



QUALIFICATIONS

2024-316 and 2024-319 MIS Main Dock Float, Dolphin Replacement & MIS Passenger Ferry Replacement February 7, 2024

Prepared for: Department of Corrections; McNeil Island Stewardship

Prepared by:

Art Anderson Associates, Inc. 830 Pacific Ave. Ste. 200 Bremerton, WA 98337 Phone: 360.479.5600 www.artanderson.com



Department of Corrections McNeil Island Stewardship February 7, 2024 FWDOC003.BP

Re: **Project No. 2024-316 + 2024-319:** MIS Main Dock Float, Dolphin Replacement & MIS Passenger Ferry Replacement

Dear Selection Committee:

Art Anderson, a SDVOSB/WA VOSB firm with 65 years of experience in engineering services, is honored to submit our proposal for the McNeil Island Dock & Ferry Redesign project. We understand the critical role this project plays in ensuring safe, reliable, and efficient ferry transportation for the Washington State Department of Corrections (DOC). Our proven track record, unwavering commitment to exceeding expectations, and deep understanding of marine environments position us as the ideal partner to bring this vision to life.

Art Anderson understands the project goals at McNeil Island Dock and Ferries:

McNeil Island Main Dock

✓ perform better during severe weather

✓ improve passenger experience during

 enable daily transportation of passengers

onloading/offloading

McNeil Island Ferry

- ✓ provide safe and reliable marine transportation service
- ✓ accommodate daily operations and emergency needs
- ✓ maximize life expectancy

Our team boasts diversified expertise in marine engineering, naval architecture, civil engineering, and construction management, enabling us to provide holistic solutions under one roof. We have a strong track record of delivering successful dock and ferry projects for clients like Kitsap Transit, Washington State Ferries, and Water Emergency Transportation Authority (WETA). Our commitment to collaboration, communication, and transparency throughout the project lifecycle ensures exceptional outcomes.

We acknowledge Amendments 001 & 002.

We are confident that our dedicated team, in-depth understanding of the project objectives, and proven track record of success make us the ideal partner for the McNeil Island Dock & Ferry Redesign project. Should you have any questions or need any further information please contact me at 360-479-5600 or <u>nanaderson@artanderson.com</u>. We are excited to work collaboratively with the DOC to deliver a solution that exceeds expectations and ensures efficient, safe, and reliable ferry transportation for years to come.

Sincerely,

Ben Anderson, PE President and CEO



STATE OF WASHINGTON

DEPARTMENT OF ENTERPRISE SERVICES

1500 Jefferson St. SE, Olympia, WA 98501 PO Box 41476, Olympia, WA 98504-1476

Consultant Selection Contact Form

Designated Point of Contact for Statement of Qualifications

For Design Bid Build, Design Build, Progressive Design Build, GC/CM & Job Order Contracting (JOC) Selections

Firm Name: Art Anderson Associates, Inc.							
Point of Contact Name & Title: Nikolas "Ben" Anderson, President and CEO							
Email: nanderson@artanderson.com	Telephone: 360-479-5600						
Address: 830 Pacific Aveune, Suite 200							
City: Bremerton	State	: WA	Zip: 98337				

Legal Name

Art Anderson Associates, Inc.

Business Status Federal SDVOSB WA VOSB OMWBE

Address 830 Pacific Avenue, Ste. 200, Bremerton, WA 98337

Phone (360) 479-5600

Contact

Ben Anderson, President/CEO nanderson@artanderson.com

Brad Ginn, VP of A&E rginn@artanderson.com



EXECUTIVE SUMMARY

Art Anderson possesses a distinguished history of shaping successful water transportation systems, built on thorough research, meticulous analysis, and practical application. Our expertise extends beyond mere experience; it's refined through years of collaboration, diverse projects, and valuable lessons learned. We translate this knowledge into solutions that optimize performance and exceed expectations.

The Washington State Department of Corrections (DOC) requires a partner with in-depth ferry terminal architecture and engineering knowledge and an unwavering understanding of marine infrastructure and repair. Art Anderson has proven experience in ferry terminal renovations and vessel redesign for esteemed clients both locally and nationally. In 2021, we played a pivotal role in the award-winning Mukilteo Ferry Terminal project, providing crucial calculations and plans for mooring, stability, and towing during the new terminal's construction.

Our team of engineers and naval architects foresee and address both immediate and long-term needs, presenting a spectrum of tailored solutions to align with the DOC's vision for the McNeil Island Dock & Ferry Redesign. Our 66-year legacy, coupled with a collaborative team boasting decades of experience in every aspect of your requirements, positions us as the ideal partner for this project.

Art Anderson:

- completed 25 terminal projects, and 27 marina projects over the last decade in the Puget Sound Region.
- provided 65 inspection projects for a variety of facilities and structures, including piers and marine structures.
- worked with WA Dept. of Natural Resources to develop options and alternatives for Lakebay Marina, a historically significant sight that has potential to be landing post for south Puget Sound travelers.
- Owner's Representative for WSF Hybrid Electric Olympic Class

Art Anderson understands the Island Mooring Float and Trestle are in fair to poor condition, showing damage and deterioration. The Barge Dock is in fair condition, with issues like soft timber decking and corroded brackets. Deficiencies include broken piles & fenders, damaged connections, and general deterioration.

Our team of engineers and ferry experts believe we are the team to help DOC make this project a success. Our team will guide the DOC through the pre-design services of developing a complete scope of work, presenting options and alternatives, estimating the potential costs associated, developing a realistic design and construction schedule, navigating the permitting expectations, getting appropriate funding, etc. In the end, the ultimate goal is about creating a safer and more reliable infrastructure for DOC to continue its mission and operations.



Expertise

Located in Bremerton, Washington, Art Anderson boasts a 65-year legacy as a multidisciplinary engineering services firm. We offer a comprehensive array of architectural, engineering, planning, research, and construction management services, seamlessly bridging the gap between land and sea.

KEY CAPABILITIES FOR DOCK & FERRY REDESIGN

Waterfront

- Inspections
- Float stability analysis
- Shore anchoring
- Piers
- Foundation Inspection & Repair
- Structural Inspection and Modification
- Seismic Improvement

Vessel

- Feasibility studies
- Hybrid power system engineering
- Regulatory (ABS, USCG, API) compliance
- Propulsion type evaluation
- Propulsion sizing and design
- Preliminary design
- Cost estimation
- Shipyard construction inspections
- Shipyard engineering phase support

Our knowledge and experience in the Puget Sound is unmatched. We have supported ferry and inland waterways vessels that navigate the Sound for decades. We first started working with WSDOT Ferries Division in 1979, performing studies and developing designs to extend the service life of the steel-electric class ferries (MV Klickitat, MV Illahee, MV Quinault and MV Nisqually) and continue that relationship today as an on-call Naval Architect/ Marine Engineering consultant firm ready to take on WSF's toughest challenges. We also support Kitsap Transit and other Puget Sound based vessel owners and operators with naval architecture, marine engineering, electrical engineering and facilities engineering support. We have held on-call contracts with Skagit County, Whatcom County, and Pierce County Ferries.

Waterfront Facilities & Ferry

Terminals Optimizing Performance and Extending Lifespan

Art Anderson specializes in planning, designing, modifying, and repairing vital waterfront infrastructure. We combine our in-depth knowledge of marine disciplines (naval architecture, marine engineering) with traditional civil, structural, mechanical, and electrical engineering expertise. This unique blend allows us to effectively address both urgent needs and complex challenges in waterfront environments. Our engineers understand how traditional landside development connects with the harsh and unforgiving marine environments. We regularly practice landside, near-shore, and over water engineering including fixed and floating structures, recreational facilities, transportation facilities, harbor protection, and working waterfronts such as boatyards and ferry terminals.

We possess a profound understanding of ferry transportation systems and terminal operations, as evidenced by our relationships with ferry clients like Kitsap Transit, Washington State Ferries, and the National Park Service. Our understanding of the entire ferry transportation system, from ferry program management, ferry terminal design and all aspects of ferry vessel programming, design, procurement, and construction management gives us the advantage. Knowing how vessels interact with the terminals and the different conditions that can cause wear and tear on the aprons and hinges will help us develop the best solution for your system.

Ferry Vessel Redesign | Designing for

Current and Future Needs

Art Anderson goes beyond engineering services; we act as a valuable strategic partner to ferry system owners. Our team of seasoned naval architecture professionals boasts extensive experience in ferry program management, vessel programming, design, procurement, and construction management.

Our experience with ferry vessels began in 1979 with the award of a major contract to prepare a 20-year service life extension study of the then-50-year-old Steel Electric



class of Washington State Ferries. Following the successful study, we were tasked with developing the plans and specifications for shipyard work and monitored the progress of construction for the four vessels in the class. Based in part on our services, Washington State Ferries was able to get more than 20 additional years of life before the storied vessels were retired in late 2007.

Since then, Art Anderson has served over 20 clients providing ferry study and design for both terminal and vessels. Some of these clients include Herron Island, Guemes Island, Kitsap Transit, King County, and private boatyards and marinas worldwide. We thrive in providing expert consulting services, empowering ferry operators to make informed decisions regarding their vessel programs. Our dedicated team possesses the knowledge and experience to tackle any ferry-related challenge you may face.

Our recent and ongoing work with Dornbush Associates and the National Park Service to develop ferry selection criteria will be a benefit to the DOC. Art Anderson recognizes the critical role that efficient ferry transportation plays in fulfilling the DOC's mission. We have a proven track record of success in collaborating with clients to determine the exact requirements needed for their unique environments. Our team will meticulously assess factors such as:

- Capacity: Passenger and vehicle requirements based on daily operations and emergency scenarios.
- Speed and Fuel Efficiency: Balancing efficient employee commutes with responsible fuel consumption and environmental impact.
- Long-Term Maintenance and Repair: Selecting a vessel design that minimizes downtime and ensures cost-effective upkeep.
- Safety and Regulations: Adherence to all applicable safety regulations and wake requirements for passenger and personnel well-being.
- Alternative Fuel Considerations: feasability and options for new fuel technologies

Selecting the right ferry design is crucial to the mission. With the ultimate goals of getting employees home faster, and being able to respond more efficiently in emergency situation, Art Anderson can help the DOC determine the best options. We are committed to providing the DOC with a safe, reliable, and efficient transportation solution that aligns with your budgetary constraints and operational goals.





QUALIFICATIONS OF KEY PERSONNEL

Committment and Collaboration

Our personnel are committed to delivering the highest levels of service and satisfaction, and seek solutions that are in the best interests of our clients. That is the distinguishing factor that sets us apart from our competition. We maintain a high level of communication and openly address challenges and issues with stakeholders. We have worked hard to develop a reputation for integrity, quality, responsiveness, and professionalism. We understand that in the end, it is these factors that determine a smooth and successful project and are the essential foundation of good design and good business.

Art Anderson's approach to projects is based on the principles of collaboration and communication. We believe that by fostering a spirit of teamwork within our own project team and with the client, we can be more responsive and deliver superior value. Our division heads and project managers are adept at managing large, multi-task contracts and small, single tasks alike.

Introducing Our Team

Brad Ginn, PE (VP of A&E) will be acting as Project Manager for the McNeil Island Dock & Ferry Redesign project. He is backed by a team of engineers specifically chosen for this project. Brad will oversee all contract administration as well as the civil/waterfront development aspect of the project. Marty McKay, PE will oversee the ferry redesign portion. He is a subject matter expert on ferry transportation planning, procurement and design. His 20 years of experience as a marine engineer and the VP of Marine Engineering has included extensive ferry design and requirements assessments.

The key members of our team have all worked together in some capacity of varying levels with some working on hundreds of taskings together. These key employees will be the team working on your project. They will be available immediately upon award of this contract and has the ability to scale up or down depending on the needs of the DOC. The following organizational chart depicts our team members and discipline lead for each competency listed in the RFQ along with support roles.







Alternative Analysis
 Feasibility Studies
 Permitting

Assistance • Scope Development

Estimating

Responsibilities

- Project management
- POC
- Project budget and schedule control

Education

BS, Civil Engineering, WSU BS, Applied Physics, Linfield College

Proposed Percentage of Time 10%



Andrew Thorsen, PE

Civil Engineer • Civil Systems

Alternative Analysis
 Marinas/Piers
 Structural Analysis

Responsibilities

- Terminal planning
- Alternative analysis
- Draft report preparation
- Load calculations

Education

BS, Civil Engineering, Carnegie Mellon University

Proposed Percentage of Time 25%

Brad is a professional waterfront civil engineer with over 20 years of marine terminal experience in general civil infrastructure project planning and design. He has held public-sector positions at the city, state, and federal level as a Project Engineer, Principal Engineer, and Project Manager. Brad is familiar with operations and facilities both on land and water. His diverse experience working with waterfront related projects including ferry terminals, marinas, and industrial installations offers immense value to this team.

Brad's Relevant Project History

- Lakeybay Marina A&E Concept Design and Planning
- SEAFAC P307 Pier Inspection
- Mukilteo Ferry Terminal
- P-834 Seawolf Class Service Pier Extension

Brad's previous work history includes time working as a civil engineer for Washington State Ferries (WSF). During his time with WSF, Brad was Project Manager and lead civil designer for several terminal projects. He also developed Design Reports, surveys for basemap development, and Produced Plans, Specs, Estimates and environmental permitting documents.

Projects include:

- Tahlequah Neil Point Dolphin Replacement
- Point Defiance/Tahlequah Terminal Upgrades
- Friday Harbor Terminal Refurbishment
- Eagle Harbor Electrical Upgrade
- Kingston Emergency Slip Reconstruction
- Clinton Phase II Dock Reconstruction
- Fauntleroy Slip Refurbishment
- Tahlequah Dolphin Replacement
- Friday Harbor Preservation



Andrew joined Art Anderson in 2016. He is a civil engineer specializing in structural engineering with an interest in seismic and other environmental loadings. Since joining the firm, Andrew has completed over 150 projects. His project experience includes designing the terminal ramps for the Kitsap Transit Bremerton-Port Orchard ferry, environmental loading and structural design work for several Floating Screen Structures, and designing mooring systems for dozens of projects. Recently, Andrew has been involved in various alternative analysis studies for different local agencies.

Andrerw's Relevant Project History

- Ramp Design for Hybrid Vessel
- South Dock Repairs Design
- Ferry and Terminal Upgrades Electrical a
- Structural & Electrical Upgrades to A St
- SEAFAC P307 Pier Inspection
- Mukilteo Ferry Terminal
- City of Mukilteo Boat Launch Float Design
- Kingston Fender Repair







- Marinas/Piers
 Alternative Analysis
- Waterfront Development

Responsibilities

- Terminal planning
- Scope of work development
- Alternative analysis
- Cost estimates
- Design and construction schedule planning

Education

MS, Civil Engineering, U of Hawaii BS, Chemistry, Villanova University

Proposed Percentage of Time 20%



Marty McKay, PE

Ferry Expert • Ferry selection criteria development

 Ferry system development and implementation
 USCG requirements for ferry vessel
 Ferry operations and maintenance cost estimating

Responsibilities

- Ferry vessel selection requirements
- Maintenance requirements
- Ferry transportation analysis
- Ferry terminal requirements
- Cost estimating

Education

BS, Mechanical Engineering, St. Martin's University AS, Engineering, Olympic College

Proposed Percentage of Time 20%

Patrick's 39-year engineering career includes environmental planning; restoration; compliance projects; facilities master planning; and the planning, design, and construction of a wide range of ventures. He brings a high level of experience with complex waterfront projects – understanding the unique requirements and conditions of these projects. He has been Project Manager or Principal-in-Charge for both civil/structural and environmental undertakings, including passenger-only ferry terminals, piers and related waterfront structures.

Patrick's Relevant Project History

- Lummi Island Ferry System- Terminal Design
- Vallejo FMF/POF Terminal
- Kitsap Transit Ferry System Upgrades Ph 1
- Guemes Island Ferry System Planning
- SEAFAC P307 Pier Inspection
- Hercules POF Terminal Planning/Design
- Chesapeake Bay Ferry Feasibility and Std
- Ferry and Terminal Upgrades Electrical a
- NPS Alcatraz Ferry Concession
- Regional POF Study
- Pier 48 POF Terminal
- Paradise Exp Ferry Terminals (Jamaica)
- Guemes Island Ferry Owner's Rep Services



As the VP of Marine Engineering, Marty has over 20 years of marine engineering and design experience. Marty has provided a wide range of ferry transportation analysis for Alaska Marine Highway Systems, Kitsap Transit, National Park Service and other ferry system operators. He is also a leader in the waterborne transportation industry. Marty led multiple ferry concession planning studies as a subcontractor to Dornbusch Associates providing operational cost analysis support and schedule and route analysis. The scope of the projects included site visits, operational and technical standards for all ferry vessels needed for the operation, and cost data for piers, vessels and routes.

Marty's Relevant Project History

- Chesapeake Bay Ferry Feasibility and Study
- NPS Alcatraz Ferry Concession
- Design New Push Boat & Barge/Single Ferry
- Design Upgrade Clackamas County Canby Ferry
- Statue of Liberty Concession
- NPS Alcatraz Ferry Concession
- Dry Tortugas Ferry Concession
- NPS Channel Island Concession Planning
- Brem POF Terminal Improvements
- POF Feasibility Study
- NPS Quick Charge Hybrid Vessels Ft Sumter
- VDOT Ferry Operations Assessment
- Vallejo Ferry Maintenance Facility/POF Term Design
- Steilacoom II Mods
- Passenger Only Service Gangway Design/Su
- Feasibility/Propulsion Study
- Kitsap Transit Vessel Spec Development
- King County Construction Cost Estimate





RELEVANT EXPERIENCE

Art Anderson has successfully planned, designed and created permit strategies for the establishment of terminals, docks, marinas, piers, waterfront parks, shoreline protection systems and other shorefront facilities. The authorization process for shoreline projects can be complex and requires specific knowledge and experience for successful completion. We have knowledge of the process and the environmental specifics related to waterfront work and have demonstrated that expertise on a number of projects. We have a complete understanding of the entire ferry system. From the terminals to the vessels, our 360-degree approach gives a unique perspective of how each vessel interacts with the terminal and allows us to see the whole picture, thus, DOC can be confident we will provide responsive, technically-sound services that meet operation objectives.



Relevancy

- ✓ Planning
- ✓ Ferry vessel selection criteria
- \checkmark Terminal requirement

Project Dates 3/2023-Ongoing

Project Budget Original - \$66,585 Final - N/A

Delivery Methods

- ✓ Feasibility Study
- ✓ Alternative Analysis

Art Anderson Staff

Marty McKay (Project Manager) Patrick Vasicek (Civil)

Point of Contact

Cambridge Systems, Inc. Michael Williamson, 954-331-6100 mwilliamson@camsys.com

Chesapeake Bay Ferry Feasibility and Economic Study | VA

Project Goals:

Establish a sustainable passenger ferry service. Fit Vessel size to specific needs. Plan terminal locations and needs.

Art Anderson, working as a subconsultant to Cambridge Systems, Inc., was awarded a project by Visit Annapolis & Anne Arundel County to develop a sustainable passenger ferry service across the Chesapeake Bay in Maryland. The goal is to connect key destinations, including Annapolis, Galesville, and 15 other cities, boosting tourism and economic development.

Art Anderson is focused on evaluating 29 potential terminal sites and their connection capabilities, alongside essential vessel functions for the potential routes. Initial data gathering involved collaborating with local agencies, followed by route planning that defined 59 potential options.

We completed a week-long site visit to visually assess all 29 locations, filling data gaps through local agency interviews. This led to a "baseline ferry system" connecting 12 cities, with the potential to expand to the remaining 6 in the future.

Currently, a detailed survey is underway to assess market potential and strategies for this initial system. This data will inform financial analyses, baseline system design (including terminals, transit, and vessels), funding strategies for construction and operation, and implementation guidance. Future efforts include developing the minimum vessel and terminal requirements and associated operational and maintenance costs to meet the projects objectives.

By April 2024, the final report will equip Visit Annapolis & Anne Arundel County with the information needed to begin implementing this transformative ferry service.







- ✓ Float Design
- ✓ State Agency
- ✓ Permitting

Project Dates 1/2023-Ongoing

Project Budget Original - \$1.1M Final - N/A

Delivery Methods

- ✓ Concept Design
- $\checkmark\,$ Alternative Analysis

Art Anderson Staff

Brad Ginn (Project Manager) Andrew Thorsen (Civil)

Point of Contact

Dept. of Natural Resources, Brittany Poirson, 360-902-1000 brittany.poirson@dnr.wa.gov

Relevancy

- ✓ Puget Sound Ferry System
- $\checkmark\,$ Terminal planning and repairs
- ✓ Vessel
- ✓ Piers
- ✓ Docks
- ✓ Mooring Structures

Project Dates 4/2021-4/2024

Project Budget Original - \$42,485 Final - \$42,485

Delivery Methods

- ✓ Designs
- ✓ Specifications
- ✓ Inspection Report

Art Anderson Staff

Brad Ginn (Project Manager) Andrew Thorsen (Civil)

Point of Contact

Kitsap Transit Ray Scott, 360-900-6937 raymonds@kitsaptransit.com

Lakebay Marina Redesign, Shoreline Restoration & Boating Facility | WA

Project Goals:

Redesign historic pier and marina to become a destination spot in the South Sound.

DNR, in partnership with the Recreational Boating Association of Washington (RBAW), wanted to provide public access and marina facilities at historic Lakebay Marina on the Key Peninsula. There was also a need to restore and protect the shoreline and aquatic habitat. Art Anderson gathered a team with the intent to design a site redevelopment plan for public recreational boating use.

This redevelopment and restoration project had unique project goals:

- Determine a preferred alternative to restore public access and boating facilities/amenities.
- Restore the aquatic environment and help control beach erosion.
- Determine the historical significance of existing structures.

The project included assessing the existing pier, developing new pier and marina layouts, developing boat launch and parking layout, beach restoration design, geotechnical investigations, surveying, and permitting. Future phases of the project will complete design of the beach, pier, marina, and boat launch facility.

Kitsap Transit Fleet & Terminals | WA

Project Goals:

Provide Architectural & Engineering (A&E) Services on an on call basis. Production of individual project scopes, schedules and cost estimates.

Art Anderson is currently serving as the engineering consultant for Kitsap Transit's Marine Terminals located in Bremerton, Port Orchard, and Annapolis, WA. Services include project management, civil engineering, structural engineering, geotechnical engineering, electrical engineering, mechanical engineering, environmental analysis and permitting, architectural design, urban/transportation planning, underwater inspections, surveying, and construction management.

Task orders under this contract include:

- Task 001 Annapolis Pier 50 Amp Pedestal Conduit
- Task 002 M-Float Crane
- Task 003 MV Finest's Wet Exhaust System Mods
- Task 004 Pier 50 Amp Pedestal Conduit
- Task 005 MV Melissa Ann USCG Survey
- Task 006 Annapolis Pier Water Line Repair
- Task 007 Annapolis Dock Electrical Upg. Inspection
- Task 008 Kingston Fender Repair
- Task 009 B-Float Fender Repair









- ✓ Master planning
- ✓ Piers
- ✓ Docks
- ✓ Mooring structures

Project Dates 2017

Project Budget

Original - \$103,273 Final - \$103,273

Delivery Methods

- ✓ Concept Designs
- ✓ Permitting
- ✓ Inspection Report

Art Anderson Staff

Patrick Vasicek (Civil) Andrew Thorsen (Civil)

Point of Contact

Port of Shelton Brandon Palmer, 360-426-1151

Oakland Bay Marina Design, Engineering, and Permitting | Shelton, WA

Project Goals:

Determine best course of action for the Port. Concept replacement design.

The Port of Shelton comprises a marina, industrial park and airport. In 2017, the Port and the Art Anderson team developed a master plan for the future marina layout and with detailed negotiations regarding land transfers to enable expansion of the marina and construction of a new breakwater. The land transfers involve contaminated properties, which are in various stages of remediation. The land transfers will enable the Port to transform both the upland and marine facilities into a beneficial amenity and a source of employment for the region. The master plan included a complete financial analysis and capital improvement/ repair/maintenance program for the marina cost center.

Art Anderson helped the Port of Shelton with an array of marine engineering related projects including support from all engineering disciplines. In support of the Port of Shelton's practice of doing most of the upgrade and repair work with in-house resources (including boat house owners), we worked with the Port staff to develop a wooden float option for fingers and non-breakwater float systems. This included developing methods for utilizing the boat ramp (and carrying out improvements to the existing boat ramp) in support of the logistics for this practice.

Dock Design: Art Anderson assisted the Port with inspection and assessment of the south dock and a new dock design for the Southern portion of the marina. The dock design has roughly 600 linear feet of pathway, multiple finger piers, and 40 pilings providing utility services to all moored vessels. This tasking involves a thorough evaluation of the existing dock, concept replacement design, and final plans, specifications, and cost estimates for construction.

New Breakwater Design: Development of a new breakwater involving civil, structural, electrical, mechanical engineering and naval architecture and subcontractors, including geotechnical engineers, environmental engineers and scientists, expert grant writers, and hydrodynamic specialists. Permitting will address both long-term (5–10-year NWP-3) permitting requirements, and full-scale NEPA documents in support of building new in-water infrastructure in navigable waters.







- $\checkmark\,$ Alternative Analysis
- ✓ Cost Estimation
- ✓ Docks
- ✓ Mooring structures

Project Dates 9/2019-1/2020

Project Budget Original - \$27,715 Final - \$27,715

Delivery Methods

- ✓ Concept Designs
- ✓ Alternative Analysis

Art Anderson Staff

Brad Ginn (Civil) Andrew Thorsen (Civil) Patrick Vasicek (Civil)

Point of Contact

Port of Bremerton Jim Rothlin, 360-813-0821

Port Orchard Marina Breakwater Feasibility & Concept Design | Port Orchard,

WA

Project Goals:

Determine best course of action for the Port. Concept replacement design. Determine potential cost.

The existing north and east breakwaters have protected vessels moored at the Port Orchard Marina for more than 46 years and now have far outlived their original design life. Replacement of this essential breakwater is the primary Marine Facilities project for the Port of Bremerton. In 2017, Art Anderson prepared a preliminary concept design of the new breakwater to replace the aged north and east breakwaters at the Port Orchard Marina. This preliminary concept design of the new breakwaters was based on existing construction costs at the time for the alternative selected in the Value Engineering (VE) study performed in 2017.

In 2019 the Port of Bremerton desired to update the preliminary information to identify current construction estimates, to clarify the cost differences between pilings and cables mooring option, and then to provide an exploration of a wider breakwater alternatives for cost comparison. The updated Preliminary Concept Design Report for Replacement of Port Orchard Marina North & East Breakwaters to include two new alternatives, to modify the other alternatives to include internal vs external pile hoops, and to provide a cost for a cable mooring system for the two new alternatives.

The client wanted to look at many options to meet their needs, particularly regarding the Port's budget. Art Anderson provided multiple concept designs for replacement of the Port Orchard Marina North and East Breakwaters. We looked at the different float sections and provided different configurations.

We developed a full report which conducted a trade-off analysis for all the alternatives and briefed the Port Commission at a public meeting. We evaluated each design against accessibility, constructability, budget constraints, public use, environmental concerns, geotechnical aspects, etc.

Each alternative presented different options that would meet the requirements of the Port while paying attention to the project scope. We delivered alternative breakwater float design with detailed cost information for each alternative, as well as presenting details on unique components, construction phasing alternatives and other project issues.







- ✓ Pier and Floating Dock
- ✓ Civil and Structural
- ✓ Cost Estimating

Project Dates 2021

Project Budget Original - \$15,886 Final - \$32,386

Delivery Methods

- ✓ Inspection Report
- ✓ Maintenance and Repair Plan

Art Anderson Staff

Brad Ginn (Project Manager) Patrick Vesicek (Civil) Andrew Thorsen (Civil)

Point of Contact

Leidos,

Jennifer Snyder, 360-394-8856 Jennifer.k.snyder@leidos.com



Relevancy ✓ Vessel requirements

Project Dates 9/2022

Project Budget Original - \$11,400 Final - \$11,400

Delivery Methods ✓ Vessel Requirements Checklist

Art Anderson Staff Marty McKay (Project Manager)

Point of Contact Dornbush Associates Casey Cornwall, 415-867-3341 ccorn@ddorn.com

SEAFAC Inspection & 10-year Maintenance & Repair Program | AK

Project Goals:

Establish maintenance the repair program to meet longevity goal.

The 32-year-old SEAFAC P307 pier is a heavily designed pier that was constructed to last for years, however, it had not been inspected during its lifetime. The Art Anderson team developed a detailed inspection plan that would take the onsite team through the entire pier in a three-day inspection. The plan also included a dive plan with our subcontractor Ballard Marine Construction. All pier inspection efforts were at Level II, which included a visual inspection, with removal of corrosion/marine growth to allow for better inspection of approximately 10% of surfaces subject to wear and corrosion.

Our inspection included the:

- Boat ramps
- Moorings
- Buoys
- Structural items, foundations, fittings
- Mechanical systems (utilities and petroleum, oil & lube (POL))
- Electrical utilities

After the inspection, we developed a Ten-Year Maintenance and Repair Program. The program prioritized the maintenance goals for the pier accounting for funding limitations. We also included a Facility Potable Water System Regulatory Analysis.



Ferry Assessments | Various Locations

Project Goals:

Provide ferry selection criteria to meet the needs to the National Parks.

Art Anderson provided professional assistance to support performance specific tasks, and to collaborate on the selection of a new vendor to provide ferry service within Everglades National Park. We provided advisory services to the Advisory Panel and assisted in evaluating the capabilities of the offeror(s). Art Anderson acted as the subject matter experts regarding the ferry vessels.

Art Anderson:

- Developed minimal vessel requirements
- Developed questions and forms for Offerors
- Created a mission tool that helped compare the different vessels
- Provided opinion on offers
- Provided cost information for vessels



LIFE CYCLE COST ANALYSIS EXPERIENCE

Art Anderson recognizes the vital role of Life Cycle Cost Analysis (LCCA) in maximizing the value of both the McNeil Island Dock and Ferry redesign projects. We align fully with the Washington State Office of Finance Management's (OFM) commitment to responsible stewardship of public resources and understand the importance of incorporating LCCA principles throughout the decision-making process.

Our team includes dedicated professionals with extensive experience in applying LCCA principles across diverse infrastructure projects. Beyond fulfilling regulatory requirements, we view LCCA as a strategic tool to optimize project value. We will not only assess initial capital costs but also consider ongoing maintenance, repair, operation, and decommissioning expenses for both the dock and ferry during their projected lifespans. This holistic approach allows us to present not just the cheapest option, but the most cost-effective solution that delivers superior long-term performance and minimizes future financial burdens for the DOC.

Floating structures are just as exposed to corrosion, wear and tear as any ship. These structures require inspections and monitoring to ensure they serve their mission for the desired design life. Predicting future repairs and costs help owners make a best value decision as repairs become more frequent and costly. Recent examples from the Art Anderson team include:

 Alaska Marine Highway System, WA State Ferries, and NOAA: Public vessels often extend the useful life beyond the original intended lifespan. Art Anderson has prepared life cycle studies to compare repair vs replacement options including estimates for future repairs and associated costs. Art Anderson is experienced with providing support for these repairs and is intimately familiar with systems affected by the wear, corrosion, and other failures associated with an extended service life.

- US Navy barges IX-527 and IX-528: Art Anderson has an ongoing support contract with the US Navy for their acoustical test barges IX-527 and IX-528. Part of our tasking included providing service life extension inspections and design modification. The life cycle of the barges' structure corrosion and preservation and system repair and equipment obsolescence is taken into consideration.
- Multnomah County Drainage District, OR: Art Anderson conducted a study to improve the drainage barge and improve its operation for Multnomah County. This study included a life cycle analysis for modifying the existing barge and building a new barge.
- Port of Portland Floating Berths, Portland, OR: Art Anderson is conducting a life cycle analysis and repair recommendations for the two floating berths for the Port of Portland.

Developing Cost Estimates

Our approach to cost estimating begins with the individuals responsible for each of the disciplines required for a specific project, those who are the most engaged with the details of project elements under their purview. Disciplinary leads work with their team to develop "bottom-up" cost estimates based on internal and industry-established cost standards for each system and subsystem involved.

Cost estimates are provided from the various disciplines and are combined into a master estimate that is reviewed by our Project Manager. Throughout a project, our team interfaces with equipment vendors and engages other industry resources (e.g., professional societies, published standards) to verify cost parameters and future availability of parts.



PAST PERFORMANCE

While these two projects, the Dock Redesign and the Ferry Redesign might seem separate from each other, the two projects are highly connected and depend on seamless communication between teams.

- New vessels need to be compatible with the both the new McNeil Island Main dock, but also the established Steilacoom Ferry Dock.
- New vessels needs to meet the current and future needs of the DOC. Passenger capacity, cargo requirements, operational efficiency, fuel efficiency, faster travel time, etc. are criteria to help determine the best solution for DOC.
- New McNeil Island Main Dock needs to perform better during severe weather with stronger materials, improved mooring systems, wave deflection features, etc.
- New McNeil Island Main Dock should facilitate safe and efficient passenger flow, considering embarkation/disembarkation procedures, accessibility features, waiting areas, etc.
- Overall, both the new dock and ferry should minimize maintenance and operational costs and increase life expectancy.

Art Anderson is a team that encompasses both waterfront infrastructure design and naval

architecture. The team leads are desks away from each other and if awarded this project they will discuss possible solutions and possible challenges as the need arises.

Our Approach

The Art Anderson team has decades of experience planning and executing ferry systems – from vessel selection to terminal infrastructure. We have developed a proven method for ensuring success on a project involving a wide range of scope. The predesign approach to replace the deteriorating McNeil Island Main Dock (and associated elements) and Ferry involves a systematic process that focuses on preliminary planning and conceptual design. This approach sets the foundation for the subsequent detailed design phase.

1. Document review and Preliminary Site Visit

The Waterfront team will conduct an assessment of the existing reports and findings. Confirm with site visit of structures, including the Main Dock, mooring float, dock house, causeway, dolphins, and associated elements. Identify critical failure points, safety concerns, and areas requiring immediate attention. Assess the impact of severe weather conditions on the current infrastructure.





The Vessel team will begin by gathering information to develop the route and mooring conditions and requirements. This is accomplished with DOC personnel interviews, site visits, and navigational chart reviews.

2. Feasibility Study

The Waterfront team will perform a preliminary feasibility study to assess the economic viability of the replacement project. Consider construction costs, potential operational savings, and long-term maintenance requirements. Evaluate the overall return on investment for the new infrastructure.

The Vessel team will develop one or more route profiles and associated minimum vessel requirements. These would be presented to key DOC personnel for review, comment, and refinement.

3. Regulatory Review

The Waterfront team will conduct a thorough review of relevant regulations and standards for marine structures, safety, and environmental considerations. Ensure that the replacement project complies with all applicable guidelines and obtains necessary permits.

The Vessel team will contact the local USCG OCMI to determine if there are any additional requirements beyond the standard Code of Federal Regulations for the specific route and service.

4. Conceptual Design

The Waterfront team will develop a conceptual design for the new Main Dock and associated elements. Prioritize design features that enhance resilience during severe weather, improve passenger safety, and meet operational requirements. Consider innovative materials and construction methods to extend the lifecycle of the infrastructure.

The Vessel team will develop a conceptual ferry design and specification to identify the speed, range, capacity, and hull type and other key features the DOC wants to ensure are included in the constructed ferry.

Both teams will utilize the Life Cycle Cost Tool to develop initial estimates for capital, maintenance, operations and replacement costs and schedules for each dock and ferry options. Also during concept design, both teams will develop scope or work, project timelines and overall budget costs.

5. Risk Assessment

Both teams will conduct a comprehensive risk assessment to identify potential challenges and mitigate associated risks. Address issues related to emergency repairs, unforeseen obstacles, and any environmental impacts during the construction phase.

6. Phased Construction Plan

The Waterfront team will develop a phased construction plan to minimize disruptions to daily transportation operations. Identify critical milestones and timelines for each construction phase. Incorporate measures to ensure continuous ferry services throughout the replacement process.

The Vessel team will develop a ferry construction schedule based on past experience with local shipyards; reaching out to industry partners when needed.

7. Construction Budget Estimation

Both teams will further refine their initial budget estimates to provide a preliminary budget estimate for the replacement project, considering construction costs, design fees, permits, and contingency funds. Ensure that the budget aligns with the economic feasibility outlined in the feasibility study.

8. Documentation and Reporting

Compile all findings, assessments, and design concepts into a comprehensive predesign report. Include detailed documentation on the proposed approach, conceptual design, and budget estimates. Present this report to relevant authorities for review and approval.

By following this predesign approach, the replacement project for the McNeil Island Main Dock and associated elements can progress to the next phase with a solid foundation, ensuring that the subsequent detailed design aligns with stakeholder needs, regulatory requirements, and the overall objectives of the DOC's operations.



Project Management Effectiveness Controlling Costs, Quality of Work, and Compliance with Schedules

We believe a comprehensive team and client communications plan, together with a structured development and inclusive review process are at the core of effectively controlling costs, maintaining work quality and adhering to schedules. To accomplish this we plan, schedule and conduct recurring meetings with the team and the client. We develop and continuously update project requirements traceability matrix to ensure the needs and expectations always remain perfectly aligned. We utilize checklists in our Quality Control processes to ensure contract documents meet quality objectives and fully conform to the project scope.

Art Anderson recognizes that public agencies, like the DOC, are often constrained by budget when implementing capital improvement projects. By practice we try to:

- Source materials locally, saving costs on distribution and delivery charges.
- Look for alternatives and innovations. Often there is a suitable design or method available where the design can be improved and done so at a lower cost.

ABILITY TO MEET THE PROPOSED SCHEDULE

Meeting a proposed schedule requires careful planning and effective strategies. Art Anderson has the capacity and systematic approach to fulfill the time constraints imposed on projects. Our schedule management approach centers on addressing issues immediately with a structured and coordinated project schedule identifying specific tasks, responsibilities, due dates and completion dates.

Some strategies we use to meet a proposed schedule include:



Define clear objectives: We work with our client and other stakeholders to clearly identify the objectives and deliverables of the project.

Set realistic deadlines: Ensure that the proposed schedule is feasible and realistic. We consider factors such as available resources, team capacity, and potential risks.



Prioritize tasks: Determine the critical tasks and prioritize them based on their importance and dependencies. Progress is reviewed by item at each design meeting with definitive actions for moving forward established and communicated.



Allocate resources effectively: Assess the resources required for each task and ensure that they are available when needed.



Use project management tools: Utilize project management tools and software to track progress, manage tasks, and communicate with team members. Work breakdown and resourcing baselines are set-up and reviewed weekly during periods of significant project activities and at least bi-monthly if activity is lower.



Monitor progress: Regularly review the progress of the project against the proposed schedule. Identify any delays or potential roadblocks early on and take proactive measures to address them. Monitoring progress allows us to make adjustments and keep the project on track.



Communicate and coordinate: Our team maintains open and effective communication with team members and stakeholders. Effective coordination and communication help manage expectations and ensure everyone is working towards the same goals.



Scope Development

Art Anderson recognizes the critical importance of aligning project scope with your objectives and budgetary constraints. During the predesign of the McNeil Island Dock & Ferry Redesign project, our dedicated Waterfront and Vessel teams will work closely with you to understand your exact vision and priorities.

Leveraging the insights from the Feasibility Study, we will collaboratively develop an initial scope of work statement that outlines the key project deliverables and aligns with your budget expectations. Throughout the predesign process, we will maintain a transparent and iterative approach, constantly refining the SOW based on your feedback and ensuring it remains within predefined budgetary parameters.

Our engineers have extensive experience in working with diverse stakeholders and managing complex projects. We will readily offer alternative solutions and cost-saving options while meticulously evaluating their impact on the project scope and ensuring they adhere to your desired outcomes.

This collaborative approach guarantees that the final SOW reflects your needs, priorities, and financial constraints, laying the foundation for a successful and cost-effective project outcome for both the dock and ferry redesign.

Project Examples:

- Vallejo Ferry Terminal & Maintenance Facilities Design: Art Anderson provided naval architecture and marine engineering services in support of ferry facilities for the Vallejo-Baylink ferry system. Projects included: Acquisition support for two new 300-passenger ferry vessels, the M/V Mare Island and the M/V Intintoli; and, Overwater design for the replacement of floats at the Vallejo ferry terminal. In 2005, we worked with WETA to develop the scope for the facility. Our team worked within the Owner's budget during design and then into construction support.
- Kingston Passenger Only Ferry (POF) Terminal: Working with Kitsap Transit, Aqua Express and the Port of Kingston,

Art Anderson completed the planning, permitting, and engineering design for the construction of a new terminal that accommodates passenger-only ferry service from Kingston to Seattle. This effort was accomplished in an unprecedented time frame of seven months. Our team innovated different aspects of the project to meet the Owners ultimate budget. Even with the expedited schedule, we remained on budget from planning through construction.

 Kitsap Transit Passenger Only Ferry Study: Art Anderson naval architects and marine engineers conducted vessel requirements studies and created a vessel profile to address hull type, material, passenger and vehicle capacity, powering and fuel consumption, crew and manning requirements, regulatory compliance, passenger amenities, and cost. The requirements were developed to a sufficient level as to be able to estimate fuel consumption, maintenance, and other operational costs. We remained on budget during the study period. Kitsap Transit was able to use all the information to ultimately build the ferry system we see today.



Kingston POF Terminal and MV Finest - Particular attention was given to vessel wake requirements during the POF Study, given the high sensitivity to wake concerns in Rich Passage.



Scheduling

Art Anderson understands the critical role of effective scheduling for the success of the McNeil Island Dock and Ferry Redesign. We have experience developing comprehensive and integrated schedules utilizing proven tools and methods to ensure timely completion, efficient resource allocation, and clear communication.

DEVELOPING A SCHEDULE

Our team utilizes Critical Path Method (CPM) software to create a detailed schedule for the design phase, identifying critical tasks, dependencies, and potential bottlenecks. This allows for proactive risk mitigation and efficient resource allocation between the dock and ferry design teams. When we develop schedules for waterfront facilities we research local regulations, permits, and environmental impact assessments that might impact scheduling. We build in time for agency reviews, material procurement and unforeseen circumstances.

Developing the schedule for the vessel construction or procurement involves

communicating with builders on current backlog for accurate delivery timeline.

Regularly scheduled reviews, progress and milestone meetings involving both dock and ferry teams will ensure alignment and timely identification of potential issues. Clear milestones with defined deliverables will maintain project momentum and accountability.

Our experience as the Owner's Representatives for the Washington State Ferries has helped us hone our schedule development capabilities.

PRELIMINARY SCHEDULE

Outlined below is a draft Design and Construction schedule and estimated timelines for completion. While changes are anticipated to this schedule, it gives the team a preliminary concept of expectations. During this predesign phase, Art Anderson's team will develop a schedule the DOC will be able to use to gage project success.

Waterfront/Vessel Construction Phase:

Waterfront/Vesse	Design Phase:
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1. Preliminary Design: Collaborate with your design team to sketch initial plans, considering size, shape, materials, access points, and amenities (e.g., decking, railings, lighting).	6 months	1. Contractor/Vendor Selection: Carefully select a qualified and experienced contractor based on reputation, references, and bids. Negotiate a detailed contract outlining scope, schedule, budget, and payment terms.	3 months
2. Permits and Approvals: Obtain necessary permits and approvals from relevant authorities before finalizing the design.	6 months	2. Material Procurement: Order and secure materials well in advance, considering lead times and potential supply chain disruptions.	3 months
3. Detailed Design and Engineering: The engineer will produce detailed construction plans, specifications, and material lists, ensuring structural integrity and compliance with regulations.	6 months	3. Construction Timeline: Break down construction into manageable phases (e.g., foundation, decking, utilities) and create a realistic timeline, factoring in weather, potential delays, and inspections.	1 year
4. RFP Development	3 months		



Successful Management of Scope, Schedule, and Budget Creates Successful Projects

Art Anderson recognizes that a successful McNeil Island Dock & Ferry Redesign hinges on the meticulous orchestration of scope, schedule, and budget. Each element plays a vital role in the project's success, and their interplay determines the final outcome. We propose an approach to managing this interplay, ensuring a project that meets your vision, stays on track, and operates within defined financial constraints.

We employ a proactive and integrated approach to managing these project elements:

- *Early Scope Definition*: Through collaborative workshops and in-depth analysis, we work with you to meticulously define the project's scope, minimizing future deviations and cost overruns.
- Dynamic Scheduling: Our seasoned project managers utilize advanced scheduling tools and risk mitigation strategies to create realistic and adaptable timelines, allowing for contingencies and adjustments while exceeding deadlines.

• *Transparent Budgeting*: We establish detailed cost estimates and actively monitor expenses throughout the project, constantly evaluating value proposition and informing decision-making to ensure your budget remains in tune.

Art Anderson believes that a successful McNeil Island Dock & Ferry Redesign is not just about individual elements, but rather about the coordination of scope, schedule, and budget. Our experience and comprehensive approach will ensure your project plays a beautiful melody of completion, efficiency, and fiscal responsibility.

- *Reduced Risks*: Early identification and mitigation of potential issues save time and money.
- *Enhanced Efficiency*: Optimized resource allocation and project flow minimize waste and maximize productivity.
- *Predictable Outcomes*: Clear lines of sight ensure deliverables align with expectations and timelines are met.
- *Financial Responsibility*: Cost control measures and transparent budgeting safeguard your budgetary limitations.





DIVERSE BUSINESS INCLUSION STRATEGIES

CEO Message

Our organization is striving to create an inclusive workplace where everyone feels valued and respected because of their difference – a place where every employee can be themselves so they can reach their potential and help us achieve our business goals.

We want our business to be innovative and productive so we can deliver the best products and services to our customers and we need diversity to help us achieve this. The more we collaborate and value difference the closer we get to living in a truly inclusive community.

This diversity and inclusion strategy provides us with a road map to create an inclusive workplace. To help us achieve this, we need the commitment of every employee to understand what we are trying to achieve, to work together and be open to change. This strategy is everyone's responsibility and I encourage you to get involved.

Vision

To have a respectful and supportive workplace that enables us to attract and retain a diverse workforce that represents our customers and community.

Purpose

This strategy was developed to help us achieve our business and people goals. It provides a shared direction and commitment for the organization so we can work together to respect and value our diverse workforce and build a more inclusive workplace.

It comprises of three key goals and identifies the priorities and actions we will take over the next two years. It outlines the key roles and responsibilities and how we will track progress and measure success.

Goals

1. Workforce diversity – recruit from a diverse, qualified group of candidates to increase diversity of thinking and perspective.

Actions:

- Advertise roles in a broad range of publications
- Ensure a diverse range of candidates are represented at shortlist stage

2. Workplace inclusion – foster a culture that encourages collaboration, flexibility and fairness to enable all employees to contribute to their potential and increase retention.

Actions:

- Provide inclusive leadership training for managers
- Promote employee advocacy through management channels

3. Sustainability and accountability – identify and breakdown systemic barriers to full inclusion by embedding diversity and inclusion in policies and practices and equipping leaders with the ability to manage diversity and be accountable for the results.

Actions:

• Review policies and practices to identify and remove systemic barriers to inclusion

Roles and Responsibilities

All employees have the responsibility to maintain an environment that is safe, respectful and productive. Everyone has the right to be treated fairly within the workplace in an environment that recognizes and accepts diversity.

We can all contribute by participating in workplace diversity and inclusion activities and opportunities and complying with all anti-discrimination and workplace diversity legislation.



Managers and supervisors can contribute by displaying a positive commitment to workplace diversity and inclusion, being role models, fostering an inclusive workplace culture, dealing quickly and effectively with inappropriate behavior, and participating in diversity training and encouraging team members to attend.

The success of the strategy is dependent upon the support of everyone in the department. Everyone has a responsibility for contributing to a culture which supports and values diversity and inclusion.

Evaluation Methodology

The effectiveness and achievement of our goals for diversity and inclusion will be reviewed and reported on quarterly. The report will be provided to the CEO and the executive team. The review will focus on the implementation of the actions, the progress made and successes. It will also identify any adjustments required to improve effectiveness.

The evaluation will include:

- A qualitative assessment of progress or achievement of the actions
- A quantitative assessment of the impact of the strategy on employee perceptions and experience of the culture of the organization

The outcome of the evaluation and review will guide the development of further action plans.



Part II – General Qualifications							Solicitation Number (if any)				any) 10	
(If a firm has branch offices, complete for each specific branch office seeking work.))	4	2024	-316 & 2024-3	19	
2A. Firm (or Branch Office) Name							3. Year Established 4. UEI Numbe		4. UEI Number			
Art Anderson Associates, Inc.							1957 LRUMUHJRCT			T31		
2B. Street												
830 Pacific Avenue							5. Owne	rship				
2C. City			2D. Stat	e 2	2E. Zip Code			a. Type				
Bremerton			WA	ę	98337			Corpor	ation			
6A. Point of Contact Name and Title							b. Small Business Status					
Ben Anderson, President/CEO							Service Disabled Veteran-Owned Small					
								Business (NAICS 541330)				
6B. Telephone Number 6C. E-Mail Address							7. Name of Firm (If Block 2A is a Branch Office)					
360-479-5600)		na	nderson	@artande	son.co	m					
8A. Former Firm	Name(s)	(If Any)						8B. Year Established			d 8C. DUNS Number	
9. Employees by	/ Disciplin	ne			10. Profile of Firm's Exp. &			p. & Annual	& Annual Avg. Revenue for Last 5 Years			
				C. No. c	of	A.		Thin & Exp. & Annual Avg. Revenue for Last 5 T				C. Rev.
A. Function				Employe	ees	Profile						Index
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02	Administ	trative		5	(C10	Cor	nmercial	Building (L	_ow-R	lise)	2
06	Architect	t <i>(naval)</i>		5		C15	Cor	nstructior	n Manager	nent	,	4
08	CADD T	echnician		5		E03	Ele	ctrical St	udies and I	Desig	n	2
12	Civil Eng	gineer		4		F03	Fire	e Protecti	ion			1
15/16	Construc	ction Insp./N	lgr.	2		G01	Gar	rages; Ve	ehicle Main	t.; Pa	rking Fac.	1
21 42	Electrica	il Engineer		2		H01	Har	DOrs; Jei	tiles; Piers;	Snip r Con	ditioning	5
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						105	Inte	erior Desi	ign; Space	Planr	ning	2
						106	Irrig	gation; Di	rainage			1
						L05	Ligh	ghting (Interior, Display, Theater, Etc.)				3
						L06	Ligh	ghting (Exterior, Street, Memorials, Etc.)				3
						P05	Pla	aval Architecture; Olishore Platiorms				4
						P06	Pla	lanning (Site. Installation and Project)				3
						P07	Plu	lumbing and Pipe Design				2
					P12 Power Generation; Transmission; Dist.				ssion; Dist.	4		
						R04 Recreation Facilities (Parks, Marinas, etc.)				Marinas, etc.)	2	
						R06	Rehabilitation(Buildings; Structures; Facilities)			tures; Facilities)	1	
					+	S02	Sei	smic Dee	signs and S	tudio	s SHOKE DEL	1
			Total	30	30 S04 Se			vage Col	lection. Tre	eatme	nt & Disposal	1
					S05		Soi	Soils and Geological Studies; Foundations			; Foundations	1
					U03 Utilities (Gas and Steam)			1				
				W03 Water Supply: Treatment and Distribution 1					1			
11. Annual Aver	age Profe	essional Ser	vices	Professi	Professional Services Revenue Inde				idex Number			
Revenues of Firm for Last 3 Years (Insert 1. Less than \$100,000		0	6. \$2 Million to less than \$5 Milli			on						
Revenue Index Number Shown at Right) 2. \$100,000 to less that		ıan \$250,000		7. \$5 Million to less than \$10 Million								
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C. Total Work		6		5. \$1 Million to less than \$2 Million 10. \$50 Million or Greater				or Greater				
12. Authorized Representative												
The foregoing is a statement of facts.												
A. Signature					B. Date							
Melissa anderson						1/18/2024						
C. Name and Title												

Authorized for Local Reproduction