DO NOT SCALE

STORM Network 1

Pipe Code	Diameter (mm)	Gradient (1:)	Pipe Type	Pipe Length	Upstream Manhole Number	Upstream Manhole Invert	Upstream Manhole Cover	Downstream Manhole Number	Downstream Manhole Invert	Downstream Manhole Cover
1.000	450	400	Circular	35.996	S101	84.39	86.67	S102	84.30	87.46
1.001	450	400	Circular	16.099	S102	84.30	87.46	S103	84.26	88.08
1.002	450	400	Circular	28.027	S103	84.26	88.08	S104	84.19	88.90
1.003	450	400	Circular	28.989	S104	84.19	88.90	S105	84.12	89.26
1.004	450	400	Circular	29.862	S105	84.12	89.26	S106	84.04	89.44
1.005	450	400	Circular	35.285	S106	84.04	89.44	S110	83.95	89.01
1.006	450	400	Circular	25.655	S110	83.95	89.01	S114	83.89	88.09
1.007	450	400	Circular	25.141	S114	83.89	88.09	S115	83.83	88.61
1.008	450	400	Circular	27.758	S115	83.83	88.61	S116	83.76	88.92
1.009	450	400	Circular	20.623	S116	83.76	88.92	S117	83.71	88.28
1.010	450	400	Circular	11.493	S117	83.71	88.28	S118	83.68	87.74
1.011	450	400	Circular	14.329	S118	83.68	87.74	S119	83.64	87.03
1.012	450	400	Circular	18.688	S119	83.64	87.03	S120	83.59	86.10
1.013	525	400	Circular	29.124	S120	83.52	86.10	S121	83.45	85.05
1.014	525	400	Circular	18.239	S121	83.45	85.05	S129	83.40	85.05
1.015	150	399	Circular	7.572	S129	84.85	85.05	S130	84.83	85.05
2.000	225	52	Circular	43.533	S107	86.48	88.43	S108	85.65	88.57
2.001	300	240	Circular	25.553	S108	85.57	88.57	S109	85.47	89.03
2.002	300	80	Circular	37.099	S109	85.47	89.03	S110	85.00	89.01
3.000	225	170	Circular	20.953	S111	84.62	87.21	S112	84.50	86.53
3.001	300	170	Circular	29.510	S112	84.42	86.53	S113	84.25	86.79
3.002	375	170	Circular	35.297	S113	84.17	86.79	S114	83.97	88.09
4.000	225	170	Circular	24.050	S122	85.76	87.19	S123	85.62	87.45
4.001	300	170	Circular	29.682	S123	85.55	87.45	S124	85.37	87.17
4.002	300	219	Circular	24.485	S124	85.37	87.17	S125	85.26	86.76
4.003	300	74	Circular	31.185	S125	85.26	86.76	S126	84.84	86.34
4.004	300	240	Circular	56.256	S126	84.84	86.34	S127	84.60	86.42
4.005	300	21	Circular	20.029	S127	84.60	86.42	S128	83.66	85.05
4.006	300	300	Circular	9.780	S128	83.66	85.05	S129	83.62	85.05

STORM Network 2

Pipe Code	Diameter (mm)	Gradient (1:)	Pipe Type	Pipe Length	Upstream Manhole Number	Upstream Manhole Invert	Upstream Manhole Cover	Downstream Manhole Number	Downstream Manhole Invert	Downstream Manhole Cover
1.000	225	170	Circular	34.125	S201	83.86	85.29	S202	83.66	86.78
1.001	225	170	Circular	20.677	S202	83.66	86.78	S204	83.54	87.52
1.002	300	240	Circular	24.376	S204	83.47	87.52	S205	83.36	87.18
1.003	300	240	Circular	20.370	S205	83.36	87.18	S206	83.28	86.93
1.004	300	240	Circular	52.112	S206	83.28	86.93	S207	83.06	84.98
1.005	300	240	Circular	14.981	S207	83.06	84.98	S208	83.00	85.76
1.006	300	242	Circular	8.954	S208	84.50	85.76	S209	84.46	86.05
2.000	225	15	Circular	23.030	S203	86.56	88.29	S204	85.04	87.52

STORM Network 3

Pipe Code	Diameter (mm)	Gradient (1:)	Pipe Type	Pipe Length	Upstream Manhole Number	Upstream Manhole Invert	Upstream Manhole Cover	Downstream Manhole Number	Downstream Manhole Invert	Downstream Manhole Cover
1.000	225	25	Circular	31.486	S301	89.90	91.33	S302	88.66	90.08
1.001	300	35	Circular	40.417	S302	88.58	90.08	S303	87.44	88.94
1.002	375	300	Circular	36.901	S303	87.37	88.94	S304	87.24	89.77
1.003	375	300	Circular	37.364	S304	87.24	89.77	S305	87.12	91.20
1.004	450	400	Circular	14.596	S305	87.04	91.20	S306	87.01	91.09
1.005	450	400	Circular	9.852	S306	87.01	91.09	S307	86.98	90.96
1.006	450	400	Circular	11.042	S307	86.98	90.96	S308	86.95	90.82
1.007	450	400	Circular	19.592	S308	86.95	90.82	S309	86.90	90.57
1.008	450	400	Circular	16.543	S309	86.90	90.57	S310	86.86	90.37
1.009	450	27	Circular	17.800	S310	86.86	90.37	S328	86.21	90.15
1.010	750	400	Circular	13.542	S328	84.41	90.15	S329	84.38	89.99
1.011	750	400	Circular	16.815	S329	84.38	89.99	S330	84.34	89.78
1.012	750	400	Circular	29.850	S330	84.34	89.78	S332	84.26	89.41
1.013	750	402	Circular	16.473	S332	84.26	89.41	S333	84.22	89.05
1.014	750	396	Circular	14.267	S333	84.22	89.05	S334	84.19	88.48
1.015	750	396	Circular	11.894	S334	84.19	88.48	S338	84.16	87.90
1.016	750	396	Circular	16.646	S338	84.16	87.90	S339	84.11	87.05
1.017	750	400	Circular	15.185	S339	84.11	87.05	S340	84.08	86.29
1.018	750	398	Circular	19.907	S340	84.08	86.29	S341	84.03	86.04
1.019	750	118	Circular	37.729	S341	84.03	86.04	S343	83.71	85.66
1.020	750	398	Circular	13.527	S343	83.71	85.66	S344	83.67	85.75
1.021	150	405	Circular	10.122	S344	85.50	85.75	S345	85.47	85.75
2.000	225	170	Circular	28.526	S311	87.66	89.09	S312	87.49	89.36
2.001	375	181	Circular	55.137	S312	87.34	89.36	S314	87.04	88.61
2.002	375	63	Circular	23.547	S314	87.04	88.61	S317	86.67	88.32
2.003	450	101	Circular	28.628	S317	86.59	88.32	S318	86.31	87.96
2.004	450	80	Circular	24.286	S318	86.31	87.96	S319	86.01	87.66
2.005	450	55	Circular	19.389	S319	86.01	87.66	S321	85.65	87.41
2.006	600	54	Circular	28.544	S321	85.48	87.41	S322	84.96	86.95
2.007	750	400	Circular	64.880	S322	84.81	86.95	S323	84.64	86.89
2.008	750	400	Circular	17.787	S323	84.64	86.89	S324	84.60	87.69
2.009	750	400	Circular	31.149	S324	84.60	87.69	S325	84.52	89.24
2.010	750	400	Circular	16.620	S325	84.52	89.24	S326	84.48	89.75
2.011	750	400	Circular	16.490	S326	84.48	89.75	S327	84.44	89.97
2.012	750	400	Circular	10.472	S327	84.44	89.97	S328	84.41	90.15
3.000	225	91	Circular	26.846	S313	87.49	88.91	S314	87.19	88.61
4.000	225	82	Circular	25.505	S315	87.51	88.94	S316	87.20	88.63
4.001	300	85	Circular	32.573	S316	87.13	88.63	S317	86.74	88.32
5.000	450	400	Circular	8.881	S320	85.65	87.30	S321	85.63	87.41
6.000	225	11	Circular	21.053	S331	88.36	89.79	S332	86.52	89.41
7.000	450	400	Circular	33.617	S335	84.69	86.42	S336	84.61	87.07
7.001	450	400	Circular	39.162	S336	84.61	87.07	S337	84.51	87.57
7.002	450	400	Circular	21.419	S337	84.51	87.57	S338	84.46	87.90
8.000	750	400	Circular	13.983	S342	83.75	85.80	S343	83.71	85.66

STORM Network 4

Pipe Code	Diameter (mm)	Gradient (1:)	Pipe Type	Pipe Length	Upstream Manhole Number	Upstream Manhole Invert	Upstream Manhole Cover	Downstream Manhole Number	Downstream Manhole Invert	Downstream Manhole Cover
1.000	375	300	Circular	40.661	S401	90.57	92.14	S402	90.43	92.92
1.001	375	300	Circular	19.602	S402	90.43	92.92	S403	90.37	92.78
1.002	375	300	Circular	24.498	S403	90.37	92.78	S404	90.28	92.59
1.003	375	300	Circular	15.357	S404	90.28	92.59	S405	90.23	92.85
1.004	375	300	Circular	18.974	S405	90.23	92.85	S406	90.17	93.17
1.005	375	125	Circular	40.147	S406	90.17	93.17	S407	89.85	91.76
1.006	375	22	Circular	16.805	S407	89.85	91.76	S408	89.08	90.65
1.007	450	400	Circular	40.694	S408	89.00	90.65	S409	88.90	92.08
1.008	450	400	Circular	38.179	S409	88.90	92.08	S410	88.80	91.26
1.009	150	398	Circular	10.357	S410	90.80	91.26	S411	90.77	91.02

STORM Network 5

Pipe Code	Diameter (mm)	Gradient (1:)	Pipe Type	Pipe Length	Upstream Manhole Number	Upstream Manhole Invert	Upstream Manhole Cover	Downstream Manhole Number	Downstream Manhole Invert	Downstream Manhole Cover
1.000	225	16	Circular	31.258	S501	87.80	89.23	S502	85.88	87.30
1.001	225	50	Circular	34.043	S502	85.88	87.30	S503	85.20	86.62
1.002	225	170	Circular	12.406	S503	85.20	86.62	S504	85.12	86.61
1.003	225	21	Circular	9.832	S504	85.12	86.61	S505	84.65	86.75
1.004	225	170	Circular	6.624	S505	85.90	86.75	S506	85.86	86.75

FOUL Network 6

Pipe Code	Diameter (mm)	Gradient (1:)	Pipe Type	Pipe Length	Upstream Manhole Number	Upstream Manhole Invert	Upstream Manhole Cover	Downstream Manhole Number	Downstream Manhole Invert	Downstream Manhole Cover
1.000	100	80	Circular	23.289	F1	92.35	93.35	F2	92.06	93.10
1.001	100	29	Circular	16.218	F2	92.06	93.10	F3	91.50	92.80
1.002	150	20	Circular	11.437	F3	91.45	92.80	F6	90.87	92.65
1.003	150	150	Circular	39.641	F6	90.87	92.65	F7	90.61	93.00
1.004	150	7	Circular	4.366	F7	90.61	93.00	F10	90.00	92.87
1.005	150	150	Circular	28.891	F10	90.00	92.87	F13	89.81	92.23
1.006	150	150	Circular	44.717	F13	89.81	92.23	F14	89.51	93.35
1.007	150	150	Circular	41.961	F14	89.51	93.35	F15	89.23	91.75
1.008	150	65	Circular	18.023	F15	89.23	91.75	F16	88.95	90.00
1.009	150	21	Circular	20.590	F16	88.95	90.00	F19	87.95	89.00
1.010	150	13	Circular	19.285	F19	87.95	89.00	F20	86.45	87.80
1.011	150	48	Circular	50.334	F20	86.45	87.80	F33	85.40	86.75
1.012	150	16	Circular	23.338	F33	85.11	86.75	F45	83.69	87.00
1.013	150	150	Circular	36.457	F45	83.69	87.00	F46	83.45	86.70
1.014	150	150	Circular	3.601	F46	83.45	86.70	F47	83.42	86.65
1.015	150	150	Circular	24.875	F47	83.42	86.65	F60	83.26	86.75
1.016	150	150	Circular	51.897	F60	83.26	86.75	F61	82.91	85.40
1.017	150	150	Circular	14.736	F61	82.91	85.40	F71	82.81	85.45
1.018	150	150	Circular	19.424	F71	82.81	85.45	F72	82.68	85.00
1.019	150	10	Circular	7.800	F72	82.68	85.00	F110	81.88	84.50
1.020	150	150	Circular	32.101	F110	81.88	84.50	F111	81.66	85.48
1.021	150	150	Circular	22.556	F111	81.66	85.48	F134	81.51	86.03
1.022	150	150	Circular	17.873	F134	81.51	86.03	F135	81.39	86.20
1.023	150	150	Circular	16.979	F135	81.39	86.20	F136	81.28	86.00
1.024	150	150	Circular	45.178	F136	81.28	86.00	F204	80.98	85.67
1.025	225	150	Circular	17.581	F204	80.91	85.67	F205	80.79	85.50
2.000	100	80	Circular	20.041	F4	91.25	92.25	F5	91.00	92.60
2.001	150	150	Circular	11.268	F5	90.95	92.60	F6	90.87	92.65
3.000	100	40	Circular	11.374	F8	91.80	93.10	F9	91.52	93.05
3.001	100	37	Circular	6.109	F9	91.52	93.05	F10	91.35	92.87
4.000	100	80	Circular	64.676	F11	91.30	92.60	F12	90.49	92.25
4.001	150	7	Circular	4.228	F12	90.44	92.25	F13	89.81	92.23
5.000	100	14	Circular	16.402	F17	90.70	92.00	F18	89.50	90.80
5.001	100	17	Circular	25.757	F18	89.50	90.80	F19	88.00	89.00
6.000	100	80	Circular	27.343	F21	92.30	93.30	F22	91.96	93.30
6.001	100	80	Circular	23.045	F22	91.96	93.30	F23	91.67	93.00
6.002	150	20	Circular	5.351	F23	91.62	93.00	F24	91.35	92.70
6.003	150	15	Circular	17.206	F24	91.35	92.70	F25	90.20	91.58
6.004	150	20	Circular	16.843	F25	89.30	91.58	F28	88.47	90.45
6.005	150	14	Circular	13.852	F28	88.47	90.45	F29	87.50	89.53
6.006	150	17	Circular	33.968	F29	87.50	89.53	F30	85.52	87.36
6.007	150	150	Circular	34.197	F30	85.52	87.36	F31	85.29	87.00
6.008	150	150	Circular	13.397	F31	85.29	87.00	F32	85.20	86.85
6.009	150	150	Circular	14.599	F32	85.20	86.85	F33	85.11	86.75
7.000	100	24	Circular	28.373	F26	90.80	92.10	F27	89.60	90.90
7.001	150	6	Circular	6.670	F27	89.55	90.90	F28	88.47	90.45
8.000	100	80	Circular	18.863	F34	88.60	89.60	F35	88.36	89.55
8.001	100	57	Circular	32.349	F35	88.36	89.55	F36	87.80	89.10
8.002	150	63	Circular	8.600	F36	87.75	89.10	F39	87.61	88.73
8.003	150	150	Circular	24.991	F39	86.26	88.73	F40	86.10	87.92
8.004	150	150	Circular	8.866	F40	86.10	87.92	F41	86.04	87.54
8.005	150	16	Circular	33.541	F41	86.04	87.54	F44	83.94	86.73
8.006	150	150	Circular	37.430	F44	83.94	86.73	F45	83.69	87.00
9.000	100	80	Circular	27.605	F37	86.75	87.75	F38	86.41	88.85
9.001	150	150	Circular	13.588	F38	86.35	88.85	F39	86.26	88.73
10.000	100	80	Circular	44.786	F42	85.40	86.40	F43	84.84	86.75
10.001	150	150	Circular	5.687	F43	84.79	86.75	F44	84.75	86.73
11.000	100	27	Circular	7.929	F48	87.55	88.55	F50	87.26	88.40
11.001	100	40	Circular	9.425	F50	87.26	88.40	F51	87.02	88.45
11.002	100	80	Circular	19.230	F51	87.02	88.45	F52	86.78	88.70
11.003	150	150	Circular	7.542	F52	86.73	88.70	F53	86.68	88.70
11.004	150	150	Circular	19.451	F53	86.68	88.70	F57	86.55	88.66
11.005	150	150	Circular	7.206	F57	86.55	88.66	F58	86.51	88.50
11.006	150	59	Circular	32.588	F58	86.51	88.50	F59	85.95	87.30
11.007	150	21	Circular	28.469	F59	85.95	87.30	F60	84.61	86.75
12.000	100	80	Circular	3.194	F49	87.30	88.30	F50	87.26	88.40
13.000	100	80	Circular	18.343	F54	88.20	89.20	F55	87.97	89.20
13.001	100	80	Circular	19.949	F55	87.97	89.20	F56	87.72	88.95
13.002	150	78	Circular	5.307	F56	87.67	88.95	F57	87.60	88.66
14.000	100	80	Circular	8.177	F62	87.70	88.70	F63	87.60	88.85
14.001	100	80	Circular	18.134	F63	87.60	88.85	F64	87.37	88.85
14.002	150	150	Circular	12.840	F64	87.32	88.85	F65	87.23	88.85
14.003	150	150	Circular	16.833	F65	87.23	88.85	F66	87.12	88.50
14.004	150	33	Circular	17.278	F66	87.12	88.50	F67	86.60	87.95
14.005	150	30	Circular	15.111	F67	86.60	87.95	F68	86.10	87.45
14.006	150	35	Circular	17.345	F68	86.10	87.45	F69	85.60	86.65
14.007	150	20	Circular	15.862	F69	85.60	86.65	F70	84.80	85.85
14.008	150	9	Circular	17.166	F70	84.80	85.85	F71	82.81	85.45
15.000	100	80	Circular	8.597	F73	85.60	86.60	F74	85.49	86.75
15.001	150	150	Circular	43.573	F74	85.44	86.75	F75	85.15	87.60
15.002	150	150	Circular	11.486	F75	85.15	87.60	F76	85.08	87.55
15.003	150	150	Circular	21.505	F76	85.08	87.55	F77	84.93	87.20
15.004	150	60	Circular	19.832	F77	84.93	87.20	F80	84.60	86.85
15.005	150	150	Circular	22.370	F80	84.60	86.85	F82	84.45	86.45
15.006	150	150	Circular	12.472	F82	84.45	86.45	F83	84.37	86.50
15.007	150	150	Circular	57.781	F83	84.37	86.50	F84	83.98	86.00
15.008	150	60	Circular	32.046	F84	83.98	86.00	F91	83.45	84.80
15.009	150	150	Circular	26.095	F91	83.45	84.80	F97	83.28	85.95
15.010	150	150	Circular	16.866	F97	83.28	85.95	F98	83.16	86.00
15.011	150	150	Circular	29.740	F98	83.16	86.00	F99	82.97	86.50
15.012	150	150	Circular	19.545	F99	82.97	86.50	F100	82.84	86.50
15.013	150	150	Circular	31.972	F100	82.84	86.50	F101	82.62	85.55
15.014	150	150	Circular	9.115	F101	82.62	85.55	F107	82.56	85.13
15.015	150	150	Circular	8.475	F107	82.56	85.13	F108	82.50	84.70
15.016	150	150	Circular	55.417	F108	82.50	84.70	F109	82.14	84.80
15.017	150	150	Circular	38.765	F109	82.14	84.80	F110	81.88	84.50
16.000	100	23	Circular	31.813	F78	86.30	87.30	F79	84.92	86.85
16.001	150	37	Circular	9.640	F79	84.86	86.85	F80	84.60	86.85
17.000	100	33	Circular	18.139	F81	85.05	86.35	F82	84.50	86.45
18.000	100	80	Circular	22.031	F85	86.45	87.45	F86	86.17	87.55
18.001	100	80	Circular	18.152	F86	86.17	87.55	F87	85.95	87.05
18.002	100	30	Circular	13.430	F87	85.95	87.05	F88	85.50	86.50
18.003	100	32	Circular	25.317	F88	85.50	86.50	F89	84.70	85.70
18.004	100	50	Circular	15.113	F89	84.70	85.70	F90	84.40	85.40
18.005	100	15	Circular	13.324	F90	84.40	85.40	F91	83.50	84.80
19.000	100	79	Circular	19.681	F92	85.90	86.90	F93	85.65	86.65
19.001	100	38	Circular	30.595	F93	85.65	86.65	F94	84.85	85.85
19.002	100	80	Circular	7.462	F94	84.85	85.85	F95	84.76	86.15
19.003	150	95	Circular	7.663	F95	84.71	86.15	F97	84.63	85.95
20.000	100	20	Circular	23.774	F96	85.84	87.14	F97	84.63	85.95
21.000	100	28	Circular	25.317	F102	86.20	87.20	F103	85.30	86.60
21.001	150	19	Circular	6.374	F103	85.25	86.60	F106	84.92	86.26
21.002	150	23	Circular	23.347	F106	84.92	86.26	F107	83.91	85.13
22.000	150	33	Circular	13.154	F104	85.55	86.90	F105	85.15	86.50
22.001	150	22	Circular	5.125	F105	85.15	86.50	F106	84.92	86.26
23.000	100	60	Circular	56.555	F112	90.60	91.60	F113	89.65	90.65
23.001	100	30	Circular	16.545	F113	89.65	90.65	F114	89.10	90.40
23.002	150	29	Circular	4.523	F114	89.05	90.40	F119	88.89	90.24
23.003	150	79	Circular	9.889	F119	88.89	90.24	F120	88.77	90.12
23.004	150	150	Circular	12.973	F120	88.77	90.12	F121	88.68	90.10
23.005	150	74	Circular	30.844	F121	88.68	90.10	F124	88.27	89.70
23.006	150	91	Circular	15.013	F124	88.27	89.70	F125	88.10	89.45
23.007	150	133	Circular	13.273	F125	88.10	89.45	F126	88.00	89.05
23.008	150	15	Circular	16.725	F126	88.00	89.05	F127	86.85	88.20
23.009	150	30	Circular	4.244	F127	86.85	88.20	F131	86.71	88.06
23.010	150	20	Circular	23.867	F131	86.71	88.06	F132	85.52	86.87
23.011	150	30	Circular	27.128	F132	85.52	86.87	F133	84.61	85.96
23.012	150	16	Circular	28.056	F133	84.61	85.96	F134	82.86	86.03
24.000	100	80	Circular	23.300	F115	89.90	90.90	F116	89.61	90.65
24.001	100	31	Circular	15.841	F116	89.61	90.65	F118	89.11	90.45
24.002	150	64	Circular	10.438	F118	89.06	90.45	F119	88.89	90.24
25.000	100	80	Circular	7.555	F117	89.20	90.20	F118	89.11	90.45
26.000	100	42	Circular	22.911	F122	88.95	89.95	F123	88.40	89.70
26.001	150	150	Circular	12.751	F123	88.35	89.70	F124	88.27	89.70
27.000	100	67	Circular	20.205	F128	88.10	89.40	F129	87.80	88.80
27.001	100	18	Circular	9.125	F129	87.80	88.80	F130	87.30	88.60
27.002	150	16	Circular	8.791	F130	87.25	88.60	F131	86.71	88.06
28.000	100	20	Circular	19.947	F137	89.40	90.40	F138	88.40	89.40
28.001	100	80	Circular	25.049	F138	88.40	89.40	F139	88.09	89.10
28.002	100	80	Circular	10.921	F139	88.09	89.10	F140	87.95	89.25
28.003	100	80	Circular	11.888	F140	87.95	89.25	F141	87.80	89.45
28.004	150	150	Circular	18.032	F141	87.75	89.45	F149	87.63	89.17
28.005	150	40	Circular	23.704	F149	87.63	89.17	F150	87.04	88.93
28.006	150	66	Circular	30.852	F150	87.04	88.93	F158	86.56	88.59
28.007	150	59	Circular	18.803	F158	86.56	88.59	F164	86.25	88.35
28.008	150	76	Circular	25.653	F164	86.25	88.35	F165	85.91	88.03
28.009	150	150	Circular	8.616	F165	85.91	88.03	F166	85.85	88.15
28.010	150	91	Circular	23.189	F166	85.85	88.15	F169	85.60	87.85
28.011	150	45	Circular	18.590	F169	85.60	87.85	F176	85.19	87.60
28.012	150	150	Circular	25.786	F176	85.19	87.60	F177	85.02	87.00
28.013	150	86	Circular	64.011	F177	85.02	87.00	F178	84.27	87.75
28.014	150	150	Circular	18.190	F178	84.27	87.75	F185	84.15	87.78
28.015	150	150	Circular	13.723	F185	84.15	87.78	F186	84.06	87.10
28.016	150	150	Circular	19.517	F186	84.06	87.10	F187	83.93	86.50
28.017	150	150	Circular	17.928	F187	83.93	86.50	F188	83.81	86.71
28.018	150	150	Circular	17.752	F188	83.81	86.71	F189	83.69	87.15
28.019	150	150	Circular	20.422	F189	83.69	87.15	F190	83.56	87.65
28.020	150	150	Circular	62.933	F190	83.56	87.65	F191	83.14	86.11
28.021	150	150	Circular	29.006	F191	83.14	86.11	F192	82.94	86.10
28.022	150	150	Circular	17.702	F192	82.94	86.10	F193	82.82	86.25
28.023	150	150	Circular	19.081	F193	82.82	86.25	F194	82.70	86.45
28.024	150	150	Circular	41.229	F194	82.70	86.45	F195	82.42	86.45
28.025	150	150	Circular	13.400	F195	82.42	86.45	F202	82.33	86.45
28.026	150	150	Circular	27.758	F202	82.33	86.45	F203	82.15	86.27
28.027	150	27	Circular	31.548	F203	82.15	86.27	F204	80.98	85.67
29.000	100	13	Circular	28.541	F142	90.85	91.85	F143	88.60	90.60
29.001	150	150	Circular	15.522	F143	88.55	90.60	F144	88.45	90.40
29.002	150	39	Circular	15.379	F144	88.45	90.40	F145	88.05	89.40
29.003	150	18	Circular	7.454	F145	88.05	89.40	F149	87.63	89.17
30.000	100	26	Circular	20.599	F146	90.35	91.35	F147	89.55	90.55
30.001	100	37	Circular	56.931	F147	89.55	90.55	F148	88.00	89.30
30.002	150	48	Circular	15.363	F148	87.95	89.30	F149	87.63	89.17
31.000	100	80	Circular	13.148	F151	87.80	88.80	F152	87.64	88.80
31.001	100	80	Circular	5.922	F152	87.64	88.80	F153	87.56	89.05
31.002	150	24	Circular	11.229	F153	87.51	89.05	F154	87.04	89.15
31.003	150	150	Circular	14.484	F154	87.04	89.15	F155	86.94	89.45
31.004	150	150	Circular	5.828	F155	86.94	89.45	F156	86.90	89.40
31.005	150	150	Circular	17.711	F156	86.90	89.40	F157	86.79	89.26
31.006	150	150	Circular	33.141	F157	86.79	89.26	F158	86.57	88.59
32.000	100	34	Circular	30.756	F159	89.90	90.90	F160	89.00	90.00
32.001	100	23	Circular	18.248	F160	89.00	90.00	F161	88.20	89.50
32.002	150	13	Circular	13.282	F161	88.15	89.50	F162	87.09	89.03
32.003	150	80	Circular	25.226	F162	87.09	89.03	F163	86.78	88.72
32.004	150	63	Circular	33.299	F163	86.78	88.72	F164	86.25	88.35
33.000	100	44	Circular	11.611	F167	86.70	88.00	F168	86.44	87.85
33.001	150	150	Circular	13.375	F168	85.69	87.85	F169	85.60	87.85
34.000	100	76	Circular	18.932	F170	86.85	87.85	F171	86.60	87.60
34.001	100	55	Circular	21.930	F171	86.60	87.60	F172	86.20	87.20
34.002	100	80	Circular	52.577	F172	86.20	87.20	F173	85.54	87.50
34.003	150	150	Circular	5.166	F173	85.49	87.50	F174	85.46	87.38
34.004	150	27	Circular	5.685	F174	85.46	87.38	F175	85.25	87.46
34.005	150	150	Circular	8.821	F175	85.25	87.46	F176	85.19	87.60
35.000	100	62	Circular	6.207	F179	88.90	89.90	F180	88.80	89.80
35.001	100	15	Circular	10.821	F180	88.80	89.80	F183	88.10	89.40
35.002	150	17	Circular	29.841	F183	88.05	89.40	F184	86.25	87.90
35.003	150	6	Circular	4.217	F184	86.25	87.90	F185	85.50	87.78
36.000	100	50	Circular	22.310	F181	88.65	89.95	F182	88.20	89.50
36.001	150	116	Circular	11.617	F182	88.15	89.50	F183	88.05	89.40
37.000	100	79	Circular	15.823	F196	86.60	87.60	F197	86.40	87.40
37.001	100	31	Circular	18.894	F197	86.40	87.40	F198	85.80	87.10
37.002	150	26	Circular	6.008	F198	85.75	87.10	F201	85.52	86.87
37.003	150	13	Circular	24.492	F201	85.52	86.87	F202	83.68	86.45
38.000	100	67	Circular	26.904	F199	86.20	87.50	F200	85.80	87.10
38.001	150	37	Circular	8.633	F200	85.75	87.10	F201	85.52	86.87

Notes

1. Setting out shall be undertaken using only the information given. Distances should not be scaled from this drawing.

2. All adoptable drainage shall be constructed in accordance with 'Sewers for Adoption' 7th Edition, Welsh Ministers Standards and Welsh Water Details and Guidelines.

3. The minimum gravity pipe diameter under adoptable highways shall be 150mm

4. It is the responsibility of the Contractor to verify all information given with regards to existing services and drainage connections etc. prior to commencing the works. The rates shall include for hand dig around services where necessary. The Contractor shall adhere to the CDM Regulations at all times

8. All materials to bear the relevant B.S. Kitemark and comply fully with the specifications. All concrete & concrete products must use Sulphate resistant cement to withstand Class 3 condition (unless the site investigation report proves that sulphate attack from soils and groundwater will not occur).

9. All opening notices etc. as required under Highways Acts etc. are to be obtained prior to commencement of works. All works are to be inspected by L.A., NHBC or the Network Operator as applicable.

10. Where structured wall UPVC pipes (or similar approved) are used in adoptable drainage they shall be handled and laid in accordance with the manufacturers instructions and will be subject to post installation deformation testing prior to adoption.
A Class S Bed and Surround must be used for structured wall pipes

10. Trench backfill in highways to within 1m of highway shall, as directed by the Highway Authority be a suitable granular material all in accordance with Sewers for Adoption.

12. Slab levels shall not be varied without reference to the Engineer for guidance.

13. Pipes have not been designed to accommodate construction traffic loading. The contractor is responsible for providing adequate protection to the pipes during construction.

14. All manhole covers and frames shall comply with BS EN124. All adoptable manholes and chambers shall comply with Sewers for Adoption 7th Edition. Covers in roads to be grade D400 and be 150mm deep. Manhole covers in car parking areas and drives to be grade B125 and covers in landscaping areas to be grade A15. All to be sized in accordance with Building Regulations Part H, Tables 11 & 12. "In-fill" type covers should not be used. Where a cover is located in an area of block paving, the bottom of the frame should be 150mm deep.

STRATEGY

Rev.	Date	Revision	By	Appd.
D	19.06.26	Foul Water Drainage revised	PW	AJ
C	03.06.26	Updated to suit revised layout	PW	AJ
B	23.04.26	Foul drainage added	PW	AJ
A	21.04.26	Updated to suit revised layout	PW	AJ

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Client
Castle Green

Project
STANSTY ROAD, WREXHAM

Title
Drainage Strategy
Sheet 3 of 3

DRAWING NUMBER	SCALE at A1	1:500	
8562 / SK02-3	DATE	21.07.25	REVISION
	DRAWN	PW	D
	CHECKED	AJ	

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