

Amey Group Plc		Page 1
South East Hub, Explorer II Fleming Way, Crawley West Sussex, RH10 9GT		
Date 04/08/2022 14:03 File Clayton Bridge 50 year ...	Designed by 139254 Checked by	
Innovyze	Network 2020.1.3	

STORM SEWER DESIGN by the Modified Rational Method

Design Criteria for Storm

Pipe Sizes M8 CJV Manhole Sizes STANDARD

FSR Rainfall Model - England and Wales

Return Period (years)	50	PIMP (%)	50
M5-60 (mm)	18.500	Add Flow / Climate Change (%)	0
Ratio R	0.315	Minimum Backdrop Height (m)	0.200
Maximum Rainfall (mm/hr)	50	Maximum Backdrop Height (m)	1.500
Maximum Time of Concentration (mins)	30	Min Design Depth for Optimisation (m)	0.600
Foul Sewage (l/s/ha)	0.000	Min Vel for Auto Design only (m/s)	0.80
Volumetric Runoff Coeff.	0.750	Min Slope for Optimisation (1:X)	500

Designed with Level Soffits

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Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Overflow Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.001	S2	71.357	-0.098	0.000	0.14		6.6	OK
S1.002	S3	71.353	0.198	0.000	0.20		9.9	SURCHARGED
S1.003	S4	71.346	0.491	0.000	0.31		13.4	SURCHARGED
S1.004	S5	71.338	0.723	0.000	0.51		17.4	SURCHARGED
S1.005	S6	71.327	0.862	0.000	0.35		21.4	SURCHARGED
S1.006	S7	71.320	0.968	0.000	0.41		24.7	SURCHARGED
S2.000	S8	71.329	0.279	0.000	0.33		5.7	SURCHARGED
S2.001	S9	71.321	0.573	0.000	0.41		6.8	SURCHARGED
S1.007	S10	71.314	1.034	0.000	0.13		31.4	SURCHARGED
S1.008	S11	71.309	1.958	0.000	0.64		29.4	SURCHARGED
S1.009	S12	71.300	2.102	0.360	0.03	148	6.8	FLOOD
S1.010	S13	60.728	-0.148	0.000	0.25		6.8	OK

PN	US/MH Name	Level Exceeded
S1.000	S1	
S1.001	S2	
S1.002	S3	
S1.003	S4	
S1.004	S5	
S1.005	S6	
S1.006	S7	
S2.000	S8	
S2.001	S9	
S1.007	S10	
S1.008	S11	
S1.009	S12	1
S1.010	S13	