Newline Hardscapes Permeable Pavement Surface Infiltration Testing
Doswell, Virginia

Pavement Type: AquaFlow
Test Date: 4/6/2015
Testing By: Charlene Harper, P.E.
Eric Giberson

Date of Previous Rainfall: 4/3/2015
Temperature: 66° F
Diameter of Infiltration Ring (inches): 12

<table>
<thead>
<tr>
<th>Location</th>
<th>Begin Time</th>
<th>Pre-Wet Mass (lbs)</th>
<th>Pre-Wet Time (sec)</th>
<th>Begin Time</th>
<th>Testing Mass (lbs)</th>
<th>Testing Time (min:sec)</th>
<th>Infiltration Rate (in/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>11:07 AM</td>
<td>7.8</td>
<td>16.43</td>
<td>11:08 AM</td>
<td>40.12</td>
<td>102.21</td>
<td>345.83</td>
</tr>
<tr>
<td>2</td>
<td>11:24 AM</td>
<td>7.9</td>
<td>13.98</td>
<td>11:25 AM</td>
<td>40.14</td>
<td>71.95</td>
<td>491.52</td>
</tr>
<tr>
<td>3</td>
<td>11:35 AM</td>
<td>7.8</td>
<td>13.45</td>
<td>11:36 AM</td>
<td>40.10</td>
<td>78.06</td>
<td>452.60</td>
</tr>
</tbody>
</table>

I = KM/(D^2 * t)
M = mass of infiltrated water (pounds)
I = infiltration rate (in/hr)
D = inside diameter of infiltration ring (inches)
K = 126,870 in [inch-pound]
t = time required for measured amount of water to infiltrate the surface (seconds)

Paver description: rectangular paver with joint width 1/4" - 1/8" typical, swept with #8 stone

Average Infiltration Rate: 429.98 in/hr

Process:
1) pre-wet the section with 1 gallon of water, maintaining head between 0.4" and 0.6"
2) if pre-wet takes less than 30 seconds, test with 40 lbs of water
3) test with 40 lbs of water, maintaining head between 0.4" and 0.6"
4) record time for water to drain into the paver system