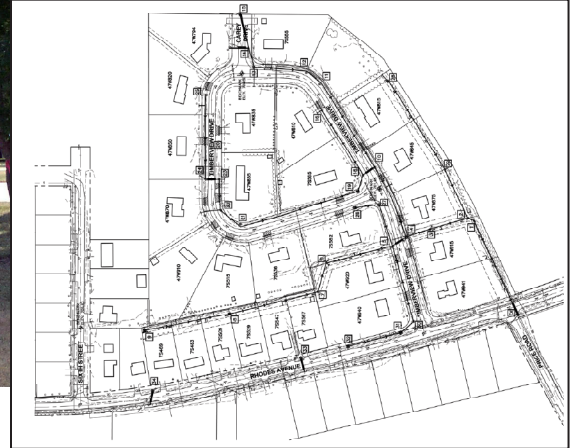
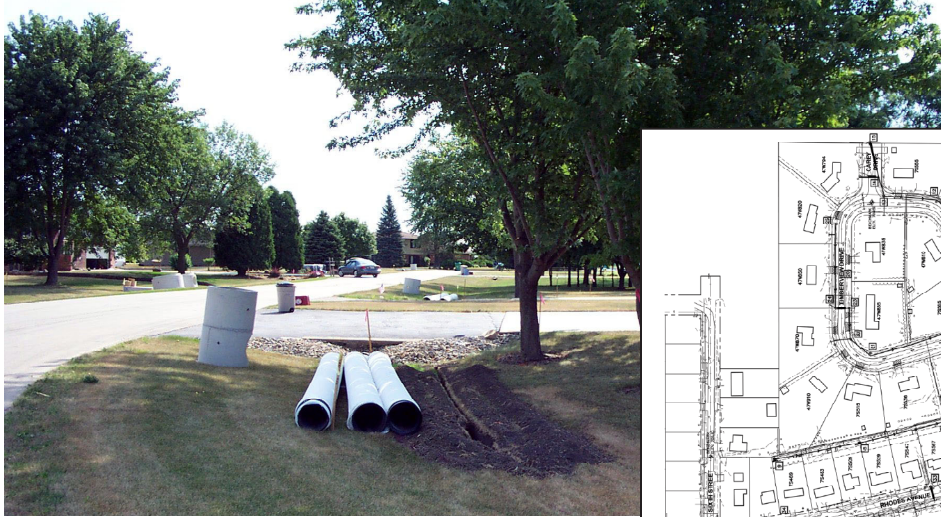




## Floodplain & Stormwater Management

Drainage Investigation and Storm Sewer Improvement  
Kane County, Illinois



EEL worked with Big Rock Township and the Kane County Water Resources Department, and later the newly incorporated Village of Big Rock, to address a growing drainage and flooding problem in the residential areas of Big Rock. EEL conducted a drainage investigation to identify and describe existing drainage problems, inventory existing drainage components, and recommend proposed improvements and costs to correct the drainage problems. After additional funding was acquired, design and construction of storm sewer improvements occurred in several phases.

These improvements included addressing drainage problems in the existing Timberview Subdivision. Timberview was drained by a network of culverts with limited success. Ponding after small storms was a common occurrence and the pumping of basement sump pumps was incessant. EEL designed a storm sewer system and ditch drainage system to address these concerns. The storm sewer was constructed with perforated high density polyethylene pipe (HDPE)

to allow for infiltration and conveyance of nuisance flows. In addition, each home in the subdivision was provided with a connection for their sump pump and future connections for septic system curtain drains.

Since the completion of the project there have been no complaints in regard to ponding water or excessive sump pump use.

### Construction Cost:

\$964,000

### Project Features:

- 11,474 lineal feet of 12 inch to 36 inch diameter storm sewer
- Bore and jack 232 lineal feet of steel casing pipe
- Catch basins, manholes and inlets
- Erosion control
- Traffic control and protection
- Drainage investigation
- Drainage ditch design