## STORM SEWER DESIGN by the Modified Rational Method

### Design Criteria for Surface Network 3

Pipe Sizes STANDARD Manhole Sizes STANDARD

FSR Rainfall Model - England and Wales

| | | | |
|---|---|---|---|
| Return Period (years) | 100 | PIMP (%) | 100 |
| M5-60 (mm) | 17.000 | Add Flow / Climate Change (%) | 40 |
| Ratio R | 0.400 | Minimum Backdrop Height (m) | 0.000 |
| Maximum Rainfall (mm/hr) | 50 | Maximum Backdrop Height (m) | 0.000 |
| Maximum Time of Concentration (mins) | 30 | Min Design Depth for Optimisation (m) | 1.200 |
| Foul Sewage (l/s/ha) | 0.000 | Min Vel for Auto Design only (m/s) | 1.00 |
| Volumetric Runoff Coeff. | 0.750 | Min Slope for Optimisation (1:X) | 500 |

Designed with Level Soffits

### Time Area Diagram for Surface Network 3

| Time (mins) | Area (ha) | Time (mins) | Area (ha) | Time (mins) | Area (ha) |
|---|---|---|---|---|---|
| 0-4 | 0.307 | 4-8 | 0.258 | 8-12 | 0.005 |

Total Area Contributing (ha) = 0.569

Total Pipe Volume (m³) = 24.403

### Network Design Table for Surface Network 3

| PN | Length (m) | Fall (m) | Slope (1:X) | I.Area (ha) | T.E. (mins) | Base Flow (l/s) | k (mm) | HYD SECT | DIA (mm) | Section Type | Auto Design |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | 26.280 | 0.263 | 99.9 | 0.038 | 5.00 | 0.0 | 0.600 | o | 225 | Pipe/Conduit | |
| 1.001 | 24.928 | 0.249 | 100.1 | 0.051 | 0.00 | 0.0 | 0.600 | o | 225 | Pipe/Conduit | |
| 1.002 | 12.982 | 1.630 | 8.0 | 0.000 | 0.00 | 0.0 | 0.600 | o | 225 | Pipe/Conduit | |
| 1.003 | 51.716 | 0.517 | 100.0 | 0.052 | 0.00 | 0.0 | 0.600 | o | 225 | Pipe/Conduit | |
| 1.004 | 38.600 | 0.386 | 100.0 | 0.032 | 0.00 | 0.0 | 0.600 | o | 225 | Pipe/Conduit | |
| 1.005 | 32.050 | 0.320 | 100.2 | 0.054 | 0.00 | 0.0 | 0.600 | o | 225 | Pipe/Conduit | |
| 1.006 | 16.638 | 0.166 | 100.2 | 0.000 | 0.00 | 0.0 | 0.600 | o | 225 | Pipe/Conduit | |

### Network Results Table

| PN | Rain (mm/hr) | T.C. (mins) | US/IL (m) | Σ I.Area (ha) | Σ Base Flow (l/s) | Foul (l/s) | Add Flow (l/s) | Vel (m/s) | Cap (l/s) | Flow (l/s) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | 50.00 | 5.33 | 165.667 | 0.038 | 0.0 | 0.0 | 2.1 | 1.31 | 52.0 | 7.2 |
| 1.001 | 50.00 | 5.65 | 165.404 | 0.089 | 0.0 | 0.0 | 4.8 | 1.31 | 52.0 | 16.9 |
| 1.002 | 50.00 | 5.70 | 164.630 | 0.089 | 0.0 | 0.0 | 4.8 | 4.67 | 185.5 | 16.9 |
| 1.003 | 50.00 | 6.36 | 163.000 | 0.141 | 0.0 | 0.0 | 7.6 | 1.31 | 52.0 | 26.7 |
| 1.004 | 50.00 | 6.85 | 162.483 | 0.173 | 0.0 | 0.0 | 9.4 | 1.31 | 52.0 | 32.8 |
| 1.005 | 50.00 | 7.26 | 162.097 | 0.227 | 0.0 | 0.0 | 12.3 | 1.31 | 51.9 | 43.0 |
| 1.006 | 50.00 | 7.47 | 161.776 | 0.227 | 0.0 | 0.0 | 12.3 | 1.31 | 51.9 | 43.0 |

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## Network Design Table for Surface Network 3

| PN | Length (m) | Fall (m) | Slope (1:X) | I.Area (ha) | T.E. (mins) | Base Flow (l/s) | k (mm) | HYD SECT | DIA (mm) | Section Type | Auto Design |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.007 | 46.041 | 0.460 | 100.1 | 0.038 | 0.00 | 0.0 | 0.600 | o | 300 | Pipe/Conduit | |
| 2.000 | 57.910 | 4.826 | 12.0 | 0.084 | 5.00 | 0.0 | 0.600 | o | 225 | Pipe/Conduit | |
| 2.001 | 37.109 | 2.851 | 13.0 | 0.000 | 0.00 | 0.0 | 0.600 | o | 225 | Pipe/Conduit | |
| 3.000 | 57.001 | 4.750 | 12.0 | 0.086 | 5.00 | 0.0 | 0.600 | o | 225 | Pipe/Conduit | |
| 1.008 | 39.575 | 0.396 | 99.9 | 0.045 | 0.00 | 0.0 | 0.600 | o | 300 | Pipe/Conduit | |
| 4.000 | 42.944 | 3.579 | 12.0 | 0.071 | 5.00 | 0.0 | 0.600 | o | 225 | Pipe/Conduit | |
| 1.009 | 30.645 | 0.922 | 33.2 | 0.018 | 0.00 | 0.0 | 0.600 | o | 300 | Pipe/Conduit | |
| 1.010 | 5.000 | 0.100 | 50.0 | 0.000 | 0.00 | 0.0 | 0.600 | o | 300 | Pipe/Conduit | |

## Network Results Table

| PN | Rain (mm/hr) | T.C. (mins) | US/IL (m) | Σ I.Area (ha) | Σ Base Flow (l/s) | Foul (l/s) | Add Flow (l/s) | Vel (m/s) | Cap (l/s) | Flow (l/s) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.007 | 50.00 | 7.96 | 161.610 | 0.265 | 0.0 | 0.0 | 14.4 | 1.57 | 111.1 | 50.2 |
| 2.000 | 50.00 | 5.25 | 168.826 | 0.084 | 0.0 | 0.0 | 4.5 | 3.80 | 151.0 | 15.9 |
| 2.001 | 50.00 | 5.42 | 164.000 | 0.084 | 0.0 | 0.0 | 4.5 | 3.65 | 145.0 | 15.9 |
| 3.000 | 50.00 | 5.25 | 165.899 | 0.086 | 0.0 | 0.0 | 4.7 | 3.80 | 151.0 | 16.3 |
| 1.008 | 50.00 | 8.38 | 161.149 | 0.480 | 0.0 | 0.0 | 26.0 | 1.57 | 111.2 | 91.0 |
| 4.000 | 50.00 | 5.19 | 164.332 | 0.071 | 0.0 | 0.0 | 3.8 | 3.80 | 151.0 | 13.5 |
| 1.009 | 50.00 | 8.57 | 160.753 | 0.569 | 0.0 | 0.0 | 30.8 | 2.74 | 193.4 | 107.9 |
| 1.010 | 50.00 | 8.60 | 159.000 | 0.569 | 0.0 | 0.0 | 30.8 | 2.23 | 157.5 | 107.9 |

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## Manhole Schedules for Surface Network 3

| MH Name | MH CL (m) | MH Depth (m) | MH Connection | MH Diam.,L*W (mm) | PN | Pipe Out Invert Level (m) | Diameter (mm) | PN | Pipes In Invert Level (m) | Diameter (mm) | Backdrop (mm) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| S42 | 171.544 | 5.877 | Open Manhole | 1200 | 1.000 | 165.667 | 225 | | | | |
| S43 | 169.554 | 4.150 | Open Manhole | 1200 | 1.001 | 165.404 | 225 | 1.000 | 165.404 | 225 | |
| S44 | 167.350 | 2.720 | Open Manhole | 1200 | 1.002 | 164.630 | 225 | 1.001 | 165.155 | 225 | 525 |
| S45 | 166.419 | 3.419 | Open Manhole | 1200 | 1.003 | 163.000 | 225 | 1.002 | 163.000 | 225 | |
| S38 | 166.500 | 4.017 | Open Manhole | 1200 | 1.004 | 162.483 | 225 | 1.003 | 162.483 | 225 | |
| S39 | 165.200 | 3.103 | Open Manhole | 1200 | 1.005 | 162.097 | 225 | 1.004 | 162.097 | 225 | |
| S40 | 164.000 | 2.224 | Open Manhole | 1200 | 1.006 | 161.776 | 225 | 1.005 | 161.777 | 225 | 1 |
| S41 | 163.000 | 1.390 | Open Manhole | 1200 | 1.007 | 161.610 | 300 | 1.006 | 161.610 | 225 | |
| S34 | 172.000 | 3.174 | Open Manhole | 1200 | 2.000 | 168.826 | 225 | | | | |
| S35 | 167.500 | 3.500 | Open Manhole | 1200 | 2.001 | 164.000 | 225 | 2.000 | 164.000 | 225 | |
| S32 | 171.563 | 5.664 | Open Manhole | 1200 | 3.000 | 165.899 | 225 | | | | |
| S33 | 168.300 | 7.151 | Open Manhole | 1200 | 1.008 | 161.149 | 300 | 1.007 | 161.150 | 300 | 1 |
| | | | | | | | | 2.001 | 161.149 | 225 | |
| | | | | | | | | 3.000 | 161.149 | 225 | |
| S30 | 165.600 | 1.268 | Open Manhole | 1200 | 4.000 | 164.332 | 225 | | | | |
| S31 | 162.000 | 1.247 | Open Manhole | 1200 | 1.009 | 160.753 | 300 | 1.008 | 160.753 | 300 | |
| | | | | | | | | 4.000 | 160.753 | 225 | |
| 15 | 161.000 | 2.000 | Open Manhole | 1200 | 1.010 | 159.000 | 300 | 1.009 | 159.831 | 300 | 831 |
| S36 | 161.000 | 2.100 | Open Manhole | 0 | | OUTFALL | | 1.010 | 158.900 | 300 | |

| MH Name | Manhole Easting (m) | Manhole Northing (m) | Intersection Easting (m) | Intersection Northing (m) | Manhole Access | Layout (North) |
|---|---|---|---|---|---|---|
| S42 | 401219.547 | 340388.888 | 401219.547 | 340388.888 | Required | |
| S43 | 401200.055 | 340371.262 | 401200.055 | 340371.262 | Required | |
| S44 | 401182.857 | 340353.216 | 401182.857 | 340353.216 | Required | |
| S45 | 401176.042 | 340342.166 | 401176.042 | 340342.166 | Required | |
| S38 | 401124.893 | 340349.802 | 401124.893 | 340349.802 | Required | |



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## Manhole Schedules for Surface Network 3

| MH Name | Manhole Easting (m) | Manhole Northing (m) | Intersection Easting (m) | Intersection Northing (m) | Manhole Access | Layout (North) |
|---|---|---|---|---|---|---|
| S39 | 401086.350 | 340351.899 | 401086.350 | 340351.899 | Required | |
| S40 | 401055.083 | 340344.860 | 401055.083 | 340344.860 | Required | |
| S41 | 401038.671 | 340347.592 | 401038.671 | 340347.592 | Required | |
| S34 | 401098.394 | 340439.171 | 401098.394 | 340439.171 | Required | |
| S35 | 401085.112 | 340382.804 | 401085.112 | 340382.804 | Required | |
| S32 | 401061.834 | 340447.995 | 401061.834 | 340447.995 | Required | |
| S33 | 401049.264 | 340392.398 | 401049.264 | 340392.398 | Required | |
| S30 | 401022.566 | 340444.095 | 401022.566 | 340444.095 | Required | |
| S31 | 401011.059 | 340402.721 | 401011.059 | 340402.721 | Required | |
| 15 | 400981.009 | 340408.727 | 400981.009 | 340408.727 | Required | |
| S36 | 400986.009 | 340408.727 | | | No Entry | |

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## PIPELINE SCHEDULES for Surface Network 3

### Upstream Manhole

| PN | Hyd Sect | Diam (mm) | MH Name | C.Level (m) | I.Level (m) | D.Depth (m) | MH Connection | MH DIAM., L*W (mm) |
|---|---|---|---|---|---|---|---|---|
| 1.000 | o | 225 | S42 | 171.544 | 165.667 | 5.652 | Open Manhole | 1200 |
| 1.001 | o | 225 | S43 | 169.554 | 165.404 | 3.925 | Open Manhole | 1200 |
| 1.002 | o | 225 | S44 | 167.350 | 164.630 | 2.495 | Open Manhole | 1200 |
| 1.003 | o | 225 | S45 | 166.419 | 163.000 | 3.194 | Open Manhole | 1200 |
| 1.004 | o | 225 | S38 | 166.500 | 162.483 | 3.792 | Open Manhole | 1200 |
| 1.005 | o | 225 | S39 | 165.200 | 162.097 | 2.878 | Open Manhole | 1200 |
| 1.006 | o | 225 | S40 | 164.000 | 161.776 | 1.999 | Open Manhole | 1200 |
| 1.007 | o | 300 | S41 | 163.000 | 161.610 | 1.090 | Open Manhole | 1200 |
| 2.000 | o | 225 | S34 | 172.000 | 168.826 | 2.949 | Open Manhole | 1200 |
| 2.001 | o | 225 | S35 | 167.500 | 164.000 | 3.275 | Open Manhole | 1200 |
| 3.000 | o | 225 | S32 | 171.563 | 165.899 | 5.439 | Open Manhole | 1200 |
| 1.008 | o | 300 | S33 | 168.300 | 161.149 | 6.851 | Open Manhole | 1200 |
| 4.000 | o | 225 | S30 | 165.600 | 164.332 | 1.043 | Open Manhole | 1200 |
| 1.009 | o | 300 | S31 | 162.000 | 160.753 | 0.947 | Open Manhole | 1200 |
| 1.010 | o | 300 | 15 | 161.000 | 159.000 | 1.700 | Open Manhole | 1200 |

### Downstream Manhole

| PN | Length (m) | Slope (1:X) | MH Name | C.Level (m) | I.Level (m) | D.Depth (m) | MH Connection | MH DIAM., L*W (mm) |
|---|---|---|---|---|---|---|---|---|
| 1.000 | 26.280 | 99.9 | S43 | 169.554 | 165.404 | 3.925 | Open Manhole | 1200 |
| 1.001 | 24.928 | 100.1 | S44 | 167.350 | 165.155 | 1.970 | Open Manhole | 1200 |
| 1.002 | 12.982 | 8.0 | S45 | 166.419 | 163.000 | 3.194 | Open Manhole | 1200 |
| 1.003 | 51.716 | 100.0 | S38 | 166.500 | 162.483 | 3.792 | Open Manhole | 1200 |
| 1.004 | 38.600 | 100.0 | S39 | 165.200 | 162.097 | 2.878 | Open Manhole | 1200 |
| 1.005 | 32.050 | 100.2 | S40 | 164.000 | 161.777 | 1.998 | Open Manhole | 1200 |
| 1.006 | 16.638 | 100.2 | S41 | 163.000 | 161.610 | 1.165 | Open Manhole | 1200 |
| 1.007 | 46.041 | 100.1 | S33 | 168.300 | 161.150 | 6.850 | Open Manhole | 1200 |
| 2.000 | 57.910 | 12.0 | S35 | 167.500 | 164.000 | 3.275 | Open Manhole | 1200 |
| 2.001 | 37.109 | 13.0 | S33 | 168.300 | 161.149 | 6.926 | Open Manhole | 1200 |
| 3.000 | 57.001 | 12.0 | S33 | 168.300 | 161.149 | 6.926 | Open Manhole | 1200 |
| 1.008 | 39.575 | 99.9 | S31 | 162.000 | 160.753 | 0.947 | Open Manhole | 1200 |
| 4.000 | 42.944 | 12.0 | S31 | 162.000 | 160.753 | 1.022 | Open Manhole | 1200 |
| 1.009 | 30.645 | 33.2 | 15 | 161.000 | 159.831 | 0.869 | Open Manhole | 1200 |
| 1.010 | 5.000 | 50.0 | S36 | 161.000 | 158.900 | 1.800 | Open Manhole | 0 |

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## Free Flowing Outfall Details for Surface Network 3

| Outfall Pipe Number | Outfall Name | C. Level (m) | I. Level (m) | Min I. Level (m) | D,L (mm) | W (mm) |
|---|---|---|---|---|---|---|
| 1.010 | S36 | 161.000 | 158.900 | 0.000 | 0 | 0 |

## Simulation Criteria for Surface Network 3

| | | | |
|---|---|---|---|
| Volumetric Runoff Coeff | 0.750 | Additional Flow - % of Total Flow | 0.000 |
| Areal Reduction Factor | 1.000 | MADD Factor * 10m³/ha Storage | 2.000 |
| Hot Start (mins) | 0 | Inlet Coeffiecient | 0.800 |
| Hot Start Level (mm) | 0 | Flow per Person per Day (l/per/day) | 0.000 |
| Manhole Headloss Coeff (Global) | 0.500 | Run Time (mins) | 60 |
| Foul Sewage per hectare (l/s) | 0.000 | Output Interval (mins) | 1 |

| | | | |
|---|---|---|---|
| Number of Input Hydrographs | 0 | Number of Storage Structures | 1 |
| Number of Online Controls | 0 | Number of Time/Area Diagrams | 0 |
| Number of Offline Controls | 0 | Number of Real Time Controls | 0 |

## Synthetic Rainfall Details

| | | | |
|---|---|---|---|
| Rainfall Model | FSR | Profile Type | Summer |
| Return Period (years) | 100 | Cv (Summer) | 0.750 |
| Region | England and Wales | Cv (Winter) | 0.840 |
| M5-60 (mm) | 17.000 | Storm Duration (mins) | 30 |
| Ratio R | 0.400 | | |

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## Storage Structures for Surface Network 3

### Infiltration Basin Manhole: 15, DS/PN: 1.010

Invert Level (m) 159.000 Safety Factor 3.0
Infiltration Coefficient Base (m/hr) 0.34380 Porosity 1.00
Infiltration Coefficient Side (m/hr) 0.34380

| Depth (m) | Area (m²) | Depth (m) | Area (m²) |
|---|---|---|---|
| 0.000 | 100.0 | 1.000 | 234.6 |

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## Summary Wizard of 15 minute 1 year Summer I+0% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 20 | 165.712 | -0.180 | 0.000 | 0.09 | | | 4.2 | OK |
| 1.001 | S43 | 21 | 165.470 | -0.159 | 0.000 | 0.19 | | | 9.0 | OK |
| 1.002 | S44 | 21 | 164.665 | -0.190 | 0.000 | 0.06 | | | 9.0 | OK |
| 1.003 | S45 | 22 | 163.081 | -0.144 | 0.000 | 0.27 | | | 13.5 | OK |
| 1.004 | S38 | 22 | 162.573 | -0.135 | 0.000 | 0.33 | | | 16.1 | OK |
| 1.005 | S39 | 23 | 162.200 | -0.122 | 0.000 | 0.42 | | | 20.6 | OK |
| 1.006 | S40 | 24 | 161.881 | -0.120 | 0.000 | 0.44 | | | 20.5 | OK |
| 1.007 | S41 | 24 | 161.706 | -0.204 | 0.000 | 0.22 | | | 23.1 | OK |
| 2.000 | S34 | 20 | 168.863 | -0.188 | 0.000 | 0.06 | | | 9.4 | OK |
| 2.001 | S35 | 20 | 164.039 | -0.186 | 0.000 | 0.07 | | | 9.3 | OK |
| 3.000 | S32 | 20 | 165.937 | -0.187 | 0.000 | 0.07 | | | 9.7 | OK |
| 1.008 | S33 | 22 | 161.286 | -0.163 | 0.000 | 0.42 | | | 43.3 | OK |
| 4.000 | S30 | 20 | 164.366 | -0.191 | 0.000 | 0.06 | | | 8.0 | OK |
| 1.009 | S31 | 22 | 160.865 | -0.188 | 0.000 | 0.29 | | | 51.7 | OK |
| 1.010 | 15 | 33 | 159.121 | -0.179 | 0.000 | 0.34 | | 11 | 27.0 | OK |

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## Summary Wizard of 30 minute 1 year Summer I+0% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 23 | 165.709 | -0.183 | 0.000 | 0.08 | | | 3.8 | OK |
| 1.001 | S43 | 24 | 165.467 | -0.162 | 0.000 | 0.17 | | | 8.3 | OK |
| 1.002 | S44 | 24 | 164.663 | -0.192 | 0.000 | 0.05 | | | 8.2 | OK |
| 1.003 | S45 | 25 | 163.077 | -0.148 | 0.000 | 0.25 | | | 12.6 | OK |
| 1.004 | S38 | 25 | 162.569 | -0.139 | 0.000 | 0.31 | | | 15.1 | OK |
| 1.005 | S39 | 25 | 162.196 | -0.126 | 0.000 | 0.40 | | | 19.4 | OK |
| 1.006 | S40 | 25 | 161.878 | -0.123 | 0.000 | 0.42 | | | 19.5 | OK |
| 1.007 | S41 | 25 | 161.704 | -0.206 | 0.000 | 0.21 | | | 22.1 | OK |
| 2.000 | S34 | 23 | 168.861 | -0.190 | 0.000 | 0.06 | | | 8.5 | OK |
| 2.001 | S35 | 23 | 164.036 | -0.189 | 0.000 | 0.06 | | | 8.5 | OK |
| 3.000 | S32 | 23 | 165.934 | -0.190 | 0.000 | 0.06 | | | 8.7 | OK |
| 1.008 | S33 | 25 | 161.280 | -0.169 | 0.000 | 0.39 | | | 40.3 | OK |
| 4.000 | S30 | 23 | 164.364 | -0.193 | 0.000 | 0.05 | | | 7.2 | OK |
| 1.009 | S31 | 25 | 160.860 | -0.193 | 0.000 | 0.27 | | | 48.2 | OK |
| 1.010 | 15 | 32 | 159.126 | -0.174 | 0.000 | 0.37 | | 14 | 29.4 | OK |

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## Summary Wizard of 60 minute 1 year Summer I+0% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 29 | 165.702 | -0.190 | 0.000 | 0.06 | | | 2.9 | OK |
| 1.001 | S43 | 30 | 165.459 | -0.170 | 0.000 | 0.13 | | | 6.4 | OK |
| 1.002 | S44 | 30 | 164.659 | -0.196 | 0.000 | 0.04 | | | 6.4 | OK |
| 1.003 | S45 | 30 | 163.068 | -0.157 | 0.000 | 0.20 | | | 10.0 | OK |
| 1.004 | S38 | 30 | 162.559 | -0.149 | 0.000 | 0.25 | | | 12.1 | OK |
| 1.005 | S39 | 30 | 162.185 | -0.137 | 0.000 | 0.32 | | | 15.7 | OK |
| 1.006 | S40 | 31 | 161.866 | -0.135 | 0.000 | 0.34 | | | 15.7 | OK |
| 1.007 | S41 | 32 | 161.694 | -0.216 | 0.000 | 0.17 | | | 18.0 | OK |
| 2.000 | S34 | 29 | 168.856 | -0.195 | 0.000 | 0.04 | | | 6.3 | OK |
| 2.001 | S35 | 29 | 164.031 | -0.194 | 0.000 | 0.05 | | | 6.3 | OK |
| 3.000 | S32 | 29 | 165.929 | -0.195 | 0.000 | 0.04 | | | 6.5 | OK |
| 1.008 | S33 | 32 | 161.265 | -0.184 | 0.000 | 0.32 | | | 32.7 | OK |
| 4.000 | S30 | 29 | 164.360 | -0.197 | 0.000 | 0.04 | | | 5.4 | OK |
| 1.009 | S31 | 32 | 160.848 | -0.205 | 0.000 | 0.22 | | | 38.7 | OK |
| 1.010 | 15 | 36 | 159.119 | -0.181 | 0.000 | 0.33 | | 16 | 26.3 | OK |

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## Summary Wizard of 120 minute 1 year Summer I+0% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 38 | 165.696 | -0.196 | 0.000 | 0.04 | | | 1.9 | OK |
| 1.001 | S43 | 39 | 165.450 | -0.179 | 0.000 | 0.09 | | | 4.4 | OK |
| 1.002 | S44 | 39 | 164.655 | -0.200 | 0.000 | 0.03 | | | 4.4 | OK |
| 1.003 | S45 | 39 | 163.056 | -0.169 | 0.000 | 0.14 | | | 7.0 | OK |
| 1.004 | S38 | 39 | 162.546 | -0.162 | 0.000 | 0.17 | | | 8.5 | OK |
| 1.005 | S39 | 39 | 162.169 | -0.153 | 0.000 | 0.23 | | | 11.1 | OK |
| 1.006 | S40 | 39 | 161.850 | -0.151 | 0.000 | 0.24 | | | 11.1 | OK |
| 1.007 | S41 | 39 | 161.680 | -0.230 | 0.000 | 0.12 | | | 12.8 | OK |
| 2.000 | S34 | 38 | 168.851 | -0.200 | 0.000 | 0.03 | | | 4.3 | OK |
| 2.001 | S35 | 38 | 164.026 | -0.199 | 0.000 | 0.03 | | | 4.3 | OK |
| 3.000 | S32 | 38 | 165.925 | -0.199 | 0.000 | 0.03 | | | 4.4 | OK |
| 1.008 | S33 | 39 | 161.245 | -0.204 | 0.000 | 0.22 | | | 23.2 | OK |
| 4.000 | S30 | 38 | 164.356 | -0.201 | 0.000 | 0.03 | | | 3.6 | OK |
| 1.009 | S31 | 39 | 160.832 | -0.221 | 0.000 | 0.16 | | | 27.5 | OK |
| 1.010 | 15 | 42 | 159.101 | -0.199 | 0.000 | 0.25 | | 22 | 19.7 | OK |

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## Summary Wizard of 180 minute 1 year Summer I+0% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 44 | 165.693 | -0.199 | 0.000 | 0.03 | | | 1.5 | OK |
| 1.001 | S43 | 44 | 165.444 | -0.185 | 0.000 | 0.07 | | | 3.5 | OK |
| 1.002 | S44 | 44 | 164.653 | -0.202 | 0.000 | 0.02 | | | 3.5 | OK |
| 1.003 | S45 | 44 | 163.049 | -0.176 | 0.000 | 0.11 | | | 5.4 | OK |
| 1.004 | S38 | 44 | 162.538 | -0.170 | 0.000 | 0.14 | | | 6.7 | OK |
| 1.005 | S39 | 44 | 162.161 | -0.161 | 0.000 | 0.18 | | | 8.7 | OK |
| 1.006 | S40 | 44 | 161.842 | -0.159 | 0.000 | 0.19 | | | 8.7 | OK |
| 1.007 | S41 | 44 | 161.672 | -0.238 | 0.000 | 0.10 | | | 10.1 | OK |
| 2.000 | S34 | 44 | 168.849 | -0.202 | 0.000 | 0.02 | | | 3.3 | OK |
| 2.001 | S35 | 44 | 164.024 | -0.201 | 0.000 | 0.02 | | | 3.3 | OK |
| 3.000 | S32 | 44 | 165.922 | -0.202 | 0.000 | 0.02 | | | 3.4 | OK |
| 1.008 | S33 | 46 | 161.233 | -0.216 | 0.000 | 0.18 | | | 18.3 | OK |
| 4.000 | S30 | 44 | 164.353 | -0.204 | 0.000 | 0.02 | | | 2.8 | OK |
| 1.009 | S31 | 44 | 160.823 | -0.230 | 0.000 | 0.12 | | | 21.7 | OK |
| 1.010 | 15 | 48 | 159.089 | -0.211 | 0.000 | 0.19 | | 27 | 15.3 | OK |

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## Summary Wizard of 240 minute 1 year Summer I+0% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 51 | 165.691 | -0.201 | 0.000 | 0.03 | | | 1.2 | OK |
| 1.001 | S43 | 51 | 165.440 | -0.189 | 0.000 | 0.06 | | | 2.9 | OK |
| 1.002 | S44 | 51 | 164.649 | -0.206 | 0.000 | 0.02 | | | 2.9 | OK |
| 1.003 | S45 | 51 | 163.045 | -0.180 | 0.000 | 0.09 | | | 4.5 | OK |
| 1.004 | S38 | 51 | 162.533 | -0.175 | 0.000 | 0.11 | | | 5.5 | OK |
| 1.005 | S39 | 51 | 162.155 | -0.167 | 0.000 | 0.15 | | | 7.2 | OK |
| 1.006 | S40 | 51 | 161.835 | -0.166 | 0.000 | 0.16 | | | 7.2 | OK |
| 1.007 | S41 | 51 | 161.667 | -0.243 | 0.000 | 0.08 | | | 8.4 | OK |
| 2.000 | S34 | 51 | 168.846 | -0.205 | 0.000 | 0.02 | | | 2.7 | OK |
| 2.001 | S35 | 51 | 164.021 | -0.204 | 0.000 | 0.02 | | | 2.7 | OK |
| 3.000 | S32 | 51 | 165.920 | -0.204 | 0.000 | 0.02 | | | 2.8 | OK |
| 1.008 | S33 | 51 | 161.225 | -0.224 | 0.000 | 0.15 | | | 15.2 | OK |
| 4.000 | S30 | 51 | 164.349 | -0.208 | 0.000 | 0.02 | | | 2.3 | OK |
| 1.009 | S31 | 51 | 160.817 | -0.236 | 0.000 | 0.10 | | | 18.1 | OK |
| 1.010 | 15 | 51 | 159.080 | -0.220 | 0.000 | 0.16 | | 33 | 12.7 | OK |

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## Summary Wizard of 360 minute 1 year Summer I+0% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 56 | 165.688 | -0.204 | 0.000 | 0.02 | | | 0.9 | OK |
| 1.001 | S43 | 56 | 165.435 | -0.194 | 0.000 | 0.05 | | | 2.2 | OK |
| 1.002 | S44 | 56 | 164.645 | -0.210 | 0.000 | 0.01 | | | 2.2 | OK |
| 1.003 | S45 | 56 | 163.039 | -0.186 | 0.000 | 0.07 | | | 3.5 | OK |
| 1.004 | S38 | 56 | 162.527 | -0.181 | 0.000 | 0.09 | | | 4.2 | OK |
| 1.005 | S39 | 56 | 162.147 | -0.175 | 0.000 | 0.11 | | | 5.5 | OK |
| 1.006 | S40 | 56 | 161.828 | -0.173 | 0.000 | 0.12 | | | 5.5 | OK |
| 1.007 | S41 | 56 | 161.658 | -0.252 | 0.000 | 0.06 | | | 6.5 | OK |
| 2.000 | S34 | 56 | 168.841 | -0.210 | 0.000 | 0.01 | | | 2.1 | OK |
| 2.001 | S35 | 56 | 164.016 | -0.209 | 0.000 | 0.02 | | | 2.1 | OK |
| 3.000 | S32 | 56 | 165.915 | -0.209 | 0.000 | 0.01 | | | 2.1 | OK |
| 1.008 | S33 | 56 | 161.216 | -0.233 | 0.000 | 0.11 | | | 11.7 | OK |
| 4.000 | S30 | 56 | 164.345 | -0.212 | 0.000 | 0.01 | | | 1.8 | OK |
| 1.009 | S31 | 56 | 160.809 | -0.244 | 0.000 | 0.08 | | | 13.9 | OK |
| 1.010 | 15 | 58 | 159.068 | -0.232 | 0.000 | 0.12 | | 46 | 9.2 | OK |

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## Summary Wizard of 480 minute 1 year Summer I+0% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 59 | 165.684 | -0.208 | 0.000 | 0.02 | | | 0.8 | OK |
| 1.001 | S43 | 59 | 165.432 | -0.197 | 0.000 | 0.04 | | | 1.8 | OK |
| 1.002 | S44 | 59 | 164.642 | -0.213 | 0.000 | 0.01 | | | 1.8 | OK |
| 1.003 | S45 | 59 | 163.034 | -0.191 | 0.000 | 0.06 | | | 2.8 | OK |
| 1.004 | S38 | 59 | 162.522 | -0.186 | 0.000 | 0.07 | | | 3.5 | OK |
| 1.005 | S39 | 59 | 162.143 | -0.179 | 0.000 | 0.09 | | | 4.6 | OK |
| 1.006 | S40 | 59 | 161.823 | -0.178 | 0.000 | 0.10 | | | 4.6 | OK |
| 1.007 | S41 | 59 | 161.653 | -0.257 | 0.000 | 0.05 | | | 5.3 | OK |
| 2.000 | S34 | 59 | 168.838 | -0.213 | 0.000 | 0.01 | | | 1.7 | OK |
| 2.001 | S35 | 59 | 164.013 | -0.212 | 0.000 | 0.01 | | | 1.7 | OK |
| 3.000 | S32 | 59 | 165.912 | -0.212 | 0.000 | 0.01 | | | 1.7 | OK |
| 1.008 | S33 | 59 | 161.210 | -0.239 | 0.000 | 0.09 | | | 9.6 | OK |
| 4.000 | S30 | 59 | 164.343 | -0.214 | 0.000 | 0.01 | | | 1.4 | OK |
| 1.009 | S31 | 59 | 160.802 | -0.251 | 0.000 | 0.06 | | | 11.4 | OK |
| 1.010 | 15 | 61 | 159.060 | -0.240 | 0.000 | 0.09 | | 59 | 7.0 | OK |

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## Summary Wizard of 600 minute 1 year Summer I+0% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 63 | 165.681 | -0.211 | 0.000 | 0.01 | | | 0.7 | OK |
| 1.001 | S43 | 63 | 165.430 | -0.199 | 0.000 | 0.03 | | | 1.5 | OK |
| 1.002 | S44 | 63 | 164.640 | -0.215 | 0.000 | 0.01 | | | 1.5 | OK |
| 1.003 | S45 | 63 | 163.032 | -0.193 | 0.000 | 0.05 | | | 2.4 | OK |
| 1.004 | S38 | 63 | 162.519 | -0.189 | 0.000 | 0.06 | | | 3.0 | OK |
| 1.005 | S39 | 63 | 162.139 | -0.183 | 0.000 | 0.08 | | | 3.9 | OK |
| 1.006 | S40 | 63 | 161.820 | -0.181 | 0.000 | 0.08 | | | 3.9 | OK |
| 1.007 | S41 | 63 | 161.650 | -0.260 | 0.000 | 0.04 | | | 4.5 | OK |
| 2.000 | S34 | 63 | 168.837 | -0.214 | 0.000 | 0.01 | | | 1.4 | OK |
| 2.001 | S35 | 63 | 164.011 | -0.214 | 0.000 | 0.01 | | | 1.4 | OK |
| 3.000 | S32 | 63 | 165.910 | -0.214 | 0.000 | 0.01 | | | 1.5 | OK |
| 1.008 | S33 | 63 | 161.205 | -0.244 | 0.000 | 0.08 | | | 8.2 | OK |
| 4.000 | S30 | 63 | 164.341 | -0.216 | 0.000 | 0.01 | | | 1.2 | OK |
| 1.009 | S31 | 63 | 160.798 | -0.255 | 0.000 | 0.06 | | | 9.8 | OK |
| 1.010 | 15 | 63 | 159.053 | -0.247 | 0.000 | 0.07 | | 77 | 5.7 | OK |

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## Summary Wizard of 720 minute 1 year Summer I+0% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 64 | 165.680 | -0.212 | 0.000 | 0.01 | | | 0.6 | OK |
| 1.001 | S43 | 64 | 165.429 | -0.200 | 0.000 | 0.03 | | | 1.3 | OK |
| 1.002 | S44 | 64 | 164.639 | -0.216 | 0.000 | 0.01 | | | 1.3 | OK |
| 1.003 | S45 | 64 | 163.030 | -0.195 | 0.000 | 0.04 | | | 2.1 | OK |
| 1.004 | S38 | 64 | 162.516 | -0.192 | 0.000 | 0.05 | | | 2.6 | OK |
| 1.005 | S39 | 64 | 162.136 | -0.186 | 0.000 | 0.07 | | | 3.4 | OK |
| 1.006 | S40 | 64 | 161.816 | -0.185 | 0.000 | 0.07 | | | 3.4 | OK |
| 1.007 | S41 | 64 | 161.648 | -0.262 | 0.000 | 0.04 | | | 4.0 | OK |
| 2.000 | S34 | 64 | 168.835 | -0.216 | 0.000 | 0.01 | | | 1.3 | OK |
| 2.001 | S35 | 64 | 164.010 | -0.215 | 0.000 | 0.01 | | | 1.3 | OK |
| 3.000 | S32 | 64 | 165.908 | -0.216 | 0.000 | 0.01 | | | 1.3 | OK |
| 1.008 | S33 | 64 | 161.201 | -0.248 | 0.000 | 0.07 | | | 7.2 | OK |
| 4.000 | S30 | 64 | 164.340 | -0.217 | 0.000 | 0.01 | | | 1.1 | OK |
| 1.009 | S31 | 64 | 160.795 | -0.258 | 0.000 | 0.05 | | | 8.5 | OK |
| 1.010 | 15 | 64 | 159.048 | -0.252 | 0.000 | 0.06 | | 90 | 4.9 | OK |

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## Summary Wizard of 960 minute 1 year Summer I+0% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 68 | 165.677 | -0.215 | 0.000 | 0.01 | | | 0.5 | OK |
| 1.001 | S43 | 68 | 165.427 | -0.202 | 0.000 | 0.02 | | | 1.1 | OK |
| 1.002 | S44 | 68 | 164.637 | -0.218 | 0.000 | 0.01 | | | 1.1 | OK |
| 1.003 | S45 | 68 | 163.027 | -0.198 | 0.000 | 0.03 | | | 1.7 | OK |
| 1.004 | S38 | 68 | 162.513 | -0.195 | 0.000 | 0.04 | | | 2.1 | OK |
| 1.005 | S39 | 68 | 162.131 | -0.191 | 0.000 | 0.06 | | | 2.8 | OK |
| 1.006 | S40 | 68 | 161.811 | -0.190 | 0.000 | 0.06 | | | 2.8 | OK |
| 1.007 | S41 | 68 | 161.644 | -0.266 | 0.000 | 0.03 | | | 3.2 | OK |
| 2.000 | S34 | 68 | 168.833 | -0.218 | 0.000 | 0.01 | | | 1.0 | OK |
| 2.001 | S35 | 68 | 164.008 | -0.217 | 0.000 | 0.01 | | | 1.0 | OK |
| 3.000 | S32 | 68 | 165.907 | -0.217 | 0.000 | 0.01 | | | 1.0 | OK |
| 1.008 | S33 | 68 | 161.195 | -0.254 | 0.000 | 0.06 | | | 5.8 | OK |
| 4.000 | S30 | 68 | 164.338 | -0.219 | 0.000 | 0.01 | | | 0.9 | OK |
| 1.009 | S31 | 68 | 160.791 | -0.262 | 0.000 | 0.04 | | | 6.9 | OK |
| 1.010 | 15 | 68 | 159.042 | -0.258 | 0.000 | 0.05 | | 111 | 3.8 | OK |

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## Summary Wizard of 1440 minute 1 year Summer I+0% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 70 | 165.675 | -0.217 | 0.000 | 0.01 | | | 0.3 | OK |
| 1.001 | S43 | 70 | 165.422 | -0.207 | 0.000 | 0.02 | | | 0.8 | OK |
| 1.002 | S44 | 70 | 164.635 | -0.220 | 0.000 | 0.01 | | | 0.8 | OK |
| 1.003 | S45 | 70 | 163.024 | -0.201 | 0.000 | 0.03 | | | 1.3 | OK |
| 1.004 | S38 | 70 | 162.509 | -0.199 | 0.000 | 0.03 | | | 1.6 | OK |
| 1.005 | S39 | 70 | 162.126 | -0.196 | 0.000 | 0.04 | | | 2.1 | OK |
| 1.006 | S40 | 70 | 161.806 | -0.195 | 0.000 | 0.04 | | | 2.1 | OK |
| 1.007 | S41 | 70 | 161.641 | -0.269 | 0.000 | 0.02 | | | 2.4 | OK |
| 2.000 | S34 | 70 | 168.832 | -0.219 | 0.000 | 0.01 | | | 0.8 | OK |
| 2.001 | S35 | 70 | 164.006 | -0.219 | 0.000 | 0.01 | | | 0.8 | OK |
| 3.000 | S32 | 70 | 165.905 | -0.219 | 0.000 | 0.01 | | | 0.8 | OK |
| 1.008 | S33 | 70 | 161.188 | -0.261 | 0.000 | 0.04 | | | 4.3 | OK |
| 4.000 | S30 | 70 | 164.337 | -0.220 | 0.000 | 0.00 | | | 0.6 | OK |
| 1.009 | S31 | 70 | 160.787 | -0.266 | 0.000 | 0.03 | | | 5.1 | OK |
| 1.010 | 15 | 70 | 159.035 | -0.265 | 0.000 | 0.03 | | 142 | 2.6 | OK |

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## Summary Wizard of 15 minute 30 year Summer I+0% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 7 | 165.738 | -0.154 | 0.000 | 0.21 | | | 10.3 | OK |
| 1.001 | S43 | 7 | 165.523 | -0.106 | 0.000 | 0.54 | | | 25.7 | OK |
| 1.002 | S44 | 7 | 164.690 | -0.165 | 0.000 | 0.16 | | | 25.5 | OK |
| 1.003 | S45 | 7 | 163.158 | -0.067 | 0.000 | 0.80 | | | 39.9 | OK |
| 1.004 | S38 | 8 | 162.743 | 0.035 | 0.000 | 0.89 | | | 44.0 | SURCHARGED |
| 1.005 | S39 | 8 | 162.434 | 0.112 | 0.000 | 1.10 | | | 53.5 | SURCHARGED |
| 1.006 | S40 | 8 | 162.048 | 0.047 | 0.000 | 1.16 | | | 53.4 | SURCHARGED |
| 1.007 | S41 | 8 | 161.774 | -0.136 | 0.000 | 0.56 | | | 58.4 | OK |
| 2.000 | S34 | 7 | 168.886 | -0.165 | 0.000 | 0.16 | | | 23.1 | OK |
| 2.001 | S35 | 7 | 164.062 | -0.163 | 0.000 | 0.17 | | | 22.9 | OK |
| 3.000 | S32 | 7 | 165.960 | -0.164 | 0.000 | 0.16 | | | 23.6 | OK |
| 1.008 | S33 | 8 | 161.490 | 0.041 | 0.000 | 1.06 | | | 109.0 | SURCHARGED |
| 4.000 | S30 | 7 | 164.387 | -0.170 | 0.000 | 0.14 | | | 19.5 | OK |
| 1.009 | S31 | 8 | 160.947 | -0.106 | 0.000 | 0.73 | | | 128.8 | OK |
| 1.010 | 15 | 12 | 159.255 | -0.045 | 0.000 | 1.00 | | 9 | 79.2 | OK |

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## Summary Wizard of 30 minute 30 year Summer I+0% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 9 | 165.734 | -0.158 | 0.000 | 0.20 | | | 9.4 | OK |
| 1.001 | S43 | 9 | 165.514 | -0.115 | 0.000 | 0.47 | | | 22.6 | OK |
| 1.002 | S44 | 9 | 164.686 | -0.169 | 0.000 | 0.14 | | | 22.6 | OK |
| 1.003 | S45 | 9 | 163.143 | -0.082 | 0.000 | 0.70 | | | 35.1 | OK |
| 1.004 | S38 | 9 | 162.649 | -0.059 | 0.000 | 0.85 | | | 42.1 | OK |
| 1.005 | S39 | 9 | 162.383 | 0.061 | 0.000 | 1.05 | | | 51.0 | SURCHARGED |
| 1.006 | S40 | 9 | 162.028 | 0.027 | 0.000 | 1.10 | | | 51.0 | SURCHARGED |
| 1.007 | S41 | 9 | 161.770 | -0.140 | 0.000 | 0.54 | | | 56.6 | OK |
| 2.000 | S34 | 9 | 168.882 | -0.169 | 0.000 | 0.14 | | | 20.8 | OK |
| 2.001 | S35 | 9 | 164.058 | -0.167 | 0.000 | 0.15 | | | 20.8 | OK |
| 3.000 | S32 | 9 | 165.956 | -0.168 | 0.000 | 0.15 | | | 21.3 | OK |
| 1.008 | S33 | 9 | 161.428 | -0.021 | 0.000 | 1.00 | | | 103.1 | OK |
| 4.000 | S30 | 9 | 164.384 | -0.173 | 0.000 | 0.12 | | | 17.6 | OK |
| 1.009 | S31 | 9 | 160.940 | -0.113 | 0.000 | 0.70 | | | 123.5 | OK |
| 1.010 | 15 | 11 | 159.265 | -0.035 | 0.000 | 1.00 | | 10 | 79.2 | OK |

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## Summary Wizard of 60 minute 30 year Summer I+0% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 12 | 165.724 | -0.168 | 0.000 | 0.15 | | | 7.0 | OK |
| 1.001 | S43 | 12 | 165.496 | -0.133 | 0.000 | 0.35 | | | 16.6 | OK |
| 1.002 | S44 | 12 | 164.678 | -0.177 | 0.000 | 0.10 | | | 16.6 | OK |
| 1.003 | S45 | 12 | 163.117 | -0.108 | 0.000 | 0.52 | | | 26.0 | OK |
| 1.004 | S38 | 12 | 162.616 | -0.092 | 0.000 | 0.64 | | | 31.6 | OK |
| 1.005 | S39 | 12 | 162.257 | -0.065 | 0.000 | 0.84 | | | 41.1 | OK |
| 1.006 | S40 | 12 | 161.941 | -0.060 | 0.000 | 0.89 | | | 41.0 | OK |
| 1.007 | S41 | 12 | 161.752 | -0.158 | 0.000 | 0.45 | | | 46.9 | OK |
| 2.000 | S34 | 12 | 168.875 | -0.176 | 0.000 | 0.11 | | | 15.5 | OK |
| 2.001 | S35 | 12 | 164.050 | -0.175 | 0.000 | 0.11 | | | 15.5 | OK |
| 3.000 | S32 | 12 | 165.948 | -0.176 | 0.000 | 0.11 | | | 15.9 | OK |
| 1.008 | S33 | 12 | 161.358 | -0.091 | 0.000 | 0.82 | | | 84.5 | OK |
| 4.000 | S30 | 12 | 164.378 | -0.179 | 0.000 | 0.09 | | | 13.1 | OK |
| 1.009 | S31 | 12 | 160.915 | -0.138 | 0.000 | 0.57 | | | 100.1 | OK |
| 1.010 | 15 | 14 | 159.233 | -0.067 | 0.000 | 0.96 | | 13 | 76.0 | OK |

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## Summary Wizard of 120 minute 30 year Summer I+0% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 18 | 165.714 | -0.178 | 0.000 | 0.10 | | | 4.6 | OK |
| 1.001 | S43 | 18 | 165.477 | -0.152 | 0.000 | 0.23 | | | 11.0 | OK |
| 1.002 | S44 | 18 | 164.668 | -0.187 | 0.000 | 0.07 | | | 11.0 | OK |
| 1.003 | S45 | 18 | 163.091 | -0.134 | 0.000 | 0.35 | | | 17.3 | OK |
| 1.004 | S38 | 18 | 162.586 | -0.122 | 0.000 | 0.43 | | | 21.1 | OK |
| 1.005 | S39 | 18 | 162.219 | -0.103 | 0.000 | 0.57 | | | 27.5 | OK |
| 1.006 | S40 | 18 | 161.901 | -0.100 | 0.000 | 0.60 | | | 27.5 | OK |
| 1.007 | S41 | 18 | 161.723 | -0.187 | 0.000 | 0.31 | | | 31.8 | OK |
| 2.000 | S34 | 18 | 168.865 | -0.186 | 0.000 | 0.07 | | | 10.3 | OK |
| 2.001 | S35 | 18 | 164.041 | -0.184 | 0.000 | 0.08 | | | 10.3 | OK |
| 3.000 | S32 | 18 | 165.939 | -0.185 | 0.000 | 0.07 | | | 10.5 | OK |
| 1.008 | S33 | 18 | 161.309 | -0.140 | 0.000 | 0.56 | | | 57.3 | OK |
| 4.000 | S30 | 18 | 164.368 | -0.189 | 0.000 | 0.06 | | | 8.7 | OK |
| 1.009 | S31 | 18 | 160.882 | -0.171 | 0.000 | 0.39 | | | 67.9 | OK |
| 1.010 | 15 | 18 | 159.186 | -0.114 | 0.000 | 0.71 | | 20 | 55.9 | OK |

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## Summary Wizard of 180 minute 30 year Summer I+0% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 24 | 165.707 | -0.185 | 0.000 | 0.07 | | | 3.6 | OK |
| 1.001 | S43 | 23 | 165.467 | -0.162 | 0.000 | 0.17 | | | 8.3 | OK |
| 1.002 | S44 | 23 | 164.663 | -0.192 | 0.000 | 0.05 | | | 8.4 | OK |
| 1.003 | S45 | 23 | 163.078 | -0.147 | 0.000 | 0.26 | | | 13.2 | OK |
| 1.004 | S38 | 23 | 162.571 | -0.137 | 0.000 | 0.33 | | | 16.1 | OK |
| 1.005 | S39 | 22 | 162.200 | -0.122 | 0.000 | 0.43 | | | 21.1 | OK |
| 1.006 | S40 | 22 | 161.882 | -0.119 | 0.000 | 0.46 | | | 21.0 | OK |
| 1.007 | S41 | 22 | 161.708 | -0.202 | 0.000 | 0.23 | | | 24.4 | OK |
| 2.000 | S34 | 24 | 168.859 | -0.192 | 0.000 | 0.05 | | | 7.9 | OK |
| 2.001 | S35 | 24 | 164.035 | -0.190 | 0.000 | 0.06 | | | 7.9 | OK |
| 3.000 | S32 | 24 | 165.933 | -0.191 | 0.000 | 0.06 | | | 8.0 | OK |
| 1.008 | S33 | 23 | 161.286 | -0.163 | 0.000 | 0.43 | | | 44.1 | OK |
| 4.000 | S30 | 24 | 164.363 | -0.194 | 0.000 | 0.05 | | | 6.6 | OK |
| 1.009 | S31 | 24 | 160.864 | -0.189 | 0.000 | 0.30 | | | 52.3 | OK |
| 1.010 | 15 | 22 | 159.159 | -0.141 | 0.000 | 0.55 | | 27 | 43.8 | OK |

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## Summary Wizard of 240 minute 30 year Summer I+0% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 28 | 165.703 | -0.189 | 0.000 | 0.06 | | | 2.9 | OK |
| 1.001 | S43 | 28 | 165.460 | -0.169 | 0.000 | 0.14 | | | 6.8 | OK |
| 1.002 | S44 | 28 | 164.660 | -0.195 | 0.000 | 0.04 | | | 6.8 | OK |
| 1.003 | S45 | 28 | 163.071 | -0.154 | 0.000 | 0.22 | | | 10.7 | OK |
| 1.004 | S38 | 28 | 162.562 | -0.146 | 0.000 | 0.27 | | | 13.2 | OK |
| 1.005 | S39 | 28 | 162.189 | -0.133 | 0.000 | 0.35 | | | 17.2 | OK |
| 1.006 | S40 | 28 | 161.871 | -0.130 | 0.000 | 0.37 | | | 17.2 | OK |
| 1.007 | S41 | 28 | 161.699 | -0.211 | 0.000 | 0.19 | | | 20.0 | OK |
| 2.000 | S34 | 28 | 168.856 | -0.195 | 0.000 | 0.04 | | | 6.4 | OK |
| 2.001 | S35 | 28 | 164.031 | -0.194 | 0.000 | 0.05 | | | 6.4 | OK |
| 3.000 | S32 | 28 | 165.930 | -0.194 | 0.000 | 0.05 | | | 6.6 | OK |
| 1.008 | S33 | 28 | 161.271 | -0.178 | 0.000 | 0.35 | | | 36.2 | OK |
| 4.000 | S30 | 28 | 164.360 | -0.197 | 0.000 | 0.04 | | | 5.4 | OK |
| 1.009 | S31 | 28 | 160.853 | -0.200 | 0.000 | 0.24 | | | 42.9 | OK |
| 1.010 | 15 | 25 | 159.142 | -0.158 | 0.000 | 0.45 | | 33 | 36.0 | OK |

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## Summary Wizard of 360 minute 30 year Summer I+0% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 36 | 165.697 | -0.195 | 0.000 | 0.04 | | | 2.2 | OK |
| 1.001 | S43 | 36 | 165.452 | -0.177 | 0.000 | 0.11 | | | 5.0 | OK |
| 1.002 | S44 | 36 | 164.656 | -0.199 | 0.000 | 0.03 | | | 5.0 | OK |
| 1.003 | S45 | 36 | 163.060 | -0.165 | 0.000 | 0.16 | | | 8.0 | OK |
| 1.004 | S38 | 36 | 162.551 | -0.157 | 0.000 | 0.20 | | | 9.8 | OK |
| 1.005 | S39 | 36 | 162.175 | -0.147 | 0.000 | 0.26 | | | 12.8 | OK |
| 1.006 | S40 | 36 | 161.856 | -0.145 | 0.000 | 0.28 | | | 12.8 | OK |
| 1.007 | S41 | 36 | 161.685 | -0.225 | 0.000 | 0.14 | | | 14.9 | OK |
| 2.000 | S34 | 36 | 168.852 | -0.199 | 0.000 | 0.03 | | | 4.8 | OK |
| 2.001 | S35 | 36 | 164.027 | -0.198 | 0.000 | 0.03 | | | 4.8 | OK |
| 3.000 | S32 | 36 | 165.926 | -0.198 | 0.000 | 0.03 | | | 4.9 | OK |
| 1.008 | S33 | 36 | 161.253 | -0.196 | 0.000 | 0.26 | | | 27.0 | OK |
| 4.000 | S30 | 36 | 164.357 | -0.200 | 0.000 | 0.03 | | | 4.0 | OK |
| 1.009 | S31 | 36 | 160.839 | -0.214 | 0.000 | 0.18 | | | 32.0 | OK |
| 1.010 | 15 | 35 | 159.119 | -0.181 | 0.000 | 0.33 | | 47 | 26.4 | OK |

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## Summary Wizard of 480 minute 30 year Summer I+0% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 41 | 165.694 | -0.198 | 0.000 | 0.04 | | | 1.7 | OK |
| 1.001 | S43 | 41 | 165.448 | -0.181 | 0.000 | 0.08 | | | 4.0 | OK |
| 1.002 | S44 | 41 | 164.654 | -0.201 | 0.000 | 0.03 | | | 4.0 | OK |
| 1.003 | S45 | 41 | 163.053 | -0.172 | 0.000 | 0.13 | | | 6.4 | OK |
| 1.004 | S38 | 41 | 162.543 | -0.165 | 0.000 | 0.16 | | | 7.8 | OK |
| 1.005 | S39 | 41 | 162.167 | -0.155 | 0.000 | 0.21 | | | 10.3 | OK |
| 1.006 | S40 | 41 | 161.848 | -0.153 | 0.000 | 0.22 | | | 10.3 | OK |
| 1.007 | S41 | 41 | 161.677 | -0.233 | 0.000 | 0.12 | | | 12.0 | OK |
| 2.000 | S34 | 41 | 168.850 | -0.201 | 0.000 | 0.03 | | | 3.8 | OK |
| 2.001 | S35 | 41 | 164.025 | -0.200 | 0.000 | 0.03 | | | 3.8 | OK |
| 3.000 | S32 | 41 | 165.923 | -0.201 | 0.000 | 0.03 | | | 3.9 | OK |
| 1.008 | S33 | 41 | 161.242 | -0.207 | 0.000 | 0.21 | | | 21.7 | OK |
| 4.000 | S30 | 41 | 164.355 | -0.202 | 0.000 | 0.02 | | | 3.2 | OK |
| 1.009 | S31 | 41 | 160.829 | -0.224 | 0.000 | 0.15 | | | 25.7 | OK |
| 1.010 | 15 | 40 | 159.104 | -0.196 | 0.000 | 0.26 | | 59 | 20.9 | OK |

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## Summary Wizard of 600 minute 30 year Summer I+0% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 46 | 165.692 | -0.200 | 0.000 | 0.03 | | | 1.4 | OK |
| 1.001 | S43 | 46 | 165.443 | -0.186 | 0.000 | 0.07 | | | 3.4 | OK |
| 1.002 | S44 | 46 | 164.653 | -0.202 | 0.000 | 0.02 | | | 3.4 | OK |
| 1.003 | S45 | 46 | 163.049 | -0.176 | 0.000 | 0.11 | | | 5.4 | OK |
| 1.004 | S38 | 46 | 162.537 | -0.171 | 0.000 | 0.13 | | | 6.6 | OK |
| 1.005 | S39 | 46 | 162.160 | -0.162 | 0.000 | 0.18 | | | 8.6 | OK |
| 1.006 | S40 | 46 | 161.841 | -0.160 | 0.000 | 0.19 | | | 8.6 | OK |
| 1.007 | S41 | 46 | 161.672 | -0.238 | 0.000 | 0.10 | | | 10.1 | OK |
| 2.000 | S34 | 46 | 168.849 | -0.202 | 0.000 | 0.02 | | | 3.2 | OK |
| 2.001 | S35 | 46 | 164.023 | -0.202 | 0.000 | 0.02 | | | 3.2 | OK |
| 3.000 | S32 | 46 | 165.922 | -0.202 | 0.000 | 0.02 | | | 3.3 | OK |
| 1.008 | S33 | 44 | 161.233 | -0.216 | 0.000 | 0.18 | | | 18.3 | OK |
| 4.000 | S30 | 46 | 164.352 | -0.205 | 0.000 | 0.02 | | | 2.7 | OK |
| 1.009 | S31 | 46 | 160.823 | -0.230 | 0.000 | 0.12 | | | 21.7 | OK |
| 1.010 | 15 | 44 | 159.094 | -0.206 | 0.000 | 0.22 | | 69 | 17.2 | OK |

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## Summary Wizard of 720 minute 30 year Summer I+0% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 49 | 165.691 | -0.201 | 0.000 | 0.03 | | | 1.3 | OK |
| 1.001 | S43 | 49 | 165.440 | -0.189 | 0.000 | 0.06 | | | 2.9 | OK |
| 1.002 | S44 | 49 | 164.650 | -0.205 | 0.000 | 0.02 | | | 2.9 | OK |
| 1.003 | S45 | 49 | 163.046 | -0.179 | 0.000 | 0.09 | | | 4.7 | OK |
| 1.004 | S38 | 49 | 162.534 | -0.174 | 0.000 | 0.12 | | | 5.7 | OK |
| 1.005 | S39 | 49 | 162.156 | -0.166 | 0.000 | 0.15 | | | 7.5 | OK |
| 1.006 | S40 | 49 | 161.836 | -0.165 | 0.000 | 0.16 | | | 7.5 | OK |
| 1.007 | S41 | 49 | 161.668 | -0.242 | 0.000 | 0.08 | | | 8.8 | OK |
| 2.000 | S34 | 49 | 168.846 | -0.205 | 0.000 | 0.02 | | | 2.8 | OK |
| 2.001 | S35 | 49 | 164.022 | -0.203 | 0.000 | 0.02 | | | 2.8 | OK |
| 3.000 | S32 | 49 | 165.920 | -0.204 | 0.000 | 0.02 | | | 2.8 | OK |
| 1.008 | S33 | 49 | 161.227 | -0.222 | 0.000 | 0.15 | | | 15.9 | OK |
| 4.000 | S30 | 49 | 164.349 | -0.208 | 0.000 | 0.02 | | | 2.3 | OK |
| 1.009 | S31 | 49 | 160.818 | -0.235 | 0.000 | 0.11 | | | 18.8 | OK |
| 1.010 | 15 | 50 | 159.086 | -0.214 | 0.000 | 0.18 | | 79 | 14.6 | OK |

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## Summary Wizard of 960 minute 30 year Summer I+0% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 54 | 165.689 | -0.203 | 0.000 | 0.02 | | | 1.0 | OK |
| 1.001 | S43 | 54 | 165.436 | -0.193 | 0.000 | 0.05 | | | 2.3 | OK |
| 1.002 | S44 | 54 | 164.646 | -0.209 | 0.000 | 0.01 | | | 2.3 | OK |
| 1.003 | S45 | 54 | 163.040 | -0.185 | 0.000 | 0.07 | | | 3.7 | OK |
| 1.004 | S38 | 54 | 162.529 | -0.179 | 0.000 | 0.09 | | | 4.6 | OK |
| 1.005 | S39 | 54 | 162.149 | -0.173 | 0.000 | 0.12 | | | 6.0 | OK |
| 1.006 | S40 | 54 | 161.830 | -0.171 | 0.000 | 0.13 | | | 6.0 | OK |
| 1.007 | S41 | 54 | 161.661 | -0.249 | 0.000 | 0.07 | | | 7.0 | OK |
| 2.000 | S34 | 54 | 168.842 | -0.209 | 0.000 | 0.02 | | | 2.2 | OK |
| 2.001 | S35 | 54 | 164.017 | -0.208 | 0.000 | 0.02 | | | 2.2 | OK |
| 3.000 | S32 | 54 | 165.916 | -0.208 | 0.000 | 0.02 | | | 2.3 | OK |
| 1.008 | S33 | 54 | 161.218 | -0.231 | 0.000 | 0.12 | | | 12.7 | OK |
| 4.000 | S30 | 54 | 164.346 | -0.211 | 0.000 | 0.01 | | | 1.9 | OK |
| 1.009 | S31 | 54 | 160.812 | -0.241 | 0.000 | 0.09 | | | 15.0 | OK |
| 1.010 | 15 | 54 | 159.074 | -0.226 | 0.000 | 0.14 | | 104 | 11.1 | OK |

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## Summary Wizard of 1440 minute 30 year Summer I+0% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 60 | 165.683 | -0.209 | 0.000 | 0.02 | | | 0.7 | OK |
| 1.001 | S43 | 60 | 165.431 | -0.198 | 0.000 | 0.04 | | | 1.7 | OK |
| 1.002 | S44 | 60 | 164.641 | -0.214 | 0.000 | 0.01 | | | 1.7 | OK |
| 1.003 | S45 | 60 | 163.034 | -0.191 | 0.000 | 0.05 | | | 2.7 | OK |
| 1.004 | S38 | 60 | 162.521 | -0.187 | 0.000 | 0.07 | | | 3.3 | OK |
| 1.005 | S39 | 60 | 162.142 | -0.180 | 0.000 | 0.09 | | | 4.4 | OK |
| 1.006 | S40 | 60 | 161.822 | -0.179 | 0.000 | 0.09 | | | 4.4 | OK |
| 1.007 | S41 | 60 | 161.652 | -0.258 | 0.000 | 0.05 | | | 5.1 | OK |
| 2.000 | S34 | 60 | 168.838 | -0.213 | 0.000 | 0.01 | | | 1.6 | OK |
| 2.001 | S35 | 60 | 164.013 | -0.212 | 0.000 | 0.01 | | | 1.6 | OK |
| 3.000 | S32 | 60 | 165.911 | -0.213 | 0.000 | 0.01 | | | 1.7 | OK |
| 1.008 | S33 | 60 | 161.209 | -0.240 | 0.000 | 0.09 | | | 9.2 | OK |
| 4.000 | S30 | 60 | 164.342 | -0.215 | 0.000 | 0.01 | | | 1.4 | OK |
| 1.009 | S31 | 60 | 160.801 | -0.252 | 0.000 | 0.06 | | | 10.9 | OK |
| 1.010 | 15 | 59 | 159.061 | -0.239 | 0.000 | 0.09 | | 156 | 7.2 | OK |

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## Summary Wizard of 15 minute 100 year Summer I+40% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 2 | 165.765 | -0.127 | 0.000 | 0.39 | | | 18.6 | OK |
| 1.001 | S43 | 2 | 165.582 | -0.047 | 0.000 | 0.97 | | | 46.3 | OK |
| 1.002 | S44 | 2 | 164.749 | -0.106 | 0.000 | 0.29 | | | 45.9 | OK |
| 1.003 | S45 | 2 | 164.700 | 1.475 | 0.000 | 1.14 | | | 56.9 | SURCHARGED |
| 1.004 | S38 | 2 | 164.179 | 1.471 | 0.000 | 1.22 | | | 60.3 | SURCHARGED |
| 1.005 | S39 | 2 | 163.600 | 1.278 | 0.000 | 1.50 | | | 73.2 | SURCHARGED |
| 1.006 | S40 | 2 | 162.850 | 0.849 | 0.000 | 1.68 | | | 77.8 | SURCHARGED |
| 1.007 | S41 | 2 | 162.430 | 0.520 | 0.000 | 0.85 | | | 88.7 | SURCHARGED |
| 2.000 | S34 | 2 | 168.908 | -0.143 | 0.000 | 0.29 | | | 41.7 | OK |
| 2.001 | S35 | 2 | 164.085 | -0.140 | 0.000 | 0.30 | | | 41.4 | OK |
| 3.000 | S32 | 2 | 165.982 | -0.142 | 0.000 | 0.29 | | | 42.7 | OK |
| 1.008 | S33 | 2 | 162.191 | 0.742 | 0.000 | 1.55 | | | 160.4 | SURCHARGED |
| 4.000 | S30 | 2 | 164.407 | -0.150 | 0.000 | 0.24 | | | 35.2 | OK |
| 1.009 | S31 | 2 | 161.223 | 0.170 | 0.000 | 1.09 | | | 191.0 | SURCHARGED |
| 1.010 | 15 | 4 | 159.408 | 0.108 | 0.000 | 1.49 | | 9 | 118.3 | SURCHARGED |

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## Summary Wizard of 30 minute 100 year Summer I+40% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 3 | 165.760 | -0.132 | 0.000 | 0.36 | | | 17.1 | OK |
| 1.001 | S43 | 3 | 165.567 | -0.062 | 0.000 | 0.86 | | | 41.2 | OK |
| 1.002 | S44 | 3 | 164.708 | -0.147 | 0.000 | 0.26 | | | 41.3 | OK |
| 1.003 | S45 | 3 | 164.430 | 1.205 | 0.000 | 1.08 | | | 53.6 | SURCHARGED |
| 1.004 | S38 | 3 | 163.941 | 1.233 | 0.000 | 1.18 | | | 57.9 | SURCHARGED |
| 1.005 | S39 | 3 | 163.407 | 1.085 | 0.000 | 1.48 | | | 72.1 | SURCHARGED |
| 1.006 | S40 | 3 | 162.685 | 0.684 | 0.000 | 1.62 | | | 74.7 | SURCHARGED |
| 1.007 | S41 | 3 | 162.305 | 0.395 | 0.000 | 0.82 | | | 85.5 | SURCHARGED |
| 2.000 | S34 | 3 | 168.904 | -0.147 | 0.000 | 0.26 | | | 37.9 | OK |
| 2.001 | S35 | 3 | 164.080 | -0.145 | 0.000 | 0.28 | | | 37.9 | OK |
| 3.000 | S32 | 3 | 165.978 | -0.146 | 0.000 | 0.27 | | | 38.8 | OK |
| 1.008 | S33 | 3 | 162.053 | 0.604 | 0.000 | 1.50 | | | 154.5 | SURCHARGED |
| 4.000 | S30 | 3 | 164.404 | -0.153 | 0.000 | 0.22 | | | 32.1 | OK |
| 1.009 | S31 | 3 | 161.141 | 0.088 | 0.000 | 1.05 | | | 185.2 | SURCHARGED |
| 1.010 | 15 | 3 | 159.429 | 0.129 | 0.000 | 1.56 | | 11 | 123.6 | SURCHARGED |

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## Summary Wizard of 60 minute 100 year Summer I+40% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 5 | 165.746 | -0.146 | 0.000 | 0.27 | | | 12.8 | OK |
| 1.001 | S43 | 5 | 165.535 | -0.094 | 0.000 | 0.64 | | | 30.5 | OK |
| 1.002 | S44 | 5 | 164.696 | -0.159 | 0.000 | 0.19 | | | 30.5 | OK |
| 1.003 | S45 | 5 | 163.442 | 0.217 | 0.000 | 0.90 | | | 44.8 | SURCHARGED |
| 1.004 | S38 | 5 | 163.094 | 0.386 | 0.000 | 0.99 | | | 48.9 | SURCHARGED |
| 1.005 | S39 | 5 | 162.714 | 0.392 | 0.000 | 1.27 | | | 61.7 | SURCHARGED |
| 1.006 | S40 | 5 | 162.194 | 0.193 | 0.000 | 1.37 | | | 63.4 | SURCHARGED |
| 1.007 | S41 | 5 | 161.897 | -0.013 | 0.000 | 0.71 | | | 73.5 | OK |
| 2.000 | S34 | 5 | 168.893 | -0.158 | 0.000 | 0.20 | | | 28.4 | OK |
| 2.001 | S35 | 5 | 164.069 | -0.156 | 0.000 | 0.21 | | | 28.4 | OK |
| 3.000 | S32 | 5 | 165.967 | -0.157 | 0.000 | 0.20 | | | 29.1 | OK |
| 1.008 | S33 | 5 | 161.701 | 0.252 | 0.000 | 1.29 | | | 133.0 | SURCHARGED |
| 4.000 | S30 | 5 | 164.393 | -0.164 | 0.000 | 0.17 | | | 24.0 | OK |
| 1.009 | S31 | 5 | 160.978 | -0.075 | 0.000 | 0.91 | | | 160.3 | OK |
| 1.010 | 15 | 5 | 159.404 | 0.104 | 0.000 | 1.48 | | 12 | 117.1 | SURCHARGED |

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## Summary Wizard of 120 minute 100 year Summer I+40% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 10 | 165.731 | -0.161 | 0.000 | 0.18 | | | 8.6 | OK |
| 1.001 | S43 | 11 | 165.506 | -0.123 | 0.000 | 0.42 | | | 20.2 | OK |
| 1.002 | S44 | 11 | 164.683 | -0.172 | 0.000 | 0.13 | | | 20.2 | OK |
| 1.003 | S45 | 11 | 163.131 | -0.094 | 0.000 | 0.64 | | | 31.8 | OK |
| 1.004 | S38 | 10 | 162.635 | -0.073 | 0.000 | 0.79 | | | 38.8 | OK |
| 1.005 | S39 | 10 | 162.339 | 0.017 | 0.000 | 1.01 | | | 49.2 | SURCHARGED |
| 1.006 | S40 | 10 | 162.012 | 0.011 | 0.000 | 1.06 | | | 49.1 | SURCHARGED |
| 1.007 | S41 | 10 | 161.768 | -0.142 | 0.000 | 0.54 | | | 56.4 | OK |
| 2.000 | S34 | 10 | 168.880 | -0.171 | 0.000 | 0.13 | | | 18.9 | OK |
| 2.001 | S35 | 10 | 164.055 | -0.170 | 0.000 | 0.14 | | | 18.9 | OK |
| 3.000 | S32 | 10 | 165.953 | -0.171 | 0.000 | 0.13 | | | 19.4 | OK |
| 1.008 | S33 | 10 | 161.389 | -0.060 | 0.000 | 1.00 | | | 102.9 | OK |
| 4.000 | S30 | 10 | 164.382 | -0.175 | 0.000 | 0.11 | | | 16.0 | OK |
| 1.009 | S31 | 10 | 160.938 | -0.115 | 0.000 | 0.70 | | | 122.6 | OK |
| 1.010 | 15 | 7 | 159.330 | 0.030 | 0.000 | 1.20 | | 15 | 95.4 | SURCHARGED |

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## Summary Wizard of 180 minute 100 year Summer I+40% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 13 | 165.722 | -0.170 | 0.000 | 0.14 | | | 6.5 | OK |
| 1.001 | S43 | 13 | 165.492 | -0.137 | 0.000 | 0.32 | | | 15.4 | OK |
| 1.002 | S44 | 13 | 164.677 | -0.178 | 0.000 | 0.10 | | | 15.4 | OK |
| 1.003 | S45 | 13 | 163.111 | -0.114 | 0.000 | 0.49 | | | 24.2 | OK |
| 1.004 | S38 | 13 | 162.609 | -0.099 | 0.000 | 0.60 | | | 29.7 | OK |
| 1.005 | S39 | 13 | 162.250 | -0.072 | 0.000 | 0.80 | | | 38.8 | OK |
| 1.006 | S40 | 13 | 161.934 | -0.067 | 0.000 | 0.84 | | | 38.7 | OK |
| 1.007 | S41 | 13 | 161.748 | -0.162 | 0.000 | 0.43 | | | 44.9 | OK |
| 2.000 | S34 | 13 | 168.873 | -0.178 | 0.000 | 0.10 | | | 14.5 | OK |
| 2.001 | S35 | 13 | 164.049 | -0.176 | 0.000 | 0.11 | | | 14.5 | OK |
| 3.000 | S32 | 13 | 165.947 | -0.177 | 0.000 | 0.10 | | | 14.8 | OK |
| 1.008 | S33 | 14 | 161.350 | -0.099 | 0.000 | 0.79 | | | 81.1 | OK |
| 4.000 | S30 | 13 | 164.376 | -0.181 | 0.000 | 0.08 | | | 12.2 | OK |
| 1.009 | S31 | 14 | 160.911 | -0.142 | 0.000 | 0.55 | | | 96.1 | OK |
| 1.010 | 15 | 13 | 159.253 | -0.047 | 0.000 | 1.00 | | 22 | 79.2 | OK |

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## Summary Wizard of 240 minute 100 year Summer I+40% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 16 | 165.717 | -0.175 | 0.000 | 0.11 | | | 5.3 | OK |
| 1.001 | S43 | 16 | 165.482 | -0.147 | 0.000 | 0.26 | | | 12.5 | OK |
| 1.002 | S44 | 16 | 164.672 | -0.183 | 0.000 | 0.08 | | | 12.5 | OK |
| 1.003 | S45 | 16 | 163.098 | -0.127 | 0.000 | 0.40 | | | 19.8 | OK |
| 1.004 | S38 | 16 | 162.595 | -0.113 | 0.000 | 0.49 | | | 24.2 | OK |
| 1.005 | S39 | 16 | 162.230 | -0.092 | 0.000 | 0.65 | | | 31.7 | OK |
| 1.006 | S40 | 16 | 161.913 | -0.088 | 0.000 | 0.69 | | | 31.6 | OK |
| 1.007 | S41 | 16 | 161.733 | -0.177 | 0.000 | 0.35 | | | 36.8 | OK |
| 2.000 | S34 | 16 | 168.869 | -0.182 | 0.000 | 0.08 | | | 11.8 | OK |
| 2.001 | S35 | 16 | 164.044 | -0.181 | 0.000 | 0.09 | | | 11.8 | OK |
| 3.000 | S32 | 16 | 165.942 | -0.182 | 0.000 | 0.08 | | | 12.1 | OK |
| 1.008 | S33 | 16 | 161.325 | -0.124 | 0.000 | 0.64 | | | 66.5 | OK |
| 4.000 | S30 | 16 | 164.371 | -0.186 | 0.000 | 0.07 | | | 10.0 | OK |
| 1.009 | S31 | 16 | 160.893 | -0.160 | 0.000 | 0.45 | | | 78.8 | OK |
| 1.010 | 15 | 16 | 159.217 | -0.083 | 0.000 | 0.87 | | 31 | 69.1 | OK |

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## Summary Wizard of 360 minute 100 year Summer I+40% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 21 | 165.710 | -0.182 | 0.000 | 0.08 | | | 3.9 | OK |
| 1.001 | S43 | 20 | 165.471 | -0.158 | 0.000 | 0.19 | | | 9.2 | OK |
| 1.002 | S44 | 20 | 164.665 | -0.190 | 0.000 | 0.06 | | | 9.2 | OK |
| 1.003 | S45 | 20 | 163.083 | -0.142 | 0.000 | 0.29 | | | 14.6 | OK |
| 1.004 | S38 | 19 | 162.577 | -0.131 | 0.000 | 0.36 | | | 17.9 | OK |
| 1.005 | S39 | 19 | 162.207 | -0.115 | 0.000 | 0.48 | | | 23.5 | OK |
| 1.006 | S40 | 19 | 161.890 | -0.111 | 0.000 | 0.51 | | | 23.5 | OK |
| 1.007 | S41 | 19 | 161.714 | -0.196 | 0.000 | 0.26 | | | 27.3 | OK |
| 2.000 | S34 | 21 | 168.861 | -0.190 | 0.000 | 0.06 | | | 8.7 | OK |
| 2.001 | S35 | 21 | 164.037 | -0.188 | 0.000 | 0.06 | | | 8.7 | OK |
| 3.000 | S32 | 21 | 165.935 | -0.189 | 0.000 | 0.06 | | | 8.9 | OK |
| 1.008 | S33 | 19 | 161.295 | -0.154 | 0.000 | 0.48 | | | 49.4 | OK |
| 4.000 | S30 | 21 | 164.365 | -0.192 | 0.000 | 0.05 | | | 7.4 | OK |
| 1.009 | S31 | 19 | 160.872 | -0.181 | 0.000 | 0.33 | | | 58.6 | OK |
| 1.010 | 15 | 20 | 159.177 | -0.123 | 0.000 | 0.65 | | 45 | 51.8 | OK |

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## Summary Wizard of 480 minute 100 year Summer I+40% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 27 | 165.704 | -0.188 | 0.000 | 0.07 | | | 3.1 | OK |
| 1.001 | S43 | 27 | 165.462 | -0.167 | 0.000 | 0.15 | | | 7.4 | OK |
| 1.002 | S44 | 27 | 164.661 | -0.194 | 0.000 | 0.05 | | | 7.4 | OK |
| 1.003 | S45 | 27 | 163.073 | -0.152 | 0.000 | 0.23 | | | 11.7 | OK |
| 1.004 | S38 | 27 | 162.565 | -0.143 | 0.000 | 0.29 | | | 14.3 | OK |
| 1.005 | S39 | 27 | 162.194 | -0.128 | 0.000 | 0.38 | | | 18.7 | OK |
| 1.006 | S40 | 27 | 161.875 | -0.126 | 0.000 | 0.41 | | | 18.8 | OK |
| 1.007 | S41 | 27 | 161.703 | -0.207 | 0.000 | 0.21 | | | 21.9 | OK |
| 2.000 | S34 | 27 | 168.857 | -0.194 | 0.000 | 0.05 | | | 6.9 | OK |
| 2.001 | S35 | 27 | 164.032 | -0.193 | 0.000 | 0.05 | | | 6.9 | OK |
| 3.000 | S32 | 27 | 165.931 | -0.193 | 0.000 | 0.05 | | | 7.1 | OK |
| 1.008 | S33 | 26 | 161.278 | -0.171 | 0.000 | 0.38 | | | 39.6 | OK |
| 4.000 | S30 | 27 | 164.361 | -0.196 | 0.000 | 0.04 | | | 5.9 | OK |
| 1.009 | S31 | 26 | 160.858 | -0.195 | 0.000 | 0.27 | | | 47.0 | OK |
| 1.010 | 15 | 23 | 159.154 | -0.146 | 0.000 | 0.52 | | 59 | 41.4 | OK |

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## Summary Wizard of 600 minute 100 year Summer I+40% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 31 | 165.701 | -0.191 | 0.000 | 0.05 | | | 2.6 | OK |
| 1.001 | S43 | 31 | 165.457 | -0.172 | 0.000 | 0.13 | | | 6.2 | OK |
| 1.002 | S44 | 31 | 164.658 | -0.197 | 0.000 | 0.04 | | | 6.2 | OK |
| 1.003 | S45 | 31 | 163.067 | -0.158 | 0.000 | 0.20 | | | 9.8 | OK |
| 1.004 | S38 | 31 | 162.558 | -0.150 | 0.000 | 0.24 | | | 12.0 | OK |
| 1.005 | S39 | 31 | 162.185 | -0.137 | 0.000 | 0.32 | | | 15.7 | OK |
| 1.006 | S40 | 30 | 161.866 | -0.135 | 0.000 | 0.34 | | | 15.7 | OK |
| 1.007 | S41 | 30 | 161.694 | -0.216 | 0.000 | 0.18 | | | 18.3 | OK |
| 2.000 | S34 | 31 | 168.855 | -0.196 | 0.000 | 0.04 | | | 5.8 | OK |
| 2.001 | S35 | 31 | 164.030 | -0.195 | 0.000 | 0.04 | | | 5.8 | OK |
| 3.000 | S32 | 31 | 165.928 | -0.196 | 0.000 | 0.04 | | | 6.0 | OK |
| 1.008 | S33 | 30 | 161.266 | -0.183 | 0.000 | 0.32 | | | 33.2 | OK |
| 4.000 | S30 | 31 | 164.359 | -0.198 | 0.000 | 0.03 | | | 4.9 | OK |
| 1.009 | S31 | 30 | 160.849 | -0.204 | 0.000 | 0.22 | | | 39.4 | OK |
| 1.010 | 15 | 26 | 159.138 | -0.162 | 0.000 | 0.44 | | 72 | 34.5 | OK |

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## Summary Wizard of 720 minute 100 year Summer I+40% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 34 | 165.698 | -0.194 | 0.000 | 0.05 | | | 2.3 | OK |
| 1.001 | S43 | 34 | 165.454 | -0.175 | 0.000 | 0.11 | | | 5.3 | OK |
| 1.002 | S44 | 34 | 164.657 | -0.198 | 0.000 | 0.03 | | | 5.3 | OK |
| 1.003 | S45 | 33 | 163.062 | -0.163 | 0.000 | 0.17 | | | 8.5 | OK |
| 1.004 | S38 | 33 | 162.553 | -0.155 | 0.000 | 0.21 | | | 10.4 | OK |
| 1.005 | S39 | 33 | 162.178 | -0.144 | 0.000 | 0.28 | | | 13.6 | OK |
| 1.006 | S40 | 33 | 161.859 | -0.142 | 0.000 | 0.29 | | | 13.6 | OK |
| 1.007 | S41 | 33 | 161.688 | -0.222 | 0.000 | 0.15 | | | 15.9 | OK |
| 2.000 | S34 | 34 | 168.853 | -0.198 | 0.000 | 0.03 | | | 5.0 | OK |
| 2.001 | S35 | 34 | 164.028 | -0.197 | 0.000 | 0.04 | | | 5.0 | OK |
| 3.000 | S32 | 34 | 165.926 | -0.198 | 0.000 | 0.04 | | | 5.2 | OK |
| 1.008 | S33 | 33 | 161.256 | -0.193 | 0.000 | 0.28 | | | 28.8 | OK |
| 4.000 | S30 | 34 | 164.357 | -0.200 | 0.000 | 0.03 | | | 4.3 | OK |
| 1.009 | S31 | 33 | 160.842 | -0.211 | 0.000 | 0.19 | | | 34.1 | OK |
| 1.010 | 15 | 31 | 159.127 | -0.173 | 0.000 | 0.37 | | 84 | 29.6 | OK |

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## Summary Wizard of 960 minute 100 year Summer I+40% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 40 | 165.695 | -0.197 | 0.000 | 0.04 | | | 1.8 | OK |
| 1.001 | S43 | 40 | 165.449 | -0.180 | 0.000 | 0.09 | | | 4.2 | OK |
| 1.002 | S44 | 40 | 164.654 | -0.201 | 0.000 | 0.03 | | | 4.2 | OK |
| 1.003 | S45 | 40 | 163.055 | -0.170 | 0.000 | 0.13 | | | 6.7 | OK |
| 1.004 | S38 | 40 | 162.544 | -0.164 | 0.000 | 0.17 | | | 8.3 | OK |
| 1.005 | S39 | 40 | 162.169 | -0.153 | 0.000 | 0.22 | | | 10.8 | OK |
| 1.006 | S40 | 40 | 161.850 | -0.151 | 0.000 | 0.23 | | | 10.8 | OK |
| 1.007 | S41 | 40 | 161.679 | -0.231 | 0.000 | 0.12 | | | 12.6 | OK |
| 2.000 | S34 | 40 | 168.851 | -0.200 | 0.000 | 0.03 | | | 4.0 | OK |
| 2.001 | S35 | 40 | 164.025 | -0.200 | 0.000 | 0.03 | | | 4.0 | OK |
| 3.000 | S32 | 40 | 165.924 | -0.200 | 0.000 | 0.03 | | | 4.1 | OK |
| 1.008 | S33 | 40 | 161.244 | -0.205 | 0.000 | 0.22 | | | 22.9 | OK |
| 4.000 | S30 | 40 | 164.355 | -0.202 | 0.000 | 0.02 | | | 3.4 | OK |
| 1.009 | S31 | 40 | 160.831 | -0.222 | 0.000 | 0.15 | | | 27.2 | OK |
| 1.010 | 15 | 39 | 159.110 | -0.190 | 0.000 | 0.29 | | 109 | 23.0 | OK |

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## Summary Wizard of 1440 minute 100 year Summer I+40% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 47 | 165.692 | -0.200 | 0.000 | 0.03 | | | 1.3 | OK |
| 1.001 | S43 | 47 | 165.441 | -0.188 | 0.000 | 0.06 | | | 3.1 | OK |
| 1.002 | S44 | 47 | 164.650 | -0.205 | 0.000 | 0.02 | | | 3.1 | OK |
| 1.003 | S45 | 47 | 163.047 | -0.178 | 0.000 | 0.10 | | | 4.9 | OK |
| 1.004 | S38 | 47 | 162.535 | -0.173 | 0.000 | 0.12 | | | 6.0 | OK |
| 1.005 | S39 | 47 | 162.157 | -0.165 | 0.000 | 0.16 | | | 7.8 | OK |
| 1.006 | S40 | 47 | 161.838 | -0.163 | 0.000 | 0.17 | | | 7.8 | OK |
| 1.007 | S41 | 47 | 161.670 | -0.240 | 0.000 | 0.09 | | | 9.2 | OK |
| 2.000 | S34 | 47 | 168.847 | -0.204 | 0.000 | 0.02 | | | 2.9 | OK |
| 2.001 | S35 | 47 | 164.023 | -0.202 | 0.000 | 0.02 | | | 2.9 | OK |
| 3.000 | S32 | 47 | 165.921 | -0.203 | 0.000 | 0.02 | | | 3.0 | OK |
| 1.008 | S33 | 47 | 161.229 | -0.220 | 0.000 | 0.16 | | | 16.6 | OK |
| 4.000 | S30 | 47 | 164.350 | -0.207 | 0.000 | 0.02 | | | 2.5 | OK |
| 1.009 | S31 | 47 | 160.819 | -0.234 | 0.000 | 0.11 | | | 19.7 | OK |
| 1.010 | 15 | 46 | 159.090 | -0.210 | 0.000 | 0.20 | | 146 | 15.7 | OK |

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## Summary Wizard of 15 minute 1 year Winter I+0% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 19 | 165.713 | -0.179 | 0.000 | 0.09 | | | 4.4 | OK |
| 1.001 | S43 | 19 | 165.472 | -0.157 | 0.000 | 0.20 | | | 9.5 | OK |
| 1.002 | S44 | 19 | 164.666 | -0.189 | 0.000 | 0.06 | | | 9.5 | OK |
| 1.003 | S45 | 19 | 163.083 | -0.142 | 0.000 | 0.29 | | | 14.3 | OK |
| 1.004 | S38 | 21 | 162.576 | -0.132 | 0.000 | 0.35 | | | 17.3 | OK |
| 1.005 | S39 | 21 | 162.204 | -0.118 | 0.000 | 0.45 | | | 22.0 | OK |
| 1.006 | S40 | 21 | 161.885 | -0.116 | 0.000 | 0.47 | | | 21.9 | OK |
| 1.007 | S41 | 21 | 161.710 | -0.200 | 0.000 | 0.24 | | | 25.1 | OK |
| 2.000 | S34 | 19 | 168.864 | -0.187 | 0.000 | 0.07 | | | 9.9 | OK |
| 2.001 | S35 | 19 | 164.040 | -0.185 | 0.000 | 0.07 | | | 9.8 | OK |
| 3.000 | S32 | 19 | 165.938 | -0.186 | 0.000 | 0.07 | | | 10.1 | OK |
| 1.008 | S33 | 21 | 161.291 | -0.158 | 0.000 | 0.45 | | | 46.0 | OK |
| 4.000 | S30 | 19 | 164.367 | -0.190 | 0.000 | 0.06 | | | 8.3 | OK |
| 1.009 | S31 | 21 | 160.868 | -0.185 | 0.000 | 0.31 | | | 55.0 | OK |
| 1.010 | 15 | 29 | 159.131 | -0.169 | 0.000 | 0.40 | | 11 | 31.3 | OK |

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## Summary Wizard of 30 minute 1 year Winter I+0% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 26 | 165.706 | -0.186 | 0.000 | 0.07 | | | 3.5 | OK |
| 1.001 | S43 | 26 | 165.464 | -0.165 | 0.000 | 0.16 | | | 7.7 | OK |
| 1.002 | S44 | 26 | 164.662 | -0.193 | 0.000 | 0.05 | | | 7.8 | OK |
| 1.003 | S45 | 26 | 163.075 | -0.150 | 0.000 | 0.24 | | | 12.0 | OK |
| 1.004 | S38 | 26 | 162.567 | -0.141 | 0.000 | 0.30 | | | 14.6 | OK |
| 1.005 | S39 | 26 | 162.194 | -0.128 | 0.000 | 0.39 | | | 18.9 | OK |
| 1.006 | S40 | 26 | 161.876 | -0.125 | 0.000 | 0.41 | | | 18.9 | OK |
| 1.007 | S41 | 26 | 161.703 | -0.207 | 0.000 | 0.21 | | | 21.7 | OK |
| 2.000 | S34 | 26 | 168.859 | -0.192 | 0.000 | 0.05 | | | 7.7 | OK |
| 2.001 | S35 | 26 | 164.034 | -0.191 | 0.000 | 0.06 | | | 7.7 | OK |
| 3.000 | S32 | 26 | 165.932 | -0.192 | 0.000 | 0.05 | | | 7.8 | OK |
| 1.008 | S33 | 27 | 161.277 | -0.172 | 0.000 | 0.38 | | | 39.3 | OK |
| 4.000 | S30 | 26 | 164.362 | -0.195 | 0.000 | 0.05 | | | 6.5 | OK |
| 1.009 | S31 | 27 | 160.858 | -0.195 | 0.000 | 0.26 | | | 46.6 | OK |
| 1.010 | 15 | 28 | 159.132 | -0.168 | 0.000 | 0.40 | | 14 | 31.6 | OK |

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## Summary Wizard of 60 minute 1 year Winter I+0% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 33 | 165.699 | -0.193 | 0.000 | 0.05 | | | 2.3 | OK |
| 1.001 | S43 | 33 | 165.454 | -0.175 | 0.000 | 0.11 | | | 5.3 | OK |
| 1.002 | S44 | 33 | 164.657 | -0.198 | 0.000 | 0.03 | | | 5.4 | OK |
| 1.003 | S45 | 34 | 163.062 | -0.163 | 0.000 | 0.17 | | | 8.4 | OK |
| 1.004 | S38 | 35 | 162.553 | -0.155 | 0.000 | 0.21 | | | 10.3 | OK |
| 1.005 | S39 | 35 | 162.177 | -0.145 | 0.000 | 0.28 | | | 13.4 | OK |
| 1.006 | S40 | 35 | 161.859 | -0.142 | 0.000 | 0.29 | | | 13.4 | OK |
| 1.007 | S41 | 35 | 161.687 | -0.223 | 0.000 | 0.15 | | | 15.6 | OK |
| 2.000 | S34 | 33 | 168.853 | -0.198 | 0.000 | 0.04 | | | 5.1 | OK |
| 2.001 | S35 | 33 | 164.028 | -0.197 | 0.000 | 0.04 | | | 5.1 | OK |
| 3.000 | S32 | 33 | 165.927 | -0.197 | 0.000 | 0.04 | | | 5.3 | OK |
| 1.008 | S33 | 35 | 161.255 | -0.194 | 0.000 | 0.27 | | | 28.2 | OK |
| 4.000 | S30 | 33 | 164.358 | -0.199 | 0.000 | 0.03 | | | 4.3 | OK |
| 1.009 | S31 | 35 | 160.841 | -0.212 | 0.000 | 0.19 | | | 33.4 | OK |
| 1.010 | 15 | 37 | 159.115 | -0.185 | 0.000 | 0.32 | | 20 | 25.0 | OK |

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## Summary Wizard of 120 minute 1 year Winter I+0% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 45 | 165.693 | -0.199 | 0.000 | 0.03 | | | 1.5 | OK |
| 1.001 | S43 | 45 | 165.443 | -0.186 | 0.000 | 0.07 | | | 3.4 | OK |
| 1.002 | S44 | 45 | 164.653 | -0.202 | 0.000 | 0.02 | | | 3.4 | OK |
| 1.003 | S45 | 45 | 163.049 | -0.176 | 0.000 | 0.11 | | | 5.4 | OK |
| 1.004 | S38 | 45 | 162.538 | -0.170 | 0.000 | 0.13 | | | 6.6 | OK |
| 1.005 | S39 | 45 | 162.161 | -0.161 | 0.000 | 0.18 | | | 8.7 | OK |
| 1.006 | S40 | 45 | 161.842 | -0.159 | 0.000 | 0.19 | | | 8.7 | OK |
| 1.007 | S41 | 45 | 161.672 | -0.238 | 0.000 | 0.10 | | | 10.1 | OK |
| 2.000 | S34 | 45 | 168.849 | -0.202 | 0.000 | 0.02 | | | 3.2 | OK |
| 2.001 | S35 | 45 | 164.023 | -0.202 | 0.000 | 0.02 | | | 3.2 | OK |
| 3.000 | S32 | 45 | 165.922 | -0.202 | 0.000 | 0.02 | | | 3.3 | OK |
| 1.008 | S33 | 45 | 161.233 | -0.216 | 0.000 | 0.18 | | | 18.3 | OK |
| 4.000 | S30 | 45 | 164.352 | -0.205 | 0.000 | 0.02 | | | 2.7 | OK |
| 1.009 | S31 | 45 | 160.823 | -0.230 | 0.000 | 0.12 | | | 21.7 | OK |
| 1.010 | 15 | 45 | 159.092 | -0.208 | 0.000 | 0.21 | | 29 | 16.4 | OK |

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## Summary Wizard of 180 minute 1 year Winter I+0% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 52 | 165.690 | -0.202 | 0.000 | 0.02 | | | 1.1 | OK |
| 1.001 | S43 | 52 | 165.437 | -0.192 | 0.000 | 0.05 | | | 2.6 | OK |
| 1.002 | S44 | 52 | 164.647 | -0.208 | 0.000 | 0.02 | | | 2.6 | OK |
| 1.003 | S45 | 52 | 163.043 | -0.182 | 0.000 | 0.08 | | | 4.1 | OK |
| 1.004 | S38 | 52 | 162.531 | -0.177 | 0.000 | 0.10 | | | 5.0 | OK |
| 1.005 | S39 | 52 | 162.152 | -0.170 | 0.000 | 0.14 | | | 6.6 | OK |
| 1.006 | S40 | 52 | 161.832 | -0.169 | 0.000 | 0.14 | | | 6.6 | OK |
| 1.007 | S41 | 52 | 161.663 | -0.247 | 0.000 | 0.07 | | | 7.7 | OK |
| 2.000 | S34 | 52 | 168.844 | -0.207 | 0.000 | 0.02 | | | 2.4 | OK |
| 2.001 | S35 | 52 | 164.019 | -0.206 | 0.000 | 0.02 | | | 2.4 | OK |
| 3.000 | S32 | 52 | 165.917 | -0.207 | 0.000 | 0.02 | | | 2.5 | OK |
| 1.008 | S33 | 52 | 161.222 | -0.227 | 0.000 | 0.13 | | | 13.9 | OK |
| 4.000 | S30 | 52 | 164.347 | -0.210 | 0.000 | 0.01 | | | 2.1 | OK |
| 1.009 | S31 | 52 | 160.814 | -0.239 | 0.000 | 0.09 | | | 16.5 | OK |
| 1.010 | 15 | 52 | 159.077 | -0.223 | 0.000 | 0.15 | | 40 | 12.0 | OK |

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## Summary Wizard of 240 minute 1 year Winter I+0% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 58 | 165.687 | -0.205 | 0.000 | 0.02 | | | 0.9 | OK |
| 1.001 | S43 | 58 | 165.434 | -0.195 | 0.000 | 0.04 | | | 2.1 | OK |
| 1.002 | S44 | 58 | 164.644 | -0.211 | 0.000 | 0.01 | | | 2.1 | OK |
| 1.003 | S45 | 58 | 163.038 | -0.187 | 0.000 | 0.07 | | | 3.3 | OK |
| 1.004 | S38 | 58 | 162.526 | -0.182 | 0.000 | 0.08 | | | 4.1 | OK |
| 1.005 | S39 | 58 | 162.147 | -0.175 | 0.000 | 0.11 | | | 5.4 | OK |
| 1.006 | S40 | 58 | 161.827 | -0.174 | 0.000 | 0.12 | | | 5.4 | OK |
| 1.007 | S41 | 58 | 161.657 | -0.253 | 0.000 | 0.06 | | | 6.3 | OK |
| 2.000 | S34 | 58 | 168.841 | -0.210 | 0.000 | 0.01 | | | 2.0 | OK |
| 2.001 | S35 | 58 | 164.016 | -0.209 | 0.000 | 0.01 | | | 2.0 | OK |
| 3.000 | S32 | 58 | 165.914 | -0.210 | 0.000 | 0.01 | | | 2.0 | OK |
| 1.008 | S33 | 58 | 161.215 | -0.234 | 0.000 | 0.11 | | | 11.4 | OK |
| 4.000 | S30 | 58 | 164.345 | -0.212 | 0.000 | 0.01 | | | 1.7 | OK |
| 1.009 | S31 | 58 | 160.808 | -0.245 | 0.000 | 0.08 | | | 13.5 | OK |
| 1.010 | 15 | 57 | 159.068 | -0.232 | 0.000 | 0.12 | | 51 | 9.4 | OK |

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## Summary Wizard of 360 minute 1 year Winter I+0% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 62 | 165.682 | -0.210 | 0.000 | 0.01 | | | 0.7 | OK |
| 1.001 | S43 | 62 | 165.431 | -0.198 | 0.000 | 0.03 | | | 1.6 | OK |
| 1.002 | S44 | 62 | 164.641 | -0.214 | 0.000 | 0.01 | | | 1.6 | OK |
| 1.003 | S45 | 62 | 163.032 | -0.193 | 0.000 | 0.05 | | | 2.5 | OK |
| 1.004 | S38 | 62 | 162.519 | -0.189 | 0.000 | 0.06 | | | 3.1 | OK |
| 1.005 | S39 | 62 | 162.140 | -0.182 | 0.000 | 0.08 | | | 4.1 | OK |
| 1.006 | S40 | 62 | 161.821 | -0.180 | 0.000 | 0.09 | | | 4.1 | OK |
| 1.007 | S41 | 62 | 161.651 | -0.259 | 0.000 | 0.05 | | | 4.7 | OK |
| 2.000 | S34 | 62 | 168.837 | -0.214 | 0.000 | 0.01 | | | 1.5 | OK |
| 2.001 | S35 | 62 | 164.012 | -0.213 | 0.000 | 0.01 | | | 1.5 | OK |
| 3.000 | S32 | 62 | 165.910 | -0.214 | 0.000 | 0.01 | | | 1.5 | OK |
| 1.008 | S33 | 62 | 161.207 | -0.242 | 0.000 | 0.08 | | | 8.6 | OK |
| 4.000 | S30 | 62 | 164.341 | -0.216 | 0.000 | 0.01 | | | 1.3 | OK |
| 1.009 | S31 | 62 | 160.799 | -0.254 | 0.000 | 0.06 | | | 10.1 | OK |
| 1.010 | 15 | 62 | 159.056 | -0.244 | 0.000 | 0.08 | | 77 | 6.3 | OK |

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## Summary Wizard of 480 minute 1 year Winter I+0% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 65 | 165.679 | -0.213 | 0.000 | 0.01 | | | 0.6 | OK |
| 1.001 | S43 | 65 | 165.428 | -0.201 | 0.000 | 0.03 | | | 1.3 | OK |
| 1.002 | S44 | 65 | 164.639 | -0.216 | 0.000 | 0.01 | | | 1.3 | OK |
| 1.003 | S45 | 65 | 163.029 | -0.196 | 0.000 | 0.04 | | | 2.1 | OK |
| 1.004 | S38 | 65 | 162.516 | -0.192 | 0.000 | 0.05 | | | 2.5 | OK |
| 1.005 | S39 | 65 | 162.135 | -0.187 | 0.000 | 0.07 | | | 3.3 | OK |
| 1.006 | S40 | 65 | 161.815 | -0.186 | 0.000 | 0.07 | | | 3.3 | OK |
| 1.007 | S41 | 65 | 161.647 | -0.263 | 0.000 | 0.04 | | | 3.9 | OK |
| 2.000 | S34 | 65 | 168.835 | -0.216 | 0.000 | 0.01 | | | 1.2 | OK |
| 2.001 | S35 | 65 | 164.010 | -0.215 | 0.000 | 0.01 | | | 1.2 | OK |
| 3.000 | S32 | 65 | 165.908 | -0.216 | 0.000 | 0.01 | | | 1.3 | OK |
| 1.008 | S33 | 65 | 161.200 | -0.249 | 0.000 | 0.07 | | | 7.0 | OK |
| 4.000 | S30 | 65 | 164.340 | -0.217 | 0.000 | 0.01 | | | 1.0 | OK |
| 1.009 | S31 | 65 | 160.795 | -0.258 | 0.000 | 0.05 | | | 8.3 | OK |
| 1.010 | 15 | 65 | 159.048 | -0.252 | 0.000 | 0.06 | | 105 | 4.8 | OK |

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## Summary Wizard of 600 minute 1 year Winter I+0% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 67 | 165.677 | -0.215 | 0.000 | 0.01 | | | 0.5 | OK |
| 1.001 | S43 | 67 | 165.427 | -0.202 | 0.000 | 0.02 | | | 1.1 | OK |
| 1.002 | S44 | 67 | 164.637 | -0.218 | 0.000 | 0.01 | | | 1.1 | OK |
| 1.003 | S45 | 67 | 163.027 | -0.198 | 0.000 | 0.04 | | | 1.7 | OK |
| 1.004 | S38 | 67 | 162.513 | -0.195 | 0.000 | 0.04 | | | 2.1 | OK |
| 1.005 | S39 | 67 | 162.132 | -0.190 | 0.000 | 0.06 | | | 2.8 | OK |
| 1.006 | S40 | 67 | 161.812 | -0.189 | 0.000 | 0.06 | | | 2.8 | OK |
| 1.007 | S41 | 67 | 161.645 | -0.265 | 0.000 | 0.03 | | | 3.3 | OK |
| 2.000 | S34 | 67 | 168.834 | -0.217 | 0.000 | 0.01 | | | 1.0 | OK |
| 2.001 | S35 | 67 | 164.008 | -0.217 | 0.000 | 0.01 | | | 1.0 | OK |
| 3.000 | S32 | 67 | 165.907 | -0.217 | 0.000 | 0.01 | | | 1.1 | OK |
| 1.008 | S33 | 67 | 161.195 | -0.254 | 0.000 | 0.06 | | | 6.0 | OK |
| 4.000 | S30 | 67 | 164.339 | -0.218 | 0.000 | 0.01 | | | 0.9 | OK |
| 1.009 | S31 | 67 | 160.791 | -0.262 | 0.000 | 0.04 | | | 7.1 | OK |
| 1.010 | 15 | 67 | 159.043 | -0.257 | 0.000 | 0.05 | | 126 | 4.0 | OK |

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## Summary Wizard of 720 minute 1 year Winter I+0% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 69 | 165.676 | -0.216 | 0.000 | 0.01 | | | 0.4 | OK |
| 1.001 | S43 | 69 | 165.425 | -0.204 | 0.000 | 0.02 | | | 1.0 | OK |
| 1.002 | S44 | 69 | 164.636 | -0.219 | 0.000 | 0.01 | | | 1.0 | OK |
| 1.003 | S45 | 69 | 163.026 | -0.199 | 0.000 | 0.03 | | | 1.5 | OK |
| 1.004 | S38 | 69 | 162.511 | -0.197 | 0.000 | 0.04 | | | 1.9 | OK |
| 1.005 | S39 | 69 | 162.129 | -0.193 | 0.000 | 0.05 | | | 2.5 | OK |
| 1.006 | S40 | 69 | 161.809 | -0.192 | 0.000 | 0.05 | | | 2.5 | OK |
| 1.007 | S41 | 69 | 161.643 | -0.267 | 0.000 | 0.03 | | | 2.9 | OK |
| 2.000 | S34 | 69 | 168.833 | -0.218 | 0.000 | 0.01 | | | 0.9 | OK |
| 2.001 | S35 | 69 | 164.007 | -0.218 | 0.000 | 0.01 | | | 0.9 | OK |
| 3.000 | S32 | 69 | 165.906 | -0.218 | 0.000 | 0.01 | | | 0.9 | OK |
| 1.008 | S33 | 69 | 161.192 | -0.257 | 0.000 | 0.05 | | | 5.2 | OK |
| 4.000 | S30 | 69 | 164.338 | -0.219 | 0.000 | 0.01 | | | 0.8 | OK |
| 1.009 | S31 | 69 | 160.789 | -0.264 | 0.000 | 0.04 | | | 6.2 | OK |
| 1.010 | 15 | 69 | 159.039 | -0.261 | 0.000 | 0.04 | | 145 | 3.4 | OK |

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## Summary Wizard of 960 minute 1 year Winter I+0% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 71 | 165.674 | -0.218 | 0.000 | 0.01 | | | 0.3 | OK |
| 1.001 | S43 | 71 | 165.421 | -0.208 | 0.000 | 0.02 | | | 0.8 | OK |
| 1.002 | S44 | 71 | 164.635 | -0.220 | 0.000 | 0.00 | | | 0.8 | OK |
| 1.003 | S45 | 71 | 163.024 | -0.201 | 0.000 | 0.02 | | | 1.2 | OK |
| 1.004 | S38 | 71 | 162.509 | -0.199 | 0.000 | 0.03 | | | 1.5 | OK |
| 1.005 | S39 | 71 | 162.126 | -0.196 | 0.000 | 0.04 | | | 2.0 | OK |
| 1.006 | S40 | 71 | 161.806 | -0.195 | 0.000 | 0.04 | | | 2.0 | OK |
| 1.007 | S41 | 71 | 161.641 | -0.269 | 0.000 | 0.02 | | | 2.3 | OK |
| 2.000 | S34 | 71 | 168.831 | -0.220 | 0.000 | 0.01 | | | 0.7 | OK |
| 2.001 | S35 | 71 | 164.006 | -0.219 | 0.000 | 0.01 | | | 0.7 | OK |
| 3.000 | S32 | 71 | 165.905 | -0.219 | 0.000 | 0.01 | | | 0.8 | OK |
| 1.008 | S33 | 71 | 161.188 | -0.261 | 0.000 | 0.04 | | | 4.2 | OK |
| 4.000 | S30 | 71 | 164.337 | -0.220 | 0.000 | 0.00 | | | 0.6 | OK |
| 1.009 | S31 | 71 | 160.786 | -0.267 | 0.000 | 0.03 | | | 5.0 | OK |
| 1.010 | 15 | 71 | 159.035 | -0.265 | 0.000 | 0.03 | | 178 | 2.5 | OK |

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## Summary Wizard of 1440 minute 1 year Winter I+0% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 72 | 165.672 | -0.220 | 0.000 | 0.01 | | | 0.2 | OK |
| 1.001 | S43 | 72 | 165.417 | -0.212 | 0.000 | 0.01 | | | 0.6 | OK |
| 1.002 | S44 | 72 | 164.634 | -0.221 | 0.000 | 0.00 | | | 0.6 | OK |
| 1.003 | S45 | 72 | 163.020 | -0.205 | 0.000 | 0.02 | | | 0.9 | OK |
| 1.004 | S38 | 72 | 162.506 | -0.202 | 0.000 | 0.02 | | | 1.1 | OK |
| 1.005 | S39 | 72 | 162.123 | -0.199 | 0.000 | 0.03 | | | 1.5 | OK |
| 1.006 | S40 | 72 | 161.802 | -0.199 | 0.000 | 0.03 | | | 1.5 | OK |
| 1.007 | S41 | 72 | 161.634 | -0.276 | 0.000 | 0.02 | | | 1.7 | OK |
| 2.000 | S34 | 72 | 168.830 | -0.221 | 0.000 | 0.00 | | | 0.5 | OK |
| 2.001 | S35 | 72 | 164.004 | -0.221 | 0.000 | 0.00 | | | 0.5 | OK |
| 3.000 | S32 | 72 | 165.903 | -0.221 | 0.000 | 0.00 | | | 0.6 | OK |
| 1.008 | S33 | 72 | 161.183 | -0.266 | 0.000 | 0.03 | | | 3.1 | OK |
| 4.000 | S30 | 72 | 164.335 | -0.222 | 0.000 | 0.00 | | | 0.5 | OK |
| 1.009 | S31 | 72 | 160.783 | -0.270 | 0.000 | 0.02 | | | 3.7 | OK |
| 1.010 | 15 | 72 | 159.029 | -0.271 | 0.000 | 0.02 | | 232 | 1.6 | OK |

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## Summary Wizard of 15 minute 30 year Winter I+0% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 6 | 165.740 | -0.152 | 0.000 | 0.22 | | | 10.8 | OK |
| 1.001 | S43 | 6 | 165.524 | -0.105 | 0.000 | 0.54 | | | 26.1 | OK |
| 1.002 | S44 | 6 | 164.691 | -0.164 | 0.000 | 0.16 | | | 25.9 | OK |
| 1.003 | S45 | 6 | 163.160 | -0.065 | 0.000 | 0.81 | | | 40.7 | OK |
| 1.004 | S38 | 7 | 162.771 | 0.063 | 0.000 | 0.90 | | | 44.5 | SURCHARGED |
| 1.005 | S39 | 7 | 162.457 | 0.135 | 0.000 | 1.12 | | | 54.5 | SURCHARGED |
| 1.006 | S40 | 7 | 162.056 | 0.055 | 0.000 | 1.18 | | | 54.5 | SURCHARGED |
| 1.007 | S41 | 7 | 161.777 | -0.133 | 0.000 | 0.58 | | | 60.5 | OK |
| 2.000 | S34 | 6 | 168.887 | -0.164 | 0.000 | 0.17 | | | 24.2 | OK |
| 2.001 | S35 | 6 | 164.064 | -0.161 | 0.000 | 0.17 | | | 23.9 | OK |
| 3.000 | S32 | 6 | 165.961 | -0.163 | 0.000 | 0.17 | | | 24.8 | OK |
| 1.008 | S33 | 7 | 161.524 | 0.075 | 0.000 | 1.10 | | | 113.3 | SURCHARGED |
| 4.000 | S30 | 6 | 164.388 | -0.169 | 0.000 | 0.14 | | | 20.4 | OK |
| 1.009 | S31 | 7 | 160.952 | -0.101 | 0.000 | 0.76 | | | 134.4 | OK |
| 1.010 | 15 | 8 | 159.282 | -0.018 | 0.000 | 1.00 | | 8 | 79.2 | OK |

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## Summary Wizard of 30 minute 30 year Winter I+0% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 11 | 165.730 | -0.162 | 0.000 | 0.18 | | | 8.5 | OK |
| 1.001 | S43 | 10 | 165.506 | -0.123 | 0.000 | 0.42 | | | 20.1 | OK |
| 1.002 | S44 | 10 | 164.683 | -0.172 | 0.000 | 0.13 | | | 20.1 | OK |
| 1.003 | S45 | 10 | 163.131 | -0.094 | 0.000 | 0.63 | | | 31.5 | OK |
| 1.004 | S38 | 11 | 162.634 | -0.074 | 0.000 | 0.78 | | | 38.3 | OK |
| 1.005 | S39 | 11 | 162.316 | -0.006 | 0.000 | 0.99 | | | 48.1 | OK |
| 1.006 | S40 | 11 | 162.005 | 0.004 | 0.000 | 1.04 | | | 47.9 | SURCHARGED |
| 1.007 | S41 | 11 | 161.765 | -0.145 | 0.000 | 0.52 | | | 54.4 | OK |
| 2.000 | S34 | 11 | 168.879 | -0.172 | 0.000 | 0.13 | | | 18.8 | OK |
| 2.001 | S35 | 11 | 164.055 | -0.170 | 0.000 | 0.14 | | | 18.8 | OK |
| 3.000 | S32 | 11 | 165.953 | -0.171 | 0.000 | 0.13 | | | 19.3 | OK |
| 1.008 | S33 | 11 | 161.387 | -0.062 | 0.000 | 0.98 | | | 101.0 | OK |
| 4.000 | S30 | 11 | 164.382 | -0.175 | 0.000 | 0.11 | | | 15.9 | OK |
| 1.009 | S31 | 11 | 160.936 | -0.117 | 0.000 | 0.68 | | | 120.2 | OK |
| 1.010 | 15 | 10 | 159.277 | -0.023 | 0.000 | 1.00 | | 10 | 79.2 | OK |

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## Summary Wizard of 60 minute 30 year Winter I+0% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 15 | 165.718 | -0.174 | 0.000 | 0.12 | | | 5.7 | OK |
| 1.001 | S43 | 15 | 165.485 | -0.144 | 0.000 | 0.28 | | | 13.3 | OK |
| 1.002 | S44 | 15 | 164.673 | -0.182 | 0.000 | 0.08 | | | 13.3 | OK |
| 1.003 | S45 | 15 | 163.102 | -0.123 | 0.000 | 0.42 | | | 21.0 | OK |
| 1.004 | S38 | 15 | 162.599 | -0.109 | 0.000 | 0.52 | | | 25.7 | OK |
| 1.005 | S39 | 15 | 162.235 | -0.087 | 0.000 | 0.69 | | | 33.6 | OK |
| 1.006 | S40 | 15 | 161.919 | -0.082 | 0.000 | 0.73 | | | 33.6 | OK |
| 1.007 | S41 | 15 | 161.737 | -0.173 | 0.000 | 0.37 | | | 38.9 | OK |
| 2.000 | S34 | 15 | 168.870 | -0.181 | 0.000 | 0.09 | | | 12.5 | OK |
| 2.001 | S35 | 15 | 164.046 | -0.179 | 0.000 | 0.09 | | | 12.5 | OK |
| 3.000 | S32 | 15 | 165.944 | -0.180 | 0.000 | 0.09 | | | 12.8 | OK |
| 1.008 | S33 | 15 | 161.331 | -0.118 | 0.000 | 0.68 | | | 70.3 | OK |
| 4.000 | S30 | 15 | 164.372 | -0.185 | 0.000 | 0.07 | | | 10.6 | OK |
| 1.009 | S31 | 15 | 160.898 | -0.155 | 0.000 | 0.47 | | | 83.3 | OK |
| 1.010 | 15 | 15 | 159.218 | -0.082 | 0.000 | 0.88 | | 16 | 69.7 | OK |

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## Summary Wizard of 120 minute 30 year Winter I+0% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 25 | 165.707 | -0.185 | 0.000 | 0.07 | | | 3.5 | OK |
| 1.001 | S43 | 25 | 165.466 | -0.163 | 0.000 | 0.17 | | | 8.2 | OK |
| 1.002 | S44 | 25 | 164.663 | -0.192 | 0.000 | 0.05 | | | 8.2 | OK |
| 1.003 | S45 | 24 | 163.078 | -0.147 | 0.000 | 0.26 | | | 13.0 | OK |
| 1.004 | S38 | 24 | 162.571 | -0.137 | 0.000 | 0.32 | | | 16.0 | OK |
| 1.005 | S39 | 24 | 162.200 | -0.122 | 0.000 | 0.43 | | | 21.0 | OK |
| 1.006 | S40 | 23 | 161.882 | -0.119 | 0.000 | 0.45 | | | 21.0 | OK |
| 1.007 | S41 | 23 | 161.708 | -0.202 | 0.000 | 0.23 | | | 24.4 | OK |
| 2.000 | S34 | 25 | 168.859 | -0.192 | 0.000 | 0.05 | | | 7.8 | OK |
| 2.001 | S35 | 25 | 164.034 | -0.191 | 0.000 | 0.06 | | | 7.8 | OK |
| 3.000 | S32 | 25 | 165.933 | -0.191 | 0.000 | 0.05 | | | 8.0 | OK |
| 1.008 | S33 | 24 | 161.286 | -0.163 | 0.000 | 0.43 | | | 44.2 | OK |
| 4.000 | S30 | 25 | 164.363 | -0.194 | 0.000 | 0.05 | | | 6.6 | OK |
| 1.009 | S31 | 23 | 160.864 | -0.189 | 0.000 | 0.30 | | | 52.4 | OK |
| 1.010 | 15 | 21 | 159.164 | -0.136 | 0.000 | 0.58 | | 29 | 45.8 | OK |

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## Summary Wizard of 180 minute 30 year Winter I+0% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 32 | 165.701 | -0.191 | 0.000 | 0.05 | | | 2.6 | OK |
| 1.001 | S43 | 32 | 165.457 | -0.172 | 0.000 | 0.13 | | | 6.1 | OK |
| 1.002 | S44 | 32 | 164.658 | -0.197 | 0.000 | 0.04 | | | 6.1 | OK |
| 1.003 | S45 | 32 | 163.067 | -0.158 | 0.000 | 0.19 | | | 9.7 | OK |
| 1.004 | S38 | 32 | 162.558 | -0.150 | 0.000 | 0.24 | | | 11.9 | OK |
| 1.005 | S39 | 32 | 162.184 | -0.138 | 0.000 | 0.32 | | | 15.6 | OK |
| 1.006 | S40 | 32 | 161.866 | -0.135 | 0.000 | 0.34 | | | 15.6 | OK |
| 1.007 | S41 | 31 | 161.694 | -0.216 | 0.000 | 0.18 | | | 18.2 | OK |
| 2.000 | S34 | 32 | 168.855 | -0.196 | 0.000 | 0.04 | | | 5.8 | OK |
| 2.001 | S35 | 32 | 164.030 | -0.195 | 0.000 | 0.04 | | | 5.8 | OK |
| 3.000 | S32 | 32 | 165.928 | -0.196 | 0.000 | 0.04 | | | 5.9 | OK |
| 1.008 | S33 | 31 | 161.265 | -0.184 | 0.000 | 0.32 | | | 33.0 | OK |
| 4.000 | S30 | 32 | 164.359 | -0.198 | 0.000 | 0.03 | | | 4.9 | OK |
| 1.009 | S31 | 31 | 160.848 | -0.205 | 0.000 | 0.22 | | | 39.1 | OK |
| 1.010 | 15 | 27 | 159.137 | -0.163 | 0.000 | 0.43 | | 41 | 33.9 | OK |

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## Summary Wizard of 240 minute 30 year Winter I+0% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 37 | 165.697 | -0.195 | 0.000 | 0.04 | | | 2.1 | OK |
| 1.001 | S43 | 37 | 165.452 | -0.177 | 0.000 | 0.10 | | | 5.0 | OK |
| 1.002 | S44 | 37 | 164.656 | -0.199 | 0.000 | 0.03 | | | 5.0 | OK |
| 1.003 | S45 | 37 | 163.059 | -0.166 | 0.000 | 0.16 | | | 7.8 | OK |
| 1.004 | S38 | 37 | 162.550 | -0.158 | 0.000 | 0.20 | | | 9.6 | OK |
| 1.005 | S39 | 37 | 162.174 | -0.148 | 0.000 | 0.26 | | | 12.6 | OK |
| 1.006 | S40 | 37 | 161.856 | -0.145 | 0.000 | 0.27 | | | 12.6 | OK |
| 1.007 | S41 | 37 | 161.685 | -0.225 | 0.000 | 0.14 | | | 14.7 | OK |
| 2.000 | S34 | 37 | 168.852 | -0.199 | 0.000 | 0.03 | | | 4.7 | OK |
| 2.001 | S35 | 37 | 164.027 | -0.198 | 0.000 | 0.03 | | | 4.7 | OK |
| 3.000 | S32 | 37 | 165.925 | -0.199 | 0.000 | 0.03 | | | 4.8 | OK |
| 1.008 | S33 | 37 | 161.252 | -0.197 | 0.000 | 0.26 | | | 26.7 | OK |
| 4.000 | S30 | 37 | 164.357 | -0.200 | 0.000 | 0.03 | | | 4.0 | OK |
| 1.009 | S31 | 37 | 160.838 | -0.215 | 0.000 | 0.18 | | | 31.6 | OK |
| 1.010 | 15 | 34 | 159.120 | -0.180 | 0.000 | 0.34 | | 52 | 26.9 | OK |

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## Summary Wizard of 360 minute 30 year Winter I+0% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 43 | 165.693 | -0.199 | 0.000 | 0.03 | | | 1.6 | OK |
| 1.001 | S43 | 43 | 165.445 | -0.184 | 0.000 | 0.08 | | | 3.6 | OK |
| 1.002 | S44 | 43 | 164.653 | -0.202 | 0.000 | 0.02 | | | 3.6 | OK |
| 1.003 | S45 | 43 | 163.051 | -0.174 | 0.000 | 0.12 | | | 5.8 | OK |
| 1.004 | S38 | 43 | 162.539 | -0.169 | 0.000 | 0.14 | | | 7.1 | OK |
| 1.005 | S39 | 43 | 162.163 | -0.159 | 0.000 | 0.19 | | | 9.3 | OK |
| 1.006 | S40 | 43 | 161.844 | -0.157 | 0.000 | 0.20 | | | 9.3 | OK |
| 1.007 | S41 | 43 | 161.674 | -0.236 | 0.000 | 0.10 | | | 10.8 | OK |
| 2.000 | S34 | 43 | 168.849 | -0.202 | 0.000 | 0.02 | | | 3.4 | OK |
| 2.001 | S35 | 43 | 164.024 | -0.201 | 0.000 | 0.03 | | | 3.4 | OK |
| 3.000 | S32 | 43 | 165.923 | -0.201 | 0.000 | 0.02 | | | 3.5 | OK |
| 1.008 | S33 | 43 | 161.237 | -0.212 | 0.000 | 0.19 | | | 19.6 | OK |
| 4.000 | S30 | 43 | 164.353 | -0.204 | 0.000 | 0.02 | | | 2.9 | OK |
| 1.009 | S31 | 43 | 160.825 | -0.228 | 0.000 | 0.13 | | | 23.3 | OK |
| 1.010 | 15 | 43 | 159.099 | -0.201 | 0.000 | 0.24 | | 75 | 19.1 | OK |

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## Summary Wizard of 480 minute 30 year Winter I+0% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 50 | 165.691 | -0.201 | 0.000 | 0.03 | | | 1.2 | OK |
| 1.001 | S43 | 50 | 165.440 | -0.189 | 0.000 | 0.06 | | | 2.9 | OK |
| 1.002 | S44 | 50 | 164.649 | -0.206 | 0.000 | 0.02 | | | 2.9 | OK |
| 1.003 | S45 | 50 | 163.046 | -0.179 | 0.000 | 0.09 | | | 4.6 | OK |
| 1.004 | S38 | 50 | 162.533 | -0.175 | 0.000 | 0.11 | | | 5.7 | OK |
| 1.005 | S39 | 50 | 162.155 | -0.167 | 0.000 | 0.15 | | | 7.4 | OK |
| 1.006 | S40 | 50 | 161.836 | -0.165 | 0.000 | 0.16 | | | 7.4 | OK |
| 1.007 | S41 | 50 | 161.668 | -0.242 | 0.000 | 0.08 | | | 8.7 | OK |
| 2.000 | S34 | 50 | 168.846 | -0.205 | 0.000 | 0.02 | | | 2.7 | OK |
| 2.001 | S35 | 50 | 164.021 | -0.204 | 0.000 | 0.02 | | | 2.7 | OK |
| 3.000 | S32 | 50 | 165.920 | -0.204 | 0.000 | 0.02 | | | 2.8 | OK |
| 1.008 | S33 | 50 | 161.227 | -0.222 | 0.000 | 0.15 | | | 15.7 | OK |
| 4.000 | S30 | 50 | 164.349 | -0.208 | 0.000 | 0.02 | | | 2.3 | OK |
| 1.009 | S31 | 50 | 160.818 | -0.235 | 0.000 | 0.11 | | | 18.6 | OK |
| 1.010 | 15 | 49 | 159.086 | -0.214 | 0.000 | 0.18 | | 95 | 14.6 | OK |

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## Summary Wizard of 600 minute 30 year Winter I+0% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 53 | 165.690 | -0.202 | 0.000 | 0.02 | | | 1.0 | OK |
| 1.001 | S43 | 53 | 165.437 | -0.192 | 0.000 | 0.05 | | | 2.4 | OK |
| 1.002 | S44 | 53 | 164.646 | -0.209 | 0.000 | 0.02 | | | 2.4 | OK |
| 1.003 | S45 | 53 | 163.041 | -0.184 | 0.000 | 0.08 | | | 3.9 | OK |
| 1.004 | S38 | 53 | 162.530 | -0.178 | 0.000 | 0.10 | | | 4.8 | OK |
| 1.005 | S39 | 53 | 162.150 | -0.172 | 0.000 | 0.13 | | | 6.2 | OK |
| 1.006 | S40 | 53 | 161.831 | -0.170 | 0.000 | 0.14 | | | 6.2 | OK |
| 1.007 | S41 | 53 | 161.662 | -0.248 | 0.000 | 0.07 | | | 7.3 | OK |
| 2.000 | S34 | 53 | 168.843 | -0.208 | 0.000 | 0.02 | | | 2.3 | OK |
| 2.001 | S35 | 53 | 164.018 | -0.207 | 0.000 | 0.02 | | | 2.3 | OK |
| 3.000 | S32 | 53 | 165.916 | -0.208 | 0.000 | 0.02 | | | 2.4 | OK |
| 1.008 | S33 | 53 | 161.220 | -0.229 | 0.000 | 0.13 | | | 13.2 | OK |
| 4.000 | S30 | 53 | 164.346 | -0.211 | 0.000 | 0.01 | | | 2.0 | OK |
| 1.009 | S31 | 53 | 160.813 | -0.240 | 0.000 | 0.09 | | | 15.6 | OK |
| 1.010 | 15 | 53 | 159.077 | -0.223 | 0.000 | 0.15 | | 119 | 11.8 | OK |

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## Summary Wizard of 720 minute 30 year Winter I+0% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 57 | 165.687 | -0.205 | 0.000 | 0.02 | | | 0.9 | OK |
| 1.001 | S43 | 57 | 165.434 | -0.195 | 0.000 | 0.04 | | | 2.1 | OK |
| 1.002 | S44 | 57 | 164.644 | -0.211 | 0.000 | 0.01 | | | 2.1 | OK |
| 1.003 | S45 | 57 | 163.038 | -0.187 | 0.000 | 0.07 | | | 3.4 | OK |
| 1.004 | S38 | 57 | 162.526 | -0.182 | 0.000 | 0.08 | | | 4.1 | OK |
| 1.005 | S39 | 57 | 162.147 | -0.175 | 0.000 | 0.11 | | | 5.4 | OK |
| 1.006 | S40 | 57 | 161.827 | -0.174 | 0.000 | 0.12 | | | 5.4 | OK |
| 1.007 | S41 | 57 | 161.658 | -0.252 | 0.000 | 0.06 | | | 6.3 | OK |
| 2.000 | S34 | 57 | 168.841 | -0.210 | 0.000 | 0.01 | | | 2.0 | OK |
| 2.001 | S35 | 57 | 164.016 | -0.209 | 0.000 | 0.01 | | | 2.0 | OK |
| 3.000 | S32 | 57 | 165.914 | -0.210 | 0.000 | 0.01 | | | 2.1 | OK |
| 1.008 | S33 | 57 | 161.215 | -0.234 | 0.000 | 0.11 | | | 11.5 | OK |
| 4.000 | S30 | 57 | 164.345 | -0.212 | 0.000 | 0.01 | | | 1.7 | OK |
| 1.009 | S31 | 57 | 160.808 | -0.245 | 0.000 | 0.08 | | | 13.6 | OK |
| 1.010 | 15 | 56 | 159.070 | -0.230 | 0.000 | 0.12 | | 143 | 9.8 | OK |

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## Summary Wizard of 960 minute 30 year Winter I+0% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 61 | 165.683 | -0.209 | 0.000 | 0.02 | | | 0.7 | OK |
| 1.001 | S43 | 61 | 165.431 | -0.198 | 0.000 | 0.04 | | | 1.7 | OK |
| 1.002 | S44 | 61 | 164.641 | -0.214 | 0.000 | 0.01 | | | 1.7 | OK |
| 1.003 | S45 | 61 | 163.033 | -0.192 | 0.000 | 0.05 | | | 2.7 | OK |
| 1.004 | S38 | 61 | 162.521 | -0.187 | 0.000 | 0.07 | | | 3.3 | OK |
| 1.005 | S39 | 61 | 162.142 | -0.180 | 0.000 | 0.09 | | | 4.3 | OK |
| 1.006 | S40 | 61 | 161.822 | -0.179 | 0.000 | 0.09 | | | 4.3 | OK |
| 1.007 | S41 | 61 | 161.652 | -0.258 | 0.000 | 0.05 | | | 5.1 | OK |
| 2.000 | S34 | 61 | 168.838 | -0.213 | 0.000 | 0.01 | | | 1.6 | OK |
| 2.001 | S35 | 61 | 164.012 | -0.213 | 0.000 | 0.01 | | | 1.6 | OK |
| 3.000 | S32 | 61 | 165.911 | -0.213 | 0.000 | 0.01 | | | 1.6 | OK |
| 1.008 | S33 | 61 | 161.209 | -0.240 | 0.000 | 0.09 | | | 9.2 | OK |
| 4.000 | S30 | 61 | 164.342 | -0.215 | 0.000 | 0.01 | | | 1.4 | OK |
| 1.009 | S31 | 61 | 160.801 | -0.252 | 0.000 | 0.06 | | | 10.9 | OK |
| 1.010 | 15 | 60 | 159.061 | -0.239 | 0.000 | 0.09 | | 193 | 7.2 | OK |

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## Summary Wizard of 1440 minute 30 year Winter I+0% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 66 | 165.679 | -0.213 | 0.000 | 0.01 | | | 0.5 | OK |
| 1.001 | S43 | 66 | 165.428 | -0.201 | 0.000 | 0.03 | | | 1.2 | OK |
| 1.002 | S44 | 66 | 164.638 | -0.217 | 0.000 | 0.01 | | | 1.2 | OK |
| 1.003 | S45 | 66 | 163.029 | -0.196 | 0.000 | 0.04 | | | 2.0 | OK |
| 1.004 | S38 | 66 | 162.515 | -0.193 | 0.000 | 0.05 | | | 2.4 | OK |
| 1.005 | S39 | 66 | 162.134 | -0.188 | 0.000 | 0.06 | | | 3.2 | OK |
| 1.006 | S40 | 66 | 161.814 | -0.187 | 0.000 | 0.07 | | | 3.2 | OK |
| 1.007 | S41 | 66 | 161.646 | -0.264 | 0.000 | 0.04 | | | 3.7 | OK |
| 2.000 | S34 | 66 | 168.835 | -0.216 | 0.000 | 0.01 | | | 1.2 | OK |
| 2.001 | S35 | 66 | 164.009 | -0.216 | 0.000 | 0.01 | | | 1.2 | OK |
| 3.000 | S32 | 66 | 165.908 | -0.216 | 0.000 | 0.01 | | | 1.2 | OK |
| 1.008 | S33 | 66 | 161.198 | -0.251 | 0.000 | 0.06 | | | 6.7 | OK |
| 4.000 | S30 | 66 | 164.339 | -0.218 | 0.000 | 0.01 | | | 1.0 | OK |
| 1.009 | S31 | 66 | 160.794 | -0.259 | 0.000 | 0.04 | | | 7.9 | OK |
| 1.010 | 15 | 66 | 159.046 | -0.254 | 0.000 | 0.06 | | 289 | 4.6 | OK |

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## Summary Wizard of 15 minute 100 year Winter I+40% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 1 | 165.768 | -0.124 | 0.000 | 0.40 | | | 19.5 | OK |
| 1.001 | S43 | 1 | 165.586 | -0.043 | 0.000 | 0.98 | | | 47.0 | OK |
| 1.002 | S44 | 1 | 165.088 | 0.233 | 0.000 | 0.29 | | | 46.6 | SURCHARGED |
| 1.003 | S45 | 1 | 165.027 | 1.802 | 0.000 | 1.13 | | | 56.4 | SURCHARGED |
| 1.004 | S38 | 1 | 164.477 | 1.769 | 0.000 | 1.24 | | | 61.0 | SURCHARGED |
| 1.005 | S39 | 1 | 163.886 | 1.564 | 0.000 | 1.56 | | | 76.1 | SURCHARGED |
| 1.006 | S40 | 1 | 163.091 | 1.090 | 0.000 | 1.74 | | | 80.4 | SURCHARGED |
| 1.007 | S41 | 1 | 162.654 | 0.744 | 0.000 | 0.89 | | | 92.9 | SURCHARGED |
| 2.000 | S34 | 1 | 168.910 | -0.141 | 0.000 | 0.30 | | | 43.7 | OK |
| 2.001 | S35 | 1 | 164.087 | -0.138 | 0.000 | 0.32 | | | 43.3 | OK |
| 3.000 | S32 | 1 | 165.985 | -0.139 | 0.000 | 0.31 | | | 44.8 | OK |
| 1.008 | S33 | 1 | 162.350 | 0.901 | 0.000 | 1.62 | | | 166.7 | SURCHARGED |
| 4.000 | S30 | 1 | 164.409 | -0.148 | 0.000 | 0.26 | | | 36.9 | OK |
| 1.009 | S31 | 1 | 161.331 | 0.278 | 0.000 | 1.14 | | | 200.1 | SURCHARGED |
| 1.010 | 15 | 2 | 159.443 | 0.143 | 0.000 | 1.60 | | 10 | 127.1 | SURCHARGED |

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## Summary Wizard of 30 minute 100 year Winter I+40% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 4 | 165.755 | -0.137 | 0.000 | 0.32 | | | 15.5 | OK |
| 1.001 | S43 | 4 | 165.553 | -0.076 | 0.000 | 0.76 | | | 36.6 | OK |
| 1.002 | S44 | 4 | 164.703 | -0.152 | 0.000 | 0.23 | | | 36.7 | OK |
| 1.003 | S45 | 4 | 164.290 | 1.065 | 0.000 | 0.99 | | | 49.6 | SURCHARGED |
| 1.004 | S38 | 4 | 163.839 | 1.131 | 0.000 | 1.14 | | | 56.3 | SURCHARGED |
| 1.005 | S39 | 4 | 163.332 | 1.010 | 0.000 | 1.46 | | | 71.4 | SURCHARGED |
| 1.006 | S40 | 4 | 162.633 | 0.632 | 0.000 | 1.59 | | | 73.3 | SURCHARGED |
| 1.007 | S41 | 4 | 162.243 | 0.333 | 0.000 | 0.81 | | | 84.2 | SURCHARGED |
| 2.000 | S34 | 4 | 168.900 | -0.151 | 0.000 | 0.24 | | | 34.3 | OK |
| 2.001 | S35 | 4 | 164.076 | -0.149 | 0.000 | 0.25 | | | 34.3 | OK |
| 3.000 | S32 | 4 | 165.974 | -0.150 | 0.000 | 0.24 | | | 35.1 | OK |
| 1.008 | S33 | 4 | 161.961 | 0.512 | 0.000 | 1.48 | | | 152.7 | SURCHARGED |
| 4.000 | S30 | 4 | 164.400 | -0.157 | 0.000 | 0.20 | | | 29.0 | OK |
| 1.009 | S31 | 4 | 161.103 | 0.050 | 0.000 | 1.03 | | | 181.5 | SURCHARGED |
| 1.010 | 15 | 1 | 159.454 | 0.154 | 0.000 | 1.64 | | 11 | 129.8 | SURCHARGED |

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## Summary Wizard of 60 minute 100 year Winter I+40% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 8 | 165.738 | -0.154 | 0.000 | 0.22 | | | 10.4 | OK |
| 1.001 | S43 | 8 | 165.518 | -0.111 | 0.000 | 0.51 | | | 24.4 | OK |
| 1.002 | S44 | 8 | 164.688 | -0.167 | 0.000 | 0.15 | | | 24.4 | OK |
| 1.003 | S45 | 8 | 163.150 | -0.075 | 0.000 | 0.77 | | | 38.5 | OK |
| 1.004 | S38 | 6 | 162.835 | 0.127 | 0.000 | 0.90 | | | 44.5 | SURCHARGED |
| 1.005 | S39 | 6 | 162.521 | 0.199 | 0.000 | 1.18 | | | 57.3 | SURCHARGED |
| 1.006 | S40 | 6 | 162.079 | 0.078 | 0.000 | 1.24 | | | 57.2 | SURCHARGED |
| 1.007 | S41 | 6 | 161.784 | -0.126 | 0.000 | 0.63 | | | 65.9 | OK |
| 2.000 | S34 | 8 | 168.885 | -0.166 | 0.000 | 0.16 | | | 23.0 | OK |
| 2.001 | S35 | 8 | 164.061 | -0.164 | 0.000 | 0.17 | | | 23.0 | OK |
| 3.000 | S32 | 8 | 165.959 | -0.165 | 0.000 | 0.16 | | | 23.5 | OK |
| 1.008 | S33 | 6 | 161.585 | 0.136 | 0.000 | 1.17 | | | 121.0 | SURCHARGED |
| 4.000 | S30 | 8 | 164.387 | -0.170 | 0.000 | 0.14 | | | 19.4 | OK |
| 1.009 | S31 | 6 | 160.961 | -0.092 | 0.000 | 0.82 | | | 144.1 | OK |
| 1.010 | 15 | 6 | 159.399 | 0.099 | 0.000 | 1.46 | | 13 | 115.7 | SURCHARGED |

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## Summary Wizard of 120 minute 100 year Winter I+40% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 14 | 165.722 | -0.170 | 0.000 | 0.13 | | | 6.5 | OK |
| 1.001 | S43 | 14 | 165.491 | -0.138 | 0.000 | 0.32 | | | 15.2 | OK |
| 1.002 | S44 | 14 | 164.676 | -0.179 | 0.000 | 0.09 | | | 15.2 | OK |
| 1.003 | S45 | 14 | 163.110 | -0.115 | 0.000 | 0.48 | | | 24.0 | OK |
| 1.004 | S38 | 14 | 162.609 | -0.099 | 0.000 | 0.60 | | | 29.5 | OK |
| 1.005 | S39 | 14 | 162.249 | -0.073 | 0.000 | 0.79 | | | 38.6 | OK |
| 1.006 | S40 | 14 | 161.934 | -0.067 | 0.000 | 0.84 | | | 38.6 | OK |
| 1.007 | S41 | 14 | 161.747 | -0.163 | 0.000 | 0.43 | | | 45.0 | OK |
| 2.000 | S34 | 14 | 168.873 | -0.178 | 0.000 | 0.10 | | | 14.3 | OK |
| 2.001 | S35 | 14 | 164.048 | -0.177 | 0.000 | 0.10 | | | 14.3 | OK |
| 3.000 | S32 | 14 | 165.947 | -0.177 | 0.000 | 0.10 | | | 14.7 | OK |
| 1.008 | S33 | 13 | 161.351 | -0.098 | 0.000 | 0.79 | | | 81.3 | OK |
| 4.000 | S30 | 14 | 164.376 | -0.181 | 0.000 | 0.08 | | | 12.1 | OK |
| 1.009 | S31 | 13 | 160.911 | -0.142 | 0.000 | 0.55 | | | 96.4 | OK |
| 1.010 | 15 | 9 | 159.278 | -0.022 | 0.000 | 1.00 | | 20 | 79.2 | OK |

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## Summary Wizard of 180 minute 100 year Winter I+40% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 17 | 165.714 | -0.178 | 0.000 | 0.10 | | | 4.8 | OK |
| 1.001 | S43 | 17 | 165.478 | -0.151 | 0.000 | 0.24 | | | 11.3 | OK |
| 1.002 | S44 | 17 | 164.669 | -0.186 | 0.000 | 0.07 | | | 11.3 | OK |
| 1.003 | S45 | 17 | 163.093 | -0.132 | 0.000 | 0.36 | | | 17.9 | OK |
| 1.004 | S38 | 17 | 162.588 | -0.120 | 0.000 | 0.45 | | | 22.0 | OK |
| 1.005 | S39 | 17 | 162.222 | -0.100 | 0.000 | 0.59 | | | 28.8 | OK |
| 1.006 | S40 | 17 | 161.905 | -0.096 | 0.000 | 0.62 | | | 28.8 | OK |
| 1.007 | S41 | 17 | 161.727 | -0.183 | 0.000 | 0.32 | | | 33.6 | OK |
| 2.000 | S34 | 17 | 168.866 | -0.185 | 0.000 | 0.07 | | | 10.7 | OK |
| 2.001 | S35 | 17 | 164.041 | -0.184 | 0.000 | 0.08 | | | 10.7 | OK |
| 3.000 | S32 | 17 | 165.940 | -0.184 | 0.000 | 0.08 | | | 10.9 | OK |
| 1.008 | S33 | 17 | 161.315 | -0.134 | 0.000 | 0.59 | | | 60.7 | OK |
| 4.000 | S30 | 17 | 164.368 | -0.189 | 0.000 | 0.06 | | | 9.0 | OK |
| 1.009 | S31 | 17 | 160.886 | -0.167 | 0.000 | 0.41 | | | 72.0 | OK |
| 1.010 | 15 | 17 | 159.208 | -0.092 | 0.000 | 0.83 | | 38 | 65.4 | OK |

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## Summary Wizard of 240 minute 100 year Winter I+40% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 22 | 165.709 | -0.183 | 0.000 | 0.08 | | | 3.9 | OK |
| 1.001 | S43 | 22 | 165.470 | -0.159 | 0.000 | 0.19 | | | 9.1 | OK |
| 1.002 | S44 | 22 | 164.664 | -0.191 | 0.000 | 0.06 | | | 9.1 | OK |
| 1.003 | S45 | 21 | 163.082 | -0.143 | 0.000 | 0.29 | | | 14.4 | OK |
| 1.004 | S38 | 20 | 162.576 | -0.132 | 0.000 | 0.36 | | | 17.7 | OK |
| 1.005 | S39 | 20 | 162.206 | -0.116 | 0.000 | 0.48 | | | 23.2 | OK |
| 1.006 | S40 | 20 | 161.889 | -0.112 | 0.000 | 0.50 | | | 23.2 | OK |
| 1.007 | S41 | 20 | 161.713 | -0.197 | 0.000 | 0.26 | | | 27.1 | OK |
| 2.000 | S34 | 22 | 168.861 | -0.190 | 0.000 | 0.06 | | | 8.6 | OK |
| 2.001 | S35 | 22 | 164.036 | -0.189 | 0.000 | 0.06 | | | 8.6 | OK |
| 3.000 | S32 | 22 | 165.935 | -0.189 | 0.000 | 0.06 | | | 8.8 | OK |
| 1.008 | S33 | 20 | 161.294 | -0.155 | 0.000 | 0.48 | | | 49.0 | OK |
| 4.000 | S30 | 22 | 164.364 | -0.193 | 0.000 | 0.05 | | | 7.3 | OK |
| 1.009 | S31 | 20 | 160.871 | -0.182 | 0.000 | 0.33 | | | 58.1 | OK |
| 1.010 | 15 | 19 | 159.179 | -0.121 | 0.000 | 0.66 | | 52 | 52.7 | OK |

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## Summary Wizard of 360 minute 100 year Winter I+40% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 30 | 165.702 | -0.190 | 0.000 | 0.06 | | | 2.8 | OK |
| 1.001 | S43 | 29 | 165.460 | -0.169 | 0.000 | 0.14 | | | 6.7 | OK |
| 1.002 | S44 | 29 | 164.659 | -0.196 | 0.000 | 0.04 | | | 6.7 | OK |
| 1.003 | S45 | 29 | 163.070 | -0.155 | 0.000 | 0.21 | | | 10.6 | OK |
| 1.004 | S38 | 29 | 162.561 | -0.147 | 0.000 | 0.26 | | | 13.0 | OK |
| 1.005 | S39 | 29 | 162.189 | -0.133 | 0.000 | 0.35 | | | 17.0 | OK |
| 1.006 | S40 | 29 | 161.870 | -0.131 | 0.000 | 0.37 | | | 17.0 | OK |
| 1.007 | S41 | 29 | 161.698 | -0.212 | 0.000 | 0.19 | | | 19.8 | OK |
| 2.000 | S34 | 30 | 168.856 | -0.195 | 0.000 | 0.04 | | | 6.3 | OK |
| 2.001 | S35 | 30 | 164.031 | -0.194 | 0.000 | 0.05 | | | 6.3 | OK |
| 3.000 | S32 | 30 | 165.929 | -0.195 | 0.000 | 0.04 | | | 6.4 | OK |
| 1.008 | S33 | 29 | 161.271 | -0.178 | 0.000 | 0.35 | | | 35.9 | OK |
| 4.000 | S30 | 30 | 164.360 | -0.197 | 0.000 | 0.04 | | | 5.3 | OK |
| 1.009 | S31 | 29 | 160.853 | -0.200 | 0.000 | 0.24 | | | 42.6 | OK |
| 1.010 | 15 | 24 | 159.146 | -0.154 | 0.000 | 0.48 | | 77 | 37.9 | OK |

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## Summary Wizard of 480 minute 100 year Winter I+40% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 35 | 165.698 | -0.194 | 0.000 | 0.05 | | | 2.3 | OK |
| 1.001 | S43 | 35 | 165.454 | -0.175 | 0.000 | 0.11 | | | 5.3 | OK |
| 1.002 | S44 | 35 | 164.657 | -0.198 | 0.000 | 0.03 | | | 5.3 | OK |
| 1.003 | S45 | 35 | 163.062 | -0.163 | 0.000 | 0.17 | | | 8.4 | OK |
| 1.004 | S38 | 34 | 162.553 | -0.155 | 0.000 | 0.21 | | | 10.3 | OK |
| 1.005 | S39 | 34 | 162.177 | -0.145 | 0.000 | 0.28 | | | 13.6 | OK |
| 1.006 | S40 | 34 | 161.859 | -0.142 | 0.000 | 0.29 | | | 13.6 | OK |
| 1.007 | S41 | 34 | 161.688 | -0.222 | 0.000 | 0.15 | | | 15.8 | OK |
| 2.000 | S34 | 35 | 168.853 | -0.198 | 0.000 | 0.03 | | | 5.0 | OK |
| 2.001 | S35 | 35 | 164.028 | -0.197 | 0.000 | 0.04 | | | 5.0 | OK |
| 3.000 | S32 | 35 | 165.926 | -0.198 | 0.000 | 0.04 | | | 5.1 | OK |
| 1.008 | S33 | 34 | 161.256 | -0.193 | 0.000 | 0.28 | | | 28.7 | OK |
| 4.000 | S30 | 35 | 164.357 | -0.200 | 0.000 | 0.03 | | | 4.2 | OK |
| 1.009 | S31 | 34 | 160.842 | -0.211 | 0.000 | 0.19 | | | 34.0 | OK |
| 1.010 | 15 | 30 | 159.127 | -0.173 | 0.000 | 0.37 | | 101 | 29.6 | OK |

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## Summary Wizard of 600 minute 100 year Winter I+40% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 39 | 165.696 | -0.196 | 0.000 | 0.04 | | | 1.9 | OK |
| 1.001 | S43 | 38 | 165.450 | -0.179 | 0.000 | 0.09 | | | 4.5 | OK |
| 1.002 | S44 | 38 | 164.655 | -0.200 | 0.000 | 0.03 | | | 4.5 | OK |
| 1.003 | S45 | 38 | 163.056 | -0.169 | 0.000 | 0.14 | | | 7.1 | OK |
| 1.004 | S38 | 38 | 162.546 | -0.162 | 0.000 | 0.18 | | | 8.7 | OK |
| 1.005 | S39 | 38 | 162.170 | -0.152 | 0.000 | 0.23 | | | 11.4 | OK |
| 1.006 | S40 | 38 | 161.851 | -0.150 | 0.000 | 0.25 | | | 11.4 | OK |
| 1.007 | S41 | 38 | 161.681 | -0.229 | 0.000 | 0.13 | | | 13.3 | OK |
| 2.000 | S34 | 39 | 168.851 | -0.200 | 0.000 | 0.03 | | | 4.2 | OK |
| 2.001 | S35 | 39 | 164.026 | -0.199 | 0.000 | 0.03 | | | 4.2 | OK |
| 3.000 | S32 | 39 | 165.924 | -0.200 | 0.000 | 0.03 | | | 4.3 | OK |
| 1.008 | S33 | 38 | 161.247 | -0.202 | 0.000 | 0.23 | | | 24.0 | OK |
| 4.000 | S30 | 39 | 164.356 | -0.201 | 0.000 | 0.02 | | | 3.6 | OK |
| 1.009 | S31 | 38 | 160.833 | -0.220 | 0.000 | 0.16 | | | 28.5 | OK |
| 1.010 | 15 | 38 | 159.113 | -0.187 | 0.000 | 0.31 | | 124 | 24.3 | OK |

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## Summary Wizard of 720 minute 100 year Winter I+40% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 42 | 165.694 | -0.198 | 0.000 | 0.03 | | | 1.6 | OK |
| 1.001 | S43 | 42 | 165.446 | -0.183 | 0.000 | 0.08 | | | 3.9 | OK |
| 1.002 | S44 | 42 | 164.653 | -0.202 | 0.000 | 0.02 | | | 3.9 | OK |
| 1.003 | S45 | 42 | 163.052 | -0.173 | 0.000 | 0.12 | | | 6.1 | OK |
| 1.004 | S38 | 42 | 162.541 | -0.167 | 0.000 | 0.15 | | | 7.5 | OK |
| 1.005 | S39 | 42 | 162.165 | -0.157 | 0.000 | 0.20 | | | 9.8 | OK |
| 1.006 | S40 | 42 | 161.846 | -0.155 | 0.000 | 0.21 | | | 9.8 | OK |
| 1.007 | S41 | 42 | 161.676 | -0.234 | 0.000 | 0.11 | | | 11.5 | OK |
| 2.000 | S34 | 42 | 168.850 | -0.201 | 0.000 | 0.02 | | | 3.6 | OK |
| 2.001 | S35 | 42 | 164.024 | -0.201 | 0.000 | 0.03 | | | 3.6 | OK |
| 3.000 | S32 | 42 | 165.923 | -0.201 | 0.000 | 0.03 | | | 3.7 | OK |
| 1.008 | S33 | 42 | 161.240 | -0.209 | 0.000 | 0.20 | | | 20.8 | OK |
| 4.000 | S30 | 42 | 164.355 | -0.202 | 0.000 | 0.02 | | | 3.1 | OK |
| 1.009 | S31 | 42 | 160.827 | -0.226 | 0.000 | 0.14 | | | 24.6 | OK |
| 1.010 | 15 | 41 | 159.103 | -0.197 | 0.000 | 0.26 | | 146 | 20.6 | OK |

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## Summary Wizard of 960 minute 100 year Winter I+40% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 48 | 165.692 | -0.200 | 0.000 | 0.03 | | | 1.3 | OK |
| 1.001 | S43 | 48 | 165.441 | -0.188 | 0.000 | 0.06 | | | 3.1 | OK |
| 1.002 | S44 | 48 | 164.650 | -0.205 | 0.000 | 0.02 | | | 3.1 | OK |
| 1.003 | S45 | 48 | 163.047 | -0.178 | 0.000 | 0.10 | | | 4.9 | OK |
| 1.004 | S38 | 48 | 162.535 | -0.173 | 0.000 | 0.12 | | | 6.0 | OK |
| 1.005 | S39 | 48 | 162.157 | -0.165 | 0.000 | 0.16 | | | 7.8 | OK |
| 1.006 | S40 | 48 | 161.838 | -0.163 | 0.000 | 0.17 | | | 7.8 | OK |
| 1.007 | S41 | 48 | 161.670 | -0.240 | 0.000 | 0.09 | | | 9.1 | OK |
| 2.000 | S34 | 48 | 168.847 | -0.204 | 0.000 | 0.02 | | | 2.9 | OK |
| 2.001 | S35 | 48 | 164.022 | -0.203 | 0.000 | 0.02 | | | 2.9 | OK |
| 3.000 | S32 | 48 | 165.921 | -0.203 | 0.000 | 0.02 | | | 3.0 | OK |
| 1.008 | S33 | 48 | 161.229 | -0.220 | 0.000 | 0.16 | | | 16.6 | OK |
| 4.000 | S30 | 48 | 164.350 | -0.207 | 0.000 | 0.02 | | | 2.4 | OK |
| 1.009 | S31 | 48 | 160.819 | -0.234 | 0.000 | 0.11 | | | 19.6 | OK |
| 1.010 | 15 | 47 | 159.090 | -0.210 | 0.000 | 0.20 | | 183 | 15.7 | OK |

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## Summary Wizard of 1440 minute 100 year Winter I+40% for Surface Network 3

### Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 1
Number of Online Controls 0 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

### Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 17.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status ON
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

| PN | US/MH Name | Storm Rank | Water Level (m) | Surcharged Depth (m) | Flooded Volume (m³) | Flow / Cap. | Overflow (l/s) | Half Drain Time (mins) | Pipe Flow (l/s) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | S42 | 55 | 165.688 | -0.204 | 0.000 | 0.02 | | | 0.9 | OK |
| 1.001 | S43 | 55 | 165.435 | -0.194 | 0.000 | 0.05 | | | 2.2 | OK |
| 1.002 | S44 | 55 | 164.645 | -0.210 | 0.000 | 0.01 | | | 2.2 | OK |
| 1.003 | S45 | 55 | 163.039 | -0.186 | 0.000 | 0.07 | | | 3.5 | OK |
| 1.004 | S38 | 55 | 162.528 | -0.180 | 0.000 | 0.09 | | | 4.3 | OK |
| 1.005 | S39 | 55 | 162.148 | -0.174 | 0.000 | 0.12 | | | 5.7 | OK |
| 1.006 | S40 | 55 | 161.828 | -0.173 | 0.000 | 0.12 | | | 5.7 | OK |
| 1.007 | S41 | 55 | 161.659 | -0.251 | 0.000 | 0.06 | | | 6.6 | OK |
| 2.000 | S34 | 55 | 168.841 | -0.210 | 0.000 | 0.01 | | | 2.1 | OK |
| 2.001 | S35 | 55 | 164.016 | -0.209 | 0.000 | 0.02 | | | 2.1 | OK |
| 3.000 | S32 | 55 | 165.915 | -0.209 | 0.000 | 0.01 | | | 2.1 | OK |
| 1.008 | S33 | 55 | 161.217 | -0.232 | 0.000 | 0.12 | | | 12.0 | OK |
| 4.000 | S30 | 55 | 164.345 | -0.212 | 0.000 | 0.01 | | | 1.8 | OK |
| 1.009 | S31 | 55 | 160.810 | -0.243 | 0.000 | 0.08 | | | 14.2 | OK |
| 1.010 | 15 | 55 | 159.072 | -0.228 | 0.000 | 0.13 | | 277 | 10.5 | OK |

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