

**PROJECT LOCATION**

PART GOVERNMENT LOT 1 & ADJACENT BAY BOTTOM  
(RE#00099570-000000 & 00099590-000000)

LONG POINT KEY

SECTION 27, TOWNSHIP 65 SOUTH, RANGE 33 EAST

LATITUDE: 24.758684°N LONGITUDE: 80.986333°W

**DIRECTIONS:**

U.S. HIGHWAY NO. 1 NORTH TO MM 57±.

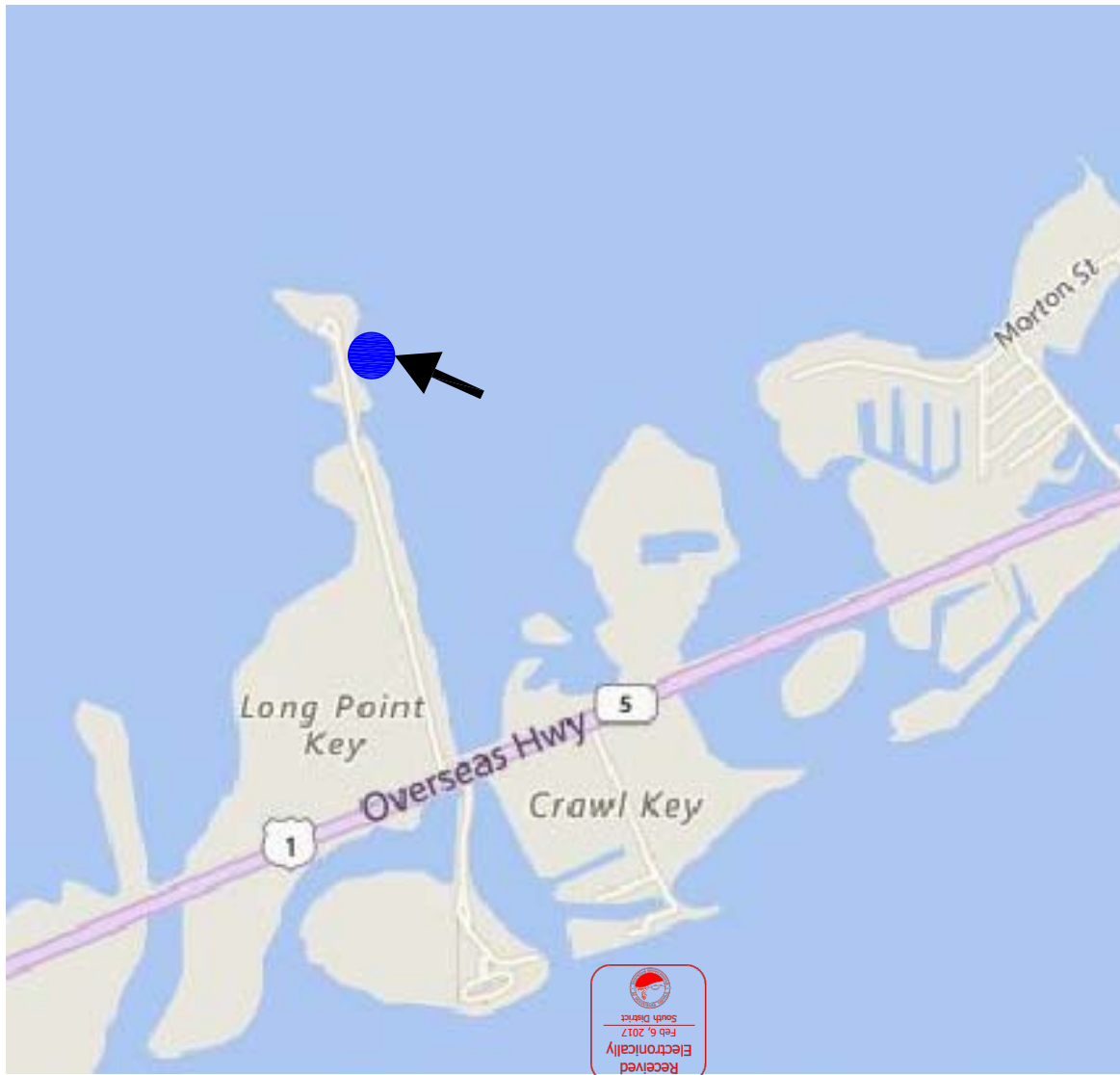
PROJECT SITE: 56195 OVERSEAS HIGHWAY

**ADJOINING OWNERS**

MICHELLE ELTER

338 BEAUFORT ST. SE

AIKEN, SC 29801-4716



REVISIONS:

LOCATION & VICINITY MAP  
SCALE: AS SHOWN

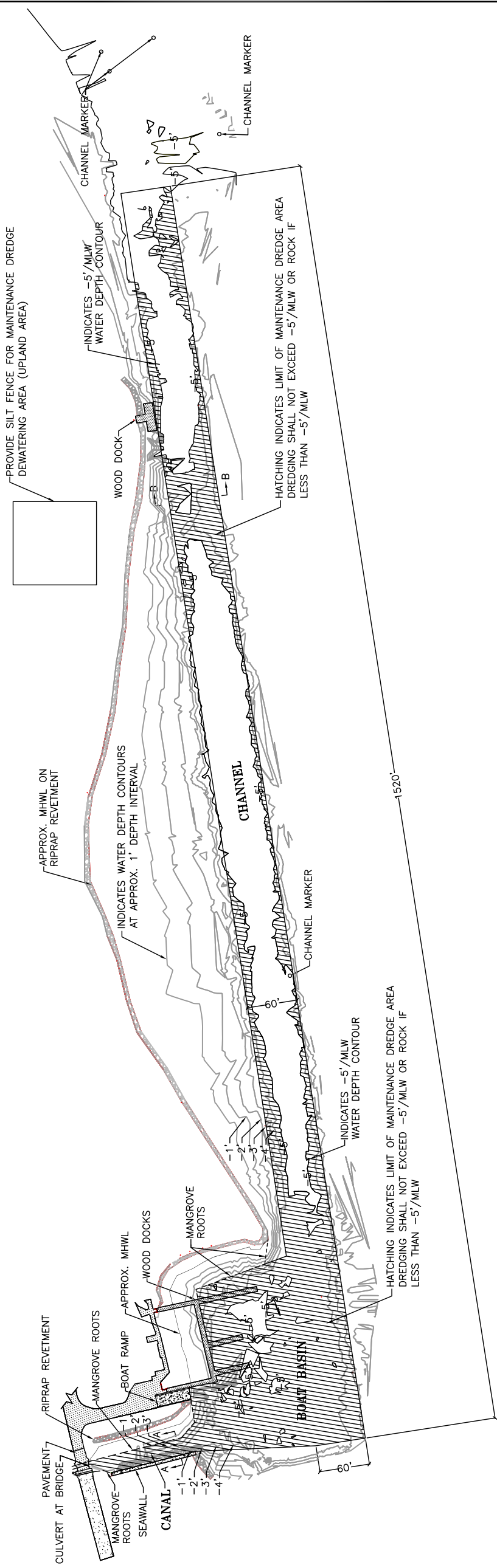
MAINTENANCE DREDGING FOR SUNSET POINT FARM LLC  
56195 OVERSEAS HIGHWAY  
MARATHON, MONROE COUNTY, FL

GLEN BOE AND ASSOCIATES, INC. # 4061  
5800 OVERSEAS HIGHWAY, SUITE 4, MARATHON, FL 33050  
Telephone (305) 743-9121 Fax (305) 743-9187  
Email: glenboe@bellsouth.net

DATE:02/02/17



PART GOVERNMENT LOT 1 & ADJACENT BAY BOTTOM  
(RE#00099570-000000 & 00099590-000000)  
LONG POINT KEY



PROPOSED MAINTENANCE DREDGE AREA 67,235±SF, 5,400±CY

**SITE PLAN**  
SCALE: 1" = 140'

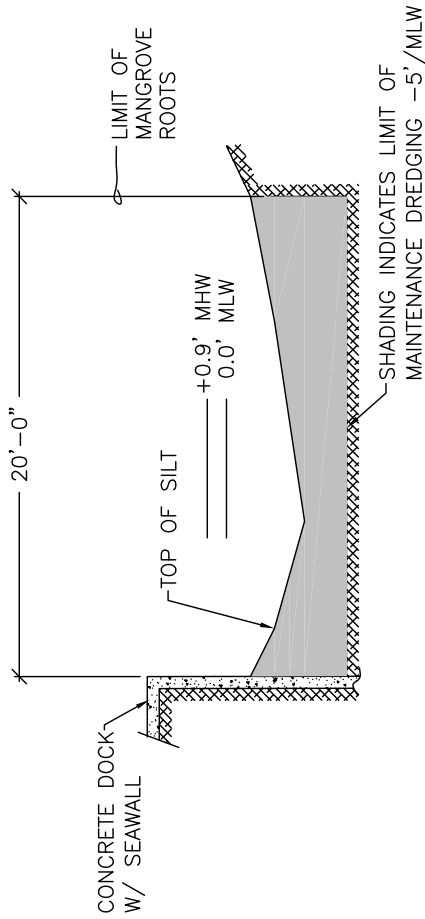
REVISIONS:

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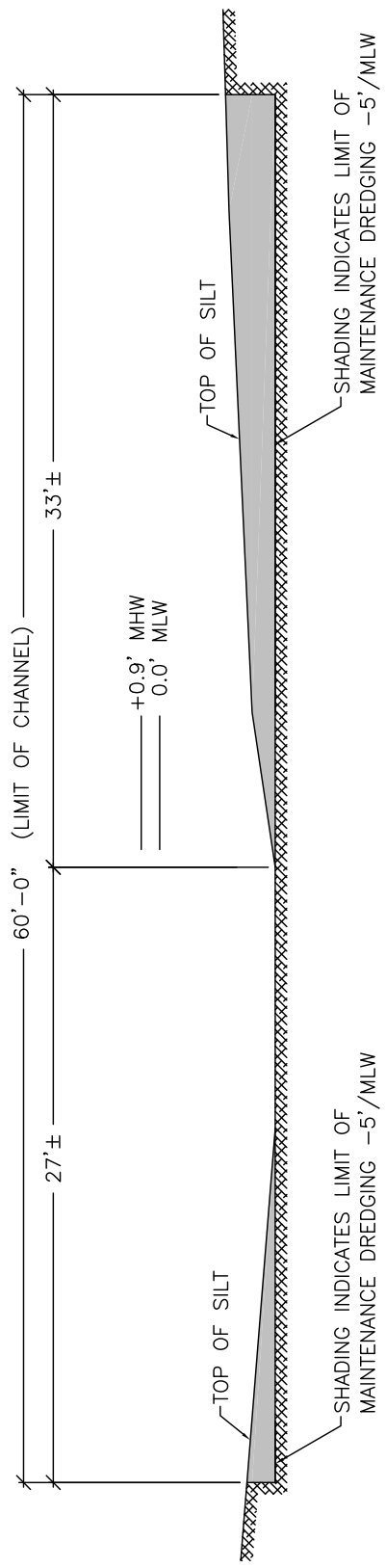
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Email: glenboe@bellsouth.net

DATE: 02/02/17

CERTIFIED BY:  
SEAN KIRWAN, P.E., #57506



**SECTION A-A**  
SCALE: 1/8" = 1'-0"



**SECTION B-B**  
SCALE: 1/8" = 1'-0"

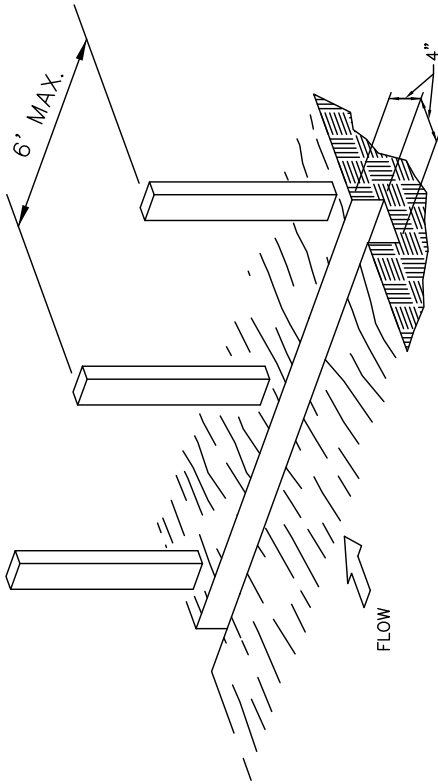
REVISIONS:	

CERTIFIED BY:  
SEAN KIRWAN, P.E. #57506

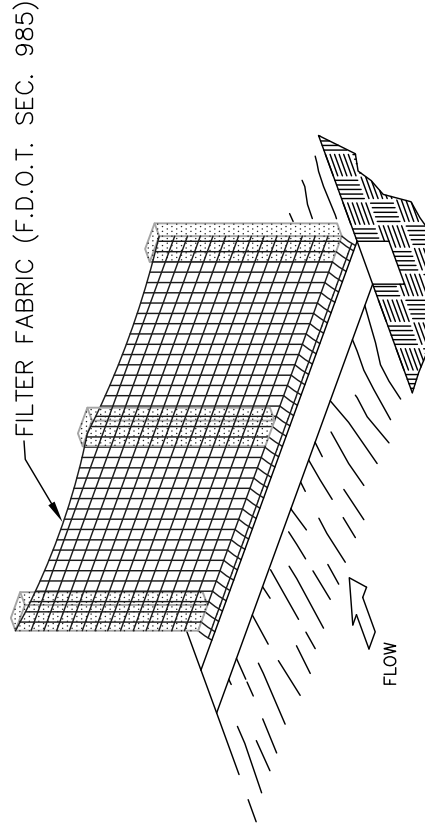
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GLEN BOE AND ASSOCIATES, INC. # 4061  
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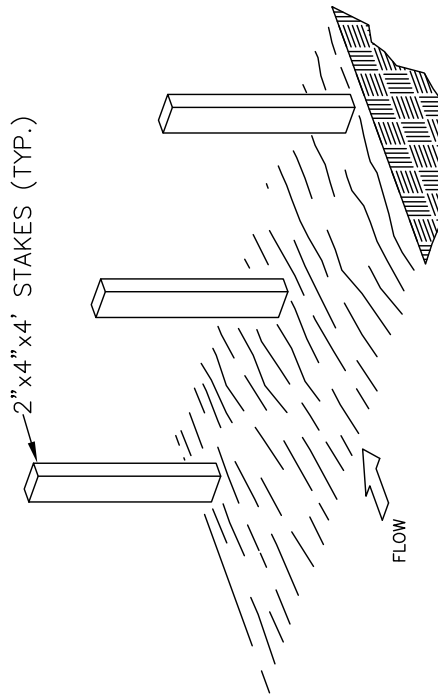
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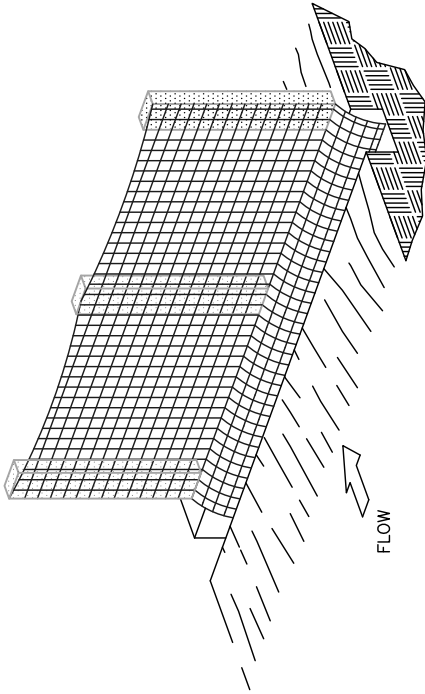
2. EXCAVATE A 4"x4" TRENCH UPSLOPE ALONG THE LINE OF STAKES.



4. BACKFILL AND COMPACT THE EXCAVATED SOIL.



1. SET THE STAKES



3. STAPLE FILTER MATERIAL TO STAKES AND EXTEND IT INTO THE TRENCH.

F.D.O.T. TYPE III FILTER FENCE

REVISIONS:

CERTIFIED BY:  
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**MAINTENANCE DREDGE BENTHIC ASSESSMENT**  
**SUNSET POINT FARM LLC**  
**LONG POINT KEY**  
**MONROE COUNTY, FLORIDA**

Prepared by:



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December 11, 2016

## **INTRODUCTION**

The owners of the Sunset Point Farms LLC, located on the northern tip of Long Point Key, Monroe County, Florida, are proposing maintenance improvements to an existing boat basin and associated access channel along the eastern shoreline of the property (Figure 1). The proposed project involves the maintenance dredging of an existing man-made boat basin and existing boat channel.

All information regarding project design was based on project plans prepared by Glen Boe and Associates received on November 8, 2016 that detail the location of the project site and the extent of all proposed improvements.

In order to evaluate the environmental impacts of the proposed project, a current assessment of the biological resources that could potentially be impacted by the project is needed. The objective of this benthic resource assessment is to document living marine resources on submerged lands within the project area. In addition, a specific-purpose survey for attached stony corals is needed to fulfill Florida Keys National Marine Sanctuary (FKNMS) requirements.

## **METHODS**

An in-water assessment of the area proposed for maintenance dredging was conducted on November 13, 2016. The survey area included the entire extent of the existing basin and docks, as well as the entire length of the channel proposed for maintenance dredging. Transects were not needed within the boat basin adjacent to the existing docks and ramp where dredging is proposed because of the small size of the area and the limited submerged resources present. Reference photographs were taken during the assessment and are provided as Attachment 1.

In order to characterize the benthic habitat within the area of proposed maintenance dredging throughout the existing access channel, a series of 300ft Keson fiberglass survey tapes were deployed along the seafloor to establish a series of primary transects extending along the

length of the western edge of existing channel that runs parallel to the eastern extent of the property (Figure 2). Additional temporary transects were then deployed out 60 feet to the east and across the existing channel extending perpendicular to the primary transect at 25 foot intervals in order to assess submerged resources throughout the entire channel area (Figure 3).

A snorkeler swam the length of each secondary transect conducting a visual assessment of the seafloor in the general vicinity of each survey tape and extending approximately 10-15 feet on either side, and recorded the location along the bottom when conditions were observably different. Percent cover for benthic communities were categorized into discrete cover classifications by visual estimation.

In addition, all areas surveyed were visually assessed in order to determine if any corals were present in the area proposed for maintenance dredging that could be impacted. Data recorded included transect number, location on transect, dominant habitat type, and significant species present. A summary of the results is provided (Tables 1-5). Reference photographs were taken during the assessment and are provided as Attachment 1.

## **RESULTS**

### ***Boat basin***

The benthic community of the existing boat basin is characterized by barren, deep silt and detritus throughout the entire area surveyed. The northern and western edges of the boat basin, as well as the northern edge of the small side channel located at the south-western extent of the boat basin were comprised of dense red mangroves (*Rhizophora mangle*) with drop roots that supported only limited algae and a few tunicates overhanging barren silt and decaying accumulated vegetation. The limit of the boat basin footprint was distinct, with a distinct rock ledge along the perimeter indicating the extent of the original removal of the seafloor to form the boat basin.

All other submerged materials associated with the concrete boat ramp and wooden support pilings for the existing docks were essentially barren, colonized by limited amounts of filamentous algae.

The area adjacent to the southern and eastern extent of the boat basin, located outside of the footprint of proposed maintenance dredging, was shallow hardbottom dominated by macroalgae along with limited amounts of soft corals, sponges, and stony corals.

### ***Access Channel***

The limit of the access channel footprint was distinct, with a distinct rock ledge on both sides along the entire length, indicating the extent of the original removal of the seafloor during the original construction of the access channel.

The benthic habitat in the access channel included a combination of the following habitats:

- Sand and rubble with sparse to moderate cover macroalgae;
- Sandy, largely barren seafloor with dense accumulations of detritus and drift algae and sparse macroalgae;
- Seagrass beds composed of moderate to dense seagrass cover;

Sand and rubble habitats: The seafloor extending out 1-5 feet from the rock edge of the channel on either side was characterized by sand and rubble with limited amounts of macroalgae, predominantly *Halimeda* sp.

Sandy, largely barren habitats: Large areas of the seafloor located in the central portion of the access channel were characterized by extensive mats of accumulated detritus and drift algae mats covering a largely barren, sandy seafloor, with limited amounts of macroalgae, primarily *Halimeda* sp. present.



Seagrass Beds: The most significant benthic resources identified within the area of proposed maintenance dredging were several large patches of consolidated seagrass (Figure 4). Within the southern section of the access channel extending into the boat basin, only occasional small seagrass isolates, primarily *Halodule wrightii*, were observed in a few locations near the center and along the eastern edge access channel that forms the eastern extent of the existing boat basin. Throughout the remainder of the access channel extending north appx. 1000 ft, several areas of the seafloor within the proposed project limits support well established mixed seagrass beds of manatee grass (*Syringodium filiforme*) and shoal grass (*Halodule wrightii*) ranging from moderate (25-50%) to dense (>75%) in cover. In addition, trace amounts of turtle grass (*Thalassia testudinum*) were present throughout the project area, but were limited to sparse isolated sprigs mixed in with denser beds of *Syringodium* and *Halodule*, or as isolated sprigs mixed in with areas of sand and macroalgae often noted along the edge of the channel seafloor near the rock edge of the channel.

Areas Outside the Project Limits: The area adjacent to both the eastern and western extent of the access channel, located outside of the footprint of proposed maintenance dredging, was shallow hardbottom dominated by macroalgae along with limited amounts of soft corals, sponges, and stony corals. The wooden support pilings of the existing dock near the northern end of the access channel were essentially barren, colonized by limited amounts of filamentous algae.

## **PROJECT IMPACTS**

### ***Seagrass***

To assess impacts to seagrass resources within the project limits, the seagrass map was overlaid onto the proposed maintenance dredging plan in ARCGIS and the overlap calculated. The total estimated impacts to seagrass habitat resulting from the proposed project is 14,177 sf, with the majority of those impacts in the access channel (Figure 4). The seagrass resources impacted are

moderate (25-50%) to dense (>75%) cover, mixed-species seagrass beds with manatee grass (*Syringodium filiforme*) and shoal grass (*Halodule wrightii*) present.

### ***Coral Impacts***

No corals were present within either the boat basin or the area of the existing channel where maintenance dredging is proposed. Although a significant number of stony corals were observed on the hardbottom area adjacent to the existing channel, because the maintenance dredging is confined to only the area within the existing channel there are no direct impacts anticipated to the surrounding hardbottom community.

## **ENVIRONMENTAL IMPACTS SUMMARY**

The proposed project was designed to avoid and minimize impacts to benthic resources to the maximum extent practical. Avoidance and minimization measures include limiting the dredge depth, and confining maintenance dredging activities to the existing man-made boat basin and access channel. Despite efforts to avoid and minimize benthic impacts, impacts to benthic resources are un-avoidable.

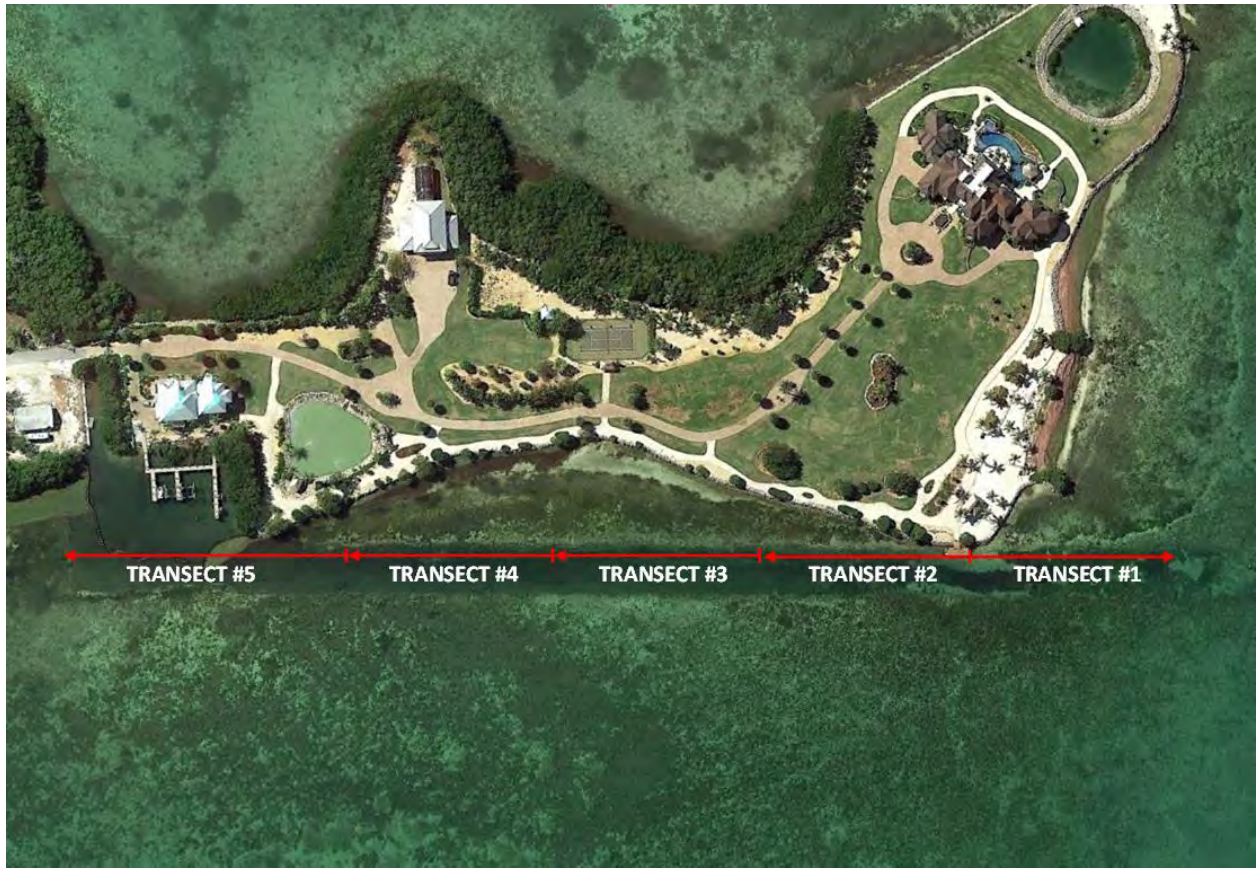
The proposed maintenance dredging will impact 14,177 sf of seagrass habitat within the existing access channel.

No corals were documented within the proposed maintenance dredging limits. Small corals were observed on hardbottom habitat outside the project limits, and impacts to these corals and other benthic resources can be easily avoided using best management practices to complete the project.



**Figure 1.** Aerial image indicating the location of proposed maintenance dredging at Sunset Point Farm LLC, Long Point Key, Monroe County, Florida.





**Figure 2.** Aerial image indicating the location of the multiple 300ft primary transects deployed in order to assess the entire length of the 1500ft channel proposed for maintenance dredging at Sunset Point Farm LLC, Long Point Key, Monroe County, Florida.





**Figure 3.** Aerial image indicating the location of primary and secondary transects deployed in order to assess each 300ft section of the channel proposed for maintenance dredging at Sunset Point Farm LLC, Long Point Key, Monroe County, Florida.



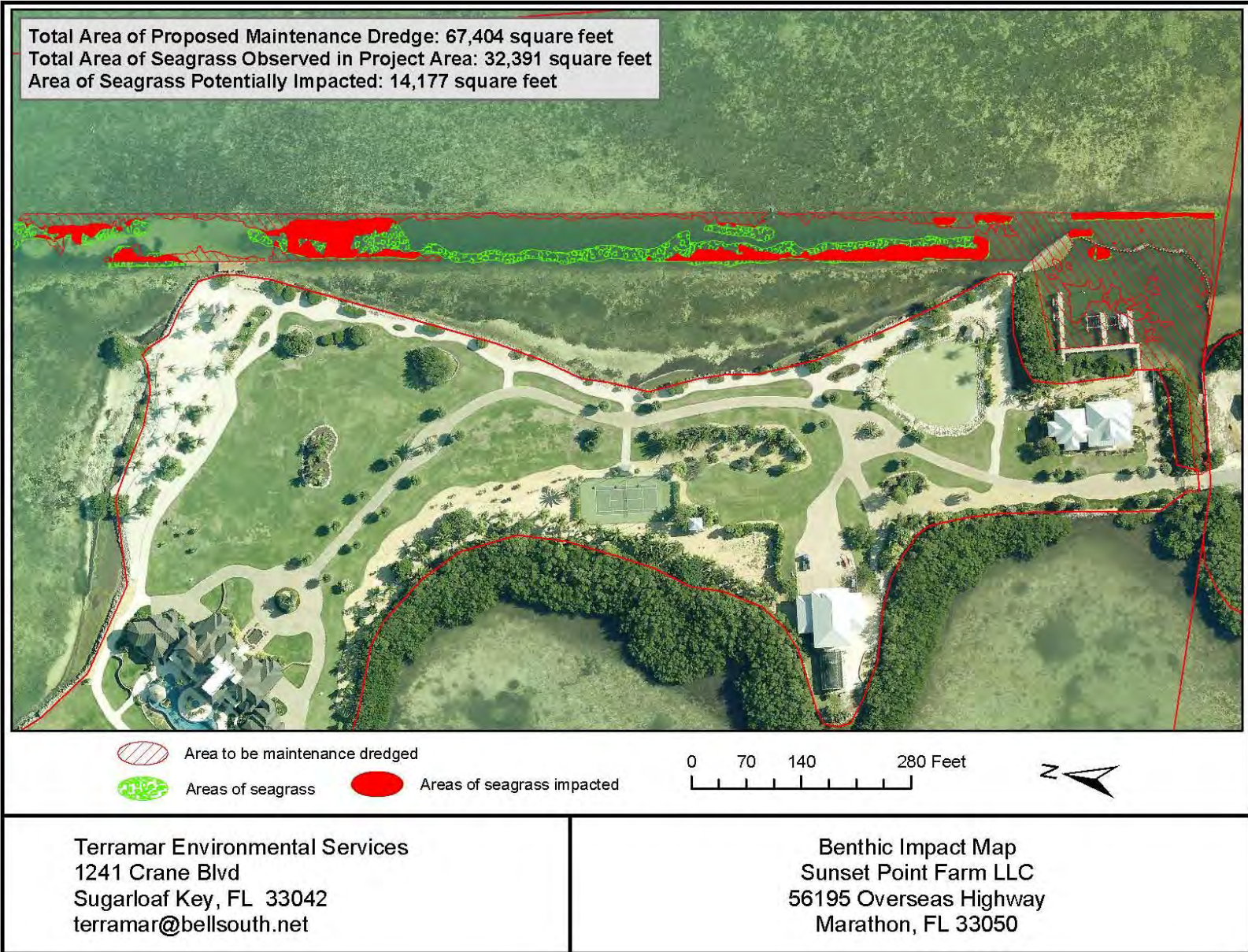


Figure 4. Seagrass distribution and estimated impacts.



**Table 1.** Summary of benthic observations (Transect #1)

Primary Transect Location (ft)	Secondary Transect Location (ft)	Observations
300	0-24 24-38 38-56 56-60	sand with sparse (<10%) macroalgae and drift algae mats sand with scattered (10-25%) <i>Syringodium</i> and limited macroalgae sand with moderate (25-50%) <i>Syringodium/Thalassia</i> mix and sparse (<10%) macroalgae sand and rubble with moderate (25-50%) macroalgae
275	0-18 18-55 55-60	sand with sparse (<10%) macroalgae and drift algae mats dense (>75%) <i>Syringodium</i> sand and rubble with moderate (25-50%) macroalgae
250	0-42 42-60	sand with sparse (<10%) macroalgae moderate/dense (50-75%) <i>Syringodium</i>
225	0-35 35-42 42-54 54-60	sand with accumulated drift algae mats sand with moderate (25-50%) macroalgae dense (>75%) <i>Syringodium</i> sand and rubble with scattered (10-25%) <i>Thalassia</i> and scattered (10-25%) macroalgae
200	0-6 6-40 40-56 56-60	sand with sparse (<10%) macroalgae sand with accumulated drift algae mats dense (>75%) <i>Syringodium</i> sand and rubble with moderate (25-50%) macroalgae
175	0-32 32-56 56-60	sand with scattered (10-25%) macroalgae dense (>75%) <i>Syringodium</i> sand and rubble with moderate (25-50%) macroalgae
150	0-34 34-55 55-60	sand with accumulated drift algae mats dense (>75%) <i>Syringodium</i> sand and rubble with moderate (25-50%) macroalgae
125	0-6 6-18 18-30 30-42 42-52 52-60	sand moderate/dense (50-75%) <i>Syringodium</i> moderate (25-50%) <i>Halodule</i> with scattered (25-50%) macroalgae sand with sparse (<10%) macroalgae and drift algae mats dense (>75%) <i>Syringodium</i> sand and rubble with scattered (10-25%) <i>Thalassia</i> and scattered (10-25%) macroalgae
100	0-12 12-18 18-42 42-60	moderate/dense (50-75%) <i>Halodule/Syringodium</i> mix with scattered (10-25%) macroalgae sand with moderate (25-50%) macroalgae and isolated sprigs of <i>Halodule</i> sand with accumulated drift algae mats moderate/dense (50-75%) <i>Halodule</i> and isolated sprigs of <i>Syringodium</i>
75	0-18 18-52 52-60	moderate/dense (50-75%) <i>Halodule/Syringodium</i> mix sand with sparse (<10%) macroalgae and drift algae mats moderate/dense (50-75%) <i>Halodule/Syringodium</i> mix
50	0-6 6-56 56-60	moderate/dense (50-75%) <i>Halodule</i> sand with accumulated drift algae mats sand and rubble with moderate (25-50%) macroalgae
25	0-56 56-60	sand with accumulated drift algae mats sand and rubble with scattered (10-25%) macroalgae
0	0-56 56-60	sand with accumulated drift algae mats sand and rubble with scattered (10-25%) macroalgae

Table 2. Summary of benthic observations (Transect #2)		
Primary Transect Location (ft)	Secondary Transect Location (ft)	Observations
300	0-6 6-12 12-60	sand with moderate/dense (50-75%) macroalgae moderate/dense (50-75%) <i>Halodule/Syringodium</i> mix sand with accumulated drift algae mats
275	0-8 8-12 12-22 22-55 55-60	sand and rubble with moderate (25-50%) macroalgae sand dense (>75%) <i>Syringodium</i> sand with accumulated drift algae mats sand and rubble with moderate (25-50%) macroalgae
250	0-6 6-12 12-56 56-60	sand and rubble with sparse (<10%) macroalgae moderate/dense (50-75%) <i>Syringodium/Halodule</i> sand with accumulated drift algae mats sand and rubble with sparse (<10%) macroalgae and accumulated drift algae mats
225	0-6 6-36 36-52 52-56 56-60	sand with moderate (25-50%) macroalgae dense (>75%) <i>Syringodium/Halodule</i> moderate(25-50%) <i>Halodule</i> dense (>75%) <i>Syringodium</i> sand and rubble with moderate (25-50%) macroalgae
200	0-6 6-12 12-56 56-60	sand with moderate (25-50%) macroalgae dense (>75%) <i>Syringodium</i> moderate/dense (50-75%) <i>Halodule/Syringodium</i> with sand blowouts sand and rubble with moderate (25-50%) macroalgae and accumulated drift algae mats
175	0-4 4-12 12-55 55-60	sand with moderate (25-50%) macroalgae dense (>75%) <i>Syringodium</i> moderate/dense (50-75%) <i>Halodule/Syringodium</i> with sand blowouts sand and rubble with moderate (25-50%) macroalgae and accumulated drift algae mats
150	0-6 6-55 55-60	sand with moderate (25-50%) macroalgae moderate/dense (50-75%) <i>Syringodium</i> sand and rubble with scattered (10-25%) macroalgae
125	0-6 6-48 48-55 55-60	sand and rubble with scattered (10-25%) macroalgae dense (>75%) <i>Syringodium/Halodule</i> moderate/dense (50-75%) <i>Halodule/Syringodium</i> mix sand and rubble with moderate (25-50%) macroalgae and accumulated drift algae mats
100	0-10 10-54 54-60	sand and rubble with moderate (25-50%) macroalgae moderate/dense (50-75%) <i>Halodule/Syringodium</i> mix sand and rubble with isolated sprigs of <i>Thalassia</i> and scattered (10-25%) macroalgae
75	0-9 9-42 42-60	sand and rubble with scattered (10-25%) macroalgae moderate/dense (50-75%) <i>Halodule/Syringodium</i> mix with sand blowouts sand and rubble with accumulated drift algae mats
50	0-30 30-45 45-60	sand and rubble with sparse (<10%) macroalgae moderate/dense (50-75%) <i>Halodule</i> sand and rubble with accumulated drift algae mats
25	0-55 55-60	sand with accumulated drift algae mats sand and rubble with scattered (10-25%) macroalgae



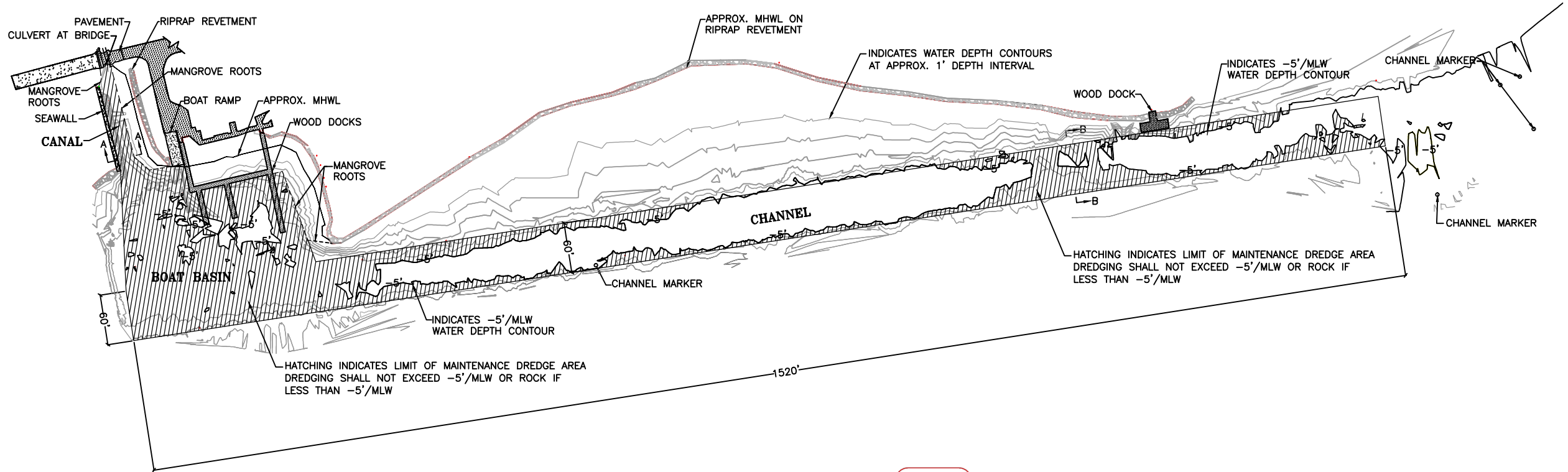
Table 3. Summary of benthic observations (Transect #3)		
Primary Transect Location (ft)	Secondary Transect Location (ft)	Observations
300	0-4 4-45 45-56 56-60	sand with scattered (10-25%) macroalgae moderate/dense (50-75%) <i>Syringodium/Halodule</i> with sand blowouts sand with accumulated drift algae mats sand and rubble with accumulated drift algae mats
275	0-3 3-30 30-52 52-60	sand with scattered (10-25%) macroalgae moderate/dense (50-75%) <i>Halodule/Syringodium</i> mix sand with accumulated drift algae mats sand with scattered (10-25%) macroalgae
250	0-4 4-18 18-56 56-60	sand with scattered (10-25%) macroalgae moderate/dense (50-75%) <i>Halodule/Syringodium</i> mix sand with accumulated drift algae mats and isolated sprigs <i>Halodule</i> sand and rubble with accumulated drift algae mats
225	0-5 5-20 20-48 48-60	sand with scattered (10-25%) macroalgae moderate/dense (50-75%) <i>Syringodium/Halodule</i> mix sand with accumulated drift algae mats sand and rubble with scattered (10-25%) macroalgae
200	0-9 9-24 24-56 56-60	sand with scattered (10-25%) macroalgae moderate/dense (50-75%) <i>Syringodium/Halodule</i> mix sand with accumulated drift algae mats sand and rubble with scattered (10-25%) macroalgae
175	0-6 6-18 18-58 58-60	sand with moderate/dense (50-75%) macroalgae sand with moderate (25-50%) <i>Syringodium/Halodule</i> mix sand with accumulated drift algae mats sand and rubble with scattered (10-25%) macroalgae
150	0-4 4-15 15-60	sand with moderate (25-50%) macroalgae moderate/dense (50-75%) <i>Syringodium</i> sand with accumulated drift algae mats
125	0-8 8-14 14-54 54-60	sand with moderate/dense (50-75%) macroalgae sand with moderate (25-50%) <i>Halodule/Syringodium</i> sand with accumulated drift algae mats sand and rubble with scattered (10-25%) macroalgae
100	0-9 9-18 18-56 56-60	sand and rubble with moderate (25-50%) macroalgae sand with moderate (25-50%) <i>Syringodium/Halodule</i> mix sand with accumulated drift algae mats sand and rubble with moderate (25-50%) macroalgae
75	0-3 3-15 15-52 52-60	sand and rubble with moderate (25-50%) macroalgae moderate/dense (50-75%) <i>Syringodium</i> sand with accumulated drift algae mats sand with moderate (25-50%) <i>Halodule</i>
50	0-8 8-20 20-58 58-60	sand with moderate (25-50%) macroalgae moderate/dense (50-75%) <i>Syringodium/Halodule</i> mix sand with accumulated drift algae mats sand and rubble with scattered (10-25%) macroalgae
25	0-5 5-14 14-60	sand with moderate (25-50%) macroalgae moderate/dense (50-75%) <i>Syringodium</i> sand with accumulated drift algae mats

Table 4. Summary of benthic observations (Transect #4)		
Primary Transect Location(ft)	Secondary Transect Location(ft)	Observations
300	0-6 6-33 33-60	sand and rubble with moderate (25-50%) macroalgae moderate/dense (50-75%) <i>Syringodium/Halodule</i> with sand blowouts sand with accumulated drift algae/detritus
275	0-4 4-30 30-60	sand with moderate(25-50%) macroalgae moderate/dense (50-75%) <i>Syringodium/Halodule</i> sand with accumulated drift algae/detritus
250	0-6 6-34 34-60	sand with moderate/dense(50-75%) macroalgae moderate/dense (50-75%) <i>Syringodium/Halodule</i> sand with accumulated drift algae/detritus
225	0-6 6-30 30-60	sand and rubble with moderate (25-50%) macroalgae moderate/dense (50-75%) <i>Halodule/Syringodium</i> mix sand with accumulated detritus
200	0-5 5-28 28-60	sand with moderate(25-50%) macroalgae moderate/dense (50-75%) <i>Syringodium/Halodule</i> sand with accumulated drift algae/detritus
175	0-4 4-30 30-60	sand with moderate(25-50%) macroalgae moderate/dense (50-75%) <i>Syringodium/Halodule</i> sand with accumulated detritus
150	0-10 10-22 22-60	sand with moderate(25-50%) macroalgae moderate/dense (50-75%) <i>Syringodium</i> sand with accumulated detritus and isolates sprigs of <i>Syringodium</i>
125	0-12 12-36 36-60	sand with moderate(25-50%) macroalgae moderate/dense (50-75%) <i>Halodule/Syringodium</i> mix sand with accumulated drift algae/detritus
100	0-3 3-24 24-36 36-52 52-60	sand with moderate(25-50%) macroalgae moderate/dense (50-75%) <i>Halodule/Syringodium</i> mix sand with accumulated drift algae/detritus moderate/dense (50-75%) <i>Halodule</i> sand and rubble with moderate(25-50%) macroalgae
75	0-6 6-33 33-40 40-54 54-60	sand with moderate(25-50%) macroalgae moderate/dense (50-75%) <i>Syringodium/Halodule</i> sand with accumulated drift algae/detritus moderate/dense (50-75%) <i>Halodule</i> with accumulated drift algae sand and rubble with accumulated drift algae
50	0-3 3-33 33-44 44-58 58-60	sand with moderate(25-50%) macroalgae moderate/dense (50-75%) <i>Syringodium/Halodule</i> sand with accumulated drift algae/detritus moderate/dense (50-75%) <i>Halodule</i> with sand blowouts sand and rubble with accumulated drift algae
25	0-9 9-36 36-50 50-56 56-60	sand and rubble with moderate(25-50%) macroalgae moderate/dense (50-75%) <i>Syringodium/Halodule</i> with sand blowouts sand with accumulated detritus moderate/dense (50-75%) <i>Halodule</i> sand and rubble with moderate(25-50%) macroalgae

Table 5. Summary of benthic observations (Transect #5)		
Primary Transect Location (ft)	Secondary Transect Location (ft)	Observations
25	0-3	sand with scattered (10-25%) macroalgae
	3-32	moderate/dense (50-75%) <i>Syringodium/Halodule</i> with sand blowouts
	32-48	sand with accumulated detritus
	48-56	moderate/dense (50-75%) <i>Syringodium</i>
	56-60	sand with accumulated drift algae/detritus
50	0-4	sand with moderate(25-50%) macroalgae
	4-30	moderate/dense (50-75%) <i>Syringodium/Halodule</i>
	30-48	sand with accumulated detritus
	48-60	sand
75	0-30	moderate/dense (50-75%) <i>Halodule</i>
	30-50	sand with accumulated detritus
	50-58	sand with moderate (25-50%) <i>Halodule</i>
	58-60	sand and rubble with scattered (10-25%) macroalgae
100	0-5	sand and rubble with moderate (25-50%) macroalgae
	5-52	sand with accumulated drift algae/detritus
	52-58	sand with moderate (25-50%) <i>Syringodium/Halodule</i>
	58-60	sand with scattered (10-25%) macroalgae
125	0-60	sand with accumulated detritus/drift algae
150	0-52	sand with accumulated detritus/drift algae
	52-58	sand
	58-60	sand and rubble with moderate (25-50%) macroalgae
175	0-50	sand with accumulated drift algae/detritus
	50-60	sand
200	0-32	sand with accumulated detritus
	32-38	moderate/dense (50-75%) <i>Halodule</i>
	38-54	sand with accumulated detritus
	54-60	moderate/dense (50-75%) <i>Halodule</i>
225	0-15	moderate/dense (50-75%) <i>Halodule</i>
	15-40	sand with accumulated detritus
	40-55	sand
	55-60	moderate/dense (50-75%) <i>Halodule</i>
250	0-55	sand with accumulated detritus
	55-60	moderate/dense (50-75%) <i>Halodule</i>
275	0-52	sand with accumulated detritus
	52-60	moderate/dense (50-75%) <i>Halodule</i>
300	0-56	sand with accumulated detritus
	56-60	moderate/dense (50-75%) <i>Halodule</i>
325	0-56	sand with accumulated detritus
	56-60	moderate/dense (50-75%) <i>Halodule</i>
350	0-54	sand with accumulated detritus
	54-60	moderate/dense (50-75%) <i>Halodule</i>
375	0-52	sand with accumulated detritus
	52-60	moderate/dense (50-75%) <i>Halodule</i>

## **ATTACHMENT 1: *Project Plans***

PART GOVERNMENT LOT 1 & ADJACENT BAY BOTTOM  
 (RE#00099570-000000 & 00099590-000000)  
 LONG POINT KEY



**SITE PLAN**  
 SCALE: 1" = 140'


**ATTACHMENT 2: Channel Dredging Assessment Photo Log**



Photo from the south end of the project area near the boat basin looking down the access channel to the north.



Photo of existing dock structures within the boat basin.



Photo showing the clear delineation between the previously dredged access channel and the surrounding hardbottom area.



Photo of dense mats of accumulated drift algae over barren sand areas throughout majority of project area.



Photo of dense seagrass bed, typically either *Syringodium*, *Halodule*, or a mix of both seagrass species, located within the area proposed for maintenance dredging.



Photo of rubble, sand, and macroalgae typical in the narrow margin between the rock edge and the existing channel. These areas are located within the area proposed for maintenance dredging.





Photo of rubble, sand, and macroalgae typical in the narrow margin between the rock edge and the existing channel, with seagrass also visible. These areas are located within the area proposed for maintenance dredging.



Photo of accumulated detritus and decaying vegetation accumulated over soft, mucky sediments within the existing boat basin.