

# American Engineering Consultants of Marco Island, Inc.

573 Bald Eagle Drive  
Marco Island, Florida 34145  
239-394-1697

April 5, 2024

Mr. Justin Martin, P.E.  
Public Works Director  
50 Bald Eagle Drive  
Marco Island, FL 34145

Re: Proposal – Analysis and Design for Stormwater Improvements – Bayport-Tahiti  
Drainage Improvement Project (Second Part)

Dear Mr. Martin:

The purpose of this letter is to express American Engineering's interest in providing civil engineering services related the City of Marco Island's stormwater improvement program.

My understanding is that the scope of the project is to upgrade existing pipe sizes, replace failed CMPs, and add additional pipes and inlets to relieve flooding in parts of the Bayport-Tahiti area that were not addressed by the 2015 project. Existing outfall at Shenandoah Waterway was upgraded with the Heathwood / San Marco intersection improvements and will not be modified.

The scope outlined below anticipates a moderate effort in data gathering, since much of the existing infrastructure is already known. The engineering analysis performed in 2015 will be re-calculated using information on improvements since then, as well as the expanded scope of the project.

The scope of services we propose to provide includes:

## **Engineering Analysis:**

1. Obtain available copies of Original Deltona drainage prints and other applicable record drawings for later improvements.
2. Review Marco Island Master Drainage Plan (2000).
3. Obtain City GIS information.
4. Field check to verify pipes, including size, material, and inverts.
5. Determination of true drainage divides and tributary areas within the study area.
6. Hydraulic modeling based on collected data.
7. Hydraulic analysis will be for existing outfalls.
8. Hydraulic analysis will include proposed new pipes and inlets.
9. Engineer's report outlining results of modeling, and recommendations for infrastructure improvements to improve flow and reduce flooding.

### **Pre-design Survey:**

Topographic Survey of approximately 4,800 lineal feet of roadway, lateral limits from Right of Way to Right of Way.

1. Perform a Topographic Survey of the area outlined in the attached Exhibit "A".
2. Take Elevations shots along the crown of the road at 25-foot intervals.
3. Take elevations cross sections at 25-foot intervals.
4. Collect all above ground visible features within the Survey area (tree, walks, driveways, mailboxes, signs, MH, CB, valves, etc.)
5. Collect all inlet inverts information.
6. Provide digitized existing Right-of-Way Maps and/or recorded Plats and the easements as depicted in the recorded Plats (perform sufficient field work to align the historical base line to the most current horizontal datum).
7. Request available record drawings of existing and proposed UAOs facilities within the limits of the project, if the documents are legible, we will continue to add the utilities line work to the Map of Survey.
8. Obtain Sunshine-One-Call Ticket. Utility Agency Owners (UAO) with facilities within the limits of the project included: Century Link, Comcast, Lee County Electric Cooperative, Marco Island Water and Sewer, Summit Broadband.
9. Survey Control for future use, Base Lines, and well-marked Benchmarks. Elevations that are based upon NAVD88

### **SUE:**

1. Perform Utility Designates using a combination of GPR and electromagnetic locator, designate (Level B).
2. Perform up to Ten (10) Verification of Vertical and Horizontal Test Holes, a minimum of Four Test Holes is required per mobilization Test Holes are estimates at \$1,100.00 per test Hole.

### **Design:**

Provide engineering design for new stormwater infrastructure and modifying and/or extending existing pipes and driveways to facilitate these changes.

1. Provide construction drawings to include plan views, profile views, construction details, and embedded specifications.
2. Includes geometry, grading, drainage, erosion control, demolition, and tree removal (if required).
3. Depict underground utilities from plans of record.
4. Includes typical work zone traffic maintenance plan.

Limitations: Does not include landscaping or irrigation design.

### **Bidding:**

1. Provide estimate of probable cost.
2. Provide Bid Sheet.
3. Respond to bidder questions (RFIs).
4. Provide conformed plans for construction.
5. Provide record drawing post-completion using data supplied to us by Contractor.

Does not include services during construction (can be quoted as needed).

**PROPOSED FEE SCHEDULE:**

Engineering Analysis:		\$ 24,100
Pre-design Survey	:	\$ 24,000
SUE:		\$ 14,500
Design:		\$ 37,300
Bidding:		<u>\$ 7,100</u>
Total:		\$107,000

American Engineering will start work on this project within 15 days of authorization to proceed.

Should you have any questions about this proposal, or need any additional information, please do not hesitate to contact me.

Sincerely yours,

**AMERICAN ENGINEERING CONSULTANTS  
of Marco Island, Inc.**

Certificate of Authorization #26446, LB #7419



Martin D. Pinckney, P.E.  
President