Newline Hardscapes Permeable Pavement Surface Infiltration Testing
Doswell, Virginia

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

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

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