03	JUNC-4-02	PARABOLIC	Natural Channel	680.2	0.53427	1.000	10	0	0.95	2.15	6.01	7.58
JUNC-41-01	JUNC-3-05	RECT_OPEN	Rectangular channel / Overflow conduit	274.72	0.00145	0.500	15	0	0.22	0.44	1.31	1.86
JUNC-41-01	JUNC-3-05	RECT_CLOSED	Closed Channel	271.07	0.00147	0.500	0.5	0	0.20	0.21	0.20	0.20
JUNC-41-02	JUNC-41-01	RECT_OPEN	Rectangular channel / Overflow conduit	177.95	0.00023	0.500	15	0	0.31	0.58	1.54	2.15
JUNC-41-02	JUNC-58-01	RECT_CLOSED	Closed Channel	11.08	-0.00334	0.500	0.5	0	0.27	0.29	0.33	0.32
JUNC-41-02	JUNC-41-01	RECT_CLOSED	Closed Channel	173.72	0.00024	0.500	0.5	0	0.25	0.24	0.22	0.22
JUNC-41-03	JUNC-41-02	RECT_CLOSED	Closed Channel	14.9	0.0057	0.500	0.5	0	0.44	0.43	0.40	0.39
JUNC-41-03	JUNC-41-02	RECT_OPEN	Rectangular channel / Overflow conduit	18.58	0.00457	0.500	15	0	0.74	1.25	2.81	3.70
JUNC-41-04	JUNC-41-03	RECT_CLOSED	Closed Channel	232.87	0.00837	0.500	0.5	0	0.44	0.44	0.43	0.43
JUNC-41-04	JUNC-41-03	RECT_OPEN	Rectangular channel / Overflow conduit	235.85	0.00826	0.250	10	0	0.16	0.41	1.31	1.83
JUNC-41-05	JUNC-41-04	RECT_OPEN	Rectangular channel / Overflow conduit	10.55	0.05011	0.250	10	0	0.00	0.00	0.82	1.36
JUNC-41-05	JUNC-41-04	RECT_CLOSED	Closed Channel	10.73	0.04927	0.500	0.5	0	0.64	0.92	1.03	1.03
STOR-41-06	JUNC-41-05	RECT_CLOSED	Closed Channel	12.89	1.15445	0.500	0.5	0	0.22	0.35	0.66	0.81
JUNC-42-01	JUNC-41-05	RECT_OPEN	Rectangular channel / Overflow conduit	65.93	0.05165	0.250	10	0	0.00	0.15	0.45	0.59
JUNC-42-01	JUNC-41-05	CIRCULAR	Pipe	65.35	0.05211	0.300	0	0	0.24	0.24	0.24	0.23
JUNC-42-02	JUNC-42-01	RECT_OPEN	Rectangular channel / Overflow conduit	16.47	0.06572	0.250	10	0	0.00	0.14	0.42	0.55
JUNC-42-02	JUNC-42-01	CIRCULAR	Pipe	14.08	0.07693	0.300	0	0	0.26	0.29	0.28	0.27
JUNC-42-03	JUNC-42-02	RECT_OPEN	Rectangular channel / Overflow conduit	65.88	0.05169	0.250	10	0	0.19	0.33	0.61	0.75
JUNC-42-03	JUNC-42-02	CIRCULAR	Pipe	63.2	0.05389	0.200	0	0	0.09	0.09	0.09	0.09
JUNC-42-04	JUNC-42-03	RECT_OPEN	Rectangular channel / Overflow conduit	17.5	0.05396	0.250	10	0	0.21	0.35	0.62	0.76
JUNC-42-04	JUNC-42-03	CIRCULAR	Pipe	15.07	0.0627	0.200	0	0	0.10	0.10	0.10	0.09
JUNC-43-01	JUNC-5-07	PARABOLIC	Natural Channel	94.22	0.0587	1.000	5	0	0.96	2.14	5.78	7.25
JUNC-43-02	JUNC-43-01	PARABOLIC	Natural Channel	480.37	0.25123	1.000	5	0	0.97	2.20	5.97	7.46
JUNC-44-01	JUNC-6-01	PARABOLIC	Natural Channel	146.08	0.07289	1.000	5	0	0.18	0.29	0.59	0.73

Table 5.1: Montagu Existing Stormwater Drainage System Details

Node Reference		Conduit Description	Conduit Description	Conduit Details					Peak Flow Rates (m ³ /s)			
Upstream Node	Downstream Node			Length (m)	Slope (m/m)	Depth / Diameter (m)	Width (m)	Side Slopes (vert : horizontal)	1 in 5yr	1 in 10yr	1 in 50 yr	1 in 100yr
JUNC-44-02	JUNC-44-01	CIRCULAR	Pipe	8.78	0.01891	0.300	0	0	0.18	0.28	0.30	0.30
JUNC-44-02	JUNC-44-01	RECT_OPEN	Rectangular channel / Overflow conduit	9.88	0.0168	0.250	10	0	0.00	0.01	0.30	0.43
JUNC-44-03	JUNC-44-02	CIRCULAR	Pipe	44.05	0.0134	0.300	0	0	0.17	0.17	0.17	0.17
JUNC-44-03	JUNC-44-02	RECT_OPEN	Rectangular channel / Overflow conduit	46.77	0.01262	0.250	10	0	0.02	0.18	0.49	0.62
JUNC-45-01	JUNC-7-02	CIRCULAR	Pipe	35.71	0.08383	0.300	0	0	0.18	0.28	0.30	0.30
JUNC-45-01	JUNC-7-02	RECT_OPEN	Rectangular channel / Overflow conduit	38.28	0.07816	0.250	10	0	0.00	0.00	0.00	0.00
JUNC-45-02	JUNC-45-01	CIRCULAR	Pipe	8.54	0.08047	0.300	0	0	0.18	0.28	0.30	0.30
JUNC-45-02	JUNC-45-01	RECT_OPEN	Rectangular channel / Overflow conduit	11.4	0.0602	0.250	10	0	0.00	0.00	0.00	0.00
JUNC-45-03	JUNC-45-02	RECT_OPEN	Rectangular channel / Overflow conduit	68.64	0.08164	0.250	10	0	0.11	0.17	0.31	0.38
JUNC-45-04	JUNC-45-03	CIRCULAR	Pipe	13.42	0.00142	0.300	0	0	0.11	0.17	0.20	0.20
JUNC-45-04	JUNC-45-03	RECT_OPEN	Rectangular channel / Overflow conduit	14.86	0.00128	0.250	10	0	0.00	0.00	0.11	0.19
JUNC-46-01	JUNC-8-06	RECT_OPEN	Rectangular channel / Overflow conduit	100.06	0.00999	0.250	10	0	0.40	0.63	1.12	1.37
JUNC-47-01	JUNC-8-05	RECT_OPEN	Rectangular channel / Overflow conduit	80.55	0.06084	0.250	10	0	0.31	0.48	1.00	1.24
JUNC-47-02	JUNC-47-01	CIRCULAR	Pipe	53.87	0.00195	0.300	0	0	0.11	0.11	0.11	0.12
JUNC-47-02	JUNC-47-01	RECT_OPEN	Rectangular channel / Overflow conduit	55.61	0.00189	0.250	10	0	0.21	0.37	0.89	1.13
JUNC-47-03	JUNC-47-02	CIRCULAR	Pipe	33.1	0.00079	0.300	0	0	0.10	0.10	0.09	0.09
JUNC-47-03	JUNC-47-02	RECT_OPEN	Rectangular channel / Overflow conduit	34.69	0.00075	0.250	10	0	0.30	0.48	1.00	1.25
JUNC-47-04	JUNC-47-03	CIRCULAR	Pipe	7.27	0.00344	0.300	0	0	0.08	0.07	0.07	0.07
JUNC-47-04	JUNC-47-03	RECT_OPEN	Rectangular channel / Overflow conduit	8.25	0.00303	0.250	10	0	0.21	0.34	0.70	0.88
JUNC-48-01	JUNC-8-10	RECT_OPEN	Rectangular channel / Overflow conduit	97.3	0.03775	0.250	10	0	0.33	0.51	0.85	1.02
JUNC-48-02	JUNC-48-01	RECT_OPEN	Rectangular channel / Overflow conduit	30.32	0.06355	0.250	10	0	0.10	0.28	0.62	0.79
JUNC-48-02	JUNC-48-01	CIRCULAR	Pipe	28.61	0.06737	0.300	0	0	0.23	0.24	0.24	0.24
JUNC-48-03	JUNC-48-02	RECT_OPEN	Rectangular channel / Overflow conduit	19.4	0.05555	0.250	10	0	0.00	0.00	0.18	0.31
JUNC-48-03	JUNC-48-02	CIRCULAR	Pipe	16.16	0.06673	0.400	0	0	0.27	0.43	0.53	0.53

Table 5.1: Montagu Existing Stormwater Drainage System Details

Node Reference		Conduit Description	Conduit Description	Conduit Details					Peak Flow Rates (m ³ /s)			
Upstream Node	Downstream Node			Length (m)	Slope (m/m)	Depth / Diameter (m)	Width (m)	Side Slopes (vert : horizontal)	1 in 5yr	1 in 10yr	1 in 50 yr	1 in 100yr
JUNC-49-01	JUNC-9-04	RECT_OPEN	Rectangular channel / Overflow conduit	2.54	0.04967	0.250	10	0	0.12	0.48	1.28	1.59
JUNC-49-01	JUNC-9-04	CIRCULAR	Pipe	1.98	0.06377	0.300	0	0	0.22	0.23	0.23	0.23
JUNC-49-02	JUNC-49-01	RECT_OPEN	Rectangular channel / Overflow conduit	8.54	0.04243	0.250	10	0	0.13	0.49	1.28	1.58
JUNC-49-02	JUNC-49-01	CIRCULAR	Pipe	7.89	0.04593	0.300	0	0	0.21	0.21	0.21	0.21
JUNC-50-01	JUNC-11-01	PARABOLIC	Natural Channel	76.13	0.03547	1.000	5	0	0.23	0.36	0.61	0.72
JUNC-50-02	JUNC-50-01	CIRCULAR	Pipe	10.59	0.10185	0.300	0	0	0.23	0.37	0.38	0.39
JUNC-50-02	JUNC-50-01	RECT_OPEN	Rectangular channel / Overflow conduit	12.68	0.08493	0.500	10	0	0.00	0.00	0.23	0.35
JUNC-5-01	JUNC-1-05	PARABOLIC	Natural Channel	156.88	0.03545	1.500	20	0	4.35	9.24	26.37	34.70
JUNC-5-02	JUNC-5-01	PARABOLIC	Natural Channel	212.49	0.03545	1.500	20	0	4.12	8.73	25.05	32.97
JUNC-5-03	JUNC-5-02	CIRCULAR	Pipe	6.7	0.07092	0.500	0	0	1.75	1.83	1.88	1.88
JUNC-5-03	JUNC-5-02	RECT_OPEN	Rectangular channel / Overflow conduit	7.75	0.06128	1.000	20	0	2.37	6.90	23.22	31.16
JUNC-5-04	JUNC-5-03	RECT_OPEN	Rectangular channel / Overflow conduit	9.45	0.06032	1.000	20	0	3.14	7.75	24.09	32.01
JUNC-5-04	JUNC-5-03	CIRCULAR	Pipe	8.54	0.06678	0.500	0	0	1.40	1.40	1.40	1.39
JUNC-5-05	JUNC-5-04	RECT_OPEN	Rectangular channel / Overflow conduit	9.89	0.03703	1.000	20	0	3.35	7.95	24.26	32.17
JUNC-5-05	JUNC-5-04	CIRCULAR	Pipe	8.91	0.04111	0.500	0	0	1.21	1.21	1.21	1.21
JUNC-5-06	JUNC-5-05	PARABOLIC	Natural Channel	57.58	0.04759	1.500	10	0	4.13	8.74	25.06	32.97
JUNC-5-07	JUNC-5-06	PARABOLIC	Natural Channel	155.75	0.04759	1.500	5	0	4.13	8.74	25.07	32.99
JUNC-5-08	JUNC-5-07	PARABOLIC	Natural Channel	204.3	0.06196	1.500	5	0	2.75	5.83	17.28	23.12
JUNC-5-09	JUNC-5-08	PARABOLIC	Natural Channel	862.35	0.20443	1.500	5	0	2.81	5.91	17.79	23.79
JUNC-51-01	JUNC-11-01	PARABOLIC	Natural Channel	78.37	0.076	1.000	5	0	0.73	1.63	4.12	5.11
JUNC-51-02	JUNC-51-01	CIRCULAR	Pipe	8.37	0.07091	0.300	0	0	0.37	0.38	0.39	0.39
JUNC-51-02	JUNC-51-01	RECT_OPEN	Rectangular channel / Overflow conduit	9.89	0.05997	0.500	10	0	0.07	0.63	2.26	2.87
JUNC-52-01	JUNC-11-02	PARABOLIC	Natural Channel	19.2	0.15344	1.000	5	0	0.33	0.55	0.95	1.13
JUNC-52-02	JUNC-52-01	CIRCULAR	Pipe	16.96	0.04994	0.300	0	0	0.26	0.27	0.28	0.28

Table 5.1: Montagu Existing Stormwater Drainage System Details

Node Reference		Conduit Description	Conduit Description	Conduit Details					Peak Flow Rates (m ³ /s)			
Upstream Node	Downstream Node			Length (m)	Slope (m/m)	Depth / Diameter (m)	Width (m)	Side Slopes (vert : horizontal)	1 in 5yr	1 in 10yr	1 in 50 yr	1 in 100yr
JUNC-52-02	JUNC-52-01	RECT_OPEN	Rectangular channel / Overflow conduit	19	0.04457	0.500	10	0	0.07	0.28	0.67	0.85
JUNC-53-01	JUNC-11-03	PARABOLIC	Natural Channel	13.85	0.65281	1.000	5	0	0.17	0.26	0.45	0.55
JUNC-53-02	JUNC-53-01	CIRCULAR	Pipe	9.94	0.03624	0.300	0	0	0.17	0.26	0.29	0.29
JUNC-53-02	JUNC-53-01	RECT_OPEN	Rectangular channel / Overflow conduit	12.48	0.02886	0.500	10	0	0.00	0.00	0.17	0.26
JUNC-54-01	JUNC-11-04	PARABOLIC	Natural Channel	8.66	0.58683	1.000	5	0	1.09	2.16	6.08	8.04
JUNC-54-02	JUNC-54-01	CIRCULAR	Pipe	11.44	0.00131	0.300	0	0	0.24	0.25	0.26	0.26
JUNC-54-02	JUNC-54-01	RECT_OPEN	Rectangular channel / Overflow conduit	13.31	0.00113	0.500	10	0	0.02	0.17	0.50	0.66
JUNC-55-01	JUNC-11-06	CIRCULAR	Pipe	68.17	0.00971	0.300	0	0	0.14	0.14	0.14	0.14
JUNC-55-01	JUNC-11-06	RECT_OPEN	Rectangular channel / Overflow conduit	72.25	0.00916	0.500	10	0	0.35	1.03	3.17	3.97
JUNC-55-02	JUNC-55-01	CIRCULAR	Pipe	39.01	0.00279	0.300	0	0	0.10	0.10	0.10	0.10
JUNC-55-02	JUNC-55-01	RECT_OPEN	Rectangular channel / Overflow conduit	43.59	0.0025	0.500	10	0	0.25	0.91	2.78	3.48
JUNC-55-03	JUNC-55-02	CIRCULAR	Pipe	19.87	0.1189	0.300	0	0	0.31	0.33	0.33	0.33
JUNC-55-03	JUNC-55-02	RECT_OPEN	Rectangular channel / Overflow conduit	23.99	0.09826	0.500	10	0	0.00	0.67	2.54	3.24
JUNC-55-04	JUNC-55-03	PARABOLIC	Natural Channel	119.62	0.06602	1.000	5	0	0.46	1.06	2.87	3.57
JUNC-56-01	JUNC-17-10	RECT_OPEN	Rectangular channel / Overflow conduit	11.99	0.00834	0.250	10	0	0.00	0.00	0.39	0.67
JUNC-56-01	JUNC-17-10	CIRCULAR	Pipe	10.83	0.00923	0.450	0	0	0.39	0.47	0.70	0.69
JUNC-56-02	JUNC-56-01	RECT_OPEN	Rectangular channel / Overflow conduit	38.96	0.0107	0.250	10	0	0.00	0.04	0.50	0.72
JUNC-56-02	JUNC-56-01	CIRCULAR	Pipe	37.59	0.01109	0.450	0	0	0.37	0.44	0.45	0.45
JUNC-56-03	JUNC-56-02	RECT_OPEN	Rectangular channel / Overflow conduit	17.57	0.05626	0.250	10	0	0.00	0.00	0.14	0.33
JUNC-56-03	JUNC-56-02	CIRCULAR	Pipe	15.73	0.06287	0.450	0	0	0.37	0.50	0.71	0.71
JUNC-56-04	JUNC-56-03	RECT_OPEN	Rectangular channel / Overflow conduit	48.33	0.0248	0.250	10	0	0.00	0.00	0.38	0.57
JUNC-56-04	JUNC-56-03	CIRCULAR	Pipe	46	0.02605	0.450	0	0	0.37	0.51	0.54	0.54
JUNC-56-05	JUNC-56-04	CIRCULAR	Pipe	21.66	0.04751	0.450	0	0	0.37	0.53	0.62	0.62
JUNC-56-05	JUNC-56-04	RECT_OPEN	Rectangular channel / Overflow conduit	24	0.04287	0.250	10	0	0.00	0.00	0.26	0.44

Table 5.1: Montagu Existing Stormwater Drainage System Details

Node Reference		Conduit Description	Conduit Description	Conduit Details					Peak Flow Rates (m ³ /s)			
Upstream Node	Downstream Node			Length (m)	Slope (m/m)	Depth / Diameter (m)	Width (m)	Side Slopes (vert : horizontal)	1 in 5yr	1 in 10yr	1 in 50 yr	1 in 100yr
JUNC-56-06	JUNC-56-05	RECT_OPEN	Rectangular channel / Overflow conduit	10.54	0.03646	0.250	10	0	0.00	0.16	0.66	0.84
JUNC-56-06	JUNC-56-05	CIRCULAR	Pipe	7.55	0.05093	0.300	0	0	0.37	0.37	0.37	0.37
JUNC-57-01	JUNC-17-04	RECT_OPEN	Rectangular channel / Overflow conduit	106.19	0.00938	0.250	15	0	1.28	2.45	5.34	5.84
JUNC-57-01	JUNC-17-04	RECT_CLOSED	Closed Channel	105.67	0.00943	0.500	0.5	0	0.45	0.45	0.45	0.45
JUNC-57-02	JUNC-20-02	RECT_CLOSED	Closed Channel	106.77	0.01608	0.500	0.5	0	0.60	0.60	0.60	0.60
JUNC-57-02	JUNC-20-02	RECT_OPEN	Rectangular channel / Overflow conduit	107.07	0.01604	0.250	15	0	0.89	2.02	5.25	6.82
JUNC-57-03	JUNC-57-02	RECT_CLOSED	Closed Channel	67.9	0.01228	0.500	0.5	0	0.63	0.64	0.61	0.61
JUNC-57-03	JUNC-57-02	RECT_OPEN	Rectangular channel / Overflow conduit	69.1	0.01207	0.250	15	0	0.96	2.09	5.31	6.87
JUNC-57-04	JUNC-23-03	RECT_OPEN	Rectangular channel / Overflow conduit	6.83	0.01391	0.250	10	0	0.85	2.31	5.89	7.45
JUNC-57-04	JUNC-23-03	RECT_CLOSED	Closed Channel	6.47	0.01468	0.500	0.5	0	0.77	0.73	0.63	0.61
JUNC-57-05	JUNC-57-04	RECT_CLOSED	Closed Channel	7.58	0.03009	0.500	0.5	0	0.81	0.82	0.82	0.82
JUNC-57-05	JUNC-57-04	RECT_OPEN	Rectangular channel / Overflow conduit	8.12	0.02809	0.250	10	0	0.59	2.07	5.65	7.21
JUNC-57-06	JUNC-57-05	RECT_CLOSED	Closed Channel	0.71	0.04512	0.500	0.5	0	0.92	0.94	0.94	0.94
JUNC-57-06	JUNC-57-05	RECT_OPEN	Rectangular channel / Overflow conduit	0.92	0.0348	0.250	10	0	0.48	1.95	5.54	7.10
JUNC-57-07	JUNC-57-06	RECT_OPEN	Rectangular channel / Overflow conduit	9.03	0.02193	0.250	10	0	0.59	2.07	5.65	7.20
JUNC-57-07	JUNC-63-02	RECT_OPEN	Rectangular channel / Overflow conduit	8.03	-0.00062	0.250	5	0	0.05	0.27	0.95	1.26
JUNC-57-07	JUNC-57-06	RECT_CLOSED	Closed Channel	7.43	0.02666	0.500	0.5	0	0.81	0.81	0.82	0.83
JUNC-57-08	JUNC-57-07	RECT_OPEN	Rectangular channel / Overflow conduit	172.17	0.03144	0.250	10	0	0.63	2.34	6.57	8.44
JUNC-57-08	JUNC-23-11	RECT_CLOSED	Closed Channel	200.33	0.00365	0.500	0.5	0	0.29	0.29	0.30	0.30
JUNC-57-08	JUNC-57-07	RECT_CLOSED	Closed Channel	170.59	0.03173	0.500	0.5	0	0.98	0.97	0.94	0.95
JUNC-58-01	JUNC-41-02	RECT_OPEN	Rectangular channel / Overflow conduit	12.31	0.00301	0.500	15	0	0.46	0.91	2.48	3.44
JUNC-58-01	JUNC-17-04	RECT_OPEN	Rectangular channel / Overflow conduit	189.55	0.0025	0.500	15	0	0.44	0.91	2.53	3.50
JUNC-58-01	JUNC-17-04	RECT_CLOSED	Closed Channel	187.54	0.00252	0.500	0.5	0	0.21	0.22	0.22	0.22
JUNC-59-01	JUNC-57-08	RECT_OPEN	Rectangular channel / Overflow conduit	61.71	0.03118	0.250	10	0	1.01	2.56	5.72	7.19

Table 5.1: Montagu Existing Stormwater Drainage System Details

Node Reference		Conduit Description	Conduit Description	Conduit Details					Peak Flow Rates (m ³ /s)			
Upstream Node	Downstream Node			Length (m)	Slope (m/m)	Depth / Diameter (m)	Width (m)	Side Slopes (vert : horizontal)	1 in 5yr	1 in 10yr	1 in 50 yr	1 in 100yr
JUNC-59-01	JUNC-57-08	RECT_CLOSED	Closed Channel	60.38	0.03186	0.500	0.5	0	0.97	0.96	0.97	0.98
JUNC-59-02	JUNC-59-01	RECT_OPEN	Rectangular channel / Overflow conduit	10.44	0.03124	0.250	10	0	1.32	2.78	5.57	6.89
JUNC-59-02	JUNC-59-01	CIRCULAR	Pipe	9.58	0.03405	0.400	0	0	0.66	0.66	0.66	0.66
JUNC-59-03	JUNC-59-02	RECT_OPEN	Rectangular channel / Overflow conduit	5.03	0.02565	0.250	10	0	1.35	2.77	5.59	6.91
JUNC-59-03	JUNC-59-02	CIRCULAR	Pipe	4.25	0.03037	0.400	0	0	0.58	0.58	0.58	0.58
JUNC-59-04	JUNC-59-03	CIRCULAR	Pipe	2.66	0.02482	0.400	0	0	0.56	0.56	0.55	0.55
JUNC-59-04	JUNC-59-03	RECT_OPEN	Rectangular channel / Overflow conduit	3.39	0.01947	0.250	10	0	1.37	2.77	5.60	6.91
JUNC-59-05	JUNC-59-04	CIRCULAR	Pipe	28.43	0.03185	0.400	0	0	0.45	0.45	0.45	0.45
JUNC-59-05	JUNC-59-04	RECT_OPEN	Rectangular channel / Overflow conduit	29.53	0.03066	0.250	10	0	1.35	2.73	5.60	6.92
JUNC-59-06	JUNC-59-05	CIRCULAR	Pipe	35.73	0.03167	0.300	0	0	0.22	0.22	0.22	0.22
JUNC-59-06	JUNC-59-05	RECT_OPEN	Rectangular channel / Overflow conduit	37.56	0.03013	0.250	10	0	1.54	2.93	5.79	7.11
JUNC-59-07	JUNC-59-06	CIRCULAR	Pipe	7.61	0.02984	0.300	0	0	0.21	0.21	0.21	0.21
JUNC-59-07	JUNC-59-06	RECT_OPEN	Rectangular channel / Overflow conduit	9.16	0.02479	0.250	10	0	1.55	2.95	5.79	7.11
JUNC-59-08	JUNC-59-07	CIRCULAR	Pipe	8.15	0.0318	0.300	0	0	0.21	0.21	0.21	0.21
JUNC-59-08	JUNC-59-07	RECT_OPEN	Rectangular channel / Overflow conduit	10.55	0.02456	0.250	10	0	1.55	2.92	5.79	7.11
JUNC-59-09	JUNC-59-08	CIRCULAR	Pipe	58.04	0.02765	0.300	0	0	0.17	0.17	0.17	0.17
JUNC-59-09	JUNC-59-08	RECT_OPEN	Rectangular channel / Overflow conduit	58.64	0.02736	0.250	10	0	1.37	2.60	5.22	6.41
JUNC-59-10	JUNC-59-09	CIRCULAR	Pipe	20.61	0.02776	0.300	0	0	0.17	0.17	0.17	0.17
JUNC-59-10	JUNC-59-09	RECT_OPEN	Rectangular channel / Overflow conduit	21.08	0.02714	0.250	10	0	1.38	2.60	5.22	6.41
JUNC-59-11	JUNC-59-10	RECT_OPEN	Rectangular channel / Overflow conduit	3.83	0.01802	0.250	10	0	1.38	2.57	5.21	6.39
JUNC-59-11	JUNC-59-10	CIRCULAR	Pipe	2.83	0.02439	0.300	0	0	0.18	0.18	0.18	0.18
JUNC-59-12	JUNC-59-11	RECT_OPEN	Rectangular channel / Overflow conduit	73.26	0.02745	0.250	10	0	1.39	2.60	5.22	6.40
JUNC-59-12	JUNC-59-11	CIRCULAR	Pipe	72.32	0.0278	0.300	0	0	0.17	0.17	0.17	0.17
JUNC-59-13	JUNC-59-12	RECT_OPEN	Rectangular channel / Overflow conduit	10.96	0.02382	0.250	10	0	0.95	1.85	3.88	4.77

Table 5.1: Montagu Existing Stormwater Drainage System Details

Node Reference		Conduit Description	Conduit Description	Conduit Details					Peak Flow Rates (m ³ /s)			
Upstream Node	Downstream Node			Length (m)	Slope (m/m)	Depth / Diameter (m)	Width (m)	Side Slopes (vert : horizontal)	1 in 5yr	1 in 10yr	1 in 50 yr	1 in 100yr
JUNC-59-13	JUNC-59-12	CIRCULAR	Pipe	9.35	0.02793	0.300	0	0	0.16	0.16	0.16	0.16
JUNC-59-14	JUNC-59-13	RECT_OPEN	Rectangular channel / Overflow conduit	10.62	0.02449	0.250	10	0	0.94	1.84	3.87	4.76
JUNC-59-14	JUNC-59-13	CIRCULAR	Pipe	8.96	0.02903	0.300	0	0	0.17	0.17	0.17	0.17
JUNC-59-15	JUNC-59-14	CIRCULAR	Pipe	68.42	0.07607	0.300	0	0	0.27	0.27	0.27	0.27
JUNC-59-15	JUNC-59-14	RECT_OPEN	Rectangular channel / Overflow conduit	69.96	0.07439	0.250	10	0	0.85	1.73	3.77	4.65
JUNC-59-16	JUNC-59-15	RECT_OPEN	Rectangular channel / Overflow conduit	12.14	0.07268	0.250	10	0	0.83	1.71	3.74	4.63
JUNC-59-16	JUNC-59-15	CIRCULAR	Pipe	9.57	0.09235	0.300	0	0	0.30	0.30	0.30	0.30
JUNC-59-17	JUNC-59-16	RECT_OPEN	Rectangular channel / Overflow conduit	77.19	0.08194	0.250	10	0	1.27	2.01	4.04	4.92
JUNC-59-18	JUNC-59-17	RECT_OPEN	Rectangular channel / Overflow conduit	119.84	0.077	0.250	10	0	0.52	0.75	1.25	1.51
JUNC-59-19	JUNC-59-18	RECT_OPEN	Rectangular channel / Overflow conduit	81.46	0.09148	0.250	7.5	0	0.26	0.49	0.98	1.24
JUNC-59-19	JUNC-59-18	TRIANGULAR	Channel	80.88	0.09214	0.300	0.6	0	0.27	0.27	0.28	0.29
JUNC-60-01	STOR-21-04	PARABOLIC	Natural Channel	112.93	0.01441	3.000	10	0	0.16	1.12	15.59	19.42
JUNC-6-01	JUNC-1-06	PARABOLIC	Natural Channel	281.33	0.0113	1.000	10	0	1.10	2.15	5.19	6.48
JUNC-6-02	JUNC-6-01	PARABOLIC	Natural Channel	98.49	0.13022	1.000	10	0	0.61	1.35	3.22	3.94
JUNC-6-03	JUNC-6-02	CIRCULAR	Pipe	14.17	0.11602	0.300	0	0	0.35	0.36	0.39	0.39
JUNC-6-03	JUNC-6-02	RECT_OPEN	Rectangular channel / Overflow conduit	15.06	0.10908	0.500	10	0	0.27	0.99	2.84	3.57
JUNC-6-04	JUNC-6-03	CIRCULAR	Pipe	3.63	0.12042	0.300	0	0	0.37	0.39	0.36	0.35
JUNC-6-04	JUNC-6-03	RECT_OPEN	Rectangular channel / Overflow conduit	4.06	0.10751	0.500	10	0	0.28	1.02	2.89	3.61
JUNC-6-05	JUNC-6-04	RECT_OPEN	Rectangular channel / Overflow conduit	155.75	0.01749	0.500	10	0	0.00	0.00	0.00	0.00
JUNC-61-01	JUNC-21-03	RECT_OPEN	Rectangular channel / Overflow conduit	6.5	0.01139	0.500	10	0	0.00	0.44	2.08	2.93
JUNC-61-01	JUNC-21-03	CIRCULAR	Pipe	5.46	0.0718	0.400	0	0	0.84	1.03	0.93	0.83
JUNC-62-01	JUNC-21-06	PARABOLIC	Natural Channel	41.43	0.014	1.500	5	0	2.50	5.22	15.74	20.97
JUNC-62-02	JUNC-62-01	CIRCULAR	Pipe	21.36	0.05406	0.300	0	0	0.29	0.29	0.29	0.29
JUNC-62-02	JUNC-62-01	RECT_OPEN	Rectangular channel / Overflow conduit	26.05	0.0443	0.500	10	0	2.22	4.95	15.46	20.66

Table 5.1: Montagu Existing Stormwater Drainage System Details

Node Reference		Conduit Description	Conduit Description	Conduit Details					Peak Flow Rates (m ³ /s)			
Upstream Node	Downstream Node			Length (m)	Slope (m/m)	Depth / Diameter (m)	Width (m)	Side Slopes (vert : horizontal)	1 in 5yr	1 in 10yr	1 in 50 yr	1 in 100yr
JUNC-62-03	JUNC-62-02	CIRCULAR	Pipe	74.76	0.02785	0.300	0	0	0.19	0.19	0.19	0.19
JUNC-62-03	JUNC-62-02	RECT_OPEN	Rectangular channel / Overflow conduit	78.49	0.02652	0.500	10	0	2.34	5.06	15.50	20.67
JUNC-62-04	JUNC-62-03	CIRCULAR	Pipe	17.22	0.05461	0.300	0	0	0.23	0.23	0.23	0.23
JUNC-62-04	JUNC-62-03	RECT_OPEN	Rectangular channel / Overflow conduit	19.42	0.04841	0.500	10	0	2.12	4.75	14.96	20.01
JUNC-62-05	JUNC-62-04	CIRCULAR	Pipe	44.98	0.05243	0.300	0	0	0.22	0.22	0.22	0.22
JUNC-62-05	JUNC-62-04	RECT_OPEN	Rectangular channel / Overflow conduit	49.11	0.04801	0.500	10	0	2.13	4.75	14.96	20.00
JUNC-62-06	JUNC-62-05	CIRCULAR	Pipe	29.14	0.05285	0.300	0	0	0.23	0.23	0.23	0.23
JUNC-62-06	JUNC-62-05	RECT_OPEN	Rectangular channel / Overflow conduit	34.33	0.04485	0.500	10	0	2.13	4.75	14.92	19.93
JUNC-62-07	JUNC-62-06	PARABOLIC	Pipe	119.62	0.03204	1.500	10	0	2.35	4.98	15.12	20.11
JUNC-63-01	JUNC-23-04	RECT_OPEN	Rectangular channel / Overflow conduit	12.88	0.03286	0.250	5	0	0.00	0.09	0.78	1.11
JUNC-63-01	JUNC-23-04	RECT_CLOSED	Culvert	12.41	0.03411	0.300	0.3	0	0.05	0.19	0.19	0.19
JUNC-63-02	JUNC-63-01	RECT_OPEN	Rectangular channel / Overflow conduit	5.06	0.01265	0.250	5	0	0.00	0.22	0.90	1.21
JUNC-63-02	JUNC-63-01	CIRCULAR	Pipe	4.31	0.01485	0.200	0	0	0.05	0.09	0.09	0.08
JUNC-64-01	JUNC-23-08	RECT_OPEN	Rectangular channel / Overflow conduit	200.5	0.00319	0.250	15	0	0.22	0.42	0.91	1.23
JUNC-64-01	JUNC-23-08	RECT_CLOSED	Closed Channel	199.53	0.00321	0.500	0.5	0	0.26	0.26	0.26	0.26
JUNC-64-02	JUNC-64-01	RECT_OPEN	Rectangular channel / Overflow conduit	18.05	0.02111	0.250	10	0	0.00	0.00	0.53	0.85
JUNC-64-02	JUNC-64-01	RECT_CLOSED	Closed Channel	16.43	0.0232	0.500	0.5	0	0.53	0.68	0.71	0.71
JUNC-64-03	JUNC-64-02	RECT_OPEN	Rectangular channel / Overflow conduit	234.13	0.02106	0.500	10	0	0.00	0.00	0.52	0.85
JUNC-64-03	JUNC-64-02	RECT_CLOSED	Closed Channel	232.83	0.02118	0.500	0.5	0	0.54	0.77	0.75	0.76
JUNC-64-04	JUNC-64-03	RECT_OPEN	Rectangular channel / Overflow conduit	15.47	0.01636	0.250	10	0	0.02	0.36	1.19	1.52
JUNC-64-04	JUNC-64-03	CIRCULAR	Pipe	14.07	0.01798	0.400	0	0	0.52	0.53	0.53	0.53
JUNC-64-05	JUNC-64-04	RECT_OPEN	Rectangular channel / Overflow conduit	12.83	0.01871	0.250	10	0	0.23	0.52	1.20	1.53
JUNC-64-05	JUNC-64-04	CIRCULAR	Pipe	11.29	0.02126	0.400	0	0	0.45	0.45	0.45	0.45
JUNC-64-06	JUNC-64-05	RECT_OPEN	Rectangular channel / Overflow conduit	56.62	0.0194	0.250	10	0	0.14	0.34	0.85	1.10

Table 5.1: Montagu Existing Stormwater Drainage System Details

Node Reference		Conduit Description	Conduit Description	Conduit Details					Peak Flow Rates (m ³ /s)			
Upstream Node	Downstream Node			Length (m)	Slope (m/m)	Depth / Diameter (m)	Width (m)	Side Slopes (vert : horizontal)	1 in 5yr	1 in 10yr	1 in 50 yr	1 in 100yr
JUNC-64-06	JUNC-64-05	CIRCULAR	Pipe	55.25	0.01988	0.400	0	0	0.33	0.33	0.32	0.32
JUNC-64-07	JUNC-64-06	CIRCULAR	Pipe	9.22	0.01931	0.300	0	0	0.29	0.29	0.29	0.29
JUNC-64-07	JUNC-64-06	RECT_OPEN	Rectangular channel / Overflow conduit	10.11	0.01761	0.250	10	0	0.30	0.50	1.00	1.26
JUNC-64-08	JUNC-64-07	RECT_OPEN	Rectangular channel / Overflow conduit	6.66	0.01457	0.250	10	0	0.30	0.50	1.00	1.26
JUNC-64-08	JUNC-64-07	CIRCULAR	Pipe	4.91	0.01976	0.300	0	0	0.26	0.26	0.26	0.26
JUNC-64-09	JUNC-64-08	RECT_OPEN	Rectangular channel / Overflow conduit	61.59	0.01944	0.250	10	0	0.31	0.50	1.01	1.26
JUNC-64-09	JUNC-64-08	CIRCULAR	Pipe	60.56	0.01977	0.300	0	0	0.17	0.17	0.17	0.17
JUNC-64-10	JUNC-64-09	RECT_OPEN	Rectangular channel / Overflow conduit	20.51	0.01058	0.250	10	0	0.02	0.07	0.21	0.28
JUNC-64-10	JUNC-64-09	CIRCULAR	Pipe	17.5	0.0124	0.300	0	0	0.10	0.10	0.10	0.10
JUNC-64-11	JUNC-64-10	RECT_OPEN	Rectangular channel / Overflow conduit	77.6	0.01182	0.250	10	0	0.02	0.07	0.21	0.27
JUNC-64-11	JUNC-64-10	CIRCULAR	Pipe	76.01	0.01207	0.300	0	0	0.11	0.11	0.11	0.11
JUNC-65-01	JUNC-23-11	RECT_CLOSED	Closed Channel	108.07	0.00404	0.500	0.5	0	0.27	0.30	0.30	0.31
JUNC-65-01	JUNC-23-11	RECT_OPEN	Rectangular channel / Overflow conduit	111.07	0.00393	0.250	5	0	0.00	0.15	0.73	1.00
JUNC-66-01	JUNC-23-15	RECT_CLOSED	Closed Channel	15.58	0.04575	0.200	0.2	0	0.11	0.11	0.11	0.11
JUNC-66-01	JUNC-23-15	RECT_OPEN	Rectangular channel / Overflow conduit	16.57	0.01883	0.250	10	0	0.48	0.74	1.32	1.61
JUNC-67-01	JUNC-26-01	PARABOLIC	Natural Channel	58.38	0.03975	1.000	5	0	0.11	0.17	0.29	0.35
JUNC-67-02	JUNC-67-01	CIRCULAR	Pipe	20.09	0.00762	0.300	0	0	0.11	0.17	0.19	0.20
JUNC-67-02	JUNC-67-01	RECT_OPEN	Rectangular channel / Overflow conduit	21.59	0.00709	0.250	10	0	0.00	0.00	0.10	0.16
JUNC-68-01	JUNC-26-01	PARABOLIC	Natural Channel	66.75	0.07178	1.000	5	0	1.03	1.90	5.10	6.72
JUNC-68-02	JUNC-68-01	CIRCULAR	Pipe	6.51	0.07703	0.300	0	0	0.14	0.21	0.40	0.39
JUNC-68-02	JUNC-68-01	RECT_OPEN	Rectangular channel / Overflow conduit	9.11	0.05497	0.250	10	0	0.00	0.00	0.00	0.12
JUNC-68-03	JUNC-68-02	CIRCULAR	Pipe	13.89	0.01174	0.300	0	0	0.14	0.21	0.25	0.25
JUNC-68-03	JUNC-68-02	RECT_OPEN	Rectangular channel / Overflow conduit	16.01	0.01018	0.250	10	0	0.00	0.00	0.28	0.39
JUNC-69-01	JUNC-26-02	PARABOLIC	Natural Channel	49.29	0.08556	1.000	5	0	0.14	0.21	0.42	0.52

Table 5.1: Montagu Existing Stormwater Drainage System Details

Node Reference		Conduit Description	Conduit Description	Conduit Details					Peak Flow Rates (m ³ /s)			
Upstream Node	Downstream Node			Length (m)	Slope (m/m)	Depth / Diameter (m)	Width (m)	Side Slopes (vert : horizontal)	1 in 5yr	1 in 10yr	1 in 50 yr	1 in 100yr
JUNC-69-02	JUNC-69-01	CIRCULAR	Pipe	6.51	0.02797	0.300	0	0	0.14	0.21	0.34	0.35
JUNC-69-02	JUNC-69-01	RECT_OPEN	Rectangular channel / Overflow conduit	9.17	0.01985	0.250	10	0	0.00	0.00	0.08	0.17
JUNC-69-03	JUNC-69-02	CIRCULAR	Pipe	13.89	0.0085	0.300	0	0	0.14	0.21	0.22	0.22
JUNC-69-03	JUNC-69-02	RECT_OPEN	Rectangular channel / Overflow conduit	16.03	0.00736	0.250	10	0	0.00	0.00	0.32	0.42
JUNC-70-01	JUNC-27-05	CIRCULAR	Pipe	6.04	0.02667	0.300	0	0	0.24	0.23	0.19	0.17
JUNC-70-01	JUNC-27-05	RECT_OPEN	Rectangular channel / Overflow conduit	8.28	0.01945	0.500	10	0	1.34	2.47	5.87	7.43
JUNC-70-02	JUNC-70-01	RECT_OPEN	Rectangular channel / Overflow conduit	14.01	0.02906	0.500	10	0	0.21	0.45	1.01	1.26
JUNC-70-02	JUNC-70-01	CIRCULAR	Pipe	12.21	0.03335	0.300	0	0	0.22	0.21	0.19	0.18
JUNC-7-01	JUNC-1-07	PARABOLIC	Natural Channel	8.18	0.02336	1.000	10	0	5.93	9.93	7.77	9.12
JUNC-7-02	JUNC-7-01	PARABOLIC	Natural Channel	311.47	0.0234	1.000	10	0	1.30	2.68	7.08	9.12
JUNC-7-03	JUNC-7-02	PARABOLIC	Natural Channel	127.66	0.06137	1.000	5	0	0.88	1.93	5.66	7.38
JUNC-7-04	JUNC-7-03	PARABOLIC	Natural Channel	657.89	0.22252	1.000	5	0	0.88	1.97	5.81	7.57
JUNC-71-01	JUNC-27-02	CIRCULAR	Pipe	59.21	0.02833	0.400	0	0	0.28	0.33	0.33	0.33
JUNC-71-01	JUNC-27-02	RECT_OPEN	Rectangular channel / Overflow conduit	60.94	0.02753	0.250	10	0	0.00	0.30	1.51	2.07
JUNC-71-02	JUNC-71-01	CIRCULAR	Pipe	7.65	0.02681	0.400	0	0	0.28	0.36	0.37	0.36
JUNC-71-02	JUNC-71-01	RECT_OPEN	Rectangular channel / Overflow conduit	9.02	0.02273	0.250	10	0	0.00	0.28	1.47	2.02
JUNC-71-03	JUNC-71-02	RECT_CLOSED	Culvert	106.24	0.00513	0.300	0.4	0	0.20	0.20	0.20	0.20
JUNC-71-03	JUNC-71-02	RECT_OPEN	Rectangular channel / Overflow conduit	107.51	0.00507	0.250	10	0	0.10	0.49	1.68	2.23
JUNC-71-04	JUNC-71-03	RECT_OPEN	Rectangular channel / Overflow conduit	14.16	0.0272	0.250	10	0	0.18	0.53	1.77	2.33
JUNC-71-04	JUNC-71-03	CIRCULAR	Pipe	13.32	0.02892	0.300	0	0	0.23	0.25	0.23	0.22
JUNC-71-05	JUNC-71-04	RECT_OPEN	Rectangular channel / Overflow conduit	10.53	0.01472	0.250	10	0	0.11	0.32	1.05	1.38
JUNC-71-05	JUNC-71-04	CIRCULAR	Pipe	10.24	0.01514	0.300	0	0	0.15	0.16	0.14	0.14
JUNC-72-01	JUNC-27-10	RECT_OPEN	Rectangular channel / Overflow conduit	75.37	0.01246	0.250	10	0	0.97	1.69	3.52	4.40
JUNC-72-01	JUNC-27-10	CIRCULAR	Pipe	73.41	0.01279	0.500	0	0	0.52	0.52	0.52	0.52

Table 5.1: Montagu Existing Stormwater Drainage System Details

Node Reference		Conduit Description	Conduit Description	Conduit Details					Peak Flow Rates (m ³ /s)			
Upstream Node	Downstream Node			Length (m)	Slope (m/m)	Depth / Diameter (m)	Width (m)	Side Slopes (vert : horizontal)	1 in 5yr	1 in 10yr	1 in 50 yr	1 in 100yr
JUNC-72-02	JUNC-72-01	RECT_OPEN	Rectangular channel / Overflow conduit	169.66	0.01576	0.250	10	0	0.52	1.00	2.17	2.75
JUNC-72-02	JUNC-72-01	CIRCULAR	Pipe	167.52	0.01596	0.500	0	0	0.48	0.48	0.48	0.48
JUNC-72-03	JUNC-72-02	CIRCULAR	Pipe	18.92	0.02162	0.300	0	0	0.24	0.24	0.24	0.24
JUNC-72-03	JUNC-72-02	RECT_OPEN	Rectangular channel / Overflow conduit	21.21	0.01929	0.250	10	0	0.90	1.41	2.59	3.19
JUNC-72-04	JUNC-72-03	CIRCULAR	Pipe	13.5	0.01608	0.300	0	0	0.20	0.20	0.20	0.20
JUNC-72-04	JUNC-72-03	RECT_OPEN	Rectangular channel / Overflow conduit	14.65	0.01481	0.250	10	0	0.92	1.43	2.61	3.20
JUNC-73-01	JUNC-27-15	RECT_CLOSED	Culvert	9.61	0.08217	0.300	0.6	0	0.04	0.05	0.04	0.04
JUNC-74-01	JUNC-29-02	RECT_OPEN	Rectangular channel / Overflow conduit	71.16	0.0058	0.500	10	0	0.00	0.00	0.26	0.73
JUNC-74-01	JUNC-29-02	CIRCULAR	Pipe	70.11	0.01855	0.600	0	0	0.23	0.38	0.45	0.43
JUNC-75-01	JUNC-29-02	RECT_OPEN	Rectangular channel / Overflow conduit	125.82	0.04113	0.500	15	0	0.05	3.04	24.26	33.00
JUNC-75-02	JUNC-29-06	CIRCULAR	Pipe	2.52	0.04966	0.750	0	0	1.87	3.08	3.08	3.08
JUNC-75-02	JUNC-29-06	RECT_OPEN	Rectangular channel / Overflow conduit	2.94	0.04256	0.500	10	0	0.00	1.30	8.29	11.47
JUNC-75-03	JUNC-75-02	CIRCULAR	Pipe	35.17	0.07522	0.750	0	0	1.87	3.04	3.07	3.06
JUNC-75-03	JUNC-75-02	RECT_OPEN	Rectangular channel / Overflow conduit	36.1	0.04542	0.500	10	0	0.00	0.81	7.40	10.47
JUNC-75-04	JUNC-75-03	CIRCULAR	Pipe	30.96	0.06028	0.750	0	0	1.87	2.93	2.93	2.93
JUNC-75-04	JUNC-75-03	RECT_OPEN	Rectangular channel / Overflow conduit	33.16	0.03207	0.500	10	0	0.00	1.12	7.66	10.67
JUNC-75-05	JUNC-75-04	TRAPEZOIDAL	Trapezoidal Channel	163.36	0.00627	1.500	1.5	3	1.48	2.99	8.50	11.24
JUNC-75-06	JUNC-75-05	TRAPEZOIDAL	Trapezoidal Channel	85.43	0.01153	1.500	1.5	3	0.21	0.30	0.48	0.57
JUNC-75-07	JUNC-75-06	TRAPEZOIDAL	Trapezoidal Channel	33.89	0.05793	0.300	0.3	4	0.22	0.31	0.50	0.60
JUNC-76-01	JUNC-29-02	RECT_OPEN	Rectangular channel / Overflow conduit	22.02	0.00663	0.500	10	0	0.03	0.26	0.82	1.04
JUNC-76-01	JUNC-29-02	CIRCULAR	Pipe	21.31	0.06801	0.300	0	0	0.23	0.24	0.19	0.17
JUNC-77-01	JUNC-29-10	CIRCULAR	Pipe	123.66	0.06721	0.500	0	0	1.04	1.04	1.04	1.04
JUNC-77-01	JUNC-29-10	RECT_OPEN	Rectangular channel / Overflow conduit	124.74	0.05695	0.500	10	0	0.54	2.50	8.11	10.52
JUNC-77-02	JUNC-77-01	CIRCULAR	Pipe	10.06	0.00626	0.500	0	0	1.01	1.02	1.01	1.01

Table 5.1: Montagu Existing Stormwater Drainage System Details

Node Reference		Conduit Description	Conduit Description	Conduit Details					Peak Flow Rates (m ³ /s)			
Upstream Node	Downstream Node			Length (m)	Slope (m/m)	Depth / Diameter (m)	Width (m)	Side Slopes (vert : horizontal)	1 in 5yr	1 in 10yr	1 in 50 yr	1 in 100yr
JUNC-77-02	JUNC-77-01	RECT_OPEN	Rectangular channel / Overflow conduit	11.83	0.00533	0.500	10	0	1.08	2.92	8.37	10.76
JUNC-77-03	JUNC-77-02	TRAPEZOIDAL	Trapezoidal Channel	59.99	0.05037	0.500	0.5	3	1.31	2.94	5.01	5.02
JUNC-77-03	JUNC-77-02	RECT_OPEN	Rectangular channel / Overflow conduit	62.89	0.04804	0.500	10	0	0.00	0.00	3.10	5.37
JUNC-77-04	JUNC-77-03	CIRCULAR	Pipe	9.58	0.10315	0.500	0	0	0.95	1.55	1.57	1.57
JUNC-77-04	JUNC-77-03	RECT_OPEN	Rectangular channel / Overflow conduit	10.06	0.09818	0.250	10	0	0.00	0.43	4.39	6.01
JUNC-78-01	JUNC-31-02	RECT_OPEN	Rectangular channel / Overflow conduit	42.85	0.04642	0.250	10	0	0.00	0.00	0.00	0.75
JUNC-78-01	JUNC-31-02	CIRCULAR	Pipe	40.87	0.04868	0.500	0	0	0.52	0.75	0.94	0.98
JUNC-78-02	JUNC-78-01	PARABOLIC	Natural Channel	29.13	0.03813	1.000	5	0	0.42	0.58	1.35	2.39
JUNC-78-03	JUNC-78-02	RECT_OPEN	Rectangular channel / Overflow conduit	22.17	0.0231	0.250	10	0	0.05	0.08	0.12	0.15
JUNC-78-03	JUNC-78-02	CIRCULAR	Pipe	21.82	0.02347	0.300	0	0	0.00	0.00	0.00	0.00
JUNC-78-04	JUNC-78-03	PARABOLIC	Natural Channel	49.59	0.06322	1.000	5	0	0.06	0.08	0.13	0.15
JUNC-78-05	JUNC-78-04	RECT_OPEN	Rectangular channel / Overflow conduit	7.8	0.08557	0.250	10	0	0.00	0.00	0.00	0.00
JUNC-78-05	JUNC-78-04	CIRCULAR	Pipe	7.37	0.0906	0.300	0	0	0.06	0.08	0.13	0.15
JUNC-78-06	JUNC-78-05	RECT_OPEN	Rectangular channel / Overflow conduit	12.47	0.09676	0.250	10	0	0.00	0.00	0.00	0.00
JUNC-78-06	JUNC-78-05	CIRCULAR	Pipe	11.97	0.10084	0.300	0	0	0.00	0.00	0.00	0.00
JUNC-79-01	JUNC-32-03	PARABOLIC	Natural Channel	124.29	0.01127	1.000	10	0	1.50	3.02	7.83	10.00
JUNC-79-02	JUNC-79-01	PARABOLIC	Natural Channel	87.17	0.01693	1.000	10	0	0.50	0.85	1.61	1.95
JUNC-79-03	JUNC-79-02	PARABOLIC	Natural Channel	134.13	0.1281	1.000	5	0	0.10	0.17	0.29	0.34
JUNC-79-04	JUNC-79-03	RECT_OPEN	Rectangular channel / Overflow conduit	8.58	0.08209	0.250	10	0	0.00	0.00	0.00	0.00
JUNC-79-04	JUNC-79-03	CIRCULAR	Pipe	6.16	0.11471	0.300	0	0	0.10	0.18	0.29	0.34
JUNC-80-01	JUNC-34-02	PARABOLIC	Natural Channel	57.23	0.02193	1.500	10	0	0.87	1.11	1.54	1.57
JUNC-80-02	JUNC-80-01	CIRCULAR	Pipe	13.62	0.03931	0.300	0	0	0.30	0.30	0.30	0.30
JUNC-80-02	JUNC-80-01	RECT_OPEN	Rectangular channel / Overflow conduit	15.43	0.03469	0.250	5	0	0.15	0.38	0.91	1.16
JUNC-8-01	JUNC-1-08	PARABOLIC	Natural Channel	5.69	0.08004	2.000	10	0	12.84	13.81	18.39	22.26

Table 5.1: Montagu Existing Stormwater Drainage System Details

Node Reference		Conduit Description	Conduit Description	Conduit Details					Peak Flow Rates (m ³ /s)			
Upstream Node	Downstream Node			Length (m)	Slope (m/m)	Depth / Diameter (m)	Width (m)	Side Slopes (vert : horizontal)	1 in 5yr	1 in 10yr	1 in 50 yr	1 in 100yr
JUNC-8-02	JUNC-8-01	CIRCULAR	Pipe	53.71	0.0194	0.500	0	0	0.65	0.69	0.68	0.67
JUNC-8-02	JUNC-8-01	RECT_OPEN	Rectangular channel / Overflow conduit	56.71	0.01838	2.000	20	0	0.35	1.64	7.30	9.06
JUNC-8-03	JUNC-8-02	CIRCULAR	Pipe	107.92	0.06332	0.300	0	0	0.26	0.26	0.26	0.26
JUNC-8-03	JUNC-8-02	RECT_OPEN	Rectangular channel / Overflow conduit	110.36	0.06192	0.500	10	0	0.67	1.93	7.25	8.86
JUNC-8-04	JUNC-8-03	RECT_OPEN	Rectangular channel / Overflow conduit	27.96	0.09166	0.500	10	0	0.63	1.89	7.23	8.81
JUNC-8-04	JUNC-8-03	CIRCULAR	Pipe	26.86	0.09544	0.300	0	0	0.30	0.30	0.30	0.30
JUNC-8-05	JUNC-8-04	CIRCULAR	Pipe	14.44	0.02799	0.300	0	0	0.26	0.26	0.25	0.25
JUNC-8-05	JUNC-8-04	RECT_OPEN	Rectangular channel / Overflow conduit	17.48	0.02312	0.500	10	0	0.67	1.91	6.86	8.29
JUNC-8-06	JUNC-8-05	CIRCULAR	Pipe	61.53	0.06678	0.300	0	0	0.25	0.25	0.25	0.25
JUNC-8-06	JUNC-8-05	RECT_OPEN	Rectangular channel / Overflow conduit	65.41	0.06281	0.500	10	0	0.31	1.46	5.79	6.98
JUNC-8-07	JUNC-8-06	RECT_OPEN	Rectangular channel / Overflow conduit	86.2	0.02486	0.250	10	0	0.32	1.25	4.22	5.00
JUNC-8-08	JUNC-8-07	CIRCULAR	Pipe	25.33	0.00217	0.300	0	0	0.15	0.16	0.19	0.19
JUNC-8-08	JUNC-8-07	RECT_OPEN	Rectangular channel / Overflow conduit	30.68	0.00179	0.500	10	0	0.17	1.10	4.02	4.80
JUNC-8-09	JUNC-8-10	CIRCULAR	Pipe	23.9	-0.00218	0.300	0	0	0.14	0.15	0.15	0.14
JUNC-8-09	JUNC-8-08	RECT_OPEN	Rectangular channel / Overflow conduit	51.04	0.00278	0.250	10	0	0.29	1.08	3.50	4.18
JUNC-8-10	JUNC-8-09	RECT_OPEN	Rectangular channel / Overflow conduit	29.06	0.00179	0.500	10	0	0.25	1.04	3.48	4.18
JUNC-81-01	JUNC-34-02	PARABOLIC	Natural Channel	105.04	0.04672	1.000	5	0	0.20	0.34	0.63	0.75
JUNC-81-02	JUNC-81-01	RECT_OPEN	Rectangular channel / Overflow conduit	33.78	0.06482	0.250	10	0	0.00	0.00	0.00	0.00
JUNC-81-02	JUNC-81-01	CIRCULAR	Pipe	30.97	0.07073	0.675	0	0	0.14	0.20	0.32	0.38
JUNC-8-11	JUNC-8-10	RECT_OPEN	Rectangular channel / Overflow conduit	75.21	0.07115	0.300	10	0	0.66	1.33	2.93	3.57
JUNC-8-12	JUNC-8-11	RECT_OPEN	Rectangular channel / Overflow conduit	30.85	0.09304	0.250	10	0	0.08	0.52	1.65	2.10
JUNC-8-12	JUNC-8-11	CIRCULAR	Pipe	28.62	0.10036	0.300	0	0	0.27	0.28	0.29	0.29
JUNC-82-01	JUNC-34-03	PARABOLIC	Natural Channel	35.99	0.0537	1.000	10	0	1.03	1.90	4.78	6.01
JUNC-82-02	JUNC-82-01	CIRCULAR	Pipe	15.51	0.07032	0.750	0	0	1.03	1.90	3.90	3.96

Table 5.1: Montagu Existing Stormwater Drainage System Details

Node Reference		Conduit Description	Conduit Description	Conduit Details					Peak Flow Rates (m ³ /s)			
Upstream Node	Downstream Node			Length (m)	Slope (m/m)	Depth / Diameter (m)	Width (m)	Side Slopes (vert : horizontal)	1 in 5yr	1 in 10yr	1 in 50 yr	1 in 100yr
JUNC-82-02	JUNC-82-01	RECT_OPEN	Rectangular channel / Overflow conduit	17.48	0.06236	0.500	10	0	0.00	0.00	0.88	2.05
JUNC-82-03	JUNC-82-02	CIRCULAR	Pipe	50.49	0.01079	0.750	0	0	0.88	1.69	1.76	1.76
JUNC-82-03	JUNC-82-02	RECT_OPEN	Rectangular channel / Overflow conduit	51.33	0.00199	0.500	10	0	0.00	0.04	3.48	4.59
JUNC-82-04	JUNC-82-03	CIRCULAR	Pipe	52.62	0.00602	0.300	0	0	0.21	0.21	0.21	0.21
JUNC-82-04	JUNC-82-03	RECT_OPEN	Rectangular channel / Overflow conduit	53.17	0.02655	0.250	10	0	0.53	1.50	3.93	4.89
JUNC-82-05	JUNC-82-04	CIRCULAR	Pipe	44.67	0.06652	0.300	0	0	0.23	0.23	0.23	0.23
JUNC-82-05	JUNC-82-04	RECT_OPEN	Rectangular channel / Overflow conduit	45.47	0.05427	0.250	10	0	0.14	0.32	0.66	0.80
JUNC-82-06	JUNC-82-05	CIRCULAR	Pipe	50.08	0.06479	0.300	0	0	0.09	0.12	0.19	0.20
JUNC-82-06	JUNC-82-05	RECT_OPEN	Rectangular channel / Overflow conduit	51.58	0.04674	0.250	10	0	0.00	0.00	0.00	0.00
JUNC-82-07	JUNC-82-06	CIRCULAR	Pipe	13.58	0.09535	0.300	0	0	0.09	0.12	0.19	0.23
JUNC-82-07	JUNC-82-06	RECT_OPEN	Rectangular channel / Overflow conduit	14.98	0.08637	0.250	10	0	0.00	0.00	0.00	0.00
JUNC-83-01	JUNC-34-04	PARABOLIC	Natural Channel	21.94	0.02033	1.000	10	0	0.24	0.41	0.99	1.10
JUNC-83-02	JUNC-83-01	CIRCULAR	Pipe	31.13	0.01571	0.300	0	0	0.17	0.18	0.20	0.20
JUNC-83-02	JUNC-83-01	RECT_OPEN	Rectangular channel / Overflow conduit	32.15	0.01521	0.250	7.5	0	0.06	0.24	0.57	0.74
JUNC-83-03	JUNC-83-02	CIRCULAR	Pipe	10.31	0.01038	0.300	0	0	0.18	0.19	0.18	0.17
JUNC-83-03	JUNC-83-02	RECT_OPEN	Rectangular channel / Overflow conduit	10.82	0.00989	0.250	7.5	0	0.14	0.32	0.66	0.82
JUNC-84-01	JUNC-34-05	PARABOLIC	Natural Channel	152.45	0.1059	1.000	5	0	0.16	0.39	0.93	1.13
JUNC-85-01	JUNC-34-07	PARABOLIC	Natural Channel	472.44	0.04356	1.500	15	0	0.00	0.00	0.00	0.00
JUNC-86-01	JUNC-34-07	PARABOLIC	Natural Channel	88.37	0.00498	1.500	10	0	6.07	10.92	30.60	44.25
JUNC-86-02	JUNC-86-01	CIRCULAR	Pipe	17.92	0.00084	0.750	0	0	3.49	3.51	3.51	3.51
JUNC-86-02	JUNC-86-01	RECT_OPEN	Rectangular channel / Overflow conduit	20.97	0.04128	1.000	10	0	2.49	7.51	27.53	39.18
JUNC-86-03	JUNC-86-02	CIRCULAR	Pipe	99.86	0.09332	0.675	0	0	2.67	2.67	2.67	2.67
JUNC-86-03	JUNC-86-02	RECT_OPEN	Rectangular channel / Overflow conduit	101.69	0.0925	0.500	15	0	3.33	8.25	27.85	39.45
JUNC-86-04	JUNC-86-03	CIRCULAR	Pipe	24.87	0.01769	0.675	0	0	0.48	0.42	0.47	0.47

Table 5.1: Montagu Existing Stormwater Drainage System Details

Node Reference		Conduit Description	Conduit Description	Conduit Details					Peak Flow Rates (m ³ /s)			
Upstream Node	Downstream Node			Length (m)	Slope (m/m)	Depth / Diameter (m)	Width (m)	Side Slopes (vert : horizontal)	1 in 5yr	1 in 10yr	1 in 50 yr	1 in 100yr
JUNC-86-04	JUNC-86-03	RECT_OPEN	Rectangular channel / Overflow conduit	27.07	0.00148	0.500	15	0	0.75	1.94	6.23	8.17
JUNC-86-05	JUNC-86-04	CIRCULAR	Pipe	85.08	0.03004	0.375	0	0	0.33	0.32	0.32	0.35
JUNC-86-05	JUNC-86-04	RECT_OPEN	Rectangular channel / Overflow conduit	87.08	0.02549	0.500	10	0	0.78	2.04	6.34	8.24
JUNC-86-06	JUNC-86-05	CIRCULAR	Pipe	65.94	0.00443	0.375	0	0	0.27	0.27	0.27	0.27
JUNC-86-06	JUNC-86-05	RECT_OPEN	Rectangular channel / Overflow conduit	68.11	0.00335	0.500	10	0	0.81	1.97	6.07	7.87
JUNC-86-07	JUNC-86-06	CIRCULAR	Pipe	26.99	0.14817	0.300	0	0	0.34	0.34	0.34	0.34
JUNC-86-07	JUNC-86-06	RECT_OPEN	Rectangular channel / Overflow conduit	27.76	0.12179	0.500	10	0	0.59	1.78	5.94	7.76
JUNC-87-01	JUNC-35-01	PARABOLIC	Natural Channel	78.22	0.00736	1.000	10	0	0.42	0.71	1.37	1.68
JUNC-87-02	JUNC-87-01	CIRCULAR	Pipe	21.18	0.04069	0.600	0	0	0.29	0.48	0.81	0.97
JUNC-87-02	JUNC-87-01	RECT_OPEN	Rectangular channel / Overflow conduit	24.42	0.03528	0.250	7.5	0	0.00	0.00	0.00	0.00
JUNC-87-03	JUNC-87-02	CIRCULAR	Pipe	18.77	0.07318	0.300	0	0	0.29	0.32	0.33	0.33
JUNC-87-03	JUNC-87-02	RECT_OPEN	Rectangular channel / Overflow conduit	21.28	0.06451	0.250	7.5	0	0.00	0.16	0.49	0.65
JUNC-87-04	JUNC-87-03	CIRCULAR	Pipe	27.75	0.07986	0.300	0	0	0.29	0.30	0.30	0.30
JUNC-87-04	JUNC-87-03	RECT_OPEN	Rectangular channel / Overflow conduit	30.18	0.07339	0.250	7.5	0	0.00	0.21	0.54	0.70
JUNC-87-05	JUNC-87-04	CIRCULAR	Pipe	9.62	0.08366	0.300	0	0	0.31	0.33	0.32	0.32
JUNC-87-05	JUNC-87-04	RECT_OPEN	Rectangular channel / Overflow conduit	10.46	0.0769	0.250	7.5	0	0.02	0.21	0.54	0.71
JUNC-88-01	JUNC-35-02	PARABOLIC	Natural Channel	105.25	0.002	1.000	5	0	0.21	0.31	0.52	0.62
JUNC-88-02	JUNC-88-01	CIRCULAR	Pipe	27.06	0.01416	0.300	0	0	0.19	0.20	0.20	0.20
JUNC-88-02	JUNC-88-01	RECT_OPEN	Rectangular channel / Overflow conduit	28.72	0.01334	0.250	10	0	0.02	0.13	0.35	0.46
JUNC-88-03	JUNC-88-02	CIRCULAR	Pipe	9.7	0.03755	0.300	0	0	0.20	0.21	0.20	0.20
JUNC-88-03	JUNC-88-02	RECT_OPEN	Rectangular channel / Overflow conduit	12.15	0.02997	0.250	10	0	0.04	0.16	0.37	0.48
JUNC-89-01	JUNC-35-03	PARABOLIC	Natural Channel	26.26	0.01017	1.000	5	0	0.27	0.37	0.65	0.78
JUNC-89-02	JUNC-89-01	CIRCULAR	Pipe	12.19	0.09851	0.300	0	0	0.27	0.37	0.38	0.38
JUNC-89-02	JUNC-89-01	RECT_OPEN	Rectangular channel / Overflow conduit	13.52	0.08873	0.250	10	0	0.00	0.00	0.27	0.40

Table 5.1: Montagu Existing Stormwater Drainage System Details

Node Reference		Conduit Description	Conduit Description	Conduit Details					Peak Flow Rates (m ³ /s)			
Upstream Node	Downstream Node			Length (m)	Slope (m/m)	Depth / Diameter (m)	Width (m)	Side Slopes (vert : horizontal)	1 in 5yr	1 in 10yr	1 in 50 yr	1 in 100yr
JUNC-89-03	JUNC-89-02	CIRCULAR	Pipe	10.31	0.02765	0.300	0	0	0.27	0.30	0.30	0.30
JUNC-89-03	JUNC-89-02	RECT_OPEN	Rectangular channel / Overflow conduit	11.12	0.02564	0.250	10	0	0.00	0.21	0.48	0.61
JUNC-90-01	JUNC-35-04	PARABOLIC	Natural Channel	42.58	0.0393	0.300	3	0	0.15	0.25	0.41	0.50
JUNC-90-02	JUNC-90-01	CIRCULAR	Pipe	5.27	0.07746	0.300	0	0	0.15	0.25	0.41	0.43
JUNC-90-02	JUNC-90-01	RECT_OPEN	Rectangular channel / Overflow conduit	7.15	0.05702	0.250	10	0	0.00	0.00	0.00	0.07
JUNC-90-03	JUNC-90-02	CIRCULAR	Pipe	10.31	0.06874	0.300	0	0	0.15	0.25	0.33	0.33
JUNC-90-03	JUNC-90-02	RECT_OPEN	Rectangular channel / Overflow conduit	11.67	0.06069	0.250	10	0	0.00	0.00	0.15	0.25
JUNC-9-01	JUNC-1-10	RECT_OPEN	Rectangular channel / Overflow conduit	55.42	0.0888	0.300	10	0	0.92	1.60	3.04	3.68
JUNC-9-02	JUNC-9-01	CIRCULAR	Pipe	37.67	0.04664	0.300	0	0	0.20	0.21	0.21	0.22
JUNC-9-02	JUNC-9-01	RECT_OPEN	Rectangular channel / Overflow conduit	38.93	0.04513	0.250	10	0	0.72	1.39	2.83	3.46
JUNC-9-03	JUNC-9-02	CIRCULAR	Pipe	48.11	0.07948	0.300	0	0	0.27	0.27	0.27	0.27
JUNC-9-03	JUNC-9-02	RECT_OPEN	Rectangular channel / Overflow conduit	49.63	0.07704	0.250	10	0	0.65	1.33	2.77	3.41
JUNC-9-04	JUNC-9-03	CIRCULAR	Pipe	23.27	0.05341	0.300	0	0	0.28	0.28	0.28	0.28
JUNC-9-04	JUNC-9-03	RECT_OPEN	Rectangular channel / Overflow conduit	23.97	0.05184	0.250	10	0	0.70	1.38	2.82	3.46
JUNC-9-05	JUNC-9-04	RECT_OPEN	Rectangular channel / Overflow conduit	154.05	0.01747	0.250	10	0	0.48	0.81	1.51	1.85
JUNC-9-05	JUNC-9-04	CIRCULAR	Pipe	152.42	0.01766	0.300	0	0	0.15	0.15	0.15	0.15
JUNC-9-06	JUNC-9-05	RECT_OPEN	Rectangular channel / Overflow conduit	21.9	0.03587	0.250	10	0	0.66	0.98	1.67	2.02
JUNC-9-06	JUNC-9-05	CIRCULAR	Pipe	20.11	0.03907	0.150	0	0	0.04	0.04	0.04	0.04
JUNC-91-01	JUNC-35-10	PARABOLIC	Natural Channel	44.7	0.05217	0.300	3	0	0.07	0.10	0.16	0.19
JUNC-91-02	JUNC-91-01	CIRCULAR	Pipe	10.74	0.06597	0.300	0	0	0.08	0.10	0.17	0.20
JUNC-91-03	JUNC-91-02	CIRCULAR	Pipe	9.69	0.06702	0.300	0	0	0.08	0.10	0.17	0.20
JUNC-92-01	JUNC-35-06	CIRCULAR	Pipe	111.95	0.04232	0.300	0	0	0.17	0.18	0.18	0.19
JUNC-92-01	JUNC-35-06	RECT_OPEN	Rectangular channel / Overflow conduit	114.08	0.04153	0.250	10	0	0.09	0.30	0.77	0.96
JUNC-92-02	JUNC-92-01	CIRCULAR	Pipe	12.94	0.04246	0.300	0	0	0.25	0.26	0.24	0.22

Table 5.1: Montagu Existing Stormwater Drainage System Details

Node Reference		Conduit Description	Conduit Description	Conduit Details					Peak Flow Rates (m ³ /s)			
Upstream Node	Downstream Node			Length (m)	Slope (m/m)	Depth / Diameter (m)	Width (m)	Side Slopes (vert : horizontal)	1 in 5yr	1 in 10yr	1 in 50 yr	1 in 100yr
JUNC-92-02	JUNC-92-01	RECT_OPEN	Rectangular channel / Overflow conduit	14.56	0.03773	0.250	10	0	0.11	0.34	0.80	1.00
JUNC-93-01	JUNC-36-03	RECT_OPEN	Rectangular channel / Overflow conduit	263.38	0.04208	0.500	10	0	0.98	1.67	3.34	4.07
JUNC-93-02	JUNC-93-01	CIRCULAR	Pipe	5.13	0.09793	0.300	0	0	0.14	0.21	0.32	0.38
JUNC-93-02	JUNC-93-01	RECT_OPEN	Rectangular channel / Overflow conduit	5.89	0.0852	0.250	10	0	0.00	0.00	0.00	0.00
JUNC-93-03	JUNC-93-02	CIRCULAR	Pipe	15.63	0.10167	0.300	0	0	0.14	0.21	0.32	0.35
JUNC-93-03	JUNC-93-02	RECT_OPEN	Rectangular channel / Overflow conduit	16.01	0.09924	0.250	10	0	0.00	0.00	0.00	0.05
JUNC-94-01	JUNC-36-07	RECT_OPEN	Rectangular channel / Overflow conduit	98.13	0.02949	0.250	10	0	0.21	0.33	0.58	0.70
JUNC-94-02	JUNC-94-01	RECT_OPEN	Rectangular channel / Overflow conduit	221.76	0.05833	0.250	10	0	0.23	0.37	0.63	0.76
JUNC-95-01	JUNC-41-05	RECT_OPEN	Rectangular channel / Overflow conduit	97.29	0.00544	0.300	0.5	0	0.21	0.29	0.29	0.29
JUNC-95-01	JUNC-41-05	RECT_OPEN	Rectangular channel / Overflow conduit	98.94	0.00535	0.250	10	0	0.00	0.01	0.41	0.61
JUNC-95-02	JUNC-95-01	RECT_CLOSED	Closed Channel	87.25	0.00538	0.500	0.5	0	0.24	0.36	0.39	0.38
JUNC-95-02	JUNC-95-01	RECT_OPEN	Rectangular channel / Overflow conduit	88.56	0.0053	0.250	10	0	0.00	0.00	0.36	0.57
JUNC-95-03	JUNC-95-02	RECT_CLOSED	Closed Channel	11.54	0.01395	0.500	0.5	0	0.24	0.38	0.57	0.57
JUNC-95-03	JUNC-95-02	RECT_OPEN	Rectangular channel / Overflow conduit	13.11	0.01228	0.250	10	0	0.00	0.00	0.23	0.45
JUNC-96-01	JUNC-59-17	RECT_OPEN	Rectangular channel / Overflow conduit	92.1	0.06326	0.250	10	0	0.77	1.31	2.86	3.49
JUNC-96-02	JUNC-96-01	RECT_OPEN	Rectangular channel / Overflow conduit	36.34	0.09202	0.250	10	0	0.54	1.07	2.60	3.22
JUNC-96-02	JUNC-96-01	TRIANGULAR	Channel	31.29	0.09082	0.300	0.6	0	0.24	0.25	0.27	0.28
JUNC-96-03	JUNC-96-02	RECT_OPEN	Rectangular channel / Overflow conduit	9.65	0.12352	0.250	10	0	0.55	1.08	2.64	3.27
JUNC-96-03	JUNC-96-02	CIRCULAR	Pipe	7.84	0.15264	0.250	0	0	0.23	0.23	0.23	0.23
JUNC-96-04	JUNC-96-03	RECT_OPEN	Rectangular channel / Overflow conduit	131.34	0.09627	0.250	10	0	0.00	0.00	0.36	0.53
JUNC-96-04	JUNC-96-03	TRIANGULAR	Channel	128.65	0.0983	0.300	0.6	0	0.38	0.45	0.45	0.45
JUNC-97-01	JUNC-64-09	RECT_OPEN	Rectangular channel / Overflow conduit	5.85	0.02497	0.250	10	0	0.30	0.46	0.84	1.03
JUNC-97-01	JUNC-64-09	CIRCULAR	Pipe	5.4	0.02705	0.200	0	0	0.12	0.12	0.12	0.12
JUNC-98-01	JUNC-75-01	RECT_OPEN	Rectangular channel / Overflow conduit	48.83	0.01006	0.300	10	0	0.06	0.09	0.14	0.16

Table 5.1: Montagu Existing Stormwater Drainage System Details

Node Reference		Conduit Description	Conduit Description	Conduit Details					Peak Flow Rates (m³/s)			
Upstream Node	Downstream Node			Length (m)	Slope (m/m)	Depth / Diameter (m)	Width (m)	Side Slopes (vert : horizontal)	1 in 5yr	1 in 10yr	1 in 50 yr	1 in 100yr
JUNC-98-02	JUNC-98-01	CIRCULAR	Pipe	15.31	0.0366	0.300	0	0	0.03	0.04	0.07	0.08
JUNC-98-02	JUNC-98-01	CIRCULAR	Pipe	13.23	0.04237	0.300	0	0	0.03	0.05	0.07	0.09
JUNC-99-01	JUNC-78-02	RECT_OPEN	Rectangular channel / Overflow conduit	6.83	0.04646	0.250	10	0	0.01	0.14	0.44	0.59
JUNC-99-01	JUNC-78-02	CIRCULAR	Pipe	6.62	0.04794	0.300	0	0	0.37	0.37	0.39	0.39