R.E. WARNER & ASSOCIATES INC.

ENGINEERS
ARCHITECTS
SURVEYORS
CONSTRUCTION MANAGERS

Excellence BY DESIGN

SPRING 2019

A DIGITAL MAGAZINE FOR CLIENTS AND FRIENDS OF R.E. WARNER & ASSOCIATES, INC.

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ON THE COVER: BUILDING ADDITIONS/EXPANSIONS ARE JUST SOME OF THE PROJECTS KEEPING OUR CIVIL AND STRUCTURAL TEAMS BUSY SO FAR IN 2019 (READ MORE ON PAGES 4-5)

PRESIDENT'S MESSAGE

by Ted Beltavski, PE, MS

Dear Colleagues,

As I look out my window and see the flowers blooming, trees budding, and grass turning emerald green, I feel a sense of rejuvenation. Spring is finally here, and with that so is renewed energy to strive for improvement. At home, this means the customary spring cleaning and pursuit of other personal goals. At the office, the timing for this revived energy couldn't be better.

We recently welcomed Department/Operations Manager Dave Ferencik, PE and Senior Project Managers Matt Benovic, PE, SE and Jen Kalin, RA, NCARB to the R.E. Warner Board of Directors. With their installment, we have kicked off an initiative to identify how we can build on R.E. Warner's legacy of technical excellence and customer service, as we know there is always room for improvement. We have determined a few initial focus areas, and you can read more about our efforts on Pages 8-9.

Dave, Matt and Jen have proven themselves to be go-getters, never satisfied with doing things "the way they've always been done" when they see how things could be better. We have long valued this mindset and bias towards action in our company. Our existing Directors could not be more pleased that these three rising professionals accepted the invitation to join the Board.

As spring gives way to summer, our pursuit of improvement will shift from identification of and planning for change to execution. I am looking forward to working with our Board and staff to persist in realizing our Vision to be our clients' preferred consultant.

Best wishes,

Ted A. Beltavski, PE, MS
President

FOCUS ON: CIVIL AND STRUCTURAL ENGINEERING

Featured work and news of note in the Civil/Structural Department

R.E. Warner is excited to feature the work of our Civil and Structural Department in this issue's department spotlight column. The team is currently working on a wide variety of projects for clients across all of our markets. In addition, we are happy to have welcomed new architect Michael Laham to the team as well as welcomed back a structural engineer and a structural designer who have re-joined the firm.

Our Civil group continues to be an essential part of the team for our many new construction and building addition/expansion projects, as well as supporting our clients various other civil engineering needs. Notably, the team has provided site development for the new Viccarone Heating & Air Conditioning office and fabrication facility in Strongsville. This new building will house a large open space for fabrication, loading/unloading, and storage plus an office which will house all the support areas such as private offices and conference rooms.

The team also is providing civil engineering design for the renovation of a scrapyard at a steel plant in Canton, OH. We are developing changes to the roadways and drainage improvements to optimize scrapyard operations by increasing the amount of land that is usable and by enabling materials to be handled more efficiently.

Meanwhile, R.E. Warner's Structural team has kicked off engineering for the $80 million building expansion project at the BWXT Barberton facility, which produces heavy components for naval nuclear reactors. The project encompasses improving existing buildings and installing new manufacturing equipment to support an anticipated increase in

TYPICAL CIVIL AND STRUCTURAL ENGINEERING SERVICES

Site Design
- Grading & Drainage
- Stormwater Management
- Streets & Roadways
- Underground Utilities
- Irrigation Systems
- Erosion Protection
- Parking Areas
- Railroad Spurs
- Permitting & Compliance

Transportation
- Roads & Highway Design
- Bridges & Structures
- Transportation Planning
- Waterways

Municipal Engineering
- Water Storage, Transmission & Distribution
- Sanitary Sewage Collection
- Stormwater Management
- Storm Sewer Systems
- Culverts & Drainage Structures
- Streets & Roadways
- Parks & Recreational Facilities

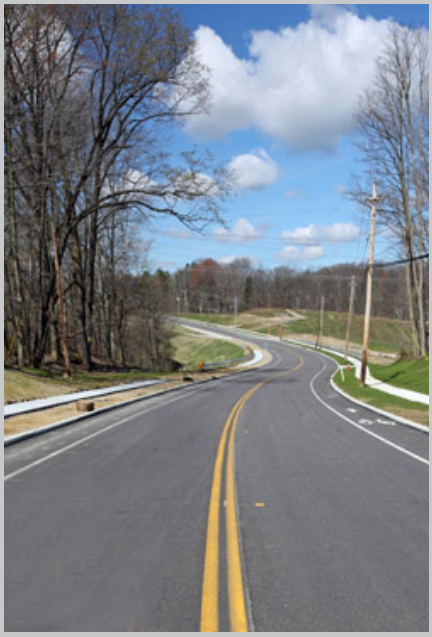
Structural Analysis & Investigation
- Special Structures
- Structural Investigation & Evaluation
- Integrity Assessment
- Crane Railway Surveys & Inspections

Foundation Design
- Pilings
- Caissons
- Footings
- Isolated Foundations
- Mats

Building Design
- Structural Steel
- Reinforced Concrete
- Pre-stressed Concrete
- Masonry Wood Structures\

Special Structures
- Fall Protection
- Overhead Crane Runways
- Material Handling System Structures
- Blast Design
- Storage Tanks
- Substation Structures
- Retaining Walls
- Water Intake & Outfall Structures

Bridges & Culverts
- Highway
- Pedestrian



production. BWXT has contracted R.E. Warner to provide full A/E services for this undertaking, and our Structural group is playing an important role as the project includes accommodating a 200-ton crane in a seven-story building.

Our Structural staff also continues to assist our auto manufacturing clients with routine maintenance as well as renovations related to plant improvements in connection with strategic production changes. Recent work has included truss analysis for structural load planning for a plant expansion, and services related to the equipment installation for a new engine manufacturing line. We also continue to find ways to integrate our advanced technologies to benefit our clients. For example, we used our 3D scanning technology to model multiple structural components above a manufacturing line that needed to be modified, which enabled the client to keep the line running instead of needing to interrupt operations with a shut down.

Another recent project requiring exceptional creativity by our Structural staff was the design of a new conveyor transfer chute for a Northeast Ohio salt mine. Due to space constraints and locations of the mine, existing conveyors, and storage areas, the transfer chute required a nautilus shape which necessitated a unique approach to the design of the chute. We utilized SolidWorks for analysis to ensure the calculations for the plate and structural steel design were accurate and workable.

Whether you need engineering services for a large, complex project or small maintenance job, we are always happy to help. Need a quote or consultation for your next project? Contact Business Development Manager Brett Neff.

WHAT WE'RE WORKING ON

Featured recent projects across our markets

METALS MARKET

MELT SHOP OPTIMIZATION

R.E. Warner is providing **ongoing services for a melt shop optimization** at a steel manufacturing plant. Our scope of work has included structural, civil, electrical, mechanical and surveying services related to design for the high voltage yard upgrades, a ladle maintenance building addition, and building modifications for LMF installation, among other project components.

INSTALLATION ENGINEERING FOR HSM THICKNESS PROFILE SYSTEM UPGRADE

Our team is providing **installation engineering services for the HSM thickness profile system upgrade** at a steel manufacturing facility. The project includes removal and replacement of existing thickness and profile gauges/housing, utilities upgrades for these units including chillers, city water and air piping, and electrical controls upgrades. Our team includes engineers from the structural, mechanical/piping and electrical disciplines. The primary deliverable is a general arrangement plan.

POWER MARKET

PLANNING & PROTECTION SUPPORT; ENVIRONMENTAL STRATEGIES SERVICES

FirstEnergy Corporation has awarded R.E. Warner a contract to continue **engineering services for planning and protection support** to their data group. Work is being performed using FirstEnergy software (TLL) to provide transmission load ability data. FirstEnergy has also awarded R.E. Warner a contract to provide **strategic insights and support for environmental programs and strategies**. Senior Project Manager Ray Evans will serve as a senior level professional environmental engineer for support activities including management systems, regulatory development, strategic compliance planning, and social responsibility reporting.

CHEMICAL PROCESS MARKET

STANDARD OPERATING PROCEDURES FOR PLANT CONVERSION; LOCKER ROOM REMODEL

ASHTA Chemicals, Inc. has awarded R.E. Warner a contract to complete **Standard Operating Procedures (SOPs) to support their $100 million chlorine plant membrane conversion project** currently underway. We are providing project liaison, coordination, development, revisions, and administration of the SOP documents.

ASHTA has also contracted our team for their **men's locker room remodel** including the shower, locker room and restroom areas at their Ashtabula facility. Our scope of work includes architectural, electrical, and mechanical demolition drawings, plans, and specifications and our services include detailed design, construction specifications, bidding and award, and construction administration.

AUTO & MANUFACTURING MARKET

MANUFACTURING BUILDING EXPANSION

BWXT Technologies, Inc. has awarded R.E. Warner the A/E design contract for their **manufacturing building expansion/additions** project. The primary design areas include two new buildings, a new building enclosure, new welding/assembly pit, new x-ray booth, new steam clean facility and a new transmission line. Our work includes geotechnical, site surveying, architecture, civil-site, structural, electrical, and mechanical engineering from schematic design through construction and project close-out.

MAINTENANCE BUILDING EXPANSION

Our team is providing complete A/E services to LORD Corporation for a **13,000-square-foot maintenance building expansion** and a 9,000-square-foot existing space upgrade. This project is part of LORD's ongoing modernization of their chemical production facility in Saegertown, PA. The addition will provide required storage capacity, renovated office spaces, a gantry crane unit, fork truck maintenance lift station, lube oil storage and dispensing system, custom storage racking, upgraded/modified HVAC system, and welding stations and associated exhaust ventilation system. Our scope of services includes basic and detailed design engineering for the preparation of construction documents and construction administration services.

ON-CALL ENGINEERING SERVICES

Ford Motor Co. has issued an additional budget allowance for **ongoing professional engineering services for a variety of as-needed tasks** at Cleveland Engine Plant 1. Work has been related to repairs, maintenance and improvements and has included structural steel design of new truss mounted rails, elevator removal, and new staircase design, among other small projects.

TRUSS ANALYSIS

R.E. Warner is providing structural engineering services in conjunction with an auto manufacturer's **assembly line conveyor extension**. Our team is preparing drawing plans and diagrams, and analysis of 34 roof trusses and 30 roof jack trusses. Our work also includes evaluating 36 columns and 34 foundations for additional gravity loads. Further, we are using existing work completed on the trusses to update the models, truss data sheets, and drawings for the new loading and required reinforcing from the conveyor modifications.

PLANT RENOVATION ENGINEERING

R.E. Warner is providing full A/E services as well as surveying for an **auto manufacturer's plant renovation** that entails repurposing the space for new operations. The project scope includes the addition of 20 semi-truck docks, creation of a new walkway connecting the main areas of the plant back to a new building, and modifications/repairs of an existing drive and parking area on the site. R.E. Warner is providing full A/E services as well as surveying.

GOVERNMENT MARKET

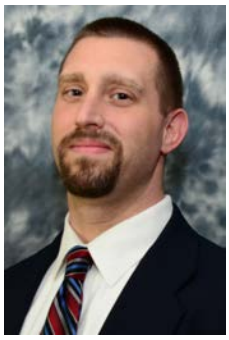
TRI-C PLAZA RENOVATION

R.E. Warner is continuing to provide structural and civil engineering design services for construction documents, bidding, and construction observation, for the remaining north and south quadrants of the **Tri-C Metro Campus plaza redesign and renovation** project. R.E. Warner has been serving as engineering subconsultant to City Architecture, providing structural and civil engineering (including landscape sprinkler) and design services, as well as construction document services.

R.E. WARNER BOARD OF DIRECTORS INITIATIVES

Board Identifies Key Strategic Areas of Focus to Build Upon Legacy of Technical Excellence and Customer Service

Ted Beltavski, PE
CEO & President



Frank Johnson, PE
COO

Matt Barratt, PE
Secretary/Health & Safety

Matt Benovic, PE, SE
Treasurer

Dave Ferencik, PE
Quality

Jen Kalin, RA, NCARB
EEO Compliance

Having welcomed three new members earlier this year, the R.E. Warner Board of Directors has been busy analyzing various firm policies, processes and procedures to identify opportunities for improvement, as the team knows there is always room to do better. With the new perspectives of Operations Manager/Department Manager Dave Ferencik, PE and Senior Project Managers Matt Benovic, PE, SE and Jen Kalin, RA, NCARB, LEED AP, the group has pinpointed three areas of focus to build upon our legacy of technical excellence and customer service so that we may better serve our clients.

One of these initiatives is expanding the perks offered to our team members. This is being done to ensure R.E. Warner remains an attractive place to work. With the younger generations increasingly making up the workforce and the A/E/C "Talent War" being of increasing concern, the Board understands firm perks and policies need to evolve in order to ensure R.E. Warner remains an employer of choice among top performers. To start, we have broadened our flex time program, relaxed the office dress code to "smart casual," are constructing a collaborative/ lounge space as part of our upcoming office renovation, and are making further investments in technology to support work/life balance and ensure staff can work efficiently.

From an operations standpoint, we are updating procedures on multiple fronts to better align with how our project management and execution style has evolved over the years. One of these updates is the start of project "huddles" to streamline communication among disciplines. Another is the development of simplified internal drawing resources and standards for design and construction document production. The Quality

R.E. WARNER & ASSOCIATES INC.

OUR MISSION:

TO PROVIDE TECHNICAL SOLUTIONS THROUGH TEAMWORK AND A PASSION FOR SERVICE

OUR VISION:

TO BE OUR CLIENTS' PREFERRED CONSULTANT

Steering Committee is meanwhile working on revamping the project closeout analysis documentation so that we can better apply lessons learned from one project to the next.

The final initiative the Board has undertaken this quarter is the solicitation of new Board Advisors. R.E. Warner has long worked with external colleagues who bring expertise and advice to the Board that helps inform our business strategy and operations. The Board is seeking to grow this Advisory Committee in order to tap into others' expertise and experience so that we can better understand and respond to forthcoming challenges and opportunities. We are excited to have preliminarily identified several well respected colleagues from various backgrounds to serve in this role and we look forward to their insight.

"The Board has pinpointed three areas of focus to build upon our legacy of technical excellence and customer service so that we may better serve our clients."

Our firm is honored to have a large roster of repeat clients and we know that we must continue to earn their desire to work with us. We are eager to capitalize on opportunities to be of better service, and we welcome any and all feedback from our colleagues and clients on further ways we can improve. In this spirit, the Board will be continuing to identify and implement programs that aid in our vision to be our clients' preferred consultant.

PERSPECTIVES & INSIGHTS

Project Management

UNDERSTANDING & MANAGING CHANGE ORDERS

This article is by Jen Kalin, RA, LEED AP, Architect and Senior Project Manager. Jen has over 10 years of experience in public, commercial, manufacturing, and residential buildings and facilities. Her experience includes all phases of architecture services. She has the capability to provide interior design/interior architecture services. Her portfolio includes new construction, renovation, and expansion projects.

As an A/E consultant, we know all too well that our clients loathe change orders; however, what owners may not know is that we also don't like them. They're a lot of paperwork, plus we want to make you happy and stay on budget. That said, we need to cover the costs of providing professional services or we won't be in business very long.

So let's look at what the typical triggers are for change orders as well as what can be done to keep them in check. We have found that the most frequent causes of change orders are:

o Owner Changes - We see owners incur additional cost when designs are changed beyond the design development cutoff point, or the scope of a project grows beyond what the client originally set out to do.

o Unforeseen Conditions – Sometimes you don't know there's an HVAC duct hiding behind a wall until you open it up. "Surprises" such as this can lead to (at worst) a major design change or (hopefully) nothing more than a tweak to the construction documents.

o Unanticipated Scope – Our team occasionally finds conditions during field investigations that require work beyond the initial project scope to correct, such as a water damaged roof.

o Contractor Assumptions – Sometimes contractors will interpret drawings differently than what was meant to be conveyed. While we strive to make our drawings very clear and contractors are good about asking questions if something is unclear, incorrect interpretations can still happen and occasionally result in rework.

While change orders are sometimes unavoidable, I personally go to great lengths to keep their causes in check and proactively communicate about potential or actual scope changes. This includes helping clients come to a consensus for decisions and stay focused on the project objectives. I have found that all parties are much happier when expectations are managed and all project stakeholders are on the same page.

If something pops up that is out of scope, I will notify the owner right away and clearly explain the root cause. I also take care to outline options (where feasible) for addressing out-of-scope items while breaking down cost to let the client make the best decision for them. Any scope changes are then documented in an email stating what is happening and why, in addition to being recorded in formal project documentation (such as change order requests).

Sometimes, what is technically "scope creep" is just a couple of small tasks done here and there that did not require a significant investment of time. While I track these items, I prefer not to nickel and

dime clients, and in these instances will not issue a change order. Similarly, some clients ask us to wait until a certain threshold of additional time is incurred before issuing a change request, and we accommodate.

Our best advice to owners hoping to avoid incurring change order charges is to stick to the scope and project schedule. It is key to avoid making design changes after the stated cutoff, and the owner's PM should make sure the client is hitting decision and review deadlines so the design process can move forward.

Design and construction projects are inherently messy. It is my goal to ensure clients are happy not only with how their project turned out, but also with their experience in working with us. Proactive project management and communication are key to navigating the process effectively. ■

CASE STUDY: IN-SITU TRUSS REINFORCEMENT

This article is by Matt Benovic, PE, SE, LEED AP, Senior Project Manager. Matt has played a crucial role in delivering the engineering design for a wide variety of single and multi-discipline projects for several of our firm's top 10 clients.

There is sometimes a misconception that routine engineering projects require plug-and-play solutions. However, in our experience, even these present situations that require creativity.

For example, a Manufacturing client is expanding an existing line. In order to expand it, existing trusses and jack trusses require reinforcement in order to install an extension to conveyors hung from the trusses.

Our structural designers have developed an in-situ reinforcement solution in order to simplify the design and avoid removal of loads prior to reinforcement. The design also reduces the total weight of steel required to reinforce the trusses.

Where reinforcement is required for the existing truss members, the solution calls for the design a new member cross section (existing plus reinforcement) without consideration for existing member stresses. As allowed by strength design, it is assumed the new section is capable of developing the full plastic capacity of the new built up member cross section. This assumes adequate connection of the reinforcement and not decreasing the radius of gyration to less than 85% of the existing radius of gyration.

The expansion is moving forward and this solution has saved the client cost and hassle. Furthermore, while this method of reinforcement is now a common practice, this particular client's staff was not familiar with it, so we were glad to be considered a partner in the project and able to provide recommendations for the design.

PERSPECTIVES & INSIGHTS

Civil Engineering

CONSTRUCTION ZONES: HOW TRAFFIC MAINTENANCE PLANS ARE DETERMINED

This article was written by Senior Civil Designer Mike Christopher. Mike has over 26 years of experience preparing design and construction drawings for a variety of roadway, intersection, and infrastructure projects for ODOT, County Engineers, and municipalities.

Ah, summer in Northeast Ohio. The season may be winding down, but construction will be going strong until the cold weather moves in. Of course, we all collectively groan when the orange barrels pop up along the routes of our commutes, but we engineers would like to reassure the public that we do our best to balance safety with minimizing the disruption to traffic in construction zones. We don't like traffic jams either!

Here's a look at how we go about forming a Maintenance of Traffic Plan for a construction project that impacts roadways/highways:

The primary function of temporary traffic control is to provide for the safe and efficient movement of vehicles, bicyclists, and pedestrians through or around temporary traffic control zones while reasonably protecting workers and equipment. The additional objective of the temporary traffic control is the efficient construction and maintenance of the roadway or highway.

In conjunction with the Ohio Manual of Uniform Traffic Control Devices (OMUTCD), all temporary traffic control must conform to ODOT's minimum standard for all traffic control devices used during construction, maintenance, and utility activities plus incident management.

Every work zone situation is different, so several items must be considered in determining the traffic control needed. Questions that illustrate the major traffic control considerations include:

1. What is the time duration of the work (Long-term, Short-term or Mobile)?
2. Where is the work zone located (on the roadway, on the shoulder, or beyond the shoulder)?
3. What type of roadway is involved?
4. What is the speed of the traffic?
5. What is the traffic volume on the roadway?
6. Will the nature of traffic change while work is underway?
7. Do the local law enforcement agencies need to be notified?
8. What kind of signing will be required?
9. Are cones, drums, barricades, or an arrow panel needed for traffic channelization?

10. Will flaggers be required?

Depending on the answers to the above questions, the three main ways traffic is controlled through work zones are: temporary lane closures, reduced speed, and detours.

When roadway projects include bridge and culvert replacement, or a major alignment and grade change is necessary, rerouting traffic with the use of detours is necessary. Detours are restricted to state routes due to commercial truck traffic and the use of nightly closures. Local Roads may be used when traffic use is restricted (i.e. no commercial trucks) and when nightly closures are not permitted. The control of road users through a temporary traffic control zone is an essential part of roadway/ highway construction, utility work, maintenance operations, and incident management. We follow the following principles to assist road users and help protect workers in the vicinity of temporary traffic control zones.

1. Road user and worker safety in temporary traffic control zones should be an integral and high priority element of every project from planning through design and construction.
2. General plans or guidelines should be developed to provide safety for drivers, bicyclists, pedestrians, workers, enforcement/ emergency officials, and equipment.
3. Road user movement should be inhibited as little as practical.
4. Drivers, bicyclists, and pedestrians should be guided in a clear and positive manner while approaching and traversing temporary traffic control zones and incident sites.
5. Routine day and night inspections of temporary traffic control elements should be performed.
6. Attention should be given to the maintenance of roadside safety during the duration of the temporary traffic control zone.
7. Each person whose actions affect temporary traffic control zone safety should receive training appropriate to the job decisions each individual is required to make.
8. Good relations should be maintained with all contractors involved in the work zone.
9. All temporary traffic control devices shall be removed as soon as practical when they are no longer needed.

Ultimately it is the engineer's responsibility to design a Maintenance of Traffic plan that follows the standard and care necessary to complete the construction work in a timely and safe manner. It is the contractor's responsibility to erect, maintain and subsequently remove according to the engineer's plan.

NEWS OF NOTE

RECOGNIZING JEFF SPANGLER - 15 YEARS AT R.E. WARNER

We are pleased to recognize Jeff Spangler for his 15 year anniversary at R.E. Warner. Jeff joined the firm on April 30, 2004 as a Senior Structural Engineer.

Jeff has more than 40 years of experience in design and project management for complex structural systems for a wide range of buildings and facilities. He has designed buildings, foundations, bridges, walls, stacks, bins, pits and other facility components for industrial buildings, parking structures, public and commercial/institutional facilities, and more. He also routinely serves as project manager and construction administrator.

Jeff has played a key role in the successful execution of many of R.E. Warner's major projects, including the design and construction of the Arconic Facility in Martinsville, VA, the Honda Automotive Assembly Expansion, the Tri-C Metropolitan Campus Plaza Renovation, Cleveland Water's Aurora Pump Station, and nearly a dozen bridge replacements, to name a few.

Please join us in congratulating Jeff on his 15 year anniversary and his many contributions to R.E. Warner.

DAVE BRUNNER COMPLETES 30-HOUR OSHA TRAINING

We are pleased to share that Senior Mechanical Designer/Safety Coordinator Dave Brunner has completed OSHA's 30-Hour General Industry Safety Training. This voluntary program provides workers with training on the recognition, avoidance, abatement, and prevention of safety and health hazards in workplaces in general industry. Specific topics covered include:

- Managing Safety and Health
- Walking and Working Surfaces, including Fall Protection
- Exit Routes, Emergency Action Plans, Fire Prevention Plans, and Fire Protection
- Electrical
- Personal Protective Equipment (PPE)
- Materials Handling
- Hazard Communication
- Hazardous Materials (Flammable/Combustible Liquids, Spray Finishing, Compressed Gases, Dipping and Coating Operations)
- Permit-Required Confined Spaces
- Machine Guarding
- Welding, Cutting, and Brazing
- Introduction to Industrial Hygiene
- Bloodborne Pathogens
- Ergonomics
- Fall Protection
- Safety and Health Programs
- Power Industrial Vehicles

As Safety Coordinator, Dave ensures safety procedures are followed and promotes a safety culture, educating and reminding our team about best practices. Completing this program ensures his knowledge is comprehensive and accurate.

PROFESSIONAL INVOLVEMENT

Highlights of recent industry participation

REW ENGINEERS PARTICIPATE IN ASCE CLEVELAND'S NEO INFRASTRUCTURE REPORT CARD DEVELOPMENT

ASCE Cleveland has released it's Northeast Ohio Infrastructure Report Card, providing critical data about the state of our roads, bridges, water systems, schools and more in Cuyahoga, Lake, Lorain, Geauga and Medina counties. We are proud to share that R.E. Warner Senior Project Manager Matt Benovic, PE, SE (ASCE Cleveland Past President) and R.E. Warner Structural Engineer Ryan O'Hearn, PE (ASCE Cleveland President) both participated on the committee that managed this massive project.

The report gives our region's infrastructure an overall grade of D+, but more importantly, it sheds light on needed improvements and raises public awareness about the need for investment. To develop this report, over the course of 18+ months, local engineering professionals volunteered their time and expertise to visit public officials, examine various sources of data, and participate in monthly progress meetings. To "grade" the infrastructure, they were considering general physical conditions including whether they jeopardize public safety, the ability to meet present and future needs, and whether operations and maintenance are meeting government regulations, in addition to other factors specific to the type of infrastructure.

Matt and Ryan's involvement in this undertaking exemplifies our team members' genuine commitment to improving our community for future generations through our work for clients and participation in industry organizations.

For in-depth news coverage of the report's findings, click here. Or, click here to read the report itself.

CIVIL 3D SEMINAR

Civil Designer Mike Christopher attended the PLSO Cleveland Chapter training seminar on the use of AutoCAD Civil 3D for surveyors/surveying technicians. The day-long seminar covered the fundamentals required to use Autodesk Civil 3D efficiently in a typical daily workflow.

ONU COLLEGE OF ENGINEERING ADVISORY COUNCIL

Business Development Manager and Ohio Northern Unviersity Alumnus Brett Neff was at his alma mater to participate in the College of Engineer's Business Advisory Council. Select alumni are invited yearly to participate in this roundtable with the dean of the college to provide feedback on the school's curriculum and provide insight on the knowledge and skills students are going to need in the near future.

ASCE CLEVELAND SCHOLARSHIP FUNDRAISER

Several staff members enjoyed a fun evening at the ASCE Cleveland Section Scholarship Mini-Golf Fundraiser. ASCE Cleveland provides four scholarships to two local universities and we were happy to help support this effort.

ST. ADALBERT SCIENCE FAIR JUDING

Civil Engineer Bill Vasko was happy to volunteer as a judge at the Academy of St. Adalbert, Berea Ohio All-School Science Fair. We were happy to hear there were some students advancing to the regional and state fairs!

ST. MICHAEL SCIENCE FAIR JUDGING

Senior Structural Engineer Jeff Spangler (pictured left) and Civil Engineer Bill Vasko (pictured right) were happy to be volunteer judges at the recent eighth-grade Science Fair at St. Michael School in Independence. Some of the project topics included mold over time on fast food burgers; how soda causes bone decay; how music affects resting heart rate; and materials that purify water. Jeff and Bill reported they were impressed with the quality of the students' work!

CSU COLLEGE OF ENGINEERING VISITING COMMITTEE

R.E. Warner President Ted Beltavski is currently serving as Chair of Cleveland State University's Washkewicz College of Engineering Visiting Committee. His duties include attending regular meetings throughout the year to guide the efforts of the college so as to produce engineers that satisfy the needs of today's employers, as well as improve the overall caliber and reputation of CSU's engineering programs. He has also served as a guest speaker presenting to multiple student organizations and classes about the business of engineering.

IN MEMORIAM

FORMER R.E. WARNER PROJECT DIRECTOR KARL SCHNEIDER, PE | 1936 - 2018

Former R.E. Warner Project Director Karl Schneider, of North Olmsted, passed away February 13, 2019 at the age of 83.

Karl retired in the fall of 2017 after 27 years at R.E. Warner. He was well respected for his dedication to building client relationships and successfully managing large multi-discipline projects for many of our most valuable clients including Cristal USA (fka Millennium), Duke Energy, ASHTA, Lubrizol, PET Processors, Eliokem, Morton Salt and Gabriel Performance Products.

He was admired by our clients and internal team for his strong technical skills, his ability to manage large multi-discipline projects, and his excellent client relationship skills. His desire to understand the client's objectives and needs coupled with his high overall standard of performance was an asset to all who worked with him.

Karl was a graduate of The Ohio State University with a degree in Mechanical Engineering and was a United States Air Force veteran. He held two United States Patents for design of mechanical systems. He enjoyed fishing and boating on Lake Erie, Cleveland sporting events, swimming, gardening, dining out, and entertaining. Karl cherished his dog Brandy, and spending time with his beloved family and friends.

NEW TEAM MEMBERS

R.E. Warner welcomes the following team members, adding to the experience and capabilities of our growing organization.

JIM LENDER // ELECTRICAL DESIGNER

New Electrical Designer Jim Lender joined R.E. Warner in February. He is currently focused on our Northeast Ohio Regional Sewer District and BWXT projects.

Jim has over 30 years of design experience on projects within the industrial process sector. Notably, he has been a team leader for the creation of original installation drawings from programming schematics for industrial process lines. He has also performed power system analysis, arc-flash analysis and relay coordination as well as designed power distribution and control systems. His software knowledge includes AutoCAD, EasyPower, Microsoft Access, Microsoft Project, and the Microsoft Office suite. Prior to joining R.E. Warner, Jim was a project engineer/designer at another consulting firm in Northeast Ohio.

KEITH ROUSSEAU // ELECTRICAL DESIGNER

New Electrical Designer Keith Rousseau joined R.E. Warner in early April. He is currently focused on our work for FirstEnergy.

Keith has over 10 years of experience designing electrical systems for transmission and distribution, including extensive experience creating/interpreting common electrical drawings such as: one lines, schematic and detail wiring diagrams, SCADA and as-built/record prints. He also has vast archiving experience using different data management tools. He is a Certified AutoCAD Professional and is also proficient at using FileNet, CREWS, CLICK-View, GIS-View, SAP, TAMI and PORD.

Keith comes to R.E. Warner from OhioEdison, a FirstEnergy company.

MICHAEL LAHAM // ARCHITECTURAL DESIGNER

New Architectural Designer Michael Laham joined R.E. Warner in early April. He is currently focused on many of our new construction and renovation projects including the BWXT expansion and LORD maintenance building.

Michael has over 30 years experience in architectural design and has been working as a freelance building designer for the last 10 years. He is proficient at developing accurate floor plans including drawing floor plan layouts and designing construction documents using CAD. He previously worked at R.E. Warner in the early 2000s, working on project teams for clients such as Ford, Honda, NASA, and others.

Michael has a Bachelor's Degree in Architecture from the New York Institute of Technology and earned a Master's Degree in Architecture at the University of California Los Angeles (UCLA).

Michael is trilingual, speaking English, Arabic and French and serves as a bilingual instructional aide at Cleveland Metropolitan School District for new students from foreign countries.

OUR MISSION IS TO PROVIDE TECHNICAL SOLUTIONS THROUGH TEAMWORK AND A PASSION FOR SERVICE.

Since our founding in 1951, R.E. Warner & Associates, Inc. has experienced steady and continuous growth. Building on our traditional strengths and values, we have entered into new fields only when it is consistent with the basic mission of our company. Today, R.E. Warner is a full service, multi-discipline consulting firm serving both public and private clients.

We call ourselves multi-discipline because we offer professional services in civil, structural, mechanical, electrical and process engineering; architecture and planning; surveying; and environmental science and engineering.

Our impressive list of clients includes many of our nation's largest steel, automotive and chemical producers, electric power companies, health and educational facilities, and various agencies of the federal, state and local governments.

R.E. Warner's mission is to provide technical solutions through teamwork and a passion for service. Our areas of practice include buildings and facilities, industrial operations and process engineering, infrastructure, transportation, energy management, surveying, environmental and construction services.

In order to fulfill our mission to our clients, R.E. Warner consistently recruits, hires and retains the leaders in our profession. In recognition of our great workplace, R.E. Warner has been named a multi-year winner of the NorthCoast 99 Award, presented annually by the Employers Resource Council to the top 99 companies to work for in Northeast, Ohio.

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