

# ELDAMAIN ROAD EXTENSION KENDALL COUNTY HIGHWAY DEPARTMENT



## CHALLENGE

*Create a new roadway corridor and Fox River crossing.*

Explosive population growth is occurring in Kendall County. The US Census Bureau has named Kendall County one of the fastest growing counties in the United States. As new commercial and residential developments are built in the area, the existing roadway network is fast reaching its capacity.

The proposed six-mile extension of Eldamain Road from US Route 34 and Walker Road will be a roadway corridor across the Fox that will create a continuous north-south route across Kendall County. Proposed Eldamain Road will follow the existing alignment of Eldamain Road, Highpoint Road and Lisbon Road. The rapidly growing City of Yorkville is located in close proximity to the proposed corridor.

## RESULTS

*The Phase I design approval is expected in 2011.*

Benefits of the proposed project will include:

- Additional Fox River Crossing will alleviate congestion
- Improved traffic safety
- Aesthetic improvements

**ENGINEERING BUDGET**  
\$800,000

## SOLUTION

The Kendall County Highway Department proposed to create a new roadway corridor and bridge crossing over the Fox River. HLR is working with the County to prepare concept designs and develop the general location of the six-mile-long roadway corridor.

HLR is preparing Phase I engineering analysis and design. Ongoing services include design of right-of-way needs, traffic flow projections, preliminary bridge design, storm sewer design, culvert analysis and design, and proposed township roadway realignments. Phase I work also includes coordination with environmental regulatory agencies on environmental issues through the NEPA process. Environmental studies including wetland delineations, tree surveys, noise and air quality analysis are on-going. This project is anticipated to be processed as an Environmental Assessment. An extensive public involvement process is necessary because of the Fox River crossing.

HLR performed a stream survey along the Fox River and incorporated this data into the existing FEMA hydraulic model. The proposed Fox River bridge is being designed in accordance with IDOT drainage policies and procedures meeting IDNR permitting guidelines.

HLR utilized hydraulic (HY-8) and hydrologic (HEC-HMS) models to check the existing roadway culverts for conveyance adequacies and to design proposed culverts if extensions were not feasible. A closed drainage system has been designed in sections where right-of-way requirements were restrictive. Storm sewers have been designed for 50-year conveyance where a subway condition was present.

HLR is coordinating with the following regulatory agencies:

- IDOT District 3 for preliminary design approval and environmental survey report.
- US Army Corps of Engineers for wetland and Waters of the US issues.
- Illinois Department of Natural Resources for floodway construction and biological and natural resource issues.
- Department of Agriculture, IEPA, and USFWS as part of the NEPA merger process.

*Improvements designed include:*

- New roadway corridor
- Township road realignments
- Fox River and Rob Roy Creek Bridge designs
- Culvert analysis and design

