

CITY OF LAFAYETTE

W E T W E A T H E R P R O G R A M

Orchard Heights Sewer and Drainage Improvements

Residents of the Orchard Heights neighborhood have experienced sewer backups during and after heavy rain for years. When overloaded with stormwater the sanitary sewer may not have sufficient capacity to transport wastewater and excess stormwater to the treatment plant, and as a result, raw sewage can back up into basements and eventually overflow into the Wabash River.

The City of Lafayette has completed smoke testing to identify sources of stormwater inflow/infiltration (I/I) into the neighborhood sanitary sewer. The inspection confirmed that stormwater was entering the sewer through manholes and weak joints and cracks in the pipes. Incorrect downspout and sump pump connections to the sanitary sewer also were identified, and residents and businesses were contacted to correct the improper connections.

Correct Connections to Reduce Inflow

In addition to the neighborhood inspections, Lafayette also plans to rehabilitate sanitary manholes and sewers to further reduce stormwater I/I. Approximately 75 percent of the sanitary sewers in the area will be rehabilitated with cured in place pipe technology. A pre-measured liner will be placed inside the existing pipe and then water will force the liner in place. Cured-in-place pipe saves time and money compared to traditional pipe replacement methods because it avoids costly excavation and requires minimal road closures and traffic inconveniences.

To improve overall performance of the Orchard Heights sewer system, the city will install a sanitary relief sewer on Phippen Lane and Golden Place as well. The new relief sewer will reduce bottlenecks and increase the amount of wastewater that can be transported to the treatment plant.

Environmentally Conscious Drainage Improvements

As part of the neighborhood improvements, Lafayette also will complete stormwater improvements. Aging, undersized infrastructure will be replaced, and several drainage outfall locations will be repaired with turf reinforcement mats. The high performance mats are composed of recycled materials and grasses, and they will help to prevent erosion.

Highlights

Project: Sewer and drainage improvements

Estimated Construction Cost: \$381,500

Status: Planning

Project Benefits:

- Reduce basement flooding
- New relief sewer to reduce raw sewage overflows in Wabash River
- Improved water quality in local waterways
- Reduced system maintenance and operating costs
- Improved drainage using environmentally friendly practices

The Orchard Heights Sewer Rehabilitation project is part of Lafayette's capital improvement program to improve the water quality of the Wabash River and other local streams and to address poor drainage conditions.

The projects will reduce flooding and satisfy the requirements of the U.S. Environmental Protection Agency and the Indiana Department of Environmental Management.

