



March 15, 2024

Patricia Strayer, PE
Town Engineer
Public Works Department
Town of Palm Beach
P.O. Box 2029
Palm Beach, FL 33480-2029

RE: North Lake Trail Living Shoreline Project Proposal

Dear Ms. Strayer:

This correspondence is provided as a formal proposal for the above referenced project.

This Work Order, when executed, shall be incorporated in, and become an integral part of the existing Agreement for Professional Services between the Town of Palm Beach (TOWN), Florida and Applied Technology & Management (CONSULTANT), hereafter referred to as the Agreement.

Introduction

It is our understanding that the Town wishes to pursue the design, permitting and construction of a 'living shorelines' shoreline stabilization and enhancement project in the vicinity of North Lake Trail along the shoreline of the Lake Worth Lagoon (see Figure 1). The project will include both engineering and environmental elements generally consisting of a nearshore rock breakwater system fronting an area for mangrove restoration and a stabilized slope transition into the upland with enhanced native vegetation. This proposal provides for planning, engineering, regulatory and construction support to implement this project.

This effort will be conducted on a Time and Materials Not to Exceed Basis at rates consistent with the CONSULTANT's General Services Agreement with the TOWN.

Scope of Services

The following is a description of the Scope of Services to be provided under this Work Proposal. The CONSULTANT shall provide the following services:



Figure 1. General location of proposed living shorelines project

Task 1 – Site Assessment

A field assessment of the project area will be conducted consisting of the following two major elements:

1.1 Bathymetric and Topographic Surveys

Bathymetric and topographic survey (elevation) data will be collected to wading depth using RTK GPS equipment. This will provide a dataset of elevations and depths within the project vicinity. Items of interest (utilities, etc.) will be geolocated within the dataset.

1.2 Environmental and Seagrass Surveys

An assessment of upland and nearshore habitats will be conducted to delineate habitats and provide details of species present. This will include upland areas in the project vicinity and nearshore habitats within the project area of influence. The nearshore surveys will be conducted within the established seagrass growing season (June through September) to determine the presence and location of seagrass in the vicinity. In addition a list of species observed in the project vicinity during the field effort will be developed.

Task 1 Deliverable: The data collected will be utilized to develop a project basemap of elevation and habitat information that will be superimposed on available aerial imagery. This dataset will survey as a basis for further project development. A summary memorandum will be prepared discussing salient aspects of the site relative to further project development. This will include discussion of the presence of any critical habitat (most notably seagrasses) or listed species within the project vicinity.

Task 2 – Design Development

ATM will utilize the data collected in Task 1 as a basis for further project development. The design effort will be divided into two main sub-task:

Task 2.1 Conceptual Design

Under this task the design will be developed to a conceptual level which will include the general concepts and project elements. This design will be further developed through engagement with the Town to develop the plan to a sufficient basis to support project permitting. An estimate of project areas and quantities will be developed at this point including a Rough order Magnitude (ROM) cost estimate.

Task 2.2 Detailed Design

The design developed in Task 2.1 will be further developed to include engineering analysis and design elements to produce a design which can serve as a basis for project construction. This will include development of detailed project drawings and engineering calculations of structure performance. Additional detail will be developed regarding project landscaping and planting. The cost estimate developed in Task 2.1 will be updated to reflect the detailed design.

Task 2 Deliverable: ATM will prepare a memorandum summarizing the results of Tasks 2.1 and 2.2. Conceptual and detailed drawings will be developed. Engineering analysis will be conducted and summarized in a Basis of Design (BD) memorandum.

Task 3 – Regulatory Review

This project will require both state and federal regulatory permits. Under this task ATM will submit permit applications to facilitate the state and federal regulatory review processes. ATM will engage with the regulatory agencies throughout the process including a pre-application meeting with both. ATM will respond to up to two Requests for Additional Information (RAI) for each process.

Task 3 Deliverable: ATM will prepare permit drawings and applications for State and Federal regulatory review. ATM will respond to up to two RAI's for each process. Copies of all relevant correspondence will be provided to the Town and ATM will coordinate regulatory responses with Town staff prior to submittal.

Task 4 – Plans, Specifications and Bidding

Upon receipt of regulatory permits ATM will prepare a set of plans and specifications to support project bidding and construction. It is assumed ATM will prepare documents delineating the technical requirements for the project that will be merged with the Town's 'front end' general specifications to complete the project bid package. ATM will participate in a pre-bid conference with potential bidders and will prepare responses to bid questions within the bid process. ATM will review bids received including the lowest responsive bid and will prepare a recommendation for bid award.

Task 4 Deliverables: Under this task ATM will prepare the following: Plans and specifications, responses to bidder questions, bid review and recommendation memorandum.

Task 5 – Meetings and Consultation

Under this task ATM will support meeting and coordination with project stakeholders as required and requested by Town staff. This may include in person or virtual meetings with project stakeholders, town staff, Town boards or council or other engagement as deemed necessary by Town staff. Effort may include the development of presentations or exhibits to facilitate further engagement as required.

Task 6 Deliverable: Memorandum, presentations and other relevant information and documentation as required.

Compensation

This effort will be conducted on a Time and Materials Not to Exceed Basis for a total cost of **\$154,210**. Task costs are summarized in Table 1, and a detailed cost breakdown is provided as an attachment.

Table 1
Cost Breakdown by Task

	Task Description and Breakdown	ATM Total Labor	Internal Direct Expenses*	Total Task Budget
Task 1	Site Assessment			
1.1	Bathy/Topo Surveys	\$8,330	\$1,500	\$9,830
1.2	Environmental and Seagrass Surveys	\$10,470	\$500	\$10,970
	Total Cost - Task 1	\$18,800	\$2,000	\$20,800
Task 2	Design Development			
2.1	Conceptual Design	\$25,110	\$0	\$25,110
2.2	Detailed Design	\$21,420	\$0	\$21,420
	Total Cost - Task 2	\$46,530	\$0	\$46,530
Task 3	Regulatory Review			
3.1	FDEP ERP Permitting	\$22,480	\$500	\$22,980
3.2	USACE Permitting	\$22,480	\$500	\$22,980
	Total Cost - Task 3	\$44,960	\$1,000	\$45,960
Task 4	Plans, Specifications and Bidding			
4.1	Plans and Specifications	\$24,180	\$0	\$24,180
4.2	Bid support and Review	\$7,860	\$250	\$8,110
	Total Cost - Task 4	\$32,040	\$250	\$32,290
Task 6	Meetings and Coordination			
6.1	Meetings and Coordination	\$11,880	\$0	\$11,880
	Total Cost - Task 6	\$11,880	\$0	\$11,880
	Total Task Order Costs	\$154,210.00	\$3,250.00	\$157,460.00

Project Schedule

The following project schedule is proposed:

Task	Description	Completion (Days from Receipt of Notice to Proceed)
Task 1	Site Assessment	60 Days
Task 2.1	Conceptual Design	120 Days
Task 2.2	Detailed Design	210 Days
Task 3	Regulatory Review	300 Days
Task 4	Plans, Specifications and Bidding	360 Days
Task 5	Meetings and Coordination	<i>as needed</i>

Should you have any questions regarding this proposal, please feel free to contact me at your convenience.

Sincerely,

Applied Technology & Management – A Geosyntec Company



Michael G. Jenkins, Ph.D., P.E.
Senior Principal