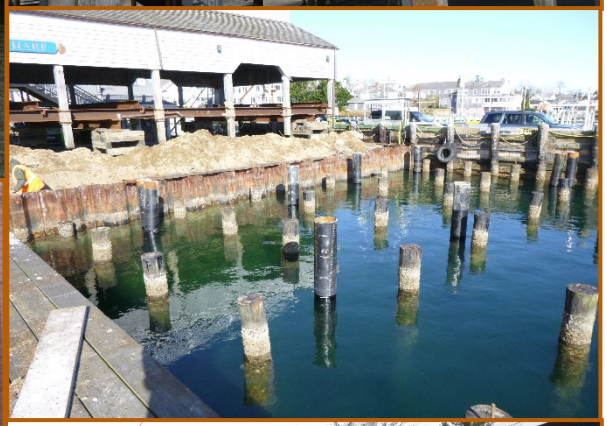
RESPONSE TO REQUEST FOR PROPOSAL

CHILDS ENGINEERING
CELEBRATING 50 YEARS
1970 – 2020

Town of Chilmark, Massachusetts
Response to Request for Proposal
Menemsha Commercial Fishing Dock and Replacement Project
Phase 1: Certified Engineering Assessment and Report

Submittal Date: January 28, 2022



Childs Engineering Corporation
Town of Chilmark, Massachusetts
Response to Request for Proposal
Menemsha Commercial Fishing Dock and Replacement Project
Phase 1: Certified Engineering Assessment and Report Proposal

TABLE OF CONTENTS

Introduction

Childs Engineering Corporation (Childs) is pleased to submit this qualifications package to provide engineering services in connection with Phase 1 of the Menemsha Commercial Fishing Dock Replacement Project presented by the Town of Chilmark. Childs will use our dedicated team of marine structural engineers to conduct a site investigation and survey, to compile a report outlining the current conditions of the Menemsha Dock and provide recommendations for future remediation. Childs has based our response to the request for proposal on the following documents presented for the project:

- Request for Proposal – January 4, 2022
- Addendum 1 – January 25, 2022

Company Overview

Childs was founded in 1970 and provides waterfront engineering services in the areas of inspection, planning, permitting, analysis, and design of new structures and repairs to existing structures for Federal, State, and Local Governments as well as private clients. Located in Bellingham, Massachusetts, Childs has dedicated itself to providing engineering services in the specialized field of marine structures and as such has a high level of expertise and experience in the following:

- Project Planning and Operational Analysis
- Conceptual Design and Feasibility Studies
- Waterfront Facilities Inspection (Topside and Underwater)
- Geotechnical Studies and Investigations
- Structural Analysis and Design
- Topographic and Hydrographic Surveying
- Wave Analysis
- Shoreline Protection Analysis and Design
- Vessel Mooring and Berthing Analysis
- Preparation of Construction Drawings and Specifications
- Value Engineering and Cost Estimating
- Permitting from Local to Federal Level
- Construction Services including Quality Control (QC)/Quality Assurance (QA) Inspections

Our more than 50 years as a waterfront structural engineering firm has provided us with extensive experience on a wide variety of marine structures. This experience involves all forms of shore protection, bulkheads, seawalls, piers, wharves, floating docks, marine terminals including cargo and passenger, moorings, instrument support structures, shipyard facilities including drydocks and shiplift systems, a variety of marine parks and recreation facilities including public and private beaches, as well as public and private marinas.

In addition to our investigation, study, and design capabilities, Childs is well versed in sustainable design, coastal resiliency, and operations in and around the working waterfronts of New England. Our approach is to always take into account coastal resiliency and future sea-level rise and to design structures that not only meet our clients' goals today and, in the future, but enable them to be able to adapt to future changes without having an extensive or expensive upgrade of their structure.

Project Approach

Childs will approach this project with the same level of expertise and attention to detail we do on all projects, to provide the Town of Chilmark with a clear and concise understanding of the conditions present at the site and the necessary steps for future improvements to ensure long term success. Our final goal is to provide the Town with a clear set of attainable goals for the Menemsha Dock.

Task A – Familiarity with Existing Site

The kickoff task for Childs to complete will be to become familiar with the site. Childs has already taken one step towards this goal by visiting the dock on a recent site visit to another Island based project. During our visit, we took photos and gained an understanding of the site to allow us to more adequately bid the job and appreciate its unique challenges. A continuation of this task will be to have preliminary discussions with the Town on the current needs and future use considerations that may allow us to focus our attention when conducting our field investigations. For this task, we have carried a cost for the project manager to attend one on site meeting with the Town. We would make every effort to piggyback this site visit with our ongoing work on the Island to reduce overall costs.

Task B – Topside Inspection

For this task, Childs will deploy a team of 2 engineers to conduct a topside inspection of the dock and surrounding area. The topside crew will conduct a thorough inspection of the easily accessible structural components, utilities, and adjacent structures using methods outline in the *Waterfront Facilities Inspection and Assessment Manual - MOP130* published by the American Society of Civil Engineers. The inspection team will also take spot elevation shots of the structure which will aid in our understanding of the current conditions and future needs. We will make every effort to inspect as far down the vertical elevation of the structure as possible but realize that much of it will remain out of reach to our topside crew. Given the small tidal fluctuation, low structure elevation, and interference with additional structures we anticipate that a diver will be able to access portions of the structure more easily even if they lay above water.

Tasks C & D – Preliminary Reporting

After completion of our topside inspection, Childs will compile all the necessary information to develop a preliminary report outlining the existing conditions. This report will include an overview of the structures, their function, existing conditions, estimated life expectancy, and a summary of repair recommendations. The life expectancy estimation will be based on our knowledge of the current use and future plans as conveyed to Childs.

Task E – Underwater Inspection

Childs is uniquely qualified to conduct an underwater inspection of the structure because most of the engineers we employ are also certified commercial divers. Our experience in the field of waterfront inspection is unparalleled having focused our attention on this method of investigation for decades and literally written the book on the subject. All diving will be done in accordance with OSHA standards by engineers who hold current Association of Diving Contractors commercial certifications and under the supervision of a qualified diving supervisor. The Childs team is not hindered by inclement weather as we are capable of conducting our dive operations safely and comfortably during all seasons. Our standard operating procedure for waterfront inspections includes both underwater and topside inspections during

the same effort and we can offer an economy to this phase of the project by conducting the underwater and topside portions of the inspection during the same site visit. We are confident that

Tasks F, G, H, & I – Update and Finalize Inspection Report

Immediately following the field investigation efforts, Childs will complete our assessments of the structures by furnishing the final version of the waterfront facility inspection and assessment report. The final version of the report will include options for repairing or replacing the waterfront structures based on our discussions with the Town centered on future operational capabilities. We also anticipate in participating in multiple meetings following the report submission to discuss our findings and provide clarity on the recommendations.

Childs is capable of commencing the field operations within 2 weeks of a notice to proceed and therefore is capable of completing all of the above-mentioned tasks by the desired completion date of April 1, 2022.

Project Costs

For the tasks outlined above in the sequence presented in the RFP, Childs proposes a cost of $29,600. As stated previously, Childs is capable of completing the topside and underwater inspections in one site visit and anticipates the need for an underwater inspection based on our understanding of the site and structures. If Childs is able to complete both inspection tasks in one field visit, our proposed cost can be reduced to $26,000. If it is determined that an underwater inspection is not required, we anticipate a total project cost of $17,900.

Project Staffing and Management

To accomplish the tasks on schedule and within budget, Childs will use its in-house and multi-disciplinary team of qualified engineers and surveyors. As Childs has focused solely on waterfront projects for over 50 years, all our personnel are very familiar with inspections, surveying, design, permitting, and construction. As a small company, we support project teams ensuring the engineers producing inspection report, structural analysis, and designs, are the same engineers that took part in the inspection and permitting of the project. This allows us to maintain a streamlined approach to projects guaranteeing efficiencies through familiarity. While we understand Phase I of this project only includes inspection, assessment, and reporting, we intend to aggressively pursue maintaining our involvement in this project as it progresses through different phases.

We intend to use some of our key engineers for the project. Our team will be anchored by Chief Waterfront Engineer, David Porter, P.E., who has over 50 years of experience with waterfront structural engineering. Mr. Porter will be both a technical resource and provide QC oversight throughout the project. No information will leave our office until it has been reviewed by the Principal-in-Charge and QC Manager, Charlie Roberts, P.E., D.PE. Mr. Roberts is a distinguished engineer in the field of waterfront structural engineering having heavily participated in the engineering community which has guided him to lead local professional engineering chapters and become a member of the *Waterfront Facility Inspection Committee* in charge of developing and publishing the *Waterfront Facilities Inspection and Assessment Manual - MOP130* published by the American Society of Civil Engineers. Our project approach will allow Mr. Roberts to be heavily involved in the overall scope of the project to ensure the team of engineers executes the job accurately and on time.

The project will be led by our Project Manager, Lead Surveyor, and Dive Supervisor, Andrew Nilson, P.E. who has conducted extensive waterfront inspections throughout Massachusetts, New England, and around the country and has been with Childs for more than 12 years. Mr. Nilson has conducted hundreds of waterfront inspections with follow-up reporting including recommendations for repairs or remediation that have often led to permitting endeavors and design of repairs or new structures. He is the lead engineer of multiple Island-based projects that have been completed in the past or are currently ongoing. He is extremely familiar with the challenges of planning for future use of structures in Massachusetts and sensitive resource areas having conducted them for many dozens of projects including in highly valued community areas. Mr. Nilson will be involved in the project from the signing of the contract to the final invoicing including participating in and overseeing all field work, assessments, and reporting. Mr. Nilson will manage the capable staff of engineers available to participate in the project. The engineers at Mr. Nilson's disposal include structural, ocean, geotechnical, and civil engineers, all capable of adding specific expertise to the project scope.

The above key personnel are available to work on the project immediately and will be supplemented with additional engineers as needed to keep the project on schedule. The resumes for the key personnel mentioned above can be found in Appendix A.

Related Experience

Childs has a significant amount of experience in the inspection, assessment, and design of all manner of waterfront structures. We have provided these services in places close to our office in the Commonwealth and as far away as Japan. With our work for Federal clients such as the US Navy, US Coast Guard, NOAA, and National Park Services we have inspected a significant number of similar structures and provided additional analysis, design, and permitting services. We have also accomplished a significant amount of inspection and design projects for local waterfront facilities along the Massachusetts coastline and inland site for State agencies, local governments, and private clients. For examples of Massachusetts based projects, please refer to Appendix B of this package.

Having focused solely on waterfront projects for over 50 years has enabled us to be able to offer our clients the same team to take the project from the initial stages all the way through to project completion. With us, the same engineers that start the project and have their hands physically on the structure below water during the inspection will be the same ones that provide reporting, conduct alternatives analysis, obtain permits, analyze, and design all the way through to the construction oversight. This provides a huge level of consistency throughout the project that allows for the project to be more streamlined and meet tight project schedules.

Our work on waterfront projects within New England has made us extremely familiar with the working conditions that will be presented in this project such as vessel traffic, wave actions, and varying environment conditions such as changing water levels and shoreline changes. We will bring all this experience to the project as we understand how important this is to get correct and have a solid long-term solution too.

Summary

The Childs team is committed to performing services in the specialized field of marine structures and ocean engineering at the highest level of quality and expertise. We feel we can provide the required services based on:

- Highly motivated, qualified, and competent team and staff members.
- Extensive experience of existing staff in permitting, analysis, design and construction support to waterfront structures including revetments for 50 years.
- Our commitment to quality.
- Our capacity to begin any and all tasks assigned immediately.

We believe our reputation for providing the highest quality permitting and engineering service; the preparation of quantitative engineering designs resulting from waterfront inspections; preparation of clear, concise, construction documents for repair or new design; and our ability to provide accurate cost estimates is the finest available. We pride ourselves in our ability to perform tasks as they are assigned, on time, and within budget.

We appreciate the opportunity to present our qualifications for consideration, and hope we are able to demonstrate our skills to the Town of Chilmark.

APPENDIX A
RESUMES

DAVID PORTER, P.E.

CHILDS ENGINEERING CORPORATION | CHIEF WATERFRONT ENGINEER

Mr. Porter has 50 years of experience in the field of marine structures and coastal engineering. He has managed projects for the US Navy and US Coast Guard as well as many private and public sector clients throughout the United States and abroad. He has assisted clients in the planning, permitting, inspection, and design of a wide range of marine structures and facilities for a diverse group of marine engineering projects. Mr. Porter's design, planning and permitting expertise is illustrated by his involvement as project manager or principal-in-charge of the representative projects listed and ensuring that each project is delivered at the highest standards possible.

EDUCATION
B.S. Civil Engineering, Union College

REGISTRATIONS
Structural/ME, MA, NY PE/RI

YEARS EXPERIENCE
Total: 50

CERTIFICATIONS
ADCI Commercial Diver – SSA Diver #17535; Diving Experience = 50+ Years

PROFESSIONAL ORGANIZATIONS
American Society of Civil Engineers (ASCE); American Society for Testing and Materials (ASTM); Boston Society of Civil Engineers (BSCES); Boston Harbor Association-Past Trustee

SELECTED RELEVANT PROJECT EXPERIENCE

Design of Repairs at Phinney's Harbor Boat Ramp, Bourne, MA Was the principal-in-charge/project manager for the design of a reinforced concrete boat ramp (double-wide) and associated access floats. The boat ramp replaced an existing deteriorated facility at an adjacent location. Engineering services included design and preparation of plans and specifications for the construction including the installation of the steel sheet pile ramp perimeter, floating docks, and floating dock access, and in association with the permit consultant, developed the proposed dredge footprint and sections.

Reconstruction of the Woods Hole Ferry Terminal, Woods Hole, Martha's Vineyard and Nantucket Steamship Authority, Woods Hole, MA Was the principal-in-charge providing the waterfront structural engineering components for the Steamship Authority. Services including support during the permitting process, design and development of construction documents for 3 new operational ferry slips, new shoreline, bulkhead and accessible design for passenger boarding.

Rehabilitation of the Town Pier, Scituate, MA Was the principal-in-charge overseeing all aspects of the project which included engineering services from initial topside and underwater inspection to final construction phase close out in order to rehabilitate the pier that was reconstructed in the 1980's. The pier provides the infrastructure and berths to support the commercial fishing industry in the region. Engineering services consisted of performing a review of the existing pier conditions; acquiring environmental permits; production of construction plans, specifications and cost estimates; providing construction bidding services; and providing construction inspection and final project close out services. Final design was reviewed and approved by Town, state, and local officials, and a representative of the commercial fishing industry.

Redevelopment of Pier 4, Boston, MA Was the principal-in-charge/project manager as consultant to Tishman Speyer designed the seawall stabilization and new Harborwalk piers and sea steps. The seawall stabilization included rip rap support, sheet pile toe strengthening seawall reconstruction. Childs also supported the environmental permit effort at the local state and federal level.

Design of Seawall Stabilization and Marine Structures at Clippership Wharf, Boston, MA Was the principal-in-charge/project manager for the design of the seawall stabilization and the fixed piers. The seawall stabilization is provided by a new stone rip rap perimeter around the old seawalls. In addition to stabilizing the seawalls and creating the "living shoreline", the project includes the installation of two floating docks.

Fan Pier Park, Boston, MA Was the principal-in-charge/project manager as a consultant to The Fallon Company planning of the schematic design and permitting of the waterfront and marine components of this project. The project site is a two-acre, publicly accessible waterfront park being constructed in two phases.

CHARLIE ROBERTS, P.E., DIPLOMATE, PORT ENGINEERING

CHILDS ENGINEERING CORPORATION | PRINCIPAL-IN-CHARGE

Mr. Roberts' entire career has been focused around the water in particular with underwater inspection and design of repairs. His wide range of experience includes underwater and topside inspections, structural assessment, bridge load ratings, permitting, dredging, topographic and hydrographic surveys, sediment sampling, marina design and layout, as well as storm water management and design. He has managed projects for the US Navy and US Coast Guard as well as private and public sector clients throughout the United States and abroad.

EDUCATION

MSc, Offshore and Ocean Technology, Cranfield University, UK

BEng (hons) Civil and Coastal Engineering, University of Plymouth, UK

REGISTRATIONS

Civil/CT, ME, MA, NH

YEARS EXPERIENCE

Total: 20

CERTIFICATIONS

ADCI Commercial Diver - SSA Diving Supervisor #566250448; MEDIC First Aid CPR, AED, and O2 Administration; OSHA 30 Hour Construction Safety #36-601291196; OSHA Authorized Climber/Rescuer; Emergency Medical Technician - Basic (MA); HYPACK Single Beam and Side Scan Survey; Boating Safety Certification; FHWA-NHI 130055 Safety Inspection of In-Service Bridges; FHWA-NHI 130091 Underwater Bridge Inspection; Diving Experience = 20+ Years

PROFESSIONAL ORGANIZATIONS

Coasts, Oceans, Ports, and Rivers Institute (COPRI); American Society of Civil Engineers (ASCE); Boston Society of Civil Engineers (BSCES); Society of American Military Engineers (SAME); Past VP, COPRI Boston; Member of COPRI Ports and Harbors Committee

SELECTED RELEVANT PROJECT EXPERIENCE

Inspection and Assessment and Design of Repairs at Harvard University, Newell and Weld Boathouses, Boston, MA Was the project manager for a topside and underwater inspection of the two Harvard University boathouse pier structures, Newell Boathouse and Weld Boathouse. The facilities are located on opposite banks of the Charles River. The inspection was intended to assess the general underwater and above water condition of each structure and to suggest recommended repairs. The inspection included the evaluation and extent of deterioration of the accessible components of the fixed and floating pier structures and associated members. In addition to the inspection and assessment, Childs was tasked with providing engineering services for the pier pile repairs at the Newell Boathouse.

Seawall and Pier Waterfront Repairs - USCG Aid to Navigation Team Bristol, Bristol, RI Was the project manager, engineer-of-record, and a dive inspector performing a design level inspection of the waterfront structures. The inspection assessed the condition and evaluated the components of the concrete and granite block seawall and concrete pier. Also, due to settlement of the concrete slab behind the seawall, additional investigation was done which included drilling through the concrete slab and taking measurements of the voids and inserting a micro camera into the void to estimate the types of materials remaining and the size and extent of the voids. Childs provided construction oversight and QA/QC inspections above and below water to make sure the project was completed correctly. Mr. Roberts led the design team and compiled the construction documents.

DCR Building Condition Survey Assessment, Upper Lock Gate House and Boathouse, Cambridge, MA Was the project manager for an underwater inspection of the Massachusetts Department of Conservation and Recreation (DCR) Boathouse, built in 1910, located adjacent to the Museum of Science Parking Garage at the intersection of Monsignor O'Brien Highway and Land Boulevard, Cambridge, MA. The inspection was conducted by a team of Childs' engineer divers led by Mr. Roberts, a registered professional engineer. The inspection was intended to assess the general underwater condition of each structure and to suggest recommended repairs.

Design of Marine Elements at 99 Sumner Street, The Mark at DeNormandie Wharf, East Boston, MA Was the project manager providing engineering services for the marine structure elements of the project. During the initial phase of work, Childs assisted in the development of the waterfront design. This included but was not limited to designing shoreline stabilization, Harborwalk structure design. Childs utilized a current accurate topographic and bathymetric survey of the shoreline and near shore zone in Boston Harbor. In addition to the schematic design, Childs assisted the permitting team in developing plans for submittal to the various permitting agencies. Childs provided input in the environmental impact of the marine facilities.

ANDREW NILSON, P.E.

CHILDS ENGINEERING CORPORATION | PROJECT MANAGER

Mr. Nilson's professional career has focused on structural engineering with most of his experience being on waterfront structures. Mr. Nilson has been involved in and overseen the inspection, reporting, analysis, and design of new and repairs to existing waterfront structures including revetments, piers, seawalls, and ramps for residential, private industrial, and government clients. His extensive experience in permitting and licensing of waterfront projects includes working with local, State, and Federal environmental permitting agencies. Mr. Nilson's role as a Project Manager includes coordinating project procedures and managing relationships with Clients, subcontractors, and construction personnel.

EDUCATION
B.S. Civil Engineering, University of Massachusetts, Dartmouth

REGISTRATIONS
Civil/MA

YEARS EXPERIENCE
Total: 12

CERTIFICATIONS
ADCI Commercial Diver - SSA Diving Supervisor #8058; Restricted Surface Supplied Air Diver (DCBC); MEDIC First Aid CPR, AED, and O2 Administration; HYPACK Certified Hydrographer; OSHA 30 Hour Construction Safety #36-601378488; Boating Safety Certification; Roadway Worker Protection-Trained; FHWA-NHI Course No. 130101 - Introduction to Safety Inspection of In-Service Bridges; FHWA-NHI Course No. 130056 Safety Inspection of In-Service Bridges; Diving Experience = 10+ Years

PROFESSIONAL ORGANIZATIONS
American Society of Civil Engineers (ASCE); Boston Society of Civil Engineers (BSCES); Society of Military Engineers (SAME)

SELECTED RELEVANT PROJECT EXPERIENCE

New Pier Design – Edgartown Yacht Club, Edgartown, MA As the project manager, Mr. Nilson was the engineer in charge of all project efforts. Prior to start of design, Mr. Nilson conducted multiple on-site inspection both below and above water. He also provided engineering services for the replacement of the existing timber pier with a new steel and timber pier. The original timber pier supported historical buildings that were to be preserved and placed on the new pier. The new pier was built using modern construction designs and techniques providing a more usable facility for the Edgartown Yacht Club. In addition, the new pier elevation was increased to ensure flooding was minimized during rising sea levels. Mr. Nilson led the design team that produced all necessary construction drawings, specifications, cost estimates, and obtained all necessary permits by working with local, state, and federal agencies. Mr. Nilson also assisted the clients in obtaining a qualified contractor for the specialized construction tasks and attending onsite weekly construction meetings.

Repairs to Regatta Point Facility, Worcester, MA Was the lead conditions inspector, surveyor, and engineer-of-record in the design and permitting process providing engineering services consisting of performing a condition survey of the existing public boats and lake access facility. The facility includes floating docks, a seawall, boat ramp, and two pile supported piers. The conditions survey was accompanied by a hydrographic and topographic survey of the immediate area. After conducting the survey and inspection, Childs developed designs with multiple repair and replacement alternatives and associated construction costs for the structures based on the condition survey. Once MassDCR approved repair and design options, Childs obtained all necessary local, State, and Federal permits; develop bid documents and provide construction services. Mr. Nilson acted as the lead conditions inspector, surveyor, and engineer of record in the design and permitting process. Mr. Nilson also provided construction services such as reviewing submittals and attending regular site inspections and meetings.

Memorial Wharf Waterfront Rehabilitation, Edgartown, MA Mr. Nilson is currently the project manager and lead engineer in charge of developing a replacement plan for the existing structures at Memorial Wharf in Edgartown. The project began with a topside and underwater inspection of the existing timber pier and steel bulkhead. After reporting was conducted, he worked with the Town to develop a comprehensive rehab project to ensure the property remains viable for decades to come. These efforts included replacing much of the structure while designing unique repairs to remaining structures such as raising the bulkhead elevation. Mr. Nilson also obtained all necessary permits and licenses to move ahead with the construction. Construction is currently ongoing but is being overseen by Edgartown personnel and Mr. Nilson and Childs through regular site visits and inspections.

APPENDIX B
REPRESENTATIVE PROJECTS

DESIGN OF NEW PIER AND WATERFRONT FACILITY

Edgartown Yacht Club

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Childs Engineering has a long history of conducting inspections, reporting results, and developing repairs to the pier and waterfront facility at the Edgartown Yacht Club. Childs worked with the Club over many years to develop a plan to replace the pier while maintaining some of the existing structures including the historically registered main hall building.

Childs worked extensively to obtain all necessary local, state, and federal permits that required in depth reviews by the permitting agencies and multiple public hearings. Upon receiving permission to proceed with the project, Childs completed a comprehensive design to replace the aging timber structure with a new steel and timber pier. The design had to utilize many unique engineering methods to overcome challenging site and structure needs.

After the design was completed, Childs helped the project team obtain a qualified marine contractor who would work in conjunction with the overall project which included rebuilding many of the buildings.

During construction, Childs played a central role on site ensuring the project was completed under a tight schedule while working heavily with multiple trades to provide the Club with a massively improved waterfront facility. The construction included supporting and protecting the historic building while developing a new foundation for it to rest on.

The final product provides the Edgartown Yacht Club with a much improved and more sustainable structure that will serve the sailing and social community for decades to come.

Client:	Edgartown Yacht Club
Location:	Edgartown, MA
Date:	2017 - 2019
Project Cost:	$3.5 Million
Point of Contact:	Rick Feldman Feldman Development richardfeldman@comcast.net 617-610-3953

Services Provided

- Waterfront Inspection
- Condition Assessment
- Technical Report Writing
- Structural Load Rating
- Geotechnical Investigation
- Cost Estimating
- Life Cycle Analysis
- Planning and Design
- Drawings and Specifications
- Permitting
- Construction Bidding
- Construction Administration Services

WATERFRONT REHABILITATION

Memorial Wharf

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CELEBRATING 50 YEARS
1970 – 2020

Childs Engineering was contacted to conduct a waterfront facilities inspection of the public use space at Memorial Wharf in Edgartown. Childs conducted the topside, underdeck, and underwater inspection and summarized our assessment in a report which included recommendations and rough cost estimates.

Childs worked closely with the Town to determine future needs and operational capabilities and the repairs required to achieve these goals. After developing a clear path forward, Childs proceeded with a design that would replace the existing timber pier with a steel and timber wharf and provide needed repairs to aging structures. Childs also obtained all local, state, and federal permits required for the project by submitting applications, attending hearings, and defending the project to permitting agencies. Childs also played a key supporting role in obtaining grants to fund the rehabilitation efforts.

After a robust but workable design was developed, Childs continued with the natural project progression by obtaining qualified bids from marine contractors, conducting interviews, cross-checking references, and then providing the Town with a recommendation on the appropriate contractor to complete the project.

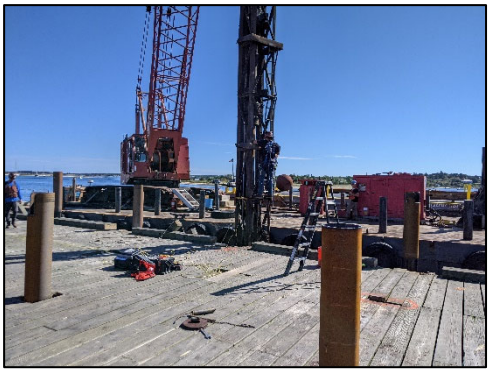
During the construction phase, Childs conducted administrative and inspection services ensuring the project remained on schedule given multiple changes due to weather or site need.

Memorial Wharf plays a central role in the local economy and required extra attention to ensure the project was executed to the Town's requirements. The rehabilitation design developed by Childs will ensure Memorial Wharf remains a sustainable and central roll in the town for decades to come.

Client:	Town of Edgartown
Location:	Edgartown, MA
Date:	2017 - 2022
Project Cost:	$3 Million
Point of Contact:	Juliet Mulinare Project Manager jmulinare@edgartown-ma.us 508-667-9123

Services Provided

- Waterfront Inspection
- Condition Assessment
- Technical Report Writing
- Structural Load Rating
- Geotechnical Investigation
- Cost Estimating
- Life Cycle Analysis
- Planning and Design
- Drawings and Specifications
- Permitting
- Construction Bidding
- Construction Administration Services



WATERFRONT REHABILITATION

Regatta Point Park Sailing Center

Client:	Massachusetts DCR
Location:	Worcester, MA
Date:	December 2016 – February 2022
Project Cost:	$1.3 million
Point of Contact:	Michael Driscoll MassDCR michael.driscoll@state.ma.us 617-626-1250

Services Provided

- Waterfront Inspection
- Condition Assessment
- Technical Report Writing
- Hydrographic Surveying
- Cost Estimating
- Life Cycle Analysis
- Environmental Permitting
- Geotechnical Investigations
- Pier Replacement Designs
- Seawall Designs

Childs Engineering Corporation was hired by the Department of Conservation and Recreation to provide engineering services at their Regatta Point facility located in Worcester on Lake Quinsigamond. The project consists of performing a condition survey of the existing floats, timber piers, concrete apron, curb, stone wall and the concrete boat ramp; performing a hydrographic survey of the immediate area; develop a design and costs for repairs and/or replacements of the structures based on the condition survey; provide permitting assistance; develop bid documents and provide construction services. The waterfront rehabilitation project includes repairs to existing structures and installation of new structures. The Regatta Point property is currently used as a public facility and provides access for a sailing and rowing program and also hosts several rowing regattas and camps for children. The purpose of the project is to maintain the existing waterfront facility by repairing existing structures or replacing structures that are beyond repair and adding ADA access where it is currently unavailable.

Childs conducted all inspection, survey, analysis, and design work with our team of in-house engineers. Childs also obtained all necessary environmental permits required to complete the waterfront rehab project.

The construction process included oversight of multiple contractors over several construction periods. Childs conducted site visits several times per week during peak construction activities and actively aided the contractor in ensuring all construction elements are accomplished on time.