1 Medlock St: 100yr + 40% CC Event	Date: 27/02/0024		
	Designed by: JT	Checked by: JT	Approved By: AW
Report Details: Type: Inflows Storm Phase: Phase	Roscoe:		

Catchment Area

Type : Catchment Area

Area (ha)	0.026

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	0.750
Winter Volumetric Runoff	0.840
Time of Concentration (mins)	5
Percentage Impervious (%)	100

Catchment Area (1)

Type : Catchment Area

Area (ha)	0.044

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	0.750
Winter Volumetric Runoff	0.840
Time of Concentration (mins)	5
Percentage Impervious (%)	100

Catchment Area (2)

Type : Catchment Area

Area (ha)	0.029

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	0.750
Winter Volumetric Runoff	0.840
Time of Concentration (mins)	5
Percentage Impervious (%)	100

Catchment Area (3)

Type : Catchment Area

Area (ha)	0.037

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	0.750
Winter Volumetric Runoff	0.840
Time of Concentration (mins)	5
Percentage Impervious (%)	100

1 Medlock St: 100yr + 40% CC Event	Date: 27/02/0024		
	Designed by: JT	Checked by: JT	Approved By: AW
Report Details: Type: Inflows Storm Phase: Phase	Roscoe:		

Catchment Area (4) Type : Catchment Area

Area (ha)	0.035

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	0.750
Winter Volumetric Runoff	0.840
Time of Concentration (mins)	5
Percentage Impervious (%)	100

Catchment Area (5) Type : Catchment Area

Area (ha)	0.016

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	0.750
Winter Volumetric Runoff	0.840
Time of Concentration (mins)	5
Percentage Impervious (%)	100

Catchment Area (6) Type : Catchment Area

Area (ha)	0.046

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	0.750
Winter Volumetric Runoff	0.840
Time of Concentration (mins)	5
Percentage Impervious (%)	100

Catchment Area (7) Type : Catchment Area

Area (ha)	0.013

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	0.750
Winter Volumetric Runoff	0.840
Time of Concentration (mins)	5
Percentage Impervious (%)	100

Catchment Area (8)

Type : Catchment Area

Area (ha)	0.013

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	0.750
Winter Volumetric Runoff	0.840
Time of Concentration (mins)	5
Percentage Impervious (%)	100

1 Medlock St: 100yr + 40% CC Event	Date: 27/02/0024		
	Designed by: JT	Checked by: JT	Approved By: AW
Report Details: Type: Junctions Storm Phase: Phase	Roscoe:		

Name	Junction Type	Easting (m)	Northing (m)	Cover Level (m)	Depth (m)	Invert Level (m)	Chamber Shape	Diameter (m)
SWMH01	Manhole	383643.829	397161.270	34.150	1.225	32.925	Circular	1.200
SWMH02	Manhole	383646.577	397149.170	34.050	1.200	32.850	Circular	1.200
SWMH03	Manhole	383626.818	397137.888	33.800	1.918	31.882	Circular	1.200
SWMH04	Manhole	383619.336	397149.930	34.200	2.450	31.750	Circular	1.200
SWMH05	Manhole	383609.340	397167.876	34.200	3.386	30.814	Circular	1.200
SWMH07	Manhole	383619.102	397207.276	34.050	1.225	32.825	Circular	1.200
SWMH08	Manhole	383614.016	397213.882	34.070	1.325	32.745	Circular	1.200
SWMH09	Manhole	383593.556	397203.301	34.200	2.303	31.897	Circular	1.200
SWMH10	Manhole	383601.156	397184.946	34.200	3.390	30.810	Circular	1.200
SWMH06	Manhole	383604.146	397177.171	34.200	3.450	30.750	Circular	1.200
Outfall	Manhole	383598.977	397174.665	34.500	3.900	30.600	Circular	1.200

Name	Lock
SWMH01	None
SWMH02	None
SWMH03	None
SWMH04	None
SWMH05	None
SWMH07	None
SWMH08	None
SWMH09	None
SWMH10	None
SWMH06	None
Outfall	None

Attenuation Tank 1

Type : Tank

Dimensions

Exceedence Level (m)	34.250
Depth (m)	2.250
Base Level (m)	32.000
Freeboard (mm)	0
Initial Depth (m)	0.000
Porosity (%)	100
Average Slope (1:x)	0.00
Total Volume (m³)	41.250

Depth (m)	Area (m²)	Volume (m³)
0.000	40.00	0.000
1.000	40.00	40.000

Advanced

Perimeter	Circular
Length (m)	13.940

Attenuation Tank 2

Type : Tank

Dimensions

Exceedence Level (m)	34.100
Depth (m)	2.100
Base Level (m)	32.000
Freeboard (mm)	0
Initial Depth (m)	0.000
Porosity (%)	100
Average Slope (1:x)	0.00
Total Volume (m³)	31.100

Depth (m)	Area (m²)	Volume (m³)
0.000	30.00	0.000
1.000	30.00	30.000

Advanced

Perimeter	Circular
Length (m)	11.999

1 Medlock St: 100yr + 40% CC Event	Date: 27/02/0024		
	Designed by: JT	Checked by: JT	Approved By: AW
Report Details: Type: Manhole Schedule Storm Phase: Phase	Roscoe:		

Name	Cover Level (m) Invert Level (m)	Manhole Size (m)	Connection Details				Type
Coordinates (m)	Depth (m)		Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
SWMH01	34.150 32.925	Diameter / Length: 1.200					Manhole
E:383643.829 N:397161.270	1.225		{a} MH01 -> MH02	Pipe	32.925	Diam/Width:225	Not Applicable
SWMH02	34.050 32.850	Diameter / Length: 1.200	{1} MH01 -> MH02	Pipe	32.850	Diam/Width:225	Manhole
E:383646.577 N:397149.170	1.200		{a} MH02 -> Tank 2	Pipe	32.850	Diam/Width:225	Not Applicable
SWMH03	33.800 31.882	Diameter / Length: 1.200	{1} Tank 2 -> MH03	Pipe	31.882	Diam/Width:225	Manhole
E:383626.818 N:397137.888	1.918		{a} MH03 -> MH04	Pipe	31.882	Diam/Width:300	Not Applicable
SWMH04	34.200 31.750	Diameter / Length: 1.200	{1} MH03 -> MH04	Pipe	31.750	Diam/Width:300	Manhole
E:383619.336 N:397149.930	2.450		{a} MH04 -> MH05	Pipe	31.750	Diam/Width:300	Not Applicable
SWMH05	34.200 30.814	Diameter / Length: 1.200	{1} MH04 -> MH05	Pipe	31.574	Diam/Width:300	Manhole
E:383609.340 N:397167.876	3.386		{a} MH05 -> MH06	Pipe	30.814	Diam/Width:300	Not Applicable

Name	Cover Level (m) Invert Level (m)	Manhole Size (m)	Connection Details				Type
Coordinates (m)	Depth (m)		Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
SWMH07	34.050 32.825	Diameter / Length: 1.200					Manhole
E:383619.102 N:397207.276	1.225		{a} MH07 -> MH08	Pipe	32.825	Diam/Width:225	Not Applicable
SWMH08	34.070 32.745	Diameter / Length: 1.200	{1} MH07 -> MH08	Pipe	32.745	Diam/Width:225	Manhole
E:383614.016 N:397213.882	1.325		{a} MH08 -> Tank 1	Pipe	32.745	Diam/Width:225	Not Applicable
SWMH09	34.200 31.897	Diameter / Length: 1.200	{1} Tank 1 -> MH09	Pipe	31.897	Diam/Width:225	Manhole
E:383593.556 N:397203.301	2.303		{a} MH09 -> MH10	Pipe	31.897	Diam/Width:300	Not Applicable
SWMH10	34.200 30.810	Diameter / Length: 1.200	{1} MH09 -> MH10	Pipe	31.742	Diam/Width:300	Manhole
E:383601.156 N:397184.946	3.390		{a} MH10 -> MH06	Pipe	30.810	Diam/Width:300	Not Applicable
SWMH06	34.200 30.750	Diameter / Length: 1.200	{1} MH05 -> MH06	Pipe	30.750	Diam/Width:300	Manhole
E:383604.146 N:397177.171	3.450		{2} MH10 -> MH06	Pipe	30.750	Diam/Width:300	
			{a} MH06 -> Outfall	Pipe	30.750	Diam/Width:225	Not Applicable

1 Medlock St: 100yr + 40% CC Event	Date: 27/02/0024			
	Designed by: JT	Checked by: JT	Approved By: AW	
Report Details: Type: Manhole Schedule Storm Phase: Phase	Roscoe:			

Name	Cover Level (m) Invert Level (m)	Manhole Size (m)	Connection Details				Type
Coordinates (m)	Depth (m)		Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
Outfall	34.500 30.600	Diameter / Length: 1.200	{1} MH06 -> Outfall	Pipe	30.600	Diam/Width:225	Manhole
E:383598.977 N:397174.665	3.900						
							Not Applicable

Runoff Type	Dynamic
Output Interval (mins)	5
Time Step	Default
Urban Creep	Apply Global Value
Urban Creep Global Value (%)	0
Junction Flood Risk Margin (mm)	300
Perform No Discharge Analysis	☐

Rainfall

FSR

Type: FSR

Region	England and Wales
M5-60 (mm)	18.0
Ratio R	0.362
Summer	☑
Winter	☑

Return Period

Return Period (years)	Increase Rainfall (%)
100.0	40

Storm Durations

Duration (mins)	Run Time (mins)
15	30
30	60
60	120
120	240
240	480
360	720
480	960
960	1920
1440	2880

1 Medlock St: 100yr + 40% CC Event	Date: 27/02/0024		
	Designed by: JT	Checked by: JT	Approved By: AW
Report Details: Type: Inflows Summary Storm Phase: Phase	Roscoe:		

Critical Storm

Inflow	Storm Event	Inflow Area (ha)	Max. Inflow (L/s)	Total Inflow (m^3)
Catchment Area	FSR: 100 years: +40 %: 15 mins: Winter	0.03	14.2	6.596
Catchment Area (1)	FSR: 100 years: +40 %: 15 mins: Winter	0.04	23.5	10.907
Catchment Area (2)	FSR: 100 years: +40 %: 15 mins: Winter	0.03	15.7	7.262
Catchment Area (3)	FSR: 100 years: +40 %: 15 mins: Winter	0.04	20.1	9.336
Catchment Area (4)	FSR: 100 years: +40 %: 15 mins: Winter	0.03	18.7	8.686
Catchment Area (5)	FSR: 100 years: +40 %: 15 mins: Winter	0.02	8.7	4.027
Catchment Area (6)	FSR: 100 years: +40 %: 15 mins: Winter	0.05	25.0	11.594
Catchment Area (7)	FSR: 100 years: +40 %: 15 mins: Winter	0.01	7.1	3.310
Catchment Area (8)	FSR: 100 years: +40 %: 15 mins: Winter	0.01	7.0	3.256

1 Medlock St: 100yr + 40% CC Event	Date: 27/02/0024		
	Designed by: JT	Checked by: JT	Approved By: AW
Report Details: Type: Junctions Summary Storm Phase: Phase	Roscoe:		

Critical Storm

Junction	Storm Event	Cover Level (m)	Invert Level (m)	Max. Level (m)	Max. Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Status
SWMH01	FSR: 100 years: +40 %: 15 mins: Winter	34.150	32.925	33.049	0.124	23.5	0.140	0.000	23.1	10.904	OK
SWMH02	FSR: 100 years: +40 %: 15 mins: Winter	34.050	32.850	32.924	0.074	37.3	0.084	0.000	37.0	17.474	OK
SWMH03	FSR: 100 years: +40 %: 60 mins: Winter	33.800	31.882	32.729	0.847	17.2	0.958	0.000	11.1	42.321	Surcharged
SWMH04	FSR: 100 years: +40 %: 60 mins: Winter	34.200	31.750	32.728	0.978	18.1	1.106	0.000	14.0	55.251	Surcharged
SWMH05	FSR: 100 years: +40 %: 60 mins: Winter	34.200	30.814	32.726	1.912	17.6	2.163	0.000	16.8	58.344	Surcharged
SWMH07	FSR: 100 years: +40 %: 15 mins: Winter	34.050	32.825	32.925	0.100	18.7	0.113	0.000	18.5	8.684	OK
SWMH08	FSR: 100 years: +40 %: 15 mins: Winter	34.070	32.745	32.811	0.066	27.1	0.074	0.000	26.9	12.693	OK
SWMH09	FSR: 100 years: +40 %: 60 mins: Winter	34.200	31.897	32.727	0.830	16.3	0.939	0.000	8.6	54.139	Surcharged
SWMH10	FSR: 100 years: +40 %: 60 mins: Winter	34.200	30.810	32.726	1.916	11.1	2.167	0.000	8.8	45.378	Surcharged
SWMH06	FSR: 100 years: +40 %: 60 mins: Winter	34.200	30.750	32.725	1.975	18.7	2.234	0.000	16.7	99.269	Surcharged
Outfall	FSR: 100 years: +40 %: 480 mins: Winter	34.500	30.600	30.668	0.068	16.9	0.000	0.000	16.9	194.454	OK

1 Medlock St: 100yr + 40% CC Event	Date: 27/02/0024		
	Designed by: JT	Checked by: JT	Approved By: AW
Report Details: Type: Stormwater Controls Summary Storm Phase: Phase	Roscoe:		

Critical Storm

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)	Percentage Available (%)	Status
Attenuation Tank 1	FSR: 100 years: +40 %: 60 mins: Winter	32.728	32.728	0.728	0.728	29.1	29.123	0.000	0.000	8.3	32.702	29	OK
Attenuation Tank 2	FSR: 100 years: +40 %: 60 mins: Winter	32.731	32.731	0.731	0.731	21.8	21.917	0.000	0.000	11.8	30.405	30	OK

Critical Storm

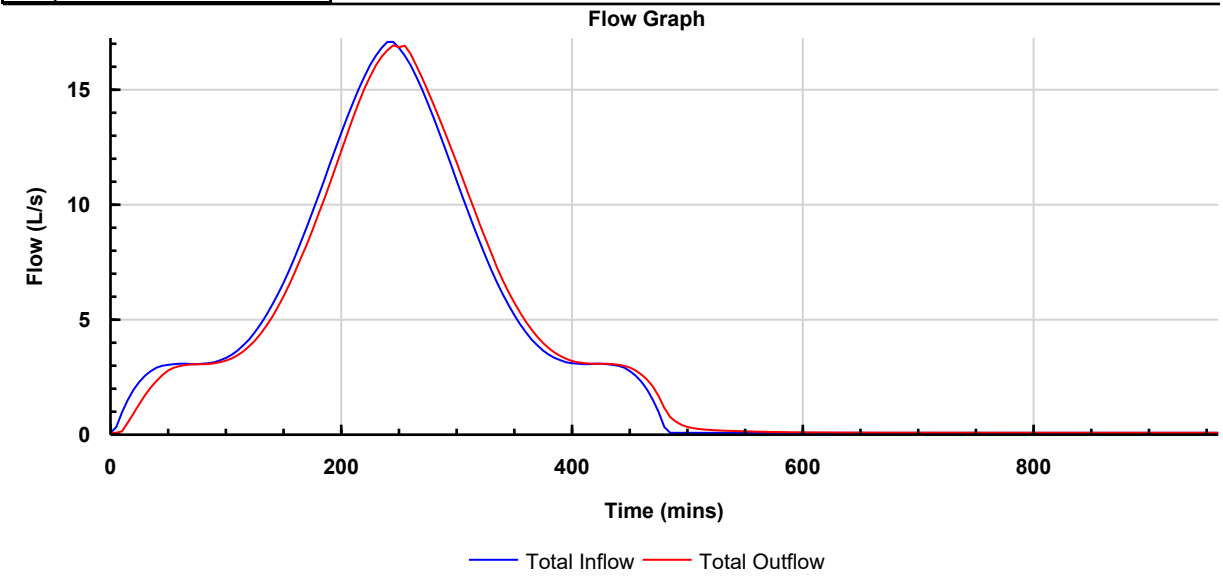
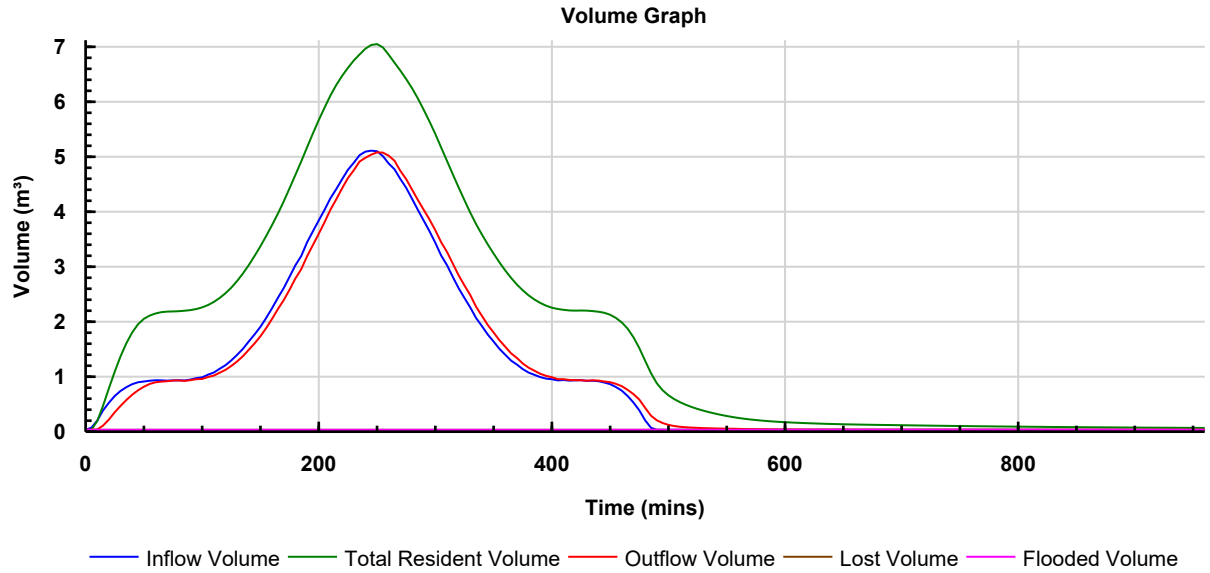
1 Medlock St: 100yr + 40% CC Event	Date: 27/02/0024		
	Designed by: JT	Checked by: JT	Approved By: AW
Report Details: Type: Connections Summary Storm Phase: Phase	Roscoe:		

Connection	Storm Event	Connection Type	From	To	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
MH01 -> MH02	FSR: 100 years: +40 %: 15 mins: Winter	Pipe	SWMH01	SWMH02	34.2	33.049	0.099	10.904	1.4	0.57	23.1	OK
MH02 -> Tank 2	FSR: 100 years: +40 %: 15 mins: Winter	Pipe	SWMH02	Attenuation Tank 2	34.1	32.924	0.225	17.474	2.2	0.24	37.0	OK
Tank 2 -> MH03	FSR: 100 years: +40 %: 60 mins: Winter	Pipe	Attenuation Tank 2	SWMH03	34.1	32.731	0.225	28.866	0.7	0.23	11.8	Surcharged
MH03 -> MH04	FSR: 100 years: +40 %: 15 mins: Winter	Pipe	SWMH03	SWMH04	33.8	32.517	0.300	11.410	0.6	0.11	11.4	Surcharged
MH04 -> MH05	FSR: 100 years: +40 %: 15 mins: Winter	Pipe	SWMH04	SWMH05	34.2	32.516	0.300	18.528	0.9	0.16	16.8	Surcharged
MH05 -> MH06	FSR: 100 years: +40 %: 30 mins: Winter	Pipe	SWMH05	SWMH06	34.2	32.674	0.300	33.392	0.3	0.23	20.1	Surcharged
MH07 -> MH08	FSR: 100 years: +40 %: 15 mins: Winter	Pipe	SWMH07	SWMH08	34.1	32.925	0.083	8.684	1.4	0.36	18.5	OK
MH08 -> Tank 1	FSR: 100 years: +40 %: 15 mins: Winter	Pipe	SWMH08	Attenuation Tank 1	34.1	32.811	0.225	12.693	2.3	0.19	26.9	OK
Tank 1 -> MH09	FSR: 100 years: +40 %: 60 mins: Winter	Pipe	Attenuation Tank 1	SWMH09	34.3	32.728	0.225	20.093	0.5	0.17	8.3	Surcharged
MH09 -> MH10	FSR: 100 years: +40 %: 60 mins: Summer	Pipe	SWMH09	SWMH10	34.2	32.607	0.300	36.226	0.9	0.11	10.3	Surcharged
MH10 -> MH06	FSR: 100 years: +40 %: 60 mins: Winter	Pipe	SWMH10	SWMH06	34.2	32.726	0.300	42.715	0.2	0.09	8.8	Surcharged
MH06 -> Outfall	FSR: 100 years: +40 %: 480 mins: Winter	Pipe	SWMH06	Outfall	34.2	31.224	0.072	194.454	1.5	0.2	16.9	Surcharged

1 Medlock St: 100yr + 40% CC Event	Date: 27/02/0024		
	Designed by: JT	Checked by: JT	Approved By: AW
Report Details: Type: Phase Management Storm Phase: Phase	Roscoe:		

Phase
FSR: 100 years: Increase Rainfall (%): +40: 480 mins: Winter

Tables

Name	Max. Inflow (L/s)	Total Inflow Volume (m³)	Max. Outflow (L/s)	Total Outflow Volume (m³)
Outfall			16.9	194.454
TOTAL	17.1	194.524	16.9	194.454

Graphs