Sheringham Recycling Centre: Surface Water Drainage	Date: 14/04/2023			
1 in 2, 30 (+45% CC) and 100 (+45% CC) RP	Designed by:	Checked by:	Approved By:	
	RO	SL	ТВ	
Report Details:	Stantec UK Ltd:			
Type: Inflows	3rd Floor, Station Road, Cambridge			
Storm Phase: Phase	CB1 2JH	-		



Catchment Area

Area (ha) 0.027

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	5
Percentage Impervious (%)	85



Catchment Area (2)

Area (ha) 0.021

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	5
Percentage Impervious (%)	85

Created in InfoDrainage 2022.1

Type : Catchment Area

Sheringham Recycling Centre: Surface Water Drainage	Date: 14/04/2023			
1 in 2, 30 (+45% CC) and 100 (+45% CC) RP	Designed by:	Checked by:	Approved By:	
	RO	SL	ТВ	
Report Details:	Stantec UK Ltd:			
Type: Inflows	3rd Floor, Station Road, Cambridge			
Storm Phase: Phase	CB1 2JH	-		



Catchment Area (3)

Area (ha) 0.017

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	5
Percentage Impervious (%)	85



Catchment Area (4)

Area (ha) 0.025

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	5
Percentage Impervious (%)	85

Created in InfoDrainage 2022.1

Type : Catchment Area

Sheringham Recycling Centre: Surface Water Drainage	Date: 14/04/2023			
1 in 2, 30 (+45% CC) and 100 (+45% CC) RP	Designed by:	Checked by:	Approved By:	
	RO	SL	ТВ	
Report Details:	Stantec UK Ltd:			
Type: Inflows	3rd Floor, Station Road, Cambridge			
Storm Phase: Phase	CB1 2JH	-		



Catchment Area (5)

Area (ha) 0.062

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	5
Percentage Impervious (%)	85



Catchment Area (6)

Area (ha) 0.009

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	5
Percentage Impervious (%)	85

Created in InfoDrainage 2022.1

Type : Catchment Area

Sheringham Recycling Centre: Surface Water Drainage	Date: 14/04/2023			
1 in 2, 30 (+45% CC) and 100 (+45% CC) RP	Designed by:	Checked by:	Approved By:	
	RO	SL	ТВ	
Report Details:	Stantec UK Ltd:			
Type: Inflows	3rd Floor, Station Road, Cambridge			
Storm Phase: Phase	CB1 2JH	-		



Catchment Area (7)

Area (ha) 0.007

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	5
Percentage Impervious (%)	85



Catchment Area (8)

Area (ha) 0.065

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	5
Percentage Impervious (%)	85

Created in InfoDrainage 2022.1

Type : Catchment Area

Sheringham Recycling Centre: Surface Water Drainage	Date: 14/04/2023			
1 in 2, 30 (+45% CC) and 100 (+45% CC) RP	Designed by:	Checked by:	Approved By:	
	RO	SL	ТВ	
Report Details:	Stantec UK Ltd:			
Type: Inflows	3rd Floor, Station Road, Ca	ambridge		
Storm Phase: Phase	CB1 2JH	-		



Catchment Area (1)

Area (ha) 0.048

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	5
Percentage Impervious (%)	85



Catchment Area (9)

Area (ha) 0.035

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	5
Percentage Impervious (%)	85

Created in InfoDrainage 2022.1

Type : Catchment Area

Sheringham Recycling Centre: Surface Water Drainage	Date: 14/04/2023			
1 in 2, 30 (+45% CC) and 100 (+45% CC) RP	Designed by:	Checked by:	Approved By:	
	RO	SL	ТВ	
Report Details:	Stantec UK Ltd:			
Type: Junctions	3rd Floor, Station F	Road, Cambridge		
Storm Phase: Phase	CB1 2JH			

Name	Junction Type	Easting (m)	Northing (m)	Cover Level (m)	Depth (m)	Invert Level (m)	Chamber Shape	Diameter (m)	Manhole Locked	Access Required	Easting (m)	Northing (m)
S1	Manhole	616262.891	341024.746	90.218	1.168	89.050	Circular	1.200				
S2	Manhole	616279.735	341017.896	89.908	1.088	88.820	Circular	1.200				
S3	Manhole	616288.890	341021.904	89.679	1.134	88.545	Circular	1.200				
S4	Manhole	616309.916	341012.954	89.663	1.209	88.454	Circular	1.200				
S5	Manhole	616312.130	341012.081	89.507	1.065	88.442	Circular	1.200				

Sheringham Recycling Centre:	Date:			
Surface Water Drainage	14/04/2023			
1 in 2, 30 (+45% CC) and 100 (+45% CC) RP	Designed by:	Checked by:	Approved By:	
	RO	SL	ТВ	
Report Details:	Stantec UK Ltd:			
Type: Stormwater Controls	3rd Floor, Station Road, Car	mbridge		
Storm Phase: Phase	CB1 2JH			





Bioretention Type : Bioretention

Ponding Area

Exceedence Level (m)	88.900
Depth (m)	0.900
Base Level (m)	88.000
Top Area (m²)	239.49
Side Slope (1:x)	2.50
Base Area (m²)	53.45
Freeboard (mm)	0
Porosity (%)	100
Length (m)	41.342
Long. Slope (1:x)	0.00
Filtration Rate (m/hr)	0.3
Friction Scheme	Manning's n
n	0.045
Total Volume (m³)	147.861

Filter Area

Base Level (m) 87.000

Filtration Layers

Use	Name	Filtration Layer Depth (mm)	Porosity (%)	Conductivity (m/hr)	Soil Type
	Soil	0	0	0.0	Soil Type
	Storage	1000	30	0.3	

Sheringham Recycling Centre: Surface Water Drainage	Date: 14/04/2023			
1 in 2, 30 (+45% CC) and 100 (+45% CC) RP	Designed by:	Checked by:	Approved By:	
	RO	SL	тв	
Report Details:	Stantec UK Ltd:		•	
Type: Stormwater Controls	3rd Floor, Station R	load, Cambridge		
Storm Phase: Phase	CB1 2JH			
Advanced				
Safety Factor	1.5			
Ponding Area				
Side Infiltration Rate (m/hr)	0.139			
Base Perimeter (m)	85.270			
Top Perimeter (m)	94.270			
Filter Area				
Base Infiltration Rate (m/hr)	0.139			
Side Infiltration Rate (m/hr)	0.139			

Sheringham Recycling Centre: Surface Water Drainage	Date: 14/04/2023			
1 in 2, 30 (+45% CC) and 100 (+45% CC) RP	Designed by:	Checked by:	Approved By:	
	RO	SL	ТВ	
Report Details:	Stantec UK Ltd:			
Type: Stormwater Controls	3rd Floor, Station Road, Car	mbridge		
Storm Phase: Phase	CB1 2JH	_		





Swale Type : Swale

Swale	
Exceedence Level (m)	
Depth (m)	

89.135 0.400 Base Level (m) 88.735 Top Width (m) 2.500 Side Slope (1:x) 2.50 0.500 Base Width (m) Freeboard (mm) Length (m)
Long. Slope (1:x)
Filtration Rate (m/hr) 79.493 300.00 0.0 Friction Scheme Manning's n 0.045 Total Volume (m³) 47.696

Advanced	

Safety Factor 1.5

Swale	
Base Infiltration Rate (m/hr)	

Base Infiltration Rate (m/hr)	0.139
Side Infiltration Rate (m/hr)	0.139
Porosity (%)	100

Sheringham Recycling Centre:	Date:				
Surface Water Drainage	14/04/2023	14/04/2023			
1 in 2, 30 (+45% CC) and 100 (+45% CC) RP	Designed by:	Checked by:	Approved By:		
	RO	SL	ТВ		
Report Details:	Stantec UK Ltd:				
Type: Connections	3rd Floor, Station F	Road, Cambridge			
Storm Phase: Phase	CB1 2JH	CB1 2JH			



Name	Length (m)	Connection Type	Slope (1:x)	Manning's n	Colebrook- White Roughness (mm)	Diameter / Base Width (mm)	Upstream Cover Level (m)	Upstream Invert Level (m)	Downstream Cover Level (m)	Downstream Invert Level (m)
S1.000	18.184	Pipe	80.105		0.6	150	90.218	89.050	89.908	88.823
S1.001	9.993	Pipe	79.947		0.6	150	89.908	88.820	89.679	88.695
S1.002	22.852	Pipe	251.119		0.6	300	89.679	88.545	89.663	88.454
S1.003	2.380	Pipe	198.341		0.6	300	89.663	88.454	89.507	88.442
S1.004	8.102	Pipe	225.063		0.6	300	89.507	88.442	88.900	88.406

Sheringham Recycling Centre:		Date:			
Surface Water Drainage		14/04/2023			
1 in 2, 30 (+45% CC) and 100 (+45% CC) RP)	Designed by:	Checked by:	Approved By:	
		RO	SL	TB	
Report Details:		Stantec UK Ltd:			
Type: Network Design Criteria		3rd Floor, Station Road	d, Cambridge		
Storm Phase: Phase		CB1 2JH			
Flow Options					
Peak Flow Calculation	(UK) Modified Rational Method				
Min. Time of Entry (mins)	(5.3)	5			
Max. Travel Time (mins)		30			
Pipe Options					
Lock Slope Options	None				
Design Level	Level Soffits				
Min. Cover Depth (m)	Level comits	1.200			
Min. Slope (1:x)		500.00			
Max. Slope (1:x)		40.00			
Min. Velocity (m/s)		1.0			
Max. Velocity (m/s)		3.0			
Use Flow Restriction					
Reduce Channel Depths					
Manhole Options					
Apply Offset					
Synchronise Manhole Invert Levels	✓				

Sheringham Recycling Centre: Surface Water Drainage	Date: 14/04/2023			
1 in 2, 30 (+45% CC) and 100 (+45% CC) RP	Designed by:	Checked by:	Approved By:	
	RO	SL	ТВ	
Type: Rainfall Analysis Criteria	Stantec UK Ltd: 3rd Floor, Station Road, Cambridge CB1 2JH			

Sheringham Recycling Centre: Surface Water Drainage	Date: 14/04/2023			
1 in 2, 30 (+45% CC) and 100 (+45% CC) RP	Designed by:	Checked by:	Approved By:	
	RO	SL	ТВ	
! '	Stantec UK Ltd: 3rd Floor, Station Road, Car CB1 2JH	mbridge		

FEH	
Site Location	GB 616285 341035 TG 16285 41035
Rainfall Version	2013
Data Type	Point
Summer	V
Winter	✓

Return Period

Return Period (years)	Increase Rainfall (%)
2.0	0
30.0	45
100.0	45

Storm Durations

Duration (mins)	Run Time (mins)
60	120
120	240
180	360
240	480
360	720
480	960
600	1200
720	1440
960	1920
1440	2880
2160	4320
2880	5760
4320	8640
5760	11520

Type: FEH

Sheringham Recycling Centre: Surface Water Drainage	Date: 14/04/2023							
1 in 2, 30 (+45% CC) and 100 (+45% CC) RP	Designed by:	Checked by:	Approved By:					
	RO	SL	ТВ					
Report Details:	Stantec UK Ltd:							
Type: Rainfall Analysis Criteria	3rd Floor, Station F	3rd Floor, Station Road, Cambridge						

FSR	
Region	England and Wales
M5-60 (mm)	19.0

M5-60 (mm) 19.0
Ratio R 0.400
Summer

Winter

Return Period

Return Period (years)	Increase Rainfall (%)
2.0	0
30.0	0
100.0	45

Storm Durations

Duration (mins)	Run Time (mins)
15	30
30	60

Type: FSR

Sheringham Recycling Centre: Surface Water Drainage	Date: 14/04/2023							
1 in 2, 30 (+45% CC) and 100 (+45% CC) RP	Designed by:	Checked by:	Approved By:					
	RO	SL	ТВ					
Report Details:	Stantec UK Ltd:							
Type: Stormwater Controls Summary	3rd Floor, Station Road, Ca	3rd Floor, Station Road, Cambridge						
Storm Phase: Phase	CB1 2JH	, , , , , , , , , , , , , , , , , , , ,						



FEH: 2 years: Increase Rainfall (%): +0: Critical Storm Per Item

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Total Lost Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Half Drain Down Time (mins)	Percentage Available (%)	Status
Bioretention	FEH: 2 years: +0 %: 120 mins: Summer	88.257	88.257	1.257	1.257	18.2	23.353	0.000	35.991	0.0	0.000	69	84	OK
Swale	FEH: 2 years: +0 %: 120 mins: Summer	89.058	88.931	0.058	0.196	6.4	6.000	0.000	13.578	0.0	0.000	28	87	ОК

Sheringham Recycling Centre: Surface Water Drainage	Date: 14/04/2023						
1 in 2, 30 (+45% CC) and 100 (+45% CC) RP	Designed by:	Checked by:	Approved By:				
	RO	SL	ТВ				
Report Details:	Stantec UK Ltd:	Stantec UK Ltd:					
Type: Stormwater Controls Summary	3rd Floor, Station F	3rd Floor, Station Road, Cambridge					
Storm Phase: Phase	CB1 2JH						



FEH: 30 years: Increase Rainfall (%): +45: Critical Storm Per Item

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Total Lost Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Half Drain Down Time (mins)	Percentage Available (%)	Status
Bioretention	FEH: 30 years: +45 %: 180 mins: Summer	88.712	88.712	1.712	1.712	45.4	89.079	0.000	107.289	0.0	0.007	163	40	ОК
Swale	FEH: 30 years: +45 %: 120 mins: Summer	89.130	89.130	0.130	0.395	20.2	25.882	0.000	37.585	0.0	0.000	63	46	OK

Sheringham Recycling Centre: Surface Water Drainage	Date: 14/04/2023							
1 in 2, 30 (+45% CC) and 100 (+45% CC) RP	Designed by:	Checked by:	Approved By:					
	RO	SL	ТВ					
Report Details:	Stantec UK Ltd:							
Type: Stormwater Controls Summary	3rd Floor, Station Road, C	3rd Floor, Station Road, Cambridge						
Storm Phase: Phase	CB1 2JH	, , , , , , , , , , , , , , , , , , ,						



FEH: 100 years: Increase Rainfall (%): +45: Critical Storm Per Item

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Total Lost Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Half Drain Down Time (mins)	Percentage Available (%)	Status
Bioretention	FEH: 100 years: +45 %: 240 mins: Summer	88.887	88.887	1.887	1.887	49.8	127.365	0.000	165.230	0.0	4.098	178	14	OK
Swale	FEH: 100 years: +45 %: 180 mins: Summer	89.201	89.201	0.202	0.466	21.6	37.202	2.832	61.718	0.0	0.000	97	22	Flood

Sheringham Recycling Centre: Surface Water Drainage	Date: 14/04/2023							
1 in 2, 30 (+45% CC) and 100 (+45% CC) RP	Designed by:	Checked by:	Approved By:					
	RO	SL	ТВ					
Report Details:	Stantec UK Ltd:							
Type: Stormwater Controls Summary	3rd Floor, Station Road, C	3rd Floor, Station Road, Cambridge						
Storm Phase: Phase	CB1 2JH	, , , , , , , , , , , , , , , , , , ,						



FSR: 2 years: Increase Rainfall (%): +0: Critical Storm Per Item

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Total Lost Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Half Drain Down Time (mins)	Percentage Available (%)	Status
Bioretention	FSR: 2 years: +0 %: 30 mins: Summer	88.250	88.250	1.250	1.250	28.2	19.999	0.000	8.808	0.0	0.000	94	86	OK
Swale	FSR: 2 years: +0 %: 30 mins: Summer	89.075	88.932	0.075	0.197	10.0	6.051	0.000	5.121	0.0	0.000	36	87	OK

Sheringham Recycling Centre: Surface Water Drainage	Date: 14/04/2023						
1 in 2, 30 (+45% CC) and 100 (+45% CC) RP	Designed by:	Checked by:	Approved By:				
	RO	SL	ТВ				
Report Details:	Stantec UK Ltd:						
Type: Stormwater Controls Summary	3rd Floor, Station Road, Car	nbridge					
Storm Phase: Phase	CB1 2JH						



FSR: 30 years: Increase Rainfall (%): +0: Critical Storm Per Item

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Total Lost Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Half Drain Down Time (mins)	Percentage Available (%)	Status
Bioretention	FSR: 30 years: +0 %: 30 mins: Summer	88.435	88.435	1.435	1.435	53.8	40.642	0.000	11.966	0.0	0.000	143	73	OK
Swale	FSR: 30 years: +0 %: 30 mins: Winter	89.103	89.021	0.103	0.286	17.9	12.842	0.000	7.577	0.0	0.000	57	73	OK

Sheringham Recycling Centre: Surface Water Drainage	Date: 14/04/2023			
1 in 2, 30 (+45% CC) and 100 (+45% CC) RP	Designed by:	Checked by:	Approved By:	
	RO	SL	ТВ	
Report Details:	Stantec UK Ltd:			
Type: Stormwater Controls Summary	3rd Floor, Station F	Road, Cambridge		
Storm Phase: Phase	CB1 2JH			



FSR: 100 years: Increase Rainfall (%): +45: Critical Storm Per Item

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Total Lost Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Half Drain Down Time (mins)	Percentage Available (%)	Status
Bioretention	FSR: 100 years: +45 %: 30 mins: Summer	88.681	88.681	1.681	1.681	101.7	78.371	0.000	16.102	0.0	0.000	204	47	OK
Swale	FSR: 100 years: +45 %: 30 mins: Winter	89.143	89.131	0.144	0.396	33.8	26.025	0.000	10.985	0.0	0.000	85	45	OK

Sheringham Recycling Centre: Surface Water Drainage	Date: 14/04/2023			
1 in 2, 30 (+45% CC) and 100 (+45% CC) RP	Designed by:	Checked by:	Approved By:	
	RO	SL	ТВ	
Report Details:	Stantec UK Ltd:		<u> </u>	
Type: Connections Summary	3rd Floor, Station F			
Storm Phase: Phase	CB1 2JH			



FEH: 2 years: Increase Rainfall (%): +0: Critical Storm Per Item

Connection	Storm Event	Connection Type	From	То	Upstream Cover Level (m)	Max. US Water Level (m)	Max. Flow Depth (m)	Discharge Volume (m³)	Max. Velocity (m/s)	Flow / Capacity	Max. Flow (L/s)	Status
S1.000	FEH: 2 years: +0 %: 60 mins: Summer	Pipe	S1	S2	90.2	89.086	0.047	3.242	0.5	0.13	2.6	ОК
S1.001	FEH: 2 years: +0 %: 60 mins: Summer	Pipe	S2	S3	89.9	88.880	0.059	7.741	1.0	0.31	6.2	ОК
S1.002	FEH: 2 years: +0 %: 60 mins: Summer	Pipe	S3	S4	89.7	88.640	0.103	18.048	0.7	0.21	14.4	ОК
S1.003	FEH: 2 years: +0 %: 60 mins: Summer	Pipe	S4	S5	89.7	88.564	0.106	19.907	0.7	0.2	15.9	ОК
S1.004	FEH: 2 years: +0 %: 60 mins: Summer	Pipe	S5	Bioretention	89.5	88.544	0.098	19.904	0.8	0.22	15.9	OK

Sheringham Recycling Centre: Surface Water Drainage	Date: 14/04/2023			
1 in 2, 30 (+45% CC) and 100 (+45% CC) RP	Designed by:	Checked by:	Approved By:	
	RO	SL	ТВ	
Report Details:	Stantec UK Ltd:	<u> </u>		
Type: Connections Summary	3rd Floor, Station I	Road, Cambridge		
Storm Phase: Phase	CB1 2JH			



FEH: 30 years: Increase Rainfall (%): +45: Critical Storm Per Item

Connection	Storm Event	Connection Type	From	То	Upstream Cover Level (m)	Max. US Water Level (m)	Max. Flow Depth (m)	Discharge Volume (m³)	Max. Velocity (m/s)	Flow / Capacity	Max. Flow (L/s)	Status
S1.000	FEH: 30 years: +45 %: 60 mins: Summer	Pipe	S1	S2	90.2	89.119	0.131	11.130	0.7	0.45	8.9	ОК
S1.001	FEH: 30 years: +45 %: 60 mins: Summer	Pipe	S2	S3	89.9	89.015	0.150	26.577	1.2	1.07	21.3	Surcharged
S1.002	FEH: 30 years: +45 %: 60 mins: Summer	Pipe	S3	S4	89.7	88.760	0.226	61.978	0.9	0.71	49.6	ОК
S1.003	FEH: 30 years: +45 %: 60 mins: Summer	Pipe	S4	S5	89.7	88.689	0.223	68.068	1.0	0.7	54.7	ОК
S1.004	FEH: 30 years: +45 %: 60 mins: Summer	Pipe	S5	Bioretention	89.5	88.670	0.246	67.640	1.1	0.74	54.7	ОК

Sheringham Recycling Centre: Surface Water Drainage	Date: 14/04/2023					
1 in 2, 30 (+45% CC) and 100 (+45% CC) RP	Designed by:	Checked by:	Approved By:	7		
	RO	SL	ТВ			
Report Details:	Stantec UK Ltd:					
Type: Connections Summary	3rd Floor, Station Road	l, Cambridge				
Storm Phase: Phase	CB1 2JH	-				



FEH: 100 years: Increase Rainfall (%): +45: Critical Storm Per Item

Connection	Storm Event	Connection Type	From	То	Upstream Cover Level (m)	Max. US Water Level (m)	Max. Flow Depth (m)	Discharge Volume (m³)	Max. Velocity (m/s)	Flow / Capacity	Max. Flow (L/s)	Status
S1.000	FEH: 100 years: +45 %: 60 mins: Summer	Pipe	S1	S2	90.2	89.246	0.150	14.855	0.7	0.6	11.9	Surcharged
S1.001	FEH: 100 years: +45 %: 60 mins: Summer	Pipe	S2	S3	89.9	89.154	0.150	35.404	1.6	1.42	28.3	Surcharged
S1.002	FEH: 100 years: +45 %: 60 mins: Summer	Pipe	S3	S4	89.7	88.842	0.300	82.307	0.9	0.94	66.0	ОК
S1.003	FEH: 100 years: +45 %: 180 mins: Summer	Pipe	S4	S5	89.7	88.884	0.300	132.587	1.9	1.32	103.5	Surcharged
S1.004	FEH: 100 years: +45 %: 60 mins: Summer	Pipe	S5	Bioretention	89.5	88.816	0.300	89.915	1.2	0.97	71.7	Surcharged

Sheringham Recycling Centre: Surface Water Drainage	Date: 14/04/2023						
1 in 2, 30 (+45% CC) and 100 (+45% CC) RP	Designed by:	Checked by:	Approved By:				
	RO	SL	ТВ				
Report Details:	Stantec UK Ltd:						
Type: Connections Summary	3rd Floor, Station R	load, Cambridge					
Storm Phase: Phase	CB1 2JH						



FSR: 2 years: Increase Rainfall (%): +0: Critical Storm Per Item

Connection	Storm Event	Connection Type	From	То	Upstream Cover Level (m)	Max. US Water Level (m)	Max. Flow Depth (m)	Discharge Volume (m³)	Max. Velocity (m/s)	Flow / Capacity	Max. Flow (L/s)	Status
S1.000	FSR: 2 years: +0 %: 15 mins: Summer	Pipe	S1	S2	90.2	89.101	0.068	2.215	0.6	0.25	4.9	ОК
S1.001	FSR: 2 years: +0 %: 15 mins: Summer	Pipe	S2	S3	89.9	88.908	0.085	5.289	1.1	0.57	11.4	ОК
S1.002	FSR: 2 years: +0 %: 15 mins: Summer	Pipe	S3	S4	89.7	88.683	0.146	12.326	0.8	0.38	26.5	ОК
S1.003	FSR: 2 years: +0 %: 15 mins: Summer	Pipe	S4	S5	89.7	88.607	0.146	13.589	0.8	0.36	28.1	ОК
S1.004	FSR: 2 years: +0 %: 15 mins: Summer	Pipe	S5	Bioretention	89.5	88.580	0.132	13.576	0.9	0.37	27.1	ОК

Sheringham Recycling Centre: Surface Water Drainage	Date: 14/04/2023						
1 in 2, 30 (+45% CC) and 100 (+45% CC) RP	Designed by:	Checked by:	Approved By:				
	RO	SL	ТВ				
Report Details:	Stantec UK Ltd:	Stantec UK Ltd:					
Type: Connections Summary	3rd Floor, Station F	3rd Floor, Station Road, Cambridge					
Storm Phase: Phase	CB1 2JH	CB1 2JH					



FSR: 30 years: Increase Rainfall (%): +0: Critical Storm Per Item

Connection	Storm Event	Connection Type	From	То	Upstream Cover Level (m)	Max. US Water Level (m)	Max. Flow Depth (m)	Discharge Volume (m³)	Max. Velocity (m/s)	Flow / Capacity	Max. Flow (L/s)	Status
S1.000	FSR: 30 years: +0 %: 15 mins: Summer	Pipe	S1	S2	90.2	89.122	0.118	4.196	0.6	0.48	9.4	ОК
S1.001	FSR: 30 years: +0 %: 15 mins: Summer	Pipe	S2	S3	89.9	88.986	0.148	10.028	1.1	1.02	20.2	Surcharged
S1.002	FSR: 30 years: +0 %: 15 mins: Summer	Pipe	S3	S4	89.7	88.758	0.221	23.372	0.9	0.71	49.2	ОК
S1.003	FSR: 30 years: +0 %: 15 mins: Summer	Pipe	S4	S5	89.7	88.684	0.217	25.773	1.0	0.68	53.1	ОК
S1.004	FSR: 30 years: +0 %: 15 mins: Summer	Pipe	S5	Bioretention	89.5	88.647	0.191	25.759	1.1	0.7	51.9	ОК

Sheringham Recycling Centre: Surface Water Drainage	Date: 14/04/2023						
1 in 2, 30 (+45% CC) and 100 (+45% CC) RP	Designed by:	Checked by:	Approved By:				
	RO	SL	ТВ				
Report Details:	Stantec UK Ltd:	Stantec UK Ltd:					
Type: Connections Summary	3rd Floor, Station F	3rd Floor, Station Road, Cambridge					
Storm Phase: Phase	CB1 2JH	· · · · · · · · · · · · · · · · · · ·					



FSR: 100 years: Increase Rainfall (%): +45: Critical Storm Per Item

Connection	Storm Event	Connection Type	From	То	Upstream Cover Level (m)	Max. US Water Level (m)	Max. Flow Depth (m)	Discharge Volume (m³)	Max. Velocity (m/s)	Flow / Capacity	Max. Flow (L/s)	Status
S1.000	FSR: 100 years: +45 %: 15 mins: Summer	Pipe	S1	S2	90.2	89.551	0.150	7.893	0.7	0.65	13.0	Surcharged
S1.001	FSR: 100 years: +45 %: 15 mins: Summer	Pipe	S2	S3	89.9	89.442	0.150	18.846	1.9	1.68	33.4	Surcharged
S1.002	FSR: 100 years: +45 %: 15 mins: Summer	Pipe	S3	S4	89.7	89.018	0.300	43.867	1.2	1.27	88.3	Surcharged
S1.003	FSR: 100 years: +45 %: 15 mins: Summer	Pipe	S4	S5	89.7	88.836	0.300	47.978	1.4	1.23	97.1	Surcharged
S1.004	FSR: 100 years: +45 %: 15 mins: Summer	Pipe	S5	Bioretention	89.5	88.772	0.285	47.507	1.4	1.29	95.3	Surcharged