FOUL SEWERAGE DESIGN

Design Criteria for FW-NET1.FWS

Pipe Sizes STANDARD Manhole Sizes STANDARD

Industrial Flow (l/s/ha)	0.00	Add Flow / Climate Change (%)	10
Industrial Peak Flow Factor	0.00	Minimum Backdrop Height (m)	0.000
Flow Per Person (l/per/day)	225.00	Maximum Backdrop Height (m)	0.000
Persons per House	3.00	Min Design Depth for Optimisation (m)	1.200
Domestic (l/s/ha)	0.00	Min Vel for Auto Design only (m/s)	0.75
Domestic Peak Flow Factor	6.00	Min Slope for Optimisation (1:X)	500

Designed with Level Soffits

Network Design Table for FW-NET1.FWS

PN	Length (m)	Fall (m)	Slope (1:X)	Area (ha)	Houses	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Auto Design
1.000	32.300	0.404	80.0	0.000	3	0.0	1.500	o	150	
1.001	61.895	0.774	80.0	0.000	5	0.0	1.500	o	150	
1.002	21.356	0.142	150.0	0.000	6	0.0	1.500	o	150	
1.003	10.392	0.069	150.0	0.000	0	0.0	1.500	o	150	
1.004	11.026	0.074	150.0	0.000	0	0.0	1.500	o	150	
2.000	46.554	0.582	80.0	0.000	2	0.0	1.500	o	150	
2.001	46.339	0.309	150.0	0.000	10	0.0	1.500	o	150	
2.002	23.502	0.157	150.0	0.000	2	0.0	1.500	o	150	
2.003	18.473	0.123	150.0	0.000	3	0.0	1.500	o	150	
2.004	16.071	0.592	27.1	0.000	0	0.0	1.500	o	150	
1.005	7.222	0.048	150.0	0.000	2	0.0	1.500	o	150	
3.000	32.304	0.404	80.0	0.000	9	0.0	1.500	o	150	
3.001	13.352	0.089	150.0	0.000	6	0.0	1.500	o	150	

Network Results Table

PN	US/IL (m)	Σ Area (ha)	Σ Base Flow (l/s)	Σ Hse	Add Flow (l/s)	P.Dep (mm)	P.Vel (m/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
1.000	46.300	0.000	0.0	3	0.0	10	0.29	0.98	17.3	0.2
1.001	45.896	0.000	0.0	8	0.0	16	0.40	0.98	17.3	0.4
1.002	45.123	0.000	0.0	14	0.1	25	0.38	0.71	12.6	0.7
1.003	44.980	0.000	0.0	14	0.1	25	0.38	0.71	12.6	0.7
1.004	44.911	0.000	0.0	14	0.1	25	0.38	0.71	12.6	0.7
2.000	46.600	0.000	0.0	2	0.0	9	0.25	0.98	17.3	0.1
2.001	46.018	0.000	0.0	12	0.1	23	0.36	0.71	12.6	0.6
2.002	45.709	0.000	0.0	14	0.1	25	0.38	0.71	12.6	0.7
2.003	45.552	0.000	0.0	17	0.1	27	0.40	0.71	12.6	0.9
2.004	45.429	0.000	0.0	17	0.1	18	0.73	1.69	29.8	0.9
1.005	44.837	0.000	0.0	33	0.2	37	0.50	0.71	12.6	1.7
3.000	46.000	0.000	0.0	9	0.0	17	0.41	0.98	17.3	0.5
3.001	45.596	0.000	0.0	15	0.1	25	0.39	0.71	12.6	0.8

Network Design Table for FW-NET1.FWS

PN	Length (m)	Fall (m)	Slope (1:X)	Area (ha)	Houses	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Auto Design
3.002	4.089	0.718	5.7	0.000	0	0.0	1.500	o	150	
1.006	3.675	0.025	150.0	0.000	5	0.0	1.500	o	150	

Network Results Table

PN	US/IL (m)	Σ Area (ha)	Σ Base Flow (l/s)	Σ Hse	Add Flow (l/s)	P.Dep (mm)	P.Vel (m/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
3.002	45.507	0.000	0.0	15	0.1	12	1.20	3.69	65.2	0.8
1.006	44.789	0.000	0.0	53	0.2	48	0.57	0.71	12.6	2.7

Manhole Schedules for FW-NET1.FWS

MH Name	MH CL (m)	MH Depth (m)	MH Connection	MH Diam.,L*W (mm)	Pipe Out PN	Pipe Out Invert Level (m)	Pipe Out Diameter (mm)	Pipes In PN	Pipes In Invert Level (m)	Pipes In Diameter (mm)	Backdrop (mm)
1	47.710	1.410	Open Manhole	1200	1.000	46.300	150				
3	47.761	1.865	Open Manhole	1200	1.001	45.896	150	1.000	45.896	150	
5	47.952	2.829	Open Manhole	1200	1.002	45.123	150	1.001	45.123	150	
7	47.758	2.778	Open Manhole	1200	1.003	44.980	150	1.002	44.980	150	
9	47.640	2.729	Open Manhole	1200	1.004	44.911	150	1.003	44.911	150	
21	48.006	1.406	Open Manhole	1200	2.000	46.600	150				
23	47.970	1.952	Open Manhole	1200	2.001	46.018	150	2.000	46.018	150	
25	47.922	2.213	Open Manhole	1200	2.002	45.709	150	2.001	45.709	150	
27	47.674	2.122	Open Manhole	1200	2.003	45.552	150	2.002	45.552	150	
29	47.534	2.105	Open Manhole	1200	2.004	45.429	150	2.003	45.429	150	
11	47.519	2.682	Open Manhole	1200	1.005	44.837	150	1.004	44.837	150	
								2.004	44.837	150	
31	47.743	1.743	Open Manhole	1200	3.000	46.000	150				
33	47.356	1.760	Open Manhole	1200	3.001	45.596	150	3.000	45.596	150	
35	47.071	1.564	Open Manhole	1200	3.002	45.507	150	3.001	45.507	150	
13	47.069	2.280	Open Manhole	1200	1.006	44.789	150	1.005	44.789	150	
								3.002	44.789	150	
15	47.080	2.315	Open Manhole	3000		OUTFALL		1.006	44.765	150	

Free Flowing Outfall Details for FW-NET1.FWS

Outfall Pipe Number	Outfall Name	C. Level (m)	I. Level (m)	Min I. Level (m)	D,L (mm)	W (mm)
1.006	15	47.080	44.765	46.337	3000	0