Ingenium

in JEN ee um: Latin. Natural disposition of talents. Root word for "engineer"

FALL 2023

EMH&T

Municipal Bridges: Trusted Partner for Streamlined Design

TeamOhio for the Win: An Intel Success Story

Unity Park: Successful Floodplain Management on the Reedy River

Nationwide Children's Hospital Campus Transformation

Pickleball!

"We build communities."

EMH&T Employee

A little over a year ago, extensive and voluntary focus groups were held at EMH&T where employees were asked a series of questions about their experience working for the company. Quotes gathered from employees were often so powerful, they became the cornerstone of our office interior design. The one above is simple and straightforward, but with layers of meaning.

Unity Park in Greenville, SC, is a wonderful example of engineering an amenity that is designed to bring people together. Faced with a history of flooding from the nearby river, water resources engineers designed a floodplain solution that enabled a park whose very name meant a brighter future. Read about the project's success on page 2.

In honor of the Ohio Transportation Engineering Conference (October 17 and 18 in Columbus, Ohio), we typically feature a transportation project on the cover. When talking about communities, what better project to feature than the Statewide Municipal Bridges project awarded to EMH&T by ODOT (page 10)? The project is literally designed to bridge the things that can separate communities!

Designing infrastructure for the villages and cities we serve is just part of the way we build communities. Healthcare campuses and university campuses are also communities that operate, in many ways, just like small (and sometimes not-so-small) cities. They, too, have complex transportation and utility infrastructure, varied stakeholders, and an added layer of safety concerns.

Previous issues of *Ingenium* have featured an array of infrastructure and landscape architecture projects for our municipal clients. Starting with this issue, we'd like to share some stories about transformations on healthcare campuses, and exciting projects on college and university campuses. This issue, we focus on the work at Nationwide Children's Hospital, ranked number six on the nation's *U.S. News and World Report* Children's Hospital Honor Roll and nationally ranked in 10 pediatric specialties. Check out the extensive campus transformation for this community on page 7.

Going forward, we hope to highlight the many different forms *community* can take.

Sandy Doyle-Ahern
President

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Ingenium *is a semi-annual publication of EMH&T. It is designed to provide information on issues that are relevant to public officials and public servants of all levels, spanning the full array of public works industries. To add your name to the mailing list for* **Ingenium***, please send an e-mail to lruh@emht.com with your name, address, e-mail and phone number.*

Past issues of *Ingenium* are available by contacting Lee Ruh at lruh@emht.com.

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Unity Park: Successful Floodplain Management on the Reedy River

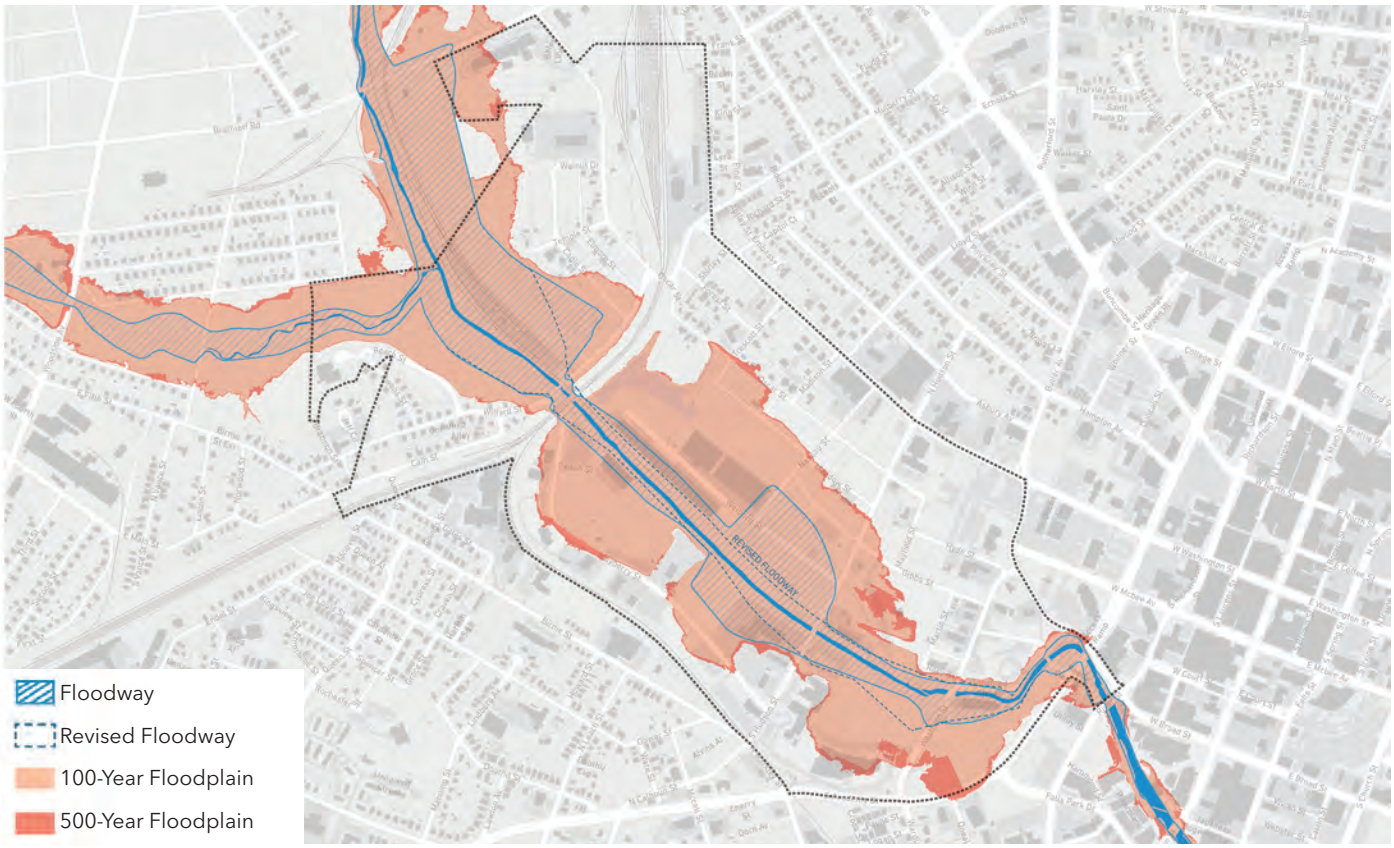
The Reedy River, which meanders through the western edge of downtown Greenville, South Carolina, has been known to be a potential flood hazard for many years.

This area of Greenville has been susceptible to flooding at the hands of the Reedy River and has put homes and businesses in danger, limiting development due to the risk of flooding. The 400± acre area of Unity Park is surrounded by culturally rich neighborhoods and the City of Greenville's public works facilities.

In an effort to enhance this historical area of town and encourage private investment, the City enlisted the assistance of a team of consultants, led by MKSK and including EMH&T. The team created a master plan for the area inclusive of critical economic opportunity, while also preserving and creating a desirable public open space, now known as Unity Park.

EMH&T provided civil engineering and environmental services in support of this project, including a stormwater master plan of the entire redevelopment area to identify appropriate best management practices to be constructed as part of future public roadways and park areas, protecting and enhancing the Reedy River channel which runs through the middle of the planning area.

The Reedy River corridor was susceptible to flooding, limiting development in the area. Robust floodplain management was the solution for enhancing the river corridor while protecting the new park.



EMH&T developed an ecosystem restoration plan to address the historical degradation of the river channel and nearby wetlands.

EMH&T developed an ecosystem restoration plan to address the historical degradation of the river channel and nearby wetlands. The restoration plan includes a constructed floodplain bench and riparian buffer, and the integration of the Swamp Rabbit Trail system into the restored river corridor, as well as providing supplemental hydrology to and replanting of existing wetlands.

"We've created a floodplain bench where we've cut into that bank and laid it back softly," said Paul Dow, City Engineer for Greenville. "That creates a massive amount of volume for when flood waters rise up. It gives that water a place to go."

EMH&T provided extensive coordination with public and private utility owners throughout the planning area to determine what changes and upgrades were necessary to accommodate the anticipated redevelopment, and to create new parklands in a previously urbanized area of the City. EMH&T also provided preliminary and final engineering, design of new roadways and supporting utilities, as well as structural and non-structural stormwater BMPs integrated into roadways, parking lots, and the surrounding parklands. The use of engineered (high capacity) soils in open space areas of the park significantly offset the need for constructed stormwater detention basins.

Additionally, EMH&T provided a comprehensive regulatory review of the redevelopment to determine compliance with local, state, and federal regulations. This included a

comprehensive flood hazard impact study of all planned re-development and Unity Park improvements, documenting compliance with the City's stringent post-construction water quality requirements, and addressing the state and federal waterway permitting process. The consulting team provided permitting services for the park improvements through local, state, and federal agencies, including submittals to the Federal Emergency Management Agency (FEMA) to update the published flood maps.

"The goal for Unity Park and the Reedy River corridor was simple—maximize useable area while minimizing any potential stormwater effects to the existing area and preserve the adjacent historical neighborhoods," said EMH&T's Miles Hebert, PE, CFM, LEED Green Associate.

During a significant rain event on January 4, 2023, the park improvements designed by the consultant team were put to the test. After several inches of rainfall, the Reedy River soon began to rise,

Within 24 hours of a significant rain event, the water receded leaving behind minimal damage and impact to the area. The team's design functioned precisely as it should.

The treatment of land adjacent to the river with native plant species and high-infiltration soils has allowed the park to become accessible very quickly after flood waters recede.

immediately impacting the floodplain where Unity Park is located. After only 24 hours, however, the water receded leaving behind minimal damage and impact to the area. In effect, the team's design functioned precisely as it should.

Unity Park serves as a good example of providing active recreational uses in proximity to a major watercourse and within a floodplain. Given the history of flooding in the area, using this land for development purposes would not have been practical. The park serves as a community-based amenity and has been popular with local residents, as well as regional users of the Swamp Rabbit Bike Trail. The treatment of land adjacent to the river with native plant species and high-infiltration soils has allowed the park to become accessible only a short period of time after flood waters recede.

"Integrating the Reedy River into the park improvements by applying natural channel design methods to stabilize the banks, and providing accessibility through the floodplain bench and walking paths, has significantly benefited the City in terms of reducing potential flood and erosion damages," said Miles. ■

To learn more about EMH&T's infrastructure services, contact Miles Hebert at mhebert@emht.com or 614.775.4205.

Photo courtesy of John Fowler and MKSK.


NATIONWIDE CHILDREN'S
Abigail Wexner Research Institute

The Nationwide Children's Hospital Campus Transformation

Nationwide Children's Hospital (NCH or "Children's"), an annually top-10 ranked pediatric healthcare system located in a vibrant urban core just outside downtown Columbus, Ohio, has undergone significant growth and development dating back to the early 2000s.

The hospital's leadership commissioned a team of experts, including EMH&T, to determine a forward-looking master plan. The goal was to expand Children's premier healthcare reach across the region to better serve increasing patient volumes, expand necessary services, and grow its research capabilities across the 76-acre campus.

Main Campus Redevelopment

The initial studies and master planning efforts addressed Children's growing patient volumes. To accommodate for this growth, a replacement hospital would be necessary. To support the influx of patients, families, visitors, and workforce, the team addressed parking concerns with the implementation and design of two additional on-campus parking facilities. In 2005, an 8-level parking garage consisting of 1,530 parking spaces was designed and constructed, followed by a 500-space underground parking structure, with an underground pedestrian tunnel to the replacement hospital. The team also determined it was necessary to realign and widen the existing public roadways surrounding the campus to support the increase in traffic along East Livingston Avenue and Parsons Avenue, which border the southern and western edges of Main Campus. This roadway work was performed concurrently with construction to Interstate 70, which borders the northern edge of the campus.

The initial master planning phase identified significant utility upgrades that were necessary due to the age of the existing utilities—many of which were at least 50 years old. The team of consultants developed innovative solutions to reconstruct the aged utilities including domestic and fire water systems, and implementation of a comprehensive stormwater management system for the entire build-out of the Hospital campus master plan. In total, approximately 2.5 miles of water, sanitary, and storm sewer were replaced and realigned.

EMH&T also provided expertise for development of a new 40,000± square foot central energy plant to, provide necessary power, heating and cooling, and fiber optic connectivity to the entirely redesigned and expanded hospital's Main Campus. Completed in 2010, the central energy plant achieved US Green Building Council (USGBC) LEED Gold Certification and distributes utilities via approximately 4,000 linear feet of subsurface utility tunnels constructed around the perimeter of the campus.

By June 2012, after eight years of extensive planning, design, and construction the new replacement hospital was opened on Nationwide Children's Hospital's Main Campus. The replacement hospital contains 12 stories and 750,000 square feet with an aggregate cost of over $900 million as of 2012. Design and construction of the replacement hospital included integration of Livingston Park, one of the City's oldest parks, to provide a welcoming respite area and connection with the community.

West Campus Evolution

Out of the initial master planning and implementation phasing of the Main Campus buildout evolved a need to expand the overall size of Nationwide Children's Hospital campus. The focus pivoted to two separate parcels located directly to the west of Parsons Avenue from the Main Campus area. In 2005 and 2013, respectively, NCH leadership acquired a 10-acre parcel that contained a Wendy's restaurant and strip retail complex, and a 10-acre parcel, which housed the Columbus Africentric School. These acquisitions added 22± acres of land that Children's Hospital would develop into what is now known as West Campus.

As a key member of the consultant design team, EMH&T developed the infrastructure elements of a facilities master plan for the newly acquired property to support planned research buildings, ambulatory care pavilion, and behavioral health hospital. Plans for West Campus included demolition of existing buildings, save for an outpatient orthopedics clinic, and utility upgrades as a continuation of much of the work EMH&T had already designed for the Main Campus. Many of the existing utilities were substantially undersized, so the infrastructure and utility master planning included abandonment of existing utilities, and construction of new utility systems to support the intended build-out of the West Campus.

Master planning quickly transitioned to implementation with Research Building 3. The new Research Building 3 was constructed from 2009 to 2012 and consists of 200,000 square feet across seven stories. The EMH&T team designed utilities and infrastructure that not only served this building, but also conceptual plans, utility analysis, private roadway system design, and grading to pave the way for continuing development of the West Campus.

The next phase of development focused on the Livingston Ambulatory Center, which was designed to be 200,000 square feet and five stories to house various outpatient services. A parking structure to service this building was designed to provide 875 parking spaces with two subsurface levels and seven above grade.

The centerpiece for West Campus is the Behavioral Health Pavilion that was officially opened in 2020. This nine-story, 386,000 square foot facility focuses entirely on a growing need for pediatric and adolescent mental health; and is the largest of its kind in the nation. EMH&T's experts provided site layout assistance, grading, drainage, utility design, and traffic design to support the development of the Pavilion with a dedicated parking structure.

Designed and built concurrently with the Behavioral Health Pavilion was a new Data Center and Conference Center building consisting of 40,000 square feet. The official opening in the spring of 2020 allowed the existing data center building to be repurposed. The Data Center was designed to service the entire 5.1 million square feet of hospital, clinic, research, and office space on the Main Campus, West Campus, and over 60 off-site facilities across the region. Key to EMH&T's design of the Data Center was connections to two primary sources for normal and emergency power with secondary feeds for both the West Central Energy Plant, as well as future connections to proposed buildings, including an adjacent parking garage and clinical building to the west.

Research Building 4, a companion to Research Building 3, is the latest facility to reach completion. Officially opened in late 2021, Research Building 4 supports basic, clinical, translational, and health services research across 220,000 square feet.

Nearing completion, with a finish date goal of the first quarter of 2024, is the Livingston Surgery Center, which will be connected to the existing Livingston Ambulatory Center. Once open, the Livingston Surgery Center will consist of 266,700 square feet housing comprehensive orthopedic and general outpatient surgery services.

An Eye to the Future

To date Nationwide Children's Hospital has invested over $1.5 billion in infrastructure improvements, expansion, and development across its entire healthcare campus. Future plans include the build-out of additional research facilities located on West Campus and a recently announced Main Campus hospital tower, which will be a companion to the 2012 replacement hospital, for which EMH&T is currently designing necessary infrastructure.

A five-year strategic plan, announced in 2021, includes plans for the new hospital tower and additional research facilities with a projected budget of $3.3 billion, bringing Nationwide Children's Hospital's total investment to nearly $5 billion since the turn of the century.

Planning and design for the new hospital tower began in early 2022 with infrastructure enabling work starting this summer and building construction in 2024. The hospital will mirror the existing hospital that was completed in 2012. The new facility will house an expanded emergency department along with additional inpatient and critical care facilities.

Since 2000, Nationwide Children's Hospital has aggressively invested in its ambitious goals. Expansion was necessary for growing populous demands to more appropriately serve the region. EMH&T is both humbled and proud to serve such a great mission by planning and designing comprehensive infrastructure solutions to facilitate the health system's growth. ■

To learn more about EMH&T's healthcare market experience, contact Todd Cunningham at tcunningham@emht.com or 614.775.4350.

Municipal Bridge Program Keeps the Cities of Ohio Connected

EMH&T was recently awarded the 2023 Ohio Department of Transportation (ODOT) General Engineering Services Municipal Bridges Program task order contract.

EMH&T is one of three firms selected from a pool of about 30 other firms that applied.

ODOT's Municipal Bridge Program serves to offset the costs associated with design and construction of bridges needing either rehabilitation or replacement across the state. Historically, the program was created to supplement a portion of construction costs. However, it was discovered that many municipalities required assistance to alleviate some of the financial burden associated with design costs as well.

The total value of the ODOT Municipal Bridge Program works out to be around $4.5 million, with much of the funding derived from the 2021 Bipartisan Infrastructure Bill. The State of Ohio received the federal funding with the express purpose of passing down to local municipalities, whereby ODOT acts as a steward to the funds.

The program services only vehicular bridges carrying municipal roadways, rather than county or state routes. The funding offered is targeted directly for federal bridges, meaning the span must be at least 20 feet in length. Additionally, project funding is primarily limited to bridge items; other components, like aesthetics, custom lighting, streetscapes, and more, are not applicable.

Selection of bridge sites for the Municipal Bridge Program is primarily based on their documented condition. Municipal bridges are inspected annually with oversight from ODOT and those deemed to be deficient have a higher priority. While many of the bridges that qualify for the program are not considered to be overly complex from a design perspective, they frequently act as a vital throughway for each municipality. Many bridges that qualify for the program will be complete replacement projects, rather than rehabilitation, with design costs typically around $150-250,000. EMH&T

The Etna Road Bridge in Whitehall, Ohio, is one of two in close proximity, designed by EMH&T. The team developed a comprehensive Structure Type Study to compare feasible alternatives for both bridges.

EMH&T recently supported the City of Kettering, Ohio for the replaced the Ridgeway Road Bridge which included additional City funding for enhanced aesthetics and unique art features on the bridge.

can expect to work on seven to eight bridges throughout the duration of the contract.

"We cannot overstate the importance of this program for the reach and impact it has on so many communities across the state," said EMH&T Senior Structures Manager Craig Schrader, MS, PE. "Our team is beyond excited for the opportunity to provide such critical improvements to the local communities."

This contract is important for EMH&T because it will afford our team a chance to extend its reach and develop relationships in more communities statewide. It will also allow our team to act as a good faith steward of the financial funding, which provides necessary and quality improvements to vital bridges. After EMH&T's structural experts complete the design improvements, many of these bridges can expect a 75-year service life.

To date EMH&T has been awarded task orders for this program in Lisbon, Delphos, and Oregon, Ohio. ■

To learn more about EMH&T's structural design services, contact Craig Schrader, at cschrader@emht.com or 614.775.4632.

The Elm Street Bridge in West Carrollton, Ohio, designed by EMH&T, is an example of the type of bridge that will be eligible for the ODOT Municipal Bridge Program.

TeamOhio for the WIN: An Intel Success Story

TeamOhio and Ohio Governor Mike DeWine received the news they had been hoping for with the big announcement on January 21, 2022. Within the halls and corridors of EMH&T, as an honored member of TeamOhio, preparations had already been taking place for months.

The Intel Corporation had been shopping for a location to house its next semi-conductor fabrication complex in the United States. New Albany, Ohio was well positioned to be a solid choice for such expansion. The City had already delivered creative and sensible solutions to support development in the nearby International Business Park and Personal Care and Beauty Campus, which houses world-class technology companies, myriad consumer goods manufacturing facilities, and logistical support required of the aforementioned.

EMH&T's role on TeamOhio was high level thinking. With what was reported to be Ohio's largest economic development project in history, and a massive project in physical size and scope, EMH&T engineers were tasked with evaluating the infrastructure needs, not only for the Intel microchip fabrication project, but for the other companies that would require close proximity to the facility. From water supply to sanitary sewer service, and from roadway access to traffic circulation, EMH&T looked at the immediate and long-range impact to local infrastructure.

Once the announcement was made and TeamOhio could celebrate an enormous win for Ohio, they shifted their focus to implementation of the infrastructure critical to facilitating the first phase of

(Above) Ohio leaders and Intel executives participate in a ceremonial groundbreaking on Friday, Sept. 9, 2022.

(Below) A rendering shows plans for the two factories on a site that spans nearly 1,000 acres .

(Above) Ohio Gov. Mike Dewine (left) accepts a silicon wafer from Intel CEO Pat Gelsinger on Friday, Jan. 21, 2022, in Licking County, Ohio during an event to announce Intel's lans for an initial investment of more than $20 billion in he construction of two new leading-edge chip factories.

(Below) Intel's Ohio One construction teams begin concrete pour in May 2023. This marks a major milestone for the future leading-edge manufacturing site and moves construction into the next phase in Silicon Heartland.

"Seeing these bid packages come together is one of the most impressive efforts that I have seen in my career."

Ryan Ohly
New Albany City Engineer

the Intel development. That meant infrastructure deigns ready for construction in a matter of just weeks.

In order to meet the strict timelines, EMH&T's mission was two-fold: dedicate the resources for intense design fast, and do so while adhering to the most stringent of quality assurance/quality control procedures.

EMH&T is well known for uniting 16 core disciplines dedicated to the planning, analysis, and design for utility and roadway infrastructure under a single roof. The resulting synergies of collaboration meant that the staff from many divisions could quickly focus their attention on the project at hand. In total, more than 100 professionals and technical staff had a role in meeting TeamOhio's needs.

Just as important (or more so), than meeting tight deadlines, was doing so with plans of the highest quality. So, while designs were being developed, an additional team of experienced professionals were reviewing them with "fresh eyes" in real time. Not a single plan sheet would be sent out without first receiving reviews for accuracy, reliability, and constructability.

The pacing with which these projects came together from design to implementation is nothing short of unprecedented.

"Seeing these bid packages come together is one of the most impressive efforts that I have seen in my career," said Ryan Ohly, New Albany City Engineer. "The thing that inspires me the most is the teamwork that was developed over the last several months. It really showed in the 11th hour as everyone came together for the final push. You all are top notch professionals and should be proud of your work!" ■

Bringing Pickleball to Your Community

EMH&T is no stranger to the recent rise in popularity of Pickleball, which was invented by three vacationers on Bainbridge Island, near Seattle, in 1965. The sport is a blend of ping pong, badminton, and tennis, and for the past three years, EMH&T has been actively involved in the design, engineering, and construction of dozens of pickleball courts.

"Our clients are adding courts as an alternative within parks and residential developments," said Jim Dziatkowicz, PLA, ASLA, Director of EMH&T's Planning and Landscape Architecture Division. "These facilities are opportunities to bring the community together for some friendly competition and raise awareness of the wonderful recreational areas."

EMH&T maintains a growing portfolio of pickleball park projects as we continue to partner with communities and developers to meet the ever-increasing demand for pickleball facilities.

"Some communities are converting tennis courts to pickleball courts," Jim said, "but most are looking to supplement the existing tennis courts with new facilities to preserve space for both types of court players."

The City of Grove City, Ohio, is a perfect example of a municipality listening to its residents. Windsor Park has six EMH&T-designed pickleball courts (known as Babbert Pickleball Courts). The Park at Beulah has seven courts recently added and in August hosted the inaugural Grove City Mayor's Pickleball Cup that brought players from across Ohio.

"Our pickleball community is quite active and we're incredible advocates for bringing pickleball courts to Grove City," said Mayor Richard L. "Ike" Stage. "Their partnership continues to be a

The Babbert Pickleball Courts at Windsor Park in Grove City, OH

According to the Sports & Fitness Industry Association (SFIA) Single Sport Participation Report from 2023, pickleball is now the fastest-growing sport in America for the third year running. Some additional facts from SFIA include:

- There are an estimated 36.5 million pickleball players in the U.S. with the ages of 18-34 being the largest percentage of players nationwide.
- Pickleball participation has grown an average of 158.6% over the last three years.
- There are currently 10,320 pickleball courts in the United States.
- The total prize pool of pickleball tournaments in 2023 will be between $9.0 and $11.0 million.[1]

1 Mackie, B (2023, February 24). Pickleball statistics: the numbers behind America's fastest growing sport in 2023. https://www.pickleheads.com/blog/pickleball-statistics

great asset, serving as more than two dozen volunteers for our first annual Mayor's Pickleball Open, benefitting LifeCare Alliance Meals-on-Wheels."

Additional communities with interest in developing pickleball courts with EMH&T include Groveport, Lancaster, Powell, and Etna Township. EMH&T has listened to the pickleball community and integrated best practices into the design.

"We know what players like about courts and what design options they prefer, so we deliver the highest quality courts," said Jim.

Jim also mentioned EMH&T's coordination of other amenities as they did for The Park at Beulah and those currently planned for the Mock

The Park at Beulah recently hosted the inaugural Grove City Mayor's Pickleball Cup, that brought players from across Ohio and benefited LifeCare Alliance Meals-on-Wheels.

Park and Anheuser Busch Sports Park (Columbus, Ohio) that include some or all of the following:

- Parking
- Lighting
- Concessions
- Picnic shelters and bleachers
- Shade structures
- Pedestrian circulation

EMH&T's client Epcon Communities (age 50+ residential developments) quickly recognized the popularity of the sport among seniors and asked EMH&T's design team to make pickleball courts a staple within the design of their communities.

The pickleball community is very active, highly participatory, and very opinionated. So, he and his team work with municipal staff to create web pages, and/or social media posts for information sharing and project updates.

"We owe our success to proactive engagement with clients," Jim said, "and a good public relations plan to streamline the design and construction process." ■

For all your pickleball court design needs, contact Jim Dziatkowicz by email at jdziatkowicz@emht.com. or 614.775.4703.

Pickleball Courts under construction at the Park at Beulah in Grove City, OH

Giving Back

EMH&T continues its commitment to give back to the communities where we live and work. The firm offers employees paid time off so they can participate in a wide variety of charitable efforts. Here's a look at how some of our staff have recently given back:

Employee Grant Program at EMH&T

At EMH&T, we have a unique opportunity to make a difference in our communities, both in the work we perform and how we serve. For this reason, we offer an Employee Grant Program where employees can apply to seek funding for an organization with which they are directly involved as a volunteer. Awards are considered through an application process and winners are chosen semiannually. The Spring 2023 award recipients include:

- Josh Meyer – Alicia's Closet is a nonprofit organization serving the foster care community in Central and Northwest Ohio.
- Zachary Cline – Boy Scouts of American (Troop 25) provides the nation's foremost youth program of character development and values-based leadership training, which helps young people be "Prepared. For Life.®"
- Rob Ferguson – Engineers Without Borders USA is a nonprofit humanitarian organization established in 2002, supporting community-driven development programs worldwide.
- Deven Draper – Lancaster-Fairfield County Charity Newsies sells newspapers every year on the 2nd Saturday in December since 1936 to raise money for less fortunate families

Childhood League Preps for Students in the Fall

EMH&T's Development II Division volunteered at the Childhood League to assist with preparations for painters to freshen up for next year's classrooms. This organization provides expert early childhood intervention specialists, social workers, and registered nurses who work with children in both classroom and home-based programs with a mission to "change the trajectory of a child's life through innovative early childhood education, transdisciplinary teams, and family-centered partnerships."

Park Clean-Up Day

A team from EMH&T volunteered in the City of Whitehall for clean-up day at Whitehall Community Park, spreading mulch around play equipment and flower beds.

Volunteers Help at the Mid-Ohio Food Collective

The Communications and Industrial & Logistics Divisions spent an afternoon volunteering at the Mid-Ohio Food Collective Market at Norton Road. Mid-Ohio Markets are an exciting new approach to free food markets, enabling customers to access a no-cost grocery store experience that provides convenient access to the right food, in the right place, and at the right time. From restocking shelves, to breaking down boxes, cart retrieval, and checking customers in, it was a great day of impact in the community.

EMH&T Staff Helping Out at Habitat for Humanity

Several EMH&T Divisions volunteered their time assisting with rehabilitation of a home for Habitat for Humanity in the Linden neighborhood of Columbus. Habitat for Humanity works together with families, local communities, volunteers, and partners so that more people are able to live in affordable and safe homes.

Southwest City Schools – Careers in Engineering and Surveying Shadow

EMH&T hosted 35 Southwest City School and Delaware County Career Center (DACC) students. The group learned from EMH&T professionals about their experience and journey in choosing engineering or survey as a profession. The group shadowed several engineers, watched how to make a CAD drawing of an example project of their school campus, and learned all about design innovation technology.

Shorts

Amy Nagy Receives 40 Under 40 Honor by *Columbus Business First*

Columbus Business First chose Amy Nagy, PE, to be a 40 Under 40 honoree. Honorees are chosen based on both their career achievements as well as community involvement. Amy has unquestionably positioned herself as a leader in the commercial development sector through her tireless work ethic and expert knowledge of the field. Amy has been with EMH&T her entire career, dating back to 2008, working on projects from small outlots to projects comprising Silicon Heartland.

Public involvement for the Meadowbrook Lake and Dam Study

Meadowbrook Lake and Dam Study, Stow, Ohio

EMH&T recently won the Meadowbrook Lake and Dam Study in the City of Stow. The 23-acre Meadowbrook Lake needed a dam study and broader amenities investigation. EMH&T is working with the City to provide a hydrologic and hydraulic study to determine the adequacy of the dam's discharge/storage capacity to safely pass the required design flood to meet ODNR standards. We are also providing survey, dredging recommendations, creative active and passive amenity options, improved pedestrian circulation, and shoreline restoration options.

EMH&T rendering of the roundabout at Cook Road and Mansfield-Lucas Road in Richland County.

RIC-CR133.2.22 Lexington Springmill Road at Home Road Roundabout, Richland County, Ohio

EMH&T was selected to prepare construction contract plans for a roundabout on Lexington Springmill Road at Home Road in Richland County with a project length of approximately 0.34 miles. Our work will include public involvement, environmental, right-of-way plans, maintenance of traffic, stormwater management, culvert improvements, and utility coordination. Our team will also coordinate the design with another close project at the northern limit of the project area. The project is added to a portfolio of more than 80 roundabouts studied or designed by EMH&T, all in Ohio.

Livingston Avenue - 18th Street to Nelson Road, Columbus, Ohio

EMH&T was selected by the City of Columbus to design improvements to the Livingston Avenue corridor from 18th Street to Nelson Road. The project will result in a lane reallocation to reduce the travel lanes and provide improvements that will increase safety for all users. The project

was awarded a Safe Streets and Roads for All (SS4A) grant to support the City of Columbus' Vision Zero goals. This is a focus on ending crash-related fatalities and serious injuries while increasing safe, healthy, and equitable mobility for all. EMH&T will also provide expertise in the administration of US Department of Transportation grants in order to support the City in meeting the grant schedule and process requirements for this roadway improvement project.

John Bishop Roller Hockey Rink, Whitehall, Ohio

The City of Whitehall recently cut the ribbon on the street hockey facility at John Bishop Park. The street hockey facility is the first to be funded by the Columbus Blue Jackets Foundation (CBJF). In addition to providing funding for the construction of the facility, the CBJF will also provide resources to establish street hockey programs for the City of Whitehall. The Foundation has long raised and allocated funds with the goal to promote childhood literacy and for the wellbeing of pediatric cancer patients. As the Whitehall City Engineer, EMH&T provided project management, site/civil engineering for the land grading on which the rink sits, renderings of the facility created by our Design Innovation Division, and survey services.

Image courtesy of N.R. Investments

Demolition Grant Awarded for Rockwell District in Whitehall, Ohio

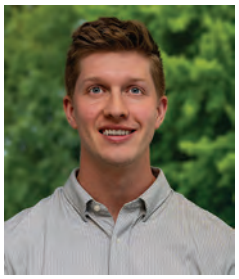
The City of Whitehall is performing the largest urban redevelopment project located in a Qualified Opportunity Zone (QOZ) in the country. According to the Internal Revenue Service, "a QOZ is an economically distressed community where new investments, under certain conditions, may be eligible for preferential tax treatment." Whitehall is partnering with national real estate developer, N.R. Investments and T-Squared Developments to lead a dynamic public-private partnership to redevelop this opportunity zone within their city. The City is demolishing the dilapidated and condemned former housing site, and investing in new infrastructure, roads, and utilities. Totaling over $250 million in private and public investment, this redevelopment will create approximately 1,000 permanent jobs and 4,000 construction jobs.

EMH&T Named Top Workplace 2023 by *Columbus CEO Magazine*

EMH&T was chosen as a Top Workplace for 2023 in the mid-size category by *Columbus CEO* magazine. EMH&T was honored as the Top Workplace along with 35 other companies in the mid-size category, and 92 companies in total. The *Columbus CEO* magazine Top Workplace honor is significant for EMH&T because it is determined by an employee survey, which is then analyzed by an independent consultant. Based on these results, EMH&T was not only chosen as a Top Workplace, but also received recognition as a company heading in the right direction.

People In The News


A. Jensen


C. Svatosky


M. Yake


J. Elleman

New Professional Licenses

Congratulations to these new Professional Engineers (PE): Alex Jensen (Water Resources), Cory Svatosky (Public Works), Michell Yake (Public Works), and Jared Elleman (Development).


J. Akins


S. Steele


R. Andrews


R. Ferguson


S. Spencer


C. Pirkle


J. Nolen


J. Smallwood

New Associates and Principals

This year, we are pleased to recognize two new Associates and six new Principals as firm leaders. Associates are those who have demonstrated that they actively foster the values of the company and promote the development of the business. Principals of EMH&T are those employees who have served in a senior leadership role and are recognized for their exceptional contributions and dedication to the company. All of these employees have brought significant value to EMH&T, their colleagues, and clients. We appreciate their contributions to the firm and thank them for their ongoing service to the company and our clients. Please join us in congratulating new Associates: James Akins (Water Resources), and Sean Steele (Urban Design). EMH&T's new Principals include: Ryan Andrews (Public Works), Robert Ferguson (Urban Design), Shane Spencer (Public Works), Christy Pirkle (Environmental), Jim Nolen (Construction Services), and Jason Smallwood (Traffic).

Contact Us

Contact EMH&T today to schedule a visit at your office. You can reach us at **614.775.4500** or by email at **info@emht.com.**

You are also welcome to contact any of the experts identified at the end of each article in this issue of *Ingenium*.

Follow us on LinkedIn

S. Arden

New Roles for Arden and Hebert

Shawn Arden, PE, CFM, LEED AP, CPESC, has been promoted to Director of Water Resources. Shawn's extensive experience with the technical, regulatory, and management of water resources projects make him a natural asset to lead the EMH&T Water Resources Division. He specializes in flood risk identification and mitigation, dam and levee safety improvements, streambank stabilization, and ecological restoration projects. Shawn has been with EMH&T since 2013 and is a Principal of the firm.

Miles Hebert, PE, CFM, LEED Green Associate, is serving in a new capacity as Director of Infrastructure Pursuits. Miles brings significant experience with pursuit strategy, proposal development, interviewing, and public involvement. He will work with internal teams pursuing new work and will connect with public sector clients statewide and regionally. In addition, as an expert water resources engineer, he will continue to lead stormwater and floodplain management projects.

M. Hebert

Joining the Team

E. Johnson

Ed Johnson joined EMH&T as a Senior Construction Representative in our Construction Services Division. Ed is an experienced construction manager with 16+ years of experience in his field.

J. Maar

John Maar, PE, has joined EMH&T as a Senior Project Manager with 20 years of experience as a consulting civil engineer. John graduated from Ohio University with a Bachelor of Science in Civil Engineering.

J. Myers

Jordan Myers joined EMH&T as an Environmental Scientist after earning his undergraduate degree in Zoology from The Ohio State University and earned a Master of Science in Biology from Ball State University.

M. Queen-Darby

Melissa Queen-Darby returned to EMH&T as an Environmental Scientist working in the Environmental Division. Melissa was with EMH&T from 2003-2014 and she has a Bachelor of Science in Environmental Management from Lake Erie College.

S. Shepherd

Shaylee Shepherd was recently hired as a Visualization Specialist working in the Design Innovation Division. Shaylee earned her Bachelor of Science in Visual Communication Design from The Ohio State University.

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- Environmental Sciences
- Infrastructure Renewal
- Railroad Services

OTEC

Leading the Transportation Transformation

October 17 & 18, 2023 | Greater Columbus Convention Center

Visit us at Booth 401/403.

Tuesday, October 17 | 10:30 a.m. to Noon

Keeping Culverts and Bridges Clean through Maintenance

Moderator: Robert Hoops, PE

Robert will moderate this session about innovative methods for reducing blockages in storm sewers and bridges. ODOT-specific research will be discussed.

Tuesday, October 17 | 1:30 to 3 p.m.

Turning Concepts into Action: Creating a Greener ODOT from Planning through Construction

Speaker: Melissa Seeley, MBA, MEn

Melissa will speak about EMH&T's role in ODOT's ongoing initiative to rethink the approach to stormwater BMPs, water quality, and vegetation aesthetics in the right-of-way.

Wednesday, October 18 | 10:30 to 11:30 a.m.

Economic Development for Local Communities – two Ohio LPAs share their success stories

Speaker: Abby Cueva, PE

This session highlights how locals can provide infrastructure support to spur economic development and community revitalization. Abby will share the process that led to the successful reconstruction of the I-75 and SR-129 interchange in Butler County that improved access to 700 undeveloped acres, and the development that has come since.

Wednesday, October 18 | 10 to 11:30 a.m.

Moving Towards a more Sustainable and Equitable Ohio Construction

Moderator: Christy Pirkle, MS

Christy will moderate this session about environment law and regulatory updates, including a discussion about stream mitigation and stream restoration opportunities.