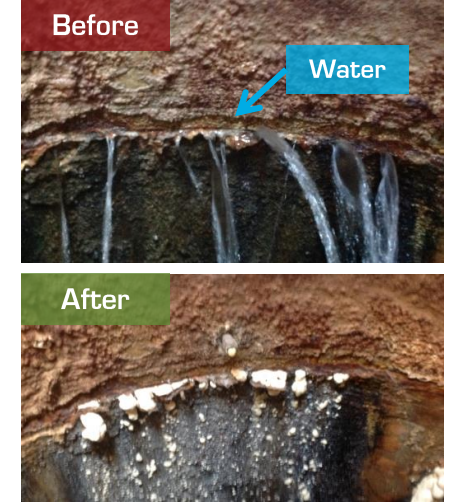
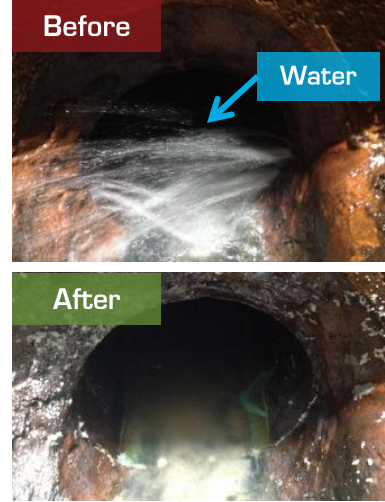


# Manhole Infiltration Repair

## Clarksville, IN



Project Challenges	Solution	Support	Outcome
<ul style="list-style-type: none"> <li>• TV inspection showed large amounts of Inflow and Infiltration (I&amp;I) in 7 manholes</li> <li>• I&amp;I caused flow to exceed pump station design</li> <li>• High ground water table (at grade in some locations)</li> <li>• Failure in structure joints and pipe to structure joints</li> </ul>	<ul style="list-style-type: none"> <li>• Inject URETEK 486Star Polymer directly through manhole walls and through base of structure, beneath pipe invert to fill voids and seal leaks</li> <li>• Where other methods failed, GWS successfully mitigated infiltration</li> </ul>	<ul style="list-style-type: none"> <li>• Designed injection quantity, depth, and location to address I&amp;I in the 12" sanitary manhole intersections as well as the structure joints</li> </ul>	<ul style="list-style-type: none"> <li>• Work completed in a day and a half</li> <li>• Stopped high pressure leaks in minutes</li> <li>• Significantly reduced I&amp;I flowing through sanitary system to pump station saving the City over \$90K per month</li> <li>• <b>Since repair, 49 pump hours per week reduced to 17</b></li> <li>• <b>Cost savings of \$100k per month since repair</b></li> </ul>