

**STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
GRANT WORK PLAN
DEP AGREEMENT NO.: R1920**

ATTACHMENT 3

Project Title: Sea Level Rise and Recurrent Flooding Vulnerability Assessment Phase 2

Grantee Contact Information:

Organization Name: Town of Longboat Key
Authorized Signer for the Organization: Tom Harmer
Title: Town Manager
Address: 501 Bay Isles Road
City: Longboat Key
Zip Code: 34228
Area Code and Telephone Number: 941-316-1999
E-mail Address: tharmer@longboatkey.org

Grant Manager Contact Information:

Organization Name: Town of Longboat Key
Name: Isaac Brownman
Title: Public Works Director
Address: 600 General Harris Street
City: Longboat Key
Zip Code: 34228
Area Code and Telephone Number: 941-316-1988
E-mail Address: ibrownman@longboatkey.org

Fiscal Agent Contact Information:

Organization Name: Town of Longboat Key
Name: Sue Smith
Title: Finance Director
Address: 501 Bay Isles Road
City: Longboat Key
Zip Code: 34228
Area Code and Telephone Number: 941-316-1999
E-mail Address: ssmith@longboatkey.org

FEID No.: 59-6017152

PROJECT LOCATION:

WORK PLAN

1. Project Summary: Sea Level Rise and Recurrent Flooding Vulnerability Assessment Phase 2.

2. Project Description:

The Town of Longboat Key (Town) has entered into an Agreement with Aptim Environmental & Infrastructure Inc. (APTIM) to perform professional services for the Town of Longboat Key. Per Work Assignment 2018-01 (Phase 1), APTIM provided a high-level assessment of potential impacts from sea level rise and recurrent flooding on public and private infrastructure in Longboat Key. This work effort included: Establishing a SLR Projection, limited field observations of low-lying neighborhoods, stormwater systems, and critical Town infrastructure, a Public Workshop, an Initial Assessment Report, and a Presentation of Findings. From this Phase 1 effort, it was determined by APTIM and ratified by consensus by the Town Commission that additional study, investigation, and planning was warranted.

Phase 2 of the Sea Level Rise and Recurring Flooding Vulnerability Assessment will include the following general tasks within select at risk neighborhoods in order to quantify the risk to homes and Town infrastructure:

- A. Existing public and private bulkhead elevation assessment
- B. Dune Assessment
- C. Stormwater System elevation analysis and backflow protection study
- D. Sewer System Lift Station Vulnerability quantification and assessment
- E. Critical Infrastructure Mapping
- F. Future Water level for recurring Storms
- G. GIS Based Flood model
- H. Bulkhead Raising feasibility Assessment including Town ordinance review
- I. Public Workshop

3. Project Need and Benefit: Resilient Communities

a. Explain the demonstrated need, which the project addresses.

The Town has been experiencing nuisance flooding in select areas of the Town during “king tide” events and during heavy rainfall events. This flooding is resulting in public concerns regarding the delivery of public safety services, and threats to private property. The Phase 1 study also indicated that the near history of the Town indicated that while storm surge events occurred, they were much smaller than those in the long-term storm record. While the Town has undertaken some public works improvement projects in select areas, a Town wide understanding of the causes and solutions is needed. The information gathered as part of the vulnerability assessment will enable Longboat Key to establish short- and long-term capital improvement plans and fact-based public information for private property owners. The action items from the report should increase the resiliency of the community.

b. Explain how the proposed project meets the purpose of one or more of the Goals and/or Priority Areas.

The study of the vulnerability to sea level rise and recurring storm events and the planning improvements will result in a more resilient community for Longboat Key.

- c. **Discuss how the project is feasible and can be completed by the Deadline of April 30, 2019.**

Stormwater Atlas – Task A1 to be completed by consultant services by 4/30/2020.

4. **Budget Summary:** Allowable budget categories and costs for this project are listed in the table below.

FIXED PRICE	Grant Amount Awarded
AGREEMENT TOTAL	\$45,443.00

- A. **Provide an explanation on what methods were used to determine the amount you are requesting.**

The Scope and Fee provided by the consultant (APTIM) referring specifically to Task A1 as follows per the Project Estimate Summary By Task for the Town of Longboat Key-SLR Vulnerability 2 dated 2/28/19:

Task #	Task Name	Labor	Equipment	Other OCD's	Travel	Total
Task A1	Stormwater Atlas	\$34,876.00	\$5,891.00	\$1,191.00	\$3,485.00	\$45,443.00

5. **Project Timeline:** All tasks are to be completed and submitted no later than the Deliverable due date listed in the table below. Request for any change must be submitted prior to the current deliverable due date listed in the project timeline. Request are to be sent via separate email to the Department's Grant Manager, with the details of the request being made and the reason for the request.

PROJECT TIMELINE			
Task No.	Task Title	Deliverable Due Date	Funding Amount
1	Stormwater Atlas	04/30/2020	\$45,443.00
Total			\$45,443.00

6. **Performance Measure:** The Department's Grant Manager will review the deliverables to verify that they meet the specifications in the Grant Work Plan and this task description, to include any work being performed by any sub-contractor(s). Upon review and written acceptance by the Department's Grant Manager of all deliverables under this task, the Grantee may proceed with payment request submittal. All deliverable documents must be provided in an electronic downloadable format.
7. **Consequences for Non-Performance:** The Department will reduce each Task Funding Amount by 5% for every day that the Deliverable(s) is not received on the specified due date in the most recent Project Timeline, for the Agreement. Should a Change Order or Amendment be requested on the date of or after the most current Deliverable Due Date, the 5% reduction of that Task Funding Amount will be imposed until the date of the requested change is received, via email by the Department.
8. **Payment Request Schedule:** Grantee may submit a request for the Task Funding Amount to be paid using the Exhibit C, after all Deliverables for that Task have been approved by the Department. Request(s) for payment must include the Exhibit A showing 100% completion of that Task and must be submitted within 45 days of the Deliverable Due Date.

Or

Grantee may submit one request for the Grant Amount Awarded, by using the Exhibit C, after the project is 100% completed. The request for the Grant Amount Awarded, must include an Exhibit A showing 100% completion for all Tasks, and must be submitted within 45 days of the Deliverable Due Date.

TASKS & DELIVERABLES

Task # 1

A. Title: Stormwater Atlas – Task A1

B. Description: During Phase 1, Town staff indicated that the Town did not have a complete stormwater atlas. In those sections of Town that are most susceptible to tidal flooding (Appendix 1), APTIM will review Town records, and create a GIS database for the stormwater system. As necessary, APTIM's survey crew will collect elevation data on all public stormwater inlets (grates) and outlet pipe (inverts), and identify the material and outlet pipe diameter. The presence of backflow prevention devices will be identified from field observation (observed at the discharge), or Town records (for inline devices). The two golf courses contain water elevation control structures, which may be overtopped during extreme surge events. APTIM will survey the downstream structures to verify the control elevations. Field work is estimated at ten (10) days.

Based on the collected Town documents and field data, a GIS based stormwater atlas will be created. It is requested that the Town provide any existing or preferred pipe, inlet, or discharge naming convention at the beginning of this work effort.

C. Deliverable: Complete stormwater inventory and corresponding GIS based stormwater atlas.