



I-69 Reconstruction
#rebuildingmichigan

Flint, MI



In November of 2020, ROWE was selected to provide full construction engineering services on I-69 from Fenton Road to M-54 (Dort Highway). Our scope on the project includes engineering, inspection, testing, and staking services.

Michigan Governor, Gretchen Whitmer, visited this project in June to discuss the Rebuilding Michigan initiative that aims to improve Michigan highways and bridges. Governor Whitmer focused her attention on the I-69/I-475 Interchange, which is considered one of the most critical aspects of this project, as it handles approximately 250,000 vehicles each day.

Continued on pg. 2

Inside this issue



Red Oaks Waterpark

In June 2021, ROWE completed the design & construction of the new Red Oaks Waterpark Splash Pad located in Madison Heights.



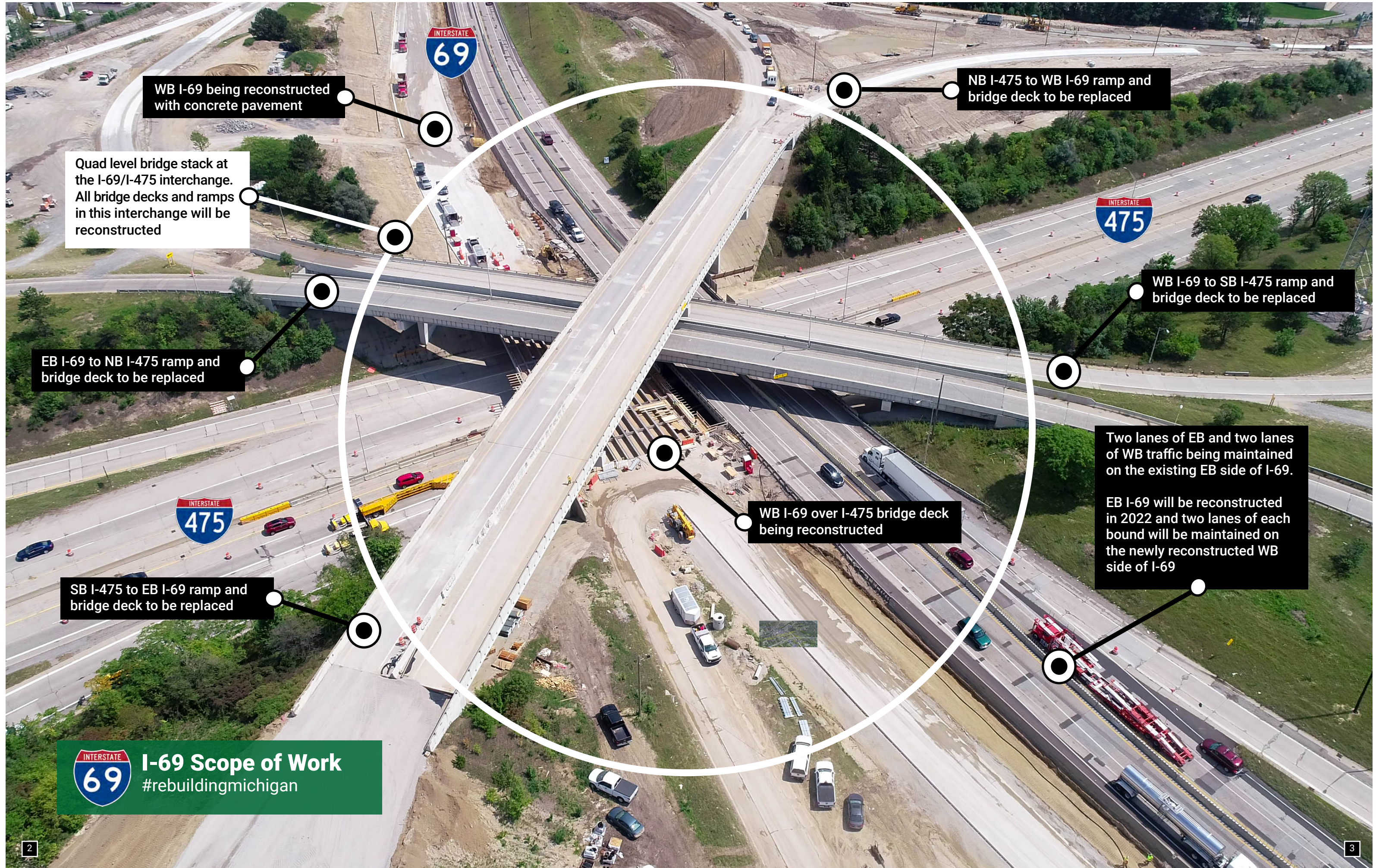
Jackson Pedestrian Bridge

ROWE has been leading the Jackson bridge project involving approximately 0.75 miles of a 10-ft wide concrete shared use path, pedestrian bridge, ADA accessible ramps, and select drainage and sidewalk improvements.



Caro Farmers Market

ROWE was selected to provide both design & construction engineering services to the City of Caro Downtown Development Authority (DDA).



WB I-69 being reconstructed with concrete pavement

NB I-475 to WB I-69 ramp and bridge deck to be replaced

Quad level bridge stack at the I-69/I-475 interchange. All bridge decks and ramps in this interchange will be reconstructed

WB I-69 to SB I-475 ramp and bridge deck to be replaced

EB I-69 to NB I-475 ramp and bridge deck to be replaced

Two lanes of EB and two lanes of WB traffic being maintained on the existing EB side of I-69.
EB I-69 will be reconstructed in 2022 and two lanes of each bound will be maintained on the newly reconstructed WB side of I-69

WB I-69 over I-475 bridge deck being reconstructed

SB I-475 to EB I-69 ramp and bridge deck to be replaced

INTERSTATE 69 I-69 Scope of Work
#rebuildingmichigan









I-69 Reconstruction | Flint, MI

Funded by Rebuilding Michigan, this project is an investment of more than \$100,000,000 that includes over two miles of freeway concrete road reconstruction along with storm sewer, traffic signal modernizations, freeway lighting, ADA ramp upgrades, rehabilitation of 19 bridges, pavement markings, and maintenance of traffic on I-69 from Fenton Road to M-54 including the I-69/I-475 interchange in the City of Flint, Genesee

County. Differentiating itself from previous I-69 work, this project has a portion of existing roadways that are built over the What Cher Coal Mine. During the reconstruction of EB I-69, our team will complete investigations of the access shafts to ensure that they are properly sealed prior to placing concrete pavement.

Project Details

- | | |
|---|---|
|  2.19 mi. of freeway reconstruction |  Storm sewer replacement |
|  Freeway lighting |  Traffic signal modernization |
|  ADA ramp upgrades |  Rehabilitation of 19 bridges |

ROWE's top priority is always the safety of the team and community members. Along with the safety precautions that are taken based on every project's unique task, it is important to discuss the safety of the team while working within a few feet of live traffic.

Members of the ROWE Engineering team, Michael Royalty, Nate Whiting, and Brian Sarkella met with officials from the Michigan Department of Transportation (MDOT) and representatives from the American Traffic Safety Services Association (ATSSA) along with Michigan House of Representatives, Tim Sneller and John Cherry, and Montel Meniffee from the office of Michigan Senate Minority Leader Jim Ananich, on this project.



The meeting focused on the safety of both workers and motorists within work zones. Demonstrating first-hand how close workers can be to live traffic, our engineers promoted awareness of the speeding issues in the state. ROWE continues to be a proponent of increased enforcement in work zones to prevent unnecessary tragedy and gain better overall compliance.

The main challenge for this project is the sheer size and complexity of the work. When coordinating bridge work, it is important to evaluate the effect it will have on the corresponding road work. Juggling both road and bridge work is one of the most difficult



"Major construction activities are currently scheduled to be completed in the fall of 2022."

- Michael Royalty | Senior Project Manager

challenges when dealing with a project of this magnitude. ROWE must ensure that the bridge work does not have any impact on the construction of the road. If a bridge deck gets demolished before the road work is completed through that bridge, the road work will be delayed.

Over the last decade, ROWE has been involved with the construction of all significant I-69 projects within Genesee County. ROWE moved the corporate office to downtown Flint in 2009, which was a major catalyst for the revitalization of the downtown area. With commitment to Flint and pride for the community, ROWE is thrilled to have been selected to manage this project for MDOT and to continue advancing Michigan and Flint's infrastructure.

Senior Project Manager, Michael Royalty, says he anticipates a 2022 completion date stating, "major construction activities are currently scheduled to be completed in the fall of 2022".



MYRTLE BEACH RIBBON CUTTING CEREMONY

Our new office in Myrtle Beach, SC is officially open! The ribbon-cutting ceremony, held by Myrtle Beach Area Chamber of Commerce, brought employees together to celebrate our newest location. Our sunshine and palm tree filled counterpart is now located at **6009 North Kings Hwy Myrtle Beach, SC 29577.**



ROWE splashes into Red Oaks Waterpark

Many families gather each year to enjoy the outdoors and good company at the Oakland County Waterparks. In June 2021, ROWE completed the design and provided construction engineering assistance for the new Red Oaks Waterpark Splash Pad located in Madison Heights. This family friendly waterpark sells out weekly, offering

multiple attractions for kids and adults alike. The new construction has 52 interactive water features with an adjacent shade structure. The splash pad replaces an older feature that included a shallow pool to operate.

For this project, we provided civil engineering design for the removal and replacement of concrete surface for this project, design support for construction access over the existing lazy river around project site, construction staking, and construction administration assistance. ROWE worked with Penchura LLC for the water feature design and JFR Architects for design of a mechanical building and new restrooms.

We are thankful to have been part of the team chosen for this project and hope to see families enjoying the park for years to come!



52 interactive water features



Summer fun in Madison Heights, MI



Waterpark Map

https://www.facebook.com/RedOaksWaterpark/?ref=page_internal



Jackson Ella Sharp Park

Beginning in March of 2021, ROWE has been leading the Jackson bridge project involving approximately 0.75 miles of a 10-ft wide concrete shared use path, pedestrian bridge, ADA accessible ramps, and select drainage and sidewalk improvements. This project is partially funded by a Safe Routes to School Grant.



View from the waterway

ROWE is providing topographical survey, permitting assistance, design engineering, construction engineering, construction inspection, and construction staking services for this project.

Located within Ella Sharp Park in the City of Jackson, this project is connected to an expansive non-motorized trail network. Ella W. Sharp donated her 530-acre farm to the City of Jackson in 1913 to be developed as a park and maintained through a trust fund from her estate.

This bridge work will connect the MLK Equality Trail to other existing trails in the park providing a safe means of travel for pedestrians by providing an alternate route than the existing roads.

Our biggest obstacle is the extensive tree clearing required to complete this project. Because of endangered species protection and seasonal restrictions, a large amount of tree cutting had to be completed in a short amount of time to meet permit requirements. Not only this, but the work for the pedestrian bridge is adjacent to state regulated wetlands and flood plains.

As of August 2021, the bridge is complete, just in time to enjoy Fall on the trails.



<https://www.facebook.com/cityofjacksonmi/photos/1597467590458810>



0.75 miles of a 10ft wide concrete non-motorized trail

Bridge connects MLK Equality Trail with other existing trails in the park





Helping You Shop Local in Caro

In 2019 and 2020, ROWE was selected to provide both design and construction engineering services to the City of Caro Downtown Development Authority (DDA).

The construction project consisted of constructing a new Market Pavilion with restrooms, a new parking lot, and related site work.

Principal items of work included:

- Pavilion and Bathrooms
- HMA Pavement
- Curb and Gutter
- Storm Sewer
- Concrete Sidewalks and Drives
- Decorative Lighting
- Landscaping

This project had a contract value of \$921,700; however, the total project value with property and engineering was roughly \$1.3 million. The project was funded by a Community Development Block Grant of \$984,700 through the Michigan Economic Development Corporation (MEDC). Caro DDA funds covered the balance.



Ribbon Cutting Ceremony

As of August 2021, the structure is complete and the new Farmers' Market is a hit amongst the community members.

The new Farmers' Market will continue to be a hit attraction in Tuscola County. The City of Caro created a newsletter featuring this construction project stating it is "expected to help revitalize the area and provide more space for farmers' market vendors" (Volume 4, Issue 4).

The new market is located at 238 South State Street in downtown Caro.

Vendors pack the market with homemade goods.



Aerial view of the new Caro Farmers Market





Creating Safe Spaces for Children in Flint

Starting in April of 2020, ROWE had the opportunity to work on the Genesee Health System's new Center for Children's Integrated Services.

This project was funded by numerous grants including CS Mott Foundation, Carl's Foundation, as well as other new tax market

opportunities. The overall project cost is an excess of twenty million dollars.

ROWE provided complete surveying and design services. Survey tasks included topographical and boundary survey, parcel combinations, road vacations, and ATLA survey. Civil design services included site plan and construction drawings with site layout, grading, utilities, drainage, permitting, traffic studies, and construction assistance.

The state-of-the-art facility consists of a two-story, 60,000-square-foot building dedicated to providing mental and physical health treatment for children in the City of Flint and Genesee County. Bill Winiarski, Chair at Greater Flint Mental Health Facilities Board, and former CEO of ROWE attended the groundbreaking ceremony.



Former ROWE CEO - Bill Winiarski

Winiarski played a vital role in the project and now the center has Children's Autism, Neurology, and Child and Family Services all under one roof. The facility also includes a playground specifically designed for use by children impacted by autism.

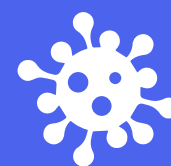
A unique requirement of this project was the need to vacate two streets to combine all the parcels. This project involved the combination and redevelopment of 17 city

lots along the Saginaw Street/I-69 corridor. Combining 17 parcels, vacating two city streets, and coordinating parallel construction schedules with MDOT's I-69 project proved to be the most challenging aspect of this project.

The new facility is expected to bring nearly 50 new jobs to the City of Flint. This investment into the community will serve our youth and support the revitalization of downtown Flint.



Genesee Health System's Center ground breaking ceremony



ROWE COVID UPDATE

Throughout this past year of uncertain times, the ROWE team has demonstrated flexibility and resilience day in and day out. It has been a series of unprecedented events from closing the offices in March of 2020 to the significant changes in field team policies.

With new guidelines steadily changing, ROWE is taking daily measures to keep the team safe while also returning to a sense of normalcy. We have successfully transitioned back into the office and are currently rolling out our new Telework Policy which will allow for hybrid home/office work locations.



South Carolina Waterway Lane Surveying

In August of 2021, ROWE performed a boundary and topographic survey for Custom Designs Marine Contracting Inc. This unique survey opportunity was completed along the Atlantic Intracoastal Waterway (AIWW) to obtain a dock and building permit from the U.S Army Corps of Engineers (USACOE). ROWE produced a plat of survey to show



Intracoastal Waterway (AIWW)

the boundary, right-of-way, and all easements and improvements on the lot. A topographic survey was performed to show all existing improvements to the parcel. To reestablish the waterway No-build line, ROWE had to identify the center of the canal prism and offset that line 125 feet toward shore.

The USACOE has platted right-of-way of the AIWW that had to be reestablished from the 1931 survey plats, making this survey opportunity stand out from a typical survey request. USACOE monuments along the AIWW were first set in 1931 and resurveyed in 1976 to establish SC State Plane Coordinates for each point. These monuments are used to establish the Center of Canal Prism, where an offset of 125 feet marks the No-build line to limit construction. Another offset of 190 feet is in place to establish the right-of-way of

the AIWW. The history of the monumentation provided a unique challenge for ROWE. The monumentation set by the USACOE is dated back to the most recent survey of 1976.

Due to residential and commercial development along the waterway, many of these monuments no longer exist today. To recover two existing monuments, ROWE teamed up with Horry County Airports to gain access the Grand Strand Airport.

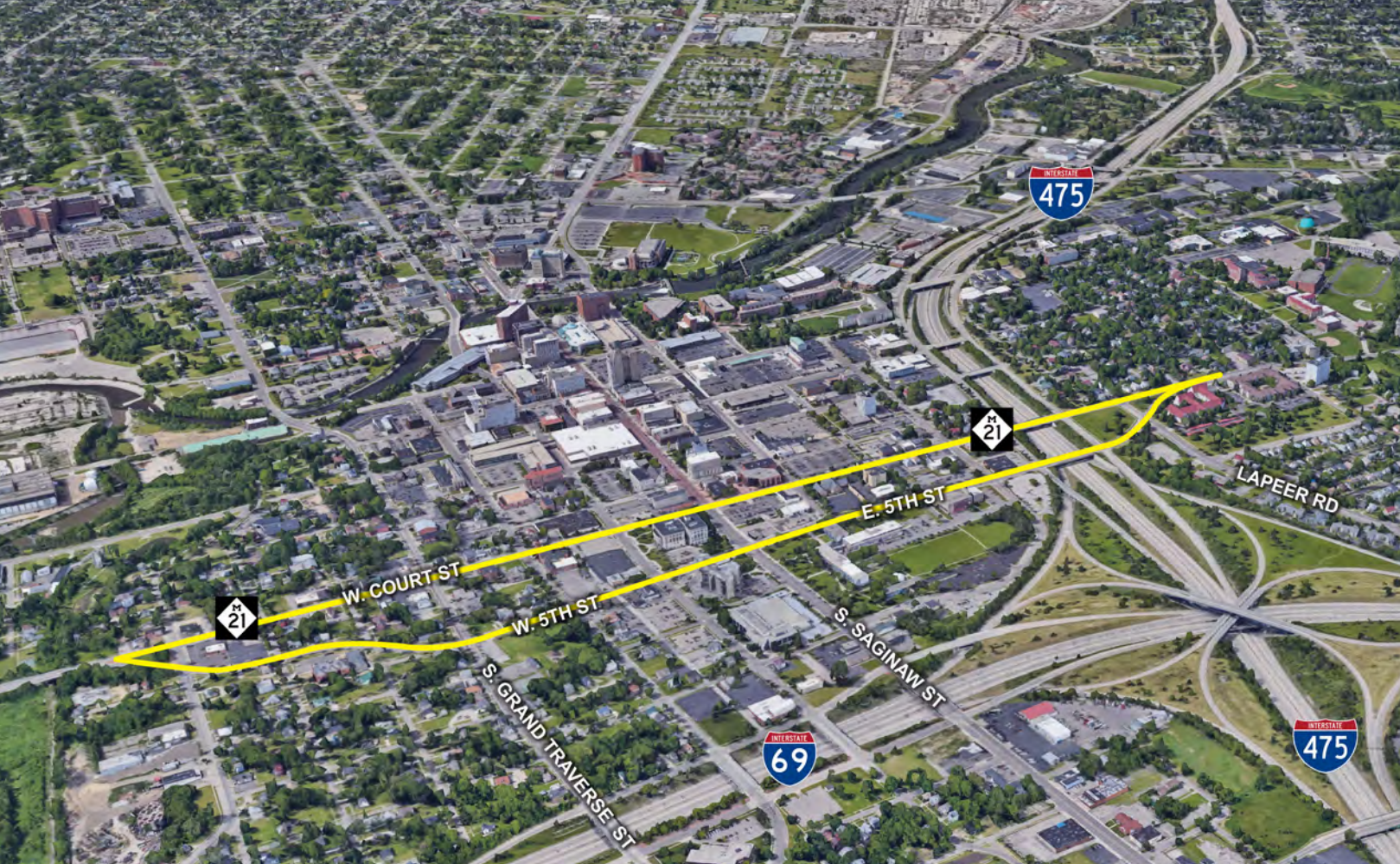
This project is a stepping stone to ultimately build an enclosed boathouse over the existing open boat slip. The space will have an open layout where friends and family can gather, along with Mr. Pringles, the pet pig.



Meet Mr. Pringles! ➡

Along the Atlantic Intracoastal Waterway





M-21 Corridor Study

ROWE's traffic engineers seek to provide solutions to corridor operations resulting in a decrease in crash likelihood and improved mobility of all road users.

Last August, ROWE began performing a traffic study for the M-21 corridor through the City of Flint from Ann Arbor Street to Lapeer Road. Alternative roadway designs were created to improve mobility and safety for all means of transportation. We aimed to create route designs that held solutions to

connectivity and safety concerns for all roadway users. Using "right-sizing", we ensured that the road size was compatible for all users while designing our alternates. Emphasis was also placed on a "Complete Streets" and "Context Sensitive Solution" mindset, where all modes of traffic are considered while keeping the surrounding area uncompromised. With M-21 currently split into two one-way pair streets for this corridor, we developed three improved alternates. These alternates included:

THREE IMPROVED ALTERNATES

- **Alternate A: One-Way Pair Restriping**
- **Alternate B: Two-Way Conversion**
- **Alternate C: One-Way Pair Reconstruction**

These alternatives ranged from short term to long term projects, with five-year to 20-year timeframes. An intersection level of service (LOS) analysis was performed for alternate A, B, and C conditions along with a no-build scenario which revealed that all intersections would operate at LOS C or better. LOS D or better is generally considered to be acceptable in an urban/suburban area with some delays.

To improve mobility, a review of the existing non-motorized network along the studied corridor was completed to identify any deficiencies in the existing facilities. Most intersections have existing pedestrian signals and crosswalks. The intersections of M-21 (Court Street) and Lapeer Road and M-21 (5th Street) and Lapeer Road do not have pedestrian signals, crosswalks, sidewalk, and curb cuts in all quadrants of the intersection.

Keeping the aforementioned items in mind, stakeholder input was also a valuable factor considered as the team carried out the corridor study. As part of the corridor study, a steering committee was engaged to help identify the

project purpose, project goals, known problems and constraints, future developments, opportunities within the corridor, non-motorized needs, and potential transportation improvement alternates.

The steering committee consisted of representatives from MDOT Bay Region, MDOT Davison TSC, ROWE Professional Services Company, City of Flint, Mass Transportation Authority (MTA), Genesee County Metropolitan Planning Organization (MPO), Flint Cultural Center, Mott Community College, University of Michigan – Flint, and the CS Mott Foundation.

In addition to the steering committee meetings listed above, additional public input was sought at multiple points in the study process. A public meeting was conducted and published on the project website, along with a survey. Presentations were also provided to the following neighborhood groups: Flint Neighborhoods United, the Central Park Neighborhood Association, and the Traffic Taming Taskforce.

Two-Way Conversion 3D Schematic





Genesee County

Roundabout Feasibility Study

The Department of Transportation recognizes that a roundabout used in the right location will speed up your commute, as well as provide a safer route. Roundabouts show an 86 percent decrease in fatal crashes, with a 42 percent overall decrease in overall injury crash rate. Without the stop signs or signals, roundabouts allow for better flow of traffic along with a 30 percent decrease of emissions and fuel consumption.

In September 2021, ROWE, in association with Fishbeck, completed a year-long roundabout implementation study of Genesee County intersections for the Genesee County Metropolitan Planning Commission (GCMPC). We were seeking locations where roundabouts could improve safety and intersection operations.

The main work elements comprising ROWE's study included:

- Engagement with local government stakeholders regarding which intersections under their jurisdiction would be potential candidates for roundabout conversion
- A preliminary skim analysis of Genesee County intersections to ascertain potential roundabout compatibility
- A more detailed secondary analysis of a select number of intersections with a high suitability
- Early Preliminary Engineering (EPE), including a microsimulation model analysis, for a select number of intersections that

have been identified as suitable for roundabouts from the skim and secondary analyses

- Collecting digital aerial drone video of peak traffic intersection performance for a select number of intersections that are either planned to be converted to roundabouts or have been identified as having a high suitability for roundabout conversion
- Public outreach and education regarding the study, primarily using social media
- Creating Geographic Information System (GIS) layers/attribute data that can be integrated into GCMPC's existing GIS database
- Creating a final report documenting the analysis and detailing recommendations.

A preliminary skim analysis of over 3,600 Genesee County intersections was completed to ascertain potential roundabout compatibility. This analysis focused on safety and was followed by a more detailed secondary analysis of a narrowed down number of intersections with a higher suitability.

The secondary analysis and stakeholder discussions contributed to the creation of the final list of 14 intersections included for further study in the early preliminary engineering phase as listed below.

- A. Beecher Road and Elms Road**
- Genesee County Road Commission (GCRC) (Flint Township)
- B. Belsay Road and E. Bristol Road**
- City of Burton
- C. Carpenter Road and Elms Road**
- GCRC (Mt. Morris Township)

D. Clio Road/Welch Boulevard and W. Dayton Street
- City of Flint

E. Coutant Street and Elms Road
- GCRC (Mt. Morris Township)

F. Davison Road and N. Oak Road
- GCRC (Davison Township)

G. Elms Road and Miller Road
- City of Swartz Creek

H. Lapeer Road and S. Genesee Road
- City of Burton

I. Lennon Road and Elms Road
- GCRC (Flint Township)

J. Lennon Road and Morrish Road
- GCRC (Clayton Township)

K. N. Leroy Street and North Road
- City of Fenton

L. Robert T. Longway Boulevard and Walnut Street
- City of Flint

M. University Avenue and N. Chevrolet Avenue
- City of Flint

N. W. Court Street and S. Dye Street
- GCRC (Flint Township)

An operational analysis was completed for both no-build 2045 and roundabout 2045 conditions at each intersection. Based on the results of the operational analysis, conceptual roundabout layouts were drawn and opinions of probable cost determined for each location. Potential funding sources were also identified.

Video Links:

- Hill and Belsay** - <https://youtu.be/RoHqMY6RFD4>
- Torey and North** - <https://youtu.be/RTWPeFGqPPM>
- Torey and North 1** - <https://youtu.be/eo5-Z0zZqG4>



Vienna Charter Township Master Plan Update

Since 2018, ROWE has been collaborating with Vienna Charter Township to update their Master Plan. Differentiating itself from similar previous plans, this project provided unique tasks for our team including a thoroughfare, economic developments, and a housing study. Beyond these tasks, we also assisted with



Bridge Park

obtaining extensive public engagement to pull input from the community. Focus groups, a town hall meeting, a community survey, and an open house took place to receive this engagement.

For the thoroughfare study, our Planning Department, in conjunction with the Traffic Group, completed the tasks needed for the study. This included a study of the road conditions in Vienna Township, along with providing inventory of the current condition of transportation options and completing a SWOT (strengths, weaknesses, opportunities, threats) analysis on the transportation of the township. These items helped evaluate potential gaps and identify policies to consider in the implementation portion of the master plan.

Next, the Planning Department completed studies of economic opportunities and housing quality in the township. To complete the economic development study, ROWE utilized information from the 2012 U.S. Census, American Community Survey 2013-2017, 2012 economic census, and 2012 survey of business owners to develop information about the economic condition of the township.

This study also involved projected economic conditions as described in the Flint and Genesee County Comprehensive Economic Strategy and I-69 "Accelerate Plan". The economic development study identified areas of growth and investment in Vienna Township. This analysis provides insight into potential growth areas where there are gaps in the market area and cohesively brings context to the overall region. The economy of a community goes beyond the jurisdiction boundary.



To complete the housing study, an inventory and assessment of 1,124 housing units across Vienna Township was conducted. Using a mixture of site visits between September and October 2019 and google street view imagery from September and October 2018, the condition of each housing unit was rated on a scale of excellent to poor. From this large sample, enough information was extrapolated to analyze the quality of housing across the

township. The study concluded that most single-family homes were of good condition, with less than 2% rated as being in poor condition. Multifamily housing was mostly rated as being in good condition with none rated poor or fair. Lastly, mobile homes were mostly rated fair with none rated as excellent. This study helped the township understand the current housing conditions and make more informed decisions pertaining to the future needs of housing in the community.



Prior to the COVID-19 Pandemic, ROWE started working with the township on the master plan. One of the first items was to hold in-house focus group interviews. Groups selected by the township included township board members, township staff, Genesee County Sheriffs, Fire Chief of Clio Area fire service, and members from the Planning Commission.

In addition, focus groups were conducted with the Clio Area Senior Center, Clio Area Chamber of Commerce, Vienna Township Business Development Authority, Clio Area School District, Parks and Recreation Committee, and Clio Youth Sports Complex. These interviews provided personal insight into the community regarding strengths to maintain and needs of the community.

A town hall was advertised for members of the public to attend to discuss various main topics in the community like commercial

areas, agricultural areas, utilities, and future vision of Vienna Township.

This provided a broader public input forum where members of the Planning Commission were able to hear the input directly from the public regarding concerns and strengths of the community. The community survey took place in the months of August to September in 2019. We asked the public a variety of questions ranging from agricultural, residential, commercial, and industrial policies to attitude towards services provided in their community. The last form of public engagement is the open house which took place from March to April. Due to the COVID-19 pandemic the township and ROWE wanted to show flexibility by providing a virtual open house. This allowed the public to join a virtual meeting to ask questions and receive an explanation of the boards. The material was provided on the website for a few weeks to allow

additional public involvement. The township went to great lengths to get input from the public on what the vision of the future community should be.



ROWE provides a variety of customized options to a master plan update to help provide additional insight about your community to assure better planning in the future. If you are interested in a master plan update or amendment to your master plan, **contact planning@rowepsc.com**

Vienna Charter Township rural setting



New Hires

May

- Bryan Abson
- Bryan Carie
- Madison Carlson
- Max Chapman
- Hannah Deloney
- Darbey Johnson
- Christina Killinger
- Ian Meeder
- Brendan Thompson
- Katie Wagonschutz

June

- Brokelle Antonides
- Maria Huber
- Michael Jaworski
- Hailey Savola

July

- Chaz Coffin
- Sean Ralston
- Garrison Rule

August

- Jason Ball
- Joel Peters
- Dewane Petzold
- Amanda Thompson
- Megan Wencel

September

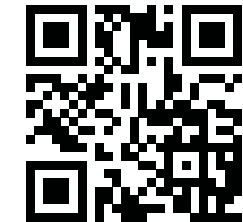
- Jesse Morgan
- Nichelle Morrison
- Victor Quiroz
- William Sanders
- Derrick Scott

Careers

We recognize talented, self-motivated, and open-minded professionals are the key to ROWE's continued success and growth. From competitive benefits / compensation packages, to companysponsored events, ROWE takes pride in being a progressive place to advance your career.

Email: employment@rowepsc.com

ROWE is an Equal Opportunity Employer.



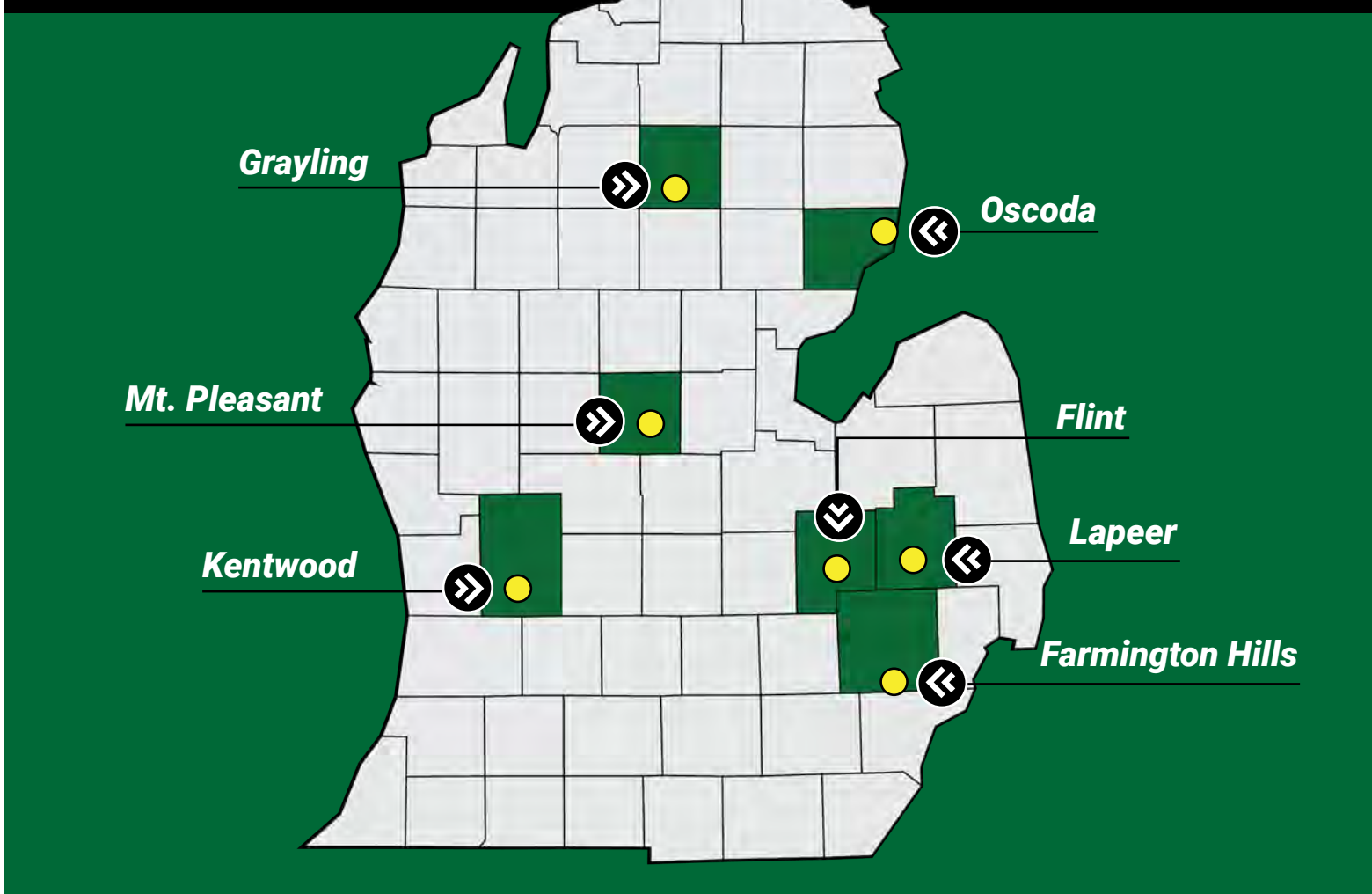
CES Reminder

On October, 20th 2021 from 7 - 9 p.m., ROWE will be hosting our Fall Community Education Series. If you would like to attend, please RSVP by 12 p.m. on October 13th.

Contact Lin Callahan @ (810-664-9411)



MICHIGAN



ROWE Office Locations

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Lapeer, MI

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Lapeer, MI 48446
(810) 664-9411

Kentwood, MI

4345 44th Street SE
Kentwood, MI 49512
(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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Grayling, MI 49738
(989) 348-4036

Oscoda, MI

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