

Old Marsh Farm Barns
Welsh Road Sealand
Flintshire CH5 2LY

Waddow View, Clitheroe
SW Network 2
10% Urban Creep



Date 16/12/2019 15:51
File DWH155 Networks with 10% Urban ...

Designed by JC
Checked by GW

Micro Drainage Network 2018.1

100 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Surface Network 2

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 10.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coefficient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 19.000 Cv (Summer) 0.750
Region England and Wales Ratio R 0.280 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status OFF
DVD Status OFF
Inertia Status OFF

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 100
Climate Change (%) 40

PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surcharge	First (Y) Flood	First (Z) Overflow	Overflow Act.	Water Level (m)	Surcharged Depth (m)
1.000	S2.1	15 Winter	100	+40%	100/15 Summer				74.409	1.152
1.001	S2.2	15 Winter	100	+40%	100/15 Summer				74.281	1.209
1.002	S2.3	15 Winter	100	+40%	100/15 Summer				73.953	1.080
1.003	S2.4	15 Winter	100	+40%	100/15 Summer				73.332	0.576
2.000	S2.5	15 Winter	100	+40%	100/15 Summer				74.382	1.104
2.001	S2.6	15 Winter	100	+40%	100/15 Summer				74.261	1.180
2.002	S2.7	15 Winter	100	+40%	100/15 Summer				74.017	1.089
1.004	S2.8	15 Winter	100	+40%	100/15 Summer				72.915	0.333
1.005	S2.9	15 Winter	100	+40%	100/15 Summer				72.888	0.329
1.006	S2.10	15 Winter	100	+40%	100/15 Summer				72.852	0.324
1.007	S2.11	15 Winter	100	+40%	100/15 Summer				72.798	0.329
3.000	S2.12	15 Winter	100	+40%	100/15 Summer				73.929	0.965
3.001	S2.13	15 Winter	100	+40%	100/15 Summer				73.806	0.961
3.002	S2.14	15 Winter	100	+40%	100/15 Summer				73.399	0.660
3.003	S2.15	15 Winter	100	+40%	100/15 Summer				73.208	0.606
1.008	S2.16	15 Winter	100	+40%	100/15 Summer				72.751	0.322
1.009	S2.17	15 Winter	100	+40%	100/15 Summer				72.597	0.229
4.000	HD1	15 Winter	100	+40%	100/15 Summer				72.436	0.070
1.010	S2.18	15 Winter	100	+40%	100/15 Summer				72.438	0.138
1.011	S2.19 Outfall	15 Winter	100	+40%	100/15 Summer				72.076	0.110
1.012	S2.21 Outfall	1440 Winter	100	+40%	100/30 Summer				72.026	0.558
1.013	S2.22 HB	1440 Winter	100	+40%	100/15 Summer				72.021	0.693

PN	US/MH Name	Flooded Volume (m³)	Flow / Cap. (l/s)	Overflow (l/s)	Pipe Flow (l/s)	Status	Level Exceeded
1.000	S2.1	0.000	0.82		32.2	SURCHARGED	
1.001	S2.2	0.000	1.29		51.3	SURCHARGED	
1.002	S2.3	0.000	1.90		74.8	SURCHARGED	
1.003	S2.4	0.000	1.61		130.7	SURCHARGED	

Old Marsh Farm Barns
Welsh Road Sealand
Flintshire CH5 2LY

Waddow View, Clitheroe
SW Network 2
10% Urban Creep



Date 16/12/2019 15:51

Designed by JC

File DWH155 Networks with 10% Urban ...

Checked by GW

Micro Drainage

Network 2018.1

100 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Surface
Network 2

PN	US/MH Name	Flooded		Pipe		Level Exceeded
		Volume (m ³)	Flow / Cap.	Overflow (l/s)	Flow (l/s)	
2.000	S2.5	0.000	0.77		30.5	SURCHARGED
2.001	S2.6	0.000	1.26		49.0	FLOOD RISK
2.002	S2.7	0.000	1.77		72.0	FLOOD RISK
1.004	S2.8	0.000	1.21		227.5	SURCHARGED
1.005	S2.9	0.000	1.16		233.5	SURCHARGED
1.006	S2.10	0.000	0.97		259.2	SURCHARGED
1.007	S2.11	0.000	1.16		255.7	SURCHARGED
3.000	S2.12	0.000	1.05		39.8	FLOOD RISK
3.001	S2.13	0.000	1.96		73.4	FLOOD RISK
3.002	S2.14	0.000	1.18		93.8	SURCHARGED
3.003	S2.15	0.000	1.68		136.1	SURCHARGED
1.008	S2.16	0.000	1.45		390.7	SURCHARGED
1.009	S2.17	0.000	1.44		396.7	SURCHARGED
4.000	HD1	0.000	0.05		1.9	SURCHARGED
1.010	S2.18	0.000	2.12		439.7	SURCHARGED
1.011	S2.19 Outfall	0.000	1.45		435.4	SURCHARGED
1.012	S2.21 Outfall	0.000	0.14		5.1	FLOOD RISK
1.013	S2.22 HB	0.000	0.38		5.0	FLOOD RISK