Weekly Field Report

Week: 11-17-13 through 11-23-13 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/Tripp Marine), 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 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 Third Report for the LHCC dredging activities includes:

- Daily Inspection Reports from the dredging oversight performed during the week of November 17th through November 23rd. Daily contractor activities are included in the form of Daily Inspection Reports noting equipment observed on site and a summary of contractor activities. (See Attachment 1);
- Water Quality Monitoring Forms completed for the week of November 17th through November 23rd are attached (Attachment 2). 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 this dredging effort Apex will;
 - Conduct three consecutive water quality monitoring events in the first week of new dredging activities, and thereafter two days per week until Phase I dredging of the LHCC has been completed.
 - Conduct water quality monitoring of each disposal event into either the existing CAD Cell #2 or CAD Cell #3 of Top of LHCC sediments removed by this Project.
 - Perform a visual inspection of dredged materials in the disposal scow prior to disposal to ascertain the effectiveness of dewatering. If deemed necessary by the visual inspection, Apex will monitor the water quality of the effluent discharge from the carbon filtration system.

2. Summary:

The Contractor, through its subcontractor, Tripp Marine, conducted dredging at the LHCC daily November 18th through the 23rd with dredging operations focused on the removal of Phase I Top of CAD cell sediments and the disposal of these sediments into CAD Cell #3. Dredging operations during this reporting period were conducted using a conventional digging bucket in certain areas of the dredge footprint where dense sandy materials were known to exist, per verbal approval discussed at the November 13th project meeting and the subsequent formal letter provided on November 21st. Tripp Marine was observed conducting these activities during the authorized operational window of 7AM until sunset, utilizing a single dredge plant; the tug *Sand Pebble*; a 900 cubic yard dump scow – *TMC 140*, and a small utility boat. Tripp Marine was utilizing the Cashman dewatering barge as a staging area for dewatering operations and as an aide in accurately positioning the dump scow for disposal operations into CAD Cell #3. Dredging operations were conducted without the use of silt curtains because these activities lie outside the time of year restrictions noted in the Project Specifications.

3. Operational Notes:

Dredging:

Dredging at the LHCC continued through the week of November 17th utilizing an open conventional digging bucket per the terms outlined during the November 13th weekly meeting and the formal letter issued on November 21st. Apex conducted three days of water quality monitoring while the open conventional bucket was being used in ensure that the use of the conventional bucket did not result in an exceedance of any project-specific water quality standards. Water quality monitoring was completed on the 18th, 20th, and 22nd of November. Monitoring of dredging activities will continue on a schedule of a minimum of two events per week as required by the project performance standards.

Disposal:

Disposal of "Top of LHCC" sediments was conducted on November 18th, 20th, and 22nd. Based on scow logs for the *TMC 140*, approximately 500 cubic yards of material (assuming 120 pounds/ft³ for dredged materials) was placed into CAD Cell #3 during each disposal event. Sediments contained in the scow were inspected prior to each disposal to assess the effectiveness of dewatering. Water quality monitoring, required for each CAD Cell disposal event, was completed for each day of disposal activity.

4. Monitoring Summary

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

Attachment 1 Daily Inspection Reports



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Inspector:	Kaios Ryan	1				Date:		18-Nov-13	
Contractor:	Tripp Mari	ine			Foreman/Supt:	Pyne Tripp)		
Weather	AM: PM:	Winds 10-1	.5k SW		Temperature	AM: PM:	48 64		
Tides	High Low	07		AM AM	2020 1338	PM PM			
Manpower O	nsite				Equipment Ons	ite			
Other:	Foreman Operators Laborers Drivers	1@	8 8 	Hrs	Description: Pu:	Scow sh Boat Sai	TTMC 140 and Pebble port Boat	Hrs8_ Hrs8_ Hrs8_ Hrs8 Hrs	
Contractor Ac	tivities: (Att	ach Additio	nal Sheet	s as Ne	cessary)				
TMC 140. Scow #3, and disposal 1119 using an op 1603 at which ti	draft marks occurs at 10 pen convent me dredging	were record 028. Scow Tonal digging stops for the	ded as 6' MC 140 r g bucket. ne day an	FWD ai maneuv Apex i id scow	ity monitoring an nd 7.5' AFT. Scov vered into positio inspects material TMC 140 is man nd 8.5' AFT. No v	v was appr in alongsid in scow at euvered ov	oved for di e dredge ar 1246. Dre ver to dewa	sposal into CAI nd dredging be dging continue Itering barge.	D Cell gins at s until End of
Problems/Issu	ies or Actioi	n Items:							
None / n/a									
Visitors:									
Signature: Title:	D.Boye (Ap	oex)				Date:		18-Nov-13 1	
Copy to:	file					File:	DIR_LHCC	_111813	



Inspector:	M. Martinh	10		_	Date	ə:	19-Nov-13
Contractor:	Tripp Mari	ne		_ Foreman/Supt:	Pyne Trip	р	
Weather	AM: PM:	Rain. Winds 5	i-15k NW	Temperature	AM: PM:	36 51	
Tides	High Low	0850 0145			PM PM		
Manpower O Other: Contractor Ac	Foreman Operators Laborers Drivers		8 Hrs 8 Hrs Hrs Hrs	Pus	Tripp Scor sh Boat Sa	47 Dredge w TMC 140 and Pebble pport Boat	Hrs8 Hrs8 Hrs8 Hrs8
Apex on-site at 1 conventional dig dredging stops for	.100 to cond ging bucket. or the day a	luct oversight Apex inspect nd scow TMC	of dredging a s material in 140 is mane	activities. Dredging scow at 1145. Dre	edging co vatering b	ntinues until parge. End o	1555 at which time of day draft marks on
Problems/Issu	ies or Action	ı Items:					
None / n/a							
Visitors:							
Signature: Title:	D.Boye (Ap	ex)			•	e:1of_	19-Nov-13 1_
Copy to:	file			_	File	e: <u>DIR_LHCC</u>	_111913



Contractor: Kaios Ryan Foreman/Supt: Pyne Tripp						-	•						
Weather AM:	Inspector:	Kaios Ryan							Date	:	20-Nov	/-13 <u></u>	
PM: Winds 5-10k N PM: 41 Tides High 0917 AM 2144 PM Low 0200 AM 1450 PM Manpower Onsite Equipment Onsite	Contractor:	Tripp Mar	ine				Foreman/Supt:	Pyn	e Trip _l	o			
Manpower Onsite Foreman 1 @ 8 Hrs Description: Tripp 47 Dredge Hrs. 8 Description:	Weather		Winds 5	-10k N			Temperature						
Foreman1 @ 8 Hrs Description:	Tides	_						-					
Operators 1 @ 8 Hrs Scow TMC 140 Hrs. 8 Laborers 1 @ 8 Hrs Push Boat Sand Pebble Hrs. 8 Drivers @ Hrs Support Boat Hrs. 8 Other:	Manpower O	nsite					Equipment Ons	ite					
Apex on-site at 0920 to conduct background water quality monitoring and to inspect sediment materials in scow TMC 140. Scow draft marks were recorded as 6' FWD and 7.5' AFT. Scow was approved for disposal into CAD Cell #3, and disposal occurs at 1036. Scow TMC 140 maneuvered into position alongside dredge and dredging begins at 1105 using an open conventional digging bucket. Dredging continues until 1435 at which time dredging stops for the day. End of day draft marks on the scow were recorded as 3.5' FWD and 5.5' AFT. No water quality issues were observed during the day Problems/Issues or Action Items: None / n/a Visitors: Signature: D.Boye (Apex) Date: 20-Nov-13 Page:1of1_	Other:	Operators Laborers	1	@ _ @ _ @	8 8	Hrs Hrs Hrs	·		Scow oat Sa	r TMC 140 nd Pebble	Hrs Hrs Hrs	8 8 8	
TMC 140. Scow draft marks were recorded as 6' FWD and 7.5' AFT. Scow was approved for disposal into CAD Cell #3, and disposal occurs at 1036. Scow TMC 140 maneuvered into position alongside dredge and dredging begins at 1105 using an open conventional digging bucket. Dredging continues until 1435 at which time dredging stops for the day. End of day draft marks on the scow were recorded as 3.5' FWD and 5.5' AFT. No water quality issues were observed during the day Problems/Issues or Action Items: None / n/a Visitors: Signature: D.Boye (Apex) Date: 20-Nov-13 Page: 1of1 Page:1of1	Contractor Ac	tivities: (Att	ach Addi	tional S	heets a	as Ne	cessary)						
Visitors:	TMC 140. Scow #3, and disposal 1105 using an op the day. End of c	draft marks occurs at 10 pen convent lay draft ma	were red 036. Scov ional dig	corded a w TMC ging bu	as 6' FV 140 ma cket. C	VD ai aneuv Dredg	nd 7.5' AFT. Scov vered into positio ing continues un	w wa on alo til 14	is appr ongsid 435 at	oved for di e dredge a which time	sposal i nd dred dredgi	into CAD ging beg ng stops	Cell gins at for
Visitors: Date: 20-Nov-13 Title: Page: 1of1	Problems/Issu	ies or Actioi	n Items:										
Signature: D.Boye (Apex) Date: 20-Nov-13 Title: Page: _1of1_	None / n/a												
Title: Page:1of1_	Visitors:	_											
	Title:		oex)						Page	1of_	1_		



					•	•					
Inspector:	M. Tumulo)						Date:		21-Nov	-13
Contractor:	Tripp Mar	ine				Foreman/Supt:	Pyn	e Tripp)		
Weather	AM: PM:	Clear. Winds v	variabl	e 5k or	less W	Temperature /SW		AM: PM:	21 46		
Tides	High Low		0955 0247		AM AM	2025 1533	PM PM				
Manpower O	nsite					Equipment Ons	site				
Other:	Foreman Operators Laborers Drivers			8 8	Hrs Hrs Hrs Hrs	Description: Pu		Scow oat Sar	7 Dredge TMC 140 nd Pebble port Boat	Hrs.	
Contractor Ac	tivities: (Att	ach Add	itional	Sheets	as Ne	cessary)					
conventional dig due to unfavoral until 0955 at wh	ging bucket ole tides acc ich time dre	. Scow v cording t edging st	was pa o Dred ops for	rtially fi ge Cap the da	illed w tain. <i>I</i> y and	ctivities. Dredging with dredged mate Apex inspects ma scow TMC 140 is 5' FWD and AFT.	erial ateria s mar	from pal in sco	orevious da ow at 0945 ed over to	y; limite . Dredg dewatei	ed dredging ging continues ring barge.
Problems/Issu	ies or Actioi	n Items:									
None / n/a											
Visitors:											
Signature: Title: Copy to:	D.Boye (Ap	oex)				·		_	1of_ DIR_LHCC		<u> </u>

Attachment 2 Water Quality Monitoring Forms

PROJECT:	New Bedford Harbor Low	er Harbor C	CAD Cell			
JOB NUMBER:	6724					
SURVEY DATE:	18 November 2013					
MONITORS:	Kaios Ryan, Chris Stillma	an				
WEATHER CONDITIONS:	Low:	48	High:	64		
WIND CONDITIONS:	Speed: 10	-15k	Direction: SW			
PRIOR STORM EVENTS:	n/a					
DREDGE / SCOW Position	: Northing/Easting: 26	96775 / 8152	273			
TYPE OF WATER QUALITY	Y MONITORING EVENT: T	OP CAD Dre	edging / BTM CAD	Dredging / Di	isposal	
TIDE INFORMATION:	High: 07	58/2020	Low: 0038/1	338		



	High: SAMPLING PERFORMED	0758/2020		0038/1338	CH COC FOR	Me		_ / ~ I-	ピン
GENERAL NOTES:	SAMPLING PERFORMED	? (TES/NU)): N	IF YES, ATTA	CH COC FOR	M2		_	
02.112.10.12.110.120.									
					UP-CURRE	<u>NT</u>			
Monitoring ID #	NORTHING / EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	RELATIVE POSITION OF MEASUREMENT	NUMBER OF HOURS DREDGING
111813-00-1-1 111813-00-1-2	2697199 / 815443	1116 1118	4.0	2	4.91 4.56		Ebbing	200' N of Dredge	0
111813-00-1-2	2007 1007 010440	1120	4.9	4	6.41	1	Looning	200 14 of Dicago	Ü
	•		AVERAGE 7		5.29			•	
111813-02-1-1	1	1318		1	2.88	1		1 1	
111813-02-1-2	2697187 / 815423	1320	4.2	2	3.93	1	Ebbing / Slack	200' N of Dredge	2
111813-02-1-4		1322		4	3.53				
			AVERAGE	TURBIDITY:	3.45				
111813-04-1-1		1515		1	2.28	I			
111813-04-1-9	2696440 / 815287	1517	18.6	9	3.22]	Flooding tide	200' S of Dredge	4
111813-04-1-18		1519		18	4.62				
			AVERAGE	TURBIDITY:	3.37	J			
111813-06-1-1		1707		1	5.64				
111813-06-1-5	2696624 / 815280	1709	9.2	5	5.71]	Flooding tide	200' S of Dredge	6
111813-06-1-9		1711	AVED AGE	9	5.7				
			AVERAGE	TURBIDITY:	5.68				
						4			
			AVERAGE	TUDDIDITY.					
					Down-Curr	rent_			
Monitoring ID #	NORTHING / EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	Down-Curr TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
111813-00-9-1		1123	DEPTH (ft)	DEPTH (ft)	TURBIDITY (NTUs)			LOCATION	DREDGING
111813-00-9-1 111813-00-9-8	NORTHING / EASTING 2696517 / 815324	1123 1125		1 8	TURBIDITY (NTUs) 4.37 4.96		TIDAL STAGE Ebbing	DISTANCE FROM LOCATION 200' S of Dredge	NUMBER OF HOURS DREDGING
111813-00-9-1		1123	16.6	1 8 16	TURBIDITY (NTUs) 4.37 4.96 4.61			LOCATION	DREDGING
111813-00-9-1 111813-00-9-8		1123 1125	DEPTH (ft)	DEPTH (ft) 1 8 16 TURBIDITY:	TURBIDITY (NTUs) 4.37 4.96			LOCATION	DREDGING
111813-00-9-1 111813-00-9-8 111813-00-9-16		1123 1125 1127	16.6 AVERAGE	DEPTH (ft) 1 8 16 TURBIDITY: INCREASE:	TURBIDITY (NTUs) 4.37 4.96 4.61 4.65 -0.65			LOCATION	DREDGING
111813-00-9-1 111813-00-9-8		1123 1125	16.6 AVERAGE	DEPTH (ft) 1 8 16 TURBIDITY:	TURBIDITY (NTUs) 4.37 4.96 4.61 4.65			LOCATION	DREDGING
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111813-00-9-1 111813-00-9-16 111813-02-9-1 111813-02-9-1 111813-02-9-3	2696517 / 815324	1123 1125 1127 1127	DEPTH (ft) 16.6 AVERAGE TURBIDITY 5.8 AVERAGE TO TURBIDITY	DEPTH (ft) 1 8 16 TURBIDITY: INCREASE: 1 3 5 TURBIDITY:	TURBIDITY (NTUs) 4.37 4.96 4.61 4.65 -0.65 3.89 4.41 4.37 4.22		Ebbing	LOCATION 200' S of Dredge	DREDGING 0
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111813-00-9-1 111813-00-9-16 111813-02-9-1 111813-02-9-3 111813-02-9-5 111813-04-9-1 111813-04-9-2 111813-04-9-4 111813-04-9-4	2696517 / 815324 2696580 / 815330 2697275 / 815519	1123 1125 1127 1127 1326 1328 1330 1525 1527 1529	DEPTH (ft) 16.6 AVERAGE TURBIDITY 5.8 AVERAGE TURBIDITY 4.4 AVERAGE TURBIDITY 5.2	DEPTH (ft) 1 8 16 TURBIDITY: INCREASE: 1 3 5 TURBIDITY: INCREASE: 1 2 4 TURBIDITY: INCREASE: 1 2 4 TURBIDITY: INCREASE: 1 TURBIDITY: INCREASE: 1 TURBIDITY: INCREASE: 1 TURBIDITY: INCREASE: 1 TURBIDITY: INCREASE:	TURBIDITY (NTUs) 4.37 4.96 4.61 4.65 -0.65 3.89 4.41 4.37 4.22 0.78 7.23 21.8 12.5 13.84 10.47	GPS FILE NAME	Ebbing / Slack Flooding tide	200' S of Dredge 200' S of Dredge 200' N of Dredge	DREDGING 0 2
111813-00-9-1 111813-00-9-16 111813-02-9-1 111813-02-9-3 111813-02-9-5 111813-04-9-1 111813-04-9-2 111813-04-9-4	2696517 / 815324 2696580 / 815330 2697275 / 815519	1123 1125 1127 1127 1326 1328 1330 1525 1527 1529	DEPTH (ft) 16.6 AVERAGE TURBIDITY 5.8 AVERAGE TURBIDITY 4.4 AVERAGE TURBIDITY 5.2 AVERAGE TURBIDITY	DEPTH (ft) 1 8 16 TURBIDITY: INCREASE: 1 3 5 TURBIDITY: INCREASE: 1 2 4 TURBIDITY: INCREASE: 1 2 4 TURBIDITY: INCREASE: 1 TURBIDITY: INCREASE: 1 TURBIDITY: INCREASE: 1 TURBIDITY: INCREASE: 1 TURBIDITY: INCREASE:	TURBIDITY (NTUs) 4.37 4.96 4.61 4.65 -0.65 3.89 4.41 4.37 4.22 0.78 7.23 21.8 12.5 13.84 10.47	GPS FILE NAME	Ebbing / Slack Flooding tide	200' S of Dredge 200' S of Dredge 200' N of Dredge	DREDGING 0 2
111813-00-9-1 111813-00-9-16 111813-02-9-1 111813-02-9-3 111813-02-9-5 111813-04-9-1 111813-04-9-2 111813-04-9-4 111813-04-9-4	2696517 / 815324 2696580 / 815330 2697275 / 815519	1123 1125 1127 1127 1326 1328 1330 1525 1527 1529	DEPTH (ft) 16.6 AVERAGE TURBIDITY 5.8 AVERAGE TURBIDITY 4.4 AVERAGE TURBIDITY 5.2 AVERAGE TURBIDITY	DEPTH (ft) 1 8 16 TURBIDITY: INCREASE: 1 3 5 TURBIDITY: INCREASE: 1 2 4 TURBIDITY: INCREASE: 1 2 4 TURBIDITY: INCREASE: 1 TURBIDITY: INCREASE: 1 TURBIDITY: INCREASE: 1 TURBIDITY: INCREASE: 1 TURBIDITY: INCREASE:	TURBIDITY (NTUs) 4.37 4.96 4.61 4.65 -0.65 3.89 4.41 4.37 4.22 0.78 7.23 21.8 12.5 13.84 10.47	GPS FILE NAME	Ebbing / Slack Flooding tide	200' S of Dredge 200' S of Dredge 200' N of Dredge	DREDGING 0 2
111813-00-9-1 111813-00-9-16 111813-02-9-1 111813-02-9-3 111813-02-9-5 111813-04-9-1 111813-04-9-2 111813-04-9-4	2696517 / 815324 2696580 / 815330 2697275 / 815519	1123 1125 1127 1127 1326 1328 1330 1525 1527 1529	DEPTH (ft) 16.6 AVERAGE TURBIDITY 5.8 AVERAGE TURBIDITY 4.4 AVERAGE TURBIDITY 5.2 AVERAGE TURBIDITY	DEPTH (ft) 1 8 16 FURBIDITY: INCREASE: 1 3 5 FURBIDITY: INCREASE: 1 2 4 FURBIDITY: INCREASE: 1 2 4 FURBIDITY: INCREASE: 1 2 4 FURBIDITY: INCREASE: 1 1 2 4 FURBIDITY: INCREASE:	TURBIDITY (NTUs) 4.37 4.96 4.61 4.65 -0.65 3.89 4.41 4.37 4.22 0.78 7.23 21.8 12.5 13.84 10.47	GPS FILE NAME	Ebbing / Slack Flooding tide	200' S of Dredge 200' S of Dredge 200' N of Dredge	DREDGING 0 2
111813-00-9-1 111813-00-9-16 111813-02-9-1 111813-02-9-3 111813-02-9-5 111813-04-9-1 111813-04-9-2 111813-04-9-4	2696517 / 815324 2696580 / 815330 2697275 / 815519	1123 1125 1127 1127 1326 1328 1330 1525 1527 1529	DEPTH (ft) 16.6 AVERAGE TURBIDITY 5.8 AVERAGE TURBIDITY 4.4 AVERAGE TURBIDITY 5.2 AVERAGE TURBIDITY	DEPTH (ft) 1 8 16 FURBIDITY: INCREASE: 1 3 5 FURBIDITY: INCREASE: 1 2 4 FURBIDITY: INCREASE: 1 1 2 4 FURBIDITY: INCREASE: 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	TURBIDITY (NTUs) 4.37 4.96 4.61 4.65 -0.65 3.89 4.41 4.37 4.22 0.78 7.23 21.8 12.5 13.84 10.47	GPS FILE NAME	Ebbing / Slack Flooding tide	200' S of Dredge 200' S of Dredge 200' N of Dredge	DREDGING 0 2

PROJECT:	New Bedford Harbor I	_ower Harbo	r CAD Cell				
JOB NUMBER:	6724						
SURVEY DATE:	18 November 2013						
MONITORS:	Kaios Ryan, Chris Stil	lman					
WEATHER CONDITIONS:	Low:	48	High:	64			
WIND CONDITIONS:	Speed:	10-15k	Direction:	sw			
PRIOR STORM EVENTS:	N/A						
DREDGE / SCOW Position	: Northing/Easting:	CAD Cell #3	1				
TYPE OF WATER QUALITY	MONITORING EVENT	: TOP CAD [Oredging / BTM	I CAD Dredging /	Disposal		
TIDE INFORMATION:	High:	0758/2020	Low: (0038/1338			
WAC WATER OUALITY CA	MDLING DEDECORMED	VEC/NO.	N	EVEC ATTACLL	200 500110	·	



PRIOR STORM EVENTS:	N/A							-	
DREDGE / SCOW Position								_ ^ _	PEX
TYPE OF WATER QUALIT					ing / Disposa	al		- /A I-	ノー X
TIDE INFORMATION:		0758/2020		0038/1338				_ / \1	
WAS WATER QUALITY SA	AMPLING PERFORMED	? (YES/NO)): N	IF YES, ATTA	CH COC FOR	MS		_	
GENERAL NOTES:									
					UP-CURRE	<u>ENT</u>			
		_							
I									
Monitoring ID #	NORTHING / EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	RELATIVE POSITION OF MEASUREMENT	NUMBER OF HOURS DREDGING
					(,				
111813-00-1-1		0921		1	2.37				
111813-00-1-4	2697385 / 815433	0922	8.5	4	4.56		Ebbing	200' N of Disposal	0
111813-00-1-8		0924		8	1.93				
			AVERAGE	TURBIDITY:	2.95				
444042.04.4.4	ı	1000	1	1 4	2.26	T .			
111813-01-1-1 111813-01-1-4	2697070 / 815883	1028 1030	8.7	4	2.26 3.61	1	Ebbing	200' N of Disposal	post
111813-01-1-8		1030	0.7	8	2.43	1	_55g	200 IV of Biopoods	poor
111013-01-1-0	l	1002	AV/ERAGE	TURBIDITY:	2.77			<u>I</u>	
			TWEITHOL	TORDIDITI.	2.11	-1			
]]			
			AVERAGE	TURBIDITY:					
	1	1	1	1	I	I		1	
			1			-			
			1			1			
	•	•	AVERAGE	TURBIDITY:				•	
						_			
			4			4			
			4			4			
			AV/ED 4 OF	TUDDIDITY		<u> </u>			
			AVERAGE	TURBIDITY:					
					Down-Curi	ent			
		7			DOWN OUN	<u>ciit</u>			
Monitoring ID #	NORTHING / EASTING	TIME	TOTAL WATER		TURBIDITY	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM	NUMBER OF HOURS
· · · · •			DEPTH (ft)	DEPTH (ft)	(NTUs)			LOCATION	DREDGING
111813-00-9-1		0932	4	1	2.22	4			_
111813-00-9-7	2696603 / 814975	0934	13.4	7	3.48	4	Ebbing	200' S of Disposal	0
111813-00-9-13		0936		13	2.26				
				TURBIDITY:	2.65	4			
			TURBIDITY	INCREASE:	-0.30				
111813-01-9-1		1036	1	1	3.9	1			
111813-01-9-6	2696452 / 815732	1038	11.8	6	2.68	1	Ebbing	200' S of Disposal	post
111813-01-9-11		1040		11	2.66	1	-	•	
			AVERAGE	TURBIDITY:	3.08				
			TURBIDITY	INCREASE:	0.31				
	T	1	_	1	ī	_		1	
	_		4			4			
			4			-			
	l		AV/EDAGE	TURBIDITY:				<u>I</u>	
				INCREASE:					
						-			
			1						
						4			
]			
				TURBIDITY:		-			
			TURBIDITY	INCREASE:					
						-1			
]		<u> </u>				
	<u> </u>								
	<u> </u>			TURBIDITY:					
				TURBIDITY:					

PROJECT:	New Bedford Harbor Lower Har	bor CAD Cell		
JOB NUMBER:	6724			
SURVEY DATE:	20 November 2013			
MONITORS:	Kaios Ryan, Dennis Claffey			
WEATHER CONDITIONS:	Low: 26	High:	41	
WIND CONDITIONS:	Speed: 5-10k	Direction: N		
PRIOR STORM EVENTS:	N/A			
DREDGE / SCOW Position:	Northing/Easting: 2697088	815411		
TYPE OF WATER QUALITY	MONITORING EVENT: TOP CA	D Dredging / BTM C	AD Dredging / Disposal	
TIDE INFORMATION:	High: 0917/214	4 Low: 145	0	
14/40 14/4 TED 01141 ITV 04	ADI INO DEDEGRAMENO AVEGAN	a\		_



WIND CONDITIONS:	Speed:		Direction:					•	
PRIOR STORM EVENTS:	N/A								
DREDGE / SCOW Position				M OAD Day day	l / Di			ΛГ	PEX
TYPE OF WATER QUALIT TIDE INFORMATION:		0917/2144	Low:		ing / Disposa	11		/-\	
WAS WATER QUALITY SA					ACH COC FOR	MS		/ 11	
GENERAL NOTES:									
					UP-CURRE	<u>:N1</u>			
		1							
Monitoring ID #	NORTHING / EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	RELATIVE POSITION OF MEASUREMENT	NUMBER OF HOURS DREDGING
112013-00-1-1		1115		1	3.6				_
112013-00-1-3 112013-00-1-5	2697207 / 815401	1117 1119	5.8	3 5	6.34 7.43	-	Ebbing	200' N of Dredge	0
112010 00 1 0		1115	AVERAGE 1		5.79			<u> </u>	
		T	_		1	1 1		1	
112013-02-1-1 112013-02-1-2	2697142 / 815361	1320 1322	4.5	2	2.76 4.08	-	Ebbing	200' N of Dredge	2
112013-02-1-4		1324	0	4	2.55				
			AVERAGE 1	TURBIDITY:	3.13]			
112013-04-1-1		1512		1	2.45]]		, , , , , , , , , , , , , , , , , , ,	
112013-04-1-3	2696611 / 815249	1514	5.7	3	5.61		Flooding tide	200' S of Dredge	4
112013-04-1-5		1516		5	3.59				
			AVERAGE 1	TURBIDITY:	3.88	_			
	4		4			_			
			AVERAGE 1	TURBIDITY:				<u> </u>	
					ı				
	4		4			_			
	-		1			-			
	•		AVERAGE 1	TURBIDITY:]			
					Down-Curr	rent			
		1							
Monitoring ID #	NORTHING / EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
112013-00-9-1		1121		1	3.04				
112013-00-9-3	2696669 / 815241	1123	6.5	3	4.11	_	Ebbing	200' S of Dredge	0
112013-00-9-6		1125	AVERAGE 1	6 TURRIDITY:	9.71 5.62	<u> </u>		<u> </u>	
			TURBIDITY		-0.17				
112013-02-0 1	<u> </u>	1326	1	- 1	6.9	ı ı			
112013-02-9-1 112013-02-9-3	2696523 / 815153	1326	6.5	3	6.48	1]	Ebbing	200' S of Dredge	2
112013-02-9-6		1330		6	3.32			_	
			AVERAGE 1		5.57	4			
			TURBIDITY	INCKEASE:	2.44	_			
112013-04-9-1		1518		1	1.49				
112013-04-9-2	2697181 / 815372	1520	4.5	2	3.2	_	Flooding tide	200' N of Dredge	4
112013-04-9-4		1522	AVERAGE 1	4 TURRIDITY:	5.4 3.36	<u> </u>		<u> </u>	
			TURBIDITY		-0.52]			
	1	1			1	, , , , , , , , , , , , , , , , , , , 		,	
	┥ !	-	1			-			
	1								
			AVERAGE 1			-			
			TURBIDITY	INCREASE:	1	J			
	-		4			4]			
-	1	I	1		1				
		•	AVERAGE	TURRIDITY:					
			AVERAGE 1 TURBIDITY						

PROJECT:	New Bedford Harbor Lower Harbor CA	AD Cell			
JOB NUMBER:	6724				
SURVEY DATE:	20 November 2013				
MONITORS:	Kaios Ryan, Dennis Claffey				
WEATHER CONDITIONS:	Low: 26	High:	41		
WIND CONDITIONS:	Speed: 5-10k	Direction: N			
PRIOR STORM EVENTS:	N/A				
DREDGE / SCOW Position	: Northing/Easting: CAD Cell #3				
TYPE OF WATER QUALITY	MONITORING EVENT: TOP CAD Dred	lging / BTM C	AD Dredging / Disposal		
TIDE INFORMATION:	High: 0917/2144	Low:	1450		
WAS WATER QUALITY SA	MPLING PERFORMED? (YES/NO): N	IF.	YES, ATTACH COC FORMS		
GENERAL NOTES:				•	



					UP-CURRI	<u>ENT</u>			
Monitoring ID #	NORTHING / EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	RELATIVE POSITION OF MEASUREMENT	NUMBER OF HOURS DREDGING
112013-00-1-1 112013-00-1-4	2696395 / 815257	0720 0722	8.4	1 4	3.67 5.78		Flooding tide	200' S of Disposal	0
112013-00-1-8	<u>, I</u>	0724	AVERAGE T	8 TURBIDITY:	3.11 4.19				
112013-00-1-1 112013-00-1-3 112013-00-1-7	2697090 / 815489	0920 0922 0924	7.6	1 3.5 7	2.52 4.33 5.19		Ebbing / Slack	200' N of Disposal	0
			AVERAGE T	TURBIDITY:	4.01				
112013-01-1-1 112013-01-1-13 112013-01-1-18	2696967 / 815977	1038 1040 1042	18.5 AVERAGE T	1 13 18	1.85 3.32 4.03 3.07		Ebbing	200' N of Disposal	post-disposal
	Т	1	AVERAGE	OKBIDITT.	3.07	<u> </u>		1	
	-					-			
	-	-	AVERAGE T	URBIDITY:		j		·	
	<u>1</u>		AVERAGE T	TUDDIDITY.					
		7			Down-Cur	rent_			
Monitoring ID #	NORTHING / EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING
112013-00-9-1 112013-00-9-3 112013-00-9-6	2697253 / 815554	0729 0731	6.4	3	2.48 3.18		Florida e del		
		0733		6	2.81		Flooding tide	200' N of Disposal	0
	-	0733	AVERAGE T	URBIDITY:			Flooding tide	200' N of Disposal	0
112013-00-9-1 112013-00-9-4.5 112013-00-9-9	2696342 / 815255	0733 0929 0931 0933		URBIDITY:	2.81 2.82	<u> </u>	Ebbing Slack	200' N of Disposal	0
112013-00-9-4.5	2696342 / 815255	0929 0931	TURBIDITY	TURBIDITY: INCREASE: 1 4.5 9 TURBIDITY:	2.81 2.82 -1.36 1.97 2.42				
112013-00-9-4.5	2696342 / 815255 2696366 / 815378	0929 0931	9.1 AVERAGE T	TURBIDITY: INCREASE: 1 4.5 9 TURBIDITY:	2.81 2.82 -1.36 1.97 2.42 2.23 2.21				
112013-00-9-4.5 112013-00-9-9 112013-01-9-1 112013-01-9-9	1	0929 0931 0933 1041 1041	9.1 AVERAGE T TURBIDITY	TURBIDITY: INCREASE: 1 4.5 9 TURBIDITY: INCREASE: 1 9 18 TURBIDITY:	2.81 2.82 -1.36 1.97 2.42 2.23 2.21 -1.81 3.42 11.5		Ebbing Slack	200' S of Disposal	0
112013-00-9-4.5 112013-00-9-9 112013-01-9-1 112013-01-9-9	1	0929 0931 0933 1041 1041	9.1 AVERAGE 1 TURBIDITY 18.5 AVERAGE 1	TURBIDITY: INCREASE: 1 4.5 9 TURBIDITY: INCREASE: 1 9 18 TURBIDITY:	2.81 2.82 -1.36 1.97 2.42 2.23 2.21 -1.81 3.42 11.5 7.23 7.38		Ebbing Slack	200' S of Disposal	0
112013-00-9-4.5 112013-00-9-9 112013-01-9-1 112013-01-9-9	1	0929 0931 0933 1041 1041	9.1 AVERAGE 1 TURBIDITY 18.5 AVERAGE 1	URBIDITY: INCREASE: 1 4.5 9 TURBIDITY: INCREASE: 1 9 18 TURBIDITY: INCREASE: URBIDITY: INCREASE:	2.81 2.82 -1.36 1.97 2.42 2.23 2.21 -1.81 3.42 11.5 7.23 7.38		Ebbing Slack	200' S of Disposal	0
112013-00-9-4.5 112013-00-9-9 112013-01-9-1 112013-01-9-9	1	0929 0931 0933 1041 1041	9.1 AVERAGE T TURBIDITY 18.5 AVERAGE T TURBIDITY	URBIDITY: INCREASE: 1 4.5 9 TURBIDITY: INCREASE: 1 9 18 TURBIDITY: INCREASE: URBIDITY: INCREASE:	2.81 2.82 -1.36 1.97 2.42 2.23 2.21 -1.81 3.42 11.5 7.23 7.38		Ebbing Slack	200' S of Disposal	0
112013-00-9-4.5 112013-00-9-9 112013-01-9-1 112013-01-9-9	1	0929 0931 0933 1041 1041	9.1 AVERAGE T TURBIDITY 18.5 AVERAGE T TURBIDITY	URBIDITY: INCREASE: 1 4.5 9 TURBIDITY: INCREASE: 1 9 18 TURBIDITY: INCREASE: TURBIDITY: INCREASE: TURBIDITY: INCREASE: TURBIDITY: INCREASE:	2.81 2.82 -1.36 1.97 2.42 2.23 2.21 -1.81 3.42 11.5 7.23 7.38		Ebbing Slack	200' S of Disposal	0

PROJECT:	New Bedford Harbor L	ower Harbor (CAD Cell				
JOB NUMBER:	6724						
SURVEY DATE:	22 November 2013						
MONITORS:	D. Boye, M. Martinho,	C.Stillman					
WEATHER CONDITIONS:	Lt./Moderate Rain	Low:	45	High:	53		
WIND CONDITIONS:	Speed:	Calm	Direction:				
PRIOR STORM EVENTS:	N/A						
DREDGE / SCOW Position	: Northing/Easting:	CAD Cell #3					
TYPE OF WATER QUALITY	MONITORING EVENT:	TOP CAD Dre	edging / BTM C	AD Dredging /	Disposal		
TIDE INFORMATION:	High:	1035	Low: 032	29/1613			
14/40 14/4 TED 01141 ITV 04		()/=0/10) 11					



PRIOR STORM EVENTS:	N/A	Calm	Direction:							
DREDGE / SCOW Position		CAD Cell #	3					^ -		
TYPE OF WATER QUALITY MONITORING EVENT: TOP CAD Dredging / BTM CAD Dredging / Disposal									PEX	
TIDE INFORMATION: High: 1035 Low: 0329/1613										
WAS WATER QUALITY SAMPLING PERFORMED? (YES/NO): N IF YES, ATTACH COC FORMS										
GENERAL NOTES:	Disposal begins at 07	05								
 										
<u>UP-CURRENT</u>										
		7								
			TOTAL WATER	SAMPLE	TURBIDITY			RELATIVE POSITION	NUMBER OF HOURS	
Monitoring ID #	NORTHING / EASTING	TIME	DEPTH (ft)	DEPTH (ft)	(NTUs)	GPS FILE NAME	TIDAL STAGE	OF MEASUREMENT	DREDGING	
112212 00 1 1		0705		1	ı	1				
112213-00-1-1 112213-00-1-8	2696391 / 815725	0705	19	8		+	Flooding tide	200' S of Dredge	0	
112213-00-1-8	1	0707	1 '3	18		1			,	
	•		AVERAGE	TURBIDITY:	2.09	*Single compos	site sample collected from three sampl	e depths for turbidity r	neasurement	
							oment failure, the disposal water qualit	y reading was used fo	r the pre-dredge water	
112213-02-1-1		0930		1	0.95	quality backgro	una reading.			
112213-02-1-1	2696316 /815150	0930	9.3	4.5	1.06	1	Flooding tide	200' S of Dredge	2	
112213-02-1-8	1	0934		8	1.34	1				
			AVERAGE	TURBIDITY:	1.12					
440040 04 4 1	1	4400			1 4 00	1				
112213-04-1-1 112213-04-1-6	2696885 / 815339	1120 1122	14	1 6	1.29 1.07	┪	Ebbing	200' N of Dredge	4	
112213-04-1-12		1124	'*	12	4.96	1	g		, i	
	•		AVERAGE		2.44			•		
	•							•		
	4		4			4				
-	1		1			1				
			AVERAGE	TURBIDITY:				•		
]						_ _				
						4				
	-		1		1	4				
 	1	<u>I</u>	AVERAGE 1	I TURRINITV:		 		1		
			TYLINAGE	. UNDIDITI.	I	_				
Î										
					Down-Cur	rent				
Manka i 15 ii	Nonzunya (T. C. T. C. T.	1	TOTAL WATER	SAMPLE	Down-Cur		******	DISTANCE FROM	NUMBER OF HOURS	
Monitoring ID #	NORTHING / EASTING	TIME	TOTAL WATER DEPTH (ft)	SAMPLE DEPTH (ft)		rent GPS FILE NAME	TIDAL STAGE	DISTANCE FROM LOCATION	NUMBER OF HOURS DREDGING	
				DEPTH (ft)	TURBIDITY (NTUs)			LOCATION	DREDGING	
Monitoring ID #	NORTHING / EASTING 2697100 / 815594	TIME 0720			TURBIDITY		TIDAL STAGE Flooding tide			
			DEPTH (ft) 5.5	DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME	Flooding tide	200' N of Dredge	DREDGING	
			DEPTH (ft)	DEPTH (ft)	TURBIDITY (NTUs)	GPS FILE NAME *Single sample	Flooding tide collected from a depth of 3-feet for tur	200' N of Dredge	DREDGING 0	
			DEPTH (ft) 5.5	3 TURBIDITY:	TURBIDITY (NTUs)	GPS FILE NAME *Single sample	Flooding tide collected from a depth of 3-feet for tur	200' N of Dredge	DREDGING 0	
112213-01-9-1		0720	5.5 AVERAGE	3 TURBIDITY:	2.19 2.19 0.10	*Single sample Due to an equip	Flooding tide collected from a depth of 3-feet for tur	200' N of Dredge	DREDGING 0	
112213-01-9-1	2697100 / 815594	0720	5.5 AVERAGE TURBIDITY	DEPTH (ft) 3 TURBIDITY: INCREASE:	2.19 2.19 0.10	*Single sample Due to an equip	Flooding tide collected from a depth of 3-feet for tur ment failure, the disposal water qualit und reading.	200' N of Dredge bidity measurement y reading was used fo	O 0 r the pre-dredge water	
112213-01-9-1 112213-02-9-1 112213-02-9-3		0720 0937 0939	5.5 AVERAGE	DEPTH (ft) 3 TURBIDITY: INCREASE: 1 3	2.19 2.19 0.10 1.08 2.46	*Single sample Due to an equip	Flooding tide collected from a depth of 3-feet for tur	200' N of Dredge	DREDGING 0	
112213-01-9-1	2697100 / 815594	0720	5.5 AVERAGE TURBIDITY	DEPTH (ft) 3 TURBIDITY: INCREASE: 1 3 5	2.19 2.19 0.10	*Single sample Due to an equip	Flooding tide collected from a depth of 3-feet for tur ment failure, the disposal water qualit und reading.	200' N of Dredge bidity measurement y reading was used fo	O 0 r the pre-dredge water	
112213-01-9-1 112213-02-9-1 112213-02-9-3	2697100 / 815594	0720 0937 0939	5.5 AVERAGE TURBIDITY 6.3	DEPTH (ft) 3 TURBIDITY: INCREASE: 1 3 5 TURBIDITY:	2.19 2.19 0.10 1.08 2.46 3.74	*Single sample Due to an equip	Flooding tide collected from a depth of 3-feet for tur ment failure, the disposal water qualit und reading.	200' N of Dredge bidity measurement y reading was used fo	O 0 r the pre-dredge water	
112213-01-9-1 112213-02-9-1 112213-02-9-3 112213-02-9-5	2697100 / 815594	0720 0937 0939 0941	5.5 AVERAGE TURBIDITY 6.3 AVERAGE	TURBIDITY: 1NCREASE: 1 3 5 5 TURBIDITY: INCREASE:	TURBIDITY (NTUs) 2.19 2.19 0.10 1.08 2.46 3.74 2.42 1.30	*Single sample Due to an equip	Flooding tide collected from a depth of 3-feet for tur ment failure, the disposal water qualit und reading.	200' N of Dredge bidity measurement y reading was used fo	O 0 r the pre-dredge water	
112213-01-9-1 112213-02-9-1 112213-02-9-5 112213-04-9-1	2697100 / 815594 2696935 / 815275	0720 0937 0939 0941	5.5 AVERAGE TURBIDITY 6.3 AVERAGE TURBIDITY	DEPTH (ft) 3 TURBIDITY: INCREASE: 1 3 5 TURBIDITY: INCREASE: 1 1	TURBIDITY (NTUs) 2.19 2.19 0.10 1.08 2.46 3.74 2.42 1.30	*Single sample Due to an equip	Flooding tide collected from a depth of 3-feet for tur ment failure, the disposal water qualit und reading. Flooding tide	200' N of Dredge bidity measurement y reading was used fo 200' N of Dredge	0 r the pre-dredge water	
112213-01-9-1 112213-02-9-1 112213-02-9-3 112213-02-9-5 112213-04-9-1 112213-04-9-3.5	2697100 / 815594	0720 0937 0939 0941 1135 1137	5.5 AVERAGE TURBIDITY 6.3 AVERAGE	DEPTH (ft) 3 TURBIDITY: INCREASE: 1 3 5 TURBIDITY: INCREASE: 1 3.5	1.08 2.46 3.74 2.42 1.30	*Single sample Due to an equip	Flooding tide collected from a depth of 3-feet for tur ment failure, the disposal water qualit und reading.	200' N of Dredge bidity measurement y reading was used fo	0 r the pre-dredge water	
112213-01-9-1 112213-02-9-1 112213-02-9-5 112213-04-9-1	2697100 / 815594 2696935 / 815275	0720 0937 0939 0941	DEPTH (ft) 5.5 AVERAGE TURBIDITY 6.3 AVERAGE TURBIDITY 7.5	DEPTH (ft) 3 TURBIDITY: INCREASE: 1 3 5 TURBIDITY: INCREASE: 1 3.5 6	1.08 2.46 2.42 1.30 1.26	*Single sample Due to an equip	Flooding tide collected from a depth of 3-feet for tur ment failure, the disposal water qualit und reading. Flooding tide	200' N of Dredge bidity measurement y reading was used fo 200' N of Dredge	0 r the pre-dredge water	
112213-01-9-1 112213-02-9-1 112213-02-9-3 112213-02-9-5 112213-04-9-1 112213-04-9-3.5	2697100 / 815594 2696935 / 815275	0720 0937 0939 0941 1135 1137	5.5 AVERAGE TURBIDITY 6.3 AVERAGE TURBIDITY	TURBIDITY: 1 3 INCREASE: 1 3 5 TURBIDITY: INCREASE: 1 3 5 TURBIDITY: INCREASE: 1 6 TURBIDITY:	1.08 2.46 3.74 2.42 1.30	*Single sample Due to an equip	Flooding tide collected from a depth of 3-feet for tur ment failure, the disposal water qualit und reading. Flooding tide	200' N of Dredge bidity measurement y reading was used fo 200' N of Dredge	0 r the pre-dredge water	
112213-01-9-1 112213-02-9-1 112213-02-9-3 112213-02-9-5 112213-04-9-1 112213-04-9-3.5	2697100 / 815594 2696935 / 815275	0720 0937 0939 0941 1135 1137	DEPTH (ft) 5.5 AVERAGE TURBIDITY 6.3 AVERAGE TURBIDITY 7.5 AVERAGE AVERA	TURBIDITY: 1 3 INCREASE: 1 3 5 TURBIDITY: INCREASE: 1 3 5 TURBIDITY: INCREASE: 1 6 TURBIDITY:	TURBIDITY (NTUs) 2.19 2.19 0.10 1.08 2.46 3.74 2.42 1.30 1 3.53 1.26 1.93	*Single sample Due to an equip	Flooding tide collected from a depth of 3-feet for tur ment failure, the disposal water qualit und reading. Flooding tide	200' N of Dredge bidity measurement y reading was used fo 200' N of Dredge	0 r the pre-dredge water	
112213-01-9-1 112213-02-9-1 112213-02-9-3 112213-02-9-5 112213-04-9-1 112213-04-9-3.5	2697100 / 815594 2696935 / 815275	0720 0937 0939 0941 1135 1137	DEPTH (ft) 5.5 AVERAGE TURBIDITY 6.3 AVERAGE TURBIDITY 7.5 AVERAGE AVERA	TURBIDITY: 1 3 INCREASE: 1 3 5 TURBIDITY: INCREASE: 1 3 5 TURBIDITY: INCREASE: 1 6 TURBIDITY:	TURBIDITY (NTUs) 2.19 2.19 0.10 1.08 2.46 3.74 2.42 1.30 1 3.53 1.26 1.93	*Single sample Due to an equip	Flooding tide collected from a depth of 3-feet for tur ment failure, the disposal water qualit und reading. Flooding tide	200' N of Dredge bidity measurement y reading was used fo 200' N of Dredge	0 r the pre-dredge water	
112213-01-9-1 112213-02-9-1 112213-02-9-3 112213-02-9-5 112213-04-9-1 112213-04-9-3.5	2697100 / 815594 2696935 / 815275	0720 0937 0939 0941 1135 1137	DEPTH (ft) 5.5 AVERAGE TURBIDITY 6.3 AVERAGE TURBIDITY 7.5 AVERAGE AVERA	TURBIDITY: 1 3 INCREASE: 1 3 5 TURBIDITY: INCREASE: 1 3 5 TURBIDITY: INCREASE: 1 6 TURBIDITY:	TURBIDITY (NTUs) 2.19 2.19 0.10 1.08 2.46 3.74 2.42 1.30 1 3.53 1.26 1.93	*Single sample Due to an equip	Flooding tide collected from a depth of 3-feet for tur ment failure, the disposal water qualit und reading. Flooding tide	200' N of Dredge bidity measurement y reading was used fo 200' N of Dredge	0 r the pre-dredge water	
112213-01-9-1 112213-02-9-1 112213-02-9-3 112213-02-9-5 112213-04-9-1 112213-04-9-3.5	2697100 / 815594 2696935 / 815275	0720 0937 0939 0941 1135 1137	DEPTH (ft) 5.5 AVERAGE TURBIDITY 6.3 AVERAGE TURBIDITY 7.5 AVERAGE AVERA	DEPTH (ft) 3 TURBIDITY: INCREASE: 1 3 5 TURBIDITY: INCREASE: 1 3.5 6 TURBIDITY: INCREASE:	TURBIDITY (NTUs) 2.19 2.19 0.10 1.08 2.46 3.74 2.42 1.30 1 3.53 1.26 1.93	*Single sample Due to an equip	Flooding tide collected from a depth of 3-feet for tur ment failure, the disposal water qualit und reading. Flooding tide	200' N of Dredge bidity measurement y reading was used fo 200' N of Dredge	0 r the pre-dredge water	
112213-01-9-1 112213-02-9-1 112213-02-9-3 112213-02-9-5 112213-04-9-1 112213-04-9-3.5	2697100 / 815594 2696935 / 815275	0720 0937 0939 0941 1135 1137	DEPTH (ft) 5.5 AVERAGE TURBIDITY 6.3 AVERAGE TURBIDITY 7.5 AVERAGE TURBIDITY	DEPTH (ft) 3 TURBIDITY: INCREASE: 1 3 5 TURBIDITY: INCREASE: 1 3.5 6 TURBIDITY: INCREASE:	TURBIDITY (NTUs) 2.19 2.19 0.10 1.08 2.46 3.74 2.42 1.30 1 3.53 1.26 1.93	*Single sample Due to an equip	Flooding tide collected from a depth of 3-feet for tur ment failure, the disposal water qualit und reading. Flooding tide	200' N of Dredge bidity measurement y reading was used fo 200' N of Dredge	0 r the pre-dredge water	
112213-01-9-1 112213-02-9-1 112213-02-9-3 112213-02-9-5 112213-04-9-1 112213-04-9-3.5	2697100 / 815594 2696935 / 815275	0720 0937 0939 0941 1135 1137	5.5 AVERAGE TURBIDITY 6.3 AVERAGE TURBIDITY 7.5 AVERAGE TURBIDITY AVERAGE TURBIDITY	DEPTH (ft) 3 TURBIDITY: INCREASE: 1 3 5 TURBIDITY: INCREASE: 1 3.5 6 TURBIDITY: INCREASE:	TURBIDITY (NTUs) 2.19 2.19 0.10 1.08 2.46 3.74 2.42 1.30 1 3.53 1.26 1.93	*Single sample Due to an equip	Flooding tide collected from a depth of 3-feet for tur ment failure, the disposal water qualit und reading. Flooding tide	200' N of Dredge bidity measurement y reading was used fo 200' N of Dredge	0 r the pre-dredge water	
112213-01-9-1 112213-02-9-1 112213-02-9-3 112213-02-9-5 112213-04-9-1 112213-04-9-3.5	2697100 / 815594 2696935 / 815275	0720 0937 0939 0941 1135 1137	5.5 AVERAGE TURBIDITY 6.3 AVERAGE TURBIDITY 7.5 AVERAGE TURBIDITY AVERAGE TURBIDITY	DEPTH (ft) 3 TURBIDITY: INCREASE: 1 3 5 TURBIDITY: INCREASE: 1 3.5 6 TURBIDITY: INCREASE:	TURBIDITY (NTUs) 2.19 2.19 0.10 1.08 2.46 3.74 2.42 1.30 1 3.53 1.26 1.93	*Single sample Due to an equip	Flooding tide collected from a depth of 3-feet for tur ment failure, the disposal water qualit und reading. Flooding tide	200' N of Dredge bidity measurement y reading was used fo 200' N of Dredge	0 r the pre-dredge water	
112213-01-9-1 112213-02-9-1 112213-02-9-3 112213-02-9-5 112213-04-9-1 112213-04-9-3.5	2697100 / 815594 2696935 / 815275	0720 0937 0939 0941 1135 1137	5.5 AVERAGE TURBIDITY 6.3 AVERAGE TURBIDITY 7.5 AVERAGE TURBIDITY AVERAGE TURBIDITY	DEPTH (ft) 3 TURBIDITY: INCREASE: 1 3 5 TURBIDITY: INCREASE: 1 3.5 6 TURBIDITY: INCREASE:	TURBIDITY (NTUs) 2.19 2.19 0.10 1.08 2.46 3.74 2.42 1.30 1 3.53 1.26 1.93	*Single sample Due to an equip	Flooding tide collected from a depth of 3-feet for tur ment failure, the disposal water qualit und reading. Flooding tide	200' N of Dredge bidity measurement y reading was used fo 200' N of Dredge	0 r the pre-dredge water	
112213-01-9-1 112213-02-9-1 112213-02-9-3 112213-02-9-5 112213-04-9-1 112213-04-9-3.5	2697100 / 815594 2696935 / 815275	0720 0937 0939 0941 1135 1137	DEPTH (ft) 5.5 AVERAGE TURBIDITY 6.3 AVERAGE TURBIDITY 7.5 AVERAGE TURBIDITY AVERAGE TURBIDITY	DEPTH (ft) 3 TURBIDITY: INCREASE: 1 3 5 TURBIDITY: INCREASE: 1 3.5 6 TURBIDITY: INCREASE: INCREASE: INCREASE: INCREASE: INCREASE: INCREASE: INCREASE:	TURBIDITY (NTUs) 2.19 2.19 0.10 1.08 2.46 3.74 2.42 1.30 1 3.53 1.26 1.93	*Single sample Due to an equip	Flooding tide collected from a depth of 3-feet for tur ment failure, the disposal water qualit und reading. Flooding tide	200' N of Dredge bidity measurement y reading was used fo 200' N of Dredge	0 r the pre-dredge water	
112213-01-9-1 112213-02-9-1 112213-02-9-3 112213-02-9-5 112213-04-9-1 112213-04-9-3.5	2697100 / 815594 2696935 / 815275	0720 0937 0939 0941 1135 1137	DEPTH (ft) 5.5 AVERAGE TURBIDITY 6.3 AVERAGE TURBIDITY 7.5 AVERAGE TURBIDITY AVERAGE TURBIDITY	DEPTH (ft) 3 TURBIDITY: INCREASE: 1 3 5 TURBIDITY: INCREASE: 1 3.5 6 TURBIDITY: INCREASE:	TURBIDITY (NTUs) 2.19 2.19 0.10 1.08 2.46 3.74 2.42 1.30 1 3.53 1.26 1.93	*Single sample Due to an equip	Flooding tide collected from a depth of 3-feet for tur ment failure, the disposal water qualit und reading. Flooding tide	200' N of Dredge bidity measurement y reading was used fo 200' N of Dredge	0 r the pre-dredge water	
112213-01-9-1 112213-02-9-1 112213-02-9-5 112213-02-9-5 112213-04-9-1 112213-04-9-3.5	2697100 / 815594 2696935 / 815275	0720 0937 0939 0941 1135 1137	DEPTH (ft) 5.5 AVERAGE TURBIDITY 6.3 AVERAGE TURBIDITY 7.5 AVERAGE TURBIDITY AVERAGE TURBIDITY AVERAGE TURBIDITY	DEPTH (ft) 3 TURBIDITY: INCREASE: 1 3 5 TURBIDITY: INCREASE: 1 3.5 6 TURBIDITY: INCREASE:	TURBIDITY (NTUs) 2.19 2.19 0.10 1.08 2.46 3.74 2.42 1.30 1 3.53 1.26 1.93	*Single sample Due to an equip	Flooding tide collected from a depth of 3-feet for tur ment failure, the disposal water qualit und reading. Flooding tide	200' N of Dredge bidity measurement y reading was used fo 200' N of Dredge	0 r the pre-dredge water	
112213-01-9-1 112213-02-9-1 112213-02-9-5 112213-02-9-5 112213-04-9-1 112213-04-9-3.5	2697100 / 815594 2696935 / 815275 2696497 / 815218	0720 0937 0939 0941 1135 1137 1139	DEPTH (ft) 5.5 AVERAGE TURBIDITY 6.3 AVERAGE TURBIDITY 7.5 AVERAGE TURBIDITY AVERAGE TURBIDITY AVERAGE TURBIDITY AVERAGE TURBIDITY	DEPTH (ft) 3 TURBIDITY: INCREASE: 1 3 5 TURBIDITY: INCREASE: 1 3.5 6 TURBIDITY: INCREASE:	TURBIDITY (NTUs) 2.19 2.19 0.10 1.08 2.46 3.74 2.42 1.30 1 3.53 1.26 1.93	*Single sample Due to an equip	Flooding tide collected from a depth of 3-feet for tur ment failure, the disposal water qualit und reading. Flooding tide	200' N of Dredge bidity measurement y reading was used fo 200' N of Dredge	0 r the pre-dredge water	

PROJECT:	New Bedford Harbor I	Lower Harbo	or CAD Cell					•	
JOB NUMBER:	6724							i	
SURVEY DATE:	22 November 2013								
MONITORS:	D. Boye, M. Martinho,	C.Stillman						100	
WEATHER CONDITIONS:	Lt./Moderate Rain	Low:	45	High:	53				
WIND CONDITIONS:	Speed:	Calm	Direction:						
PRIOR STORM EVENTS:	N/A								PEX
DREDGE / SCOW Position:	: Northing/Easting:	CAD Cell #	3						
TYPE OF WATER QUALITY	MONITORING EVENT	: TOP CAD	Dredging / BT	M CAD Dredg	ing / Disposa			/\ I_	Л— X
TIDE INFORMATION:	High:	1035	Low:	0329/1613				/\\	
WAS WATER QUALITY SA	MPLING PERFORMED	? (YES/NO):	: N	IF YES, ATTA	CH COC FOR	MS			
GENERAL NOTES:	Disposal begins at 07	05						•	
					UP-CURRE	<u>NT</u>			
		1							
			TOTAL WATER	SAMPLE	TURBIDITY			RELATIVE POSITION	NUMBER OF HOURS
Monitoring ID #	NORTHING / EASTING	TIME	DEPTH (ft)	DEPTH (ft)	(NTUs)	GPS FILE NAME	TIDAL STAGE	OF MEASUREMENT	DREDGING
112213-00-1-1		0705		1					
112213-00-1-8	2696391 / 815725	0707	19	8	1		Flooding tide	200' S of Disposal	0
112213-00-1-18		0709		18			-	•	
			AVERAGE 1		2.09	*Single compos	site sample collected from three sample	denths for turbidity n	neasurement
			AVEIGICE	TORBIDITI.	2.00	olligic compos	site sample conceied from three sample	s deptilis for tarbialty fi	icasarcincia
-					T .	ı		I	
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			AVERAGE 1	TURBIDITY:		1			
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			AVERAGE 1	TURBIDITY:					
	1								
		•	AVERAGE 1	TURBIDITY:					
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	1				1	1			
			1						
		1	AVERAGE 1	TUDDIDITY:					
			AVERAGE	IURBIDITT:		J			
					Down-Curr	<u>ent</u>			
		7							
Monitoring ID #	NORTHING / EASTING	TIME	TOTAL WATER	SAMPLE	TURBIDITY	GPS FILE NAME	TIDAL STAGE	DISTANCE FROM	NUMBER OF HOURS
Monitoring ID #	NORTHING / EASTING	IIIVIE	DEPTH (ft)	DEPTH (ft)	(NTUs)	GF3 FILE NAME	TIDAL STAGE	LOCATION	DREDGING
112213-01-9-1	2697100 / 815594	0720	5.5	3	2.19	1	Flooding tide	200' N of Disposal	0
112210 01 0 1		0720	0.0	- J	2.10				•
	1	1	V/ED VOE	LI IDBIDITA'	2.40	*Cingle a	collected from a danth of 0 foother.	hidity measure	
			AVERAGE 1		2.19	oingle sample	collected from a depth of 3-feet for turl	olully measurement	
			TURBIDITY	INCREASE:	0.10	J			
		1						1	
	ł		4		-	1			
			AVERAGE 1						
			TURBIDITY	INCREASE:]			
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			AVERAGE 1	TURBIDITY:					
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	1		AVERAGE 1	TI IRRINITV:	t	1			
			TURBIDITY		t	1			
			TONDIDITT	II TOILEAGE.	1	1			

AVERAGE TURBIDITY: TURBIDITY INCREASE:

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

