Innovative Bridge Construction Method Shortens Detour Time Period

ROWE staff saw firsthand how offsite bridge construction successfully minimized disruption to some popular vacation destinations last summer. ROWE performed construction engineering for removal and replacement of the M-25 bridge over Mill Creek in Sanilac County, MI for the Michigan Department of Transportation-Huron TSC. The bridge was replaced with a prestressed, concrete box beam and precast deck that were constructed in Grand Haven. Using this method allowed onsite construction to begin much later in the typical summer construction season, decreasing its effects on vacation and tourism travel. The nearest paved road detour sends drivers 12 miles out of their way. The method also shortened construction by approximately two weeks.

Click here to watch MDOT's time-lapse video of the M-25 Bridge construction.

The $2.6M project also included scour countermeasures, relocating the adjacent water main to accommodate the wider bridge, and approach work.

Shown above is the completed project.

Above, precast beams are placed on temporary abutments at Anlaan Corporation's yard in Grand Haven.

Above, precast deck segments are placed. Anlaan Corporation utilized two cranes to place the beams onto the abutments.

Above, the deck was designed to be diamond ground to achieve a consistent driving surface. Anlaan Corporation's construction methods yielded a finished product that fit well together. Their as-constructed tolerances achieved a finished surface that did not require the deck to be diamond ground.

ROWE Chief Operating Officer Richard S. Mark, PE, Retires

ROWE announces the retirement of Chief Operating Officer Richard S. Mark, PE, after a 38-year engineering career and many wonderful contributions to the industry. Rick began his career as a survey crew member for ROWE in 1972 while he was still in high school. He earned a B.S. in civil engineering from Michigan State University in 1978 and was promoted to civil engineer at ROWE in 1979. From 1981 to 1992, he served as the City of Westminster, CO's city engineer. While there, he earned an M.B.A. from the University of Colorado in 1986.

Richard S. Mark, PE

Rick rejoined ROWE in 1992 as a project manager and was named vice president and principal in 1996. He became the company's chief operating officer (COO) in 1999. By the time he retired on January 1, 2017, he had served in almost every engineering-related position at the company.

During his time at ROWE, he managed several notable projects, including the design for the development of the Genesys Health Park campus in Grand Blanc, MI and the AutoWorld demolition/transformation in Flint, MI. As COO, he assisted with several strategic acquisitions as the company grew and he worked diligently to update/refine the annual operating and capital investment budget.

Rick's community involvement included serving on the Junior Achievement of Greater Genesee County Advisory Board, several Flint and Genesee Regional Chamber of Commerce committees, and the Flushing City Council.

ROWE greatly appreciates Rick's many years of service to the company and wishes him the best as he and his wife spend more quality time with their grandchildren and traveling.

Award-Winning Road Reconstruction Adheres to Compact Schedule

Above is a section of Almont Avenue prior to beginning the project; at right is the same area after completion.

Quick and efficient design and permitting allowed ROWE to ensure Imlay City, MI's Almont Avenue project was constructed before the start of the school year. The $946K project included removing existing curb and gutter and pavement; constructing new storm sewer and sanitary sewer; replacing existing older water services and hydrants; installing new curb and gutter and sidewalk; and paving with hot-mix asphalt.

Considered an enhancement to the community, the new road section includes two travel lanes and two new dedicated bike lanes. Energy-provider DTE installed decorative LED lighting that will be low-maintenance to the city.

The design agreement for the 1,950-foot project was approved on February 16. ROWE completed the survey and design, obtained permits, and issued the project for bids in a mere nine weeks. ROWE also performed construction engineering, working closely with prime contractor Diponio Contracting, Inc. to keep the project on track and minimize the detour time for this gateway street to the city. Construction began June 27 and was open to traffic Aug. 26 – a short construction time for a project of this size.

The project received a 2016 Merit Award from the Asphalt Pavement Association of Michigan in the Urban Street Projects category.

Sucessful Grant Applications Total $4M+ for Recreation Projects

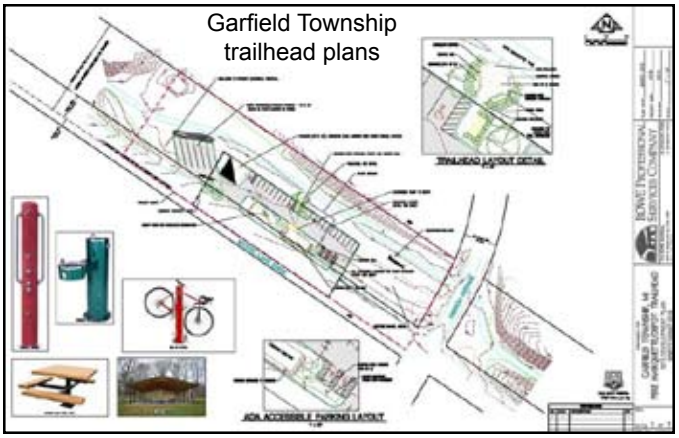
ROWE's grant application expertise resulted in six Michigan clients receiving or having funding approved for recreation projects in 2016/2017. Following is a list of organizations, their projects, whether the funding source is the Michigan Department of Natural Resources (MDNR) or Michigan Department of Transportation (MDOT), and the amount of the grant. One project also received Congestion Mitigation and Air Quality (CMAQ) funds.

- City of Clio: City Park Trailhead and Restroom Development (MDNR) $262K
- City of Davison: Jack Abernathy Park Basketball Court Renovations (MDNR) $45K
- City of Flushing: Trailway Extension (MDNR) $300K
- Garfield Township: Lake Station Trailhead (MDNR) $228K
- Genesee County Parks & Recreation: Iron Belle Trail (MDNR) $300K
- Genesee County Parks & Recreation: Flint River Trail - Genesee Road to Vassar Road (MDOT & CMAQ) $960K
- Genesee County Parks & Recreation: Hegel Road Acquisition (MDNR) $540K
- Mid-Michigan Community Pathways: City of Ithaca to Cities of Alma / St. Louis Segment (MDOT) $2M

ROWE is continuing to work with these clients to complete some of the unfinished projects.

Please contact your project manager or Director of Landscape Architecture Douglas R. Schultz, PLA, at 800-837-9131 or DSchultz@rowepsc.com to explore funding options for your recreation project.

Mid-Michigan Community Pathway



Garfield Township trailhead plans

Challenges Conquered to Replace Pontiac's Featherstone Bridge

Significant work added to the original project scope and unexpectedly discovering underground fiber optic cables in the construction area were a couple of challenges the ROWE team overcame to successfully replace the Featherstone Road Bridge in the City of Pontiac, MI.

ROWE performed construction engineering to remove and replace the Featherstone Road Bridge with a precast, concrete box culvert. After the project began, the Oakland County Water Resources Commissioner added water main replacement to the project. During construction, underground fiber optic cables were discovered. Prime contractor Dan's Excavating had to lower the cables to be able to complete the project. The team's efficient use of time and resources allowed them to complete the extra water main work and spend the time necessary to lower the cables without an extensive delay in the schedule.

The $1.2M project also included earthwork and concrete paving on Featherstone Road at Grand Trunk Western Railroad. The city is in the process of acquiring the railroad right-of-way with the goal of making it part of the local rails-to-trails system.

Shown above is the completed project.

Concrete sidewalk was placed on the inside of the culvert for the future multi-use path.

Martin J. Concrete utilized a concrete paver to place the four outside lanes of pavement on the five-lane-wide concrete roadway; the center lane was hand-paved.

The three-span bridge over the abandoned CSX rail road line was replaced with a 16-foot by 12-foot box culvert for a future multi-use path. Dan's excavating was constrained by the transmission power lines that flanked each side of the culvert and 10 fiber optic lines that were temporarily supported by wood poles.

Staff Updates

- **Scott F. Dengate** joined ROWE as a survey crew chief in the Survey Department in the Lapeer, MI office. He has nearly 20 years' land surveying experience.
- **Jeremiah L. Harrington** joined ROWE as a survey office technician II in the Survey Department in the Flint, MI corporate office. He has an M.S. in integrated geospatial technologies from Michigan Technological University and one year of experience as a remote sensing and GIS research intern.
- **Jonathan D. Lidgard, PE,** joined ROWE as a project engineer in the Transportation Division in the Flint, MI corporate office. He has a B.S. in civil engineering from the University of Toledo and six years' bridge engineering experience.
- **Katie E. Lambert** joined ROWE as a graduate engineer in the Land Development Division in the Flint, MI corporate office. She has a B.S. in environmental engineering from Michigan Technological University and experience gained from internships for the Michigan Department of Transportation and a Michigan township's public works department.
- **Steven D. McKinnon, PE,** joined ROWE as a project engineer in the Transportation Division in the Flint, MI corporate office. He has a B.S. in civil engineering from Lawrence Technological University and 10 years of civil engineering experience.

For questions about these projects and more, contact Director of Corporate Marketing Jack Wheatley, PE, at JWheatley@rowepsc.com or (800) 837-9131.

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