

# Sanitary Sewer Rehabilitation Program



## 2009 SUBURBAN BRANCH PROJECT OF THE YEAR

\$5-25 Million - Environment



Managing Agency: Village of Hoffman Estates

Design By: Baxter & Woodman, Inc.

Constructed by: Kennedy Construction Co.

## PROJECT HIGHLIGHTS

The Village of Hoffman Estates experienced structural problems with their aging clay pipe sanitary sewer system. Maintenance was becoming cumbersome and ineffective.

In 1998, the Village hired a consultant to televise the sewers and recommend how the Village should proceed. The result was a staggering project cost estimate for improvements totaling over \$6 million dollars!

The Village sought a second opinion from Baxter & Woodman, Inc. By utilizing a different approach, Baxter & Woodman cut the cost estimate by approximately 40%.

The new approach used multiple rehabilitation technologies and specifically targeted their uses based on pipe condition, maintenance history, system configuration and cost effectiveness. The refined project approach, combined with favorable bidding conditions, reduced the cost to 60% of the original estimate.

So far, combinations of 6 techniques have been used to structurally improve 28,000 feet of sewer. Now entering year seven of the ongoing improvements, the Village is thrilled with the results. The project cost less than originally projected, and the improvements have been dramatic.



Smoke testing was one method used to identify spots of Infiltration/ Inflow (I/I).



Smoke testing in progress.



Another rehabilitation technique used was a liner installed manhole to manhole.

*"In late summer of 2007, the Chicagoland area experienced several heavy rainstorms, wreaking havoc on area sewers. Communities throughout the suburbs reported significant problems with sewer backups.*

*During this time, the local ServiceMaster sales rep called to inquire if Hoffman Estates could use his company's drainage services after the deluge of rain we had been receiving. In the past, it was a good bet that I would have been saying yes, but it was my pleasure to tell him that we didn't need him! Since we started our ongoing sanitary sewer rehabilitation and I/I program, we have experienced zero reported sewer backups!"*

*Mr. Ken Hari  
Director of Public Works  
Village of Hoffman Estates*