

STRAIGHT LINES

Fall 2023



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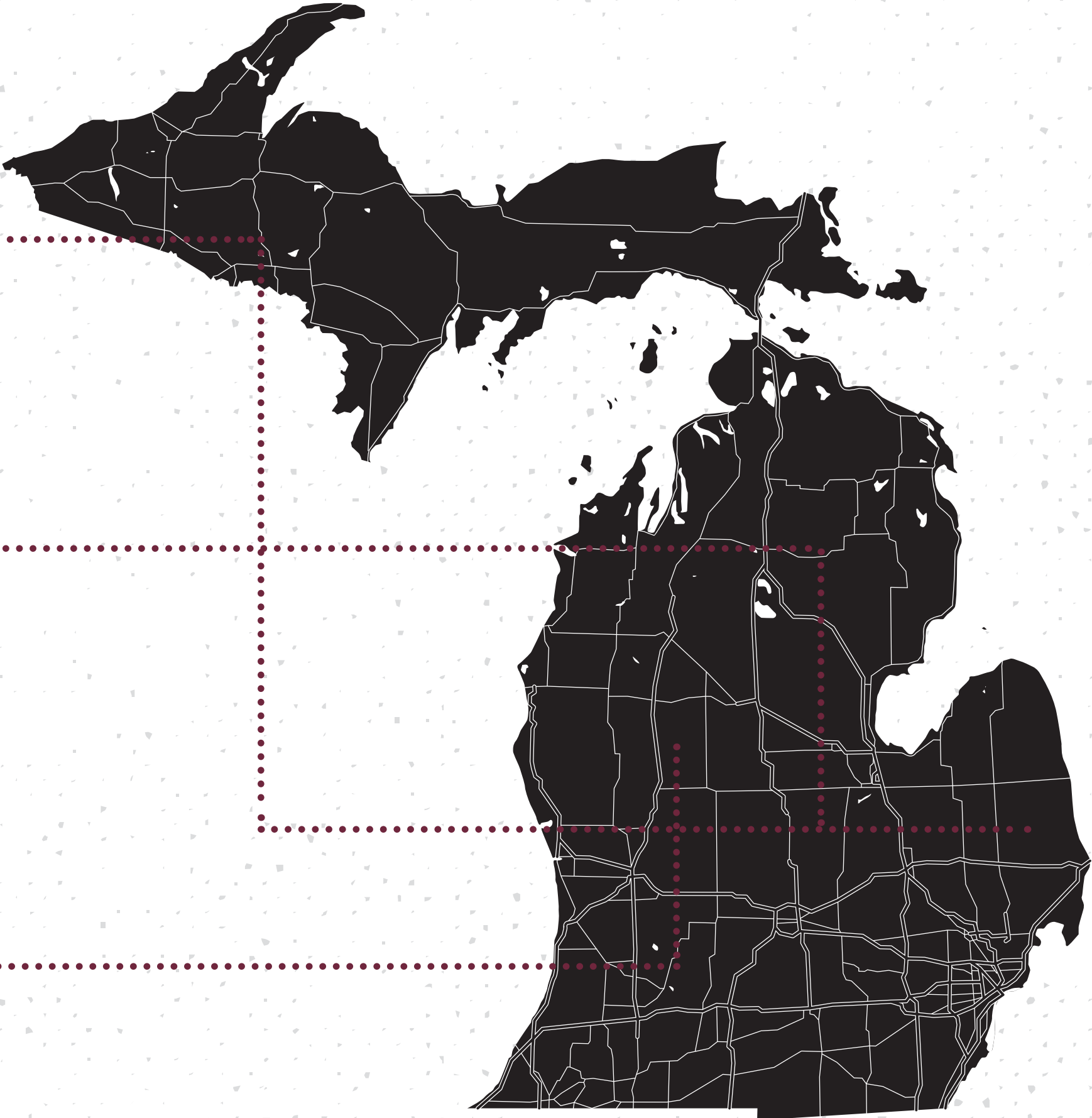
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VILLAGE OF PECK PLANNING

for the future Spicer Group Assists with the Village's Master Plan, Recreation Plan, and Zoning Ordinance

In 2021, the Village of Peck was awarded a Michigan Economic Development Corporation (MEDC) Redevelopment Ready Communities (RRC) Technical Assistance Grant. The Village was undertaking a comprehensive update to the existing zoning ordinance, which was enacted in the 1980's.

The zoning ordinance update began with an update to the Village's Master Plan and Recreation Plan. In 2019, the Village hired Spicer Group to update both plans, and at that time, the Village Zoning Administrator (now Supervisor) Tim Heiden was enrolling the Village in the Redevelopment Ready Communities (RRC) program. RRC is a voluntary program offered through MEDC that communities in Michigan can enroll in. The goals of the program are to help communities create an environment that is friendly to high-quality development and placemaking by enacting processes that are transparent, predictable, and efficient.



"Tim really did this process right. Almost five years ago, he saw an opportunity to make Peck more marketable and took the right steps to ensure that he could get the tools in place he would need to capitalize on the funding opportunities offered by MEDC," said Spicer Group Community Planner Jennifer Stewart, AICP who was involved in the Master Plan, Recreation Plan, and Zoning Ordinance updates.

"Because of his forethought, hard work, and perseverance he was able to guide the Village through these extensive updates and be the champion of the RRC process for Peck," said Cindy Todd, PLA Director of Planning.

When updating the Master Plan and Recreation Plan, Spicer Group understood that the Village was interested in pursuing the RRC Certified Community requirements. Therefore, both plans were tailored, in particular

the Master Plan, to meet the requirements of the program so the Village could use their new Master Plan as one of the RRC requirements. Following the adoption of the Master Plan, the Village did the heavy lifting to become engaged in the RRC process. Once they were engaged, they were able to apply for a Technical Assistance Grant. The grant is only available to communities who are engaged in the RRC process.

The grant requires a 25% match and the remaining 75% is monies from the State. It can be used for a variety of updates; however, the Village of Peck applied for and was awarded a grant to update their zoning ordinance.

Zoning is a set of rules that separate a community into different districts or areas, each of which has a specific set of guidelines for how the land can be used. Oftentimes, zoning ordinances can be cumbersome and difficult for the average person to comprehend. One of the tenets of the MEDC RRC program is to make ordinances readable, friendly, and uncomplicated. The program's intention is to lessen the barrier of understanding for the everyday citizen, to ensure a community has common sense rules for development, and to create a process that ensures development is completed in a timely manner.

For the Village of Peck, this meant a comprehensive re-write of their existing ordinance which was 40 plus years old. Spicer Group Planners Jennifer Stewart, AICP and Michael Daly-Martin, AICP assisted the Village with the update. In addition to ensuring the ordinance complied with the current enabling legislation and outlined clear processes and responsibilities for the Zoning Administrator, Planning Commission, and ZBA, the update also included standards that addressed some of the following topics: ground floor transparency of buildings in the downtown, build-to lines or zero lot lines, multiple types of housing, shared parking or a reduction of parking requirements, EV charging stations, bicycle parking, and green infrastructure rules for rain water collection, street tree planting standards, parking lot landscaping, and native planting requirements to name a few.

The Michigan Economic Development Corporation also prioritizes accessibility and user-friendliness. In order to achieve that, Spicer Group created a zoning ordinance in an interactive format. Instead of long paragraphs of text and lists, the ordinance includes tables, charts, and diagrams to illustrate detailed concepts. Additionally, the document was set up for electronic users to easily navigate through the pages by clickable links that take users to specific pages or chapters. For example, if someone were to click on a topic in the table of contents, the document would jump to that page, eliminating the need for users to scroll through multiple pages to find what they are looking for.

"The interactive capability is really awesome for our clients, and it is an exciting project to be a part of. Some of the other interactive features include: a back button so the user can go to their previous page, chapter buttons on the bottom of each page so users can jump between chapters if they need to review a different section of the ordinance, links in the table of contents, and links to state laws throughout the document," Stewart said.

"The new document is more efficient and will allow the permitting process to go much quicker," Heiden said. "The new zoning ordinance document is a lot easier for the average person to understand and overall, the Village Planning Commission loves and is happy with the updated document."

A big change that is already underway for the Village of Peck is a new housing project of townhouses. Prior to the ordinance update, this style of housing was not allowed in the Village. The Village plans to continue this trend by encouraging more residential and commercial developers to look at sites in Peck.

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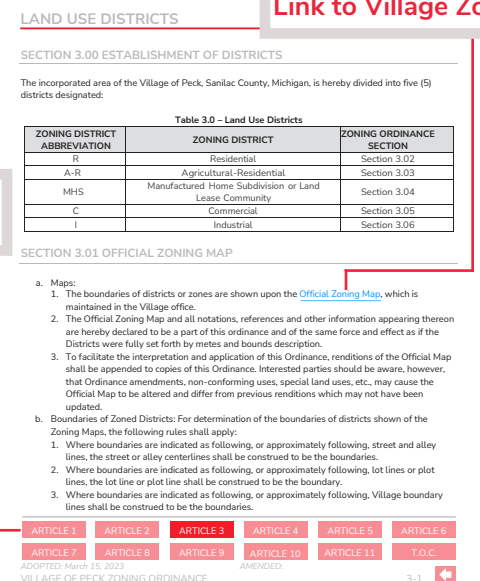
The new document is more efficient and will allow the permitting process to go much quicker...the new zoning ordinance document is a lot easier for the average person to understand...

*Tim Heiden
Village Zoning Supervisor*

Interactive PDF

Jump to a Different Chapter

Link to Village Zoning Map



Back Button to Previous Page

SPICER GROUP ANNOUNCES 2023 PROMOTIONS

SENIOR ASSOCIATES



WARREN MILLER, P.E. - SENIOR ASSOCIATE

Warren earned his bachelor's degree in Environmental Engineering from Michigan Technological University in 2013. He joined Spicer's Water Resources Service Group in 2014 as a Design Engineer in our Saginaw office. In 2017, he became a Project Engineer, and in 2019 he became a Project Manager. Warren earned his professional engineer's license in Michigan in 2020 and in 2021 was named as an Associate at Spicer Group.



CYNTHIA TODD, PLA - SENIOR ASSOCIATE

Cindy earned her bachelor's degree in Landscape Architecture from the University of Illinois and her master's degree in Urban and Regional Planning from the University of Michigan. She has been a licensed landscape architect in Michigan for over 25 years and was hired at Spicer Group in 2021 as the Director of the Planning Service Group. She became an Associate at Spicer in 2021. Prior to joining Spicer, she worked in the public sector as the Capital Program Administrator for the State of Delaware, Division of Parks and Recreation, and in private sector as the Director of Planning and Landscape Architecture for civil engineering and design firms.

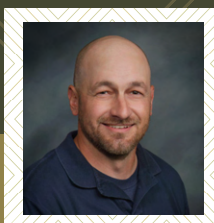


DEAN WENDLING - SENIOR ASSOCIATE

Dean began his career at Spicer Group more than 30 years ago, when he was hired as a Survey Technician. In 2009, he became a Project Manager in our Survey Service Group and in 2020 he became a Project Surveyor. Dean was named as an Associate at Spicer in 2010.

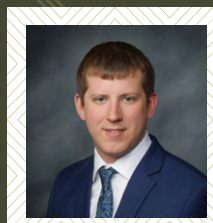
Since 1944, Spicer Group has grown its staff to 330 professionals—adding more than 50 employees over the last year. Our team is an impressive mix that includes professional engineers, surveyors, community planners, architects, and landscape architects. We also have a strong network of support staff comprised of technicians, designers, construction inspectors, crew chiefs, accountants, human resources, and marketing professionals. As we continue to grow and expand our services, it is important to align our efforts with strong leadership who will continue the legacy of Stronger, Safer, Smarter services. Congratulations to our new Associates and Senior Associates who will provide essential guidance and management as well as key technical expertise in providing successful solutions for our clients.

ASSOCIATES



DARRIN WILSON JR. - ASSOCIATE

Darrin earned his bachelor's degree in Surveying Engineering and Technology from the University of Maine in 2023. He has more than 16 years of experience in the surveying field. He was hired as a Project Surveyor in Spicer's Survey Service Group in 2021.



MITCHEL JACQMAIN, P.E. - ASSOCIATE

Mitch was hired at Spicer Group in 2013 as an Intern in our Construction Service Group while still attending college. He earned his bachelor's degree in Civil Engineering from Michigan Technological University in 2016 and became a Construction Engineer. He then became a Design Engineer in our Municipal Service Group in 2018, a Project Engineer in 2020, and a Project Manager in 2023. He became a licensed professional engineer in the state of Michigan in 2023.



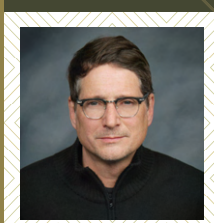
KEVIN WILKS, P.E. - ASSOCIATE

Kevin earned his bachelor's degree in Civil Engineering from Michigan Technological University in 2014. He was hired at Spicer in 2014 as a Construction Engineer and became a Design Engineer in 2016. In 2018 he became a Project Engineer and earned his professional engineering license in the state of Michigan. He became a Project Manager in Spicer's Municipal Service Group in our Byron Center office in 2021.



WILLIAM BECKER - ASSOCIATE

Bill began his career at Spicer Group more than 20 years ago while finishing his senior year at Arthur Hill High School in Saginaw. Hired as a Technician in what was our Mapping Department, he also worked as a Technician in the Saginaw Office's Site Development, Transportation, Structural, and Survey Departments until 2008, when he became a key employee in our Water Resources Service Group. Between becoming a Designer in 2013 and a Senior Designer in 2018, he relocated to our Dundee office in 2015, where he has been a Project Manager since 2019.



AARON S. WOSEK - ASSOCIATE

Aaron earned his bachelor's degree in Mechanical Engineering from Montana State University in 2001. He was hired in 2015 as a Project Manager in Spicer's Municipal Service Group and is now a project manager in Spicer Group's Mechanical Service Group which includes architectural, electrical engineering, mechanical engineering, and plumbing design services.



BRENT EVERITT, P.S. - ASSOCIATE

Brent earned his bachelor's degree in Surveying Engineering from Ferris State University. He has more than 17 years of experience in the surveying field and became a licensed professional surveyor in the state of Michigan in 2015. He was hired as a Project Surveyor in the Survey Service Group at our Standish office in 2022.

SAGINAW COUNTY REBUILDS TWO BRIDGES

Two bridges receive complete remodels to provide safer transportation

SAGINAW COUNTY – Two bridges 6.7 miles apart near the Village of St. Charles recently underwent construction to be rehabilitated. The first bridge is located on Hemlock Road over the South Branch of the Bad River and the second is on Fordney Road over Beaver Creek. Both roads provide essential access for residences and fire/safety and keeping these open is a priority.

Spicer Group is responsible for conducting bridge safety inspections for bridges located within Saginaw County and has been completing these inspections since the 1990s. As noted during the routine inspections, it was observed these bridges had significant deterioration from deck leakage, age, and general wear. This deterioration led to deck spalling and severe section loss with holes in the beam ends. This caused both bridges to be posted at a reduced weight limit, restricting truck traffic over the bridges.

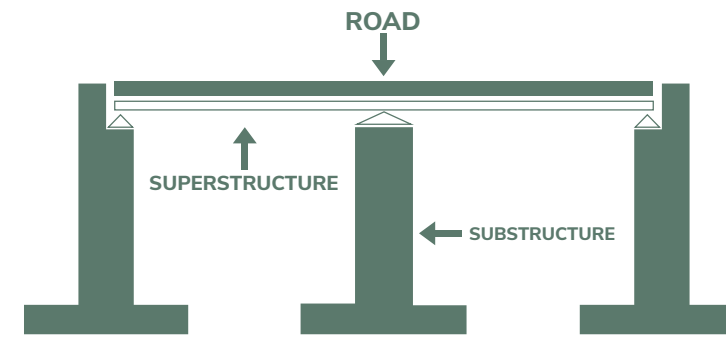
Based on the inspections and repair recommendations, the Saginaw County Road Commission (SCRC) agreed that the best option was to replace both superstructures. Both of these structures are listed in the National Bridge inventory and are eligible for federal funding through the Michigan Department of Transportation's (MDOT) Local Agency Program (LAP). The SCRC submitted applications for both structures in 2020 and 2021. The Hemlock Rd. and Fordney Rd. Bridge projects were each awarded \$800,000 in funds from this program towards superstructure replacements.

The superstructure of a bridge supports and stabilizes the deck, transferring the weight of traffic to the substructures. The substructure of a bridge—better known as the foundation—supports the loads from the deck and superstructure. Because the foundation of these structures was in relatively good condition,

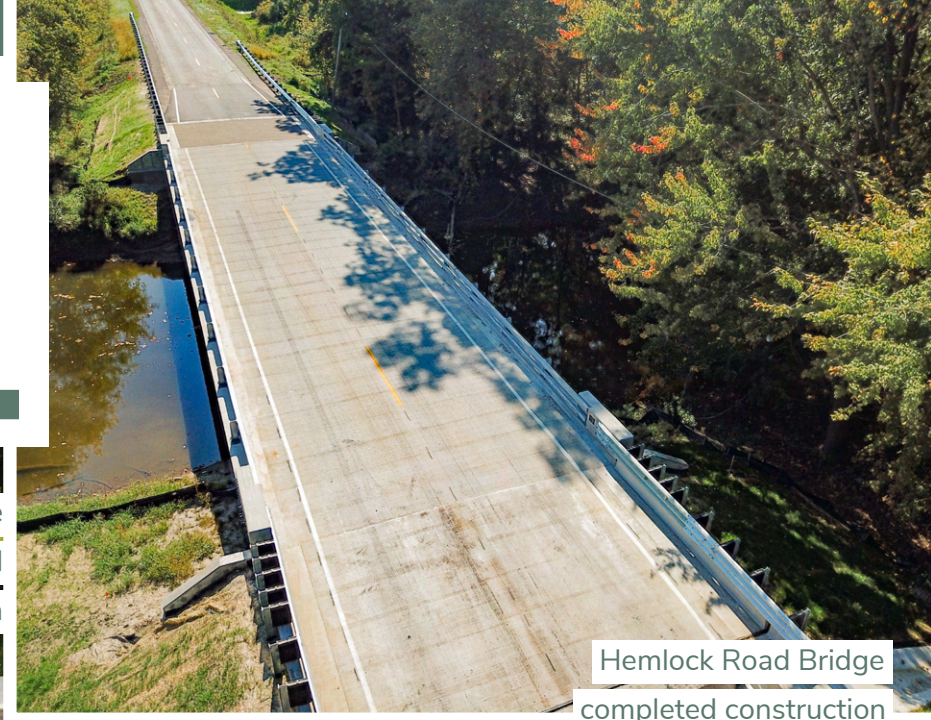
the most economical solution was to replace the superstructure.

The design of the projects began in early 2022 for each bridge. The existing structures were surveyed and evaluated for environmental impacts, soil conditions, hydraulics, traffic, and utilities, and then preliminary plans were prepared. The existing Hemlock and Fordney Road Bridges had similar span and substructure configurations which resulted in similar superstructure designs, saving both time and money on the projects.

During the preliminary design phase, Spicer Group presented several options to the SCRC for replacing the superstructures. The options included Steel I-Beams, Prestressed Concrete I-Beams, and Prestressed Concrete Box Beams. Due to high construction prices following the Covid-19 pandemic and long lead times on conventional materials, the SCRC was looking for ways to reduce costs and avoid delays in the construction of these bridges.



Fordney Road Bridge being demolished for new construction



Hemlock Road Bridge completed construction



Fordney Road Bridge beam setting

“The answer came to us at a bridge conference in March 2022, where one of the presenters was speaking on press brake tub girders.” Dan Zeddies P.E., Project Manager from Spicer Group said. “Press brake tub girders (PBTG) are folded plates made of galvanized steel plates, shallow, trapezoid-shaped boxes. They are a newer and economic alternative being used in bridge construction.”

These PBTG superstructures had also been utilized recently in the Michigan Bridge Bundling project that replaced 19 bridge superstructures throughout the state. After the conference, Spicer Group's engineers did their research, comparing the PBTGs to the other options originally proposed. This superstructure type met the design parameters for cost and efficiency. With SCRC's support, the PBTGs were the selected solution and were included in the final drawings.

“These press brake tub girders saved on costs and time significantly.” Zeddies said “They are galvanized to prevent corrosion, designed by the manufacturer, and are less maintenance because they don't require painting.”

Spicer Group coordinated with the manufacturer throughout the PBTG design process, utilizing Bentley's OpenBridge Designer for analysis of the superstructure, substructure, deck, and bridge geometry. The manufacturer was able to complete the final designs and send the PBTGs out for production.

The projects were both bid together, and demolition of both existing structures began in early summer of 2023 with construction beginning immediately after. The Hemlock Road Bridge was opened to traffic on September 1st and the Fordney Road Bridge was close to opening at the time of publication.

Austin Alexander

Austin was recently hired as a Design Engineer in the Municipal Service Group in our Lansing office. He earned his bachelor's degree in Chemical Engineering with a minor in Organizational Leadership from Michigan State University.

Drew Bakos

Drew was recently hired as a Construction Services Technician in the Water Resources Service Group in our Saginaw office.

Logan Brown

Logan was recently hired as a Crew Chief in the Survey Service Group in our Atlanta, Georgia office. He earned his bachelor's degree in Geospatial Science from Kennesaw State University and was a Spicer intern in 2022.

Luke Cook

Luke was recently hired as a Design Engineer in the Water Resources Service Group in our Saginaw office. He earned his bachelor's degree in Environmental Engineering with a minor in Surveying from Michigan Technological University and his associates degree in Science and Arts from Muskegon Community College.

Austin Cousineau

Austin recently joined our Survey Service Group in our Saginaw office as a Crew Chief. He comes to Spicer with more than 7 years of surveying experience.

Michael Doan

Michael was recently hired as a Network Administrator in the Corporate Service Group in our Saginaw Office. He earned his master's degree in Network and Communications Management from the Keller Graduate School of Management and his bachelor's degree in Network and Communications Management from DeVry University.

William Furman

William was recently hired as a Construction Services Technician in the Construction Service Group in our Saginaw office.

Zachary Gentry

Zachary was recently hired as a Design Engineer in the Water Resources Service Group in our Saginaw office. He earned his master's and bachelor's degree in Environmental Engineering from Michigan State University.

Lillian Glass

Lillian was recently hired as a GIS Specialist in the Water Resources Service Group in our Saginaw office. She was a Spicer intern in the summer of 2023.

Kara Jueckstock

Kara was recently hired as a GIS Specialist in the Water Resources Service Group in our Lansing office. She earned her bachelor's degree in Geography and GIS from South Dakota State University.

Nicholas LaPan

Nicholas recently joined the Survey Service Group in our Saginaw office as a Crew Chief. He comes to Spicer with eight years of surveying experience.

Joseph Lawe

Joseph was recently hired as a Construction Service Technician in the Construction Service Group in our Saginaw office.

Joe Primeau, P.E.

Joe was recently hired as a Project Engineer in the Municipal Service Group in our Saginaw office. He earned his bachelor's degree in Civil Engineering from Michigan State University and is a licensed professional Engineer in the state of Michigan.

Jake Quinn

Jake recently joined the Survey Service Group in our Saginaw office as a Survey Technician.

Jill Ruess

Jill was recently hired as a Project Assistant in the Structural Service Group in our St. Johns office. She earned her associate's degree in Accounting from Lansing Community College.

Myles Sakshaug

Myles was recently hired as a Finance Manager in the Corporate Service Group in our Saginaw office. He earned his bachelor's degree in Accounting and Finance from the Stephen M. Ross School of Business at the University of Michigan. Myles is a licensed Certified Public Accountant.

Eric Schulte

Eric was recently hired as a Design Engineer in the Municipal Service Group in our Lansing office. He earned his bachelor's degree in Environmental Engineering from Michigan State University.

Dave Solberg

Dave was recently hired as a Technical Advisor in the Water Resources Service Group in our Lansing office. He earned his bachelor's degree in Environmental Policy and Natural Resource Studies from Michigan State University.

Alana Wiggins

Alana was recently hired as a Construction Services Technician in the Water Resources Service Group in our Saginaw office. She earned her associate's degree in General Studies from Delta College.

SPICER GROUP

NEW HIRES

Welcome to the Team

Anthony Goucher

Anthony recently joined the Administrative Service Group in our Bingham Farms office as a Talent Acquisition Specialist. He comes to Spicer with six years of recruitment experience.

Noah Hansard

Noah recently joined the Survey Service Group in our Atlanta, Georgia office as a Survey Technician.

Sydney Janssen

Sydney was recently hired as a Design Engineer in the Water Resources Service Group in our Dundee office. She earned her bachelor's degree in Civil Engineering from Michigan State University.

Andrew Lemstrom

Andrew was recently hired as an I.T. Technician in the Water Resources Service Group in our St. Johns office. He comes to Spicer with more than 15 years of system administration and network administrative experience.

Brent Moore

Brent recently joined the Water Resources Service Group in our Saginaw office as a Construction Services Technician. He comes to Spicer with nine years of professional utility locating experience.

Connor Muscott

Connor was recently hired as a Construction Services Technician in the Water Resources Service Group in our Saginaw office. He earned his bachelor's degree in Finance from Saginaw Valley State University.

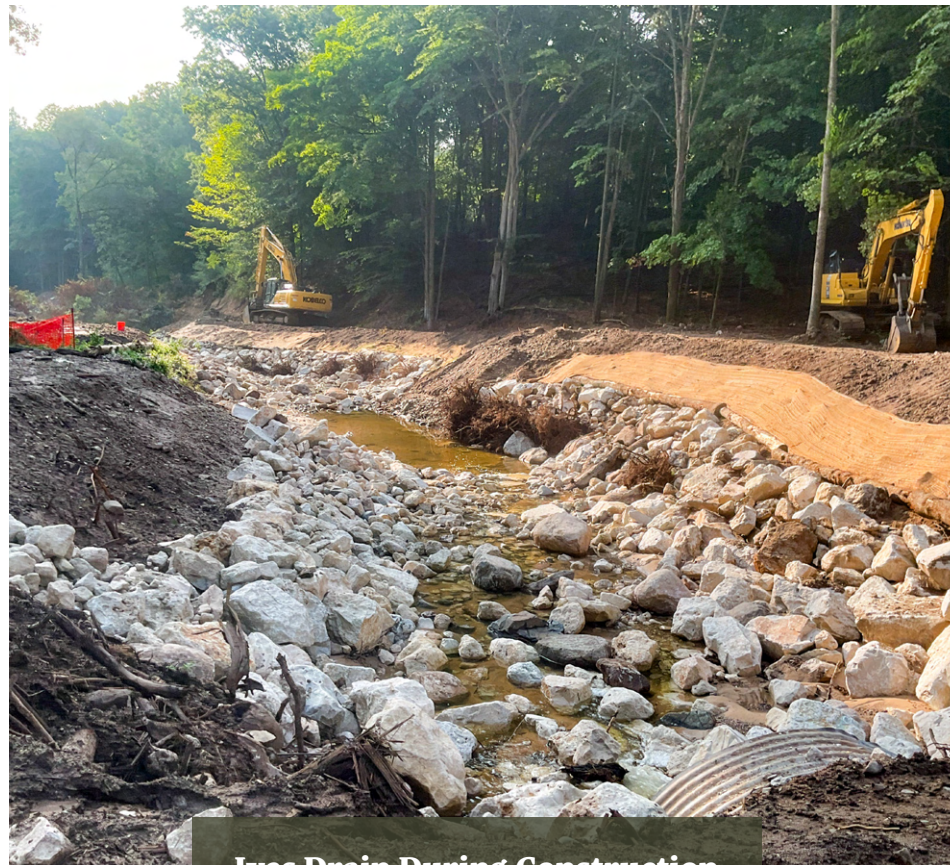
Drain Establishment and Improvement Project

Working to Solve Decades-Old Erosion Issues in Mecosta County

Big Rapids, MI – Construction on a drain establishment and improvement project near the campus of Ferris State University is nearing completion. This project, which transforms a severely eroded natural watercourse into a maintainable county drain, will help mend and mitigate decades worth of erosion in a Big Rapids residential neighborhood.



Ives Drain During Inspection



Ives Drain During Construction

Since the 1950's, the City of Big Rapids – like many municipalities – has grown from a small town with open pastures, and agricultural land, into a full community with a bustling downtown. One of Michigan's top higher education institutions, Ferris State University, calls Big Rapids home and welcomes thousands of students to its campus every year.

A natural watercourse that empties into the Muskegon River existed along what is now the city's east side, between the river and Ives Avenue. As the area was

developed, increased stormwater runoff from the watershed to the watercourse occurred, increasing the energy to the stream, and resulting in erosion issues.

"As Ferris State, Big Rapids Charter Township, and the City of Big Rapids developed with minimal stormwater detention installed, the increased urbanization of the watershed and increased runoff to the channel also increased the energy of the water that was entering into the natural stream bed," Spicer Group Project Manager Charles Smith, P.E. said.



"Portions of the stream were severely eroded enough that landowners were in fear of losing their homes and outbuildings."

"Over time, these erosion issues along the stream banks became more severe," Smith said. "Busloads of sediment were deposited in the stream and tangles of deadfall fell throughout its path."

Portions of the stream were severely eroded enough that landowners were in fear of losing their homes and outbuildings. In the early 2000's, bank erosion threatened the integrity of city infrastructure by exposing underground sanitary sewer infrastructure, which was relocated away from the erosion. Since then, the relocated sanitary sewer mainline had become exposed once more due to further erosion.

The fast-moving water was also carrying loads of sediment from the eroding channel to the Muskegon River, causing increased loads of phosphorus and nutrients to be deposited there and a delta to be formed.

The city applied smaller fixes throughout the years, but as a natural watercourse, there was no established entity to remedy the erosion issue and no method of funding any major improvement project. Private landowners were self-stabilizing stream banks in an effort to protect their properties where they could.



In 2016, the City of Big Rapids hired Spicer Group to conduct a preliminary study and maintenance inspection of the watercourse. In 2019, landowners petitioned the Mecosta County Drain Commissioner, and the Ives Drain was formally established under the Michigan Drain Code. This allowed a drainage district to be established and an assessment district to be established to assist with funding improvements to the drain.

The Mecosta County Drain Commissioner hired the team of Spicer Group, Streamside Ecological and Fahey Schultz Burzych Rhodes to assist with establishing the drainage district, acquiring the necessary easements and permits, and design improvements to the newly established drain.

Smith said that several options for drain improvements were explored. The team knew the water entering the drain needed to be slowed down and the option of detaining water, or storing it, was not readily available as the watershed had been built out.

“We could store water, but the amount of water we would need to store to lower the velocities to be non-erosive was substantial. We would need to utilize a lot of land,” he said. “The storage needed at the downstream outlet was so substantial that it would’ve created a football-field-size of a detention pond.”

As that amount of land was not available, the team designed a project that conveyed the water at safe velocities in a stabilized channel from the end of an established 84-inch enclosed storm sewer pipe at Ives Avenue to the Muskegon River.

Spicer Group Project Engineer Brandon Williams, E.I.T., said the design of the newly established drain included it being subdivided into sections of riffles and pools. The rocks and rip rap within the stream bed will help dissipate energy, and rock headers will help channel the water to the center, where it is deeper and keep the water away from the banks to prevent erosion. Wood and rock cross vanes made up of logs and/or riprap will also be installed to help control the grade and elevation of the drain to help dissipate energy, slow the water down, and redirect water to the main flow in the center of the channel.



Ives Drain After Construction

“People are amazed and couldn’t believe how bad it was because they couldn’t see it all. But now that they can see it, and see the restoration, they see how good it looks and how beautiful it is turning out.”

- Karla Miller, Mecosta County Drain Commissioner

Aaron Snell, with Streamside Ecological Services, assisted with the design elements of the drain.

“This design is unique because there is such a change in elevation from the outlet pipe to the Muskegon River over about a half mile and between the extreme slope and the sandy soils, stabilization was a real challenge,” Snell said. “This is a very high-energy stream during and after a runoff event. Naturally, a steep stream with little floodplain access relies on roughness to dissipate energy. Roughness being in the form of large, resistant rock, large woody debris, deep pools, and heavily vegetated stream banks. Most of these elements we were able to construct, with the vegetation just taking some time to grow and mature.”

Jackson Dirt Works, a contractor based in Lake Odessa, was hired for the construction work – including shipping in more than 6,000 tons of rock

and rip rap from Wisconsin when local supplies were diminished to be used in the drain design.

Construction began in April of this year and is scheduled for significant completion later this fall, with only a small amount of punch list items to be completed in the spring of 2024.

As construction has been moving along, Karla Miller, Mecosta County Drain Commissioner, said the project has been well received by the public and residents surrounding the drain.

“I think we have a project here the likes of which my community hasn’t seen before,” Miller said. “People are amazed and couldn’t believe how bad it was because they couldn’t see it all. But now that they can see it, and see the restoration, they see how good it looks and how beautiful it is turning out.”

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