APPENDIX O

AGENCY COORDINATION

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APPENDIX O –AGENCY COORDINATION

Formal agency comments have been requested during the EIS process. All USACE coordination and formal (letters) and informal (telephone communication records) agency comments that have been received to date are documented in Table O-1 and are included in this Appendix following the text. All agency comments recieved between the release of the Draft EIS and the Final EIS is included in Appendix Q along with the response to the comments.

Table O-1. Agency Coordination and Responses Included in Appendix O.

Type of Coordination	Purpose of Correspondence	Agency Contacted or Responding Agency – Contact Person	Date
Agency response letter	Underwater archeology	Maryland Department of Housing and Community Development – Susan B.M. Langley, Ph.D.	7 July 2005
Response to agency request for information	Test pit survey sampling coordination	Chesapeake Bay Critical Area Commission – Dawn McCleary	7 September 2005
Project coordination letter	ESA, Section 7 and EFH Coordination Letter	National Marine Fisheries Service (NMFS) – Christopher Mantzaris	9 September 2005
Project coordination letter	ESA, Section 7 Coordination Letter	U.S. Fish and Wildlife Service (USFWS) – John Wolflin	9 September 2005
Project coordination letter	ESA, Section 7 Coordination Letter	Maryland Department of Natural Resources (MDNR), Natural Heritage Program – Lori Byrne	9 September 2005
Agency response letter	Letter response to ESA, Section 7 Coordination	MDNR, Natural Heritage Program – Lori Byrne	14 October 2005
Agency Response	Phone response to sea turtles for Section 7 Coordination	MDNR, Oxford Laboratory – Tricia Kimmel	20 October 2005

Table O-1. Continued.

Type of Coordination	Purpose of Correspondence	Agency Contacted or Responding Agency – Contact Person	Date of Letter
Agency Response	Phone response to sea turtle stranding and activity in the Inner Harbor	National Aquarium in Baltimore, Marine Mammal Strandings Program – Cindi Perry	25 October 2005
Agency Response	Section 7 Coordination	U.S. Department of the Interior, Fish and Wildlife Service – Mary Ratnaswamy	8 December 2005
Phone call	Information Request	U.S. Geological Survey (USGS) – Wendy McPherson	13 January 2006
Agency Response	Agency response to request	USGS – Daniel Soeder	17 January 2006
Agency Response	Email response to Fish and Wildlife Coordination Act and Bald Eagle coordination	MDNR, Wildlife and Heritage Service – Glenn D. Therres	18 and 19 January 2006
Agency Response	Email response regarding Anadromous fish TOY restrictions	NMFS – John Nichols	27 January 2006
Preliminary request for agency comments	Request for comments on PDEIS Capters 1-3	MDNR, USEPA, USFWS, MDE, NOAA – NMFS	13 March 2006
Agency Response	Email response regarding Waterfowl TOY restrictions	MDNR – Larry Hindman	15 March 2006
Agency Response	Email response on State Forest Conservation Act	MDNR – Marian Honeczy	16 March 2006
Phone	Coordination about mooring bouy	MDNR – Sergeant Dorsey	20 March 2006
Request for agency comments	Request for comments on the PDEIS	MDNR, USEPA, USFWS, MDE, NOAA – NMFS	20 March 2006
Phone	Coordination about drinking water in Baltimore City	Bureau of Environmental Services, Environmental Health Division – Bernard Bohenek	23 March 2006
Phone	Coordination about mooring bouy	US Goast Guard – Ron Houck and Michael Lemay	23 March 2006

Agency Response	Letter regarding endangered species	NMFS – Mary Colligan	23 March 2006
Agency Response	Email with application to relocate mooring bouy	US Coast Guard – Michael Lemay	23 March 2006
Agency Response	Comments on PDEIS	USFWS – Bob Zepp	27 March 2006
Phone	Endangered species coordination	National Aquarium in Baltimore- Marine Mammal Strandings Program – Jen Dittmar	4 April 2006
Phone	Endangered species coordination	MDNR – Tricia Kimmel	4 April 2006
Email	Follow up on phone call	MDNR – Tricia Kimmel	4 April 2006
Agency Response	Comments on PDEIS	USEPA – Marria Walsh	5 April 2006
Agency Response	Comments on PDEIS	MDNR – Roland Limpert	6 April 2006
Agency Response	Comments on PDEIS	MDE – George Harmon	6 April 2006
Agency Response	Comments on PDEIS	NMFS – John Nichols	6 April 2006
Agency Response	Comments on PDEIS	USFWS – Bob Zepp	7 April 2006
Agency Coordination	Endangered Species Coordination	MDNR – Glen Therres	7 April 2007
Agency Response	Comments on PDEIS	NMFS – John Nichols	7 April 2006
Agency Response	Comments on PDEIS #2	NMFS – John Nichols	7 April 2006
Agency Response	Comments on PDEIS	MDNR – Roland Limpert	10 April 2006
Agency Response	Comments on PDEIS	NMFS – John Nichols	11 April 2006
Agency Response	Comments on PDEIS	City Planning – Duncan Stuart	12 April 2006
Phone	Endangered Species Coordination	National Aquarium in Baltimore – Marine Mammal Strandings Program – Jen Dittmar and Polly Yanick	13 April 2006
Coordination	Endangered Species Coordination	US Coast Guard – Katie Moore	13 April 2006
Coordination	Endangered Species Coordination	Virginia Aquarium – Susan Barco	13 April 2006
Corodination	Endangered Species Coordination	NOAA – Mendy Garron	13 April 2006

Coordination	Endangered Species Coordination #2	NOAA – Mendy Garron	13 April 2006
Coordination	Endangered Species Coordination	MDNR – Tricia Kimmel	14 April 2006
Coordination	Endangered Species Coordination	National Aquarium in Baltimore – Marine Mammal Strandings Program – Jen Dittmar	24 April 2006
Coordination	Agency Coordination	MHT – Dixie Henry	2 May 2006
Coordination	Agency Coordination	NMFS – Pat Scida	2 May 2006
Coordination	Agency Coordination	USFWS – John Wolflin	2 May 2006
Response to Comments	Response to Comments	Various Agencies	2 May 2006
See Comments and Responses on the DEIS (Appendix Q) and on the Air Conformity Report, Appendix K			
Coordination	Agency Response	Critical Area Commission – LeAnne Chandler	11 December 2006
Agency Coordination	Coordination Letter	City of Baltimore – Department of Public Works	26 January 2007
Comments	Agency Comments	Maryland Department of the Environment – Robert Cuthbertson	21 February 2007
Agency Coordination	Presentation	Critical Area Commission	7 March 2007
Agency Response	Agency Response	Critical Area Commission	8 March 2007
Response to Comments	Agency read-ahead package for March 27, 2007 meeting	Maryland Department of the Environment – Robert Cuthbertson	20 March 2007
Meeting Minutes	Meeting Minutes – March 27, 2007 meeting	Maryland Department of the Environment	20 March 2007
Comment Response Table	Comment Response Table	Maryland Department of the Environment	April 2007
Coordination	Agency Coordination; response to communications (21 Feburary 2007, 20 March 2007)	Maryland Department of the Environment – Robert Cuthbertson	3 April 2007
Coordination	Agency Coordination: regarding complaince with 26.24.03.03 and 26.24.03.04	Maryland Department of the Environment – Robert Cuthbertson	3 April 2007

Correspondence	Record of Agency Coordination	Environmental Protection Agency, Maryland Port Administration, Maryland Department of the Environment	5 April 2007
Correspondence	Support for MDE Comment Response	MPA Consultants	14 April 2007
Agency Coordination	Response to comment re: Dike Design Practices and Guidelines	Maryland Department of the Environment and Maryland Port Administration	16 April 2007

**Full ESA Section 7 Coordination is included in Appendix D*

Table O-2. Coordination with Agencies.

Date	Type	Purpose of Coordination	Agencies Involved
February 2005	Meeting	Discuss Masonville project	National Park Service MPA
September 31, 2005	Meeting	Discuss proposed mitigation package	Joint Evaluation Committee
January 13, 2006	Meeting	Discuss Mitigation	MDE MPA
January 25, 2006	Meeting	Discuss Mitigation	MDE MPA
February 9, 2006	Meeting	Discuss how to interpret MDE's water quality standards for NTUs and mixing zones for the proposed Masonville construction effort	MDE MPA Representatives (EA Engineering)
February 16, 2006	Meeting	Discuss the preliminary DREDGE modeling, summarize the discussions with MDE, and discuss minimization techniques for suspended solids in the water column (e.g., turbidity curtains)	USACE- Baltimore MPA MPA Representatives (EA Engineering, GBA, M&N) MES
March 27, 2006	Meeting	Discuss Clean Air Act compliance and the Federal Conformity Decision process.	MPA MPA Representatives (EA MDOT MDE
May 15, 2006	Meeting	Discuss Clean Air Act compliance	MPA, MDE, MDOT, MPA Representatitves
July 13, 2006	Coordination	Anadromous fish TOY restrictions	Roland Limpert, DNR
July 28, 2006	Coordination	Anadromous fish TOY restrictions	John Nichols, NMFS
August 2006	Coordination	Productivity modeling	George Ruddy, USFWS
August 30, 2006	Meeting	Discuss proposed mitigation	Joint Evaluation

		package	Committee
September 8, 2006	Coordination	Monitoring and measures of success	John Nichols, NMFS
September 18, 2006 (week of)	Coordination	Discuss habitat coniditon and analysis	Joint Evaluation Committee
September 22 to 26, 2006	Coordination	Discuss Habitat Condition Analysis	George Ruddy, USFWS
September 22, 2006	Coordination	Monitoring and measures of success	John Nichols, NMFS
September 25, 2006	Meeting	Discuss impacts to Chesapeake Bay Critical Area	Critical Area Commission
September 27, 2006	Meeting	Discuss proposed mitigation package	Joint evaluation committee
November 15, 2006	Meeting	Discuss KIM derelict vessel remediation	MDE
November 29, 2006	Meeting	Masonville project update	Joint Evaluation Committee
January 29, 2007	Meeting	Conservation Easement	Maryland Environmental Trust
February 9, 2007	Meeting (conference call)	Emissions and Mitigation	MDE, MPA, EPA, MPA representatives
March 27, 2007	Meeting	Response to comment letter from Febraury 21, 2007	MDE, MPA, USACE, MPA representatives

DHCD
Maryland Department of Housing
and Community Development

July 7, 2005

Michael Rooney
Project Manager
Environmental Dredging and Restoration Division
Maryland Environmental Services
259 Najoles Road
Millersville, MD 21108

Dear Mr. Rooney,

This office has reviewed the draft report, *Underwater Archeological Survey in the Vicinity of Masonville, Sparrow's Point and Soller's Point in the Baltimore Harbor, Maryland*, produced by R. Christopher Goodwin and Associates, Inc. We concur with the findings it contains.

There are a number of typographical and grammatical errors as well as omissions pertaining to the bibliography. J.B. Pelletier, at R. Christopher Goodwin and Associates, is aware of these and has agreed to correct them in the final report.

If you have any questions or wish to discuss any aspects of either the report or this letter, please feel free to contact me at 410-514-7662, or via email: Langley@dhcd.state.md.us.

Sincerely,

Susan B.M. Langley, Ph.D.
State Underwater Archaeologist

/sl

cc: Steve Storms (MPA)
Tammy Banta (MES)
Beth Cole (MHT
Stephen Bilicki (MHT)

DIVISION OF HISTORICAL AND
CULTURAL PROGRAMS

100 Community Place
Crownsville, MD 21032

PHONE 410-514-7600
TOLL FREE 1-800-756-0119
FAX 410-987-4071
TTY/RELAY 711 or 1-800-735-2258
WEB www.mdhousing.org

7 September 2005

Ms. Dawn McCleary
Chesapeake Bay Critical Area Commission
1804 West Street, Suite 100
Annapolis, Maryland 21401

RE: Test Pit Surveys at the MPA Masonville Site

Dear Ms. McCleary:

I am writing to provide you with the information you requested regarding the sampling effort we will be undertaking to define the nature of waste materials at the MPA Masonville site. We anticipate conducting test pit sampling in about two weeks in the two areas noted on the attached figure.

On 22 March 2005, EA representatives performed a site reconnaissance of the shoreline of the Masonville property. In addition, a representative portion of interior (non-shoreline) areas was also traversed. The purpose of the site reconnaissance was to attempt to identify the source and/or content of anthropogenic fill materials present on the site and assess the potential methodology and feasibility involved in their identification and possible removal. In addition, the purpose was to identify areas that may warrant additional investigation.

The following table contains a brief description of the materials observed and correlates with Figure 1.

Area	Description	Primary Materials Observed
A	Outfall	Beached plastic bottles, Styrofoam waste, brick and concrete rubble, municipal trash, concrete slabs, portions of brick wall
B	Small Cove	Submerged, buried and beached insulators, approximately 50 tires submerged in cove, steel cable on land, Styrofoam, plastic bottles, possible fly ash
C	Elevated land	Surficial scrap metal and timbers, mounded area, crushed, buried 55-gallon rusty drums, large truck tires, discarded steel storage tank (former contents unknown), one 55-gallon bung-top drum filled with a white solid material, four 55-gallon drums on surface, steel I-beams, metal piping, railroad ties, discarded pier pilings, brick rubble fill
D	Elevated land	Surficial timbers, telephone poles, burned timbers and telephone poles, carpet, foam, slag on surface, concrete slabs and blocks with re-bar, large pieces of scrap iron sheet metal, Cementitious gray concrete, insulators, kiln bricks, cable wires, aluminum tie straps, railroad ties, old refrigerator

E	Mixed hardwoods	Sporadic piles of rubble (brick, concrete), large (2 x 3 ft.) blocks of slag (approximately 15-20 blocks), some blocks of concrete and slag are partially buried, surface appears mounded, at least one crushed drum observed partially buried, trees in area have roots on surface due to obstructions in subsurface, plastic sheeting, scrap metal, buried pipe, waste tires
F	Beach area	Relic dredging barge located atop a submerged wooden platform, large concrete blocks, plastic bottles, Styrofoam waste, and municipal trash, possible fly ash, burned timbers, slag, large support beams (iron with concrete filled posts), brick, scrap metal
G	South of western peninsula	Open area, one pile of discarded white goods, household trash and debris, area of sandy gravel fill, buried timbers w/iron, mounds of concrete fill
H	Western peninsula	Beached plastic bottles, few large concrete pieces, older mounds of municipal trash (glass bottles), ash fill, concrete rubble on shoreline
I	Steep vegetated slope / stormwater conveyance	Waste truck tires, roadside litter, large concrete pipes
J	Beach area	Beached plastic bottles, timbers, driftwood, plastic bottles, Styrofoam waste, and municipal trash, burned timbers, slag
K	Stormwater conveyance	Large (20' concrete pipes with rebar, approximately 40-50 waste truck tires, municipal trash, bottles from stormwater
L	Cove and side slope	Scrap metal, waste tires, municipal waste, slag, burned timbers

Our current objective is to investigate and characterize the lithologic, physical, and Chemical nature of fill material and/or site soils in the observed 'mounded' areas via test pitting in the areas noted in the attached figure - Areas C and E. We intend to excavate up to 10 test pits and monitor for VOCs with PID to native fill or until groundwater is encountered. We will collect composite soil samples from the surface (0 - 2 ft) and at the groundwater / native interface in each test pit (2 samples per test pit, 20 samples total) or at the most contaminated interval. As part of field work, test pit and sample locations will be flagged and located by GPS for inclusion on an existing overall site map.

We will be accessing the sites from two locations(see the attached figure for the proposed access routes): 1) Area E through the Arundel Corporation property to the west of the Masonville site and 2) through the ATC property to the east of the site. We will use existing haul roads where ever possible. These old haul roads do have some vegetation growing in and along them and we will need to remove some shrubs and small trees in order to gain access to the two test pit areas. We will be very judicious in this effort and will make every attempt to avoid any major trees. The actual test pit areas are overgrown with vines and invasive plants, and these will be removed during the sampling process. All materials removed during the test pitting will be placed back in the pit for safety reasons.

We are requesting your approval to conduct this test pitting operation. It is essential that we rule out the presence of hazardous or regulated materials to ensure that they are properly managed or removed. We can walk the site with you if you wish to define the areas that will be affected.

Please let me know if you require any additional information. I am sending a copy of this letter to Duncan Stuart for his review also. Hope you are feeling better.

Sincerely,

Frank W. Pine, Ph.D.
Project Director

Cc: V. Miller
D. Stuart
S. Storms, MPA Harbor Development
P:\State & Local\State\Port of Baltimore\New 2004-2007 Contract\Masonville Studies & EIS\Test Pit Sampling\7 September 2005 Letter to Dawn McCleary.doc

EA Engineering, Science, and Technology, Inc.
15 LOVETON CIRCLE
SPARKS, MARYLAND 21152

September 9, 2005

Ms. Lori Byrne
Maryland Department of Natural Resources – Natural Heritage
580 Taylor Avenue, E-1
Annapolis, Maryland 21401

Dear Ms Byrne:

This letter is in reference to the Maryland Port Administration's (MPA) study to determine the feasibility and suitability of the Masonville Marine Terminal (Masonville) site located in Baltimore, Maryland for the confined placement of dredged material from the Baltimore Harbor. This project is moving ahead for private permitting and it has been determined that a Joint State/Federal Tidal Wetlands Permit will be submitted for this project in December 2005. EA Engineering is preparing an Environmental Impact Statement (EIS) for the project to support the permit and is requesting information that your agency may have on the Masonville site that may assist us in the EIS process. Public scoping was conducted in early summer by the Baltimore District, US Army Corps of Engineers (Regulatory Division) although little agency input was received at that time. We are currently trying to confirm the status of some resources that may be utilizing the area.

The Masonville site is located west of the Baltimore Harbor Tunnel in the Fairfield area of South Baltimore (Figure 1). The site is bordered by the Patapsco River and Ferry Bar Channel to the North, Masonville Marine Terminal to the South, Fairfield Marine Terminal to the East, and approximately 55 acres of Designated Habitat Protection Area (Masonville Cove) to the West (Figure 1). This study is based on the need to identify sites to manage approximately 1.5 million cubic yards (mcy) annually of material dredged from Baltimore Harbor for at least 20 years. Dredged material placement at the Masonville site would predominantly involve sediment dredged from the Patapsco River, upstream of the line between North Point and Rock Point (which is required to be managed in a confined facility if placed in the water).

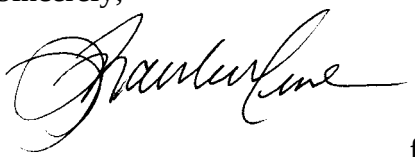
The proposed placement at the site includes the construction of a dredged material placement facility (for expansion of the existing terminal) and the enhancement of Masonville Cove, located immediately adjacent to the proposed placement facility at the Masonville site. The final use of the placement facility would include development for maritime and commercial industry. The proposed action would include evaluating an alignment for placement at the Masonville site (Figure 2). The alignment is an 117-acre alignment with a total footprint of

120 acres. The final elevation for the proposed alternative is 36 ft, with the dikes temporarily raised to 42 ft during placement operations. This project would also include remediation of the Kurt Iron & Metal facility (including encapsulation of existing contaminants), which would prove to be a significant environmental enhancement to the area. The Masonville Cove improvements will largely act as mitigation for the project. Potential enhancements at Masonville Cove may include shoreline cleanup/rehabilitation, wetlands creation, fish reef creation, in-water cleanup and substrate improvements (for SAV protection/propogation), an ecological protection area, hiking trails, an observation deck, a canoe launch, and fishing beaches. The community and environmental enhancements would be considered as part of the NEPA process.

We are requesting any information your agency may have on the presence of listed species associated with the Maryland Natural Heritage Program. We need this determination as quickly as possible in order to get some earth moving equipment onto the land side of Masonville Cove in order to determine the extent of potential contamination and debris cleanup needed.

If you have any questions or agency input on this matter, please contact me at my home office: (410) 745-3433. Thank you for your time.

Sincerely,



for JB

Jane Boraczek
Project Manager

Enclosures (2)

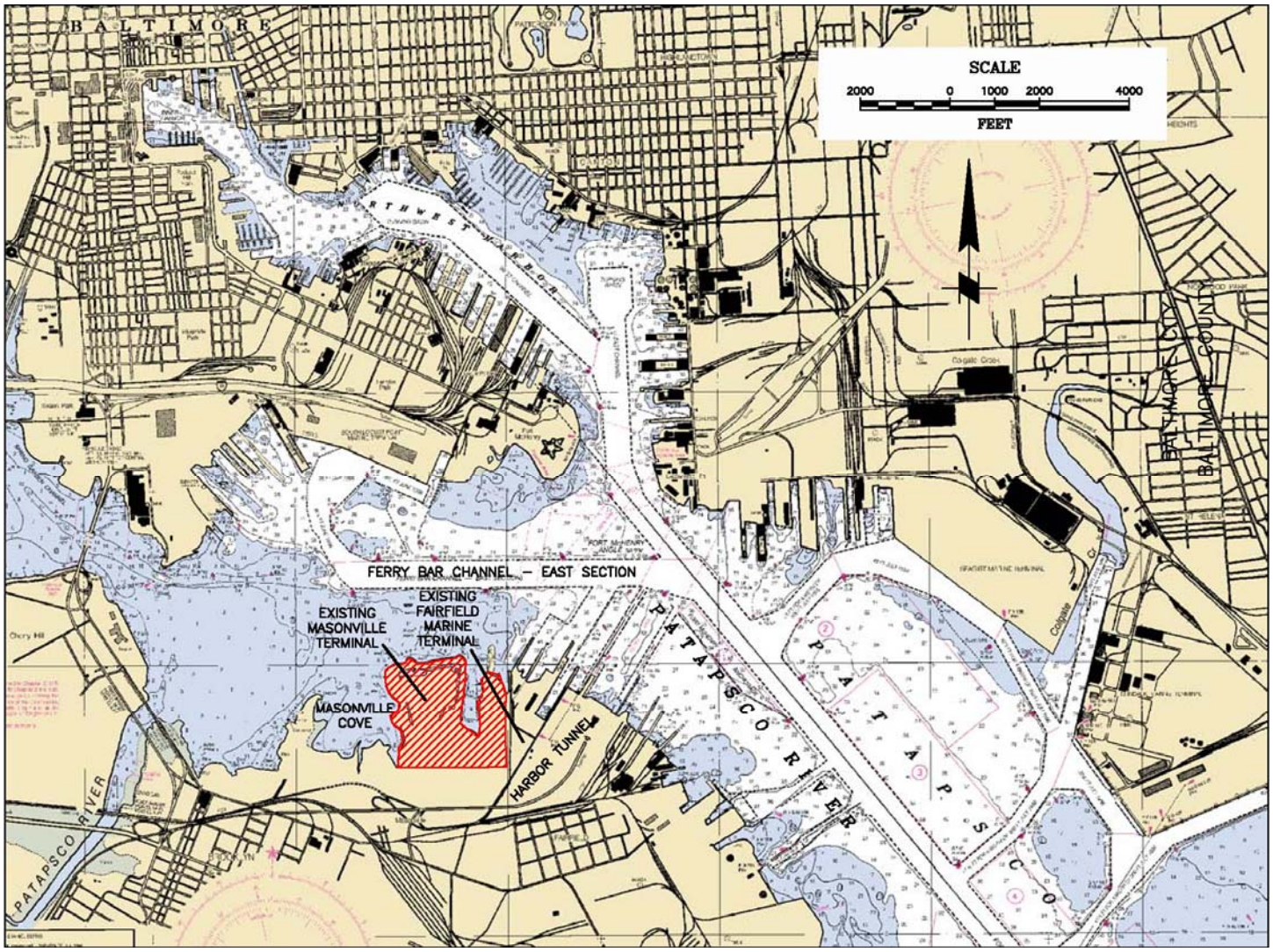


Figure 1. Location of Existing Masonville Terminal and Masonville Cove.

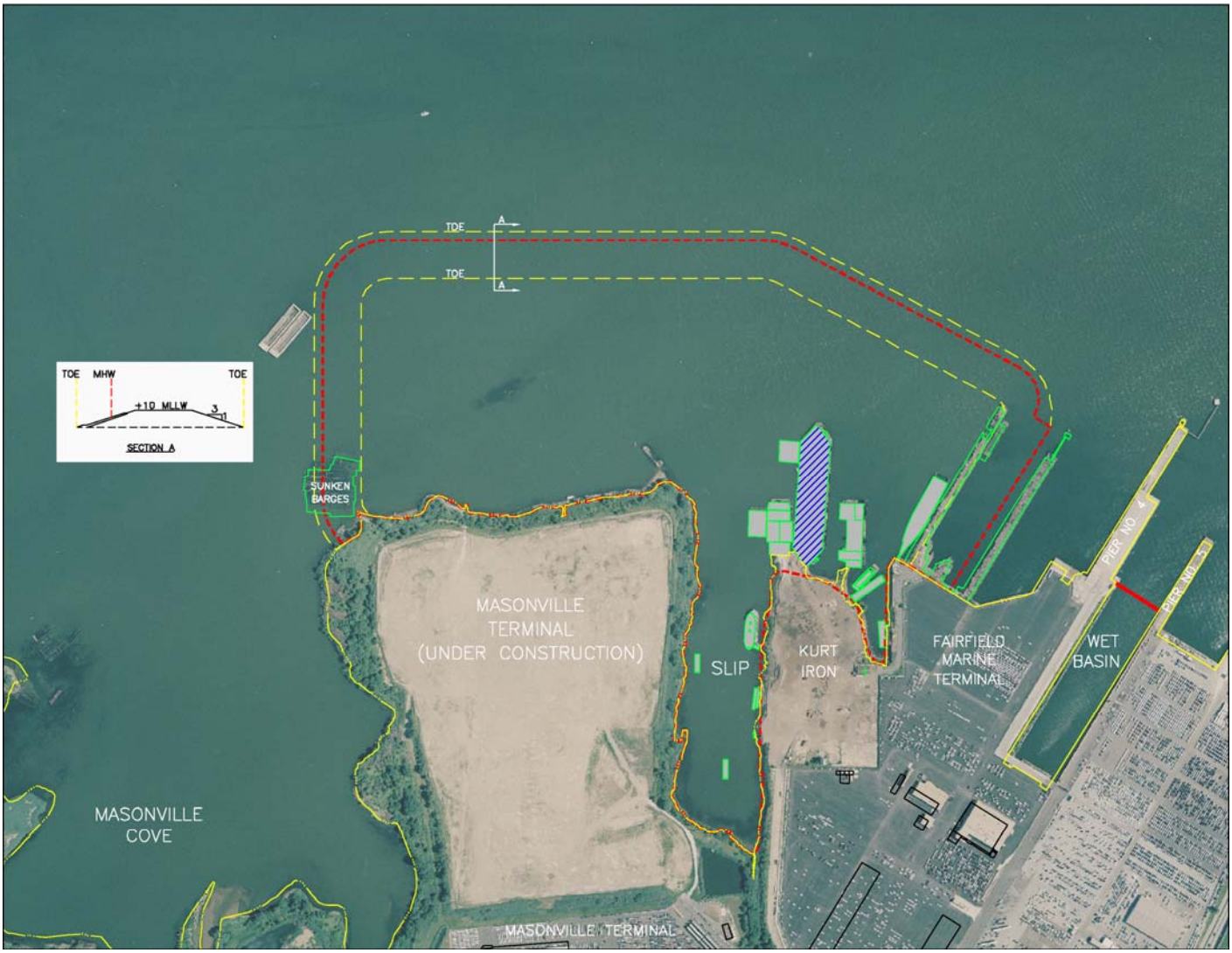


Figure 2. Location and Dimensions of Alignment 6 Proposed for the Masonville Dredged Material Containment Facility

EA Engineering, Science, and Technology, Inc.
15 LOVETON CIRCLE
SPARKS, MARYLAND 21152

September 9, 2005

Mr. Christopher Mantzaris
Regional Director, National Marine Fisheries Service
U.S. Department of Commerce
One Blackburn Drive
Gloucester, MA 01930

Dear Mr. Mantzaris:

This letter is in reference to the Maryland Port Administration's (MPA) study to determine the feasibility and suitability of the Masonville Marine Terminal (Masonville) site located in Baltimore, Maryland for the confined placement of dredged material from the Baltimore Harbor. This project is moving ahead for private permitting and it has been determined that a Joint State/Federal Tidal Wetlands Permit will be submitted for this project in December 2005. EA Engineering is preparing an Environmental Impact Statement (EIS) for the project to support the permit and is requesting information that your agency may have on the Masonville site that may assist us in the EIS process. Public scoping was conducted in early summer by the Baltimore District, US Army Corps of Engineers (Regulatory Dividion) although little agency input was received at that time. We are currently trying to confirm the status of some resources that may be utilizing the area.

The Masonville site is located west of the Baltimore Harbor Tunnel in the Fairfield area of South Baltimore (Figure 1). The site is bordered by the Patapsco River and Ferry Bar Channel to the North, Masonville Marine Terminal to the South, Fairfield Marine Terminal to the East, and approximately 55 acres of Designated Habitat Protection Area (Masonville Cove) to the West (Figure 1). This study is based on the need to identify sites to manage approximately 1.5 million cubic yards (mcy) annually of material dredged from Baltimore Harbor for at least 20 years. Dredged material placement at the Masonville site would predominantly involve sediment dredged from the Patapsco River, upstream of the line between North Point and Rock Point (which is required to be managed in a confined facility if placed in the water).

The proposed placement at the site includes the construction of a dredged material placement facility (for expansion of the existing terminal) and the enhancement of Masonville Cove, located immediately adjacent to the proposed placement facility at the Masonville site. The final use of the placement facility would include development for maritime and commercial industry. The proposed action would include evaluating an alignment for placement at the

Masonville site (Figure 2). The alignment is an 117-acre alignment with a total footprint of 120 acres. The final elevation for the proposed alternative is 36 ft, with the dikes temporarily raised to 42 ft during placement operations. This project would also include remediation of the Kurt Iron & Metal facility (including encapsulation of existing contaminants), which would prove to be a significant environmental enhancement to the area. The Masonville Cove improvements will largely act as mitigation for the project. Potential enhancements at Masonville Cove may include shoreline cleanup/rehabilitation, wetlands creation, fish reef creation, in-water cleanup and substrate improvements (for SAV protection/propogation), an ecological protection area, hiking trails, an observation deck, a canoe launch, and fishing beaches. The community and environmental enhancements would be considered as part of the NEPA process.

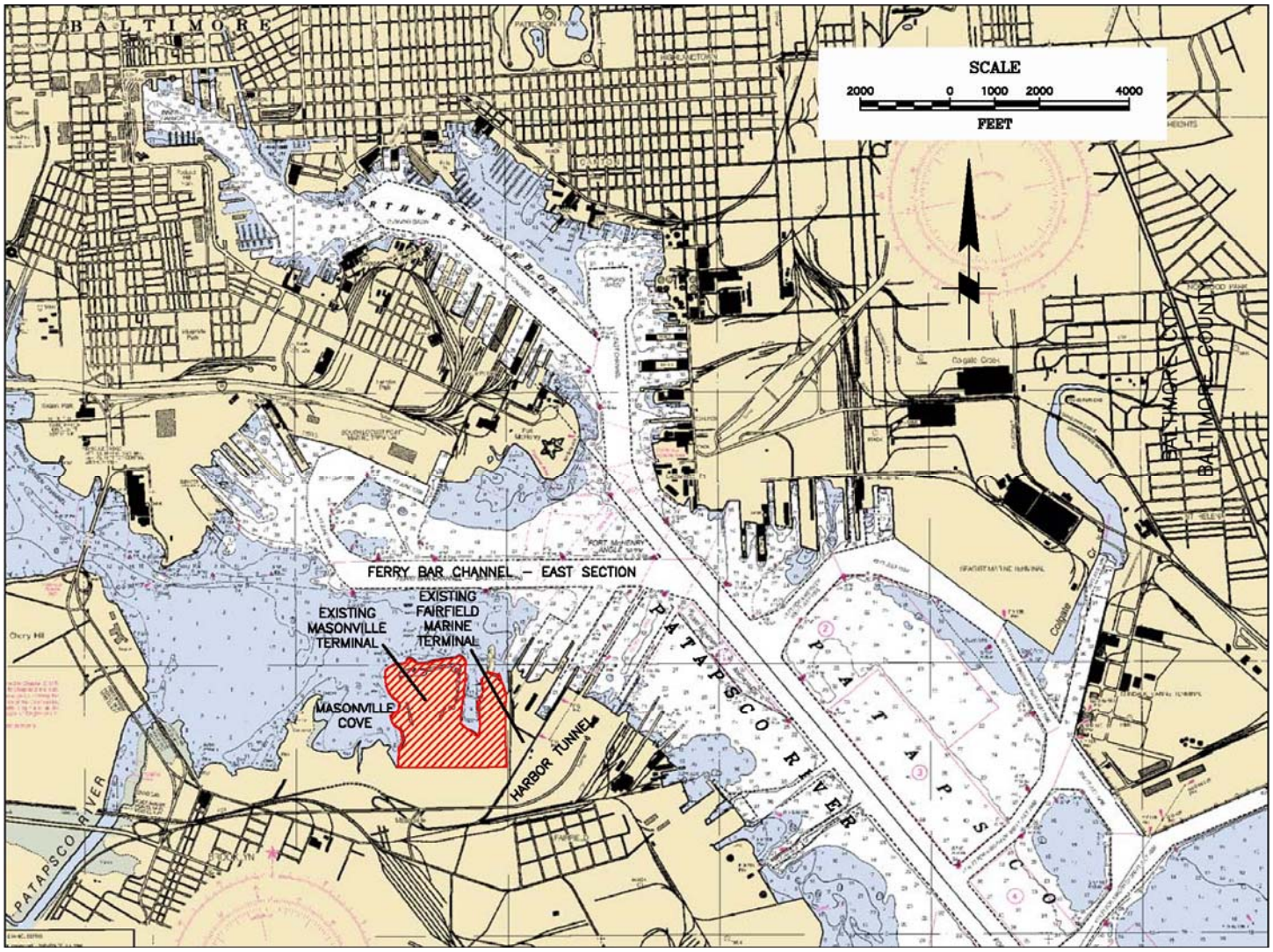
We are requesting any information your agency may have on the presence of listed species under NMFS jurisdiction that may be utilizing the site. We have also conducted informatl consultations on EFH for the lower Patapsco River but would like to have confirmation of the status of EFH in the project area. We need this determination as quickly as possible in order to complete our EIS.

If you have any questions or agency input on this matter, please contact me at my home office: (410) 745-3433. Thank you for your time.

Sincerely,

Jane Boraczek
Project Manager

Enclosures (2)
CC: John S. Nichols
U.S. Department of Commerce
NOAA/NMFS
Chesapeake Bay Office
410 Severn Avenue, Suite 107A
Annapolis, MD 21403



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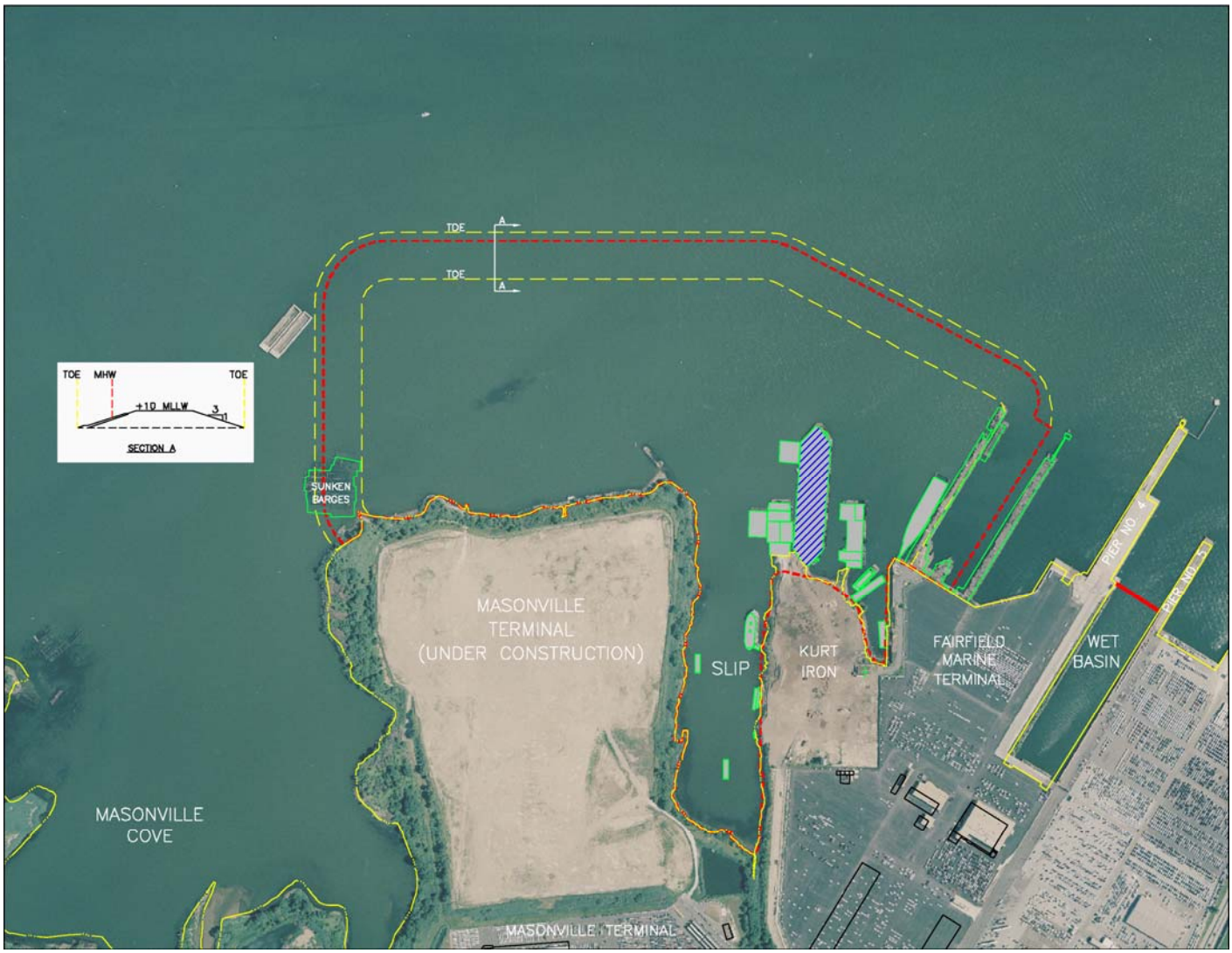

Figure 2. Location and Dimensions of Alignment 6 Proposed for the Masonville Dredged Material Containment Facility

EA Engineering, Science, and Technology, Inc.
15 LOVETON CIRCLE
SPARKS, MARYLAND 21152

September 9, 2005

Mr. John Wolflin
Supervisor
U.S. Fish and Wildlife Service
Chesapeake Bay Field Office
177 Admiral Cochrane Drive
Annapolis, Maryland 21014

Dear Mr. Wolflin:

This letter is in reference to the Maryland Port Administration's (MPA) study to determine the feasibility and suitability of the Masonville Marine Terminal (Masonville) site located in Baltimore, Maryland for the confined placement of dredged material from the Baltimore Harbor. This project is moving ahead for private permitting and it has been determined that a Joint State/Federal Tidal Wetlands Permit will be submitted for this project in December 2005. EA Engineering is preparing an Environmental Impact Statement (EIS) for the project to support the permit and is requesting information that your agency may have on the Masonville site that may assist us in the EIS process. Public scoping was conducted in early summer by the Baltimore District, US Army Corps of Engineers (Regulatory Division) although little agency input was received at that time. We are currently trying to confirm the status of some resources that may be utilizing the area.

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industry. The proposed action would include evaluating an alignment for placement at the Masonville site (Figure 2). The alignment is an 117-acre alignment with a total footprint of 120 acres. The final elevation for the proposed alternative is 36 ft, with the dikes temporarily raised to 42 ft during placement operations. This project would also include remediation of the Kurt Iron & Metal facility (including encapsulation of existing contaminants), which would prove to be a significant environmental enhancement to the area. The Masonville Cove improvements will largely act as mitigation for the project. Potential enhancements at Masonville Cove may include shoreline cleanup/rehabilitation, wetlands creation, fish reef creation, in-water cleanup and substrate improvements (for SAV protection/propogation), an ecological protection area, hiking trails, an observation deck, a canoe launch, and fishing beaches. The community and environmental enhancements would be considered as part of the NEPA process.

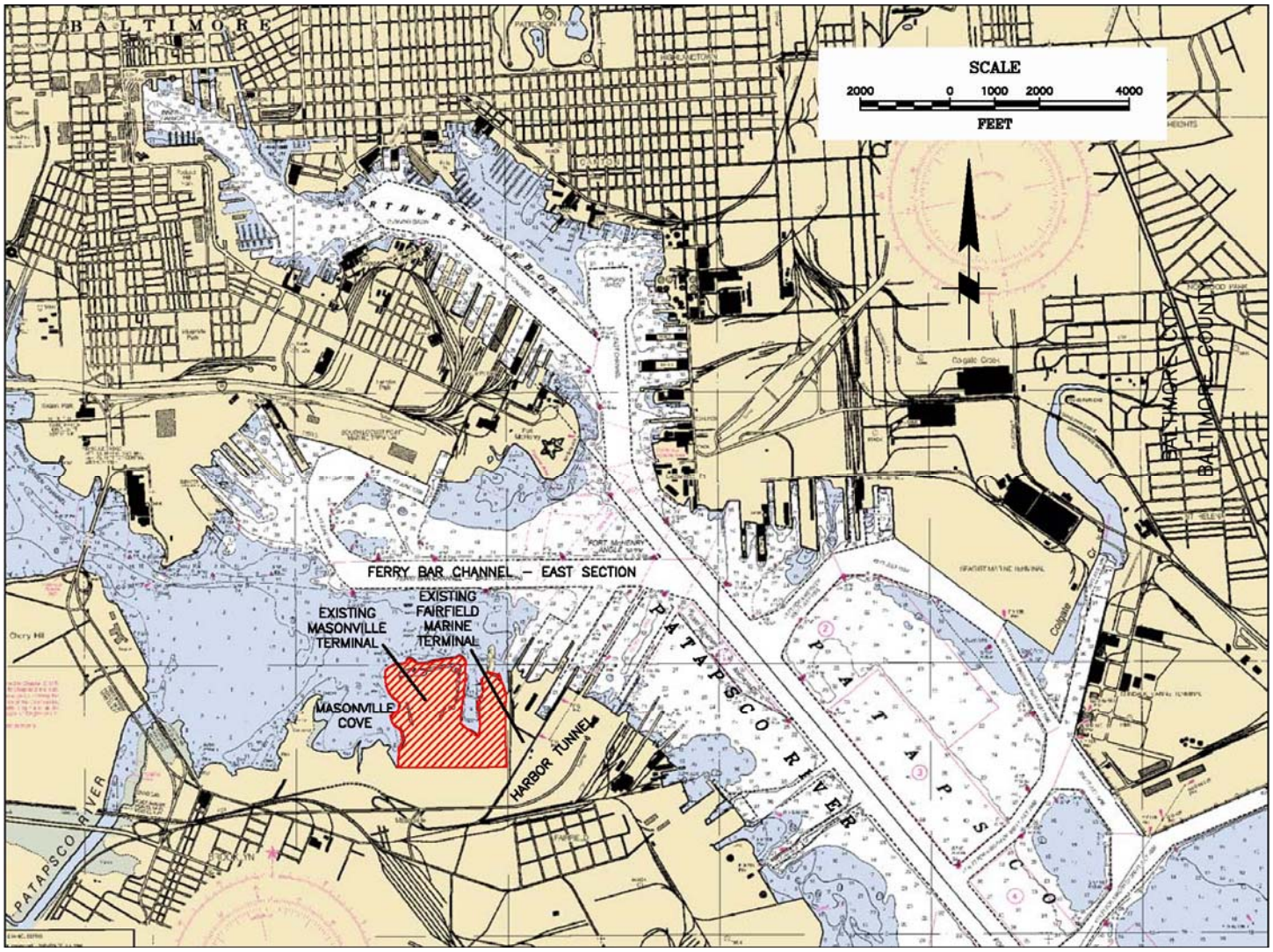
We are requesting any information your agency may have on the presence of listed species under USFWS jurisdiction that may be utilizing the site. We need this determination as quickly as possible in order to complete our EIS.

If you have any questions or agency input on this matter, please contact me at my home office: (410) 745-3433. Thank you for your time.

Sincerely,

Jane Boraczek
Project Manager

Enclosures (2)



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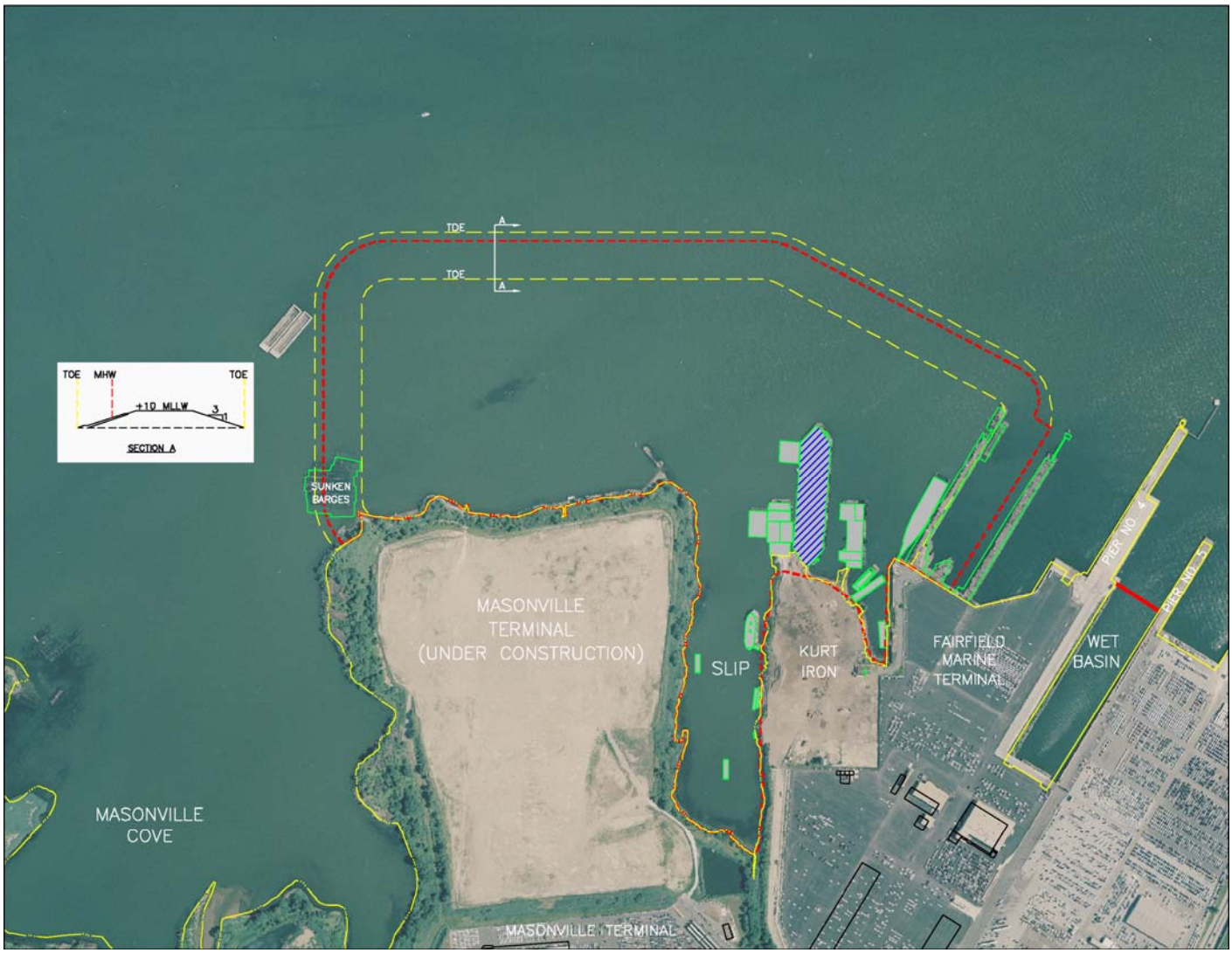


Figure 2. Location and Dimensions of Alignment 6 Proposed for the Masonville Dredged Material Containment Facility

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
NORTHEAST REGION
One Blackburn Drive
Gloucester, MA 01930-2298

OCT 11 2005

Jane Boraczek
EA Engineering, Science and Technology, Inc.
15 Loveton Circle
Sparks, Maryland 21152

Dear Ms. Boraczek,

This is in response to your letter dated September 9, 2005 requesting information on the presence of species listed as threatened and/or endangered under the jurisdiction of NOAA's National Marine Fisheries Service (NMFS) in the vicinity of the Masonville Marine Terminal site located in Baltimore, Maryland. The Maryland Port Administration (MPA) is determining the feasibility and suitability of the Masonville site for the confined placement of dredged material from Baltimore Harbor.

The Masonville site is located west of the Baltimore Harbor Tunnel in South Baltimore. MPA's study of the site is based on the need to identify sites to manage approximately 1.5 million cubic yards (cy) annually of material dredged from Baltimore Harbor for at least 20 years. Dredged material placement at the Masonville site would predominantly involve sediment dredged from the Patapsco River, upstream of the line between North Point and Rock Point. The proposed placement at the site includes the construction of a dredged material placement facility (for expansion of the existing marine terminal) and the enhancement of Masonville Cove. The final use of the placement facility would include development for maritime and commercial industry. The proposed alignment is an 117-acre alignment with a total footprint of 120 acres. The project would also include remediation of the Kurt Iron and Metal facility, including encapsulation of existing contaminants. EA Engineering is preparing an Environmental Impact Statement for the project.

Several threatened and endangered species under the jurisdiction of NMFS can be found in the Chesapeake Bay and its tidal tributaries. Several species of sea turtles are known to be present in the Chesapeake Bay from April 1 – November 30 each year. Loggerhead (*Caretta caretta*), Kemp's ridley (*Lepidochelys kempi*), and green sea turtles (*Chelonia mydas*) are present in the Chesapeake Bay, mainly during late spring, summer and early fall when water temperatures are relatively warm. An estimated 3,000 - 10,000 loggerhead turtles and 500 Kemp's ridley sea turtles are found in the Chesapeake Bay annually. In the Chesapeake Bay, Kemp's ridleys frequently forage in shallow embayments, particularly in areas supporting submerged aquatic vegetation and on tidal flats. Approximately 95 percent of the loggerheads found in the Chesapeake Bay are juveniles; these turtles are found most commonly from the mouth of the Bay to the Potomac River while foraging along channel edges. The summer developmental habitat

for green turtles encompasses estuarine and coastal waters of Chesapeake Bay and this species occurs in the Chesapeake Bay in warmer months. Leatherback sea turtles (*Dermochelys coriacea*) are predominantly pelagic but are also seasonally present in the Chesapeake Bay. Recent data from sightings and incidental captures in fishing gear indicate that loggerhead and Kemp's ridley are the species of sea turtles most likely to be found in the waters of Chesapeake Bay while leatherback and green sea turtles are less common in the area. Sea turtles are less common in the upper Bay and are not known to occur in Baltimore Harbor.

The federally endangered shortnose sturgeon is known to be present in the Chesapeake Bay. The NMFS recovery plan (1998) indicates that shortnose sturgeon found in the Chesapeake Bay and its tributaries are considered part of the Chesapeake Bay population. The US Fish and Wildlife Service Reward Program for Atlantic Sturgeon began in 1996. Through the fall of 2004, the incidental capture of fifty-seven different shortnose sturgeon had been reported via the reward program in the Chesapeake Bay and its tributaries – four from the lower Susquehanna River, two in the Bohemia River, six in the Potomac River, two south of the Bay Bridge near Kent Island, one near Howell Point, one just north of Hooper's Island, one in the Elk River and two in Fishing Bay. The remaining shortnose sturgeon were captured in the upper Bay north of Hart-Miller Island. All fish were captured alive in either commercial gillnets, poundnets, fykenets, eel pots, hoop nets, or catfish traps. While no shortnose sturgeon have been captured in Baltimore Harbor, shortnose sturgeon occur in other heavily industrialized areas (i.e., Philadelphia, New York Harbor) and have been captured in the Bay in the vicinity of Baltimore Harbor. As such, the best available information suggests that shortnose sturgeon may occasionally occur in Baltimore Harbor.

Shortnose sturgeon may be affected by the creation of a dredged material management site if foraging or overwintering habitats are destroyed. Shortnose sturgeon are also vulnerable to entrainment in dredges and may be affected by construction necessary for site preparation. In addition, the placement of contaminated sediments at the site has the potential to affect water quality in the area. These effects should be considered in the EIS.

Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus*) are distributed along the entire East Coast of the United States and have been designated a Species of Concern by NMFS. Many populations, including those found in the Chesapeake Bay, have undergone drastic declines in abundance since the late 1800s. Consequently, NMFS has initiated a status review for this species to determine if listing as threatened or endangered under the ESA is warranted. If it is determined that listing is warranted a proposed rule would be published and a final rule could be published within a year of the proposed rule. While Atlantic sturgeon currently receive no protection under the ESA, NMFS recommends that project proponents consider implementing conservation actions to limit the potential for adverse effects on Atlantic sturgeon from this project.

Section 7(a)(2) of the Endangered Species Act (ESA) of 1973, as amended, states that each Federal agency shall, in consultation with the Secretary, insure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of designated critical habitat. Any discretionary federal

action that may affect a listed species must undergo Section 7 consultation. It is the understanding of NMFS that Federal permits will be required for this project. As listed species may be present in the project area, the federal action agency (i.e, the Army Corps of Engineers (ACOE)) is responsible for determining whether the proposed action is likely to affect any listed species. The ACOE should submit their determination along with a justification for the determination and a request for concurrence, to the attention of the Endangered Species Coordinator, NMFS, Northeast Regional Office, Protected Resources Division, One Blackburn Drive, Gloucester, MA 01930. After reviewing this information, NMFS would then be able to conduct a consultation under section 7 of the ESA. Should you have any questions about these comments or about the section 7 consultation process in general, please contact Julie Crocker at (978)281-9328 ext. 6530.

Sincerely,

Mary A. Colligan
Assistant Regional Administrator
for Protected Resources

cc: Nichols, F/NER4 - Annapolis

File Code: Sec 7 ACOE NAB Masonville Marine Terminal

MARYLAND
DEPARTMENT OF
NATURAL RESOURCES

Robert L. Ehrlich, Jr., *Governor*
Michael S. Steele, *Lt. Governor*
C. Ronald Franks, *Secretary*

October 14, 2005

Ms. Jane Boraczek
EA Engineering
9267 Pennywhistle Drive
McDaniel, MD 21647

RE: Environmental Review for Masonville Marine Terminal Site, Baltimore, Maryland.

Dear Ms. Boraczek:

The Wildlife and Heritage Service has determined that there are no State or Federal records for rare, threatened or endangered species within the boundaries of the project site as delineated. As a result, we have no specific comments or requirements pertaining to protection measures at this time. Please note however that the utilization of state funds, the need to obtain a state-authorized permit, or changes to the plan might warrant additional evaluations that could lead to protection or survey recommendations by the Wildlife and Heritage Service. Please contact us again for further coordination if this project falls into one of those categories.

We would also like to point out that our initial evaluation of this project should not be interpreted as meaning that it is not possible for rare, threatened or endangered species to be present. Certain species could be present without documentation because adequate surveys may not have been conducted in the past. Although we are not requiring any surveys, we would like to bring to your attention that Wildlife and Heritage Service's Natural Heritage database records do indicate that there is a breeding record for the state rare Hooded Merganser (*Lophodytes cucullatus*) and the Common Moorhen (Gallinula chloropus), a species with In Need of Conservation status in Maryland, known to occur within the vicinity of the project site. These species could potentially occur on the project site itself, if the appropriate wetland habitat is present.

In order to prevent disturbance to any breeding individuals of these two species, we recommend that work in or near any wetlands not be conducted during the breeding season of the Hooded Merganser and Common Moorhen, which is typically mid-March to end of June of any given year. Since the populations of these native birds have declined historically we would encourage efforts to help conserve them across the state. Feel free to contact us if you would like technical assistance regarding the conservation of these important species.

It is also important to note that the open waters that are adjacent to or part of the site are known historic waterfowl concentration areas. If there is to be any construction of water-dependent facilities please contact Larry Hindman of the Wildlife and Heritage Service at (410) 221-8838, for further technical assistance regarding waterfowl.

Thank you for allowing us the opportunity to review these projects. If you should have any further questions regarding this information, please contact me at (410) 260-8573.

Sincerely,

Lori A. Byrne,
Environmental Review Coordinator
Wildlife and Heritage Service
MD Dept. of Natural Resources

ER# 2005.2198.bc
Cc: D. Brinker, DNR
L. Hindman, DNR
R. Esslinger, CAC

COMMUNICATIONS RECORD FORM

Person Contacted: Tricia Kimmel
Date: October 20, 2005
Affiliation: Maryland Department of Natural Resources, Oxford Laboratory
Address:
Type of Contact: Phone
Person Making Contact: Kaitlin McCormick

Communications Summary:

I spoke with Tricia to obtain information on sea turtles within the Patapsco River and the Chesapeake Bay in general. I gave her a brief explanation of the information needed for the Section 7 consultation. She is sending a digital copy of a report discussing data from 1991 to 2003. This report will discuss incidental catches and sea turtle strandings within the Bay. To her knowledge, there have been no sea turtle strandings or incidental captures in the Patapsco River since 1991. In 2004 and 2005 (to date), there were no sea turtle strandings or incidental catches in the Patapsco River. Tricia did state that there have been sea turtles reported in the Magothy River and the Back River which are the rivers north and south of the Patapsco River. She recommended consulting Cindi Perry at the National Aquarium to verify that they have not been informed of any catches or strandings in the Baltimore Harbor or Patapsco River. Cindi Perry can be reached at 410-576-8723.

COMMUNICATIONS RECORD FORM

Person Contacted: Cindi Perry
Date: October 25, 2005
Affiliation: National Aquarium at Baltimore, Marine Mammal Strandings Program
Address:
Type of Contact: Phone (410-576-8723)
Person Making Contact: Kaitlin McCormick

Communications Summary:

Cindi confirmed what Tricia Kimmel said about sea turtle strandings. Cindi is unaware of any but will check data reports from before her work at the aquarium and will call back if she finds any reports of sea turtles in the Patapsco or Inner Harbor. She scanned through data and did not see any strandings in the Patapsco or Inner Harbor. She said that she "wouldn't even expect to see them [sea turtles] in the Harbor." She noted that there has been sea turtle activity in the bay in general, but does not think there has been any sea turtle activity in the Patapsco or Inner Harbor. She said it would be "very much out of the ordinary" to have sea turtle activity in the Inner Harbor.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Chesapeake Bay Field Office
177 Admiral Cochrane Drive
Annapolis, MD 21401

December 8, 2005

Mr. James Boraczek
Project Manager
EA Engineering, Science, and Technology, Inc.
15 Loveton Circle
Sparks, Maryland 21152

RE: Maryland Port Administration Masonville Marine Terminal Feasibility and Suitability Study, Dredged Material Placement, Baltimore City, MD

Dear Mr. Boraczek:

This responds to your letter, dated September 9, 2005, requesting information on the presence of species which are federally listed or proposed for listing as endangered or threatened within the above referenced project area. We have reviewed the information you enclosed and are providing comments in accordance with section 7 of the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*).

The federally threatened bald eagle *(Haliaeetus leucocephalus)* nests within the vicinity of the Masonville Terminal. A nest, identified as BC-04-01, is located approximately one-quarter mile from the terminal in Masonville Cove. For further information regarding activity at this nest, Glenn Therres of the Maryland Wildlife and Heritage Division should be contacted at (410) 260-8572. Any construction or forest clearing activities within one-quarter mile of an active nest may impact bald eagles. If such impacts may occur, further section 7 consultation with the U.S. Fish and Wildlife Service may be required.

Except for occasional transient individuals, no other federally proposed or listed endangered or threatened species are known to exist within the area. Should additional information on the distribution of listed or proposed species become available, this determination may be reconsidered.

This response relates only to federally-protected threatened or endangered species under our jurisdiction. For information on the presence of other rare species, you should contact Lori Byrne of the Maryland Wildlife and Heritage Division at (410) 260-8573.

An additional concern of the Service is wetlands protection. Federal and state partners of the Chesapeake Bay Program have adopted an interim goal of no overall net loss of the basin's remaining wetlands, and the long term of increasing the quality and quantity of the basin's wetlands resource base. Because of this policy and the functions and values wetlands perform, the Service recommends avoiding wetland impacts. All wetlands within the project area should be identified, and if construction in wetlands proposed, the U.S. Army Corps of Engineers, Baltimore District should be contacted for permit requirements. They can be reached at (410) 962-3670.

We appreciate the opportunity to provide information relative to fish and wildlife issues, and thank you for your interest in these resources. If you have any questions or need further assistance, please contact Craig Koppie (410) 573-4534.

Sincerely,

Mary J. Ratnaswamy, Supervisor
Threatened and Endangered Species Program

cc: Glenn Therres, Maryland Wildlife and Heritage Division, Annapolis, MD

COMMUNICATIONS RECORD FORM

Person Contacted: Wendy McPherson
Date: January 13, 2006
Affiliation: U.S. Geological Survey, Maryland Branch
Address:
Type of Contact: Phone- 410-238-4200
Person Making Contact: Kaitlin McCormick

Communications Summary:

I called the USGS to determine whether or not there is a cross section of the Patapsco River, specifically the middle branch, that shows the underlying rock formations. Ms. McPherson said that I should send an e-mail to Dan Soeder who was out of the office and that he should be able to check up on that. Mr. Soeder's email address is dsoeder@usgs.gov. If I do not hear from him in a few days she said to contact her again. Her e-mail address is wsmcpher@usgs.gov.

McCormick, Kaitlin

From: Daniel J Soeder [dsoeder@usgs.gov]
Sent: Tuesday, January 17, 2006 6:57 PM
To: McCormick, Kaitlin
Cc: Wendy S McPherson
Subject: Re: Patapsco River Cross Section

Hi Kaitlin. Your question may be better suited to the Maryland Geological Survey (MGS) than to us; however, I will do my best.

The unit is defined in older texts as the Arundel formation of the Potomac Group; later documents and the MGS geologic map for Anne Arundel County refer to it as the Arundel Clay. The cross section on the map shows the Arundel Clay having a thickness of 40 to 120 feet in the north end of the county near the Patapsco River, and thinning to the south. Without knowing the precise location of where you are interested, it is difficult to pinpoint an answer beyond that rather broad range. The clay is documented in the Lexicon of Geologic Names as being formed of large and small lens-shaped bodies that filled depressions in the underlying Patuxent Formation. The Lexicon states that these lenses are up to 125 feet thick, which seems to agree with the map, so this may be a good upper limit. The clay is described as being carbon-rich, dense, hard, and containing numerous siderite (iron carbonate) nodules. These nodules and the weathered iron oxides they produced were, in fact, mined as iron ore during colonial times along Furnace Branch. FYI, the Lexicon also notes that the clay contains fossilized tree trunks and occasional dinosaur bones. It is Cretaceous in age.

I suggest you visit the MGS web site for more information. They may have access to wells drilled near your location with more precise thickness and composition data.

http://www.mgs.md.gov/

I hope this was of some help. Thank you for contacting the USGS.

- Dan Soeder

****
Daniel J. Soeder, U.S. Geological Survey
Maryland-Delaware-DC Water Science Center
8987 Yellow Brick Road, Baltimore, MD 21237
(410) 238-4213 Fax: (410) 238-4210
dsoeder@usgs.gov
****

"McCormick, Kaitlin" <kmccormick@eaest.com>

01/13/2006 01:55 PM

To <dsoeder@usgs.gov>
cc
Subject Patapsco River Cross Section

I spoke with Wendy McPherson on the phone briefly this afternoon and she suggested I contact you. I was wondering if the USGS had a cross section of the middle branch of the Patapsco River. Specifically I am looking for one that will indicate the thickness of the Arundel formation in that region. Any assistance you can provide is appreciated.

Thank you!

Kaitlin

Kaitlin McCormick
EA Engineering, Science, and Technology
15 Loveton Circle
Sparks, MD 21152
ph: (410) 771-4950 x5989
fax: (410) 771-4204
kmccormick@eaest.com

McCormick, Kaitlin

From: Boraczek, Jane
Sent: Friday, February 17, 2006 10:47 AM
To: McCormick, Kaitlin
Subject: FW: Masonville Map... P.S.
Follow Up Flag: Follow up
Flag Status: Completed

_____
Jane Boraczek
EA-Eastern Shore
9267 Pennywhistle Dr.
McDaniel, MD 21647
410-745-3433
cell: 410-746-6968

From: Therres, Glenn [mailto:GTHERRES@dnr.state.md.us]
Sent: Thu 1/19/2006 9:31 AM
To: Boraczek, Jane
Subject: RE: Masonville Map... P.S.

Yes, I will block off the 28-30.

> -----Original Message-----
> **From:** Boraczek, Jane [mailto:jboraczek@eaest.com]
> **Sent:** Thursday, January 19, 2006 8:36 AM
> **To:** Therres, Glenn
> **Cc:** Frazier, Mary A NAB02
> **Subject:** RE: Masonville Map... P.S.
>
> Just got an email from Mary Frazier who would like to go too but is our that week. Can we make it one day the following week?
>
> _____
> ***Jane Boraczek***
> ***EA-Eastern Shore***
> ***9267 Pennywhistle Dr.***
> ***McDaniel, MD 21647***
> ***410-745-3433***
> ***cell: 410-746-6968***
>
> ---
>
> **From:** Therres, Glenn [mailto:GTHERRES@dnr.state.md.us]
> **Sent:** Thu 1/19/2006 7:55 AM
> **To:** Boraczek, Jane
> **Subject:** RE: Masonville Map
>
> How about one day during the week of March 20th?

-----Original Message-----
From: Boraczek, Jane [mailto:jboraczek@eaest.com]
Sent: Thursday, January 19, 2006 7:44 AM
To: Therres, Glenn
Cc: Byrne, Lori; Brinker, Dave; Frazier, Mary A NAB02
Subject: RE: Masonville Map

Hi Glenn--

Thanks for your input. Dave Drinker and I have consulted on this nest informally in the past and everything I see below is consistent with my understanding of the issues.

FYI: The MPA has a birder that they allow on to the site to do species counts every other month or so (because the Cove is one of the best places to bird watch within the City). The deal is that he has to submit the list so the Port has some informal monitoring of the site. He was the first to alert us that the old nest tree had blown down. (We have pictures somewhere that our field team took during sediment sampling). We have gotten reports that an eagle is still hanging around the area (as of last November) but have not put anyone on land to see if nest building is occurring.

We would love to have you go out with one of our scientists in March. If I can arrange it, maybe we can get you there by boat....which is much easier access than through the land side for various reasons. Let me know if you have a preference of dates and I'll arrange it from this side.

Jane

_____
Jane Boraczek
EA-Eastern Shore
9267 Pennywhistle Dr.
McDaniel, MD 21647
410-745-3433
cell: 410-746-6968

From: Therres, Glenn [mailto:GTHERRES@dnr.state.md.us]
Sent: Wed 1/18/2006 8:27 AM
To: Boraczek, Jane
Cc: Byrne, Lori; Brinker, Dave
Subject: RE: Masonville Map

The bald eagle nest (BC-04-01) was located near the tip of the area designated "Bird Sanctuary" on the Masonville Cove Environmental Restoration map you provided. Though I have not surveyed that nest since 2004, I have been told that the nest has been damaged. A survey of that area should be conducted in March 2006 to determine if the bald eagles have built a new nest or refurbished their original one.

If the bald eagles continue to nest at the site, than a nest site protection plan will need to be developed. Normal nest site protection measures include:

1. Establish a 1/4-mile protection zone around the eagle nest.
2. No construction activities should occur within 660 feet of the nest.
3. Beyond 660 feet, a time-of-year restriction (December 15 - June 15) should be implemented for any construction activities within 1/4 mile of the nest.

These guidelines can be modified upon agreement by my office and the U.S. Fish & Wildlife Service.

I would be glad to accompany someone from your office to search for a new or refurbished bald eagle nest on the site in March.

Glenn D. Therres
Maryland Department of Natural Resources
Wildlife and Heritage Service
410-260-8572

McCormick, Kaitlin

From: Boraczek, Jane
Sent: Monday, January 30, 2006 2:56 PM
To: Steve Storms; Jim Runion; Kotulak, Pete /BA; Pine, Frank; tbant@menv.com; Karen Cushman
Cc: McCormick, Kaitlin; Dennis Urso
Subject: FW: revised 004 Masonville EFH text.doc

-----Original Message-----
From: John Nichols [mailto:John.Nichols@noaa.gov]
Sent: Friday, January 27, 2006 4:02 PM
To: Frazier, Mary A NAB02
Subject: Re: revised 004 Masonville EFH text.doc

Frazier, Mary A NAB02 wrote:

> <<revised 004 Masonville EFH text.doc>>
>
> John,
>
> I know the port wants to meet with you concerning TOY restrictions,
> but I thought you'd want to review this first.
>
> Mary Frazier
> Corps of Engineers
> Regulatory Branch
> 410-962-5679
>

I discussed the issue of a TOY with the Port representatives at JE this past Wednesday. Essentially, I am recommending that any action that will re-suspend significant amounts of sediment into the water column, such as dredging, be restricted from February 15- June 1. I omitted that last 15 days of the normal restriction period, since this is primarily to protect late striped bass spawning activity. Frank Hammonds of the Port also mentioned that they are working on a plan to enclose the site footprint with a sand berm, that would isolate subsequent actions within the berm from the outside riverine waters. If that comes to fruition, then all actions occurring inside the berm could be conducted during the restriction period.

McCormick, Kaitlin

From: Boraczek, Jane
Sent: Thursday, March 16, 2006 6:48 AM
To: McCormick, Kaitlin; Frazier, Mary A NAB02
Cc: Hobbs, Vance G NAB02
Subject: FW: Waterfowl concnetration areas in the Harbor

From: Hindman, Larry [mailto:LHINDMAN@dnr.state.md.us]
Sent: Wed 3/15/2006 1:33 PM
To: Boraczek, Jane
Cc: Limpert, Roland
Subject: RE: Waterfowl concnetration areas in the Harbor

No TOY restriction needed for this proposed work.

Larry

-----Original Message-----
From: Boraczek, Jane [mailto:jboraczek@eaest.com]
Sent: Wednesday, March 15, 2006 11:01 AM
To: Hindman, Larry
Cc: Limpert, Roland
Subject: Waterfowl concnetration areas in the Harbor

Larry (and Roland)--

Hi. I've tried to call you (Larry) a couple times on this issue and Roland suggested that I email you.

I am working on an EIS for a potential dredged material placement site in Baltimore Harbor (Masonville). Part of the site lies on the edge of an area that maps up as a historical waterfowl concentration area. We consulted with Lori Byrne on this project last fall and she CC'ed you on the response. Recently, MDE consulted with Roland who indicated that DNR would not require TOY restrictions on construction. However, I really need to confirm that with you in order to satisfy the Corps and MDE.

Attached please find two maps that were used for general coordination purposes to help your review. Masonville is the NW site. Please let me know ASAP whether there will be a waterfowl TOY restriction for this project. A reply to this email would be sufficient for my needs. Thanks, in advance and please don't hesitate to ask questions.

Jane Boraczek

_____

Jane Boraczek
EA-Eastern Shore
9267 Pennywhistle Dr.
McDaniel, MD 21647
410-745-3433
cell: 410-746-6968

McCormick, Kaitlin

From: Hobbs, Vance G NAB02 [vance.g.hobbs@usace.army.mil]
Sent: Thursday, March 16, 2006 2:03 PM
To: McCormick, Kaitlin; Boraczek, Jane
Subject: FW: Masonville PDEIS

F.Y.I.

-----Original Message-----
From: Honeczy, Marian [mailto:MHONECZY@dnr.state.md.us]
Sent: Thursday, March 16, 2006 1:37 PM
To: Frazier, Mary A NAB02; Hobbs, Vance G NAB02; Romeo, Jon NAB02
Subject: RE: Masonville PDEIS

Compliance with the State Forest Conservation Act and Regulations is not required.

Marian Honeczy
State Forest Conservation Program Coordinator MD DNR Forest Service
580 Taylor Ave E-1
Annapolis, MD 21401
(410) 260-8511

-----Original Message-----
From: Frazier, Mary A NAB02 [mailto:Mary.A.Frazier@nab02.usace.army.mil]
Sent: Monday, March 13, 2006 2:38 PM
To: Golden, Greg; mconley@dnr.state.md.us; Honeczy, Marian; Owens, Mary; Dintaman, Ray; Esslinger, Regina; Limpert, Roland; Serey, Ren; Butch.Jim@epamail.epa.gov; Muir.; Bob_Zepp@fws.gov; ray_li@fws.gov; eghigiarelli@mde.state.md.us; jkincaid@mde.state.md.us; rayella@mde.state.md.us; stsai@mde.state.md.us; RCuthbertson@mde.state.md.us; John.Nichols@noaa.gov; GHarman@mde.state.md.us; jmcdill@mde.state.md.us; bdye@mde.state.md.us; estone@mde.state.md.us; rcuthbertson@mde.state.md.us; gsetzer@mde.state.md.us; pgaynor@mdot.state.md.us; cpoukish@mde.state.us; mrowe@mde.state.md.us; Mary.Colligan@noaa.gov; Snyder, Michael R NAB02; McKee, Jeffrey A NAB02; Romeo, Jon NAB02; Mendelsohn, Mark NAB02; Lorenz, Carl J NAB02; Hobbs, Vance G NAB02
Subject: Masonville PDEIS

Subject: Masonville Dredged Material Containment Facility PDEIS available for agency comment.

I am requesting your review and comment on the Preliminary Draft Environmental Impact Statement for the proposed Masonville Dredged Material Containment Facility. We currently have Chapters 1-3 available electronically. To access the electronic chapters of the PDEIS follow the directions to access the ftp site below. EA can forward you a hard copy of sections you have interest in reviewing as they become available. Please contact them directly using the information below. We are providing the read ahead chapters of the PDEIS as they come available to better accommodate your review schedule. Once the entire PDEIS is available for review, we will contact you with a cut off date for comments. We will notify you by e-mail as further chapter/sections become available on the ftp site. If you have any questions please do not hesitate to contact me at 410-962-4252.

All files, including Appendices, will be available in a special area of EA's Port ftp site:

Address: ftp://eaftp.eaest.com/Masonville_PDEIS_Read_Ahead
username: mpa

password: mpa0313

- If you have problems using the link above, type the path into your browser. (Note the underscores between words).
- If you continue to have problems, go to the general ftp area (ftp://eaftp.eaest.com) and use the username and password. Once you are in, you will see the "Masonville_PDEIS_Read_Ahead" Folder.
- If you continue to have problems, please email Jane or Kaitlin (addresses below)

Please submit comments directly to the Corps Regulatory staff. Electronic comments (via email) preferred and should be copied to all Corps staff:

Name	Phone	Email
Vance Hobbs	410-962-5691	vance.g.hobbs@usace.army.mil
Mary Frazier	410-962-5679	mary.a.frazier@nab02.usace.army.mil
Jon Romeo	410-962-6079	jon.romeo@nab02.usace.army.mil

If you prefer to send comments via US mail, please send to:

Vance Hobbs Operations Division, Regulatory Branch U.S. Army Corps of Engineers
ATTN: CENAB-OP-RMN

P.O. Box 1715
Baltimore, MD 21203-1715

Corps Fax Number: 410-962-6024

If you need hard copies or have any problem downloading sections, please contact EA staff directly:

Name	Phone	Email
Jane Boraczek	410-745-3433	jboraczek@eaest.com
Kaitlin McCormick	410-771-4950 x5989	kmccormick@eaest.com

Vance Hobbs
U.S. Army Corps of Engineers
Baltimore District
410-962-5691

COMMUNICATIONS RECORD FORM

Person Contacted: Sergeant Dorsey
Date: March 20, 2006
Affiliation: Maryland Department of Natural Resources
Address:
Type of Contact: Phone (410-260-3289)
Person Making Contact: Kaitlin McCormick

Communications Summary:

Sergeant Dorsey indicated that no permits are required from DNR to relocate a single commercial mooring buoy, but that the Coast Guard should be contacted to determine whether or not any permits would be required from them. The DNR should be notified of the existing mooring buoy location and the future mooring buoy location and that the Coast Guard should also be notified. No permits or approval would be required from DNR.

McCormick, Kaitlin

From: Hobbs, Vance G NAB02 [vance.g.hobbs@usace.army.mil]

Sent: Monday, March 20, 2006 3:40 PM

To: Frazier, Mary A NAB02; GGOLDEN@dnr.state.md.us; mconley@dnr.state.md.us; MHONECZY@dnr.state.md.us; MOWENS@dnr.state.md.us; RDintaman@dnr.state.md.us; resslinger@dnr.state.md.us; RLIMPERT@dnr.state.md.us; rserey@dnr.state.md.us; Butch.Jim@epamail.epa.gov; Muir.; Bob_Zepp@fws.gov; ray_li@fws.gov; eghigiarelli@mde.state.md.us; jkincaid@mde.state.md.us; rayella@mde.state.md.us; stsai@mde.state.md.us; RCuthbertson@mde.state.md.us; John.Nichols@noaa.gov; GHarman@mde.state.md.us; jmcdill@mde.state.md.us; bdye@mde.state.md.us; estone@mde.state.md.us; rcuthbertson@mde.state.md.us; gsetzer@mde.state.md.us; pgaynor@mdot.state.md.us; cpoukish@mde.state.us; mrowe@mde.state.md.us; Mary.Colligan@noaa.gov; Snyder, Michael R NAB02; McKee, Jeffrey A NAB02; Romeo, Jon NAB02; Mendelsohn, Mark NAB02; Lorenz, Carl J NAB02

Cc: Boraczek, Jane; McCormick, Kaitlin; Steve Storms

Subject: Masonville Dredged Material Containment Facility PDEIS Available For Agency Comment thru April 7th.

Follow Up Flag: Follow up

Due By: Friday, April 07, 2006 4:30 PM

Flag Status: Completed

The ftp site has been updated with the complete Masonville PDEIS. EA will provide hard copies to the agencies requesting them (EA contact information provided below). To get to the electronic chapters of the document follow the link below. **Please provide comments on the PDEIS no later than April 7, 2006.** Submit comments directly to the Corps Regulatory staff. Electronic comments (via email) are preferred and should be copied to all Corps staff. If you have any questions, please do not hesitate to contact me.

Thanks,

Vance Hobbs

LINK TO ELECTRONIC DOCUMENTS

Address: ftp://eaftp.eaest.com/Masonville_PDEIS_Read_Ahead
username: mpa
password: mpa0313

Corps Staff	Phone	Email
Vance Hobbs	410-962-5691	vance.g.hobbs@usace.army.mil
Mary Frazier	410-962-5679	mary.a.frazier@nab02.usace.army.mil
Jon Romeo	410-962-6079	jon.romeo@nab02.usace.army.mil

EA Staff	Phone	Email
Jane Boraczek	410-745-3433	jboraczek@eaest.com
Kaitlin McCormick	410-771-4950 x5989	kmccormick@eaest.com

If you prefer to send comments via US mail, please send to:

Vance Hobbs
U.S. Army Corps of Engineers
Operations Division, Regulatory Branch
ATTN: CENAB–OP-RMN
P.O. Box 1715
Baltimore, MD 21203–1715

Corps Fax Number: 410-962-6024 ATTN: Vance Hobbs

-----Original Message-----
From: Frazier, Mary A NAB02
Sent: Monday, March 13, 2006 2:38 PM
To: 'GGOLDEN@dnr.state.md.us'; 'mconley@dnr.state.md.us'; 'MHONECZY@dnr.state.md.us'; 'MOWENS@dnr.state.md.us'; 'RDintaman@dnr.state.md.us'; 'resslinger@dnr.state.md.us'; 'RLIMPERT@dnr.state.md.us'; 'rserey@dnr.state.md.us'; 'Butch.Jim@epamail.epa.gov'; 'Muir.'; 'Bob_Zepp@fws.gov'; 'ray_li@fws.gov'; 'eghigiarelli@mde.state.md.us'; 'jkincaid@mde.state.md.us'; 'rayella@mde.state.md.us'; 'stsai@mde.state.md.us'; 'RCuthbertson@mde.state.md.us'; 'John.Nichols@noaa.gov'; 'GHarman@mde.state.md.us'; 'jmcdill@mde.state.md.us'; 'bdye@mde.state.md.us'; 'estone@mde.state.md.us'; 'rcuthbertson@mde.state.md.us'; 'gsetzer@mde.state.md.us'; 'pgaynor@mdot.state.md.us'; 'cpoukish@mde.state.us'; 'mrowe@mde.state.md.us'; 'Mary.Colligan@noaa.gov'; Snyder, Michael R NAB02; McKee, Jeffrey A NAB02; Romeo, Jon NAB02; Mendelsohn, Mark NAB02; Lorenz, Carl J NAB02; Hobbs, Vance G NAB02
Subject: Masonville PDEIS

Subject: Masonville Dredged Material Containment Facility PDEIS available for agency comment.

I am requesting your review and comment on the Preliminary Draft Environmental Impact Statement for the proposed Masonville Dredged Material Containment Facility. We currently have Chapters 1-3 available electronically. To access the electronic chapters of the PDEIS follow the directions to access the ftp site below. EA can forward you a hard copy of sections you have interest in reviewing as they become available. Please contact them directly using the information below. We are providing the read ahead chapters of the PDEIS as they come available to better accommodate your review schedule. Once the entire PDEIS is available for review, we will contact you with a cut off date for comments. We will notify you by e-mail as further chapter/sections become available on the ftp site. If you have any questions please do not hesitate to contact me at 410-962-4252.

All files, including Appendices, will be available in a special area of EA's Port ftp site:

Address: ftp://eaftp.eaest.com/Masonville_PDEIS_Read_Ahead
username: mpa
password: mpa0313

- If you have problems using the link above, type the path into your browser. (Note the underscores between words).
- If you continue to have problems, go to the general ftp area (ftp://eaftp.eaest.com) and use the username and password. Once you are in, you will see the "Masonville_PDEIS_Read_Ahead" Folder.
- If you continue to have problems, please email Jane or Kaitlin (addresses below)

Please submit comments directly to the Corps Regulatory staff. Electronic comments (via email) preferred and should be copied to all Corps staff:

Name	Phone	Email
Vance Hobbs	410-962-5691	vance.g.hobbs@usace.army.mil
Mary Frazier	410-962-5679	mary.a.frazier@nab02.usace.army.mil
Jon Romeo	410-962-6079	jon.romeo@nab02.usace.army.mil

If you prefer to send comments via US mail, please send to:

Vance Hobbs Operations Division, Regulatory Branch U.S. Army Corps of Engineers
ATTN: CENAB–OP-RMN

P.O. Box 1715
Baltimore, MD 21203–1715

Corps Fax Number: 410-962-6024

If you need hard copies or have any problem downloading sections, please contact EA staff directly:

Name Phone Email
Jane Boraczek 410-745-3433 jboraczek@eaest.com
Kaitlin McCormick 410-771-4950 x5989 kmccormick@eaest.com

Vance Hobbs
U.S. Army Corps of Engineers
Baltimore District
410-962-5691

COMMUNICATIONS RECORD FORM

Person Contacted: Bernard Bohenek
Date: March 23, 2006
Affiliation: Director, Bureau of Environmental Services, Environmental Health Division
Address:
Type of Contact: Phone (410-396-4428)
Person Making Contact: Kaitlin McCormick

Communications Summary:

Mr. Bohenek stated that there were no drinking water wells within the City of Baltimore and that any drinking water well placed in the City of Baltimore would require a permit from the City.

COMMUNICATIONS RECORD FORM

Person Contacted: Ron Houck and then CWO2 Michael Lemay
Date: March 23, 2006
Affiliation: U.S. Coast Guard
Address:
Type of Contact: Phone (410-576-2674)
Person Making Contact: Kaitlin McCormick

Communications Summary:

Mr. Ron Houck said that a permit would be required for the relocation of a commercial mooring buoy and connected me with Michael Lemay. Mr. Lemay said that a permit from District 5 would be required to relocate the commercial mooring buoy and the initial permits to place the buoy should be on file. He sent me an e-mail with the permit application and information immediately following our conversation.

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
NORTHEAST REGION
One Blackburn Drive
Gloucester, MA 01930-2298

Vance Hobbs
Baltimore District, Corps of Engineers
Operations Division, Regulatory Branch
PO Box 1715
Baltimore, MD 21203-1715

MAR 23 2006

Attn: CENAB-OP-RMN

Dear Mr. Hobbs,

This is in response to your e-mail dated March 21, 2006 transmitting the Army Corps of Engineer's (ACOE) Preliminary Draft Environmental Impact Statement (PDEIS) for the proposed Masonville Dredged Material Confinement Facility. The Maryland Port Administration (MPA) is determining the feasibility and suitability of the Masonville site for the confined placement of dredged material from Baltimore Harbor. This letter transmits the comments of the Protected Resources Division (PRD) of NOAA's National Marine Fisheries Service (NMFS).

The Masonville site is located west of the Baltimore Harbor Tunnel in South Baltimore. The study of the site is based on the need to identify sites to manage approximately 1.5 million cubic yards (cy) annually of material dredged from Baltimore Harbor for at least 20 years. Dredged material placement at the Masonville site would predominantly involve sediment dredged from the Patapsco River, upstream of the line between North Point and Rock Point. The proposed placement at the site includes the construction of a dredged material placement facility (for expansion of the existing marine terminal) and the enhancement of Masonville Cove. The final use of the placement facility would include development for maritime and commercial industry. The proposed alignment is a 117-acre alignment with a total footprint of 120 acres. The project would also include remediation of the Kurt Iron and Metal facility, including encapsulation of existing contaminants.

As noted in our letter to the applicant's consultant (EA Engineering) dated October 11, 2005, the best available information suggests that shortnose sturgeon (*Acipenser brevirostrum*) may occasionally occur in Baltimore Harbor. NMFS agrees with the discussion in the PDEIS that use of Baltimore Harbor by shortnose sturgeon is likely to be rare and that the species would most likely be encountered in the deep channels rather than the near shore area proposed for the Masonville facility. As noted in the PDEIS, the ACOE will be initiating consultation pursuant to Section 7 of the Endangered Species Act (ESA) on the effects of the proposed action on shortnose sturgeon. NMFS anticipates that the assessment will focus on the likelihood of direct (injury, mortality) and indirect effects (suspension of contaminated sediments, destruction of

benthic resources) of the proposed project on shortnose sturgeon. NMFS looks forward to reviewing the assessment being prepared by ACOE.

As noted above, the final use of the facility will be for commercial and maritime industry. If this development will result in an increase in the number of large vessels using the port of Baltimore, ACOE should assess the potential for an increase in the number of vessel encounters with marine mammals. Large whales, particularly the endangered Northern Right Whale, are vulnerable to ship strikes. While whales are not common in the Chesapeake Bay, ships traveling to the Masonville site from outside of the Bay are likely to intercept known migration corridors of listed whales. For more information on assessing the potential for ship strikes, please contact Kristen Koyama, Northeast Regional Ship Strike Coordinator, at (978)281-9300 x6531 or by e-mail (Kristen.Koyama@noaa.gov). NMFS PRD offers no additional comments on the PDEIS. You may receive comments from NMFS Habitat Conservation Division under separate cover. Thank you for the opportunity to review the PDEIS. Should you have any questions regarding these comments or the Section 7 process, please contact Julie Crocker of my staff at (978)281-9300 x6530.

Sincerely,

Mary A. Colligan
Assistant Regional Administrator
For Protected Resources

Cc: Nichols, F/NER4

File Code: Sec 7 ACE NAB Masonville Dredged Material Disposal Facility

McCormick, Kaitlin

From: Michael.R.Lemay@uscg.mil on behalf of Lemay, Michael BOSN2 [Michael.R.Lemay@uscg.mil]

Sent: Thursday, March 23, 2006 1:41 PM

To: McCormick, Kaitlin

Subject: Private Aid to Navigation Application

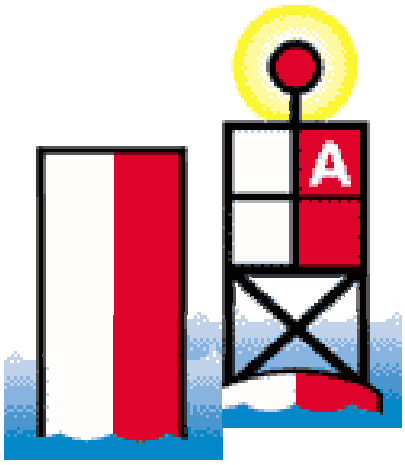
Attachments: PATON APPL.pdf; 5th district PATON Info.pdf

Kate-As requested here is the application required for approval from the Fifth Coast Guard District to relocate the aid. If you should have any further questions please feel free to contact me.

<<PATON APPL.pdf>> <<5th district PATON Info.pdf>>

CWO2 Michael Lemay
USCG SECTOR BALTIMORE
AIDS TO NAVIGATION OFFICER
2401 Hawkins Point Road
Baltimore, MD 21226-5000
Tel-410-576-2526 (W)
443-871-2936 (C)

5th Coast Guard District Private Aids to Navigation Information Handout



REPORT DEFECTS IN AIDS TO NAVIGATION TO THE NEAREST COAST GUARD UNIT 24 HOURS A DAY

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Definition of "temporary and permanent" aids to navigation.
Page 2.

Title 33, Code of Federal Regulations, Subchapter C, Part 62 – United States Aids to Navigation System. (An edited copy which explains the aids to navigation system used within the United States.)
Pages 3 through 8.

Title 33, Code of Federal Regulations, Subchapter C, Part 66 – Private Aids to Navigation. (An edited copy which explains the private aids to navigation system used within the United States.)
Pages 9 through 13.

Instructions for completing a Private Aids to Navigation Application (CG-2554).
Pages 14 through 16.

A list of suggested sources of equipment and services for private aids to navigation.
Pages 17 through 26.

5th Coast Guard District, Office Aids to Navigation mailing address, phone numbers, e-mail address.
Page 27.

Attached copy of "Private Aids to Navigation Application" (CG-2554).

Definitions:

Temporary aids are those that will be on station six months or less and do not require an application. These aids only require notification to the Coast Guard by letter, fax or email, for publication in the Local Notice to Mariners (LNM).

Permanent aids are those that will be on station for more than six months. These aids do require a completed and approved Private Aids to Navigation application (Form CG-2554), which is included in this handout.

TITLE 33, CODE OF FEDERAL REGULATIONS, SUBCHAPTER C (PARTS 62 AND 66 edited)

• PART 62 - UNITED STATES AIDS TO NAVIGATION SYSTEM

o 62.23 Beacons and buoys
o 62.25 Lateral marks
o 62.31 Special marks
o 62.33 Information and regulatory marks
o 62.34 Numbers and letters
o 62.45 Lights characteristics

(Subpart B - The U.S. Aids to Navigation System.)

62.23 Beacons and buoys

(a) Aids to navigation are placed on shore or marine sites to assist a navigator to determine his position or safe course. They may mark limits of navigable channels, or warn of dangers or obstructions to navigation. The primary components of the U.S. Aids to Navigation system are beacons and buoys.

(b) Beacons are aids to navigation structures, which are permanently fixed to the earth surface. They range from large lighthouses to small, single-pile structures and may be located on land or in the water. Lighted beacons are called lights; unlighted beacons are called daybeacons.

(1) Beacons exhibit a daymark. For small structures these are colored geometric shapes, which makes an aid to navigation readily visible and easily identifiable against background conditions. Generally, the daymark conveys to the mariner, during daylight hours, the same significance, as does the aids light or reflector at night. The daymark of large lighthouses and towers, however, consists of the structure itself. As a result, these daymarks do not infer lateral significance.

(2) Vessels should not pass beacons close aboard due to the danger of collision with riprap or structure foundations, or the obstruction or danger the aid marks.

(c) Buoys are floating aids to navigation used extensively throughout U.S. waters. They are moored to the seabed by sinkers with chain or other moorings of various types.

62.23 Beacons and buoys (cont.)

(1) The daymark of a buoy is the color and shape of the buoy and if so equipped the topmark.

(a) Can buoys have a cylindrical shape and are green in color.

(b) Nun buoys have a tapered, conical shape and are red in color.

(c) Pillar buoys have a wide cylindrical base supporting a narrow superstructure. They may be surmounted by color shapes called topmarks.

(d) Spherical buoys have a round shape.

(2) Mariners attempting to pass a buoy close aboard risk collision with a yawing buoy, the buoy's mooring, or with the obstruction which the buoy marks.

(3) Mariners should not rely on buoys alone for determining their positions due to factors limiting the reliability. Prudent mariners will use bearings or angles from beacons or other landmarks, soundings, and various methods of electronic navigation. Buoys vary in reliability because:

(a) Buoy positions represented on nautical charts are approximate positions only, due to practical limitations in positioning and maintaining buoys and their sinkers in precise geographical locations.

(b) Buoy moorings vary in length. The mooring lengths defines a "watch circle", and. buoys can be expected to move within this circle. Actual watch circles do not coincide with dots or circles representing them on charts.

(d) Buoy positions are normally verified during periodic maintenance visits. Between visits, environmental conditions, including atmospheric and sea conditions, and seabed slope and composition, may shift buoys off their charted positions. Also buoys may be dragged off station, sunk, or capsized by a collision with a vessel.

62.25 Lateral marks

(a) Lateral marks define the port and starboard sides of a route to be followed. They may be either beacons or buoys.

62.25 Lateral marks (cont.)

(b) Sidermarks are lateral marks, which advise the mariner to stay to one side of the mark. Their most frequent use is to mark the sides of channels; however, they may be used individually to mark obstructions outside of clearly defined channels. Sidemarks are not always placed directly on a channel edge and may be positioned outside the channel as indicated on charts and nautical publications.

(1) Port hand marks indicate the left side of channels when proceeding in the Conventional Direction of Buoyage. Beacons have green square daymarks, while buoys are green can or pillar buoys.

(2) Starboard hand marks indicate the right side of channels when proceeding in the Conventional Direction of Buoyage. Beacons have red triangular daymarks, while buoys are red nun or pillar buoys.

(b) Preferred channel marks indicate channel junctions or bifurcations and may also mark wrecks or obstructions, which the mariner, after consulting a chart to ascertain the location of the obstruction relative to the aid, may pass on either side. Preferred channel marks have red and green horizontal bands with the color of the topmost band indicating the preferred channel. If the topmost band is green, the mark serves as a port hand mark for vessels following the preferred channel proceeding in the Conventional Direction of Buoyage, and as a starboard hand mark for the other channel. Beacons would have square daymarks, while buoys would be can or pillar buoys. If the topmost band is red, the mark serves as a starboard hand mark for vessels following the preferred channel proceeding in the Conventional Direction of Buoyage, and a port hand mark for the other channel. Beacons would have a triangular daymark, while buoys would be nun or pillar buoys.

(c) The above color schemes apply to IALA (International Association of Lighthouse Authorities) Region B. Marks located in the IALA Region A exhibit reverse colors significance: port hand marks will be red when following Conventional Direction of Buoyage, and the starboard hand marks will be green. The meaning of daymark and buoy shapes is identical in both regions.

(d) Certain marks on intracoastal waterways may exhibit reversed lateral significance. See 62.49 (not enclosed).

62.31 Special marks

Special marks are not primarily intended to assist safe navigation, but to indicate special areas or features referred to in charts and other nautical publications. They may be used, for example, to mark anchorages, cable or pipeline areas, traffic separation schemes, military exercise zones, ocean data acquisition systems, etc. Special marks are colored solid yellow.

62.33 Information and regulatory marks

Information and Regulatory marks are used to alert the mariner to various warnings or regulatory matters. These marks have orange geometric shapes against a white background. The meaning associated with the orange shapes are as follows:

(a) A vertical open-faced diamond signifies danger.

(b) A vertical diamond shape having a cross center within indicates that vessels are excluded from the marked area.

(c) A circular shape indicates that certain operating restrictions are in effect within the marked area.

(d) A square or rectangular shape will contain directions or instructions lettered within the shape.

62.43 Numbers and letters

(a) All solid red and solid green aids are numbered, with red aids bearing even numbers and green aids with odd numbers. The numbers increase in the Conventional Direction of Buoyage. Numbers are kept: in approximately sequence on both sides of the channel by omitting numbers when necessary.

(b) Only Sidemarks are numbered. However, aids other than those mentioned above may be lettered to assist in their identification, or to indicate their purpose. Sidemarks may carry letters in addition to numbers to identify the first aid to navigation in a waterway, or when new aids to navigation are added to channels with previously completed numerical sequences. Letters on Sidemarks with follow alphabetical order from seaward and proceeding toward the Conventional Direction of Buoyage and will be added to numbers and suffixes.

(c) Aids to navigation may be fitted with light-reflecting material to increase their visibility in darkness. The colors of this material may convey the same significance as the aid except that letters and numbers may be white.

62.43 Numbers and letters (cont.)

(d) Exceptions to the provisions of this section will be found on the Western Rivers System. See 62.51.

(e) The guidelines for the display of numbers and letters on aids to navigation are identical for both Region A and Region B; red aids to navigation display even numbers and green aids display odd numbers.

62.45 Light characteristics

(a) Lights on aids to navigation are differentiated by color and rhythm.. Lighthouses and range lights may display distinctive light- characteristics to facilitate recognition. No special significance should be attached to the color or rhythm of such lights. Other lighted aids to navigation employ light characteristics to convey additional information.

(b) When proceeding in the Conventional Direction of Buoyage, aids to navigation if lighted, display light characteristics as follows:

(1) Green lights mark port (left) sides of channels and locations of wrecks or obstructions, which are to be passed by keeping these lights on the port (left) hand of the vessel. Green lights are also used on Preferred Channel Marks where the topmost band is green.

(2) Red lights mark starboard (right) sides of channels and locations of wrecks or obstructions, which are to be passed by keeping these lights on the starboard (right) of a vessel. Red lights are also used on Preferred Channel Marks where the topmost band is red.

(3) Certain lights marking the Intracoastal Waterway may display reversed lateral significance. See 62.49.

(c) Yellow lights have no lateral significance. Except on Western Rivers, see 62.51, white lights have no lateral significance. The purpose of aids exhibiting white or yellow lights may be determined by their shape, color, letters or numbers, and the light rhythm employed.

(d) Light rhythms, except as noted in 62.51 for Western Rivers, are employed as follows:

(1) Aids with lateral significance display regularly flashing or regularly occulting light rhythms. Ordinarily, flashing lights (frequency not exceeding 30 flashes per minute) will be used.

62.45 Light characteristics (cont.)

(2) Preferred Channel Marks display a composite group flashing light rhythm (group of two flashes followed by one flash).

(3) Safe Water Marks display a white Morse Code "A" rhythm (short-long flash).

(4) Isolated Danger Marks display a group flashing two.

(5) Special Marks display yellow (amber) lights with fixed or slow flashing rhythms preferred.

(6) Information and Regulatory Marks display white lights of various rhythms.

(7) For situations where lights require a distinct cautionary significance, as at sharp turns, sudden channel constrictions, wrecks, or obstructions, a quick flashing light rhythm (60 flashes per minute) may be used.

(e) Occasionally lights use sectors to mark shoals or warn mariners of other dangers. Lights equipped show one color from most directions and a different color or colors over a definite arc of the horizon as indicated on the appropriate nautical chart. These sectors provide approximate bearing information since the observer should note a change of color as the boundary between the sectors is crossed. As sector bearings are not precise, they should be considered a warning only and not used to determine exact bearing to the light.

(f) Aids to navigation may be fitted with light-reflecting material to increase their visibility in darkness. Green or red reflective material is used only on marks, which if lighted, would exhibit a light of that color. Yellow reflective material is used on special marks and on Intracoastal Waterway Marks. No significance is attached to white reflective material.

• PART 66 - PRIVATE AIDS TO NAVIGATION
(Authority: 14 U.S.C., 83, 85; 43 U.S.C. 1333; 49 CFR 1.46)

- o 66.01-1 Basic provisions
- o 66.01-3 Delegation of authority to District Commander
- o 66.01-5 Application procedure
- o 66.01-10 Characteristics
- o 66.01-15 Action by Coast Guard
- o 66.01-20 Inspections
- o 66.01-25 Discontinuance and removal
- o 66.01-30 Army Corp of Engineers Approval
- o 66.01-40 Exemptions
- o 66.01-45 Penalties
- o 66.01-50 Protection of private aids to navigation
- o 66.01-55 Transfer of ownership

(Subpart 66.01 - Aids to Navigation Other Than Federal or State.)

66.01-1 Basic provisions

(a) No person, public body or other instrumentality not under the control of the Commandant, exclusive of the Armed Forces, shall establish and maintain, discontinue, or change or transfer ownership of any aid to maritime navigation, without first obtaining permission to do·so from the Commandant.

(b) For the purpose of this subpart, the term private aids to navigation includes all marine aids to navigation operated in the navigable waters of the United States other then those operated by the Federal Government (Part 62 of this subchapter) or those operated in State waters for private aids to navigation (Subpart 66.05).

(c) Coast Guard authorization of a private aid to navigation does not authorize any invasion of private rights, nor grant any exclusive privileges, nor does it obviate any necessity of complying with any other Federal, State of local laws or regulations.

(d) With the exception of radar beacons (racons) shore based radar stations, operation of electronic aids to navigation as private aids will not be authorized.

66.01-3 Delegation of authority to District Commander

(a) Pursuant to the authority in 49 CFR 1.4(g), the Commandant delegates to the District Commander within the confines of their respective districts (see part 3 of this chapter for descriptions) the authority to grant permission to establish and maintain, discontinue, change or transfer ownership of private aids to maritime navigation, and otherwise administer the requirements of this subpart.

(b) The decision of the District Commander may be appealed within 30 days of the date of the decision. The decision of the Commandant in any case is final.

66.01-5 Application procedures

Application to establish and maintain, discontinue, change, or transfer ownership of a private aid to navigation shall be made to the Commander of the Coast Guard District in which the private aid is or will be located. Application forms (CG-2554) will be provided upon request. The applicant shall complete all parts of the form applicable to the aid to navigation concerned, and shall forward the application in triplicate to the District Commander. The following information is required:

(a) The proposed position of the aid to navigation by two or more horizontal angles, or bearings and distance from a charted landmark. A section of chart or a sketch showing the proposed location of the aid to navigation shall be included.

(b) The name and address of the person at whose expense the aid will be maintained.

(c) The name and address of the person who will maintain the aid to navigation.

(c) The time and date during which it is proposed to operate the aid.

(e) The necessity for the aid.

(f) For lights: The color, characteristics, height above water, and description of illuminating apparatus.

(g) For fog signals: Type (whistle, horn, bell) and characteristics.

(h) For buoys or daybeacons: Shape, color, number or letter, depth of water at location of the buoy or height above water for the daybeacon.

66.01-10 Characteristics

(i) For racons: Manufacturer and model number or racon, height above the water of desired installation, and requested coding characteristics. Equipment must have FCC authorization.

(a) The characteristics of a private aid to navigation shall conform to -the United States aids to Navigation System described in Subpart B of Part 62 of this subchapter [see following section], except that only tungsten-incandescent light sources will be approved for electric lights.

(b) Owners of previously authorized, but non-conforming private aids to navigation must bring such aids to navigation into conformance with the U.S. Aids to Navigation System not later than December 31, 1994.

66.01-15 Action by Coast Guard

(a) The District Commander receiving the application will review it for completeness and assign the one of the following classifications:

Class I: Aids to navigation on marine structures or other works, which the owners are legally, obligated to establish, maintain and operate as prescribed by the Coast Guard.

Class II: Aids to navigation exclusive of Class I located in waters used by general navigation.

Class III: Aids to navigation exclusive of Class I located in waters not ordinarily used by general navigation.

(b) Upon approval by the District Commander, a signed copy of the application will be returned to the applicant. Approval for the operation of radar beacons (racons) will be effective for an initial two-year period, then subject to annual review without further submissions required of owner.

66.01-20 Inspections

All classes of private aids to navigation shall be maintained in proper operating condition. They are subject to inspection by the Coast Guard at ant time and without prior notice.

66.01-25 Discontinuance and removal

(a) no person, public body or instrumentality shall change, move or discontinue any authorized private aid to navigation required by statute or regulation (Class 1, 66.01-15) without first obtaining permission to do so from the District Commander.

(b) Any authorized private aid to navigation not required by statute or regulation (Classes II and III, 66.01-15) may be discontinued and removed after 30 days notice to the District Commander to whom the original request for authorization for establishment of the aid was submitted.

(c) Private aids to navigation, which have been authorized pursuant to this part, shall be discontinued and removed without expense to the United States by the person, public body or instrumentality establishing or maintaining such aids when so directed by the District Commander.

66.01-30 Army Corps of Engineers Approval

(e) Before any private aid to navigation consisting of a fixed structure is placed in navigable waters of the United States, authorization to erect such a structure shall first be obtained from the District Engineer, U.S. Arm Corps of Engineers in whose district the aid will be located.

(f) The application to establish any private aid to navigation consisting of a fixed structure shall show evidence of the required permit having been issued by the Corps of Engineers.

66.01-40 Exemptions

(a) Nothing in the preceding section of this subpart shall construed to interfere with or nullify the requirements of existing laws regulations pertaining to the marking of structures, vessels and other obstructions sunken within waters subject to the jurisdiction of the United States (Part 64 of this subchapter), and the marking of artificial islands and structures which are erected on or over the seabed and subsoil of the Outer Continental Shelf (Part 67 of this subchapter), or the lighting of bridges over navigable waters of United States (subchapter J of this subchapter).

(b) Persons marking bridges pursuant to Subchapter J of this title are exempt from the provisions of 66.01-5.

66.01-45 Penalties

Any person, public body or instrumentality, excluding the Armed Forces, who shall establish, erect or maintain any aid to maritime navigation without first obtaining authority to do so from the Coast Guard, with the exception of those established in accordance with 64.10 of this chapter, or who shall violate the regulations relative thereto issued in this part, is subject to the provisions of 14 U.S.C. 83.

66.01-50 Protection of private aids to navigation

Private aids to navigation lawfully maintained under these regulations are entitled to the same protection against interference or obstruction as is afforded by law to Coast Guard aids to navigation (Part 70 of this subchapter). If interference occurs, a prompt report containing all the evidence available should be made to the Commander of the Coast Guard District in which the aid(s) are located.

66.01-55 Transfer of ownership

(a) When any private aid to navigation authorized by the District Commander, or the essential real estate or facility with which the aid is associated, is sold or transferred, both parties to the transaction shall submit application (66.01-5) to the Commander of the Coast Guard District in which the aid is located requesting authorization to transfer responsibility for maintenance of the aid.

(b) The party relinquishing responsibility for maintenance of the private aid to navigation shall indicate on the application form (CG-2554) both the discontinuance and the change of ownership of the aid sold or transferred.

(c) The party accepting the responsibility for maintenance of the private aid to navigation shall indicate on the application form (CG-2554) both the establishment and the change of ownership of the aid sold or transferred.

(d) In the event the new owner of the essential real estate or facility with which the aid is associated refuses to accept responsibility for maintenance of the aid, the former owner shall be required to remove the aid without expense to the United States. This requirement shall not apply in the case of any authorized private aid to navigation required, by statute or regulation (Class I, 66.01-15), which shall be maintained by the new owner until the conditions which made the aid necessary have been eliminated.

PRIVATE AIDS TO NAVIGATION APPLICATION (CG-2554) INSTRUCTIONS

1. The rules, regulations and procedures pertaining to Private Aids to Navigation (PATON) are set forth in Title 33, Code of Federal Regulations, Chapter 1, Parts 62 and 66.

2. A minimum of 30 days in advance of the proposed action, one copy of the application for Private aids shall be forwarded with original signature to:

   Commander (oan)
   5th Coast Guard District
   Attn.: Albert Grimes (For PATON in VA, MD, District of Columbia), or
   Tom Flynn (For PATON in PA, NJ, DE or NC)
   431 Crawford Street
   Portsmouth, VA 23704-5004
   Tel: Albert Grimes 1-757-398-6360, or Tom Flynn 1-757-398-6229

3. When making application for fixed structures, within navigable waters, evidence must accompany your application showing authorization obtained from the Corps of Engineers, Department of the Army (Code of Federal Regulations; Title 33, Part 66.01-30).

4. The applicant shall complete all of blocks 1, 2, 3, 4, 5, 9 and 10 for all new applications. When an aid is being discontinued, block 3 need not be completed. Block 6 shall be completed whenever authorization is required from the Corps of Engineers (Instruction No. 3) Columns of Block 7 will be completed as follows:
   a. Unlighted buoys- 7a, 7e, 7f, and 7j.
   b. Lighted buoys- 7a, 7b, 7c, 7d, 7e, 7f, 7h, and 7j.
   c. Daybeacons - 7a, 7e, 7f (if applicable), 7h, 7i, and 7j.
   d. Light on a structure- 7a, 7b, 7c, 7d, 7e, 7f (if applicable), 7h, 7i, and 7j.

When an aid is being changed, Block 8 shall be used to describe the nature of the change.

5. The required information for each column includes the following:

   (7a) Proposed number or letter to be assigned to the aid. Only aids with lateral significance will display numbers, with red aids bearing even numbers and green aids bearing odd numbers.

   (7b) Period of light (time in seconds for one complete cycle)

(7c) Flash length in seconds. Complex or multiple flashes, explain in column 7j.

(7d) Color of light.

PRIVATE AIDS TO NAVIGATION APPLICATION INSTRUCTIONS (cont.)

(7e) Position indicated by Latitude and Longitude as precisely as chart permits or bearing and distance from a prominent charted landmark.

(7f) Depth of water at buoy or structure (if marine site). All depths are indicated in feet and measured from mean low water.

(7g) DELETED, do not use this column.

(7h) Height of light or daymark above water. Height is measured from mean high water. The height of a light on a buoy is measured from the water line.
(7i) Include details on structures (type, height above ground if applicable).

(7j) Used for the following specific information, plus any other useful details:

a. Buoys - size, shape color, and light reflective material used.
b. Structures - daymark shape, color and size.
c. Fog signal on a buoy or structure - type and model, audible range, and characteristics (number of strokes or blasts per minute and blast length).
d. Positioning method used - (GPS, LORAN, bearing and distance from surveyed land mark, indicated on NOAA navigation chart).

6. This form may be used to cover more than one aid in the same geographic area. Attach sheet if additional space is required.

7. a.) After receipt of the approved form the applicant will advise the 5th Coast Guard District, Aids to Navigation Branch, Portsmouth, VA, by any rapid means of communication (phone, fax, e-mail) when the work authorized is actually established.

b.) If the aid(s) have not been installed within six months of the application approval date, the approved application is automatically canceled.

c.) Any discrepancy in the operation of the aid(s) at any time shall be reported to the 5th Coast Guard District, Aids to Navigation Branch, Portsmouth,

VA by any rapid means of communication (phone, fax, e-mail). The discrepancy will be published in the Notice to Mariners. A discrepancy exists whenever the aid is not as described in the approved application (lack of signal, incorrect light characteristics, or improper color, shape or position of shore structure or buoy). The correction of the discrepancy will also be reported by the same method.

PRIVATE AIDS TO NAVIGATION APPLICATION INSTRUCTIONS (cont.)

8. All classes of Private Aids to Navigation shall be maintained in proper condition. They are subject to inspection by the Coast Guard at any time and without prior notice to the maintainer or owner.

9. Do not fill in the Light List number or the aid name. The Coast Guard will assign names and Light List numbers in accordance with established rules and regulations.

10. If you need to make changes to an approved application or need to discontinue a PATON, please call the 5th Coast Guard District, Aids to Navigation Branch, Portsmouth, VA., for VA, MD or DC at (757) 398-6360, or for PA, NJ, DE or NC at (757) 398-6229. Remember to reference your approved PATON application for the proper name, class of the aid and Light List number if applicable.

SOURCES OF EQUIPMENT FOR PRIVATE AIDS TO NAVIGATION

Check the U. S. Coast: Guard requirements before buying aids to navigation equipment.

33CFR 66.01-10 Characteristics

(a) The characteristics of a private aid to navigation shall conform to the United States Aids to Navigation System described in Subpart 62 of this subchapter [see following section], except that only tungsten-incandescent light sources will be approved for electric lights. Light Emitting Diode (LED) lighting equipment will be authorized for use as an aid to navigation after 8 March 2004.

(b) Owners of previously authorized, but non-conforming, private aids to navigation should have brought such aids to navigation into conformance with U. S. Aids to Navigation System not later than December 31, 1993.

LANTERNS AND FLASHERS

Ability One, Inc.
PO Box 578
Germantown, WI. 53022
1-888-269-2869
1-262-251-7840
www.rolyanbuoys.com
(Lanterns and flashers for Rolyan buoys, marking lights.)

Flash Technology Corporation of America
PO Box 681509
Franklin, TN. 37068
1-615-261-2000
www.flashtechnology.com
(Electro flash beacons, lanterns and flashers for their equipment and obstruction lights.)

Curd Enterprises, Inc.
476 Long Point Road
Mt. Pleasant, SC. 29464
1-800-968-3091
www.curdbuoy.com/curd/home
(Lanterns and flashers, buoys, floats and hardware.)

LANTERNS AND FLASHERS (cont.)

Julian A. McDermott Corp.
1639 Stephen Street
Ridgewood, NY. 11385
1-800-842-5708
1-718-456-3606
www.mcdermottlight.com
(Lanterns of all types, flashers, barge navigation lights.)

Automatic Power, Inc.
PO Box 230738
Houston, TX 77223
1-713-228-5208
www.automaticpower.com
(Lanterns and lamp changers, commercial, battery or solar powered, 6-12 volt DC, 12 volt AC, in both solid state and mechanical configurations. Lights for navigation aids, bridges, ranges and barge lights.)

Tideland Signal Corporation
PO Box 52370, O.C.S.
Lafayette, LA. 70505
1-800-824-0575
1-337-269-9113
www.tidelandsignal.com
(Lanterns, special purpose and bridge lights, flashers, lamp changers, and lamps, channel markers.)

Federal Signal Corp.
2645 Federal Signal Drive
University Park, IL. 60466
1-708-534-3400
www.federalsignal.com
(Lanterns and pier lights.)

Premier Materials Technology, Inc.
7401 Central Avenue NE
Minneapolis, MN. 55432
1-800-262-2275
www.premierfloats.com
(Solar lighting systems.)

LANTERNS AND FLASHERS (cont.)

Beacon Industries, Inc.
3131 South Lawrence Street
Tacoma, WA. 98409-4823
1-253-272-7860
(Lanterns and lamp changers, commercial, battery or solar powered, 6-12 volt DC, 12 volt AC, in both solid state and mechanical configurations. Lights for navigation aids, bridges, ranges and barge lights.)

Sola Communications, Inc.
PO Box 999
Larose, LA. 70373
1-800-321-8874
1-985-693-0678
www.solacomm.com
(Flashers and lamp changers.)

Watermark Navigation Systems
29 Gilford East Drive
Gilford, NH 03249
1-888-628-2869
www.navbuoy.com
(Buoy lights.)

FOG SIGNALS

Automatic Power, Inc.
PO Box 230738
Houston, TX 77223
1-713-228-5208
www.automaticpower.com
(For commercial and battery powered operation.)

Tideland Signal Corporation
PO Box 52370, O.C.S.
Lafayette, LA. 70505
1-800-824-0575
1-337-269-9113
www.tidelandsignal.com
(Foghorns and other sound signals.)

FOG SIGNALS (cont.)

Beacon Industries, Inc.
3131 South Lawrence Street
Tacoma, WA. 98409-4823
1-253-272-7860
(For commercial and battery powered operation.)

BUOYS

Automatic Power, Inc.
PO Box 230738
Houston, TX 77223
1-713-228-5208
www.automaticpower.com
(Lighted and unlighted buoys, mooring buoys, steel and plastic models.)

Watermark Navigation Systems
29 Gilford East Drive
Gilford, NH 03249
1-888-628-2869
www.navbuoy.com
(Lighted and unlighted buoys.)

Urethane Technologies, Inc.
30150 Eden Church Road
Denham Springs, LA. 70726
1-225-664-9936
www.utibuoys.com
(Lighted and unlighted buoys.)

Tideland Signal Corporation
PO Box 52370, O.C.S.
Lafayette, LA. 70505
1-800-824-0575
1-337-269-9113
www.tidelandsignal.com
(Ocean-type lighted buoys, lighted channel buoys, lighted navigation buoys, plastic marker buoys.)

BUOYS (cont.)

Beacon Industries, Inc.
3131 South Lawrence Street
Tacoma, WA. 98409-4823
1-253-272-7860
(Lighted and unlighted buoys, mooring buoys, steel and plastic models.)

Curd Enterprises, Inc.
476 Long Point Road
Mt. Pleasant, SC. 29464
1-800-968-3091
www.curdbuoy.com/curd/home
(Lighted and unlighted buoys.)

Ability One, Inc.
PO Box 578
Germantown, WI. 53022
1-888-269-2869
1-262-251-7840
www.rolyanbuoys.com
(Lanterns and flashers for Rolyan buoys, marking lights.)

Polyform U.S. Ltd.
7030 South 224th
Kent, WA. 98032
1-800-423-0664
www.polyformus.com
(Buoys of all types.)

Pacific Industrial Supplies, Marine Division
1220 West Nickerson Street
Seattle, WA. 98119
1-800-275-7472
1-206-224-9058
www.pacificindustrial.com
(Buoys and moorings.)

Topper Industries, Inc.
PO Box 2439
Battle Ground, WA. 98604
1-800-332-3625
1-360-687-1232
www.topperfloats.com
(Lighted and unlighted buoys.)

BUOYS (cont.)

Julian A. McDermott Corp.
1639 Stephen Street
Ridgewood, NY. 11385
1-800-842-5708
1-718-456-3606
www.mcdermottlight.com
(Lighted and unlighted buoys.)

Gilman Corporation
PO Box 68
Gilman, CT. 06336
1-800-622-3626
www.gilmancorp.com
(All types of buoys and fenders.)

BATTERIES

Saft America, Inc.
Commerce Center
2155 Paseo De Las Americas #31
San Diego, CA. 92154
1-619-661-5070
www.saftbatteries.com
(Wet primary batteries, nickel-cadmium rechargeable and lead acid type.)

Beacon Industries, Inc.
3131 South Lawrence Street
Tacoma, WA. 98409-4823
1-253-272-7860
(Wet and gel-cell batteries, primary and secondary, rechargeable and solar compatible batteries.)

Automatic Power, Inc.
PO Box 230738
Houston, TX 77223
1-713-228-5208
www.automaticpower.com
(Wet primary batteries, gel-cell and rechargeable types.)

BATTERIES (cont.)

Tideland Signal Corporation
PO Box 52370, O.C.S.
Lafayette, LA. 70505
1-800-824-0575
1-337-269-9113
www.tidelandsignal.com
(Wet primary batteries, gel-cell and rechargeable types.)

GNB Batteries, Inc.
829 Parkview Boulevard
Lombard, IL. 60148
1-630-629-5200
www.gnb.com
(Solar compatible batteries.)

Topper Industries, Inc.
PO Box 2439
Battle Ground, WA. 98604
1-800-332-3625
1-360-687-1232
www.topperfloats.com
(Batteries for buoys.)

Sola Communications, Inc.
PO Box 999
Larose, LA. 70373
1-800-321-8874
1-985-693-0678
www.solacomm.com
(Primary and secondary batteries.)

SOLAR EQUIPMENT

Beacon Industries, Inc.
3131 South Lawrence Street
Tacoma, WA. 98409-4823
1-253-272-7860
(Solar systems including lights, panels, and batteries.)

Automatic Power, Inc.
PO Box 230738
Houston, TX 77223
1-713-228-5208
www.automaticpower.com
(Solar cells and panels.)

Tideland Signal Corporation
PO Box 52370, O.C.S.
Lafayette, LA. 70505
1-800-824-0575
1-337-269-9113
www.tidelandsignal.com
(Solar cells and panels.)

GNB Batteries, Inc.
829 Parkview Boulevard
Lombard, IL. 60148
1-630-629-5200
www.gnb.com
(Solar cells and panels.)

Julian A. McDermott Corp.
1639 Stephen Street
Ridgewood, NY. 11385
1-800-842-5708
1-718-456-3606
www.mcdermottlight.com
(Solar cells and panels.)

Topper Industries, Inc.
PO Box 2439
Battle Ground, WA. 98604
1-800-332-3625
1-360-687-1232
www.topperfloats.com
(Solar cells and panels.)

SOLAR EQUIPMENT (cont.)

Premier Materials Technology, Inc.
7401 Central Avenue NE
Minneapolis, MN. 55432
1-800-262-2275
www.premierfloats.com
(Solar lighting systems.)

Sola Communications, Inc.
PO Box 999
Larose, LA. 70373
1-800-321-8874
1-985-693-0678
www.solacomm.com
(Solar cells and panels.)

LIGHT REFLECTIVE PRODUCTS

3M Company, United States
(Call or visit their website to inquire about sales.)
1-888-364-3577
www.3m.com
(Buoy and dayboard marking kits, numbers, letters, sheets and rolls of light reflective tape.)

Avery Products
50 Pointe Drive
Brea, CA. 92821
1-800-462-8379
www.avery.com
(Heat activated fluorescent film and tape. Pressure sensitive tape.)

Ability One, Inc.
PO Box 578
Germantown, WI. 53022
1-888-269-2869
1-262-251-7840
www.rolyanbuoys.com
(Lanterns and flashers for Rolyan buoys, marking lights.)

LIGHT REFLECTIVE PRODUCTS (cont.)

Beacon Industries, Inc.
3131 South Lawrence Street
Tacoma, WA. 98409-4823
1-253-272-7860
(Light reflective tape for buoys and daybeacons.)

Curd Enterprises, Inc.
476 Long Point Road
Mt. Pleasant, SC. 29464
1-800-968-3091
www.curdbuoy.com/curd/home
(Light reflective tape, numbers and letters.)

DAYBEACONS

Interstate Highway Sign Company
(mailing) PO Box 2380
(street) 6005 Scott-Hamilton Drive
Little Rock, AR. 72203
1-501-565-8484
(Daymarks and regulatory signs.)

Automatic Power, Inc.
PO Box 230738
Houston, TX 77223
1-713-228-5208
www.automaticpower.com
(Daymarks and regulatory signs.)

Watermark Navigation Systems
29 Gilford East Drive
Gilford, NH 03249
1-888-628-2869
www.navbuoy.com
(Daymarks, regulatory signs.)

RACONS

Tideland Signal Corporation
PO Box 52370, O.C.S.
Lafayette, LA. 70505
1-800-824-0575 , 1-337-269-9113
www.tidelandsignal.com (Radar beacons.)

Sola Communications, Inc.
PO Box 999 Larose, LA. 70373
1-800-321-8874, 1-985-693-0678
www.solacomm.com (Radar beacons.)

5TH COAST GUARD DISTRICT OFFICE AIDS TO NAVIGATION •

Mailing address.
Commander (oan)
Fifth Coast Guard District
431 Crawford Street, Portsmouth, VA 23704-5004
Phone and fax numbers.
1-757-398-6360 (VA, MD, DC), or
1-757-398-6229 (PA, NJ, DE, NC)
1-757-398-6334 (FAX) •

McCormick, Kaitlin

From: Frazier, Mary A NAB02 [Mary.A.Frazier@nab02.usace.army.mil]
Sent: Thursday, March 30, 2006 8:33 AM
To: McCormick, Kaitlin; Boraczek, Jane
Subject: FW: Review of sections 1-3 pdeis

Follow Up Flag: Follow up
Flag Status: Red

-----Original Message-----
From: Romeo, Jon NAB02
Sent: Thursday, March 30, 2006 8:21 AM
To: Hobbs, Vance G NAB02; Frazier, Mary A NAB02
Subject: FW: Review of sections 1-3 pdeis

-----Original Message-----
From: Bob_Zepp@fws.gov [mailto:Bob_Zepp@fws.gov]
Sent: Monday, March 27, 2006 2:57 PM
To: vance.g.hobbs%usace.army.mil.@fws.gov;
mary.a.frazier%nab02.usace.army.mil.@fws.gov; Romeo, Jon NAB02
Subject: Review of sections 1-3 pdeis

Hi gang. Have reviewed the first 3 sections and here are my comments.

Section 1

Line 6 - 129 acres; line 398 - 123 acres. Which is it? I suggest 129 since the COE regulates the extent of fill. Good explanation starting @ line 569

Section 2

Figure 2-1 caption says 140 acres Also, is the wet basin acreage included in the 129 acre total?

Line 793 etc. Which locations?
Table 2-15 Shading is not consistent. Some higher values are unshaded while lower values are not., especially for Dieldrin and PCB's Line 874 Metals. A statistical analysis would be useful here.
Line 1578 Didelphis virginiana should be dropped. Name was changed to marsuupialis.
Line 1581 Should be Sylvilagus floridanus.

Section 3

Lines 300, 396, 512, 1767 = Appendix D. Should be Appendix F.
Lines 738-740 - incomplete sentence.

Section 3.6 Lines 1142-1151. This seems misleading. No matter which scenario is chosen, this part of the Middle Branch will be cut off from the main stem by the dike and will provide no contaminant release to the river for ever and ever. If maximizing the borrow source is selected, (Scenario A), the source of potential contamination would be removed to HMI. Please better explain the logic here.

Lines 1153-54 Technically, you have eliminated 129 acres of contaminated sediment @ the cost of eliminating 129 acres of the Patapsco River and still

the Middle Branch remains a source of contaminants.

Line 1784 - As in Section 1, use 129 acres.

General Comment: Part 230 of the Clean Water Act, the Section 404(b)(1) Guidelines, provides the foundation for permitting discharges into navigable water. For non-water dependent discharges (Line 39), there is a rebuttable presumption that upland alternatives exist that are less damaging to the aquatic ecosystem and do not have other adverse impacts.
This Section goes into great detail (actually more than I needed) about how we got to this point. However, in my humble opinion, this does not meet the rebuttable presumption test. There must be a clear discussion of why some alternatives listed in Appendix F such as the 1982 Sparrows Point #21 or the Table F-3 Sparrows Point Fastland/Upland sites are not practical alternatives. To me, this is the crux of the whole permitting process. If this 129 acre fill cannot be shown to be the only practical alternative, the COE should not issue a permit for it.

I will review the other sections received last week and provide comments.
BZ

COMMUNICATIONS RECORD FORM

Person Contacted: Jen Dittmar
Date: April 4, 2006
Affiliation: National Aquarium at Baltimore, Marine Mammal Strandings Program
Address:
Type of Contact: Phone (410-576-8723)
Person Making Contact: Kaitlin McCormick

Communications Summary:

I spoke with Jen at the National Aquarium Marine Mammal Strandings Program about whales stranded within the Chesapeake Bay. She is not sure what information can be given out, but will contact me early next week with any information she can obtain.

COMMUNICATIONS RECORD FORM

Person Contacted: Tricia Kimmel
Date: April 4, 2006
Affiliation: Maryland Department of Natural Resources, Oxford Laboratory
Address:
Type of Contact: Phone – 410-226-5193
Person Making Contact: Kaitlin McCormick

Communications Summary:

I spoke with Tricia to obtain information on whales (fin, humpback, right) that have been spotted or stranded in the Maryland portion of the Chesapeake Bay. I gave her a brief overview of what we were looking for and followed up with her via e-mail, per her request. She is going to search their database and see what information is available.

From: McCormick, Kaitlin
Sent: Tuesday, April 04, 2006 3:05 PM
To: 'tkimmel@dnr.state.md.us'
Subject: Whales in the Chesapeake Bay
Ms. Kimmel,

I am following up on our phone call, per your request. I am looking for information on whales in the Chesapeake Bay, particularly right whales, fin whales, and humpback whales. A consultation on whales is being completed for endangered whales as part of an EIS for a dredged material containment facility proposed for the Baltimore Harbor.

Any information you can provide on strandings or individuals washed on shore would be appreciated. Is there a contact for the VA waters?

Thank you!

Kaitlin

Kaitlin McCormick
EA Engineering, Science, and Technology
15 Loveton Circle
Sparks, MD 21152
ph: (410) 771-4950 x5989
fax: (410) 771-4204
kmccormick@eaest.com

EPA has reviewed the Preliminary Draft Environmental Impact Statement (PDEIS) for the Proposed Masonville DMCF dated 3/20/06. We have the following broad comments with regards to NEPA. We are continuing to review the document and will provide specific technical comments when the DEIS is provided for review and comment.

1. Table of Contents.
Inclusion of a table of contents would have been helpful in review of the PDEIS.

2 .Alternatives Analysis (Section 3)
The PDEIS is the result of significant agency and public input over several years. A flowchart that defines the tiered process used in the alternatives analysis to reach the preferred alternative, the Masonville DMCP alternative 3-c-10, would be helpful to the reviewer.
Table 3-8 Comparison of Environmental Characteristics of Sparrows Point and BP-Fairchild. The sediment quality section could benefit by describing TEL and PEL results in terms of percent of stations for each site that exceed the criteria for easier comparison...

3. Recommended Plan and Evaluation. (Section 4)
Proposed mitigation for the recommended plan should more appropriately follow the discussion of Impacts (Section 5) for the preferred alternative. Mitigation is developed after impacts are determined. Page 4-30 states the mitigation package is still under development. It is assumed that the final proposed plan will be included in the DEIS.

4. Preliminary review of Impacts (Section 5) indicates no major gaps in information as presented. The cumulative impacts analysis has determined that implementation of the DMMP utilizing the Masonville, Sparrows Point, and BP-Fairchild sites for dredged material disposal over the next 20 years has the potential to result in the irrevocable and irretrievable loss of 4.9 % of the tidal open water habitat in the Patapsco River. While MPA is working with key stakeholders and interagency committees to develop an appropriate and approvable mitigation plan to offset the impacts of the Masonville DMCF we believe that future further filling of water of the U.S. at the magnitude proposed would not comply with the applicable EPA and Corps regulatory review guidelines. Accordingly EPA will recommend that any permit issued for the Masonville DMCF have a condition that MPA will vigorously pursue viable innovative use alternatives for future disposal of dredged material.

As previously stated we will review and provide detailed comments on the DEIS for the proposed project. Please advise of the anticipated timeline for receipt and review of this document.

4/05/06
Marria O'Malley Walsh
EPA III
570-628- 9685

McCormick, Kaitlin

From: Boraczek, Jane
Sent: Thursday, April 06, 2006 4:29 PM
To: McCormick, Kaitlin
Cc: Kotulak, Pete /BA; Daniel A. Wilson
Subject: FW: Masonville DMCF
Follow Up Flag: Follow up
Flag Status: Red

From: Limpert, Roland [mailto:RLIMPERT@dnr.state.md.us]
Sent: Thu 4/6/2006 2:32 PM
To: Boraczek, Jane
Subject: FW: Masonville DMCF

Jane - Sorry I misspelled your email the first time.

> -----Original Message-----
> From: Limpert, Roland
> Sent: Thursday, April 06, 2006 2:27 PM
> To: 'vance.g.hobbs@usace.army.mil'; 'mary.a.frazier@nab02.usace.army.mil'; 'jon.romeo@nab02.usace.army.mil'
> Cc: Dintaman, Ray; Elder Ghigiarelli (E-mail); 'jboracezek@eaest.com'
> Subject: Masonville DMCF
>
> Vance et. al,
>
> Here are my comments on the preliminary draft EIS for the Masonville DMCF.
>
> 1. I would concur with the statements made at the 4 April 2006 BEWG meeting regarding the need to expand and enhance the alternatives discussion regarding possible upland alternatives to the proposed filling of open water for a containment facility. Also, I would concur with the statement made at the meeting by NMFS to expand the discussion of Innovative Reuse of dredged material and include Innovative Reuse in Table 1-2 as part of the projected disposal options out to 2017.
>
> 2. Section 1.4, page 1-15, lines 485-490: This paragraph is really obtuse. I think what is trying to be said is that the Port may or may not overload the sites it just depends. The entire issue of delaying new work dredging needs to be addressed better and with more clarity. This could also be a good location to discuss Innovative Reuse.
>
> 3. Section 2.1.7.1, page 2-75, lines 1562-1564: The Masonville DMCF site is designated a "Historic Waterfowl Concentration Area" by the Department under the State's Critical Area law.
>
> 4. Section 2.1.8, page 2-80, line 1723: This sentence gives the impression that the Peregrine Falcon has no legal protection in the State of Maryland which is not the case. The Peregrine Falcon is protected, as would any bird species, it just is not listed a rare, threatened or endangered species by the State.
>
> 5. Section 5.1.5.2, page 5-47, line 1343: The time of year restriction period for anadromous and resident fish spawning would be 15 February through 15 June - not 1 June as stated. This time of year restriction period is also wrongly stated in Section 6.6, lines 482-483.
>
> Section 5.1.5.3, page 5-49, lines 1396-1401: On page 2-62, lines 1243-1244 the document states that an oyster reef is proposed at Fort Carroll. In this Section it states that the reef is in existence and will be impacted.
>
> 6. Section 5.1.5.6, pages 5-53 to 5-54, lines 1610-1614: The use of turbidity curtains in tidal waters is not an acceptable method of minimizing turbidity impacts to SAV. DNR would request that any dredging of unsuitable material with 500 yards of SAV have a time of year restriction to not allow dredging during the period 15 April through 15 October if the dredging is not occurring behind the dikes.
>

>

Habitat Conservation Division
Chesapeake Bay Program Office
410 Severn Ave., Suite 107A
Annapolis, Maryland 21403

April 6, 2006

MEMORANDUM TO: Mary Frazier, Jon Romeo
Regulatory Branch, Baltimore District Corps of Engineers

FROM: John Nichols

SUBJECT: Cooperating Agency Review of Masonville DMCF, PDEIS

This memorandum contains National Marine Fisheries Service comments on the Masonville DMCF Preliminary Draft Environmental Impact Statement (PDEIS), dated March 6, 2006; specifically, Section 1: Introduction & Purpose and Need Statement; and, Section 2: Existing Conditions. Additional comments on subsequent sections of the PDEIS will be forthcoming.

Section 1: Introduction, Purpose & Need

The Harbor Team selected Innovative Use as the preferred alternative of the 20-Year DMMP Plan for Baltimore's Inner Harbor. The Purpose & Need statement of the PDEIS, however, has minimal discussion of this alternative, and fails to incorporate it into the MPA Harbor Dredged Material Placement Plan for Inner Harbor options. Sadly, the PDEIS predicts that overloading of existing and proposed dredge material containment facilities cannot be avoided during the 20-Year Plan, including sites for which NEPA review is still in the early stages. Innovative Use offers opportunities for restoring the capacity of dredge material containment facilities, so that site overloading, and the need for additional fill of Harbor waters can be minimized.

Harbor Team recommendations call for 30% of dredge material generated inside the Rock Point - North Point line of the Patapsco River to be processed through Innovative use by the year 2023. This will require laying the groundwork for Innovative Use options now, so that this schedule can be met. We recommend that discussion of the Innovative Use alternative be expanded within the Purpose & Need statement, particularly within the following sections.

Section 1.4: Proposed Action To Accommodate Harbor Needs; including Sec. 1.4.1 (New Placement Options)
Section 1.7: Studies Completed (expand to studies under-way, to include on-going functions pertaining to Innovative Use)

Additionally, Table 1-2., detailing the MPA DMPP for Inner Harbor Options, should reflect gradual incorporation of Innovative Use into the site capacity analysis. For example, inclusion of Innovative Use into the site capacity analysis could be reflected through rough estimates of DMFC capacity renewal potentially achievable after a specific year; e.g., 2015, one year before the Cox Creek site capacity has been exhausted.

Section 2: Existing Conditions

Subsection 2.1.4.: Water Quality
State regulations designating the following uses should be checked for accuracy:
1) Migratory spawning and nursery use, February 1 to May 31 (**such activities by migratory fish in Maryland usually occur from February 15 through June 15**)
2) Shallow water (to 1 meter depth) SAV use, April 1 to October 30 (**the period optimal for SAV growth and reproduction, as determined by Chesapeake Bay Program, is April 15 through October 15**)

Subsection 2.1.6.1: Plankton (specifically Zooplankton)
Plankton studies for waters in the vicinity of the Masonville site did not include spring ichthyoplankton trawls, which may have detected the presence of anadromous fish eggs and larvae. Spawning by white perch and yellow perch occurs immediately upstream from the Masonville site (i.e., in the lower Patapsco River mainstem, and lower Gwynns Falls), and early life stages of these species can be transported downstream into shallow bays along the south shoreline of the river. If additional ichthyoplankon sampling during spring months cannot be conducted during 2006 or 2007, then the potential for occurrence of perch eggs and larvae in the project area should be discussed in more detail this subsection.

Subsection 2.1.6.2: Fisheries
The conclusions of this subsection (lines 1188 through 1194) do not reflect the results with regard seine data. It appears that Masonville Cove, like Thoms Cove, provides **unique** shallow water habitat for small fish (i.e., juveniles, bait species) using the tidal Patapsco River. This is likely true for most shallow water coves along the south shoreline of the river. Although seining was not conducted within the Kim Channel, similar fish use may also occur in this area. Shallows along the Kim Channel shoreline provide attractive habitats for small fish, including SAV.

Subsection 2.1.6.4: Essential Fish Habitat (EFH)
I recommend re-writing of the second paragraph in this section (lines 1270 through 1278) as follows.

> "A Summary EFH Designation specific to the Patapsco River does not exist at this time. However, consultations with local NMFS staff revealed that all areas of the Bay with 0.5 ppt or greater salinity should technically be considered as EFH, based on EFH definitions for those federally managed species that occur in Maryland tidal waters of the Bay. Furthermore, an EFH Summary Designation for upper Bay waters nearest to the Patapsco River should be used for determining which federal species have EFH designated for waters of the project vicinity. In this case, the Summary Designation for the Chester River estuary in Kent and Queen Anne's County on Maryland's Eastern Shore was used in the preparation of an EFH Assessment for this project. Additionally, recent literature on fish distribution and ecology for the Chesapeake Bay, fish surveys conducted in association with the Masonville site review, and personal communications with local NMFS staff
>
> (Nichols, 2005), were used for determining which federal species with EFH designated

for the Patapsco River likely occur in the project vicinity.

It should also be noted that areas such as the Middle Branch of the Patapsco River, which possess environmentally impaired conditions, as well as a prevailing oligohaline - lower mesohaline salinity regime, create marginal habitat conditions for federal species occurring in this tributary to the Chesapeake Bay. Consequently, waters of the Middle Branch provide less benefit to federal species as compared to: e.g., waters of the mid-Bay and lower-Bay regions, and/or waters less affected by intense industrial activity characteristic of the Inner Harbor region."

In the paragraphs concerning Habitat of Particular Concern (HAPC); specifically, lines 1312 through 1316; it should be stated that the MAFMC has identified SAV and macroalgae beds as HAPC within all waters of the mid-Atlantic region used by adult and juvenile summer flounder. Finally, in lines 1327 through 1329, juvenile bluefish can be considered as uncommon visitors to the Middle Branch of the Patapsco River, but should be considered as common (regular visitors) in the lower Patapsco River. Relative to summer flounder, I would treat adults and juveniles of this species as rare or uncommon visitors to the Patapsco River during years of increased salt wedge intrusion into the Bay.

Subsection 2.1.6.6: Submerged Aquatic Vegetation (SAV)
It is noted in the PDEIS that the EA 2004 survey for SAV in the project area was seasonally late, and that SAV distribution and abundance may have been under-represented by that survey. To ensure that SAV habitat is accurately determined for this project, this section should include a statement indicating that spring and summer SAVsurveys will be conducted during 2006, that will delineate SAV distribution, density, species, and bathymetry relative to the project area.

Subsection 2.1.8: Rare, Threatened, and Endangered Species
The genus and species for shortnose sturgeon is **Acipenser brevirostrum**. The genus and species for Atlantic sturgeon is **Acipenser oxyrhynchus**.

Habitat Conservation Division
Chesapeake Bay Program Office
410 Severn Ave., Suite 107A
Annapolis, Maryland 21403

April 7, 2006

MEMORANDUM TO: Mary Frazier, Jon Romeo
Regulatory Branch, Baltimore District Corps of Engineers

FROM: John Nichols

SUBJECT: Cooperating Agency Comments on the Masonville DMCF PDEIS

The following are National Marine Fisheries Service comments on Section 3 (Alternatives Development and Analysis) for the Masonville DMCF PDEIS.

Port of Baltimore disposal issues inside the Rock Point - North Line of the Patapsco River present their own unique problems, especially following passage of Maryland's Dredged Material Management Act of 2001 (MD Code Environment, Section 5-1102, prohibiting "unconfined disposal of Harbor material in the Chesapeake Bay or its tributaries". Section 3 of the PDEIS contains too much irrelevant material regarding Bay mainstem and approach channel disposal issues, and too little detail on alternatives that were considered for the Inner Harbor region. While this section does discuss the interagency review mechanisms by which currently proposed Inner Harbor DMCF sites have been selected, more discussion is needed on other Inner Harbor sites that were considered during the past review process (e.g., by the Harbor Team), and why they are not suitable, and have not given further consideration.

For example, use of an upland containment facility option would be a preferred alternative relative to avoiding impacts to NMFS resources within the Inner Harbor. What upland sites and alternatives were considered? Why are these upland sites not suitable for further consideration?

In Subsection 3.4.3.1 (Federal DMMP Study Summary), a discussion of values related to beneficial use options is also irrelevant, since the material within the Inner Harbor is legally considered as contaminated, and cannot be confined in a hydrologically open manner as required by typical beneficial use scenarios. Innovative Use, a preferred alternative recommended by the Harbor Team, however, is more appropriate for inclusion under the Federal DMMP Study Summery for Inner Harbor disposal issues.

Regarding the short synopsis that was provided in Section 3 (pages 3-19 through 3-20) on Innovative Use; discussion of this alternative relative to its on-going development should be expanded throughout this section. Masonville, and the other potential DMCF sites selected by the Harbor Team are intricately linked to Innovative Use. The fact that available DMCF sites within the Inner Harbor region are extremely scarce, and that continued displacement of Harbor open waters by new DMCF sites is environmentally inappropriate, mandates the need for developing innovative use technologies to renew DMCF capacity. Including statements, such as

the paragraph in lines 743 through 749, which conclude that, based on past experience, Innovative Use technologies are not feasible options, are inappropriate relative to the existing disposal crisis that exists within the Inner Harbor.

McCormick, Kaitlin

From: Frazier, Mary A NAB02 [Mary.A.Frazier@nab02.usace.army.mil]
Sent: Monday, April 10, 2006 8:55 AM
To: McCormick, Kaitlin
Subject: FW: Section 4 & 5 comments.

-----Original Message-----
From: Bob_Zepp@fws.gov [mailto:Bob_Zepp@fws.gov]
Sent: Friday, April 07, 2006 3:37 PM
To: Hobbs, Vance G NAB02; Frazier, Mary A NAB02; Romeo, Jon NAB02
Subject: Section 4 & 5 comments.

Here are my comments on the subject sections. I do not expect to have further comments but I haven't looked at all the sections.

Section 4

Line 128 - is there a range here?
Line 914 American Eel Passages - who would maintain/repair/remove and for how long?
Figure 4-28 - I believe it should be Liberty Reservoir not Lock Raven Section
4.10.1 Sediment and Contaminant Encapsulation. - This seems somewhat of a stretch. It appears that half of the contaminated material will be removed and taken to HMI. Just constructing the dike would remove the availability of the contaminants.

Section 5

Line 30 - Same comment as for Section 4.10.1. It would not be 129 acres.
Figure 5-12 - top- move Ferry Bar Channel caption up as in the bottom.
Bottom - Masonville Cove is in the opposite direction of the arrow.
Line 1296 - 1263 must be a typo.
Line 1403 - Information from the MPA boat captain indicated that rather large crabs rivalling Wye River were regularly caught in the Masonville area.
While we toured the area there was a crabber running a trot line.
Line 1767 - Should be only a 404 permit. (b)(1) is the Guidelines promulgated by EPA.
Line 2794 - Comment similar to Section 4.10.1.

Should I decide to provide additional comments, I'll get them to you early next week.
BZ

Habitat Conservation Division
Chesapeake Bay Program Office
410 Severn Ave., Suite 107A
Annapolis, Maryland 21403

April 7, 2006

MEMORANDUM TO: Mary Frazier, Jon Romeo
Regulatory Branch, Baltimore District Corps of Engineers

FROM: John Nichols

SUBJECT: Cooperating Agency Review of Masonville DMCF, PDEIS

The following are National Marine Fisheries Service comments on Appendix D: Essential Fish Habitat (EFH) Assessment for the Masonville DMCF PDEIS.

Relative to format and content, the EFH Assessment was very well prepared. We, therefore, have only minor comments and recommended changes to Appendix D.

I. Description of the Proposed Action
A. Purpose, first paragraph on page 1
It should also be noted that Harbor Team recommendations included Innovative Use for renewing Inner Harbor DMCF capacity over the long term.

B. Description of Proposed Action
2. Project Area Description, last paragraph on page 3
The estimate of SAV acreage affected; i.e., 0.038 acres, should be checked for accuracy

2. Project Area Description, first paragraph on page 4
Sentence #6 (i.e., Dredged material from Harbor navigation channels and berthing areas other...) appears to be an incomplete sentence.

II. Species With EFH in the Project Area

First paragraph, page 5, needs to be re-written as follows (similar to what we recommended in Section 2 of the PDEIS for the EFH subsection.).

> "A Summary EFH Designation specific to the Patapsco River does not exist at this time. However, consultations with local NMFS staff revealed that all areas of the Bay with 0.5 ppt or greater salinity should technically be considered as EFH, based on EFH definitions for those federally managed species that occur in Maryland tidal waters of the Bay. Furthermore, an EFH Summary Designation for upper Bay waters nearest to the Patapsco River should be used for determining which federal species have EFH designated for waters of the project vicinity. In this case, the Summary Designation for the Chester River estuary in Kent and Queen Anne's County on Maryland's Eastern Shore was used

in the preparation of an EFH Assessment for this project. Additionally, recent literature on fish distribution and ecology for the Chesapeake Bay, fish surveys conducted in association with the Masonville site review, and personal communications with local NMFS staff (Nichols, 2005) were used for determining which federal species with EFH designated for the Patapsco River likely occur in the project vicinity."

III. Effect of the Proposed Action

III.1 Summer flounder, pages 7-8, last sentence beginning at bottom of page 7 "Habitat restoration in Masonville Cove includes substrate improvements including augmenting the bottom with sandy...."; the word "material" should follow the word sandy.

Page 8, first paragraph: The estimate of 0.38 acres of SAV impact needs to be checked for accuracy.

III.1.2.d. Cumulative Impacts

We strongly recommend that the long term alternative of renewing DMCF capacity through Innovative Use be included as a "mitigative measure" for minimizing impacts to summer flounder and bluefish in the Inner Harbor.

III.2.2.a Impacts to Individuals (i.e., bluefish)

Juvenile bluefish should be considered as common in the Bay mainstem and the mouths of major tributaries north of the Bay Bridge, depending on annual conditions of salt wedge intrusion into the Bay.

IV. Federal Agency's Opinion on Project Impacts to EFH

3. The estimate of 0.38 acres of SAV impact should be checked for accuracy
4. Use of cofferdams and/or preliminary dike construction to seal off the construction site (interior of DMCF) from the river during project construction should be included as a potential mitigative measure.

V. Mitigation

The EFH Assessment contains numerous references to mitigative actions that will improve and/or minimize impact to summer flounder and bluefish habitat in the project area. We suggest that they be referenced in this section.

From: Frazier, Mary A NAB02 [Mary.A.Frazier@nab02.usace.army.mil]
Sent: Monday, April 10, 2006 8:56 AM
To: McCormick, Kaitlin
Subject: FW: Masonville Bald Eagle Survey

From: Therres, Glenn [mailto:GTHERRES@dnr.state.md.us]
Sent: Friday, April 07, 2006 5:02 PM
To: Frazier, Mary A NAB02; Boraczek, Jane
Cc: Limpert, Roland; craig_koppie@fws.gov
Subject: Masonville Bald Eagle Survey

This is a follow-up to the boat survey yesterday of the Masonville Cove area of Baltimore harbor for nesting bald eagles. Though we observed one adult bald eagle flying overhead near the private sand operation on the west side of the area, no bald eagle nest was found on the project site. The nest that occurred on the site in 2004 is no longer there. The top of the tree in which the nest occurred has broken off.

Waterfowl observed in Masonville Cove were:
200+ ruddy ducks
20+ buffleheads
5 common mergansers
5 red-breasted mergansers
5 green-winged teal
10+ northern shovelers
20+ lesser scaup
10+ mallards
10+ American coots
10+ mute swans
10+ Canada geese

Glenn D. Therres
Maryland Department of Natural Resources
Wildlife and Heritage Service
410-260-8572

McCormick, Kaitlin

From: Pine, Frank
Sent: Monday, April 10, 2006 3:13 PM
To: McCormick, Kaitlin
Subject: FW: Masonville DMCF

From: Limpert, Roland [mailto:RLIMPERT@dnr.state.md.us]
Sent: Monday, April 10, 2006 11:10 AM
To: Boraczek, Jane
Cc: sstorms@marylandports.com; Kotulak, Pete; Pine, Frank
Subject: RE: Masonville DMCF

Jane,

I talked with John Nichols and he told me that the turbidity curtain was his idea to allow work to proceed during the restricted period. Based on what John told me I would not object to the use of a turbidity curtain in this case to allow work during the SAV restriction period. Hopefully the SAV bed is far enough away from the dredging activity that this is a non-issue.

Roland

Roland Limpert
Maryland Department of Natural Resources
Environmental Review
Tawes State Office Building, B-3
Annapolis, MD 21401

410.260.8333
410.260.8339 (fax)

> -----Original Message-----
> **From:** Boraczek, Jane [mailto:jboraczek@eaest.com]
> **Sent:** Friday, April 07, 2006 8:04 AM
> **To:** Limpert, Roland
> **Cc:** sstorms@marylandports.com; Kotulak, Pete; Pine, Frank
> **Subject:** RE: Masonville DMCF
>
> Roland, I'm a little confused about the last one. We have an email from you (via Bob Cuthbertson) saying the DNR would not require any TOY restrictions for the project (and have been basing our constuction schedules on that information). I think that unsuitable dredging is sufficiently far from the SAV beds (we are confirming that now), but I'm a bit concerned that this issue is emerging (no pun intended) now. Has something changed?
>
> Jane
>
> _____
> ***Jane Boraczek***
> ***EA-Eastern Shore***
> ***9267 Pennywhistle Dr.***

McDaniel, MD 21647
410-745-3433
cell: 410-746-6968

From: Limpert, Roland [mailto:RLIMPERT@dnr.state.md.us]
Sent: Thu 4/6/2006 2:32 PM
To: Boraczek, Jane
Subject: FW: Masonville DMCF

Jane - Sorry I misspelled your email the first time.

> -----Original Message-----
> From: Limpert, Roland
> Sent: Thursday, April 06, 2006 2:27 PM
> To: 'vance.g.hobbs@usace.army.mil'; 'mary.a.frazier@nab02.usace.army.mil'; 'jon.romeo@nab02.usace.army.mil'
> Cc: Dintaman, Ray; Elder Ghigiarelli (E-mail); 'jboracezek@eaest.com'
> Subject: Masonville DMCF
>
> Vance et. al,
>
> Here are my comments on the preliminary draft EIS for the Masonville DMCF.
>
> 1. I would concur with the statements made at the 4 April 2006 BEWG meeting regarding the need to expand and enhance the alternatives discussion regarding possible upland alternatives to the proposed filling of open water for a containment facility. Also, I would concur with the statement made at the meeting by NMFS to expand the discussion of Innovative Reuse of dredged material and include Innovative Reuse in Table 1-2 as part of the projected disposal options out to 2017.
>
> 2. Section 1.4, page 1-15, lines 485-490: This paragraph is really obtuse. I think what is trying to be said is that the Port may or may not overload the sites it just depends. The entire issue of delaying new work dredging needs to be addressed better and with more clarity. This could also be a good location to discuss Innovative Reuse.
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> 3. Section 2.1.7.1, page 2-75, lines 1562-1564: The Masonville DMCF site is designated a "Historic Waterfowl Concentration Area" by the Department under the State's Critical Area law.
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> 4. Section 2.1.8, page 2-80, line 1723: This sentence gives the impression that the Peregrine Falcon has no legal protection in the State of Maryland which is not the case. The Peregrine Falcon is protected, as would any bird species, it just is not listed a rare, threatened or endangered species by the State.
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> 5. Section 5.1.5.2, page 5-47, line 1343: The time of year restriction period for anadromous and resident fish spawning would be 15 February through 15 June - not 1 June as stated. This time of year restriction period is also wrongly stated in Section 6.6, lines 482-483.
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> Section 5.1.5.3, page 5-49, lines 1396-1401: On page 2-62, lines 1243-1244 the document states that an oyster reef is proposed at Fort Carroll. In this Section it states that the reef is in existence and will be impacted.
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> 6. Section 5.1.5.6, pages 5-53 to 5-54, lines 1610-1614: The use of turbidity curtains in tidal waters is not an acceptable method of minimizing turbidity impacts to SAV. DNR would request that any dredging of unsuitable material with 500 yards of SAV have a time of year restriction to not allow dredging during the period 15 April through 15 October if the dredging is not occurring behind the dikes.
>
>

NOAA/NMFS
Habitat Conservation Division
Chesapeake Bay Program Office
410 Severn Ave., Suite 107A
Annapolis, Maryland 21403

April 11, 2006

MEMORANDUM TO: Mary Frazier, Jon Romeo
Regulatory Branch, Baltimore District Corps of Engineers

FROM: John Nichols

SUBJECT: Cooperating Agency Comments on Masonville DMCF PDEIS

The following are National Marine Fisheries Service comments on Section 4 (Recommended Plan & Evaluation) of the Masonville DMCF PDEIS.

Subsection 4.9: Mitigation

Throughout the entire section, no mention is made of post-construction monitoring of proposed compensatory components to ensure their success. For each of the following compensatory components, a minimum 5-year monitoring protocol should be developed, which includes measures for remediating poorly functioning systems.

1. Tidal wetland creation and enhancement
   - to ensure successful establishment of target vegetative species, including development of subsurface root-rhizome systems
   - to eradicate exotic and/or invasive plant species
   - to ensure proper hydrologic functioning of established wetlands
   - to document wetland use of fish and benthic invertebrates

2. Non-tidal wetland creation
   - to ensure successful establishment of target vegetative species
   - to eradicate exotic and/or invasive plant species
   - to ensure proper hydrology has been established

   • The mitigation plan for this element should also provide additional discussion of the function and design of water level maintenance structures, and measures that will be used to minimize displacement of higher value forest areas at the proposed site

3. Reef and Fish Habitat Creation
   - to determine fate of placed sandy material
   - to appraise fish use and fouling community colonization of reef structures

4. Beach Creation
   - to determine fate of placed sandy material
   - to appraise fish and invertebrate use

5. Water Quality Monitoring
   - to maintain monitoring equipment, and facilitate availability and use of data

6. Eel Passage
   - to maintain eel ladders, correct malfunctions, and appraise their use by target species

7. Shad and Herring Restoration
   - to monitor return of stocked progeny to Patapsco River
   - to appraise use of existing fish ladders by stocked progeny

8. Trash Interceptors
   - to determine effectives of trash interceptors
   - to develop a long term maintenance plan

Duncan Stuart, City Planner II, City of Baltimore

Preliminary Draft EIS Comments:

ES-4 Line 134-136	City 48" waterline-just so we cross pollinate internally-do you know who the contact people in City on this?
2-90 Lines 1965-1966	Are you sure it is Critical Area RCA?
4-4 4.2.5 Line 132-133	Might explain how the $12 million maximum in mitigation costs was developed-formula, etc.
4-21 Phase I Line 489-	Again-know who been talking to at City so we can coordinate a bit better internally.
4-23 Line 516	48"inch city waterline reconstruction–not sure how costs/sharing will take place-maybe elsewhere in report.
4-37 Line 850	For mitigation planting projects-would be great if a maintenance funding incorporated into mitigation efforts for invasive removal/encroachment into new plantings (maybe Aquarium, Living Classrooms).
4-42 Line 954	Trash Interceptors-how will the final locations be selected? Preliminary map in report is excellent. We could coordinate locations by meeting – Corps and our DPW are planning several locations, don't want overlap or to waste MPA time on wrong locations.
4-44 Line 1017	Could mitigation costs be broken out separately?

McCormick, Kaitlin

From: Sue Barco [ocrab@erols.com]
Sent: Thursday, April 13, 2006 11:48 AM
To: McCormick, Kaitlin
Cc: 'Mendy Garron'; 'Jennifer Cucksey'
Subject: RE: whales in the Chesapeake Bay

Hi Kaitlin,
I would be happy to prepare a report for you based on our strandings data. We usually charge a fee for this type of report. If you would prefer to obtain the data without any analysis or explanation, I suggest you contact NOAA Fisheries Northeast Region. Mendy Garron and Jennifer Cucksey should be able to help.
Let me know if you would like to discuss having us prepare a report for you.
Sue

Susan G. Barco
Stranding Program
Virginia Aquarium & Marine Science Center
717 General Booth Blvd.
Virginia Beach, VA 23451
757-437-7765 voice
757-437-4933 fax

-----Original Message-----
From: McCormick, Kaitlin [mailto:kmccormick@eaest.com]
Sent: Thursday, April 13, 2006 10:33 AM
To: ocrab@rcn.com
Subject: whales in the Chesapeake Bay

Ms. Barco,

Polly Yanick at Baltimore Aquarium Marine Mammal Strandings Program gave me your contact information and suggested that I contact you to obtain some information on whale strandings (and sightings if available) for the Chesapeake Bay. I am working on an environmental impact statement for a Maryland Port Administration facility and we have been asked to evaluate any potential impacts to large endangered whale species, specifically, right whales, fin whales, and humpback whales. Any information that you may be able to provide on strandings or sightings of these species within the Chesapeake Bay would be appreciated.

If you have any questions on how this information would be used or need clarification on what I am looking for please contact me at the phone number below. I will be out of the office Friday 4/14, Monday 4/17 and Tuesday 4/18. Jane Boraczek can be reached at 410-745-3433 on those dates to answer any questions or provide clarification.

Thank you,
Kaitlin

Kaitlin McCormick
EA Engineering, Science, and Technology
15 Loveton Circle
Sparks, MD 21152

ph: (410) 771-4950 x5989
fax: (410) 771-4204
kmccormick@eaest.com

From: Mendy Garron [Mendy.Garron@noaa.gov]
Sent: Thursday, April 13, 2006 3:10 PM
To: McCormick, Kaitlin
Cc: Boraczek, Jane
Subject: Re: large whales in the Chesapeake Bay

Follow Up Flag: Follow up
Flag Status: Completed

Attachments: '95-'05 Chesapeake Large Whales.xls
Kaitlin,
I have queried large whales (right, fin, humpback, minke, sei) for VA and MD from 1995-2005 (attached). I have included the counties. In some cases, the lat/long may need to be mapped out to see if it is inside the bay or on the ocean side for certain counties. I have also included age if known. Please let me know if you have questions or need more specific data. Please credit the Northeast Region Stranding Network for this data.

Regarding sightings: You should speak with Sue Barco at the Virginia Aquarium for records of large whale sightings in the Bay area. I believe you have been in contact with her already and have her contact information.

Please let me know if there is anything further.
Mendy Garron

McCormick, Kaitlin wrote:

> Mendy,
>
> We are looking for information on fin, right, and humpback whale utilization of the Chesapeake Bay to support a biological assessment on those species requested by NMFS. We have information on ship-strikes from the ocean, but are lacking information from within the Bay itself, other than a shipstrike in the mouth of the Bay.
>
> To refine what we are looking for,
> Geographically - Maryland and Virginia portions of the Chesapeake Bay
> Dates - the last 10 years
> Life History - any life history information would be useful- particularly if only one age class is using areas of the Bay.
>
> Thanks for your rapid response!
>
> Kaitlin
>
> ---
>
> **From:** Mendy Garron [mailto:Mendy.Garron@noaa.gov]
> **Sent:** Thursday, April 13, 2006 11:54 AM
> **To:** McCormick, Kaitlin
> **Cc:** Boraczek, Jane
> **Subject:** Re: large whales in the Chesapeake Bay
>
> Hi Kaitlin,

I only have access to strandings data. I am checking with our science center staff to see who would be the best person to refer you to for sightings data. I will keep you posted. I would like to know a few details about what this data would be used for exactly. Also, can you provide me with more information on exactly what you are looking for. Are you concerned with just the counties surrounding the Chesapeake or could I provide data for all of Maryland and Virginia? Also, do you need to know any life history stats on the stranded animals (ex: age class, sex, length, alive or dead at initial stranding observation)? Do you have a specific date range you are looking at?

Thanks,
Mendy

McCormick, Kaitlin wrote:

> Polly Yanick at Baltimore Aquarium Marine Mammal Strandings Program gave me your contact information and suggested that I contact you to obtain some information on whale strandings (and sightings if available) for the Chesapeake Bay. I am working on an environmental impact statement for a Maryland Port Administration facility and we have been asked to evaluate any potential impacts to large endangered whale species, specifically, right whales, fin whales, and humpback whales. Any information that you may be able to provide on strandings or sightings of these species within the Chesapeake Bay would be appreciated.
>
> If you have any questions on how this information would be used or need clarification on what I am looking for please contact me at the phone number below. I will be out of the office Friday 4/14, Monday 4/17 and Tuesday 4/18. Jane Boraczek can be reached at 410-745-3433 on those dates to answer any questions or provide clarification.
>
> Thank you,
> Kaitlin
>
> Kaitlin McCormick
> EA Engineering, Science, and Technology
> 15 Loveton Circle
> Sparks, MD 21152
> ph: (410) 771-4950 x5989
> fax: (410) 771-4204
> kmccormick@eaest.com

COMMUNICATIONS RECORD FORM

Person Contacted: Jen Denmar / Polly Yanick
Date: April 13, 2006
Affiliation: National Aquarium at Baltimore, Marine Mammal Strandings Program
Address:
Type of Contact: Phone (Jen - 410-986-2377, Polly – 410-576-3801)
Person Making Contact: Kaitlin McCormick

Communications Summary:

I left a message for Jen Denmar to follow up on our conversation from April 4th on whale data for the Chesapeake Bay. Her voicemail said she would be out of the office until April 20th, but to call Polly Yanick for assistance while she was out. I left a message for Jen and called Polly and explained what I was looking for. She provided the following contacts to request the desired information:

Mendy Garron – mendy.garron@noaa.gov
Susan Barco (VA Marine Science Museum Strandings Program) – ocrab@rcn.com
Katie Moore – katie.f.moore@uscg.mil

McCormick, Kaitlin

From: Katie.S.Moore@uscg.mil on behalf of Moore, Katie [Katie.S.Moore@uscg.mil]
Sent: Thursday, April 13, 2006 11:46 AM
To: McCormick, Kaitlin
Cc: Boraczek, Jane; Mendy.Garron@noaa.gov; Diane Borggaard; Kristen Koyama
Subject: RE: whales in the Chesapeake Bay

Hi Kaitlin,
Nice of Polly to think that I could be of help. I think that Ms. Mendy Garron of NOAA's Northeast Stranding Network and Diane Borggaard (Large Whale Take Reduction Plan Coordinator for NOAA Fisheries) and Kristen Koyama (Whale/shipping specialist for NOAA Fisheries) would likely be better POCs for you. Mendy may be able to help you with strandings/sightings information, and Diane may be able to give you some information regarding the status of the species, because she's currently working on an EIS that deals with these species. Kristen has a strong role in whale/shipping interaction issues in the northeast, and she may
be a good POC regarding that topic. I've cc'd them.

Best of luck to you.

Very respectfully,
Katie

Katie Moore, M.E.M.
Living Marine Resources/Marine Protected Species Planner United States Coast Guard
Atlantic Area Office of Law Enforcement
431 Crawford St.; Portsmouth, VA 23704
bus: (757) 398-6504
fax: (757) 398-6279
cell: (757) 651-5858
My pager is no longer operational. I have Treo capabilities.
Education, Enforcement, Compliance, Partnership.

-----Original Message-----
From: kmccormick@eaest.com [mailto:kmccormick@eaest.com]
Sent: Thursday, April 13, 2006 11:37 AM
To: Moore, Katie
Cc: Boraczek, Jane
Subject: whales in the Chesapeake Bay

Ms. Moore,

Polly Yanick at Baltimore Aquarium Marine Mammal Strandings Program gave me your contact information and suggested that I contact you to obtain some information on whale strandings (and sightings if available) for the Chesapeake Bay. I am working on an environmental impact statement for a Maryland Port Administration facility and we have been asked to evaluate any potential impacts to large endangered whale species, specifically, right whales, fin whales, and humpback whales. Any information that you may be able to provide on strandings or sightings of these species within the Chesapeake Bay would be appreciated.

If you have any questions on how this information would be used or need clarification on what I am looking for please contact me at the phone number below. I will be out of the office Friday 4/14, Monday 4/17 and Tuesday 4/18. Jane Boraczek can be reached at 410-745-3433 on those dates to answer any questions or provide clarification.

Thank you,
Kaitlin

Kaitlin McCormick
EA Engineering, Science, and Technology

15 Loveton Circle
Sparks, MD 21152
ph: (410) 771-4950 x5989
fax: (410) 771-4204
kmccormick@eaest.com
<BLOCKED::BLOCKED::blocked::mailto:kmccormick@eaest.com>

Commonname	Field Number	Observation Status	Observation Year	Observation Month	Observation Day	Age Class	Sex Cd	Locality Detail
FIN WHALE	VMSM971015	Moderate Decomposition	1997	APR	24		Male	CEDAR ISLAND; OCEAN BEACH
FIN WHALE	VMSM19991005	Moderate Decomposition	1999	FEB	10		Male	FCSP APPROX 1 MILE SOUTH OF BBNWR OCEAN BEACH
FIN WHALE	VAQS20051017	Moderate Decomposition	2005	MAR	26	Adult	Female	Sandbridge
HUMPBACK WHALE	VMSM951043	Advanced Decomposition	1995	AUG	18		Female	HILLS CREEK GWYNN'S ISLAND; BAY BEACH
HUMPBACK WHALE	VMSM951028	Moderate Decomposition	1995	JUN	04		Male	FOUND FLOATING ~5 MILES OF DUDEE INLET (OCEAN)
HUMPBACK WHALE	VMSM961010	Fresh Dead	1996	APR	02		Female	CAPE STORY BEACH AT END OF WAKE FOREST RD.; DAY BEACH
HUMPBACK WHALE	VMSM961063	Moderate Decomposition	1996	JUN	12		Female	13 MI ENE OF CAPE HENRY - FLOATING CARCASS; OCEAN
HUMPBACK WHALE	VMSM19991096	Advanced Decomposition	1999	SEP	28		Unknown	TOM'S HOOK ASSATEAGUE ISLAND-CNWR-OCEAN
HUMPBACK WHALE	00MNO30	Advanced Decomposition	2000	SEP	23		Unknown	ASSATEAGUE ISLAND NATIONAL SEASHORE, DUNE CROSSING 13
HUMPBACK WHALE	VMSM20001033	Moderate Decomposition	2000	JUL	22		Female	PARRAMORE ISLAND
HUMPBACK WHALE	01MNO38	Fresh Dead	2001	AUG	18		Unknown	9 MILES SE OCEAN CITY INLET. FLOATING 5 MILES OFFSHORE.
HUMPBACK WHALE	VMSM20011038	Moderate Decomposition	2001	APR	09		Female	~500 YARDS OFFSHORE AT SANDBRIDGE.
HUMPBACK WHALE	VMSM20021002	Moderate Decomposition	2002	FEB	08		Female	THIMBLE SHOALS CHANNEL-- FLOATING (BEACHED 2/9/02 @ 33RD ST.)
HUMPBACK WHALE	VMSM20021013	Moderate Decomposition	2002	MAR	24		Male	DAMNECK AT SHIFTING SANDS CLUB
HUMPBACK WHALE	VMSM20021103	Advanced Decomposition	2002	OCT	30		Unknown	66TH STREET, OCEANFRONT
HUMPBACK WHALE	VMSM20031050	Moderate Decomposition	2003	JUN	06		Female	THIMBLE SHOALS
HUMPBACK WHALE	MDDNR-05-MNO-20	Fresh Dead	2005	JUN	14	Unknown	Unknown	Floating, 6 mi offshore of Ocean City
HUMPBACK WHALE	VAQS20051079	Advanced Decomposition	2005	JUL	01		Unknown	Metompkin Island
MINKE WHALE	95BAC10	Moderate Decomposition	1995	JUN	10		Female	ON THE GROUNDS OF PINEY PT. LIGHTHOUSE MUSEUM, NEAR STEWART PETROLEUM FACILITY
MINKE WHALE	99BAC22	Fresh Dead	1999	JUN	10		Male	FLOATING OFF LOVE POINT AT GREEN CAN '1 UC'
MINKE WHALE	VMSM20011005	Alive	2001	FEB	20		Unknown	YORK RIVER NEAR SANDY POINT OFF JENKIN'S NECK AND HOG ISLAND.
MINKE WHALE	VMSM20031103	Advanced Decomposition	2003	DEC	22		Female	FISHERMAN'S ISLAND
MINKE WHALE	04-BAC-32	Fresh Dead	2004	AUG	20	Yearling	Male	1/2 mile offshore, 6-10 miles North of VA state line-floating
MINKE WHALE	VMSM20041035	Advanced Decomposition	2004	MAY	13	Unknown	Unknown	Fleeton Point
MINKE WHALE	VAQS20051068	Moderate Decomposition	2005	JUN	19		Male	7th street(oceanfront)
NORTHERN RIGHT WHALE	VMSM20011021	Moderate Decomposition	2001	MAR	17		Male	ASSATEAGUE ISLAND. OCEAN BEACH. CNWR.
NORTHERN RIGHT WHALE	02EGL34	Moderate Decomposition	2002	AUG	22		Female	FLOATING 23 MILES E/NE OF OCEAN CITY INLET
NORTHERN RIGHT WHALE	VMSM20021097	Advanced Decomposition	2002	SEP	25		Female	OCEAN BEACH, FALSE CAPE STATE PARK ~ 1 MILES N OF VA/NC LINE
NORTHERN RIGHT WHALE	VMSM20041004	Moderate Decomposition	2004	FEB	07	Adult	Female	6 miles East of Rudee Inlet
NORTHERN RIGHT WHALE	VMSM20041004F	Advanced Decomposition	2004	FEB	07	Pup/Calf	Male	off VA Beach. 6 miles East Rudee Inlet
NORTHERN RIGHT WHALE	VAQS20051008	Moderate Decomposition	2005	MAR	03	Subadult	Unknown	South end of Wreck Island
SEI WHALE	VMSM20031006	Moderate Decomposition	2003	FEB	19		Male	NULL
SPERM WHALE	95PMA14	Moderate Decomposition	1995	JUN	25		Male	NORTH END OF ASSATEAGUE ISLAND
SPERM WHALE	00PCA01	Fresh Dead	2000	JAN	30		Female	ASSATEAGUE NATIONAL SEASHORE, DUNE CROSSING #1, JUST SOUTH OF STATE PARK
Unidentified Balaenopterid	01BAU12	Moderate Decomposition	2001	MAY	27		Unknown	FLOATING 2.5 MILES EAST OF OCEAN CITY INLET
Unidentified Balaenopterid	03BAU07	Advanced Decomposition	2003	APR	20		Unknown	15TH ST

Commonname	Field Number	Stranding State	Stranding County	City	Lattitude	Lattitude Units	Longitude	Longitude Units	Straight Length SUM	Length Units
FIN WHALE	VMSM971015	VA	ACCOMACK	NULL	3735.62	dec deg	7536.75	dec deg	1900.60	cm
FIN WHALE	VMSM19991005	VA	UNKNOWN	VA BEACH	NULL	NULL	NULL	NULL	1545.00	cm
FIN WHALE	VAQS20051017	VA	none	Virginia Beach	36.75704	dec deg	75.94794	dec deg	1625.00	cm
HUMPBACK WHALE	VMSM951043	VA	MATHEWS	GWYNN	3729.23	dec deg	7616.08	dec deg	348.00	in
HUMPBACK WHALE	VMSM951028	VA	UNKNOWN	VA BEACH	364935	deg.min.sec	0755810	deg.min.sec	886.00	cm
HUMPBACK WHALE	VMSM961010	VA	UNKNOWN	VIRGINIA BEACH	365458	deg.min.sec	0760345	deg.min.sec	716.00	cm
HUMPBACK WHALE	VMSM961063	VA	UNKNOWN	OFF VA BEACH	370300	deg.min.sec	0754300	deg.min.sec	900.00	cm
HUMPBACK WHALE	VMSM19991096	VA	ACCOMACK	NULL	NULL	NULL	NULL	NULL	850.00	cm
HUMPBACK WHALE	00MNO30	MD	WORCESTER	BERLIN	3802.48	dec deg	7513.92	dec deg	1572.00	cm
HUMPBACK WHALE	VMSM20001033	VA	ACCOMACK	NULL	NULL	NULL	NULL	NULL	850.00	cm
HUMPBACK WHALE	01MNO38	MD	WORCESTER	BERLIN	380930	deg.min.sec	0750102	deg.min.sec	300.00	in
HUMPBACK WHALE	VMSM20011038	VA	UNKNOWN	VIRGINIA BEACH	3643.89	dec deg	7555.92	dec deg	879.00	cm
HUMPBACK WHALE	VMSM20021002	VA	UNKNOWN	VA BEACH	3657.67	dec deg	7605.97	dec deg	840.00	cm
HUMPBACK WHALE	VMSM20021013	VA	UNKNOWN	VIRGINIA BEACH	3647.93	dec deg	7557.45	dec deg	800.00	cm
HUMPBACK WHALE	VMSM20021103	VA	UNKNOWN	VA BEACH	NULL	NULL	NULL	NULL	850.00	cm
HUMPBACK WHALE	VMSM20031050	VA	UNKNOWN	VIRGINIA BEACH	3659.79	dec deg	7604.66	dec deg	825.00	cm
HUMPBACK WHALE	MDDNR-05-MNO-20	MD	Worcester	Ocean City	38/18.6	dec deg	74/58.3	dec deg	360.00	in
HUMPBACK WHALE	VAQS20051079	VA	Accomack	NULL	37.76472	dec deg	75.54003	dec deg	.00	cm
MINKE WHALE	95BAC10	MD	ST. MARY'S	PINEY POINT	3808.62	dec deg	7631.82	dec deg	377.00	cm
MINKE WHALE	99BAC22	MD	QUEEN ANNE'S	STEVENSVILLE	3904.92	dec deg	7619	dec deg	418.00	cm
MINKE WHALE	VMSM20011005	VA	GLOUCESTER	NULL	3715.56	dec deg	7623.57	dec deg	650.00	cm
MINKE WHALE	VMSM20031103	VA	NORTHAMPTON	NULL	NULL	NULL	NULL	NULL	340.00	cm
MINKE WHALE	04-BAC-32	MD	Worcester	NULL	380642	deg/min/sec	751043	deg/min/sec	478.50	cm
MINKE WHALE	VMSM20041035	VA	Northumberland	Reedville	37.8133	deg/decdeg	76.2767	deg/decdeg	.00	cm
MINKE WHALE	VAQS20051068	VA	Virginia Beach (city)	NULL	36.80351	dec deg	75.96298	dec deg	460.00	cm
NORTHERN RIGHT WHALE	VMSM20011021	VA	ACCOMACK	NULL	NULL	NULL	NULL	NULL	771.00	cm
NORTHERN RIGHT WHALE	02EGL34	MD	WORCESTER	OCEAN CITY	3823.01	dec deg	7435.89	dec deg	1256.00	cm
NORTHERN RIGHT WHALE	VMSM20021097	VA	UNKNOWN	VA. BEACH	NULL	NULL	NULL	NULL	1435.00	cm
NORTHERN RIGHT WHALE	VMSM20041004	VA	none	Virginia Beach	36/47.288	deg/min/decmin	75/50.432	deg/min/decmin	1600.00	cm
NORTHERN RIGHT WHALE	VMSM20041004F	VA	none	Virginia Beach	36/47.288	deg/min/decmin	75/50.432	deg/min/decmin	532.00	cm
NORTHERN RIGHT WHALE	VAQS20051008	VA	Northampton	Oyster	37.24609	dec deg	75.80589	dec deg	1380.00	cm
SEI WHALE	VMSM20031006	VA	UNKNOWN	NORFOLK	NULL	NULL	NULL	NULL	1096.00	cm
SPERM WHALE	95PMA14	MD	WORCESTER	BERLIN	3817.02	dec deg	7506.87	dec deg	337.00	cm
SPERM WHALE	00PCA01	MD	WORCESTER	BERLIN	3811.25	dec deg	7509.48	dec deg	389.00	cm
Unidentified Balaenopterid	01BAU12	MD	WORCESTER	OCEAN CITY	3820.59	dec deg	7502.13	dec deg	264.00	in
Unidentified Balaenopterid	03BAU07	MD	WORCESTER	OCEAN CITY	382040	deg.min.sec	0750441	deg.min.sec	246.00	in

From: Kimmel, Tricia [TKimmel@dnr.state.md.us]
Sent: Friday, April 14, 2006 9:02 AM
To: McCormick, Kaitlin
Subject: RE: whale information, part 2

Follow Up Flag: Follow up
Flag Status: Red

Kaitlin,

I got your message from the other day. I have been in training all week and have not had much of a chance to look in to your inquiry. I did see in an email yesterday that you have requested Maryland stranding data from Mendy Garron at NOAA for 1995-2005. If you are getting the information from them, there is no need for me to send you anything, as it will be a duplicate effort. The only other thing I can tell you is that several humpback whales were seen feeding under the Chesapeake Bay Bridge (in Maryland) in 1992. Other than that, you will get any pertinent data from Mendy.

Hope it helps.

Trish

Tricia Kimmel
Natural Resources Biologist
Maryland Department of Natural Resources
Cooperative Oxford Laboratory
904 S. Morris Street, Oxford, MD 21654
410-226-5908 x137 (W)
410-226-0120 (F)
tkimmel@dnr.state.md.us

> -----Original Message-----
> **From:** McCormick, Kaitlin [mailto:kmccormick@eaest.com]
> **Sent:** Wednesday, April 05, 2006 8:34 AM
> **To:** Kimmel, Tricia
> **Subject:** whale information, part 2
>
> Tricia,
>
> I am going to be out of the office doing field work Thursday and Friday. Should you e-mail me any information on whales in the Chesapeake Bay during that time, please CC jboraczek@eaest.com on that e-mail.
>
> Again, thank you for your help.
>
> Kaitlin
>
> Kaitlin McCormick
> EA Engineering, Science, and Technology
> 15 Loveton Circle
> Sparks, MD 21152
> ph: (410) 771-4950 x5989
> fax: (410) 771-4204
> kmccormick@eaest.com

From: Mendy Garron [Mendy.Garron@noaa.gov]
Sent: Wednesday, April 19, 2006 4:23 PM
To: McCormick, Kaitlin
Subject: Re: large whales in the Chesapeake Bay

Attachments: Chesapeake Large Whales.xls
The records in our database for that area only go back to 1990. I have attached an updated query for all strandings in that area. If you have further questions while I am away please contact Angela Collins-Payne (Angela.Collins-Payne@noaa.gov).
Thanks,
Mendy

McCormick, Kaitlin wrote:

> Mendy, this EIS is going to production Apr 26, if possible, can I get this data from someone else if you can't do it before you leave?
>
> Thanks!
>
> Kaitlin

From: Mendy Garron [mailto:Mendy.Garron@noaa.gov]
Sent: Wednesday, April 19, 2006 4:09 PM
To: McCormick, Kaitlin
Subject: Re: large whales in the Chesapeake Bay

Kaitlin,
I am getting ready to leave the office until May 1st. Would I be able to provide this data to you then?
Mendy

McCormick, Kaitlin wrote:

> Mendy,
>
> Can we get the data from 1979 to 1995 as well??
>
> sorry to bother you again!
>
> Thanks!!
>
> Kaitlin

From: Mendy Garron [mailto:Mendy.Garron@noaa.gov]
Sent: Thursday, April 13, 2006 3:10 PM
To: McCormick, Kaitlin
Cc: Boraczek, Jane
Subject: Re: large whales in the Chesapeake Bay

Kaitlin,

I have queried large whales (right, fin, humpback, minke, sei) for VA and MD from 1995-2005 (attached). I have included the counties. In some cases, the lat/long may need to be mapped out to see if it is inside the bay or on the ocean side for certain counties. I have also included age if known. Please let me know if you have questions or need more specific data. Please credit the Northeast Region Stranding Network for this data.

Regarding sightings: You should speak with Sue Barco at the Virginia Aquarium for records of large whale sightings in the Bay area. I believe you have been in contact with her already and have her contact information.

Please let me know if there is anything further.
Mendy Garron

McCormick, Kaitlin wrote:

> Mendy,
>
> We are looking for information on fin, right, and humpback whale utilization of the Chesapeake Bay to support a biological assessment on those species requested by NMFS. We have information on ship-strikes from the ocean, but are lacking information from within the Bay itself, other than a shipstrike in the mouth of the Bay.
>
> To refine what we are looking for,
> Geographically - Maryland and Virginia portions of the Chesapeake Bay
> Dates - the last 10 years
> Life History - any life history information would be useful- particularly if only one age class is using areas of the Bay.
>
> Thanks for your rapid response!
>
> Kaitlin

From: Mendy Garron [mailto:Mendy.Garron@noaa.gov]
Sent: Thursday, April 13, 2006 11:54 AM
To: McCormick, Kaitlin
Cc: Boraczek, Jane
Subject: Re: large whales in the Chesapeake Bay

Hi Kaitlin,
I only have access to strandings data. I am checking with our science center staff to see who would be the best person to refer you to for sightings data. I will keep you posted.
I would like to know a few details about what this data would be used for exactly. Also, can you provide me with more information on exactly what you are looking for. Are you concerned with just the counties surrounding the Chesapeake or could I provide data

for all of Maryland and Virginia? Also, do you need to know any life history stats on the stranded animals (ex: age class, sex, length, alive or dead at initial stranding observation)? Do you have a specific date range you are looking at?

Thanks,
Mendy

McCormick, Kaitlin wrote:

> Polly Yanick at Baltimore Aquarium Marine Mammal Strandings Program gave me your contact information and suggested that I contact you to obtain some information on whale strandings (and sightings if available) for the Chesapeake Bay. I am working on an environmental impact statement for a Maryland Port Administration facility and we have been asked to evaluate any potential impacts to large endangered whale species, specifically, right whales, fin whales, and humpback whales. Any information that you may be able to provide on strandings or sightings of these species within the Chesapeake Bay would be appreciated.
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> Thank you,
> Kaitlin
>
> Kaitlin McCormick
> EA Engineering, Science, and Technology
> 15 Loveton Circle
> Sparks, MD 21152
> ph: (410) 771-4950 x5989
> fax: (410) 771-4204
> kmccormick@eaest.com

Commonname	Field Number	Observation Status	Observation Year	Observation Month	Observation Day	Age Class	Sex Cd	Locality Detail	Stranding State	Stranding County
HUMPBACK WHALE	MM14Nov1990	Fresh Dead	1990	NOV	14		Male	Big Island.	VA	Gloucester
HUMPBACK WHALE	VMSM901003	Fresh Dead	1990	APR	01		Female	3 miles S of refuge camp at contact station.	VA	Virginia Beach (city)
HUMPBACK WHALE	92MMAOMN05	Advanced Decomposition	1992	APR	16		Female	Assateague National Seashore, midway between N. Beach Ranger Station and southern boundary of State Park.	MD	Worcester
HUMPBACK WHALE	92MMAOMN38	Moderate Decomposition	1992	SEP	26		Male	Toms Cove Hook - 3/4 mile toward tip.	VA	Accomack
HUMPBACK WHALE	92MMAOMN39	Fresh Dead	1992	OCT	09		Female	Barrier Island S of CNWR - Metompkin Is. between Assawaoman Is. and Cedar Is. - accessible from Gargatby Inlet.	VA	Accomack
HUMPBACK WHALE	VMSM921002	Moderate Decomposition	1992	FEB	14		Male	found floating in Chesapeake Bay mouth.	VA	none
HUMPBACK WHALE	VMSM921025	Moderate Decomposition	1992	OCT	22		Male	Dam Neck - USNB	VA	none
UNSPECIFIED BALEEN WHALE	92MMAOBW25	Advanced Decomposition	1992	JUL	20		Unknown	Parramore Island, southern most point.	VA	Accomack
MINKE WHALE	93BAC32	Moderate Decomposition	1993	SEP	27		Unknown	124TH STREET	MD	WORCESTER
MINKE WHALE	VMSM931050	Moderate Decomposition	1993	OCT	01		Unknown	ATLANTIC OCEAN BEACH, 2600 SANDFIDDLER RD. -	VA	UNKNOWN
MINKE WHALE	VMSM931051	Advanced Decomposition	1993	OCT	07		Unknown	ATLANTIC OCEAN BEACH AT FALSE CAPE	VA	UNKNOWN
FIN WHALE	VMSM941010	Moderate Decomposition	1994	MAR	12		Female	CAPE HENRY AT MOUTH OF CHESAPEAKE BAY ON FORT STORY	VA	UNKNOWN
MINKE WHALE	VMSM941078	Advanced Decomposition	1994	JUN	24		Male	NORTH ATLANTIC: CHINCOTEAGUE NWR, ASSATEAGUE ISLAND, OCEAN BEACH - TOM'S HOOK	VA	ACCOMOCK
MINKE WHALE	VMSM941084	Advanced Decomposition	1994	AUG	15		Unknown	BAY BEACH, 3500 BLOCK CHESAPEAKE AVE. ON ROCKS, HAMPTON ROADS, CHESAPEAKE BAY: NORTH ATLANTIC	VA	UNKNOWN
HUMPBACK WHALE	VMSM951028	Moderate Decomposition	1995	JUN	04		Male	FOUND FLOATING ~5 MILES OF DUDEE INLET (OCEAN)	VA	UNKNOWN
HUMPBACK WHALE	VMSM951043	Advanced Decomposition	1995	AUG	18		Female	HILLS CREEK GWYNN'S ISLAND; BAY BEACH	VA	MATHEWS
MINKE WHALE	95BAC10	Moderate Decomposition	1995	JUN	10		Female	ON THE GROUNDS OF PINEY PT. LIGHTHOUSE MUSEUM, NEAR STEWART PETROLEUM FACILITY	MD	ST. MARY'S
SPERM WHALE	95PMA14	Moderate Decomposition	1995	JUN	25		Male	NORTH END OF ASSATEAGUE ISLAND	MD	WORCESTER
HUMPBACK WHALE	VMSM961010	Fresh Dead	1996	APR	02		Female	CAPE STORY BEACH AT END OF WAKE FOREST RD.; DAY	VA	UNKNOWN
HUMPBACK WHALE	VMSM961063	Moderate Decomposition	1996	JUN	12		Female	13 MI ENE OF CAPE HENRY - FLOATING CARCASS; OCEAN	VA	UNKNOWN
FIN WHALE	VMSM971015	Moderate Decomposition	1997	APR	24		Male	CEDAR ISLAND; OCEAN BEACH	VA	ACCOMACK
FIN WHALE	VMSM19991005	Moderate Decomposition	1999	FEB	10		Male	FCSP APPROX 1 MILE SOUTH OF BBNWR OCEAN BEACH	VA	UNKNOWN
HUMPBACK WHALE	VMSM19991096	Advanced Decomposition	1999	SEP	28		Unknown	TOM'S HOOK ASSATEAGUE ISLAND-CNWR-OCEAN	VA	ACCOMACK
MINKE WHALE	99BAC22	Fresh Dead	1999	JUN	10		Male	FLOATING OFF LOVE POINT AT GREEN CAN '1 UC'	MD	QUEEN ANNE'S
HUMPBACK WHALE	00MNO30	Advanced Decomposition	2000	SEP	23		Unknown	ASSATEAGUE ISLAND NATIONAL SEASHORE, DUNE CROSSING	MD	WORCESTER
HUMPBACK WHALE	VMSM20001033	Moderate Decomposition	2000	JUL	22		Female	PARRAMORE ISLAND	VA	ACCOMACK
SPERM WHALE	00PCA01	Fresh Dead	2000	JAN	30		Female	ASSATEAGUE NATIONAL SEASHORE, DUNE CROSSING #1, JUST SOUTH OF STATE PARK	MD	WORCESTER
HUMPBACK WHALE	01MNO38	Fresh Dead	2001	AUG	18		Unknown	9 MILES SE OCEAN CITY INLET. FLOATING 5 MILES OFFSHORE.	MD	WORCESTER
HUMPBACK WHALE	VMSM20011038	Moderate Decomposition	2001	APR	09		Female	~500 YARDS OFFSHORE AT SANDBRIDGE.	VA	UNKNOWN
MINKE WHALE	VMSM20011005	Alive	2001	FEB	20		Unknown	YORK RIVER NEAR SANDY POINT OFF JENKIN'S NECK AND HOG	VA	GLOUCESTER
NORTHERN RIGHT WHALE	VMSM20011021	Moderate Decomposition	2001	MAR	17		Male	ASSATEAGUE ISLAND. OCEAN BEACH. CNWR.	VA	ACCOMACK
Unidentified Balaenopterid	01BAU12	Moderate Decomposition	2001	MAY	27		Unknown	FLOATING 2.5 MILES EAST OF OCEAN CITY INLET	MD	WORCESTER
HUMPBACK WHALE	VMSM20021002	Moderate Decomposition	2002	FEB	08		Female	THIMBLE SHOALS CHANNEL-- FLOATING (BEACHED 2/9/02 @	VA	UNKNOWN
HUMPBACK WHALE	VMSM20021013	Moderate Decomposition	2002	MAR	24		Male	DAMNECK AT SHIFTING SANDS CLUB	VA	UNKNOWN
HUMPBACK WHALE	VMSM20021103	Advanced Decomposition	2002	OCT	30		Unknown	66TH STREET, OCEANFRONT	VA	UNKNOWN
NORTHERN RIGHT WHALE	02EGL34	Moderate Decomposition	2002	AUG	22		Female	FLOATING 23 MILES E/NE OF OCEAN CITY INLET	MD	WORCESTER
NORTHERN RIGHT WHALE	VMSM20021097	Advanced Decomposition	2002	SEP	25		Female	OCEAN BEACH, FALSE CAPE STATE PARK ~ 1 MILES N OF VA/NC	VA	UNKNOWN
HUMPBACK WHALE	VMSM20031050	Moderate Decomposition	2003	JUN	06		Female	THIMBLE SHOALS	VA	UNKNOWN
MINKE WHALE	VMSM20031103	Advanced Decomposition	2003	DEC	22		Female	FISHERMAN'S ISLAND	VA	NORTHAMPTON
SEI WHALE	VMSM20031006	Moderate Decomposition	2003	FEB	19		Male	NULL	VA	UNKNOWN
Unidentified Balaenopterid	03BAU07	Advanced Decomposition	2003	APR	20		Unknown	15TH ST	MD	WORCESTER
MINKE WHALE	04-BAC-32	Fresh Dead	2004	AUG	20	Yearling	Male	1/2 mile offshore, 6-10 miles North of VA state line-floating	MD	Worcester
MINKE WHALE	VMSM20041035	Advanced Decomposition	2004	MAY	13	Unknown	Unknown	Fleeton Point	VA	Northumberland
NORTHERN RIGHT WHALE	VMSM20041004	Moderate Decomposition	2004	FEB	07	Adult	Female	6 miles East of Rudee Inlet	VA	none
NORTHERN RIGHT WHALE	VMSM20041004F	Advanced Decomposition	2004	FEB	07	Pup/Calf	Male	off VA Beach. 6 miles East Rudee Inlet	VA	none
FIN WHALE	VAQS20051017	Moderate Decomposition	2005	MAR	26	Adult	Female	Sandbridge	VA	none
HUMPBACK WHALE	MDDNR-05-MNO-20	Fresh Dead	2005	JUN	14	Unknown	Unknown	Floating, 6 mi offshore of Ocean City	MD	Worcester
HUMPBACK WHALE	VAQS20051079	Advanced Decomposition	2005	JUL	01		Unknown	Metompkin Island	VA	Accomack
MINKE WHALE	VAQS20051068	Moderate Decomposition	2005	JUN	19		Male	7th street(oceanfront)	VA	Virginia Beach (city)
NORTHERN RIGHT WHALE	VAQS20051008	Moderate Decomposition	2005	MAR	03	Subadult	Unknown	South end of Wreck Island	VA	Northampton

Commonname	Field Number	City	Lattitude	Lattitude Units	Longitude	Longitude Units	Straight Length SUM	Length Units
HUMPBACK WHALE	MM14Nov1990	Gloucester Point	NULL	NULL	NULL	NULL	950.00	cm
HUMPBACK WHALE	VMSM901003	NULL	36 41 15	deg.min.sec	75 55 45	deg.min.sec	960.12	cm
HUMPBACK WHALE	92MMAOMN05	Assateague	38 10	dec deg	75 10	dec deg	893.00	cm
HUMPBACK WHALE	92MMAOMN38	Chincoteague	37 52	dec deg	75 22	dec deg	891.00	cm
HUMPBACK WHALE	92MMAOMN39	Accomac	37 46	dec deg	75 32	dec deg	870.00	cm
HUMPBACK WHALE	VMSM921002	Virginia Beach	36 59 00	deg.min.sec	76 08 00	deg.min.sec	853.00	cm
HUMPBACK WHALE	VMSM921025	Virginia Beach	36 46 15	deg.min.sec	75 57 02	deg.min.sec	908.00	cm
UNSPECIFIED BALEEN WHALE	92MMAOBW25	NULL	37 29.0	dec.min	75 39.5	dec.min	370.00	cm
MINKE WHALE	93BAC32	OCEAN CITY	3825.78	dec deg	7504.18	dec deg	NULL	cm
MINKE WHALE	VMSM931050	VIRGINIA BEACH	3644.33	dec deg	7556.42	dec deg	523.00	cm
MINKE WHALE	VMSM931051	VIRGINIA BEACH	3637.83	dec deg	7553.5	dec deg	337.00	cm
FIN WHALE	VMSM941010	VA BEACH	3655.97	dec deg	7601.93	dec deg	1635.00	cm
MINKE WHALE	VMSM941078	NULL	5751.97	dec deg	7521.57	dec deg	390.00	cm
MINKE WHALE	VMSM941084	HAMPTON	3700.13	dec deg	7621.73	dec deg	NULL	cm
HUMPBACK WHALE	VMSM951028	VA BEACH	364935	deg.min.sec	0755810	deg.min.sec	886.00	cm
HUMPBACK WHALE	VMSM951043	GWYNN	3729.23	dec deg	7616.08	dec deg	348.00	in
MINKE WHALE	95BAC10	PINEY POINT	3808.62	dec deg	7631.82	dec deg	377.00	cm
SPERM WHALE	95PMA14	BERLIN	3817.02	dec deg	7506.87	dec deg	337.00	cm
HUMPBACK WHALE	VMSM961010	VIRGINIA BEACH	365458	deg.min.sec	0760345	deg.min.sec	716.00	cm
HUMPBACK WHALE	VMSM961063	OFF VA BEACH	370300	deg.min.sec	0754300	deg.min.sec	900.00	cm
FIN WHALE	VMSM971015	NULL	3735.62	dec deg	7536.75	dec deg	1900.60	cm
FIN WHALE	VMSM19991005	VA BEACH	NULL	NULL	NULL	NULL	1545.00	cm
HUMPBACK WHALE	VMSM19991096	NULL	NULL	NULL	NULL	NULL	850.00	cm
MINKE WHALE	99BAC22	STEVENSVILLE	3904.92	dec deg	7619	dec deg	418.00	cm
HUMPBACK WHALE	00MNO30	BERLIN	3802.48	dec deg	7513.92	dec deg	1572.00	cm
HUMPBACK WHALE	VMSM20001033	NULL	NULL	NULL	NULL	NULL	850.00	cm
SPERM WHALE	00PCA01	BERLIN	3811.25	dec deg	7509.48	dec deg	389.00	cm
HUMPBACK WHALE	01MNO38	BERLIN	380930	deg.min.sec	0750102	deg.min.sec	300.00	in
HUMPBACK WHALE	VMSM20011038	VIRGINIA BEACH	3643.89	dec deg	7555.92	dec deg	879.00	cm
MINKE WHALE	VMSM20011005	NULL	3715.56	dec deg	7623.57	dec deg	650.00	cm
NORTHERN RIGHT WHALE	VMSM20011021	NULL	NULL	NULL	NULL	NULL	771.00	cm
Unidentified Balaenopterid	01BAU12	OCEAN CITY	3820.59	dec deg	7502.13	dec deg	264.00	in
HUMPBACK WHALE	VMSM20021002	VA BEACH	3657.67	dec deg	7605.97	dec deg	840.00	cm
HUMPBACK WHALE	VMSM20021013	VIRGINIA BEACH	3647.93	dec deg	7557.45	dec deg	800.00	cm
HUMPBACK WHALE	VMSM20021103	VA BEACH	NULL	NULL	NULL	NULL	850.00	cm
NORTHERN RIGHT WHALE	02EGL34	OCEAN CITY	3823.01	dec deg	7435.89	dec deg	1256.00	cm
NORTHERN RIGHT WHALE	VMSM20021097	VA. BEACH	NULL	NULL	NULL	NULL	1435.00	cm
HUMPBACK WHALE	VMSM20031050	VIRGINIA BEACH	3659.79	dec deg	7604.66	dec deg	825.00	cm
MINKE WHALE	VMSM20031103	NULL	NULL	NULL	NULL	NULL	340.00	cm
SEI WHALE	VMSM20031006	NORFOLK	NULL	NULL	NULL	NULL	1096.00	cm
Unidentified Balaenopterid	03BAU07	OCEAN CITY	382040	deg.min.sec	0750441	deg.min.sec	246.00	in
MINKE WHALE	04-BAC-32	NULL	380642	deg/min/sec	751043	deg/min/sec	478.50	cm
MINKE WHALE	VMSM20041035	Reedville	37.8133	deg/decdeg	76.2767	deg/decdeg	.00	cm
NORTHERN RIGHT WHALE	VMSM20041004	Virginia Beach	36/47.288	deg/min/decmin	75/50.432	deg/min/decmin	1600.00	cm
NORTHERN RIGHT WHALE	VMSM20041004F	Virginia Beach	36/47.288	deg/min/decmin	75/50.432	deg/min/decmin	532.00	cm
FIN WHALE	VAQS20051017	Virginia Beach	36.75704	dec deg	75.94794	dec deg	1625.00	cm
HUMPBACK WHALE	MDDNR-05-MNO-20	Ocean City	38/18.6	dec deg	74/58.3	dec deg	360.00	in
HUMPBACK WHALE	VAQS20051079	NULL	37.76472	dec deg	75.54003	dec deg	.00	cm
MINKE WHALE	VAQS20051068	NULL	36.80351	dec deg	75.96298	dec deg	460.00	cm
NORTHERN RIGHT WHALE	VAQS20051008	Oyster	37.24609	dec deg	75.80589	dec deg	1380.00	cm

From: Dittmar, Jennifer [jdittmar@aqua.org]
Sent: Monday, April 24, 2006 11:39 AM
To: McCormick, Kaitlin
Cc: Page, Glenn; Barrios, Jose'
Subject: National Aquarium's MARP Accession Records

Attachments: accession 2002.xls; accession 1995.XLS; accession 1996.XLS; accession 1997.XLS; accession 1998.doc; accession 1999.XLS; accession 2000.XLS; accession 2001.doc; accession 2003.xls; accession 2004.xls; accession 2005.xls

Hi Kaitlin,

As per our discussion today, here are the accession records for 1995-2005 for the Marine Animal Rescue Program for your EIS. The data is to be used for the environmental impact statement for the Maryland Port Administration facility to evaluate any potential impacts to large endangered whale species.

Thank you for your patience while I gathered the information I needed. Please don't hesitate to let me know if there are any questions or concerns.

Thanks again, and have a good one!

Jennifer Dittmar
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	National Aquarium in Baltimore					
	Marine Animal Rescue Program					
				Alive or		
Date	Accession	Sex	Number	Dead	Stranding Locatior	Comments
1/8/1995	Harbor Seal (*Phoca vitulina*)	F	9501PV	A	Assateague Island	Transported to NEA, released in Biddeford Pool, ME 4/95
#######	Harbor Seal (*Phoca vitulina*)	F	9502PV	A	Chicnoteague Island	Died 2/27/95
#######	Harbor Seal (*Phoca vitulina*)	F	9503PV	A	Chicnoteague Island	Died 1/15/95
#######	Harbor Porpoise (*Phocoena phocoena*)	M	9504PV	A	Chicnoteague Island	Euthansized 2/16/95
#######	Dwarf Sperm Whale (*Kogia simus*)	M	9505KB	A	Ocean City, Maryland	Died on the beach
#######	Harbor Seal (*Phoca vitulina*)	F	9506PV	A	Ocean City, Maryland	Euthansized 3/19/95
#######	Harp Seal (*Phoca groenlandica*)	M	9507PG	A	Assateague Island	Transported to NEA, released in Biddeford Pool, ME 4/101
4/1/1995	Harbor Porpoise (*Phocoena phocoena*)	F	9508PP	A	New Jersey	Released off Ocean City, MD 4/29/96 satellite tagged - tracked for 50 days
#######	Loggerhead Turtle (*Caretta caretta*)	U	9509CC	A	New England	Released 5/26/95
#######	Loggerhead Turtle (*Caretta caretta*)	U	9510CC	A	New England	Released 5/26/95
#######	Loggerhead Turtle (*Caretta caretta*)	U	9511CC	A	New England	Released 5/26/95
#######	Loggerhead Turtle (*Caretta caretta*)	U	9512CC	A	New England	Released 5/26/95
#######	Loggerhead Turtle (*Caretta caretta*)	U	9513CC	A	New England	Released 5/26/95
#######	Harbor Porpoise (*Phocoena phocoena*)	M	9514PP	D	Solomon's Island, Maryland	
#######	Loggerhead Turtle (*Caretta caretta*)	U	9515CC	D	Solomon's Island, Maryland	
6/3/1995	Striped Dolphin (*Stenella coeruleoalba*)	F	9516SC	A	Assateague, Virginia	Transferred to Okeanos. Died 6/5/95
?	Diamondback Terrapin	F	9517	A	Ocean City, Maryland	Released
#######	Sei Whale	U	9518	D	Found floating in Chesapeake Bay	
9/2/1995	Loggerhead Turtle (*Caretta caretta*)	F	9519CC	A	Indian River Bay, Delaware	Boat strike. Died 9/23/95
#######	Kemp's Ridley Turtle (*Lepidochelys kempii*)	U	9520LK	A	Long Island, New York	Transport from Long Is. Release at Assateague Island, Maryland
#######	Pygmy Sperm Whale (*Kogia breviceps*)	F	9521KB	D	Herring Poin, Cape Henlopen, DE	Necropsy 11/12/95 by CD, SH, TDS, LS, and Del DNR
#######	Loggerhead Turtle (*Caretta caretta*)	U	9522CC	A	Chincoteague Island, Virginia	Cold shock- water temp in 40's. Transport to FL for release 2/19/96
#######	Harbor Seal (*Phoca vitulina*)	F	9523PV	A	South of Bethany Beach, Delaware	Euthansized 3/6/96

	National Aquarium in Baltimore					
	Marine Animal Rescue Program					
				Alive or		
Date	Accession	Sex	Number	Dead	Stranding Locatior	Comments
1/15/1996	Hooded Seal (*Cystophora cristata*)	M	9601CC	A	South Portland, Maine	Transfered from NEA through NY. Surgery 1/19/96 to remove rocks. Died 2/3/96
2/29/1996	Harbor Seal (*Phoca vitulina*)	F	9602PV	A	Ocean City, Maryland	euthanized 3/1/96
3/1/1996	Hooded Seal (*Cystophora cristata*)	M	9603CC	A	Virginia Beach, Virginia	Stranded in VA 2/28/96. Transported to NAIB 3/1/96. Transported to Biddefordpool, ME 5/30/96for release
3/1/1996	Harp Seal (*Phoca groelandica*)	M	9604PG	A	Ocean City, Maryland	Transported to NEA for release 5/4/96
3/6/1996	Harp Seal (*Phoca groelandica*)	M	9605PG	A	Lewes. Delaware	Died 3/10/96
3/19/1996	Harp Seal (*Phoca groelandica*)	F	9606PG	A	Chincoteague, Virginia	euthanized 3/21/96
3/22/1996	Harbor Seal (*Phoca vitulina*)	M	9607PV	A	Ocean City, Maryland	euthanized 3/26/96
3/23/1996	Harp Seal (*Phoca groelandica*)	U	9608PG	A	Chincoteague, Virginia	Transport to Brigantine for release. Tag #18, Field # MMSC 96054
7/19/1996	Loggerhead Turtle (*Caretta caretta*)	M	9609CC	A	Stranded in S.C. 6/9/96. Transfered to NAIB 7/19/96	Hemi penis prolapse. euthanized 8/2/96
9/28/1996	Hooded Seal (*Cystophora cristata*)	F	9610CC	A	Chincoteague, Virginia	Transported to Sea World, Ohio 12/20/96 Released 7/9/97 satelite tagged and tracked for 25 days.
10/10/1996	Loggerhead Turtle (*Caretta caretta*)	U	9611CC	A	Pickering Beach, Delaware	euthanized
10/15/1996	Loggerhead Turtle (*Caretta caretta*)	U	9612CC	A	Hatchling, picked up off beach in N.C.	Held for 2 months in fish tank before taken to NAIB. Died 10/21/96

	National Aquarium in Baltimore					
	Marine Animal Rescue Program					
				Alive or		
Date	Accession	Sex	Number	Dead	Stranding Location	Comments
1/20/1997	Hooded Seal (Cystophora cristata)	M	9701Cc	A	Bethany Beach, Delaware	3-4 weeks old. Died 1/27
1/29/1997	Harbor Seal (Phoca vitulina)	F	9702Pv	A	Ocean City, Maryland	Heartworm test 4/8, 4/9. Released 7/9 satelite tagged and tracked for 28 days
2/4/1997	Harp Seal (Phoca groenlandica)	M	9703Pg	A	Chincoteague, Virginia	Lethargic, bald; euthanized 2/6
2/7/1997	Harbor Porpoise (Phocoena phocoena)	M	9704Pp	A	Salisbury, Maryland	In shallow tributary. euthanized 4/3
3/31/1997	Harp Seal (Phoca groenlandica)	M	9705Pg	A	Assateague, Virginia	169 lbs. 7+ yrs old, full coat pattern. released into NAIB collection
4/5/1997	Harp Seal (Phoca groenlandica)	M	9706Pg	A	Bay side of MD's Eastern Shore	141 lbs., 7+ yrs old, full coat pattern. Euthanized
4/21/1997	Harp Seal pup (Phoca groenlandica)	M	9707Pg	A	VA Beach Naval Base (Damneck)	21lbs, 4-7 wks old. died 5/1 congental def.
6/18/1997	Kemp's Ridley Sea Turtle	U	9708Lk	A	Pokomoke River	11.5 lbs, held for a month, rlsd 7/18.
6/18/1997	Kemp's Ridley Sea Turtle	U	9709Lk	A	Pokomoke River	Rescued with 9708: euth. *Micrbacterium* disease disease
7/30/1997	Bottlenose Dolphin (Turisops truncatus)	M	9710Tt	A	Ocean City, MD	Died in transport to USCG station
10/8/1997	Pygmy Sperm Whale (Kogia Breviceps)	F	9711Kb	A	Virginia Beach, VA	Transported to NAIB 10/7; died 10/8
10/20/1997	Loggerhead Sea Turtle (Caretta caretta)	U	9712Cc	A	Delaware Bay	Cold shock, released Assateague 8/97
10/30/1997	Bottlenose Dolphin (Turisops truncatus)	U	9713Tt	A	mouth of Patapsco River, MD	Stayed in defined area; last sighted 11/11.
12/18/1997	Grey seal (Halichoerus grypus)	F	9714Hg	A	Dewey Beach, Delaware	Young; died 12/19.

National Aquarium in Baltimore
Marine Animal Rescue Program - Accession record for 1998.

Date	Animal	D/A	NAIB #	Sex	Rescue Location	Disposition	Comments
01-03-98	Loggerhead sea turtle Caretta caretta	A	9801Cc	?	Westhampton Beach, Suffolk County, NY on 08-05-95	Animal moved from NY to Maine to NAIB on 01-03-98	Missing foreflipper. Sent to South Carolina Aquarium on 01-09-98.
02-19-98	Hooded Seal Crystophora cristata Juvenile	A	9802Cc	M	South Bethany, DE on 02-19-98	Stranded, but alert and active when reaching NAIB	Animal released at Nahant, MA on 07-15-98 satellite tagged and tracked for 212 days.
02-21-98	Harbor seal Phoca vitulina	A	9803Pv	?	Stranding	Euthanized On 03-12-98	Necropsy at JHU- report pending
03-11-98	Grey seal Halichoerus grypus Neonate	A	9804Hg	M	Chincoteague, VA, 03-11-98	Assessed at NAIB underweight, emaciated	Released at Hardings Beach, Chatham, MA on 11-23-98, satellite tagged- tracked for 26 days.
03-15-98	Harbor seal Phoca vitulina	A	9805Pv	F	Ocean City, MD, 03-15-98	Brought to NAIB, labored breathing, lethargy and emaciated	Seal found dead next morning in pen. Carcass taken to JHU for necropsy.
03-23-98	Grey seal Halichoerus grypus	A	9806Hg	M	Cape Henolopin State Park	Brought to NAIB, coughing, mucus in nostrils, labored breathing, emaciated	Died on 03-27-98. Carcass sent to JHU for necropsy.
07-16-98	Snapping turtle Chelydra serpentina	A	9807Cs	?	Bear Creek, Dundalk, MD	Animal stuck in mud as high tide was coming in. At low tide two attempts to release animal	Animal released at 16:30 on 07-16-98 at Bear Creek.

11-15-98	Loggerhead sea turtle Caretta caretta	A	9808Cc	?	Ferry terminal Lewes, DE	To NAIB cold stunned	Animal released to VMSM on 01-22-99.
11-28-98	Harp seal Phoca groenlandica	A	9809Pg	F	Assateague Island	Brought to NAIB, radiographs revealed 8 pieces of shot in chest and abdomen	Animal euthanized on 12-01-98. Carcass sent to JHU for necropsy.
12-30-98	Kemps Ridley sea turtle Lepidochelys kempii	A	9810Lk	?	Original stranding Coast Guard Beach, Eastham, MA	Cold stunned. Moved from New England Aquarium to NAIB on 12-30-98 for further rehab.	Animal released on 03-23-00 to Hidden Harbor Turtle Hospital in Marathon, FL for further rehab.
12-30-98	Kemps Ridley Sea turtle Lepidochelys kempii	A	9811Lk	?	Original stranding at Boat Meadow Creek, Eastham, MA on 11-22-98	Cold stunned, mild pneumonia missing left rear flipper. Transferred to NAIB on 12-30-98 for further rehab.	Animal released on 03-23-00 to Hidden Harbor Turtle Hospital in Marathon, Fl for further rehab.
12-30-98	Kemps Ridley sea turtle Lepidochelys kempii Juvenile	A	9812Lk	?	Original stranding on 11-03-98 Crosby Landing, Brewster, MA	Cold stunned. Animal transferred to NAIB on 12-30-98.	Tagged and released at Ocean City, MD n 07-17-99.

	National Aquarium in Baltimore					
	Marine Animal Rescue Program					
				Alive or		
Date	Accession	Sex	Number	Dead	Stranding Location	Comments
1/21/1999	*Phocoena phocoena* Harbor Porpoise	M	9901Pp	A	Barnstable, Massachusetts	Released 6/18/99. Satelite tagged and tracked for 60 days
1/27/1999	*Phoca vitulina* *Harbor Seal*	F	9902Pv	A	Assateague Island, Maryland	Died in route to Aquarium
3/28/1999	*Globicephala melas*	M	9903Gm	A	Assateague Island City, Maryland	Euthanized on site
7/13/1999	*Caretta caretta* Loggerhead Sea Turtle	U	9904Cc	A	Sussex, Deleware	Euthanized 8/14/99
8/16/1999	*Tursiops truncatus* Bottlenosed Dolphin	M	9905Tt	A	Ocean City, Maryland	Caught in line, died during assessment
8/21/1999	*Caretta caretta*	U	9906Cc	A	Gibson Island, Maryland	Transferred to VA Marine Sci. Museum
9/6/1999	*Tursiops truncatus* Bottlenosed Dolphin Offshore stock	F	9907Tt	A	Berlin, Maryland	Died 10/15/99 Shark bite wounds

	National Aquarium in Baltimore					
	Marine Animal Rescue Program					
				Alive or		
Date	Accession	Sex	Number	Dead	Stranding Locatior	Comments
1/8/2000	Harbor Seal *Phoca vitulina*	F	0001Pv	died	Virginia Beach	Necropsied at JHU
1/13/2000	Harbor Seal *Phoca vitulina*		0002Pv	died	Virginia Beach	euthanized
	Harbor Seal *Phoca vitulina*	M	0003Pv	Alive	Chincoteague, VA	Died during transport.Human interaction
	Terrapin from Pepco		0004Cc			died
5/25/2000	Pygmy Sperm Whale *Kogia breviceps*		0005Kb	Alive	Monmouth, NJ	Necropsied at NAIB
	Leatherback Sea Turtle *Dermochelys coriacea*		0006Dc			released in Ocean City
8/26/2000	Loggerhead Sea Turtle *Caretta caretta*		0007Cc	Alive	Ocean Pines, MD	Euthanized, Human interaction (boat strike)
11/8/2000	bottlenose dolphin *Tursiops truncatus*		0008Tt	Alive	Shrewsbury, New Jersey	Out of habitat, collection relocation attempt

National Aquarium in Baltimore
Marine Animal Rescue Program - Accession record for 2001

Date	Animal	D/A	NAIB ID#	Sex	Rescue Location	Disposition	Comments
1/9/01	Harbor seal *Phoca vitulina* YOY	A	0101pv	M	Nags Head, NC	Died in transit	Held overnight at VMSM, Necropsied at JHU Pneumonia, lung hemorage, stomach parasitism
1/13/01	Harbor seal *Phoca vitulina* YOY	A	0102pv	M	VA Beach,VA	Relocated to Riverhead, Released from riverhead in September	Pox., tape worms, 35 to 71 pounds as of 3/22/01
1/22/01	Harp seal *Phoca vitulina* Adult	A	0103pg	M	Assateague National Park, MD	Euthanized	Necropsied at JHU- report pending
2/7/01	Harp seal *Phoca greonlandica* Beater coat Juvenile	A	0104pg	F	Chincoteague, VA	Assessed at NAIB, Transported to MMSC	Still in rehab. At MMSC
2/21/01	Harp seal *Phoca greonlandica* Adult	A	0105pg	?	Bishopville, MD	Rescued from a pond at the head waters of the St. Martins River.	Assessed by Dr. Traegal (vol. MARP vet) , Euthanized. Necropsy COL- report pending. Plastics reported in stomach
2/21/01	Grey seal *Halichoerus grypus*	A	0106hg	?	135th st. OCMD	Relocated	Relocated because body condition and demeanor was reported as satisfactory. Animal was being harassed by beach-goers. Entered water by next morning.
4/23/01	Harbor seal *Phoca vitulina*	A	Investigation no number assigned	?	Hog Island, Virginia.	Went back into the water. Followed up by VMSM	A real estate broker saw the seal on the beach while flying in his helicopter. He landed "next to the seal" and tried to feed it a granola bar. I provided the individual with outreach materials, etc. Pictures he had taken showed that it appeared healthy.
5/7/01	Common dolphin *Delphinus delphi*	A	Investigation no number assigned NAIB: Mark Sampson and Jimmy Traegal responded along with VMSM	?	Chincoteague, VA	People pushed it into the water but it restranded two days later	Animal euthanized at scene by VMSM. Necropsy results pending
6/13	Loggerhead *Caretta caretta*	A	0107CC		Hooper's island, MD	Turtle rescued from a pound net with the cooperation of a	Animal animal tagged left and right front and pit tag. Reports of tag numbers and DNA sample sent to Wendy

						local waterman	Teas. Approx. 60 pounds.
6/13	Loggerhead *Caretta caretta*	A	0108CC		Hooper's island, MD	" "	Already tagged by VIMS in 1994. No pit tag. Report sent to NMFS Wendy Teas. Weight approx. 100 pounds.
5/18	Rough toothed dolphin *Steno bradenses*	A	0109SB	F	Cape Henlopen, DE.	Euthanized three days after being transported to Riverhead.	Results pending, transport involved OC MARP team MERR team and Riverhead. Blood ran by Beebe medical Center. NMFS report sent in by Riverhead.
6/24/01	Leatherback ST\ Dermochelys coriacea.	A	0110DC	U	Assawoman Bay, Lighthouse sound near golf course.	Freed from crab pot	
7/8/01	Tursiops truncatus	A	0111tTt	M	Stranded on Assateague National Seashore	Animal was returned to the water by public and later euthanized	Animal necropsied by MD COL 204cm male. Rancid smell inside suggesting disease. COL to complete report and send to NAIB and NMFS.
7/31/01	Hooded seal Cystophora cristata	A	0112Cc	M	Assateague National Seashore 38 09.78 North 075 10.00 West	Eating sand rescued by Mark Sampson, called in by Jack Kummer NPS	In guarded but stable condition. To be released 11/8-9
8/8/01 8/20/01	Humpback whale(s)	A D	Investigation	U F	Ocean City Inlet. 12.5 miles SE of OC Inlet	Whale harassed into the SE jetty by 3 tourist boats. Dead humpback discovered 1.5 weeks after inlet incident.	Scot Yamashita of the NOAA OFLE was contacted regarding the harassment issue. Due to a lack of resources the humpback whale discovered 1.5 weeks later could not be towed in to indicate if this was the same whale.
	Loggerhead	A E	0113Cc	U		Boat struck	
9/3/01	Hooded seal	A R	0114Cc	U	Animal stranded on Assateague relocated		Possible death. Hooded seal later retrieved by VMSM in nearby area.
9/20/01	Hooded seal	A	0115Cc	M	Animal stranded on marsh in Captain's Creek behind CNWR		Released 12/21/01 Chatum, Mass
10/01	Terrapin	A	0116	U	Turtle transported to the Chesapeake Wildlife Sanctuary		Current status unknown
12/3/01	Green sea turtle	A	0117Cm	U	Turtle found cold stunned on Assateague Island.	Cold stunned- in rehab. -thriving	Turtle transported to the Topsail Sea Turtle hospital in NC awaiting a spring release.

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				ongo	Alive or		
Date	Common name, *Genus, species*	Sex	Number	total #	Dead	Stranding Location	Disposition
2/10/2002	Harbor seal *Phoca vitulina*	u	0201Pv		A	Ocean City, MD 18th street	returned to water of own accord
2/25/2002	Harbor seal *Phoca vitulina*	u	0202Pv		A	Assateague Island Nat. Sea Shore	returned to water of own accord
3/17/2002	Harbor seal *Phoca vitulina*	u	0203Pv		A	Ocean City, MD 133rd street	returned to water, traveled south was reported on beach at 131, and 91 street, but returned to water of own accord
4/17/2002	Kemp's ridley *Lepidochelys kempii*	u	0204Lk		A	transferred from NEA	cold stun rehab from NEA, released off DEL
4/17/2002	Kemp's ridley *Lepidochelys kempii*	u	0205Lk		A	transferred from NEA	cold stun rehab from NEA, released off NC
4/17/2002	Kemp's ridley *Lepidochelys kempii*	u	0206Lk		A	transferred from NEA	cold stun rehab from NEA released off NC
4/17/2002	Kemp's ridley *Lepidochelys kempii*	u	0207Lk		A	transferred from NEA	cold stun rehab from NEA, released off OC
4/17/2002	Kemp's ridley *Lepidochelys kempii*	u	0208Lk		A	transferred from NEA	cold stun rehab from NEA, released off NC
4/17/2002	Kemp's ridley *Lepidochelys kempii*	u	0209Lk		A	transferred from NEA	cold stun rehab from NEA, released off NC
5/21/2002	Loggerhead *Caretta caretta*	u	0210Cc		A	ocean city	transported to topsail for release
6/9/2002	Loggerhead *Caretta caretta*	u	0211Cc		D	taken to COL for necropsy	
6/12/2002	Loggerhead *Caretta caretta*	u	0212Cc		A	Corinthian Yatch Club, Ridge MD	listing to one side in water, euthanized at NAIB
6/19/2002	Loggerhead/Green *Caretta caretta/ Cheylonia mydas*	f	0213Cc		A	Bower's Beach, Delaware	boat strike injuries on head and left side of carapace, still in rehab @ NAIB released off Charelston SC 11/15/02 with satellite tag and tracked for 339 days - genetics sent out to determine if loggerhead or logger green hybrid - results back received in 3/04 as loggerhead
6/30/2002	Loggerhead *Caretta caretta*	u	0214Cc		A	OC, MD	died in transport
7/30/2002	long finned pilot whale *Globicephala melas*	m/f	no number assigned		D	Wellfleet, MA	mass stranding on chapin beach west dennis, ma and then on wellfleet mudflats, assisted with recovery and necropsy
8/3/2002	leather back *Dermochelys coriacea*	u	0215Dc		A	20 miles off OC	ocmarp (Mark Sampson) disentangled from gear (crab or whelk pot line) and released - gear not damaged - left in water animal swam away as released
8/14/2002	Loggerhead *Caretta caretta*	u	0216Cc		D	waters off OC	brought into uscg picked up by COL

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				ongo	Alive or		
Date	Common name, *Genus, species*	Sex	Number	total #	Dead	Stranding Location	Disposition
8/22/2002	Northern Right Whale *Eubalaena glacialis*	f	0217Eg		D	floater	towed to assateague national sea shore from 25 miles off shore, naib & col very basic necropsy
8/30/2002	Bottlenose Dolphin *Tursiops truncatus*	m	0218Tt		A	Assateague Island Nat. Sea Shore	died at naib 8/31
9/14/2002	Loggerhead *Caretta caretta*	u	0219Cc	147	A	ocean city	died during transport to OC
12/2/2002	Kemp's ridley *Lepidochelys kempii*	u	0220Lk		A	dennis ma	cold stunned--transported from NEA (MH-02-759-Lk)to NAIB for rehab- then to the aq of the americas in new orleans for continued rehab- released
12/2/2002	Kemp's ridley *Lepidochelys kempii*	u	0221Lk		A	ma	cold stunned--transported from NEA(MH-02-769-Lk) to NAIB for rehab then to aq of the americas in new orleans for continued rehab-
12/2/2002	Kemp's ridley *Lepidochelys kempii*	u	0222Lk		A	ma	cold stunned--transported from NEA (MH-02-743-Lk)to NAIB for rehab then to aq of the americas in new orleans for continued rehab-
12/2/2002	Kemp's ridley *Lepidochelys kempii*	u	0223Lk	162	A	ma	cold stunned--transported from NEA (MH-02-744-Lk)to NAIB for rehab then to aq of the americas in new orleansf or continued rehab- released

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				Alive/				
Date	**NAIB ID #**	**Genus/species common name**	**Sex**	**Dead**	**Stranding Location**	**Comments**	**Disposition**	**running #**
1/7/03	0301Pv	*Phoca vitulna* harbor seal	U	A	Assateague Island, MD	returned to water on own, blood found in sand	returnd to water on own	
1/14/2003	0302Pv	*Phoca vitulna* harbor seal	M	A	Nags Head, NC	transported from NC to VMSM to NAIB oronasal fistula found--euthanized	euthanized	
2/12/2003	0303Pg	*Phoca groenlandica* harp seal	M	A	33rd street, OC	beater coat harp	died NAIB 6/22/03 septic DIC	
3/21/2003	0304Pp	*Phocoena phocoena* harbor porpoise	M	A	Avon, NC	stranded on Avon, NC- transported to VMSM for overnight, came to NAIB next day 3/21	transported to UNE (keith matassa) on 9/5/03 released at 43.564N X 70.135W with sat. tag on 1/20/04 and tracked for 63 days "gus" freeze brand 901	
4/6/2003	0305Lk	*Lepidochelys kempii* kemp's ridley	U	A	ME	transported from NEA(MH-02-822-Lk) - cold stun	transported to Florida Aquarium 10/16/03	
4/6/2003	0306Lk	*Lepidochelys kempii* kemp's ridley	U	A	ME	transported from NEA(MH-02-839-Lk) - cold stun	transported to Florida Aquarium 10/16/03	
7/8/2003	0307Cs	*Chelydra serpentina* snapping turtle	U	A	MD	found Forth McHenry carapace damage	maintained in sx pier 4	
7/11/2003	0308Lk	*Lepidochelys kempii* kemp's ridley	U	A	MD	pound net entanglement off taylor's island, brought in by COL, successful disentanglement, but old carapace fracture	released off taylor's island 9/25/03	
7/24/2003	0309Mn	*Megaptera novaeangliae* humback whale	U	A	MD	swimming offshore with buoy and line attached. first spotted in DE, tracked through OC disentanglement and tagging attempt by glen salvador and tds. Moving south, lost tag within 24hrs.		
8/14/2003	0310Mm	*Mola mola* ocean sunfish	U	A	assawoman bay, MD	reported as a dolphin with cut dorsal to NRP turned out to be ~450lb sunfish, found in bay transported back to sea and released		
8/?/03	0311Mn	*Megaptera novaeangliae* humback whale	U	A	water off coast of OC	whale reported dragging gear about a mile off shore, oc marp investigated but did not find animal -kayaker described 2 humpbacks, 1 dragging gear going out to sea, thought it possibly dislodged the gear on its own		
12/26/03	0312Pv	*Phoca vitulina* harbor seal	F	A	144th street OC	collected by animal control, transported to easton - naib emaciated, lesions/ulcerations on mouth. Rads show bird shot in head and neck (6 pellets). Found dead in pen on 1/1/04		
12/26/2003	no number	*Phoca vitulina* harbor seal sp. unconfirmed	U	A	north jetty, OC	oc animal control report: small seal (thought to be a harbor) on rocks of north jetty. too far out to collect safely. patrol of area next day did not find seal		
12/27/2003	no number	*Phoca vitulina* harbor seal sp. Unconfirmed	U	A	Assateague Island, MD	NPS report of seal in and out of the water in same area for 36 hours. As collection plan was being coordinated, seal went back into water.		
12/28/2003	0313Pv	*Phoca vitulina* harbor seal	U	A	chincoteague national seashore, VA	NPS reported animal to NAIB and VMSM. VMSM collected animal and relayed to MERR in salisbury relay to NAIB in easton found dead in pen 1/11/04		
12/31/2003	0314Pv	*Phoca vitulina* harbor seal	U	A	82nd Street OC, MD	harbor seal relayed from OC (oc animal control) to MERR in Indian River then to (MMSC) Brigantine - released off NJ in April 04		

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				Alive/				
Date	**NAIB ID #**	**Genus/species common**	**Sex**	**Dead**	**Stranding Location**	**Comments**	**Disposition**	**running #**
1/1/04	0401Pv	*Phoca vitulina* habor seal	F	A	41st street OC	thin, ulcerations on mouth	Mark Sampson, Dave Quilter, OC animal control collected animal. Charlotte Sampson relayed to easton. Animal was seizing upon arrival at SAGA, vomitting, agonal - pain meds administered in lieu of euthansia solution, died	178
1/16/04	0402Dd	*Delphinus delphis* common dolphin	M	A	OC waters	listing to one side - alone	collected from water, died as moving up the beach - to COL for necropsy COL # 04DDE02	179
1/22/04	0403Pg	*Pagophilus groenlandicus* harp seal	M	A	Lewes, DE	lethargic - allowing people to approach	MERR collected animal and relayed to 404 - recycling center. rads show rocks in stomach. recovered well from sx. transported to UNE on 2/26/04 for continue rehab RELEASED 4/18/04 with sat. tag from fortunes point beach, maine with UNE "lewie" and tracked for 35 days.	180
2/17/04	investiga-tion	seal - unconfirmed sp	U	A	Manklin Creek, MD (near ocean pines)	call from public to report a seal smaller than a german shepard. Hugh Hommel was the contact	swam away	no number assigned so not in count
2/25/04	0404Pv	*Phoca vitulina* harbor seal	F	A	virginia beach, VA	transfer from VMSM - stranded 2/10/04 @ camp pendalton in virginia beach "hopper" vmsm name	transported for release to Riverhead. One night in riverhead and released with satellite tag "hopper" from shinnecock bay, ny 6/17/04 and tracked for 29 days.	181
3/13/04	investiga-tion	*seal - unconfirmed sp*	U	A	surf ave. OC, MD	on the jetty - reported by public - suspect possible eye injury	back in the water on own (seal picked on 3/14 and euthanized 0409Hg may be the same animal)	no number assigned so not in count
3/13/04	0405Pg	*Pagophilus groenlandicus* harp seal	M	A	Rehoboth, DE	picked up by MERR - eating sand	died at naib 3/23/04 -necrospy at JHU	182
3/13/04	0406Cc	*Cystophora cristata* hooded seal	M	A	Assateague IS, MD	adult (300lbs + and ~ 7 ft long) past dunes in campground on Ass. State park	relocated to remote portion of Ass National park on 3/13, animal still there on 3/14 in poor condition (labored breathing, lethargic) and was euthanized by Jimmy Traegal and brought to COL for necropsy. COL # 04CCR07	183
3/14/04	0407Hg	*Halichoerus grypus* gray seal	U	A	OC beach	picked up by OC Animal Control	missing 1 eye, injured - euthanized by J Treagel at whaleyville animal hospital and sent to COL for necropsy COL # 04HGR06	184
3/22/04	investiga-tion	*Lutra canadensis* river otter	A	U	OC	animal reported in the water on bay side at jolly roger's. reported as seal turned out to be river otter		no number assigned - not in count
6/5/04	investiga-tion	sea turtle (unconfirmed sp.)	U	A	St. Mary's Co., Cedar Cove, 1 mi S. of Naval Air Station	animal reported in the water, later sighted on beach in Cedar Cove, alive, unresponsive but raised head/moved	2ft long, 1.5 ft wide, 1ft high, heavy barnacle load, green shell/yellow-gray shell	no number assigned so not in count
6/9/04	investiga-tion	dolphin (unconfirmed sp)	U	A	OC, 54th St. heading S	reported in water		no number assigned so not in count
6/16/04	0408 Gg	*Grampus griseus* risso's dolphin	F	A	OC, 51st St.	alone, picked up by OC MARP after being supported in the water for ~1hr	Dr. Jimmy Traegl euthanized with 40 cc of ketamine after animal transported to Ambo and began to sieze. DNR/COL necropsied: Lung abscesses, necrotic intestinal tissue, signs of just giving birth(difficult birth, no sign of calf, assumed dead); level A sent in by COL	185
6/18/04	0409Cs	*Chelydra serpentina* s napping turtle	U	A			Brought in by Dr. Brent Whittaker, apparently hit by a car, rehabilitation by NAIB veterinary staff, released	186
7/1/04	0410 Gg	*Grampus griseus* risso's dolphin	M	A	MD, Assateague Nat'l Seashore 500 yds N of state line	calf reported alone in the water, body moribund upon discovery, 149.8 cm straight length	Euthanized by Dr. John Maniotti using 40 mL of Beuthanasia via heart stick and necropsied by DNR/COL, still had 6 apparent fetal folds, hemmoraging apparent in brain and liver, lung abscess. Cause of death will be determined by results of tissue cultures.	187
7/14/04	0411Cs	*Chelydra serpentnia* s napping turtle	U	A	Pier 3, NAIB, Baltimore, MD	visible from NAIB, shell fracture, reported to staff	treatment and rehabilitation for shell fracture in process with NAIB veterinary staff relocated/released to WL sanctuary	188
7/15/04	0412 Cc	*Caretta caretta* loggerhead sea turtle	U	A	OC Bayside between 13th and 14th streets, floated to 9th by the time it was pulled from water	reported in water alone, floating, animal heading back to see when picked up by MARP, shell cracked from notch to notch from boat strike, left lung visible through crack in shell, animal was breathing fairly normally and was transported to NAIB, 60.5 cm straight length from notch to notch	Upon examination by NAIB vets the animal was determined to be moribund and was euthanized by new Aquarium Vet, Dr. Leigh Clayton, **using" "**. Necropsied on site. Left lung punctured and diseased from boat strike, no food in entire digestive system, unable to sex visually, barnacles down esophagus, scutes on carapace blistered and peeling, gray adipose tissue was soft, lateral scutes split and diseased, all flippers showed signs of blistering skin damage, heavy bio load when animal came in had to be removed to observe most of the above injuries. Tissues collected and banked, skull and shell kept for educational purposes (currently at Smithsonian being cleaned).	189
8/7/04	0413 Tt	*Tursiops truncatus* bottlenose dolphin	F	A	Chester River/Lankford Creek	reported in shallow water of Chester River and then in creek that feeds into Chester River	lone dolphin was reported on 8/7 by locals, monitored by locals who reported to TDS over weekend. MARP staff and intern monitored animal on-site on 8/10, NMFS sent representative for monitoring on 8/11. Animal lethargic, moving slowly, 8 ft long, female, severe scarring on dorsal fin, old shark bites visible. Animal continued upriver in shallow water until it eventually stranded in less than 2 ft of water in Lankford Creek where it was severely lethargic and unable to keep upright. It expired as MARP staff were preparing for a water catch. Carcass collected and delivered to COL for necropsy. Awaiting necropsy results. Estimated age: over 30 yrs old.	190
8/20/04	0414 Ba	*Balaenoptera acutorostrata* minke whale	M	D	6 mi N of Va./Md line	calf spotted floating water by MARP during annual dolphin count, dead upon discovery	Animal 18 ft long, no visible trauma. Carcass towed to Assateague National Seashore by US Coast Guard and necropsied by COL and NAIB staff, awaiting necropsy results.	191

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				Alive/				
Date	**NAIB ID #**	**Genus/species common**	**Sex**	**Dead**	**Stranding Location**	**Comments**	**Disposition**	**running #**
8/26/04	0415 Dd	*Delphinius delphii* common dolphin	F	A	15th Street, OC	cetacean spotted very close to shore alone by USCG	animal beached at 6th street, OC MARP responded, animal bleeding from mouth, internal bleeding, superficial scrapes on flukes from beach. Animal removed from beach to 15th St fire station where it expired while awaiting Dr. Maniotti to arrive for euthanization. juvenile female, 7 ft, approximately 250 lbs. necropsy conducted by COL, awaiting results.	192
9/21/04	investiga-tion	turtle - unconfirmed sp	U	A	Florida	teacher reported that a student had brought a sea turtle hatchling back to VA from vaction. Message came through Sandy Barnett. Contacted teacher who investigated with student turned out to be a land turtle		no number so not in count
9/22/04	investiga-tion	*Trichechus manatus* west indian manatee	U	A	Port Tobacco River, Charles County	animal sighted swimming around a marina 10-12 miles north of the mouth of the Potomac River. Animal seems healthy. TDS reported to USGS Sirenia - Cathy Beck. Second sighting on Sunday 9/26 by Mike Dockerty in Breton Bay, South of the Port Tobacco river in swimming in shallow water CP reported to Cathy Beck		no number so not in count
9/24/04	investiga-tion	*Tursiops truncatus* bottlenose dolphin	U	D	Ocean City, MD	dead dolphin washed up on oc beach reported by oc communications	DPW transported to 65th street for necropsy by COL	no number so not in count
10/29/2004	investiga-tion	*Tursiops truncatus bottlenose dolphin*	U	D	Assateague IS, MD	large - flat fluked animal reported to Hugh Hommel dead on beach	CP reported to Juli who responded - Tt probably offshore - pending	no number so not in count
11/26/2004	investiga-tion	sea bird	U	A	Ocean City, MD	injured shore bird reported by naib member on trip to OC	cp assisted in connecting to OC animal control	no number so not in count

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Date	NAIB ID #	Genus/species common name	Sex	Alive/Dead	Stranding Location	Comments	Disposition	running #
1/16/05	assist /no number	short finned pilot whales *Globicephala macrorhynchus*	both	D	oregon inlet/bodie island, NC outerbanks	assisted with necropsy at request of Aleta Hohn through Janet Whaley	necropsied on beach	no number assigned - not in count
2/4/2005	0501Pv	Harbor seal *Phoca vitulina*	F	A	VA beach	admitted to VAQS on1/3/05 with trauma to L eye and abrasions on L side of head. Transferred to NIAB on 2/4/05 for continued rehab	"sand dollar" released off ocean city on 3/15/05 with satellite tag and rr flipper yellow roto tag #0010	193
2/6/2005	0502Pv	Harbor seal *Phoca vitulina*	U	A	delaware	collected by MERR and held overnight, transported to Easton to meet NAIB volunteers - DOA in Easton	DOA at meeting point in Easton. MERR volunteer kept carcass for necropsy by MERR	194
2/18/2005	0503 Hg	Gray seal pup *Halichoerus grypus*	M	A	South Bethany Beach, DE	admitted to NAIB, dehydrated and underweight. Later was determined to have seal pox and possible liver disease	euthanized 3/2/04, necropsied at Johns Hopkins tissues sent to AFIP	195
2/26/2005	0504 Hg	Gray seal pup *Halichoerus grypus*	U	A	Ocean City	Animal Control Officer Pam Bunting recovered and transported to Easton to meet NAIB team, animal died in transport. Initial investigation showed possible pox lesions on underbelly	died in transport, frozen for later necropsy. Necropsied at Assateague Island as a workshop animal - COL performed the necropsy and sent any viable samples out.	196
3/6/2005	investigation no number	seal - unconfirmed sp. reported to be a Gray seal pup *Halichoerus grypus*	U	A	Assateague	call from DNR communications stating that there was a possible seal on beach, but did not find it when patrol drove up and down Assateague		no accession so not in count
3/6/05 - 3/7/05	investigation	seal - unconfirmed sp. reported to be a Gray seal pup *Halichoerus grypus*	U	A	on beach between 133rd 134th streets, Ocean City	first spotted at 5:00pm on 3/6/05 hauling out onto beach. Observed by Larry Sackadorf going back into water. Larry stated that seal appeared to have "swollen beestings" on its neck area (possible pox?) call from OC police and fire communications - reported by citizen Tina Balderson 410-592-0596 as being alive at 6:00am the following morning, same location	went back into water	no accession so not in count
3/11/2005	0505Hg	Gray seal *Halichoerus grypus*	U	A	Ocean City 122 street	collected by OC animal control (Pam Bunting) and transported to NAIB volunteer in Easton	DOA at NAIB - carcass necropsied at Hopkins	197

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Date	NAIB ID #	Genus/species common name	Sex	Alive/Dead	Stranding Location	Comments	Disposition	running #
3/11/2005	0506Pg	Harp seal *Pagophilus groenlandicus*	U	A	Assateague Island National Seashore - 4.7 miles south in the off road	photos from ranger (Lynn Belanich) to determine status	relocated to protected (no public traffic area) .5 miles north of the State Park Line	198
3/15/2005	0507Hg	Gray seal *Halichoerus grypus*	U	A	Ocean City at the Inlet	Baltimore MARP in town - responded - pup on beach not emaciated, but showing neurologic signs - head sway, not focusing on us when approached - allowed us to wrap in blanket easily	transported to Dr. Maniatty - agonal on arrival - euthansia sol'n administerd then transported to trish kimmel (in town for meeting) to take to COL/DNR - col number: 05-HGR-03	199
3/17/2005	0508UP (unknown phocid)	reported as Gray seal Halichoerus grypus (unconfirmed species)	U	A	Ocean City 63rd street	OCPD (Officer Joe Lotito) found small seal entangled in line around net - thought animal was choking so removed netting the seal returned to water after about 20 seconds. OC Animal Control (Pam Bunting) patroled beach but did not find animal	OC Animal Control will continue to patrol (NAIB requested pictures of net and for it to be mailed to us to send to NMFS)	200
3/25/2005	0509Pg	Harp seal *Pagophilus groenlandicus*	U	A	assategue island	ranger todd garrett (assateague island national seashore) reported seal was sighted the night before at tide line - healthy resting seal but was moving toward the camp gorund the next mornining (up the dune rather than back to the water) - sent pics decided to relocate	relocated to protected (no public traffic area) North end of the island, approximately 3 miles north of Shell road, 3.3 miles north of the paved Road (611). Lat 38* 16.4' N Long 074* 49.3' W	201
3/29/2005	0510Pg	Harp seal *Pagophilus groenlandicus*		A	NC	VAQS admitted on 3/26, reported on the beach eating sand - BAR rads show several rocks in abdomen	original field number is from NC: JND006 transported to NAIB on 3/29/05 - passed one rock on own, endoscopy removed 7 more - released with Riverhead - shinnecock bay 40 52' 18.3" N X 072 31' 47.7" W on 6/2/05 with satellite tag "Petey" - yellow roto tag #0027	202
4/18/2005	0511Pv	Harbor seal *Phoca vitulina*	U	A	Ocean City just south of the fishing pier at Dorcester street	DPW reported seal on beach to OCPD - pics show animal in good body conidition with some healing wounds/lesions BAR - approx 3.5 feet in length	Hugh and Dave Q. assessed on beach and collected with Barab W of OC Animal control relocated seal to state park, approximately 8 miles south of OC jetty near nature center on Assateague State Park -under direction of JC Barbly (state park ass. manager) lat and long: 38° 11.9' N 075° 09.1' W. Seal went into the water immediately, then hauled out in same general location. It continued to get in and out of the water that day with no further sightings reported.	203

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Date	NAIB ID #	Genus/species common name	Sex	Alive/Dead	Stranding Location	Comments	Disposition	running #
4/26/2005	0512Lk	Kemp's ridley sea turtle *Lepidochelys kempii*	U	A	Sand Neck Beach, Barnstable, MA	Cold stun / boat strike from NEAq - original stranding date 11/16/04 NEAq # MH 04-703-Lk	transported to NAIB on 4/26/05 - had yellow band at NEAq but was removed no band in NAIB - double carapace fracture - boat strike. Pit tag # 072 570 595 (right forelimb). Released 9 miles off shore SE of OC (Assateague area) over Great Gull Bank 38° 12.917N X 74 57.415W 75° water temp. Released with 0513Lk	204
4/26/2005	0513Lk	Kemp's ridley sea turtle *Lepidochelys kempii*	U	A	Kingsbury Beach, Eastham, MA	Cold stun from NEAq - original stranding date 12/5/05 NEAq # MH 04-712-Lk	transported to NAIB on 4/26/05 - blue green band. Pit tag # 072 367 631 (right forelimb) . Satellite tagged and released 9 miles off shore SE of OC (Assateague area) over Great Gull Bank 38◦ 12.917N X 74 57.415W 75° water temp. Released with 0512Lk. Named "Sapphire" by NEAq - tracked on Whalenet.	205
5/1/2005 - 5/2/2005	0514Pv	Harbor seal *Phoca vitulina*	U	A	Ocean City - 23rd street	ocpd reported - hauled out on beach - approx 3.5- 4ft in length	Barb W and Hugh Hommel on scene - BAR good condition pics taken on file - late enough in evening that crowd should not be problem - 24 observation on seal with plan to relocate to Assateague State Park if needed overnight or next am - 5/2/05 - Barb W and Dave Q. on scene hauled in and out several times 60-65 streets - very active/good condition slight abrasion on flipper - possible public interaction problems - relocated to Assateague State Park approximately 8 miles south of OC jetty near nature center - 38*11.9'N 075 09.1'W same location as 0511Pv under direction of JC Barbly	206

National Aquarium in Baltimore Marine Animal Rescue Program

Accession 2005

Date	NAIB ID #	Genus/species common name	Sex	Alive/Dead	Stranding Location	Comments	Disposition	running #
5/17/2005	0515Tt	Bottlemose dolphin *Tursiops truncatus*	U	A	little annemessex river at bouy # 5	nrp reported an entangled dolphin - uscg standing by animal until we arrive	nrp helicopter flew tds, cp to crisfield airport, nrp boats took us to animal - 2 nrp boats, 1uscg boat tracked animal for 2 hours - red bouy visible between dorsal fin and fluke. mulitple attempts to disentangle with grappling hook and rope - no luck determined not attached to pot - grapple didn't catch anything and animal was free swimming at 3-4 knots (started in little annemessex moved into pocomoke sound into VA waters over our tracking period) - 5-8 feet long, good body condition, boat savy media alert put out asking for sightings to be reported to 800-628-9944 to track animal - if animal slows or moves to shallow water another disentanglement attempt will be made	207
5/20/2005	0516Gm	Long finned pilot whale *Globicephala melas*	F	A	Assateague Island National Park - on the beach behind the Ranger Station animal just over 13 feet	first sighting was in surf on state park side reported approx 7:45 pm, beached on national park land just over the boundry between state and national behind ranger station	died on scene during assesment - hugh hommel on scene - animal thrashed when touched - volunteers backed off for safety, animal was likely euthanasia candidate - expired on beach col worked up on 5/22 col number: MDDNR-05-GME-13	208
5/27/2005	investigation no number	Terrapin	U	A		good samaratin called about a sea turtle that was a terrapin. TDS instructed him to release the animal in the back bay area.		no accession so not in count
6/9/2005	0517Gg	Risso's Dolphin *Grampus griseus*	U	D	130th street, OC	first report was as a floater- Hugh overheard radio chatter from USCG, and reported to CP - called Juli and reported to COL, later that day reported stranded on 130th street OC - OCPD on scene, Del responded for public education as people were reported to be climbing on it or interacting with it in the surf	MD DNR/COL moved had animal moved to 65th street for necropsy COL# MD DNR 05-GGR16	209

National Aquarium in Baltimore Marine Animal Rescue Program

Accession 2005

Date	NAIB ID #	Genus/species common name	Sex	Alive/Dead	Stranding Location	Comments	Disposition	running #
6/14/05-6/15/05	0518Mn	Humpback whale *Megaptera novaeangliae*	U	D	sighted on 6/14 floating 2 miles off shore OC inlet	NOAA advised no action on 6/14 and then advised to tow and necropsy on 6/15. 6/15: Carcass was towed close to shore at Assateague State Park - but heavy shark scavaging activity made for public safety hazard so whale was towed 4 miles off shore and released	uscg towed carcass ~4 miles off shore, collected a tissue sample, and released at 38* 14.38 N 075-02.62 W. Tissue sample was given to juli to process md ddnr/col # MDDNR- 05MNO-20	210
6/28/2005	0519Gg	Risso's Dolphin *Grampus griseus*	M	A	stranded alive, died on the beach before assesment team arrived	reported by Ass. National Seashore as a bottlenose alive at extreme north end of the seashore (almost to the OC inlet) - OCMARP not available - cp jd responded with jimmy tragle lined up to euthanize animal md dnr/col also responded	animal died while response team in transit - md dnr, NAIB responded with national seashore to remove animal from beach and transport to COL for necropsy - MD DNR / COL # MD DNR 05GGR-26	211
7/2/2005	0520Cc	Loggerhead Sea Turtle *Caretta caretta*	U	D	floating in shallow water at a fishing pier at 9th street and Edgewater in OC	reported by DNR communications and by a public by- stander (Cheryl Conner 301-639-1934). Mark Sampson responded - reported that it was dead - and likely not fresh dead - possible boat strike wound apparent on carapace near hind quarters - per Juli: wounds do not look like typical prop but possible struck by hull	OCPD (officer Eade) on site - they requested a pick up from DPW. Juli was paged and told the animal would be at DPW 65th street waiting for necrospy MD DNR / COL # MD DNR 05CCA-28	212

National Aquarium in Baltimore Marine Animal Rescue Program

Accession 2005

Date	NAIB ID #	Genus/species common name	Sex	Alive/Dead	Stranding Location	Comments	Disposition	running #
7/3-7/4/05	investigation no number	Loggerhead Sea Turtle Caretta caretta	U	D	washed up on jetty near calvert cliffs	(officer Wilkinson) - contacted William Counterman of Calvert Cliffs Museum (410-586-3348) - he had received a call from Connie Smith at Metoaka Beach Cabins who reported the turtle - contacted Connie who reported: a turtle was seen a day or two ago on its back by a renter who may or may not have tried to flip it over in the water and it may have been alive (couldn't determine if the animal was moving or the water was moving it) but then washed out (was not called in that day - she just heard about it later). Turtle seen again on 7/3 and called in but gone when we spoke to her - not sure if alive or dead, Connie was given CP's pager number. Connie paged CP on 7/4 and reported the turtle washed up on the rock jetty dead near cabins at follwoing address. Connie - 410-586-0269 - 4510 Matoaka Lane, St. Leonard, MD (Calvert County)	reported to Juli at MD DNR / COL on 7/4/05	no accession so not in count
7/5/2005	investigation no number	Loggerhead Sea Turtle Caretta caretta	U	D	between 1st and 2nd street in OC	reported to naib by ward kovacs of ocbp as dead logger or leatherback between 1st and 2nd street - estimated to be 100lbs and looks like it is fresh dead. Reported as a boat strike	called md dnr / col to report - trish to call oc dpw for pick up - cindi called ward back to let him know md dnr would handle it	no accession so not in count
7/25/2005	investigation no number	Leatherback Sea Turtle *Dermochelys coriacea*	U	D	assateague island - southern tip of National Seashore - close to state park (state park reported it)	state park life guard cineva kline found carcass. Took marp staff to animal for species id and pictures	left carcass on scene, reported to juli at md dnr / col	no accession so not in count
8/23/2005	investigation no number	Common Dolphin *Delphinus delphis*	U	A	Indian River Inlet, DE	USCG Indian River reported live dolphin on the beach, also reported to MERR but did not get an immediate response from MERR - NAIB started phone calls for response. Chuck Erbe from MERR arrived on scene to repsond.	Died on scene, transported to MERR for necropsy	no accession so not in count

National Aquarium in Baltimore Marine Animal Rescue Program

Accession 2005

Date	NAIB ID #	Genus/species common name	Sex	Alive/Dead	Stranding Location	Comments	Disposition	running #
12/21/2005	investigation no number	Harbor seal Phoca vitulina	U	A	111st street in OC	Initial call on 12/21 - Hugh H investigated and stated animal was a harbor seal, and appeared healthy with decent blubber layer, clear eyes/nose, and appeared alert. Seal was moving in and out of water and migrating +/- a few blocks. Late on 12/21 Hugh recieved a report from animal control stating that the animal had cloudy eyes. Hugh rechecked th animal on 12/22, and found the carcass of the seal on the beach. Hugh said the animal seemed thinner up close, but not emaciated, and it appeared healthy with clear eyes and nose.	Died on scene on 12/22, tranported to 65th st and Col notified to pick it up.	no accession so not in count
12/22/2005	0521Pv	Harbor seal Phoca vitulina	U	A	Rock jetty next to OC CG station	Intial call came in early afternoon by OCCG as a possibly boat strike. Hugh dispacted Mark Sampsonand MS determined the animal was a "typical" animal we would pick-up, as there was blood trailing to the animal and on the face, though the amount was minimal. Mark collected the animal and transported to Dr. Traegel for examination. Dr Traegel reported open bleeding lesions that were not abrasions around the head and neck of the animal. Description was typical open, contagious seal pox lesions. Consult wit BS, JD, and Dr Traegel at 4:30pm and Dr. Traegel reccomemded euthanasia. Aniamal euthanised by Dr. Traegel.	Euthanized on 12/22, and transported to 65th st holding facility and DNR notified for pick-up	213
12/26/2005	investigation no number	unknown phocid	U	U	Assateague Island	Received page from NRP reporting a seal being sighted on Assateague National Seashore. Returned call to 410-641-3937 and left message, but did not receive a call back		no accession so not in count

National Aquarium in Baltimore Marine Animal Rescue Program

Accession 2005

Date	NAIB ID #	Genus/species common name	Sex	Alive/Dead	Stranding Location	Comments	Disposition	running #
12/30/2005	investigation no number	unknown phocid	U	U	Northern tip of Assateague Isalnd, by OC intlet	Page received from NRP at 6pm that a member of the public had reported a "baby seal on the beach bleeding from the mouth". Hugh was contacted and neither him or Mark could respond by 7pm (the time the last ranger was leaving). On 12/31 Mark and Hugh were ready to respond. JD contacted the rangers to see if the seal was spotted on the morning rounds, and the seal was not. The ranger stated there were no marks in the sand where he could see a seal had layed, and also no evidence of blood.		no accession so not in count

200601501

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CoE

DEPARTMENT OF THE ARMY
BALTIMORE DISTRICT, U.S. ARMY CORPS OF ENGINEERS
P.O. BOX 1715
BALTIMORE, MD 21203-1715

REPLY TO
ATTENTION OF

May 2, 2006

EJC

Regulatory Branch

RECEIVED
MAY - 5 2006
By

Dr. Dixie Henry
Maryland Historical Trust
100 Community Place
Crownsville, Maryland 21032

Dear Dr. Henry:

This letter is in reference to the Environmental Impact Statement (EIS) being prepared by EA for the Corps of Engineers/Port of Maryland for the Masonville Marine Terminal (Masonville) site located in Baltimore, Maryland. The proposed project is a confined placement of dredged material from the Baltimore Harbor. In accordance with Section 106 of the National Historic Preservation Act, we are requesting your comments regarding potential effects of the proposed undertaking on historic/archeological resources on the site or in the vicinity, including Fort McHenry, National Monument and Historic Shrine.

We are requesting information that your agency may have on the Masonville site that may assist us in the EIS process. Public scoping was conducted in early summer by the Baltimore District, U.S. Army Corps of Engineers (Regulatory Branch, Operations Division) although little agency input was received at that time. EA, Engineering Science and Technology has coordinated with your office previously concerning this project.

The Masonville site is located west of the Baltimore Harbor Tunnel in the Fairfield area of South Baltimore (Enclosure 1). The site is bordered by the Patapsco River and Ferry Bar Channel to the North, Masonville Marine Terminal to the South, Fairfield Marine Terminal to the East, and approximately 55 acres of Designated Habitat Protection Area (Masonville Cove) to the West (Enclosure 1). This study is based on the need to identify sites to manage approximately 1.5 million cubic yards (mcy) annually of material dredged from Baltimore Harbor for at least 20 years. Dredged material placement at the Masonville site would predominantly involve sediment dredged from the Patapsco River, upstream of the line between North Point and Rock Point (which is required to be managed in a confined facility if placed in the water).

The proposed project includes the construction of a confined dredged material placement facility (DMP) and the enhancement of Masonville Cove, located immediately adjacent to the proposed placement facility at the Masonville site. The proposed action includes evaluating alternative alignment, for the proposed DMP at the Masonville site (Enclosure 2). The preferred alternative proposes a footprint approximately 141 acres. The

NPS has no concerns from an hp. perspective - as per Anna Von Lunz 5/30/06

#1 ABC 5/30/06

final elevation for the preferred alternative is 36 feet, with the dikes temporarily raised to 42 feet during placement operations. This project would also include remediation of the Kurt Iron & Metal facility (including encapsulation of existing contaminants). The Masonville Cove improvements will largely act as mitigation for the project. Potential enhancements at Masonville Cove may include shoreline cleanup/rehabilitation, wetlands creation, fish reef creation, in-water cleanup and substrate improvements (for SAV protection/propogation), an ecological protection area, hiking trails, an observation deck, a canoe launch, and fishing beaches. The community and environmental enhancements would be considered during the NEPA process and our review of the permit application.

If you have any questions concerning this matter, please contact Ms. Mary Frazier at (410) 962-5679. Thank you for your time.

Sincerely,

V. A. Hobbs

Vance G. Hobbs
Maryland Section Northern

Enclosures (2)

Copy Furnished:

Ms. Anna Von Lunz, National Park Service 410- 962-4290 x239

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

The Maryland Historical Trust has determined that there are no historic properties affected by this undertaking.
EJC Date 5/30/06

OPTIONAL FORM 99 (7-90)
FAX TRANSMITTAL

To Kaitlin McC	# of pages ▶ 2
Dept./Agency	From Mary
Fax # 771-4209	Phone #
NSN 7540-01-317-7368	Fax #
5099-101	GENERAL SERVICES ADMINISTRATION

STATE OF MARYLAND
CRITICAL AREA COMMISSION
CHESAPEAKE AND ATLANTIC COASTAL BAYS
1804 West Street, Suite 100, Annapolis, Maryland 21401
(410) 260-3460 Fax: (410) 974-5338
www.dnr.state.md.us/criticalarea/

December 11, 2006

Mr. Nathaniel K. Brown, Principal Planner
Office of Harbor Development
Maryland Port Administration
2310 Broening Highway
Baltimore, MD 21224

RE: Masonville Dredged Material Containment Facility

Dear Mr. Brown:

At its meeting on December 6, 2006, the Critical Area Commission for the Chesapeake and Atlantic Coastal Bays concurred with the concept plan for the proposed dredged material containment facility (DMCF) at Masonville. This concurrence was made with the following conditions:

(1) Individual components of the proposed project must be approved by the Commission;

(2) Prior to the approval of any individual project component, the Maryland Port Administration must submit for review and approval a mitigation plan for the entire project;

(3) Future development of the site must include a properly vegetated 100-foot Buffer or mitigation at a 3:1 ratio for areas where establishment of the Buffer is not possible; and

(4) Future development of the site must include a stormwater management design based on appropriate best management practices that focus on improving water quality for the entire site.

Given the second condition listed above, in the next month, Commission staff will work closely with the Port to bring the mitigation plan to the Commission for review and approval as soon as possible. We appreciate the assistance of Port staff and consultants in providing information to facilitate Commission review. Kristen Gaumer of Moffatt &

Nichol was especially responsive in finding answers to a broad range of questions and in providing presentation materials.

If you have any questions or concerns regarding the Commission's approval or the next steps, please contact me at (410) 260-3477.

Sincerely,

LeeAnne Chandler
Science Advisor

cc: Meg Andrews, (MDOT)
Stephen E. Storms, Ph.D (MPA).
Michael W. Bozman, PE (MPA)
Mark C. Kreafle, Sr., PE (MPA)
Phillip Lee, PE (Moffatt & Nichol)
Kristen Gaumer, PE (Moffatt & Nichol)

CITY OF BALTIMORE

SHEILA DIXON, Mayor

DEPARTMENT OF PUBLIC WORKS

GEORGE L. WINFIELD, Director
600 Abel Wolman Municipal Building
Baltimore, Maryland 21202

January 26, 2007

Mr. Frank Hamons
Deputy Director for Harbor Development
Maryland Port Administration
2310 Broening Highway
Baltimore, MD 21224

Reference: Masonville Dredged Material Containment Facility
Relocation of 48-inch Water Main under Patapsco River

Dear Mr. Hamons:

As a follow up to our January 8, 2007 meeting, it is our understanding the following items were agreed to during the meeting:

1. The proposed shut-down period for the 48-inch water main can be increased by approximately six (6) weeks by initiating the shut-down on September 15, 2007. We note the water main shut-down period will be minimized by stipulating two work shifts in Maryland Port Administration's (MdPA) construction contract. We also recognize MdPA will allow the contractor to work six to seven days in a week for the water main work.

2. No underwater valve or Wye will be installed on the 48-inch main. This will require shut-down of the water main twice during the period of low water demand from September 15 to the end of April 2008.

Please contract Mr. Opinder Singh of the Water Engineering Section at 410-396-1470 if you need any further assistance in this matter.

Sincerely,

GEORGE L. WINFIELD
DIRECTOR

GLW/os
cc: Mr. Jay Sakai
Mr. Jaswant Dhupar
Mr. Gary Wyatt
Mr. Opinder Singh

MARYLAND DEPARTMENT OF THE ENVIRONMENT
1800 Washington Boulevard • Baltimore MD 21230
410-537-3000 • 1-800-633-6101

Martin O'Malley
Governor

Anthony G. Brown
Lieutenant Governor

Shari T. Wilson
Acting Secretary

February 21, 2007

Gahagan & Bryant Associates, Inc.
ATTN.: James Runion
9008-O Yellow Brick Road
Baltimore, MD 21237

Subject: Wetlands Case No.: 06-WL-1653/Maryland Port Administration
RAMS Tracking No.: 200663743
Borrow Material Analysis
Masonville Dredged Material Containment Facility construction

Dear Mr. Runion:

Thank you for supplying the information necessary for the Maryland Department of the Environment (Department) to make an evaluation of the mined sediment (borrow material) from an area near the Seagirt Marine Terminal for construction of the dike at the proposed Masonville Dredged Material Containment Facility. The Department, in its review, assessed the suitability, grain size of the borrow material for the dike construction, possible methods of placement, containment of the materials during construction and impacts to surrounding waters.

The composite dredged material to be used in the construction of the facility might be difficult to contain during placement due to the size and method of placement of the material. In addition, sloughing towards the existing channel is a concern. Please explain how the material is to be placed and contained if performed by hydraulic and/or mechanical methods. Additionally, address how much sloughing is anticipated if either of these methods is used to construct the facility. Furthermore, please describe the procedures that will be employed during construction to insure that the project will not violate Maryland's water quality standards. The Department has recommended the use of turbidity curtains in previous projects. In this case, a curtain would have to be deployed to the bottom and anchored to contain the turbidity plume generated by the placement of the fine materials. The Department has also authorized "geotubes" in previous projects to keep materials from sloughing towards the channel. The Maryland Port Administration (MPA) may consider geotubes or something of similar nature to deter sloughing of sediments

The Department also discussed the applicability of its dam safety regulations to the construction of the Masonville Dredged Material Containment Facility. Since, in many respects, these

regulations cannot be applied to the construction of the dike, the Department has decided to rely on the professional certification of the design engineer. This strategy will allow the Department to comment on the design, including structural, environmental and public safety considerations, while insuring that the most recent concepts for the construction of containment facilities are incorporated into the project. For example, at this point it its review, the Department has identified two items of concern related to the construction of the facility: (1) The dredged material may not be suitable for the foundation of the proposed containment facility unless the Geotechnical Engineer for the project demonstrates and certifies that the structure can be built on this foundation and (2) The Department's engineers are very concerned about the proposed water pipe through the proposed dike. The addition of material over the pipe will add to the load on the pipe and possibly cause failure. Please consider the removal of this pipe from the plans for the structure.

At this time the Department would like to schedule a meeting with you to discuss the suitability of the borrow material, methods of placement, containment of the materials during construction and sloughing to the surrounding waters. Please provide me with dates and times of availability. The meeting will be held at the Department's headquarters, Montgomery Park, 1800 Washington Boulevard, Baltimore, MD 21230.

If you have any questions concerning this matter, please contact me at 410-537-3845 or rcuthbertson@mde.state.md.us.

Sincerely,

Robert Cuthbertson

Robert Cuthbertson

cc: Gary Setzer, MDE
Elder Ghigiarelli, MDE
Ken Pensyl, MDE
Cas Taherian, MDE
Jon Romeo, COE
✓ Steve Storms, MPA
Nathaniel Brown, MPA

Masonville Dredged Material Containment Facility

Presented to:

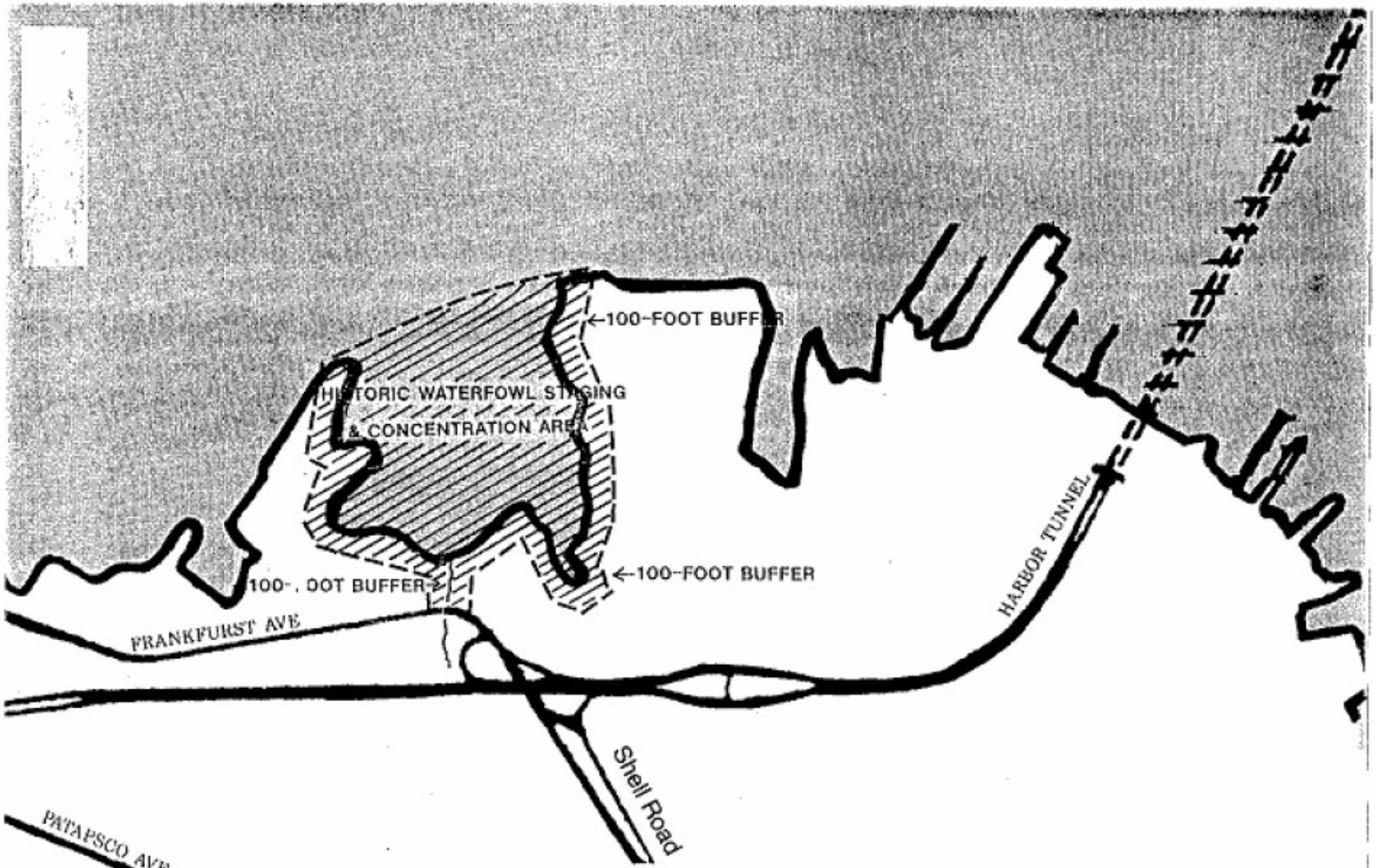
Critical Area Commission for the Chesapeake and Atlantic Coastal Bays

Maryland Port Administration
March 7, 2007

Overview

- Masonville DMCF CBCAC Impacts
- Masonville CBCAC Mitigation Plan
- Schedule
- Summary

Masonville Project Area



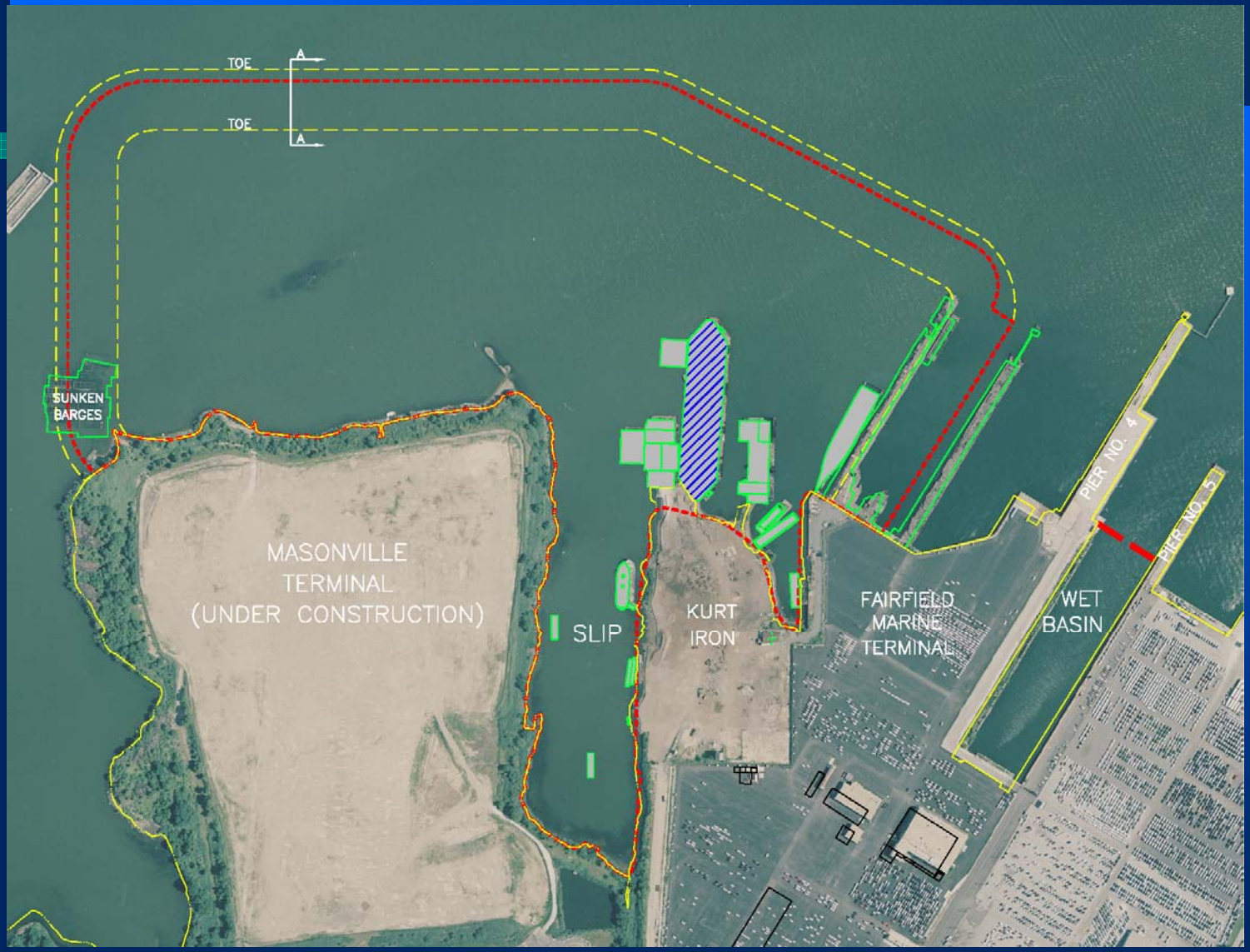
DESIGNATED HABITAT PROTECTION AREA:

MASONVILLE

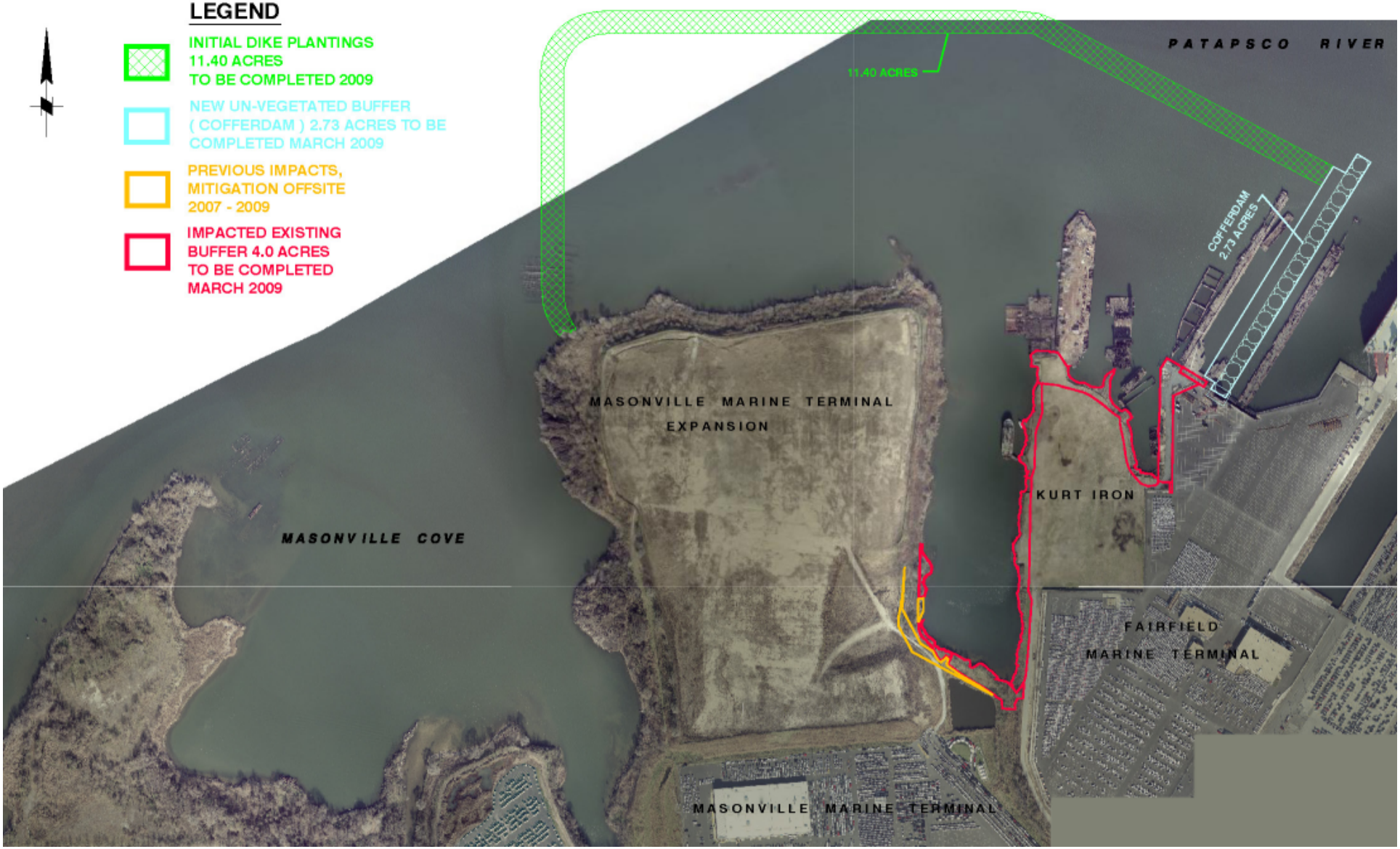
↑ North

City of Baltimore
Department of Planning

DMCF Project Area



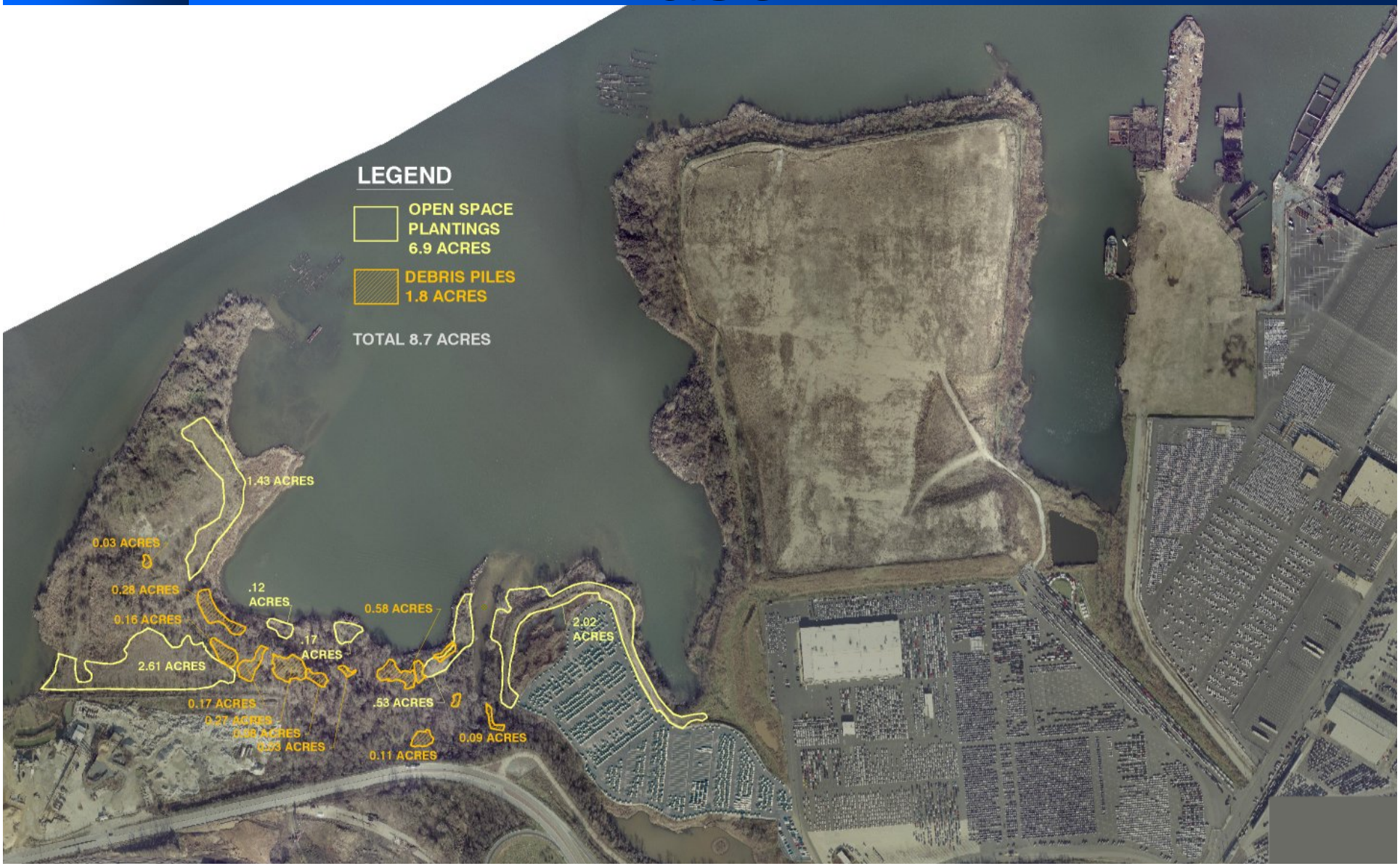
Initial Construction Dike & Cofferdam



Overall Mitigation Plan

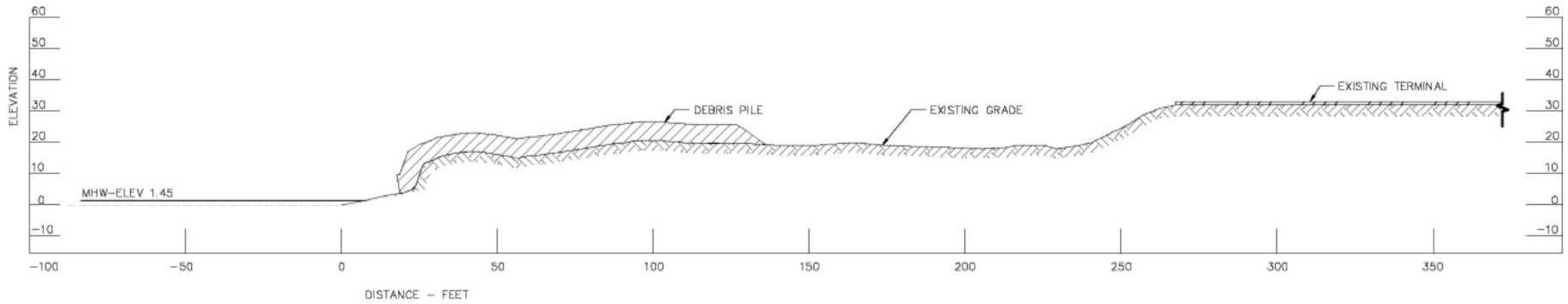
Environmental Education Center

Masonville Cove Cleanup – Phase 1



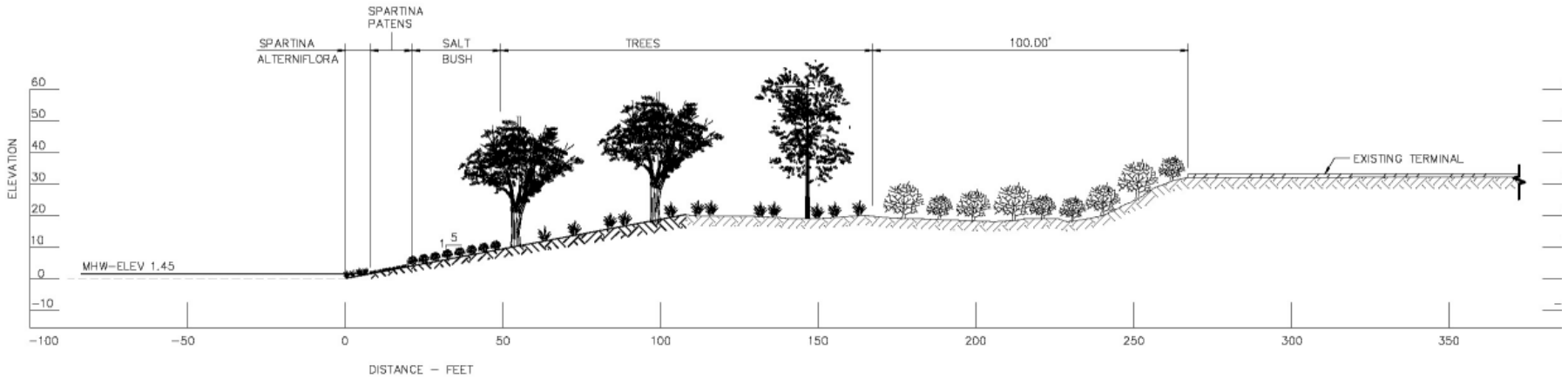
Shoreline Stabilization

Shoreline Stabilization Planting Typical Sections



SECTION – TYPICAL SHORELINE EXISTING CONDITIONS

SCALE: 1" = 20'



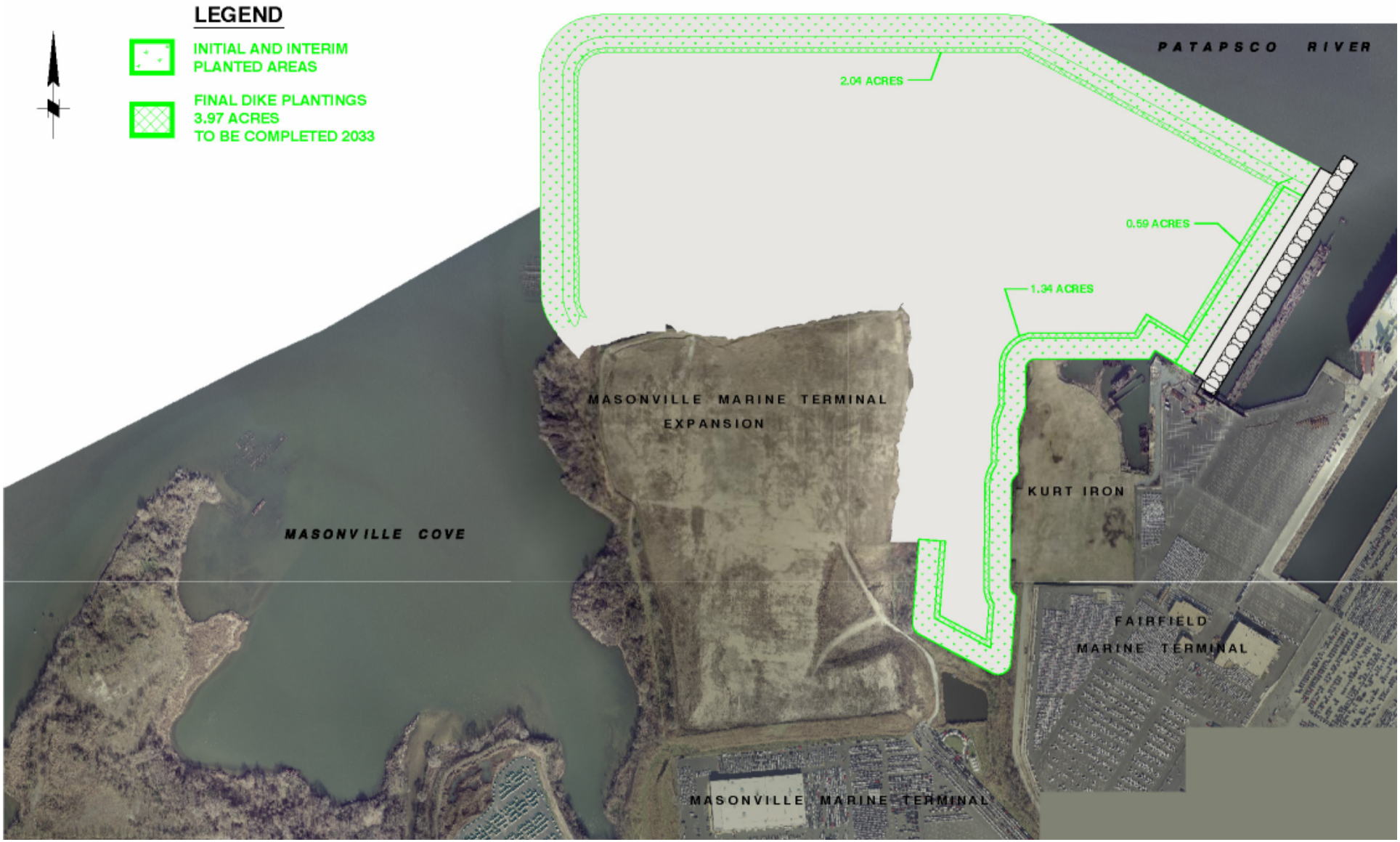
SECTION – TYPICAL SHORELINE STABILIZATION PLANTINGS

Masonville Marine Terminal Plantings

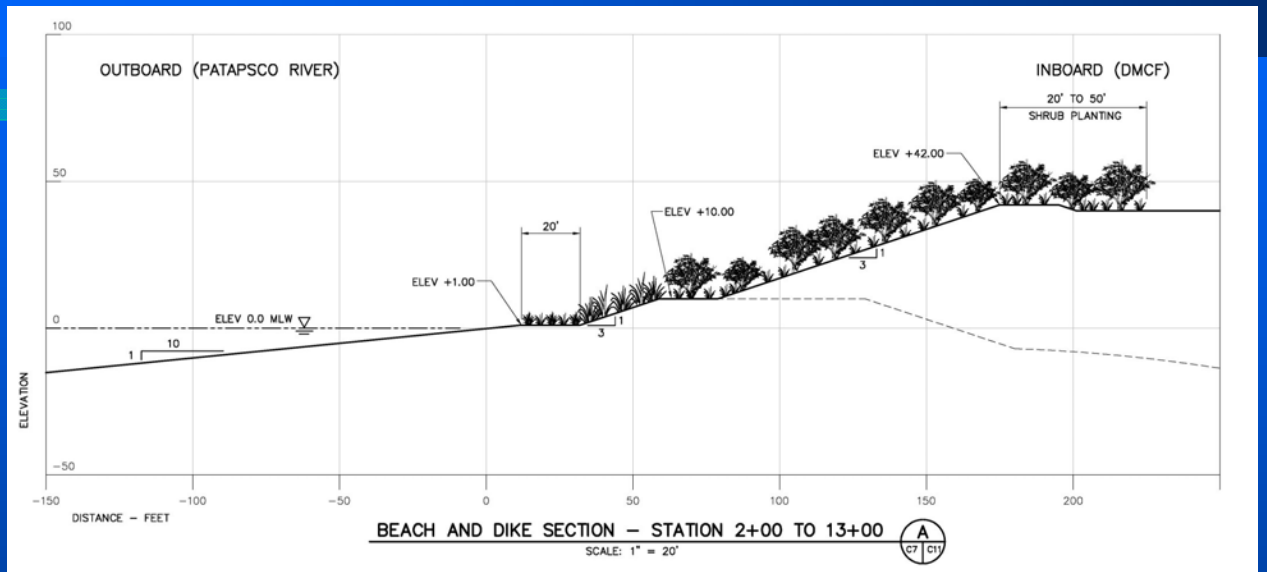
Overall Mitigation Plan

Dike Raising & Filling to +42 ft
Interim Plantings (2019 - 2032)

Final Plantings (2033)

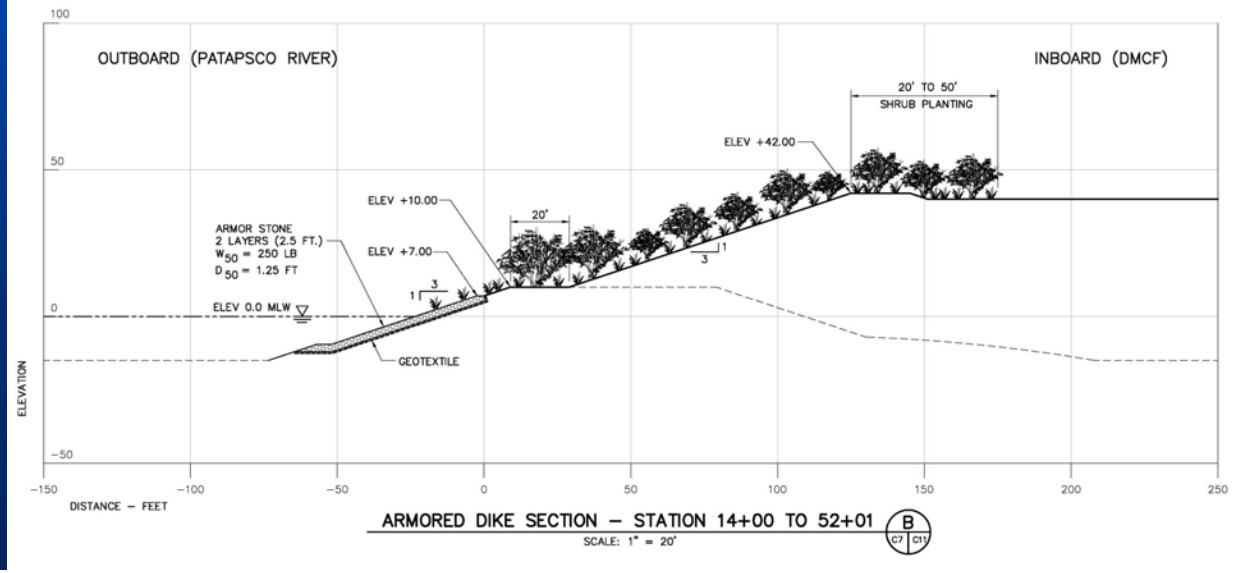


Final New Dike Plantings Typical Sections



BEACH AND DIKE SECTION – STATION 2+00 TO 13+00 (A)

SCALE: 1" = 20'



ARMORED DIKE SECTION – STATION 14+00 TO 52+01 (B)

SCALE: 1" = 20'

Construction and Mitigation Schedule

Project	Schedule	Impact/Mitigation (acres)*	Net Mitigation (acres)
Initial Construction			
Environmental Education Center	2007-08	0.68	**0.68**
Cove Cleanup and Planting - Phase 1	2007-08	8.68	**9.36**
Tidal Wetland Creation/Enhancement & Shoreline Stabilization	2007-08	5.21	**14.57**
Masonville Marine Terminal Plantings	2007-08	5.82	**20.39**
Demolition of Sea Wall	2007	-2.76	**17.63**
Cofferdam/Waterline Phase 2	2007-09	-8.19	**9.44**
Initial Dike and Spillways	2008-09	-9.90	**-0.46**
Storm Drain Phase 2	2008-09	-0.60	**-1.06**
Cove Cleanup and Planting - Phases 2 & 3	2009	6.76	**5.70**
Intermediate Construction			
Dredged Material Placement to +0	2010-19	0.00	**5.70**
Dike Raising	2019-21	-1.71	**3.99**
Planting of Dike (beyond 100 ft buffer)	2022	13.90	**17.89**
Dredged Material Placement - to +22	2019-28	-9.75	**8.14**
Dredged Material Placement - to +40	2029-32	-9.75	**-1.61**
Final Construction			
Site final planting	2033	4.03	**2.42**

*Impacts are shown as negative acreage and are calculated based on a 3:1 mitigation ratio.

Buffer Restoration Projects

Description	Allocated Funds
Landside and Water (Shoreline) Cleanup	$2,500,000
Terrestrial Habitat Enhancement (10 acres)	$840,000
Conservation Easement	$0
Total	**$3,390,000**

Summary

- Need New DMCF by 2009
- Total Impacted Buffer Area 11.5 Acres
- Total Mitigation Required 43 Acres
- Total Mitigation Provided 45 Acres
- Individual Projects Submitted for Approval

STATE OF MARYLAND
CRITICAL AREA COMMISSION
CHESAPEAKE AND ATLANTIC COASTAL BAYS
1804 West Street, Suite 100, Annapolis, Maryland 21401
(410) 260-3460 Fax: (410) 974-5338
www.dnr.state.md.us/criticalarea/

March 8, 2007

Mr. Nathaniel K. Brown, Principal Planner
Office of Harbor Development
Maryland Port Administration
2310 Broening Highway
Baltimore, MD 21224

RE: Masonville Dredged Material Containment Facility – Mitigation Package

Dear Mr. Brown:

At its meeting on March 7, 2007, the Critical Area Commission for the Chesapeake and Atlantic Coastal Bays approved the proposed mitigation package for the Masonville Dredged Material Containment Facility with the following three (3) conditions:

1. Specific details for the Buffer mitigation projects, including exact acreages, planting plans and schedules will be finalized and submitted to the Critical Area Commission for review and approval on a contract by contract basis.

2. Any aquatic mitigation project that involves development activity on uplands within the Critical Area will be submitted to the Critical Area Commission for review and approval.

3. The MPA will provide an updated mitigation "balance sheet" for Masonville DMCF if acreages of impact or mitigation change when designs of each stage of construction and mitigation are finalized.

We appreciate the assistance of Port staff and consultants in providing information to facilitate Commission review. If you have any questions or concerns regarding the Commission's approval or the next steps, please contact me at (410) 260-3477.

Sincerely,

LeeAnne Chandler
Science Advisor

cc: Meg Andrews, (MDOT)
Stephen E. Storms, Ph.D (MPA).
Michael W. Bozman, PE (MPA)
Mark C. Kreafle, Sr., PE (MPA)
Kristen Gaumer, PE (Moffatt & Nichol)

MARYLAND PORT ADMINISTRATION

Addressing MDE's Concerns
Masonville Dredged Material Containment Facility

Read-Ahead Material for MDE-MPA Meeting

March 27, 2007 – MDE's Test Room – 2:00 PM

Introduction

The purpose of the meeting scheduled for March 27, 2007 is for MPA to address MDE's concerns regarding the Masonville Dredged Material Containment Facility. MPA is intent on resolving any concerns to MDE's satisfaction to obtain MDE approval for the Masonville project at the March 27 meeting. Pending MDE approval, MPA and USACE, Baltimore District will submit the Final Environmental Impact Statement for the Masonville project.

MDE has expressed concerns in a letter to Jim Runion (Gahagan & Bryant Associates, Inc.) and in a planning meeting with Critical Area Commission (CAC) representatives. The following is a list of MDE's concerns, as understood by MPA:

1) "Please explain how the material is to be placed…." (MDE Letter) – *Concern:* Placement Methods;
2) "…sloughing towards the existing channel is a concern. Please explain how the material is to be placed and contained…" (MDE Letter) – *Concern:* Containment Methods, Sloughing;
3) "…please describe the procedures that will be employed during construction to insure that the project will not violate Maryland's water quality standards." (MDE Letter) – *Concern:* Meeting Maryland Water Quality Standards;
4) "…dredged material may not be suitable for the foundation of the proposed containment facility…" (MDE letter) – *Concern:* Borrow Suitability;
5) "…Department's engineers are very concerned about the proposed water pipe through the proposed dike. The addition of material over the pipe will add to the load on the pipe and possibly cause failure." (MDE Letter) – *Concern:* Dike Load on Waterline; and
6) Will there be impacts to dike structural integrity due to vegetation? (concern voiced at CAC planning meeting) – *Concern:* Dike Vegetation.

MPA has prepared this read-ahead package to address the above list of concerns, and provide MDE with a chance to review MPA's responses. MPA is hoping MDE will be able to review this package and identify any remaining concerns so that the meeting will be efficient, focused, and productive.

2310 Broening Highway; Baltimore, MD 21224 Phone: (410) 631-1102 Fax: (410) 631-1057

This package is organized as follows:

- Project Background
- Addressing MDE's Concerns
- Summation
- Attachments with backup information for addressing concerns
  - Attachment A – Placement Methods
  - Attachment B – Containment Methods, Sloughing
  - Attachment C – Meeting Maryland Water Quality Standards
  - Attachment D – Borrow Suitability
  - Attachment E – Dike Load on Waterline
  - Attachment F – Dike Vegetation

Project Background

The proposed project is a Dredged Material Containment Facility at Masonville. The project area (see Figure 1) would impact 141 acres. The containment structure consists of sand dikes and a cofferdam section. Table 1 provides several key facts about the site. For further information on the project, feel free to contact Dr. Steve Storms with MPA [(410) 631-1102] or refer to the Draft EIS.

The project is at the end of the Draft EIS editing stage, and the Final EIS is to be submitted as soon as MDE's issues are resolved to MDE's satisfaction.

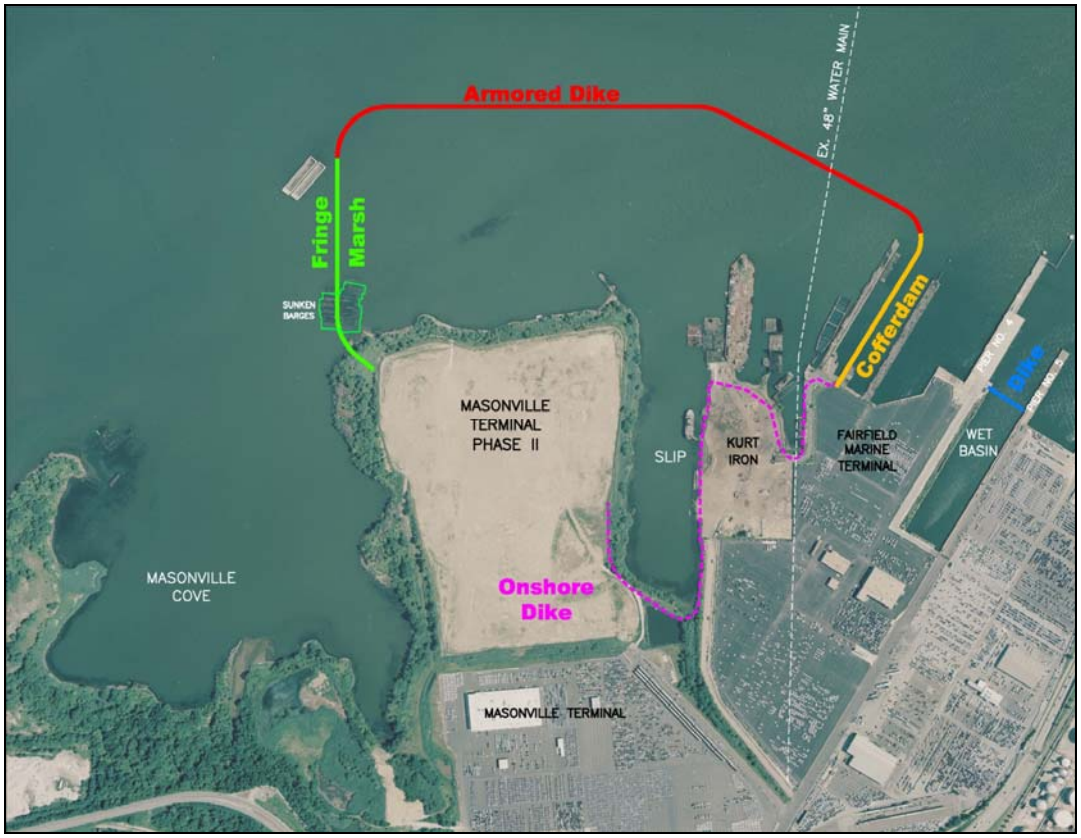


Figure 1 – DMCF Containment Structure

Table 1 – Masonville Key Facts

Item	Quantity
Site Footprint	141 acres
Site Capacity (for dredged material)	15.4 mcy
Site Life	19 years
Initial Project Cost (includes mitigation)	$107 Million

Source: Draft EIS

Addressing MDE's Concerns

This section names and addresses each of MDE's aforementioned concerns. This section contains the general response for each concern and references more detailed information contained in the Draft EIS and the attachments to this package.

Concern 1 - Placement Methods

Construction of the containment structure would be accomplished through four main stages of dredging activity (see list below). Each stage is briefly described in the paragraphs following the list. An in-depth description of the proposed construction process is located in Section 4 of the Draft EIS.

1) Overburden removal to HMI
2) Seagirt borrow placement at Masonville
3) Masonville onsite borrow cofferdam fill
4) Masonville onsite borrow dike construction

Overburden removal to HMI – In this stage, materials geotechnically unsuitable for building the containment structure would be excavated. This excavation would occur along the footprint of the containment structure and overtop of the onsite borrow source. Excavation would be done using clamshell dredges, and the material would be transported to HMI in barges. Overburden material would be removed from Seagirt as well. The material at Seagirt is being removed as part of separate channel deepening project. Figure 1 in Attachment A illustrates this stage.

Seagirt borrow placement at Masonville – In this stage, suitable borrow material would be transported from the Seagirt channels deepening project and placed within the footprint of the containment structure where overburden material was previously removed. The Seagirt material would be excavated using a clamshell dredge and transported to Masonville in split-hull barges. The split-hull barges would place the material within the excavated containment structure area. Figure 2 in Attachment A illustrates this stage. Figures 3-5 in Attachment A illustrate this placement.

Masonville onsite borrow cofferdam fill – In this stage, material would be excavated from the onsite borrow area using a clamshell dredge. The material would be placed in barges, which would be mechanically unloaded into place at the cofferdam section. Figure 6 in Attachment A illustrates this stage.

Masonville onsite borrow dike construction – In this stage, material would be excavated from the onsite borrow area by a hydraulic cutter-head dredge. The material would be pumped into the

dike section of the containment structure. Industry standard methods including training dikes for managing the pumped material would be employed for this stage. Figure 7 in Attachment A illustrates this stage.

Concern 2 – Containment Methods, Sloughing

Figure 2 shows the dike section at the point where it is closest to the Ferry Bar channel. The design of the Masonville DMCF dike is based on a granular embankment with design friction angle of 28^o below the water level and 30^o above the water level. The friction angle used in the design is based on laboratory test data with an allowance for safety. Thus, the material should stand at a close to the design friction angle. Slope stability analyses of the designed dike presented in Findling 2006 show that sloughing would not occur.

The results of laboratory tests and first hand experience during construction of Hart-Miller Island confirm that the hydraulically placed sand material would typically stand at a 2H : 1V to 3H : 1V slope below the water level. In discussing of this method of placement with USACE, their experience and opinion are similar, however, they have experienced under water slopes as flat as 5H : 1V for hydraulically placed granular material, under certain conditions.

Practical experience at Hart-Miller Island has shown that the contractor would able to keep the sand within the design dike section using industry standard construction methods (see Appendix A, Figures 8 and 9 for descriptions of construction methods). The successful industry standard construction methods used at Hart-Miller Island would be employed at Masonville. Thus, Port consulting engineers are confident that the fill material will be adequately kept within dike section. An additional point of interest is that the contractor would only be paid for meeting the specified dike section. This fact would make it in the contractor's financial interest to keep the material from being placed outside of the dike section. Attachment C contains a memorandum from the Port's geotechnical engineering consultant addressing this issue in more detail.

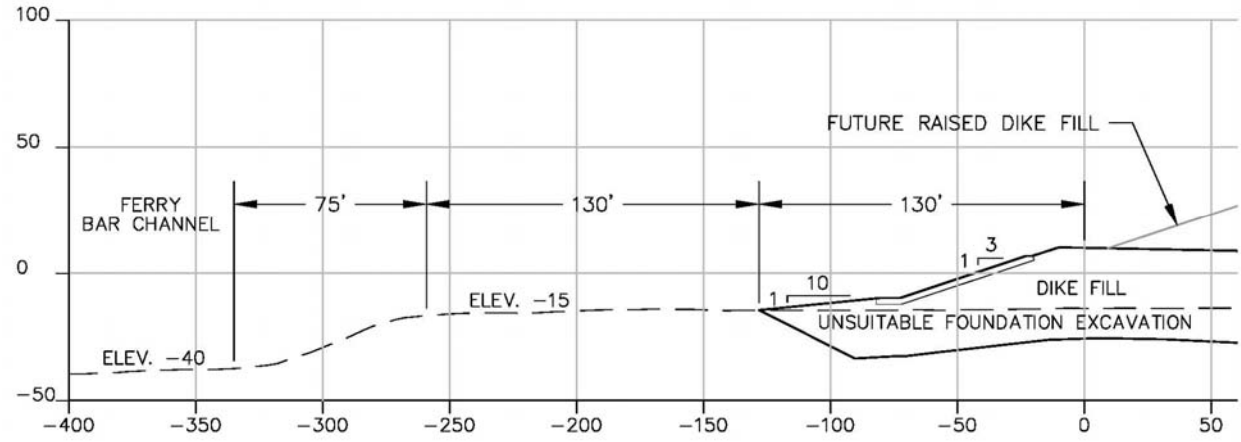


Figure 2 – Masonville Dike Proximity to Ferry Bar Channel

Concern 3 - Meeting Maryland Water Quality Standards

Port contractors performed turbidity modeling using USACE models DREDGE and STFATE for the relevant proposed construction efforts to predict the potential turbidity plumes relative to the various dike building activities. The model inputs were based on site-specific sediment sampling and average current conditions for this reach of the Patapsco River. Modeling predicted turbidity concentrations at various cross-sectional areas of the Patapsco River. The affected cross-sectional areas were screened against Maryland's instantaneous maximum (150 NTU) and monthly average (50 NTU) TSS water quality criteria to determine if affected cross-sections would be in compliance with the 10% cross-sectional area allowed by Maryland law. The modeling and analysis determined that neither the instantaneous maximum nor the monthly-average Maryland water quality criteria would be exceeded during construction efforts, except in the case of the dike construction with onsite borrow material placed hydraulically. For this construction stage, the Port agrees with MDE's suggestion that turbidity curtains be employed as necessary to meet water quality standards. Attachment C outlines the models, modeling results, and conclusions in detail. Physical characteristics of the sands proposed for dike building can be found in Appendices A and H of the Draft EIS. Detailed turbidity modeling results are included in Appendix J of the Draft EIS and the hydrodynamics and current assumptions used for the modeling can be found in Appendix B of the Draft EIS.

Concern 4 - Borrow Suitability

There are three sources of borrow to obtain material to build the DMCF containment structure. These are Seagirt borrow, Masonville onsite borrow, and offsite upland borrow. The design of the dike structure requires that fill material in the dike section not exceed 30 percent fines passing the 200 sieve. This requirement is an industry standard that has been successfully used on past local projects, such as Hart-Miller Island. The suitability of each borrow source is addressed in the following paragraphs. The Seagirt and Masonville onsite borrow areas would provide the majority of the necessary material. Some more expensive offsite upland borrow would be required to supplement the Seagirt and Masonville onsite sources. Attachment D contains tables showing the needed and available material quantities.

Seagirt Borrow – The Seagirt borrow source has an average fines content of 12 percent and is deemed suitable for dike construction by Port consultants and USACE's engineers. Attachment D provides a summary of the strata from which Seagirt borrow would be obtained. This summary is excerpted from E2CR 2006. The boring logs and laboratory test results are found in E2CR 2006, which is being provided in a CD accompanying this package.

Masonville Onsite Borrow – The onsite borrow source has an average fines content of 29 percent and is deemed suitable for dike construction by Port consultants and USACE's engineers. Attachment D provides a summary of the Masonville borrow area from Findling 2006. The boring logs and laboratory test results are found in Findling 2006, which is being provided in a CD accompanying this package.

Offsite Upland Borrow – Offsite upland borrow sources exist in the region that are capable of providing fill meeting the 30 percent fines criteria. This has been verified by Port consultants.

Concern 5 - Dike Load on Waterline

The proposed containment structure would be constructed over the area where the existing Baltimore City 48" waterline runs (shown in Figures 1 & 3). The Port, in coordination with Baltimore City, has developed a plan to reroute the waterline. Figure 3 shows the plan for rerouting the waterline. This plan would eliminate large loads from the dike being placed on the waterline. The rerouting plan is described in detail in Attachment E and Section 4 of the Draft EIS.

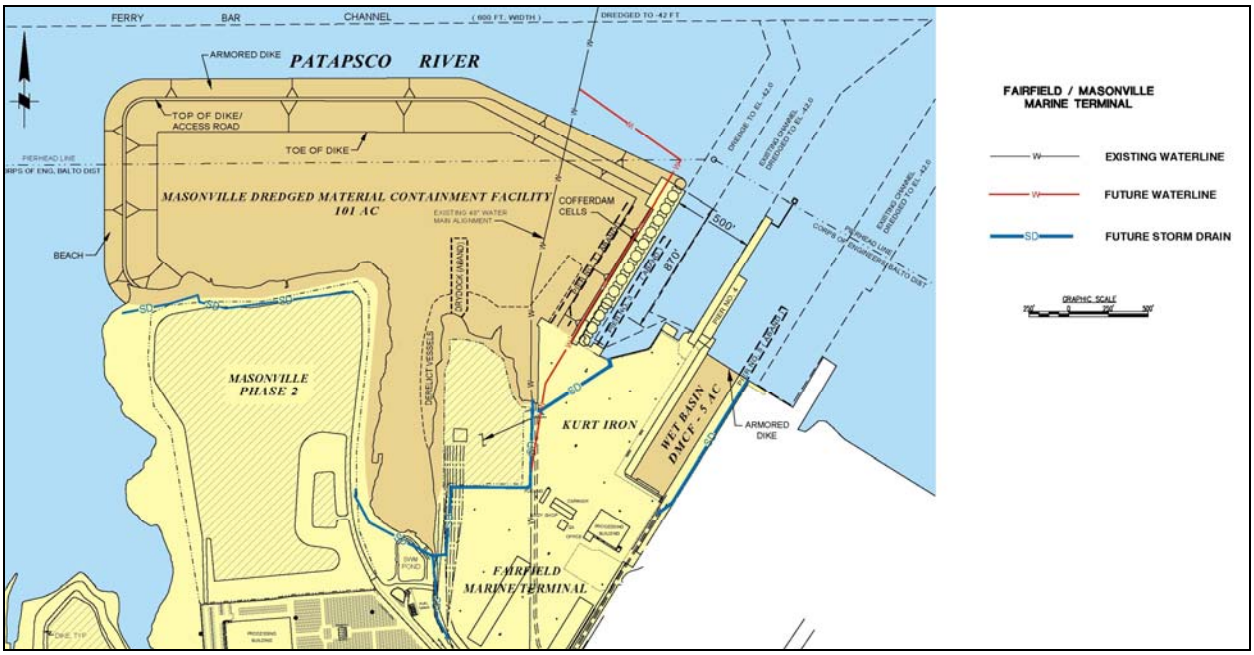


Figure 3 – Waterline Rerouting Plan

Concern 6 - Dike Vegetation

The proposed containment dike slopes would be vegetated to replace buffer impacted by the proposed project. Criteria for this vegetation have been specified by the Port's geotechnical consultant. These criteria will ensure that the vegetation does not impact the structural integrity of the dike. Attachment F contains a letter from the consultant with the specified criteria.

Summation

This read-ahead package has presented the MDE's concerns regarding the proposed Masonville Dredged Material Containment Facility. MPA has responded to each concern with the information provided in the body of this package and in the attached documents. Please contact Dr. Steve Storms of MPA if MDE's concerns are not satisfactorily addressed, or if MDE should have any additional concerns. MPA is hoping MDE will be able to review this package and identify any remaining concerns so that the meeting on the 27th will be efficient, focused, and productive.

References

Draft EIS – *Legal Sufficiency Review Version Tiered Draft Environmental Impact Statement for the Proposed Masonville Dredged Material Containment Facility, Baltimore, MD.* USACE, Baltimore District. October 2006

E2CR 2006 - *Surface Investigation and Laboratory Testing for Seagirt and Dundalk Marine Terminal 50 ft Deepening.* E2CR. July 2006.

Findling 2006 – *Geotechnical Study for Masonville Marine Terminal*. Findling, Inc. 2006.

MARYLAND PORT ADMINISTRATION

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Attachment A
Placement Methods

CONTENTS:

(1) **Figure 1 - Overburden Removal to HMI**
(2) **Figure 2 - Seagirt Borrow Placement at Masonville**
(3) **Figure 3 - Split-Hull Barge Placement Sequence – Number 1**
(4) **Figure 4 - Split-Hull Barge Placement Sequence – Number 2**
(5) **Figure 5 - Split-Hull Barge Placement Sequence – Number 3**
(6) **Figure 6 - Masonville Onsite Borrow Cofferdam Fill**
(7) **Figure 7 - Masonville Onsite Borrow Dike Construction**
(8) **Figure 8 - Training dike plan view**
(9) **Figure 9 - Training dike cross-section**

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WEST CHANNEL

EAST CHANNEL

P A T A P S C O

R I V E R

FERRY BAR CHANNEL

FORT McHENRY CHANNEL

SEAGIRT MARINE TERMINAL

DUNDALK MARINE TERMINAL

MASONVILLE DMCF

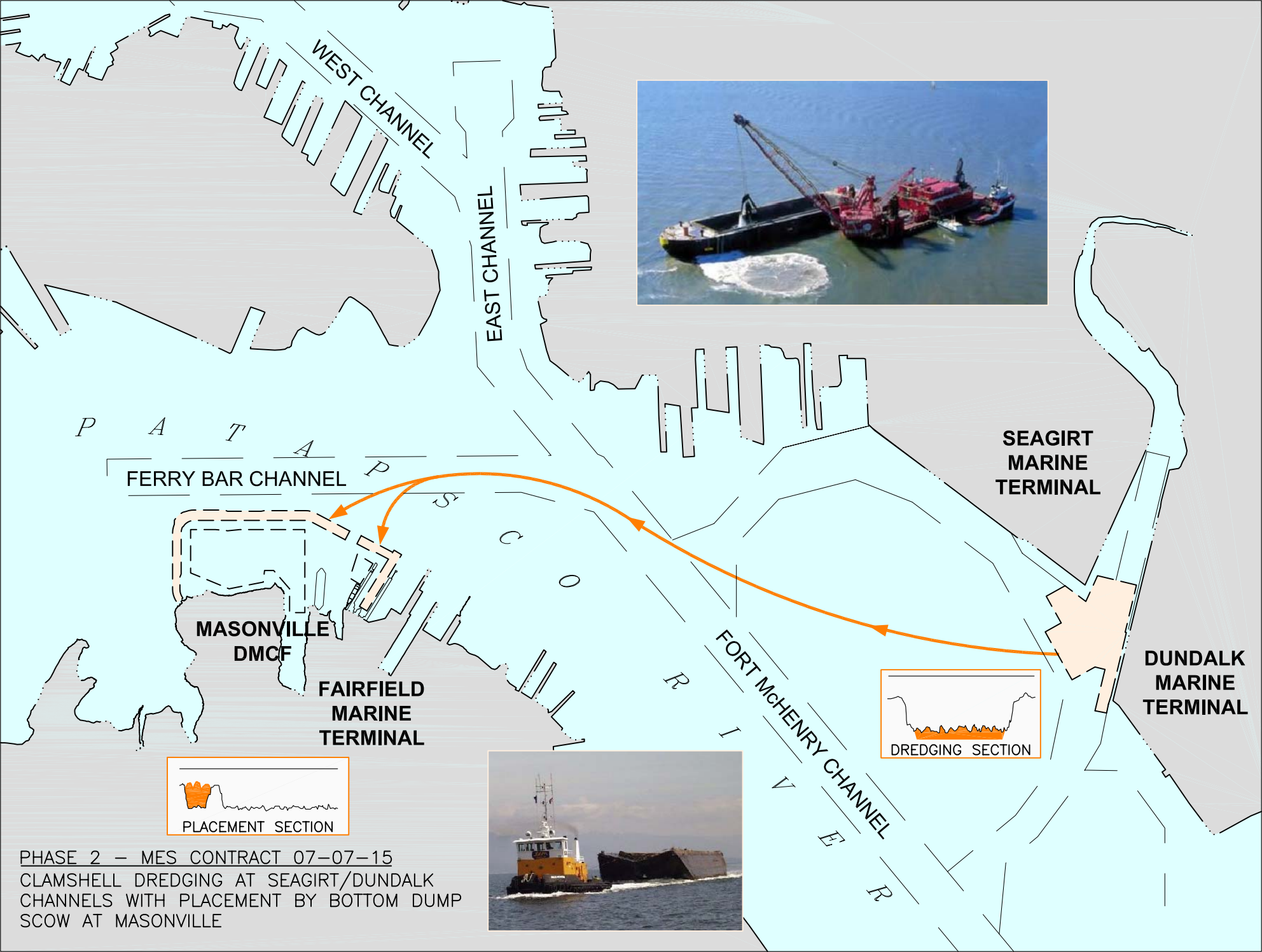
FAIRFIELD MARINE TERMINAL

DREDGING SECTION

DREDGING SECTION

PHASE 1 – MES CONTRACT 07–07–15

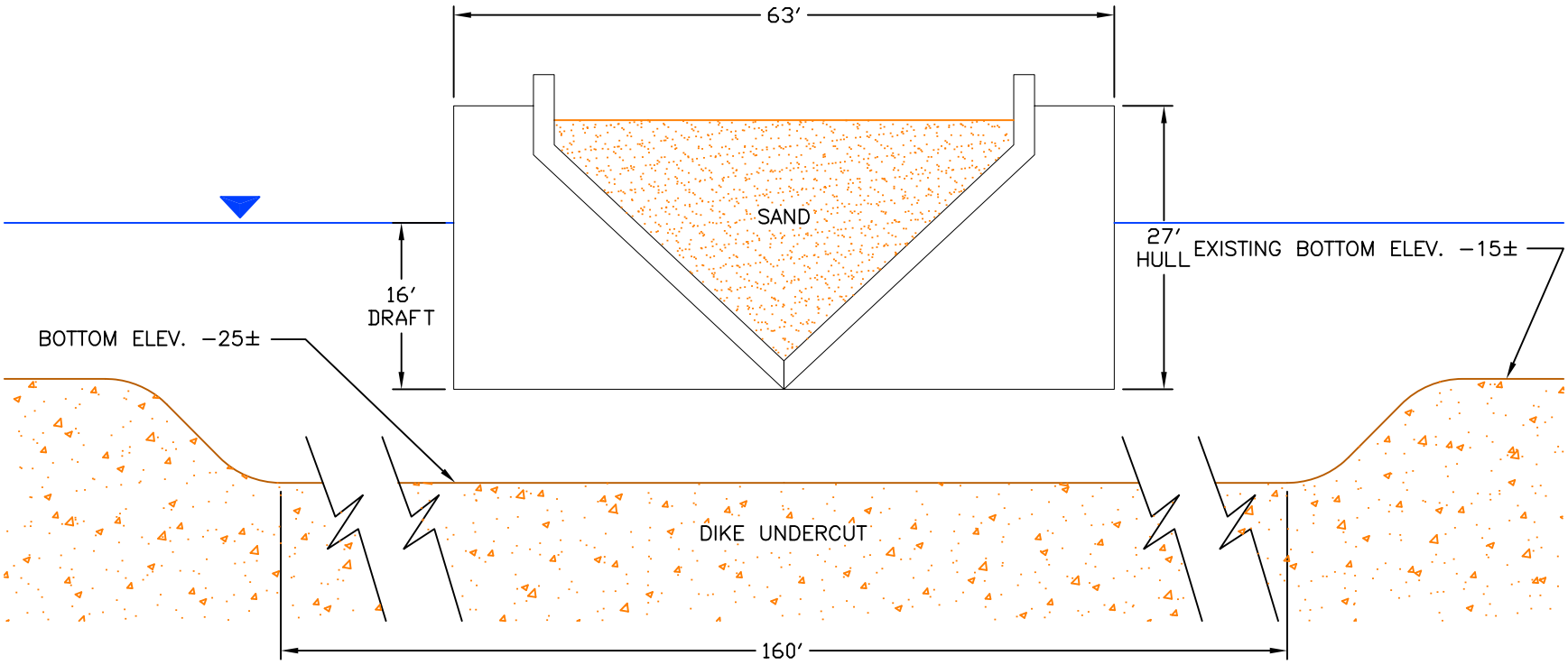
CLAMSHELL DREDGING AT SEAGIRT/DUNDALK CHANNELS AND MASONVILLE WITH PLACEMENT AT HART–MILLER ISLAND.



PHASE 2 – MES CONTRACT 07–07–15

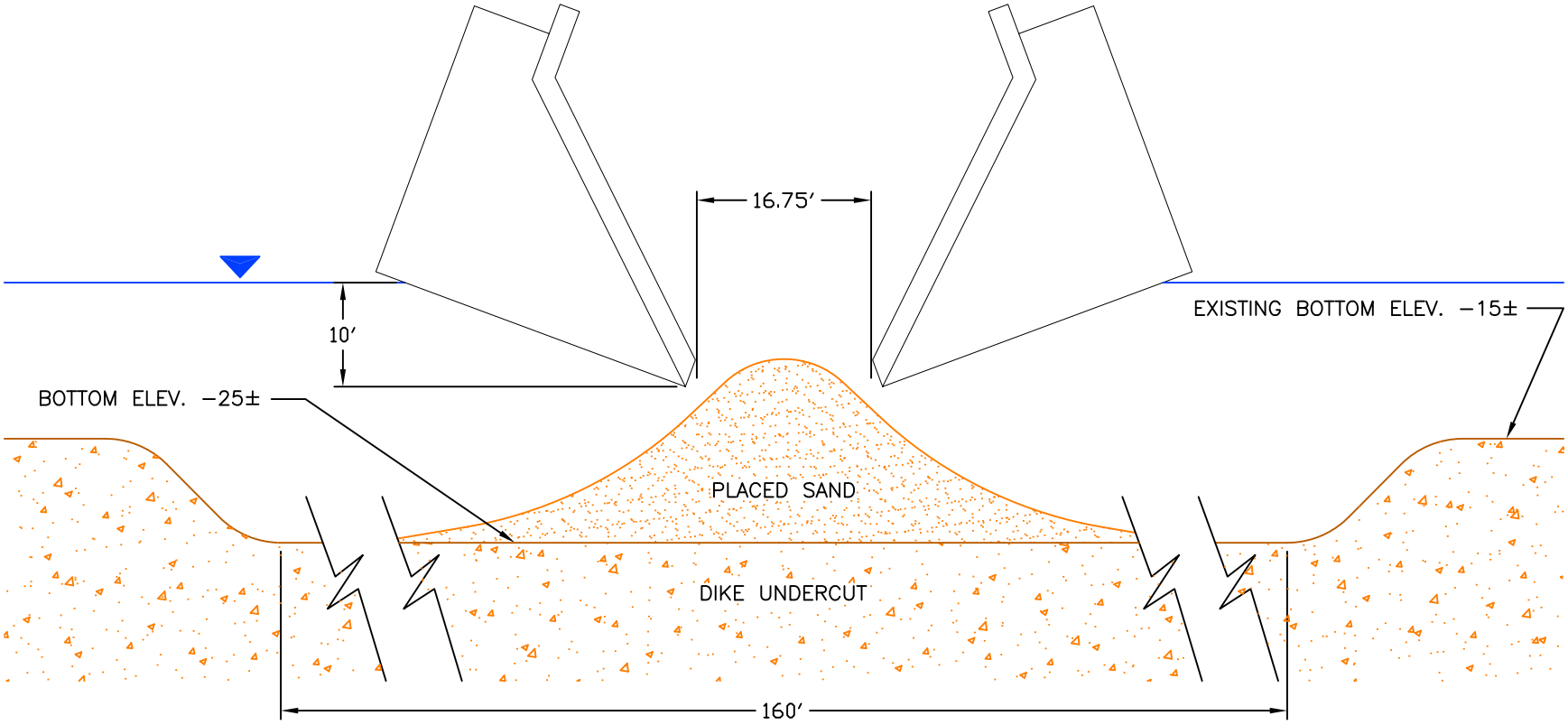
CLAMSHELL DREDGING AT SEAGIRT/DUNDALK CHANNELS WITH PLACEMENT BY BOTTOM DUMP SCOW AT MASONVILLE

(1) LOADED SCOW



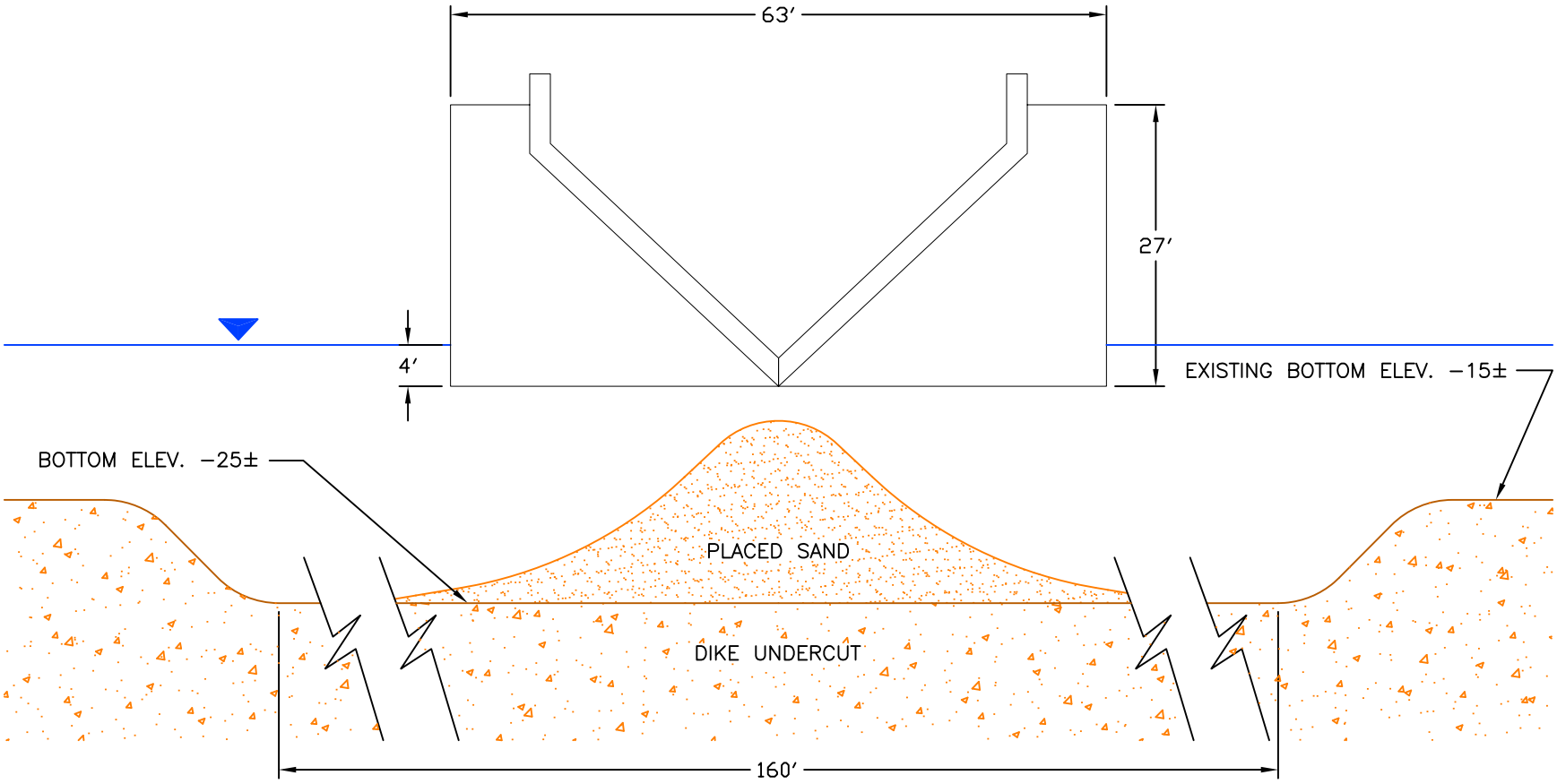
NOTE:
AVERAGE DIKE UNDERCUT WIDTH 160’

(2) INITIAL PLACEMENT



NOTE:
AVERAGE DIKE UNDERCUT WIDTH 160'

(3) LIGHT SCOW



NOTE:
AVERAGE DIKE UNDERCUT WIDTH 160'

FERRY BAR CHANNEL

PLACEMENT SECTION

DREDGING SECTION

48" WATER MAIN

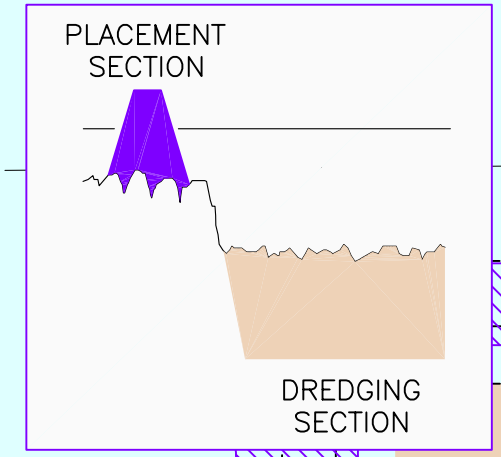
WATER MAIN RELOCATION

MASONVILLE DMCF

FAIRFIELD MARINE TERMINAL

48" WATER MAIN

PHASE 3 – MPA CONTRACT 506525
CLAMSHELL DREDGING IN MASONVILLE BORROW AREAS WITH CLAMSHELL INFILL AND BACKFILL OF COFFERDAM CELLS, RELOCATION OF 48" WATER MAIN



FERRY BAR CHANNEL

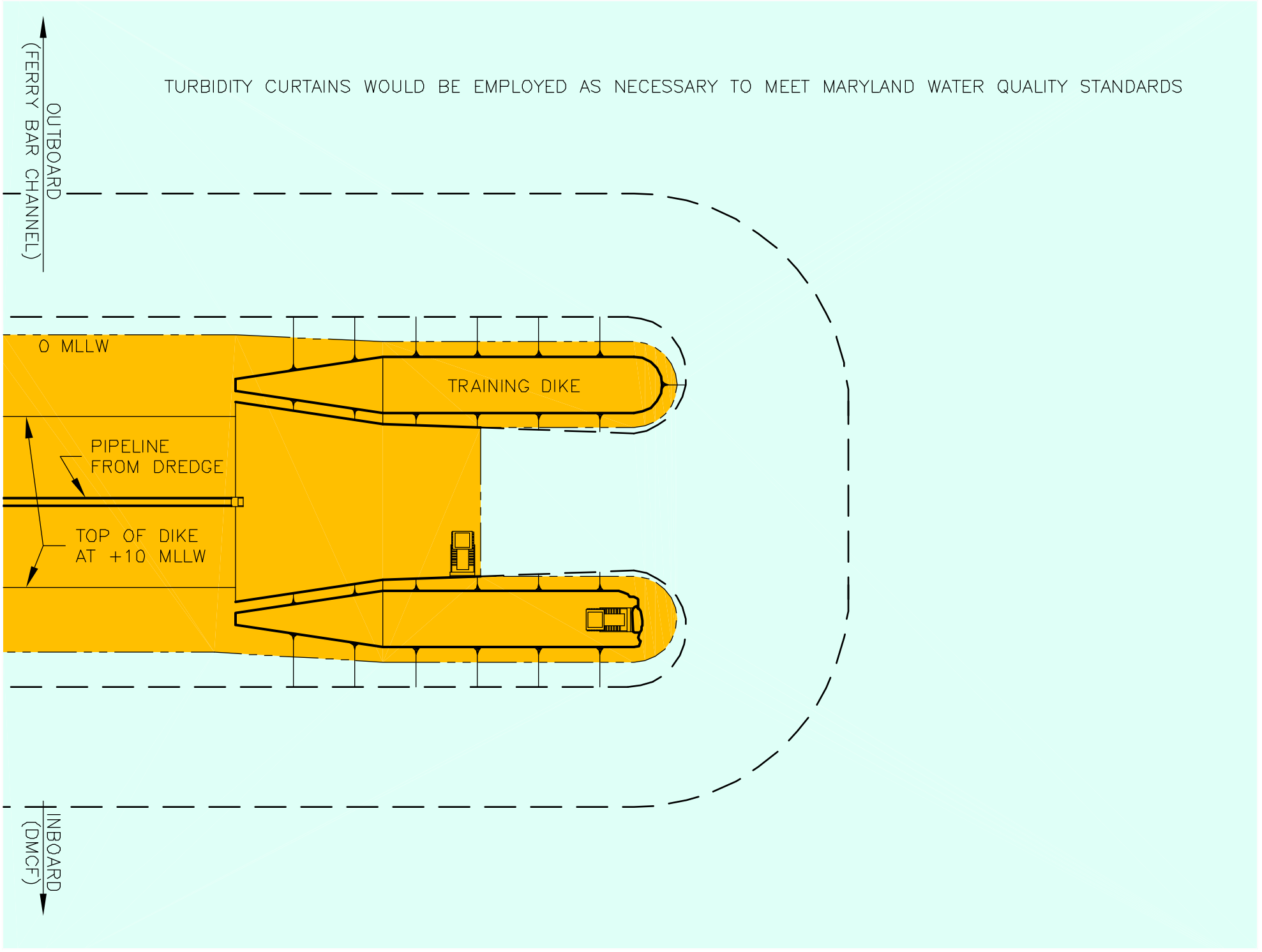
MASONVILLE
DMCF

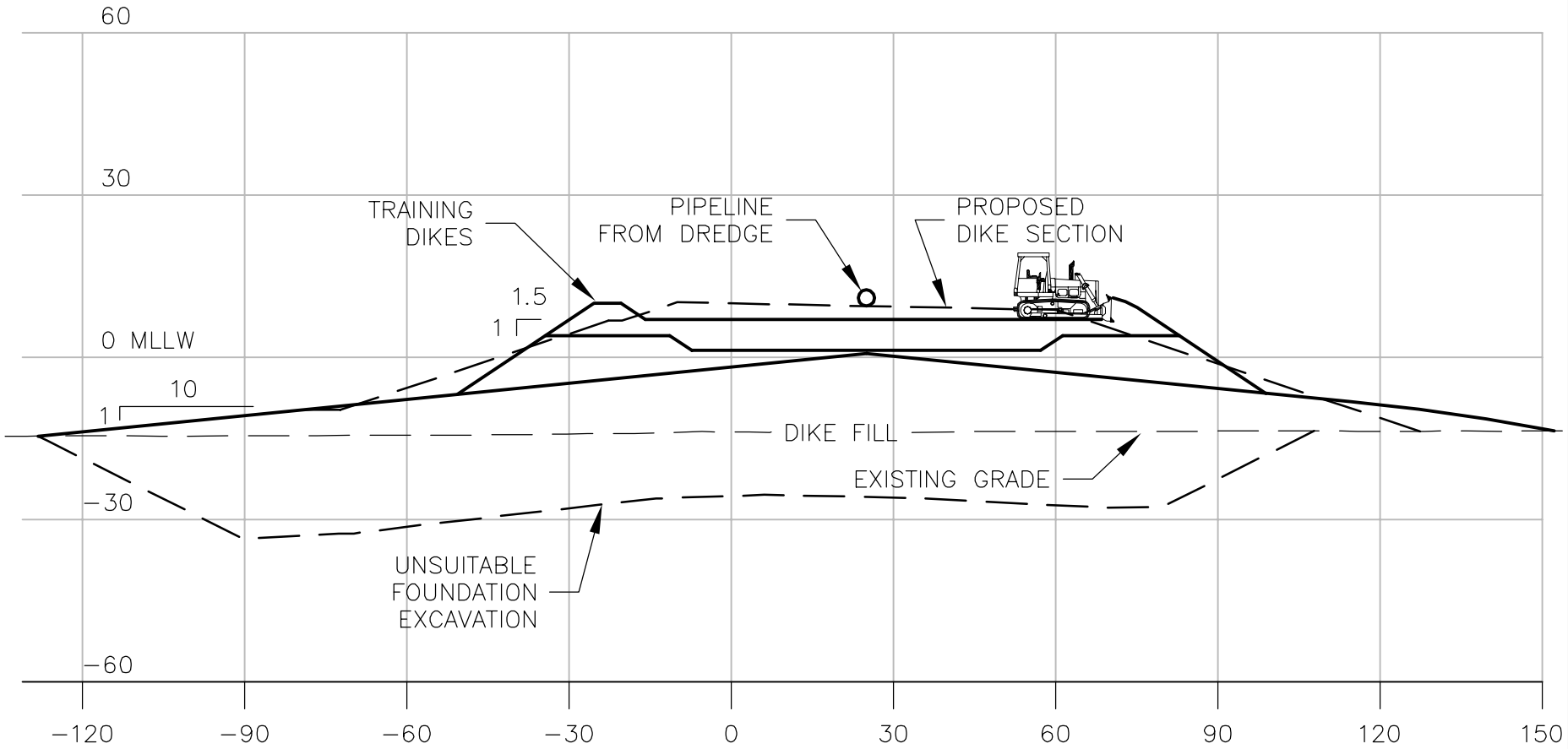
STOCKPILE

FAIRFIELD
MARINE
TERMINAL

48" WATER MAIN

PHASE 4 – MES DIKES & SPILLWAYS CONTRACT
HYDRAULIC DREDGING IN MASONVILLE BORROW AREAS WITH DIRECT PLACEMENT INTO DIKES AND STOCKPILE. A SHORELINE DIKE WILL BE BUILT FROM THE STOCKPILE.


TURBIDITY CURTAINS WOULD BE EMPLOYED AS NECESSARY TO MEET MARYLAND WATER QUALITY STANDARDS
OUTBOARD
(FERRY BAR CHANNEL)
0 MLLW
TRAINING DIKE
PIPELINE
FROM DREDGE
TOP OF DIKE
AT +10 MLLW
INBOARD
(DMCF)


60
30
0 MLLW
−30
−60
TRAINING
DIKES
PIPELINE
FROM DREDGE
PROPOSED
DIKE SECTION
1.5
1
10
1
DIKE FILL
EXISTING GRADE
UNSUITABLE
FOUNDATION
EXCAVATION
−120
−90
−60
−30
0
30
60
90
120
150

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Attachment B
Containment Methods, Sloughing

CONTENTS:

(1) Memorandum on Containment Methods and Sloughing

2310 Broening Highway; Baltimore, MD 21224 Phone: (410) 631-1102 Fax: (410) 631-1057

CENTURY ENGINEERING
10710 GILROY ROAD, HUNT VALLEY, MD 21031 (410) 823-8070

MEMORANDUM

DATE: March 16, 2007

TO: Lu Duressa/Suri Surendra, Jim Runion

FROM: Ed Dalton

RE: Masonville DMCF

The Masonville DMCF earth embankment would be constructed in two phases. After the unsuitable foundation material is excavated along the embankment footprint, the undercut area would be backfilled with granular material excavated from the Seagirt dredging project. The granular fill material would be transported from Seagirt to Masonville in split-hull barges and placed in the dike undercut excavated. Thus, the sides of the undercut excavated would contain the material placed via split-hull barge. See Figure 1.

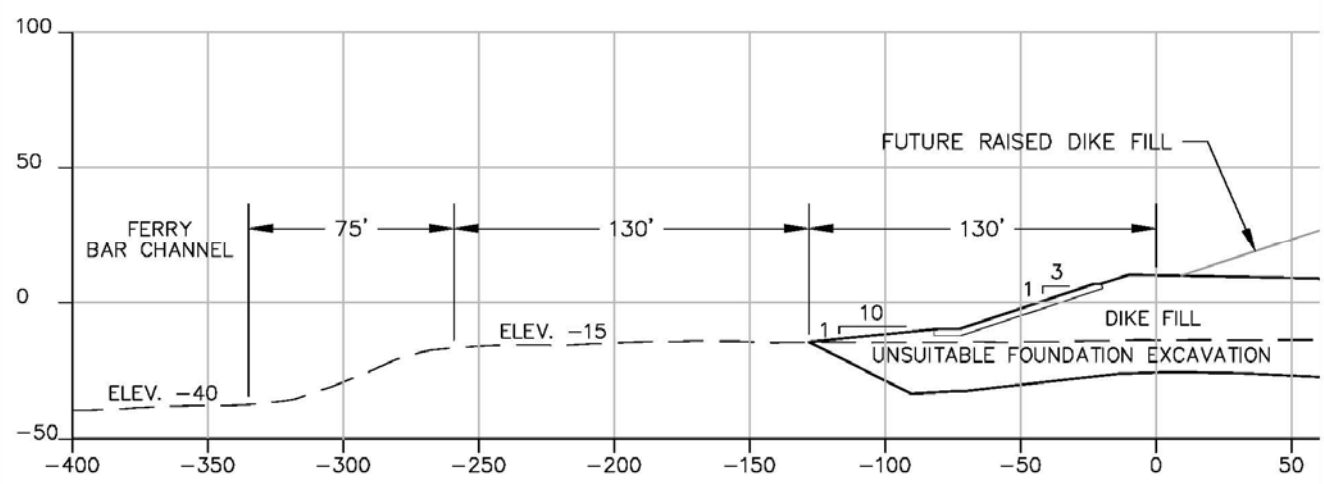

Figure 1 - Cross Section of Undercut, Channel with side slopes of Fill and Dike

The second phase of earth embankment construction would include excavation of granular borrow material inside the containment dike area and placing this material in sections to construct the dike. It is envisioned the operation would be carried out using a hydraulic cutter head dredge to excavate and place material. However, the contract documents allow excavation using a clam shell. The contractor would be required to present his proposed method of borrow excavation and dike construction prior to initiation of construction. Several methods of placement are possible – direct pipeline placement from the hydraulic dredge, stockpile borrow and use conventional land equipment to construct the dike, hydraulic placement utilizing some type of spill barge, or the contractor may have some other method proposed to construct the dike. The issue comes down to how would placement of material be controlled to assure the material is retained in the dike section and how much sloughing would occur. It is to no one's advantage to have borrow material placed beyond the dike template – the contractor would be paid based on material within the template and the owner's representative would be on site continuously monitoring material placement to

avoid wasting of material, beyond the proposed dike limits.

In the design phase of the Poplar Island DMCF, similar question arose concerning the running or sloughing of hydraulic placed borrow material. The basis of the concern on the Poplar Island project arose due to the gradation of the borrow sand being very fine. Therefore, E2Si conducted a test in their materials laboratory whereby they constructed a Plexiglas tank, filled the tank with water and pumped fine sand in one end of the tank and measured the angle of repose of the sand below the water level (see photo). The soil held on a slope of approximately 2H : 1V.

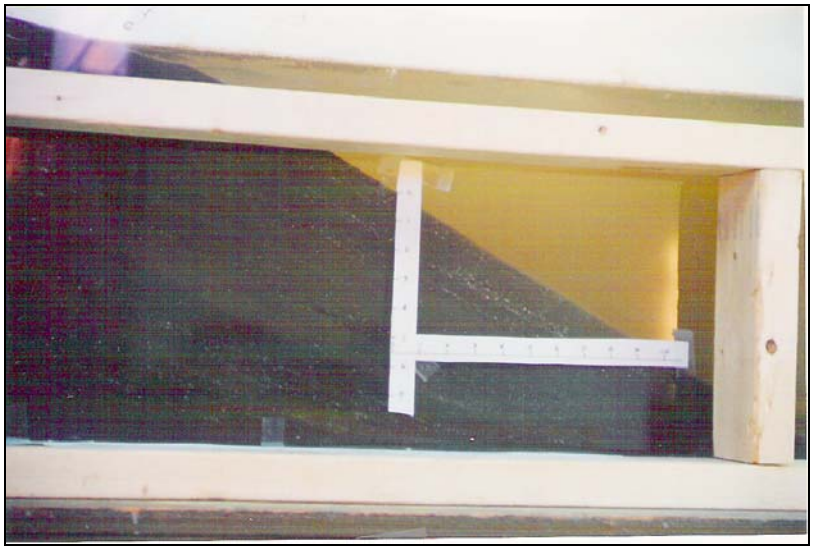

Figure 2 – E2Si Slope of Hydraulically Placed Borrow

This result closely matched the results that were obtained during construction of the Hart Miller Island DMCF. The Hart Miller Island facility was constructed by excavating material with the containment area using a cutter head dredge and placed in sections via hydraulic placement from the dredge discharge pipe. On this project, a variety of materials were encountered from a coarse sand and gravel with varying amounts of clay to very fine silty sand. The depth of water varied from a couple feet up to about 15 feet at HMI. The hydraulically placed material slopes below the water level were 2H : 1V to 3H : 1V with flatter slope associated with the fine sands and silty sands.

The design of the Masonville DMCF dike is based on granular embankment with design friction angle of 28^{o} below the water level and 30^{o} above the water level. The friction angle used in the design is based on laboratory test data with an allowance for safety. Thus, the material should stand at a close to the design friction angle.

In summary, although we do not have survey data readily available, the results of laboratory test and our first hand experience during construction of HMI confirm the hydraulically placed sand material would typically stand at a 2H : 1V to 3H : 1V slope below the water level. In discussing of this method of placement with COE, their experience and opinion are similar, however, they have experienced under water slope as flat as 5H : 1V for hydraulically placed granular material, under certain conditions.

If the material is stockpiled and placed in the dike section using conventional land equipment similar to the

procedure used for Poplar Island DMCF, similar or steeper slopes would be maintained.

The sand material is however susceptible to erosion due to wave action and must be protected to prevent erosion due to wave action. Typically, contractor utilizes a barge or discharge pipe or some other means to protect the dike slope until the permanent armor stone is placed.

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Attachment C
Meeting Maryland Water Quality Standards

CONTENTS:

(1) Modeling of Suspended Sediment Resulting from Dredging and Construction Operations at the Proposed Masonville Site

2310 Broening Highway; Baltimore, MD 21224 Phone: (410) 631-1102 Fax: (410) 631-1057

Modeling of Suspended Sediment Resulting from Dredging and Construction Operations at the Proposed Masonville Site

1. BACKGROUND

Suspended sediment modeling was performed at the Masonville site to examine the turbidity plumes that would potentially result from dredging and placement operations during perimeter dike construction. The results from these studies were presented in Appendix J of the Masonville DMCF EIS. The following presentation provides a summary of the ***Appendix J*** results and expands on the ***WQ impacts sections of the EIS (Section 5.1.4)***. The dredge/placement operations will take place in a series of steps.

- Clam-shell dredging of silty overburden and removal to the HMI DMCF,
- Placement with split hull barge of Seagirt sand/gravel material in undercut areas that were unsuitable for dike construction,
- Cutter head dredging of Masonville borrow material, and
- Hydraulic placement of borrow material during perimeter dike construction.

During pre-dredging, the silty overburden [approximately 1.7 million cubic yards (mcy)] that is unsuitable for dike construction and covering the borrow material would be removed and barged to the HMI DMCF for placement. It is anticipated that pre-dredging of the unsuitable material would take approximately three to four months to complete. Pre-dredging would be conducted mechanically using a clam-shell dredge.

The overburden removal would also include material along the perimeter dike footprint that is unsuitable as foundation material below the constructed dike. This material would be removed resulting in an undercut to a depth of approximately 28 ft in an area with original depths of approximately 14 ft. The undercut area will be filled with sand/gravel material transported from Seagirt with a split hull barge.

The construction of the perimeter dike will start with placement of the cofferdam (east site per miter). The sand dike construction would begin with the western dike (fringe marsh) alignment and involve a cutter head dredge moving material from the borrow area to the dike line. The entire dike line will first be raised to +4 feet MLLW, thus closing it off from the Patapsco River, before finishing construction. This will minimize turbidity effects during the remaining dredging and placement operations as the dike is raised to final grade. The utilization of finer grained borrow material would not likely occur until the borrow area is enclosed. Construction of the sand perimeter dikes is expected to take approximately 12 months to complete. The orientation and size of the expected turbidity plume would vary on a daily basis, depending on the volume of disturbed material as well as winds, tides and currents in the study area.

To assess the potential extent and impact of the dredging and placement operations during dike construction, the USACE DREDGE model [developed by the Engineer Research and Development Center (ERDC) in Vicksburg, Mississippi] was executed for site-specific scenarios. The DREDGE model uses site grain-size data in conjunction with the clam-shell/cutter head size, pumping rates, and ambient current velocity to predict the extent of the turbidity plume. Turbidity plumes from both clam-shell and cutter head dredge operations and hydraulic placement of materials along the dike line were modeled for a range of grain-size distributions and for near slack water, tidal average, and full ebb/flood receiving water velocity conditions. The results included in this summary are for average particle distributions and a 6-cm/sec average tidal condition.

2. WATER QUALITY CRITERIA FOR TURBIDITY

Turbidity is regulated by the rules for conventional pollutants: the allowed mixing zone in Maryland estuarine waters is defined as 10-percent of the cross-sectional area of the receiving water body (at mean water level). Turbidity limits in the surface water resulting from any discharge may not exceed 150 nephelometric turbidity units (NTUs) at any time, and 50 NTUs as a monthly average. The DREDGE model simulates total suspended solids (TSS), which are output with units of milligram per liter (mg/L). The relationship between TSS and NTU is variable and is influenced by such things as salinity, phytoplankton, and the grain size distribution of the sediments. Two datasets were available for Baltimore Harbor materials that relate measurements of TSS to NTU. One was from the I-95 Tunnel turbidity monitoring for dredging operations and the other was for the spillway monitoring at the HMI DMCF. Both indicated that for local dredged materials, 1 mg/L of TSS was generally slightly greater than 1 NTU of turbidity. Based on analysis of the harbor data, a probable TSS range was associated with the 50 NTU and 150 NTU turbidity criteria.

- 50 NTU monthly average: 50-70 mg/L TSS
- 150 NTU at any time maximum: 150-240 mg/L TSS

In the following sections, the suspended solids modeling results are summarized for these TSS concentrations.

3. REMOVAL OF OVERBURDEN AND BORROW MATERIAL

The clam-shell dredging of the overburden and the cutter head deriding of the borrow material were simulated with the USACE DREDGE model. This model has previously been applied to monitoring data collected in Baltimore Harbor adjacent to the Seagirt Marine Terminal. During this earlier study, USACE-WES conducted detailed TSS plume mapping surveys downstream of the dredge point and this data was used by EA for model calibration. The material from the Baltimore Harbor study was similar to the Masonville overburden. Model parameters including dispersion coefficients and a clam-shell loss rates from the earlier study were utilized at Masonville.

3.1 Clam-Shell Dredging of Overburden

Field sampling of the overburden had indicated that the material, on average, was 87.3 percent fine silts and clays. The removal of this overburden was simulated with the DREDGE model using a 20-yd^3 clam-shell. Cross-sectional areas of the resulting suspended sediment plume were calculated from model output. TSS concentrations associated with the 50 NTU and 150 NTU turbidity criteria are provided in the following table for the 6-cm/sec average tidal current condition.

Table 1. Cross-Sectional Area of Sediment Plumes at the Masonville Site for Clam-Shell Dredging of the Overburden

Downstream Distance (m)	Cross-Sectional Area (%)			
	Monthly Average (50 NTU)		Maximum (150 NTU)	
	50 mg/L	70 mg/L	150 mg/L	240 mg/L
20	5.2	1.7	0.0	0.0
60	0.0	0.0	0.0	0.0
100	0.0	0.0	0.0	0.0

The above table indicates that the turbidity plume resulting from the clam-shell dredging of the overburden is significantly smaller than the allowed 10-percent cross-sectional area mixing zone. TSS concentrations in excess of 150 mg/L were not present beyond the immediate vicinity of the dredge. A 50 mg/L TSS concentration was 5.2-percent of the cross-sectional area at a 20-m downstream distance, and dispersion reduced plume concentrations to less than 50 mg/L by a 60-m distance.

3.2 Cutter Head Dredging of the Borrow Material

The grain-size of the borrow material was variable but the average particle distribution was 18.6-percent gravel, 52.1-percent sand, and 29.3-percent fines. The cutter head removal of the sandy borrow material was modeled with DREDGE assuming a 5 ft thick cut and a 2,400 yd^3/hr dredging rate. Cross-sectional areas of the resulting suspended sediment plume were calculated from model output. TSS concentrations associated with the 50 NTU and 150 NTU turbidity criteria are provided in the following table for the 6-cm/sec average tidal current condition.

Table 2. Cross-Sectional Area of Sediment Plumes at the Masonville Site for Cutter Head Dredging of the Borrow Material

Downstream Distance (m)	Cross-Sectional Area (%)			
	Monthly Average (50 NTU)		Maximum (150 NTU)	
	50 mg/L	70 mg/L	150 mg/L	240 mg/L
20	2.54	1.76	0.26	0.04
100	0.24	0.04	0.00	0.00
200	0.00	0.00	0.00	0.00

The DREDGE model results in the above table indicates that the cutter head dredging of the borrow material would be in compliance with the 10-percent cross-sectional area mixing zone criteria under average tidal conditions. The at any time maximum concentration associated with a 150-mg/L TSS concentration would not exceed 1-percent of the cross-sectional area. The monthly maximum value is predicted to be less than 3-percent of the cross–section at a 20-m downstream distance with dispersion reducing the maximum plume concentration to less than 50-mg/L by a 200-m distance.

4. HYDRAULIC PLACEMENT OF BORROW MATERIAL DURING DIKE CONSTRUCTION

The dredged material resulting from the cutter head operation in the borrow will be transported to the dike construction site through a 32-inch diameter pipe. At the construction site, the dredged material is typically discharged on top of the newly formed dike. The sand is mechanically shaped into training dikes on each side of the dike centerline. The dredge material being pumped through the 32-inch pipe is discharged between the training dikes. The discharged material flows between the training dikes while dropping its suspended load on the newly forming leading face of the dike being constructed. Only a portion of fines remain in the flow that enters the water column.

The initial sediment release was modeled with the USACE STFATE model. The particle fraction remaining in the water column after several minutes was used as the sediment source term in the DREDGE model. This approach was suggested by Dr. Donald Hayes, a co-author of the DREDGE model. ***As previously indicated, the average particle distribution of the borrow material was approximately 29.3-percent fines.*** For a tidal average ambient velocity condition, 13.1-percent of the fine material (25.6 kg/sec) remained in suspension. Cross-sectional areas of the resulting suspended sediment plume were calculated from model output. TSS concentrations associated with the 50 NTU and 150 NTU turbidity criteria are provided in the following table for the 6-cm/sec average tidal current condition.

Table 3. Cross-Sectional Area of Sediment Plumes at the Masonville Site for the Hydraulic Placement of Dredged Borrow Material during Dike Construction

Downstream Distance (m)	Cross-Sectional Area (%)			
	Monthly Average (50 NTU)		Maximum (150 NTU)	
	50 mg/L	70 mg/L	150 mg/L	240 mg/L
100	17.6	14.2	6.7	2.1
200	21.2	14.8	1.0	0.0
400	15.7	4.5	0.0	0.0

Water column average TSS contours corresponding to the model results in the above table are displayed in Figure 1. At a 100-m downstream distance, water column average TSS concentrations do not exceed 130 mg/L. However, the figure displays the extent of the lower 50-70 mg/L TSS values.

The DREDGE model results in the above table assumes the worst-case discharge of an unregulated outflow pipe. ***Even under those conditions, the turbidity associated with dike construction should be able to meet the cross-sectional requirements of the MDE's surface water regulations for the instantaneous maximum for turbidity (150 NTU). However, the model predicts that the turbidity plume would exceed 50-70 mg/L TSS over 4.5 to 21.2 percent of the cross-section on a monthly average basis if dike construction was conducted without any turbidity control techniques. The project implementation plan includes the use of turbidity curtains around the discharge point (Section 7.4 of the EIS) in order to control turbidity and the effect of the turbidity curtains is not included in the TSS modeling.*** Because the Masonville area has relatively weak currents and is protected, turbidity curtains would likely be an effective turbidity management tool. The effectiveness of turbidity curtains is highly variable but can remove as much as 80 to 90 percent of the turbidity in a water body (Francingues *et. al.* 2005). Even assuming a more conservative 50 to 60 percent effectiveness, turbidity curtains in conjunction with construction techniques designed to minimize material losses should bring dike construction into compliance with MDE's turbidity limits.

5. PLACEMENT OF SEAGIRT MATERIAL AT MASONVILLE WITH A SPLIT HULL BARGE

As part of Masonville project, unsuitable foundation material is to be removed resulting in an undercut to a depth of approximately 28 ft in an area with original depths of approximately 14 ft. It is proposed to fill these undercut areas with sandy dredged material from the Seagirt New Work dredging project. The placement of this material at Masonville with a split hull barge was simulated with the STFATE model. STFATE is a USACE model used for computing the fate of material placed from either a split hull barge or a hopper dredge. This placement operation with Seagirt material would take place after removal of the overburden and prior to construction of the perimeter dike.

Specific areas to be dredged at Seagirt Marine Terminal have a very high sand and gravel content, a desirable attribute for use in the undercut areas. Particle size data was available at the Seagirt site for 20 samples. In these samples, the gravel fraction ranged up to 60 percent and the sand fraction ranged from 22 to 90 percent. Particle size attributes resulting from averaging the 20 samples into a composite were as follows:

- Gravel: 33.3-percent
- Sand: 54.8-percent
- Fines: 12.0-percent (silt and clay)

The 20 samples included two locations with a fines content of 48-49 percent. These locations will be excluded from the material transported to Masonville. The fines content of the remaining 18 samples ranged from 2.0-percent to 18.5-percent and averaged 7.8-percent.

The geometric configuration of the undercut was included in the bottom depth matrix used by the STFATE model. The undercut will have a 160-ft bottom width with a 2:1 side slope. The resulting top width at a 14-ft local depth is 210-ft. Three undercut depth scenarios were examined with STFATE:

- A 28-ft undercut representing initial placement.
- A 21-ft deep undercut representing placement when the trench is half filled, and
- A uniform 14-ft depth representing placement after the trench is filled to the original grade.

The barge characteristics modeled with STFATE are as follows:

Length of hopper	185 ft
Width of hopper	60 ft
Draft empty	4 ft
Partial draft	16 ft (3,000 yd^3 sand and gravel)
	14 ft (2,500 yd^3 sand and gravel)
	12 ft (2,000 yd^3 sand and gravel)

The placement operation was modeled as a barge filled to partial capacity with drafts of 12-ft to 16-ft, corresponding to 2,000 yd^3 to 3,000 yd^3 of dredged material. Only the 12-ft draft barge was modeled for the 14-ft at grade scenario. The model predicted cross-sectional areas of the resulting turbidity plumes are provided in the following table for the 6-cm/sec average tidal velocity condition.

Table 4. Cross-Sectional Area of Sediment Plumes at the Masonville Site for the Placement of Seagirt Material with a Split Hull Barge

Water Depth (ft)	Barge Capacity (yd3)	Cross-Sectional Area (%)			
		Monthly Average (50 NTU)		Maximum (150 NTU)	
		50 mg/L	70 mg/L	150 mg/L	240 mg/L
14	2,000 (12 ft)	6.0	5.0	3.4	2.7
21	2,000 (12 ft)	7.3	6.5	3.9	2.6
21	2,500 (14 ft)	7.5	6.6	3.9	2.5
21	3,000 (16 ft)	7.7	6.7	4.0	2.7
28	2,000 (12 ft)	6.3	5.3	2.9	1.6
28	2,500 (14 ft)	6.5	5.4	2.4	1.3
28	3,000 (16 ft)	6.6	5.5	2.2	0.7

TSS contours for the 21-ft depth/3,000 yd^3 model scenario are displayed in Figure 2. The placement of material with a split hull barge is a short duration event that results in a "cloud" of suspended material moving along with the ambient current. Figure 2 displays TSS contours in the surface layer and in the 12-ft near bottom layer 0.5-hour and 1-hour after the barge release. In the surface layer, the 150-mg/L contour was present at 0.5-hour, but not after 1-hour. In the near bottom layer, the 240-mg/L TSS contour was approximately the same size after 0.5 and 1.0 hours, while the size of the 50-mg/L and 70-mg/L contours increased.

The predicted cross-sectional areas in the above table indicate that the sediment plumes resulting from the placement of Seagirt material at the Masonville site will be in

compliance with MDE's 10-percent mixing zone criteria for turbidity. The at any time maximum 150 NTU turbidity value is not expected to exceed 4.0-pecent of the cross-sectional area. The monthly average 50 NTU value is predicted to range from 5.0-percent to 7.7 percent of the cross-section. In STFATE during the initial fall, the fines are entrained within the rest of the material. As the mass reaches the bottom, the fines are dispersed into the water column. In the above table, the cross-sectional areas for the 28-ft depth scenarios are slightly less than at the 21-ft depth, because a greater portion of the dispersed material remains within the deeper trench. When placing material at a 14-ft depth from a 12-ft draft barge, the initial fall to bottom is less dynamic, keeping a greater portion of the fines entrained within the courser material with a lower loss rate to the water column.

Figure 1 Water Column Average TSS Concentrations Predicted by the DREDGE Model for the Hydraulic Placement of Borrow Material During Dike Construction

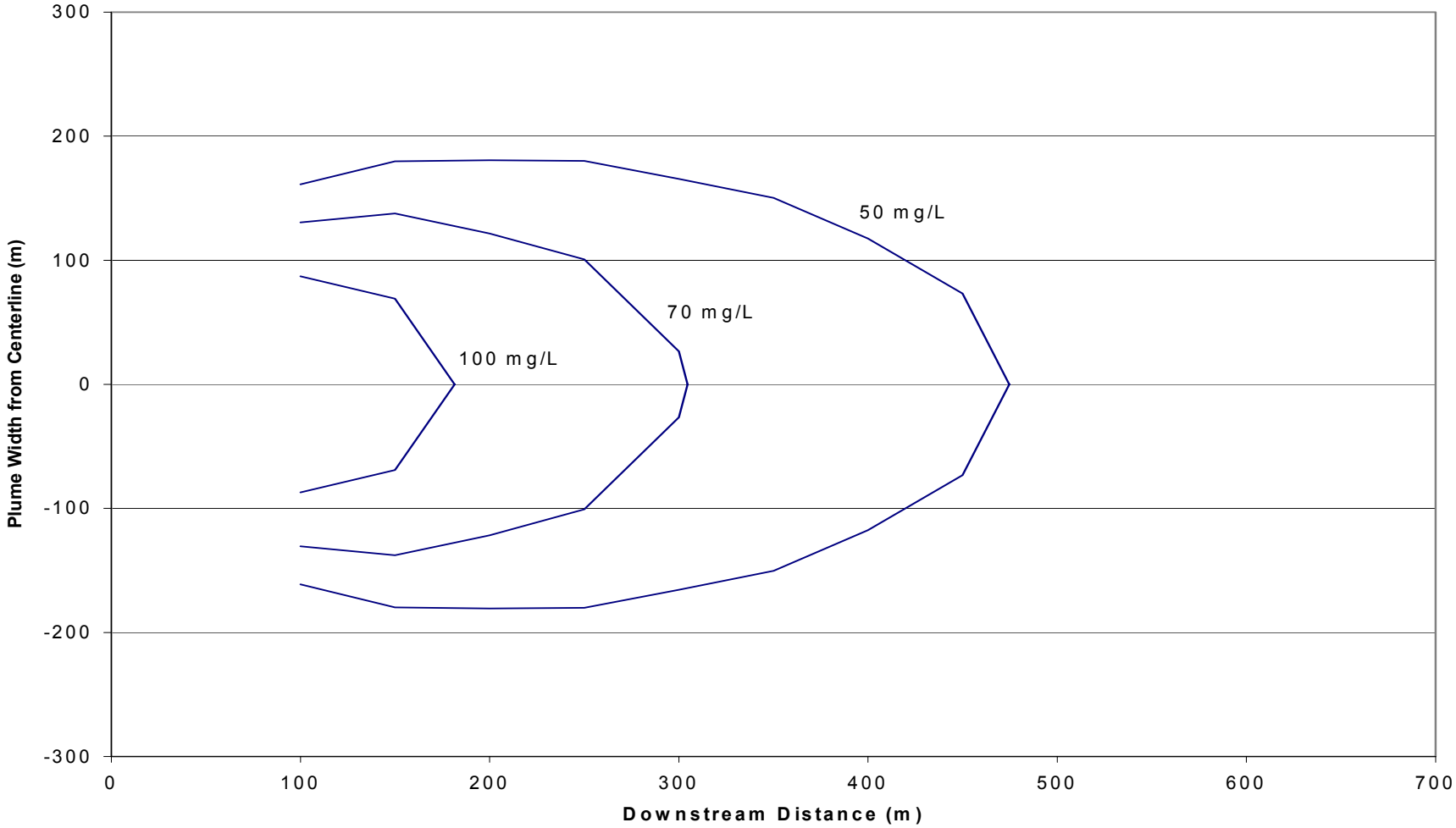
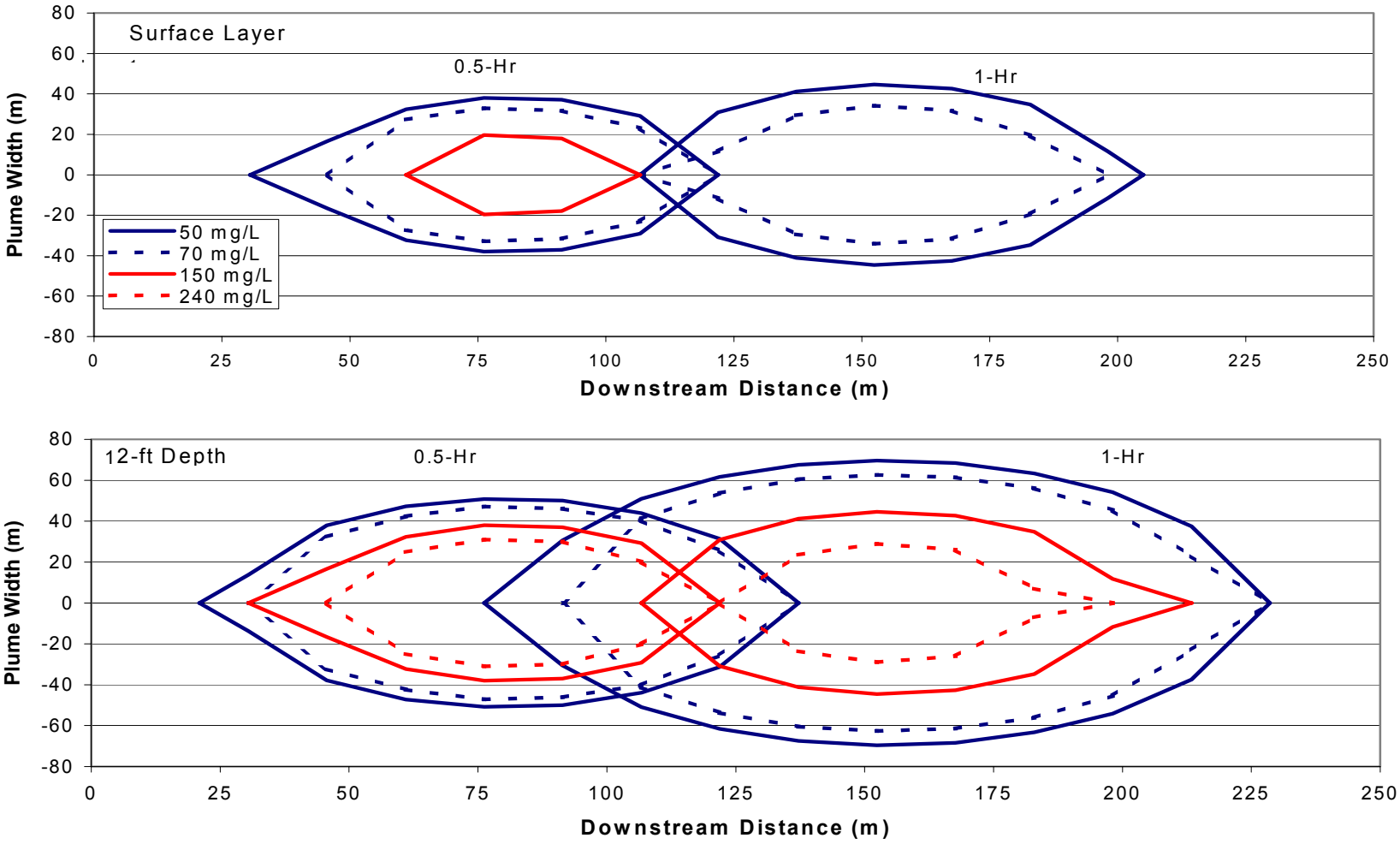


Figure 2 TSS Contours for Placement of Seagirt Material at the Masonville Site after 0.5-hr and 1-hr, 3,000 yd^3 in 21 ft Depth



MARYLAND PORT ADMINISTRATION

Addressing MDE's Concerns
Masonville Dredged Material Containment Facility

Read-Ahead Material for MDE-MPA Meeting

March 27, 2007

Attachment D
Borrow Suitability

CONTENTS:

(1) **Summary of borrow quantities**
(2) **Summary of Masonville Borrow from Findling 2006 (2 pages)**
(3) **Summary of Seagirt Borrow from E2CR 2006 (2 pages)**

A CD with all of the geotechnical information for the Masonville and Seagirt projects has been included with this package. Feel free to call Dr. Steve Storms [(410) 631-1102] with any questions regarding this material.

2310 Broening Highway; Baltimore, MD 21224 Phone: (410) 631-1102 Fax: (410) 631-1057

Needed Quantities

Construction Item	Quantity (mcy)
Dikes	1.36
Onshore	0.10
Cofferdams	0.48

Available Quantities

Borrow Source	Quantity (mcy)
Masonville	0.34
Seagirt	1.54
Offsite Upland	Remainder of Needed

The following text is extracted from Findling's 2006 report entitled *Geotechnical Study for Masonville Marine Terminal.* The full report is included on the CD that accompanies this package.

8.0 EVALUATION AND ANALYSIS

8.1 General

The two major issues concerning the geotechnical evaluation of a dredged material placement site are:

a) Availability of Borrow Materials, and
b) Foundation Conditions.

The issues are discussed below:

a) Borrow Material – Availability of borrow material within the enclosed area: Historically, dredge material containment facilities constructed in open water in the Baltimore area have been built with granular material (sand and gravel) excavated within the containment area or near the site. The Sand typically contained less than 30 percent fines in place in the dike section. However, the borrow area identified within the proposed Masonville containment facility does not appear to have sufficient quantity of granular material to construct the entire section of the initial dike to El.+10. Similar containment facilities have been constructed in other areas using clay and/or mixture of sand and clay and are stable. Therefore, the dike design for this site is based on a portion of the embankment containing both granular material and clay.

b) Foundation Conditions – Foundation conditions under the perimeter dike: Stiff clays and sands are the preferred foundation conditions. Soft clays in the foundation soils would require flatter slopes for the dike, or steeper slopes and stabilizing berms. Flatter slopes or berms would increase the cost. Additionally, areas that have very soft clays may require the total or partial removal of theses very soft soils by undercutting. The undercut soil will need to be disposed of, and the undercut area will need to be backfilled with sand.

In evaluating the stability of a slope, four variables have to be considered:

i) The analytical method used.
ii) Shear strength of the foundation soil and the embankment soil.
iii) Cross-section of the containment dike and side slopes.
iv) Factor of safety, acceptable and computed.

8.2 Borrow Material: Quantity and Quality of Sand and Clay

It is proposed to build a dike from the sand of Stratum II and the clay of Stratum II and III.

In evaluating the borrow area, two variables have to be evaluated: 1) quantity of sand and clay, and 2) quality of sand and clay.

8.2.1 Quantity of Sand and Clay:

Subsurface information from previous investigation, completed as part of this study and probe data were used to evaluate the quantity of the various types of borrow. This analysis was conducted by another consultant.

8.2.2 Quality of Sand (Stratum II) and Clay (Startum III):

The sand of Stratum II appears to be angular to semi-angular. The percent of fines in the sand portion of Stratum II varies considerably, but is generally less than 30%. The sand appears to be suitable for building the dike using hydraulic or mechanical dredging.

It should be noted that the sand (Stratum II) does contain layers/pockets of silty clay. It will not be practical to segregate this clay from the sand. The clay would probably get incorporated in the dike, as balls or chunks depending on the construction material and methods. It is also possible that portions of the dike could consist mostly of clay, rather than sand, from Stratum II and/or Stratum III. The initial dike design to El.+10 is based on the exterior portion of the dike to contain sand with up to 30 percent fines, however the interior portion of the dike could be either sand or clay. The stability analysis was conducted for both types of material on the inside portion of the dike.

The clay in Stratum III is stiff to hard. It is anticipated that this clay will form balls during hydraulic dredging and placement or relatively large chunks if mechanical methods are used. The balls or chunks will form a steep slope above and below water.

The following text is extracted from E2CR's 2006 report entitled *Surface Investigation and Laboratory Testing for Seagirt and Dundalk Marine Terminal 50 ft Deepening.* The full report is included on the CD that accompanies this package.

Stratum II

At drilling locations where Stratum I did not exceed or boring depth and at undredged locations, Stratum II layer was generally observed. Stratum II generally consists of interbedded Sands, Silts and Clay of the Talbot formation. Grain size within these Gravel and Sand beds are known to change abruptly laterally as is common in fluvial depositional settings. Cobbles and or Boulders may be present. In many borings located within the previously dredged areas, this Stratum II was encountered just below the mudline with a thin cover of Stratum I.

Also observed was the presence cemented Sandy Silt at about El –42 feet in boring E-34. Coarse Gravel and Sand layers were also encountered in the borings along the bulkhead of Dundalk Marine Terminal. In a few borings, this stratum was observed to be missing. The physical properties of this stratum are:

Non Plastic Materials

USCS Classification:	SM-SP-ML
Relative Density:	Very loose to dense, generally very loose to med. dense
Nat. Moisture Content:	11% to 50% but generally 10% to 25%
Percent Fines:	4% to 50% but generally 5% to 20%

Cohesive Materials

USCS Classification:	ML-MH-CH-CL
Consistency:	Soft to medium stiff
Nat. Moisture Content:	50% to 108%
Percent Fines:	50% to 100% but generally in excess of 80%
Liquid Limit:	60% to 90%
Plasticity Index:	25% to 55%
Cohesion:	150 to 1,100 PSF but generally 300 to 500 PSF

Stratum III

Stratum III consists of orange to greenish brown silty Sand and Gravel with occasional interbedded layer of Silts and Clay. The borings indicate that the Sand and Gravelly soils, in general, are semi angular to angular. The particle size in this stratum could be rather coarse and the stratum could contain Cobbles and or Boulders. Since the size of the sampler used to obtain subsurface samples was only 2 3/8 inches, the Cobbles and Boulders that might be present could not be sampled in the borings.

However, review of the geological formation data, the blow counts and the observations made during the drilling (such as chattering of auger) indicate that large size Gravels and Cobbles should be anticipated with in this stratum. The photos of the particle sizes of a few Gravel samples are shown on Figures 6 to 8 in the Appendix. The physical properties of this stratum are:

Non Plastic Materials

USCS Classification:	SM-SP-GP-GM-GW
Relative Density:	Medium dense to very dense
Nat. Moisture Content:	6% to 12%
Percent Fines:	1% to 17%

Stratum IV

Stratum IV consists of brown, tan and gray Sand with pockets of Gravel, scattered Cobbles and layers of Silty Clay.

Non Plastic Materials

USCS Classification:	SM-SP-GP-GM-GW
Relative Density:	Medium dense to very dense
Nat. Moisture Content:	7% to 22%
Percent Fines:	3% to 25%

MARYLAND PORT ADMINISTRATION

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Masonville Dredged Material Containment Facility

Read-Ahead Material for MDE-MPA Meeting

March 27, 2007

Attachment E
Dike Load on Waterline

CONTENTS:

(1) Memorandum describing the waterline rerouting

2310 Broening Highway; Baltimore, MD 21224 Phone: (410) 631-1102 Fax: (410) 631-1057

MEMORANDUM: DESCRIPTION OF WATERLINE REROUTING

An existing Baltimore City 48" water main is located within the footprint of the proposed DMCF. As a condition of development of the DMCF, Baltimore City indicated they would not allow placement of dredged material over the existing line. To accommodate this requirement, MPA worked with the City to develop an acceptable alignment to relocate the water main to the perimeter of the facility. Figure E-1 shows the location of the existing water main and the proposed relocation. As shown in Figure E-1, the future waterline is located inboard of the cofferdam portion of the DMCF. The waterline will be located behind the cofferdam, penetrate the dike at a bulkheaded section. Figure E-2 shows a cross section of the location of the proposed water main. As shown in the figure, the water main is located within vibrocompacted granular fill, approximately 40 feet behind the cofferdam structure. The water main is covered by at least 4 feet of granular fill. Figure E-3 shows the penetration of the water main through the containment structure. As seen in the figure, a sheet pile wall will be installed in the area where the water main penetrates the containment structure. Figure E-4 shows the profile of the water main. The figure shows the transition between pile supported and fill supported sections of the main, as well as riprap armoring over the main at the penetration of the bulkhead.

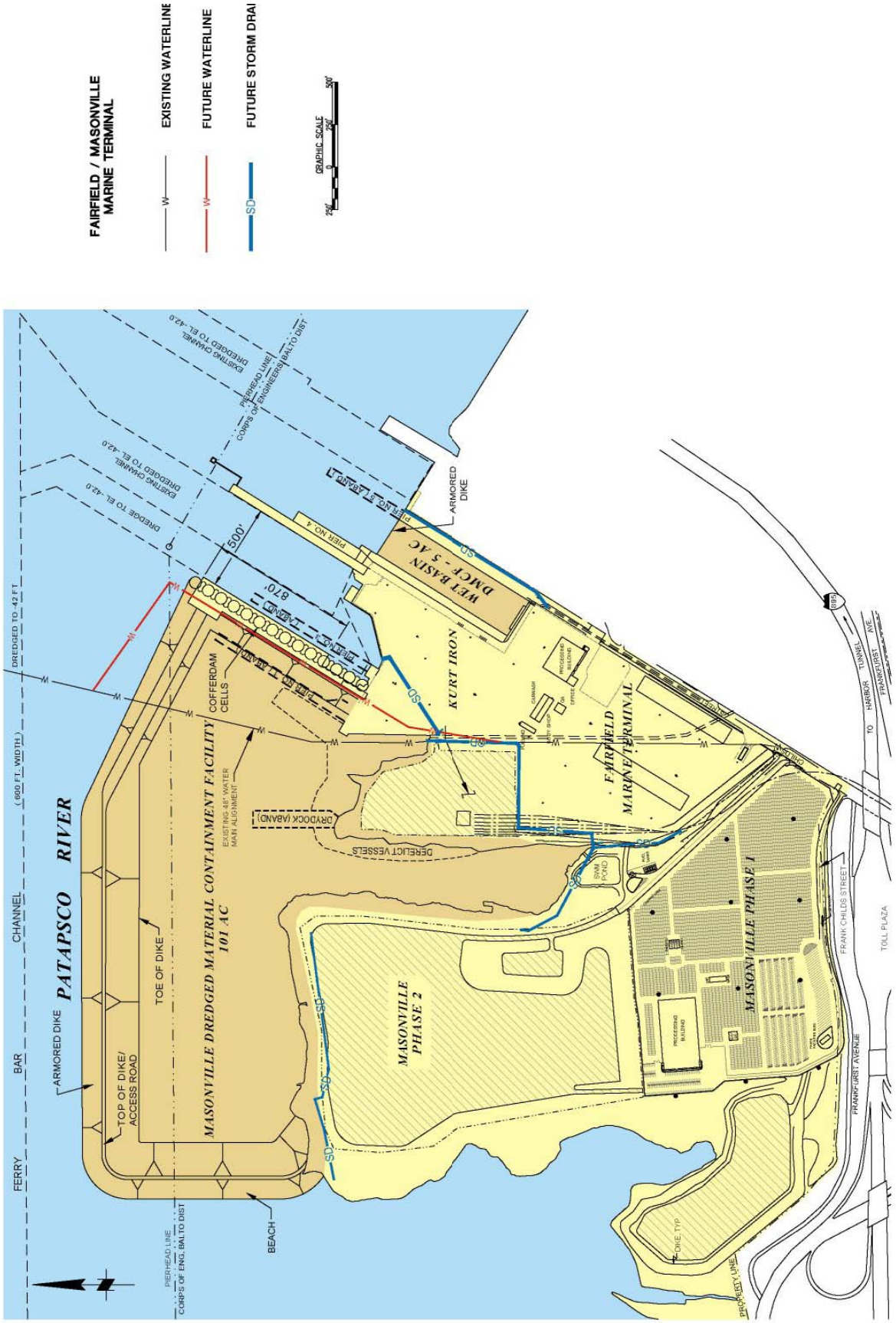

Figure 1 - Water Main Location

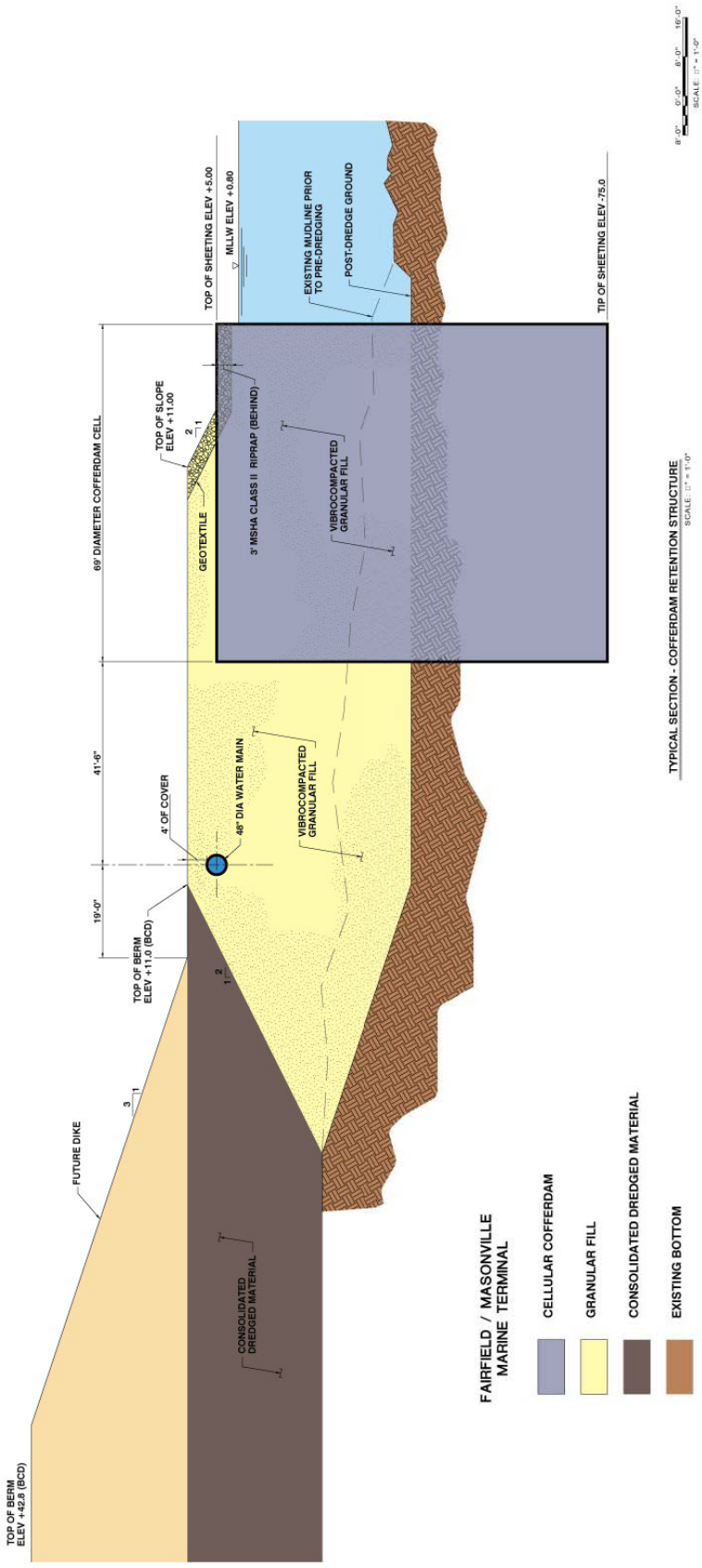

Figure 2 - Water Main Cross Section

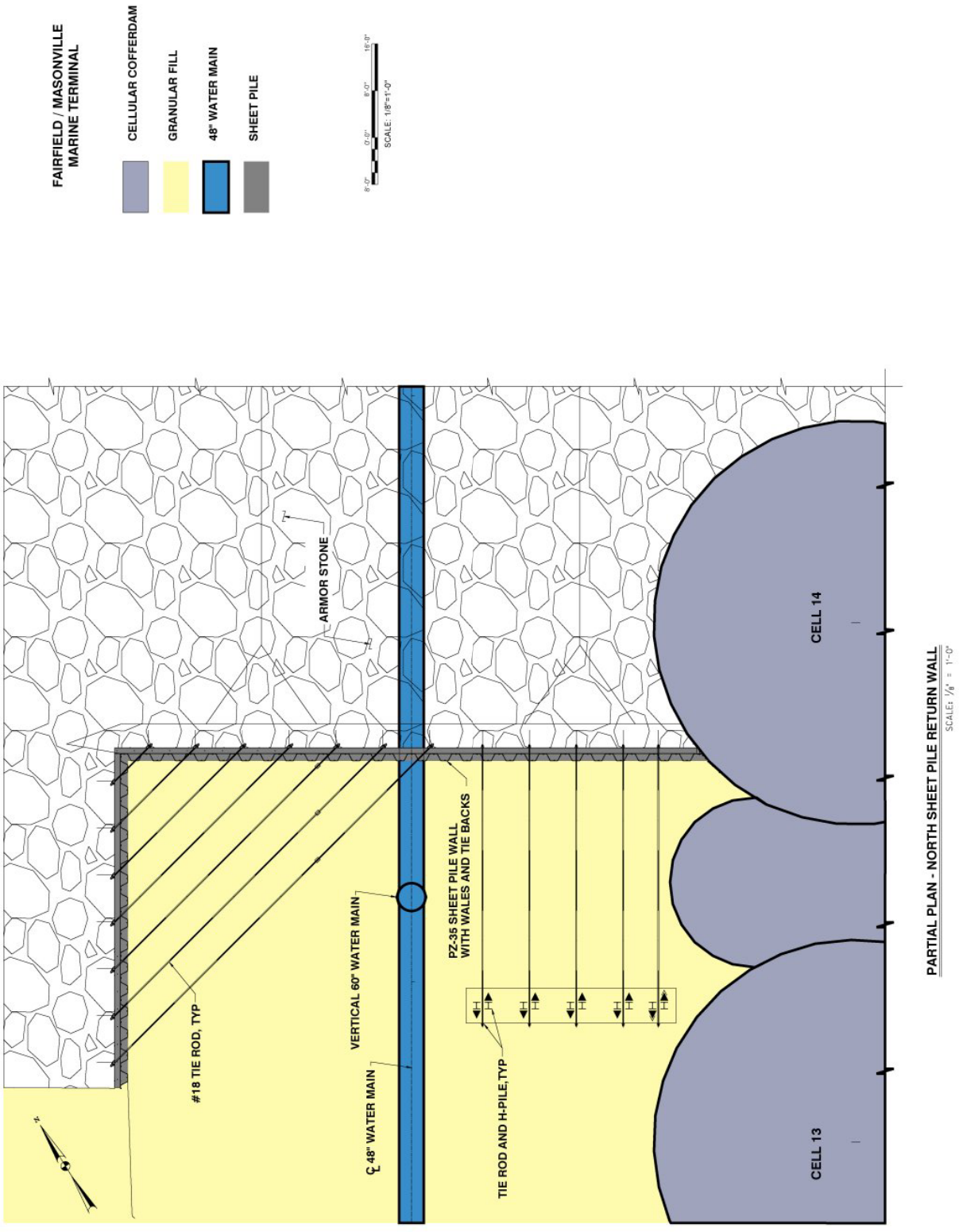

Figure 3 - Water Main Penetration through Containment Structure

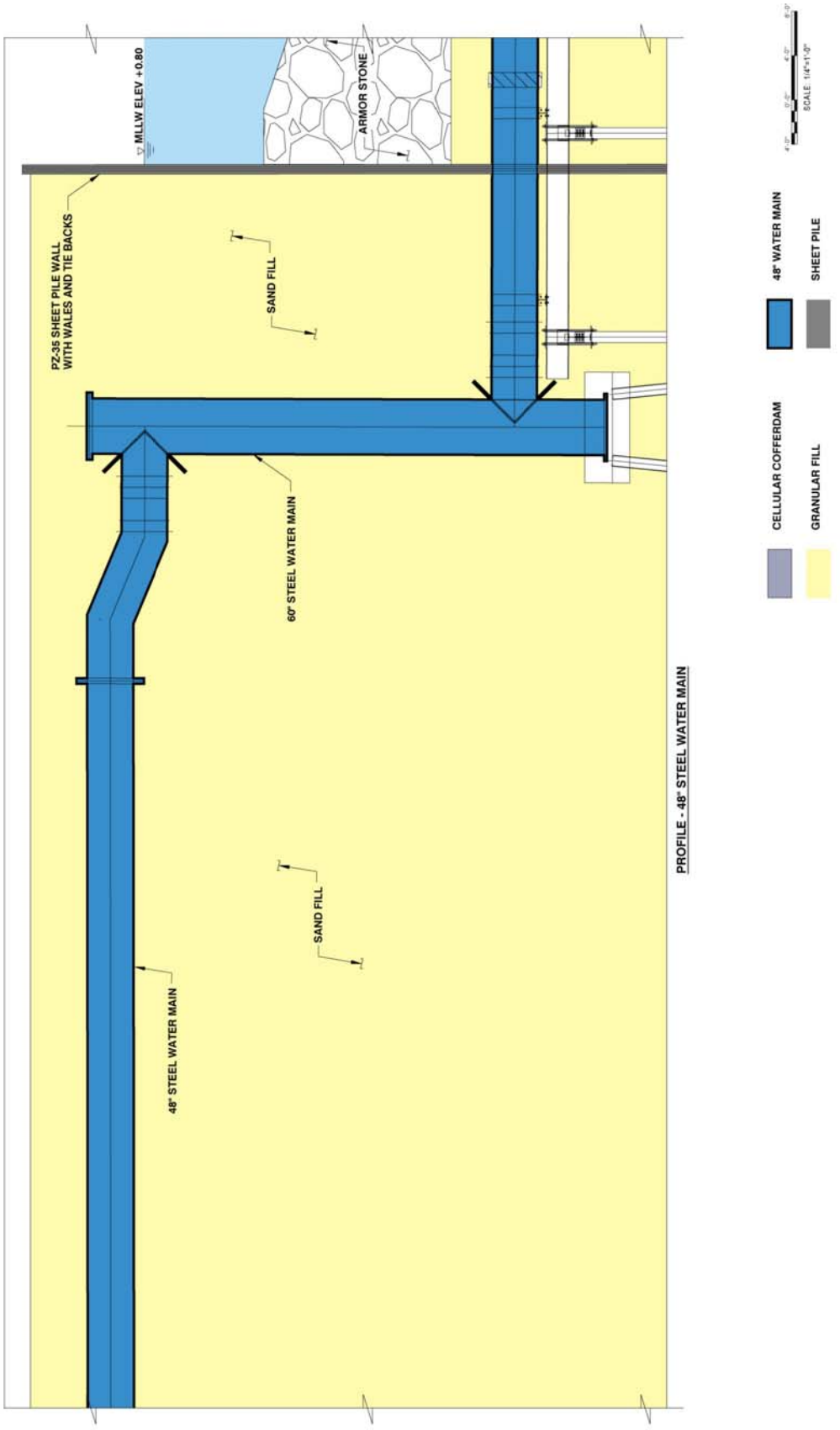

Figure 4 - Water Main Profile

MARYLAND PORT ADMINISTRATION

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Attachment F
Dike Vegetation

CONTENTS:

(1) Letter from Findling detailing vegetation criteria
(2) Dike cross-sections showing acceptable vegetation

2310 Broening Highway; Baltimore, MD 21224 Phone: (410) 631-1102 Fax: (410) 631-1057

FINDLING, INC.
Engineers and Contractors
3401 Carlins Park Drive Baltimore, Maryland 21215

Tel.: 410-367-1400
Fax: 410-466-6867
info@findlinginc.com

March 5, 2007

Moffat & Nichol Engineers
2700 Lighthouse Point East, Suite 501
Baltimore Maryland 21224

Attention: Mr. Pete Kotulak, P.E.

Re: Planting on Exterior of Dikes
Masonville DMCF
Baltimore, Maryland

Dear Mr. Kotulak:

In response to your request, we are providing general vegetation criteria for the Masonville DMCF embankments. In general, a dense healthy stand of grass is ideal embankment slope cover to reduce the risk of erosion. Small woody shrubs with root penetration of generally less than one foot can also be planted on the slope. Woody vegetation (trees, shrubs) with root penetration greater than about one foot and vegetation with tubular root system should not permitted on the embankment slopes. The slope must be maintained on a regular basis and inspected at least annually for signs of distress.

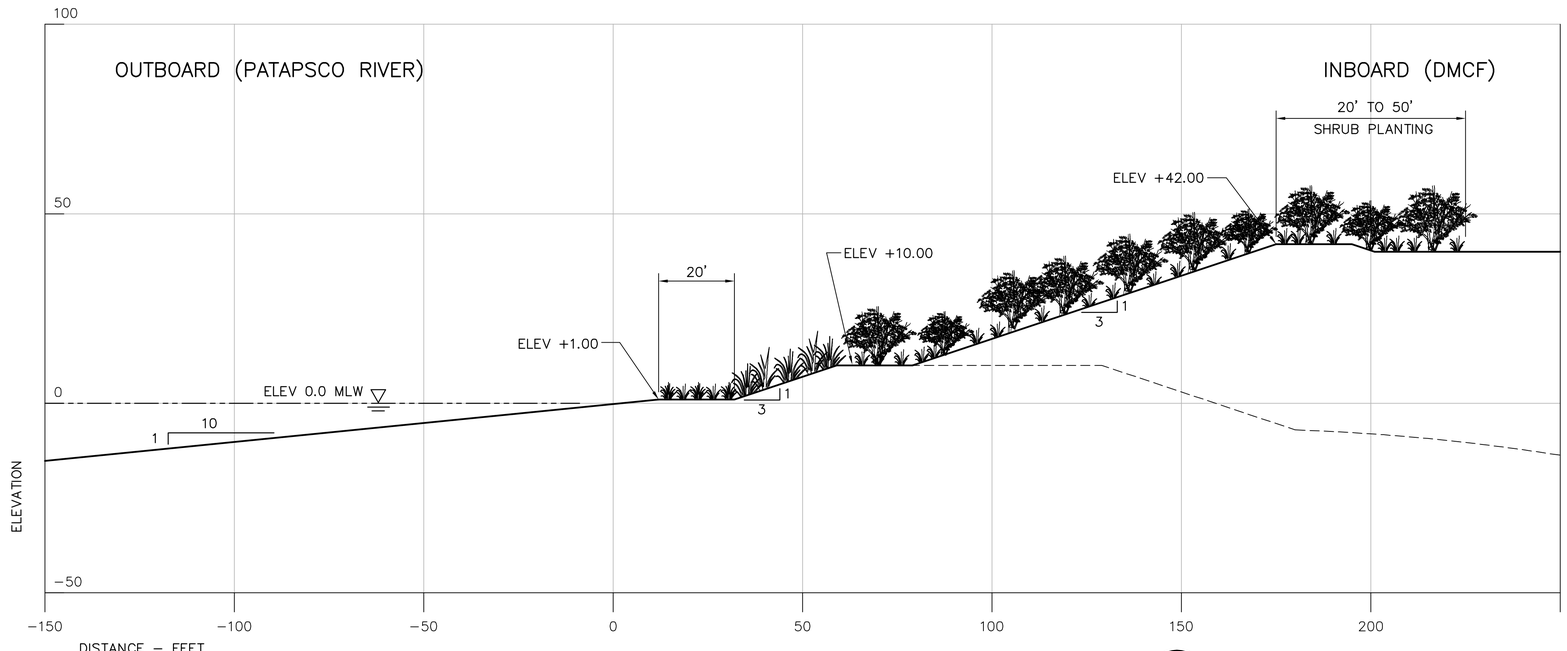
However, after the completion of filling (i.e., when the containment facility is completely filled-in with soil type materials consisting of consolidated dredged materials) it may be possible to plant some larger woody shrubs on the exposed slopes.

If you have any questions or require more detail plant criteria, please contact us at (410) 367-1400 .

Sincerely,
FINDLING, INC.

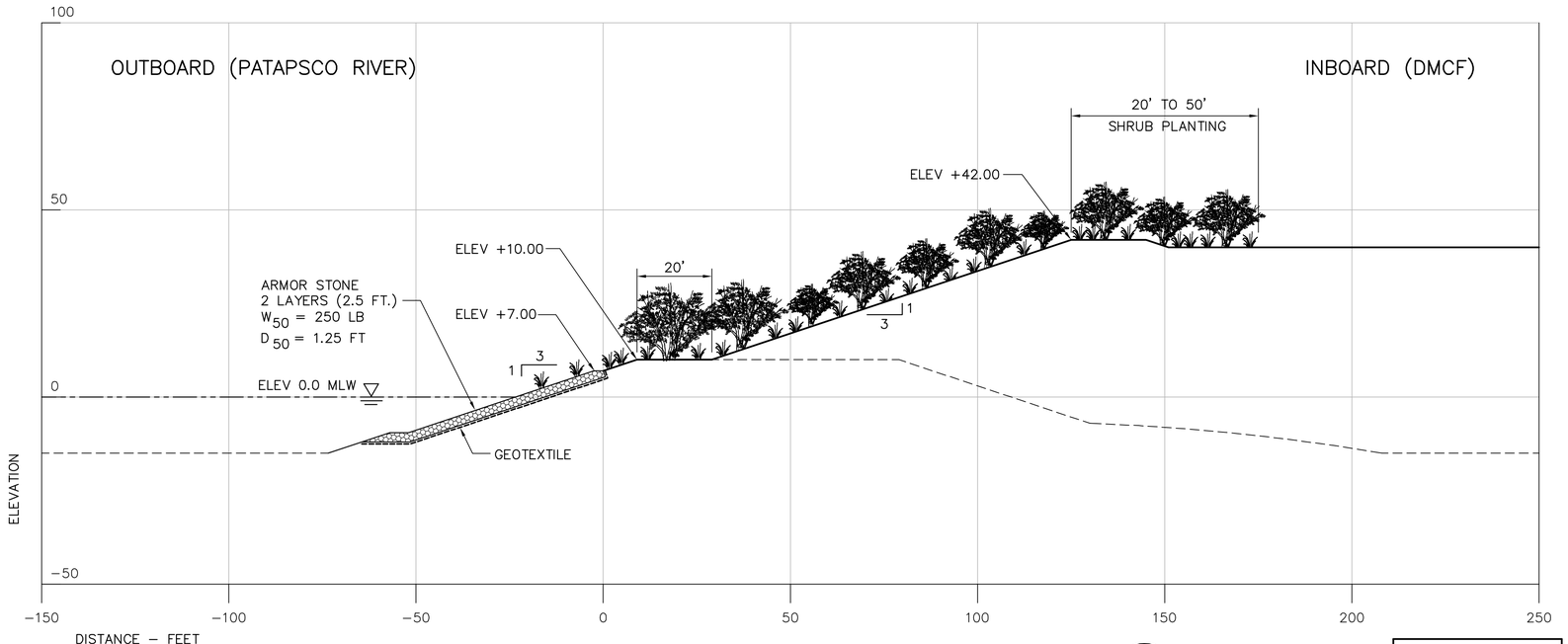
Amsalu Duressa

Amsalu Duressa, P.E.
Chief Executive Officer



BEACH AND DIKE SECTION – STATION 2+00 TO 13+00 (A; C7 | C11)

SCALE: 1" = 20'



ARMORED DIKE SECTION – STATION 14+00 TO 52+01 (B; C7 | C11)

SCALE: 1" = 20'

20' 0' 20' 40'

SCALE: 1"=20'

SURVEYED BY: –
DESIGNED BY: C. BRANT/P. KOTULAK
DRAWN BY: C. BRANT
TRACED BY: –
CHECKED BY: P. KOTULAK

P:\5570-04 MMT PRECON & ENG\CADD-MITIGATION\CRITICAL AREAS\5570004C011; 1-Mar-07 12:12 PM; Voelker, Paul

PRODUCED BY MOFFATT AND NICHOL CADD

NO.	DATE	REVISION	BY

MARYLAND PORT ADMINISTRATION
DIVISION OF ENGINEERING
MASONVILLE MARINE TERMINAL

MASONVILLE DREDGED MATERIAL CONTAINMENT FACILITY (DMCF)

DMCF DIKE TYPICAL SECTIONS BEACH AND ARMORED SECTIONS

MOFFATT & NICHOL

C–11

DATE: FEB 2007
SCALE:

CONTRACT NO. 000000

DRAWING NO. OF

FINAL

Addressing MDE's Concerns Regarding the Proposed Masonville Dredged Material Containment Facility

MDE Test Room
March 27, 2007 2:00 pm

Attendees

Name	Affiliation	Email
Jim Fritz	MDE	jfritz@mde.state.md.us
Elder Ghigiarelli	MDE	eghigiarelli@mde.state.md.us
Robert Cuthbertson	MDE	rcuthbertson@mde.state.md.us
George Harman	MDE	gharman@mde.state.md.us
Cas Taherian	MDE	ctaherian@mde.state.md.us
Hal Van Aller	MDE	hvanaller@mde.state.md.us
Jim Tracy	MDE/WMA	jtracy@mde.state.md.us
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Jeffrey McKee	USACE	jeffrey.a.mckee@usace.army.mil
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Kristen Gaumer	MN	kgaumer@moffattnichol.com
Bill Wheaton	MN	bwheaton@moffattnichol.com
Jim Robinson	MES	jrobi@menv.com
Stephanie Lindley	MES	slind@menv.com

Mr. Cuthbertson welcomed the attendees and everyone introduced himself or herself.

Mr. Hamons explained that the purpose of today's meeting is to describe how the Maryland Port Administration (MPA) will address the Maryland Department of the Environment's (MDE's) concerns and obtain necessary MDE approvals for the Masonville Environmental Impact Statement (EIS), which would allow the U.S. Army Corps of Engineers (USACE) and MPA to proceed with the submittal of the Final

Masonville EIS. He summarized MDE's concerns as they appear in the letter dated February 21, 2007 from Mr. Cuthbertson to Mr. Runion. Those concerns included: 1) anticipated placement methods; 2) containment methods during placement, sloughing of dike material (use of "geotubes"); 3) meeting Maryland water quality standards; 4) borrow suitability as foundation for the dike; 5) dike load on waterline; and 6) dike vegetation.

Mr. Hamons provided a brief background on the proposed Masonville project. He explained that a new placement option for material dredged from the Baltimore Harbor is essential because the Hart-Miller Island (HMI) Dredged Material Containment Facility (DMCF) will be closing due to state mandate at the end of 2009. Through the ongoing Harbor Team process, Masonville was recommended by the local community and other stakeholder interests for implementation by 2009 in order to meet Harbor dredging needs. The design of the project, including the associated mitigation and community enhancements, was closely coordinated with stakeholders together with local interests and regulatory and reviewing agencies. The Final EIS will be submitted as soon as MDE's concerns are resolved.

Mr. Runion showed the attendees the most recent project footprint and explained that the site is 141 acres. The proposed dikes around the site would include fringe marsh, armored dike, cofferdam, and shoreline dike. Mr. Ghigiarelli asked how the acreage increased to 141, as the most recent acreage value he'd heard was 130. Ms. Boraczek responded that there are 120 acres to the middle of the dike; when the toe of the dike is included, the total amounts to 130 acres. There are currently 10 acres of shoreline that will no longer be shoreline, and there is one additional acre of wetlands, thus bringing the total to 141. Mr. Ghigiarelli asked how much open water would be filled, and Ms. Boraczek responded 131 acres.

In response to MDE's question regarding how the material will be placed, Mr. Runion explained that placement would involve a four-stage construction process: 1) removal of the Seagirt and Masonville overburden by clamshell dredge and transport to HMI; 2) placement of Seagirt borrow at Masonville by split hull barge; 3) use of Masonville onsite borrow as cofferdam fill; and 4) use of Masonville onsite borrow for dike construction. Mr. Runion added that the borrow material quantity required for dike and cofferdam construction is 1.94 million cubic yards (mcy). Currently, the quantity of borrow available from Masonville and Seagirt combined is 1.88 mcy. Mr. Tracy asked if the undercut material at Masonville would be placed in the Masonville dredged material containment facility (DMCF), and Mr. Runion replied that the overburden at Masonville would be taken to HMI. Mr. Patel asked if the borrow material would be adequate for dike stability; Mr. Runion replied that stability would be discussed later in this presentation and if there are still questions following that portion of the presentation, he would be happy to answer them at that time.

In response to MDE's concern regarding sloughing of the dike toward the existing channel, Mr. Dalton explained that material containment would be a design consideration for all phases of Masonville construction. Currently, the dike design section and

anticipated construction methods promote material containment and conservation of borrow material. The proposed dike would be constructed with a 3:1 slope and the toe of the dike would be 250 feet from the toe of the channel. It is anticipated that the dike would be constructed hydraulically and then backfilled. Mr. Van Aller asked how close the bottom dump barges would get to the drop site for the dike construction. Mr. Dalton responded that the bottom dump scow would be able to be positioned directly over the area of dike construction because the area for dike construction would be undercut prior to the placement of borrow material. Mr. Van Aller then asked how the dike would be constructed above the water line. Mr. Dalton responded that inside the training dike, there would be a dozer constantly pushing material outwards to the area which would ultimately be covered in armor stone. Mr. Dalton clarified that there may be some clay mixed in with the material intended for dike construction, but this will be monitored; any clay material would be pushed toward the inside of the site and not used for dike construction. He reiterated that the material would be constantly monitored and the material used for dike construction would be no more than 30% fines. Mr. Van Aller asked if this is the same method that was used for construction of HMI, and Mr. Dalton responded that it is. Mr. Dalton explained that MPA and their contractors would constantly monitor the side slopes at Masonville. He added that armor stone and riprap would also be used to stabilize the dike. Mr. Taherian asked what the backup plan would be if unsuitable material was found in the borrow material intended for dike construction. Mr. Dalton replied that if clay balls form, the contractor would push that material toward the inside of the containment facility. He added that if a large amount of clay needs to be removed from the borrow material, the contractor could use a "Y" valve to pump the unsuitable material to the inside of the containment area.

Mr. Dalton then went on to discuss the use of geotubes, which was referenced in MDE's letter as a potential technique for preventing sediment sloughing. He explained that geotubes have been reviewed as a containment method and are not recommended for use at Masonville. Water depths at Masonville average over 15 ft mean lower low water (MLLW), and there is an additional 15 ft of unsuitable foundation that would need to be removed prior to geotube placement. Ultimately, Mr. Dalton pointed out that geotubes would be difficult to implement at depths of 30 ft MLLW. Mr. Van Aller asked if the proposed factor of safety is 1.3 for the dike, and Mr. Dalton replied that it is 1.3, which is the same design that was used for HMI where the dike was placed hydraulically. Mr. Van Aller stated that the report showed factors of safety less than 1.3 and that the standard is 1.5. Mr. Patel asked if the cofferdam is only in the area of the proposed pier, and Mr. Dalton replied that it is.

In response to MDE's request to describe the procedures that would be employed during construction to ensure that the project would not violate Maryland's water quality standards, Ms. Boraczek explained that modeling was performed and turbidity curtains would be used. Two models were run to simulate dike construction. The first was the DREDGE model, which was run to simulate the mechanical removal of overburden and hydraulic placement of the Masonville borrow material along the dike line. The second model, STFATE, was performed to simulate the split hull barge placement of sand borrow from Seagirt along the dike line. The data on the composition of the borrow and

unsuitable material from Seagirt and Masonville were input into the models. The results of the modeling were presented in table format showing the cross-sectional area that would be affected. These values were compared to the Maryland Surface Water Quality Regulation of 10% or less of cross-section that can be affected. In conclusion, the overburden at Masonville (removed via mechanical dredging) meets the state surface water quality criteria (SWC); the grain-size of the Seagirt borrow is generally coarser than Masonville borrow, so under the worst case scenario for depth, bottom placement would also meet SWC; and hydraulic placement of Masonville borrow would require turbidity curtains to comply with state turbidity SWC.

Mr. Van Aller inquired if MPA had applied for the monitoring permit or the discharge permit. Ms. Boraczek responded that there is a turbidity monitoring plan that is ready for MDE's review, however, the project team was waiting until DMCF permit issuance to begin those discussions. Ms. Boraczek also mentioned that Mr. Harman and others at MDE are aware that a plan exists. Mr. Ghigiarelli added that authorization would not be required during construction, but that a discharge permit would be required when the site is operational.

Mr. Cuthbertson referred to the previously mentioned "Y" valve used for the clay material, and inquired as to whether the clay would be adding to the impermeability of the dike, thus keeping material from leaching out of it. Mr. Runion responded that a barrier would be installed in the dike, but the project team had not yet determined the details of the liner. Mr. Ghigiarelli interjected that some type of liner would be required, to which Mr. Hamons replied that one of the options under consideration for a liner is a slurry wall, similar to the one required by MDE at Cox Creek.

Mr. Harmon inquired if the 294 m shown in the total suspended solids (TSS) contour diagram was from the existing Masonville shoreline or from the proposed dike to the Ft. McHenry shoreline. Ms. Boraczek clarified that this was from the existing shoreline using depth as part of the cross-section. She went on to explain that once the dike is closed, the cross-section would be less because there would be a new shoreline for construction, thus a new cross section. Mr. Taherian asked if the 10% of the cross-section is also from the current shoreline. Mr. Yost explained that the 10% is of the cross-sectional area taking into account depth and width. Ms. Boraczek added that there would be a different cross-section when discharge takes place after dike construction.

In response to MDE's concern that the dredged material may not be suitable for the foundation of the proposed containment facility, Mr. Dalton explained that the foundation and borrow materials have been carefully evaluated for suitability based on previous experience with Poplar Island and HMI, and have met the industry design criteria for DMCF dikes. He further explained that unsuitable foundation material would be removed and replaced with suitable borrow. The design parameter for dike sand is 30% or less fines; the average fines content of Seagirt sand borrow is 12%, and the average fines of Masonville sand borrow is about 29%.

Mr. Patel asked about the origination of the borrow material. Mr. Dalton responded that he believes it is native Arundel Clay. He clarified that they are not planning to remove previously placed material from the property currently occupied by Mercedes or other sites, but rather all the material would be borrowed from the river bottom. Mr. Patel asked if the fines would go to HMI, which Mr. Dalton confirmed. Mr. McKee then asked if the contractor would have the option to stockpile and mechanically place the material. Mr. Dalton responded that the specifications do not preclude this.

In response to MDE's engineers' concern regarding the possible failure of the water line that is proposed to run through the dike due to the load of material that is proposed for placement on top of it, Mr. Wheaton explained that several alternatives to relocating the water line were evaluated. MPA worked with Baltimore City to produce a City-approved design to minimize loading on the water line. The water line would be rerouted outside of the placement cell and exit the site through a sheetpile wall, not the dike. Several drawings were shared including, a cross-section of the cofferdam, the steel sheet-pile wall plan, and the cross-section of the waterline. Mr. Cuthbertson asked if rock would be placed over the pipe. Mr. Wheaton responded that sand would be placed over the pipe to protect it. Mr. Van Aller asked if armor stone would be placed around the cofferdam, to which Mr. Wheaton responded that there are areas of the dike, which would not have armor stone, but there would be armor stone where the pipe penetrates the dike.

In response to MDE's question regarding proposed dike vegetation and possible effects to dike integrity, Ms. Gaumer stated that root systems of the proposed plants would not affect the integrity of the dike if they were less than 12 inches deep. Mr. McKee asked if the plantings would be maintained over time to ensure that no unwanted species began to grow on the dike. Ms. Gaumer replied that efforts would be made to ensure that nothing would compromise dike integrity.

A cross-section of the proposed dike vegetation planting was shown. At approximately elevation +7 feet MLLW, small plantings would begin (below this elevation the dike would be covered in armor stone). At approximately elevation +10 feet MLLW, larger shrubs would be planted, and would extend up the slope of the dike and over the top of the dike, 20 to 50 feet inland of the dike's upper edge.

Mr. Van Aller asked why the project team would promote vegetation and burrowing animals on the dike slopes while they are still being used. Mr. Taherian stated that MDE's Dam Safety office encourages grass cover only. Ms. Boraczek responded that plants were selected for their nesting and foraging qualities, which make them appealing to birds rather than burrowing animals. Ms. Gaumer added that the Critical Area Commission (CAC) requested that the dikes be vegetated.

Mr. Van Aller and Mr. Taherian stated that MDE's concerns regarding dike vegetation have not been suitably addressed. MDE would like to determine plants suitable for dike vegetation and return this list to the project team at a later date.

Mr. Hamons asked if MDE was amenable to the project team moving forward with the EIS. Mr. Van Aller responded that Dam Safety's issues have not yet been resolved; Dam Safety has not yet had sufficient time to review the project. He stated that he is concerned that a factor of safety of 1.3, which is proposed for the dike at Masonville, is only suitable for dikes less than 30 feet in elevation. MDE Dam Safety considers the factor of safety for dikes more than 30 ft in height to be 1.5. Mr. Hamons replied that these issues can be addressed through discussions with Dam Safety and the project engineers, and he would like to see them resolved quickly. He asked how the project team could proceed to meet MDE's concerns.

Mr. Ghigiarelli stated that MDE needs to have further internal discussions. There was an understanding that the project would not require a Dam Safety permit, however MDE wanted to address the concerns of the Wetlands and Waterways Department. Even if a Dam Safety permit is not required, MDE would like to see that department's concerns addressed.

Mr. Dalton stated that a factor of safety of 1.3 was used at HMI where the dikes are at elevation +44 feet MLLW, as well as at the Cox Creek DMCF where the dikes are at elevation +36 feet MLLW. Mr. Van Aller stated that he was not pleased with communication during construction of the Cox Creek DMCF. He felt there was no communication after the slurry wall was installed, and he would like better communication during construction of the Masonville project. Mr. Van Aller indicated he was unsure if a permit from Dam Safety would be required.

Ms. Boraczek stated that the read-ahead material includes the construction specifications for the Masonville project; it also indicates that the EIS is currently available for review. Mr. Ghigiarelli added that the geotechnical materials were distributed in November 2006.

Mr. Hamons stated that he would like to develop a schedule for resolving these issues as soon as possible. Mr. Ghigiarelli stated that further MDE discussions would answer Dam Safety's questions. Mr. Hamons asked if there was any additional information that MPA could provide to MDE, such as a geotechnical presentation. Mr. Van Aller replied that no additional information was required at this time.

Mr. Fritz stated that MDE would like to review the stormwater management plan for the above dike high water mark. Mr. Fritz observed that the dike surface may be completely impervious and commented that stormwater controls would be required. Mr. Tracy stated that his group would provide comments to the design drawings when they are submitted for review. Mr. Hamons stated that it is MPA's goal to provide MDE with any information required to obtain the necessary permits while simultaneously moving forward to finalize the Masonville EIS.

Mr. Fritz mentioned that vegetation specifications are typically submitted to MDE along with sediment control measures. MDE requested that the dike vegetation plan be submitted for review. Mr. Ghigiarelli asked whether the vegetation plan had been discussed with the CAC. Ms. Gaumer replied that CAC staff recommended that the

geotechnical engineer on the project approve the onsite vegetation planting plan to ensure dike integrity. The CAC also recommended that the dike vegetation plan should not be limited to only grasses. Mr. Ghigiarelli agreed to correspond with the CAC and MDE staff to resolve vegetation concerns. Mr. Taherian asked if the geotechnical engineer would supervise site work at all times. Mr. Hamons responded that all site work would be monitored and inspected by the geotechnical engineer. In addition, MPA would accommodate MDE's involvement with site work at their request.

MDE Comments February-March 2007 and Responses

Comment Number	Comment Forum	Comment	Response
1	Letter to Jim Runion, dated 2-21-07	"Please explain how the material is to be placed…."	Read-Ahead Material in appendix ?? contains details - Four stages of construction involving dredging: 1) Overburden removal and placement at HMI; 2) Dredging of suitable borrow at Seagirt and split-hull placement at Masonville; 3) Mechanical dredging of Masonville borrow and mechanical placment in cofferdam section; and 4) Hydraulic dredging of Masonville borrow and hydraulic placement in dike section.
2	Letter to Jim Runion, dated 2-21-07	"…sloughing towards the existing channel is a concern. Please explain how the material is to be placed and contained…"	Read-Ahead Material in appendix ?? contains details - Dike design section and anticipated construction methods promote material containment and conservation of borrow material
3	Letter to Jim Runion, dated 2-21-07	"…please describe the procedures that will be employed during construction to insure that the project will not violate Maryland's water quality standards."	Read-Ahead Material in appendix ?? contains details - Models were run to determine the extent of turbidity plume. The model results were compared to surface water criteria. It was determined that turbidity curtains would be required for hydraulic placement of dike material.
4	Letter to Jim Runion, dated 2-21-07	"…dredged material may not be suitable for the foundation of the proposed containment facility…"	Foundation and borrow materials have been carefully evaluated for suitability based on previous experience and meet industry design standards for DMCF dikes.
5	Letter to Jim Runion, dated 2-21-07	"…Department's engineers are very concerned about the proposed water pipe through the proposed dike. The addition of material over the pipe will add to the load on the pipe and possibly cause failure."	MPA worked with Baltimore City to produce a design which minimizes loading on the waterline. The waterline will be rerouted outside of the placement cell and exits the site through a sheetpile wall.
6	CAC Planning Meeting	Will there be impacts to dike structural integrity due to vegetation?	Vegetative cover selected to minimize root system effects on dike structure and maximize habitat values. Habitat that would encourage burrowing animals will be avoided.

MDE Comments February-March 2007 and Responses

Comment Number	Comment Forum	Comment	Response
7	3-27-07 Mtg at MDE	The factor of saftey used for the dike design at Masonville is 1.3. MDE Dam Safety considers the factor of safety for dikes more than 30 ft in height to be 1.5.	A 1.3 safety factor is standard for use in design of DMCF dikes. The factor of safety used for design of the existing HMI facility, where the dikes are a elevation +44 ft was 1.3.
8	3-27-07 Mtg at MDE	MDE Dam Safety voiced concern about planting vegetation that would encourage burrowing animals.	Vegetative cover selected to minimize root system effects on dike structure and maximize habitat values. Habitat that would encourage burrowing animals will be avoided.

STEVE

April 3, 2007

Robert Cuthbertson
Maryland Department of the Environment
1800 Washington Blvd
Baltimore Maryland 21230

Subject: Wetlands Case No.: 06-WL-1653/Maryland Port Administration
RAMS Tracking No.: 200663743
Borrow Material Analysis
Masonville Dredged Material Containment Facility Construction

Re: Meeting Maryland Water Quality Standards

Dear Mr. Cuthbertson,

Your February 21, 2007 letter to Jim Runion concerning the referenced project included the following statements regarding turbidity curtains: "... describe the procedures that will be employed during construction to insure that the project will not violate Maryland's water quality standards. The Department has recommended the use of turbidity curtains in previous projects. In this case, a curtain would have to be deployed to the bottom and anchored to contain the turbidity plume generated by the placement of fine materials."

The Maryland Port Administration (MPA) concurs with Maryland Department of the Environment's (MDE's) general recommendation for utilizing turbidity curtains to meet applicable standards. MPA anticipates that turbidity curtains would be necessary to meet Maryland water quality criteria for some phases of dike construction. This is based on extensive modeling, which was presented at the March 27th meeting at MDE and is presented in the Masonville Dredged Material Containment Facility Draft EIS.

As presented in the meeting, the proposed work for the Masonville DMCF would include: (1) mechanical dredging of overburden, (2) split-hull placement of borrow, (3) hydraulic dredging of borrow material, and (4) hydraulic placement of borrow material.

Modeling results presented at the March 27th meeting indicate (1) mechanical and (3) hydraulic dredging and (2) split hull placement would meet Maryland water quality criteria without additional turbidity management measures.

Conservative modeling of (4) hydraulic placement (based on the worst case scenario with no training dikes in place) indicates that turbidity management measures would be required to meet state water quality criteria. These criteria must be met on a monthly average basis within 10% of

the cross-sectional area of the Patapsco River where the Masonville DMCF is proposed. Construction management measures, such as turbidity curtains, would be employed by the contractor to comply with state surface water criteria within the allowable cross-sectional area.

MPA understands that turbidity management measures would need to address the entire water column, and thus, turbidity curtains would be deployed to the lower depths of the water column. Since the underlying surface is undulating, a specific bottom-of-curtain depth will be established to cover the majority of project site at or near the bottom (85% to 95% depending on site conditions following pre-dredging activity). The system would be weighted/anchored as required per manufacture direction.

With MDE's concurrence, MPA would like to meet with MDE following distribution of the Final EIS to discuss curtain deployment methods, curtain specification and weighting/anchoring systems.

Feel free to contact me with any questions or concerns regarding this matter.

Regards,

Nathaniel K. Brown
Harbor Development

Cc: Steve Storms, MPA
Frank L. Hamons, MPA

April 3, 2007

Maryland Department of the Environment
1800 Washington Blvd.
Baltimore, MD 21230

Attention: Mr. Robert Cuthbertson

RE: Compliance with MDE Regulations
Proposed Masonville DMCF
Maryland Port Administration

Subject: Wetlands Case No.: 06-WL-1653/Maryland Port Administration
RAMS Tracking No.: 200663743

Dear Mr. Cuthbertson:

In regards to recent conversations regarding Maryland Department of the Environment (MDE) regulations, we have reviewed those regulations identified below and believe the proposed construction of the Masonville DMCF is in compliance as noted.

COMAR 26.24.03.03 and 26.24.03.04 were reviewed in detail to determine whether documents, plans and the design procedures for the proposed DMCF are in compliance. Documents defining the proposed projects that have previously been submitted to MDE include the following:

1. Draft Environmental Impact Statement for Proposed Masonville Dredged Material Containment Facility.
2. November 9 letter to Mr. Bob Cuthbertson re: Borrow Material Analysis, and accompanying reports.
3. Draft Permit Application to accompany EIS.

These documents define the Masonville project and provide information showing that the proposed construction is in compliance.

As some design elements are not complete, the following items are not detailed in the above documents. These items will be in compliance with the above referenced regulations and will be forwarded to MDE at the appropriate time:

1. Sealed Dike construction drawings.
2. Sealed Cofferdam construction drawings
3. Final EIS for Proposed Masonville DMCF
4. Sediment and erosion control plan approved by the soil conservation district.
5. Spillway locations, weir box details and outlet design.
6. Final critical area buffer mitigation resolution is underway but not complete.

By copy of this letter, the Maryland Port Administration (MPA) affirms that the existing HMI DMCF, which is a previously approved disposal facility, has ample capacity for the placement of unsuitable foundation material from the Masonville project site.

We trust this answers questions of compliance however, should MDE have any further questions, please advise at your earliest convenience. Thank you.

Sincerely,

Nathaniel K. Brown
Harbor Development

CC: Elder Ghigiarelli, MDE
Frank Hamons, MPA
David Bibo, MPA
Steve Storms, MPA

From: Steve Storms
Sent: Thursday, April 05, 2007 12:01 PM
To: 'Mark.Mendelsohn@nab02.usace.army.mil'; 'Frazier, Mary A NAB02'
Cc: Nat Brown; Frank Hamons; 'jbrunion@gba-inc.com'; 'Jane Boraczek'; 'Stephanie Lindley'
Subject: Masonville Air Emission Reduction Credits Teleconference, 9 Feb 2007

On 9 February 2007, Maryland Port Administration convened a teleconference with Maryland Department of the Environment and US Environmental Protection Agency personnel to discuss MPA's proposed leasing of air emission reduction credits regarding the construction of the Masonville Dredged Material Containment Facility.

MPA participants in the call included Frank Hamons, Nat Brown, and Steve Storms; MDE participants included Brian Hug; EPA was represented by Makeba Morris and Rose Quinto. Several MPA contractors were in attendance as well.

MPA and its contractors detailed the proposed approach involving leasing NOx credits originating from the shutdown of a local Bethlehem Steel facility from their current owner, Sempra Energy, to offset calculated NOx emissions for the period of construction of the Masonville DMCF.

EPA indicated that they have no objections to the proposed air emission reduction credit leasing plan.

MDE indicated that they are amenable to the proposed air emission reduction credit leasing plan.

MPA indicated it would continue to work to finalize the draft air emission reduction credit lease with Sempra Energy as soon as possible.

FINDLING, INC.
Engineers and Contractors
3401 Carlins Park Drive, Baltimore, MD 21215

TEL.: 410-367-1400
FAX: 410-466-6867
info@findlinginc.com

April 14, 2007

Mr. Dennis Urso, P.E.
Vice President
Gahagan & Bryant Associates, Inc.
9008-O Yellow Brick Road
Baltimore, MD 21237

Re: Masonville DMCF

Dear Mr. Urso,

This letter is in response to MDE's comments regarding the geotechnical aspects of the design for the Masonville DMCF dike. Findling, Inc. designed the earth containment dike in accordance with criteria established and accepted by regulatory agencies for similar DMCF construction (Hart Miller Island, Poplar Island and Cox Creek) in Maryland. The details of the design are included in the geotechnical engineering report for the project dated February 2, 2006.

The Masonville dike was designed in accordance with criteria which has been accepted for DMCF dike construction in Maryland, namely Hart Miller Island, Poplar Island and Cox Creek. The dike design has been reviewed by independent Geotechnical Engineer Consultant and the Army Corps of Engineers and found to be acceptable.

As with all previous Maryland DMCF construction projects listed above, there will be extensive oversight and quality control to assure every aspect of the design intent is met.

Very truly yours,

FINDLING, INC.

Edward H. Dalton, P.E.

Amsalu Duressa, P.E.
Chief Executive Officer

April 16, 2007

Maryland Department of the Environment
Water Management Administration
1800 Washington Blvd.
Baltimore, MD 21230

Attention: Mr. Robert Cuthbertson

RE: Dike Design Practices and Guidelines
Proposed Masonville DMCF
Maryland Port Administration

Dear Mr. Cuthbertson:

In regards to the design of the dikes for the proposed Masonville DMCF, we are attaching a letter from the design engineer.

Findling, Inc. is the geotechnical engineer used by MPA for geotechnical and stability issues in this dike design. Findling is a sub-consultant to Gahagan and Bryant Associates, Inc., another consulting engineering firm utilized by MPA on the Masonville DMCF project.

Findling has considerable design experience in dikes similar to that proposed for Masonville. They have performed extensive geotechnical investigations of the specific site and have performed design and stability studies for the new dikes. Previous work has included projects at Hart Miller Island, Poplar Island and Cox Creek facilities.

As noted, Findling designed the dikes in accordance with criteria utilized in construction of similar earthen structures. This design has been reviewed by the Corps of Engineers as well.

We trust this answers questions regarding dike design. Should MDE have further questions, please advise at your earliest convenience. To further assist in distribution, an electronic copy of this letter will be forwarded to those on distribution.

Sincerely,

Nathaniel K. Brown
Harbor Development

Attachments

CC: Mr. Elder Ghigiarelli, MDE
Mr. Gary Setzer, MDE
Mr. Stephen Pattison, MDE
Mr. Ken Pensyl, MDE
Mr. George Harman, MDE
Mr. Mike Snyder, CENAB
Mr. Frank L. Hamons, MPA
Dr. Steve Storms, MPA