

# ORCHARD ROAD BRIDGE OVER FOX RIVER KENDALL COUNTY HIGHWAY DEPARTMENT



## CHALLENGE

*Relieve traffic congestion in a fast-growing suburban area by extending an important county highway over the Fox River while minimizing effects on environmental resources.*

Kendall County, one of the fastest growing counties in the United States, needed an economical, cost-effective solution to its traffic congestion problem.

Kendall County and communities along the Fox River have sought to add additional highway crossings over the Fox River to relieve traffic congestion, allow capacity for future growth, and improve mobility for emergency vehicles.

Kendall County asked HLR to provide traffic, geometric and structural engineering services to design a bridge to cross the Fox River while obtaining environmental permits to protect natural resources.

## RESULTS

*Construction of the bridge and roadway was completed in 2000. Benefits include improved traffic flow in the northeast Kendall County area as well as:*

- Reduced travel times
- Improved mobility for emergency vehicles
- Increased capacity for additional population growth

CONSTRUCTION BUDGET  
\$8.3 MILLION

2002 ACEC ENGINEERING  
EXCELLENCE HONOR AWARD

## SOLUTION

HLR served as the lead engineering firm, providing Phase I, Phase II and Phase III engineering services. To gain approval for the project, HLR coordinated engineering, funding, biological and natural resource issues with regulatory and permitting agencies including:

- Illinois Department of Transportation
- Illinois Department of Natural Resources
- U.S. Army Corps of Engineers
- Illinois Environmental Protection Agency
- U.S. Fish and Wildlife Service

HLR's Phase II engineering services included roadway and intersection design, lighting and traffic signal design, structural design, coordination of sub-consultants, as well as preparation of final plans and specifications. Upon approval of the project, HLR also provided construction observation services, ensuring that the project was built as planned with the minimum possible disturbance of natural resources.

### *Project highlights:*

- Construction of a new bridge over the Fox River and adjoining railroad
- Extension of Orchard Road from US Route 34 to IL Route 71.
- New traffic signals at US Route 34 and at IL Route 71
- Construction of a 4½ acre wetland to enhance an affected resource
- Construction of an earth berm for reduction of traffic noise
- Planting of 135 new trees to support local wildlife
- Erosion and sedimentation control



ORCHARD ROAD BRIDGE