

# WOODSTOCK PUBLIC LIBRARY PARKING LOT CITY OF WOODSTOCK, ILLINOIS



## CHALLENGE

*Woodstock Library District was in need of additional parking for their facility. Adjacent homes next to the library were located in a low depressional area and experiencing flooding. To accommodate the additional parking spaces and to improve the drainage for the watershed, the City bought out two adjacent properties experiencing the worst flooding and demolished the existing homes.*

## SOLUTION

This project was a joint effort of the Woodstock Library District and the City of Woodstock. City called on HLR to provide the engineering design of an additional parking lot and to improve the drainage in the existing watershed. The engineering design included permeable paved brick, lighting, grading, stormwater detention, and landscaping.

HLR designed the proposed parking lot with a permeable pavement and an underground stormwater detention facility. The design of the additional parking lot utilized Contech's Aqua-Bric and Stormchamber technology. The extra stormwater detention provided underneath the parking facility will provide flood relief for neighboring properties. HLR also provided a grading plan that maximized the volume of stormwater detention available above ground on the two parcels. The permeable pavement, underground stormwater detention system and native wetland vegetation and landscaping on the site all promote the infiltration of stormwater and are considered best management practices for water quality.

HLR also provided construction observation services to ensure the parking lot was built to plan specifications. HLR provided bidding assistance to the City of Woodstock and conducted a Preconstruction conference with the selected contractor. In addition to providing daily construction observation, HLR reviewed pay requests and change orders from the contractor. HLR also assisted the City with the closeout of all engineering contracts.

## RESULTS

*Construction was complete in May 2009.*

Project benefits included:

- Additional parking area for the Woodstock Library District.
- Lower water surface elevations within depressional area.
- Improved water quality due to project's best management practices.

**CONSTRUCTION BUDGET**  
\$265,500

