

SANITARY SEWER TABLE							
U/S MH	D/S MH	U/S INVERT	D/S INVERT	DIAMETER	LENGTH	SLOPE	PIPE COVER U/S, D/S, MIN
101	100	110.661	110.650	200mmØ	3.26m	0.35%	3.13, 3.14, 3.13
102	101	110.793	110.700	200mmØ	26.68m	0.35%	2.91, 3.08, 2.87
103	102	110.868	110.823	200mmØ	12.72m	0.35%	2.92, 2.88, 2.86
104	103	111.008	110.898	200mmØ	31.49m	0.35%	2.91, 2.89, 2.85
105	104	111.066	111.038	200mmØ	7.95m	0.35%	2.83, 2.88, 2.81
106	105	111.644	111.096	200mmØ	91.01m	0.60%	3.06, 2.80, 2.52
107	106	111.840	111.670	200mmØ	8.08m	2.10%	2.88, 3.04, 2.88
108	107	112.050	111.870	200mmØ	9.57m	1.88%	2.86, 2.85, 2.83
109	106	112.761	111.670	200mmØ	25.50m	4.28%	2.45, 3.04, 2.45
110	101	110.970	110.700	200mmØ	41.50m	0.65%	2.10, 3.09, 2.10

MAIN RUN PIPING							
STORM SEWER TABLE							
U/S STRUCTURE	D/S STRUCTURE	U/S INVERT	D/S INVERT	DIAMETER	LENGTH	SLOPE	PIPE COVER U/S, D/S, MIN
201	216	111.356	111.320	375mmØ	6.31m	0.57%	2.06, 2.03, 2.02
200	MHST09004	111.132	111.097	450mmØ	11.52m	0.30%	2.26, 2.36, 2.26
OGS	200	111.225	111.175	375mmØ	10.73m	0.47%	2.25, 2.30, 2.25
205	204	111.880	111.730	375mmØ	44.51m	0.34%	1.76, 1.93, 1.76
204	203	111.700	111.670	375mmØ	8.55m	0.35%	1.96, 2.02, 1.95
203	202	111.610	111.487	375mmØ	35.07m	0.35%	2.08, 2.00, 1.98
202	201	111.460	111.420	375mmØ	11.46m	0.35%	2.09, 2.06, 2.04
216	OGS	111.294	111.245	375mmØ	10.41m	0.47%	2.06, 2.23, 2.06
207	206	113.000	112.470	250mmØ	15.82m	3.35%	1.95, 2.01, 1.80
206	205	112.300	112.020	250mmØ	46.79m	0.60%	2.16, 1.82, 1.81

STORM MANHOLE STRUCTURE TABLE					
MH #	TOP OF GRATE	INVERTS	REFERENCE	FRAME	COVER
OGS	T/G=113.95	W=111.245 (375mmØ) E=111.225 (375mmØ)	SEE DETAIL	CUSTOM	CUSTOM
200	T/G=113.95	W=111.175 (375mmØ) N=111.136 (375mmØ) S=111.132 (450mmØ)	OPSD 701.010	S25	S24.1
201	T/G=113.89	NW=111.420 (375mmØ) SE=111.356 (375mmØ)	OPSD 701.010	S25	S24.1
202	T/G=113.96	N=111.487 (375mmØ) SE=111.460 (375mmØ)	OPSD 701.010	S25	S24.1
203	T/G=114.17	W=111.670 (375mmØ) E=111.610 (375mmØ)	OPSD 701.010	S25	S24.1
204	T/G=114.13	SW=111.730 (375mmØ) E=111.700 (375mmØ)	OPSD 701.010	S25	S24.1
205	T/G=114.12	SW=112.020 (250mmØ) SE=111.950 (300mmØ) NE=111.880 (375mmØ)	OPSD 701.010	S25	S24.1
206	T/G=114.74	SE=112.470 (250mmØ) NE=112.300 (250mmØ)	OPSD 701.010	S25	S24.1
207	T/G=115.20	NW=113.000 (250mmØ)	OPSD 701.010	S25	S24.1
208	T/G=114.42	NW=112.720 (300mmØ) N=112.700 (300mmØ) SE=112.600 (600mmØ)	OPSD 701.010	S25	S24.1
210	T/G=114.27	N=112.310 (300mmØ) SE=112.278 (300mmØ)	OPSD 701.010	S25	S24.1
211	T/G=114.05	NW=112.120 (300mmØ) NE=112.190 (300mmØ) SW=111.790 (600mmØ)	OPSD 701.010	S25	S24.1
212	T/G=114.17	SW=111.680 (300mmØ) N=111.420 (300mmØ)	OPSD 701.010	S25	S24.1
213	T/G=114.32	SW=113.244 (250mmØ) NE=112.900 (250mmØ) SE=112.868 (300mmØ)	OPSD 701.010	S25	S24.1
215	T/G=114.35	SE=112.400 (300mmØ) NW=112.240 (300mmØ)	OPSD 701.010	S25	S24.1
216	T/G=113.83	S=111.380 (300mmØ) W=111.320 (375mmØ) E=111.294 (375mmØ)	OPSD 701.010	S25	S24.1
217	T/G=114.80	SW=113.550 (250mmØ) NW=113.490 (250mmØ)	OPSD 701.010	S25	S24.1
218	T/G=114.10	NW=112.780 (300mmØ) S=112.746 (300mmØ)	OPSD 701.010	S25	S24.1

STORM CHAMBER 1 ASSOCIATED PIPING							
STORM SEWER TABLE							
U/S STRUCTURE	D/S STRUCTURE	U/S INVERT	D/S INVERT	DIAMETER	LENGTH	SLOPE	PIPE COVER U/S, D/S, MIN
CBE16	CHMB1-IN-2	113.150	112.400	250mmØ	2.50m	29.97%	0.74, 1.52, 0.74
210	211	112.278	112.120	300mmØ	15.33m	1.03%	1.66, 1.60, 1.57
CB1	211	112.400	112.190	300mmØ	14.77m	1.42%	1.07, 1.53, 1.07
212	216	111.420	111.380	300mmØ	6.74m	0.59%	2.42, 2.11, 2.11
CHMB1-OUT	212	111.730	111.680	300mmØ	5.72m	0.87%	1.96, 2.19, 1.96
211	CHMB1-IN-1	111.790	111.770	600mmØ	2.61m	0.77%	1.64, 1.69, 1.64
CB6	210	112.502	112.310	300mmØ	18.19m	1.05%	1.09, 1.65, 1.09

STORM CHAMBER 2 ASSOCIATED PIPING							
STORM SEWER TABLE							
U/S STRUCTURE	D/S STRUCTURE	U/S INVERT	D/S INVERT	DIAMETER	LENGTH	SLOPE	PIPE COVER U/S, D/S, MIN
CBE4	CBT5	113.900	113.786	250mmØ	11.40m	1.00%	0.74, 0.77, 0.74
CBT5	CBT6	113.786	113.681	250mmØ	10.54m	1.00%	0.77, 0.78, 0.76
CBT6	CBT7	113.681	113.614	250mmØ	6.66m	1.00%	0.78, 0.79, 0.77
CBT7	CBT8	113.614	113.516	250mmØ	9.79m	1.00%	0.79, 0.91, 0.79
CBT8	CBT9	113.516	113.389	250mmØ	12.75m	1.00%	0.91, 0.82, 0.82
CBT9	CBT10	113.389	113.277	250mmØ	11.17m	1.00%	0.82, 0.82, 0.77
CBT10	213	113.277	113.244	250mmØ	3.30m	1.00%	0.82, 0.82, 0.82
CBE14	CBT13	113.015	112.977	250mmØ	12.74m	0.30%	0.75, 0.83, 0.75
CBT13	CBT12	112.977	112.939	250mmØ	12.74m	0.30%	0.83, 1.08, 0.83
CBT12	CBT11	112.939	112.910	250mmØ	9.53m	0.30%	1.08, 1.13, 1.08
CBT11	213	112.910	112.900	250mmØ	3.30m	0.30%	1.13, 1.16, 1.13
213	218	112.868	112.780	300mmØ	29.25m	0.30%	1.14, 1.01, 1.01
217	CHMB2-IN-2	113.490	112.909	250mmØ	5.54m	10.49%	1.03, 1.63, 1.03
CBE1	CBT2	114.200	114.100	250mmØ	22.23m	0.45%	0.74, 1.04, 0.74
CBT2	CB5	114.100	114.004	250mmØ	20.70m	0.46%	1.04, 1.14, 1.04
CB5	CBT3	113.950	113.780	250mmØ	34.30m	0.50%	1.19, 1.06, 1.06
CBT3	217	113.780	113.550	250mmØ	22.97m	1.00%	1.06, 0.99, 0.99
CHMB2-OUT	215	112.510	112.400	300mmØ	2.00m	5.50%	1.57, 1.65, 1.57
218	208	112.746	112.700	300mmØ	15.21m	0.30%	1.05, 1.41, 0.96
215	205	112.240	111.950	300mmØ	19.55m	1.48%	1.81, 1.86, 1.67
CB3	208	112.850	112.720	300mmØ	15.05m	0.86%	1.07, 1.37, 1.07
208	CHMB2-IN-1	112.600	112.560	600mmØ	3.35m	1.20%	1.09, 1.24, 1.09

STORM CATCHBASIN STRUCTURE TABLE					
CB #	TOP OF GRATE	INVERTS	REFERENCE	FRAME	COVER
CB1	T/G=113.80	SW=112.400 (300mmØ)	OPSD 705.010	S19	S19
CB3	T/G=114.25	SE=112.850 (300mmØ)	OPSD 705.010	S19	S19
CB5	T/G=115.40	NW=114.004 (250mmØ) NE=113.950 (250mmØ)	OPSD 705.010	S19	S19
CB6	T/G=113.90	S=112.502 (300mmØ)	OPSD 705.010	S19	S19
CBE1	T/G=115.20	SE=114.200 (250mmØ)		S31	S31
CBE4	T/G=114.90	NE=113.900 (250mmØ)		S31	S31
CBE14	T/G=114.02	SW=113.015 (250mmØ)		S31	S31
CBE16	T/G=114.15	NW=113.150 (250mmØ)		S31	S31
CBT2	T/G=115.40	NW=114.100 (250mmØ) SE=114.100 (250mmØ)		S30	S30
CBT3	T/G=115.10	SW=113.780 (250mmØ) NE=113.780 (250mmØ)		S30	S30
CBT5	T/G=114.81	SW=113.786 (250mmØ) NE=113.786 (250mmØ)		S30	S30
CBT6	T/G=114.72	SW=113.681 (250mmØ) NE=113.681 (250mmØ)		S30	S30
CBT7	T/G=114.66	SW=113.614 (250mmØ) NE=113.614 (250mmØ)		S30	S30
CBT8	T/G=114.68	SW=113.516 (250mmØ) NE=113.516 (250mmØ)		S30	S30
CBT9	T/G=114.47	SW=113.389 (250mmØ) NE=113.389 (250mmØ)		S30	S30
CBT10	T/G=114.35	SW=113.277 (250mmØ) NE=113.277 (250mmØ)		S30	S30
CBT11	T/G=114.30	NE=112.910 (250mmØ) SW=112.910 (250mmØ)		S30	S30
CBT12	T/G=114.28	NE=112.939 (250mmØ) SW=112.939 (250mmØ)		S30	S30
CBT13	T/G=114.06	NE=112.977 (250mmØ) SW=112.977 (250mmØ)		S30	S30

WATERMAIN / SEWER CROSSING TABLE											
LOCATION	FINISHED GRADE (m)	SANITARY SEWER			STORM SEWER			WATERMAIN			CLEARANCES (mm)
		INV ELEV (m)	DIA (mm)	OBV ELEV (m)	INV ELEV (m)	DIA (mm)	OBV ELEV (m)	INV ELEV (m)	DIA (mm)	OBV ELEV (m)	
0	113.90	110.68	200	110.88	111.25	375	111.62				370
1	113.86	110.72	200	110.92	111.22	375	111.59				302
2	113.90				111.41	300	111.71	111.96	200	112.16	253
3	113.90	110.78	200	110.98	111.39	300	111.69				410
4	113.83				112.36	300	112.66				713
5	113.88	110.80	200	111.00	112.31	300	112.61				1311
6	114.00				111.59	300	111.89	110.89	200	111.09	500
7	114.10				111.98	300	112.28	111.53	200	111.73	253
8	114.10	111.28	200	111.48	111.95	300	112.25				470
9	114.20				112.82	300	113.12	111.69	200	111.89	925
10	114.51	111.50	200	111.70				111.95	200	112.15	250
11	114.55				112.32	250	112.57	111.61	200	111.81	507
12	114.73	111.56	200	111.76	112.52	250	112.77				767
13	114.20	111.31	200	111.51	111.96	300	112.26				450
14	114.20				112.02	300	112.32	111.32	200	111.52	500
15	114.07				112.09	300	112.39				340
					112.73	300	113.03				

WATERMAIN TABLE			
STATION	DESCRIPTION	GROUND ELEV	TWM
1+000	200X200 TEE	113.90	111.62
1+010		113.85	111.45
1+014.9	V&V	113.92	111.52
1+020		113.93	111.53
1+022.4	200X150 TEE	113.94	111.54
1+022.4	150 V&V	113.94	111.54
1+022.4	HYDRANT	113.94	111.54
1+024.5	45° VERT.	113.94	111.54
1+025.1	45° VERT.	113.94	112.16
1+027.4	45° VERT.	113.94	112.16
1+028.0	45° VERT.	113.94	111.54
1+030		113.95	111.55
1+035.1	45° HORZ.	113.95	111.55
1+040		114.08	111.68
1+050.3	22.5° HORZ.	114.32	111.92
1+060		113.93	111.53
1+070		113.88	111.48
1+079.2	22.5° HORZ.	113.91	111.51
1+080.8	45° HORZ.	113.93	111.53
1+083.6	45° HORZ.	113.94	111.54
1+090		113.99	111.59
1+100		114.03	111.63
1+110		114.18	111.78
1+119.9	200X150 TEE	114.14	111.73
1+119.9	150 V&V	114.14	111.73
1+119.9	HYDRANT	114.14	111.73
1+120		114.14	111.73
1+130		114.18	111.75
1+140		114.29	111.89
1+150		114.35	111.95
1+160			