ACEC *Massachusetts*

American Council of Engineering Companies of Massachusetts

#2024EEA

Engineering Excellence & Awards Gala

March 28, 2024 | Renaissance Boston Waterfront Hotel | Boston, MA

The ACEC/Massachusetts Engineering Excellence Awards (EEA) competition recognizes engineering firms for projects that demonstrate an exceptional degree of innovation, complexity, achievement, and value.

ACEC/MA is delighted to celebrate outstanding projects and recognize great people at our 2024 Awards Gala.

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A Letter from our 2024 President

Welcome to the
ACEC/MA 2024
Engineering Excellence
& Awards Gala

March 28, 2024

Each year we gather to celebrate and recognize engineering firms for projects that demonstrate innovation and excellence. Tonight culminates a process that began many months ago, from the initial call for entries last summer to the selection of finalists and Grand Conceptor by a distinguished panel of judges. This evening we recognize all the firms who took the time and investment to participate in the competition.

In addition, tonight's Gala also recognizes those who work tirelessly throughout the year to advance the goals and values of not only our organization, but also the industry. Therefore, we are excited to share with you the winners of the ACEC/MA Education Corporation scholarship and Young Professional Awards.

Again, welcome and thank you for joining us this evening and congratulations to all of the winners!

Sincerely,

Colleen Moore
2023-2024 ACEC/MA President

2024 ACEC/MA Education Corporation Presidents' Scholarship

Deidra Anderson

Deirdra Anderson is pursuing a Bachelor of Science in Civil Engineering at Worcester Polytechnic Institute. She is a member of Society of Women Engineers and a WPI student athlete. Deirdra volunteers at the Food Recovery Network for local schools and is an avid runner. She wanted to be an engineer from a young age, with a strong desire to "make a difference as a leader." Her recent internship experience at Jacobs exposed her to an exciting multi-million dollar interchange project, giving her real-world experience.

Mia Balistrieri

Mia Balistrieri is pursuing a Bachelor of Science in Civil Engineering at Northeastern University. Mia chose this degree because she "wants to be part of the change" that comes from advancing technologies and community infrastructure. Mia is a member of the National Honor Society and a Community Volunteer Tutor for underprivileged students. Mia worked over the Summer 2023 for Nitsch Engineering as a transportation engineering intern and helped on traffic management, bike lane designs and AutoCAD.

2024 ACEC/MA Education Corporation
Nitsch Engineering's Judith Nitsch Scholarship

Olivia Sousa

Olivia Sousa is pursuing a Bachelor of Science in Civil Engineering at the University of Massachusetts Dartmouth. Olivia has a focused concentration in Environmental Resources Engineering and is passionate in researching opportunities to create a better environment through the application of engineering principles. Her undergraduate research has led to extensive field work opportunity, most notably using drones to fly over marshes to evaluate impacts of construction on natural habitats. Olivia is a member of ASCE where she has served as secretary and involved in concrete canoe.

2024 Financial Aid Package Scholarship

Ravyn Rapley

Ravyn Rapley, Rae for short, is pursuing a Bachelor of Science in Civil Engineering at Worcester Polytechnic Institute. Rae has a passion for mathematics and architecture so its fitting she has a focus on becoming a structural engineer. Her internships have allowed her opportunities to work on both owner and the consultant side with extensive field experience inspecting tunnels and bridges. Rae is a member of several different organizations, most notably WPI's Leadership Delta Pearl Mentor Program, Gender Leadership and Opportunities for Woman, and the Black Student Union.

2024 ACEC/MA DEI Award

AI Engineers, Inc.

AI Engineers, Inc. is a multi-disciplinary firm providing infrastructure solutions with a Massachusetts office located in Charlestown, MA. One of the Firm's core values is a belief in inclusiveness, driving their engineering efforts to create a diverse and collaborative environment that encourages every voice to be heard. This commitment to diversity is shown in their talent pool, with an impressive 75% minority/female representation in executive leadership and 54% minority/female makeup of their workforce. As a Minority Business Enterprise themselves, AI Engineers, Inc. actively strives to build passionate teams comprising diverse industry experts and has forged meaningful collaborations with various diverse firms in Massachusetts. They focus on giving meaningful opportunities to Minority and Women Business Enterprises with which they collaborate, assigning them integral roles with substantial involvement in project scopes.

Internally, AI Engineers, Inc. has implemented strategies to foster an inclusive atmosphere where every employee feels valued and heard through conversations, anonymous polls and company-wide surveys. Employees are also able to access internal trainings covering a spectrum of DEI topics, that are then discussed in open forums. Externally, AI Engineers, Inc. prioritize active engagement in initiatives that address local concerns and desires, actively participating in programs that strengthen communities. They support DEI development and pipeline expansion through support programs at Hartford high school with STEM educational support and internships, at the college level with a commitment to sponsoring an intern to attend the Society of Hispanic Professional Engineers National Convention, and within the AEC community through support and membership with WTS International.

2024 ACEC/MA DEI Award

VHB

VHB is a multi-disciplinary firm with its four Massachusetts offices located across the state. At VHB, diversity is a core value that fosters an environment of understanding, empathy, and equitable opportunities for all, recognizing that diversity is a strength that drives innovation and growth. VHB has implemented various initiatives to raise the awareness of DEI, create opportunities for learning and knowledge sharing, diversify its workforce, and create a sense of belonging and a culture of DEI.

Internally, VHB aims to provide gender and racial pay equity for their team and was among the first to sign the Boston Women's Workforce Council's 100% Talent Compact. This Compact requires companywide employee demographic and salary data be reported anonymously every two years. Also, VHB raises awareness of DEI through internal Community Conversations, an innovative Learning Experience Platform designed to provide equitable access to all employees for learning and development to enhance their skills and foster career advancement, and a diverse Board of Directors with 33 percent women, representation from the Black/African American community, and international perspectives.

Externally, VHB's leadership team, in partnership with ACEC, helped launch the Diversity Roadmap, a DEIB maturity model that will help firms plot their paths to a more inclusive future. VHB's impressive commitment to community service is exemplified by their employee-led charitable giving program, which has raised $4.7 million for charities across VHB's 30+ offices. Their employees select local nonprofit organizations, plan, and participate in creative and engaging fundraising events, like mini-golf tournaments, an online charity auction, and chili cook-offs, that foster a sense of camaraderie, build team spirit, and give back to our communities.

2024 Young Professional Award Winners

Alison Love

Senior Associate Structural Engineer

STV

Alison Love's exceptional contributions to the engineering field, coupled with her outstanding volunteer work, make her an unquestionable winner of this award.

As a Senior Associate Structural Engineer at STV, Alison has consistently demonstrated outstanding leadership and technical excellence. She recently had a pivotal role in the design of the Longfellow Bridge Rehabilitation project as she navigated complex three-dimensional modeling analyses, while ensuring project success. Alison has also fulfilled crucial design roles on complex projects like Belden Bly bascule bridge over Saugus River and the towers for the MBTA Draw 1 Bridges at North Station.

Beyond her professional achievements, Alison has been an active member in WTS, Boston Chapter and ASCE/BSCES since 2011, actively participating in leadership roles, committees, and outreach programs. Her accomplishments include revitalizing WTS-Boston's student outreach program and leading the annual Boston Summit. This signature event has positively impacted young minds, providing hands-on experiences and exposure to industry professionals.

Alison's commitment extends to numerous community volunteer activities, including serving as a Future City Presentation Judge and participating in the RAMP Mentoring program. Her passion for STEM education has undoubtedly contributed to her well-deserved recognition as Young Professional of the Year.

2024 Young Professional Award Winners

Lauren Underwood

Project Manager and Associate

Environmental Partners, An Apex Company

Lauren Underwood has consistently demonstrated exceptional performance as a Project Manager at Environmental Partners and has contributed to the company's success through hard work, dedication, and strategic vision. One stand-out project that showcases Lauren's exceptional leadership is the modernization and automation of a well water pump station. She navigated the complexities of upgrading the lime chemical feed system with strategic vision, where her expertise and collaborative approach led to project success.

Lauren's achievements extend beyond individual projects. Serving as the youngest President of the Massachusetts Water Works Association, Lauren has a clear goal for this year – to build impactful relationships between generations within MWWA and spread a robust mentorship culture within the organization.

Her active engagement in various professional organizations like the Massachusetts Water Works Association, the New England Water Works Association, the Plymouth County Water Works Association, and many more showcases a commitment to continuous learning and collaboration.

Lauren's volunteer work, notably with UMass Dartmouth, where she serves as a member of the Civil Engineering Industry Advisory Board, brings consulting engineering knowledge and skills to the Department of Civil and Environmental Engineering to aid in fulfilling its mission and to inspire the next generation of engineers.

2024 EEA Award Winning Lead Engineering Firms

Bronze Award

BSC Group
CHA
Dewberry
Environmental Partners Group, An Apex Company
Fitzemeyer & Tocci Associates, Inc.
Gannett Fleming
GPI
Jacobs
Kleinfelder
Michael Baker International
Pare Corporation
Sanborn, Head & Associates, Inc.
Simpson Gumpertz & Heger
SLR International Corporation
SMMA
Stantec
STV
TEC, Inc. The Engineering Corp
VHB

Silver Award

BETA Group, Inc.
CDM Smith
HDR
Highpoint
Jacobs
Kleinfelder
Sanborn, Head & Associates
VHB
WSP USA Inc.

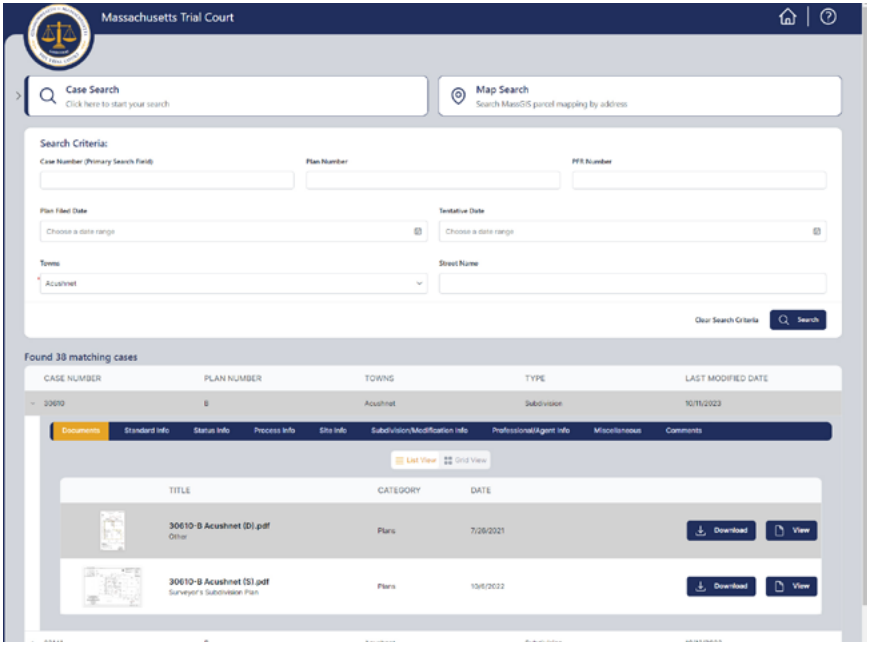
Finalists

Fennick McCredie Architecture
HNTB Corporation & SPS New England, Inc.
Howard Stein Hudson
Hoyle Tanner & Associates, Inc.
Nitsch Engineering

2024 EEA Bronze Award Winner

Land Survey Project Management System
Statewide, MA
BSC Group, Inc.

In 2021, Geonetics, a BSC Group Company, developed and deployed a data management tool for the Massachusetts Trial Court – Land Court division to assist with managing the business processes involving the ownership, development, and use of property. The system provides an automated workflow tool to better track and maintain their operations, and involved GIS data integration and creating a custom web application and AutoCAD plugin. In October 2023, Geonetics released a new module that makes the information in the system available to the public, replacing the manual process of requesting information and documents. The system is now publicly available free of charge.



2024 EEA Bronze Award Winner

Reconstruction of Main Street (Route 113)
Dunstable, MA
BSC Group

BSC Group served as prime consultant for providing engineering design services for a roadway safety and infrastructure improvement project at Main Street (Route 113) in Dunstable. Route 113 is a critical roadway for commuters connecting northern Central and Western Massachusetts with Northeast and Metrowest Massachusetts, and New Hampshire. The roadway is situated directly between protected wetlands and a historic cemetery containing several crypts and a retaining wall immediately adjacent to the roadway, requiring vibration monitoring and careful construction phasing. The project also included the successful replacement of an aging granite culvert that was built over the course of a weekend.

2024 EEA Bronze Award Winner

Morton Street Intersection Improvements
Boston, MA
CHA

CHA developed multimodal intersection and signal improvements for a portion of Morton Street (Route 203) in Boston at the intersections of Blue Hill Avenue, Harvard Street, and Courtland Road at Havelock Street to improve safety at a top two hundred crash site in one of the most congested metro areas on the east coast. This project included intersection safety improvements, pavement rehabilitation, signal upgrades, traffic signage upgrades, drainage improvements, and enhanced safety. CHA evaluated and improved safety and accessibility of sidewalks, crosswalks and bus stops to accommodate all modes of transportation and added bicycle lanes to improve bicycle safety.

2024 EEA Bronze Award Winner

Williams College Outdoor Tennis Courts
Williamstown, MA
CHA

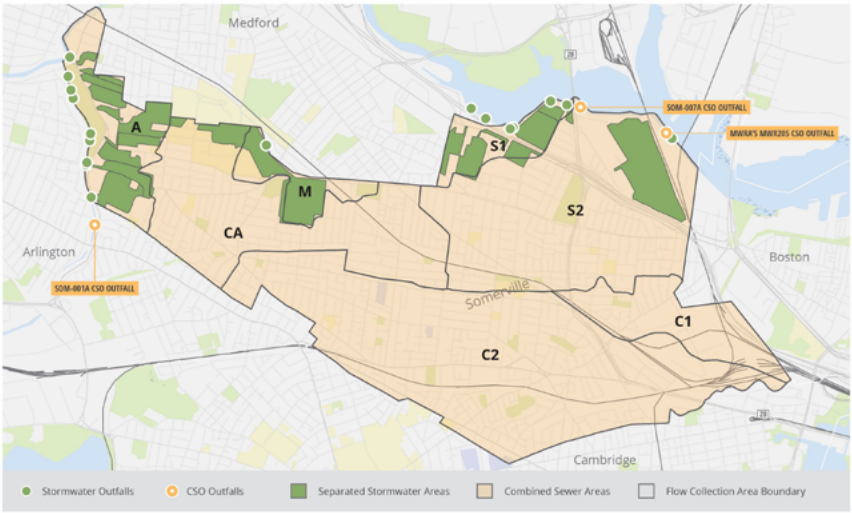
The Torrence M. Hunt ’44 Tournament Courts at Williams College are a cornerstone of collegiate tennis in Williamstown, Massachusetts, boasting 18 hard courts, including six competition courts and an additional five clay courts. The six competition courts have undergone an extensive makeover, resulting in a contemporary and accessible facility. The new courts are crafted using post-tension concrete to improve cracking resistance. A premier urethane court surface further enhances gameplay by balancing resilience and traction. New seating, a public address system, and a scoreboard amplify the spectator experience. This extensive revitalization solidifies Williams College as a premier destination for collegiate tennis.

2024 EEA Bronze Award Winner

Citywide Drainage and Water Quality Master Plan
Somerville, MA
Dewberry

With the Citywide Drainage and Water Quality Master Plan as a resource, the city can thoughtfully and strategically plan for future development and environmental impacts, including wastewater overflows in adjacent water bodies and increased flooding due to climate change.

Dewberry delivered a variety of scenarios to assist the city in developing an appropriate framework for a detailed, comprehensive, forward looking and practical tool for the city – to be used on an ongoing basis to inform, pollution/flood mitigation, future development and the investment approach to support those needs.



2024 EEA Bronze Award Winner

Weymouth Sewer Collapse Emergency Response
Weymouth, MA
Environmental Partners Group, An Apex Company

Turning Historic Infrastructure into Innovative Sewer Solutions. On September 14, 2022, the Town of Weymouth responded to a sewer collapse on Bridge Street, a high-traffic commuter route servicing commercial and residential areas. After the issue was detected at an extreme depth of 40ft, Environmental Partners was called in to assess possible connections and repair options. Though posing many challenges, the successful solution of rehabilitating a nearby, 30-year abandoned manhole saved the town time, money, and disruption.

2024 EEA Bronze Award Winner

CHA - Inpatient Child & Adolescent Psychiatry
Somerville, MA
Fitzemeyer & Tocci Associates, Inc.

The Cambridge Health Alliance's new Center for Inpatient Child & Adolescent Psychiatry at its Somerville campus, which adds 69 beds for children, adolescents, and specialized youth neurodevelopmental care, was made possible with the MEP/FP engineering services provided by Fitzemeyer & Tocci. Totaling 60,800 SF across 6 floors, the center increases their capacity to provide first class metal health care and address the national and state-wide shortages. The project involved the rapid transformation of 6 existing floors to accommodate 69 inpatient beds and a cafeteria. The specially designed units and engineering of the spaces prioritize patient safety and well-being.

2024 EEA Bronze Award Winner

Variable Message Sign Replacement Project
Statewide MA
Gannett Fleming

Part of MassDOT's Intelligent Transportation System (ITS) Program, Gannett Fleming provided engineering design and construction phase services for replacing and upgrading 22 non-functioning overhead Variable Message Signs (VMS) along several interstate highways and state highways throughout eastern Massachusetts. The project demonstrates that innovative thinking and analytical techniques can offer safe, cost-effective solutions that also reduce inconvenience to the public. The project introduces modern, technologically advanced equipment that helps improve communications and awareness, making our roadways safer and motorists more informed.

2024 EEA Bronze Award Winner

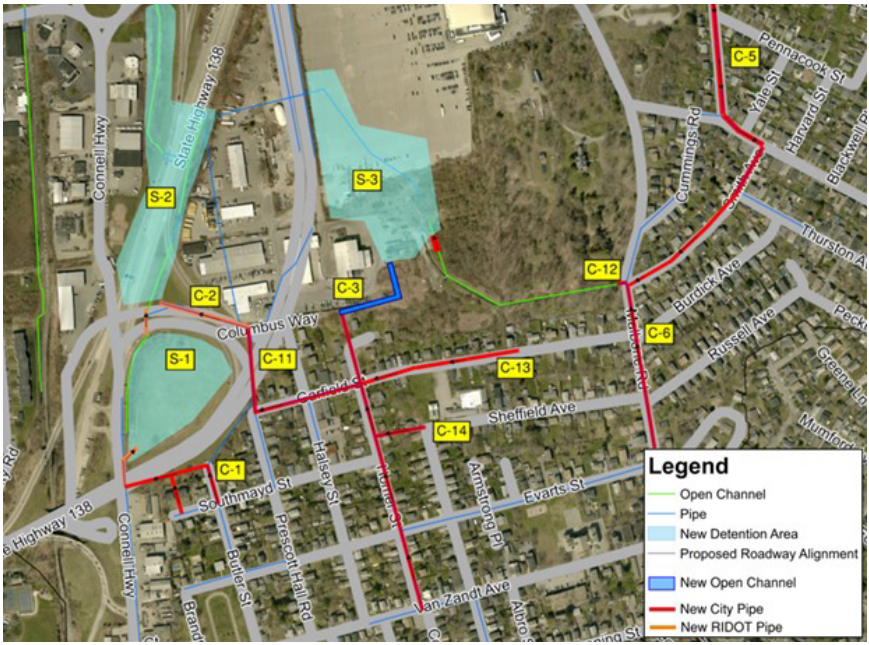
Bruce Freeman Rail Trail 2B - Concord/Acton
Concord/Acton, MA
GPI

Phase 2B of the Bruce Freeman Rail Trail is a pivotal connector, literally bridging the gap between Concord and Acton. The significance of the entire trail led to the passage of H. 1455 in 1989, and this complex phase is a linchpin for the trail's ultimate realization. The bridges over Route 2 and the Nashoba Brook have been meticulously designed and executed, paying homage to the past while embracing the possibilities of the future, all while providing access to additional miles of trail and recreational havens for all. Together, we create the infrastructure people need most.

2024 EEA Bronze Award Winner

Newport Prescott Hall Drainage Study
Newport, RI
Jacobs

Historically the Prescott Hall neighborhood in Newport, RI has experienced significant flooding during large precipitation events. The City contracted Jacobs to perform a drainage study to investigate the causes of flooding and identify potential mitigation measures. The project team worked with stakeholders to identify a favorable solution that addresses the wide range of priorities and constraints in this community. Alternatives were evaluated using a 2D hydraulic model and presented at a series of public workshops. The study resulted a phased implementation approach encompassing 13 projects that is estimated to reduce flooding for the 10-year, 24-hour design storm by 72%.



2024 EEA Bronze Award Winner

Transit Signal Priority Performance Measure
Greater Boston Region
Jacobs

The Transit Signal Priority Performance Measure project, marked by interdisciplinary collaboration, innovation, and sustainability, stands as a testament to the potential of engineering excellence. We have created a scalable framework that empowers MBTA to monitor and enhance transit service quality for people in Greater Boston continuously. This approach is easily replicable in other regions, with low cost and independence from TSP providers, enabling transit agencies to drive data-driven decisions and encourage industry innovation. We believe it deserves special recognition for the lasting impact it will have on the future of public transportation in Greater Boston and beyond.

2024 EEA Bronze Award Winner

York St. Pump Station and CT River Crossing
Springfield, MA
Kleinfelder

The Springfield Water & Sewer Commission's $137.6 million York St. Pump Station and CT River Crossing is the cornerstone of a 40-year Combined Sewer Overflow Integrated Wastewater Plan — one of the nation's first approved by the EPA. The project helps improve water quality through reducing the annual combined sewer overflow by over 100 million gallons during the typical year and includes new critical infrastructure. The project garnered national attention as one of the first horizontal pipeline projects in Massachusetts to warrant an Alternative Delivery method and achieved environmental benefits while providing climate resiliency, system redundancy, and infrastructure renewal.

2024 EEA Bronze Award Winner

Pawtucket-Central Falls Transit Center
Pawtucket, RI
Michael Baker International

The new Pawtucket-Central Falls Transit Center provides a robust combination of commuter rail and bus service in an emerging area of transit-oriented economic development in Pawtucket and Central Falls, Rhode Island. It allows riders to switch modes of transportation easily between commuter rail operated by the MBTA and RIPTA statewide bus network – making it easier and more convenient for many travelers to and from Boston and other destinations in Massachusetts.

The project was led by contractor Barletta Heavy Division and designer of record Michael Baker International.

2024 EEA Bronze Award Winner

East Providence High School
East Providence, RI
Pare Corporation

Pare Corporation provided structural, site/civil, environmental, permitting, and traffic engineering services for East Providence High School, the first new public high school to be built in Rhode Island in over two decades. This $190-million, four-story, 307,000-SF building is truly a 21st-century educational facility. The new school accommodates 1,600 pupils in grades 9-12 and is a comprehensive high school that combines traditional educational programs with career technical pathways such as Dentistry, Nursing, Automotive, Construction, Graphic Design, Engineering and Robotics, Computer-Aided Design, Childcare, and Culinary Arts. The school was recognized as a 2023 Green Ribbon School by the U.S. Department of Education.

2024 EEA Bronze Award Winner

CambridgeSide Redevelopment Phase 1
Cambridge, MA
Sanborn, Head & Associates, Inc.

The first phase of the redevelopment of CambridgeSide is deserving of special recognition due to the project's transformative impact on the community. The project converted 160,000 SF of existing space and added 250,000 SF of new life science space that further stiches the CambridgeSide development into its Cambridge neighborhood and positions the development for years to come. The team employed innovative engineering solutions to overcome the challenges of the constrained, occupied site, coordinating extensive work while maintaining the safety of the public at all times. The project epitomizes the fusion of engineering excellence, adaptability, and social progress.

2024 EEA Bronze Award Winner

180 CityPoint
Waltham, MA
Sanborn, Head & Associates, Inc.

180 CityPoint, Waltham is worthy of recognition by the ACEC/MA for the collaboration and collective engineering excellence that was displayed by the team in managing the complexities of the project. Building a 329,000 square foot building into a steeply sloped site required changes to the foundations and building design as the actual conditions of the bedrock were discovered through the course of excavation. Constant communication between the design team and the contractors facilitated the resolution of issues quickly and creatively, pushing the team to meet the goal of delivering a state-of-the-art research facility while minimizing disruptions and maintaining safe operations.

2024 EEA Bronze Award Winner

The First Church of Christ, Scientist
Boston, MA
Simpson Gumpertz & Heger

The First Church of Christ, Scientist (TFCCS), was seeking a comprehensive rehabilitation solution to preserve the iconic structure, The Mother Church Extension (TMCX). SGH designed repairs and replacements that addressed the roofs, facades, semi-domes, and cupola on the main dome that preserved the building's original appearance while incorporating modern waterproofing techniques. Our goal was to provide TFCCS with a long-term solution that would minimize maintenance. The seven-year restoration project added 100 years to the building's life and incorporated innovative solutions to preserve its original appearance.

2024 EEA Bronze Award Winner

Revere Beach Apartments
Revere, MA
SLR International Corporation

The project consisted of design phase geotechnical and site engineering by SLR at the site of the proposed multifamily development located in Revere, Massachusetts. SLR developed a unique and innovative hybrid method of using geo-concrete columns for heavily loaded foundations and rammed aggregate piers under the floor slabs. Due to the building occupying the majority of the site, SLR proposed an innovative stormwater retention system located below the first-floor slab within stormwater galleries. The lower-level parking garage portion of the building was designed so that storm surge flowed through the garage.

2024 EEA Bronze Award Winner

The Lincoln School
Lincoln, MA
SMMA

The Lincoln School is the first projected Net-Zero public school renovation project in Massachusetts. Serving as a PreK-8 school, community gathering spot, and emergency shelter, this project intricately worked to preserve the historic architecture and update programming while eliminating the use of fossil fuels with innovative architectural and engineering solutions that use half as much energy as a similar building. This building highlights the mechanical and electrical engineering systems that will be required as we design buildings for a carbon-free future and allows the building to serve as a teaching tool to all the people that visit.

2024 EEA Bronze Award Winner

The Northern Strand
Everett, Malden, Revere, Saugus, & Lynn, MA
Stantec

The Northern Strand is a 10-mile shared-use path connecting Everett, Malden, Revere, Saugus, and Lynn. The design included over 20 roadway crossings, several amenities, play spaces, two overlooks, three bridges, raised community garden beds, and equitable access to numerous fields and open space. The design team engaged in a robust public engagement plan to collaborate efficiently with the municipalities, the public, and permitting agencies to meet the aggressive design schedule. Despite the Pandemic, the $14M construction contract was completed on schedule and within the funding budget, exceeding the expectations of these urban communities.

2024 EEA Bronze Award Winner

Connecticut River Mainline Bridge 47.90
Northfield, MA
STV

The Massachusetts Department of Transportation (MassDOT) Rail & Transit Division selected STV to serve as engineer-of-record to rehabilitate the existing single-track, single-span masonry stone arch, the Connecticut River Mainline (CRML) Bridge 47.90 in Northfield, MA. STV developed a long-term solution to address both the structural deficiencies and bridge drainage, and to better support rail service expansion in this region. The project team used an accelerated rehabilitation construction method to replace the existing deck of the bridge with a ballasted precast deck section with aesthetic and functional considerations. The rehabilitation was performed over a 72-hour weekend shutdown.

2024 EEA Bronze Award Winner

Beaver Brook Road Bridge Replacement
Westford, MA
TEC, Inc. The Engineering Corp

The Beaver Brook Road Bridge Replacement project was a remarkable example of smooth project execution made possible by project planning, construction considerations and close collaboration. The project partners worked seamlessly to replace a vital piece of infrastructure that was in dire need of replacement and provided a design that was context sensitive, cost-effective and greatly minimized the construction duration and construction impacts. Through the use of new wetland replication standards, Accelerated Bridge Construction (ABC) techniques and collaborative construction reviews, the new bridge structure will provide safe passage and recreational opportunities for all those in the area.

2024 EEA Bronze Award Winner

Flood Resiliency for Route 9 in Framinghams
Framingham, MA
VHB

Route 9 under the Route 126 overpass in Framingham was the site of dangerous flooding when it rained. MassDOT engaged VHB to design a new stormwater system that would alleviate flooding while being quick to implement and manageable in cost. VHB designed two basins to collect stormwater and remove sediments and pollutants as the water infiltrated into the ground. Since its completion in April 2023, the new system has proven effective; no flooding has occurred, even with the summer's unusually heavy rains. The project has led MassDOT to plan additional flood resiliency improvements throughout the state.

2024 EEA Bronze Award Winner

MassDOT Stormwater Design Guide
Statewide MA
VHB

MassDOT's stormwater control measures protect water resources from pollutants in stormwater runoff along the Commonwealth's 4,600-mile road system. Designers of these measures face complex challenges in meeting regulatory requirements in project sites with narrow corridors. To update its stormwater design guidance, MassDOT partnered with VHB and undertook the unique and exhaustive task of collecting more than 25 years' worth of best practices from staff throughout the Department. This collaborative effort resulted in a new Stormwater Design Guide that gives designers a comprehensive resource with practical, MassDOT-specific guidance for designing effective solutions that achieve regulatory compliance on every MassDOT project.

2024 EEA Bronze Award Winner

Rte. 128/I-95 Land Use & Transportation Study
Newton to Lexington, MA
VHB

All roads lead to a future of accessibility and sustainability for the Route 128/I-95 Corridor. VHB's multimodal infrastructure- and policy-based recommendations and multilevel coordination across stakeholders resulted in an actionable plan for a sustainable environment that encourages inclusive and equitable transportation alternatives. These forward-thinking, data-driven recommendations, presented in a clearly defined implementation plan, aim to reduce carbon footprint and alleviate some of the impacts of the bustling economic development—all while making way for an equitable and sustainable future.

2024 EEA Bronze Award Winner

Rand-Whitney Corrugated Packaging Facility
Boylston, MA
VHB

As a business with roots in Central Massachusetts, it was important to Rand-Whitney Container to remain local when it built a new packaging facility. Its new site in Boylston, MA, offered proximity to the highway, minimizing emissions and interruption to residential neighborhoods from facility traffic—but also introduced challenges. Surrounded by wetlands and featuring a steep grade, the topography presented VHB with the complex task of maximizing the land's potential for Rand-Whitney while respecting the natural environment. Using model-based design and integrated thinking, VHB provided designs that addressed these challenges while helping Rand-Whitney open its doors as soon as possible.

2024 EEA Silver Award Winner

Revitalizing & Preserving Lexington Center
Lexington, MA
BETA Group, Inc.

The revitalization and preservation of the historic Lexington downtown enhanced the vehicular, transit, pedestrian, and bicycle experience through state-of-the-art streetscape amenities and complete streets/traffic calming features that meet ADA compliance and improve overall safety. Through thoughtful and innovative design engineering, sustainable solutions and an innovative lighting system were implemented which beautify and improve the streetscape. The project included significant public outreach, which resulted in stakeholder buy-in and support, coordination with local business owners, and informed residents and visitors. The finished project, which took over a decade to complete, resulted in safety improvements, landscape amenities, improved traffic circulation, and accessibility.

2024 EEA Silver Award Winner

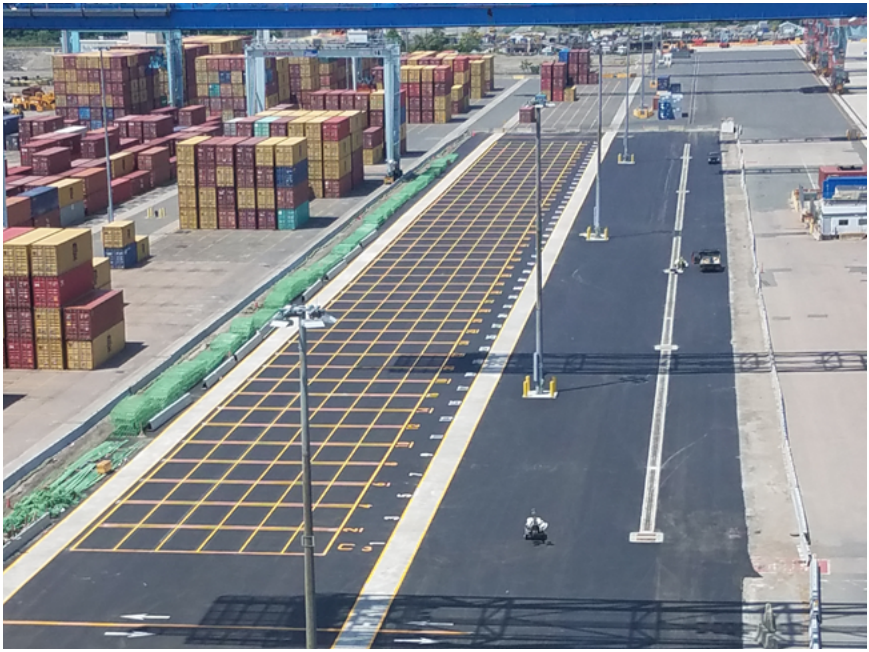
Low Service Pressure Reducing Valve Upgrades
Boston & Medford, MA
CDM Smith

The Massachusetts Water Resources Authority (MWRA) provides high-quality drinking water to approximately 2.5 million residents in 53 Massachusetts communities. The Low Service Pressure Reducing Valve Improvements project is a strategic distribution system improvement that will increase the reliability and resiliency of water supply to communities north of Boston and provide greater operational flexibility for the overall MWRA distribution network. This highly complex project required careful planning to maintain uninterrupted system operation during construction. Additionally, community outreach and cooperation were key elements of the project given the project locations. The project will benefit over a million greater Boston residents.

2024 EEA Silver Award Winner

Conley Backlands Reclamation
Boston, MA
HDR

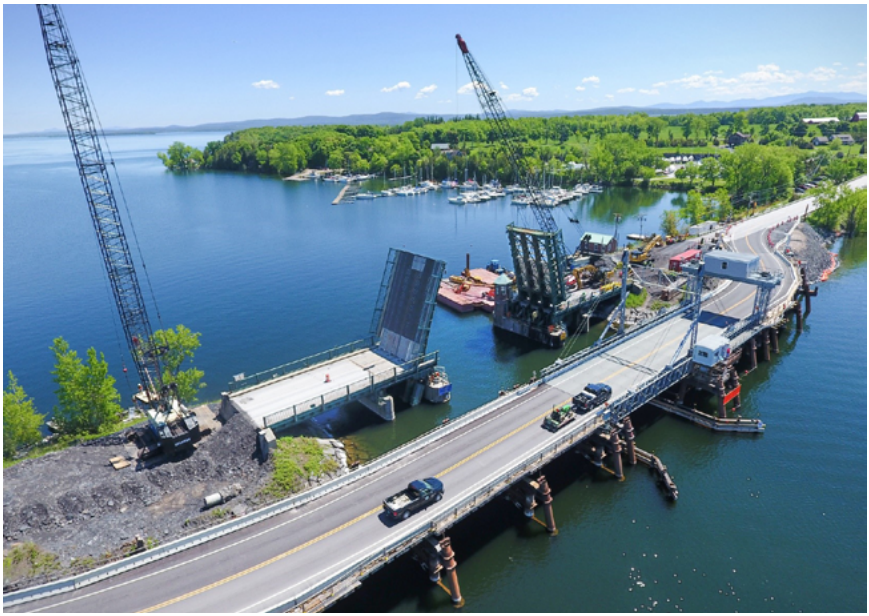
Massport's Conley Terminal is a vital economic asset for New England, as its only deep-water, full-service container terminal. The Conley Terminal Berth 11 & 12 Backlands Reconstruction Project rebuilt severely deteriorated portions of the container yard by using an innovative sustainable pavement recycling method that reused asphalt in place, eliminating off-site disposal as well as the import of sub-base material. The approach had only been used on terminals twice before in North America, and never in the Northeast. Sustainable management of 8,800 tons of asphalt, soil and construction materials reduced the project's impacts to the environment and surrounding community.



2024 EEA Silver Award Winner

North Hero-Grand Isle Drawbridge Replacement
North Hero and Grand Isle, Vermont
HDR

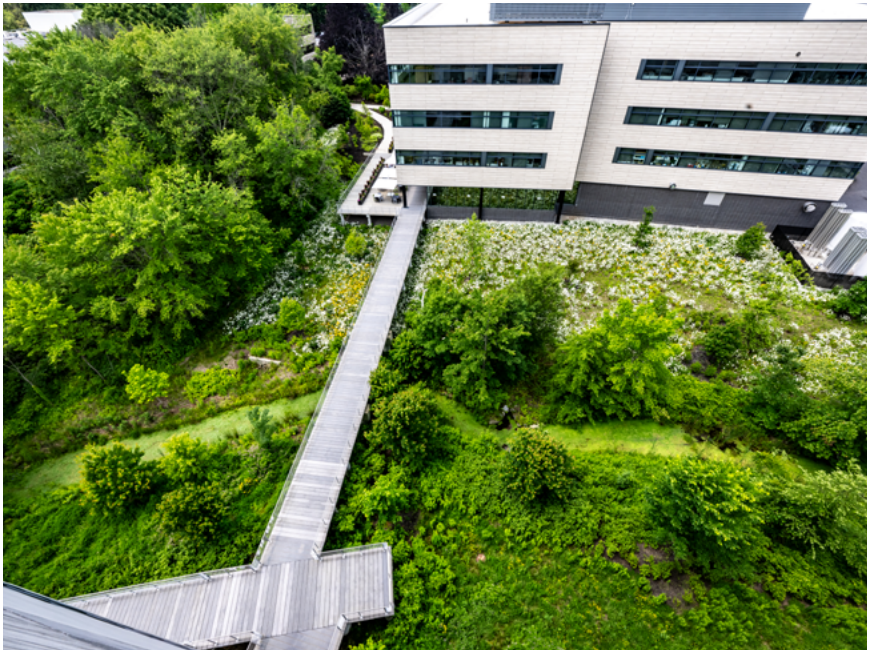
The North Hero - Grand Isle Drawbridge Replacement restores a critical crossing and Vermont's only highway drawbridge with a similar twin-leaf bascule structure. The bridge features unique hydraulic cylinders with fewer components. It's more reliable, improves maintenance and operations, provides a redundant frame, protects from the harsh winters and correlated road salt, and enhances safety. The team overcame significant challenges, including changing to a temporary bridge design, difficult construction access, unexpected soil contamination, extreme weather conditions and a global pandemic. Perhaps most importantly, they kept the crossing open to both road and boat traffic throughout the project with minimal delays.



2024 EEA Silver Award Winner

Hayden Campus
Lexington, MA
Highpoint

Highpoint played a key role in transforming Lexington's Hayden Campus into a modern laboratory and life science cluster, branded as the "Hayden Research Campus." The aged site was poised for transformation, to integrate a best-in-class life science development with essential improvements to eliminate flooding, improve stream flow, and enhance degraded environmental resource areas. The Project design balanced the campus expansion with ecological enhancements including stream restoration, expansion of wildlife habitat and foraging areas, invasive species management, improved stormwater discharges, and support of passive recreation with public access to abutting conservation land.



2024 EEA Silver Award Winner

Airport Portal & Alewife Flood Resiliency
Cambridge & Boston, MA
Jacobs

Jacobs developed a plan for implementation of flood protection systems at Airport Portal in Boston, MA and Alewife Station/Garage in Cambridge, MA. The project involved site visits to assess facility vulnerabilities, gathering and analysis of existing flood maps and expected flood inundation levels from various sources for the 2030-, 2050-, and 2070-time horizons, definition of a design flood elevation, and development of a plan to protect the facilities from future flood hazard. The Study has been extremely important and valuable so the MBTA can plan to mitigate future flood impacts from climate change and increase the resiliency of the facilities.

2024 EEA Silver Award Winner

Carlton St. Footbridge Restoration
Brookline, MA
Kleinfelder

The project achieved its goal of restoring and reopening an historic pedestrian truss bridge as a universally accessible, bicycle-friendly connection over active MBTA Green Line tracks. Closed since 1976 due to poor structural condition, the reopened bridge restores an important connection between Brookline's historic Longwood/Cottage Farm neighborhoods and the historic Riverway Park and the nearby Longwood Medical area. The challenge of working over active tracks was met by lifting and transporting the bridge to an off-site location for truss and stair repairs and painting, saving time and money, thus minimizing conflicts with on-going MBTA operations.

2024 EEA Silver Award Winner

Gillette Stadium North End Zone Improvements
Foxborough, MA
Sanborn, Head & Associates

The Gillette Stadium North End Zone Improvement Project is worthy of recognition for the team's effective collaboration and creative engineering required to deliver a complex project on a fixed, aggressive schedule while keeping the venue safely operating to host a schedule of events. Engineering contributions include the design and installation of the country's largest high-definition video board without an expansion joint on the screen, use of a mix of existing foundation system enhancements including drilled micro piles in the existing structure, design, and coordination of the 218-foot light house and a complex deep transfer truss system above the north entrance.

2024 EEA Silver Award Winner

Lord Overpass Reconstruction
Lowell, MA
VHB

The original grade-separated Lord Overpass structure had long been a significant barrier to equitable access and economic growth, isolating vulnerable communities from the more vibrant downtown Lowell area. Safety enhancements and multimodal access were needed to boost economic and social opportunities. VHB worked with the City of Lowell and the public to develop and execute a design that balances vehicular traffic with other transportation modes, promoting healthier alternatives. The newly designed Lord Overpass has revitalized the City's connectivity and innovation, creating a new urban corridor that is poised to benefit both residents and visitors for years to come.

2024 EEA Silver Award Winner

Route 9 Connected Corridor Project
Worcester to Wellesley, MA
VHB

MassDOT's Route 9 Connected Corridor Project, a result of the Signal Phase and Timing (SPaT) Challenge, was the first of its kind in Massachusetts—a 38-intersection corridor that shares traffic information with drivers, pedestrians, and cyclists. VHB's innovative team designed a Connected Vehicle communications network that is compatible with both existing and emerging technologies and remotely accessible by MassDOT for monitoring and resolving issues. MassDOT has adopted the Connected Vehicle system and its technology as the new MassDOT standard for future intersection work across the Commonwealth.

2024 EEA Silver Award Winner

Somerville Ave. Utility & Streetscape Project
Somerville, MA
WSP USA Inc.

The Somerville Ave. Utility & Streetscape Project, the largest project in the City's history, has transformed Union Square by enhancing critical infrastructure, reducing flooding, advancing sustainability and climate resiliency, and enabling the transit-oriented redevelopment made possible by the MBTA's Green Line extension.

The major components include:

- Constructing a drainage conduit 14 feet wide by 6 feet high;
- Lining 6,000 feet of 19th century sewers from 8 inches to 84 inches in diameter;
- Installing 5,000 feet of water mains;
- Adding separated cycle tracks and enhanced sidewalks; and
- Constructing green stormwater infrastructure and streetscape to increase groundwater infiltration and improve stormwater quality.

2024 EEA Finalist Award Winner

Logan Airport Terminal B to C Connector
East Boston, MA
Fennick McCredie Architecture

The new Logan Airport Terminal B to C Connector improves efficiency and connectivity for passengers, tenants, and airport operators by creating a post-security connection between Terminals B and C. The Connector was an ambitious project for which innovative, forward-thinking design was expected of a project bound by complicated existing conditions. This multi-stakeholder project was defined both by the complex details inherent in stitching together new construction elements with some of Logan's oldest terminal space, and the big ideas that Massport envisions for Logan – namely the establishment of a seamless, post-security connection. Working on an active airfield added further complexity.

2024 EEA Finalist Award Winner

Haverhill Bridge Replacement Design-Build
Haverhill, MA
HNTB Corporation & SPS New England, Inc.

The MassDOT Haverhill Bridge Replacement DB provided needed improvements to heavily-traveled I-495 structures. Both bridges were structurally deficient and required complete replacement to establish a safer transportation network and improve traffic operations between exits 48 and 49 on I-495. The SPS and HNTB Team's innovative solution and seamless collaboration provided enhanced structures on-time and on-budget, despite a variety of significant challenges.

2024 EEA Finalist Award Winner

East Milton Square Reconstruction Project
Milton, MA
Howard Stein Hudson

Howard Stein Hudson (HSH) partnered with the Town of Milton and MassDOT to provide design and engineering services for the complete reconstruction of East Milton Square. This project reconstructed and revitalized a bustling business district sitting on top of bridge deck over the southeast expressway (I-93). This complex project included adaptive signal technology, complete streets improvements, structural repairs to the bridge deck, robust community engagement, design, local and regional traffic management, construction and activation of a new park, plantings, irrigation, landscape features and traffic control devices – all installed with minimal depth for construction on top of a bridge deck.

2024 EEA Finalist Award Winner

Main Street Bridge & US 202 Reconstruction
Peterborough, NH
Hoyle Tanner & Associates, Inc.

The Main Street Bridge and US 202 Reconstruction project successfully preserved the cultural appeal of the Historic District by replicating the appearance of the existing bridge and retaining walls through innovative reuse of existing stone elements fused with modern engineering techniques to update the structures to current design standards. Paid for by two separate funding streams, the project included six major elements consisting of bridge replacement, canal slip lining, partial dam reconstruction, king pile retaining wall construction, boulder wall stabilization, and roadway widening. Unforeseen conditions, extreme weather, and Covid-19 were a handful of the challenges overcome to complete this project.

2024 EEA Finalist Award Winner

BU Center for Computing & Data Sciences
Boston, MA
Nitsch Engineering

Nitsch Engineering worked as part of a collaborative project team to provide civil engineering, permitting, and land surveying services for Boston University's Center for Computing and Data Sciences. Nitsch's unique and sustainable stormwater management and permitting solutions, provided within a very complex urban site, contributed to the huge environmental achievement of this project. The CCDS is an exemplary model for future development projects in Boston as a sustainable and iconic center of learning and community that serves both the university and the public.

ACEC/MA 2024 Judges

Dr. Eleni Christofa
Associate Professor, Civil and Environmental Engineering
University of Massachusetts at Amherst

Kendra Halliwell AIA, LEED AP
Associate Principal, Practice & Design Team Leader
ICON Architecture

Glen Pisani
Steel Division Manager
MAS Building & Bridge, Inc.

Jon Chesto
Business reporter
The Boston Globe

William J. Renault, Jr., P.E.
Town Engineer, ADA Coordinator
Wakefield Public Works

ACEC/MA EEA Committee

Deborah M. Danik, PE, LEED AP BD+C
(co-Chair)
Nitsch Engineering, Inc.

Timothy Letton, PE
(co-Chair)
GPI

Megan Y. Alper
The Engineering Center Education Trust

James T. Barnack, PE
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Tatyana Dudiac
CDM Smith

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The Engineering Center Education Trust

Kurt Jelinek, PE
Nobis Group

David Matton
Howard Stein Hudson

Christopher R. McDermott, PE
TRC Companies, Inc.

Matthew W. Skelly, PE, PTOE
Fuss & O'Neill, Inc

Elizabeth Tyminski
The Engineering Center Education Trust

Dennis A. Vertiyev, PE
Green International Affiliates, Inc.

Kristine Wickham, PE
VHB

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Leadership Education Committee

Leadership Education

ACEC/MA offers several high quality courses for engineers, land surveyors, architects and other design professionals to develop their expertise in the business side of our field through our Leadership Education Committee. The individual courses are geared to different experience levels and often are presented by nationally recognized instructors in a local venue or on Zoom, allowing participants to stay engaged in their workload while building skills.

More on ACEC/MA Leadership Education Programs here:
https://www.acecma.org/about/news/acec-ma-leadership-education-programs-4345

Engineers and Land Surveyors Day at the State House - May 30, 2024

Engineers, Land Surveyors, Public Works Professionals and other design professionals will meet with Massachusetts state legislators at the State House on May 30, 2024. It is important for legislators to hear from us.

Details about this event:
https://www.engineers.org/about/news/engineers-and-land-surveyors-day-at-the-state-house-may-30-2024-5491

Sign Up by May 1:

ACEC/MA Education Corporation Golf Tournament

ACEC Massachusetts
Education Corporation

September 30, 2024
Ferncroft Country Club in Middleton, MA

https://www.acecma.org/events/acec-ma-education-corporation-golf-tournament-2024-5243

Proceeds benefit the ACEC/MA Education Corporation Presidents' Scholarship Fund

Passionate in our pursuit to tackle your toughest issues.

For more information, contact:

Wayne Chadbourne
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HALEY ALDRICH

ACEC/MA Upcoming Events

April 11, 2024
ACEC/MA State Markets Conference 2024 at MHA Conference Center, Burlington, MA
https://www.acecma.org/events/acec-ma-state-markets-conference-2024-5342

May 21, 2024
ACEC/MA Energy & Utilities Conference 2024 at MHA Conference Center, Burlington, MA
https://www.acecma.org/events/acec-ma-energy-and-utilities-conference-2024-5508

May 30, 2024
Engineers & Land Surveyors Day at the State House
https://www.acecma.org/events/engineers-and-land-surveyors-day-at-the-state-house-5494

June 10, 2024
TECET Golf Tournament at Marlborough Country Club
https://www.engineers.org/events/annual-golf-tournament

June 18, 2024
ACEC/MA 2024 Annual Celebration
https://www.acecma.org/events/acec-ma-2024-annual-celebration-5509

September 30, 2024
ACEC/MA Education Corporation Golf Tournament, Ferncroft Country Club, Middleton, MA
https://www.acecma.org/events/acec-ma-education-corporation-golf-tournament-2024-5243

ACEC *Massachusetts*

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