******

***Monday, October 31, 2022 – Wednesday, November 2, 2022***

***DeVos Place Convention Center***



**MAPPA / MiAPPA 2022 Conference**

**Presentation Information:**

**Tuesday, November 1, 2022**

**9:15 a.m. Educational Session 1**

**Campus Placemaking: Filling a Gap in Properties with Partnerships, Pedestrians and Art**

Karen Ingle, Assoc. Vice President, Facilities Planning, Grand Valley State University

Ryan Musch, PE, LEED AP, SITES AP, Vice President & Senior Civil Engineer, Fishbeck

Grand Valley State University partnered with the City of Grand Rapids and Consumers Energy to repurpose an under used public street that bisected their downtown campus properties into a new vibrant pedestrian corridor. Guided by their masterplan and after years of discussion with the City of Grand Rapids and Consumers Energy, the University abandoned the city right-of-way and relocated important infrastructure underground, allowing for new placemaking of the space. The project literally bridged the gap between GVSU's properties with new vibrant outdoor space providing campus connectivity for students, an extended bike network for the City and improved the overall image for on the south side of Fulton Street. Through careful planning and historical research, the project was able to incorporate and celebrate the history of the property with several educational art pieces commissioned by the University.

**Karen Ingle, PE, LEED AP** is the Associate Vice President for Facilities Planning at Grand Valley State University. During her time at the University, she has served as senior project manager prior to assuming her current role as AVP. The Grand Valley State University mission is to empower learners in their pursuits, professions and purpose. The University enriches society through excellent teaching, active scholarship, advancement of equity, and public service. Karen is a graduate of Michigan State University and achieved a Bachelor of Science degree in Mechanical Engineering.

**Ryan Musch, PE, LEED AP, SITES AP** is a Vice President and Senior Civil Engineer at Fishbeck. He is a graduate of Calvin College (BSE) and Grand Valley State University (MBA). He has been with Fishbeck for over 15 years and leads Fishbeck's Site Development Team. Ryan focuses much of his efforts on Site/Civil Engineering for university campuses across the Midwest. Ryan was the project manager and lead civil engineer for GVSU's Mount Vernon Pedestrian Mall project and led the multidiscipline team and stakeholder group through master planning, concept phases and final design and construction.

**Designing for Human Behavior**

Joe Agati, Director of Design, Agati Furniture

This course discusses the different behavior and work patterns we have observed over our 30+ years of designing for education spaces and offers proven solutions for addressing those patterns. The limbic system in our brains plays a strong role in the idiosyncratic and repetitive behavior patterns we see displayed in all public spaces, especially education environments. To maximize the effectiveness of learning spaces and achieve the desired function, we must design with these behavioral patterns in mind.

**Joe Agati** has a degree in Industrial Design from the University of Illinois. Joe started his career designing products for Radio Flyer before becoming Director of Design at Agati Furniture. He has spent his career observing human behavior looking for what make us feel comfortable. He has taken those key user insights and turned them into innovative product that work with people’s innate behavioral tendencies.

**Inflation Reduction Act – Expanded Tax Credits for Alternative Energy**

Gwen Pettit, Trane

Thomas Huberty, Comprehensive Solutions Advisor - Education

Trane Technologies

This course will discuss the Inflation Reduction Act, and the impact it could have on colleges and universities. Colleges and universities may now qualify for expanded tax credits for solar, wind, EV, batteries, thermal storage, CHP, microgrids, etc.

**Gwen Pettit** is a former educator who remains impassioned to help students attain 21st century skills, regardless of economic status and conditions. Gwen has built a strong track record working with K-12 and higher educational facilities to create virtual learning living labs through facility upgrades, using every square foot of a schools existing building as a real-world learning tool, maximizing a schools educational and operational investments.

Gwen is also recognized among her customers for her leadership in creating a budget-neutral approach to address building upgrades, reduce utility and operational spending, and create a healthier more sustainable environment. She received her Bachelor of Education in Elementary Education from the University of Michigan, and Associates Degree, Liberal Arts from Schoolcraft College. Gwen serves as a coach for Livingston United Girls High School Hockey and is the founder of the Maddie Doty Foundation that serves families in crisis.

**Thomas Huberty** has strategically helped educational institutions connect facilities investment, operations, energy performance and sustainability goals to institutional goals and missions that are aligned with financial priorities and realities since 2008. Understanding institutional drivers helps Thomas deliver cost effective comprehensive energy solutions to drive energy efficiency and address sustainability goals while reducing operational and capital demand.

Thomas is recognized as a thought leader for his clients and has presented at over 30 regional, national, and international conferences such as APPA, MAPPA, NACUBO, CACUBO, and IFMA

[**Nanobubbles: Tiny Fighters of Your Biggest Cost and Energy Wasters**](file:///\\office.ads.gvsu.edu\dfs\Facilities-Data\FAC-EXEC\Michelle\MAPPA%202022\Presentations\Slide%20Decks\New%20RWT%20Power%20Point%20V3%20Rapids%20Water%20Tech.pdf)

Pete Strazdas, Retired Associate Vice President for Facilities Management,

Western Michigan University

Dave DeVree, Rapid Water Technologies

What's plaguing the water systems on your campus? Calcium buildup? Biofilm growth and equipment fouling? The high cost of chemicals and energy use? Rapid Water Technologies has a tiny solution for your campus's biggest water problems. Nanobubble technology transforms existing non-condensable gases into millions of nanobubbles/ml of water, preventing scale and biofilm buildup. Learn how maintenance professionals and scientists are harnessing the flow of nanobubbles through water systems to improve water quality and lower energy maintenance costs.

**Pete Strazdas** is the retired Associate Vice President for Facilities Management at Western Michigan University. A Department of over 330 employees, they are responsible for planning, engineering, construction, and operations for a campus of 150 buildings and 8 million GSF. In his 43-year tenure at WMU, he also held positions as Construction Administrator, Director of Maintenance Services, and Assistant Professor of Construction Management. He served on the Michigan APPA Board for many years, including six years as President. He also served for many years on the International APPA Board and served as their President.

**Dave DeVree** has been a part of the HVAC industry since the late 80s, when he started his career as a sheet metal installer. In addition to his l0+ years of field knowledge, Dave has decades of experience as a manufacturer’s rep, project manager and estimator. He works with Rapid Water Technologies' institutional customers, with a focus on universities and hospitals. These organizations can especially benefit from the water, energy and cost savings created with nanobubble technology. Water is a major part of Dave's life outside of work, and you can often find him salmon fishing on Lake Michigan or enjoying watersports with his family at their Fife Lake cottage.

**10:45 a.m. Educational Session 2**

**[Solidifying Community Presence for Lifelong Learners: Bringing New Opportunities](\\\\office.ads.gvsu.edu\\dfs\\Facilities-Data\\FAC-EXEC\\Michelle\\MAPPA 2022\\Presentations\\Slide Decks\\MiAPPA MAPPA.GRCC Presentation_Reduced.pdf)**

**[Through Consolidation, Sustainable Spaces & Utilizing Community Assets](\\\\office.ads.gvsu.edu\\dfs\\Facilities-Data\\FAC-EXEC\\Michelle\\MAPPA 2022\\Presentations\\Slide Decks\\MiAPPA MAPPA.GRCC Presentation_Reduced.pdf)**

David Wilkins, Higher Education Practice Leader, GMB Architecture + Engineering

Jim VanDokkumburg, Executive Director of Facilities at Grand Rapids

Community College

Nate Van Heukelum, Mechanical Engineer, GMB Architecture + Engineering

Faced with declining college age population, many of Michigan's community colleges are looking for strategies to approach the future of their facilities. Grand Rapids Community College embarked on a Lakeshore feasibility study that evaluated their programs, the locations of their lakeshore campuses and made a bold determination, the consolidation of four campuses. Funding strategies were at the core of determining the right approach that ultimately led the College to purchase a vacant department store and build a student-centered campus. A key part of the approach was to design a campus that met GRCC's sustainability goals.

Opened Fall 2021, one consolidated campus creates synergy and collaboration across programs that are physically co-located and provides opportunities for operational efficiencies and partnerships with four­ year universities, business partners, K-12 districts, and community agencies in the region.

**David Wilkins** serves as Higher Education Practice Leader at GMB Architecture + Engineering. He was an integral part of the Grand Rapids Community College (GRCC) Lakeshore Campus project as a client and project advocate in the planning, design, and construction process. He is known for leading teams to create inclusive, visionary, and all-encompassing approaches to projects with the goal to promote lifelong learning and opportunity for all learners.

**Jim VanDokkumburg,** Executive Director of Facilities at Grand Rapids Community College (GRCC), oversees the development, operation, and maintenance of dynamic urban and satellite GRCC campuses. He has 30+ years' experience working with various teams in the planning and implementation of campus improvements, including over $60 million within the last five years. Jim served on the steering committee for the consolidation of the Lakeshore Campus.

**Nate Van Heukelum** led the Mechanical Engineering team for GMB Architecture + Engineering at the Grand Rapids Community College (GRCC) Lakeshore Campus project. He is passionate about designing sustainable, efficient, and optimized mechanical systems that solve our clients' problems and exceed expectations. He has designed systems for several LEED certified projects, including GRCC's Lakeshore Campus, and is familiar with many sustainable and innovative technologies.

**A Path for High Performance Cleaning**

Brandon Baswell, Campus Service Manager, Michigan State University

Ben Walker, COO at Management, Inc.

There are many best practices that may be identified for any operation but picking and choosing your path may not produce the desired results. By identifying your cycle of success and articulating a vision, you can ensure that the strategies you employ will have the maximum impact. The presenters can share the success and pitfalls of change from first hand cleaning industry experience both as leaders and consultants. This presentation is based on the chapter that Ben and Brandon are currently submitting to APPA for the next edition of Operational Guidelines for Custodial.

**Brandon Baswell** is the Campus Services Manager at Michigan State University where his primary role is to lead a large team of professional supervisors and skilled cleaning workers to clean for health. MSU claims one of the highest square foot per FTE ratios in the Big Ten while maintaining an APPA level 2.

**Ben Walker** is COO at Management, Inc., a leading cleaning industry consultancy specializing in training, transitions, auditing, and educational materials.

**Overcoming Facility Operations Challenges: Building Intelligence, Knowledge Continuity, and Emergency Response Planning.**

Matt Wandrie, General Manager, BELFOR

BELFOR Alert is a cloud-based, virtual emergency response planning and mass notification app, designed to help businesses better prepare for - and respond to - any number of emergency scenarios. By implementing 21st-century emergency response planning technology, BELFOR Alert helps organizations convert their outdated "3-ring binder" plans into digital and immersive cloud-based profiles accessible on any connected device. BELFOR Alert employs the latest in mobile app technology, making building infrastructure details, emergency operation plans, and BELFOR's 24/7/365 disaster response easily accessible. The end result is the intuitive and efficient mitigation of risk, management of emergency and property loss incidents, and a reduction in overall downtime in the event of a loss or other emergency.

**Emergency preparedness is critical.** Across all industries, the need for proactive and responsive Emergency Response Planning has never been greater. However, despite this need and the increased frequency of natural and manmade disasters impacting businesses each year, the majority of Americans to include a large number of businesses across the county - are still not adequately prepared for emergencies. According to the latest national preparedness survey commissioned by BELFOR and conducted by a third-party, only 32% of all respondents had created some sort of emergency preparedness plan. Being prepared before disaster strikes is far less costly in both time and dollars. BELFOR Alert helps streamline the emergency planning and response processes to ensure every organization has access to up-to-date preparedness plan, that every BELFOR Alert user can become familiar with those plans, and that all users are capable of helping to implement those critical action items when needed.

**There for you when every second counts.** By providing quick and intuitive access to on-the-ground knowledge during any kind of emergency, disaster, or loss, BELFOR Alert is instrumental in helping businesses and their key staff to actively manage and stabilize incidents when every second counts. Customized 'Facility Profiles' provide instant access to details about each building's critical infrastructure, organizational response plans, and allows users to quickly and easily mobilize BELFOR's industry-leading restoration resources. Utilizing BELFOR Alert during emergencies equips businesses to better mitigate risk, reduce response times during incidents, and recover faster from an emergency situation or property loss. BELOR Alert improves a business' ability to prepare for a full range of emergency scenarios, streamline facility management tasks and knowledge continuity amongst staff, and to alert key staff to emergent issues through Push Notification, SMS messaging, and e-mail. All users of the app are able to rapidly access contact information for key partners and service providers- day or night - regardless of location.

The key features of BELFOR Alert are:

* A direct connection to BELFOR's 24/7/365 call center. Report a loss using the app and BELFOR's proprietary job management system automatically receives the pertinent information about the business, affected location, established procedures, and loss details as reported through the app - allowing for quick and seamless mobilization of BELFOR's response to the impacted site(s)
* Mass Notification Engine broadcast alerts to all users for emergency situations OR to limited groups for more tailored communications
* 'Facility Profiles' are active and of value, regardless of how much or how little information is added, immediately upon account establishment
* Information updates are applied immediately across all users
* The business 'owns' the profiles and can control user permissions and accounts
* All data resides in a U.S.-based cloud environment that employs ISO 27001 cyber security protocols for data/information security

Business that activate a BELFOR Alert account may add enhanced features to their facility profile(s), including the creation of visually stunning and highly immersive 3D renderings of the entire facility and/or integrate existing live surveillance camera feeds - both features that are accessed directly through BELFOR Alert.

A good disaster recovery plan will save time and money when a loss occurs. A great disaster recovery plan starts with BELFOR Alert - it begins working for you before any emergency occurs, helps you act quickly while events are unfolding, and keeps you moving forward after a loss.

**Using UV-C to Improve Indoor Air Quality and Lower Your Energy Bill**

Jess Kota, Director of Business Development, Sterile-Aire

Alongside ventilation and filtration, UV·C technology is one of the highest recommended solutions to significantly lower the risk of airborne infectious disease while producing no harmful bi-products. In this seminar we will demonstrate how poor indoor air quality reduces our ability to perform at the highest levels and increases employee absenteeism followed only by peer-reviewed proven means to improve our air quality. We will then wrap up our discussion with the efficacy of different UV-C applications to fight off harmful viruses including COVID and how saving your facility significantly on their power bill will make anyone look like a hero.

We will show how organizations such as the EPA, Department of Homeland Security, the CDC, ASHRAE, the Green Building Council and others continue to wave the flag of UV-C as one of the best means for prevention of the spread of disease. We will also show how you can increase the life of any HVAC system and lower your energy bill without spending hundreds of thousands of dollars. Our presentation will be presented via power point and will be highly interactive as to keep the entirety of the room engaged.

**Jess Kota** is the Director of Business Development in the Midwest for Steril-Aire. Although I was raised in North Carolina and lived there most of my life, I fell in love with my beautiful Midwestern bride in 2009 while working in the HVAC department at Liberty University in Lynchburg, Virginia. Throughout my career nothing has been more rewarding than educating people on the ability of UV-C products to make their daily lives much easier. It has been an honor to work with the APPAorganization in NC for the last 4.5 years.

**2:15 p.m. Educational Session 3**

**Will Flexible Work Actually Save Space?**

Andrew Sama, Manager, Huron Consulting Group

Is flexible work actually going to "save" space at higher education institutions? If so, how?

Join us for a discussion about the trends around flexible work in higher education and an overview of the important data and systems your institution needs to accurately estimate recoverable space. We will also discuss realistic options for savings and repurposing of space to help set expectations and inform your conversations with campus partners outside of facilities.

* What is the current state of flexible work adoption across higher education?
  + Provides an overview of survey results & industry data that paint apicture of where things are and where they may be going
* What facilities & space data can inform decision making around flexible work?
  + Provides a high-level overview of the basic data required to estimate and understand the space impacts of flexible work at a higher ed institution
  + We will also live poll the audience and share the results to get a sense of how they rate themselves on these basic requirements and give them a sense of where they stand relative to their peers
* What processes and technologies support the collection, maintenance, reporting and visualization of that data?
  + Offers a high-level overview of the types of systems required to estimate and understand the space impacts of flexible work at a higher ed institution
* How can we use data & technology to help inform decision making?
  + Reviews a scenario planning approach that uses available data to estimate the amount & type of space that could be recovered
* What can institutions really expect in terms of cost or space savings from the adoption of flexible work?
  + Discusses trends we're seeing across the industry and provide attendees with some "food for thought" as they consider what's likely at their particular institutions

**Andrew Sama** For the last 13 years, Andrew has helped leaders in higher education to solve problems and drive change. He specializes in operational assessment & improvement, program development and the implementation of large integrated cross-functional initiatives. Prior to joining Huron, Andrew was the first Director of University Facilities Information for the University of Notre Dame. In this position, Andrew established a brand-new business unit that managed facilities information across all university properties. Andrew developed the business processes to create and maintain accurate space and floor plan data for 200+ buildings and collaborated with campus partners to launch a suite of enterprise-level technology tools that allowed campus users to access, visualize and utilize space data to improve their planning and operational performance.

**Reimagining Student Services to Bridge the Gap in Achieving Student Success**

Rebecca Celis, Vice President, HGA

Completed in two construction phases over three years, the 145,000 square foot renovation of the College Services building at Normandale Community College aimed to bridge the gap for first-generation and non-traditional students to simplify and consolidate access to Student Services including financial aid, registration, billing and advising. Along with a new one-stop service center, the project spurred the development of an integrated service model to align service delivery and meet student needs.

Presenters will also speak on how the project spurred the development of flexible, right-sized, technology-enriched classrooms and created student-study and collaboration areas that bridged the gap in the transition to hybrid learning. In addition, presenters will share how creative phasing allowed the project to seek successful funding, successfully navigating the state's bonding process to deliver a fully­ renovated core academic space on campus while avoiding major disruption to campus activity during the pandemic.

**Rebecca Celis** As a principal specializing in higher education facilities, Rebecca fully immerses herself in understanding the unique program and facility goals of her clients. Rebecca is an experienced facilitator and aims to bring a research-oriented lens into her architectural practice to facilitate improved learning outcomes in her higher ed work. She has successfully led projects through the design process for clients including Normandale Community College, Carleton College, Macalester College, Bowdoin College, Hope College, and Augsburg University. She has a B.A. in Architecture from Wellesley College and an M. Arch. from the University of Minnesota.

**Aligning Hiring Teams for Advancement**

Marc Datz, Regional Manager, Helbling & Associates

When facilities professionals, human resources representatives, and other institutional leaders unite, organizations are better positioned to identify, secure, and retain top-tier talent. But how do you bridge the gap among people performing different functions?

Join Marc Datz, a national executive search expert, who will share case studies on educational clients within Illinois, Indiana, Iowa, Michigan, Minnesota, Ohio, and Wisconsin. Learn their best practices for recruiting, hiring, and onboarding professionals. Hear firsthand how hiring teams can align for the advancement of the department and the organization as a whole.

**Marc Datz** leads recruiting efforts in the Midwest region of the United States and has more than 20 years of experience, representing a multitude of client organizations.

He has an innate ability to connect with clients and define their executive search parameters based on their organizational goals, mission, and vision. Many of Marc's career successes involve partnerships with human resources professionals at client organizations. Marc contributes to Helbling & Associates' position as a subject matter expert on facilities management executive search for educational institutions.

**Validating and Budgeting Your Essential Service**

Jill Kegler, Vice President, Janitorial Manager

The past 2 years brought recognition to the value of the custodian. Let's not lose the momentum! Continuing to promote the image and recognition of what your cleaning staff does, and the impact your key people have on the overall success of your educational institution is critical to retaining quality employees and justifying the dollars you need for the essential service you provide. At this session you will learn innovative ways to stay relevant and be seen as a professional partner in the eyes of those your clean for long into the future. In addition, gather ideas on best practices you can implement in your cleaning operation to increase employee retention and achieve overall budgetary goals.

* Clearly communicate with staff your expectations and their responsibilities
* Develop an equitable work plan
* Analyze costs to perform duties
* Justify staffing to achieve cleaning goals
* Analyze the financial impact on changing products and procedures
* Share critical & industry validated date to solidify budget needs & requests
* Provide documentation to key stake holders & the public on the importance of your department and the value of clean

**Jill Kegler** grew up in the Jan-San industry. Her grandfather founded Kellermeyer Company, and her father founded Kellermeyer Building Services. After Jill graduated from Michigan State University she joined the family business. Starting in outside sales, Jill learned how to run a swing machine at the age of 6 and joined a janitorial distribution business as a sales rep in 2002 and she was named President in 2005. In 2014 the company was acquired. Jill continued with the new owners ensuring a smooth transition for customers and team members. At the end of 2018, Double A Solutions-a Toledo software development company reached out to Jill for insight on Janitorial Manager.  With a background in understanding the needs of end users like universities -it was a perfect fit. She recognized the value and innovation Double A Solutions could bring to the cleaning industry and joined the company. She has 2 kids and is also a mom to Roxie, a rescue pup.

**3:30 p.m. Educational Session 4**

[**Decarbonization Solutions and Master Planning for a Sustainable and Resilient Campus**](file:///\\office.ads.gvsu.edu\dfs\Facilities-Data\FAC-EXEC\Michelle\MAPPA%202022\Presentations\Slide%20Decks\Data%20Driven%20Low%20Carbon%20Energy%20for%20Sustainability%20(Jim%20Leidel,%20October%202022%20MAPPA).pdf)

James Leidel, Technical Consultant, DTE

Sustainability issues and low carbon energy are slowly becoming the center of attention for many state and local governments, as well as many private and public institutions. Discussions of Net Zero carbon buildings and energy often focus on all electric solutions and the eventual electrification of everything. But is this practical, or even possible? Issues of affordability, resiliency and reliability will surely be part of most practical solutions.

This discussion will offer a data driven view of our changing climate, Michigan weather, and the current state of our energy infrastructure. The magnitude of energy supply and new infrastructure needed for comprehensive electrification will be presented, as well as the carbon accounting of a various residential and large-scale energy systems. We will touch upon other technologies such as renewable natural gas, renewable hydrogen, combined heat and power, micro-grids, and carbon capture to offer a more practical, realistic view of our future energy supply.

* Why do we care? Intro to climate change, energy interactions & greenhouse gases
* Michigan weather over the past 20 years (Detroit heating and cooling degree data)
* The three energy infrastructures (electric, petroleum and natural gas)
* Is electrification the only path forward?
* Solar and wind energy will be a significant part of the energy future
* Comparison of lMW solar PV system combined with battery or gas generator
* Discussion of Bio-energy, RNG, and renewable hydrogen
* Energy storage & transportation review. Let's compare electric & gas infrastructures
* Carbon capture, carbon offsets
* The vision of the future: where do we go from here? Including sample decarbonization plans for a typical mid-sized university.

**James Leidel** of DTE Gas is an in-house Technical Consultant supporting around 900 commercial/industrial customers and the DTE Gas territory in Michigan. He is a U-M and Purdue, mechanical engineering grad with over 30 years’ experience in the energy industry, with specializations in green buildings, renewables and CHP. Before joining DTE, James worked at Oakland University for sixteen years, first as Energy Manager with Facilities, followed by a position in the School of Engineering, running a new Clean Energy Center. At OU, he helped facilitate the implementation of a 4.GMW CHP gas turbine, micro-turbines, multiple solar PV installations, a biomass boiler, and the first LEED Platinum rated building on a Michigan campus, using a solar thermal / geo-thermal hybrid design. This experience inspired his career move to DTE where he inspires and assists large customers to identify and execute customized, innovative solutions for onsite power generation, microgrids and decarbonization.

**Bridging the Gap – While Adding to the Mission**

Roger Tadajewski, Executive Director National Coalition of Certification Centers NC3

Thomas Huberty, Comprehensive Solutions Advisor - Education

Trane Technologies

Can you create spaces for faculty, staff and students that enhance collaborative and individual productivity while also providing a visible reminder addressing potential health and safety concerns brought on by the pandemic? Can you leverage technology to accomplish your goals? Can you make it fit in the budget? Can you also leverage your built environment to advance your core educational mission? Where can you find the budget? simultaneously...

With a portfolio of buildings spread out across nine campuses, Gateway Technical College needed to accomplish it all to ensure their 20,000 students could return to in-person learning.

Follow Gateway's journey on how they leveraged technology, partners, and available resources to make it happen!

**Thomas Huberty** has strategically helped educational institutions connect facilities investment, operations, energy performance and sustainability goals to institutional goals and missions that are aligned with financial priorities and realities since 2008. Understanding institutional drivers helps Thomas deliver cost effective comprehensive energy solutions to drive energy efficiency and address sustainability goals while reducing operational and capital demand.

Thomas is recognized as a thought leader for his clients and has presented at over 30 regional, national, and international conferences such as APPA, MAPPA, NACUBO, CACUBO, and IFMA

**Roger Tadajewski** has dedicated his professional life to the advancement of education and workforce development in the transportation, aerospace, energy and manufacturing industries.

Currently, Mr. Tadajewski is the Executive Director of NC3-National Coalition of Certification Centers. This organization target’s the advancement of standardized certifications developed in partnership with industry and educational leaders in the transportation, aviation, manufacturing, welding, building trades, energy, health & safety, and STEM sectors.

Mr. Tadajewski received his degree in Business at Pepperdine University, The George L. Graziadio School of Business and Management in 1995. His professional experience includes 14 years in metallurgical engineering research and development in both the energy and aerospace industries, he continued on to develop the most comprehensive automotive educational youth program in America - Automotive Youth Educations Systems (AYES). In 2007 he began work on forming the current NC3 model to bring business, industry and education across multiple sectors to collectively work together. To attract, train and retain current and the emerging workforce in the aviation/aerospace, energy, manufacturing, and transportation industries. These efforts lead to the founding of NC3 in 2009.

Mr. Tadajewski currently resides in Edmond, OK and is currently serving as a board member for the American Technical Education Association (ATEA), US FAB LAB Network, Partnership for Air-Conditioning, Heating, Refrigeration Accreditation (PAHRA), Coalition for Career Development (CCD), NC3 - National Coalition of Certification Centers and serves as Chairmen of the Center for Occupational Research and Development (CORD).

**Bridging Student Occupancy Gaps: Best Practices for Maintaining Building Water Systems During Low to No Use**

Hilary Nardone, Environmental Group Training Manager, Barclay Water Management

The CDC, EPA and local health departments recognize that temporary shutdown or reductions in normal water use (e.g. summer breaks, remote learning) can create hazards for returning occupants and damage expensive water treatment equipment. In this presentation you'll learn how to properly maintain building water quality during times of low building occupancy on college and university campuses to protect the health of returning students, staff, faculty, and visitors, as well as water system components.

* 1. Understand how *Legionella* bacteria and biofilms amplify in building water systems and how their growth and spread can be minimized during times of low or no occupancy.
  2. Learn what a Water Management Program (WMP) is and how it can minimize *Legionella* bacteria and biofilms in building water systems (including dormitories, academic buildings, laboratories, and office spaces), as well as comply with ASHRAE Standard 188-2021.
  3. Understand Cooling Tower best practices, including water treatment, routine maintenance and disinfection and cleaning.

**Hilary Nardone** is the Environmental Group Training Manager at Barclay Water Management, Inc. She received her B.S in Biology from St. Michael's College and her Master of Public Health from the University of Vermont. She is a certified ASSE 12080 *Legionella* Water Safety and Management Specialist.

**[Compound Your Energy Savings! Reduce Service Calls and Improve Your Facilities](\\\\office.ads.gvsu.edu\\dfs\\Facilities-Data\\FAC-EXEC\\Michelle\\MAPPA 2022\\Presentations\\Slide Decks\\2022.10.31 MAPPA_MiAPPA dbHMS_WMU Presentation.pdf)**

**[Management Strategy with Monitoring Based Commissioning](\\\\office.ads.gvsu.edu\\dfs\\Facilities-Data\\FAC-EXEC\\Michelle\\MAPPA 2022\\Presentations\\Slide Decks\\2022.10.31 MAPPA_MiAPPA dbHMS_WMU Presentation.pdf)**

Pete Strazdas, Retired Associate Vice President, Western Michigan University

Mark Wisz, Principal and Commissioning Studio Leader, dbHMS

Kody Meier, Commissioning Engineer, dbHMS

Considering Monitoring Based Commissioning (MBCx)- What do I need to know? How do I get started? Western Michigan University and dbHMS will give answers to these questions and more. See real world examples of the process and the enormous potential energy savings of monitoring-based commissioning. Prioritize maintenance and service calls based on calculated impact. Learn how you can grow your energy savings exponentially allowing even small universities with tight budgets to realize impactful, immediate return on investment. Participate in an open discussion about how you too can use your building's data to your greatest advantage.

Facilities managers, building engineers, and energy managers/engineers will benefit from an understanding the basics of a monitoring-based commissioning program and potential implementation strategies. We will discuss specific examples of contemporary energy conservation measures and their outcomes on WMU's campus. WMU will present information on how they are able to secure, maintain, and grow funding for their MBCx programs. Lastly, we will provide an open forum for sharing experiences pertaining to, outcomes, strategies, and tools from the audience's experience.

**Pete Strazdas**, former Associate Vice President for Facilities Management at Western Michigan University. In his 43-years at WMU he held positions as Construction Administrator, Director of Maintenance Services, and Assistant Professor of Construction Management. He served on the Michigan APPA Board, including six years as President. He served on the International APPA Board as President. He is presently on the APPA Credentialing Board. Appointed by the Governor to the Michigan OSHA Construction Commission, served six terms as Mayor in the City of Portage, and President of the Council of Governments in Kalamazoo County. He presented at the COAA, ASHEE, SCUP, CAUBO, NFMT, CDS, HEFMA, AUDE, TEFMA, and Engineering Society of Detroit conferences.

**Mark Wisz**, Principal and Commissioning Studio leader with dbHMS since 2009. He holds credentials as a Certified Energy Manager, University of Wisconsin Commissioning Authority Professional, LEED AP, and awarded the Building Commissioning Association's "20 under 40" distinction in 2021. Mark's experience includes projects at WMU, Notre Dame, and Grand Valley State University, and high-profile projects at Stryker and Spectrum Health, and the William Eckhardt Research Center at University of Chicago. He worked throughout the United States and internationally, with Boeing and the U.S. Army Corps of Engineers. Mark's collaborative, proactive approach to commissioning elevates owner requirements to the top priority.

**Kody Meier**, Commissioning Engineer, with dbHMS since 2019. He holds bachelor's degrees from Ferris State University in Mechanical Engineering Technology and Energy Systems Engineering. His education and experience focus on energy efficiency and innovation, adding his unique perspective to the dbHMS Team. Kody provides value to commissioning projects in healthcare, universities, lab buildings, office buildings, and high-rise residences. Provides Monitoring Based Commissioning influencing energy usage strategies for clients. Kody's expertise in systems' functional testing and operational data investigations, recently including projects with the Western Michigan University FM Team, making his involvement a key component of our MBCx efforts.

**Wednesday, November 2, 2022**

**10:15 a.m. Educational Session 5**

[**Workshop: Closeouts that Work – For YOU and Your Staff**](file:///\\office.ads.gvsu.edu\dfs\Facilities-Data\FAC-EXEC\Michelle\MAPPA%202022\Presentations\Slide%20Decks\MAPPA%202022_Workshop.pdf)

Ariel Castillo,Strategic Process and VDC SpecialistMiller Davis Company

When it comes to construction projects, one of the most exciting milestones is achieving substantial completion. What many fail to share are the tedious, never-ending tasks required to successfully hit this milestone: creating a closeout log and generating a turnover package. With project specifications now featuring hundreds (if not thousands) of pages, how can construction companies make sure that they are providing useful documentation that meets the requirements of facilities management departments?

This session will be an interactive workshop to discuss status quo and workflows. You will leave with a better understanding of how to work through pain points, and multiple perspectives about how closeout documentation should be managed and delivered.

**Ariel Castillo** is strategic process and VDC specialist at Miller-Davis Company. Working in the industry since 2010, he has become a reference in the Latin America region. His focus is on promoting and utilizing emerging technologies to create new experiences that allow companies to maximize resources, whether they’re designing, building, maintaining, or selling a project. Ariel has proven his expertise by working on high-demand construction jobs, implementing new technologies, and incorporating new project delivery processes in multimillion-dollar projects. He also creates BIM content for the industry through his BIMnomad Newsletter and podcast, Shared Coordinates. Ariel was featured in 40 Under 40: Construction Champions of 2019.

**Matt Postma** is a Project Executive at Miller-Davis Company based in Kalamazoo, Michigan. With over 20 years in the construction industry, he has guided dozens of high-profile projects through successful construction. He holds a bachelor’s degree in construction management from Michigan State University, is LEED accredited, and oversees the bulk of Miller-Davis Company’s higher education construction. Matt lends his expertise to bolster Miller-Davis’ ambitious approach to meet the demands of 21st-century construction and enhance its level of service. Off the construction site, Matt enjoys leading his church’s Cadets program, spending time outdoors, and being with his wife, two teenage children, and pug named Chunk.

**Building for the New Normal: How Actionable Facilities Data and Master Plans Help Bridge the Gap to Meet New (Everchanging) Needs.**

Sarah Hempstead, CEO/Principal/Higher Education Studio Leader,

Schmidt Associates

In a rapidly changing educational environment, comprehensive facility planning and adjustments are critical to success. Unfortunately, the foundational information upon which many capital decisions are made-assessments and master plans-are often "dead" documents, found sitting on a shelf collecting dust. This results in frustration for colleges and universities who need to make data-based decisions that:

* Facilitate health and wellness
* Support changing programmatic needs
* Adjust to shifting expectations

This session will explain the benefits of actionable, comprehensive, multi-disciplinary assessments and real-time plan iterations to help address space needs in the post-pandemic university. Assessments and master plans can facilitate good strategic decisions only if they are living, working documents, and become an extension of the vision and strategy developed by the university/college. Attendees will gain an understanding of the framework necessary to evaluate and adjust their current data and plans.

[**Developing a Pathway to Campus Sustainability**](file:///\\office.ads.gvsu.edu\dfs\Facilities-Data\FAC-EXEC\Michelle\MAPPA%202022\Presentations\Slide%20Decks\MAPPA%20-%20Developing%20a%20Pathway%20to%20Campus%20Sustainability%20-%20Centrica.pdf)

Jake Smith, Account Executive, Centrica Business Solutions

Mark Weiss: Senior Account Executive, Centrica Business Solutions

Sustainability isn't just part of the curriculum for higher education facilities - it's critical to their financial security, ability to attract students, and operational resilience. Embedding sustainability will help you reduce operating costs, address your growing deferred maintenance backlog, and hit your budget. But with competing budget priorities, various options for infrastructure upgrades, and a wide array of solutions and technologies you could implement, where do you start? Join us as we discuss how to bridge the gap between budgetary constraints and prioritizing energy infrastructure upgrades and net zero targets, demonstrating how to practically implement a sustainability pathway to meet your financial and carbon goals.

**Jake Smith** utilizes his extensive industry experience to help customers conceptualize, design, finance and implement comprehensive energy and sustainability projects. He is responsible for coordinating the design and development efforts, constructing the winning theme for the customers, and developing the contract vehicle.

Throughout Jake’s career at Centrica Business Solutions, he has developed and managed design/build agreements, primarily energy performance contracts and energy-as-a-service agreements with higher education, municipal, state, county, K-12, and healthcare agencies.

**Mark Weiss** has more than 25 years of experience delivering on complex direct sales that deliver bottom line results for his customers. Since 2009, he has focused on selling energy efficiency projects. Mark has experience with selling and delivering successful LED, Energy Efficiency and Renewables projects.

Mark joined Centrica Business Solutions in January 2021 as the Senior Account Executive for the Midwest. Mark focuses on a mission to help his customers attain their journey to net zero by helping them successfully complete projects for Energy Efficiency and Renewable Energy Solutions.

[**Meet Your Next Custodian – The Autonomous Floor Cleaner**](file:///\\office.ads.gvsu.edu\dfs\Facilities-Data\FAC-EXEC\Michelle\MAPPA%202022\Presentations\Slide%20Decks\MAPPA%202022%20Presentation%20Nichols%20Next%20Custodian%20(with%20MSU).pdf)

Brandon Baswell, Campus Service Manager, Michigan State University

Glen Huizenga, Sales Leader, Nichols

Who would have thought in the year 2022 we would be bridging a gap utilizing robotics in the cleaning of our buildings? We have arrived and the technology continues to improve at lightning speed! In this session we will share case studies of implementations of autonomous floor cleaning equipment, results to date, return on investment strategies and the realities of our new world and what is now available.

**Brandon Baswell** is the Campus Services Manager at Michigan State University where his primary role is to lead a large team of professional supervisors and skilled cleaning workers to clean for health. MSU claims one of the highest square foot per FTE ratios in the Big Ten while maintaining an APPA level 2. MSU began exploring robotics in 1996 and has embraced the more recent expansion of this technology.

**Glen Huizenga,** Sales Leader, with Nichols, a Division of Imperial Dade, is a 34- year veteran of the custodial industry - 6 years as a custodian and 28 years as a sales person/sales manager. He is an annual presenter at the Michigan Schools Business Officials {MSBO} conferences and multi-time presenter at MiAPPA. He is passionate about helping customers achieve clean and healthy facilities. He is a believer in people and personal improvement.

**11:15 a.m. Educational Session 6**

**Grand Valley State University – Interprofessional Simulation Center: From Vision to Reality**

Katie Branch. Director of Simulation, Grand Valley State University

Bill Rapson, Vice President/Senior Architect, Fishbeck

Grand Valley State University celebrated the expansion of their healthcare education interprofessional Simulation Center in 2021. The Center is based at the University's Health Campus on the Medical Mile of Grand Rapids and encompasses over 67,800 square feet of space dedicated to skill acquisition, patient safety, and interprofessional collaboration.

The Simulation Center features state-of-the-art tools and spaces, including plastinated specimens, an Anatomage Table, biomechanics labs, and multiple assessment labs. Featured are separate suites for 30 immersive interactive technology, hospital simulation, standardized patients, model home living, gait analysis, operating, and audiology.

Cutting edge technology allows for students to learn in a safe, but realistic environment. Technology, such as programmable patient simulators, voiced and operated by Simulation Center staff and observed by faculty in remote observation control rooms, and 3D augmented reality create a world-class healthcare education facility.

Join us for a presentation of the Grand Valley State University interprofessional Simulation Center.

**Katie Branch, PhD, MSN, RN, CHSE** has been the Director of Simulation at Grand Valley State University (GVSU) since 2017. At GVSU, the interprofessional Simulation Center is a centralized service for over 20+ health-related academic disciplines. Katie is responsible for overseeing all the high-fidelity patient simulator, assessment labs, and standardized patient programming within the Center. In her tenure at GVSU, Katie has managed and been instrumental in the design, expansion, and remodel of the Health Campus, including the expansion and renovation of the Simulation Center from 21,881 square feet in one building to 67,828 square feet spread-out across three buildings.

**Bill Rapson, RA, CDT, LEED AP,** Vice President / Senior Architect, Fishbeck. Over the course of several projects, Bill has worked side by side with Katie and Grand Valley State University through the growth of the Health Campus and the Simulation Center. He brings a depth of understanding on the programmatical requirements, functional needs, and design strategies to achieve operations success in simulation centers.

**Audiovisual Equity for Learning Environments**

Robert Hnasko. Sr., Technology Designer, HGA

Our society's journey through the past two plus years has led us to embrace new technologies to communicate, learn, and share. For higher education, these technologies have had a profound effect on how educational content is delivered. The new hybrid workplace is prevalent in the work environment and similar "hybrid" approaches to learning are also evolving. It is widely acknowledged that we will return to a learning environment that is different- content is now easily delivered digitally, but we all still long for that personal and physical interaction. This session explores the changes in learning spaces and supporting technologies to support this new age what the future holds for how learning spaces will evolve.

**Rob Hnasko** consults with clients from initial strategic planning, through the design process, to the completion of a project. Rob designs advanced technology systems for clients in Healthcare, Corporate/Commercial, and Higher Education markets. Rob is an experienced Audiovisual, Telecommunications, and Security consultant with 20 years of experience working to help clients better understand the ever-changing, multi-faceted world of technology. He enjoys being able to help clients and users understand complex technology in basic terms. He is a certified member of AVIXA, the trade association representing the professional audiovisual and communications industries.

**Design Considerations for Small Scale (<20 MW) Heat Recovery Steam Generators**

Kimberly Garcia, HRSG/Energy Recovery Product Manager, Cleaver-Brooks

There Is a perception that combined cycle projects are only for large power plants, but there is the potential for new and existing projects under 20 MW to transform into a combined cycle plant by designing the hrsg and steam turbine generator set to complement one another. This presentation will do a brief review of combined heat and power and the benefits to a college or university campus as well as diving into the key design characteristics that are used when designing heat recovery steam generator sets for use in combined cycle projects.

**Kimberly Garcia** is the HRSG/Energy Recovery Product Line Manager for Cleaver-Brooks. She has more than 20 years of experience in the power generation industry, including 13 years designing and manufacturing steam turbine generator sets and nine years in the boiler industry. Kimberly holds a Bachelor of Science degree In Marine Engineering from Massachusetts Maritime Academy, and a Master of Science degree in Operations and Project Management from Southern New Hampshire University.

[**Solutions for Project Construction Escalation**](file:///\\office.ads.gvsu.edu\dfs\Facilities-Data\FAC-EXEC\Michelle\MAPPA%202022\Presentations\Slide%20Decks\How%20to%20Combat%20Infaltion%20and%20Excalation%20Design%20Collab.pdf)

Thad Berkes, Chief Estimator, Design Collaborative

One of the major hurdles that we attempt to forecast for our projects is escalation. There are many factors that affect escalation in the construction world which include inflation, supply chain and labor shortages.

There are several ways to help predict construction escalation. Turner Construction posts a quarterly cost index which measures costs in the construction market. Two other agencies that we look for guidance on our predictions are Consumer Price Index and local contractors. Also, using our own historical cost data from previous projects help us understand how the market has been behaving and allows us to make an educated guess to what escalation percentage will be needed to include for the future.

There is no rule of thumb that can predict how the market is going to change. But with factual statistical information we can help validate and expect what is to come for our next project.

**Thad Berkes** has 15 years of experience in the A/E/C industry, having previously worked as a land surveyor, quantity surveyor, and senior planner and estimator. He works diligently to survey the market and prepare construction budgets, working closely with the project design team to provide current cost estimates throughout the design process.