

Coopers		Page 0
Park House Sandpiper Court Chester CH4 9QU		
Date 01/01/0001 File 7387 FW01.MDX	Designed by lworthington Checked by	
Micro Drainage Network 2018.1.1		

FOUL SEWERAGE DESIGN

Design Criteria for 7387 FW01.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)	0.200
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)	135

Designed with Level Soffits

Network Design Table for 7387 FW01.FWS

PN	Length (m)	Fall (m)	Slope (1:X)	Area (ha)	Houses	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
1.000	13.639	0.170	80.0	0.000	7	0.0	1.500	o	150	Pipe/Conduit	
2.000	13.203	0.165	80.0	0.000	6	0.0	1.500	o	150	Pipe/Conduit	
1.001	21.673	0.161	135.0	0.000	2	0.0	1.500	o	150	Pipe/Conduit	
1.002	8.640	0.064	135.0	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
1.003	23.444	0.174	135.0	0.000	0	0.0	1.500	o	150	Pipe/Conduit	
1.004	14.008	0.104	135.0	0.000	4	0.0	1.500	o	150	Pipe/Conduit	
1.005	4.768	0.035	135.0	0.000	3	0.0	1.500	o	150	Pipe/Conduit	

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	84.045	0.000	0.0	7	0.0	15	0.38	0.98	17.3	0.4
2.000	84.045	0.000	0.0	6	0.0	14	0.36	0.98	17.3	0.3
1.001	83.875	0.000	0.0	15	0.1	25	0.40	0.75	13.3	0.8
1.002	83.714	0.000	0.0	15	0.1	25	0.40	0.75	13.3	0.8
1.003	83.650	0.000	0.0	15	0.1	25	0.40	0.75	13.3	0.8
1.004	83.476	0.000	0.0	19	0.1	28	0.43	0.75	13.3	1.0
1.005	83.373	0.000	0.0	22	0.1	30	0.45	0.75	13.3	1.1

Coopers		Page 1
Park House Sandpiper Court Chester CH4 9QU		
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Manhole Schedules for 7387 FW01.FWS

MH Name	MH CL (m)	MH Depth (m)	MH Connection	MH Diam., L*W (mm)	PN	Pipe Out Invert Level (m)	Diameter (mm)	PN	Pipes In Invert Level (m)	Diameter (mm)	Backdrop (mm)
1	85.477	1.432	Open Manhole	1200	1.000	84.045	150				
2	85.444	1.399	Open Manhole	1200	2.000	84.045	150				
3	85.625	1.750	Open Manhole	1200	1.001	83.875	150	1.000	83.875	150	5
								2.000	83.880	150	
4	85.291	1.577	Open Manhole	1200	1.002	83.714	150	1.001	83.714	150	
5	85.186	1.536	Open Manhole	1200	1.003	83.650	150	1.002	83.650	150	
6	85.315	1.839	Open Manhole	1200	1.004	83.476	150	1.003	83.476	150	
7	85.248	1.875	Open Manhole	1200	1.005	83.373	150	1.004	83.373	150	
8	85.344	2.007	Open Manhole	0		OUTFALL		1.005	83.337	150	

Coopers		Page 2
Park House Sandpiper Court Chester CH4 9QU		
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PIPELINE SCHEDULES for 7387 FW01.FWS

Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
1.000	o	150	1	85.477	84.045	1.282	Open Manhole	1200
2.000	o	150	2	85.444	84.045	1.249	Open Manhole	1200
1.001	o	150	3	85.625	83.875	1.600	Open Manhole	1200
1.002	o	150	4	85.291	83.714	1.427	Open Manhole	1200
1.003	o	150	5	85.186	83.650	1.386	Open Manhole	1200
1.004	o	150	6	85.315	83.476	1.689	Open Manhole	1200
1.005	o	150	7	85.248	83.373	1.725	Open Manhole	1200

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
1.000	13.639	80.0	3	85.625	83.875	1.600	Open Manhole	1200
2.000	13.203	80.0	3	85.625	83.880	1.595	Open Manhole	1200
1.001	21.673	135.0	4	85.291	83.714	1.427	Open Manhole	1200
1.002	8.640	135.0	5	85.186	83.650	1.386	Open Manhole	1200
1.003	23.444	135.0	6	85.315	83.476	1.689	Open Manhole	1200
1.004	14.008	135.0	7	85.248	83.373	1.725	Open Manhole	1200
1.005	4.768	135.0	8	85.344	83.337	1.857	Open Manhole	0

Free Flowing Outfall Details for 7387 FW01.FWS

Outfall Pipe Number	Outfall Name	C. Level (m)	I. Level (m)	Min I. Level (m)	D,L (mm)	W (mm)
1.005		8	85.344	83.337	0.000	0