

## Dredging Inspection Field Report

### Site Observations

Date: 9/1/2021 Field Engineer: Mike Triano  
 Weather Conditions: Breezy, Partly Cloudy Temperature: 80s  
 Wood Project Number: 2402210005.01.01 Client: Isle of Palms  
 Contractor: Branch Diversified (BDI) Foreman Onsite: Brett Tucker

Item	Observations	Photo
<b>Crew Size &amp; Location</b>	<p><b>**All Barges are located in the Southern Canals**</b></p> <p>30' x 80' barge, moored off to the large ~ 50' X 100'+ Hopper barge in the intracoastal. The 30' X 80' Barge is used to unload the smaller barges. The ~ 50' X 100'+ Hopper barge is used to transport material to DMMA. Both Barges are located east of Baseline 1 in the Intracoastal: Southern IOP.</p> <p>Two 20' Wide push barges actively dredging Baseline 1 at the time of the inspection.</p> <p>Two Tugs pushing 20' Wide barges back and forth from Baseline 1.</p> <p>One 26' Thruster barge was actively dredging Baseline 5.</p> <p>One large tug moving large Hopper barges to the DMMA</p> <p>20' aluminum boat used to travel to and from the site.</p>	<p>Photo: 1, 2, 3, &amp; 5</p> <p>See Map</p>
<b>Equipment on Site</b>	Same as Crew size, 3 mechanical dredges (excavators)	Photos: 1, 2, 3, & 5
<b>Work Completed</b>	<p>Majority of Northern IOP Canals. *</p> <p>Portions of Baseline 1 and 5 Southern IOP Canals</p> <p><u>BDI advised dredging occurs in two phases: on the way in for access &amp; removal of top layer of sediment and on the way out for getting canal to specified grade. This is true for all canals that barges cannot initially access.</u></p>	See Map
<b>Work Underway</b>	Actively Dredging Baseline 1 & 5 Southern IOP.	See Map
<b>Materials on Site</b>	<p>Stored in ~100'+ X 50' Hopper barge and One 30' x 80' barge. Both barges are moored in the intracoastal. East of Baseline 1: Southern IOP.</p> <p>Lance indicated that once dredging commences in the South IOP Canals, a second Large ~100'+ 50' will be stored on pilings east of the entrance to the southern canals.</p>	Photo: 6
<b>Manatee Observer</b>	All crew on barges were advised to keep eye out for Manatees - signs posted on northern and southern canals.	Photos: 4
<b>Turbidity Monitoring</b>	<p>Background Reading: 14.4 NTU</p> <p>12:30 Reading: 15.1</p>	Photos: 7



<b>Dewatering</b>	Lance advised dewatering does not occur - drain holes are located in bottom of containers. Lance advised inner canals are mixing zones and therefore sediment/water returning to canals are not of concern.	
<b>Dredging</b>	Mechanical	
<b>Offloading Location</b>	Large ~50' -100'+ Hopper barge and 30' X 80' Barge – east of Baseline 1: Southern IOP.  Advised that trips to Reed Island DMMA are taken once these large barges are full, that usually occurs once a day.	Photo: 5 & 6
<b>Posted Permit</b>	Permits are not posted. BDI was provided with additional copies.	
<b>Other...</b>	See Additional Comments Below	

### Additional Notes

**Projected Schedule:**

- Brett Tucker indicated that Baselines 1, 3, 4, and 5 in the southern IOP canals will be focus for the next month.
- 30' X 80' "MD-80" barge is going to be used in Baseline 1 until it cannot fit.

**Anticipated Obstacles to Meeting Schedule:**

- Equipment malfunctioning / no operator to dig / Barges at Idle.
- Narrow spots in the canals between boat docks.
- Displaced material causing contractor to re-work areas to correct high spots.

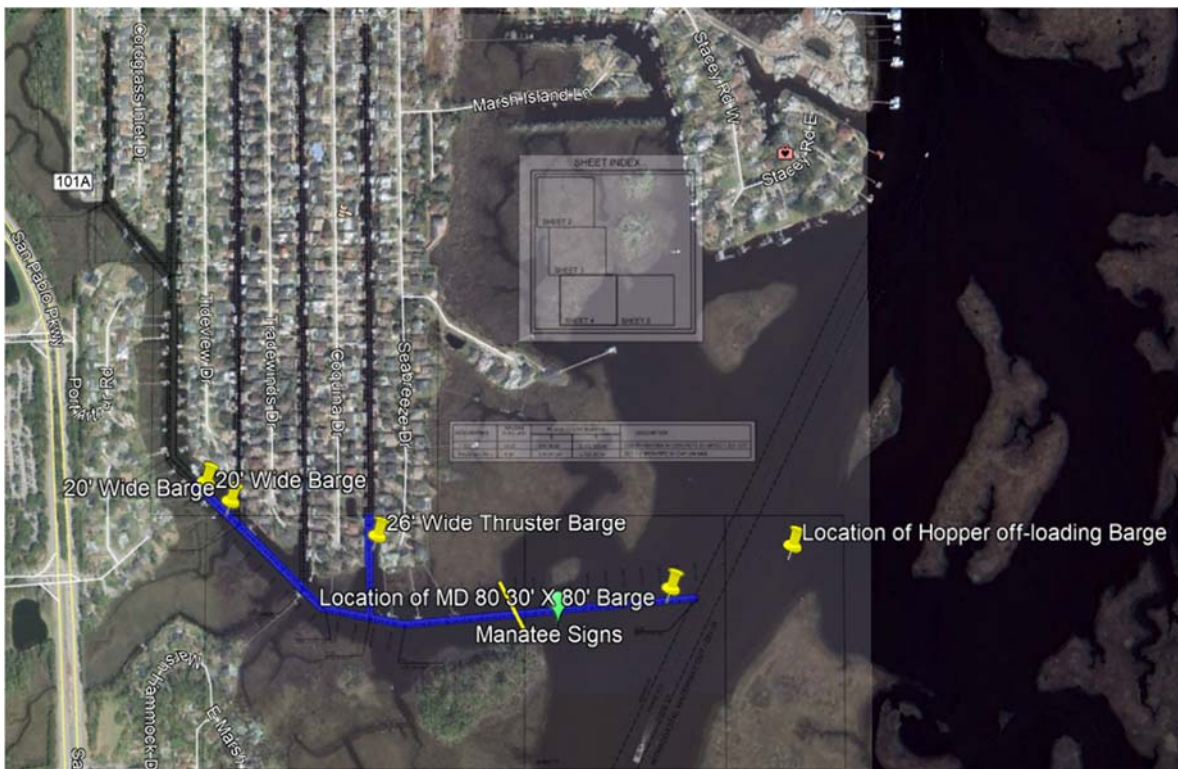
**Engineer's Notes:**

- Brett Tucker indicated that turbidity readings are taken at the mouth of Baseline 1: Southern IOP.
- Brett Tucker indicated that this was the first week all the barges were located in the Southern Canals. He also said they are awaiting additional surveys in the northern canals to determine if/where additional work needs to be done.
- A representative of the Bank named Major was on board at the time of the inspection.

Field Engineer Signature:

Date: 9/1/2021

Maps: **Red** is completed Work **Blue** is Work to be completed





**Photograph Log:**



**Photo 1:** View of two 20' Wide Push Barge located in Baseline 1: Southern IOP



**Photo 2:** View of 26' Thruster Barge located in Baseline 5: Southern IOP.



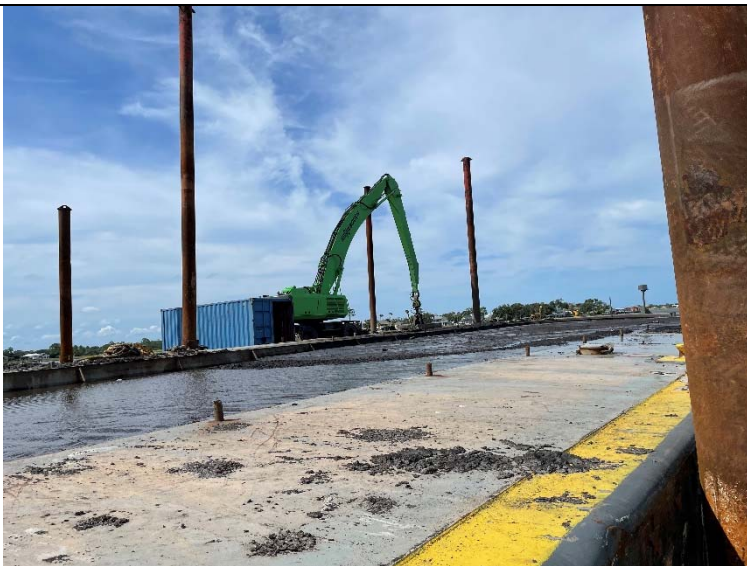
**Photo 3:** MD-80 Push Barge located at the mouth of Baseline 1.



**Photo 4:** View towards mouth of Baseline 1: Southern IOP. Manatee Signs and Turbidity Curtain visible in the distance.



**Photo 5:** View towards large Hopper barge and 30' X 80' Barge located east of Baseline 1: Southern IOP.



**Photo 6:** Close up view of material within Hopper Barge – Barge was full and will be unloaded tomorrow.

**Isle of Palms  
TURBIDITY MONITORING REPORT**

DATE: 9-1-21 TIME: 12:00 MACHINE: 2100Q HACH TURBIDITY METER  
COLLECTOR: Paula B. Reynolds

**1. WEATHER AND WATER OBSERVATIONS:**  
 Atmospheric Conditions: Wind Speed: 5 mph  
 Wind Direction: W  E  N  S   
 Weather Condition: NW  NE  SW  SE   
 Rain  Clear  Cloudy   
 Water Conditions: Tide Stage: Low  Medium  High   
 Water Current: 5 mph  
 Water Direction to: W  E  N  S   
 Harbor seas: NW  NE  SW  SE   
 Calm  (little or no waves)  
 Moderate  (waves 1 to 2' high)  
 Rough  (waves > 2' high)

**2. BACKGROUND SAMPLES**  
 Location Taken: SW-1 Time of Sample: 12:00 Date: 9-1-21

Sample No.:	Surface Sample	Mid-Depth Sample	Bottom Sample
1			
Analysis Date:	<u>9-1-21</u>		
Analysis Time:	<u>12:00 PM</u>		
Turbidity (NTU):	<u>11.1</u>		

Comments (if any):

**3. MONITORING SAMPLES (taken every 4 hours):**  
 Location Taken: SW-1 Time of Sample: 12:30 PM Date: 9-1-21

Sample No.:	Surface Sample	Mid-Depth Sample	Bottom Sample
1			
Analysis Date:	<u>9-1-21</u>		
Analysis Time:	<u>12:30 PM</u>		
Turbidity (NTU):	<u>16.1</u>		

Comments (if any):

Photo 7: 9/1/2021 Turbidity Form.