



IN PROGRESS

US-23 Flex Route Segment 3 & 4

BRIGHTON, MI

To relieve congestion in and out of the Ann Arbor area, the existing flex lane is being extended south through the I-96/US-23 interchange.

The biggest challenge for this project is the complexity of the staging. Broken up into four segments with eight stages for each, every stage has certain items of work that need to be completed during a particular traffic configuration and many times those items may overlap in adjacent segments. We are currently in Year 1 of the project which includes the majority of the work in Segments 3 and 4.

SEE MORE on pg. 4

INSIDE THIS ISSUE



Wastewater System Improvements

The Village of Columbiaville is revamping their wastewater systems! ROWE assisted with the grant application, design, surveying, construction observation, and engineering.



Reality Capture Service Line

ROWE is now providing Reality Capture services with our new static and SLAM based liDAR collection and processing technologies.



Genesee Road Bridge

The new steel girders have been placed on the east half of the bridge and concrete work is ongoing. This project is on schedule to be completed in September.



GRAND OPENING OPTIMIST SKATE PARK

NEW SERVICE LINE ADDED



Dreams have become a reality! Located in the City of Port Huron, the new Optimist Skatepark is now open to all skaters and riders. This highly anticipated park has had great turnout and we are proud to have been a part of this community project.

A MESSAGE FROM OUR CEO



Leanne H. Panduren, PE, F.NSPE

This edition includes a variety of projects showcasing several of our service areas. We are also excited to introduce our NEW 3D scanning/reality capture capabilities. The one constant between the stories is our goal to find solutions for our clients and serve the public. Even after almost 30 years of doing this work, the most fulfilling part of my job remains solving a problem for our clients or helping them meet a need in their community. Civil engineering drew me in from the start when I was in middle school because I liked the idea of being part of the team figuring out how to get a project completed. At that time, I thought I would be performing structural building design, but after a few classes and a summer internship, I quickly realized my real interest in the area of road and infrastructure design and construction.

While the problem-solving part of engineering is what drew me in, I found that working with clients and improving communities for the public is what made me love this career. Driving through projects, utilizing recreation areas, or even hearing about how the improvements to infrastructure have improved the quality of life for residents and business owners all make what we do worthwhile. There are several types of challenges to be faced during planning, design, and construction. From determining the timing and funding for projects, to addressing current and future community goals during design, to dealing with the unknown things often found during construction, we collaborate with our clients to figure out how to make all the puzzle pieces fit. ROWE has always been committed to not just working for our clients but instead being an active member of the communities in which we work and live by working together to achieve their goals.



STAY CONNECTED
WITH EVERYTHING ROWE





US-23 FLEX ROUTE LIVINGSTON COUNTY

\$162M INVESTMENT

7.5 MILES



To relieve congestion in and out of the Ann Arbor area, the existing flex lane is being extended south through the I-96/US-23 interchange. The project includes construction of 7.5 miles along US-23 in Livingston County consisting of:

- **Shoulder widening for the flex route lane**
- **Construction of crash investigation sites**
- **Interchange configurations**
- **Bridge replacement**
- **Bridge rehabilitation**
- **Widening of 9 structures**
- **Retaining walls**
- **Sound wall**
- **ITS infrastructure**

The biggest challenge for this project is the complexity of the staging. Broken up into four segments with eight stages for each, every stage has certain items of work that need to be completed during a particular traffic configuration and many times those items may overlap in adjacent segments. We are currently in Year 1 of the project which includes the majority of the work in Segments 3 and 4.

Segment 3 - US-23 from Lee Road to I-96

Segment 4 - I-96 to just north of Spencer Road

Upon completion, the southbound flex lane will be utilized during the morning rush hour, while the northbound flex lane will be utilized during the afternoon rush hour. Ultimately alleviating traffic congestion during peak hours, this \$162,000,000 investment will improve mobility for everyday users and help with special events like our Michigan football games!



AUGUST PROGRESS
US-23 AND LEE ROAD



AUGUST PROGRESS
US-23 AND LEE ROAD



AUGUST PROGRESS
US-23 AND LEE ROAD

GENESEE ROAD BRIDGE



Flint River

OPENING SOON!

The new steel girders have been placed on the east half of the bridge and concrete work is ongoing. Genesee Road will be maintained in its current configuration through the rest of Stage 1, then traffic will be shifted onto the new half of the bridge for Stage 2. The project is on schedule to be completely open to traffic September 15, 2023.



SEPTEMBER 2023

Why is this bridge being replaced?

There is ongoing deterioration that limits the load capacity of the existing structure. The improvements will restore full capacity, allowing unrestricted flow of industrial, commercial, emergency, and residential traffic along the corridor.





REALITY CAPTURE

3D MODELING & SCANNING

ROWE is now providing Reality Capture services! With our new static and Simultaneous Localization and Mapping (SLAM) based LiDAR collection and processing technologies, we are able to provide enhanced services to the following:

- High Accuracy LiDAR Surveying
- Civil Engineering Applications
- Reverse Engineering
- Aerial Imaging for Forensic Building Inspection
- BIM Modeling: Architectural Applications, Mechanical/Electrical/Plumbing, Structural

LiDAR provides a unique method for acquiring 3D data in the field and can be used for most architectural, civil, transportation, industrial, commercial and energy applications. Our team provides LiDAR services in all four of its formats: mobile, stationary, SLAM and aerial. Our ability to analyze and extract information is past the standard for most providers allowing us to be a one stop shop for complicated projects.



EMAIL: mpfaff@rowepsc.com
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MEET MICHAEL PFAFF

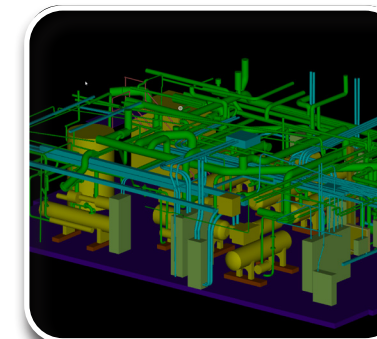
Michael Pfaff, has worked nationally in the survey and mapping industry since 1998 with a degree in Surveying Sciences. Spending the first 10 years of his career in conventional surveying projects and construction surveys, in 2008 he focused his career specifically on remote sensing through lidar and imaging. Mike is an active FAA certified sUAS remote pilot, certified thermographer, photographer, and is serving as ROWE Professional Service Company's Remote Sensing Project Coordinator. Career project types vary from Building Application Model (BIM), Civil,

Monitoring and Analysis, Fabrication and Constructability, Reverse Engineering, Visualization, Historic Preservation, and Forensics. As an active professional in this field, he deploys technologies in interesting and practical ways.

"I have a real connection to this field and technology. The ability to create a replica of a site digitally, accurately, safely, effectively, and efficiently to impress a client is critical. Knowing how to consistently provide this service, identify and circumvent obstacles, and coordinate the project effectively to surpass the project objectives is the key to success. Each project is unique and attention to the detail is important. Truly listening to the client and all the stakeholders involved downstream to verify all objectives and deliverables of the project is the "Secret Sauce".

BENEFITS OF REALITY CAPTURE

- Easily measure difficult dimensions in the field
- Capture highly accurate measurements
- Reduce overall modifications or rework time
- Archive and verify current conditions
- Shorten project schedule and costs
- Access confined spaces
- Fast, accurate, efficient
- Solve safety concerns
- Low site impact



WASTEWATER SYSTEM IMPROVEMENTS

VILLAGE OF COLUMBIAVILLE, MI

The Village of Columbiaville is revamping their wastewater systems! Along with improvements to the wastewater lagoons, a new primary submersible pump station with a dedicated backup generator, supervisory control and data acquisition system, and other updates has been installed.

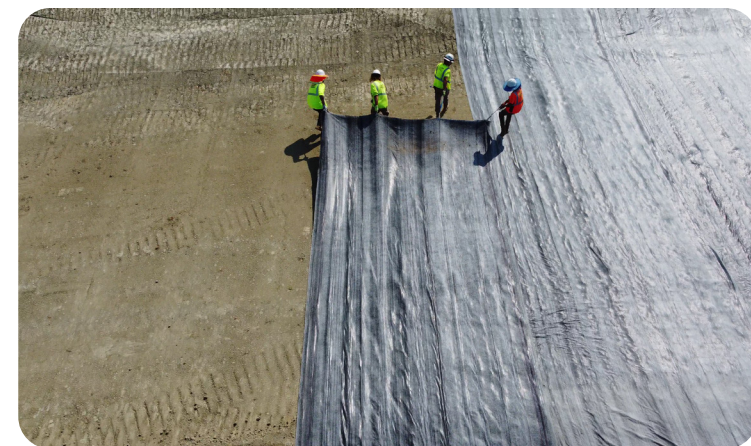
ROWE assisted with the grant application, design, surveying, construction observation, engineering, and contract administration. Utilizing \$3M in Clean Water State Revolving funds, the project included the new lift station and lining of lagoon cell two. Lining of this cell

was required by the Michigan Department of Environment, Great Lakes, and Energy to protect the groundwater. Cell two was emptied, sludge was removed, discharge and inlet feed pipes were replaced, dual liners were installed, and the cell will also be tested for integrity. Valves on the inlet splitter box and discharge control structure will also be replaced to allow village staff to control flow into the lagoons.

Keeping the existing lift station in service while constructing the new one presents multiple challenges. The lift station site is relatively small with houses on each side, a street in front, and the

Holloway Reservoir in the rear, leaving no room for storage of materials or staging of equipment. With the lift station located directly across from the elementary school and playground, keeping the site secured to prevent accidents is very important.

With the last lift station constructed in the 1970s, these positive changes were due. The new lift station will allow the Department of Public Works to focus on other needs and the lining of the lagoon will prevent groundwater contamination to maintain the highest quality water services.



METAMORA CAPITAL IMPROVEMENT PLAN



To gain perspective on current water, sewer, public works, parks, and village facility needs, the Metamora village council utilized ROWE for their Capital Improvement Plan. Completed in April, this plan helped the council understand the full picture as they prepare for upcoming budgets and determine how to find sources for funding. With the goal to maintain village assets, ROWE assembled a five-year plan for budgeting the improvements.



TEAM ROLES

Paul T. O'Meara, PE

- Interviewed staff for initial project review
- Pulled the team together to assist
- Visited village hall and Department of Public Works property
- Interviewed staff to develop a list of current maintenance and upgrades needed to properties

Douglas R. Schultz, PLA

- Visited park sites
- Interviewed staff
- Reviewed old master plans to develop a current list of parks projects

Douglas A. Scott, PE

- Visited site
- Interviewed the village's water and sewer operations contractor
- Developed a current list of needed projects to keep the systems running

Samantha M. Hoover

- Inspected all streets
- Developed a PASER list rating all current road conditions and listed suggested improvements



SANITARY SEWER MASTER PLANNING

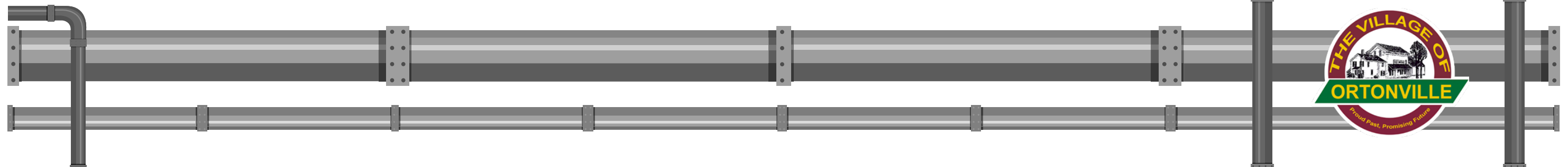
VILLAGE OF ORTONVILLE, MI

To accommodate the Village of Ortonville's future land use plan and to help the village with their downtown development goals, ROWE conducted an update to their **2004 Wastewater Facilities Study**. The study reevaluated installing a low-pressure sewer collection system to connect the village to the proposed

Northwest Oakland County Interceptor, including identifying the overall service area, projecting wastewater flows, preliminary design and layout of the system, developing an engineer's opinion of probable construction cost, construction phasing considerations, and public meeting and input.

The Village of Ortonville is currently serviced by septic systems. Due to existing soil and groundwater conditions, many of the septic systems cannot be conventional systems. The village desires to grow their downtown area, but the existing septic systems limit the amount of growth that can take place. The proposed

low-pressure collection system was sized to accommodate these growth plans and allow these goals to be achievable.





CONWAY, SC | SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION (SCDOT)

ROWE is thrilled to be working with the South Carolina Department of Transportation (SCDOT) for the first time! The Conway area is gaining a new 200 site RV campground with amenities.

The ROWE team is performing right-of-way mapping, boundary survey, and topographic survey for the engineering firm performing the site design of the Crooked Oaks RV Park.

The large scale of the project requires a turn lane to be added to South Carolina Highway 544 to access and leave the site, as well as additional right-of-way for the turn lanes. The new lane allows the RVs more space to turn on the busy highway. ROWE produced a plat showing the area of right-of-way being acquired by SCDOT and placed monuments in the field for the new right-of-way. With limited campground options

in the area, the park will allow more camping enthusiasts to come into town and enjoy!



ROWE

SUMMER EVENTS



STAFF UPDATES

Q3 2023

NEW HIRES

- **Michael E. Pfaff**
Remote Sensing Project Coordinator
- **Justin R. Balcer**
Graduate Engineer
- **Brandon D. Hamel**
Engineering Technician I
- **Matthew J. Craft**
Engineering Technician II
- **Matthew D. Keyes**
Graduate Engineer
- **Andrew J. Holmes**
Engineering Technician III
- **Josie A. Wagner**
Marketing Assistant

PASSED PE EXAM

- Tyler A. Kearly, PE

CAREERS

We recognize talented, self-motivated, and open-minded professionals are the key to ROWE's continued success and growth.

- Competitive benefits
- 401(k) with company match
- Telework opportunities
- Flex time scheduling
- Paid holidays
- Generous PTO program
- Overtime pay

Email: employment@rowepsc.com
ROWE is an Equal Opportunity Employer.



Summertime at ROWE is filled with outdoor social events! This year, we enjoyed an afternoon at a Lansing Lugnuts game, spent a day on the greens at the Wheatfield Valley Golf Course, and hosted a family picnic in Lapeer!

FUN FACTS

ESTABLISHED

1962

PROFESSIONALS

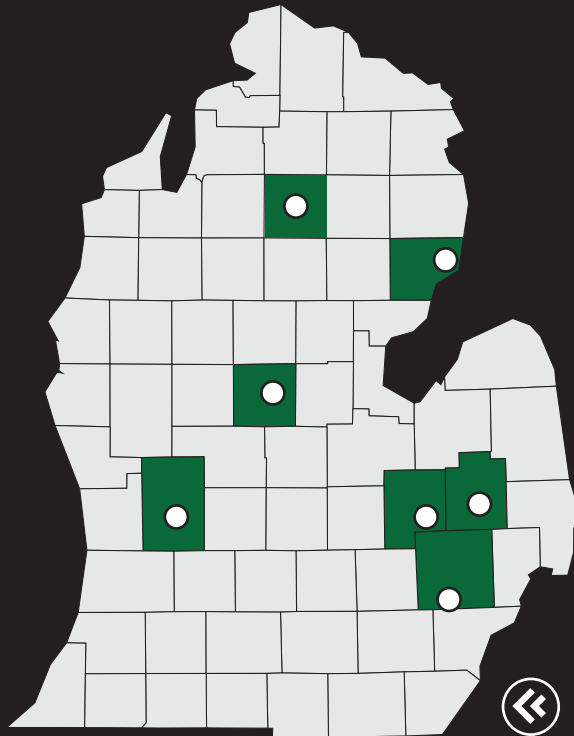
220+

LOCATIONS

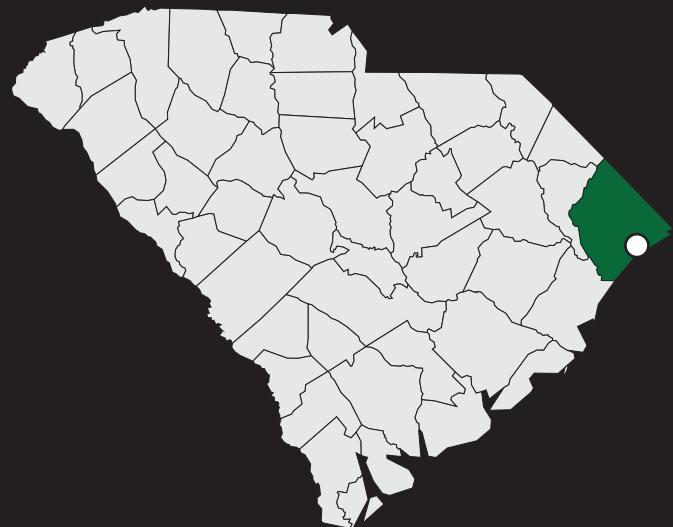
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ENR TOP 500

#424



◀ MICHIGAN



SOUTH CAROLINA ▼

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Flint, MI 48502
(810) 341-7500

Lapeer, MI

128 N. Saginaw Street
Lapeer, MI 48446
(810) 664-9411

NEW LOCATION

Grand Rapids, MI

507 36th Street SE
Grand Rapids, MI 49548
(616) 272-7125

Farmington Hills, MI

27280 Haggerty Road, Suite C-2
Farmington Hills, MI 48331
(248) 675-1096

Mt. Pleasant, MI

127 S. Main Street
Mt. Pleasant, MI 48858
(989) 772-2138

Grayling, MI

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Oscoda, MI

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