

Dredging Inspection Field Report

Site Observations

Date: 8/4/2021 Field Engineer: Mike Triano
 Weather Conditions: Breezy, Overcast, Rainy Temperature: 80s
 Wood Project Number: 2402210005.01.01 Client: Isle of Palms
 Contractor: Branch Diversified (BDI) Foreman Onsite: Lance Young

Item	Observations	Photo
Crew Size & Location	<p>30' x 80' barge, moored off to the large Hopper barge in the intracoastal. This barge is used to unload the smaller barges. Southeast of Baseline 7.</p> <p>One 26' Thruster Barge actively off-loading at the time of the inspection – was dredging additional identified material and high spots in Baseline 1.</p> <p>One 20' Push Barge was down for maintenance at the time of the inspection (Ruptured Hydraulic Hose)</p> <p>One 20' Wide push barge was actively dredging Baseline 7 at the time of the inspection.</p> <p>One Tug moored off to the large Hopper barge in the intracoastal.</p> <p>One Tug pushing 20' Wide barge back and forth from Baseline 7.</p> <p>One large tug moving large Hopper barges to the DMMA</p> <p>One ~ 50' X 100'+ Hopper barge staged in intracoastal southeast of Baseline 7 used to transport material to DMMA.</p> <p>20' aluminum boat</p>	<p>Photo: 1, 2 & 3</p> <p>See Map</p>
Equipment on Site	Same as Crew size, 4 mechanical dredges (excavators)	Photos: 1, 2 & 3
Work Completed	<p>S Baseline 1 from POB to ~ Station 31</p> <p>Majority of N Baseline 1 to terminus:</p> <p>Correction of High Spots within Baseline 1</p> <p>Mooring Canals</p> <p>Portions of N Baseline 2, 3, 4, 5, & 6</p> <p><u>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.</u></p>	See Map
Work Underway	<p>Actively Dredging Baseline 7 North IOP</p> <p>Actively Dredging Identified Additional Material / Correcting High spots in Baseline 1 North IOP</p>	See Map
Materials on Site	<p>Stored in ~ 50' x 100'+ Hopper barge and One 30' x 80' barge. Both barges are moored in the intracoastal. Southeast of Baseline 7.</p> <p>Lance indicated that once dredging commences in the South IOP Canals, a second Large ~ 50' x 100'+ will be stored on pilings east of the entrance to the southern canals.</p>	Photo: 2 & 3

Manatee Observer	All crew on barges were advised to keep eye out for Manatees - signs posted on northern and southern canals.	Photos: N/A
Turbidity Monitoring	Background Reading: 15.9 NTU 1600 Reading: 16.2 NTU	Photos: 4
Dewatering	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.	
Dredging	Mechanical	
Offloading Location	<p>Large ~50' X 100'+ Hopper barge – southeast of the Baseline 7. A second Large ~50' x 100'+ Hopper Barge will be staged east of the entrance to the south IOP Canals.</p> <p>One 30' X 80' Barge located in the Intracoastal southeast of Baseline 7, moored to the large Hopper.</p> <p>Both barges are moored in the intracoastal.</p> <p>Angel advised that trips to the DMMA are taken once these large barges are full, that usually occurs once a day – will resume once large tug is repaired.</p>	Photo: 2 & 3
Posted Permit	Permits are not posted. BDI was provided with additional copies.	
Other...	See Additional Comments Below	

Additional Notes

Projected Schedule:

- Lance Young indicated dredging in Canals within the southern portion of IOP will begin once Baseline 7 and additional dredging/clean-up work in Baseline 1 in the northern canals are completed.
- Dredging within Baseline 7 will continue for approximately 1-2 additional weeks.
- Lance Young indicated Arc has/will be conducting a survey weekending 8/6.

Anticipated Obstacles to Meeting Schedule:

- Equipment malfunctioning / no operator to dig / Barges at Idle.
- The very end of Baselines 3, 6 and 2 will have to be finished at a later time, current dredges do not have a long enough boom to reach past the two docks at the end of the canal. Lance Young indicated a smaller 15' barge will be utilized to reach these areas at a later time. He indicated that this sized barge is unavailable as a rental at the moment and is looking at additional options.
- Displaced material causing contractor to re-work areas to correct high spots.

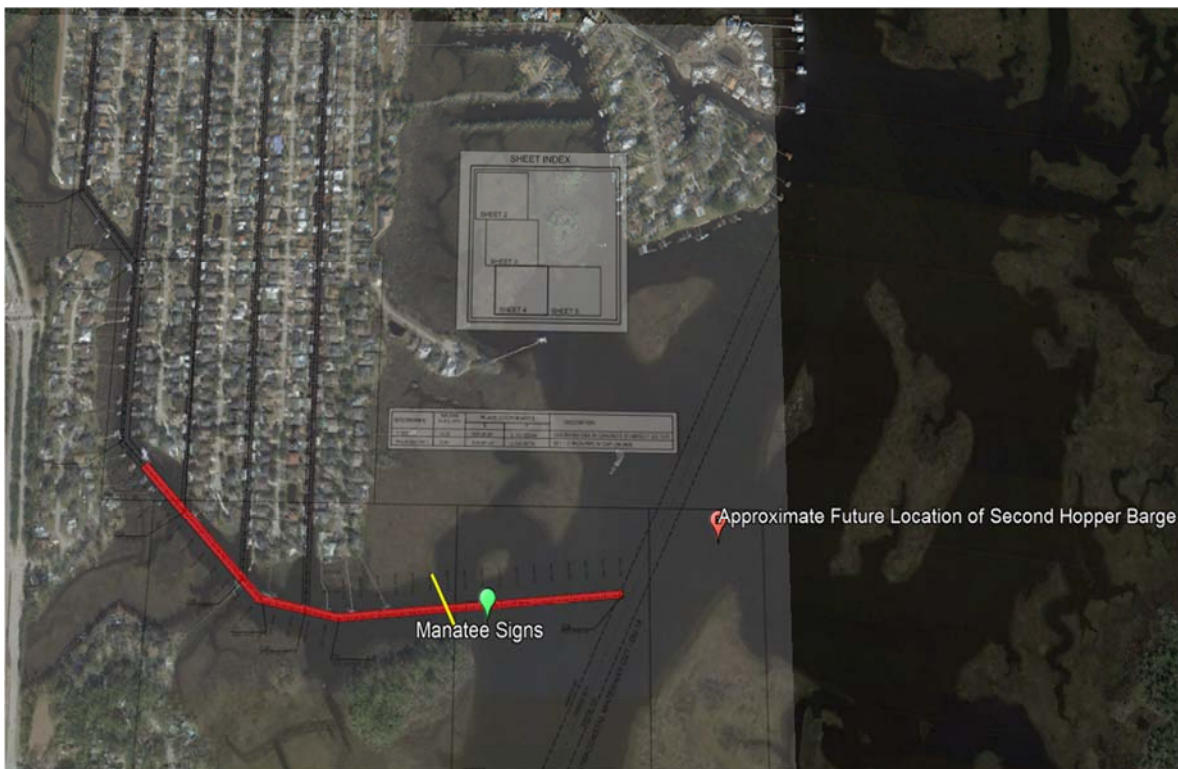
Engineer's Notes:

- Mechanic was on-site fixing one of the 20' wide push barges at the time of the inspection.
- Lance Young indicated he will have up to four barges at one time in the southern canals when the northern canals are finished.
- Large Hopper storage barge was moved and moored southeast of Baseline 7.

Field Engineer Signature: 

Date: 8/4/2021

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



Photograph Log:



Photo 1: View of 20' Wide Push Barge returning to Baseline 7 after off – loading.



Photo 2: View of 26' Thruster Barge actively off-loading before returning to Baseline 1.



Photo 3: Additional photo of 26' Thruster Barge full of material off-loading to the Hopper storage barge.

**Isle of Palms
TURBIDITY MONITORING REPORT**

DATE: 8-4-21 TIME: 9:45 MACHINE: 2100Q HACH TURBIDITY METER
COLLECTOR: Arthur Ewing

1. WEATHER AND WATER OBSERVATIONS:

Atmospheric Conditions: Wind Speed: 10 mph
Wind Direction: W E N S
Weather Condition Rain NE SW SE
Clear Cloudy

Water Conditions: Tide Stage: Low Medium High
Water Current: mph
Water Direction to: W E N S
NW NE SW SE
Harbor seas: Calm (little or no waves)
Moderate (waves 1' to 2' high)
Rough (waves > 2' high)

2. BACKGROUND SAMPLES:
Location Taken: North B #7 Time of Sample: 2:45 Date: 8-4-21

	Surface Sample	Mid-Depth Sample	Bottom Sample
Sample No.:	<u>2100</u>		
Analysis Date:	<u>8-4-21</u>		
Analysis Time:	<u>2:45</u>		
Turbidity (NTU)	<u>15.9</u>		

Comments (if any): N/A

3. MONITORING SAMPLES (taken every 4 hours):
Location Taken: North B #7 Time of Sample: 4:00 pm Date: 8-4-21

	Surface Sample	Mid-Depth Sample	Bottom Sample
Sample No.:	<u>2100</u>		
Analysis Date:	<u>8-4-21</u>		
Analysis Time:	<u>4:00 pm</u>		
Turbidity (NTU)	<u>16.2</u>		

Comments (if any): N/A

Photo 2: 8/4/2021 Turbidity Report.