

# CARLSON CONSULTING ENGINEERS, INC.

## Forensic Engineering Sample Project

Storm Sewer Collapse  
Fairfield, AL

At a Big Box Retail site in Fairfield, AL, there were several reoccurring sink holes in the existing parking lot. Carlson Consulting Engineers was retained to investigate the situation and determine if the existing 40-year-old underground storm sewer system was failing. After inspecting a ¼ mile of underground storm sewer piping, CCE found that one of the dual 84" storm sewer pipes was totally collapsed. With only one operating pipe, the system had become undersized and the concentration of flow had deteriorated the walls of the pipe to the point that the surrounding soil was eroding away. To repair the storm drainage system and prevent future sink holes, CCE prepared the contract documents to replace 1350 linear feet of the old dual pipe system with a single 102" storm sewer pipe. Detailed phasing plans were prepared to enable the store to remain in operation throughout construction.

