



# AT A GLANCE™

An informative newsletter from the award-winning international planning, design, and construction management firm of Gannett Fleming

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## A Time to Give Thanks

Can you believe that fall, with its crisp temperatures and vibrant colors, is already here? We want to take this opportunity to wish you a blessed Thanksgiving, as well as say thank you. *Engineering News-Record* has released its 2005 national rankings. As you will read, we are pleased to be recognized among the nation's top engineering firms and sincerely appreciate the opportunities that you, our clients, provide us to achieve this recognition.

### Spill Containment a Focus for IR 80 Widening

Our Columbus office staff, along with the assistance of several employees from our Harrisburg office, recently completed the design for the widening of Interstate Route (IR) 80 in Mahoning County, Ohio, for the Ohio Department of Transportation (ODOT), District 4. This nearly \$70 million project involves the widening from four to six lanes of approximately 4.5 miles of IR 80 between the Ohio Turnpike and S.R. 11 Interchanges.

The project includes the widening or replacement of four mainline dual overpass bridges, the replacement of twin 2,500-foot bridges over a drinking water reservoir, and the construction of a new spill containment system for potential hazardous material spills.

This latter component is a key objective of this project; the new containment system provides a minimum needed reaction time of 30 minutes, and the basins have been designed to contain the volume of a 100-year storm. This spill containment system is the first of its kind to be constructed by ODOT, and it was the focus of our project manager's presentation at the recent 2005 Ohio Transportation Engineering Conference.

The IR 80 alignment, new bridge profile, typical section, components, and design methodology were all impacted by requirements of the containment system. Ultimately, this project will increase the vehicle capacity of IR 80, eliminate the high cost of annual maintenance to the existing reservoir bridges, and reduce the risk of reservoir contamination.



*The Columbus office staff pauses before delivering the design plans for the widening of IR 80 to ODOT, District 4.*



**Gannett Fleming**

*Celebrating 90 years of Excellence*

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*Drilling and grouting operations at the McCook Reservoir.*

## IntelliGrout® Provides Real Time Results for McCook Reservoir

The McCook Reservoir Project is part of the Chicagoland Underflow Plan (CUP), the proper and efficient functioning of which is critical to maintaining Chicago's infrastructure. CUP consists of numerous underground tunnels constructed to store combined sanitary and storm water runoff, produced during high precipitation events, prior to treatment.

The largest reservoir of its type in the world, the McCook Reservoir will provide an additional 32,100 acre feet of combined sewer storage. Several factors necessitated the installation of a grout curtain to prevent groundwater inflow when the reservoir is empty and combined sewer outflow when the reservoir is full. The project requires the removal of seven million cubic yards of overburden and 50 million cubic yards of bedrock.

Gannett Fleming and Advanced Construction Techniques were awarded the grout test contract by the United States Army Corps of Engineers (USACE) – Chicago District to conduct pressure testing and grouting operations on the McCook Reservoir. Gannett Fleming personnel completed the monitoring using our patented IntelliGrout system, a real-time grouting data collection and display system.

The system's database enabled Gannett Fleming to mine specific data through queries that provided valuable insight into the subsurface conditions and patterns within the strata. The hard copies of all data monitored by IntelliGrout were provided to USACE personnel on a daily basis. In addition, computer-aided drafting drawings showing critical information were submitted and posted on the IntelliGrout Web site for instant access by USACE staff.

## Expanding Services with Deep Water Mussel Surveying

Gannett Fleming has partnered with HMB Professional Engineers, Inc. to provide deep water mussel survey services. The lead Columbus office staff member in this venture is environmental scientist and professional scuba diver, Rob Parker.

Mussel surveys are normally required when projects impact streams or rivers that are known to potentially contain rare or endangered mussel survey species. Our deep water mussel survey team can provide clients with agency-approved mussel surveys in almost any deep water condition throughout the U.S.

Projects that require a mussel survey for a stream or river, where the depth of water is greater than approximately three to four feet, would most likely be considered a deep water condition that would require scuba diving.



*Rob Parker during a recent deep water mussel survey for a barge trans-loading facility on the Ohio River in Meade County, Ky.*

Please contact Rob at (614) 794-9424, ext. 117, if you would like more information on our mussel survey capabilities.

**ENR's National Rankings** We are pleased to share the following 2005 national rankings by *Engineering News-Record* (ENR) for Gannett Fleming. We are honored to be recognized and consistently ranked among the nation's top engineering firms.

2005 Rank	ENR Category	2005 Rank	ENR Category
#9	Top 15 in <b>Dams and Reservoirs</b>	#16	Top 100 " <b>Pure</b> " Designers
#9	Top 25 in <b>Mass Transit/Light Rail</b>	#16	Top 25 in <b>Bridges</b>
#14	Top 50 in <b>Transportation</b>	#18	Top 25 in <b>Water Supply</b>
#15	Top 25 in <b>Highways</b>	#42	Top 500 <b>Design Firms</b>
#15	Top 25 in <b>Water Treatment/Desalination Plants</b>	#75	Top 200 <b>Environmental Firms</b>



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