

STRAIGHT LINES

Spring 2020



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NEW
HIRES

Shane Mudd

Shane was hired in as a Construction Engineer in our Saginaw Construction Department after interning with us for three summers. He graduated with his bachelor's degree in Civil Engineering from Lawrence Technological University.

Matthew Sopcak

Matthew was recently hired in as a Designer in our Saginaw Municipal Department. He has many years of experience working as a computer systems and drafting manager for Dome Corporation of North America.

Aaron Holton

Aaron was recently hired in as a Survey Technician in our St. Johns Survey Department. He previously worked as a technician at Scope Services and Davey Resource Group.

Luke Ames

Luke was recently hired in as a Survey Technician in our St. Johns Survey Department. He has previous experience working for ACL Plumbing and Industrial Technology Services.

Andrew Patterson

Andrew was recently hired in as a Construction Services Technician working out of our Dundee office. He has previous technician experience working at Intertek PSI Engineering and Somat Engineering company.

Eric DeBolt II

Eric was recently hired in as a Construction Services Technician in our Saginaw Construction Department. He previously worked at Northern Concrete Pipe, SRU Electric, and Bierlein Demolition.

SPICER GROUP HELPS COMMUNITIES RECEIVE RECREATION GRANT FUNDING

PARKS AND RECREATION FACILITIES ACROSS THE STATE TO BENEFIT



In 2019, Spicer Group professionals helped seven communities across Michigan obtain over \$2.3 million in recreation grant funding for nine different park projects in Michigan. The grants were funded through three different Michigan Department of Natural Resources (MDNR) grant programs: the Michigan Natural Resources Trust Fund (MNRTF), the Land and Water Conservation

Fund (LWCF), and the Recreation Passport Grant program. Since 2011, Spicer has written more than 80 successful MDNR grant applications. The following communities have received their funding notices from the state agencies and have begun working on designs for their projects and hope to begin construction in late 2020 or early 2021.



LAKE LANSING PARK SOUTH

Ingham County's Lake Lansing Park South is located in Haslett. During the summer more than 2,000 people visit the park daily. It has a variety of amenities to offer its visitors, such as concerts, events, pavilions to rent, and educational outreach programs, but the jewel of the park is the access to Lake Lansing. Ingham County was awarded two separate grants in 2019 for improvement projects within the park.

Park Improvements

Ingham County – LWCF – \$300,000

This project at Lake Lansing Park South includes paving ADA spaces in the existing gravel main parking lot and drainage improvements around the parking lot with bioswales and native plantings. The project also includes improving the overflow parking area with gravel and paved ADA parking spaces and constructing new accessible pathways to complete a loop trail around the park and to connect park features. The project will also add accessible picnic tables on a concrete pad and benches for seating options at the park.

Bathhouse Replacement

Ingham County – MNRTF – \$300,000

This project will provide a new bathhouse and park amenities at Lake Lansing Park South. The park's current restroom and concession building along with an adjacent shelter will be removed. The new bathhouse will be located to be more convenient to the beach and will house restrooms, changing rooms, concessions, and storage. The project also includes the construction of outdoor showers, new walkways, a new plaza, new picnic tables, interpretive signs, and relocation of the shelter that was removed.

HAWK ISLAND PARK

Hawk Island Park is a 100-acre park in the City of Lansing that boasts a 30-acre pond and frontage on the Sycamore Creek. It also has a beach, splash pad, fishing and boating docks, a playground, picnic areas, walking paths, and a tubing hill. Hawk Island is the County's most popular park with more than 500,000 visitors per year. Ingham County was awarded two separate grants in 2019 for improvement projects within the park.

Boardwalk Replacement

Ingham County – MNRTF – \$300,000

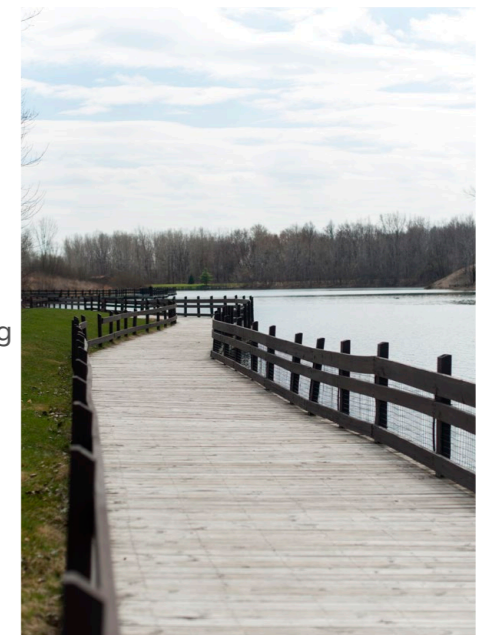
Due to unsafe conditions after the 2018 winter season, Ingham County removed the boardwalk on the south end of the pond at Hawk Island Park. The existing boardwalk's footers were over 20 years old, heaved, and in poor shape. This project will replace the boardwalk with an on-land paved path and three fishing/viewing docks. It will also replace some existing walkways, stripe the 1.5-mile loop trail around the pond, stripe the ADA parking spaces in the south parking lot, provide park amenities such as interpretive signs, benches and trash receptacles, and replace the vegetation along the south pond bank with native plants.

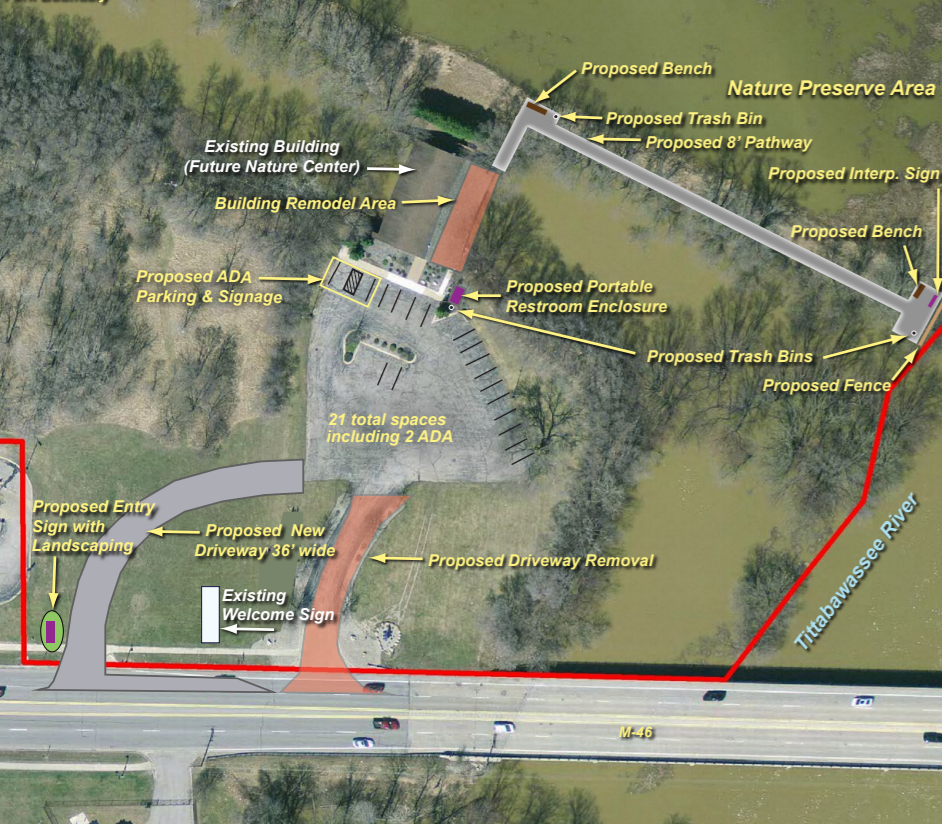
Park Improvements

Ingham County – LWCF – \$292,100

The floating dock at the south end of Hawk Island park is over 20 years old. This improvement project will replace the existing floating pedal boat dock and re-grade the existing walkways to provide an accessible slope to the boat dock and launch. A new accessible canoe/kayak launch will be installed, along with two new sun-shade shelters with picnic tables, grills and

fencing, new trash/recycling bins, new concrete walks, a bench made out of recycled materials, an interpretive sign, native landscaping to enhance the improvements and striping and signing of the ADA parking spaces in the existing parking lot.





THOMAS TOWNSHIP NATURE CENTER DEVELOPMENT

Thomas Township – LWCF – \$300,000

This project is the first phase in the overall development of the 66-acre Thomas Township Nature Preserve and Nature Center. The project will construct a new entrance drive off M-46 that allows for safe access to the site and the future Nature Center building. Within the site, striping and signage will be added in the parking lot for ADA parking. A concrete pad and screening fence will be constructed for a portable restroom. The existing building, which will eventually be developed into a Nature Center, will be modified to allow for access to the rear of the property. A pathway will also be constructed to connect to an overlook area on the Tittabawassee River with two benches and an interpretive sign.

HAITHCO RECREATION AREA SPLASH PAD DEVELOPMENT

Saginaw County – MNRTF – \$300,000

Haitlco Recreation Area is a 77-acre popular park in Saginaw County. The park is home to a 40-acre lake with a swimming beach. This project will add a new splash pad near the existing concessions and restroom building in the center of the park. The splash pad will be designed with special areas for different age groups, with specific areas dedicated for younger children to play. The project will also add universally-accessible benches and picnic tables, a rain garden, paved pathways, and 12 new paved ADA parking spaces in the existing gravel parking lot. In addition to receiving a Michigan Natural Resources Trust Fund grant, the County was also awarded a Saginaw County Community Foundation Grant for this project.



LAKE MICHIGAN BEACH DEVELOPMENT

City of Frankfort – MNRTF – \$210,900

This project will construct a new restroom facility at the Lake Michigan public beach in the City of Frankfort. The new facility will include accessible bathroom facilities with a drinking fountain, water bottle filling station, an outdoor shower and foot wash station, and canoe and kayak storage rack. There will also be new benches, trash and recycling receptacles, and interpretive signage.



BARBER MEMORIAL PARK IMPROVEMENTS

Montrose Township – Recreation Passport – \$150,000

Montrose Township's popular Barber Memorial Park will develop a new outdoor fenced basketball court with four goals and benches. The Township will also add parking for 60 more vehicles, including handicap accessible parking. The expanded parking area will include a rain garden for environmentally-friendly drainage.



BAY COURT PARK PLAYGROUND RENOVATION

Independence Township – LWCF – \$200,000

Bay Court Park in Independence Township received a grant to renovate an existing wood playground that has deteriorated. The existing playground was a much-loved community-build project. The renovation is intended to honor the existing layout and is based on the original blueprints of the current structure. The new playground will be a modernized replica, using updated materials, accessibility principles, and safety standards. The playground will have different activities for all age groups and abilities. This project will also replace existing picnic tables and benches and resurface the existing park pathways. New ADA parking spaces adjacent to the playground will also be added to the parking lot.

If you would like to learn more about how your community might obtain grant funding for a recreation project, please contact one of our recreation grant specialists:

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DONALD SCHERZER

40 YEARS AT SPICER



Don Scherzer (middle) - 1986

ATTRIBUTES GROWTH, SUCCESS, AND SKILLS TO HANGING AROUND A LOT OF SMART PEOPLE

We are not sure if Don Scherzer was a fan of Robert Frost or not, but after graduating with a teaching degree in Industrial Technology from Central Michigan University, Scherzer definitely took the road less traveled among his classmates. After testing the waters as a teacher for one year, he found his way back to Spicer Group, then known as Spicer Engineering, where he would spend the next four decades fulfilling many roles including Principal, Vice President, President and Executive Vice President.

“After I graduated from college, I applied for work at Spicer because I needed a job,” Scherzer said. “That fall I left Spicer and taught Industrial Technology at Pinconning. I really enjoyed working at Spicer the previous summer, and after teaching for a full year, Spicer asked me if I could come back and they hired me full time in 1979.”

That first summer of working for Spicer was very exciting for him as he assisted engineers with providing drafting and designing tasks for various types of water main, sanitary sewer and bridge projects across the region. Scherzer’s passion for the work and his quality work ethic didn’t go unnoticed by Spicer’s leadership as he was moved up the ranks and eventually found himself managing large and complex projects.

“One of my most memorable, yet challenging, projects was the Golfside Subdivision in Saginaw Charter Township,” Scherzer explained. “This was a huge undertaking and we were in charge of putting all new roads, sanitary sewer and water main throughout the subdivision. Then we had 30 days of rain which resulted in the ‘flood of 86’ and put the project on hold. Once things dried out, the project got underway and was completed successfully.”

Scherzer says he still approaches each project and challenge the same way he has for the last 40 years—carefully and with an open mind—but the tools available to complete jobs have changed quite a bit.

“New technology such as mobile mapping and 3-D modeling have really changed the way we collect data and design projects, Scherzer said. “Not too long ago it was common practice to send survey staff out to collect all needed data for projects. Now you can get pinpoint-accurate data by simply driving down the road with our mobile mapping truck.”

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“The way things work now has also changed quite a bit. For instance back then when we would design pump stations, you had an alarm and a light that would go off if one of the pumps malfunctioned. Now the pump station automatically calls your phone if there is a



Don Scherzer - 2019

problem, and you can monitor the run time of the pumps and their pumping records by looking at your phone as well.”

He said materials have changed quite a bit as well as pipe which was mostly asbestos cement, vitrified clay and ductile iron. Today, plastic pipe for water main, sanitary sewer, and various storm water applications are quite popular. He explained that competition was more localized, but now it's everywhere we look. Competition is nationwide.

Scherzer was named Vice President in 2000 and became President in 2005, and he held that role until 2017. He said becoming President of Spicer Group was an exciting task but also had its challenges.

“I went from managing projects and doing my best to keep clients happy by keeping their projects on budget and on time to doing that same thing while also performing more human resources and administrative tasks including leading the whole company,” Scherzer said. “I learned real quick how to deal with tough personnel issues such as hiring, discipline, solving people problems, and corporate-wide finances.”

As most companies would agree, leading the company in the 2008 economic downturn was very challenging for Scherzer. Spicer Group had to adjust staff accordingly and strategize on streamlining finances to match clients' demand for work.

“I'm happy to say that even through the tough times, Spicer has always been profitable,” Scherzer said. “We are fortunate to have some strong-roots in key areas, and that has helped us. We've been blessed with a lot of great clients and a great team of dedicated employees.”

Even after 40 years, Scherzer still enjoys the job and all the new challenges that come with it every day. From the unexpected ordinances that say you can't cut down a specific tree until winter because of a certain species of bat that uses it, to not being able to move dirt because of a unique clam that might live in it, to dealing with work-stopping occurrences on the job site—he says the job never gets old.

“I wouldn't say I've always made the best decisions, but I've always tried to make the most educated decision. From the very start, I was fortunate to hang around several very smart people,” Scherzer said. “I attribute my growth here to many individuals including Dale Deibel, Charles Sessner, Merlyn Luoma, John Byam, and many loyal clients.”

Scherzer has worn many hats at Spicer Group, and his quality work ethic, knowledge of the industry, and loyalty are all certain contributors to the company's success. He continues to assist Spicer's Municipal Services Group with engineering services, growth and sustaining key client relationships. Congrats Don on 40 years of success.

“We are fortunate to have some strong-roots in key areas, and that has helped us. We've been blessed with a lot of great clients and a great team of dedicated employees.”

A NEW DRAIN IN AN OLD POND: CREATIVE SOLUTION TO INFRASTRUCTURE MANAGEMENT

The Michigan Association of County Drain Commissioners (MACDC) recently presented Evan Pratt, P.E., the Washtenaw County Water Resources Commissioner, with an Innovation and Excellence Award for the Tyler Dam Drain Project.

A Combination of Issues

On the eastern edge of Washtenaw County, in Ypsilanti Charter Township, are two now-defunct factories that once churned out automobile parts and B-24 Liberator bombers during WWII. The Willow Run Creek meanders between these properties, and in the 1940's, a dam was built along the creek to create a stormwater impoundment pond in a natural ravine.

This impoundment was called Tyler Pond and provided water for the factories to fight fires. When the plants closed, the Tyler Dam was passed to Ypsilanti Charter Township.

Spanning the width of Tyler Pond were two sanitary sewer mains built in the 1970's that were supported by a timber trestle bridge. The 24-inch gravity sewer and a 36-inch force main connect to a pump station along Airport Road in Ypsilanti Charter Township

and a nearby wastewater treatment plant. The Ypsilanti Community Utilities Authority (YCUA) owns and operates the sanitary sewer lines and the wastewater treatment plant.

Spicer Group was hired by YCUA to conduct a structural analysis of the aging trestle bridges and developed several different options to replace or repair the trestle structure. Around the same time, safety inspections of the Tyler Dam identified potentially costly repairs that were needed to bring the dam up to safety standards.

Ypsilanti Charter Township had also begun investigating removing or decommissioning the dam structure to prevent long-term maintenance costs and decided to permanently dewater the impoundment through a pipe under the dam, leaving the dam in place. This solution allowed the dam to be decommissioned, minimizing future maintenance costs, and did not require full dam removal, which would have been a significant additional expense. After Tyler Pond was dewatered, the natural channel would be restored to the ravine.

Partnering for a Solution

To aid in the completion of both projects, Ypsilanti Charter Township contacted Evan Pratt, P.E., Washtenaw County Water Resource Commissioner (WCWRC) to follow the procedure of establishing the Tyler Pond as a new county drain, the Tyler Dam Drain, in Washtenaw County, as laid out in the Michigan Drain Code.

After receiving an application and petition from the Township to establish a portion of the Willow Run Creek as a county drain, the WCWRC office held a Board of Determination Hearing. Spicer Group presented the history of the Tyler Pond and the engineering observations on decommissioning the dam and establishing the new drain.

The Board then found it necessary to proceed with establishing this portion of the creek as a new county drain. Petitioning the WCWRC to establish this portion as a county drain facilitated the necessary permitting and funding to be in place to make these projects a reality.

Beginning the Transformation

The WCWRC hired Spicer Group to design improvements that would transform Tyler Pond into a county drain. Spicer Group created a solution that incorporated the decommissioning of the dam, drawing down Tyler Pond, and replacing the failing utility trestle.

"Preliminary design had already been started on stream restoration," Evan Pratt, P.E., said. "We and the Township were both thrilled that the Spicer team found over \$750,000 worth of value-engineered savings from existing estimates."

Due to different funding streams being used, the three different projects were bundled together.

"This was a situation where it was a real benefit to have one consultant managing all of the overlaps between design, permitting, and developing contracts to make it easier to assign costs to different funding sources," Pratt said. "EGLE was also very accommodating by taking time to work together on the best permitting process for the big picture. It also helped that a single contractor won all divisions."

Newly reconstructed Tyler Dam Drain channel.





Reconstructed and armored storm sewer outfall.

In order to construct within the original Tyler Pond area, a cofferdam was constructed around the Tyler Dam to allow crews to draw the water down six inches per day, as dictated by the permit issued for the project, which took several months to complete.

The trestle was replaced with a nearly 18-foot-high berm and large-diameter arch culvert structure that stretched over the newly established drain and was used to bury YCUA's sanitary sewer pipes above the drain safely. This saved a considerable amount of money compared to boring or constructing a new trestle.

The embankment around the culvert was armored to allow for short-term re-watering of the impoundment during extreme rain events. Large amounts of heavy riprap and fabric were used, and the existing clay material from areas around the drain were used to stabilize the embankment under the utility lines.

The newly-exposed ravine was then reconstructed into a natural two-stage channel county drain by excavating a new channel through the sediment, which had accumulated in the pond bottom.

To prevent erosion and promote the overall drain health and water quality, biodegradable contour wattles were used after the drain banks were constructed, and substantial riprap was put into place.

Additionally, more than a dozen outfalls from nearby residential and commercial areas were extended outwards into reinforced and armored channels. French drains were also implemented to reinforce the channel's drainage capacity and prevent soil erosion. Heavy riprap was then placed along the drain bank for reinforcement. Live staking was placed along the banks, and various seed mixtures were used to preserve their shape and protect against erosion.

Benefits to the Environment

The newly-established Tyler Dam Drain carries stormwater from upstream lands, which are a mix of roadways, residential, and commercial uses, into the Willow Run Creek and ultimately into Belleville Lake.

Before this project, the only improvements that had been made to the area was a dredging of the pond to remove contaminated soils by the Environmental Protection Agency in the 1990's. The existing stormwater outlets were in poor condition and undersized for flow now coming through them.

Spicer Group designed this project to create a free-flowing drain with a two-stage channel that allows for improved water quality downstream and an environment more conducive to native wildlife.

Crews placed more than 1,160 square yards of heavy riprap on the newly-formed drain banks for reinforcement. This helped stabilize the channel in areas of steeper slopes and protected the banks against the high-velocity water that flows into the drain from the extended and reinforced outfalls.

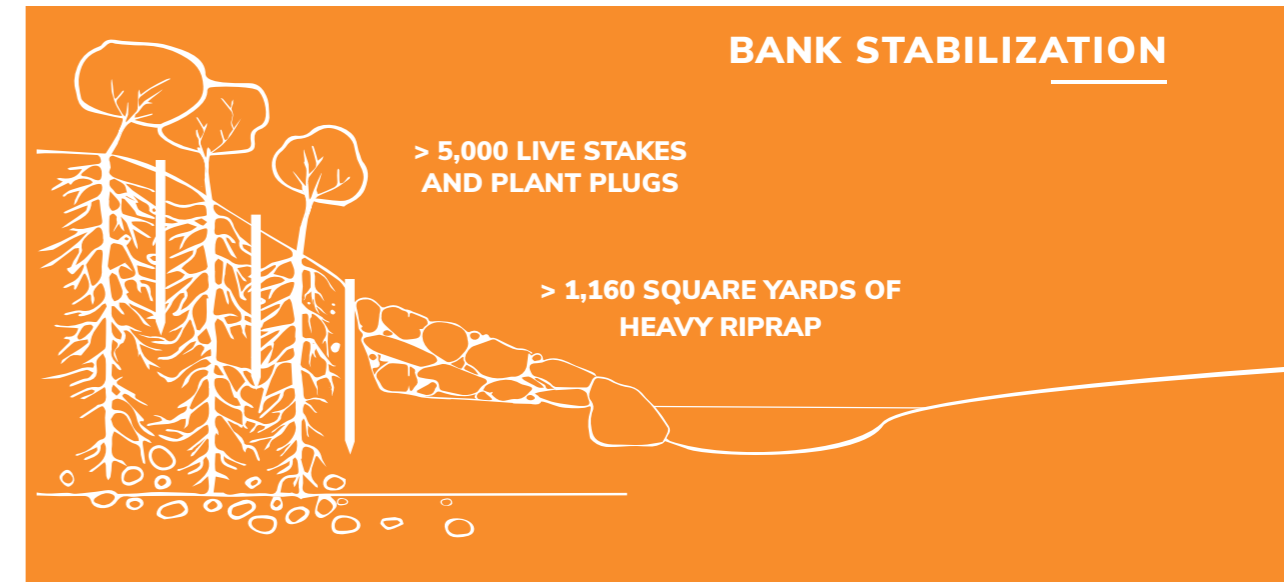
The drain center was also designed to follow the naturally-formed ravine, and a meandering low-flow channel was designed to reduce overall sediment transport into Belleville Lake.

More than 5,000 live stakes and plant plugs were installed along the drain banks to reduce the risk of severe erosion. These plant plugs take root and help protect and stabilize the drain banks. A riparian seed mix was also used, which takes root and grows better under wet soil conditions.

Funding the Fix

Developing the Tyler Pond into the Tyler Dam Drain allowed the WCWRC to use Special Assessment funds to facilitate the necessary drain work needed. This made the project of decommissioning the dam and building the culvert over the drain cost-effective.

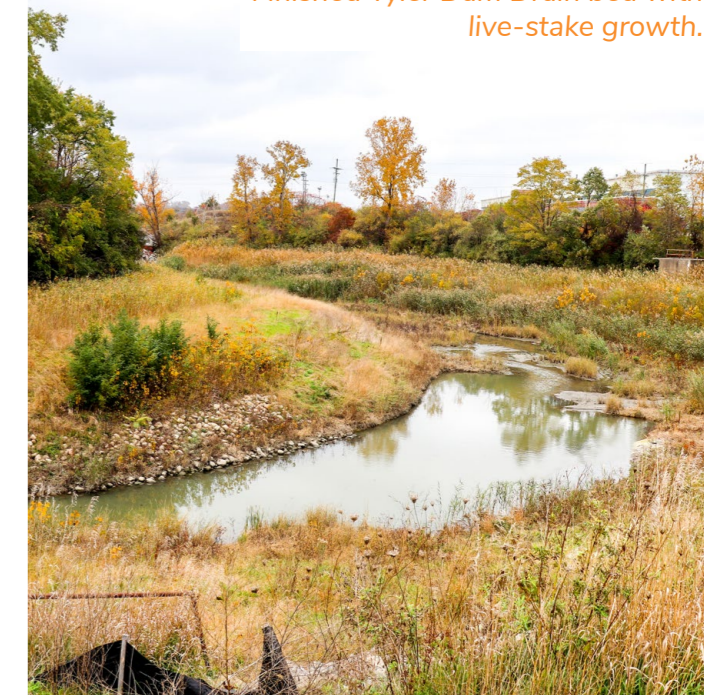
Funding for the overall project was a mixture of State Revolving Funds for the utility culvert and associated utility work, Township funding for some limited work on the dam, and Special Assessment funds for the drain work. Due to sound legal advice in 1980 when the upstream Beyer Dam was accepted by Washtenaw, a strong negotiating position allowed for contributions from a redeveloped industrial site to offset property owner costs. Because the district is the largest low-income part of the County, Pratt



said it was very helpful going into the Hearing of Necessity knowing that the project would be funded with no drain assessments to property owners.

Now that the project is finished, this area will cost less for the WCWRC to maintain, the Township will not have to expend funds to maintain the dam, and the buried utility lines across the culvert are easier and safer for YCUA to maintain.

Finished Tyler Dam Drain bed with live-stake growth.



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