

Heatherwood Village Stormwater System Assessment Rochester Hills, Michigan



The Heatherwood Village subdivision is situated on the north side of Avon Road, east of Rochester Road. Four hundred and twenty nine (429) homes comprise the subdivision, which was constructed in three phases (1979-1989). The subdivision was experiencing problems associated with

residential sump pump back-ups that had led to property damage and required a proactive approach to mitigate potential problems associated with their storm drainage system.



Spalding DeDecker Associates, Inc. (SDA) was previously retained by the homeowners association to conduct a comprehensive storm system assessment for the first of three phases to address problems associated with residential sump pump back-ups that were causing property damage. The homeowners association wanted SDA to assess the storm systems of the second and third phases to help prevent future problems.

SDA inspected their storm drainage system in phases, corresponding to the subdivision's three-phase development. Phase I entailed the inspection of the storm drainage structures located within the Phase I development, with a completion date of the end of 2004 (excluding structures located within the road pavement influence). Phases II and III were inspected in 2005 and 2006.

Storm drainage structures were field inspected, structure inspection forms were compiled, and digital photographs were taken to document structure location and condition. A total of 49 structures were inspected, and written recommendations for both short and long-term fixes



OWNER / CLIENT

Heatherwood Village Homeowners Association

PROJECT START - END

June 2004 - September 2005
August 2005 - December 2006
March 2006 - December 2006

SDA PROJECT NO.

CE04-001
CE05-004
CE06-001

were provided. Based upon field investigations, it was discovered that two major storm sewer line blockages required immediate attention, and a number of structures had foreign substances and/or major root intrusion creating structural damage.

SDA designed a new drainage system for the basin that will prevent future clogging, and obtained approval from the City Engineering Department. SDA also performed a bid request and retained a contractor to complete the installation.

SPECIAL FEATURES

It was ascertained that the Rochester Hills Department of Public Works was responsible for maintaining the storm drainage structures located within the pavement influence, and the remaining storm drainage structures, located in front and rear yards, were the responsibility of the Heatherwood Village Homeowners Association.