

|                                                                    |                                       |             |              |
|--------------------------------------------------------------------|---------------------------------------|-------------|--------------|
| JK-7144:<br>Mortimer College                                       | Date:<br>04/10/2023                   |             |              |
|                                                                    | Designed by:<br>DH                    | Checked by: | Approved By: |
| Report Details:<br>Type: Inflows<br>Storm Phase: Surface Network 1 | Jasper Kerr Consulting Engineers Ltd: |             |              |





Catchment Area

Type : Catchment Area

|           |      |
|-----------|------|
| Area (ha) | 0.01 |
|-----------|------|

Dynamic Sizing

| Runoff Method                | Time of Concentration |
|------------------------------|-----------------------|
| Summer Volumetric Runoff     | 0.750                 |
| Winter Volumetric Runoff     | 0.840                 |
| Time of Concentration (mins) | 5                     |
| Percentage Impervious (%)    | 100                   |
| Urban Creep (%)              | 0                     |



Catchment Area (1)

Type : Catchment Area

|           |       |
|-----------|-------|
| Area (ha) | 0.007 |
|-----------|-------|

Dynamic Sizing

| Runoff Method                | Time of Concentration |
|------------------------------|-----------------------|
| Summer Volumetric Runoff     | 0.750                 |
| Winter Volumetric Runoff     | 0.840                 |
| Time of Concentration (mins) | 5                     |
| Percentage Impervious (%)    | 100                   |
| Urban Creep (%)              | 0                     |



Catchment Area (2)

Type : Catchment Area

|           |       |
|-----------|-------|
| Area (ha) | 0.007 |
|-----------|-------|

Dynamic Sizing

| Runoff Method                | Time of Concentration |
|------------------------------|-----------------------|
| Summer Volumetric Runoff     | 0.750                 |
| Winter Volumetric Runoff     | 0.840                 |
| Time of Concentration (mins) | 5                     |
| Percentage Impervious (%)    | 100                   |
| Urban Creep (%)              | 0                     |

|                                                                    |                                       |             |              |
|--------------------------------------------------------------------|---------------------------------------|-------------|--------------|
| JK-7144:<br>Mortimer College                                       | Date:<br>04/10/2023                   |             |              |
|                                                                    | Designed by:<br>DH                    | Checked by: | Approved By: |
| Report Details:<br>Type: Inflows<br>Storm Phase: Surface Network 1 | Jasper Kerr Consulting Engineers Ltd: |             |              |





### Catchment Area (3)

Type : Catchment Area

|           |       |
|-----------|-------|
| Area (ha) | 0.009 |
|-----------|-------|

### Dynamic Sizing

| Runoff Method                | Time of Concentration |
|------------------------------|-----------------------|
| Summer Volumetric Runoff     | 0.750                 |
| Winter Volumetric Runoff     | 0.840                 |
| Time of Concentration (mins) | 5                     |
| Percentage Impervious (%)    | 100                   |
| Urban Creep (%)              | 0                     |



### Catchment Area (4)

Type : Catchment Area

|           |       |
|-----------|-------|
| Area (ha) | 0.012 |
|-----------|-------|

### Dynamic Sizing

| Runoff Method                | Time of Concentration |
|------------------------------|-----------------------|
| Summer Volumetric Runoff     | 0.750                 |
| Winter Volumetric Runoff     | 0.840                 |
| Time of Concentration (mins) | 5                     |
| Percentage Impervious (%)    | 100                   |
| Urban Creep (%)              | 0                     |



### Catchment Area (5)

Type : Catchment Area

|           |       |
|-----------|-------|
| Area (ha) | 0.013 |
|-----------|-------|

### Dynamic Sizing

| Runoff Method                | Time of Concentration |
|------------------------------|-----------------------|
| Summer Volumetric Runoff     | 0.750                 |
| Winter Volumetric Runoff     | 0.840                 |
| Time of Concentration (mins) | 5                     |
| Percentage Impervious (%)    | 100                   |
| Urban Creep (%)              | 0                     |

|                                                                    |                                       |             |              |
|--------------------------------------------------------------------|---------------------------------------|-------------|--------------|
| JK-7144:<br>Mortimer College                                       | Date:<br>04/10/2023                   |             |              |
|                                                                    | Designed by:<br>DH                    | Checked by: | Approved By: |
| Report Details:<br>Type: Inflows<br>Storm Phase: Surface Network 1 | Jasper Kerr Consulting Engineers Ltd: |             |              |





#### Catchment Area (6)

Type : Catchment Area

|           |       |
|-----------|-------|
| Area (ha) | 0.026 |
|-----------|-------|

#### Dynamic Sizing

| Runoff Method                | Time of Concentration |
|------------------------------|-----------------------|
| Summer Volumetric Runoff     | 0.750                 |
| Winter Volumetric Runoff     | 0.840                 |
| Time of Concentration (mins) | 5                     |
| Percentage Impervious (%)    | 100                   |
| Urban Creep (%)              | 0                     |



#### Catchment Area (7)

Type : Catchment Area

|           |       |
|-----------|-------|
| Area (ha) | 0.014 |
|-----------|-------|

#### Dynamic Sizing

| Runoff Method                | Time of Concentration |
|------------------------------|-----------------------|
| Summer Volumetric Runoff     | 0.750                 |
| Winter Volumetric Runoff     | 0.840                 |
| Time of Concentration (mins) | 5                     |
| Percentage Impervious (%)    | 100                   |
| Urban Creep (%)              | 0                     |



#### Catchment Area (8)

Type : Catchment Area

|           |       |
|-----------|-------|
| Area (ha) | 0.008 |
|-----------|-------|

#### Dynamic Sizing

| Runoff Method                | Time of Concentration |
|------------------------------|-----------------------|
| Summer Volumetric Runoff     | 0.750                 |
| Winter Volumetric Runoff     | 0.840                 |
| Time of Concentration (mins) | 5                     |
| Percentage Impervious (%)    | 100                   |
| Urban Creep (%)              | 0                     |

|                                                                    |                                       |             |              |
|--------------------------------------------------------------------|---------------------------------------|-------------|--------------|
| JK-7144:<br>Mortimer College                                       | Date:<br>04/10/2023                   |             |              |
|                                                                    | Designed by:<br>DH                    | Checked by: | Approved By: |
| Report Details:<br>Type: Inflows<br>Storm Phase: Surface Network 1 | Jasper Kerr Consulting Engineers Ltd: |             |              |





### Catchment Area (10)

Type : Catchment Area

|           |       |
|-----------|-------|
| Area (ha) | 0.007 |
|-----------|-------|

### Dynamic Sizing

| Runoff Method                | Time of Concentration |
|------------------------------|-----------------------|
| Summer Volumetric Runoff     | 0.750                 |
| Winter Volumetric Runoff     | 0.840                 |
| Time of Concentration (mins) | 5                     |
| Percentage Impervious (%)    | 100                   |
| Urban Creep (%)              | 0                     |



### Catchment Area (9)

Type : Catchment Area

|           |       |
|-----------|-------|
| Area (ha) | 0.016 |
|-----------|-------|

### Dynamic Sizing

| Runoff Method                | Time of Concentration |
|------------------------------|-----------------------|
| Summer Volumetric Runoff     | 0.750                 |
| Winter Volumetric Runoff     | 0.840                 |
| Time of Concentration (mins) | 5                     |
| Percentage Impervious (%)    | 100                   |
| Urban Creep (%)              | 0                     |



### Catchment Area (11)

Type : Catchment Area

|           |       |
|-----------|-------|
| Area (ha) | 0.009 |
|-----------|-------|

### Dynamic Sizing

| Runoff Method                | Time of Concentration |
|------------------------------|-----------------------|
| Summer Volumetric Runoff     | 0.750                 |
| Winter Volumetric Runoff     | 0.840                 |
| Time of Concentration (mins) | 5                     |
| Percentage Impervious (%)    | 100                   |
| Urban Creep (%)              | 0                     |

|                                                                    |                                       |             |              |
|--------------------------------------------------------------------|---------------------------------------|-------------|--------------|
| JK-7144:<br>Mortimer College                                       | Date:<br>04/10/2023                   |             |              |
|                                                                    | Designed by:<br>DH                    | Checked by: | Approved By: |
| Report Details:<br>Type: Inflows<br>Storm Phase: Surface Network 1 | Jasper Kerr Consulting Engineers Ltd: |             |              |





### Catchment Area (12)

Type : Catchment Area

|           |       |
|-----------|-------|
| Area (ha) | 0.017 |
|-----------|-------|

### Dynamic Sizing

| Runoff Method                | Time of Concentration |
|------------------------------|-----------------------|
| Summer Volumetric Runoff     | 0.750                 |
| Winter Volumetric Runoff     | 0.840                 |
| Time of Concentration (mins) | 5                     |
| Percentage Impervious (%)    | 100                   |
| Urban Creep (%)              | 0                     |



### Catchment Area (13)

Type : Catchment Area

|           |       |
|-----------|-------|
| Area (ha) | 0.013 |
|-----------|-------|

### Dynamic Sizing

| Runoff Method                | Time of Concentration |
|------------------------------|-----------------------|
| Summer Volumetric Runoff     | 0.750                 |
| Winter Volumetric Runoff     | 0.840                 |
| Time of Concentration (mins) | 5                     |
| Percentage Impervious (%)    | 100                   |
| Urban Creep (%)              | 0                     |



### Catchment Area (14)

Type : Catchment Area

|           |       |
|-----------|-------|
| Area (ha) | 0.012 |
|-----------|-------|

### Dynamic Sizing

| Runoff Method                | Time of Concentration |
|------------------------------|-----------------------|
| Summer Volumetric Runoff     | 0.750                 |
| Winter Volumetric Runoff     | 0.840                 |
| Time of Concentration (mins) | 5                     |
| Percentage Impervious (%)    | 100                   |
| Urban Creep (%)              | 0                     |

|                                                                                    |                                       |             |              |
|------------------------------------------------------------------------------------|---------------------------------------|-------------|--------------|
| JK-7144:<br>Mortimer College                                                       | Date:<br>04/10/2023                   |             |              |
|                                                                                    | Designed by:<br>DH                    | Checked by: | Approved By: |
| Report Details:<br>Type: Network Design Criteria<br>Storm Phase: Surface Network 1 | Jasper Kerr Consulting Engineers Ltd: |             |              |



### Flow Options

|                           |                               |
|---------------------------|-------------------------------|
| Peak Flow Calculation     | (UK) Modified Rational Method |
| Min. Time of Entry (mins) | 5                             |
| Max. Travel Time (mins)   | 30                            |

### Pipe Options

|                       |                          |
|-----------------------|--------------------------|
| Lock Slope Options    | None                     |
| Design Options        | Minimise Excavation      |
| Design Level          | Level Soffits            |
| Min. Cover Depth (m)  | 1.200                    |
| Min. Slope (1:X)      | 500.00                   |
| Max. Slope (1:X)      | 40.00                    |
| Min. Velocity (m/s)   | 1.0                      |
| Max. Velocity (m/s)   | 3.0                      |
| Use Flow Restriction  | <input type="checkbox"/> |
| Reduce Channel Depths | <input type="checkbox"/> |

### Pipe Size Library

#### Default

|                     |    |
|---------------------|----|
| Add. Increment (mm) | 75 |
| Max. Diameter (mm)  | 0  |

| Diameter (mm) | Min. Slope (1:X) | Max. Slope (1:X) |
|---------------|------------------|------------------|
| 100           | 0.00             | 0.00             |
| 150           | 0.00             | 0.00             |

|                                                                                    |                                       |             |              |
|------------------------------------------------------------------------------------|---------------------------------------|-------------|--------------|
| JK-7144:<br>Mortimer College                                                       | Date:<br>04/10/2023                   |             |              |
|                                                                                    | Designed by:<br>DH                    | Checked by: | Approved By: |
| Report Details:<br>Type: Network Design Criteria<br>Storm Phase: Surface Network 1 | Jasper Kerr Consulting Engineers Ltd: |             |              |



### Manhole Options

Apply Offset ☐

### Manhole Size Library

#### Default

#### Diameter / Width

| Connection (mm) | Diameter / Length (m) | Width (m) |
|-----------------|-----------------------|-----------|
| 0               | 1.200                 | 0.000     |
| 375             | 1.350                 | 0.000     |
| 500             | 1.500                 | 0.000     |
| 0               | 0.000                 | 0.000     |

#### Additional Sizing

|                       |       |
|-----------------------|-------|
| Connection (mm)       | 900   |
| Diameter / Length (m) | 0.900 |
| Width (m)             | 0.000 |

#### Depth

| Depth (m) | Diameter / Length (m) | Width (m) |
|-----------|-----------------------|-----------|
| 0.000     | 1.050                 | 0.000     |
| 1.500     | 1.200                 | 0.000     |

#### Access

| Depth (m) | Ladder Protrusion (mm) |
|-----------|------------------------|
| 0.000     | 130                    |
| 3.000     | 230                    |

#### Benching Requirements

|                     |     |
|---------------------|-----|
| Landing Width (mm)  | 500 |
| Benching Width (mm) | 225 |

|                                                                              |                                       |             |              |
|------------------------------------------------------------------------------|---------------------------------------|-------------|--------------|
| JK-7144:<br>Mortimer College                                                 | Date:<br>04/10/2023                   |             |              |
|                                                                              | Designed by:<br>DH                    | Checked by: | Approved By: |
| Report Details:<br>Type: Junctions Summary<br>Storm Phase: Surface Network 1 | Jasper Kerr Consulting Engineers Ltd: |             |              |





**Rainfall: 1 years: Increase Rainfall (%): +0: 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     |
|----------|---------------------------------------------|-----------------|------------------|----------------|----------------|-------------------|---------------------------|--------------------------|--------------------|-----------------------------|------------|
| SW4      | Rainfall: 1 years: +0<br>%: 15 mins: Winter | 19.87<br>3      | 18.40<br>0       | 18.420         | 0.020          | 1.3               | 0.029                     | 0.000                    | 1.3                | 0.614                       | OK         |
| SW3      | Rainfall: 1 years: +0<br>%: 15 mins: Winter | 19.20<br>2      | 17.96<br>0       | 18.023         | 0.063          | 6.3               | 0.091                     | 0.000                    | 5.8                | 2.986                       | OK         |
| SW2      | Rainfall: 1 years: +0<br>%: 15 mins: Winter | 18.89<br>7      | 17.85<br>0       | 17.901         | 0.051          | 7.6               | 0.073                     | 0.000                    | 7.2                | 3.824                       | OK         |
| SW1      | Rainfall: 1 years: +0<br>%: 30 mins: Winter | 18.74<br>3      | 17.50<br>0       | 17.691         | 0.191          | 5.5               | 0.337                     | 0.000                    | 2.4                | 6.680                       | Surcharged |
| EXSW1    | Rainfall: 1 years: +0<br>%: 15 mins: Winter | 18.73<br>4      | 17.17<br>0       | 17.206         | 0.036          | 7.0               | 0.000                     | 0.000                    | 7.0                | 5.576                       | OK         |
| 8        | Rainfall: 1 years: +0<br>%: 30 mins: Summer | 18.57<br>7      | 17.58<br>0       | 17.690         | 0.110          | 3.4               | 0.157                     | 0.000                    | 1.5                | 2.881                       | OK         |
| SW5      | Rainfall: 1 years: +0<br>%: 15 mins: Winter | 19.36<br>9      | 18.20<br>0       | 18.238         | 0.038          | 5.0               | 0.043                     | 0.000                    | 4.8                | 2.327                       | OK         |
| SW9      | Rainfall: 1 years: +0<br>%: 15 mins: Winter | 19.70<br>0      | 17.84<br>5       | 17.932         | 0.087          | 2.0               | 0.098                     | 0.000                    | 1.9                | 0.917                       | OK         |
| SW8      | Rainfall: 1 years: +0<br>%: 15 mins: Winter | 20.80<br>0      | 17.89<br>0       | 17.926         | 0.036          | 2.9               | 0.041                     | 0.000                    | 2.7                | 1.371                       | OK         |
| SW10     | Rainfall: 1 years: +0<br>%: 15 mins: Winter | 19.00<br>0      | 17.67<br>0       | 17.705         | 0.035          | 2.7               | 0.040                     | 0.000                    | 2.4                | 1.341                       | OK         |
| SW11     | Rainfall: 1 years: +0<br>%: 15 mins: Winter | 19.00<br>0      | 17.62<br>0       | 17.667         | 0.047          | 5.1               | 0.053                     | 0.000                    | 4.7                | 2.608                       | OK         |

|                                                                              |                                       |             |              |
|------------------------------------------------------------------------------|---------------------------------------|-------------|--------------|
| JK-7144:<br>Mortimer College                                                 | Date:<br>04/10/2023                   |             |              |
|                                                                              | Designed by:<br>DH                    | Checked by: | Approved By: |
| Report Details:<br>Type: Junctions Summary<br>Storm Phase: Surface Network 1 | Jasper Kerr Consulting Engineers Ltd: |             |              |





**Rainfall: 100 years: Increase Rainfall (%): +45: 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     |
|----------|----------------------------------------------|-----------------|------------------|----------------|----------------|-------------------|---------------------------|--------------------------|--------------------|-----------------------------|------------|
| SW4      | Rainfall: 100 years: +45 %: 15 mins: Winter  | 19.873          | 18.400           | 18.442         | 0.042          | 6.1               | 0.060                     | 0.000                    | 6.0                | 2.806                       | OK         |
| SW3      | Rainfall: 100 years: +45 %: 120 mins: Winter | 19.202          | 17.960           | 18.257         | 0.297          | 10.1              | 0.425                     | 0.000                    | 10.2               | 29.565                      | Surcharged |
| SW2      | Rainfall: 100 years: +45 %: 120 mins: Winter | 18.897          | 17.850           | 18.254         | 0.404          | 13.0              | 0.578                     | 0.000                    | 11.8               | 37.042                      | Surcharged |
| SW1      | Rainfall: 100 years: +45 %: 120 mins: Winter | 18.743          | 17.500           | 18.248         | 0.748          | 11.8              | 1.322                     | 0.000                    | 2.5                | 48.978                      | Surcharged |
| EXSW1    | Rainfall: 100 years: +45 %: 15 mins: Winter  | 18.734          | 17.170           | 17.265         | 0.095          | 26.3              | 0.000                     | 0.000                    | 26.3               | 16.132                      | OK         |
| 8        | Rainfall: 100 years: +45 %: 120 mins: Winter | 18.577          | 17.580           | 18.247         | 0.667          | 10.2              | 0.955                     | 0.000                    | 2.2                | 37.615                      | Surcharged |
| SW5      | Rainfall: 100 years: +45 %: 15 mins: Winter  | 19.369          | 18.200           | 18.287         | 0.087          | 22.8              | 0.099                     | 0.000                    | 22.4               | 10.609                      | OK         |
| SW9      | Rainfall: 100 years: +45 %: 15 mins: Winter  | 19.700          | 17.845           | 17.999         | 0.154          | 9.6               | 0.175                     | 0.000                    | 9.2                | 4.527                       | OK         |
| SW8      | Rainfall: 100 years: +45 %: 15 mins: Winter  | 20.800          | 17.890           | 17.972         | 0.082          | 13.7              | 0.093                     | 0.000                    | 13.1               | 6.602                       | OK         |
| SW10     | Rainfall: 100 years: +45 %: 15 mins: Winter  | 19.000          | 17.670           | 17.762         | 0.092          | 13.1              | 0.104                     | 0.000                    | 12.3               | 6.565                       | OK         |
| SW11     | Rainfall: 100 years: +45 %: 15 mins: Winter  | 19.000          | 17.620           | 17.729         | 0.109          | 24.9              | 0.123                     | 0.000                    | 23.8               | 12.360                      | OK         |

|                                                                                        |                     |                                       |              |
|----------------------------------------------------------------------------------------|---------------------|---------------------------------------|--------------|
| JK-7144:<br>Mortimer College                                                           | Date:<br>04/10/2023 |                                       |              |
|                                                                                        | Designed by:<br>DH  | Checked by:                           | Approved By: |
| Report Details:<br>Type: Stormwater Controls Summary<br>Storm Phase: Surface Network 1 |                     | Jasper Kerr Consulting Engineers Ltd: |              |





**Rainfall: 1 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Flooded Volume**

| 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 |
|--------------------|------------------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|---------------------------|--------------------------|------------------------|--------------------|-----------------------------|--------------------------|--------|
| Porous Paving      | Rainfall: 1 years: +0 %: 15 mins: Summer | 18.190            | 17.985            | 0.014             | 0.023             | 0.9               | 0.387                     | 0.000                    | 0.000                  | 0.0                | 0.000                       | 96.359                   | OK     |
| Porous Paving (1)  | Rainfall: 1 years: +0 %: 15 mins: Summer | 18.069            | 17.895            | 0.034             | 0.014             | 1.6               | 0.459                     | 0.000                    | 0.000                  | 0.4                | 0.293                       | 93.594                   | OK     |
| Porous Paving (2)  | Rainfall: 1 years: +0 %: 15 mins: Summer | 18.147            | 17.889            | 0.033             | 0.054             | 2.9               | 1.242                     | 0.000                    | 0.000                  | 0.0                | 0.000                       | 91.191                   | OK     |
| Bioretention       | Rainfall: 1 years: +0 %: 15 mins: Summer | 17.845            | 17.845            | 0.000             | 0.000             | 0.0               | 1.471                     | 0.000                    | 0.000                  | 0.0                | 0.000                       | 95.267                   | OK     |
| Tank               | Rainfall: 1 years: +0 %: 15 mins: Summer | 17.635            | 17.635            | 0.035             | 0.035             | 4.0               | 1.107                     | 0.000                    | 0.000                  | 0.9                | 0.641                       | 91.522                   | OK     |
| Porous Paving (5)  | Rainfall: 1 years: +0 %: 15 mins: Summer | 18.486            | 18.297            | 0.008             | 0.005             | 0.7               | 0.253                     | 0.000                    | 0.000                  | 0.1                | 0.103                       | 98.435                   | OK     |

|                                                                                        |                     |                                       |              |
|----------------------------------------------------------------------------------------|---------------------|---------------------------------------|--------------|
| JK-7144:<br>Mortimer College                                                           | Date:<br>04/10/2023 |                                       |              |
|                                                                                        | Designed by:<br>DH  | Checked by:                           | Approved By: |
| Report Details:<br>Type: Stormwater Controls Summary<br>Storm Phase: Surface Network 1 |                     | Jasper Kerr Consulting Engineers Ltd: |              |





**Rainfall: 100 years: Increase Rainfall (%): +45: Critical Storm Per Item: Rank By: Max. Flooded Volume**

| 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 |
|--------------------|---------------------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|---------------------------|--------------------------|------------------------|--------------------|-----------------------------|--------------------------|--------|
| Porous Paving      | Rainfall: 100 years: +45 %: 15 mins: Summer | 18.238            | 18.062            | 0.062             | 0.100             | 4.0               | 1.755                     | 0.000                    | 0.000                  | 0.0                | 0.000                       | 83.489                   | OK     |
| Porous Paving (1)  | Rainfall: 100 years: +45 %: 15 mins: Summer | 18.194            | 17.951            | 0.159             | 0.070             | 7.2               | 2.084                     | 0.000                    | 0.000                  | 2.2                | 1.443                       | 70.921                   | OK     |
| Porous Paving (2)  | Rainfall: 100 years: +45 %: 15 mins: Summer | 18.267            | 17.992            | 0.153             | 0.157             | 13.0              | 5.155                     | 0.000                    | 0.000                  | 1.4                | 0.814                       | 63.442                   | OK     |
| Bioretention       | Rainfall: 100 years: +45 %: 15 mins: Summer | 17.845            | 17.951            | 0.000             | 0.106             | 2.2               | 2.141                     | 0.000                    | 0.000                  | 0.2                | 0.085                       | 93.114                   | OK     |
| Tank               | Rainfall: 100 years: +45 %: 15 mins: Summer | 17.951            | 17.951            | 0.351             | 0.351             | 28.1              | 10.997                    | 0.000                    | 0.000                  | 1.4                | 0.775                       | 15.817                   | OK     |
| Porous Paving (5)  | Rainfall: 100 years: +45 %: 15 mins: Summer | 18.514            | 18.304            | 0.036             | 0.012             | 3.4               | 1.005                     | 0.000                    | 0.000                  | 0.9                | 0.552                       | 93.772                   | OK     |

|                                                                                |                                       |             |              |
|--------------------------------------------------------------------------------|---------------------------------------|-------------|--------------|
| JK-7144:<br>Mortimer College                                                   | Date:<br>04/10/2023                   |             |              |
|                                                                                | Designed by:<br>DH                    | Checked by: | Approved By: |
| Report Details:<br>Type: Connections Summary<br>Storm Phase: Surface Network 1 | Jasper Kerr Consulting Engineers Ltd: |             |              |





**Rainfall: 1 years: Increase Rainfall (%): +0: 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     |
|------------|-------------------------------------------|-----------------|-------------------|--------------|--------------------------|-------------------------|---------------------|-----------------------|---------------------|-----------------|-----------------|------------|
| 4.002      | Rainfall: 1 years: +0 %: 15 mins: Winter  | Pipe            | 8                 | SW1          | 18.577                   | 17.668                  | 0.129               | 0.000                 | 0.1                 | 0.03            | 1.6             | OK         |
| 1.004      | Rainfall: 1 years: +0 %: 30 mins: Winter  | Pipe            | SW1               | EXSW1        | 18.743                   | 17.691                  | 0.026               | 5.149                 | 1.6                 | 0.04            | 2.4             | Surcharged |
| 1.002      | Rainfall: 1 years: +0 %: 15 mins: Winter  | Pipe            | SW3               | SW2          | 19.202                   | 18.023                  | 0.057               | 2.986                 | 0.7                 | 0.16            | 5.8             | OK         |
| 4.001      | Rainfall: 1 years: +0 %: 15 mins: Summer  | Pipe            | Bioretention      | 8            | 18.646                   | 17.845                  | 0.000               | 0.000                 | 0.0                 | 0               | 0.0             | OK         |
| 4.000      | Rainfall: 1 years: +0 %: 15 mins: Summer  | Pipe            | Porous Paving     | Bioretention | 18.636                   | 17.979                  | 0.011               | 0.000                 | -0.0                | 0               | 0.0             | OK         |
| 5.001      | Rainfall: 1 years: +0 %: 15 mins: Winter  | Pipe            | Tank              | 8            | 18.535                   | 17.644                  | 0.063               | 0.000                 | 0.4                 | 0.04            | 1.3             | OK         |
| 5.000      | Rainfall: 1 years: +0 %: 360 mins: Winter | Pipe            | Porous Paving (2) | Tank         | 18.537                   | 17.928                  | 0.008               | 2.860                 | 0.8                 | 0.01            | 0.3             | OK         |
| 6.000      | Rainfall: 1 years: +0 %: 30 mins: Winter  | Pipe            | Porous Paving (1) | 8            | 18.558                   | 17.919                  | 0.014               | 0.603                 | 0.6                 | 0.04            | 0.4             | OK         |
| 1.003      | Rainfall: 1 years: +0 %: 15 mins: Winter  | Pipe            | SW2               | SW1          | 18.897                   | 17.901                  | 0.103               | 3.824                 | 0.6                 | 0.12            | 7.2             | OK         |
| 1.001      | Rainfall: 1 years: +0 %: 15 mins: Winter  | Pipe            | SW5               | SW3          | 19.369                   | 18.238                  | 0.051               | 2.327                 | 0.7                 | 0.05            | 4.8             | OK         |
| 1.000      | Rainfall: 1 years: +0 %: 15 mins: Winter  | Pipe            | SW4               | SW5          | 19.873                   | 18.420                  | 0.029               | 0.614                 | 0.4                 | 0.02            | 1.3             | OK         |
| Pipe       | Rainfall: 1 years: +0 %: 30 mins: Winter  | Pipe            | Porous Paving (5) | SW9          | 19.148                   | 18.301                  | 0.043               | 0.197                 | 0.0                 | 0               | 0.2             | OK         |
| Pipe (1)   | Rainfall: 1 years: +0 %: 15 mins: Winter  | Pipe            | SW9               | SW8          | 19.700                   | 17.932                  | 0.062               | 0.014                 | 0.2                 | 0.06            | 1.9             | OK         |
| Pipe (2)   | Rainfall: 1 years: +0 %: 15 mins: Winter  | Pipe            | SW8               | SW10         | 20.800                   | 17.926                  | 0.036               | 1.354                 | 0.7                 | 0.05            | 2.7             | OK         |

|                                                                                |                                                   |      |      |                                       |        |        |             |       |              |      |                                                                                     |    |  |  |
|--------------------------------------------------------------------------------|---------------------------------------------------|------|------|---------------------------------------|--------|--------|-------------|-------|--------------|------|-------------------------------------------------------------------------------------|----|--|--|
| JK-7144:<br>Mortimer College                                                   |                                                   |      |      | Date:<br>04/10/2023                   |        |        |             |       |              |      |  |    |  |  |
|                                                                                |                                                   |      |      | Designed by:<br>DH                    |        |        | Checked by: |       | Approved By: |      |                                                                                     |    |  |  |
| Report Details:<br>Type: Connections Summary<br>Storm Phase: Surface Network 1 |                                                   |      |      | Jasper Kerr Consulting Engineers Ltd: |        |        |             |       |              |      |                                                                                     |    |  |  |
|                                                                                |                                                   |      |      |                                       |        |        |             |       |              |      |                                                                                     |    |  |  |
| Pipe (3)                                                                       | Rainfall: 1<br>years: +0 %:<br>15 mins:<br>Winter | Pipe | SW10 | SW11                                  | 19.000 | 17.705 | 0.041       | 1.341 | 0.5          | 0.05 | 2.4                                                                                 | OK |  |  |
| Pipe (4)                                                                       | Rainfall: 1<br>years: +0 %:<br>15 mins:<br>Winter | Pipe | SW11 | EXSW1                                 | 19.000 | 17.667 | 0.042       | 2.608 | 0.9          | 0.09 | 4.7                                                                                 | OK |  |  |

|                                                                                |                                       |             |              |
|--------------------------------------------------------------------------------|---------------------------------------|-------------|--------------|
| JK-7144:<br>Mortimer College                                                   | Date:<br>04/10/2023                   |             |              |
|                                                                                | Designed by:<br>DH                    | Checked by: | Approved By: |
| Report Details:<br>Type: Connections Summary<br>Storm Phase: Surface Network 1 | Jasper Kerr Consulting Engineers Ltd: |             |              |





**Rainfall: 100 years: Increase Rainfall (%): +45: 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     |
|------------|----------------------------------------------|-----------------|-------------------|--------------|--------------------------|-------------------------|---------------------|-----------------------|---------------------|-----------------|-----------------|------------|
| 4.002      | Rainfall: 100 years: +45 %: 15 mins: Winter  | Pipe            | 8                 | SW1          | 18.577                   | 17.992                  | 0.225               | 0.000                 | 0.1                 | 0.05            | 2.6             | Surcharged |
| 1.004      | Rainfall: 100 years: +45 %: 15 mins: Summer  | Pipe            | SW1               | EXSW1        | 18.743                   | 17.950                  | 0.056               | 3.747                 | 1.7                 | 0.04            | 2.5             | Surcharged |
| 1.002      | Rainfall: 100 years: +45 %: 15 mins: Winter  | Pipe            | SW3               | SW2          | 19.202                   | 18.113                  | 0.138               | 13.599                | 1.1                 | 0.76            | 27.4            | OK         |
| 4.001      | Rainfall: 100 years: +45 %: 240 mins: Winter | Pipe            | Bioretention      | 8            | 18.646                   | 18.514                  | 0.100               | 0.000                 | 0.4                 | 0.12            | 1.2             | Surcharged |
| 4.000      | Rainfall: 100 years: +45 %: 240 mins: Winter | Pipe            | Porous Paving     | Bioretention | 18.636                   | 18.135                  | 0.122               | 0.000                 | 0.0                 | 0.03            | 0.5             | Surcharged |
| 5.001      | Rainfall: 100 years: +45 %: 600 mins: Summer | Pipe            | Tank              | 8            | 18.535                   | 18.181                  | 0.225               | 17.146                | 0.4                 | 0.05            | 2.1             | Surcharged |
| 5.000      | Rainfall: 100 years: +45 %: 30 mins: Winter  | Pipe            | Porous Paving (2) | Tank         | 18.537                   | 18.103                  | 0.100               | 1.446                 | 0.4                 | 0.14            | 2.7             | Surcharged |
| 6.000      | Rainfall: 100 years: +45 %: 15 mins: Winter  | Pipe            | Porous Paving (1) | 8            | 18.558                   | 18.038                  | 0.100               | 1.397                 | 0.8                 | 0.25            | 2.5             | Surcharged |
| 1.003      | Rainfall: 100 years: +45 %: 15 mins: Winter  | Pipe            | SW2               | SW1          | 18.897                   | 17.990                  | 0.225               | 16.670                | 0.9                 | 0.57            | 34.2            | OK         |
| 1.001      | Rainfall: 100 years: +45 %: 15 mins: Winter  | Pipe            | SW5               | SW3          | 19.369                   | 18.287                  | 0.120               | 10.609                | 0.9                 | 0.22            | 22.4            | OK         |
| 1.000      | Rainfall: 100 years: +45 %: 15 mins: Winter  | Pipe            | SW4               | SW5          | 19.873                   | 18.442                  | 0.065               | 2.806                 | 0.6                 | 0.08            | 6.0             | OK         |
| Pipe       | Rainfall: 100 years: +45 %: 15 mins: Winter  | Pipe            | Porous Paving (5) | SW9          | 19.148                   | 18.323                  | 0.084               | 0.623                 | 0.1                 | 0.02            | 1.0             | OK         |
| Pipe (1)   | Rainfall: 100 years: +45 %: 15 mins: Winter  | Pipe            | SW9               | SW8          | 19.700                   | 17.999                  | 0.118               | 0.000                 | 0.4                 | 0.31            | 9.2             | OK         |
| Pipe (2)   | Rainfall: 100 years: +45 %: 15 mins: Winter  | Pipe            | SW8               | SW10         | 20.800                   | 17.972                  | 0.087               | 6.588                 | 0.9                 | 0.27            | 13.1            | OK         |

|                                                                                |                                                      |      |      |                                       |        |             |       |              |     |      |                                                                                     |    |  |
|--------------------------------------------------------------------------------|------------------------------------------------------|------|------|---------------------------------------|--------|-------------|-------|--------------|-----|------|-------------------------------------------------------------------------------------|----|--|
| JK-7144:<br>Mortimer College                                                   |                                                      |      |      | Date:<br>04/10/2023                   |        |             |       |              |     |      |  |    |  |
|                                                                                |                                                      |      |      | Designed by:                          |        | Checked by: |       | Approved By: |     |      |                                                                                     |    |  |
|                                                                                |                                                      |      |      | DH                                    |        |             |       |              |     |      |                                                                                     |    |  |
| Report Details:<br>Type: Connections Summary<br>Storm Phase: Surface Network 1 |                                                      |      |      | Jasper Kerr Consulting Engineers Ltd: |        |             |       |              |     |      |                                                                                     |    |  |
| Pipe (3)                                                                       | Rainfall: 100<br>years: +45 %:<br>15 mins:<br>Winter | Pipe | SW10 | SW11                                  | 19.000 | 17.762      | 0.100 | 6.565        | 0.7 | 0.24 | 12.3                                                                                | OK |  |
| Pipe (4)                                                                       | Rainfall: 100<br>years: +45 %:<br>15 mins:<br>Winter | Pipe | SW11 | EXSW1                                 | 19.000 | 17.729      | 0.102 | 12.360       | 1.4 | 0.43 | 23.8                                                                                | OK |  |