

Old Marsh Farm Barns  
Welsh Road Sealand  
Flintshire CH5 2LY

Waddow View, Clitheroe  
SW Network 5  
10% Urban Creep



Date 16/12/2019 16:01  
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 5

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 10.000  
Hot Start (mins) 0 MADD Factor \* 10m<sup>3</sup>/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 2 Number of Storage Structures 0 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	S5.1	180 Winter	100	+40%	100/30 Winter	100/180 Winter			78.545	2.243
2.000	S5.2	180 Winter	100	+40%	100/30 Winter				78.557	2.271
1.001	S5.3 HB	180 Winter	100	+40%	100/15 Summer				78.556	3.254
1.002	S5.4	480 Winter	100	+40%	100/360 Winter				74.298	0.213
3.000	S5.5	480 Winter	100	+40%	100/360 Winter				74.298	0.214
1.003	S5.6 HB	480 Winter	100	+40%	100/15 Summer				74.298	1.529

PN	US/MH Name	Flooded		Pipe		Level Exceeded
		Volume (m <sup>3</sup> )	Flow / Overflow Cap. (l/s)	Flow (l/s)	Status	
1.000	S5.1	1.280	0.01	16.1	FLOOD	2
2.000	S5.2	0.000	0.02	18.3	SURCHARGED	
1.001	S5.3 HB	0.000	0.59	7.6	FLOOD RISK	
1.002	S5.4	0.000	0.01	12.2	SURCHARGED	
3.000	S5.5	0.000	0.00	6.3	SURCHARGED	
1.003	S5.6 HB	0.000	0.49	6.6	SURCHARGED	