

Weekly Field Report
Week: 04-06-14 through 04-12-14
New Bedford Harbor Lower Harbor CAD Cell (LHCC)

This Weekly Field Report was prepared to serve as a summary of field activities conducted throughout the week for Phase I dredging of the New Bedford Harbor Lower Harbor CAD Cell (LHCC) in New Bedford, Massachusetts.

1. Introduction:

The weekly field report describes the activities carried out by the Contractor (Cashman), the Owner's Representative (Apex Companies, LLC), and any subcontractors completing work within the scope of the project requirements.

This Weekly Field Report represents the twenty third Report associated with Phase I dredging of the LHCC in New Bedford Harbor, and the associated handling and disposal of dredged materials at CAD cells within the Harbor, and at designated open-water disposal sites approved for this Project.

This 23rd Report for the LHCC dredging activities includes:

- Daily Inspection Reports from the dredging oversight performed during the week of April 6th through April 12th, 2014. These reports include notes on the equipment used on site, and a summary of contractor activities. (See Attachment 1);
- Water Quality Monitoring Forms completed for the week of April 6th through April 12th, 2014, (Attachment 2) summarizing monitoring survey data recorded during active dredging. Included with the attached forms is Figure 1 Lower Harbor CAD Cell Phase I Water Quality Monitoring Plan, which shows the locations of the water quality monitoring events conducted during this reporting period. Per the approved Water Quality Monitoring Plan and associated performance standards for the dredging efforts being conducted during this reporting period, Apex has:
 - Conducted water quality monitoring a minimum of one day per week
 - Performed visual inspections of dredged materials before the disposal of a scow for any visible debris or other items that could potentially become a hazard to navigation prior to the scow's departure for the offshore disposal site.

Summary:

The Contractor, Cashman Dredging and Marine Contracting, Co. LLC (Cashman) conducted dredging at the LHCC on April 7th, 8th, 9th, 10th, 11th, and 12th. Dredging operations focused on the removal of Phase I Bottom of CAD Cell sediments. During this reporting period, dredging operations were conducted using a conventional digging bucket, with dredged materials being disposed offshore at the Rhode Island Sound Disposal Site (RISDS). Cashman was observed conducting these activities during the authorized operational window of 7AM until sunset, utilizing a single dredge plant – the Bobby D; two tugs – Ellsea and Lucinda Smith; a 2800 cubic yard split scow – Eddie Carroll; and two small utility boats.

With time of year restrictions now in place (January 15th through June 15th) all dredging activities were conducted within a silt curtained perimeter surrounding the LHCC.

2. Operational Notes:

Dredging:

Dredging of LHCC Phase I Bottom of CAD sediments continued during the week. Apex conducted one day of water quality monitoring on April 8th while dredging was being performed to ensure that this activity did not result in an exceedance of any project-specific water quality standards.

Offshore Disposal:

Offshore disposal for LHCC Phase I Bottom of CAD sediments is scheduled and permitted for the Rhode Island Sound Disposal Site. Three offshore disposal events, using the split scow Eddie Carroll, were recorded during the week and occurred on April 7th, 9th, and 11th.

Table 1 – Cumulative Dredging Progress

Period of Activity	Volume (cy)
Approximate Top of CAD Volume Dredged to Date*	24,890
Approximate Bottom of CAD Volume Dredged this Reporting Period	5,550
Approximate Bottom of CAD Volume Dredged to Date*	41,050

* Dredge volume quantities are estimated based on observed scow draft marks and an assumed density of the materials dredged. Given the uncertainty in the density of a composite mix of sediments being dredged, all volumes are confirmed and adjusted as necessary using bathymetric survey data.

3. Monitoring Summary

There were no water quality exceedances observed during this reporting period related to dredging operations. No water quality samples were collected.

Prepared by:
Apex Companies, LLC



John B. McAllister, P.E.
Senior Project Engineer

Attachment 1
Daily Inspection Reports



City of New Bedford Harbor Development Commission
New Bedford Harbor USEPA Lower Harbor CAD Cell
CFDA No.: 66.802
Inspection Report

Inspector: Brett Young **Date:** 4/7/2014

Contractor: Cashman **Foreman/Supt:** Junior Huggins

Weather	AM:	<u>Sunny</u>	Temperature	AM:	<u>52</u>
	PM:	<u>Rain</u>		PM:	<u>46</u>
Tides	High	<u>0222</u>	AM	<u>1451</u>	PM
	Low	<u>0817</u>	AM	<u>1959</u>	PM

Manpower Onsite

Foreman	<u>1</u>	@	<u>12</u>	Hrs
Operators	<u>1</u>	@	<u>12</u>	Hrs
Laborers	<u>3</u>	@	<u>12</u>	Hrs
Drivers	<u>1</u>	@	<u>12</u>	Hrs
Other:	<u>1</u>	@	<u>9</u>	Hrs

Equipment Onsite

Description:	<u>Bobby D</u>	Hrs.	<u>8</u>
	<u>Eddie Carroll</u>	Hrs.	<u>12</u>
	<u>Ellsea</u>	Hrs.	<u>0</u>
	<u>Lucinda Smith</u>	Hrs.	<u>11</u>
	<u>Red Skiff</u>	Hrs.	<u>12</u>
	<u>Survey 4</u>	Hrs.	<u>4</u>
		Hrs.	

Contractor Activities: (Attach Additional Sheets as Necessary)

0700 No activity on site. Lucinda Smith is tied up to the Bobby D and Eddie Carroll inside the silt curtain. The Bobby D bucket is on deck and the crew is onsite. 0730 The silt curtain is closed. 0745 The Bobby D begins dredging material into the Eddie Carroll at cut 4, station 6+60. The Eddie Carroll is drafting; bow-4', stern-4'. 0845 The Bobby D is dredging full buckets into the Eddie Carroll. 0924 The Bobby D stops dredging to relocate. 0930 The Bobby D resumes dredging in cut 4, station 6+38. 1022 The Bobby D repositions and begins dredging cuts 4 & 5, station 6+72. 1040 Survey 4 is circling outside the silt curtain. 1045 The Bobby D is dredging full buckets into the Eddie Carroll. 1109 The Bobby D stops dredging to discuss the dredging plan and adjust the scow. 1112 The Bobby D resumes dredging. 1127 The Bobby D stops dredging to relocate. (Continued on next page.)

Problems/Issues or Action Items:

Note: The GPS for the new excavator has not been installed yet. All cut and station locations are based on the cursor chainage of the estimated bucket location.

Visitors:

Signature: 
Title: Environmental Scientist

Date: 4/7/2014
Page: 1 of 3

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File: DIR_LHCC_040714



City of New Bedford Harbor Development Commission
New Bedford Harbor USEPA Lower Harbor CAD Cell
CFDA No.: 66.802
Inspection Report

Inspector: Brett Young **Date:** 4/7/2014
Contractor: Cashman **Foreman/Supt:** Junior Huggins

Weather	AM:	<u>Sunny</u>	Temperature	AM:	<u>52</u>
	PM:	<u>Rain</u>		PM:	<u>46</u>
Tides	High	<u>0222</u>	AM	<u>1451</u>	PM
	Low	<u>0817</u>	AM	<u>1959</u>	PM

Contractor Activities: (Attach Additional Sheets as Necessary)

1158 The Bobby D resumes dredging in cuts 4 & 5, station 6+92. 1225 The Bobby D begins washing down the scow. 1230 Lucinda Smith ties up to the Eddie Carroll. The silt curtain is opened. 1232 Lucinda Smith begins to take the Eddie Carroll outside of the silt curtain and flip it 180 degrees. Eddie Carroll is drafting; bow-10', stern-7'. 1252 Eddie Carroll ties up to the Bobby D. 1254 Fuel barge ties up to the Bobby D. 1305 Fuel barge exits the silt curtain. Survey 4 enters silt curtain and surveys the southeast corner of the site. 1311 Silt curtain is closed. 1315 Survey 4 makes another pass of the southeast corner. 1350 The Bobby D resumes dredging into the Eddie Carroll in cuts 8 & 9 station 7+98. 1402 The Bobby D relocates and begins dredging cuts 8 & 9 station 7+80. 1455 The Bobby D stops dredging. The silt curtain gate is opened. 1458 Lucinda Smith departs headed for South Terminal. 1500 Silt curtain gate is closed. The Bobby D resumes dredging. 1502 The red skiff goes to fix the silt curtain on the east side. 1518 The Bobby D relocates and begins dredging cuts 8 & 9 station 7+60. 1535 Lucinda Smith ties the SEI 2000 to the Richie Barber. 1550 The Bobby D stops dredging. The red skiff opens the silt curtain. 1554 Lucinda Smith enters and ties to the Eddie Carroll. 1555 Silt curtain is closed. 1600 The Bobby D repositions. 1617 Lucinda Smith ties up to the Winslow. Bobby D resumes dredging in cuts 6 & 10 station 6+75. 1625 Lucinda Smith takes the Winslow south. 1643 The Bobby D relocates and is now dredging cut 8 & 10 station 6+92. 1716 relocates and is now dredging cuts 5, 8, & 10 station 6+77. 1750 Lucinda Smith ties up to the Richie Barber. 1805 The Bobby D begins to water down the Eddie Carroll. 1812 The Bobby D repositions for Eddie Carroll to exit the silt curtain. 1820 The Bobby D completes the move. Lucinda Smith unties from the Richie Barber. 1825 Eddie Carroll is inspected and cleared for offshore disposal. Eddie Carroll final drafts; bow-10', stern-11'. 1830 Lucinda Smith ties up to the Eddie Carroll and takes it outside the silt curtain. 1840 All crew offsite, activity complete for the day.

Problems/Issues or Action Items:

Visitors:

Signature: 
 Title: Environmental Scientist

Date: 4/7/2014
 Page: 2 of 3

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File: DIR_LHCC_040714



City of New Bedford Harbor Development Commission
New Bedford Harbor USEPA Lower Harbor CAD Cell
CFDA No.: 66.802
Inspection Report

Inspector: Brett Young

Date: 4/7/2014

Contractor: Cashman

Foreman/Supt: Junior Huggins



The Bobby D dredging into the Eddie Carroll.

The Lucinda Smith spinning the Eddie Carroll around.



The Bobby D dredging at LHCC.

The Bobby D dredging into the Eddie Carroll.

Visitors: _____

Signature: 

Date: 4/7/2014

Title: Environmental Scientist

Page: 3 of 3

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File: DIR_LHCC_040714



City of New Bedford Harbor Development Commission
New Bedford Harbor USEPA Lower Harbor CAD Cell
CFDA No.: 66.802
Inspection Report

Inspector: Mark Martinho **Date:** 4/8/2014

Contractor: Cashman **Foreman/Supt:** Junior Huggins

Weather	AM:	<u>Rain</u>	Temperature	AM:	<u>54</u>
	PM:	<u>fog</u>		PM:	<u>54</u>
Tides	High	<u>0314</u>	AM	<u>1546</u>	PM
	Low	<u>0815</u>	AM	<u>2047</u>	PM

Manpower Onsite

Foreman	<u>1</u>	@	<u>12</u>	Hrs
Operators	<u>1</u>	@	<u>12</u>	Hrs
Laborers	<u>3</u>	@	<u>12</u>	Hrs
Drivers	<u>1</u>	@	<u>12</u>	Hrs
Other:	<u>0</u>	@	<u>0</u>	Hrs

Equipment Onsite

Description:	<u>Bobby D</u>	Hrs.	<u>12</u>
	<u>Eddie Carroll</u>	Hrs.	<u>12</u>
	<u>Ellsea</u>	Hrs.	<u>0</u>
	<u>Lucinda Smith</u>	Hrs.	<u>5</u>
	<u>Red Skiff</u>	Hrs.	<u>12</u>
	<u>Survey 4</u>	Hrs.	<u>2</u>
		Hrs.	

Contractor Activities: (Attach Additional Sheets as Necessary)

0700 There is no activity on site. 0858 The Bobby D begins dredging into the empty Eddie Carroll. 0925 Dredging stops while repairs are made to the east side of the silt curtain. 1025 Dredging resumes. 1030 Dredging stops again for repairs to the excavator bucket and arm. 1212 Dredging resumes. 1340 Dredging continues in cut 8, station 7+38. 1420 The Eddie Carroll moves south about 50', still dredging in cut 8. 1740 The Bobby D stops dredging and washes down the Eddie Carroll. The Eddie Carroll is inspected and cleared for offshore disposal.

Problems/Issues or Action Items:

The Lucinda Smith brought the Eddie Carroll into the LHCC area at 0757. While doing so she ran over a double piling on the north side of silt curtain gate. Only the piling was damaged and the contractor was able to stretch the remaining silt curtain to another piling by 0830. New sections of silt curtain have been ordered as a precaution for any future repairs.

Visitors:

Signature: 
Title: Environmental Scientist

Date: 4/8/2014
Page: 1 of 2

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City of New Bedford Harbor Development Commission
New Bedford Harbor USEPA Lower Harbor CAD Cell
CFDA No.: 66.802
Inspection Report

Inspector: Kyle Miller **Date:** 4/9/2014

Contractor: Cashman **Foreman/Supt:** Junior Huggins

Weather	AM:	<u>34</u>	Temperature	AM:	<u>34</u>
	PM:	<u>59</u>		PM:	<u>59</u>

Tides	High	<u>0414</u>	AM	<u>1646</u>	PM
	Low	<u>1030</u>	AM	<u>2231</u>	PM

Manpower Onsite

Foreman	<u>1</u>	@	<u>11</u>	Hrs
Operators	<u>1</u>	@	<u>11</u>	Hrs
Deckhand	<u>2</u>	@	<u>11</u>	Hrs
Mate	<u>1</u>	@	<u>11</u>	Hrs
Engineer	<u>1</u>	@	<u>11</u>	Hrs

Equipment Onsite

Description:	<u>Bobby D</u>	Hrs.	<u>6</u>
	<u>Eddie Carroll</u>	Hrs.	<u>10.5</u>
	<u>Ellsea</u>	Hrs.	<u>0</u>
	<u>Lucinda Smith</u>	Hrs.	<u>1</u>
	<u>Red Skiff</u>	Hrs.	<u>11</u>
	<u>Survey 4</u>	Hrs.	<u>8</u>
		Hrs.	

Contractor Activities: (Attach Additional Sheets as Necessary)

0700 The crew boards the Bobby D. 0700 Survey crew and a Komatsu mechanic are on board. The mechanic is attempting to diagnose a problem with the excavator not having enough power. The Eddie Carrol is alongside the Bobby D; it did not go offshore for a disposal last night and is drafting 7.5-8.5'. 0944 The Bobby D begins dredging in cut 8 at station 7+36. 0958 The Bobby D moves and resumes dredging in cut 9 at station 7+36. 1042 The Bobby D. moves to cut 9, station 7+70 and resumes dredging. 1207 The Bobby D. moves to cut 8, station 7+03 and resumes dredging. 1258 The Bobby D. moves to cut 8, station 6+68 and resumes dredging. 1328 The Bobby D. moves to cut 5 station 6+48 and resumes dredging. (Continued on next page.)

Problems/Issues or Action Items:

Visitors:

Signature: *Kyle Miller*
Title: Kyle Miller, Environmental Scientist

Date: 4/9/14
Page: 1 of 3

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City of New Bedford Harbor Development Commission
New Bedford Harbor USEPA Lower Harbor CAD Cell
CFDA No.: 66.802
Inspection Report

Inspector: Kyle Miller

Date: 4/9/2014

Contractor: Cashman

Foreman/Supt: Junior Huggins

Weather	AM:	<u>34</u>	Temperature	AM:	<u>34</u>
	PM:	<u>59</u>		PM:	<u>59</u>
Tides	High	<u>0414</u>	AM	<u>1646</u>	PM
	Low	<u>1030</u>	AM	<u>2231</u>	PM

Contractor Activities: (Attach Additional Sheets as Necessary)

1414 The Bobby D. moves and resumes dredging in cut 4, station 5+90. 1438 The Bobby D. stops dredging to refuel the excavator. 1525 The Bobby D. resumes dredging in cut 10 at station 6+23. 1640 The Bobby D. moves and resumes dredging in cut 10, at station 5+60. 1700 The Bobby D. stops dredging for the evening. The Eddie Carrol is drafting 12.5'-10.6'. The Eddie Carrol is inspected and cleared for disposal. 1716 The Lucinda Smith arrives and begins moving the Eddie Carrol out for disposal offshore. 1800 The Bobby D. crew departs.

Problems/Issues or Action Items:

Visitors:

Signature: 

Title: Kyle Miller, Environmental Scientist

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Date: 4/9/14

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File: DIR_LHCC_040914



City of New Bedford Harbor Development Commission
New Bedford Harbor USEPA Lower Harbor CAD Cell
CFDA No.: 66.802
Inspection Report

Inspector: Kyle Miller

Date: 4/9/2014

Contractor: Cashman

Foreman/Supt: Junior Huggins



The Bobby D places material in the Eddie Carrol.



The Bobby D. lifts a bucket full of material.



The Bobby D. with a full bucket of material.



The Bobby D. empties a bucket of material into the Eddie Carrol.

Visitors:

Signature:

Kyle Miller

Title:

Kyle Miller, Environmental Scientist

Date: 4/9/14

Page: 3 of 3

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File: DIR_LHCC_040914



City of New Bedford Harbor Development Commission
New Bedford Harbor USEPA Lower Harbor CAD Cell
CFDA No.: 66.802
Inspection Report

Inspector: Mark Martinho **Date:** 4/10/2014

Contractor: Cashman **Foreman/Supt:** Junior Huggins

Weather	AM:	<u>Sunny</u>	Temperature	AM:	<u>28</u>
	PM:	<u>Sunny</u>		PM:	<u>52</u>
Tides	High	<u>0503</u>	AM	<u>1727</u>	PM
	Low	<u>1057</u>	AM	<u>2348</u>	PM

Manpower Onsite

Foreman	<u>1</u>	@	<u>9</u>	Hrs
Operators	<u>1</u>	@	<u>9</u>	Hrs
Laborers	<u>3</u>	@	<u>9</u>	Hrs
Drivers	<u>1</u>	@	<u>9</u>	Hrs
Other:	<u>1</u>	@	<u>9</u>	Hrs

Equipment Onsite

Description:	<u>Bobby D</u>	Hrs.	<u>4.5</u>
	<u>Eddie Carroll</u>	Hrs.	<u>4.5</u>
	<u>Ellsea</u>	Hrs.	<u>0</u>
	<u>Lucinda Smith</u>	Hrs.	<u>1</u>
	<u>Red Skiff</u>	Hrs.	<u>9</u>
	<u>Survey 4</u>	Hrs.	<u>1</u>
		Hrs.	

Contractor Activities: (Attach Additional Sheets as Necessary)

0700 Crew boards the Bobby D. 0800 The Bobby D begins dredging into the empty Eddie Carroll at cut 6, station 4+24. 0835 The red skiff and 2 crew members are mending sections of silt curtain that are weathered in various locations. 0910 Dredging stops while repairs are done to the excavator arm. A fuel barge enters LHCC. The drafts on the Eddie Carroll are 6.0' bow, 4.5' stern. 1000 The fuel barge exits LHCC. 1045 Dredging resumes. 1210 Junior informs APEX that the mechanical issue with the SEI 2000 has been fixed and it will dispose today over CAD Cell #3. 1235 The SEI 2000 disposes over CAD Cell #3. 1246 Dredging continues in cut 6, station 4+46. 1405 Dredging stops again; mechanical issues are still occurring. 1630 No more activity is scheduled for the day. The Eddie Carroll is drafting: 9'-stern 5'-bow.

Problems/Issues or Action Items:

Visitors:

Signature: 
 Title: Environmental Scientist

Date: 4/10/2014
 Page: 1 of 2

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City of New Bedford Harbor Development Commission
New Bedford Harbor USEPA Lower Harbor CAD Cell
CFDA No.: 66.802
Inspection Report

Inspector: Mark Martinho

Date: 4/10/2014

Contractor: Cashman

Foreman/Supt: Junior Huggins



The Bobby D dredging into the Eddie Carroll.



Dredging stops for fuel barge.



Crew working on excavator arm.



Red skiff mending silt curtain.

Visitors: _____

Signature: 

Title: Environmental Scientist

Date: 4/10/2014

Page: 2 of 2

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File: DIR_LHCC_041014



City of New Bedford Harbor Development Commission
New Bedford Harbor USEPA Lower Harbor CAD Cell
CFDA No.: 66.802
Inspection Report

Inspector: Kyle Miller

Date: 4/11/2014

Contractor: Cashman

Foreman/Supt: Horrace Huggins



The Bobby D. dredging into the Eddie Carrol.

The Bobby D. dredging into the Eddie Carrol.



The Eddie Carrol losing material.

The Eddie Carrol stops losing material. Water fills the void.

Visitors: _____

Signature: *Kyle Miller*

Date: 4/11/14

Title: Environmental Scientist

Page: 3 of 3

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File: DIR_LHCC_041114



City of New Bedford Harbor Development Commission

New Bedford Harbor USEPA Lower Harbor CAD Cell

CFDA No.: 66.802

Inspection Report

Inspector: Kaios Ryan

Date: 04/12/2014

Contractor: Cashman

Foreman/Supt: Dave Norton

Weather	AM:	<u>Clear</u>	Temperature	AM:	<u>66</u>
	PM:	<u>Clear</u>		PM:	<u>40</u>

Tides	High	<u>0638</u>	AM	<u>1901</u>	PM
	Low	<u></u>	AM	<u>1219</u>	PM

Manpower Onsite

Engineer	<u>1</u>	@	<u>10</u>	Hrs
Chief Engineer	<u>1</u>	@	<u>1</u>	Hrs
Operators	<u>1</u>	@	<u>12</u>	Hrs
Mate	<u>1</u>	@	<u>12</u>	Hrs
Deckhand	<u>1</u>	@	<u>12</u>	Hrs
Other:	<u></u>	@	<u></u>	Hrs

Equipment Onsite

Description:	<u>Bobby D</u>	Hrs.	<u>7</u>
	<u>Eddie Carroll</u>	Hrs.	<u>12</u>
	<u>Edna</u>	Hrs.	<u>0</u>
	<u>Lucinda Smith</u>	Hrs.	<u>12</u>
	<u>Red Skiff</u>	Hrs.	<u>12</u>
	<u>SEI 2000</u>	Hrs.	<u>0</u>
	<u>Survey 4</u>	Hrs.	<u>3</u>

Contractor Activities: (Attach Additional Sheets as Necessary)

0758 The silt curtain is closed and the Bobby D. begins dredging into the Eddie Carroll in cut 7 station 4+06. The Eddie Carroll is drafting at 3.5'. 0832 An engineer is fixing the silt curtain on the northeast side with the red skiff. 0954 The Bobby D stops dredging and moves 10' to the east to cut 7 station 4+41. 1004 The Bobby D resumes dredging into the Eddie Carroll. 1051 The Bobby D stops dredging and moves 20' to the east to cut 7 station 5+29. 1108 The Bobby D resumes dredging into the Eddie Carroll. 1244 The Bobby D stops dredging and the red skiff opens the silt curtain. 1249 Lucinda Smith enters the dredge area and flips the Eddie Carroll 180°. The Eddie Carroll's is drafting at 5'-bow, 9'-stern. 1349 The Bobby D resumes dredging into the Eddie Carroll at cut 7 station 4+67. 1632 The Bobby D stops dredging due to problems with the arm of the excavator. The bucket was on deck and pieces of metal were falling from the arm of the excavator. There will be no more dredging activities for the day. 1651 The Eddie Carroll is inspected and cleared for offshore disposal, drafting at 8.5'. 1730 Lucinda Smith ties the Eddie Carroll to the Richie Barber. 1815 Lucinda Smith ties up to the Bobby D and heads south for South Terminal. 1858 Lucinda Smith and the Bobby D tie up to the Wood 1 at Shusters bulkhead.

Problems/Issues or Action Items:

At 1632 the operator of the Bobby D. reported a problem with the arm of the Bobby D. While the operator was placing the bucket on the deck pieces of metal were falling from the arm of the excavator. The chief engineer reports the bushings are gone in the arm of the excavator. Repairs will be performed on 04/13/2014 by the crew of the Bobby D.

Visitors:

Signature: *Kaios Ryan*

Title: Environmental Scientist

Date: 04/12/2014

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File: DIR_LHCC_041214



City of New Bedford Harbor Development Commission
New Bedford Harbor USEPA Lower Harbor CAD Cell
CFDA No.: 66.802
Inspection Report

Inspector: Kaios Ryan

Date: 04/12/2014

Contractor: Cashman

Foreman/Supt: Dave Norton



The Bobby D dredges in cut 7.



The Bobby D dredges material into the Eddie Carroll.



An engineer repairs a damaged section of the silt curtain.



The Lucinda Smith brings the Eddie Carroll into the dredge area.

Visitors: _____

Signature: Kaios Ryan

Title: Environmental Scientist

Date: 04/12/2014

Page: 3 of 3

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File: DIR_LHCC_041214

Attachment 2
Water Quality Monitoring Forms

PROJECT: New Bedford Harbor Lower Harbor CAD Cell

JOB NUMBER: 6724

DATE: 4/8/2014

MONITORS: Mark Martinho

WEATHER CONDITIONS: High: 55 Low: 46

WIND: 13-17 mph Southwest

PRIOR STORM EVENTS:

DREDGE UPDATE:

TYPE OF WATER QUALITY MONITORING EVENT: TOP CAD Dredging / BTM CAD Dredging / Disposal

TIDE High: 0314/1546 Low: 0815/2047

Please Note: In some instances, the down-current monitoring event occurred prior to the up-current monitoring event. This is the result of the initial analysis of our field crew indicating one direction of flow, however our checks from our Quality Control program provided a more accurate depiction of the pattern, which is how the information is now presented below.



UP-CURRENT

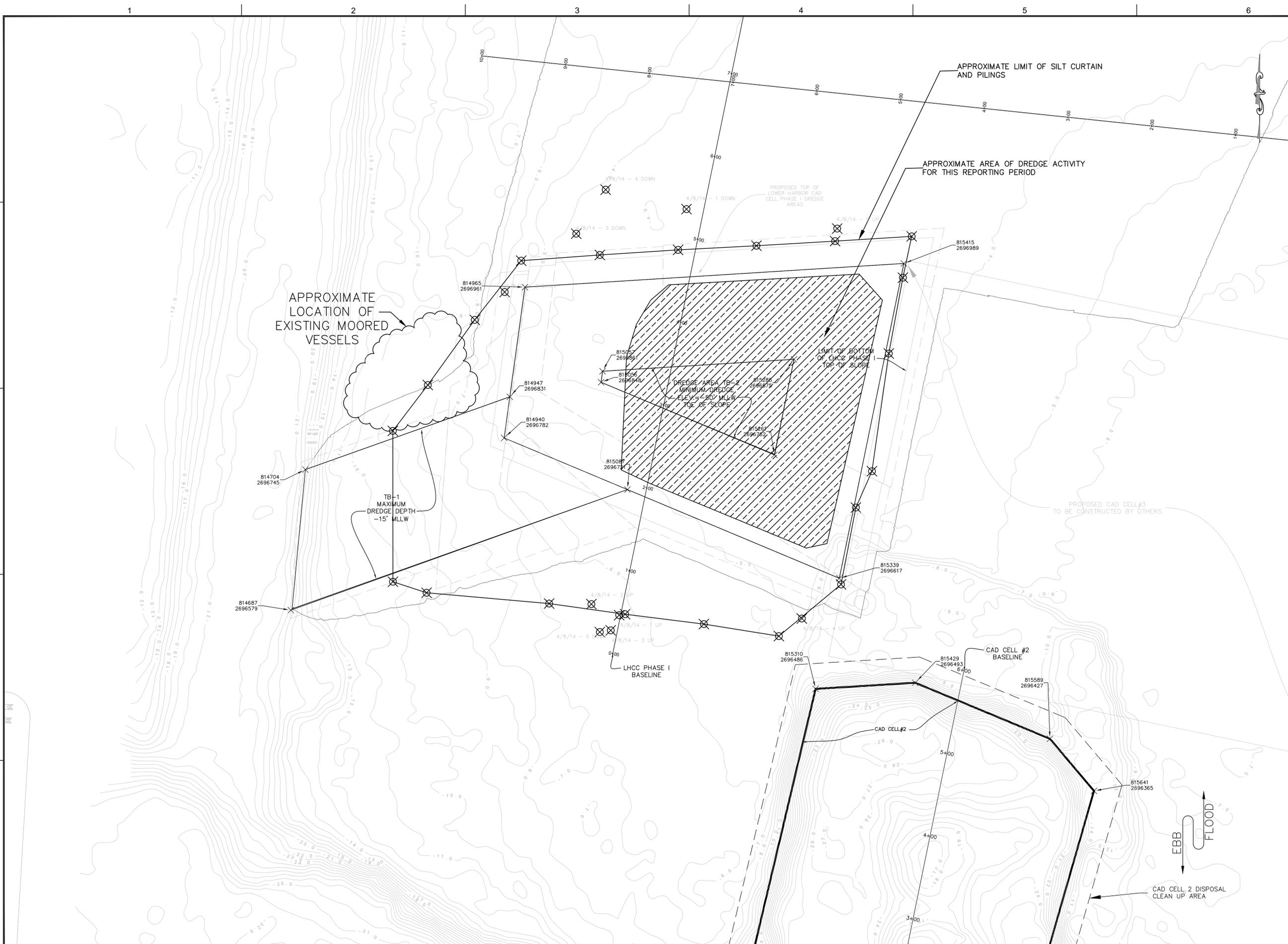
Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	TYPE OF WQM & DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
040814-00-1-1		840		1	4.43				
040814-00-1-3		842	7.5	3	2.62	lhcc wqm up			
040814-00-1-6	2696573, 815077	844		6	2.6	0840	Flooding	15' S of Silt Curtain	00
					AVERAGE TURBIDITY:	3.22			
040814-02-1-1		1005		1	4.26				
040814-02-1-4		1007	8.8	4	3.46	lhcc wqm up			
040814-02-1-8	2696586, 815044	1009		8	4.27	1005	Flooding	15' S of Silt Curtain	02
					AVERAGE TURBIDITY:	4.00			
040814-04-1-1		1200		1	4.89				
040814-04-1-3		1202	7.9	3	4.49	lhcc wqm up			
040814-04-1-6	2696555, 815067	1204		6	4.46	1200	Flooding	15' S of Silt Curtain	04
					AVERAGE TURBIDITY:	4.61			
040814-06-1-1		1400		1	3.78				
040814-06-1-6		1402	13	6	4.64	lhcc wqm up			
040814-06-1-12	2696569, 815294	1404		12	5.11	1400	Flooding	15' S of Silt Curtain	06
					AVERAGE TURBIDITY:	4.51			
040814-08-1-1		1605		1	3.46				
040814-08-1-4		1607	9	4	3.37	lhcc wqm dn			
040814-08-1-8	2696553, 815054	1609		8	3.61	1605	Ebbing	15' S of Silt Curtain	08
					AVERAGE TURBIDITY:	3.48			

Down-Current

Monitoring ID #	NORTHING/ EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM DREDGE/SILT CURTAIN	NUMBER OF HOURS DREDGING
040814-00-9-1		847		1	4.32				
040814-00-9-2		849	5.2	2	2.67	lhcc wm dn			
040814-00-9-4	2697053, 815157	851		4	6.79	0847	Flooding	15' N of Silt Curtain	00
					AVERAGE TURBIDITY:	4.59			
					TURBIDITY INCREASE:	1.38			
040814-02-9-1		1010		1	6.9				
040814-02-9-2		1012	5.5	2	7.37	lhcc wqm dn			
040814-02-9-4	2696955, 814941	1014		4	8.23	1010	Flooding	15' N of Silt Curtain	02
					AVERAGE TURBIDITY:	7.50			
					TURBIDITY INCREASE:	3.50			
040814-04-9-1		1205		1	4.17				
040814-04-9-3		1207	6	3	5.29	lhcc wqm dn			
040814-04-9-5	2697024, 815026	1209		5	5.85	1205	Flooding	15' N of Silt Curtain	04
					AVERAGE TURBIDITY:	5.10			
					TURBIDITY INCREASE:	0.49			
040814-06-9-1		1410		1	4.42				
040814-06-9-3		1412	7	3	5.17	lhcc wqm dn			
040814-06-9-6	2697076, 815061	1414		6	4.3	1410	Flooding	15' N of Silt Curtain	06
					AVERAGE TURBIDITY:	4.63			
					TURBIDITY INCREASE:	0.12			
040814-08-9-1		1600		1	3.73				
040814-08-9-5		1602	10	5	4.34	lhcc wqm up			
040814-08-9-9	2697030, 815336	1604		9	3.36	1600	Ebbing	15' N of Silt Curtain	08
					AVERAGE TURBIDITY:	3.81			
					TURBIDITY INCREASE:	0.33			

* Turbidity Increase = Down-Current Average Turbidity - Up-Current Average Turbidity

Figure 1
Lower Harbor CAD Cell Phase I – Water Quality Monitoring



ROCKVILLE, MD
 SOUTH WINDSOR, CT - BOSTON, MA -
 NEW BEDFORD, MA - HOLYOKE, MA
 125 BROAD STREET, 5TH FLOOR
 BOSTON, MA 02210
 58H CONNECTICUT AVENUE
 SOUTH WINDSOR, CT

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PROJECT	NEW BEDFORD HARBOR DEVELOPMENT COMMISSION LOWER HARBOR CAD CELL	
	OWNER	NEW BEDFORD HARBOR DEVELOPMENT COMMISSION 52 FISHERMAN'S WHARF, NEW BEDFORD, MA 02740

1	9/25/2012	EPA COMMENTS	GCD
2	2/21/2013	DRAFT SUITABILITY	MCK

DATE	DESCRIPTION	BY
9/25/2012	EPA COMMENTS	GCD
2/21/2013	DRAFT SUITABILITY	MCK

PROJECT NO.	6724
CADD FILE	
DESIGNED BY	CHM
DRAWN BY	GCD
CHECKED BY	GCD
DATE	MAY 2013
DRAWING SCALE	AS NOTED

GRAPHIC SCALE
 SCALE: 1"=50'
 0 25 50 100
 SHEET TITLE
BOTTOM OF LOWER HARBOR CAD CELL PHASE 1 WATER QUALITY
 4/06/14- 4/12/14

DRAWING NO.
WQM-1
 6 OF 15