

Attachment A

PENNSYLVANIA FISH and BOAT COMMISSION BUREAU OF ENGINEERING

Solicitation for:
North East Marina Improvement Feasibility Study
North East Township
Erie County, Pennsylvania

June 21, 2023

SOLICITATION

The Pennsylvania Fish & Boat Commission ("PFBC") hereby invites submissions of proposals for the <u>North East Marina Improvement Feasibility Study</u> ("Project") associated with the improvement of facilities at the North East Marina in North East Township, Erie County.

BACKGROUND INFORMATION

The North East Marina is a 17-acre property owned by the Commonwealth of Pennsylvania and managed by the PFBC. It situated on the shorelines of Lake Erie approximately 18-miles northeast of the City of Erie, Pennsylvania.

The property and marina amenities were acquired by the PFBC in 1988 and include an 8-acre marina enclosed by 2,300 linear feet of concrete bin-wall which provides seasonal mooring facilities for up to 220 slip-holders. Also included on the property is a 20,000-square foot boat storage building, a 600-square foot fish cleaning station, a 5,700-square foot multi-use administration building with a restaurant, workshop/garage bays, public restrooms, wastewater treatment system, and bait and tackle store. The PFBC has a concession agreement in place for operations and basic maintenance of the site. Major maintenance, basin dredging, and sand movement is conducted by PFBC staff and/or contractors.

Beginning in 1994, the PFBC has been conducting biannual sand movement operations in the months of March and October to excavate and transport approximately 18,000 cubic yards of sand from the west side of the marina to the east side of the marina, which is required to replenish sand to approximately 1,000 linear feet of lake shoreline.

PROJECT INTENT

The intent of this project is to identify options to restore the natural littoral drift, eliminate annual sand bypass costs, and to provide concepts for day-use operations that include a smaller footprint, public access, less intensive dredging requirements, parking, fish cleaning station, and restrooms.

The condition assessment shall also include all costs associated with the design, construction, and maintenance of the facility improvements. This project will determine the feasibility and costs associated with the design, demolition and/or construction of marina wall modifications to allow for a functioning launch ramp and an option for mooring facilities for up to 10 boats while also fully restoring the littoral drift of sand through the marina basin area and further east along the shoreline.

PROJECT SCOPE OF WORK

The proposer shall provide the necessary professional, technical and labor staff to complete the Project. The proposer shall provide all materials, supplies, and equipment to complete the Project as follows:

- 1. The contractor or its consultants shall conduct site reconnaissance at the North East Marina including, at a minimum:
 - a. Compile a comprehensive summary of previous studies relating to the sand movement and/or marina basin infrastructure at PFBC's North East Marina.
 - b. Review existing information related to the marina's impact on the littoral drift of sand within Lake Erie, and the cost of sand movement operations.
 - c. Review and inspect all infrastructure at the marina, including but not limited to marina bin-walls, boat storage building, administration building, retaining walls, electrical infrastructure, docks and driving surfaces. Compare and contrast findings with the PFBC's infrastructure assessment and prioritization for this site.
 - d. Review current sand movement and sediment dredging operations including permits, equipment, and operational costs.
- 2. The contractor or its consultants shall conduct a needs assessment on which to base its conceptual designs.
- 3. The contractor or its consultants shall develop three conceptual designs for proposed marina facilities; associated cost estimates for design, construction/demolition, operations and maintenance; and a narrative that explains the elements of each design. The conceptual designs shall consider the following:
 - a. Reconfiguration and/or demolition of marina bin-walls that will maintain public accessibility, allow the use of the facility as a day use boat launch site, and restore the littoral drift of sand to the extent necessary to eliminate sand bypassing obligations.
 - b. Alternative design configuration that meets the Project Intent.
 - c. Sediment management including:

- i. The anticipated frequency of dredging to maintaining navigable depths within the boat launch area.
- ii. The equipment and staff needed to adequately address sediment management needs.
- iii. Regulatory permits needed to legally manage sediment (dredging and sand bypassing operations)
- d. Analysis of wave climate and storm events and their impacts on the proposed designs.
- e. All roadways, parking areas and stormwater systems necessary to accommodate the proposed improvements.

PROJECT DELIVERABLES

The awarded vendor shall be required to prepare, submit, and present a site plan or plans, and written report that provides the following information, at a minimum:

- 1. Conceptual site plans which include the following elements delineated or identified:
 - a. Existing and proposed site plan for each design alternative showing dimensions, existing utilities, proposed utilities, cross sections, and end elevations.
 - b. Key map identifying adjacent roadways, waterways, and properties.
 - c. Delineation of streams, wetlands, and lakes.
 - d. Right of Ways.
- 2. A written report which contains the following information:
 - a. Brief introductory description of what information was gathered, and the extent of studies/testing done.
 - b. Written discussion of the needs assessment and infrastructure assessment and prioritization at this site.
 - c. Written discussion/report of the site, including topography, bathymetry, soil conditions, site hydrology and necessary site preparation.
 - d. Written discussion of environmental and archeological restrictions, if any.
 - e. Approximate design and construction cost estimates for each design alternative.
 - f. Approximate yearly operation and maintenance costs of each design alternative.
- 3. A virtual or in-person presentation to PFBC staff summarizing items 1 and 2 above.

The awarded vendor will be required to deliver three (3) full size copies of the plan or plans and three (3) copies of the written report. The consultant shall deliver one (1) digital copy of the plans, written report and presentation on a USB memory stick.

PROPOSER'S QUALIFICATIONS

All work shall be performed by or under the direct supervision of a Pennsylvania registered Professional Engineer, or a Board-Certified Coastal Engineer experienced in coastal engineering and/or marina construction and operation. Provide a professional resume for the Lead Project Engineer with bid submission.

SUPPLEMENTAL INFORMATION – Located in Jaggaer buyer attachments

1. Beach Erosion and Sediment Processes Study, North East Marina, Erie County Pennsylvania. Technical Report ERDC/CHL TR-01-12, US Army Corps of Engineers, 2001

BIDDING PHASE

Bidders should examine the "Supplemental Information" previously referenced herein /and/ shall visit the site prior to submitting a proposal. PFBC Engineers will be onsite to conduct an <u>optional</u> pre-proposal meeting. Vendors attending the pre-proposal meeting must pre-register with Dan Gahagan no later than 10:00 AM on June 30, 2023.

Dan Gahagan 814-359-5142 dgahagan@pa.gov

Optional pre-proposal meeting details:

Location: PFBC's North East Marina parking lot

Date: July 11, 2023 Time: 11:00 AM

COMPENSATION

The Project is a Lump Sum with payment due upon completion and acceptance of the final work products.