

## Dredging Inspection Field Report

### Site Observations

Date: 5/25/2021 Field Inspector: Mike Triano  
 Weather Conditions: Sunny Temperature: 80s / Windy  
 Wood Project Number: 2402210005.01.01 Client: Isle of Palms  
 Contractor: Branch Diversified (BDI) Foreman Onsite: Angel Guzman

Item	Observations	Photo
<b>Crew Size</b>	Two 20' wide barges dredging at time of inspection. Two tugs to move the barges back and forth. One 26' Thruster Barge One ~ 50' X 100'+ Hopper barge staged in intracoastal east of mooring canals used to transport material to DMMA. Angel's ~20' aluminum boat The 30' x 80' barge, typically located at Station 18, Baseline 1, was moored off to the large Hopper barge in the intracoastal at the time of the inspection. This barge was still being used to unload the smaller barges.	Photos: 1, 2, 5
<b>Location of Crew</b>	20' Wide barge: Actively dredging Baseline 2 26' Wide Thruster barge: Actively dredging in Baseline 4 20' Wide barge located: Actively dredging in Baseline 6 One ~ 50' X 100'+ Hopper barge staged in intracoastal east of mooring canals. The 30' x 80' barge, typically located at Station 18, Baseline 1, was moored off to the large Hopper barge in the intracoastal at the time of the inspection. This barge was still being used to unload the smaller barges. Angel's ~20' aluminum boat roams throughout	Photos: 1, 2, 5 See Map
<b>Equipment on Site</b>	Same as Crew size, 4 mechanical dredges (excavators)	Photos: 1, 2, 5
<b>Work Completed</b>	S Baseline 1 from POB to ~ Station 31 Majority of N Baseline 1 to terminus - High spots remain: BDI indicated that any high spots identified will be corrected to the proper depth. Mooring Canals Portions of N Baseline 2, 3, 4, 5, & 6  BDI indicated that the Mooring Canals are now fully completed.  BDI advised dredging occurs in two phases: on the way in for access & 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.	See Map

<b>Work Underway</b>	Dredging was underway in Baseline 2, Baseline 6 and Baseline 7 at the time of the inspection.	See Map
<b>Materials on Site</b>	<p>Stored in ~100' + long X 50' wide Hopper barge and One 30' x 80' barge. Both barges were moored in the intracoastal at the time of the inspection.</p> <p>The 30' x 80' barge, typically located at Station 18, Baseline 1, was moored off to the large Hopper barge in the intracoastal at the time of the inspection. This barge was still being used to unload the smaller barges.</p> <p>Angel advised that trips to the DMMA are taken once these large barges are full, that usually occurs once a day.</p>	Photos: 3, 5
<b>Manatee Observer</b>	All crew on barges were advised to keep eye out for Manatees - signs posted on northern and southern canals.	Photo: 6
<b>Turbidity Monitoring</b>	<p>0800 reading was 8.08 NTU. 1200 reading was 29.6 NTU – taken at the time of the inspection.</p> <p><b>Note:</b> the 29.6 NTU reading is still within the acceptable threshold standard determined by 62 – 302.530 F.A.C. (70) (29 NTU above Natural Background Conditions) Control sample taken for today was the 0800 reading which was done before work commenced and read 8.08 NTU.</p> <p>Barrier was open at the time of the inspection.</p>	Photos: 4, 6
<b>Dewatering</b>	Lance advised dewatering does not occur - drain holes are located in bottom of containers. Lance advised inner canals are mixing zones. Turbidity samples are being taken at the mouth of the north project area.	N/A
<b>Dredging</b>	Mechanical	
<b>Offloading Location</b>	<p>Large ~80' -100' + storage barge located in the Intracoastal. Angel advised that there are several barges of this size, and larger that are interchanged once full.</p> <p>The 30' x 80' barge, typically located at Station 18, Baseline 1, was moored off to the large Hopper barge in the intracoastal at the time of the inspection. This barge was still being used to unload the smaller barges.</p> <p>Angel advised that trips to the DMMA are taken once these large barges are full, that usually occurs once a day.</p>	Photo: 5
<b>Posted Permit</b>	Permits are not posted. Copies are kept on Angel's boat while dredging operations are taking place.	
<b>Other...</b>	See Additional Comments Below	

## Additional Notes

### **Projected Schedule:**

- Active dredging in Baseline 2, 4, & 6 at the time of the inspection.
- Dredging of Baseline 4 was initiated due to the presence of a large sailboat blocking access to Baseline 5. Although this sailboat was not present at the time of the inspection, BDI indicated that dredging would continue in Baseline 4 for now until the first phase of dredging was completed.

### **Anticipated Obstacles to Meeting Schedule:**

- Equipment malfunctioning at the time of the inspection, one tugboat was out of commission. One barge continues to have battery issues, generator was left on all day to combat this.
- The very end of Baseline 3 will have to be finished later; current dredges do not have a long enough boom to reach past the two docks at the end of the canal.
- The input of material in Baseline 5 – BDI indicated that material keeps filling in the dredged location at the terminus of the canal (near Beach BLVD). BDI indicated that the likely reason for this is material within the riprap flowing out into the dredged portions. – This scenario is likely what was occurring at the Mooring Canals which took longer than expected.
- Warmer weather increasing Manatee sightings.

### **Engineer's Notes:**

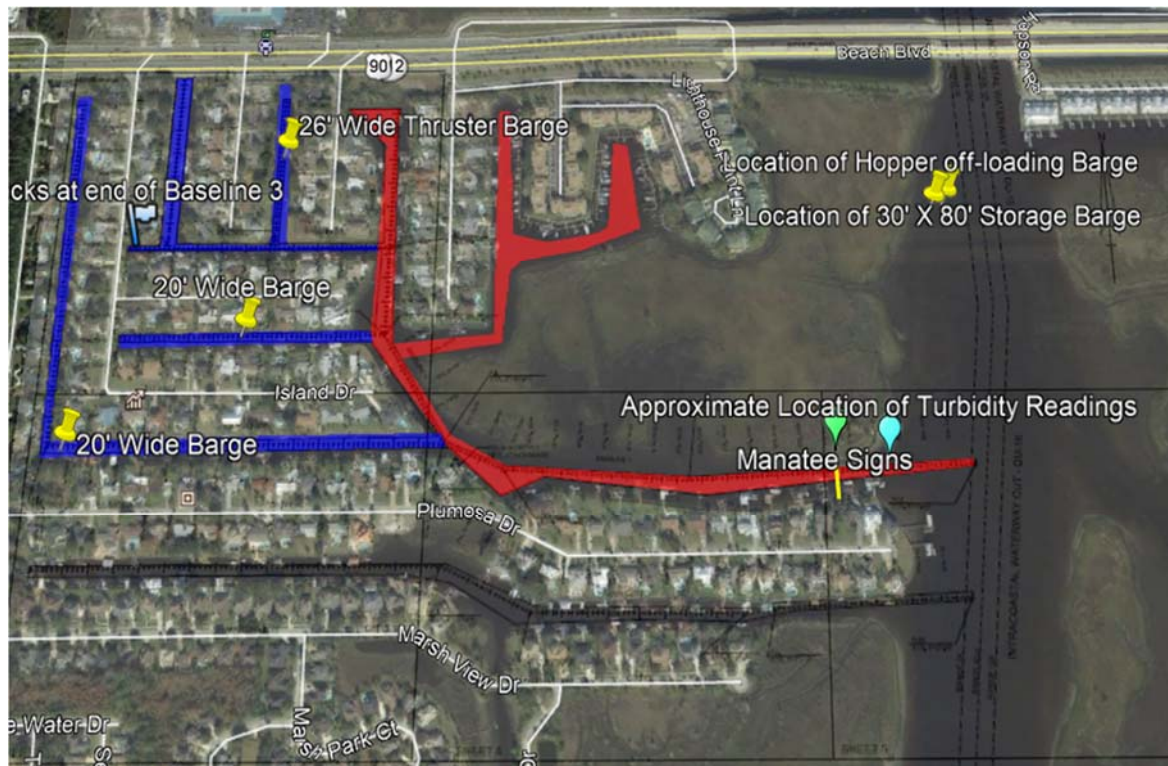
- BDI indicated that dredging of the terminus of Baseline 5 starts approximately 20 feet south of the riprap associated with Beach Blvd. See photo 8 for reference.
- BDI indicated that the northern most half of Baseline 5, (approximately from Station 3 to Station 7) was only 1 foot away from being at grade.
- BDI indicated that any high spots identified by the Arc Survey in Baseline 1 will be corrected to the proper depth.

Field Engineer Signature:



Date: 5/25/2021

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





**Photograph Log:**



**Photo 1:** 20' Wide Barge actively dredging within Baseline 2.



**Photo 2:** 26' Wide Thruster Barge actively dredging within Baseline 4.



**Photo 3:** Material removed from Baseline 2.



**Photo 4:** 1200 Turbidity Reading of 29.6 NTU.





**Photo 5:** View of Barge setup in the intracoastal and active material removal from smaller, 20' wide barge at the time of the inspection.

Barge being off-loaded was the barge BDI indicated was working within Baseline 6.



**Photo 6:** Turbidity barrier and manatee signs.



**Photo 7:** Typical view of riprap at terminus of Baseline 5.



**Photo 8:** For reference, BDI indicated that the dredge is parked parallel to the end of this dock (northern most dock in Baseline 5) during dredging activities.