

#= WHKS & CO. =#

ENGINEERS ■ PLANNERS ■ LAND SURVEYORS
Shaping the Horizon

April 2006



Steve Lentz, WHKS survey technician, observing a GPS point for an Iowa survey project.

On-Call Survey for State of Iowa

In 2005, WHKS was selected by the Iowa Department of Transportation (Iowa DOT) to provide “on-call” engineering survey for improvement projects at various locations throughout Iowa. The selection was based on staff qualifications, experience, past performance, availability, software and technology compatibility with Iowa DOT. WHKS has provided services to the Iowa DOT for 47 years.

The Office of Design and WHKS work together to determine the specific scope of services required on a project-by-project basis. The WHKS survey process for these projects was developed to cover all aspects and complexities that could be expected, and was tailored to meet the specific requirements of the Office of Design. The survey data that WHKS collects in the field is processed to create documents and computer files, meeting Iowa DOT requirements for file naming and formats.

The initial projects have included topographic survey for a variety of projects across the state, both in high-traffic urban areas and in difficult terrain in rural parts of Iowa. Survey projects have included:

- Bridge deck replacement for the bridge over the IAIS Railroad for the southbound IA 141 entrance ramp to I-80/I-35 in Polk County
- I-80 dual bridges over the IAIS Railroad in Adair County
- Bridge replacement for IA 92 bridge over West Nodaway River in Cass County
- I-29 dual bridges over the Boyer River in Harrison County
- IA 183 culvert and stockpass replacement in Harrison County
- U.S. 30 bridge over Mud Creek in Harrison County
- IA 187 culvert and drainage survey in Fayette County

Additional survey work is anticipated over the three-year contract period.

WHKS & Co. publishes this newsletter for our clients and friends. For more information about our company, please contact us:

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Bridge Painting/Cleaning on I-80

WHKS & Co. recently provided construction observation and monitoring services to document general compliance with the plans and specifications for bridge painting and cleaning for the Iowa Department of Transportation (Iowa DOT). The bridge is located on Interstate 80 over the Missouri River between Council Bluffs, IA and Omaha, NE. The project started in early July of 2005 and was completed in mid November.

Thirty years of salt, chemicals, and weathering had caused the original lead based coating system to deteriorate and allow the steel to rust around deck joints and drains. The contractor worked an average of ten hours a day, seven days a week to shot blast one hundred eighty-three thousand (183,000) square feet of existing paint and rusted surface and then repaint the areas with a new three coat paint system. The contractor utilized a containment system, suspended from the bridge seventy-five feet above the water, and filtration systems to safely remove and dispose of lead paint dust and blast media.

WHKS & Co. worked with the contractor and local Iowa DOT offices to finish the three million-dollar project before winter weather would cause a shut down for the season.



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Work Begins on Manufactured Home Park in Ames, Iowa

WHKS is working with Dayton Park LLC on a 24-acre affordable housing development in Ames, Iowa. Unlike many existing manufactured home parks in the Ames area, residents of the proposed Four Seasons Park will benefit from paved streets, public water and sewer, a club house, a swimming pool, and a recreation park. The park is located close to businesses and to a new Des Moines Area Community College Career Academy Center. WHKS is providing engineering and survey services on the project.

The project site was formerly zoned for agricultural use and has been re-zoned for the residential development. Preliminary design of the subdivision takes into account the lot sizes based on the sizes of building pads for single-wide and double-wide manufactured homes. The Preliminary Plat and Stormwater Management Plan have been approved by the local government.

Downtown Streetscape Improvements Continue in Clear Lake, Iowa

Beginning in 1992, the City of Clear Lake embarked on a phased development program to upgrade and improve the infrastructure facilities in the downtown area. The area encompassed one block on both sides of Main Avenue and extended from 8th Street to the shoreline of Clear Lake.

Improvements consist of total street reconstruction; sanitary sewer, water main and storm sewer replacements; brick paver sidewalks; and period street lighting. The streetscape improvements have been completed in phases to minimize impacts on the project area businesses. Construction work is typically scheduled for late fall for underground work and early spring for street paving work. This schedule avoids the summer months of June, July and August, which are the critical business months for downtown merchants.

Two phases are currently underway. Construction work on 1st Avenue North began in the Fall of 2005 and will be completed with street paving in the Spring of 2006. Improvements on 1st Avenue South have recently been authorized with underground work scheduled for this fall and street paving in the Spring of 2007.

With the completion of the 1st Avenue South improvements, a total of eight phases will be completed over a fifteen-year period. The eight phases incorporate an area of approximately ten square blocks.

The implementation of a phased approach to a large scale downtown streetscape program has proven to be a success for Clear Lake. WHKS appreciates the opportunity to partner with the Clear Lake City Officials and staff to schedule and implement construction of the identified streetscape improvements.

New River Pointe Development in Dubuque, Iowa

WHKS was retained by River Pointe Development LLC, a private development group, to perform traffic engineering services for a 15-acre development on Mazzuchelli Place in Dubuque, Iowa. The project area is the site of the former St. Dominic Villa. The proposed development will include two twelve-story condominium buildings on Kelly's Bluff, overlooking the Mississippi River.

The City of Dubuque required a Site Traffic Impact Study for the project because of the potential for increased vehicular traffic in the project area. WHKS performed traffic counts at six intersections within the project area, estimated the trips that will be generated, analyzed intersection capacities and developed the Site Traffic Impact Study.

The results of the Site Traffic Impact Study were presented to the City of Dubuque Zoning Advisory Commission and the Dubuque City Council. The project also included coordination with the developer, interested citizens and City staff.

"WHKS was really responsive to requests for additional information made by City staff during the re-zoning process. They were instrumental in helping River Pointe obtain the re-zoning approval from the City of Dubuque," said George Murphy, project manager for River Pointe Development LLC.

Completion of the first building is planned for 2007. In addition to traffic engineering services, WHKS will provide civil engineering services required for the completion of the multi-million dollar development.

New Springfield, Illinois Office Location

WHKS is excited to announce the addition of Scott D. Sanford, P.E., S.E., as the Office Manager of its new office location in Springfield, Illinois. Scott has 15 years of engineering experience, primarily in bridges, building structures and project management. He will be involved with the planning, design and management of roadway, bridge and structural projects in the downstate and Springfield areas. The Springfield office will also provide bridge and structural engineering support for our East Dubuque office on projects in the northern areas of Illinois.



Scott D. Sanford, P.E., S.E.

Scott has a B.S. Degree in Civil Engineering from the University of Illinois at Urbana-Champaign. Scott also enjoyed 10 years with the Illinois Department of Transportation in the Bureau of Bridges and Structures. While employed at Illinois DOT, he held various positions and worked on a wide variety of bridge design, planning and repair projects throughout the state. Most recently, he was the Chief Structural Engineer for a consulting firm in the Springfield area. In addition to his extensive bridge engineering experience, Scott also has a variety of building structural design, geotechnical engineering, hydraulic analysis and project management experience. He is a licensed Professional Engineer in Illinois, Iowa and Colorado and a licensed Structural Engineer in Illinois.

Also joining the Springfield office is Cory W. Chamberlain, P.E., S.E. Cory has nine years of experience as a structural design engineer and project manager. Mr. Chamberlain has a B.S. Degree in Civil Engineering (Specialization: Structures) from Southern Illinois University at Carbondale. Prior to joining WHKS & Co., he was the Structural Department Manager for another Central Illinois consulting firm where he participated in, or managed, a variety of bridge, roadway, building and hydraulic projects in Illinois.

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Is Your Sewer & Water System Experiencing “Growing Pains”?

The City of Rochester, Minnesota has experienced rapid population growth in recent years as a result of expanding industry and a high quality of life in a small metropolitan area. The City consistently appears at or near the top of several of the nation’s “Best” or “Most Livable” Cities’ lists.

Because of wastewater capacity needs, WHKS was retained by the City of the Rochester to design a 60-inch diameter relief line approximately 2,000 feet long through a residential area, a park area, and a crossing of State T.H. 63, as the first phase of extending a new interceptor sewer to the City’s Water Reclamation Facility. The project was completed in late 2005.

The City also hired WHKS for the second phase of sanitary sewer trunk line construction. Phase Two required the design of a 66”-diameter sewer extending approximately 9,000 feet along the Zumbro River from the end of the first phase to the treatment plant. The project includes three river crossing siphons, metering facilities, a trenchless construction segment, and environmental and endangered species issues. The project is currently in final design stages and is scheduled for construction later in 2006. The total estimated cost of the two projects is \$10 to \$12 million.

WHKS & Co. has worked closely with the City of Rochester to coordinate activities on both projects. In addition to plans and specifications, the work has also included survey, erosion control plans, and landscape restoration. WHKS was also hired to perform construction staking and construction observation.

Many expanding communities are experiencing “growing pains” in relation to their water and sewer systems. For information regarding municipal system upgrades, please contact WHKS.



Part of the 2006 project area in Rochester, Minnesota.