

PROJECT Profile

INFRASTRUCTURE ENGINEERING

MUNICIPAL ENGINEERING CONSULTING

North Gratiot Interceptor Drain – Phase 5 and Lenox Local Drain Project

Macomb County, MI

The North Gratiot Interceptor Drain – Phase 5 & Lenox Local Drain Project is a new sewer that will provide sanitary service to Lenox Township and the Village of New Haven. The sewer is designed along the east side of Gratiot Avenue from 26 Mile Road to 31 Mile Road and consists of approximately 31,600 feet of 15” through 36” diameter sewer pipes. **Spalding DeDecker Associates (SDA)** has designed the sewer and specifications in accordance with the Macomb County Public Works Office, Michigan Department of Transportation, Road Commission of Macomb County, and Michigan Department of Environmental Quality requirements. The service area for this sewer extends from 26 Mile Road to the north limits of the Township and between Grand Truck Western Rail Road / Lowe Plank Road and County Line Road. This sanitary sewer will help to meet the extra capacity needs as the Township continues to develop and grow in population.

The sewer construction will be performed in a high traffic area along Gratiot Avenue through the Village of New Haven and Lenox Township. The project features open cut excavation (approximately 25300 feet) and tunneling construction (approximately 6,300 feet) at depths of 30 feet or more below the existing surface through various soil types from loose to very dense hard pan.

SPECIAL FEATURES

The design constraints include existing Detroit Edison trunkline overhead utilities, existing underground utilities, numerous river crossings, and very limited construction work areas between the edge of pavement and the existing road Right-Of-Way where a unique traffic treatment plan was designed.

A Parshall Flume Meter Pit has also been designed to calculate the flow strictly from Lenox Township that will be maintained and operated by Macomb County Public Works Office.

Specific SDA services consist of sanitary sewer master plan and design, contract administration, construction layout and staking, and record plans. SDA was also responsible for obtaining all public agency approvals for the necessary permits including; MDEQ Act 451, Part 31 (Floodplain), MDEQ Act 451, Part 41 (Sanitary Sewer); Michigan Department of Transportation; Macomb County Office County Public Works soil erosion and drain crossing, and Road Commission Macomb County permits.

OWNER

Macomb County Public Works Office

CLIENT

Lenox Township

PROJECT START - END

9/2006 - Fall 2007

ESTIMATED COST

\$14 million

SDA KEY PERSONNEL

David A. Lakin, PE
David L. Potter, PE
George P. Nichols, PE
Sermed K. Saif, PE
Dennis Kopp, PE

SDA PROJECT NO.

LE03007