

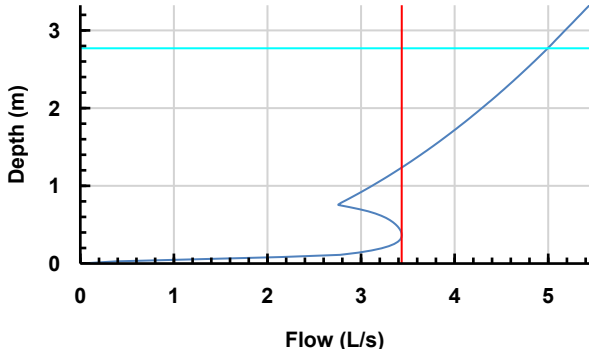
|                                                          |                              |             |              |                                                                                     |
|----------------------------------------------------------|------------------------------|-------------|--------------|-------------------------------------------------------------------------------------|
| Project:                                                 | Date:<br>03/02/2022          |             |              |  |
|                                                          | Designed by:<br>oliver.boyes | Checked by: | Approved By: |                                                                                     |
| Report Details:<br>Type: Junctions<br>Storm Phase: Phase | Company Address:             |             |              |                                                                                     |

## Outlets

| Junction                            | Outlet Name | Outgoing Connection                    | Outlet Type    |
|-------------------------------------|-------------|----------------------------------------|----------------|
| SW1 (Surface Water Network - S104)  | Outlet      | SW1.000 (Surface Water Network - S104) | Free Discharge |
| SW2 (Surface Water Network - S104)  | Outlet      | SW1.001 (Surface Water Network - S104) | Free Discharge |
| SW8 (Surface Water Network - S104)  | Outlet      | SW3.000 (Surface Water Network - S104) | Free Discharge |
| SW3 (Surface Water Network - S104)  | Outlet      | SW1.002 (Surface Water Network - S104) | Free Discharge |
| SW7 (Surface Water Network - S104)  | Outlet      | SW2.001 (Surface Water Network - S104) | Free Discharge |
| SW4 (Surface Water Network - S104)  | Outlet      | SW1.003 (Surface Water Network - S104) | Free Discharge |
| SW6 (Surface Water Network - S104)  | Outlet      | SW2.000 (Surface Water Network - S104) | Free Discharge |
| SW9 (Surface Water Network - S104)  | Outlet      | SW2.002 (Surface Water Network - S104) | Free Discharge |
| SW5 (Surface Water Network - S104)  | Outlet      | SW1.004 (Surface Water Network - S104) | Free Discharge |
| SW10 (Surface Water Network - S104) | Outlet      | SW1.005 (Surface Water Network - S104) | Free Discharge |
| SW12 (Surface Water Network - S104) | Outlet      | SW4.000 (Surface Water Network - S104) | Free Discharge |
| SW16 (Surface Water Network - S104) | Outlet      | SW5.000 (Surface Water Network - S104) | Free Discharge |
| SW13 (Surface Water Network - S104) | Outlet      | SW4.001 (Surface Water Network - S104) | Free Discharge |
| SW14 (Surface Water Network - S104) | Outlet      | SW4.002 (Surface Water Network - S104) | Free Discharge |
| SW11 (Surface Water Network - S104) | Outlet      | SW1.006 (Surface Water Network - S104) | Free Discharge |
| SW17 (Surface Water Network - S104) | Outlet      | Pipe                                   | Free Discharge |
| SW18 (Surface Water Network - S104) | Outlet      | SW5.002 (Surface Water Network - S104) | Free Discharge |
| SW15 (Surface Water Network - S104) | Outlet      | SW1.007 (Surface Water Network - S104) | Free Discharge |
| SW19 (Surface Water Network - S104) | Outlet      | SW1.008 (Surface Water Network - S104) | Free Discharge |
| SW20 (Surface Water Network - S104) | Outlet      | SW1.009 (Surface Water Network - S104) | Free Discharge |
| SW24 (Surface Water Network - S104) | Outlet      | SW6.002 (Surface Water Network - S104) | Free Discharge |
| SW25 (Surface Water Network - S104) | Outlet      | SW6.003 (Surface Water Network - S104) | Free Discharge |
| SW23 (Surface Water Network - S104) | Outlet      | SW6.001 (Surface Water Network - S104) | Free Discharge |
| SW21 (Surface Water Network - S104) | Outlet      | SW1.010 (Surface Water Network - S104) | Free Discharge |
| SW22 (Surface Water Network - S104) | Outlet      | SW6.000 (Surface Water Network - S104) | Free Discharge |
| SW27 (Surface Water Network - S104) | Outlet      | SW6.005 (Surface Water Network - S104) | Free Discharge |
| SW26 (Surface Water Network - S104) | Outlet      | SW6.004 (Surface Water Network - S104) | Free Discharge |
|                                     | Outlet      | SW1.013 (Surface Water Network - S104) | Hydro-Brake®   |

|                                                          |                              |             |              |
|----------------------------------------------------------|------------------------------|-------------|--------------|
| Project:                                                 | Date:<br>03/02/2022          |             |              |
|                                                          | Designed by:<br>oliver.boyes | Checked by: | Approved By: |
| Report Details:<br>Type: Junctions<br>Storm Phase: Phase | Company Address:             |             |              |



| Junction                            | Outlet Name                                                                        | Outgoing Connection                        | Outlet Type    |
|-------------------------------------|------------------------------------------------------------------------------------|--------------------------------------------|----------------|
| SW29 (Surface Water Network - S104) | Invert Level (m)                                                                   | 149.325                                    |                |
|                                     | Design Depth (m)                                                                   | 2.770                                      |                |
|                                     | Design Flow (L/s)                                                                  | 5.0                                        |                |
|                                     | Objective                                                                          | Minimise Upstream Storage Requirements     |                |
|                                     | Application                                                                        | Surface Water Only                         |                |
|                                     | Sump Available                                                                     | <input checked="" type="checkbox"/>        |                |
|                                     | Unit Reference                                                                     | SHE-0085-5000-2770-5000                    |                |
|                                     |  |                                            |                |
|                                     |                                                                                    |                                            |                |
|                                     |                                                                                    |                                            |                |
| SW31 (Surface Water Network - S104) | Outlet                                                                             | SW1.014 (Surface Water Network - S104)     | Free Discharge |
| SW17a                               | Outlet                                                                             | Pipe (3)                                   | Free Discharge |
| SW16a                               | Outlet                                                                             | SW5.000 (Surface Water Network - S104) (1) | Free Discharge |
| SW16b                               | Outlet                                                                             | Pipe (4)                                   | Free Discharge |
| SW33                                | Outlet                                                                             | Pipe (6)                                   | Free Discharge |
| SW34                                | Outlet                                                                             | Pipe (7)                                   | Free Discharge |
| SW35                                | Outlet                                                                             | Pipe (8)                                   | Free Discharge |
| SW36                                | Outlet                                                                             | Pipe (9)                                   | Free Discharge |
| SW37                                | Outlet                                                                             | SW1.010 (Surface Water Network - S104) (1) | Free Discharge |
| SW30                                | Outlet                                                                             | SW1.013 (Surface Water Network - S104) (1) | Free Discharge |
| SW29a                               | Outlet                                                                             | SW1.013 (Surface Water Network - S104) (2) | Free Discharge |
| SW32                                | Outlet                                                                             | SW1.014 (Surface Water Network - S104) (1) | Free Discharge |

|                                                 |                              |             |              |                                                                                     |
|-------------------------------------------------|------------------------------|-------------|--------------|-------------------------------------------------------------------------------------|
| Project:                                        | Date:<br>03/02/2022          |             |              |  |
|                                                 | Designed by:<br>oliver.boyes | Checked by: | Approved By: |                                                                                     |
| Report Details:                                 | Company Address:             |             |              |                                                                                     |
| Type: Stormwater Controls<br>Storm Phase: Phase |                              |             |              |                                                                                     |



**Tank**

Type : Tank

### Dimensions

|                      |         |
|----------------------|---------|
| Exceedance Level (m) | 153.800 |
| Depth (m)            | 4.420   |
| Base Level (m)       | 149.380 |
| Freeboard (mm)       | 0       |
| Initial Depth (m)    | 0.000   |
| Porosity (%)         | 87.43   |
| Average Slope (1:X)  | 0.00    |
| Total Volume (m³)    | 877.469 |

| Depth (m) | Area (m²) | Volume (m³) |
|-----------|-----------|-------------|
| 0.000     | 334.00    | 0.000       |
| 3.000     | 334.00    | 876.049     |

### Inlets

#### Inlet (1)

|                    |                                            |
|--------------------|--------------------------------------------|
| Inlet Type         | Point Inflow                               |
| Incoming Item(s)   | SW1.010 (Surface Water Network - S104) (1) |
| Bypass Destination | (None)                                     |
| Capacity Type      | No Restriction                             |

### Outlets

#### Outlet

|                     |                |
|---------------------|----------------|
| Outgoing Connection | Pipe (2)       |
| Outlet Type         | Free Discharge |

### Advanced

|            |             |
|------------|-------------|
| Perimeter  | Rectangular |
| Length (m) | 35.522      |

|                                                                    |                              |             |              |
|--------------------------------------------------------------------|------------------------------|-------------|--------------|
| Project:                                                           | Date:<br>03/02/2022          |             |              |
|                                                                    | Designed by:<br>oliver.boyes | Checked by: | Approved By: |
| Report Details:<br>Type: Stormwater Controls<br>Storm Phase: Phase | Company Address:             |             |              |





**Tank (1)**

Type : Tank

### Dimensions

|                      |         |
|----------------------|---------|
| Exceedance Level (m) | 157.296 |
| Depth (m)            | 6.493   |
| Base Level (m)       | 150.803 |
| Freeboard (mm)       | 0       |
| Initial Depth (m)    | 0.000   |
| Porosity (%)         | 95      |
| Average Slope (1:X)  | 0.00    |
| Total Volume (m³)    | 157.739 |

| Depth (m) | Area (m²) | Volume (m³) |
|-----------|-----------|-------------|
| 0.000     | 97.25     | 0.000       |
| 1.655     | 97.25     | 152.901     |

### Inlets

#### Inlet

|                    |                |
|--------------------|----------------|
| Inlet Type         | Point Inflow   |
| Incoming Item(s)   | Pipe (3)       |
| Bypass Destination | (None)         |
| Capacity Type      | No Restriction |

### Outlets

#### Outlet

|                     |                |
|---------------------|----------------|
| Outgoing Connection | Pipe (1)       |
| Outlet Type         | Free Discharge |

### Advanced

|            |          |
|------------|----------|
| Perimeter  | Circular |
| Length (m) | 20.988   |

|                                                            |                              |             |              |
|------------------------------------------------------------|------------------------------|-------------|--------------|
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| Report Details:<br>Type: Connections<br>Storm Phase: Phase | Company Address:             |             |              |



| 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) |
|--------------------------------------------|------------|-----------------|-------------|-------------|--------------------------------|----------------------------|--------------------------|---------------------------|
| SW1.008 (Surface Water Network - S104)     | 21.352     | Pipe            | 24.486      | 0.009       |                                | 375                        | 158.380                  | 156.025                   |
| SW1.009 (Surface Water Network - S104)     | 6.087      | Pipe            | 12.550      | 0.009       |                                | 375                        | 156.728                  | 155.153                   |
| SW1.007 (Surface Water Network - S104)     | 20.481     | Pipe            | 109.523     | 0.009       |                                | 375                        | 159.753                  | 156.212                   |
| SW1.000 (Surface Water Network - S104)     | 21.385     | Pipe            | 21.449      | 0.009       |                                | 150                        | 168.177                  | 166.827                   |
| SW1.001 (Surface Water Network - S104)     | 22.680     | Pipe            | 13.232      | 0.009       |                                | 150                        | 167.180                  | 165.830                   |
| SW1.002 (Surface Water Network - S104)     | 11.900     | Pipe            | 13.006      | 0.009       |                                | 225                        | 165.466                  | 164.041                   |
| SW1.003 (Surface Water Network - S104)     | 13.081     | Pipe            | 13.003      | 0.009       |                                | 225                        | 164.645                  | 163.126                   |
| SW1.004 (Surface Water Network - S104)     | 34.910     | Pipe            | 13.959      | 0.009       |                                | 225                        | 163.671                  | 162.120                   |
| SW1.006 (Surface Water Network - S104)     | 17.321     | Pipe            | 199.089     | 0.009       |                                | 375                        | 160.556                  | 156.299                   |
| SW5.002 (Surface Water Network - S104)     | 13.566     | Pipe            | 169.579     | 0.009       |                                | 225                        | 160.102                  | 158.122                   |
| SW2.000 (Surface Water Network - S104)     | 11.452     | Pipe            | 134.734     | 0.009       |                                | 150                        | 164.431                  | 163.081                   |
| SW2.001 (Surface Water Network - S104)     | 16.607     | Pipe            | 23.423      | 0.009       |                                | 225                        | 164.661                  | 162.891                   |
| SW2.002 (Surface Water Network - S104)     | 10.408     | Pipe            | 167.878     | 0.009       |                                | 225                        | 164.100                  | 162.182                   |
| SW3.000 (Surface Water Network - S104)     | 8.449      | Pipe            | 51.206      | 0.009       |                                | 150                        | 165.082                  | 163.161                   |
| SW4.000 (Surface Water Network - S104)     | 42.523     | Pipe            | 112.792     | 0.009       |                                | 225                        | 160.298                  | 158.170                   |
| SW4.002 (Surface Water Network - S104)     | 22.523     | Pipe            | 36.743      | 0.009       |                                | 225                        | 160.544                  | 157.062                   |
| SW6.000 (Surface Water Network - S104)     | 12.517     | Pipe            | 50.069      | 0.009       |                                | 100                        | 153.145                  | 151.859                   |
| SW6.003 (Surface Water Network - S104)     | 55.362     | Pipe            | 152.512     | 0.009       |                                | 225                        | 153.707                  | 151.302                   |
| SW6.004 (Surface Water Network - S104)     | 14.035     | Pipe            | 22.933      | 0.009       |                                | 300                        | 154.757                  | 150.864                   |
| SW6.005 (Surface Water Network - S104)     | 9.849      | Pipe            | 43.009      | 0.009       |                                | 375                        | 155.513                  | 150.177                   |
| SW6.001 (Surface Water Network - S104)     | 9.506      | Pipe            | 100.067     | 0.009       |                                | 150                        | 153.347                  | 151.559                   |
| SW6.002 (Surface Water Network - S104)     | 8.658      | Pipe            | 99.513      | 0.009       |                                | 150                        | 153.538                  | 151.464                   |
| SW1.005 (Surface Water Network - S104)     | 12.372     | Pipe            | 20.793      | 0.009       |                                | 300                        | 161.208                  | 159.544                   |
| SW4.001 (Surface Water Network - S104)     | 18.035     | Pipe            | 24.671      | 0.009       |                                | 225                        | 161.182                  | 157.793                   |
| Pipe                                       | 19.293     | Pipe            | 11.998      |             | 0.6                            | 150                        | 160.371                  | 157.332                   |
| Pipe (3)                                   | 4.235      | Pipe            | 11.998      |             | 0.6                            | 150                        | 157.828                  | 152.661                   |
| Pipe (2)                                   | 12.939     | Pipe            | 2587.710    |             | 0.6                            | 600                        | 153.800                  | 149.380                   |
| SW5.000 (Surface Water Network - S104)     | 16.643     | Pipe            | 61.414      | 0.009       |                                | 150                        | 160.767                  | 158.950                   |
| SW5.000 (Surface Water Network - S104) (1) | 12.291     | Pipe            | 99.930      | 0.009       |                                | 150                        | 160.536                  | 158.679                   |
| Pipe (4)                                   | 4.686      | Pipe            | 13.053      |             | 0.6                            | 100                        | 160.388                  | 159.088                   |
| Pipe (1)                                   | 13.075     | Pipe            | 100.576     |             | 0.6                            | 150                        | 157.296                  | 150.803                   |
| Pipe (6)                                   | 14.374     | Pipe            | 100.520     |             | 0.6                            | 150                        | 154.794                  | 150.673                   |
| Pipe (7)                                   | 8.061      | Pipe            | 99.521      |             | 0.6                            | 150                        | 156.775                  | 150.530                   |
| Pipe (8)                                   | 21.395     | Pipe            | 84.565      |             | 0.6                            | 150                        | 156.180                  | 150.449                   |
| SW1.010 (Surface Water Network - S104)     | 9.698      | Pipe            | 438.618     |             | 0.6                            | 600                        | 156.245                  | 149.723                   |
| SW1.010 (Surface Water Network - S104) (1) | 9.400      | Pipe            | 1057.492    |             | 0.6                            | 600                        | 155.353                  | 149.701                   |
| Pipe (9)                                   | 4.456      | Pipe            | 101.280     |             | 0.6                            | 150                        | 155.608                  | 150.196                   |

|                                                            |                              |             |              |
|------------------------------------------------------------|------------------------------|-------------|--------------|
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|                                                            | Designed by:<br>oliver.boyes | Checked by: | Approved By: |
|                                                            | Company Address:             |             |              |
| Report Details:<br>Type: Connections<br>Storm Phase: Phase |                              |             |              |



|                                            |        |      |         |       |  |     |         |         |
|--------------------------------------------|--------|------|---------|-------|--|-----|---------|---------|
| SW1.013 (Surface Water Network - S104) (1) | 17.353 | Pipe | 99.731  | 0.009 |  | 150 | 152.772 | 149.157 |
| SW1.013 (Surface Water Network - S104)     | 4.132  | Pipe | 100.780 | 0.009 |  | 150 | 154.984 | 149.325 |
| SW1.013 (Surface Water Network - S104) (2) | 12.749 | Pipe | 100.389 | 0.009 |  | 150 | 155.018 | 149.284 |
| SW1.014 (Surface Water Network - S104)     | 8.525  | Pipe | 9.493   | 0.009 |  | 150 | 152.433 | 148.983 |
| SW1.014 (Surface Water Network - S104) (1) | 2.472  | Pipe | 65.048  | 0.009 |  | 225 | 149.587 | 148.063 |

| Name                                       | Downstream Cover Level (m) | Downstream Invert Level (m) | Part Family | Lock   | Flow Restriction (L/s) | Culvert Type | Culvert Entrance |
|--------------------------------------------|----------------------------|-----------------------------|-------------|--------|------------------------|--------------|------------------|
| SW1.008 (Surface Water Network - S104)     | 156.728                    | 155.153                     |             | All    |                        | (None)       | (None)           |
| SW1.009 (Surface Water Network - S104)     | 156.245                    | 154.668                     |             | All    |                        | (None)       | (None)           |
| SW1.007 (Surface Water Network - S104)     | 158.380                    | 156.025                     |             | All    |                        | (None)       | (None)           |
| SW1.000 (Surface Water Network - S104)     | 167.180                    | 165.830                     |             | All    |                        | (None)       | (None)           |
| SW1.001 (Surface Water Network - S104)     | 165.466                    | 164.116                     |             | All    |                        | (None)       | (None)           |
| SW1.002 (Surface Water Network - S104)     | 164.645                    | 163.126                     |             | All    |                        | (None)       | (None)           |
| SW1.003 (Surface Water Network - S104)     | 163.671                    | 162.120                     |             | All    |                        | (None)       | (None)           |
| SW1.004 (Surface Water Network - S104)     | 161.208                    | 159.619                     |             | All    |                        | (None)       | (None)           |
| SW1.006 (Surface Water Network - S104)     | 159.753                    | 156.212                     |             | All    |                        | (None)       | (None)           |
| SW5.002 (Surface Water Network - S104)     | 159.753                    | 158.042                     |             | Levels |                        | (None)       | (None)           |
| SW2.000 (Surface Water Network - S104)     | 164.661                    | 162.996                     |             | All    |                        | (None)       | (None)           |
| SW2.001 (Surface Water Network - S104)     | 164.100                    | 162.182                     |             | All    |                        | (None)       | (None)           |
| SW2.002 (Surface Water Network - S104)     | 163.671                    | 162.120                     |             | All    |                        | (None)       | (None)           |
| SW3.000 (Surface Water Network - S104)     | 164.661                    | 162.996                     |             | All    |                        | (None)       | (None)           |
| SW4.000 (Surface Water Network - S104)     | 161.182                    | 157.793                     |             | All    |                        | (None)       | (None)           |
| SW4.002 (Surface Water Network - S104)     | 160.556                    | 156.449                     |             | All    |                        | (None)       | (None)           |
| SW6.000 (Surface Water Network - S104)     | 153.347                    | 151.609                     |             | All    |                        | (None)       | (None)           |
| SW6.003 (Surface Water Network - S104)     | 154.757                    | 150.939                     |             | All    |                        | (None)       | (None)           |
| SW6.004 (Surface Water Network - S104)     | 155.513                    | 150.252                     |             | All    |                        | (None)       | (None)           |
| SW6.005 (Surface Water Network - S104)     | 156.245                    | 149.948                     |             | All    |                        | (None)       | (None)           |
| SW6.001 (Surface Water Network - S104)     | 153.538                    | 151.464                     |             | All    |                        | (None)       | (None)           |
| SW6.002 (Surface Water Network - S104)     | 153.707                    | 151.377                     |             | All    |                        | (None)       | (None)           |
| SW1.005 (Surface Water Network - S104)     | 160.556                    | 158.949                     |             | All    |                        | (None)       | (None)           |
| SW4.001 (Surface Water Network - S104)     | 160.544                    | 157.062                     |             | All    |                        | (None)       | (None)           |
| Pipe                                       | 157.828                    | 155.724                     |             | All    |                        | (None)       | (None)           |
| Pipe (3)                                   | 157.296                    | 152.308                     |             | All    |                        | (None)       | (None)           |
| Pipe (2)                                   | 154.984                    | 149.375                     |             | All    |                        | (None)       | (None)           |
| SW5.000 (Surface Water Network - S104)     | 160.536                    | 158.679                     |             | All    |                        | (None)       | (None)           |
| SW5.000 (Surface Water Network - S104) (1) | 160.371                    | 158.556                     |             | All    |                        | (None)       | (None)           |
| Pipe (4)                                   | 160.536                    | 158.729                     |             | All    |                        | (None)       | (None)           |

|                                         |                              |             |              |                                                                                     |
|-----------------------------------------|------------------------------|-------------|--------------|-------------------------------------------------------------------------------------|
| Project:                                | Date:<br>03/02/2022          |             |              |  |
|                                         | Designed by:<br>oliver.boyes | Checked by: | Approved By: |                                                                                     |
| Report Details:                         | Company Address:             |             |              |                                                                                     |
| Type: Connections<br>Storm Phase: Phase |                              |             |              |                                                                                     |

|                                            |         |         |  |        |     |        |        |
|--------------------------------------------|---------|---------|--|--------|-----|--------|--------|
| Pipe (1)                                   | 154.794 | 150.673 |  | None   |     | (None) | (None) |
| Pipe (6)                                   | 156.775 | 150.530 |  | None   |     | (None) | (None) |
| Pipe (7)                                   | 156.180 | 150.449 |  | None   |     | (None) | (None) |
| Pipe (8)                                   | 155.608 | 150.196 |  | None   |     | (None) | (None) |
| SW1.010 (Surface Water Network - S104)     | 155.353 | 149.701 |  | All    |     | (None) | (None) |
| SW1.010 (Surface Water Network - S104) (1) | 153.800 | 149.692 |  | All    |     | (None) | (None) |
| Pipe (9)                                   | 155.353 | 150.152 |  | Levels |     | (None) | (None) |
| SW1.013 (Surface Water Network - S104) (1) | 152.433 | 148.983 |  | All    | 5.0 | (None) | (None) |
| SW1.013 (Surface Water Network - S104)     | 155.018 | 149.284 |  | All    | 5.0 | (None) | (None) |
| SW1.013 (Surface Water Network - S104) (2) | 152.772 | 149.157 |  | All    | 5.0 | (None) | (None) |
| SW1.014 (Surface Water Network - S104)     | 149.587 | 148.085 |  | All    |     | (None) | (None) |
| SW1.014 (Surface Water Network - S104) (1) | 148.410 | 148.025 |  | All    |     | (None) | (None) |

|                                                               |                              |             |              |
|---------------------------------------------------------------|------------------------------|-------------|--------------|
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|                                                               | Designed by:<br>oliver.boyes | Checked by: | Approved By: |
| Report Details:<br>Type: Inflow Summary<br>Storm Phase: Phase | Company Address:             |             |              |



| Inflow Label | Connected To                       | Flow (L/s) | Runoff Method         | Area (ha) | Percentage Impervious (%) | Urban Creep (%) | Adjusted Percentage Impervious (%) | Area Analysed (ha) |
|--------------|------------------------------------|------------|-----------------------|-----------|---------------------------|-----------------|------------------------------------|--------------------|
| SW1.000a     | SW1 (Surface Water Network - S104) |            | Time of Concentration | 0.033     | 100                       | 0               | 100                                | 0.033              |
| SW1.000b     | SW1 (Surface Water Network - S104) |            | Time of Concentration | 0.011     | 100                       | 0               | 100                                | 0.011              |
| SW1.000c     | SW1 (Surface Water Network - S104) |            | Time of Concentration | 0.004     | 100                       | 0               | 100                                | 0.004              |
| SW1.000d     | SW1 (Surface Water Network - S104) |            | Time of Concentration | 0.002     | 100                       | 0               | 100                                | 0.002              |
| SW1.000e     | SW1 (Surface Water Network - S104) |            | Time of Concentration | 0.010     | 100                       | 0               | 100                                | 0.010              |
| SW1.000f     | SW1 (Surface Water Network - S104) |            | Time of Concentration | 0.004     | 100                       | 0               | 100                                | 0.004              |
| SW1.001a     | SW2 (Surface Water Network - S104) |            | Time of Concentration | 0.013     | 100                       | 0               | 100                                | 0.013              |
| SW1.001b     | SW2 (Surface Water Network - S104) |            | Time of Concentration | 0.012     | 100                       | 0               | 100                                | 0.012              |
| SW1.001c     | SW2 (Surface Water Network - S104) |            | Time of Concentration | 0.021     | 100                       | 0               | 100                                | 0.021              |
| SW1.002a     | SW3 (Surface Water Network - S104) |            | Time of Concentration | 0.024     | 100                       | 0               | 100                                | 0.024              |
| SW1.002b     | SW3 (Surface Water Network - S104) |            | Time of Concentration | 0.008     | 100                       | 0               | 100                                | 0.008              |
| SW1.002c     | SW3 (Surface Water Network - S104) |            | Time of Concentration | 0.008     | 100                       | 0               | 100                                | 0.008              |
| SW1.002d     | SW3 (Surface Water Network - S104) |            | Time of Concentration | 0.017     | 100                       | 0               | 100                                | 0.017              |

|                                                               |                              |             |              |
|---------------------------------------------------------------|------------------------------|-------------|--------------|
| Project:                                                      | Date:<br>03/02/2022          |             |              |
|                                                               | Designed by:<br>oliver.boyes | Checked by: | Approved By: |
| Report Details:<br>Type: Inflow Summary<br>Storm Phase: Phase | Company Address:             |             |              |



|          |                                                 |  |                          |       |     |   |     |       |
|----------|-------------------------------------------------|--|--------------------------|-------|-----|---|-----|-------|
| SW1.002e | SW3<br>(Surface<br>Water<br>Network -<br>S104)  |  | Time of<br>Concentration | 0.013 | 100 | 0 | 100 | 0.013 |
| SW1.002f | SW3<br>(Surface<br>Water<br>Network -<br>S104)  |  | Time of<br>Concentration | 0.006 | 100 | 0 | 100 | 0.006 |
| SW1.002g | SW3<br>(Surface<br>Water<br>Network -<br>S104)  |  | Time of<br>Concentration | 0.008 | 100 | 0 | 100 | 0.008 |
| SW1.003a | SW5<br>(Surface<br>Water<br>Network -<br>S104)  |  | Time of<br>Concentration | 0.026 | 100 | 0 | 100 | 0.026 |
| SW1.004a | SW10<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.039 | 100 | 0 | 100 | 0.039 |
| SW1.005a | SW10<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.015 | 100 | 0 | 100 | 0.015 |
| SW1.005b | SW10<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.013 | 100 | 0 | 100 | 0.013 |
| SW1.005c | SW10<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.006 | 100 | 0 | 100 | 0.006 |
| SW1.005d | SW10<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.010 | 100 | 0 | 100 | 0.010 |
| SW1.005e | SW10<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.002 | 100 | 0 | 100 | 0.002 |
| SW1.005f | SW10<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.006 | 100 | 0 | 100 | 0.006 |
| SW1.005g | SW10<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.002 | 100 | 0 | 100 | 0.002 |
| SW1.005h | SW10<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.010 | 100 | 0 | 100 | 0.010 |
| SW1.005i | SW10<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.004 | 100 | 0 | 100 | 0.004 |

|                                            |                              |             |              |                                                                                     |
|--------------------------------------------|------------------------------|-------------|--------------|-------------------------------------------------------------------------------------|
| Project:                                   | Date:<br>03/02/2022          |             |              |  |
|                                            | Designed by:<br>oliver.boyes | Checked by: | Approved By: |                                                                                     |
| Report Details:                            | Company Address:             |             |              |                                                                                     |
| Type: Inflow Summary<br>Storm Phase: Phase |                              |             |              |                                                                                     |

|          |                                                 |  |                          |       |     |   |     |       |
|----------|-------------------------------------------------|--|--------------------------|-------|-----|---|-----|-------|
| SW1.006a | SW15<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.015 | 100 | 0 | 100 | 0.015 |
| SW1.007a | SW15<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.015 | 100 | 0 | 100 | 0.015 |
| SW1.008a | SW18<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.030 | 100 | 0 | 100 | 0.030 |
| SW1.009a | SW20<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.015 | 100 | 0 | 100 | 0.015 |
| SW1.009b | SW15<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.003 | 100 | 0 | 100 | 0.003 |
| SW1.009c | SW15<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.004 | 100 | 0 | 100 | 0.004 |
| SW1.009d | SW19<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.003 | 100 | 0 | 100 | 0.003 |
| SW1.009e | SW19<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.003 | 100 | 0 | 100 | 0.003 |
| SW1.009f | SW20<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.010 | 100 | 0 | 100 | 0.010 |
| SW1.009g | SW20<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.002 | 100 | 0 | 100 | 0.002 |
| SW1.009h | SW20<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.016 | 100 | 0 | 100 | 0.016 |
| SW1.010a | SW20<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.014 | 100 | 0 | 100 | 0.014 |
| SW2.000a | SW6<br>(Surface<br>Water<br>Network -<br>S104)  |  | Time of<br>Concentration | 0.023 | 100 | 0 | 100 | 0.023 |
| SW2.000b | SW6<br>(Surface<br>Water<br>Network -<br>S104)  |  | Time of<br>Concentration | 0.006 | 100 | 0 | 100 | 0.006 |

|                                                               |                              |             |              |                                                                                     |
|---------------------------------------------------------------|------------------------------|-------------|--------------|-------------------------------------------------------------------------------------|
| Project:                                                      | Date:<br>03/02/2022          |             |              |  |
|                                                               | Designed by:<br>oliver.boyes | Checked by: | Approved By: |                                                                                     |
| Report Details:<br>Type: Inflow Summary<br>Storm Phase: Phase | Company Address:             |             |              |                                                                                     |

|          |                                                 |  |                          |       |     |   |     |       |
|----------|-------------------------------------------------|--|--------------------------|-------|-----|---|-----|-------|
| SW2.000c | SW6<br>(Surface<br>Water<br>Network -<br>S104)  |  | Time of<br>Concentration | 0.011 | 100 | 0 | 100 | 0.011 |
| SW2.000d | SW6<br>(Surface<br>Water<br>Network -<br>S104)  |  | Time of<br>Concentration | 0.011 | 100 | 0 | 100 | 0.011 |
| SW2.000e | SW8<br>(Surface<br>Water<br>Network -<br>S104)  |  | Time of<br>Concentration | 0.011 | 100 | 0 | 100 | 0.011 |
| SW2.001a | SW9<br>(Surface<br>Water<br>Network -<br>S104)  |  | Time of<br>Concentration | 0.015 | 100 | 0 | 100 | 0.015 |
| SW2.002a | SW9<br>(Surface<br>Water<br>Network -<br>S104)  |  | Time of<br>Concentration | 0.012 | 100 | 0 | 100 | 0.012 |
| SW2.002b | SW9<br>(Surface<br>Water<br>Network -<br>S104)  |  | Time of<br>Concentration | 0.003 | 100 | 0 | 100 | 0.003 |
| SW2.002c | SW9<br>(Surface<br>Water<br>Network -<br>S104)  |  | Time of<br>Concentration | 0.003 | 100 | 0 | 100 | 0.003 |
| SW2.002d | SW9<br>(Surface<br>Water<br>Network -<br>S104)  |  | Time of<br>Concentration | 0.006 | 100 | 0 | 100 | 0.006 |
| SW2.002e | SW9<br>(Surface<br>Water<br>Network -<br>S104)  |  | Time of<br>Concentration | 0.003 | 100 | 0 | 100 | 0.003 |
| SW3.000a | SW8<br>(Surface<br>Water<br>Network -<br>S104)  |  | Time of<br>Concentration | 0.015 | 100 | 0 | 100 | 0.015 |
| SW3.000b | SW8<br>(Surface<br>Water<br>Network -<br>S104)  |  | Time of<br>Concentration | 0.020 | 100 | 0 | 100 | 0.020 |
| SW4.000a | SW12<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.068 | 100 | 0 | 100 | 0.068 |
| SW4.000b | SW12<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.011 | 100 | 0 | 100 | 0.011 |
| SW4.001a | SW13<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.005 | 100 | 0 | 100 | 0.005 |

|                                                               |                              |             |              |
|---------------------------------------------------------------|------------------------------|-------------|--------------|
| Project:                                                      | Date:<br>03/02/2022          |             |              |
|                                                               | Designed by:<br>oliver.boyes | Checked by: | Approved By: |
| Report Details:<br>Type: Inflow Summary<br>Storm Phase: Phase | Company Address:             |             |              |



|          |                                                 |  |                          |       |     |   |     |       |
|----------|-------------------------------------------------|--|--------------------------|-------|-----|---|-----|-------|
| SW4.001b | SW13<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.002 | 100 | 0 | 100 | 0.002 |
| SW4.001c | SW13<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.002 | 100 | 0 | 100 | 0.002 |
| SW4.001d | SW13<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.006 | 100 | 0 | 100 | 0.006 |
| SW4.001e | SW13<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.004 | 100 | 0 | 100 | 0.004 |
| SW4.001f | SW13<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.006 | 100 | 0 | 100 | 0.006 |
| SW4.001g | SW13<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.004 | 100 | 0 | 100 | 0.004 |
| SW4.001h | SW13<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.007 | 100 | 0 | 100 | 0.007 |
| SW4.001i | SW13<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.002 | 100 | 0 | 100 | 0.002 |
| SW4.001j | SW13<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.009 | 100 | 0 | 100 | 0.009 |
| SW4.001k | SW13<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.001 | 100 | 0 | 100 | 0.001 |
| SW4.001l | SW13<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.012 | 100 | 0 | 100 | 0.012 |
| SW4.002a | SW14<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.019 | 100 | 0 | 100 | 0.019 |
| SW4.002b | SW14<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.025 | 100 | 0 | 100 | 0.025 |
| SW4.002c | SW14<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.002 | 100 | 0 | 100 | 0.002 |

|                                                               |                              |             |              |
|---------------------------------------------------------------|------------------------------|-------------|--------------|
| Project:                                                      | Date:<br>03/02/2022          |             |              |
|                                                               | Designed by:<br>oliver.boyes | Checked by: | Approved By: |
| Report Details:<br>Type: Inflow Summary<br>Storm Phase: Phase | Company Address:             |             |              |



|          |                                                 |  |                          |       |     |   |     |       |
|----------|-------------------------------------------------|--|--------------------------|-------|-----|---|-----|-------|
| SW4.002d | SW14<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.013 | 100 | 0 | 100 | 0.013 |
| SW4.002e | SW14<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.022 | 100 | 0 | 100 | 0.022 |
| SW4.002f | SW14<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.002 | 100 | 0 | 100 | 0.002 |
| SW4.002g | SW14<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.010 | 100 | 0 | 100 | 0.010 |
| SW4.002h | SW14<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.003 | 100 | 0 | 100 | 0.003 |
| SW4.002i | SW14<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.002 | 100 | 0 | 100 | 0.002 |
| SW4.002j | SW14<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.001 | 100 | 0 | 100 | 0.001 |
| SW4.002k | SW14<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.003 | 100 | 0 | 100 | 0.003 |
| SW4.002l | SW14<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.003 | 100 | 0 | 100 | 0.003 |
| SW4.002m | SW12<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.011 | 100 | 0 | 100 | 0.011 |
| SW5.002a | SW18<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.011 | 100 | 0 | 100 | 0.011 |
| SW5.002b | SW18<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.003 | 100 | 0 | 100 | 0.003 |
| SW5.002c | SW18<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.008 | 100 | 0 | 100 | 0.008 |
| SW5.002d | SW18<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.006 | 100 | 0 | 100 | 0.006 |

|                                                               |                              |             |              |
|---------------------------------------------------------------|------------------------------|-------------|--------------|
| Project:                                                      | Date:<br>03/02/2022          |             |              |
|                                                               | Designed by:<br>oliver.boyes | Checked by: | Approved By: |
| Report Details:<br>Type: Inflow Summary<br>Storm Phase: Phase | Company Address:             |             |              |



|          |                                                 |  |                          |       |     |   |     |       |
|----------|-------------------------------------------------|--|--------------------------|-------|-----|---|-----|-------|
| SW5.002e | SW18<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.002 | 100 | 0 | 100 | 0.002 |
| SW6.000a | SW22<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.044 | 100 | 0 | 100 | 0.044 |
| SW6.000b | SW23<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.007 | 100 | 0 | 100 | 0.007 |
| SW6.000c | SW23<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.006 | 100 | 0 | 100 | 0.006 |
| SW6.002a | SW24<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.015 | 100 | 0 | 100 | 0.015 |
| SW6.002b | SW24<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.011 | 100 | 0 | 100 | 0.011 |
| SW6.002c | SW24<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.006 | 100 | 0 | 100 | 0.006 |
| SW6.002d | SW24<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.001 | 100 | 0 | 100 | 0.001 |
| SW6.003a | SW26<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.061 | 100 | 0 | 100 | 0.061 |
| SW6.003b | SW27<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.001 | 100 | 0 | 100 | 0.001 |
| SW6.003c | SW27<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.006 | 100 | 0 | 100 | 0.006 |
| SW6.003d | SW27<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.002 | 100 | 0 | 100 | 0.002 |
| SW6.003e | SW27<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.008 | 100 | 0 | 100 | 0.008 |
| SW6.003f | SW27<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.017 | 100 | 0 | 100 | 0.017 |

|                                                               |                              |             |              |
|---------------------------------------------------------------|------------------------------|-------------|--------------|
| Project:                                                      | Date:<br>03/02/2022          |             |              |
|                                                               | Designed by:<br>oliver.boyes | Checked by: | Approved By: |
| Report Details:<br>Type: Inflow Summary<br>Storm Phase: Phase | Company Address:             |             |              |



|          |                                                 |  |                          |       |     |   |     |       |
|----------|-------------------------------------------------|--|--------------------------|-------|-----|---|-----|-------|
| SW6.003g | SW27<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.002 | 100 | 0 | 100 | 0.002 |
| SW6.004a | SW21<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.014 | 100 | 0 | 100 | 0.014 |
| SW6.004b | SW26<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.006 | 100 | 0 | 100 | 0.006 |
| SW6.004c | SW26<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.003 | 100 | 0 | 100 | 0.003 |
| SW6.004d | SW26<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.015 | 100 | 0 | 100 | 0.015 |
| SW6.004e | SW26<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.015 | 100 | 0 | 100 | 0.015 |
| SW6.004f | SW26<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.015 | 100 | 0 | 100 | 0.015 |
| SW6.004g | SW26<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.019 | 100 | 0 | 100 | 0.019 |
| SW6.005a | SW27<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.015 | 100 | 0 | 100 | 0.015 |
| SW6.005b | SW27<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.008 | 100 | 0 | 100 | 0.008 |
| SW6.005c | SW27<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.010 | 100 | 0 | 100 | 0.010 |
| SW6.005d | SW27<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.013 | 100 | 0 | 100 | 0.013 |
| SW6.005e | SW27<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.004 | 100 | 0 | 100 | 0.004 |
| SW6.005f | SW27<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.002 | 100 | 0 | 100 | 0.002 |

|                                                               |                              |             |              |
|---------------------------------------------------------------|------------------------------|-------------|--------------|
| Project:                                                      | Date:<br>03/02/2022          |             |              |
|                                                               | Designed by:<br>oliver.boyes | Checked by: | Approved By: |
| Report Details:<br>Type: Inflow Summary<br>Storm Phase: Phase | Company Address:             |             |              |



|          |                                                 |  |                          |       |     |   |     |       |
|----------|-------------------------------------------------|--|--------------------------|-------|-----|---|-----|-------|
| SW6.005g | SW27<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.002 | 100 | 0 | 100 | 0.002 |
| SW6.005h | SW27<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.010 | 100 | 0 | 100 | 0.010 |
| SW6.005i | SW27<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.002 | 100 | 0 | 100 | 0.002 |
| SW7.000a | SW16b                                           |  | Time of<br>Concentration | 0.021 | 100 | 0 | 100 | 0.021 |
| SW7.000b | SW16a                                           |  | Time of<br>Concentration | 0.010 | 100 | 0 | 100 | 0.010 |
| SW7.000c | SW16<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.009 | 100 | 0 | 100 | 0.009 |
| SW7.000d | SW16<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.015 | 100 | 0 | 100 | 0.015 |
| SW7.000e | SW16<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.019 | 100 | 0 | 100 | 0.019 |
| SW7.000f | SW16<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.010 | 100 | 0 | 100 | 0.010 |
| SW7.000g | SW16<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.011 | 100 | 0 | 100 | 0.011 |
| SW7.000h | SW16<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.011 | 100 | 0 | 100 | 0.011 |
| SW7.002a | SW17<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.014 | 100 | 0 | 100 | 0.014 |
| SW7.002b | SW17<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.017 | 100 | 0 | 100 | 0.017 |
| SW7.002c | SW17<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.010 | 100 | 0 | 100 | 0.010 |
| SW7.002d | SW17<br>(Surface<br>Water<br>Network -<br>S104) |  | Time of<br>Concentration | 0.013 | 100 | 0 | 100 | 0.013 |

|                                                               |                              |                  |              |
|---------------------------------------------------------------|------------------------------|------------------|--------------|
| Project:                                                      | Date:<br>03/02/2022          |                  |              |
|                                                               | Designed by:<br>oliver.boyes | Checked by:      | Approved By: |
| Report Details:<br>Type: Inflow Summary<br>Storm Phase: Phase |                              | Company Address: |              |



|              |       |            |                       |              |     |   |     |              |
|--------------|-------|------------|-----------------------|--------------|-----|---|-----|--------------|
| SW7.003a     | SW17a |            | Time of Concentration | 0.006        | 100 | 0 | 100 | 0.006        |
| SW7.003b     | SW17a |            | Time of Concentration | 0.003        | 100 | 0 | 100 | 0.003        |
| SW7.003c     | SW17a |            | Time of Concentration | 0.010        | 100 | 0 | 100 | 0.010        |
| SW7.003d     | SW17a |            | Time of Concentration | 0.006        | 100 | 0 | 100 | 0.006        |
| <b>TOTAL</b> |       | <b>0.0</b> |                       | <b>1.409</b> |     |   |     | <b>1.409</b> |

|                                             |                              |             |              |                                                                                     |
|---------------------------------------------|------------------------------|-------------|--------------|-------------------------------------------------------------------------------------|
| Project:                                    | Date:<br>03/02/2022          |             |              |  |
|                                             | Designed by:<br>oliver.boyes | Checked by: | Approved By: |                                                                                     |
| Report Title:<br>Rainfall Analysis Criteria | Company Address:             |             |              |                                                                                     |

|                                 |                          |
|---------------------------------|--------------------------|
| Runoff Type                     | Dynamic                  |
| Output Interval (mins)          | 1                        |
| Time Step                       | Shortest                 |
| Urban Creep                     | Use Catchment Values     |
| Junction Flood Risk Margin (mm) | 50                       |
| Perform No Discharge Analysis   | <input type="checkbox"/> |

### Rainfall

09.21011 - Birkenshaw Type: FSR

|            |                                     |
|------------|-------------------------------------|
| Region     | England And Wales                   |
| M5-60 (mm) | 19.0                                |
| Ratio R    | 0.352                               |
| Summer     | <input checked="" type="checkbox"/> |
| Winter     | <input checked="" type="checkbox"/> |

### Return Period

|                       |                       |
|-----------------------|-----------------------|
| Return Period (years) | Increase Rainfall (%) |
| 100.0                 | 30.000                |

### 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            |

|                                                                  |                              |             |              |
|------------------------------------------------------------------|------------------------------|-------------|--------------|
| Project:                                                         | Date:<br>03/02/2022          |             |              |
|                                                                  | Designed by:<br>oliver.boyes | Checked by: | Approved By: |
| Report Details:<br>Type: Junctions Summary<br>Storm Phase: Phase | Company Address:             |             |              |





**09.21011 - Birkenshaw: 100 years: Increase Rainfall (%): +30: Critical Storm Per Item: Rank By: Max. Depth**

| 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     |
|-------------------------------------|------------------------------------------------------------|-----------------|------------------|----------------|----------------|-------------------|---------------------------|--------------------------|--------------------|-----------------------------|------------|
| Outfall                             | 09.21011 - Birkenshaw: 100 years: +30 %: 1440 mins: Winter |                 | 148.025          | 148.063        | 0.038          | 5.0               |                           |                          | 5.0                | 725.199                     | OK         |
| SW1 (Surface Water Network - S104)  | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter   | 168.177         | 166.827          | 166.924        | 0.097          | 34.1              | 0.109                     | 0.000                    | 33.9               | 15.733                      | OK         |
| SW2 (Surface Water Network - S104)  | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter   | 167.180         | 165.830          | 165.965        | 0.135          | 58.2              | 0.153                     | 0.000                    | 57.2               | 26.962                      | OK         |
| SW8 (Surface Water Network - S104)  | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter   | 165.082         | 163.161          | 163.283        | 0.122          | 24.2              | 0.138                     | 0.000                    | 24.0               | 11.172                      | OK         |
| SW3 (Surface Water Network - S104)  | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter   | 165.466         | 164.041          | 164.186        | 0.145          | 101.4             | 0.164                     | 0.000                    | 101.2              | 47.408                      | OK         |
| SW7 (Surface Water Network - S104)  | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter   | 164.661         | 162.891          | 163.186        | 0.295          | 50.3              | 0.334                     | 0.000                    | 50.2               | 23.572                      | Surcharged |
| SW4 (Surface Water Network - S104)  | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter   | 164.645         | 163.126          | 163.254        | 0.128          | 101.2             | 0.145                     | 0.000                    | 101.0              | 47.376                      | OK         |
| SW6 (Surface Water Network - S104)  | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter   | 164.431         | 163.081          | 163.355        | 0.274          | 26.9              | 0.310                     | 0.000                    | 26.3               | 12.405                      | Surcharged |
| SW9 (Surface Water Network - S104)  | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter   | 164.100         | 162.182          | 163.080        | 0.898          | 72.5              | 1.016                     | 0.000                    | 69.6               | 33.858                      | Surcharged |
| SW5 (Surface Water Network - S104)  | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter   | 163.671         | 162.120          | 162.927        | 0.807          | 176.7             | 0.913                     | 0.000                    | 171.4              | 87.549                      | Surcharged |
| SW10 (Surface Water Network - S104) | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter   | 161.208         | 159.544          | 159.796        | 0.252          | 223.1             | 0.361                     | 0.000                    | 222.9              | 112.871                     | OK         |
| SW12 (Surface Water Network - S104) | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter   | 160.298         | 158.170          | 159.102        | 0.932          | 47.6              | 1.054                     | 0.000                    | 47.2               | 21.941                      | Surcharged |

|                                                                  |                              |             |              |
|------------------------------------------------------------------|------------------------------|-------------|--------------|
| Project:                                                         | Date:<br>03/02/2022          |             |              |
|                                                                  | Designed by:<br>oliver.boyes | Checked by: | Approved By: |
| Report Details:<br>Type: Junctions Summary<br>Storm Phase: Phase | Company Address:             |             |              |



|                                        |                                                            |         |         |         |       |       |       |       |       |          |            |
|----------------------------------------|------------------------------------------------------------|---------|---------|---------|-------|-------|-------|-------|-------|----------|------------|
| SW16<br>(Surface Water Network - S104) | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter   | 160.767 | 158.950 | 159.979 | 1.029 | 39.6  | 1.163 | 0.000 | 36.2  | 18.268   | Surcharged |
| SW13<br>(Surface Water Network - S104) | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter   | 161.182 | 157.793 | 158.910 | 1.117 | 76.8  | 1.263 | 0.000 | 71.4  | 36.526   | Surcharged |
| SW14<br>(Surface Water Network - S104) | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter   | 160.544 | 157.062 | 158.659 | 1.597 | 121.5 | 1.806 | 0.000 | 119.5 | 62.476   | Surcharged |
| SW11<br>(Surface Water Network - S104) | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter   | 160.556 | 156.299 | 157.788 | 1.489 | 342.3 | 1.684 | 0.000 | 341.8 | 175.316  | Surcharged |
| SW17<br>(Surface Water Network - S104) | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter   | 160.371 | 157.332 | 158.837 | 1.505 | 73.1  | 1.702 | 0.000 | 69.8  | 38.387   | Surcharged |
| SW18<br>(Surface Water Network - S104) | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter   | 160.102 | 158.122 | 158.263 | 0.141 | 30.5  | 0.160 | 0.000 | 30.1  | 14.092   | OK         |
| SW15<br>(Surface Water Network - S104) | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter   | 159.753 | 156.212 | 157.261 | 1.049 | 388.1 | 1.501 | 0.000 | 387.9 | 197.859  | Surcharged |
| SW19<br>(Surface Water Network - S104) | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter   | 158.380 | 156.025 | 156.344 | 0.319 | 391.2 | 0.457 | 0.000 | 391.1 | 199.439  | OK         |
| SW20<br>(Surface Water Network - S104) | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter   | 156.728 | 155.153 | 155.483 | 0.330 | 420.0 | 0.472 | 0.000 | 419.5 | 213.582  | OK         |
| SW24<br>(Surface Water Network - S104) | 09.21011 - Birkenshaw: 100 years: +30 %: 1440 mins: Winter | 153.538 | 151.464 | 152.219 | 0.755 | 2.5   | 0.854 | 0.000 | 2.5   | 84.859   | Surcharged |
| SW25<br>(Surface Water Network - S104) | 09.21011 - Birkenshaw: 100 years: +30 %: 1440 mins: Winter | 153.707 | 151.302 | 152.219 | 0.917 | 2.5   | 1.037 | 0.000 | 2.5   | 84.788   | Surcharged |
| SW23<br>(Surface Water Network - S104) | 09.21011 - Birkenshaw: 100 years: +30 %: 1440 mins: Winter | 153.347 | 151.559 | 152.219 | 0.660 | 1.6   | 0.746 | 0.000 | 1.6   | 53.478   | Surcharged |
| SW21<br>(Surface Water Network - S104) | 09.21011 - Birkenshaw: 100 years: +30 %: 1440 mins: Winter | 156.245 | 149.723 | 152.219 | 2.496 | 33.0  | 4.410 | 0.000 | 32.8  | 1141.465 | Surcharged |
| SW22<br>(Surface Water Network - S104) | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter   | 153.145 | 151.859 | 152.997 | 1.138 | 23.4  | 1.288 | 0.000 | 20.0  | 10.803   | Surcharged |

|                                                                  |                              |             |              |
|------------------------------------------------------------------|------------------------------|-------------|--------------|
| Project:                                                         | Date:<br>03/02/2022          |             |              |
|                                                                  | Designed by:<br>oliver.boyes | Checked by: | Approved By: |
| Report Details:<br>Type: Junctions Summary<br>Storm Phase: Phase | Company Address:             |             |              |



|                                        |                                                            |         |         |         |       |      |       |       |      |          |            |
|----------------------------------------|------------------------------------------------------------|---------|---------|---------|-------|------|-------|-------|------|----------|------------|
| SW27<br>(Surface Water Network - S104) | 09.21011 - Birkenshaw: 100 years: +30 %: 1440 mins: Winter | 155.513 | 150.177 | 152.219 | 2.042 | 8.7  | 2.309 | 0.000 | 8.6  | 303.322  | Surcharged |
| SW26<br>(Surface Water Network - S104) | 09.21011 - Birkenshaw: 100 years: +30 %: 1440 mins: Winter | 154.757 | 150.864 | 152.219 | 1.355 | 6.1  | 1.532 | 0.000 | 5.9  | 207.258  | Surcharged |
| SW29<br>(Surface Water Network - S104) | 09.21011 - Birkenshaw: 100 years: +30 %: 1440 mins: Winter | 154.984 | 149.325 | 152.219 | 2.894 | 5.1  | 5.113 | 0.000 | 5.0  | 725.589  | Surcharged |
| SW31<br>(Surface Water Network - S104) | 09.21011 - Birkenshaw: 100 years: +30 %: 1440 mins: Winter | 152.433 | 148.983 | 149.011 | 0.028 | 5.0  | 0.032 | 0.000 | 5.0  | 725.250  | OK         |
| SW17a                                  | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter   | 157.828 | 152.661 | 153.733 | 1.072 | 81.7 | 1.213 | 0.000 | 80.9 | 44.581   | Surcharged |
| SW16a                                  | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter   | 160.536 | 158.679 | 159.533 | 0.854 | 49.7 | 0.966 | 0.000 | 47.3 | 25.799   | Surcharged |
| SW16b                                  | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter   | 160.388 | 159.088 | 159.652 | 0.564 | 11.1 | 0.638 | 0.000 | 10.2 | 5.124    | Surcharged |
| SW33                                   | 09.21011 - Birkenshaw: 100 years: +30 %: 1440 mins: Winter | 154.794 | 150.673 | 152.220 | 1.547 | 4.9  | 1.749 | 0.000 | 4.7  | 208.416  | Surcharged |
| SW34                                   | 09.21011 - Birkenshaw: 100 years: +30 %: 1440 mins: Winter | 156.775 | 150.530 | 152.219 | 1.689 | 4.7  | 1.911 | 0.000 | 4.6  | 210.273  | Surcharged |
| SW35                                   | 09.21011 - Birkenshaw: 100 years: +30 %: 1440 mins: Winter | 156.180 | 150.449 | 152.219 | 1.770 | 4.6  | 2.002 | 0.000 | 4.4  | 212.048  | Surcharged |
| SW36                                   | 09.21011 - Birkenshaw: 100 years: +30 %: 1440 mins: Winter | 155.608 | 150.196 | 152.219 | 2.023 | 4.4  | 2.288 | 0.000 | 4.3  | 213.431  | Surcharged |
| SW37                                   | 09.21011 - Birkenshaw: 100 years: +30 %: 1440 mins: Winter | 155.353 | 149.701 | 152.219 | 2.518 | 35.7 | 4.449 | 0.000 | 35.5 | 1308.405 | Surcharged |
| SW30                                   | 09.21011 - Birkenshaw: 100 years: +30 %: 1440 mins: Winter | 152.772 | 149.157 | 149.210 | 0.053 | 5.0  | 0.060 | 0.000 | 5.0  | 725.314  | OK         |
| SW29a                                  | 09.21011 - Birkenshaw: 100 years: +30 %: 1440 mins: Winter | 155.018 | 149.284 | 149.335 | 0.051 | 5.0  | 0.058 | 0.000 | 5.0  | 725.440  | OK         |
| SW32                                   | 09.21011 - Birkenshaw: 100 years: +30 %: 1440 mins: Winter | 149.587 | 148.063 | 148.107 | 0.044 | 5.0  | 0.050 | 0.000 | 5.0  | 725.199  | OK         |

|                                                                            |                              |             |              |
|----------------------------------------------------------------------------|------------------------------|-------------|--------------|
| Project:                                                                   | Date:<br>03/02/2022          |             |              |
|                                                                            | Designed by:<br>oliver.boyes | Checked by: | Approved By: |
| Report Details:<br>Type: Stormwater Controls Summary<br>Storm Phase: Phase | Company Address:             |             |              |





**09.21011 - Birkenshaw: 100 years: Increase Rainfall (%): +30: Critical Storm Per**  
**Item: Rank By: Max. Avg. Depth**

| 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. Residual Volume (m³) | Max. Flooded Volume (m³) | Total Lost Volume (m³) | Max. Outflow (L/s) | Total Discharge Volume (m³) | Percentage Available (%) | Status |
|--------------------|------------------------------------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|---------------------------|--------------------------|------------------------|--------------------|-----------------------------|--------------------------|--------|
| Tank               | 09.21011 - Birkenshaw: 100 years: +30 %: 1440 mins: Winter | 152.219           | 152.219           | 2.839             | 2.839             | 35.5              | 828.947                   | 0.000                    | 0.000                  | 5.1                | 730.888                     | 5.530                    | OK     |
| Tank (1)           | 09.21011 - Birkenshaw: 100 years: +30 %: 1440 mins: Winter | 152.220           | 152.220           | 1.417             | 1.417             | 7.9               | 130.893                   | 0.000                    | 0.000                  | 4.9                | 171.439                     | 17.019                   | OK     |

|                                                                    |                              |             |              |
|--------------------------------------------------------------------|------------------------------|-------------|--------------|
| Project:                                                           | Date:<br>03/02/2022          |             |              |
|                                                                    | Designed by:<br>oliver.boyes | Checked by: | Approved By: |
| Report Details:<br>Type: Connections Summary<br>Storm Phase: Phase | Company Address:             |             |              |





**09.21011 - Birkenshaw: 100 years: Increase Rainfall (%): +30: Critical Storm Per Item: Rank By: Max. Flow**

| 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     |
|----------------------------------------|----------------------------------------------------------|-----------------|-------------------------------------|-------------------------------------|--------------------------|-------------------------|---------------------|-----------------------|---------------------|-----------------|-----------------|------------|
| SW1.008 (Surface Water Network - S104) | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter | Pipe            | SW19 (Surface Water Network - S104) | SW20 (Surface Water Network - S104) | 158.380                  | 156.344                 | 0.324               | 199.439               | 3.9                 | 0.76            | 391.1           | OK         |
| SW1.009 (Surface Water Network - S104) | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter | Pipe            | SW20 (Surface Water Network - S104) | SW21 (Surface Water Network - S104) | 156.728                  | 155.483                 | 0.268               | 213.582               | 5.0                 | 0.59            | 419.5           | OK         |
| SW1.007 (Surface Water Network - S104) | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter | Pipe            | SW15 (Surface Water Network - S104) | SW19 (Surface Water Network - S104) | 159.753                  | 157.261                 | 0.375               | 197.859               | 3.5                 | 1.6             | 387.9           | Surcharged |
| SW1.000 (Surface Water Network - S104) | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter | Pipe            | SW1 (Surface Water Network - S104)  | SW2 (Surface Water Network - S104)  | 168.177                  | 166.924                 | 0.116               | 15.733                | 2.3                 | 0.71            | 33.9            | OK         |
| SW1.001 (Surface Water Network - S104) | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter | Pipe            | SW2 (Surface Water Network - S104)  | SW3 (Surface Water Network - S104)  | 167.180                  | 165.965                 | 0.126               | 26.962                | 3.6                 | 0.95            | 57.2            | OK         |
| SW1.002 (Surface Water Network - S104) | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter | Pipe            | SW3 (Surface Water Network - S104)  | SW4 (Surface Water Network - S104)  | 165.466                  | 164.186                 | 0.133               | 47.408                | 4.1                 | 0.56            | 101.2           | OK         |
| SW1.003 (Surface Water Network - S104) | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter | Pipe            | SW4 (Surface Water Network - S104)  | SW5 (Surface Water Network - S104)  | 164.645                  | 163.254                 | 0.225               | 47.376                | 3.0                 | 0.56            | 101.0           | OK         |
| SW1.004 (Surface Water Network - S104) | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter | Pipe            | SW5 (Surface Water Network - S104)  | SW10 (Surface Water Network - S104) | 163.671                  | 162.927                 | 0.225               | 87.549                | 4.6                 | 0.99            | 171.4           | Surcharged |
| SW1.006 (Surface Water Network - S104) | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter | Pipe            | SW11 (Surface Water Network - S104) | SW15 (Surface Water Network - S104) | 160.556                  | 157.788                 | 0.375               | 175.316               | 3.1                 | 1.9             | 341.8           | Surcharged |
| SW5.002 (Surface Water Network - S104) | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter | Pipe            | SW18 (Surface Water Network - S104) | SW15 (Surface Water Network - S104) | 160.102                  | 158.263                 | 0.134               | 14.092                | 1.2                 | 0.61            | 30.1            | OK         |
| SW2.000 (Surface Water Network - S104) | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter | Pipe            | SW6 (Surface Water Network - S104)  | SW7 (Surface Water Network - S104)  | 164.431                  | 163.355                 | 0.150               | 12.405                | 1.5                 | 1.39            | 26.3            | Surcharged |

|                                                                    |  |                              |             |              |
|--------------------------------------------------------------------|--|------------------------------|-------------|--------------|
| Project:                                                           |  | Date:<br>03/02/2022          |             |              |
|                                                                    |  | Designed by:<br>oliver.boyes | Checked by: | Approved By: |
| Report Details:<br>Type: Connections Summary<br>Storm Phase: Phase |  | Company Address:             |             |              |



|                                           |                                                          |      |                                        |                                        |         |         |       |         |     |      |       |            |
|-------------------------------------------|----------------------------------------------------------|------|----------------------------------------|----------------------------------------|---------|---------|-------|---------|-----|------|-------|------------|
| SW2.001<br>(Surface Water Network - S104) | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter | Pipe | SW7<br>(Surface Water Network - S104)  | SW9<br>(Surface Water Network - S104)  | 164.661 | 163.186 | 0.225 | 23.572  | 1.3 | 0.37 | 50.2  | Surcharged |
| SW2.002<br>(Surface Water Network - S104) | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter | Pipe | SW9<br>(Surface Water Network - S104)  | SW5<br>(Surface Water Network - S104)  | 164.100 | 163.080 | 0.225 | 33.858  | 1.7 | 1.39 | 69.6  | Surcharged |
| SW3.000<br>(Surface Water Network - S104) | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter | Pipe | SW8<br>(Surface Water Network - S104)  | SW7<br>(Surface Water Network - S104)  | 165.082 | 163.283 | 0.150 | 11.172  | 1.7 | 0.78 | 24.0  | OK         |
| SW4.000<br>(Surface Water Network - S104) | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter | Pipe | SW12<br>(Surface Water Network - S104) | SW13<br>(Surface Water Network - S104) | 160.298 | 159.102 | 0.225 | 21.941  | 1.6 | 0.77 | 47.2  | Surcharged |
| SW4.002<br>(Surface Water Network - S104) | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter | Pipe | SW14<br>(Surface Water Network - S104) | SW11<br>(Surface Water Network - S104) | 160.544 | 158.659 | 0.225 | 62.476  | 3.0 | 1.12 | 119.5 | Surcharged |
| SW6.000<br>(Surface Water Network - S104) | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter | Pipe | SW22<br>(Surface Water Network - S104) | SW23<br>(Surface Water Network - S104) | 153.145 | 152.997 | 0.100 | 10.803  | 2.5 | 1.9  | 20.0  | Surcharged |
| SW6.003<br>(Surface Water Network - S104) | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter | Pipe | SW25<br>(Surface Water Network - S104) | SW26<br>(Surface Water Network - S104) | 153.707 | 151.459 | 0.153 | 21.813  | 1.4 | 0.78 | 40.9  | OK         |
| SW6.004<br>(Surface Water Network - S104) | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter | Pipe | SW26<br>(Surface Water Network - S104) | SW27<br>(Surface Water Network - S104) | 154.757 | 150.997 | 0.279 | 53.725  | 2.9 | 0.37 | 106.6 | OK         |
| SW6.005<br>(Surface Water Network - S104) | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter | Pipe | SW27<br>(Surface Water Network - S104) | SW21<br>(Surface Water Network - S104) | 155.513 | 150.687 | 0.375 | 78.323  | 2.0 | 0.41 | 159.6 | Surcharged |
| SW6.001<br>(Surface Water Network - S104) | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter | Pipe | SW23<br>(Surface Water Network - S104) | SW24<br>(Surface Water Network - S104) | 153.347 | 152.114 | 0.150 | 13.749  | 1.5 | 1.18 | 25.9  | Surcharged |
| SW6.002<br>(Surface Water Network - S104) | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter | Pipe | SW24<br>(Surface Water Network - S104) | SW25<br>(Surface Water Network - S104) | 153.538 | 151.950 | 0.150 | 21.828  | 2.3 | 1.86 | 40.9  | Surcharged |
| SW1.005<br>(Surface Water Network - S104) | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter | Pipe | SW10<br>(Surface Water Network - S104) | SW11<br>(Surface Water Network - S104) | 161.208 | 159.796 | 0.221 | 112.871 | 4.0 | 0.73 | 222.9 | OK         |
| SW4.001<br>(Surface Water Network - S104) | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter | Pipe | SW13<br>(Surface Water Network - S104) | SW14<br>(Surface Water Network - S104) | 161.182 | 158.910 | 0.225 | 36.526  | 1.9 | 0.55 | 71.4  | Surcharged |
| Pipe                                      | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter | Pipe | SW17<br>(Surface Water Network - S104) | SW17a                                  | 160.371 | 158.837 | 0.150 | 38.387  | 4.0 | 1.35 | 69.8  | Surcharged |

|                                                                    |  |                              |             |              |
|--------------------------------------------------------------------|--|------------------------------|-------------|--------------|
| Project:                                                           |  | Date:<br>03/02/2022          |             |              |
|                                                                    |  | Designed by:<br>oliver.boyes | Checked by: | Approved By: |
| Report Details:<br>Type: Connections Summary<br>Storm Phase: Phase |  | Company Address:             |             |              |



|                                            |                                                            |      |                                     |                                     |         |         |       |         |     |      |       |            |
|--------------------------------------------|------------------------------------------------------------|------|-------------------------------------|-------------------------------------|---------|---------|-------|---------|-----|------|-------|------------|
| Pipe (3)                                   | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter   | Pipe | SW17a                               | Tank (1)                            | 157.828 | 153.733 | 0.150 | 44.581  | 4.6 | 1.56 | 80.9  | Surcharged |
| Pipe (2)                                   | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter   | Pipe | Tank                                | SW29 (Surface Water Network - S104) | 153.800 | 150.409 | 0.600 | 8.224   | 0.3 | 0.11 | 14.1  | Surcharged |
| SW5.000 (Surface Water Network - S104)     | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter   | Pipe | SW16 (Surface Water Network - S104) | SW16a                               | 160.767 | 159.979 | 0.150 | 18.268  | 2.0 | 1.29 | 36.2  | Surcharged |
| SW5.000 (Surface Water Network - S104) (1) | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Summer   | Pipe | SW16a                               | SW17 (Surface Water Network - S104) | 160.536 | 159.430 | 0.150 | 23.029  | 2.7 | 2.15 | 47.3  | Surcharged |
| Pipe (4)                                   | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter   | Pipe | SW16b                               | SW16a                               | 160.388 | 159.652 | 0.100 | 5.124   | 1.4 | 0.6  | 10.2  | Surcharged |
| Pipe (1)                                   | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter   | Pipe | Tank (1)                            | SW33                                | 157.296 | 151.158 | 0.150 | 24.011  | 1.1 | 1.12 | 19.8  | Surcharged |
| Pipe (6)                                   | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter   | Pipe | SW33                                | SW34                                | 154.794 | 150.979 | 0.150 | 23.500  | 1.1 | 1.11 | 19.6  | Surcharged |
| Pipe (7)                                   | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter   | Pipe | SW34                                | SW35                                | 156.775 | 150.799 | 0.150 | 23.028  | 1.1 | 1.09 | 19.3  | Surcharged |
| Pipe (8)                                   | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter   | Pipe | SW35                                | SW36                                | 156.180 | 150.691 | 0.150 | 22.536  | 1.1 | 0.99 | 19.1  | Surcharged |
| SW1.010 (Surface Water Network - S104)     | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter   | Pipe | SW21 (Surface Water Network - S104) | SW37                                | 156.245 | 150.602 | 0.600 | 292.216 | 2.1 | 1.78 | 582.5 | Surcharged |
| SW1.010 (Surface Water Network - S104) (1) | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Winter   | Pipe | SW37                                | Tank                                | 155.353 | 150.434 | 0.600 | 308.692 | 2.1 | 2.85 | 595.9 | Surcharged |
| Pipe (9)                                   | 09.21011 - Birkenshaw: 100 years: +30 %: 15 mins: Summer   | Pipe | SW36                                | SW37                                | 155.608 | 150.459 | 0.150 | 22.248  | 1.1 | 1.12 | 19.7  | Surcharged |
| SW1.013 (Surface Water Network - S104) (1) | 09.21011 - Birkenshaw: 100 years: +30 %: 1440 mins: Winter | Pipe | SW30                                | SW31 (Surface Water Network - S104) | 152.772 | 149.210 | 0.041 | 725.314 | 1.3 | 0.23 | 5.0   | OK         |
| SW1.013 (Surface Water Network - S104)     | 09.21011 - Birkenshaw: 100 years: +30 %: 1440 mins: Winter | Pipe | SW29 (Surface Water Network - S104) | SW29a                               | 154.984 | 152.219 | 0.053 | 725.531 | 0.9 | 0.23 | 5.0   | Surcharged |

|                                                                    |                              |                  |              |
|--------------------------------------------------------------------|------------------------------|------------------|--------------|
| Project:                                                           | Date:<br>03/02/2022          |                  |              |
|                                                                    | Designed by:<br>oliver.boyes | Checked by:      | Approved By: |
| Report Details:<br>Type: Connections Summary<br>Storm Phase: Phase |                              | Company Address: |              |



|                                               |                                                            |      |                                        |         |         |         |       |         |     |      |     |    |
|-----------------------------------------------|------------------------------------------------------------|------|----------------------------------------|---------|---------|---------|-------|---------|-----|------|-----|----|
| SW1.013<br>(Surface Water Network - S104) (2) | 09.21011 - Birkenshaw: 100 years: +30 %: 1440 mins: Winter | Pipe | SW29a                                  | SW30    | 155.018 | 149.335 | 0.052 | 725.440 | 0.9 | 0.23 | 5.0 | OK |
| SW1.014<br>(Surface Water Network - S104)     | 09.21011 - Birkenshaw: 100 years: +30 %: 1440 mins: Winter | Pipe | SW31<br>(Surface Water Network - S104) | SW32    | 152.433 | 149.011 | 0.028 | 725.250 | 2.3 | 0.07 | 5.0 | OK |
| SW1.014<br>(Surface Water Network - S104) (1) | 09.21011 - Birkenshaw: 100 years: +30 %: 1440 mins: Winter | Pipe | SW32                                   | Outfall | 149.587 | 148.107 | 0.041 | 725.199 | 1.0 | 0.06 | 5.0 | OK |