



Hampton Discovers the Difference with Con^{MIC}Shield[®]

In 2000, the manholes near City Hall in Hampton, Virginia, were identified as being severely deteriorated from high levels of hydrogen sulfide gas which fed bacteria to form Microbiologically Induced Corrosion. When unprotected concrete is exposed to Hydrogen Sulfide Gas, bacteria can quickly grow creating sulfuric acid which allows structural damage in just a few short years. This was the case in the City of Hampton.

The City of Hampton chose to fix the manhole on Queens Way using a process called PERMAFORM[®] fortified with Con^{MIC}Shield[®]. PERMAFORM[®] is a unique, patented process for reconstructing manholes quickly and cost-effectively, involving neither excavation nor interruption of the flow. Lightweight steel panels are assembled inside the manhole and concrete is poured between the form and existing wall. After the concrete has hardened, the formwork is removed leaving a completely sealed, structurally sound, 'manhole within a manhole'. Con^{MIC}Shield[®] is a revolutionary technology for the effective and economical prevention of Microbiologically Induced Corrosion, commonly developed in concrete sewer pipe and manholes. It prevents the acid-producing bacteria (*Thiobacillus*) from

colonizing into concentrations that produce sulfuric acid. Con^{MIC}Shield[®] is an additive that easily can be added to concrete prior to placing. Unlike coatings or plastic linings, Con^{MIC}Shield[®] molecularly bonds to the cement particles. It cannot wash off, chip off, peel off, delaminate or pinhole!

The Queens Way manhole was renewed by City of Hampton crews in February 2001. The manhole was then re-inspected by Barry Dobbins, Wastewater I&I Manager in September of 2006. As expected, the manhole shows no sign of deterioration. (See pictures below).

That same year another manhole on the same line within a few feet of the Queens Way manhole was also renewed but, for comparison sake, this one was done without Con^{MIC}Shield[®]. When this manhole was inspected in September 2006, it was already showing signs of severe deterioration. (See picture on the right below).

Con^{MIC}Shield[®] Technologies Inc. can be contacted Toll Free at 1-877-543-2094 or info@conshield.com. Barry Dobbins of the City of Hampton can be contacted at 757-726-7944.



These photos clearly show the benefits of Con^{MIC}Shield[®]. The manhole on the left was fortified with Con^{MIC}Shield[®] and the manhole in the photo on the right was not. These photos were taken in September of 2006 by Barry Dobbins with the City of Hampton.