

| Robert Clark Associates                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |               |                     |                                         |                 | Page 1 |  |             |               |               |                        |                 |        |               |       |       |     |     |     |               |       |       |     |     |     |               |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                  |       |       |     |     |     |               |       |       |     |     |     |             |              |                     |                  |               |         |     |    |               |        |     |    |               |        |     |    |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |       |     |     |                |       |     |     |                |       |     |     |                 |       |     |     |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                  |       |     |      |               |         |     |    |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------------|-----------------------------------------|-----------------|--------|--|-------------|---------------|---------------|------------------------|-----------------|--------|---------------|-------|-------|-----|-----|-----|---------------|-------|-------|-----|-----|-----|---------------|-------|-------|-----|-----|-----|----------------|-------|-------|-----|-----|-----|----------------|-------|-------|-----|-----|-----|----------------|-------|-------|-----|-----|-----|----------------|-------|-------|-----|-----|-----|----------------|-------|-------|-----|-----|-----|----------------|-------|-------|-----|-----|-----|----------------|-------|-------|-----|-----|-----|----------------|-------|-------|-----|-----|-----|-----------------|-------|-------|-----|-----|-----|-----------------|-------|-------|-----|-----|-----|-----------------|-------|-------|-----|-----|-----|-----------------|-------|-------|-----|-----|-----|-----------------|-------|-------|-----|-----|-----|-----------------|-------|-------|-----|-----|-----|-----------------|-------|-------|-----|-----|-----|------------------|-------|-------|-----|-----|-----|---------------|-------|-------|-----|-----|-----|-------------|--------------|---------------------|------------------|---------------|---------|-----|----|---------------|--------|-----|----|---------------|--------|-----|----|----------------|--------|-----|-----|----------------|--------|-----|-----|----------------|--------|-----|-----|----------------|--------|-----|-----|----------------|--------|-----|-----|----------------|-------|-----|-----|----------------|-------|-----|-----|----------------|-------|-----|-----|-----------------|-------|-----|-----|-----------------|-------|-----|------|-----------------|-------|-----|------|-----------------|-------|-----|------|-----------------|-------|-----|------|-----------------|-------|-----|------|-----------------|-------|-----|------|------------------|-------|-----|------|---------------|---------|-----|----|
| Willow Cottage<br>Herne Lane<br>Rustington BN16 3EE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |               |                     | The Cottage<br>Shripney Road<br>Phase 1 |                 |        |  |             |               |               |                        |                 |        |               |       |       |     |     |     |               |       |       |     |     |     |               |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                  |       |       |     |     |     |               |       |       |     |     |     |             |              |                     |                  |               |         |     |    |               |        |     |    |               |        |     |    |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |       |     |     |                |       |     |     |                |       |     |     |                 |       |     |     |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                  |       |     |      |               |         |     |    |
| Date 13.2.19<br>File SA1.SRCX                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |               |                     | Designed by RTFC<br>Checked by          |                 |        |  |             |               |               |                        |                 |        |               |       |       |     |     |     |               |       |       |     |     |     |               |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                  |       |       |     |     |     |               |       |       |     |     |     |             |              |                     |                  |               |         |     |    |               |        |     |    |               |        |     |    |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |       |     |     |                |       |     |     |                |       |     |     |                 |       |     |     |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                  |       |     |      |               |         |     |    |
| Micro Drainage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |               |                     | Source Control 2016.1                   |                 |        |  |             |               |               |                        |                 |        |               |       |       |     |     |     |               |       |       |     |     |     |               |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                  |       |       |     |     |     |               |       |       |     |     |     |             |              |                     |                  |               |         |     |    |               |        |     |    |               |        |     |    |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |       |     |     |                |       |     |     |                |       |     |     |                 |       |     |     |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                  |       |     |      |               |         |     |    |
| <div>Summary of Results for 100 year Return Period (+40%)</div> <div>Half Drain Time : 200 minutes.</div> <table><thead><tr><th>Storm Event</th><th>Max Level (m)</th><th>Max Depth (m)</th><th>Max Infiltration (l/s)</th><th>Max Volume (m³)</th><th>Status</th></tr></thead><tbody><tr><td>15 min Summer</td><td>2.049</td><td>0.449</td><td>0.1</td><td>1.1</td><td>0 K</td></tr><tr><td>30 min Summer</td><td>2.190</td><td>0.590</td><td>0.1</td><td>1.5</td><td>0 K</td></tr><tr><td>60 min Summer</td><td>2.322</td><td>0.722</td><td>0.1</td><td>1.8</td><td>0 K</td></tr><tr><td>120 min Summer</td><td>2.414</td><td>0.814</td><td>0.1</td><td>2.1</td><td>0 K</td></tr><tr><td>180 min Summer</td><td>2.443</td><td>0.843</td><td>0.1</td><td>2.1</td><td>0 K</td></tr><tr><td>240 min Summer</td><td>2.456</td><td>0.856</td><td>0.1</td><td>2.2</td><td>0 K</td></tr><tr><td>360 min Summer</td><td>2.462</td><td>0.862</td><td>0.1</td><td>2.2</td><td>0 K</td></tr><tr><td>480 min Summer</td><td>2.455</td><td>0.855</td><td>0.1</td><td>2.2</td><td>0 K</td></tr><tr><td>600 min Summer</td><td>2.442</td><td>0.842</td><td>0.1</td><td>2.1</td><td>0 K</td></tr><tr><td>720 min Summer</td><td>2.425</td><td>0.825</td><td>0.1</td><td>2.1</td><td>0 K</td></tr><tr><td>960 min Summer</td><td>2.387</td><td>0.787</td><td>0.1</td><td>2.0</td><td>0 K</td></tr><tr><td>1440 min Summer</td><td>2.314</td><td>0.714</td><td>0.1</td><td>1.8</td><td>0 K</td></tr><tr><td>2160 min Summer</td><td>2.224</td><td>0.624</td><td>0.1</td><td>1.6</td><td>0 K</td></tr><tr><td>2880 min Summer</td><td>2.156</td><td>0.556</td><td>0.1</td><td>1.4</td><td>0 K</td></tr><tr><td>4320 min Summer</td><td>2.059</td><td>0.459</td><td>0.1</td><td>1.2</td><td>0 K</td></tr><tr><td>5760 min Summer</td><td>1.993</td><td>0.393</td><td>0.1</td><td>1.0</td><td>0 K</td></tr><tr><td>7200 min Summer</td><td>1.945</td><td>0.345</td><td>0.0</td><td>0.9</td><td>0 K</td></tr><tr><td>8640 min Summer</td><td>1.909</td><td>0.309</td><td>0.0</td><td>0.8</td><td>0 K</td></tr><tr><td>10080 min Summer</td><td>1.881</td><td>0.281</td><td>0.0</td><td>0.7</td><td>0 K</td></tr><tr><td>15 min Winter</td><td>2.104</td><td>0.504</td><td>0.1</td><td>1.3</td><td>0 K</td></tr></tbody></table> <table><thead><tr><th>Storm Event</th><th>Rain (mm/hr)</th><th>Flooded Volume (m³)</th><th>Time-Peak (mins)</th></tr></thead><tbody><tr><td>15 min Summer</td><td>124.633</td><td>0.0</td><td>18</td></tr><tr><td>30 min Summer</td><td>83.789</td><td>0.0</td><td>33</td></tr><tr><td>60 min Summer</td><td>53.779</td><td>0.0</td><td>62</td></tr><tr><td>120 min Summer</td><td>33.337</td><td>0.0</td><td>120</td></tr><tr><td>180 min Summer</td><td>24.832</td><td>0.0</td><td>146</td></tr><tr><td>240 min Summer</td><td>20.006</td><td>0.0</td><td>176</td></tr><tr><td>360 min Summer</td><td>14.706</td><td>0.0</td><td>244</td></tr><tr><td>480 min Summer</td><td>11.818</td><td>0.0</td><td>312</td></tr><tr><td>600 min Summer</td><td>9.966</td><td>0.0</td><td>380</td></tr><tr><td>720 min Summer</td><td>8.665</td><td>0.0</td><td>448</td></tr><tr><td>960 min Summer</td><td>6.943</td><td>0.0</td><td>580</td></tr><tr><td>1440 min Summer</td><td>5.071</td><td>0.0</td><td>840</td></tr><tr><td>2160 min Summer</td><td>3.696</td><td>0.0</td><td>1216</td></tr><tr><td>2880 min Summer</td><td>2.949</td><td>0.0</td><td>1588</td></tr><tr><td>4320 min Summer</td><td>2.142</td><td>0.0</td><td>2332</td></tr><tr><td>5760 min Summer</td><td>1.705</td><td>0.0</td><td>3056</td></tr><tr><td>7200 min Summer</td><td>1.427</td><td>0.0</td><td>3816</td></tr><tr><td>8640 min Summer</td><td>1.235</td><td>0.0</td><td>4496</td></tr><tr><td>10080 min Summer</td><td>1.093</td><td>0.0</td><td>5240</td></tr><tr><td>15 min Winter</td><td>124.633</td><td>0.0</td><td>18</td></tr></tbody></table> |               |                     |                                         |                 |        |  | Storm Event | Max Level (m) | Max Depth (m) | Max Infiltration (l/s) | Max Volume (m³) | Status | 15 min Summer | 2.049 | 0.449 | 0.1 | 1.1 | 0 K | 30 min Summer | 2.190 | 0.590 | 0.1 | 1.5 | 0 K | 60 min Summer | 2.322 | 0.722 | 0.1 | 1.8 | 0 K | 120 min Summer | 2.414 | 0.814 | 0.1 | 2.1 | 0 K | 180 min Summer | 2.443 | 0.843 | 0.1 | 2.1 | 0 K | 240 min Summer | 2.456 | 0.856 | 0.1 | 2.2 | 0 K | 360 min Summer | 2.462 | 0.862 | 0.1 | 2.2 | 0 K | 480 min Summer | 2.455 | 0.855 | 0.1 | 2.2 | 0 K | 600 min Summer | 2.442 | 0.842 | 0.1 | 2.1 | 0 K | 720 min Summer | 2.425 | 0.825 | 0.1 | 2.1 | 0 K | 960 min Summer | 2.387 | 0.787 | 0.1 | 2.0 | 0 K | 1440 min Summer | 2.314 | 0.714 | 0.1 | 1.8 | 0 K | 2160 min Summer | 2.224 | 0.624 | 0.1 | 1.6 | 0 K | 2880 min Summer | 2.156 | 0.556 | 0.1 | 1.4 | 0 K | 4320 min Summer | 2.059 | 0.459 | 0.1 | 1.2 | 0 K | 5760 min Summer | 1.993 | 0.393 | 0.1 | 1.0 | 0 K | 7200 min Summer | 1.945 | 0.345 | 0.0 | 0.9 | 0 K | 8640 min Summer | 1.909 | 0.309 | 0.0 | 0.8 | 0 K | 10080 min Summer | 1.881 | 0.281 | 0.0 | 0.7 | 0 K | 15 min Winter | 2.104 | 0.504 | 0.1 | 1.3 | 0 K | Storm Event | Rain (mm/hr) | Flooded Volume (m³) | Time-Peak (mins) | 15 min Summer | 124.633 | 0.0 | 18 | 30 min Summer | 83.789 | 0.0 | 33 | 60 min Summer | 53.779 | 0.0 | 62 | 120 min Summer | 33.337 | 0.0 | 120 | 180 min Summer | 24.832 | 0.0 | 146 | 240 min Summer | 20.006 | 0.0 | 176 | 360 min Summer | 14.706 | 0.0 | 244 | 480 min Summer | 11.818 | 0.0 | 312 | 600 min Summer | 9.966 | 0.0 | 380 | 720 min Summer | 8.665 | 0.0 | 448 | 960 min Summer | 6.943 | 0.0 | 580 | 1440 min Summer | 5.071 | 0.0 | 840 | 2160 min Summer | 3.696 | 0.0 | 1216 | 2880 min Summer | 2.949 | 0.0 | 1588 | 4320 min Summer | 2.142 | 0.0 | 2332 | 5760 min Summer | 1.705 | 0.0 | 3056 | 7200 min Summer | 1.427 | 0.0 | 3816 | 8640 min Summer | 1.235 | 0.0 | 4496 | 10080 min Summer | 1.093 | 0.0 | 5240 | 15 min Winter | 124.633 | 0.0 | 18 |
| Storm Event                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Max Level (m) | Max Depth (m)       | Max Infiltration (l/s)                  | Max Volume (m³) | Status |  |             |               |               |                        |                 |        |               |       |       |     |     |     |               |       |       |     |     |     |               |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                  |       |       |     |     |     |               |       |       |     |     |     |             |              |                     |                  |               |         |     |    |               |        |     |    |               |        |     |    |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |       |     |     |                |       |     |     |                |       |     |     |                 |       |     |     |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                  |       |     |      |               |         |     |    |
| 15 min Summer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 2.049         | 0.449               | 0.1                                     | 1.1             | 0 K    |  |             |               |               |                        |                 |        |               |       |       |     |     |     |               |       |       |     |     |     |               |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                  |       |       |     |     |     |               |       |       |     |     |     |             |              |                     |                  |               |         |     |    |               |        |     |    |               |        |     |    |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |       |     |     |                |       |     |     |                |       |     |     |                 |       |     |     |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                  |       |     |      |               |         |     |    |
| 30 min Summer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 2.190         | 0.590               | 0.1                                     | 1.5             | 0 K    |  |             |               |               |                        |                 |        |               |       |       |     |     |     |               |       |       |     |     |     |               |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                  |       |       |     |     |     |               |       |       |     |     |     |             |              |                     |                  |               |         |     |    |               |        |     |    |               |        |     |    |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |       |     |     |                |       |     |     |                |       |     |     |                 |       |     |     |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                  |       |     |      |               |         |     |    |
| 60 min Summer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 2.322         | 0.722               | 0.1                                     | 1.8             | 0 K    |  |             |               |               |                        |                 |        |               |       |       |     |     |     |               |       |       |     |     |     |               |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                  |       |       |     |     |     |               |       |       |     |     |     |             |              |                     |                  |               |         |     |    |               |        |     |    |               |        |     |    |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |       |     |     |                |       |     |     |                |       |     |     |                 |       |     |     |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                  |       |     |      |               |         |     |    |
| 120 min Summer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 2.414         | 0.814               | 0.1                                     | 2.1             | 0 K    |  |             |               |               |                        |                 |        |               |       |       |     |     |     |               |       |       |     |     |     |               |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                  |       |       |     |     |     |               |       |       |     |     |     |             |              |                     |                  |               |         |     |    |               |        |     |    |               |        |     |    |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |       |     |     |                |       |     |     |                |       |     |     |                 |       |     |     |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                  |       |     |      |               |         |     |    |
| 180 min Summer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 2.443         | 0.843               | 0.1                                     | 2.1             | 0 K    |  |             |               |               |                        |                 |        |               |       |       |     |     |     |               |       |       |     |     |     |               |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                  |       |       |     |     |     |               |       |       |     |     |     |             |              |                     |                  |               |         |     |    |               |        |     |    |               |        |     |    |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |       |     |     |                |       |     |     |                |       |     |     |                 |       |     |     |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                  |       |     |      |               |         |     |    |
| 240 min Summer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 2.456         | 0.856               | 0.1                                     | 2.2             | 0 K    |  |             |               |               |                        |                 |        |               |       |       |     |     |     |               |       |       |     |     |     |               |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                  |       |       |     |     |     |               |       |       |     |     |     |             |              |                     |                  |               |         |     |    |               |        |     |    |               |        |     |    |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |       |     |     |                |       |     |     |                |       |     |     |                 |       |     |     |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                  |       |     |      |               |         |     |    |
| 360 min Summer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 2.462         | 0.862               | 0.1                                     | 2.2             | 0 K    |  |             |               |               |                        |                 |        |               |       |       |     |     |     |               |       |       |     |     |     |               |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                  |       |       |     |     |     |               |       |       |     |     |     |             |              |                     |                  |               |         |     |    |               |        |     |    |               |        |     |    |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |       |     |     |                |       |     |     |                |       |     |     |                 |       |     |     |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                  |       |     |      |               |         |     |    |
| 480 min Summer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 2.455         | 0.855               | 0.1                                     | 2.2             | 0 K    |  |             |               |               |                        |                 |        |               |       |       |     |     |     |               |       |       |     |     |     |               |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                  |       |       |     |     |     |               |       |       |     |     |     |             |              |                     |                  |               |         |     |    |               |        |     |    |               |        |     |    |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |       |     |     |                |       |     |     |                |       |     |     |                 |       |     |     |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                  |       |     |      |               |         |     |    |
| 600 min Summer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 2.442         | 0.842               | 0.1                                     | 2.1             | 0 K    |  |             |               |               |                        |                 |        |               |       |       |     |     |     |               |       |       |     |     |     |               |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                  |       |       |     |     |     |               |       |       |     |     |     |             |              |                     |                  |               |         |     |    |               |        |     |    |               |        |     |    |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |       |     |     |                |       |     |     |                |       |     |     |                 |       |     |     |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                  |       |     |      |               |         |     |    |
| 720 min Summer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 2.425         | 0.825               | 0.1                                     | 2.1             | 0 K    |  |             |               |               |                        |                 |        |               |       |       |     |     |     |               |       |       |     |     |     |               |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                  |       |       |     |     |     |               |       |       |     |     |     |             |              |                     |                  |               |         |     |    |               |        |     |    |               |        |     |    |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |       |     |     |                |       |     |     |                |       |     |     |                 |       |     |     |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                  |       |     |      |               |         |     |    |
| 960 min Summer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 2.387         | 0.787               | 0.1                                     | 2.0             | 0 K    |  |             |               |               |                        |                 |        |               |       |       |     |     |     |               |       |       |     |     |     |               |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                  |       |       |     |     |     |               |       |       |     |     |     |             |              |                     |                  |               |         |     |    |               |        |     |    |               |        |     |    |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |       |     |     |                |       |     |     |                |       |     |     |                 |       |     |     |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                  |       |     |      |               |         |     |    |
| 1440 min Summer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 2.314         | 0.714               | 0.1                                     | 1.8             | 0 K    |  |             |               |               |                        |                 |        |               |       |       |     |     |     |               |       |       |     |     |     |               |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                  |       |       |     |     |     |               |       |       |     |     |     |             |              |                     |                  |               |         |     |    |               |        |     |    |               |        |     |    |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |       |     |     |                |       |     |     |                |       |     |     |                 |       |     |     |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                  |       |     |      |               |         |     |    |
| 2160 min Summer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 2.224         | 0.624               | 0.1                                     | 1.6             | 0 K    |  |             |               |               |                        |                 |        |               |       |       |     |     |     |               |       |       |     |     |     |               |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                  |       |       |     |     |     |               |       |       |     |     |     |             |              |                     |                  |               |         |     |    |               |        |     |    |               |        |     |    |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |       |     |     |                |       |     |     |                |       |     |     |                 |       |     |     |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                  |       |     |      |               |         |     |    |
| 2880 min Summer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 2.156         | 0.556               | 0.1                                     | 1.4             | 0 K    |  |             |               |               |                        |                 |        |               |       |       |     |     |     |               |       |       |     |     |     |               |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                  |       |       |     |     |     |               |       |       |     |     |     |             |              |                     |                  |               |         |     |    |               |        |     |    |               |        |     |    |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |       |     |     |                |       |     |     |                |       |     |     |                 |       |     |     |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                  |       |     |      |               |         |     |    |
| 4320 min Summer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 2.059         | 0.459               | 0.1                                     | 1.2             | 0 K    |  |             |               |               |                        |                 |        |               |       |       |     |     |     |               |       |       |     |     |     |               |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                  |       |       |     |     |     |               |       |       |     |     |     |             |              |                     |                  |               |         |     |    |               |        |     |    |               |        |     |    |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |       |     |     |                |       |     |     |                |       |     |     |                 |       |     |     |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                  |       |     |      |               |         |     |    |
| 5760 min Summer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 1.993         | 0.393               | 0.1                                     | 1.0             | 0 K    |  |             |               |               |                        |                 |        |               |       |       |     |     |     |               |       |       |     |     |     |               |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                  |       |       |     |     |     |               |       |       |     |     |     |             |              |                     |                  |               |         |     |    |               |        |     |    |               |        |     |    |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |       |     |     |                |       |     |     |                |       |     |     |                 |       |     |     |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                  |       |     |      |               |         |     |    |
| 7200 min Summer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 1.945         | 0.345               | 0.0                                     | 0.9             | 0 K    |  |             |               |               |                        |                 |        |               |       |       |     |     |     |               |       |       |     |     |     |               |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                  |       |       |     |     |     |               |       |       |     |     |     |             |              |                     |                  |               |         |     |    |               |        |     |    |               |        |     |    |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |       |     |     |                |       |     |     |                |       |     |     |                 |       |     |     |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                  |       |     |      |               |         |     |    |
| 8640 min Summer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 1.909         | 0.309               | 0.0                                     | 0.8             | 0 K    |  |             |               |               |                        |                 |        |               |       |       |     |     |     |               |       |       |     |     |     |               |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                  |       |       |     |     |     |               |       |       |     |     |     |             |              |                     |                  |               |         |     |    |               |        |     |    |               |        |     |    |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |       |     |     |                |       |     |     |                |       |     |     |                 |       |     |     |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                  |       |     |      |               |         |     |    |
| 10080 min Summer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 1.881         | 0.281               | 0.0                                     | 0.7             | 0 K    |  |             |               |               |                        |                 |        |               |       |       |     |     |     |               |       |       |     |     |     |               |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                  |       |       |     |     |     |               |       |       |     |     |     |             |              |                     |                  |               |         |     |    |               |        |     |    |               |        |     |    |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |       |     |     |                |       |     |     |                |       |     |     |                 |       |     |     |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                  |       |     |      |               |         |     |    |
| 15 min Winter                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 2.104         | 0.504               | 0.1                                     | 1.3             | 0 K    |  |             |               |               |                        |                 |        |               |       |       |     |     |     |               |       |       |     |     |     |               |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                  |       |       |     |     |     |               |       |       |     |     |     |             |              |                     |                  |               |         |     |    |               |        |     |    |               |        |     |    |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |       |     |     |                |       |     |     |                |       |     |     |                 |       |     |     |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                  |       |     |      |               |         |     |    |
| Storm Event                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Rain (mm/hr)  | Flooded Volume (m³) | Time-Peak (mins)                        |                 |        |  |             |               |               |                        |                 |        |               |       |       |     |     |     |               |       |       |     |     |     |               |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                  |       |       |     |     |     |               |       |       |     |     |     |             |              |                     |                  |               |         |     |    |               |        |     |    |               |        |     |    |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |       |     |     |                |       |     |     |                |       |     |     |                 |       |     |     |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                  |       |     |      |               |         |     |    |
| 15 min Summer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 124.633       | 0.0                 | 18                                      |                 |        |  |             |               |               |                        |                 |        |               |       |       |     |     |     |               |       |       |     |     |     |               |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                  |       |       |     |     |     |               |       |       |     |     |     |             |              |                     |                  |               |         |     |    |               |        |     |    |               |        |     |    |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |       |     |     |                |       |     |     |                |       |     |     |                 |       |     |     |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                  |       |     |      |               |         |     |    |
| 30 min Summer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 83.789        | 0.0                 | 33                                      |                 |        |  |             |               |               |                        |                 |        |               |       |       |     |     |     |               |       |       |     |     |     |               |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                  |       |       |     |     |     |               |       |       |     |     |     |             |              |                     |                  |               |         |     |    |               |        |     |    |               |        |     |    |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |       |     |     |                |       |     |     |                |       |     |     |                 |       |     |     |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                  |       |     |      |               |         |     |    |
| 60 min Summer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 53.779        | 0.0                 | 62                                      |                 |        |  |             |               |               |                        |                 |        |               |       |       |     |     |     |               |       |       |     |     |     |               |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                  |       |       |     |     |     |               |       |       |     |     |     |             |              |                     |                  |               |         |     |    |               |        |     |    |               |        |     |    |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |       |     |     |                |       |     |     |                |       |     |     |                 |       |     |     |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                  |       |     |      |               |         |     |    |
| 120 min Summer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 33.337        | 0.0                 | 120                                     |                 |        |  |             |               |               |                        |                 |        |               |       |       |     |     |     |               |       |       |     |     |     |               |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                  |       |       |     |     |     |               |       |       |     |     |     |             |              |                     |                  |               |         |     |    |               |        |     |    |               |        |     |    |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |       |     |     |                |       |     |     |                |       |     |     |                 |       |     |     |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                  |       |     |      |               |         |     |    |
| 180 min Summer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 24.832        | 0.0                 | 146                                     |                 |        |  |             |               |               |                        |                 |        |               |       |       |     |     |     |               |       |       |     |     |     |               |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                  |       |       |     |     |     |               |       |       |     |     |     |             |              |                     |                  |               |         |     |    |               |        |     |    |               |        |     |    |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |       |     |     |                |       |     |     |                |       |     |     |                 |       |     |     |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                  |       |     |      |               |         |     |    |
| 240 min Summer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 20.006        | 0.0                 | 176                                     |                 |        |  |             |               |               |                        |                 |        |               |       |       |     |     |     |               |       |       |     |     |     |               |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                  |       |       |     |     |     |               |       |       |     |     |     |             |              |                     |                  |               |         |     |    |               |        |     |    |               |        |     |    |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |       |     |     |                |       |     |     |                |       |     |     |                 |       |     |     |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                  |       |     |      |               |         |     |    |
| 360 min Summer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 14.706        | 0.0                 | 244                                     |                 |        |  |             |               |               |                        |                 |        |               |       |       |     |     |     |               |       |       |     |     |     |               |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                  |       |       |     |     |     |               |       |       |     |     |     |             |              |                     |                  |               |         |     |    |               |        |     |    |               |        |     |    |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |       |     |     |                |       |     |     |                |       |     |     |                 |       |     |     |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                  |       |     |      |               |         |     |    |
| 480 min Summer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 11.818        | 0.0                 | 312                                     |                 |        |  |             |               |               |                        |                 |        |               |       |       |     |     |     |               |       |       |     |     |     |               |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                  |       |       |     |     |     |               |       |       |     |     |     |             |              |                     |                  |               |         |     |    |               |        |     |    |               |        |     |    |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |       |     |     |                |       |     |     |                |       |     |     |                 |       |     |     |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                  |       |     |      |               |         |     |    |
| 600 min Summer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 9.966         | 0.0                 | 380                                     |                 |        |  |             |               |               |                        |                 |        |               |       |       |     |     |     |               |       |       |     |     |     |               |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                  |       |       |     |     |     |               |       |       |     |     |     |             |              |                     |                  |               |         |     |    |               |        |     |    |               |        |     |    |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |       |     |     |                |       |     |     |                |       |     |     |                 |       |     |     |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                  |       |     |      |               |         |     |    |
| 720 min Summer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 8.665         | 0.0                 | 448                                     |                 |        |  |             |               |               |                        |                 |        |               |       |       |     |     |     |               |       |       |     |     |     |               |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                  |       |       |     |     |     |               |       |       |     |     |     |             |              |                     |                  |               |         |     |    |               |        |     |    |               |        |     |    |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |       |     |     |                |       |     |     |                |       |     |     |                 |       |     |     |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                  |       |     |      |               |         |     |    |
| 960 min Summer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 6.943         | 0.0                 | 580                                     |                 |        |  |             |               |               |                        |                 |        |               |       |       |     |     |     |               |       |       |     |     |     |               |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                  |       |       |     |     |     |               |       |       |     |     |     |             |              |                     |                  |               |         |     |    |               |        |     |    |               |        |     |    |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |       |     |     |                |       |     |     |                |       |     |     |                 |       |     |     |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                  |       |     |      |               |         |     |    |
| 1440 min Summer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 5.071         | 0.0                 | 840                                     |                 |        |  |             |               |               |                        |                 |        |               |       |       |     |     |     |               |       |       |     |     |     |               |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                  |       |       |     |     |     |               |       |       |     |     |     |             |              |                     |                  |               |         |     |    |               |        |     |    |               |        |     |    |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |       |     |     |                |       |     |     |                |       |     |     |                 |       |     |     |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                  |       |     |      |               |         |     |    |
| 2160 min Summer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 3.696         | 0.0                 | 1216                                    |                 |        |  |             |               |               |                        |                 |        |               |       |       |     |     |     |               |       |       |     |     |     |               |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                  |       |       |     |     |     |               |       |       |     |     |     |             |              |                     |                  |               |         |     |    |               |        |     |    |               |        |     |    |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |       |     |     |                |       |     |     |                |       |     |     |                 |       |     |     |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                  |       |     |      |               |         |     |    |
| 2880 min Summer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 2.949         | 0.0                 | 1588                                    |                 |        |  |             |               |               |                        |                 |        |               |       |       |     |     |     |               |       |       |     |     |     |               |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                  |       |       |     |     |     |               |       |       |     |     |     |             |              |                     |                  |               |         |     |    |               |        |     |    |               |        |     |    |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |       |     |     |                |       |     |     |                |       |     |     |                 |       |     |     |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                  |       |     |      |               |         |     |    |
| 4320 min Summer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 2.142         | 0.0                 | 2332                                    |                 |        |  |             |               |               |                        |                 |        |               |       |       |     |     |     |               |       |       |     |     |     |               |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                  |       |       |     |     |     |               |       |       |     |     |     |             |              |                     |                  |               |         |     |    |               |        |     |    |               |        |     |    |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |       |     |     |                |       |     |     |                |       |     |     |                 |       |     |     |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                  |       |     |      |               |         |     |    |
| 5760 min Summer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 1.705         | 0.0                 | 3056                                    |                 |        |  |             |               |               |                        |                 |        |               |       |       |     |     |     |               |       |       |     |     |     |               |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                  |       |       |     |     |     |               |       |       |     |     |     |             |              |                     |                  |               |         |     |    |               |        |     |    |               |        |     |    |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |       |     |     |                |       |     |     |                |       |     |     |                 |       |     |     |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                  |       |     |      |               |         |     |    |
| 7200 min Summer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 1.427         | 0.0                 | 3816                                    |                 |        |  |             |               |               |                        |                 |        |               |       |       |     |     |     |               |       |       |     |     |     |               |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                  |       |       |     |     |     |               |       |       |     |     |     |             |              |                     |                  |               |         |     |    |               |        |     |    |               |        |     |    |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |       |     |     |                |       |     |     |                |       |     |     |                 |       |     |     |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                  |       |     |      |               |         |     |    |
| 8640 min Summer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 1.235         | 0.0                 | 4496                                    |                 |        |  |             |               |               |                        |                 |        |               |       |       |     |     |     |               |       |       |     |     |     |               |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                  |       |       |     |     |     |               |       |       |     |     |     |             |              |                     |                  |               |         |     |    |               |        |     |    |               |        |     |    |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |       |     |     |                |       |     |     |                |       |     |     |                 |       |     |     |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                  |       |     |      |               |         |     |    |
| 10080 min Summer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 1.093         | 0.0                 | 5240                                    |                 |        |  |             |               |               |                        |                 |        |               |       |       |     |     |     |               |       |       |     |     |     |               |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                  |       |       |     |     |     |               |       |       |     |     |     |             |              |                     |                  |               |         |     |    |               |        |     |    |               |        |     |    |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |       |     |     |                |       |     |     |                |       |     |     |                 |       |     |     |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                  |       |     |      |               |         |     |    |
| 15 min Winter                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 124.633       | 0.0                 | 18                                      |                 |        |  |             |               |               |                        |                 |        |               |       |       |     |     |     |               |       |       |     |     |     |               |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                  |       |       |     |     |     |               |       |       |     |     |     |             |              |                     |                  |               |         |     |    |               |        |     |    |               |        |     |    |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |       |     |     |                |       |     |     |                |       |     |     |                 |       |     |     |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                  |       |     |      |               |         |     |    |
| ©1982-2016 XP Solutions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |               |                     |                                         |                 |        |  |             |               |               |                        |                 |        |               |       |       |     |     |     |               |       |       |     |     |     |               |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                 |       |       |     |     |     |                  |       |       |     |     |     |               |       |       |     |     |     |             |              |                     |                  |               |         |     |    |               |        |     |    |               |        |     |    |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |        |     |     |                |       |     |     |                |       |     |     |                |       |     |     |                 |       |     |     |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                 |       |     |      |                  |       |     |      |               |         |     |    |

|                                                     |                                         |                                                                                     |
|-----------------------------------------------------|-----------------------------------------|-------------------------------------------------------------------------------------|
| Robert Clark Associates                             |                                         | Page 2                                                                              |
| Willow Cottage<br>Herne Lane<br>Rustington BN16 3EE | The Cottage<br>Shripney Road<br>Phase 1 |  |
| Date 13.2.19<br>File SA1.SRCX                       | Designed by RTFC<br>Checked by          |                                                                                     |
| Micro Drainage                                      | Source Control 2016.1                   |                                                                                     |

Summary of Results for 100 year Return Period (+40%)

| Storm Event           | Max Level (m) | Max Depth (m) | Max Infiltration (l/s) | Max Volume (m³) | Status     |
|-----------------------|---------------|---------------|------------------------|-----------------|------------|
| 30 min Winter         | 2.262         | 0.662         | 0.1                    | 1.7             | 0 K        |
| 60 min Winter         | 2.411         | 0.811         | 0.1                    | 2.0             | 0 K        |
| 120 min Winter        | 2.519         | 0.919         | 0.1                    | 2.3             | 0 K        |
| 180 min Winter        | 2.545         | 0.945         | 0.1                    | 2.4             | 0 K        |
| <b>240 min Winter</b> | <b>2.556</b>  | <b>0.956</b>  | <b>0.1</b>             | <b>2.4</b>      | <b>0 K</b> |
| 360 min Winter        | 2.550         | 0.950         | 0.1                    | 2.4             | 0 K        |
| 480 min Winter        | 2.530         | 0.930         | 0.1                    | 2.3             | 0 K        |
| 600 min Winter        | 2.502         | 0.902         | 0.1                    | 2.3             | 0 K        |
| 720 min Winter        | 2.473         | 0.873         | 0.1                    | 2.2             | 0 K        |
| 960 min Winter        | 2.414         | 0.814         | 0.1                    | 2.1             | 0 K        |
| 1440 min Winter       | 2.311         | 0.711         | 0.1                    | 1.8             | 0 K        |
| 2160 min Winter       | 2.194         | 0.594         | 0.1                    | 1.5             | 0 K        |
| 2880 min Winter       | 2.111         | 0.511         | 0.1                    | 1.3             | 0 K        |
| 4320 min Winter       | 2.000         | 0.400         | 0.1                    | 1.0             | 0 K        |
| 5760 min Winter       | 1.931         | 0.331         | 0.0                    | 0.8             | 0 K        |
| 7200 min Winter       | 1.883         | 0.283         | 0.0                    | 0.7             | 0 K        |
| 8640 min Winter       | 1.848         | 0.248         | 0.0                    | 0.6             | 0 K        |
| 10080 min Winter      | 1.822         | 0.222         | 0.0                    | 0.6             | 0 K        |

| Storm Event           | Rain (mm/hr)  | Flooded Volume (m³) | Time-Peak (mins) |
|-----------------------|---------------|---------------------|------------------|
| 30 min Winter         | 83.789        | 0.0                 | 32               |
| 60 min Winter         | 53.779        | 0.0                 | 60               |
| 120 min Winter        | 33.337        | 0.0                 | 116              |
| 180 min Winter        | 24.832        | 0.0                 | 150              |
| <b>240 min Winter</b> | <b>20.006</b> | <b>0.0</b>          | <b>184</b>       |
| 360 min Winter        | 14.706        | 0.0                 | 262              |
| 480 min Winter        | 11.818        | 0.0                 | 336              |
| 600 min Winter        | 9.966         | 0.0                 | 410              |
| 720 min Winter        | 8.665         | 0.0                 | 478              |
| 960 min Winter        | 6.943         | 0.0                 | 618              |
| 1440 min Winter       | 5.071         | 0.0                 | 882              |
| 2160 min Winter       | 3.696         | 0.0                 | 1276             |
| 2880 min Winter       | 2.949         | 0.0                 | 1644             |
| 4320 min Winter       | 2.142         | 0.0                 | 2380             |
| 5760 min Winter       | 1.705         | 0.0                 | 3120             |
| 7200 min Winter       | 1.427         | 0.0                 | 3824             |
| 8640 min Winter       | 1.235         | 0.0                 | 4584             |
| 10080 min Winter      | 1.093         | 0.0                 | 5256             |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                         |                                                                                     |                |     |               |     |                       |     |             |       |        |                   |             |       |            |        |                       |    |         |       |                      |       |               |     |                  |     |                    |             |                  |             |   |         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|-------------------------------------------------------------------------------------|----------------|-----|---------------|-----|-----------------------|-----|-------------|-------|--------|-------------------|-------------|-------|------------|--------|-----------------------|----|---------|-------|----------------------|-------|---------------|-----|------------------|-----|--------------------|-------------|------------------|-------------|---|---------|
| Robert Clark Associates                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                         | Page 3                                                                              |                |     |               |     |                       |     |             |       |        |                   |             |       |            |        |                       |    |         |       |                      |       |               |     |                  |     |                    |             |                  |             |   |         |
| Willow Cottage<br>Herne Lane<br>Rustington BN16 3EE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | The Cottage<br>Shripney Road<br>Phase 1 |  |                |     |               |     |                       |     |             |       |        |                   |             |       |            |        |                       |    |         |       |                      |       |               |     |                  |     |                    |             |                  |             |   |         |
| Date 13.2.19<br>File SA1.SRCX                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Designed by RTFC<br>Checked by          |                                                                                     |                |     |               |     |                       |     |             |       |        |                   |             |       |            |        |                       |    |         |       |                      |       |               |     |                  |     |                    |             |                  |             |   |         |
| Micro Drainage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                         |                                                                                     |                |     |               |     |                       |     |             |       |        |                   |             |       |            |        |                       |    |         |       |                      |       |               |     |                  |     |                    |             |                  |             |   |         |
| <p style="text-align: center;"><u>Rainfall Details</u></p> <table> <tr> <td>Rainfall Model</td> <td>FSR</td> <td>Winter Storms</td> <td>Yes</td> </tr> <tr> <td>Return Period (years)</td> <td>100</td> <td>Cv (Summer)</td> <td>0.750</td> </tr> <tr> <td>Region</td> <td>England and Wales</td> <td>Cv (Winter)</td> <td>0.840</td> </tr> <tr> <td>M5-60 (mm)</td> <td>19.000</td> <td>Shortest Storm (mins)</td> <td>15</td> </tr> <tr> <td>Ratio R</td> <td>0.350</td> <td>Longest Storm (mins)</td> <td>10080</td> </tr> <tr> <td>Summer Storms</td> <td>Yes</td> <td>Climate Change %</td> <td>+40</td> </tr> </table> <p style="text-align: center;"><u>Time Area Diagram</u></p> <p style="text-align: center;">Total Area (ha) 0.005</p> <table> <tr> <td><b>Time (mins)</b></td> <td><b>Area</b></td> </tr> <tr> <td><b>From: To:</b></td> <td><b>(ha)</b></td> </tr> <tr> <td>0</td> <td>4 0.005</td> </tr> </table> |                                         |                                                                                     | Rainfall Model | FSR | Winter Storms | Yes | Return Period (years) | 100 | Cv (Summer) | 0.750 | Region | England and Wales | Cv (Winter) | 0.840 | M5-60 (mm) | 19.000 | Shortest Storm (mins) | 15 | Ratio R | 0.350 | Longest Storm (mins) | 10080 | Summer Storms | Yes | Climate Change % | +40 | <b>Time (mins)</b> | <b>Area</b> | <b>From: To:</b> | <b>(ha)</b> | 0 | 4 0.005 |
| Rainfall Model                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | FSR                                     | Winter Storms                                                                       | Yes            |     |               |     |                       |     |             |       |        |                   |             |       |            |        |                       |    |         |       |                      |       |               |     |                  |     |                    |             |                  |             |   |         |
| Return Period (years)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 100                                     | Cv (Summer)                                                                         | 0.750          |     |               |     |                       |     |             |       |        |                   |             |       |            |        |                       |    |         |       |                      |       |               |     |                  |     |                    |             |                  |             |   |         |
| Region                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | England and Wales                       | Cv (Winter)                                                                         | 0.840          |     |               |     |                       |     |             |       |        |                   |             |       |            |        |                       |    |         |       |                      |       |               |     |                  |     |                    |             |                  |             |   |         |
| M5-60 (mm)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 19.000                                  | Shortest Storm (mins)                                                               | 15             |     |               |     |                       |     |             |       |        |                   |             |       |            |        |                       |    |         |       |                      |       |               |     |                  |     |                    |             |                  |             |   |         |
| Ratio R                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 0.350                                   | Longest Storm (mins)                                                                | 10080          |     |               |     |                       |     |             |       |        |                   |             |       |            |        |                       |    |         |       |                      |       |               |     |                  |     |                    |             |                  |             |   |         |
| Summer Storms                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Yes                                     | Climate Change %                                                                    | +40            |     |               |     |                       |     |             |       |        |                   |             |       |            |        |                       |    |         |       |                      |       |               |     |                  |     |                    |             |                  |             |   |         |
| <b>Time (mins)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>Area</b>                             |                                                                                     |                |     |               |     |                       |     |             |       |        |                   |             |       |            |        |                       |    |         |       |                      |       |               |     |                  |     |                    |             |                  |             |   |         |
| <b>From: To:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>(ha)</b>                             |                                                                                     |                |     |               |     |                       |     |             |       |        |                   |             |       |            |        |                       |    |         |       |                      |       |               |     |                  |     |                    |             |                  |             |   |         |
| 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 4 0.005                                 |                                                                                     |                |     |               |     |                       |     |             |       |        |                   |             |       |            |        |                       |    |         |       |                      |       |               |     |                  |     |                    |             |                  |             |   |         |
| ©1982-2016 XP Solutions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                         |                                                                                     |                |     |               |     |                       |     |             |       |        |                   |             |       |            |        |                       |    |         |       |                      |       |               |     |                  |     |                    |             |                  |             |   |         |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                         |                                                                                     |                                      |         |                                      |         |               |     |          |      |                  |       |                   |      |                |     |                 |   |                      |       |                            |       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------|---------|--------------------------------------|---------|---------------|-----|----------|------|------------------|-------|-------------------|------|----------------|-----|-----------------|---|----------------------|-------|----------------------------|-------|
| Robert Clark Associates                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                         | Page 4                                                                              |                                      |         |                                      |         |               |     |          |      |                  |       |                   |      |                |     |                 |   |                      |       |                            |       |
| Willow Cottage<br>Herne Lane<br>Rustington BN16 3EE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | The Cottage<br>Shripney Road<br>Phase 1 |  |                                      |         |                                      |         |               |     |          |      |                  |       |                   |      |                |     |                 |   |                      |       |                            |       |
| Date 13.2.19<br>File SA1.SRCX                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Designed by RTFC<br>Checked by          |                                                                                     |                                      |         |                                      |         |               |     |          |      |                  |       |                   |      |                |     |                 |   |                      |       |                            |       |
| Micro Drainage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                         |                                                                                     |                                      |         |                                      |         |               |     |          |      |                  |       |                   |      |                |     |                 |   |                      |       |                            |       |
| <p style="text-align: center;"><u>Model Details</u></p> <p style="text-align: center;">Storage is Online Cover Level (m) 3.250</p> <p style="text-align: center;"><u>Lined Soakaway Structure</u></p> <table> <tr> <td>Infiltration Coefficient Base (m/hr)</td> <td>0.00000</td> </tr> <tr> <td>Infiltration Coefficient Side (m/hr)</td> <td>0.15836</td> </tr> <tr> <td>Safety Factor</td> <td>3.0</td> </tr> <tr> <td>Porosity</td> <td>0.30</td> </tr> <tr> <td>Invert Level (m)</td> <td>1.600</td> </tr> <tr> <td>Ring Diameter (m)</td> <td>1.20</td> </tr> <tr> <td>Pit Multiplier</td> <td>2.0</td> </tr> <tr> <td>Number Required</td> <td>1</td> </tr> <tr> <td>Cap Volume Depth (m)</td> <td>2.850</td> </tr> <tr> <td>Cap Infiltration Depth (m)</td> <td>2.600</td> </tr> </table> |                                         |                                                                                     | Infiltration Coefficient Base (m/hr) | 0.00000 | Infiltration Coefficient Side (m/hr) | 0.15836 | Safety Factor | 3.0 | Porosity | 0.30 | Invert Level (m) | 1.600 | Ring Diameter (m) | 1.20 | Pit Multiplier | 2.0 | Number Required | 1 | Cap Volume Depth (m) | 2.850 | Cap Infiltration Depth (m) | 2.600 |
| Infiltration Coefficient Base (m/hr)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 0.00000                                 |                                                                                     |                                      |         |                                      |         |               |     |          |      |                  |       |                   |      |                |     |                 |   |                      |       |                            |       |
| Infiltration Coefficient Side (m/hr)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 0.15836                                 |                                                                                     |                                      |         |                                      |         |               |     |          |      |                  |       |                   |      |                |     |                 |   |                      |       |                            |       |
| Safety Factor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 3.0                                     |                                                                                     |                                      |         |                                      |         |               |     |          |      |                  |       |                   |      |                |     |                 |   |                      |       |                            |       |
| Porosity                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 0.30                                    |                                                                                     |                                      |         |                                      |         |               |     |          |      |                  |       |                   |      |                |     |                 |   |                      |       |                            |       |
| Invert Level (m)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 1.600                                   |                                                                                     |                                      |         |                                      |         |               |     |          |      |                  |       |                   |      |                |     |                 |   |                      |       |                            |       |
| Ring Diameter (m)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 1.20                                    |                                                                                     |                                      |         |                                      |         |               |     |          |      |                  |       |                   |      |                |     |                 |   |                      |       |                            |       |
| Pit Multiplier                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 2.0                                     |                                                                                     |                                      |         |                                      |         |               |     |          |      |                  |       |                   |      |                |     |                 |   |                      |       |                            |       |
| Number Required                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 1                                       |                                                                                     |                                      |         |                                      |         |               |     |          |      |                  |       |                   |      |                |     |                 |   |                      |       |                            |       |
| Cap Volume Depth (m)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 2.850                                   |                                                                                     |                                      |         |                                      |         |               |     |          |      |                  |       |                   |      |                |     |                 |   |                      |       |                            |       |
| Cap Infiltration Depth (m)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 2.600                                   |                                                                                     |                                      |         |                                      |         |               |     |          |      |                  |       |                   |      |                |     |                 |   |                      |       |                            |       |
| ©1982-2016 XP Solutions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                         |                                                                                     |                                      |         |                                      |         |               |     |          |      |                  |       |                   |      |                |     |                 |   |                      |       |                            |       |