



ARCHITECTURAL DESIGN, ENGINEERING, AND
CONSTRUCTION ADMINISTRATION SERVICES FOR THE

New Harbor Centre Marina

AND ASSOCIATED FACILITIES

PRESENTED TO
CITY OF SHEBOYGAN

RFP #2078-25
JUNE 26, 2025

PREPARED BY
EDGEWATER RESOURCES

PREPARED BY



PROJECT PARTNERS



The logo for Ramboll features the word "RAMBOLL" in white, uppercase, sans-serif font inside a blue rounded rectangle. A white lightning bolt icon is positioned above the letter "O".

The logo for Collins Engineers Inc. features the word "COLLINS" in a large, black, serif font, and the words "ENGINEERS" and "INC." in a smaller, green, serif font below it.



Edgewater
resources

TO:

Bernard Rammer

Purchasing Agent

City of Sheboygan, City Hall
828 Center Avenue, Suite 110
Sheboygan, WI 53081

Edgewater Resources

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St. Joseph, Michigan 49085

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RE: Request for Proposals #2078-25

Complete Architectural Design and Engineering Services associated with Construction of new Harbor Centre Marina and Associated Facilities.

Dear Mr. Rammer,

June 26, 2025

Thank you for the opportunity to provide this proposal for architectural design and engineering services for the permitting and construction of the new Harbor Centre Marina and associated facilities.

Edgewater Resources is a full-service design, planning, and engineering firm that specializes in marinas and waterfront projects. We have completed hundreds of marina projects around the Great Lakes and across the country, serving our clients from offices in Madison, Wisconsin and St. Joseph, Michigan. We have an in-house team of experienced, licensed professionals to lead this effort, and the development experience as the owners and developers of similar waterfront projects valued in excess of \$35 million, so we understand the issues from your perspective as the owner and operator of the marina.

We believe we are particularly qualified to assist you with this project, as we have more recent and ongoing marina construction projects underway now and over the last fifteen years on Lake Michigan than any other firm. This includes the complete reconstruction of Reefpoint Marina in Racine (underway now), 31st Street Harbor and Navy Pier Marina in downtown Chicago (opening this week), along with recent and ongoing work in Green Bay, Sturgeon Bay, Egg Harbor, Kewaunee, and Port Washington, and twenty more along the east side of the lake (not counting the projects still in the design and planning). This experience provides us with unmatched expertise in marine construction methods and current construction costs already being affected by tariffs.

We are also very familiar with Harbor Centre Marina and the regional marina market, having just completed the Harbor Centre Marina Market Analysis that provides current market data that will be very useful in the refinement of the current Master Plan. We will use this data to ensure the new marina provides the right mix of slips of the right size, and the amenities needed to make sure this marina is again one of the best marinas on Lake Michigan. Additionally, our team includes the key individuals who modeled the harbor for the City of Sheboygan Wave Surge Mitigation Study in 2016 while with their previous employer, so we are already familiar with the most important environmental conditions that have been causing so much damage over the years.

Our project director will be Mike Morphey, who led the design, permitting, and construction of the Port of Rochester Marina, a \$20 million marina which converted an underutilized port parking facility into a 158-slip marina. Mike will be your day-to-day point of contact and oversee all aspects of the project and coordinate the efforts of our entire team. Mike also oversaw the construction of 31st Street Harbor in Chicago, a 1,023 slip \$103 million marina that is LEED Gold Certified and winner of the Fabien Cousteau Blue Award for Sustainable Harbor Design. Jack Cox, Vice

President and Director of Engineering for the firm and leader of our Madison office, will apply his fifty years of marine and coastal engineering experience to ensure the design addresses all physical conditions including geotechnical, wind, waves, ice, and hydraulic. Michelle Rumsa will lead the architectural design components of the project, applying her 30 years of experience designing beautiful, durable, and functional buildings for marinas and waterfronts all across the Great Lakes. As a landscape architect and lifelong boater, I will work with you and the community to ensure the new marina and waterfront reflects the community's vision and expands access to the waterfront for everyone in Sheboygan. Also, as an owner and investor of several similar sized marinas on Lake Michigan, I will apply my experience in operations as we collaborate with your team to make sure the marina works for the staff as well.

We will be collaborating with a well-rounded team, including Ramboll, who will provide environmental and demolition-related services; Collins Engineers, Inc., who will provide survey, civil engineering, and construction administration support; Maffett Loftis Engineering, who will provide mechanical, electrical, and plumbing design support; and a local geotechnical engineer who will be determined as the project is kicked off.

We sincerely hope to have the opportunity to help the City of Sheboygan shape and implement your vision for the future of Harbor Centre Marina and the surrounding waterfront. We recognize that the scope of work outlined in the request for proposal is comprehensive and truly transformational in scale. We have prepared a scope of work and budget that corresponds with this vision, and we recognize that this effort may well need to be refined or phased over time to align with project funding. If you find that our team is the most qualified to help you see this vision through, we will always find a way to adjust our scope of work, phasing, and budgets to match your needs. We look forward to the opportunity to meet with you to learn more about your vision for the project.

Sincerely,



Gregory Weykamp, ASLA, LEED AP, BD+C
Principal | President
gweykamp@edgewaterresources.com



Mike Morphey, PE, LEED AP
Principal
mmorphey@edgewaterresources.com

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2. Statement of Qualifications



Resilient Coastlines and Innovative Waterfronts Worldwide.

Edgewater Resources was founded with the goal of enhancing community waterfronts, with a focus on planning, design, and development solutions based in economic reality.

Edgewater is a design and engineering consultancy firm based in the United States, with offices in Michigan, Washington, Wisconsin, and South America. Our work is focused entirely on marinas, mixed-use waterfront developments, coastal improvements, and harbor works. We create waterfront projects that respect and celebrate the local culture and natural environment, respond to natural forces with resilient and durable designs, and consider financial realities to ensure the long term economic viability of our work.

Our team provides skilled and thoughtful professionals practicing in the fields of architecture, planning, landscape architecture, environmental science, development finance, and marine, civil, coastal, geotechnical, mechanical, and structural engineering. Our specific services include:

- + Marina, Civil, Structural, and Geotechnical Engineering
- + Mechanical Engineering and Dry Stack Engineering Design
- + Coastal, Port, and Navigation Engineering
 - Shoreline Processes Studies
 - Hydrodynamic and Wave Modeling
 - Marinas and Harborworks
 - Nearshore Structures Design
- + Market Analysis, Funding, and Financial Feasibility
- + Regulatory, Permitting, Assessments, and Mitigation Support
- + Architecture, Landscape Architecture, and Master Planning
- + Public Process and Stakeholder Engagement
- + Development Finance, Economics, and Grant Funding
- + Expert and Forensic Analyses



Edgewater places an equal emphasis on design and engineering in all of our work, ensuring that all that we build is beautifully and thoughtfully designed to complement its setting, and thoroughly engineered to function, operate, and serve its purpose for decades. Our principals include award winning CLARB certified landscape architects and planners licensed to practice across the United States, LEED Accredited Professionals, Clean & Resilient Marina Professionals, and Board Certified Port, Coastal, and Navigation Professional Engineers. Our team works together on every project in a collaborative environment without divisions or departments, ensuring our work is well thought out and considered from many points of view, and we engage local partner firms and specialists to provide additional design resources as needed. Additionally, the Principals of our firm, Jack Cox, PE, BC.CE, PE, NE, BC.PE, and Greg Weykamp, ASLA, RLA, LEED AP, are currently leading the writing of the next edition of ASCE Manual 50, Planning and Design Guidelines for Small Craft Harbors.

3. Personnel



Team Structure

A world of knowledge applied to projects of all sizes.

Our team boasts considerable expertise and a wealth of experience, comprised of industry innovators who are at the forefront of developing revolutionary sustainable design and engineering practices.

With years of experience and success in all coastal environments, the Edgewater team is a trusted waterfront consultancy and regularly called on to advise local, state, and federal government agencies on shoreline, coastal, marina design, and engineering issues.

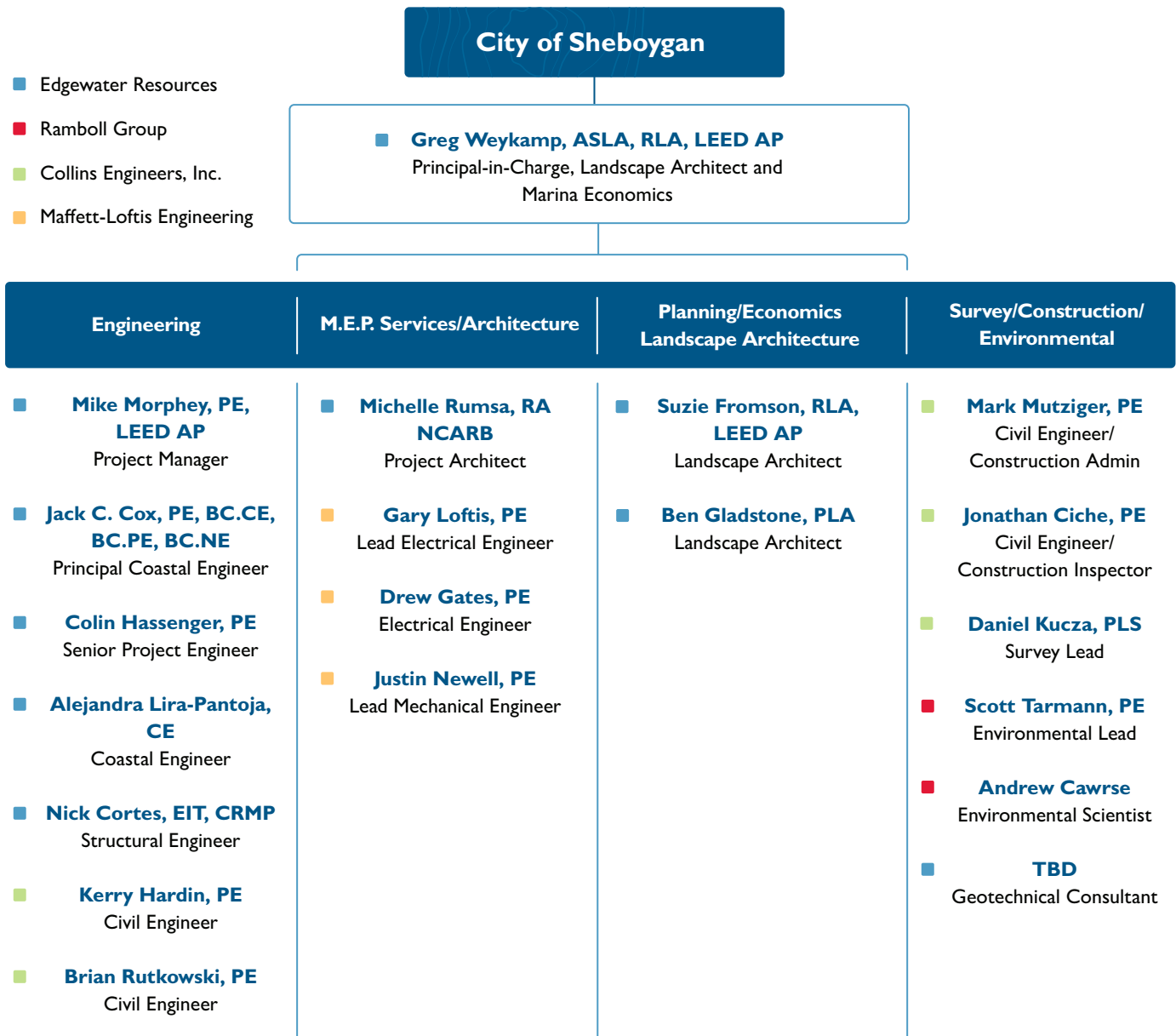
Professional and Support Positions

The team of Edgewater Resources, Maffett-Loftis Engineering, Collins Engineers, and Ramboll Group will complete the project with a team of over 15 professionals and approximately 25 support staff. Further information regarding the lead professionals may be found in the project organizational chart.



Org Chart

The illustration below details the coordinated structure of the Edgewater team and our partnering associates, ensuring unique experience and efficient management of your overall project.





Education

PhD ABT in Coastal Engineering,
University of Delaware

Post-Graduate Studies in
Geophysical Fluid Dynamics,
University of Chicago

Master of Engineering Science,
Purdue University

Bachelor of Engineering Science,
Purdue University

Registrations

Professional Engineer in the
States of AK, DE, FL, IL, IN, LA,
MD, MI, NY, NJ, OH, PA, RI, SC,
TX, WA, WI, and Cyprus.

Certifications

Academy of Coastal,
Ocean, Port and Navigation
Engineers. (ACOPNE)

Jack Cox

PE, BC.CE, BC.NE, BC.PE

Jack is Principal and Vice President of Engineering for Edgewater. He is triple board certified in Coastal, Port, and Navigation Engineering by the Academy of Coastal, Ocean, Port, and Navigation Engineers (ACOPNE). He possesses internationally recognized credentials in research, engineering, and design of projects involving nearshore hydrodynamics, harbor tranquility, breakwaters, fixed and floating marine structures, vessel navigation and berthing, dredge material disposal, shore protection, port planning, marina design, and risk analysis. Jack is also the principal author and lecturer for the ASCE Manual 50 for Planning and Design of Small Craft Harbors, the PIANC Marina Design Guidelines Manual and the International Marina Designer Training Program.

Relevant Experience

Master Planning of Racine Reef Point Marina

Jack developed a Master Plan for the reconfiguration of Reef Point Marina to an over-600-slip facility to accommodate a growing yacht-sized fleet. A new marina layout was introduced to include a central public festival pier, a floating fuel station relocation and modifications to the breakwater entrance. Jack managed the detailed design of the float system, mooring system and utilities upgrade., and directed dockage vendor selection, and construction oversight. The phasing plan was developed to accommodate transformation while the marina remained in full service.

Ft. Pierce Marina Living Breakwater Design

In 2004, The Ft. Pierce Marina was devastated by a series of hurricanes, leveling the old panel-style breakwater and washing away the docks. Jack directed the design of a "living shoreline" harbor and shoreline wave protection system including the design of segmental rubblemound breakwaters disguised as natural islands and reefs. He developed the geometry of the breakwater islands and archipelago array so as to also function as a current diverting system to reduce hazardous tidal velocities along the shoreline and modify and redirect sediment transport and accretion patterns. He also directed three-dimensional model testing of the design to control and confirm wave sheltering and sedimentation control current patterns. This project received the 2016 ASCE COPRI Award for Design Excellence.

Board Certified Coastal Engineer

Board Certified Port Engineer

Board Certified Navigation Engineer

Honors & Awards

Adjunct Professor of Practice in The Department of Civil and Environmental Engineering, University of Wisconsin.

Assistant Director for The Docks and Marinas Program, Department of Engineering Professional Development, University of Wisconsin.

Board of Trustees of The Academy of Coastal, Ocean, Port and Navigation Engineers (ACOPNE) / Trustee for Navigation and Coastal Engineering.

Inaugural Diplomate in The Fields of Coastal, Port and Navigation Engineering, ACOPNE/ASCE

US Representative and Deputy Chairman for The PIANC Recreational Boating Commission - 18 Years

Tsunami Technical Advisory Board, University of Washington.

Special Presidential License Recipient to Practice Marine Engineering - Cyprus.

Patent Holder for "Quay Wall with Absorption Blocks and Interconnecting Flow Paths" Patent No.: US 9,896,814 B2.

Jack Cox

PE, BC.CE, BC.NE, BC.PE

Illinois Beach State Park Shoreline Stabilization

Retained by the Illinois Department of Natural Resources, Jack led the design development of a six-mile shoreline stabilization project to protect and enhance a highly eco-sensitive coastline on Lake Michigan. His team employed a design approach intended to minimize any structural contact with the beach by using tuned offshore structures and introducing the concept of virtual shorelines. The plan integrated a system of properly oriented, configured, and detailed detached structures, submerged reefs, and beach reconstruction using offshore mining. Successful approaches to achieving shoreline resilience and sustainability were accomplished by introducing new geometric elements such as fishtail spurs to induce reverse sediment transport, triggering the self-healing of the beaches. The design was specifically formulated to passively increase the resilience of the shoreline. Jack directed numerical shoreline change modeling and large-scale physical model testing to confirm and refine the design. He also integrated habitat-enhancing features into the breakwater design to create a living shoreline.

St. Clair Pier Extension

Lake St. Clair is located near Detroit, hydrologically connected with Lake Huron to the north and Lake Erie to the south. Given its northern climate and orientation, lake ice is a major design consideration for any marine structure built on the lake. Damage to the waterfront structures along its shores are commonplace during the winter months. The municipality of St. Clair Shores envisioned building a public access pier extending off of an existing armored shore point of land rubble mound at Blossom Heath Park. This pier extension is for the purpose of offering park patrons the ability to experience the lake and shoreline from open water. Edgewater also developed this plan to consider adding taxi services from the pier to other points of shore in the future.

31st Street Harbor Breakwater

Jack performed an expert review of the harbor breakwater design and construction, including an assessment of the design sections for armor stability, inferring expected wave transmission, overtopping levels, and interpretation and extrapolation of the physical model's test results. Additionally, he examined the actual armor placement technique and quantified an achieved armor interlock. A validation of stone quality and quarry production rates was provided, as well as an assessment of the effectiveness of the breakwater crest armoring assembly using dissimilar armor types.



Education

Bachelor of Science in
Civil Engineering,
Michigan State University

Registrations

Professional Engineer
MI, IN, IL, FL, NY

Certifications

LEED (Leadership in Energy and
Environmental Design), 2003

Professional Affiliations

American Society of Civil Engineers
Associate Member

Society of Naval Architects and
Marine Engineers

Great Lakes Coalition
Vice President and Beach
Nourishment Chairperson

PRINCIPAL

Mike Morphey

PE, LEED AP

Mike is a licensed professional engineer with over 22 years of experience in consulting engineering. His experience ranges from small parks to large-scale waterfront improvements to local and state transportation projects. His work includes marina consulting for facilities of all types and sizes, both domestic and international. He has worked on over fifty coastal projects, primarily on Lake Michigan, while continuing to provide marina consulting to private and public clients in the Great Lakes.

Relevant Experience

31st Street Harbor

Mike led the construction administration phase of the new 1000-slip harbor for the Chicago Park District. He reviewed construction of the marina, including dock fabrication, dock installation and anchorage, marina utilities installation, and other related components. This project included the creation of a 1.5-acre waterfront park, integrated into a 2,200-foot-long stone revetment structure in Lake Michigan. The project opened in May of 2012 and created significant waterfront and traffic calming and pedestrian circulation improvements to the area, including the elimination of all four conflicts between the Lakefront Trail and vehicular traffic.

Port of Rochester Marina

The Port of Rochester Marina project included the transformation of an underutilized asphalt parking lot and ship loading area into a new 180-slip marina, serving both seasonal and transient boaters. Mike led the design and construction administration of the marine components of the project, including basin perimeter, docks, gangways, and other related components. The facility opened in Spring 2016 and remained fully functional during the record high Lake Ontario water levels of 2017.

East Tawas State Harbor Marina Expansion

The State of Michigan engaged Edgewater in the condition assessment, market analysis, boater survey, and Master Planning of the expansion of the existing state harbor facility in East Tawas, Michigan. Phase I included a new pedestrian promenade, coastal wetland areas, floating wave attenuator, floating fuel/service pier, and floating dock infrastructure. Mike managed the project and led the design and permit process of Phase I.

Presentations

ACEC of MI "Coastal Protection, Hard Armor to Soft Setbacks," June 2020

Assoc. of State Floodplain Mangers, National No-adverse Impact Workshop "Developing a No-Build Zone Ordinance," August, 2014

Michigan Boating Industry Assoc. Permitting for New and Existing Marina Projects," December 2015

MI Society of Professional Engineers Design & Construction of Modern Floating Dock Systems," October 2015

PRINCIPAL

Mike Morphey

PE, LEED AP

Brooklyn Bridge Park Marina

This project involved the creation of a new marina facility with full accommodation for vessels, from small sailing dinghies to over 200 ft. superyachts. The project site was a former industrial shipping pier that had been partially removed and repurposed into public park space, creating a unique set of challenges and design constraints. Due to its size and location, the project required detailed utility routing analysis and coordination with the surrounding public park to ensure compatibility with the current layout, along with the park's proposed future improvements. Mike served as project engineer and contributed to design development, local/state/federal permit acquisition, and construction administration.

Caroline Bay Marina

Edgewater was contracted to provide a market feasibility study, design, engineering, and project management for a luxury marina and yacht club. The project's scope included the design of a 500 ft. pier, piles, seawalls, a marina, and shoreline stabilization. Wave attenuation was incorporated into the design to protect small vessels and megayachts at the facility. As project engineer, Mike completed a condition evaluation of a World War II-era Naval Air Station loading pier, developed concept alternatives, and applied for permits.

St. Clair Municipal Marina Broadside Dock

The St. Clair Municipal Marina includes a steel seawall which doubles as a broadside dock. The dock serves transient boats and boat shows, including an annual offshore racing event. Mike led an evaluation of the dock, given upland settlement issues, and aging dock utility systems. The evaluation included geotechnical analysis, dive inspection, multibeam hydrographic survey, analysis, and long-term planning. The study resulted in a long term plan and phased approach for implementation.

F. Grant Moore Marina

Mike led a multi-year effort to re-think the City of Boyne City's long term improvement plan. After hearing input from community members about how the plan could balance various interests, a new long-term plan was developed. Through State of Michigan Waterways Grants, Mike assisted the City in optimizing an initial phase to restore capacity to the marina, then led the design of the initial phase. The project is in construction with anticipated completion in spring 2025.



PRESIDENT | PRINCIPAL

Gregory Weykamp

ASLA, RLA, LEED AP

Greg has over thirty-one years of experience in the planning and design of the public realm, with an emphasis on the implementation of sustainable landscapes and urban waterfront environments. His project experience spans waterfront parks, marinas, Master-Planned communities, urban revitalization, streetscapes, parks and recreation facilities, medical and university campuses, and military installations.



Education

Bachelor of Landscape
Architecture, Michigan
State University

Registrations/ Certifications

Registered Landscape Architect
in the States of IL, IN, MI, OH,
NY, and WI

CLARB Certified

Council of Landscape
Architecture, Registration Board

LEED Accredited
Professional Building,
Design & Construction

Clean & Resilient Marina
Professional (CRMP),
Association of Marina Industries

Relevant Experience

31st Street Harbor

Greg served as Principal-in-Charge, leading the combined design and engineering team in the development of a new 1000-slip harbor for the Chicago Park District. The design included a green roof-covered parking area providing heated winter boat storage below and expanded park space above. Additionally, the marina project was leveraged to create a new regional destination play area and a new 1.5-acre park space offshore in Lake Michigan, providing views of the Chicago skyline. Key elements included improved pedestrian and bicycle safety by realigning the Lakefront Trail and the integration of extensive sustainable design strategies including green roof-covered parking, bioswales, bio-infiltration, materials selection, habitat creation, alternative energy generation, boat wash, and LEED Certified structures.

Sheboygan Marina Market Analysis

Edgewater prepared a comprehensive marina market analysis for Harbor Centre Marina in the fall of 2024 that documented the current demand for marina services along the length of the Lake Michigan shoreline from Kenosha to Sturgeon Bay, Wisconsin. The analysis identified current market rates and demand for slips of various sizes, as well as supplemental marina services and associated upland services that affect demand and revenues. The marina market analysis provides information that can be used to refine the marina Master Plan prepared for Harbor Centre Marina to ensure the new facility meets the current and future needs of the marina market to ensure long term financial viability.

Navy Pier Marina

The Navy Pier Marina project included the design and development of a new transient marina located at the heart of Chicago's waterfront at Navy Pier. The facility provided 120 new transient slips on a combination of fixed and floating dock infrastructure. As Principal of the design team, Greg led the design, permitting, planning, and engineering for all aspects of the project.

Honors & Awards

Great Lakes Sea Grant
Network, Great Lakes Outreach
Programming Award, Sustainable
Small Harbors Project

American Society of Landscape
Architects, Illinois Chapter, 2013
President's Award, 31st Street
Harbor

Chicago, Illinois, ISS Fabien
Cousteau Blue Award, 31st Street
Harbor

Chicago, Illinois, AIA Chicago
SustainABILITY Leadership
Merit Award 2012, 31st Street
Harbor

First Place, Engineering News
Record Midwest "Best Projects"
2012, 31st Street Harbor

Design Evanston Urban Design
Award 2010, Evanston Lakefront
Master Plan

Air Force Design Award,
Planning/Design Guidelines
Category, Misawa AB, 2005

Merit Award for Research,
Summer Student Program 2001

Colorado Chapter ASLA, 2001

Great Plains Chapter American
Society of Landscape
Architecture, Merit Award for
Planning, Omaha City Parks
Master Plan

National APA Honor Award

GASLA Merit Award

Georgia APA Honor Award,
Gateway to Coastal Georgia

Gregory Weykamp

ASLA, RLA, LEED AP

Holland Civic Center

The City of Holland engaged the Edgewater team to facilitate the redevelopment of the Holland Civic Center. This project renovated the 60-year-old Civic Center, Holland's historic center of recreational and cultural activity, while strengthening the physical connection of downtown Holland to the Lake Macatawa waterfront. Through a robust engagement process, the team distilled the needs and wants of the stakeholders to produce a plan that welcomed and served all members of the community. Through a careful balance of recreation, cultural programming, and farmer's market activity, the site catalyzes the activation of the west end of 8th Street. The project was completed in 2018. As Principal of the design team, Greg led the design, planning, and final design of all aspects of the project.

Lexington State Harbor Redevelopment Plan

The Lexington State Harbor project included the condition assessment, marina market analysis, boater survey, and initial planning and design for the renovation and expansion of a 120-slip marina for the Michigan Department of Natural Resources. As Principal of the design team, Greg led the design, planning, and final design of all aspects of the project.

Port of Rochester Marina

The Port of Rochester Marina project included the transformation of an underutilized asphalt parking lot and ship loading area into a new 180-slip marina serving both seasonal and transient boaters. As Principal of the design team, Greg led the design and implementation of the marine-based elements as well as the surrounding site infrastructure of the project.

South Bay Marina

Edgewater assisted South Bay Marina in the development of a Master Plan for the expansion of transient slips and landside amenities. Additional efforts included a successful USFWS Boating Infrastructure Grant Application, which would fund design efforts for the expansion of the facility. As Principal of the design team, Greg led the design and planning of all aspects of the project.



ARCHITECT | PROJECT MANAGER

Michelle Rumsa

RA, NCARB

Michelle has more than twenty-five years of architectural design experience. Her projects include new construction and renovation for hospitality, commercial, marine, non-profit, and residential design from proposal through completion with a focus on building codes, zoning ordinances, barrier-free and energy code compliance, and municipal team collaboration. She is an advocate for the process of prioritizing and organizing ideas into structures and finding appropriate design solutions for each unique project. Michelle is a mother, wife, musician, boater, and dog rescuer.



Education

Master of Architecture,
University of Illinois,
Champaign-Urbana

L'Ecole de Architecture et
d'Urbanism de Versailles, Study
Abroad

Bachelor of Fine Arts in Scene
Design and Technical Theatre
with a Piano Minor, Central
Michigan University

Registrations

Licensed Architect in the States
of MI and NY.

Registered NCARB.

Honors and Awards

2023 Recipient of the AIA Grand
Rapids - Say it Loud Award

Relevant Experience

Discovery Pier Pavilion Phases I and 3

Edgewater's long-term relationship assisting in expanding the mission of the Discovery Center & Pier, a non-profit education and research organization in Traverse City, Michigan, includes civil, marina, landscape, and architecture Master Planning. Michelle designed a new 4,000 sq ft. pavilion event structure located directly on the pier in Phase I and a 784 sq ft. Ticket Office in Phase 3. The Pavilion design process included plans and 3D model renderings for grant acquisition, municipal review, stakeholder presentations, and the Design-Build contractor. The new Pavilion was designed to accommodate a variety of groups for the individual or simultaneous use of education, freshwater research events, concerts, parties, and weddings. The pavilion was completed in the spring of 2024, and the Phase 3 Ticket Office was set to be completed in the spring of 2025.

Michigan Maritime Museum Heritage Center

Michelle led the Edgewater team as principal architect and project manager for the first phase of a campus-wide Master Plan at the Michigan Maritime Museum in South Haven, Michigan. The Heritage Center is a 17,000 sq ft., two-story landmark of owner and community shared community goals for inclusive, sustainable, and accessible access to the waterfront. Michelle coordinated design services from conception through completion for architecture, with Edgewater team members providing civil and marine engineering and landscape design in a Design-Build construction collaboration. Her thoughtful planning and design of the visual character and spaces tell the story of the Great Lakes through exhibits, education, research, a ship store, events, and meeting spaces. The Heritage Center was completed in July 2022.

Awarded Charles E Peterson
Prize, 1992

HABS/HAER, Library of
Congress

Macoupin County Courthouse,
Ink on Vellum,

University of Illinois Team

Professional Affiliations

Member of the Association of
Licensed Architects

Member of the Art Institute
of Chicago

Volunteer Positions

Harbor Habitat for Humanity
Affordable Homes Architect

Executive Board Member
of the St Joseph Public
Schools Foundation

Board Member of the Berrien
Artists Guild/Box Factory for
the Arts

Michelle Rumsa

RA, NCARB

Navy Pier Marina

The Navy Pier Marina project includes the design and development of a new transient marina located at the heart of Chicago's waterfront at Navy Pier. The facility will provide 120 new transient slips on a combination of fixed and floating dock infrastructure. As Edgewater's design and building code Architect, Michelle represented the owner's interest to lead a shipping container fabricator's team through the design of a two story, 2,600 sf Boater's Amenity building constructed of 12 single-use shipping containers. The building is the first of its kind in a Chicago marina. It will be highly visible from the shore as it is installed on a specialty dock within the Navy Pier Marina.

Inn at Harbor Shores

Michelle was the architect of record for a 124,000 sq ft., nine-story hotel with 92 hotel rooms, 14 penthouse condominiums, Planks Tavern: a full-service restaurant, a 1,900 sq ft. luxury spa, indoor and outdoor pools, event spaces for up to 400 guests, and a ninth-floor rooftop deck. She provided architecture and interior design services, focusing on priorities that maximize waterfront views and express the local maritime story in form, material, interior art, and sustainable design strategies in this coastal design-influenced building. Michelle coordinated design services from initial conception through completion for architecture, with Edgewater team members providing civil and marine engineering and landscape design in a Design-Build construction collaboration that took eleven months of planning and thirteen months of construction. The Inn was completed in May 2014.

Lexington State Harbor Boater Amenities Building

Edgewater's long-standing relationship with the State of Michigan led to the opportunity to develop a marina and upland Master Plan at the Lexington State Harbor. Michelle provided architectural design services from schematic design through completion for the worn 1978 marina restroom building with an interior renovation and a new 700 sq ft. addition to complete the 1,754 sq ft. boater's amenities building. The program for accessible ADA and Michigan Energy compliance included new showers and restrooms, a boater's lounge and laundry, a staff office, a breakroom, and a covered porch overlooking the marina.



Education

Bachelor of Science in
Civil Engineering, Michigan
State University

Registrations

Registered Professional Engineer
in the States of FL, ID, IN, MI,
NY, OH, and WI.

Publications/Lectures

"St. Joseph Coastal Study",
FEMA Great Lakes Coastal Flood
Study, 2012

NOAA Great Lakes Coastal
Resiliency Planning Guide, 2013

"Design & Construction of a
Modern Floating Dock Facility",
MSPE, Muskegon Chapter, 2015

Colin Hassenger

PE

Colin has vast experience ranging from fieldwork and conditions assessments to marina design and construction oversight. He joined Edgewater in 2011 and has since been extensively involved in numerous marina and waterfront projects in the Great Lakes, across the country, and internationally. Colin has led the design and implementation of numerous waterfront projects, ranging from private residential shorelines to waterfront parks to full-service modern marinas with hundreds of vessels. He currently oversees the engineering staff on all marina design projects at Edgewater.

Relevant Experience

Navy Pier Marina

The Navy Pier Marina project includes the design and development of a new transient marina located at the heart of Chicago's waterfront at Navy Pier. The facility will provide 120 new transient slips on a combination of fixed and floating dock infrastructure. Colin was responsible for coordination with design team members, design calculation review, utility integration, and project document review during the design phase of the project. During construction, Colin was responsible for submittal review, contractor RFI's, contractor testing review and coordination, field engineering, and site observation.

Port Austin State Harbor

The existing inner harbor berthing area at Port Austin suffered from excessive wave action and chronic damage to docks despite the presence of an outer breakwater structure. Edgewater examined the causes for the agitation and developed mitigative solutions for the problem. Edgewater conducted a series of numerical model studies including detailed Boussinesq modeling of the wave behavior around various harbor features and potential corrective options. Corrective measures were developed which included modifications to the harbor entrance, creating an overall reduction of the harbor agitation level, and nearshore improvements to locally address the problems.

Eagle Harbor Marina

Eagle Harbor State Marina sits at the most northern tip of Michigan. Owned and operated by the Michigan Department of Natural Resources, the facilities and harbor had not been updated since the 1970s. This Design-Bid-Build project renovated the existing buildings and marina on site and added 3,650 sq. ft of new crib-pier docks.

Colin Hassenger

PE

Discovery Center Great Lakes Marina

The Discovery Center Great Lakes is home to a range of community and non-profit organizations interpreting historic shipping and boating on the Great Lakes. Colin served as Project Engineer. This project created the Master Plan for a completely renovated waterfront and marina to provide homes for a number of historic tall ships, wooden sailing vessels, and the Traverse Area Community Sailing program. In addition, several seasonal and transient slips were made available for lease to help fund non-profit activities and offset the cost of construction.

South Haven Northside Marina Renovations

Master Planning, grant funding, and marine engineering for the complete renovation of this 108-slip marina located in South Haven, Michigan. The impetus for the project was responding to record high water levels that caused extensive flood damage to the facility and electrical safety concerns. The new facility was constructed through a Design-Build process using several innovative strategies to minimize costs and speed construction, while achieving the highest level of marine electrical safety. The project was completed ahead of schedule and under budget.

Port of Rochester Marina

The Port of Rochester Marina project included the transformation of an underutilized asphalt parking lot and ship loading area into a new 180-slip marina, serving both seasonal and transient boaters. As part of the overall project design team, Colin, acting as Project Engineer, performed the design and implementation oversight of the marine-based elements of the project along with coordinating their connectivity to the surrounding site infrastructure. The facility opened in Spring 2016 and remained fully functional during the record high Lake Ontario water levels of 2017.

Harrisville Harbor

As acting Project Engineer/Project Manager, Colin assisted the City of Harrisville and the Harrisville Harbor commission on the multi-phased reconstruction of their marina. Along with the Commission, Colin developed a phasing plan to reconstruct the entire marina facility over four years and in four phases to meet available grant funding and overall project budget requirements while keeping the facility operational and income-generating between phases. The phased construction was coordinated with MDNR representatives to ensure grant requirements were satisfied and cost remained in budget.



Suzanne Fromson

LEED AP, RLA

Suzanne has over twenty years of experience managing a wide range of projects including community and site Master Planning, restoration and resource management plans, park and recreation design and administration, and urban design. Her public collaboration skills, design creativity, construction knowledge, and management of project schedules and budgets make her an integral player in the planning, design, and implementation process.



Education

Bachelor of Landscape
Architecture, Michigan
State University

Registrations

Registered Landscape Architect
in the State of MI.

Accomplishments

2019 Honor Award,
American Institute of Architects
Grand Rapids Chapter, Holland
Civic Center

2016 Project of the Year,
Transportation by the American
Public Works Association,
New York Chapter, Port of
Rochester Marina

President of St John's, MI Board
of Parks and Recreation.

Relevant Experience

Lexington Harbor Upland Master Plan

Edgewater was engaged by the Michigan Department of Natural Resources to prepare the Lexington State Harbor Master Plan in 2018, which was completed in coordination with the Village of Lexington Master Plan. As part of that effort, Edgewater's team collaborated with the village planners on the concept design of the proposed Patrick Tierney Park Redevelopment and engaged the residents of Lexington in the design of the new State Harbor facilities and Tierney Park. Suzanne served as project manager for the park planning work, coordinated with architects and civil engineers, and worked in parallel with the engineering team as they managed the marina planning process.

Navy Pier

The City of Chicago is Illinois' most popular destination, and Navy Pier is lauded as the most visited destination in the state, plus, one of the top destinations in the Midwest. The creation of dedicated transient slips would serve these boaters and provide new access, connecting a larger market to area amenities. Suzanne was a key team member in construction document production and coordination of key site design elements including site furniture and entry gates to the new marina.

Ferry Beach Corridor Master Plan

The City of Charlevoix retained Edgewater to prepare a feasibility study and collect site data and public input for the Ferry Avenue corridor at the Charlevoix Municipal Coat Ramp at Ferry Beach Park. Suzanne was the project manager leading this study. She led the project through every phase of site evaluation, public outreach, conceptual design, and feasibility.

Certifications

LEED (Leadership in Energy and Environmental Design), 2003

Teaching Experience

Graphics for Landscape Designers at The George Washington University, Washington, D.C.

Landscape Graphics at Front Range Community College, Westminster, Colorado

Suzanne Fromson

LEED AP, RLA

East Tawas State Harbor Marina Expansion

The State of Michigan engaged Edgewater in the condition assessment, market analysis, boater survey, and Master Planning of the expansion of the existing state harbor facility in East Tawas, Michigan. Suzanne worked as part of the Edgewater architecture and engineering team to create a Master Plan, alternatives, and landscape design during the initial planning phase. The following processes for Phase I included a new pedestrian promenade and floating dock infrastructure, for which Suzanne oversaw the development and implementation.

Holland Civic Center Place Redevelopment

The City of Holland engaged the team of engineers, planners, and landscape architects at Edgewater to facilitate the redevelopment of the Holland Civic Center. Additional team members included Holland-based Livable Community by Design and GMB Architects and Engineers, along with Walker Parking Consultants and Project for Public Spaces. The project included the design and redevelopment of the Civic Center Building and the surrounding city block. This project aimed to renovate the 60-year-old Civic Center, Holland's historic center of recreational and cultural activity, while strengthening the physical connection of downtown Holland to the Lake Macatawa waterfront. Suzanne was involved with all aspects of the project and was the project manager for the construction phase of work.

Belle Isle Trailhead and Loop Trail

Edgewater was retained by the Michigan Department of Technology, Management & Budget to design and implement the Belle Isle Trailhead and Loop Trail. The Trailhead is a hiker and cyclist-friendly facility that serves as the southern terminus of Michigan's over-2,000-mile Iron Belle Trail. The project included a new restroom building, a parking lot with a bioswale rain garden, and public art. The Loop Trail included the engineering of approximately six miles of non-motorized trail, also part of the Iron Belle Trail system. The project required extensive permitting and stakeholder communication and coordination. Suzanne led the Edgewater team as project manager in all phases of work from the production of concept graphics through construction drawings and construction administration.



Education

Master of Science in
Coastal Engineering,
National Autonomous
University of Mexico

Bachelor of Engineering in
Civil Engineering,
Autonomous
University of Yucatan

Certifications and Supplemental Education

*Young Leader Award, Marina
Dock Age, 2023*

*Climate Change Adaptation for
Ports and Navigation Infrastructure
North American PIANC Seminar
and Workshop, Port of New
York, and New Jersey, Brooklyn,
NY, 2017*

COASTAL ENGINEER

Alejandra Lira-Pantoja

CE

Alejandra is a skilled coastal engineer with comprehensive experience in the development of waterfront infrastructure with attention to quality, budget, and schedule. She specializes in utilizing numerical modeling techniques to analyze a range of coastal processes, leveraging the results to inform and improve the final built design. Alejandra's professional journey includes contributions to a wide array of waterfront aspects, covering tasks such as design calculations, comprehensive numerical modeling, cost estimation, drafting of construction drawings, and preparation of permitting documentation as required.

Relevant Experience

Illinois Beach State Park Shoreline Stabilization

The Illinois Beach State Park represents the final remaining natural, undeveloped shoreline in the state. Alejandra spearheaded the numerical modeling efforts of wave and sediment transport to devise a solution scheme that incorporated offshore breakwaters and beach nourishment aimed at stabilizing the park's three most vulnerable areas. Additionally, she actively participated in physical modeling sessions conducted at the HR Wallingford laboratories in the UK, overseeing and optimizing the design for one area while providing insightful contributions for the remaining two. Alejandra played an integral role in conducting coastal and breakwater analyses, calculating structural design parameters, and contributing to beach design, bid documents, cost estimation, and schematic designs.

Saxon Harbor Upland Marina

Saxon Harbor Park was severely damaged during an event in July 2016 in which the flooding of the Oronto Creek washed out County Trunk Highway A at the park entrance. The water also severely damaged the campground, marina, and recreational facilities of the park. Funded by FEMA, the project required complex coordination and permitting between agencies and partners, including USACE, WisDOT, and WDNR. Alejandra worked on the redesign and replacement of the marina facilities and site campground, analyzed the coastal wave environment, and coordinated with the modeling of the Oronto Creek hydrology to produce a design that reduced the risk of damage from future extreme events, creating a more resilient park.

Wave Modeling Summer School, by the Waves Group at the National Centers for Environmental Prediction, NOAA and the University of Maryland, EUA, 2015

Latin American Seminar on Wave Modeling, Engineering, and Erosion. Taught by professors from ISMAR, NOAA, CICESE, TU Braunschweig, IH, Cantabria, and the University of Medellín. Cartagena, Colombia, 2014

PADI Open Water Diver Certification

Alejandra Lira-Pantoja

CE

Rockport State Recreation Area

The Michigan Department of Natural Resources (MDNR) retained Edgewater to conduct a sediment transport stabilization study aimed at resolving boater navigation challenges and the recurring need for dredging at the entrance of Rockport State Harbor. Alejandra implemented Spectral Wave (SW) and Hydrodynamic (HD) models utilizing DHI's MIKE21 modeling suite. The modeling process accounted for offshore wave transformation, wind-induced energy input, wave-breaking dynamics, and resultant currents.

Egg Harbor Beach Park

The Village of Egg Harbor owned and operated a beach park where most of the sand material had eroded away, leaving the public with little beach area to enjoy. Alejandra worked on the wave and current modeling of the area to understand the coastal dynamics at the site and designed a beach system that would remain in place. She also assisted with permitting, cost estimates, and drawings.

Milwaukee County South Shore Park Beach

Milwaukee County's South Shore Park Beach was one of the city's most popular beach parks, however, it was experiencing regular beach closures due to water quality issues that were putting beachgoers at risk. Alejandra worked on the wave and currents numerical model to inform a beach design that promoted water circulation, preliminary drawings, and cost estimates.

Baileys Harbor Sedimentation Study

Alejandra led the Edgewater engineering team in conducting a comprehensive hydrodynamic study focused on the entrance of the Baileys Harbor Town Marina. The primary objective was to evaluate the current patterns in the vicinity of the existing entrance and assess the feasibility of implementing a spur addition. This addition aimed to minimize dredging requirements, enhance water circulation to mitigate algae and debris accumulation, and facilitate the establishment of a recreational beach. The study encompassed a bathymetric survey alongside numerical wave modeling and sediment transport modeling, examining various configurations to address the identified issues effectively.



STAFF ENGINEER

Nick Cortes

EIT, CRMP

Nick is a staff engineer and project manager for Edgewater. He is responsible for engineering design, calculations, modeling, and quality control of Edgewater's various waterfront projects. He primarily focuses on structural analysis and design for steel, reinforced concrete, and timber infrastructure. As an avid sailor, he combines practical experience in the boating industry with engineering work at Edgewater.



Education

Bachelor of Science in Civil
Engineering, Minor in Economics,
Michigan Technological
University

Certifications

Association of Marina Industries
Clean and Resilient Marina
Professional (CRMP)

Michigan Clean Marina
Certification Specialist

Relevant Experience

Michigan Maritime Museum

The Michigan Maritime Museum project included the condition assessment, planning, and design of the renovation and expansion of the Michigan Maritime Museum campus. The scope of work included a complete campus Master Plan, site civil engineering, landscape architecture, architectural services for an \$8 million new museum building, and marine engineering for all harbor elements for the Museum fleet, as well as visiting boats. Nick completed the structural design for a concrete abutment and wood dock system for site engineering. Nick also completed the structural design for the steel, timber, and concrete elements for a larger boardwalk and dock system expansion. This included sheet pile wall and revetment systems that would provide protection to a planned two-story building. Nick served as project manager for this project.

Port Austin State Harbor

The existing inner harbor berthing area at Port Austin suffered from excessive wave action and chronic damage to the docks despite the presence of an outer breakwater structure. Edgewater examined the causes for the agitation and developed mitigative solutions for the problem. Edgewater then conducted a series of numerical model studies including detailed Boussinesq modeling of the wave behavior around various harbor features, and potential corrective options. Corrective measures were developed that included modifications to the harbor entrance, creating an overall reduction of the harbor agitation level and nearshore improvements to locally address the problems. Nick completed the structural design of many marine elements of the project and conducted site visits with topographic and bathymetric surveying.

Nick Cortes

EIT, CRMP

Navy Pier Marina

The Navy Pier Marina project included the design and development of a new transient marina located at the heart of Chicago's waterfront: Navy Pier. The facility would provide 120 new transient slips on a combination of fixed and floating dock infrastructure. Nick performed calculations of site-specific loads, including wind and wave loading, and completed the structural steel design for fixed piers, floating pier supports, and a pile-supported two-story boater-services building. During construction, Nick was responsible for submittal review, contractor RFI's, contractor testing review and coordination, field engineering, and site observation.

Discovery Center Great Lakes

The Discovery Center Great Lakes is home to a range of community and non-profit organizations interpreting historic shipping and boating on the Great Lakes. This project created the Master Plan for a completely renovated waterfront and marina to provide berths for several historic tall ships, wooden sailing vessels, and the Traverse Area Community Sailing program. Several seasonal and transient slips were made available for lease to help fund non-profit activities and offset the cost of construction. Nick designed modifications to the original seawalls to raise the cap elevation; this included analyzing the existing steel wall and presenting options to the client in both reinforced concrete and steel. Additional design work included floating dock support piles, gangway platforms, jib crane support structures, and structural connections throughout the site.

South Haven Northside Marina Renovations

Nick completed marine engineering for the complete renovation of a 108-slip marina located in South Haven, Michigan. The impetus for the project was responding to record-high water levels that caused extensive flood damage to the facility as well as electrical safety concerns. The new facility was constructed through a Design-Build process using several innovative strategies to minimize costs and speed up construction, while simultaneously achieving the highest level of marine electrical safety. The project was completed ahead of schedule and under budget. This included a structural analysis of the existing fixed timber structure, adding additional structure to raise the deck elevation, and reinforcing new structural elements with additional timber beams and stringers.



Project Manager/Project Architect References

Mike Morphey, Project Manager

Harbor Shores Parcel 2 Marina

St. Joseph, Michigan

Christopher J. Cook, PE

Managing Director, Harbor Shores
Community Redevelopment

E ccook@harborshoresresort.com

P 269 876 9290

Grayhaven State Harbor

Detroit, Michigan

Bruce Watkins, PE

Project Director, Michigan Department
of Technology, Management and Budget

E watkinsbl@michigan.gov

P 517 242 7882

South Haven Harbor Wave Mitigation Study

South Haven, Michigan

Kate Hosier

City Manager, City of South Haven

E khosier@southhavenmi.gov

P 269 637 0750

Michelle Rumsa, Project Architect

Discovery Center & Pier

Traverse City, Michigan

Matt McDonough

CEO, Discovery Pier

E Matt@discoverygreatlakes.org

P 231 409 4285

Michigan Maritime Museum

South Haven, Michigan

Patty Reinert-Montgomery

Executive Director, Michigan
Maritime Museum

E Patti@mimaritime.org

P 269 637 8078 Ext. #2

Lexington State Harbor

Lexington, MI

Bruce Watkins, PE

Project Director, Michigan Department
of Technology, Management and Budget

E watkinsbl@michigan.gov

P 517 242 7882



Maffett-Loftis Engineering, LLC

Our focus is narrow but deep: Marina and Waterfront Utility Systems

Maffett-Loftis Engineering (MLE) will be responsible for engineering services for the following:

- Marina electrical, plumbing, fuel, telecommunications, fire protection systems
- Building Design Support: Electrical, plumbing, fire protection, fuel, telecommunications, and HVAC
- Marina electrical system testing and commissioning

Marina Expertise

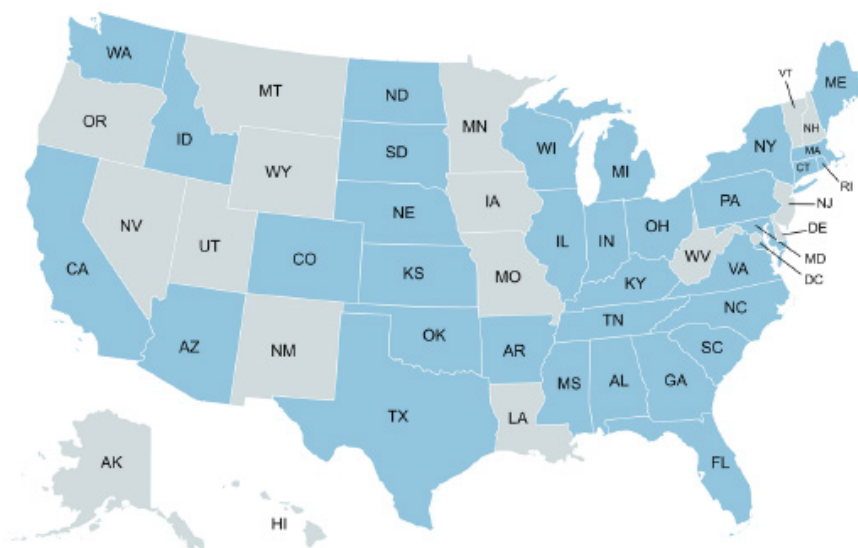
MLE has worked with hundreds of marinas across the United States, providing electrical system designs that prioritize safety,

efficiency, and regulatory compliance. Our team also brings deep experience in fuel systems and telecommunications infrastructure, enabling us to support a wide range of project needs in both new construction and retrofit applications. From feasibility through final design, MLE delivers responsive, technically sound engineering grounded in years of specialized practice.

MLE is not a generalist engineering firm. Our focus is narrow but deep: marina and waterfront utility systems. We are nationally recognized for correcting legacy electrical issues in marina environments, improving reliability, and bringing complex sites up to modern code.

- Over 400 completed marina power systems across the United States
- Expertise in medium voltage engineering, including detailed arc flash studies, load analysis, and fault coordination
- Consultant to municipal and state authorities for marina electrical modernization
- Principal engineer is a member of the NEC code making panel 7

Our team is intimately familiar with the challenges of dock power distribution and has worked alongside architects, utility companies, electricians, inspectors, and code enforcement officials to deliver safe and efficient methods of distributing power throughout marinas.



● States where MLE has performed design and/or inspection work for marinas

GARY LOFTIS, PE



Electrical Engineer Lead

Tennessee Tech University | BS, Electrical Engineering
ABYC Marina Electrical Certification
MI License #6201309092

Licensed in: Arizona, California, Colorado, Florida, Georgia, Illinois, Indiana, Kansas, Kansas, Kentucky, Maryland, Maine, Massachusetts, Michigan, Nebraska, North Carolina, New York, South Carolina, South Dakota, Tennessee, Texas, Virginia, Washington, Wisconsin

Gary is an Electrical Engineer with over 30 years of experience in the field. Owner and manager of engineering design business for 26 years with responsibilities in all facets of company operations including R&D, design, prototypes, production manufacturing, product installation, employee management, business development, engineering design, plans and specifications generation, inspection, customer service and relations, quality control, contractor interface, construction observations.

He oversees and is responsible for the design of power, lighting, and fire alarm systems for marina projects. As well as provides engineering studies to include arc flash analysis, selective coordination, and fault current studies. Gary manages the activities of designers and draftsmen with accountability for goals, objectives, and operational policies. Below is a sampling of marinas on the Great Lakes he provided engineering services for.

- Racine Reef Pointe Marina - *Racine, WI*
- Lakeshore Towers Marina - *Racine, WI*
- Great Lakes Marina - *Muskegon, MI*
- Point Pleasant Marina - *Douglas, MI*
- Sunset Marina - *Rock Island, IL*
- Navy Pier - *Chicago, IL*
- Hoosier Hills Marina - *Celestine, IN*

GARY LOFTIS, PE

2019 – present Principal voting member of the National Electric Code (NEC) Technical Committee – CMP-07

2008 – present Maffett Loftis Engineering, LLC, Cookeville, Tennessee

- Co-owner and Principal Electrical Engineer
- Specializes in marina electrical design, inspection, and testing throughout the US.
- Annually teaches marina electrical code, safety, and practical application classes
- Responsible for all electrical, lighting, fire alarm and low voltage design, provide electrical systems analyses, expert electrical witness, and responsible for business affairs.

2006 – 2008 Maffett Engineering, LLC, Cookeville, Tennessee

- Electrical Engineering Designer (specialized in marina electrical design)
- Responsible for all electrical, lighting, fire alarm and low voltage design

2004 – 2022 Certified Deputy Electrical Inspector, State of Tennessee

- Met qualifications set by Tennessee State Fire Marshal, Electrical Section to become an electrical inspector to include minimal five years of field wiring experience, passing of certification test through National Certification Program for Construction Code Inspectors (NCPCCI) (One-Two Family Dwelling and Electrical General), passing of state interview process, and demonstrated extensive knowledge of National Electrical Code NFPA 70.
- Responsible for performing electrical inspections on electrical installation ranging from residential to large commercial to health care to ensure proper installation according to the National Electrical Code and Tennessee Regulations.
- Inspection jurisdictions include City of Cookeville, Putnam County, and Overton County

1995 – 2005 PLM Corporation, Cookeville, Tennessee

Owner and Principal Electrical Designer

- Responsibilities included: project quotation, machine concept, machine design (mechanical, electrical, and controls), machine-shop work, assembly, testing and debug, customer interface, machine installation, business finance, advertising, and employee management.
- Specializing in marina electrical design.
- Engineering-In-Training (EIT)

1993 - 1994 Architect and Engineers Inc., Cookeville, Tennessee

- Responsibilities included: drafting building systems, architectural layout and details, and upkeep of computer systems and software.
- Taught AutoCAD classes to Architect's and draftsmen that were designed specifically to fit the needs for Architect's and Engineer's.

DREW GATES, PE



Electrical Engineer

Tennessee Tech University | BS, Electrical Engineering
TN License #130933

Drew is an electrical engineer with over 6 years of experience in power distribution, lighting, telecommunications, and fire alarm design. Drew has practical experience in electrical systems as he worked for electrical contractors while obtaining his bachelor's degree. In his nearly 4 years at Maffett Loftis, he has played an integral role in the design of marina projects from the Florida Keys to the upper peninsula of eastern Michigan and has assisted in inspecting and testing electrical systems on marinas.

Below is a sampling of marinas on the Great Lakes he has provided engineering services for.

- Racine Reef Pointe Marina - *Racine, WI*
- Lakeshore Towers Marina - *Racine, WI*
- Sunset Marina - *Rock Island, IL*
- Navy Pier - *Chicago, IL*
- City of Geneva Marina - *Geneva, NY*

DREW GATES, PE

2021 – Present Maffett Loftis Engineering, LLC, Cookeville, TN

- Electrical Engineer / Project Manager
- Designs power, lighting, fire alarm, and low-voltage systems compliant with local and state codes for projects in the marina market.
- Manages projects from initial kickoff to substantial completion.
- Provides markups and engineering guidance to designers and EIT's for marina projects.
- Active in the following construction administration activities: Reviewing submittals, Answering RFI's, Performing visits during construction, and Creating Observation Reports from site visits.
- Assist in commissioning in marina projects to verify ground fault protection systems function properly and are coordinated with upstream/downstream ground fault protection devices.
- Inspection of marina utility installations following substantial completion.

2020 – 2021 Smith Seckman Reid, Inc., Nashville, TN

- Electrical Designer/Engineer-in-Training (EIT)
- Created power, lighting, and fire alarm layouts compliant with local and state codes utilizing Revit for projects in the healthcare, industrial, commercial, and sports/entertainment markets.
- Assisted in data collection, modeling, and assessment for Arc Flash Study of Baptist Health Corbin Hospital.
- Provided markups and engineering guidance to electrical designers and EIT's for Spartanburg Regional Healthcare System projects.
- Active in the following construction administration activities: Reviewing submittals, Answering RFI's, Performing visits during construction, and Creating Observation Reports from site visits.
- Participated in client meetings and user group meetings to improve the design of electrical systems on various projects.

2019 Tennessee Valley Authority, Chattanooga, TN

- Transmission Planning Intern (May – August)
- Performed power flow and contingency analysis studies utilizing PSS/E software.
- Created detailed recommendations for future projects in the Kentucky service area to correct future issues found during contingency analysis.
- Created detailed map showing all TVA substations, power plants, and high-voltage transmission lines.

2018 Advanced Energy Engineering and Design, Chattanooga, TN

- Electrical Engineering Intern (May – August)
- Provided power, lighting, and fire alarm layouts utilizing Revit and AutoCAD for commercial projects.
- Assisted in data collection and modeling for Arc Flash Study of Chattanooga Water Treatment Plant.
- Visited project sites to assess existing conditions.

JUSTIN NEWELL, PE



Mechanical Engineer Lead

Tennessee Tech University | BS, Mechanical Engineering
TN License #118817

Justin is a registered professional engineer with over 16 years of experience in the mechanical, plumbing, fire protection, and fuel system fields. He worked for 3 years as a certified test and balance technician gaining experience with mechanical and piping systems testing, troubleshooting, and commissioning. He specializes in marina domestic water, sanitary sewer, fire protection, and fuel design.

Justin is responsible for the design of mechanical, plumbing, and fire protection systems for commercial and industrial construction projects. Coordinates with architects, building owners, and other design trades to produce construction documents and drawings. He is committed to providing code compliant designs while also delivering economic, practical, and robust solutions for marina owners. Below is a sampling of marina projects he provided engineering services for.

- Racine Reef Pointe Marina - *Racine, WI*
- Sunset Marina - *Rock Island, IL*
- Wisdom Dock Marina - *Albany, KY*
- Marathon Key Marina - *Marathon, FL*
- Savannah City Lights Marina - *Savannah, GA*
- Don Pedro Marina - *La Grange, CA*
- Rockland Maine Marina - *Rockland, ME*

JUSTIN NEWELL, PE

2013 – Pres. Maffett Loftis Engineering, LLC, Cookeville, Tennessee

- Co-owner and Mechanical Engineer
- Responsible for engineering calculations, mechanical, plumbing, and fire protection design, trade coordination, construction observation, and commissioning.

2013 MP&E Engineering, LLC, Brentwood, Tennessee

- Mechanical Engineer in Training
- Responsible for engineering calculations, mechanical and plumbing design, trade coordination, construction observation, and commissioning.

2010-2013 United Testing and Balancing, Nashville, Tennessee

- AABC Certified Test and Balance Technician, Certified Indoor Environmentalist
- Responsible for plans and specification review, test and balance procedures for air and hydronic systems, management of test and balance teams, and report generation.

2008-2010 Cavender's, LLC, Cookeville, Tennessee

- Warehouse Manager and Installer
- Responsible for shipping and receiving and warehouse organization.
- Installation of cabinets, hardwood flooring, tile, and carpet.

2006-2008 The Trane Company, Clarksville, Tennessee

- Test Lab Engineering Co-op
- Responsible for quality and efficiency testing of new air conditioning units manufactured by Trane.
 - Tasks included: prototype construction, unit instrumentation, test set up and data collection, test analysis and reporting.

Present or Past Professional Engineering Registrations:

- Current Professional Engineering License: FL, TN, TX



Collins Engineers, Inc.

Diverse Expertise in Planning, Design, Construction Engineering, and Condition Assessment of Public Infrastructure and Related Works

Collins Engineers, Inc. (CEI) will be responsible for engineering/survey services for the following:

- Boundary, topographic, and bathymetric survey
- Site engineering support, in combination with Edgewater staff
- Construction administration services

Firm Overview

Founded in 1979, Collins Engineers, Inc. (Collins) is an ENR Top 500 Design Firm providing civil, structural, construction management, water resources, and underwater engineering services to various public and private sector clients. Collins' multi-disciplined staff of over 250 experienced professionals, in 25 offices across the country, provides a host of abilities and diverse expertise in planning, design, construction engineering, and condition assessment of public infrastructure and related works.

The initial expertise of the firm was in the areas of structural and transportation analysis, design, and underwater engineering. Over the years, the firm's ability to provide additional engineering services has evolved. Experienced professionals have joined Collins providing a host of additional abilities and diverse expertise in the planning, design, construction engineering and condition assessment of a large

variety of civil engineering systems and related works. Collins leverages these professionals and their experience to provide engineering ingenuity and solutions to complex problems, and realistic, honest answers.

Collins' staff take great pride in providing designs that meet not only our client's requirements but also their expectations. This mentality is formalized in our Core Values which states, in part, "Excellence – Providing quality service that meets clearly defined client expectations (needs and desires) by being professional and the best in all that we do."

Civil/Site Engineering

Collins Engineers regularly engineers site civil, parks, transportation, underground water, wastewater, storm conveyance systems, and other infrastructure needs. We regularly design storm sewer systems as part of our design projects, which include municipal roadways, WisDOT highways, and private site design work. Our staff has extensive knowledge in modeling both above and underground stormwater management systems and applying Best Management Practices (BMP's) suited to meet the needs of each specific project. In particular, stormwater managements systems such as permeable pavers, bioretention, bioswales, level spreaders, underground detention, rain gardens, and wet and dry detention ponds are just a few of the measures Collins has incorporated into our designs. As a result, Collins is aware of the regulations surrounding these various methods and is prepared to incorporate the appropriate solution in conjunction with governing regulations.

Survey/Regulatory

Our staff is experienced in the collection and mapping of survey data to support design for large infrastructure projects. Collins also possesses knowledge and experience with various permitting agencies such as the Wisconsin Department of Natural Resources (DNR), the Wisconsin Department of Safety and Professional Services (DSPS), and local governing agencies in obtaining the necessary permitting approvals to complete the project. Collins has incorporated into our designs. As a result, Collins is aware of the regulations surrounding these various methods and is prepared to incorporate the appropriate solution in conjunction with governing regulations.

Construction Services

Collins provides construction management and inspection services to projects in the fields of transportation, utilities, and waterfront engineering. Projects have included local municipal roadway and utility projects, bridge construction and rehabilitation projects including the Hoan Bridge and the Juneau Avenue lift bridge in the City of Milwaukee, rehabilitation of waterfront structures, and the total reconstruction of major interstate interchanges including the largest reconstruction projects in the history of Wisconsin in the Marquette, Mitchell, and Zoo interchanges, as well as the I-94 North-South Project.

Collins' Milwaukee office employs 10 individuals dedicated to construction services. Many of our engineers and technicians are cross trained in municipal design and structural inspections, allowing us to draw from a deep pool of experience and talent to fill our construction inspection staffing needs.

Collins' experience has shown that the greatest challenges to a project often come at the beginning and at the end. Once the project is running smoothly it often takes less work to keep it that way. It can be tough to define or measure a "good start on the job," but for Collins, it starts with establishing communication between all parties. At the start of every construction project there is an initial phase where all the team members understand the roles, attitudes, communication styles, wants, and needs of the others. Collins' key staff understand this and have experienced it multiple times. The Preconstruction Meeting will start the communication, but it will be important that it continues into the field work.

Honest, open communication will be the key to resolving issues before they become problems. Regular, daily communication will be required for project success. This communication will be both formal and informal. Issues must be identified, documented, and resolved in the shortest time frame. Any issue which has the potential to negatively affect the schedule needs to be given the highest priority. Collins' construction services staff understand that there are some critical activities common to municipal construction.

Collins' staff have extensive knowledge of material documentation requirements. At the start of the project, they prepare a master list of all submittals and material certifications that will be needed based on the bid items. This list will be shared with the contractor. At the weekly progress meeting,

the status of material documentation will be discussed, and any outstanding submittals will be noted. Payment for items without proper documentation will be requested to be held until the required information is received. If the contractor receives full payment for items that do not have proper material documentation, there is little incentive to provide the information so that the project can be closed. This is often one of the last items needed in order to close a project. Waiting until the end of a project to start material documentation only leads to trouble. Once the construction work is complete a final "hit list" will be sent to the contractor. Our staff will compile all of the materials documentation and submit it at project completion.



Key Qualifications

Ms. Hardin has over 23 years of experience in land development projects. She has a wide variety of experience including grading, utility design, stormwater management, and erosion control. She has experience coordinating with clients, local governments, and state and federal agencies to acquire approvals and necessary permits for projects. Her past project experience varies from entitlement, through design and construction, to project closeout.

Education

B.S., Civil Engineering, Marquette University, 1997

Years of Experience – 23

Professional Engineer

Wisconsin (#34919-6)

Select Project Experience

Illinois Capital Development Board (CDB), Construct New Crime Lab, Crest Hill, IL – Project Manager

Project included site civil design for the project, including the design of access driveways, associated parking, pedestrian access, site security fencing, grading and earthwork, new stormwater management facilities, and new utility services. Collins also performed topographic survey for the project through both Unmanned Aircraft System (UAS) and traditional field survey methods. Responsible for project management.

Cudahy Water Utility, Revetment Wall Construction Documents, Cudahy, WI, Project Manager

Project included steel sheet piling constructed adjacent to the existing wall to protect the pump station as well as intakes and discharge pipes to and from the pump station. Deliverables included civil site and structural plans and specifications. Responsible for project management.

HDR, New In-Patient Treatment Center, Joliet, IL – Project Engineer

Project included professional engineering services for the Department of Corrections to construct a new In-Patient Treatment Center in Joliet, Illinois, in conjunction with the Capital Development Board. The project included a 16-acre site development expansion adjacent to the Joliet Treatment Center Campus. This design/build project, led by River City Construction and HDR, consisted of a new 160,000-square-foot inpatient treatment building, a new 20,000-square-foot administration building, a new 10,000-square-foot central utility plant building and a new bar screen building. Collins Engineers, Inc. provided the site civil engineering services for the project, including the design of the access roads, pedestrian access, parking lot expansion, site security fencing, grading and earthwork, new stormwater management facilities, site structures, new utility services, and utility relocation. Responsible for stormwater permitting.

Madden McMillan, Commercial Site Parking Lot Resurfacing, Newport News, VA – Project Manager

Project included preparation of construction documents for a parking lot at the existing commercial facility in Newport News, Virginia. Repaving consisted of mill and overlay with selected areas of full depth pavement replacement. Responsible for project management.

Hitchcock Design Group, Stormwater Management Analysis, Deerfield, IL – Project Manager

Hitchcock Design Group contracted Collins Engineers, Inc. to perform a stormwater management analysis for the Oracle facility in Deerfield, IL. Collins had previously worked with Nelson on the building expansion for this facility in 2019 and Hitchcock was furthering the landscape improvements for the facility. Collins reviewed the proposed impervious improvements and their impact on the current stormwater management pond at the facility. Deliverable included analysis results and recommendations. Responsible for project management.

Glenwood Springs Association, Stormwater Analysis, Lake Geneva, WI – Assistant Project Manager

Project included the stormwater analysis for an existing lake community located adjacent to Lake Geneva in Fontana, WI. Collins Engineers, Inc. conducted a drone survey of the existing conditions of the community, analyzed the existing storm sewer system, and reported on recommendations for repair. Additionally, Collins prepared construction documents for repair areas recommended in the analysis.

Private Client, Property Development, Saukville, WI – Project Manager

Project included professional engineering services to assist a private client to develop his property into five residential lots in the Village of Saukville. Work included floodplain analysis, stormwater management and Wisconsin Department of Natural Resources

(WNDER) permitting for filling wetlands. Assistance with the Village of Saukville rezoning process is included in this scope of work in addition to the preparation of construction documents.

R & L Carriers, Facility Parking Lot, Milwaukee, WI – Project Manager

Project included the preparation of site civil documents for the removal of an under-utilized asphalt parking lot to increase the pervious area on the site. As part of the project, minor grading issues and storm sewer pipe connections were corrected. Permitting included multiple City of Milwaukee permits and the Wisconsin Department of Natural Resources (WDNR) Notice of Intent permit.

Assembly Park, Dry Hydrant Installation, Delavan, WI – Project Manager

Project consisted of the preparation of construction documents for the installation of two dry hydrants within the Assembly Park community. In addition to the plan preparation, permitting for the dry hydrant installation was coordinated with the Wisconsin Department of Natural Resources (WDNR) and Walworth County.

Hampton Roads Sanitary District, York River Treatment Plant Aeration Building, Seaford, VA – Project Engineer

Project included site, grading, and erosion control construction documents for a 350-square-foot aeration building and generator pads constructed adjacent to the aeration tanks at the York River Treatment Plant. Responsible for erosion control and stormwater design.

HRSD, West Point Parking Lot & Laydown Yard Improvements, Westpoint, VA – Project Manager

Project included preparation of construction drawings for a new parking lot and laydown area at the West Point Operation Center in West Point, VA. Currently, the warehouse of the West Point Operations Center houses offices and a maintenance shop. Hampton Roads Sanitation District (HRSD) desired to construct an extension to the east side of the warehouse to serve as additional storage. This extension fully encompassed the existing laydown yard and development of a 2.5-acre parcel adjacent to the south property line that included a new parking lot and laydown area. Civil design services included site plan preparation, grading and drainage design, stormwater management pond design and report preparation, and paving design. Preparation of the development of a SWPPP for permit and construction was performed.

WE Energies, Building Expansion, Oak Creek, WI – Project Engineer

Project included site permitting coordination and site design services including grading and drainage, utility coordination, and stormwater management for a new 60,000-square-foot administration building addition to the WE Energies Oak Creek facilities. Responsible for stormwater management and permitting.

Prior Experience

Prior to joining Collins, Ms. Hardin's experience included:

Retail/Site Civil

Wal-Mart Stores, Inc., Various Wal-Mart Store Development, Various, WI – Project Manager

Project included entitlement, permitting, civil design, and construction observation for 12+ Wal-Mart Stores across Wisconsin. Stores were new construction or expansions of existing stores into Supercenters (100,000-sf – 180,000-sf), or Neighborhood Markets (40,000-sf). Plans involved the coordination of subconsultants and designers to produce grading, erosion control, utility, paving, and lighting plans.

Kohl's Corporation, Kohl's Department Store, Waukesha, WI – Project Manager

Project included the design, permitting, and coordination of an 86,000 square-foot Kohl's Department Store and a 25,000-square-foot retail space. Work included grading, erosion control, stormwater management, paving and utilities for Kohl's Corporation and the attached retail. Highway improvements to W. St. Paul Avenue (CTH X) were also required. Permitting included WDNR Chapter 30 permit, NOI permit, DOC utility permits, Waukesha County permits, and City of Waukesha permits. Extensive coordination was required between the Waukesha County, City of Waukesha, Kohl's Corporation, and Richter Realty.

Key Qualifications

Mr. Rutkowski has more than 26 years of experience in construction engineering and design work for various transportation projects. His construction experience includes corridor management of multiple simultaneous projects, construction team management of engineering and inspection staff (of up to 30 individuals), interagency coordination, electronic documentation, schedule review, shop drawing review, submittal review, processing of RFI's, processing of change orders, project status reporting, documentation auditing, contractor inspection, material certification documentation, and quality assurance review. He has managed projects including interstate highways, urban roadways, bridges, retaining walls, utility relocations, and sewer installations.

Select Project Experience

Wisconsin DOT, 43MP I43 Brown Deer to County Line, WisDOT SE Region – Traffic and Roadway Project Engineer

Collins Engineers Inc. provided construction management services for the reconstruction of approximately 1.5 miles of IH 43 from Brown Deer Rd. to W. County Line Rd. in Milwaukee and Ozaukee counties (Project ID 1229-04-74). Major items of work included asphalt paving, base aggregate, beam guard, common excavation, concrete approach slabs, concrete pavement, curb and gutter, electrical, excavation, new bridge construction, culvert replacement (IH 43 over Fish Creek), pavement marking, permanent signing, storm sewer, and traffic signals. Mr. Rutkowski was the lead engineer for paving and traffic control activities.

Village of Grafton – StoneWall Development, Grafton, WI – Project Manager

Collins Engineers, Inc. provided professional engineering services for the development of an 80-acre subdivision called Stonewall Farms, located adjacent to STH 60 and Keup Rd. in Grafton, WI.

Collins' services included construction inspection and survey verification. This included enforcing the Village of Grafton Standard Construction Specifications, and submitting compiled daily construction reports with pictures each week. Collins also collected as-built information on storm sewer, water main, sanitary sewer, electrical, roadway, structures and appurtenant construction, and provided a final as-built for work inspected by the consultant. Collins also inspected construction staking to verify compliance with construction documents, inspected erosion control measures, and performed final inspection.

Milwaukee County, W. Layton Avenue (CTH Y) Reconstruction, W. Loomis Road to S. 27th Street – Assistant Project Leader

This project included the complete reconstruction of the W. Layton Ave., of existing roadway between W. Loomis Road and S. 27th Street. Services included: providing clarifications necessary for construction; reviewing and approving shop drawings and other submittals; and coordinating materials with the owner. This also included providing coordination and on-site observation of the work; interpreting and confirming compliance with contract documents; determining quality and acceptability of materials provided; observing required tests; and making recommendations regarding change orders and payments to contractors.

Wisconsin DOT, East-West Freeway, 70th Street to 16th Street, WisDOT SE Region – Project Leader

This was a perpetuation project to repair bridges along the East-West corridor. The project included 24 bridges with various repairs including thin polymer overlays, concrete surface repairs, bearing replacements, bearing repairs and column repairs. Services included: construction inspection; electronic documentation; material testing/sampling; coordination with local, state, and utility agencies; cost and schedule tracking; payment of contractor; finals documentation and construction contract administration.

Wisconsin DOT, IH-94 North-South Freeway, N-S & S-N Curve Thru the Mitchell IC, WisDOT SE Region - Project Leader

This project provided high friction surface treatments and new pavement markings in the Mitchell Interchange in Milwaukee County. The goal of this perpetuation project thru the curves in the Mitchell Interchange was to improve safety. Services

Education

M.S., Transportation, Marquette University, 2007

B.S., Civil Engineering, Marquette University, 1997

Years of Experience – 26

Professional Engineer

Iowa, Illinois, Wisconsin

Certifications

- AWS Certified Welding Inspector (#07030601)
- ACI Concrete Field Testing Technician – Grade I

Training

- OSHA 10 Hour outreach 2021
- OSHA 30 Hour Outreach – Construction 2020
- IDOT – Documentation of Contract Quantities 2019
- IDOT S-14 Documentation of Contract Quantities (#08-0627), 2008
- IDOT Hot Mix Asphalt (HMA) - Level I, 2007
- IDOT Bituminous Concrete Density Tester, 2007
- IDOT Material Training Refresher Course

included: construction inspection; electronic documentation; material testing/sampling; coordination with local, state, and utility agencies; cost and schedule tracking; payment of contractor; finals documentation and construction contract administration.

Wisconsin DOT, IH-94 North-South Freeway, College Ave. to STH 142, WisDOT SE Region – Roadway Leader (Central)

The North-South IH-94 Reconstruction Project is an accelerated interstate construction mega project in SE Wisconsin. The purpose of the project is to enhance safety, expand the freeway to four through lanes in each direction, and reconstruct all the interchanges to accommodate the expanded horizontal and vertical clearances required to efficiently serve the adjacent developments of Uline, Amazon, and Foxconn. Due to the length of the corridor, the project was divided into three separate let projects: South – 6.5 miles/\$180 million, Central – 4.5 miles/\$90 million, and North - 7.5 miles/\$180 million which began in fall 2018 and was substantially completed by March 2020. Services included: interagency coordination, claims resolution, electronic documentation, schedule review, shop drawing review, submittal review, processing of Requests For Information (RFIs), processing of change orders, project status reporting, documentation auditing, contractor inspection, material testing, material certification documentation, watershed and sediment management, and quality assurance review.

Deliverables: Interagency coordination, claims resolution, electronic documentation, schedule review, shop drawing review, submittal review, processing of RFIs, processing of change orders, project status reporting, documentation auditing, contractor inspection, material testing, material certification documentation, watershed & sediment management, and quality assurance review

Wisconsin DOT, IH-894, 84th St to Lincoln Ave, Milwaukee County, WI – Assistant Resident Engineer

Project included rehabilitation and reconstruction of 2.5 miles of a major urban freeway and bridges as well as adjacent arterial roadways. The project included multiple stages to expand this stretch of freeway surrounding and including the Hale Interchange from three lanes to four lanes of traffic in each direction for IH-894 within its existing footprint. Major items included removals, base patching, grading, base aggregate, select crushed material, storm sewer, slotted vane and trench drain systems, 12 sign structures, concrete sidewalk, concrete curb and gutter, concrete barrier wall, HMA and Stone Matrix Asphalt (SMA) paving, ITS, lighting, signals, permanent signing, pavement marking, and 12 bridges: concrete surface repair, deck repair, bearing replacements, deck overlay, Polyester Polymer concrete (PPC) overlay, polymer overlay, bridge painting, and high friction surface treatment. Deliverables included interagency coordination, claims resolution, electronic documentation, schedule review, shop drawing review, submittal review, processing of Requests For Information (RFIs), processing of change orders, project status reporting, documentation auditing, contractor inspection, material testing, material certification documentation, and quality assurance review.

Wisconsin DOT, Zoo Interchange – Core II, Stage 2 (1060-33-81), Milwaukee, WI – Project Manager

Project included Phase II engineering services for the Zoo Interchange. Phase II of the Zoo Interchange included construction of 15 bridges, two temporary bridges, six multi-level-system ramp bridges with steel tub girders, and 24 retaining walls. Collins Engineers, Inc. provided inspection and construction management services for earthwork, temporary ramps with staging, and freeway reconstruction (asphalt base and concrete pavement) with storm sewer and utility coordination. Work also included seven noise walls, electrical facility construction (both temporary and permanent) in a staged urban environment with two lanes in each direction remaining open with staged construction. Collins also provided coordination of contract modifications, ensuring contractor compliance through active inspection, performing verification surveys, measuring and documenting items of work, and maintaining all project documents.

Wisconsin DOT, Zoo Interchange – Core II (1060-33-81), Milwaukee, WI – Project Manager

Project included the removal, widening, and reconstruction of the Zoo Interchange Core II project in Milwaukee, Wisconsin. Work consisted of removals, grading, base, 110,000 square yards of concrete pavement, concrete barrier, asphaltic pavement, sewers, water mains, Milwaukee Metropolitan Sewerage District (MMSD) manholes, landscaping, signing and marking, lighting, culverts, 25 bridges, 10 noise barriers, 28 retaining walls, 50 sign structures, 1 million cubic yards of excavation common, Freeway Traffic Management System (FTMS), and incidentals. Services included: construction inspection; electronic documentation; material testing/sampling; coordination with local, state, and utility agencies; cost and schedule tracking; payment of contractor; and redesign of facilities for changed field conditions.

Key Qualifications

Mr. Mutziger has over 24 years of experience in a wide variety of civil engineering fields including construction management, design and inspection.

Mr. Mutziger regularly performs design-related services. This includes structural engineering and waterfront design. Mr. Mutziger has experience working with numerous design, analysis and modeling programs and has performed inspection, analysis, and design of transportation and building structures. He regularly performs quality control on a variety of projects including design calculations, plan production, engineer's estimate of probable construction costs and reports.

Mr. Mutziger has extensive experience with inspecting and managing large construction projects. His construction experience includes management of simultaneous projects, construction team management of engineering and inspection staff, electronic documentation, schedule review, shop drawing review, submittal review, processing of RFIs, processing of change orders, project status reporting, documentation auditing, contractor inspection, material certification documentation, and quality assurance review. His experience includes rehabilitation projects as well as large scale, Mega project reconstruction.

As Regional Manager, he serves as Principal for the vast majority of projects completed within Collins' territory within his responsibility and regularly performs quality assurance functions to ensure that Collins' services comply with quality control requirements.

Education

M.S., Civil Engineering, University of Minnesota, 2000

B.S., Civil Engineering, South Dakota School of Mines and Technology, 1998

Years of Experience – 24

Professional Engineer

Wisconsin, Minnesota, Nebraska

Training

- FHWA-NHI Course 134071 – TCCC Daily Diary
- FHWA-NHI Course 134069 – TCCC Ethics Awareness for the Transportation Industry

Select Project Experience

City of Wauwatosa, Local Street Reconstruction (2020-2021), Wauwatosa, WI – Project Manager

Collins Engineers, Inc. performed construction inspection and surveying for all site improvements according to project plans and specifications. The scope of services included attending preconstruction and project meetings, reporting, construction survey/staking, daily management and coordination of City projects, and processing contract payment requests. Responsible for project management and oversight.

Wisconsin DOT, Hoan Bridge & Lake Freeway Bridge Landscaping (1300-13-73), Milwaukee County, WI – Project Manager

Project included landscaping, irrigation, and decorative lighting. Services included construction inspection, electronic documentation, coordination with local, state, and utility agencies, cost and schedule tracking, and payment of contractor. Responsible for project oversight, quality control and assurance, and coordination.

Wisconsin DOT, Hoan Bridge & Lake Freeway Bridge Rehabilitation (1300-13-70), Milwaukee County, WI – Project Leader

Project included demolition and reconstruction of four bridges and three retaining walls, overlay of 32 bridge units, and redecking of 54 bridge units including the main tied arch span. Other work included lead paint abatement and structural steel recoating, sign structure replacement, storm sewer, and lighting for this 3.4-mile-long project. Services included construction inspection, electronic documentation, material testing/sampling, coordination with local, state, and utility agencies, cost and schedule tracking, payment of contractor, and non-destructive testing of structural work. Responsible for quality control and assurance on deliverables, team oversight and management including the coordination of all various engineering firms on the team, and interactions with the client and the contractor.

Wisconsin DOT, Hwy 50 West Frontage Road over the Des Plaines River, Kenosha County, WI – Project Manager

Project included reconstruction of an existing bridge over the environmentally sensitive Des Plaines River. Services included construction inspection, management, and documentation for this bridge and its associated roadway pavement. Responsible for quality assurance and project tracking.

Wisconsin DOT, N-S Freeway IH-94 Reconstruction and Widening, Illinois State Line to State Highway 50, WI – Assistant Resident Engineer

Project included removal, reconstruction, and widening of the concrete mainline roadway 4.5 miles from the Illinois State Line to State Highway 50 in Kenosha. Details include the construction of four prestressed girder bridges, the construction of four MSE retaining walls, the reconstruction of the CTH C intersection, the construction of a new enclosed drainage system along the mainline, the replacement of lighting systems and sign structures, and all other appurtenant and miscellaneous construction. Responsible for quality assurance, project tracking, field inspection staff coordination, and project change orders for all components of the project.

Village of Grafton, Bridge Street Dam Repair, Grafton, WI – Quality Control

Project included engineering services for the review of previous underwater dam inspection reports performed on the Bridge Street Dam and recommended repair options. Collins Engineers, Inc. designed a repair for the overhanging of the buttress of Pier 6 to provide full support per the original design plans. Responsible for quality control of structural design.

Milwaukee Water Works, Linnwood Seawall Inspection and Design, Milwaukee, WI – Project Manager/Quality Control

Collins Engineers, Inc. was tasked with performing an emergency underwater inspection for the Linnwood Seawall on the Lake Michigan shoreline in Milwaukee, WI. The inspection was prompted by site personnel observing that a section of the steel sheeting failed and a significant area of undermining was present behind the wall. Collins mobilized to the site the day after being notified of the issue. Collins provided a report of the issues and then prepared repair plans that would address the issues for the client to bid to contractors. Collins Engineers, Inc. performed an above and below water inspection of approximately 2,000 LF of steel sheetpile seawall located at the Linnwood Avenue Water Treatment Plant. As part of the inspection, Collins staff examined the wall tieback anchors where they penetrate the front of the wall. Collins subconsulted with a contractor to excavate and expose select samples of the timber deadman anchors for the tieback system. Collins prepared a report detailing the deficiencies observed with recommendations for repair. Collins also prepared plans, specifications and an engineer's estimate of probable construction cost suitable for bidding purposes related to repair of the seawall system and removal and replacement of the access road adjacent to the seawall and the drainage system. Responsible for project management and quality control.

Milwaukee County DOT, McKinley Flushing Channel Design, Milwaukee, WI – Project Manager/Quality Control

Project included professional engineering services to complete the planning, design, and construction documents for a seawall replacement at the flushing channel next to McKinley Marina. Project included the professional engineering services to complete the planning, design, and construction documents for a seawall replacement at the Flushing Channel next to McKinley Marina.

Collins Engineers, Inc. conducted a topographic and hydrographic survey of the project area. Collins utilized a drone to obtain detailed aerial photography of the project site that was processed through photogrammetry software to obtain a detailed 3-D model of the above-water portions of the project site. Collins also conducted an underwater inspection of the existing Flushing Channel.

Collins' approach was that the existing walls at the Flushing Channel would not be incorporated into the new construction. The design had new sheeting driven directly in front of the existing Wakefield wall. The existing concrete structure was deteriorated and needed to be removed and new construction installed. There was existing steel sheeting on the south face of the property where the Milwaukee Yacht Club is located that turns and extends for several feet into the Flushing Channel. New steel sheeting installed as part of the Flushing Channel was detailed to connect into this existing sheeting. It was also detailed to connect to the headwall at the intake tunnel.

The Collins Team coordinated with Milwaukee County on the hardscape and architectural design at the Flushing Channel. The intent was to match the work previously installed by MMSD, the concrete promenade and railings like the McKinley Marina center section, and other recent improvements adjacent to the Milwaukee Yacht Club. The Collins Team included the architectural firm American Design to coordinate these efforts. The sheet pile wall design followed the U.S. Army Corps of Engineers EM 1110-2-2504, "Design of Sheet Pile Walls." Borings and a geotechnical report were prepared by Gestra Engineering Inc.

Key Qualifications

Mr. Ciche is a Civil Engineer with over 13 years of experience in construction inspection and management for large transportation projects.

Select Project Experience

Wisconsin DOT, ZOO IC, USH 145 Swan BLVD to Burleigh St, WisDOT SE Region – Engineer

Project included the removal, widening, and reconstruction of the Zoo Interchange North Leg project in Milwaukee, Wisconsin. Work consisted of removals, grading, base, concrete pavement, concrete barrier, asphaltic pavement, sewers, water mains, Milwaukee Metropolitan Sewerage District (MMSD) manholes, landscaping, signing and marking, lighting, culverts, 10 bridges, 6 noise barriers, 12 retaining walls, 14 sign structures, excavation common, FTMS, and incidentals. Services included construction inspection; electronic documentation; material testing/sampling; coordination with local, state, and utility agencies; cost and schedule tracking; payment of contractor; and redesign of facilities for changed field conditions.

WisDOT I43 South CM UPRR 1229-04-72, Glendale, WI – Project Manager

The Union Pacific Railroad bridge was replaced. The new bridge was built just to the North of the existing UPRR bridge which utilized deep shaft foundations to support the abutments. The piers are supported by driven piles. Also featured on this job is a precast concrete T-Wall to support the new UPRR embankment. Work consisted of removals, grading, base, sewers, landscaping, signing and marking, excavation common, FTMS, and incidentals. Services included construction inspection; electronic documentation; material testing/sampling; coordination with local, state, and utility agencies; cost and schedule tracking; payment of contractor; and redesign of facilities for changed field conditions.

WisDOT I43 South CM 1229-04-73, Glendale, WI – Project Manager

IH 43 will be expanded from Bender Road to North of Brown Deer Road where it connects to the County Line Road Interchange Project 1229-04-74. The Good Hope Road and Brown Deer Road Interchanges with IH 43 will both be reconstructed. The Bender Road bridges will be overlaid. The existing Indian Creek box culvert will be replaced with a box culvert under Pheasant Lane and two new bridges for northbound and southbound I-43. Four noise walls will be constructed: one will be along the west side of I-43 from the Union Pacific Railroad bridge to W Daphne Road, the other 3 will be along the east side of I-43 from Good Hope Road to north of Brown Deer Road. Work consisted of removals, grading, base, concrete pavement, concrete barrier, asphaltic pavement, sewers, water mains, MMSD manholes, landscaping, signing and marking, lighting, culverts, retaining walls, 25 sign structures, excavation common, FTMS, and incidentals. Services included construction inspection; electronic documentation; material testing/sampling; coordination with local, state, and utility agencies; cost and schedule tracking; payment of contractor; and redesign of facilities for changed field conditions.

City of Wauwatosa, Construction Management (2020-2021), Wauwatosa, WI – Project Engineer

Project included construction inspection and survey for all site improvements according to project plans and specifications. Services included attending preconstruction and project meetings, reporting, construction survey/staking, daily management and coordination of City projects, and processing contract payment requests. Additionally provided services for miscellaneous removals, excavation common, base aggregate dense, Hot Mix Asphalt (HMA) pavement, pavement markings, multiple Mechanically Stabilized Earth (MSE) walls, temporary shoring, permanent signing, landscaping and all incidental items necessary to complete the work as shown on the plans and included in the proposal and contract.

Wisconsin DOT, IH-94 EW 70th St to 16th St CM, Milwaukee, WI – Project Engineer

Project included professional engineering services to repair bridges on the East-West corridor of IH-94. The project included 24 bridges with various repairs consisting of thin polymer overlays, concrete surface repairs, bearing replacements, and column repairs. The project extended from 70th Street to 16th Street.

Education

B.S., Civil Engineering, University of Wisconsin-Madison, 2010

Years of Experience – 13

Professional Engineer

Wisconsin

Certifications

- IDOT S-14 Documentation of Contract Quantities (#19-15478)
- WisDOT Certified Highway Technician – Transportation Materials Sampling (TMS)
- WisDOT Certified Highway Technician – Materials Coordinator Training (MCT)
- WisDOT Certified Highway Technician – Portland Cement Concrete Technician 1 (PCCTEC-1)

Training

- WisDOT OCIP OSHA Construction Inspection Program
- OSHA 30-Hour Safety Course, 2019

Key Qualifications

Mr. Kucza is a Professional Land Surveyor with over 38 years of experience in successfully building project teams in the Heavy Civil and Site Development Markets. His survey experience includes network control surveys, right of way plats, topographic surveys, boundary surveys, hydrographic surveys, construction layout, 3D modeling, LIDAR scanning, and GIS development.

Education

A.D., Civil Engineering, Milwaukee Area Technical College, 1991

Years of Experience – 38

Professional Land Surveyor

Colorado, Idaho, Illinois, Wisconsin, Kentucky, Utah, Virginia

Certifications

- FAA Remote Pilot (#4298811)
- Philosophy of Vocational and Technical Education Certificate
- Adjunct Survey Instructor, Gateway Technical College

Select Project Experience

Survey

Michels Corporation, CDB IL State Beach Survey, Zion, IL – Project Surveyor

Project included a land survey for three beachfill areas, marine surveying, and post processing deliverables, which included the preparation of beachfill volume calculations, a 3D model of each beachfill and break water excavation area, as built surveying of shoreline improvements, and post-construction hydrographic mapping.

Michels Corporation, Michels MMSD DMMF Survey, Milwaukee, WI – Project Surveyor

Collins Engineers, Inc. provided hydrographic surveys for pre-construction and post-construction for Michels Corporation for a Milwaukee Metropolitan Sewerage District project. The work also involved developing an automatic I-794 bridge pier monitoring system and combi-wall monitoring system that gathered data at pre-set intervals during fill operations and construction activities for the project team to access. The system allowed the project team to calculate the impact of the filling and construction activities on the delta.

Moffat & Nichol, Inc., Moffatt - CDB - IL Beach State Park, Zion, IL – Project Surveyor

This unique project for the Illinois Capital Development Board (CDB) was to rehabilitate the shoreline of the Illinois Beach State Park in Zion, Illinois. The \$73 million design-build project was funded by the Illinois Department of Natural Resources and the Illinois Capital Development Board to preserve 2.2 miles of Illinois Beach State Park shoreline from harmful erosion from Lake Michigan. The project included restoring three sections of beaches as well as building up to 22 rock breakwaters to offer protection. The project also included the installation of several habitat areas to restore the areas for fish and wildlife. Collins was tasked with developing construction access drawings and specifications, performing a pre-construction drone survey, providing structural calculations for the habitat elements, construction management and survey.

CDB- Discovery Partners Institute 2020, Chicago, IL – Project Surveyor

The Capital Development Board (CDB) and the University of Illinois System (University) and Discovery Partners Institute (DPI), selected OMA/Jacobs to design a new technology and research center in the “78-Development” of Chicago. Collins was the civil engineer and surveyor for the project and prepared topographic and boundary survey, civil site design drawings and specifications, and coordinated with the City of Chicago on local permitting/approval, local utility agencies, and project team. Collins also provided construction administration for the site development of the project. In January 2022, Collins was contracted for Program Analysis (PA) phase of the project through March 2022. Project scope in PA phase included site assessment, site PA narrative, Flood Plain letter, topographic survey and management of geotechnical engineer. Responsible for survey team oversight and quality control, and Unmanned Aerial System data collection and modeling.

Milwaukee County DOT, Milwaukee McKinley Flushing Channel Design, Milwaukee, WI – Project Surveyor

Project included the design of over 1,000 feet of seawall rehabilitation with a new steel sheet pile bulkhead. The rehabilitation project was completed for an existing timber seawall located in Milwaukee, WI which extended along a public park and marina facility. The project included several site constraints such as record high water levels in Lake Michigan and adjacent building foundations to the seawall.

Collins Engineers, Inc. conducted a topographic and hydrographic survey of the project area. Collins utilized a drone to obtain detailed aerial photography of the project site that was processed through photogrammetry software to obtain a detailed 3-D model of the above-water portions of the project site. Collins also conducted an underwater inspection of the existing Flushing Channel.

South Milwaukee Madison Avenue Survey, South Milwaukee, WI – Project Surveyor

Project included topographic survey of vacant lots located at the northeast corner of Madison Avenue and 11th Avenue, including the portions of Madison Avenue, 11th Avenue, and Alley adjacent to the vacant lots. Collins also set property pins at the corners

of the easternmost lot, which was purchased by the City at the time of topographic survey. Responsible for all aspects.

South Milwaukee Heritage Reserve Topo, South Milwaukee, WI – Project Surveyor

Project included topographic survey of vacant lots located at the northeast corner of Madison Avenue and 11th Avenue, including the portions of Madison Avenue, 11th Avenue, and Alley adjacent to the vacant lots. Collins also set property pins at the corners of the easternmost lot, which was purchased by the City at the time of topographic survey. Responsible for all aspects.

South Milwaukee 14th Ave & Mill Rd Topo, South Milwaukee, WI – Project Surveyor

Collins Engineers, Inc. provided topographic survey for two roadway rehabilitation projects (14th Avenue from Marshall Avenue to Marquette Avenue, and 6th Avenue/Mill Road from Milwaukee Avenue to Milwaukee County Right of Way). Project included topographic survey of approximately 1,000 LF of urban local roadway, including locations of existing utilities marked in the field and inverts, sizes, and locations of existing storm and sanitary sewers.

CDM Smith Sheboygan Easement 2021, Sheboygan, WI – Project Surveyor

Collins Engineers, Inc. provided professional engineering services to CDM Smith by establishing a new permanent easement for the new raw water intake facility at the Sheboygan Water Utility site. The permanent easement was three feet outside of a fence and underground pipe layout needed to be considered. Collins established a temporary easement based on the proposed site disturbance limits, as well as a utility easement for a sanitary force main. Collins surveyed the existing right-of-way for Vollrath Boulevard from field evidence and existing survey documents to establish the boundary. Responsible for survey team oversight and quality control.

CDM Smith, Water Intake Coastal Survey, Sheboygan, WI – Survey Project Manager

Project included professional engineering services to provide boundary survey, bathymetric mapping using a Norbit WBMS sonar with integrated Applanix OceanMaster inertial motion unit and Trimble SX-10 terrestrial LiDAR combined with UAS imagery for topographic mapping landside. Responsible for survey team oversight and quality control.

Veterans United Constructors/HDR, Construct Campus Rehab, Quincy, IL – Project Surveyor

Project included professional engineering services for the Department of Veterans Affairs (DVA), in conjunction with the Illinois Capital Development Board, to construct a new Long-Term Care Facility and Domiciliary at the Quincy Veterans Home in Quincy, Adams County, Illinois. This design/build project, led by Veterans United Constructors (a Joint Venture between Alberici Constructors and River City Construction, LLC), and HDR, included a new +200 unit Long-Term Care Facility building, a new +80 unit Domiciliary building, and existing building demolition and site renovation. Collins was the civil engineer of record and survey services included: Topographic Mapping, Survey Control, UAS Collection & Mapping. Responsible for survey team oversight and quality control.

Illinois Capital Development Board (CDB)- New Crime Lab, Crest Hill, IL – Project Surveyor

The Capital Development Board constructed a new Forensic Lab and District 5 Headquarters in Crest Hill, Illinois. The project is a 10-acre site development that included a building of approximately 76,000 square feet. Collins Engineers, Inc. is providing the site civil design for the project, including the design of access driveways, associated parking, pedestrian access, site security fencing, grading and earthwork, new stormwater management facilities, and new utility services. Collins also performed topographic survey for the project through both Unmanned Aircraft System (UAS) and traditional field survey methods. Responsible for survey team oversight and quality control.

Wisconsin Central District, ALTA Survey, Milwaukee, WI – Project Manager

Project included professional engineering services to provide an ALTA survey with topographic and utility information for the Wisconsin Center District (WCD) expansion project. Responsible for survey team oversight and quality control.



Ramboll Group

Strong Reputation and Depth of Experience with Site Assessment and Remediation Projects and Related Works

Ramboll will be responsible for the following:

- Environmental Consulting
- Building Demolition and Underground Storage Tank closure consulting

Firm Overview

Ramboll employs 16,500 experts globally and has an especially strong representation in North America, the Nordics, UK, Continental Europe, Middle East, and Asia-Pacific. Ramboll was established in Copenhagen, Denmark in 1945 and is instrumental in providing sustainable societies where people and nature flourish. With 300 offices in 35 countries, Ramboll combines local experience with a global knowledgebase constantly striving to achieve inspiring and exacting solutions that make a genuine difference to clients, the end-users and society at large. Ramboll is committed to achieving environmental, economic, and social sustainability in every project. To achieve this goal and ensure local stewardship and the long-term success of our solutions, we prioritize stakeholder and public engagement.

Ramboll employs 75 staff in our regional Milwaukee office who are focused on providing environmental services in Wisconsin. In addition, Ramboll has regional offices in both Chicago, Illinois and Minneapolis, Minnesota to support the project. We also have 12 remote staff in Madison, La Crosse, Eau Claire, and Oshkosh.

For over 25 years, we have provided environmental services in Wisconsin that align with the City of Sheboygan's requested scope of services. Ramboll's capabilities and experience in

Wisconsin bring a deep resource base in site assessment, remediation and closure. Ramboll's approach for providing services to the City of Sheboygan will encompass strategy, planning, world-class technical design capabilities, and effective contract management approaches to provide the environmental services needed to support the City's harbor revitalization project. We bring substantial local experience for navigating all aspects of the Wisconsin Administrative Code (WAC) NR 700, including the Voluntary Party Liability Exemption (VPLE) Program, addressing emerging contaminant issues, regulatory compliance and training, site remediation trends, strategies, and site closure specific to Wisconsin. Also, we have a strong reputation with both the USEPA and Wisconsin Department of Natural Resources (WDNR) and are well positioned to continue to provide strategic and technical support necessary for a successful project.

Our team keeps pace with advances in science and technology and the ever-evolving regulatory, legal, and social pressures so that we can best partner with our clients in achieving project goals. The Wisconsin Ramboll team is known for these attributes and, with our depth of experience with site assessment and remediation projects, we will work well in accomplishing the goals of the project.

Andrew Cawrse will be the **Environmental Project Manager** for this project. Mr. Cawrse has over 16 years of environmental consulting experience as a senior project scientist and project manager. His consulting activities include Phase I and Phase II Environmental Site Assessments, site investigation and remediation, asbestos surveys and abatement, tank closure, project management, report preparation and technical review, managing subcontractors, and communication with clients and federal, state, and local agencies. He has worked extensively throughout the mid-west on a wide variety of projects and will lend his knowledge and expertise in continuing Ramboll's record of delivering successful environmental programs. Mr. Cawrse is certified with the Wisconsin DATCP as a Tank-System Site Assessor and maintains certification in Wisconsin as an Asbestos Inspector.

Scott Tarmann, PE, Environmental Project Principal, has over 34 years of environmental consulting experience in project and program management, preparing remedial construction plans and specifications, construction bidding, subcontractor procurement, contract management, planning site investigations, conducting UST site assessments, and leading project teams performing site assessment work under Wisconsin Administrative Code (WAC) Ch. NR 700. He also has extensive experience under Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Resource Conservation and Recovery Act (RCRA), Toxic Substances Control Act (TSCA) and state-led programs. In his current role, Scott combines leadership, business, and technical experience to assist teams in delivering service-oriented solutions across the firm's environmental business. As Project Principal, Scott will be responsible for technical quality, plan review, bidding management, cost estimating, project execution, subcontractor management, and area resource management for project team staff.

David Markelz, Site Assessor and Health & Safety Coordinator, has over 30 years of experience conducting Phase I and Phase II Environmental Site Assessments, asbestos surveys and abatement, tank closure, project management, tank site assessment report preparation and technical review, and managing subcontractors. David is also the Health and Safety Coordinator for Ramboll's Milwaukee office. David is certified in Wisconsin as an Underground Storage Tank (UST) Site Assessor, Asbestos Inspector, and Lead Risk Assessor. David will serve as the local Health and Safety Coordinator and will provide local support for the tank system site assessment and asbestos/lead-based paint inspection work.

Kristin Searcy Bell, Ph.D., has more than 15 years of experience in environmental engineering, with particular emphasis on sediment investigation, evaluating potential remedial strategies for contaminated sediment sites, and sediment remedial design. She has managed several sediment remediation and restoration projects both within the United States and Canada that involve site assessment, remedy evaluation and selection, and remedy design. She has experience evaluating a variety of sediment management options, including sediment dredging, excavation, capping, thin-layer capping, monitored natural recovery and in-situ containment, for a variety of constituents of concern, including polychlorinated biphenyls (PCBs), polycyclic

aromatic hydrocarbons (PAHs), metals, dioxins and furans, and chlorobenzenes. Kristin will be responsible for managing sediment investigations and remedial design that may be needed for the project.

Hazardous Materials Site Assessment Project Examples

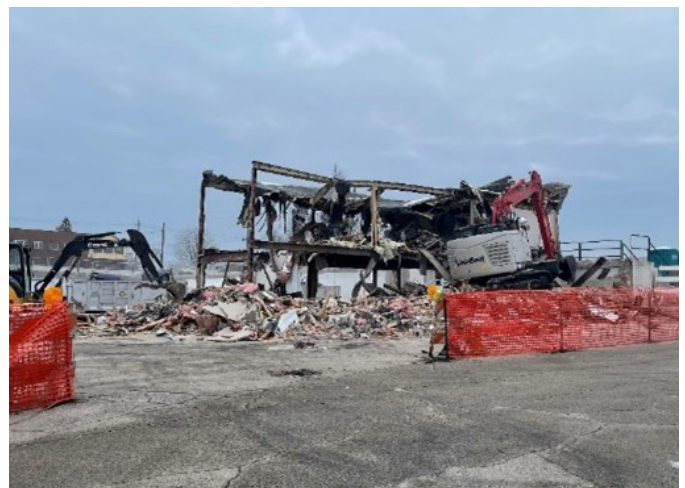
- Asbestos Abatement Associated with Demolition, Milwaukee, Wisconsin
- Hazardous Building Materials Assessment, Chicago, Illinois
- Pre-Renovation Hazardous Building Materials Assessment, Milwaukee Athletic Club, Milwaukee, Wisconsin
- Pre-Demolition Hazardous Materials Assessment, Milwaukee, WI
- Pre-Renovation Asbestos and Lead Paint Survey, Mount Pleasant, WI
- Asbestos Survey, Milwaukee, WI

UST Site Assessment and Closure Project Examples

- Underground Storage Tank Closure, Town of Carlton, WI
- Tank Closure and Immediate Actions, Pleasant Prairie, WI

Demolition and Decommissioning Project Examples

- Facility Demolition, Former Gypsum Storage Building, City of Oak Creek, WI
- Decommissioning and Demolition of a Groundwater Treatment Building, Manitowoc, WI
- Demolition of a Warehouse Building, City of Chicago, IL



4. Marina Boat Docking Facilities



Projects

A world of knowledge applied to projects of all sizes.

Our team boasts considerable expertise and a wealth of experience, comprised of industry innovators who are at the forefront of developing revolutionary sustainable design and engineering practices.

With years of experience and success in all coastal environments, the Edgewater team is a trusted waterfront consultancy and regularly called on to advise local, state, and federal government agencies on shoreline, coastal, marina design, and engineering issues.

The following chart is intended to represent a sampling of our Great Lakes marina projects.



Great Lakes Marina Boat Docking Facilities:

Project Name	Location	Status
Detour State Harbor	Detour, MI	Completion Expected July 2025
Port Austin State Harbor	Port Austin, MI	Completed June 2025
Navy Pier Marina	Chicago, IL	Completed June 2025
Adelaide Pointe Marina	Muskegon, MI	Completed 2024
East Tawas State Harbor	East Tawas, MI	Completed Final Phase Summer 2018
Port of Rochester Marina	Rochester, NY	Completed Summer 2016
31st Street Harbor	Chicago, IL	Completed 2012
Ottawa Beach Marina	Holland, MI	Completed 2018
Harbor Shores Marina	St. Joseph, MI	Completed 2014
Trail Creek Marina	Michigan City, IN	Completed 2015
Spring Lake Yacht Club	Spring Lake, MI	Completed 2015
Eagle Harbor	Eagle Harbor, MI	Completed 2022
Boyne City Municipal Marina	Boyne City, MI	Completion Expected June 2025

Continued...

Project Name	Location	Status
New Buffalo Municipal Marina	New Buffalo, MI	Completed 2024
Discovery Pier Expansion	Traverse City, MI	Completion Expected July 2025
Racine Reefpoint Marina	Racine, WI	Completion Expected Spring 2026
Washington Park Marina	Michigan City, IN	Completed 2022
West Basin Marina	St. Joseph, MI	Completed 2024
South Haven Northside Marina	South Haven, MI	Completed 2022
Harrisville Harbor	Harrisville, MI	Completed 2019
Whitefish Pointe	Paradise, MI	Permits issued, Bidding expected 2026
Mackinac Island State Harbor	Mackinac Island, MI	Completed 2014
Statewide Harbor Assessment	100+ Michigan Sites	Completed 2019
Docks at Michigan Maritime Museum	South Haven, MI	Completed 2024
South Marina	Green Bay, WI	In progress
Grand Haven Municipal Marina Preliminary Engineering Study	Grand Haven, MI	Completed 2018
St. Clair Municipal Marina Preliminary Engineering Study	Saint Clair, MI	Completed 2022
Grosse Pointe Park Marina Master Plan	Grosse Pointe Park, MI	Completed 2024
Suttons Bay Marina Master Plan	Suttons Bay, MI	Completed 2024
Ford Yacht Club	Grosse Ile, MI	Completed 2019
Rogers City Marina Dredging	Rogers City, MI	Completed 2013
The Harborage Marina Study	Boyne City, MI	Completed 2019
Elk Rapids Marina Master Plan	Elk Rapids, MI	Completed 2024
Leelanau Wine Center Marina	Omena, MI	Completed 2021
Hartshorn Marina Reconstruction	Muskegon, MI	Completed 2021
Harbor 31 Marina Design	Muskegon, MI	Completed 2021
South Haven Southside Marina	South Haven, MI	Completed 2020
Sammie L. Maletta Marina Master Plan	Portage, IN	Completed 2018



Last Marina Projects

Port Austin State Harbor

Modeling a Wave Environment to Develop a Mitigative Solution to Excessive Waves and Agitation.

Port Austin initially included a conditions assessment to evaluate sustained damage on the existing system, followed by the preparation of design and contract documents for select demolition of damaged portions of the docking facility. The work was necessary to remove portions of the system that were inadequate for service. Edgewater also evaluated the remaining portions of the system to ensure safe operating condition prior to the following boating season. As additional years continued to deteriorate the dock system and utility systems, the client continued to allocate funding until additional improvements could be afforded. Edgewater completed a coastal study to evaluate the existing conditions that could have possibly caused the earlier than expected deterioration and shorten lifespan. The results of that coastal study were used to create a two phase strategy for replacement of the west dock system. The first phase included extending the breakwater and the second phase included the design and bid of a new dock system replacement. The new dock system includes utility replacement in compliance with current codes and safety requirements in the harsh cold marine environment. The project is nearing completion with final testing completed in June 2025.

Michigan Department of Natural Resources, Port Austin, MI

Contact: Bruce Watkins, PE, Project Director
watkinsb1@michigan.gov - 517 242 7882

Initial Budget: \$2,474,000

Total Project Cost: \$2,474,000

Number of Change Orders: 2

Total Cost of Change Orders: Net zero

Date of Bid: June 2024

Scheduled Completion Date: June 15, 2025

Actual Completion Date: June 25, 2025





Last Marina Projects

Discovery Pier Final Phase (4)

Revitalization of a Historic Waterfront into a Hub for Maritime Experiences.

Discovery Pier is a retired earthen retained coal dock initially used to offload industrial goods. Over time the pier was modified and reinforced but then left to degrade. In 2006 the dock was donated to the Discovery Center and Pier intended to open the waterfront to the public. Edgewater has been consulting on this since 2018 with engineering and architecture improvements supporting the Discovery Pier mission and vision.

Edgewater's marine, civil engineering, and architectural design teams accommodated full ADA compliance for the berthing of historic tall ships, large research vessels, wooden vessels, fishing charters, ecology studies, marine technology explorations and a public kayak launch with mooring bollards, dolphins, fenders, a new crane and new docks. This project created a renovated waterfront attraction with fishing rails, public shade structures, a green space and a 4,000 square foot event and education pavilion.

Discovery Center Great Lakes, Traverse City, MI

Contact: Matt McDonough, CEO
matt@discoverygreatlakes.org - 231 409 4285

Initial Budget: \$1,143,434

Total Project Cost: \$1,088,330

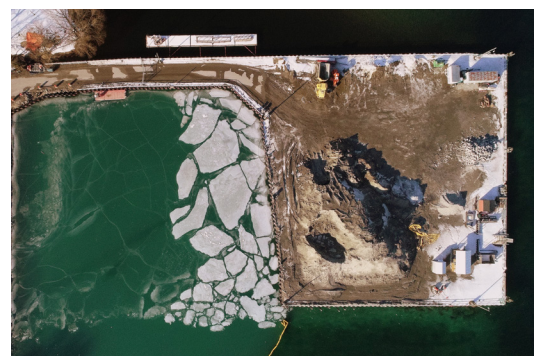
Number of Change Orders: 2

Total Cost of Change Orders: Net deduct \$55,104

Date of Bid: August 2024

Scheduled Completion Date: June 15, 2025

Actual Completion Date: July 1, 2025



Top Three Projects

The Heritage Center at Michigan Maritime Museum

**Michigan Maritime Museum,
South Haven, MI**

Current Staff Involved:

Greg Weykamp - *Principal-in-Charge*

Michelle Rumsa - *Project Architect*

Colin Hassenger - *Project Manager*



A Hands-On, Exhibit-Focused Museum Specializing in Maritime History and Education of the Great Lakes.

Edgewater's multi-disciplined team developed a campus Master Plan preserving current traditions and the future legacy of the museum campus. Elements of the Master Plan included a new marina and docks to accommodate the "On the Water" trademark events, guests, and the current fleet including several sailing vessels, a Truscott boat, and a tall ship. The new building, completed in 2022, is 17,000 sq ft. and two stories tall, with state-of-the-art technology, expanded research and education capabilities, fully-accessible exhibits, education, and a ship store with event and meeting spaces designed to seamlessly integrate into the character and scale of the maritime campus.

Services performed by Edgewater for the Michigan Maritime Museum included:

- Feasibility Study
- Municipal Collaboration
- Marina Design and Engineering
- Civil Engineering
- Landscape Design
- Architecture
- Interior Design
- Graphics



31st Street Harbor

Chicago Parks District, Chicago, IL

Current Staff Involved:

Greg Weykamp - *Principal-in-Charge*

Mike Morpheo - *Project Manager - Marina*

Colin Hassenger - *Project Engineer*



A \$103M Resilient Green Harbor, 1,015-slip Marina, and Waterfront Park.

The 31st Street Harbor project, just south of downtown Chicago, included the creation of a 1.5-acre waterfront park integrated in a 2,200-foot-long stone revetment structure in Lake Michigan. The project opened in May of 2012 and created significant waterfront and traffic calming/pedestrian circulation improvements to the area, including the elimination of all four conflicts between the Lakefront Trail and vehicular traffic.

Renovation of the existing concrete revetment shoreline protection system into a softer and greener edge created a more welcoming waterfront promenade interface between the new green roof covered parking facility and the water's edge. Construction of a new regional playground, picnic areas, and reconfigured regional bike paths integrated the project into the community and ensure that all members of the community benefited from the project.

Services performed by Edgewater for 31st Street Harbor included:

- Overall Project Principal-in-Charge
- Floating Dock Design
- Marina Utilities Oversight
- Upland Park Design
- Construction Administration- Marina



Port of Rochester Marina

Michigan Department of Technology, Management and Budget, Rochester, NY

Current Staff Involved:

Greg Weykamp - *Principal-in-Charge*

Suzanne Fromson - *Landscape Architecture Lead*

Mike Morpheu - *Project Manager - Phase I*

Colin Hassenger - *Project Manager - Phase II*

Consultants: LaBella Associates



Conversion of an Underutilized Parking Lot into an Active Public Waterfront.

The Port of Rochester Marina opened in the spring of 2016, converting acres of underutilized, impervious asphalt parking and ferry loading areas into an active public waterfront with a new park, public promenade, and a 158-slip marina serving both seasonal and transient boaters. Edgewater created an entirely new basin for Rochester, renovated an existing boat launch, and designed a marina that accommodated record-high water levels by design.

Excavation of the marina basin removed 98,000 cubic yards of regulated fill, and incorporated energy reduction and LEED-inspired solutions including the use of previous paving, bio-infiltration, sustainable ebony wood decking materials on the docks, and installed individual electrical metering to boat slips for more boater conscious energy use.

Services performed by Edgewater for the Port of Rochester Marina included:

- Waterfront Master Planning
- Landscape Architecture
- Land Use Planning





Marina Expertise

Great Lakes Ice Survivability

In each of our Great Lakes projects, we consider the risks associated with northern climate, freshwater ice and address the risks in design but also with long term management recommendations. Pile forces and loading, dock utility systems, and the docks themselves are designed and specified to survive moving and/or compressive ice forces. Where fixed structures or dock anchorage systems are at risk, we incorporate ice suppression into our recommendations and bid documents.

Wind/Wave Protection

Through experienced design, we design marinas to balance the complex factors of risk, basin tranquility, cost, and regulatory factors. Through our wide array of experience in dealing with these challenges, we are able to develop creative solutions based upon specific site characteristics and client/user needs, priorities, and limitations. No two sites experience the same

conditions and therefore we must be prepared to apply the right tools and approaches to each project. In some cases, fixed breakwater structures are necessary, affordable and allowable. In other cases, minimally invasive, less expensive approaches must be considered, such as floating wave attenuators, limited depth wave walls, baffle walls, and other alternatives. We will draw upon our experiences elsewhere to find the right solution for Sheboygan, as we have in countless other places. survivability are designed with the assumption that moving and/or compressive ice forces will be present. Where fixed structures or dock anchorage systems are at risk, we incorporate ice suppression into our recommendations and bid documents, where feasible.

Upland Park Interface

We believe the waterfront should be a place for everyone and our marina design process includes development of meaningful connections to the upland spaces which line our waterfronts. In cases like the Port of Rochester (Rochester, NY), our design made the final connection between a multi-mile non-motorized pathway from the downtown district, to the City's waterfront and marina. In other cases, like the 31st Street Harbor (Chicago, IL) the upland space included a winter boat storage facility and a green rooftop park, with a freeform playground. Our marina design for the Michigan Maritime Museum (South Haven, MI), included the design and construction of the new 17,000 square foot Heritage Center, an inclusive, sustainable, and accessible building which tells the story of the Great Lakes through exhibits, education, research, and other amenities.

Sedimentation

In many marinas, sedimentation can be a constant challenge as harbor operators look to maintain navigable depths. Our team has explored and implemented cutting edge solutions to control sedimentation, including harnessing natural flows and wave energy to divert sediment purposefully, creating habitat and protection at the same time. Our team has directed the development of a "living shoreline" harbor protection system at the Fort Pierce Marina (Ft. Pierce, FL). The series of segmental rubblemound breakwaters helps to redirect sediment transport and accretion patterns, while enhancing reef habitat systems, and providing protection to the marina within.

Creative Design

In nearly all marina and waterfront projects, our team must apply creativity and deep knowledge regarding designing for safety, accessibility, code considerations, zoning requirement, and the physical challenges in the marine environment. We enjoy finding the right fit to meet these complex considerations and we will work to ensure the final built deliverable meets the community's intent. We strive to make these solutions feel playful and interesting, once constructed and we love our jobs because we get to see it when it's all done.

As we noted in our cover letter, we specialize in marina facilities. And although marinas and waterfronts are the core of what we do, the driver for our work is community enhancement. We realize that the waterfront drives our economies, provides recreational opportunities, and therefore supports the fabric of our communities.

We have completed hundreds of marina projects around the Great Lakes and across the country, from small transient docks within municipal parks, to full-scale commercial marinas and waterfront spaces. The adjacent upland spaces include gathering spaces, parks,

buildings, development opportunities, access and viewing platforms, and many other features that enhance our communities and waterfronts. Edgewater Resources and its partners will ensure that the infrastructure, park space, and building spaces envisioned in Sheboygan's waterfront will maximize the potential value to the community.



Fort Pierce Marina
2016 ASCE COPRI Project Excellence Award

Fort Pierce Marina

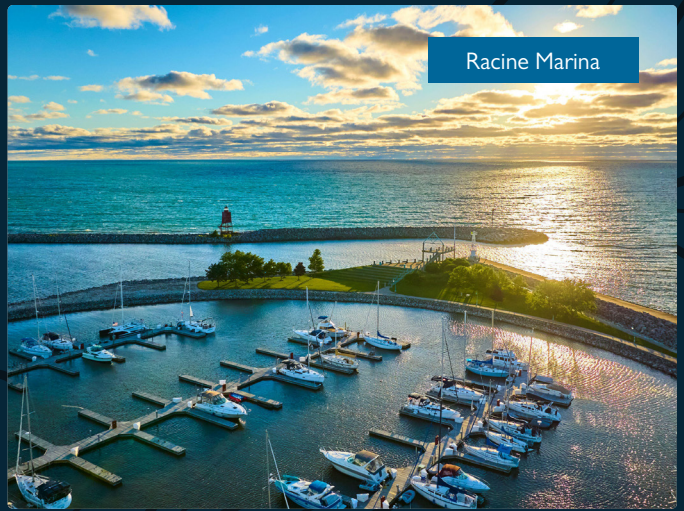


Fort Pierce Marina

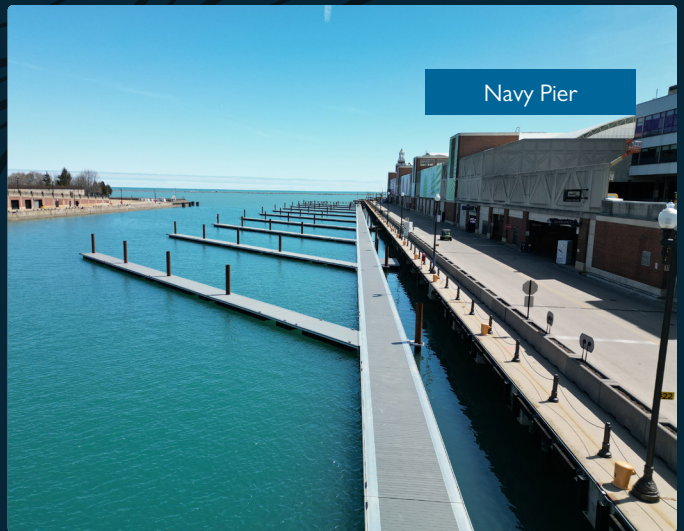




Harbor Shores Inn



Racine Marina



Navy Pier



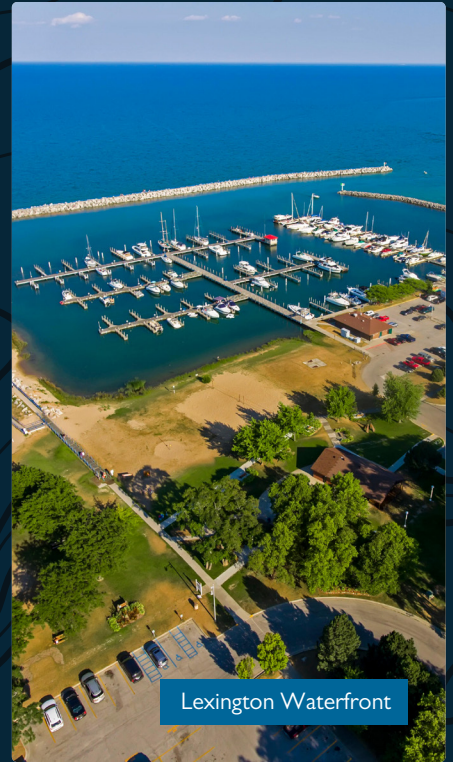
Harbor Shores Inn



Navy Pier



Discovery Center



Lexington Waterfront



Navy Pier Marina



Michigan Maritime Museum



Michigan Maritime Museum

5. Special Design Concerns



Special Design Concerns

This is what we do.

The team of Edgewater Resources, Maffatt Loftis Engineering, Collins Engineers, and Ramboll Group will provide the expertise you need to navigate the realization of your waterfront vision. We hope that the information that follows will illustrate our experience, capabilities, and proposed approach and we look forward to the opportunity to work with the City of Sheboygan.

Questions and Answers

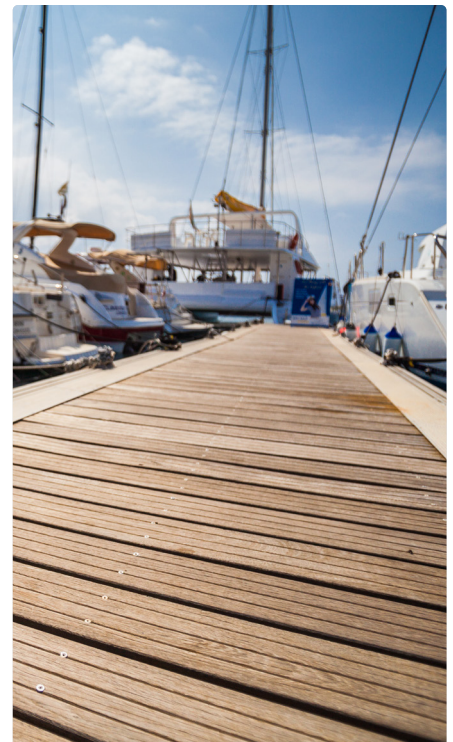
5a. Explain how your firm ensures compliance with the Americans with Disabilities Act (ADA). Provide examples.

All of our projects are designed to comply with the Americans with Disabilities Act. We are experienced in designing public spaces, buildings, and waterfront/marina facilities using the 2010 ADA Standards for Accessible Design. As concepts and schematic design are developed, and through final construction documents, our staff constantly evaluates accessibility. We are incorporating more ADA-compliant family and assisted-use restrooms alongside group restrooms at marinas and parks. Our approach emphasizes full accessibility, including accessible routes, parking, marina access, dimensional and tactile materials, required floor clearances, and compliant interior and exterior building elements.

Our most recent designs integrate Universal Design principles, featuring family restrooms equipped with adult changing stations, additional grab bars, roll-in showers, and 42-inch-wide entry doors.

Key projects featuring these accessibility enhancements include:

- The Inn at Harbor Shores, Saint Joseph, MI
- Michigan Maritime Museum, South Haven, MI
- Lexington State Harbor, Lexington, MI
- Navy Pier Marina, Chicago, IL
- Discovery Pier Redevelopment and Pavillion, Traverse City, MI
- The Beach House at Holland State Park, Holland, MI
- Village of Lexington's Tierney Park, Lexington, MI
- 31st Street Harbor, Chicago, IL
- Port of Rochester Marina, Rochester, NY



5b. Efficient energy usage and Sustainability is a concern for the City. Describe how your firm incorporates these aspects of design into its work. Provide examples.

We are deeply committed to energy efficiency and sustainable design in our work, and we have led and worked on the design of award winning LEED Gold Certified projects ranging from 31st Street Harbor in Chicago to the Masdar Future Energy Corporation Headquarters in Abu Dhabi. 31st Street Harbor in Chicago earned LEED Gold certification through the incorporation of a two acre green roof covered marina services building that provides parking in the summer and indoor heated boat storage in the winter. The building is heated and cooled through geothermal systems utilizing Lake Michigan as a ground source, while incorporating energy star appliances, LED lighting, low water use plumbing fixtures, dark sky lighting, low VOC coatings, native plantings, and drip irrigation among many other strategies. The project was awarded both the AIA Chicago SustainABILITY Leadership Merit Award and the Fabien Cousteau Blue Award for sustainable harbor design in 2012. 31st Street Harbor was also recognized at the 2024 Smart and Sustainable Marinas conference in Monaco.

Working with Adrian Smith + Gordon Gill, designers of the Burj Khalifa, Greg Weykamp led the design of the public realm spaces for the Masdar Headquarters building. The design brief for this structure was that it needed to achieve carbon neutrality while being energy positive (creating more energy than it used) relying only on the sunlight, wind, rain, and geothermal resources present within the footprint of the building itself. Our team designed a series of gardens and public spaces with fountains and irrigation systems that utilized reclaimed water from the HVAC systems, while relying on native plant materials and reclaimed materials for construction. Occupancy sensors managed energy use for the lighting and fountain systems.

In Sydney, Australia, Greg led the design of the public realm and private gardens of the Olympic Village for the 2000 Olympic Games. This 2,000 home neighborhood incorporated photovoltaic panels on every home, and generates sufficient electricity that it is listed in the Sydney utility grid power plants as “Power Station Homebush”. Every material utilized in the construction of the homes and public spaces went through a sustainable design review, resulting in the elimination of all PVC materials, and use of innovative strategies such as dual potable/gray water systems to utilize rain and gray water capture from the inside of the homes to irrigate gardens. We worked with local nurseries to establish the first native plant nurseries in the country.

Closer to home, we led the design of Adelaide Pointe, a mixed use waterfront development with a 200 slip marina, 400 upland residential units, a restaurant, hotel, conference, and boat storage facilities. This project included the first mass timber residential structure in Michigan, and only the third mass timber structure in the state. From an environmental sustainability perspective, we incorporated extensive habitat and wetland restoration, including reducing hardened shorelines by 80%. We incorporated all native plant materials, habitat structures along the water’s edge,



ISS FABIEN COUSTEAU BLUE AWARD

Environmental leadership, global oceanic conservation and resource preservation are prerequisites for nomination. The integration of environmental technologies and resource management with the goal of setting achievable standards and models for wide adaptation in the design, engineering and building of large yachts—and the use of the Earth’s waterways—are essential criteria for obtaining this award.

photovoltaic panels on the roofs, and removal of over 100,000 cubic yards of regulated fill materials from Muskegon Lake. From a social equity sustainability perspective, we led the developer to making over one mile of the lakefront open to the public through a permanent dedicated access easement, protecting access to the lake for the adjacent neighborhoods for all time. We incorporated multiple ADA compliant fishing access sites for low income neighbors who historically used the site for subsistence fishing, while also providing ADA compliant paddlecraft access.

Extending our personal commitment to sustainable design, our president Greg Weykamp has completed a deep energy retrofit of his own home, including an 11kWh solar energy system with 27kW hours of battery storage in addition to all new windows, doors, and an entirely new insulation system doubling the previous R value of the original home. All HVAC and water heater appliances have been converted to air source heat pump systems, dramatically reducing energy demand. Finally, he has driven pure electric vehicles for over five years. Greg teaches classes, writes articles, and has spoken at many national and international conferences on sustainable design.

In summary, we take sustainable design very seriously, and build support for these strategies by focusing on the economic values in addition to the environmental values. We are working with the International Marine Electrification Association to bring electric boating to America, and we are already designing EV boat charging systems in marinas in the Great Lakes.

Key projects featuring efficient energy usage include:

- Port of Rochester Marina, Rochester, NY
- 31st Street Harbor, Chicago, IL
- Adelaide Pointe Marina, Muskegon, MI
- Washington Park Marina, Michigan City, IN
- Fort Pierce Marina, Fort Pierce, FL

5c. Fueling Systems design is a concern for the City. Describe how your firm incorporates this aspect of design into its work. Provide examples.

We have designed and constructed many marina fueling systems over the past 15 years and our team's experience will be applied to ensure the new fuel system is safe, compliant, functional, and maintainable.

Key examples of fuel systems we've designed include:

- Marine system at East Tawas State Harbor, East Tawas, MI
- Marine system at Harrisville Harbor, Harrisville, MI
- Upland system at Lexington State Harbor, Lexington, MI
- Dispensers/Pumps at Port Austin State Harbor, Port Austin, MI

5d. Docking systems that can withstand the rigors of the Great Lakes is of utmost importance. Please provide some ideas as to your approach.

Marinas in the Great Lakes are subject to some of the most harsh conditions in the world. Wind, waves, and the forces associated with northern freshwater ice can cause havoc in a marina. Our team has designed and consulted on over 100 Great Lakes marinas in the past 15 years, more than any other firm that we are aware of. Design decisions will always come with risk, but we have found that balancing the management of the risks with other factors will lead to the right solutions for our clients. Above all else, safety is critical to all designs, and a non-negotiable component of marinas. As we begin the schematic design process and data is gathered, we will optimize layouts and recommendations for protection and anchorage to address conditions and maintenance expectations.

More specifically, our staff is familiar with Sheboygan's 2016 Wave Mitigation Study and we will review its findings and recommendations as the initial phase of the redevelopment is designed and programmed.

5e. Building design for long-term maintenance-free sustainability in a harsh marine environment is of high concern. Please provide some insight as to your experience in the design and long-term viability of buildings in this type of environment.

Our goal is to design buildings that are durable and long-lasting. While truly maintenance-free structures are not an option, we focus on minimizing material deterioration and reducing maintenance needs over the building's lifetime. In coastal environments, where wind and water are constant factors, this often means specifying resilient materials such as concrete masonry or brick for long-term environmental exposure.

Depending on the scale and location—whether the building is on a dock or inland—we incorporate materials that balance durability with the desired coastal architectural styles. These may include wood framing with fiber cement board or pre-engineered wood siding, and hollow metal or fiberglass doors and windows with high-impact glazing.

We tailor our material choices to suit each site and its environmental conditions. Interior spaces are designed for heavy public use, with durable yet cleanable surface walls and flooring that minimize grout lines, especially underfoot. Ceilings are typically finished in painted or stained wood nickel gap boards, which are often extended to walls for added resilience.

To support durability and prevent tampering, we conceal system controls, thermostats, and flush valves, and incorporate sensor-operated fixtures whenever possible.

Effective moisture control and well-designed ventilation systems are essential - even in seasonal buildings that are winterized or lack air conditioning - to prevent mold, rot and associated odors and occupant discomfort. We often include operable awning windows for privacy, fresh natural ventilation and ceiling fans to enhance airflow in a wide variety of interior spaces.

5f. Provide information on your current workload and how you would accommodate this project.

We are busy designing and constructing marinas and several multi-year projects are nearing completion. Our team is prepared to apply our collective experience to Sheboygan's waterfront. Assuming the City selects a consultant in July, we would be prepared to kickoff the project soon after. At that point, our focus would shift to data collection, and schematic design, followed by early community engagement. This initial effort would be intended to ensure that we know what we reasonably can, and that we identify a clear program for the initial phase of the project. As fall and winter approach, the heavy design development phase would begin, as well as the start to state and federal regulatory processes. The initial scope fits well within staff workloads and other commitments during the same timeframes. And as design progresses, other future work would be planned with consideration to the Sheboygan design schedule.



5g-h. PLEASE SEE PAGES 69-83 FOR WORK PLAN AND DESIGN SCHEDULE

5i. Describe your method for consensus building, including your role, the methodology employed, the outcome, and a contact person for a recent project where you employed this method.

We believe community consensus building is critical to developing the local support needed to see a project of this scope through to completion, and we have developed a very effective process over the past twenty five years that has proven successful time and again. In this case, as the community has presumably been part of the process to develop the existing Master Plan, we will be sure to respect the time they have already invested in the process by orienting our conversations around that plan as the starting point while we work through incorporating the marina market analysis and other new information into the refinement of the plan.

We begin our consensus building process by working with you to identify the key stakeholder groups who will provide their feedback, such as the operators of the marina, the public works staff and first responders, the boaters, and other community and neighborhood organizations. We will then meet with these groups individually to gain their feedback during a one day listening session, followed by a public meeting where we invite anyone with an interest in the project to share their views. In these meetings, we will review the existing plan, outlined the additional data from the market analysis and other new information, and facilitate a visioning exercise to help us better understand the community's goals for the project. As we advance through schematic design and then into design development, we propose to host subsequent public information meetings to review the progress of design as it evolves in a process we call "continuous community involvement". The farther we go into design, we get into more detail on costs and how we set priorities with the community. We have found that this process maintains a clear and open line of communication that allows the community to see the process work, so they understand how decisions were made along the way. This generally results in much greater support for the project and the financial investments needed to see it through.

We use a variety of different communication and feedback methods to make sure we hear the voices of everyone, rather than just those with the loudest voices. These include interactive visioning exercises, online surveys, and simply providing opportunities to reach us by phone or email. One of the most effective strategies though is simply handing out note cards and pencils at every public meeting, and asking participants to leave us their thoughts in a note. We have found that we get very clear and direct feedback using this method, and it is an effective way to present a much broader range of views as many residents are simply not comfortable speaking in public in front of a crowd. This is especially so when a contentious topic is being discussed, and their views are no less important than those of someone willing to speak in public.

We have followed this process successfully in many communities, and we encourage you to reach out to our clients from across the Great Lakes region below to see how this process worked from their perspective.

- Mike Singleton, Elk Rapids Harbormaster - **231 357 9419**
- Michele Spillane, Elk Rapids Harbor Committee - **248 763 0917**
- Mark Heydlauff, City Manager, Charlevoix, MI - **231 547 3263**
- Nancy Deboer, Mayor, City of Holland, MI - **616 405 5236**
- Mark Gregor, City of Rochester, NY - **585 943 0765**
- Bill Clevenger, Decatur Park District, IL - **217 433 2731**



5j. Describe the types of problems you have encountered on similar projects, and explain what you did to resolve the problems and what you would do differently to avoid such problems on future projects.

There is little doubt that we will encounter bumps in the road as the waterfront is redeveloped. In our experience, communication and experience will be the keys to minimizing the impact of challenges that arise.

As large Great Lakes marina projects are implemented, we often encounter lead time/supply chain issues, particularly with specialty marina electrical components such as substations. In some cases, it may be feasible to minimize this issue through early procurement and bidding. In other cases, when unexpected delays occur, we have relied upon the experience of our team to troubleshoot and seek alternative pathways. Our team has come through in several recent cases, to find creative ways to provide power to slips on an interim basis while maintaining compliance with codes and ensuring the safety of the public.

Material cost issues can often arise during bidding and construction, as well. For example, we dealt with the cost implications of the recent global pandemic as several projects moved from design to construction. More recently, cost issues such as tariffs have created the need for our team to think well ahead. In nearly all cases, we have worked to ensure that clear and fair language is included in bid documents. In doing so, owners are able to see where these uncertainties might be applied, while bidders can continue to bid projects fairly and efficiently, knowing that properly communicated changes to material costs will be evaluated based upon fact.

Our team has the experience to deal with issues like those above and will always strive to think ahead, gather the facts, evaluate options, and present you with recommendations based upon your best interests.

5k. Describe how your firm can add value to this project and the process and include examples of situations from comparable projects where the owner realized tangible value.

Edgewater is a multidisciplinary team of skilled, licensed professionals who collaborate closely across disciplines every day. Our team thrives not only on effective collaboration but also on mutual respect and genuine camaraderie. We like each other. We value the unique expertise each member contributes and take pride in our ability to anticipate potential issues and develop thoughtful solutions before they become real challenges.

Any qualified professional firm can take a Master Plan through design, bidding, and construction. There are certainly many firms who can meet this intent. When issues arise that require specific knowledge and experience pertinent to the project, our value will come through. Within just the past few months, our expertise has been applied to assist our clients through tough, time and cost sensitive challenges. Whether it was dealing with permit challenges for emergency dredging projects such as the Black River Dredge Project in South Haven, Michigan; electrical equipment delivery issues and related interim design needs at the Discovery Center in Traverse City, Michigan; or on-the-fly design changes to minimize costs at Navy Pier Marina in Chicago, Illinois, our team has sought to find the solutions and strategies to address challenges when they arise.



5l. Describe how you intend to minimize disruption in Marina Operations.

During the schematic design process, we will work with you to determine what's possible and likely, and how to phase construction to minimize disruptions to the critical boating season. Ultimately, we expect some impacts will be felt but will look at various options to maximize use of the docks and upland space during the months when the facility is most utilized.

We are not new to the redevelopment of large marinas and we understand the process and how to minimize disruptions to our short boating seasons.

5m. Describe your standard operating protocol for construction management and oversight to assure that the best interests of the owner are maintained.

As we have on countless projects above, we anticipate representing the City's interests during construction by fairly evaluating the construction process against contract documents. This may include a mix of full time site representation on site for some aspects of the project, and some part-time representation if it makes sense. Overall, we will ensure we have eyes on the ground when it matters most. Given the many project components, we anticipate that we will have an overall construction point of contact with whom multiple teams will coordinate as various construction contracts and projects are completed.



Work Process (5g)

The scope of work that follows outlines a detailed process we have used successfully to construct projects exceeding \$100 million in total cost and has been refined to specifically address the program elements outlined in the request for proposal. As the cost estimates outlined in the Master Plan may exceed available funding for construction, we recommend reevaluating the scope of work at the completion of the Schematic Design phase of work. At this point we will have incorporated the additional information received through the completion of the marina market analysis, background surveys, and the consensus building process with the community, and we will have a much better sense of priorities, grant funding opportunities, and construction costs. This will allow us to work with you to refine both the actual scope of construction and the level of engineering and design effort needed to build the initial phase. In other words, while the approach we will take to completing the scope of work outlined below from Design Development through Construction will remain the same, the fees for completing that work will be adjusted to match the actual scope of construction.

The scope herein includes the project components outlined in the Request for Proposal, which have not been repeated herein for brevity.

Task One Project Initiation

Task 1.1 Project Initiation

Core members of the Edgewater Resources project team will meet with the City of Sheboygan (the City) and Stakeholders shortly after notice to proceed to develop a detailed work plan, project schedule, define goals and priorities for the Marina, Site and Building Program and establish a series of milestones to measure progress. We will work collaboratively with the Stakeholder group to identify all regulatory agencies, procedures, and any other partners to consult throughout the planning and design effort. Subsequent meetings will take place either via Teams or in person on site as needed. planning and design effort. Subsequent meetings will take place either via Teams or in person on site as needed.

Task 1.1 Deliverables

- + Meeting agenda/summary with schedule

Task 1.2 Background Data Collection

We will review the site and surrounding area in person and will collect any available or additional background information from the City and Stakeholders at this time, including but not limited to:

- Existing survey data including property boundaries, bathymetric and topographic surveys, and legal descriptions
- Existing Master Plans, studies, reports, drawings, and documents for buildings, marina, and site amenities
- Historic Photos
- Programming information
- Demographic and use data
- Permitting requirements, local zoning ordinances, and relevant Wisconsin building codes
- Parking data
- Utility data
- Environmental and Geotechnical reports

Task 1.2 Deliverables

- + Data Inventory

Task Two

Inventory of Existing Conditions

Task 2.1 Survey of Existing Physical Conditions

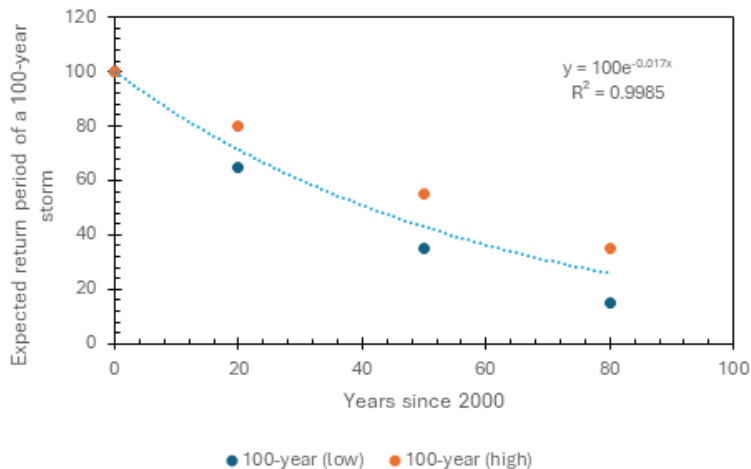
The Edgewater team will complete site boundary survey of the park parcel, as well as topographic and bathymetric survey of the project areas. All visible structures, surface edges, grade breaks, and site features will be surveyed. Trees above 4-inches diameter breast height will be located, or in densely vegetated areas, vegetation or tree lines will be located. If available, record underground utility data will be layered into the base drawings to provide a full picture of the existing site. Documenting these existing conditions will provide the sound informational and analytical base for decision-making throughout the rest of the process.

Task 2.1 Deliverables

- + Existing conditions drawings with topography, bathymetry, and parcel lines

Task 2.2 Preliminary Wave and Coastal Conditions Analysis

Using available information, including bathymetric data and previous studies, Edgewater will conduct a preliminary analysis of probable wave conditions at the site. This study will provide Edgewater engineers with anticipated wave properties, leading to agitation levels and forces impacting existing and proposed docks, attenuators, and other components. Edgewater will use record weather data and bathymetric information as inputs into modeling programs or manual equations.



Moreover, Edgewater will also use weather data to calculate likely ice thicknesses and preliminary winter forces. Upon the conclusion of this task, Edgewater will provide a report outlining recommendations and an overview of the processes involved.

Edgewater will also factor potential impact of climate change on the resilience requirements into the future. Edgewater has taken historical trend data on storm intensities and found that what was considered the 100 year storm in the year 2000, today would be more like a 70 year storm. Looking into the future 50 more years, that old 100 year storm might be as common as a 30 year storm. To prepare for the long view, Edgewater will pre-design for such possibilities.

Task 2.2 Deliverables

- + Initial Wave and Ice Conditions Report

Task Three

Schematic Plan and Phasing Confirmation

Task 3.1 Confirm Master Plan

The Edgewater team will review the Master Plan with regard to the data gathered in Tasks One and Two and the data from the recently complete marina market analysis. We will meet with City representatives and stakeholders to discuss potential iterations of the plan, if needed. Recent funding changes, the marina market analysis, and the ever-changing materials and construction markets may impact the feasibility of the full plan or the phasing of its implementation. By confirming the plan with regard to current conditions, the project will benefit from the latest data and information. If components of the plan are in need of modification, we will develop alternative variations of the plan for review and discussion.

Task 3.1 Deliverables



- + Meeting agendas/summaries
- + Preliminary basis of design
- + Alternative plans

Task 3.2 Consensus Building Process

The Edgewater Resources team will present alternative plans to City representatives, including the Common Council, stakeholders, and the public through a series of public events to seek feedback, make adjustments, and ultimately arrive at a reasonable consensus for the direction of the long term site plan. This process will ensure that all community members have the opportunity to provide input into the future for the City's waterfront park and marina. A final plan will be prepared, depicting the primary components and approaches for the site and marina. Additional detail regarding this process is further described in Part 5 of the proposal.

Task 3.2 Deliverables



- + Plan Iterations
- + Presentations and Summaries
- + Consensus Plan

Task 3.3 Opinion of Probable Construction Cost

Once a preferred plan is selected, the Edgewater team will prepare a detailed opinion of probable construction cost, utilizing recent cost data from other similar regional Great Lakes projects. The cost opinion will be formatted to allow the isolation of larger key components as phasing and funding strategies are considered.

Task 3.3 Deliverables



- + Opinion of Probable Construction Cost

Task 3.4 Phasing Analysis

The Edgewater Resources team will evaluate various potential phasing plans based upon input from the City. The plans will first consider the 'Initial Phase' as outlined in the May 2025 Request for Proposals, but will also consider:

- City Budget Direction/Limitations
- Marina Market Analysis
- Funding opportunities including potential grant programs
- Project timing, seasonal opportunities/constraints, and permit/implementations schedules
- Asset management data within the project site, including age, criticality, and condition
- Marina and building needs based upon current conditions

Several alternative phasing plans will be developed and presented to the City. Plans will include illustrative graphics and cost opinions by phase. The team will also identify the opportunities created by each plan, as well as the drawbacks and limitations of each plan. Ultimately, after review of each of the strategies, a phasing plan will be confirmed with a focus on defining the initial phase of implementation.

Task 3.4 Deliverables



- + Phasing plan alternatives
- + Meeting agendas/summaries/presentations
- + Final phasing plan

Task 3.5 Revisit/Confirm Project Scope

The Edgewater team will revisit the proposed scope as presented herein, and revise and/or confirm as necessary. If the initial phase changes from the general plan laid out in the Request for Proposals, the scope may be reduced or expanded as necessary to best meet the City's needs. The remainder of the scope herein is intended to address the initial phase as presented in the RFP at a macro level, but the Edgewater Resources team recommends revisiting the scope once the plan and phasing strategy are confirmed, as described above.



- + Scope Update and Proposal

BEGIN DESIGN DEVELOPMENT THROUGH CONSTRUCTION

Task Four

Design Development Investigations and Demolition

Task 4.1 Hazardous Materials Inspections - Lead and Asbestos

Prior to demolition activities, Ramboll Group will conduct a hazardous materials inspection at the marina administration building, the marina fueling station/building, two trash enclosures and the swimming pool building. The hazardous materials inspections will involve testing for the presence of asbestos-containing materials (ACM) and lead-based paint. Inspection of the dock system for the presence of old caulking that may contain asbestos will also be conducted. While conducting the inspections for hazardous materials, Ramboll Group will also complete a visual inspection at each building/structure listed above to identify if universal waste materials such as batteries, pesticides, mercury-containing equipment, light ballasts, fluorescent tubes, and aerosol cans are present. Further detail describing the scope of the hazardous materials inspections to be performed at Harbor Centre Marina are discussed below. The asbestos inspection will include a survey to identify, sample, and analyze accessible suspect friable and non-friable ACM materials. Friable ACMs are defined as materials that contain greater than 1% asbestos, and that can be easily crushed or reduced to a powder by hand pressure when dry. The visual asbestos survey will consist of evaluating accessible materials to identify suspect ACMs and evaluate homogeneous areas for sample collection. Materials of similar age, type, color, and texture are considered to belong to the same homogeneous material group.

Following the visual survey, representative bulk samples will be collected from materials that appear to represent each homogeneous group of PACMs. All bulk samples will be submitted under chain-of-custody procedures for laboratory analysis by Polarized Light Microscopy (PLM) with optical dispersion staining (USEPA Interim Method No. 600/R-93/116) by an independent laboratory.

Ramboll Group will also complete lead paint surveys on painted surfaces. The surveys determine lead content of paint coatings, targeting damaged coatings and coatings applied to surfaces that will be disturbed by demolition or renovation activities. Lead paint surveys will analyze for the presence of lead paint coatings using a handheld X-ray fluorescence (XRF) analyzer.

Following the surveys and PACM sampling activities, an asbestos and lead paint survey report will be prepared. The report will include tables with the lead paint survey results and description of asbestos containing materials; condition of the materials; sampling and material locations shown on drawings; inspector certifications; and laboratory results. In addition, the report will include an interpretation of the results as well as recommendations relative to materials management and abatement of ACM, lead paint, and possible further evaluation of materials or building systems which may need be tested prior to demolition. The report will be submitted to the City of Sheboygan for review and will be included as a referenced contract document as part of the building demolition bid specifications. The draft report will be provided to the City electronically within 2 to 4 weeks after receiving laboratory results.

Assumptions:

- Because the quantity of PACM at each of the buildings to be inspected is unknown, we have included an allowance of \$3,000 for the laboratory analysis of PACM. This amount may be more or less depending on the quantity of PACM identified at the site.
- A reasonable effort to access suspect materials within known areas of restricted access (e.g., attic, crawl spaces) will be made provided these areas are not determined to be permit-required confined spaces, or to pose a health or safety risk to Ramboll Group personnel.

- Confined space sampling will not be required for the assessment. If confined space sampling is required, Ramboll Group will utilize a subcontractor to collect these samples. The cost for a subcontractor to collect confined space samples is not included and a change order will be requested.
- Sampling will not include suspect materials that cannot be safely reached with ladders. We anticipate a manlift will not be required to perform the sampling.
- Sampling is conducted in a destructive manner that will damage building materials. Ramboll Group is not responsible for repairing sample locations.
- Sampling is conducted in a thorough but random manner. The possibility exists that ACM and lead paint are present in areas that were not sampled or were inaccessible during the inspection.
- Electrical equipment or other equipment associated with facility operations will not be disassembled and inspected for PACM. It is assumed this equipment will be removed from the facility in such a manner that PACM will not be disturbed.

Task 4.1 Deliverables



- + Asbestos and Lead Paint Survey Report

Task 4.2 UST Site Assessment

As part of the demolition activity associated with the removal of the underground storage tank (UST) systems (tanks, piping, fuel pump dispensers, etc.) at the marina fueling station/building, Ramboll Group will perform an UST site assessment in accordance with the Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP) Tank-System Site Assessment (TSSA) guidance. One double-walled 8,000-gallon diesel fuel UST (tank ID 106509) and one double-walled 12,000-gallon unleaded gasoline UST (tank ID 112095) are registered under DATCP as in use at the site. The two tanks, three dispensers, and associated piping are to be closed/removed as part of the Harbor Centre Marina project.

As required by DATCP, a closure assessment in accordance with the TSSA guidance will be completed for both UST systems by a Ramboll Group certified site assessor. The TSSA

will consist of collecting soil samples for laboratory analysis of petroleum compounds consistent with those materials currently and historically stored within the removed USTs. Requirements for the removal and decommissioning of the current underground storage tanks and marine fueling facilities and equipment will be described in the bidding documents associated with the demolition and removal of the marina fueling station/building.

Ramboll Group assumes the TSSA will occur over a one-day period. During this time, and as required by DATCP, photographic documentation of the closure activities will occur showing the condition of the removed UST system.

Per the Wisconsin TSSA guidance, upon completion of the UST site assessment and tank closure processes outlined above, Ramboll Group will document the UST site assessment activities by preparing a Closure Report (which will include DATCP forms TR-WM-137 and TR-WM-140). Note, the selected tank remover contractor will submit a “Notification Record” (Form TR-WM-121) and coordinate with a local program operator and City inspector and complete Part A of the Tank System Service and Closure Assessment Report (Form TR-WM-140). The Closure Report will summarize the field activities, illustrate the soil sampling locations, present the field screening and laboratory analytical results. The Closure Report will be submitted to the Wisconsin Department of Natural Resources (WDNR) in accordance with DATCP TSSA guidance following review and approval of the report by the City of Sheboygan. The draft report will be provided to the City electronically within 2 to 4 weeks after receiving laboratory results.

Ramboll Group will prepare site-specific Health and Safety Plans (HASP) for the field activities associated with the hazardous material inspections and UST site assessment. The HASP’s will be prepared in accordance with 29 CFR 1926 (OSHA Standards for Construction), 29 CFR 1910 (OSHA Standards for General Industry) and 29 CFR 1904 (US Dept of Labor, Recording and reporting Occupational Injuries and Illnesses). The purpose of the HASP is to inform all site workers of known or reasonably anticipated potential hazards and safety concerns at the site.

Assumptions:

- Only two tanks, one 8,000-gallon diesel fuel UST (tank ID 106509) and one 12,000-gallon unleaded gasoline

UST (tank ID 112095) are registered as in use at the site. If unregistered tanks are present, additional costs to complete TSSA activities may be incurred.

- The two USTs are located beneath a sidewalk and the three dispensers are located adjacent to the lake in a fenced area. The USTs and dispensers will be accessible during the removal activities.
- If a release from the UST system has been identified during the site assessment, waste characterization samples will not be collected by Ramboll Group.
- This proposal assumes that no impacts are identified as part of the tank system closure and Ramboll Group will request a No Action Required determination for the tank system. If impacts are identified, Ramboll Group recommends that notification of a release be made to WDNR as required by TSSA regulations. If impacts are identified, it is possible that additional assessment and/or remediation activities will then be required under WAC ch. NR 716.
- If a release is identified, costs for additional environmental assessment work beyond the tank closure activities detailed above are not included within this proposal. The total cost of potential site investigation activities are estimated to be between \$40,000-and \$60,000 but depend on the degree and extent of the release. Site closure under WAC Ch. NR 700 would include submittal of a work plan, conducting field investigation and sampling, reporting, submittal of a Remedial Action Options Report and Remedial Action Plan, and case closure documentation.
- Sampling is conducted in a thorough but random manner. The possibility exists that ACM and lead paint are present in areas that were not sampled or were inaccessible during the inspection.

Task 4.2 Deliverables



- + Health and Safety Plan
- + UST Site Assessment Report

Task 4.3 Geotechnical Site Investigation

The Edgewater Resources team will work with a geotechnical consultant with knowledge and experience within the general region. We will select a consultant once schematic design is completed and the location of primary project components has been confirmed. For the purposes of preparing a budget for this proposal, we have assume the following borings will be completed within the project site:

- Eight (8) upland borings located at building pads, gangway connections, and critical utility corridors
- Six (6) marine-based borings located within the marina basin to support design of anchor systems.

Task 4.3 Deliverables



- + Geotechnical boring logs and foundation recommendations report

Task 4.4 Building Demolition and UST Closure Engineering

Ramboll Group will initiate a procurement and pricing process to identify qualified subcontractors to implement the activities associated with building demolition, UST removal, lead-based paint/ACM removal (if necessary), and sediment dredging, materials management and disposal (if requested). Ramboll Group will prepare procurement bid packages which will include:

- Demolition plans and specifications which include, but are not limited to the following:
 - Project information including project summary and schedule as well as requirements for mobilization and demobilization, site preparation, structure demolition, material management, loading and transporting to landfill, and site restoration.
- Work restrictions for onsite work hours, noise, odor, and other nuisances.
- Safety precautions and programs including contractor site health and safety requirements, public safety, incident reporting, fire protection and other emergencies, and working in proximity to active utilities.

- Requirements to protect utilities, subsurface features, facilities, walks, pavements, roadways, and structures not designated for removal, relocation, or replacement in the course of construction.
- Requirements for applicable permits, permit-equivalents, and approvals to be acquired by the subcontractor(s) for completion of the work.
- Administrative provisions for coordinating construction operations on the project including schedule, project meetings, and status updates.
- Procedural requirements for work-related submittals including demolition progress schedules and other miscellaneous work-related submittals.
- Requirements for temporary utilities, support facilities, and security and protection facilities.
- Requirements for site access, dust control, security, access roads, parking, public road requirements, and traffic control.
- Requirements to keep work areas on and off site free from environmental pollution that would be in violation of federal, state or local regulations. This includes management of visual aesthetics, noise, and solid waste, as well as other pollutants and resources encountered or generated by the bidder.
- Demolition of site buildings and management, disposal, and/or recycling of demolished building materials.
- Final site cleaning, closeout procedures, and site restoration.
- A bid form which includes key dates, bidder information, and bid price.
- Instructions to bidders/bid submittal requirements.
- A description of health & safety requirements for the project
- A bid schedule

For Ramboll Group's project procurement approach, a minimum of three bidders are selected for each work element to increase competitiveness and receive a broad range of proposals and input. If desired, Ramboll Group may pre-qualify bidders in advance to provide proposals based on Ramboll Group's prequalification process for subcontractors as well as

Ramboll Group's industry experience. Ramboll Group's pre-qualification of subcontractors includes the following criteria (in no particular order):

- Past performance with Ramboll
- Expertise and experience with conducting the planned construction activities
- Health and safety record
- Positive project references
- Financial capabilities
- Legal claims history

Throughout the procurement and pricing process, Ramboll will coordinate with the City to receive input on the content and elements of the bid packages, subcontractor pre-qualification (if desired), and to seek all necessary approvals from City, State and Federal agencies for the work to be performed. We acknowledge that the project may require several bid lettings in order to account for some of the specialized elements of the project. For purposes of this proposal, we have assumed that three separate bid lettings will be conducted for the building demolition, UST removal, and lead-based paint/ACM removal.

Bid Process: Ramboll will plan for and coordinate a mandatory pre-bid and site walk meeting with the prospective bidders. Major construction elements of the project (i.e., building demolition, UST removal, lead paint/ACM removal) typically require the pre-bid and site walk meeting while other elements (surveyors or QA/QC laboratories) will not. Ramboll will prepare appropriate level Request for Proposal (RFP) packages for interested subcontractors. As necessary, Ramboll will issue addenda to the RFP and answer potential subcontractor questions or clarifications over the bidding period and disseminate the information to all bidders on record. Ramboll will conduct a fair and equitable bid process and will not allow collusion between bidders, non-responsive bidders, imbalanced bids or bidders who fail to demonstrate a qualified team and resources dedicated to the project. It is assumed that separate bid packages for the following demolition items will be prepared for:

- UST removal
- Asbestos and lead paint removal and disposal (if necessary)

- Building Demolition, removal, and materials disposal which includes utility disconnection, abandonment, and/or removal, and removal of hardscape/site improvements

Ramboll will also attend all pre-bid conferences and meetings organized by the City that are related to the above building demolition activities.

Bid Review, Selection Process and Contracting:

Following receipt of the bid proposals, Ramboll will review each proposal for technical approach (inclusive of underlying project specific elements), price (including potential for change orders and unit pricing), schedule, project team qualifications, capacity to perform the project within the desired schedule, health and safety information (including program and metrics), and insurability. Ramboll will also submit questions to bidders whose proposals require further clarification to complete the review process. A tabulation of bids and formulation of a recommendation of award of each of the contracts that will be required to complete the project will be prepared for submittal to the City. All bids and bid documents will be made available to the City of Sheboygan for review along with the summary of our evaluation and ranking.

Based upon the recommendation for award and affirmation of same by the City, Ramboll will draft and present to the City contracts utilizing an AIA or EJCDC format for formal review, approval, and award by the City.

Contract Administration: Ramboll will perform the necessary activities associated with contract administration for the duration of the building demolition work and through demolition contract closeout. Activities include attending project update meetings and sessions with City officials and staff, communications with Edgewater and selected demolition contractors, coordination and completion of all contract required activities, preside over all regular meetings with the contractors and City representatives relating to the demolition activities, resolve issues that arise with respect to the project and resource scheduling, budget tracking, review and approval of contractor applications for payment, and submittal of contractor applications to the City for payment. For purposes of this proposal, Ramboll estimates that the contract administration activities associated with the demolition scope will be conducted over a period of one year.

Field Oversight Services for Building Demolition:

Ramboll will provide comprehensive field oversight services for the building demolition project. Our experienced personnel will ensure that all demolition activities are performed in accordance with the established plans and specifications, applicable safety standards, regulatory requirements, and industry best practices. Key aspects of our oversight services include:

- On-Site Presence: Ramboll professionals with extensive experience in demolition and contractor management will be present on-site to conduct necessary inspections as needed. We anticipate having field oversight staff available to readily mobilize to the site during planned demolition activities.
- Documentation: Our team will meticulously document all demolition activities, capturing key details to maintain thorough records.
- Progress Reporting: We will provide regular progress reports to keep stakeholders informed about the status and advancements of the demolition work.

These measures will ensure that the demolition project proceeds smoothly, safely, and in compliance with all relevant standards and regulations.



Task Five

Marina Engineering and Design Services

Task 5.1 Preliminary Engineering (DD)

Using the consensus plan and phasing strategy, record plan information, site information collected, and the characteristics of the site, the Edgewater team will initiate engineering design of the marina, including wave attenuation, floating dockage layout, shoreline improvements and connection points, basin dredging, and associated utility schematics. Design will be advanced to approximately 30% level, the appropriate level of detail required to support joint-permit application to state and federal regulatory agencies.

Specific Tasks will include:

- Marine engineering concept consideration:
 - Review of the preferred marina layout previously developed
 - ADA considerations for marina accessibility
 - Design and integration of dock electrical and plumbing systems
 - Floating dock system land-side connections
 - New upland walkway/promenade design considerations
- Develop preliminary opinion of probable construction cost

Task 5.1 Deliverables

- + 30% Marina Design Plans
- + Specifications Outline

Task 5.2 Permitting (DD)

The Edgewater team will first propose a regulatory pre-application meeting with the U.S. Army Corps of Engineers (USACE) and the Wisconsin Department of Natural Resources – Waterways (WDNR)

We will prepare a joint permit application based on the results of preliminary engineering and submit it to the USACE and the WDNR. The permit application will include engineering

drawings and quantity calculations for the proposed plans as required by the agencies. Prior to submittal, a draft of the permit package will be submitted to you for review and comment. You will also be asked to sign a Letter of Authorization (LOA), allowing Edgewater to apply for the permits on your behalf.

Edgewater staff will coordinate with regulatory agencies on an as-needed basis. It is typical during the state/federal permit process for agencies to request additional calculations, clarifications, drawing revisions, or other supplemental information. We will be responsible for timely responses to these requests. Edgewater will make all reasonable attempts to meet the agency’s requirements, however, permit issuance will be subject to the agency’s jurisdictional determination and discretion.

Task 5.2 Deliverables

- + Permit application with drawings
- + Permit correspondence, clarifications, etc.

Task 5.3 Final Engineering (CD)

Upon receipt of permit approvals (or indications they are forthcoming), and at your direction, we will prepare the final design and construction drawings, specifications, and cost estimates necessary to bid and construct the marina project elements. These documents will be stamped and certified by Wisconsin licensed professional engineers, landscape architects, and architects as appropriate and affixed with the appropriate seals and signatures. The final engineering will include design calculation, drawings, and other studies needed to execute the proposed elements of construction.

We will plan to meet with you at key points in the development process to review plans, and address comments. We anticipate 50% and 90% review submittals with review periods and follow up meetings, at minimum.

Task 5.3 Deliverables

- + 50%, 90%, and 100% Drawings and Specifications
- + Meeting agendas/summaries

Task Six

Site Engineering and Design

Task 6.1 Preliminary Site Engineering, Landscape Architecture and Permitting (DD)

Using the consensus plan and phasing strategy, record plan information, site information collected, and the characteristics of the site, the Edgewater team will initiate design of the upland site, including underground utility systems, roads, parking areas, green space, fencing, lighting, security and access control systems, and other site components outlined in the RFP and the consensus plan. Design will be advanced to approximately 30% level and an updated construction cost estimate will be developed.

During this phase, we will also seek necessary local and state approvals for infrastructure (potable water distribution, wastewater, soil erosion and sedimentation control, etc.) and for zoning and site improvements. We anticipate upland approvals will be straightforward, as the site use will remain consistent with existing uses.

Task 6.1 Deliverables

- + 30% Site Design Plans
- + Specifications Outline
- + Local/State permit/Approvals submissions

Task 6.2 Final Site Engineering and Landscape Architecture (CD)

Either concurrently for prior to Final Marina Engineering, we will prepare the final site design and construction drawings, specifications, and cost estimates necessary to bid and construct the site project elements. These documents will be stamped and certified by Wisconsin licensed professional engineers, landscape architects, and architects as appropriate and affixed with the appropriate seals and signatures. The final engineering will include design calculation, drawings, and other studies needed to execute the proposed elements of construction.

We will plan to meet with you at key points in the development process to review plans, and address comments. We anticipate 50% and 90% review submittals with review periods and follow up meetings, at minimum.

Task 6.2 Deliverables

- + 50%, 90%, and 100% Drawings and Specifications
- + Meeting agendas/summaries

Task Seven

Architectural Design Services

Task 7.1 Schematic Design (SD)

Edgewater site and building design services are organized into the tasks needed for implementation of four new buildings at the Harbor Centre Marina along with the immediately surrounding site. The architectural scope of work includes new construction for:

- The Restaurant and Event building of approximately 12,000 sf
- The Marina Administration Building of approximately 8,000 sf
- The Fuel Service Building at approximately 2,900 sf
- The Great Lakes Education Building of approximately 9,000 sf – excluded from this scope of work, but acknowledged as a future phase
- Uplands and Park area future phase buildings could include a new gateway Bathhouse near the playground and a new North Restroom as noted in the Master Plan but not included in this proposal.

Accomplishing building design for each building type is a sequential series of design services beginning with Schematic Design to define each respective Program and Scope of work. Once defined, the design process continues with Design Development, Construction Documents, Bidding Assistance and Construction Administration.

Based on the information gathered in Tasks One, Two, and Three, we will define the Building Program and prepare up to three (3) schematic design concepts that explore alternative strategies to best accomplish planning for each building. Specific tasks for each building include:

- Schematic design level Floor Plans and Exterior Elevations for owner review
- Owner and architect progress meetings at 50% and 90% SD completion
- 3D digital model views as needed for design clarification and visualization
- Review and Compliance with local Zoning Ordinances, State of Wisconsin Building Codes including ADA design requirement and Energy efficiency codes
- Adjacent Site requirement considerations for ADA compliant accessibility for parking and pedestrian pathways, user connections to green spaces and docks and exterior lighting for safety and ambience.
- Utility Considerations, including Potential Renewable Energy Generation Strategies
- Final schematic design meeting with owner and stakeholders for Schematic Design approval
- Initial Schematic Design level Cost Estimate.

Task 7.1 Deliverables



- + Building Program of uses, space sizes and scale
- + Schematic design (30%) completion architectural plans
- + Graphics required for specific presentations
- + Meeting agendas and minutes

Task 7.2 Design Development (DD)

The Design Development phase of work refines the approved Schematic Design plans to include selection options for materials, fixtures, components, and mechanical, electrical, and plumbing systems to be incorporated into the project. Building sections, construction types for assembly and structural systems are developed as we define the character and scale to

be in harmony with the Harbor Centre Marina branding and identity. Specific tasks will include:

- Approved Schematic Design plans are developed into a digital base set for collaboration with consultant design disciplines:
 - Civil engineering, site drainage, parking, and utility connections
 - Landscape design and accessibility
 - Structural system design
 - Mechanical, Electrical and Plumbing systems coordination
- Design development revisions integrate the following to the plans:
 - Foundation and structural framing systems
 - Building sections for construction assembly
 - Integration and design of Mechanical, Electrical and Plumbing systems
 - Exterior Elevations are studied for material choices and details
 - Interior space planning design in collaboration with proposed users
 - Door, Window, Hardware and Interior finish design and schedules initiated
- 3D model views as needed for clarification and presentation
- State of Wisconsin Building Code, ADA, Permitting and local Zoning review are documented
- (2) Progress meetings at 50% and 90% DD completion
- 50% Written Specification
- 50% complete Cost Estimate
- Quality Assurance/Quality Control project review and coordination
- Owner / Stakeholder sign off and approval to proceed to the next documentation stage.

Task 7.2 Deliverables



- + Design Development full set of plans
- + DD level cost estimate
- + 3D digital model images for design clarity as needed
- + Meeting Minutes

Task 7.3 Construction Documents (CD)

This phase of work will advance the approved design development documents into construction documents suitable for the construction of a complete and functional project. The construction documents include necessary specifications, details, and information to be issued for permitting, bidding, and construction. All documents will be comprehensive and well-coordinated between disciplines. The work will be completed to the standard of care utilizing professional skills and judgment which can be reasonably expected of licensed architects and engineers performing similar services. Drawings will be sealed by licensed professionals as required by the State of Wisconsin for a commercial building.

Task 7.3 Deliverables



- + Bid Documents and Construction/Building Permit acquisition plans to include:
 - + Cover Sheet of municipality required information and project location
 - + Site plans as required for new construction sealed and signed by an engineer licensed in the State of Wisconsin and defined in Task Four
 - + Existing Site Conditions and Demolition plan
 - + Proposed dimensioned site plan with all property, zoning, topography information within the limits of the identified project area
 - + Proposed Civil infrastructure including Utilities, Stormwater management, Zoning requirements, Site access and circulation within the limits of the identified project area and connections to surrounding areas of the park
- + Existing and Proposed hardscape, landscape, lighting, and site furnishing plans within the limits of the identified project area
- + Architectural Building plans, sealed and signed by a licensed professional in the State of Wisconsin
 - + Foundation plan and details coordinated with the Structural Engineer
 - + Structural framing and roof plans coordinated with the Structural Engineer
 - + Main floor plan
 - + Second floor plan as needed
 - + Elevator plans if needed to be provided by professional consultant
 - + Roof plans
 - + (4) Building Elevations with material selections and colors
 - + (2) Building sections, wall sections and required details
 - + Interior elevations and details
 - + Reflected ceiling plan if required
 - + Finish schedule with material selections, colors, and details
 - + Window, Door and Hardware schedules and details
 - + Mechanical, Electrical and Plumbing and if required, Automatic Fire Suppression Sprinkler system plans in coordination with professional consultants
 - + Technology , Data, Security integration coordination with consultants or GC as required
 - + Compliance with all local and state building codes, zoning, permitting and ADA guidelines
 - + Written specifications
- + Up to four (4) Owner and Architect meetings for progress review at 50% and 90% plan completion and final reviews
- + Updated cost estimate
- + Meeting agendas and Minutes

Task Eight

Bidding Assistance

We will prepare and package appropriate bid documents, host pre-bid meetings, attend bid openings, review bids, and assist with negotiation of contractor contracts. The Edgewater Resources team will comply with applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities applicable to its performance under this contract, and with other programs as may be required by governmental and quasi-governmental authorities for inclusion in the contract documents.

During the bidding process our team will provide formal responses and clarifications to bidders through formal addenda, as needed. As bids are received, we will prepare tabulations, review of submittal packages, bid alternate evaluation, and recommendations for award.

Based upon the project scope, we anticipate that a minimum of four bid/contract packages will be required, including the following:

- Building Demolition and Environmental Remediation, if required
- Site Infrastructure
- Buildings (3)
- Marina

Task 8 Deliverables



- + Attendance at four (4) pre-bid meetings
- + Attendance at four (4) bid openings and internal bid review meetings
- + Response to RFI's/Addenda preparation
- + Attendance at Post-bid/Best Value Interviews, as requested
- + Bid Award Recommendations (4)

Task Nine

Construction Administration

We will support the construction process by acting as your representative observing the progress of the work during construction for conformance with the drawings, permits, and specifications as requested. Our Team will review construction submittals and maintain submittal logs. We will provide clarifications to the drawings through the RFI process and provide bulletins as needed for the Contractor to price changes to the work for your consideration. This proposal anticipates a construction period of approximately 18 months, during which we will make periodic site visits as requested and attend progress meetings. The project team will stay involved and be available to answer questions and solve problems via calls and MS Teams meetings throughout construction. This task will be dependent upon the final project scope established in Task Three.

Specifically, following substantial completion of the marina electrical system, our Team will provide an electrical commissioning site visit to verify the operation of the marina electrical system including compliance with NEC and Technical Specifications including GFPE trip levels and trip timing. This electrical testing effort will be led by Gary Loftis of Maffett Loftis Engineering who has extensive experience in the design and testing of these systems and also is a member of the NEC code making panel for Article 555 Marinas and Boatyards.

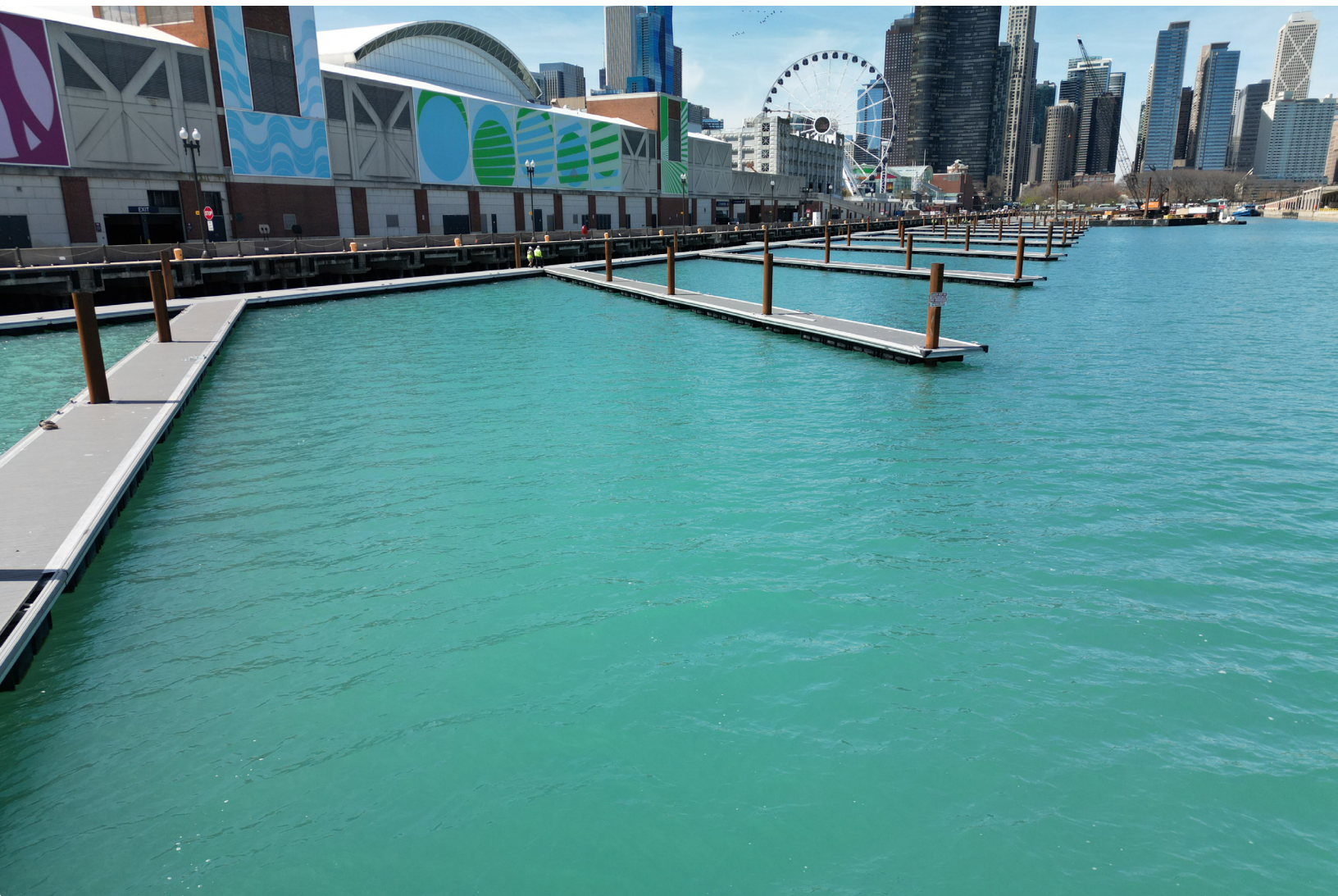
Tasks include but are not limited to:

- Attendance at four (4) Pre-Construction Meetings per construction contract
- Attend construction progress meetings either in person or online via Teams, monthly at minimum
- Respond to RFI's, Create Bulletins, Review Shop Drawings, Change orders, and Punch list close out
- Attend one (1) Punch List meeting on site per construction contract (anticipate 4 contracts)
- Marina electrical commissioning and report
- Meeting Agendas and Minutes

Task Ten

Full-Time Resident Construction Administration

Because of the size and complexity of the initial phase, as outlined in the RFP, and due to prior indications that a full-time representative may be required, this task is included as an option. The estimated fee for 18 months of full-time site representation has been provided in the fee section of this proposal. This scope anticipates that a senior level, experienced expert will be present on site to maintain a constant presence and continuity between the multiple construction contracts. The full time representative would track the overall progress of each contract, verify that required reporting and tracking is completed, and will be ultimately responsible for coordinating the engineering and architecture teams and the contractors on site, and for providing communications regarding progress, construction issues, and other critical events between the consultant team, contractor and the City.



Design Schedule (5h)

As noted in Addendum I, the project schedule will be fluid and will be based upon the design and approval process.

We will coordinate with you to confirm a schedule and milestones that achieve the City's goals. As the plans and phasing are confirmed, and as permits and investigations are completed, we will actively communicate timelines and work with you to adjust on the fly throughout the design, bidding, and construction phases.

The following represents an initial schedule for discussion as we kick off the process.



2025 Q3 ————— ✓

- Kickoff Meeting
- Site investigations and survey
- Schematic Design
- Review/confirm Master Plan and Phasing Analysis
- Begin Consensus Building

2025 Q4 ————— ✓

- Continue Consensus Building
- Design development
- Regulatory/permit processes
- Funding Strategies/Grants

2026 Q1 ————— ✓

- Continue permit processes
- Final design/construction documents

2026 Q2 ————— ✓

- Continue final design/construction documents
- Bidding/contracts- demo, site/civil, underground utilities

2026 Q3 ————— ✓

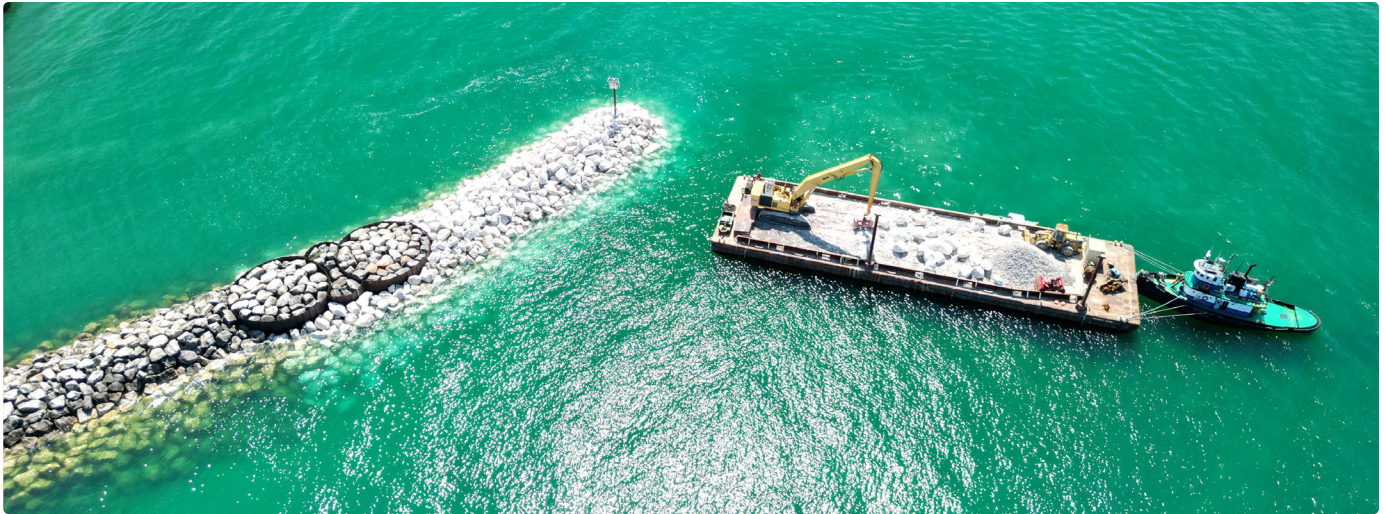
- Bidding/contracts- buildings, marina
- Construction- demo, site/civil, underground utilities

2026 Q4 ————— ✓

- Construction- buildings, marina, site/civil
- Construction/Closeout 2027

6. Construction Costs





Construction Costs

Cost Control Methods and Cost Estimates

In the preparation of cost estimates (opinions of probable construction cost), we utilize bid data from similar recent projects within the region and our knowledge of construction costs. Early in the process, during concept and schematic design, line items typically represent larger components of the project lumped into fewer lines. And contingency percentages will be higher, based upon a higher level of uncertainty. As the design process advances, line items will become more granular and will begin to represent the bid items that will eventually be advertised to potential bidders. The contingency percentage will be lowered as the design is confirmed, and data is gathered.

We will constantly apply new cost data from other projects to ensure estimates represent the latest data available. In some cases, we will reach out to known contractors or manufacturers to confirm the cost of various components.

As we approach the bidding process, we often include alternative bid items to allow flexibility in the award amount. These alternative bid items could be deductive alternates such as alternative decking to save cost if needed or additive alternatives such as expanded scope items if bids come in lower than expected. Ultimately, if bid amounts exceed budgets, we are capable of 'value engineering' various items in an effort to reduce costs. This process of value engineering is not ideal, but we have the knowledge and experience to determine how the project can be modified if necessary, while preserving function.

Market and construction costs have been volatile in recent years, and it will be important to plan for the uncertainty. We are working on marina projects daily and our continuous exposure to the marine construction market, as well

as the adjacent upland construction market allows us to provide the best possible cost insights for estimating purposes. In the past few years, despite the unpredictable nature of the construction market, many of our estimates have been within five percent of the awarded bid amount, and some have been within one percent.

Steps in Our Standard Change Order Procedure

During construction, changes are the only constant. As the need for changes arise, we will work with the contractor to identify the following:

- Why is modification needed?
- What is the cost implication?
- What is the schedule implication?

Once the above evaluations have been made, we will collaborate to minimize the cost and/or schedule impacts to the project, evaluate the contractor's request, and present options to you with a recommendation.

Project Construction Cost Understanding

Although not specifically requested in the Request for Proposals, the Edgewater team has reviewed the scope items outlined for inclusion in the initial phase and isolated the estimated construction costs reported in the marina Master Plan. Individual line items and unit costs have not yet been independently verified.

The following is a result of the exercise and has been relied upon for the budgeting of the fees presented herein. As outlined above in the Work Process section of this proposal, the Edgewater team will work to confirm the plan and phasing strategy with the City, and subsequently will adjust the scope of work and fees to best meet the City's intended plan.

I. SITE PREPARATION AND INFRASTRUCTURE	QTY	UNIT	UNIT COST	FULL BUILD	RFP - PHASE I
Site Preparation and Demolition	1	LS	\$1,500,000	\$1,500,000	\$1,500,000
Mobilization	1	LS	\$2,500,000	\$2,500,000	\$1,250,000
Site Water Service	1	LS	\$100,000	\$100,000	\$100,000
Site Electrical Service and Lighting	1	LS	\$2,250,000	\$2,250,000	\$2,250,000
Site Sanitary Sewer	1	LS	\$300,000	\$300,000	\$300,000
Site Stormwater	1	LS	\$75,000	\$75,000	\$75,000
Site Preparation and Infrastructure Subtotal:				\$6,725,000	\$5,475,000

2. MARINA	QTY	UNIT	UNIT COST	FULL BUILD	RFP - PHASE I
Marina and Admin Building	8,000	SF	\$600	\$4,800,000	\$4,800,000
Fuel Service and Park Maintenance Building	2,900	SF	\$400	\$1,160,000	\$1,160,000
Docks	36.210	SF	\$75	\$2,715,750	\$2,715,750
Wave Attenuator Dock	6,225	SF	\$150	\$933,750	\$933,750
Floating Marina Buildings	4,676	SF	\$500	\$2,338,000	
Floating Marina Buildings Platform	14,465	SF	\$75	\$1,084,875	
Piling	240	EA	\$5,000	\$1,200,000	\$1,200,000
Gangways (1-60ft. ADA, 3-35')	1	LS	\$95,000	\$95,000	\$95,000
Dredging	1	LS	\$375,000	\$375,000	\$375,000
Fuel System Replacement	1	LS	\$350,000	\$350,000	\$350,000
Pump Out	1	LS	\$35,000	\$35,000	\$35,000
North Sand Deposit Stone Cover	1000	TON	\$110	\$110,000	
Marina Subtotal:				\$15,197,375	\$11,664,500

3. PROMENADE	QTY	UNIT	UNIT COST	FULL BUILD	RFP - PHASE I
Pathways	170,886	SF	\$10	\$1,708,860	\$854,430
Kiosks	870	SF	\$300	\$261,000	
Parking Lot	10,095	SY	\$35	\$353,325	\$353,325
Restaurant and Event Building	12,000	SF	\$700	\$8,400,000	\$8,400,000
Water Education Building	9,900	SF	\$700	\$6,930,000	
Site Stormwater	1	LS	\$75,000	\$75,000	\$75,000
Promenade Subtotal:				\$17,728,185	\$9,682,755

4. GATEWAY PLAZA, PARK SPACE, BEACH	QTY	UNIT	UNIT COST	FULL BUILD	RFP - PHASE I
Plaza Building	4,500	SF	\$500	\$2,250,000	
Ice Ribbon	1	LS	\$1,500,000	\$1,500,000	
Splash Pad	1	LS	\$650,000	\$650,000	
Pickleball Courts	8	EA	\$30,000	\$240,000	
Lottie Cooper Move and New Site	1	LS	\$750,000	\$750,000	
North Beach Restroom Building	1,000	SF	\$400	\$400,000	
Playground	1	LS	\$1,250,000	\$1,250,000	
Plantings	1	LS	\$150,000	\$150,000	
Shade Structure	2,300	SF	\$500	\$1,150,000	
Gateway Plaza, Park Space, and Beach Subtotal:				\$8,340,000	

5. ROTARY PARK	QTY	UNIT	UNIT COST	FULL BUILD	RFP - PHASE I
Kayak Launch	1	LS	\$10,000	\$10,000	
Concessionaire Kiosk	100	SF	\$300	\$30,000	
Shelter	1000	SF	\$500	\$500,000	
Rotary Park Subtotal:				\$540,000	

6. PIER AT PENNSYLVANIA	QTY	UNIT	UNIT COST	FULL BUILD	RFP - PHASE I
Pier	1	LS	\$3,500,000	\$3,500,000	
Pier at Pennsylvania Subtotal:				\$3,500,000	
PROJECT CONSTRUCTION SUBTOTAL:				\$52,030,560	\$26,822,255

7. ADDITIONALS	QTY	UNIT	UNIT COST	FULL BUILD	RFP - PHASE I
Mobilization				\$2,601,528	\$1,341,113
Construction Contingency 30%				\$15,609,000	\$8,047,000
Design and Permitting Contingency 20%				\$10,406,000	\$5,364,000
Additional Subtotal:				\$28,616,528	\$14,752,113
PROJECT TOTAL:				\$80,647,088	\$41,574,368

7. Legal Concerns



Arbitration & Insurance

Arbitration Claim

A Demand for Arbitration was brought by Edgewater Resources to Respondent Ryan Leestma for Breach of Promissory Note and Confession of Judgment. The Promissory Note is dated August 9, 2024 with arbitration clause incorporated by reference. The claim is for non-payment for work performed under contract for design, engineering, permitting and bidding assistance for Adelaide Pointe, a mixed-use and marina development in Muskegon, MI.

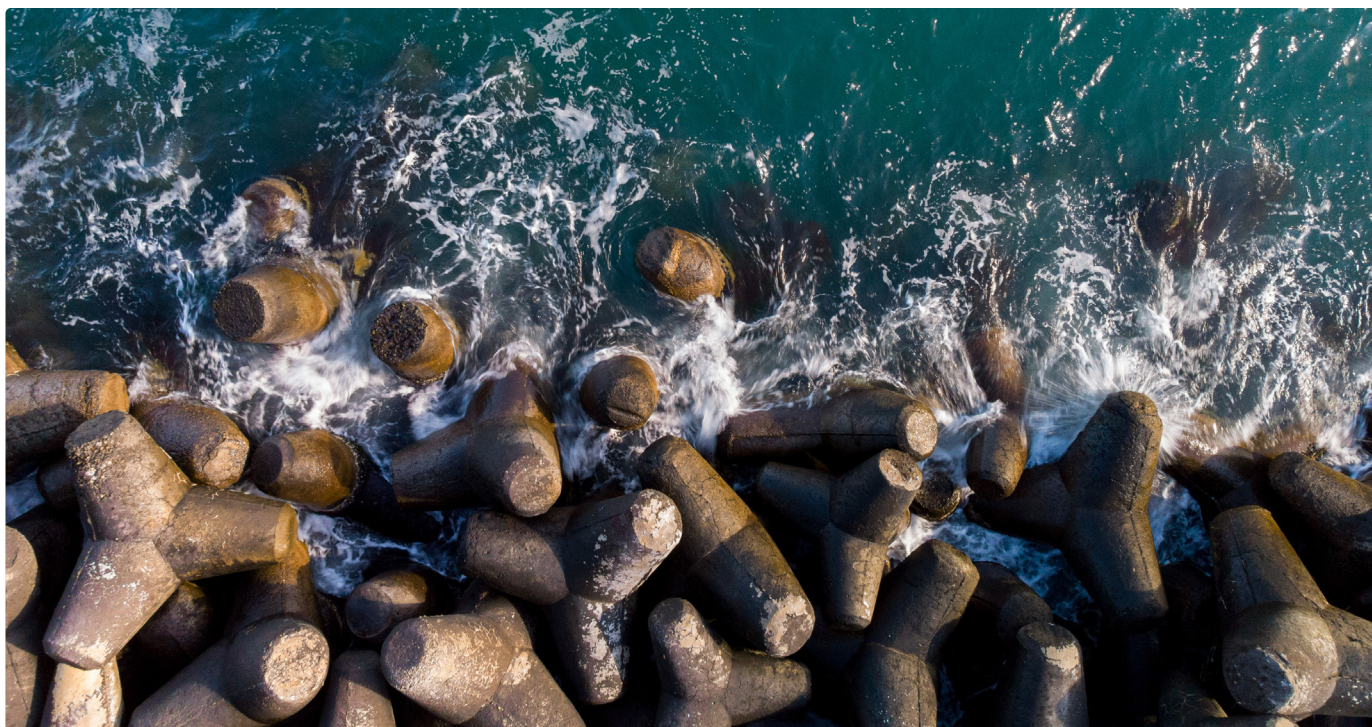
Insurance Information

We have provided a certificate of insurance that shows our General and Professional Liability insurance coverages on the following page.

Acknowledgement of Addendum

Addenda 1 & 2

Edgewater Resources hereby acknowledges receipt of Addenda 1 and 2.





CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
06/18/2025

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Insurance Management Service, Inc. 501 Main Street PO Box 88 Saint Joseph MI 49085-0088	CONTACT NAME: Gretchen French PHONE (A/C, No, Ext): (269) 983-7101 FAX (A/C, No): (269) 983-7109 E-MAIL ADDRESS: gfredch@imsinsuranceagency.com																					
INSURED Edgewater Resources LLC Po Box 960 Saint Joseph MI 49085-0960	<table><tr><th colspan="2">INSURER(S) AFFORDING COVERAGE</th><th>NAIC #</th></tr><tr><td>INSURER A:</td><td>Cincinnati Insurance Co.</td><td>10677</td></tr><tr><td>INSURER B:</td><td>The Accident Fund</td><td>10166</td></tr><tr><td>INSURER C:</td><td>Admiral Insurance Company</td><td>24856</td></tr><tr><td>INSURER D:</td><td></td><td></td></tr><tr><td>INSURER E:</td><td></td><td></td></tr><tr><td>INSURER F:</td><td></td><td></td></tr></table>	INSURER(S) AFFORDING COVERAGE		NAIC #	INSURER A:	Cincinnati Insurance Co.	10677	INSURER B:	The Accident Fund	10166	INSURER C:	Admiral Insurance Company	24856	INSURER D:			INSURER E:			INSURER F:		
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INSURER C:	Admiral Insurance Company	24856																				
INSURER D:																						
INSURER E:																						
INSURER F:																						

COVERAGES

CERTIFICATE NUMBER: 2025

REVISION NUMBER:

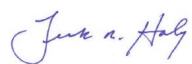
THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR VWD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:			ENP 0672826	12/01/2024	12/01/2025	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 500,000 MED EXP (Any one person) \$ 10,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000 \$
A	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> NON-OWNED AUTOS ONLY			ENP 0672826	12/01/2024	12/01/2025	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
A	<input checked="" type="checkbox"/> UMBRELLA LIAB <input type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED \$ RETENTION \$			ENP 0672826	12/01/2024	12/01/2025	EACH OCCURRENCE \$ 8,000,000 AGGREGATE \$ 8,000,000 \$
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N N	N/A	100011944	03/02/2025	03/02/2026	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000
C	Professional & Pollution Liability			EO00006273702	05/07/2025	05/07/2026	Per Claim \$2,000,000 Per Aggregate \$4,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER

CANCELLATION

City of Sheboygan 828 Center Ave. Sheboygan WI 53081	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE 
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ACORD 25 (2016/03)

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8. Fees



Fees

The fees outlined here are based on the original scope of construction outlined in the request for proposal.

As we recognize the final scope of construction may need to be adjusted to match available budgets, **we propose to complete the schematic design phase for the lump sum budget outlined below.** Upon clarification of the final scope of construction, we will work with you to adjust the fees outlined below from Design Development onward to correspond with the final scope and project phasing.

1. Schematic Design (SD)			
		SD Subtotal	\$200,000
2. Design Development (DD)			
Design Development			\$818,677
Investigations			\$111,823
	a. Environmental - Lead and Asbestos Evaluation (3 buildings)	\$25,645	
	b. Environmental – Tank System Closure and Reporting	\$16,178	
	c. Geotechnical Site Investigation Budget (8 Borings)	\$25,000	
	d. Geotechnical Basin Investigation Budget (6 Borings)	\$45,000	
DD (Site, Marina, Architectural) Subtotal			\$930,500
3. Construction Documents, Bidding, Contracts (CD)			
		CD Subtotal	\$1,453,500
4. Construction Administration and Construction Closeout (CA)			
		CA Subtotal	\$646,000
		DD, CD, CA Subtotal	\$3,030,000
		Task 1-4 Subtotal	\$3,230,000

The above Scope includes part-time, on site construction administration. If a full-time representative is needed on site during the entire elapsed time of construction, the following Task 5 is presented. This option is offered for budgetary information based upon the information requested in the RFP and subsequent addenda.

5. Full Time, On Site Construction Administration (18 Months)		
Full Time CA Subtotal		\$820,320
Task I-5 Subtotal		\$4,050,000

For the scope described above, all reimbursable costs are anticipated to be \$30,000 or less, in addition to the totals shown.

The following estimated fees for the alternative scopes of work are offered for consideration in addition to the fees described above. The fees below assume the alternatives are authorize in addition to the full scope of work for the initial phase. Please note that the amounts below represent fee estimates based upon the data included in the RFP and Master Plan documents. If alternate scopes of work are authorized, the engineering, architecture, and construction administration scopes of work will be incorporated into the work process tasks as defined herein.

Alternate A Estimated Fee		
Education Building Design and Construction Administration		\$832,000
Alternate B Estimated Fee		
Marina “Floating” Buildings Platforms (Platforms only, Buildings Excluded)		\$108,000

FEE SCHEDULE

BASIS OF COMPENSATION

The compensation of Edgewater Resources, LLC for professional services is based upon hourly rates as indicated below.

TITLE	RATE
Sr. Principal	\$254.00
Principal	\$230.00
Sr. Architect	\$204.00
Sr. Engineer	\$204.00
Sr. Landscape Architect	\$204.00
PM Engineer	\$181.00
Project Landscape Architect	\$181.00
Project Engineer	\$165.00
Project Director	\$153.00
Landscape Designer	\$153.00
Staff Engineer	\$153.00
Administration	\$115.00
Intern	\$103.00

Please Note:

Expenses connected with the work such as travel, vehicle rental, equipment rental, subsistence, lodging, etc., will be charged at cost.

Vehicle mileage will be charged at the standard, federal, per mile rate.

Printing expenses will be charged as follows: standard b/w format prints /copies @ \$0.25/page; large format b/w prints/copies @ \$0.40/sq.ft.

Large format color prints/copies range from \$5-15 / l.f. for non-mounted/non-laminated b&w or color prints.

Drone services will be charged at \$20 per hour, or \$100 per day.

Wave sensor usage will be charged at \$100 per week, or \$300 per month.

Any labor expended in support or performance of expert services and litigation activities shall be 1.5 times the above standard hourly rates.

Any labor expended associated with numerical wave modeling software shall be charged at 1.25 times the above standard hourly rates.

Collins Engineers, Inc.
Engineering Services Table of Rates
Effective Date Range 01/01/2025 - 12/31/2025

Classification	Rate / Hour	Overtime Rate / Hour
Principal Engineer (E8)	\$ 492.00	\$ 492.00
Principal Engineer (E7)	\$ 382.00	\$ 382.00
Senior Engineer (E6)	\$ 300.00	\$ 300.00
Senior Engineer (E5)	\$ 256.00	\$ 256.00
Engineer (E4)	\$ 226.00	\$ 226.00
Engineer (E3)	\$ 195.00	\$ 195.00
Junior Engineer (E2)	\$ 162.00	\$ 162.00
Junior Engineer (E1)	\$ 140.00	\$ 140.00
Senior Engineering Technician, Designer (T3)	\$ 179.00	\$ 223.75
Senior CAD Technician (D3)	\$ 165.00	\$ 206.25
Technician (T2)	\$ 136.00	\$ 170.00
CAD Technician (D2)	\$ 131.00	\$ 163.75
Junior CAD Technician (D1)	\$ 93.00	\$ 116.25
Junior Technician (T1)	\$ 95.00	\$ 118.75
Project Administrator	\$ 137.00	\$ 137.00
Project Planner	\$ 159.00	\$ 198.75
Clerical (C2)	\$ 131.00	\$ 163.75
Clerical (C1)	\$ 92.00	\$ 115.00

Underwater Investigation	Rate / Day	Overtime Rate / Day
Diver - All Classifications (Additional Labor Cost Per Day at diving site in diving or standby capacity.)	\$ 300.00	\$ 300.00

Rope Access Investigation	Rate / Day	Rate / Day
Rope Access Technician - All Classifications (Additional Labor Cost Per Day at site where Rope Access Techniques are used.)	\$ 165.00	\$ 165.00

Expenses will be billed as follows:

Travel & Lodging	Actual Cost
Sustenance	Current GSA ME&I Per Diem Rates
Printing and Reproduction	Actual Cost
Wi-Fi, Cell phone, and Shipping	Actual Cost
Equipment Rental	Actual Cost
Expendable Supplies	Actual Cost
14 ft. Boat and Motor	\$80.00 per day
15-19 ft. Boat, Motor, and Trailer	\$110.00 per day
20-21 ft. Boat, Motor, and Trailer	\$150.00 per day
22-25 ft. Boat, Motor, and Trailer	\$190.00 per day
Mileage: Automobile	Current IRS rate per mile plus tolls

Testimony and Preparation for Testimony before Courts, Commissions, etc.

Officer-Principal Engineer	At Above Standard Rates
All Other Classifications	

Payment is due within thirty days after submission of invoices.

ENGINEERING INGENUITY AND SOLUTIONS; REALISTIC, HONEST ANSWERS

MLE 2025 HOURLY RATES

TITLE	HOURLY RATE
Principal Engineer, Engineer of Record	\$275
Project Manager	\$225
Engineer	\$175
Designer	\$125
Draftsman	\$105
Clerical	\$85

MLE Overtime Policy

We will pay for overtime work according to local and national laws.

If you are an exempt employee, you are not entitled to overtime pay by federal law. In the event that an exempt employee must work overtime, we will set a cap for overtime hours at 10 hours per week to prevent overworking and burnout. MLE may elect to pay overtime for certain projects or situations.

If you are a non-exempt employee, you are entitled to overtime pay of one and a half times your wage. Please record your overtime hours accurately, so we can calculate your pay correctly. We also ask you to work overtime only after it's authorized by your supervisor to make our record-keeping easier.



Ramboll's schedule of hourly rates by employee classification is presented in Table 2 below.

Table 2: Ramboll Project Labor Rates

Labor Category	Classification	Labor Rate
Project Principal (Principal)	L9	\$325
Senior Managing Consultant	L8	\$315
Managing Consultant	L7	\$285
Sr. Consultant 2	L6	\$240
Sr. Consultant 1	L5	\$220
Engineer/Geologist (Consultant 3)	L4	\$200
Engineer/Geologist (Consultant 2)	L3	\$175
Field Staff (Consultant 1)	L2	\$150
CAD/GIS Drafting	L1	\$150
Administrative Support	L1	\$120

Notes:

1. Reimbursable expenses for travel and accommodations, equipment charges, priority mail, overnight delivery, and outside reproduction and courier services will be billed at cost, plus 15 percent.
2. Project-related communications, to include in-house telephone, facsimile, postage, and reproduction, computers, data compilation, and Computer Aided Design and Drafting ("CADD") will be charged at 6 percent of total labor charges.
3. A 15% mark-up will be added to all subcontracted services (laboratory, private utility locator, surveyors, etc.).

Table 3: Field Equipment and Project Expenses

Description	Units	Unit Cost
PID (10.6 ev lamp)	day	\$70
X-ray fluorescence (XRF) analyzer	day	\$610
Ramboll owned vehicle charge	day	\$125
Personal Vehicle Mileage (federal rate) ¹	mile	\$0.70

Notes:

1. Based on project needs, distance to site and other factors, Ramboll may elect to rent a vehicle for site visits and field work. Typical vehicle rental rates, based on our company preferred provider fee schedule are between \$40 and \$70/day. Fuel expense is additional.

9. Grant Writing



Successful Grant Applications

We've worked with local municipality representatives, state agency coordinators and federal program directors to ensure a successful process and outcome for each project type.

Experience in Successful Grant Applications related to Public Marinas:

Project Name	Location	Grant Amount	Program	Purpose of Funding	Dept. or Agency Contact
Sebewaing Harbor/ Marina	Sebewaing, MI	\$10,535	MI Waterways	Engineering grant and study	DNR Waterways - Curt Wemple WempleCI@Michigan.gov
Hessel Marina Phase I	Clark Township, MI	\$100,000	MI Waterways	Hessel Marina Breakwall, Boater Amenity Building	DNR Waterways - Curt Wemple WempleCI@Michigan.gov
Port Sanilac Marina	Port Sanilac, MI	\$22,500	MI Waterways	Engineering grant and study	DNR Waterways - Curt Wemple WempleCI@Michigan.gov
Hessel Marina Preliminary Engineering	Clark Township, MI	\$15,000	MI Waterways	Engineering grant and study	DNR Waterways - Curt Wemple WempleCI@Michigan.gov
Lake St. Clair Metropark North Marina	Harrison Township, MI	\$294,000	MI Waterways	Preliminary Engineering	DNR Waterways - Curt Wemple WempleCI@Michigan.gov
South Haven Northside Marina Phase I	South Haven, MI	\$785,799	MI Waterways	Emergency Repairs	DNR Waterways - Curt Wemple WempleCI@Michigan.gov
Harrisville Harbor	Clark Township, MI	\$47,100	MI Waterways	High Water Damage repairs	DNR Waterways - Curt Wemple WempleCI@Michigan.gov
South Haven Northside Marina Phase 2	South Haven, MI	\$750,000	MI Waterways	Emergency Repairs	DNR Waterways - Curt Wemple WempleCI@Michigan.gov
Harrisville Harbor	Clark Township, MI	\$500,000	MI Waterways	High Water Damage repairs	DNR Waterways - Curt Wemple WempleCI@Michigan.gov
Gull Lake Ramp and Skid Pier	Prairieville Township, MI	\$128,803	MI Waterways	Ramp and Skid Pier replacement	DNR Waterways - Curt Wemple WempleCI@Michigan.gov
Harrisville Harbor	Clark Township, MI	\$499,475	MI Waterways	North and South dock replacement and repairs	DNR Waterways - Curt Wemple WempleCI@Michigan.gov
Hessel Marina	Clark Township, MI	\$19,500	MI Waterways	Renovation preliminary engineering	DNR Waterways - Curt Wemple WempleCI@Michigan.gov
New Buffalo Marina	New Buffalo, MI	\$15,000	MI Waterways	Preliminary Engineering	DNR Waterways - Curt Wemple WempleCI@Michigan.gov
South Haven Southside Marina	South Haven, MI	\$100,000	MI Waterways	Electrical upgrades	DNR Waterways - Curt Wemple WempleCI@Michigan.gov
New Buffalo Marina	New Buffalo, MI	\$500,000	MI Waterways	Broadside dock and erosion control	DNR Waterways - Curt Wemple WempleCI@Michigan.gov
F. Grant Moore Phase 2	Boyne City, MI	\$500,000	MI Waterways	Marina improvements	DNR Waterways - Curt Wemple WempleCI@Michigan.gov
New Buffalo Marina	New Buffalo, MI	\$189,481	MI Waterways	Marina electrical improvements	DNR Waterways - Curt Wemple WempleCI@Michigan.gov
New Buffalo Marina	New Buffalo, MI	\$500,000	MI Waterways	Dock improvements: Non-emergency	DNR Waterways - Curt Wemple WempleCI@Michigan.gov
F. Grant Moore Phase 2	Boyne City, MI	\$500,000	MI Waterways	Marina improvements: Non-emergency	DNR Waterways - Curt Wemple WempleCI@Michigan.gov
City of St. Clair Marina	St. Clair, MI	\$35,000	MI Waterways	Preliminary Engineering	DNR Waterways - Curt Wemple WempleCI@Michigan.gov

Continued...

Grant Name	Location	Grant Amount	Program	Purpose of Funding	Dept. or Agency Contact
Orleans	New Orleans, LA	\$22,436	CVA	Pump-out facilities	LA Wildlife & Fisheries Melissa Longman mlongman@wlf.la.gov
South Shore	New Orleans, LA	\$22,436	CVA	Pump-out facilities	LA Wildlife & Fisheries Melissa Longman mlongman@wlf.la.gov
Chicago Gateway Harbor	Chicago, IL	\$3,100,00	Boating Infrastructure	Tier II- Marina engineering, permitting and construction	U.S. Fish & Wildlife Service Paul Van Ryzin paul_vanryzin@fws.gov
Port Rochester Marina	Rochester, NY	\$1,450,000	Boating Infrastructure	Tier II- Marina engineering, permitting and construction	U.S. Fish & Wildlife Service Paul Van Ryzin paul_vanryzin@fws.gov
East Tawas Marina	East Tawas, MI	\$1,300,000	Boating Infrastructure	Tier II- Marina engineering, permitting and construction	U.S. Fish & Wildlife Service Paul Van Ryzin paul_vanryzin@fws.gov
Ottawa Beach Marina	Holland, MI	\$642,917	Boating Infrastructure	Tier II- Marina engineering	U.S. Fish & Wildlife Service Paul Van Ryzin paul_vanryzin@fws.gov
Seneca Lake Marina	Seneca Lake, NY	\$649,732	Boating Infrastructure	Tier II- Marina engineering	U.S. Fish & Wildlife Service Paul Van Ryzin paul_vanryzin@fws.gov
Discovery Center and Pier	Traverse City, MI	\$847,955	Boating Infrastructure	Tier II- Marina engineering	U.S. Fish & Wildlife Service Paul Van Ryzin paul_vanryzin@fws.gov
DeRivera Park Trust	Put-In-Bay, OH	\$1,430,886	Boating Infrastructure	Tier II- Marina engineering, permitting and construction	U.S. Fish & Wildlife Service Paul Van Ryzin paul_vanryzin@fws.gov
Lexington State Harbor	Lexington, MI	\$1,200,000	Boating Infrastructure	Tier II- Marina engineering, permitting and construction	U.S. Fish & Wildlife Service Paul Van Ryzin paul_vanryzin@fws.gov
Spring Lake Transient Marinas	Spring Lake, MI	\$956,152	Boating Infrastructure	Tier II- Marina engineering, permitting and construction	U.S. Fish & Wildlife Service Paul Van Ryzin paul_vanryzin@fws.gov
South Padre Marina	South Padre Island, TX	\$181,125	Boating Infrastructure	Tier I- Marina engineering	U.S. Fish & Wildlife Service Paul Van Ryzin paul_vanryzin@fws.gov
Cape Vincent Marina	Cape Vincent, NY	\$599,866	Boating Infrastructure	Tier II- Marina engineering, permitting and construction	U.S. Fish & Wildlife Service Paul Van Ryzin paul_vanryzin@fws.gov
Waukegan Port Authority	Waukegan, IL	\$12,000,000	Rebuild Illinois	Port engineering and construction	Illinois DOT Greg Lupton greg.lupton@illinois.gov
Gooseberry Point Launching Pier	Lummi Nation, Bellingham, WA	\$11,000,000	Port Infrastructure Dev.	Launching pier engineering, permitting and construction	MARAD DOT Xochitl Castañeda xochitl.castaneda@dot.gov

Edgewater has assisted in securing and administrating over \$30,000,000 in additional funding for private marinas, shoreline stabilization and coastal studies grant funding.

10. Alternate



Alternative Scope of Work



Alternate A Education Building Design and Construction Administration

The Edgewater team will include design and construction administration services for the 9,900 square foot Education Building, in addition to the full scope of work offered herein. Specific related scopes of work would be incorporated into the Work Process tasks described on the previous pages.

Alternate B Marina “Floating” Building Platforms (Platforms Only, Building Excluded)

The Edgewater team will include design and construction administration services for the two building platforms (14,465 square feet total) which would eventually support the two marina buildings shown in the Master Plan. The design and construction administration of the buildings themselves are excluded from this alternative scope item. Specific related scopes of work would be incorporated into the Work Process tasks described above.



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