

## The Shops at Sterling Ponds Sterling Heights, Michigan

**Spalding DeDecker Associates, Inc. (SDA)** was the Civil Engineering consultant for the underground utility work at the shopping center, a 120-acre commercial development. The underground utilities consisted of 10,000' of watermain, 3,300' of sanitary sewer, and 18,000' of storm sewer ranging from 12" to 66" pipe. SDA remained with the project from start to finish and assisted through leasing changes and site revisions requested by the owner.



The client, Pioneer Development Company, contracted SDA to provide services for several additional projects associated with the shopping center. SDA performed the drainage study to determine the effects this development would have on Big Beaver Creek, which is the drainage outlet for the storm water. In the study, SDA determined that providing detention for this project would actually be detrimental to the creek. As a result, it is estimated that a minimum of two to four additional acres could be developed rather than be used as a detention basin. This potentially added profits of \$200,000 to \$300,000 for the developer.

SDA was contracted to provide as-needed traffic studies, predominantly inside the development. SDA analyzed plans and made recommendations for roadways and geometrics, which were formulated to improve traffic flow and eliminate any turning conflicts or confusion. Additionally, SDA provided design services for all four shopping center entrances and secured the necessary Michigan Department of Transportation (MDOT) and Macomb County Department of Roads (MCDR) approvals.

SDA provided platting and engineering services for the 40 acres adjacent to the commercial property, which has been developed as an industrial subdivision. The design consisted of a 3,200' roadway, with sanitary sewer, watermain, and storm sewer to serve the industrial lots. A drain crossing and railroad crossing were part of the design. SDA also prepared the plat document for the 21-lot subdivision.

The SDA Survey Department was involved in the site from the onset. The initial involvement was for an ALTA survey of the full 160 acres, with detailed topographic, boundary, and tree surveys. SDA was involved in the preparation of legal descriptions, which were required for lease documents or parcel splitting. SDA prepared condominium documents for five outlots in the retail development.

SDA provided construction layout for the entire project, including grading, paving, curb and gutter, sanitary and storm sewer, watermain, site lighting, public utilities, and the mall area buildings including the large Super K-Mart building.

### OWNER / CLIENT

Pioneer Development Company

### PROJECT START - END

July 1994 - July 2000

### SDA PROJECT NO.

DV94-018