



STATE OF DELAWARE
**DEPARTMENT OF NATURAL RESOURCES AND
ENVIRONMENTAL CONTROL**

DIVISION OF WATERSHED STEWARDSHIP
ENTERPRISE BUSINESS PARK
285 BEISER BOULEVARD, SUITE 102
DOVER, DELAWARE 19904

PHONE: (302) 739-9921
FAX: (302) 739-6724

**DIRECTOR'S
OFFICE**

June 10th, 2021

Ms. Laura Mensch
Principal Planner, Regulatory
DNREC, Delaware Coastal Programs
100 W. Water Street, Suite 7B
Dover, Delaware 19904

Dear Ms. Mensch:

Reference is made to CENAP-OP-R-2013-1033023, which permits the Division of Watershed Stewardship to hydraulically dredge the Murderkill River entrance channel. The Division is requesting modifications to the Department of Army Permit relevant to (1) the method of dredging for a portion of the channel and (2) the volume of material to be disposed in the previously authorized overboard disposal sites.

Due to the urgency of the shoaling issues in the entrance channel, we are proposing to mechanically dredge 1,800 cubic yards of material from the shoal north of the South Bowers jetty (see enclosed map) and place it in the previously authorized placement area on South Bowers Beach. The mechanical dredging will be performed using a long reach excavator sited on the South Bowers jetty and adjacent beach, and the sediment will then be trucked up the beach to the placement area. Once placed on the beach, the sediment will be used to achieve the previously authorized typical beach nourishment profile design.

We intend to perform the remainder of maintenance dredging in the Murderkill River entrance channel through hydraulic dredging. However, we request a modification to the permit to allow a total of 43,200 cubic yards to be disposed of in the previously authorized overboard disposal area. This additional volume of 32,200 cubic yards for overboard disposal is needed because additional flexibility is needed if the grain size distribution encountered while dredging does not easily facilitate the allocated placement volume in each location. During the 2014 dredging event, for example, less beach-quality sand was dredged than expected, despite sampling performed prior to the start of dredging, due to the dynamic nature of the Delaware Bayshore environment. Flexibility to pump additional material to the overboard disposal area would ensure that shoal areas are effectively dredged from the entrance channel during a single dredging event, efficiently alleviating the navigational concerns of stakeholders and emergency responders that use the channel.

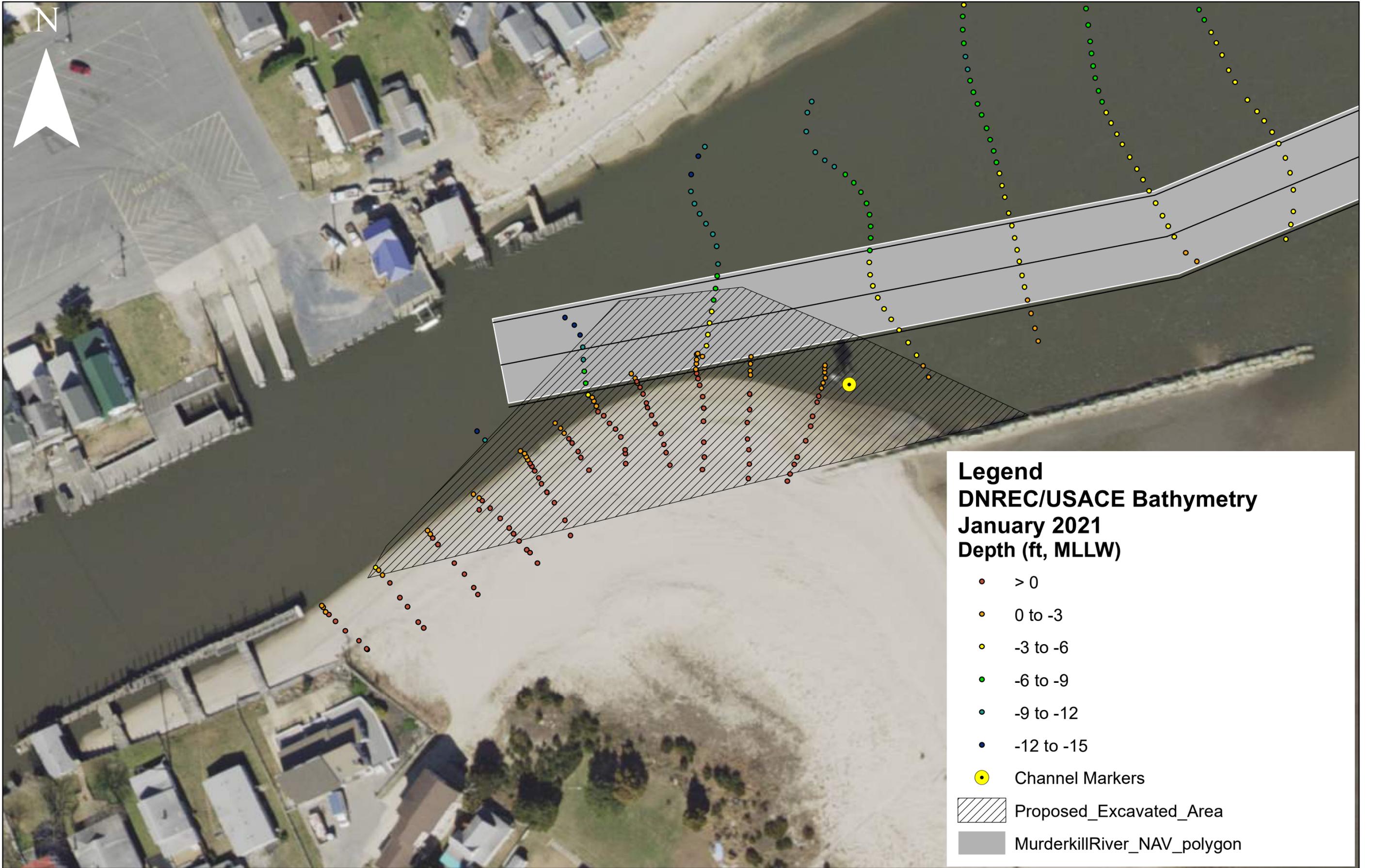
Ms. Mensch
June 10th, 2021
Page 2

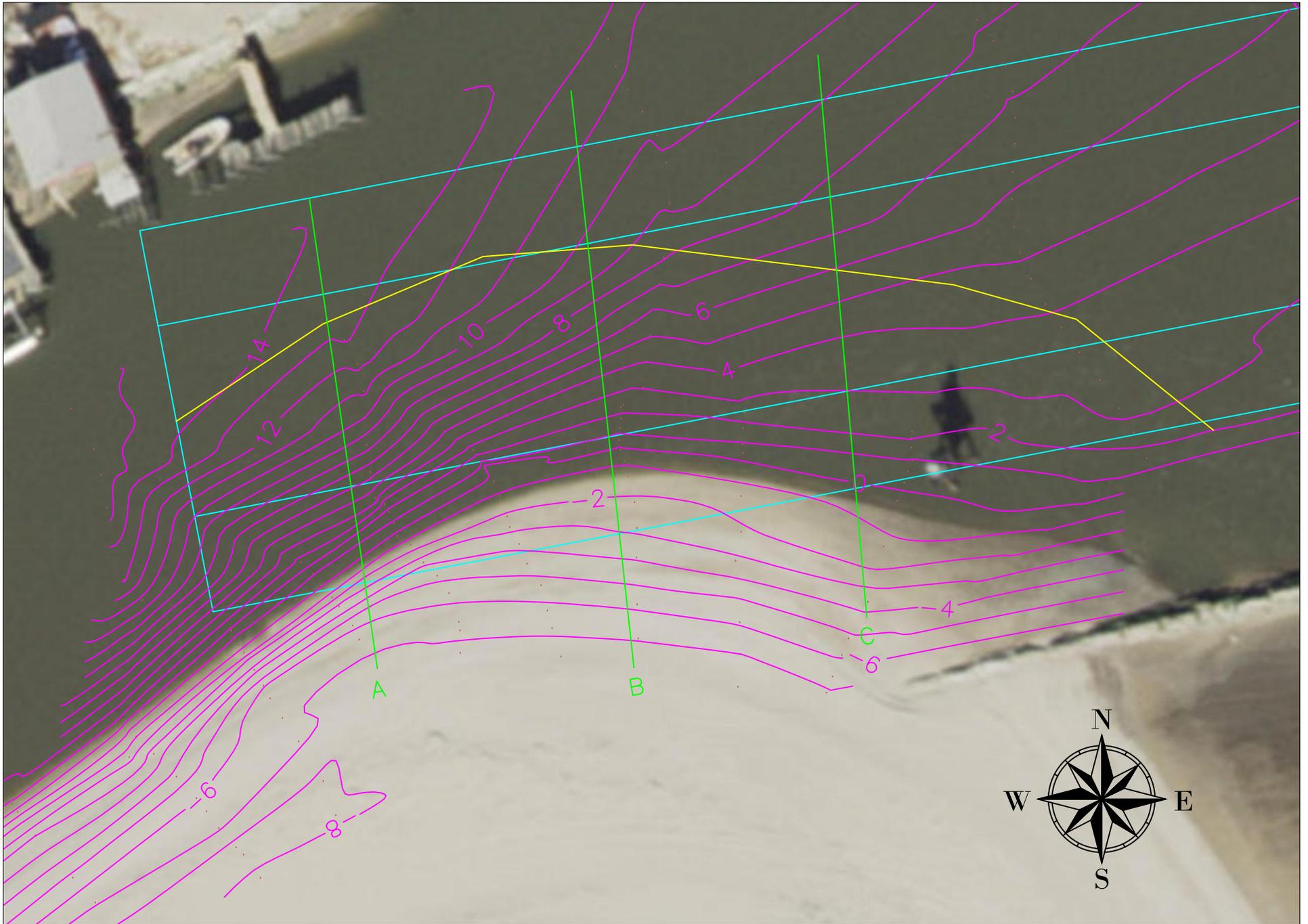
With this understanding of the nature of the hydraulic dredging in a dynamic environment and the urgent navigational concerns in the Murderkill River entrance channel, our Division is requesting the above modifications to achieve the required channel design. If you have any further questions or need additional information to process this request please contact me at 302-739-9921 or via email at ashley.norton@delaware.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Ashley R. Norton". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Ashley R. Norton, Ph.D.
Section Planner,
Shoreline & Waterway
Management Section



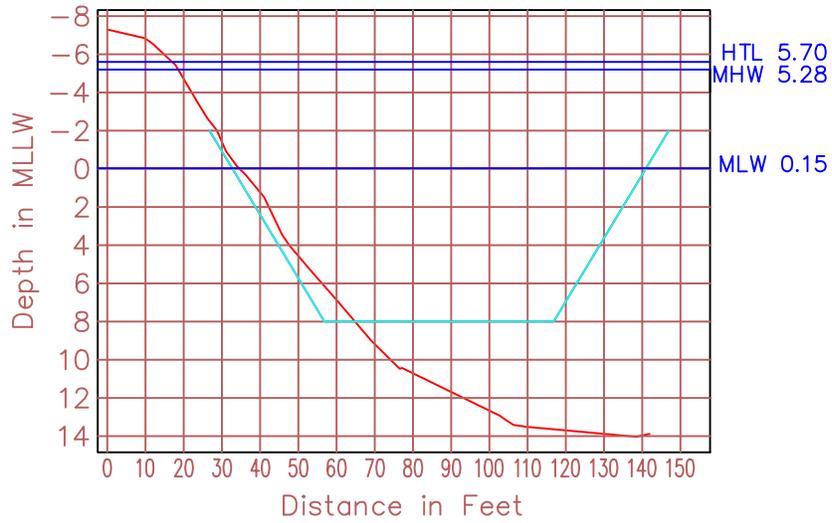


Legend	
 Fed Authorized Channel	 Excavator Reach
 Existing Conditions	 Typical Cross Sections

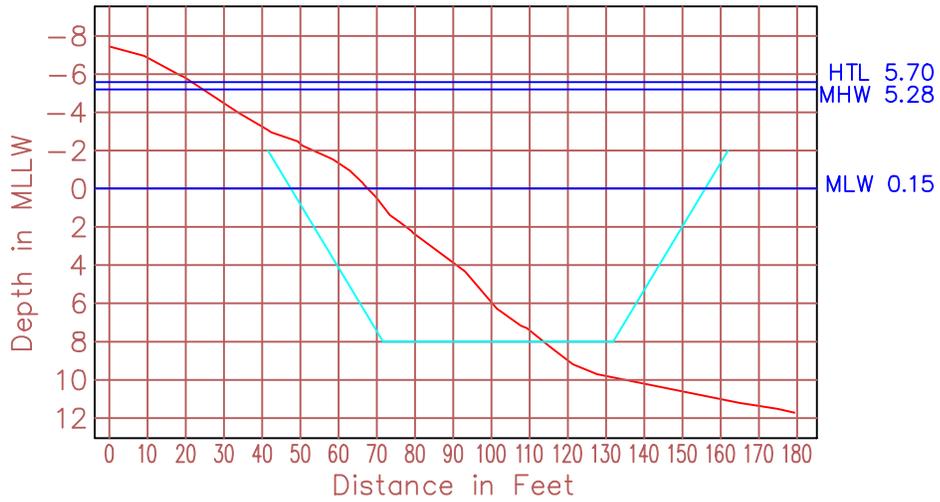
Murderkill River Entrance
Scale 1"=40'

Date of Survey: June 1, 2021
 Vertical Datum: Mean Lower Low Water (Feet)
 Horizontal Datum: NAD 83 Feet

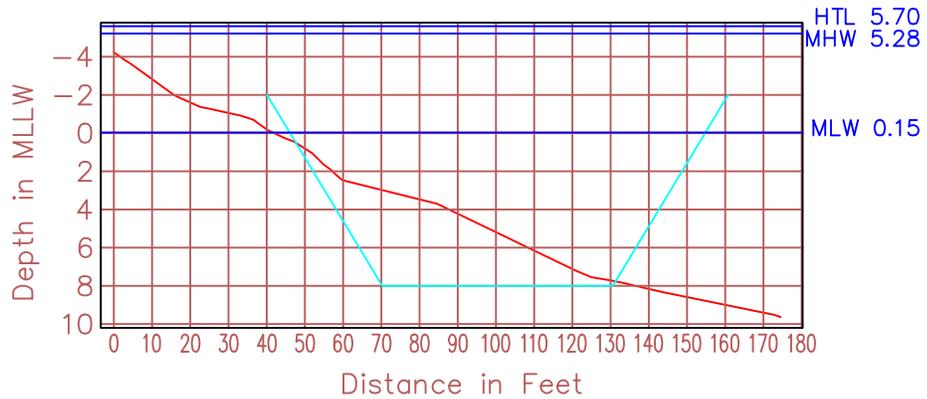
XSEC A



XSEC B



XSEC C



Legend

-  Federally Authorized Channel
Channel Width 60' with 3:1 Slope
-  Existing Conditions

Scale 1"=50'

Vertical Exaggeration 5:1

Vertical Datum: Mean Lower Low Water (Feet)

Horizontal Datum: NAD 83 (feet)

Typical Cross Sections

Date of Survey: June 1, 2021



This notice of authorization must be conspicuously displayed at the site of work.

United States Army Corps of Engineers

DEC 06 2013

Conduct hydraulic maintenance dredging

A permit to _____

at The mouth of the Murderkill River _____

has been issued to Charles E. William II on DEC 06 2013

Address of Permittee 89 King Highway, Dover, Delaware 19901 _____

Permit Number

CENAP-OP-R-2013-1033-23 Draft IP

Frank J. Cianfrani
Chief, Regulatory Branch

District Commander

for: John C. Becking, P.E.
Lieutenant Colonel, US Army
District Commander

NOTIFICATION/CERTIFICATION OF WORK COMPLETION/COMPLIANCE FORM

Permit Number: 2013-1033-23 (IP)
Name of Permittee: Delaware Division of Watershed Stewardship
Name of Contractor:
Project Name: Murderkill River Dredging and Jetty Modification
County: Kent
State: Delaware
Waterway: Murderkill River

Within 10 days of completion of the activity authorized by this permit, please sign this certification and return it to the following address:

Department of the Army
U.S. Army Corps of Engineers, Philadelphia District
Wanamaker Building - 100 Penn Square East
Philadelphia, Pennsylvania 19107-3390
Attention: CENAP-OP-R

Please note that the permitted activity is subject to a compliance inspection by an U.S. Army Corps of Engineers representative. If you fail to return this notification form or fail to perform work in compliance with the permit, you are subject to administrative, civil and/or criminal penalties. Further, the subject permit may be suspended or revoked.

I hereby certify that the work authorized by the above referenced permit has been completed in accordance with the terms and conditions of the above noted permit.

The authorized work was commenced on 1/20/14.

The authorized work was completed on 2/18/14.

Dredging authorized: Yes No If yes, see *NOTE* below.

The volume of dredged material was 45,000 cubic yards.

The dredged material was placed at Authorized overboard disposal, and South Bowers Beach

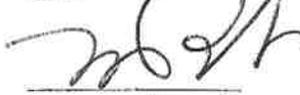


Signature of Contractor

Address: 4309 PABLO OAKS

JACKSONVILLE, FL 32224

Telephone Number: 904-871-0211



Signature of Permittee

Address: 89 KING'S HIGHWAY

DOVER, DE 19301

Telephone Number: 302-739-9921

SPECIAL NOTE FOR MAINTENANCE DREDGING:

If the above referenced permit authorizes maintenance dredging, the permittee/contractor shall notify this office of the completion of the work by submitting this form for each dredging occurrence. This form may be reproduced for this purpose

Enclosure 4

NOTIFICATION/CERTIFICATION OF WORK COMPLETION/COMPLIANCE FORM

Permit Number: 2013-1033-23 (IP)
Name of Permittee: Delaware Division of Watershed Stewardship
Name of Contractor:
Project Name: Murderkill River Dredging and Jetty Modification
County: Kent
State: Delaware
Waterway: Murderkill River

Within 10 days of completion of the activity authorized by this permit, please sign this certification and return it to the following address:

Department of the Army
U.S. Army Corps of Engineers, Philadelphia District
Wanamaker Building - 100 Penn Square East
Philadelphia, Pennsylvania 19107-3390
Attention: CENAP-OP-R

Please note that the permitted activity is subject to a compliance inspection by an U.S. Army Corps of Engineers representative. If you fail to return this notification form or fail to perform work in compliance with the permit, you are subject to administrative, civil and/or criminal penalties. Further, the subject permit may be suspended or revoked.

I hereby certify that the work authorized by the above referenced permit has been completed in accordance with the terms and conditions of the above noted permit.

The authorized work was commenced on _____.

The authorized work was completed on _____.

Dredging authorized: Yes No If yes, see **NOTE** below.

The volume of dredged material was _____ cubic yards.

The dredged material was placed at _____.

Signature of Contractor

Signature of Permittee

Address: _____

Address: _____

Telephone Number: _____

Telephone Number: _____

SPECIAL NOTE FOR MAINTENANCE DREDGING:

If the above referenced permit authorizes maintenance dredging, the permittee/contractor shall notify this office of the completion of the work by submitting this form for each dredging occurrence. This form may be reproduced for this purpose

NOTIFICATION/CERTIFICATION OF WORK COMMENCEMENT FORM

Permit Number: CENAP-OP-R-2013-1033-23 (IP)
State Permit #: WQ-322/13 and FC 2014.0001
Name of Permittee: Delaware Division of Watershed Stewardship
Project Name: Murderkill River Dredging and Jetty Modification
Waterway: Murderkill River
County: Kent State: Delaware
Compensation/Mitigation Work Required: Yes No

TO: U.S. Army Corps of Engineers, Philadelphia District
Wanamaker Building - 100 Penn Square East
Philadelphia, Pennsylvania 19107-3390
Attention: CENAP-OP-R

I have received authorization to: conduct hydraulic maintenance dredging of the authorized federal navigation channel at the mouth of the Murderkill River; conduct beach nourishment activities on the shoreline of South Bowers Beach; and widen, lengthen and raise the elevation of the north Murderkill River entrance jetty.

The work will be performed by:

Name of Person or Firm MANSON CONSTRUCTION CO.

Address: 5209 EAST MAGINAL WAY S.
SEATTLE, WA 98134

I hereby certify that I have reviewed the approved plans, have read the terms and conditions of the above referenced permit, and shall perform the authorized work in strict accordance with the permit document. The authorized work will begin on or about 1/15/2014 and should be completed on or about 2/1/2014.

Please note that the permitted activity is subject to compliance inspections by the Army Corps of Engineers. If you fail to return this notification form or fail to comply with the terms or conditions of the permit, you are subject to permit suspension, modification, revocation, and/or penalties.



Permittee (Signature and Date) 1/13/14

302-739-9921
Telephone Number



Contractor (Signature and Date) 1/14/14

904-252-5123
Telephone Number

NOTE: This form shall be completed/signed and returned to the Philadelphia District Office a minimum of 10 days prior to commencing work.

REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY

PHILADELPHIA DISTRICT CORPS OF ENGINEERS
WANAMAKER BUILDING, 100 PENN SQUARE EAST
PHILADELPHIA, PENNSYLVANIA 19107-3390

DEC 06 2013

Regulatory Branch
Applications Section ISUBJECT: CENAP-OP-R-2013-1033-23 (Final IP)
DDNREC #: FC 2014.0001 and WQ-322/13
Location: 39.05841 and -75.39676Charles E. Williams II
Delaware Division of Watershed Stewardship
89 Kings Highway
Dover, Delaware 19901

Dear Mr. Williams:

Enclosed is a Department of the Army Permit (Enclosure 1) authorizing the Delaware Division of Watershed Stewardship to: conduct hydraulic maintenance dredging of the authorized federal navigation channel at the mouth of the Murderkill River; conduct beach nourishment activities on the shoreline of South Bowers Beach; and widen, lengthen and raise the elevation of the north Murderkill River entrance jetty. Also enclosed is a notice of authorization (ENG Form 4336-Enclosure 2) to be conspicuously displayed at the site of work.

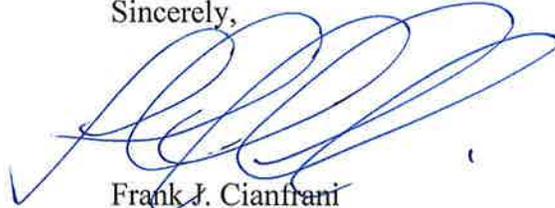
Carefully review all the terms and conditions of the Department of the Army permit and understand them fully. Performing any work not specifically authorized by the permit or failing to comply with its conditions may subject you and/or your contractor to the enforcement provisions of our regulations. If a contractor performs the work for you, both you and the contractor are responsible for assuring the work is done in conformance with the conditions and limitations of this permit. Please be sure the person who will do the work has read and understands the conditions of the permit.

This office shall be notified of the commencement and completion of the permitted work. To assist you in meeting this requirement, enclosed with the Department of the Army Permit is a Notification/Certification of Work Commencement Form and a Notification/Certification of Work Completion/ Compliance Form (Enclosures 3 and 4) which must be signed and returned to this office. Additional information concerning this permit may be obtained by writing to John Brundage of my office at the above address or calling between the hours of 1:00 and 3:30 p.m. at 302-736-9763.

If any material changes in the location or plans of the permitted work are found necessary on account of unforeseen or altered conditions or otherwise, revised plans should be submitted

promptly to this office in order that the revised plans, if found unobjectionable, may receive the approval required by law before operations on the permitted work are commenced.

Sincerely,

A handwritten signature in blue ink, consisting of several overlapping loops and a long horizontal stroke at the bottom.

Frank J. Cianfrani
Chief, Regulatory Branch

Enclosures

DEPARTMENT OF THE ARMY PERMIT

PERMITTEE AND PERMIT NUMBER:

PERMITTEE: Delaware Division of Watershed Stewardship
CENAP-OP-R-2013-1033-23

ISSUING OFFICE:

Department of the Army
U.S. Army Corps of Engineers, Philadelphia District
Wanamaker Building - 100 Penn Square East
Philadelphia, Pennsylvania 19107-3390

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

PROJECT DESCRIPTION: To conduct hydraulic maintenance dredging of the authorized federal navigation channel at the mouth of the Murderkill River; conduct beach nourishment activities on the shoreline of South Bowers Beach; and widen, lengthen and raise the elevation of the north Murderkill River entrance jetty. All work is to be completed in accordance with the attached plans E-1 through E-13.

PROJECT LOCATION: Delaware Bay at the Mouth of the Murderkill River, Bowers Beach and South Bowers, Kent County, Delaware.

PERMIT CONDITIONS:

General Conditions:

1. The time limit for completing the authorized work ends on December 31, 2017. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.
2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.

3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and State coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.
4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.
5. If a conditioned water quality certification has been issued for your project, you must comply with conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.
6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

Special Conditions:

1. All work performed in association with the above noted project shall be conducted in accordance with the project plans identified as E-1 through E-13. The project plans illustrate a proposal to conduct hydraulic maintenance dredging of the authorized federal navigation channel at the mouth of the Murderkill River; conduct beach nourishment activities on the shoreline of South Bowers Beach; and widen, lengthen and raise the elevation of the north Murderkill River entrance jetty. The stated purposes of the project are as follows:

Channel Dredging: Dredging of the federal navigation channel is necessary to provide adequate and safe boating access into the Murderkill River as well as to provide a beneficial use of the sandy dredged material by utilizing it to nourish the adjacent beach at South Bowers.

Beach Nourishment: Nourishment of the shoreline at South Bowers is necessary in order to widen the existing beach to provide storm protection and greater recreational opportunities.

Jetty Rehabilitation: Rehabilitation of the north jetty is needed in order to alleviate the on-going siltation of the Murderkill River entrance channel, thereby reducing the need for future dredging.

2. Any deviation in construction methodology or project design from that shown on the above noted drawings must be approved by this office, in writing, prior to performance of the work. All modifications to the above noted project plans shall be approved, in writing, by this office. No work shall be performed prior to written approval of this office.

3. This office shall be notified at least 10 days prior to the commencement of authorized work by completing and signing the attached *Notification/ Certification of Work Commencement Form*. This office shall also be notified within 10 days of the completion of the authorized work by completing and signing the attached *Notification/Certification of Work Completion/Compliance Form*. All notifications required by this condition shall be in writing

and shall be transmitted to this office by registered mail. Oral notifications are not acceptable. Similar notification is required each time maintenance work is to be done under the terms of this Corps of Engineers permit.

4. The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration. (This special condition is applicable to Corps of Engineers permits that provide authorization under Section 10 of the Rivers and Harbors Act of 1899.)

5. The Special Conditions imposed by the Delaware Department of Natural Resources and Environmental Control (DDNREC) on your DDNREC Section 401 WQC and/or DDNREC CZM concurrence shall also be conditions to this Department of the Army permit.

6. Representatives of the U.S. Army Corps of Engineers shall be permitted to inspect the project during its phase of construction, and to collect any samples, or to conduct any tests deemed necessary.

7. The permittee is responsible for ensuring that the contractor and/or workers executing the activity(s) authorized by this permit have knowledge of the terms and conditions of the authorization and that a copy of the permit document is at the project site throughout the period the work is underway.

8. All material to be used as fill for the jetty improvement portion of the project shall be obtained from an upland source. The fill material shall be free of oil and grease, debris, wood, general refuse, plaster, and other pollutants, and shall contain no broken asphalt.

9. In order to minimize impacts to essential fish habitat for sandbar sharks (*Carcharhinus obscurus*) and sand tiger sharks (*Odontaspis Taurus*), the authorized work in waters of the United States shall not occur between March 31 and September 15 of any year.

10. This permit authorizes maintenance dredging for a period of ten years to terminate on 31 December 2024 provided the dredging method, location, depth and disposal sites remain unchanged. The Corps of Engineers shall be notified before any subsequent maintenance dredging takes place.

11. This permit does not obviate the permittee from obtaining any State or local assent required by law for the activity authorized.

FURTHER INFORMATION:

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:

X Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).

X Section 404 of the Clean Water Act (33 U.S.C. 1344).

Section 103 of the Marine Protection, Research and Sanctuaries Act.

2. Limits of this authorization.

a. This permit does not obviate the need to obtain other Federal, State, or local authorizations required by law.

b. This permit does not grant any property rights or exclusive privileges.

c. This permit does not authorize any injury to the property or rights of others.

d. This permit does not authorize interference with any existing or proposed Federal projects.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

d. Design or construction deficiencies associated with the permitted work.

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data. The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

a. You fail to comply with the terms and conditions of this permit.

b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (see 4 above).

c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions. General Condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

Charles E. Williams, D 12/9/13
(PERMITTEE) *Frank M. Piorko* (DATE)

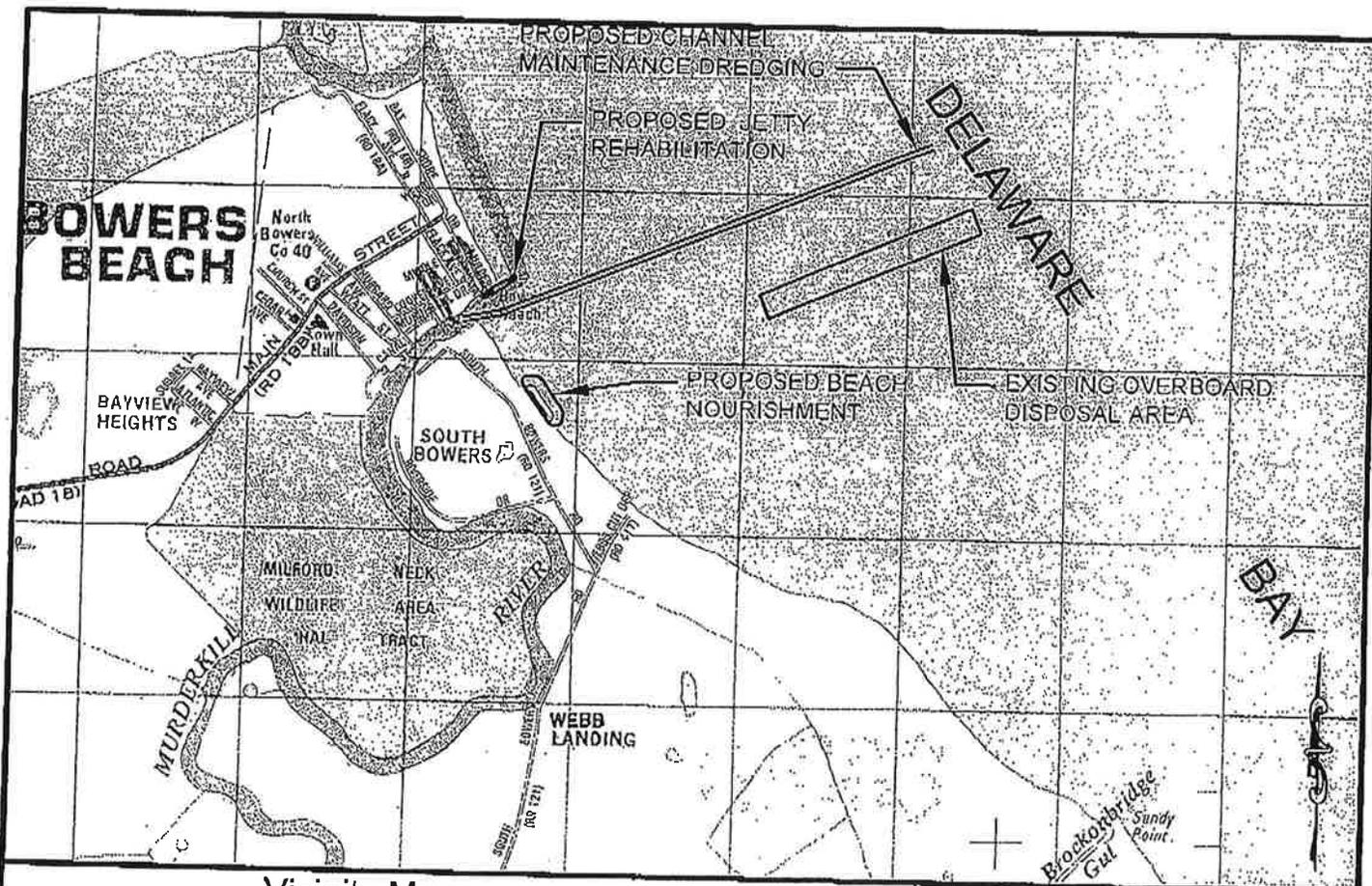
This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

[Signature] 12/6/13
(District Engineer) (DATE)
Frank J. Cianfrani, Chief, Regulatory Branch
for: John C. Becking, P.E.
Lieutenant Colonel, US Army
District Commander

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

(TRANSFEEEE)

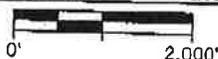
(DATE)



Vicinity Map

Copyright ADC The Map People
Permitted Use No. 20911192

SCALE : 1" = 2000'



SCOPE OF WORK

Dredging: 80' wide x 5839' long (1.16 ac)
Depth to -8' MLLW
max from MLLW = 5450'
max from MHW = 5660'
quantity: 45,000 cy total
(±11k cy overburden; ±34k cy beach quality)
10 year maintenance dredging

Beach Nourishment:
South Bowers: 220' wide x 695' long (3.12ac)
max from MLLW = 110' (0.26ac)
max from MHW = 220' (2.96ac)
quantity: ±34,000 cy
Dune Planting: 0.32ac total
(9,950 sf channelward MHW)

Jetty Rehabilitation: ±58' wide x 470' long (0.63ac)
Steel Pile w/ warning sign: 1 each
max from MLLW = 110' (0.20ac)
max from MHW = 300' (0.48ac)
armor stone quantity: 3840 cy
#2 stone quantity: 1300 cy
new bottom disturbance: 2555sy

INDEX OF DRAWINGS

- 1 - - - - - Cover
- 2 - - - - - Adjacent Property Owners
- 3 - - - - - Key Plan
- 4 THRU 6 - - - Dredging Site Plan
- 7 - - - - - Jetty Site Plan
- 8 THRU 9 - - - South Bowers Beach Nourishment Site Plan
- 10 - - - - - Overboard Disposal Area Site Plan
- 11 THRU 12 - Sections

NOTES:

- 1. PUBLISHED MEAN TIDAL RANGE IS 5.10 FEET.
- 2. SOUNDINGS ARE IN FEET AND REFER TO MLLW.
- 3. PROPERTY LINES SHOWN WERE TAKEN FROM THE KENT COUNTY TAX MAPS AND ARE APPROXIMATE ONLY.
- 4. LIMITS OF WETLAND WERE TAKEN FROM DNREC WETLAND MAP 16-015
- 5. THESE DRAWINGS ARE FOR OUTLINE PURPOSES ONLY. DESIGN DRAWINGS WILL BE PROVIDED SEPARATELY.

SHEET 1 OF 12
**Proposed Maintenance
Dredging, Beach
Nourishment, Jetty
Rehabilitation**

IN: DELAWARE BAY
AT: BOWERS BEACH / SOUTH BOWERS
KENT COUNTY, DELAWARE
APPL. BY: DNREC - DIVISION OF
WATERSHED STEWARDSHIP
DATE: AUGUST 2013
REVISED: NOV. 2013

E-1



Andrews, Miller & Associates
A Division of
ARCHITECTS ENGINEERS SURVEYORS

dbp DAVIS,
BOWEN &
FRIEDEL, INC.

EASTON, MARYLAND (410) 370-4744
SALISBURY, MARYLAND (410) 340-0001
MILFORD, DELAWARE (302) 424-1441

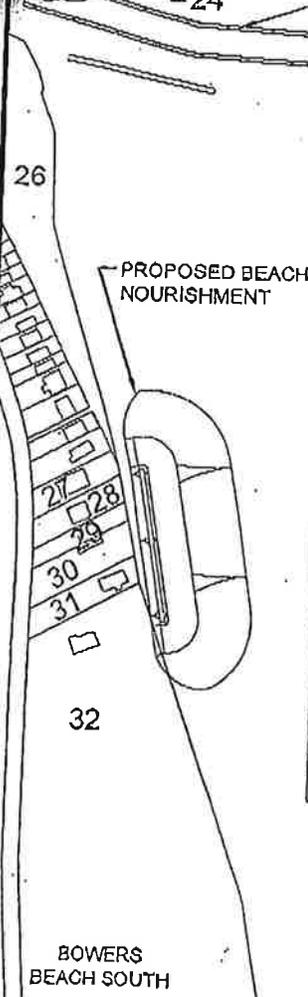
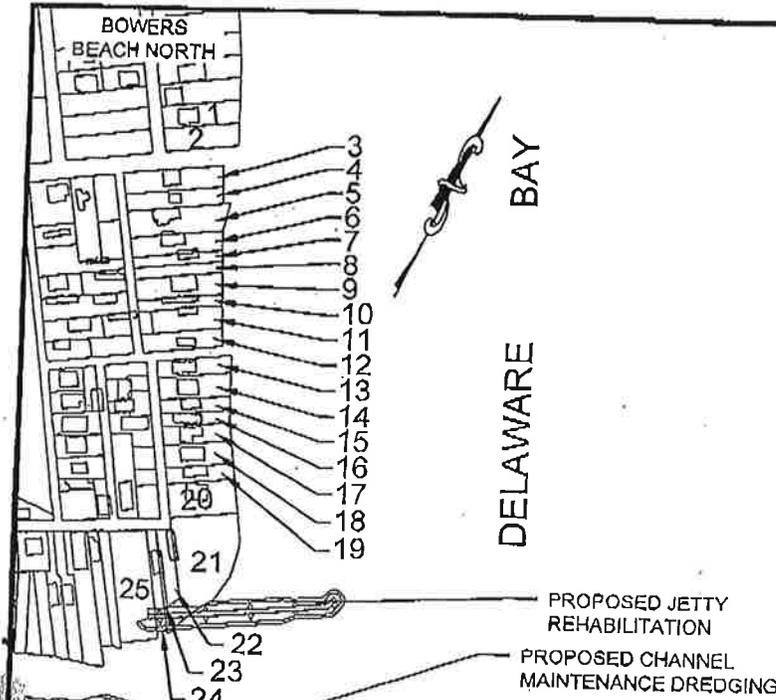
2013-1033

SMS

SHEET 2 OF 12

Proposed Maintenance Dredging, Beach Nourishment, Jetty Rehabilitation

IN: DELAWARE BAY
 AT: BOWERS BEACH / SOUTH BOWERS
 KENT COUNTY, DELAWARE
 APPL. BY: DNREC - DIVISION OF
 WATERSHED STEWARDSHIP
 DATE: AUGUST 2013
 REVISED: NOV. 2013



ID #	PROPERTY ADDRESS				NAME	OWNER INFORMATION			
	ADDRESS	CITY	STATE	ZIP		ADDRESS	CITY	STATE	ZIP
1	1B BAYSHORE DR	FREDERICA	DE	19946	MARIE A. NEIMAN	64 SUNSET DRIVE	BOYERTOWN	PA	19512
2	BAYSHORE DR	FREDERICA	DE	19946	MARIE A. NEIMAN	64 SUNSET DRIVE	BOYERTOWN	PA	19512
3	BAYSHORE DR	FREDERICA	DE	19946	JOSEPHINE V. P. COULBOURNE	505 EAGLE NEST DR	CAMDEN-WYOMING	DE	19934
4	BAYSHORE DR	FREDERICA	DE	19946	JOSEPHINE V. P. COULBOURNE	505 EAGLE NEST DR	CAMDEN-WYOMING	DE	19934
5	21 BAYSHORE DR	FREDERICA	DE	19946	MARVIN D. EHLEN	2302 RIDDLE AVE APT B105	WILMINGTON	DE	19806
6	33 BAYSHORE DR	FREDERICA	DE	19946	KEVIN M. O'NEILL	18808 FALLING STAR ROAD	GERMANTOWN	MD	20874
7	FLACK AVE	DOVER	DE	19901	HARRIET E. MAMMARELLI	2829 SKEETER NECK RD	FREDERICA	DE	19946
8	43 BAYSHORE DR	FREDERICA	DE	19946	HARRIET MAMMARELLI	2329 SKEETER NECK RD.	FREDERICA	DE	19946
9	49 BAYSHORE DR	FREDERICA	DE	19946	LEE KERN	792 BRANCH ROAD	HARLEYSVILLE	PA	19428
10	55 BAYSHORE DR	FREDERICA	DE	19946	WILLIAM K. PHILLIS	2236 THERESA AVENUE	MONTON	PA	19070
11	78 FLACK AVE	FREDERICA	DE	19946	ELIZABETH ANNE STEPANIK	777 TREE LANE	W CHESTER	PA	19380
12	60 MULBERRY DR	FREDERICA	DE	19946	WAYNE C. JARRELL	19 N KINGS CROFT DR	BEAR	DE	19701
13	60 MULBERRY DR	FREDERICA	DE	19946	RANDALL R. FRECH	309 WALNUT ST	SPRING CITY	PA	19475
14	58 MULBERRY DR	FREDERICA	DE	19946	RONALD N. HUNSICKER	58 MULBERRY DR DRIVE	FREDERICA	DE	19946
15	MULBERRY DR	FREDERICA	DE	19946	LINDA F. SHELLY	924 DARBY LANE	LANCASTER	PA	17601
16	96 MULBERRY DR	FREDERICA	DE	19946	HOWARD C. HOUSEKNECHT	152 RICK RD	BOYERTOWN	PA	19512
17	28 MULBERRY DR	FREDERICA	DE	19946	STEVEN R. NICHOLAS	3022 ARTESIAN LANE	N. FORT MYERS	FL	33917
18	22 MULBERRY DR	FREDERICA	DE	19946	ROBERT J. MCDEVITY SR.	22 MULBERRY DR DRIVE	FREDERICA	DE	19946
19	12 MULBERRY DR	FREDERICA	DE	19946	RICHARD M. FAWBER	37 NAOMI AVE	LANDISVILLE	PA	17538
20	MULBERRY DR	FREDERICA	DE	19946	RALPH O. ORENDORF	521 TERRAPIN LANE	NEWARK	DE	19711
21	COOPER AVE	MAGNOLIA	DE	19963	RALPH O. ORENDORF	521 TERRAPIN LANE	NEWARK	DE	19711
22	212 COOPER AVE	FREDERICA	DE	19946	WILLIAM R. AURAND	906 PERRY ROAD	LITITZ	PA	17543
23	202 COOPER AVE	FREDERICA	DE	19946	WILLIAM R. AURAND	906 PERRY ROAD	LITITZ	PA	17543
24	202 COOPER AVE	FREDERICA	DE	19946	WILLIAM R. AURAND	906 PERRY ROAD	LITITZ	PA	17543
25	COOPER AVE	FREDERICA	DE	19946	TERRY L. HAWK	393 BAY AVENUE	MILFORD	DE	19963
26	BOWERS RD	MILFORD	DE	19963	STATE OF DELAWARE	89 KINGS HWY	DOVER	DE	19901
27	4196 BOWERS RD	MILFORD	DE	19963	DAVID A. LECHNER	9404 BETHANY PL	MONTGOMERY VILLAGE	MD	20886
28	4188 BOWERS RD	MILFORD	DE	19963	WILLIAM J. QIODOARDO	1012 MARROWS RD	NEWARK	DE	19713
29	4174 BOWERS RD	MILFORD	DE	19963	TROY C. ADAMS	119 BEACH PLUM DRIVE	MILFORD	DE	19963
30	BOWERS RD	MILFORD	DE	19963	JANE L. LAUGHLIN	4152 S. BOWERS RD ROAD	MILFORD	DE	19963
31	4152 BOWERS RD	MILFORD	DE	19963	JANE L. LAUGHLIN	4152 S. BOWERS RD ROAD	MILFORD	DE	19963
32	4132 BOWERS RD	MILFORD	DE	19963	JAMES S. WEBB JR. C/O THOMAS E. WEBB	7343 BIG STONE BEACH RD	MILFORD	DE	19963

ADJACENT PROPERTY OWNERS

Scale: 1" = 400'



E-2

2013-1033

SMS

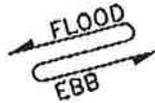
SHEET 3 OF 12

Proposed Maintenance Dredging, Beach Nourishment, Jetty Rehabilitation

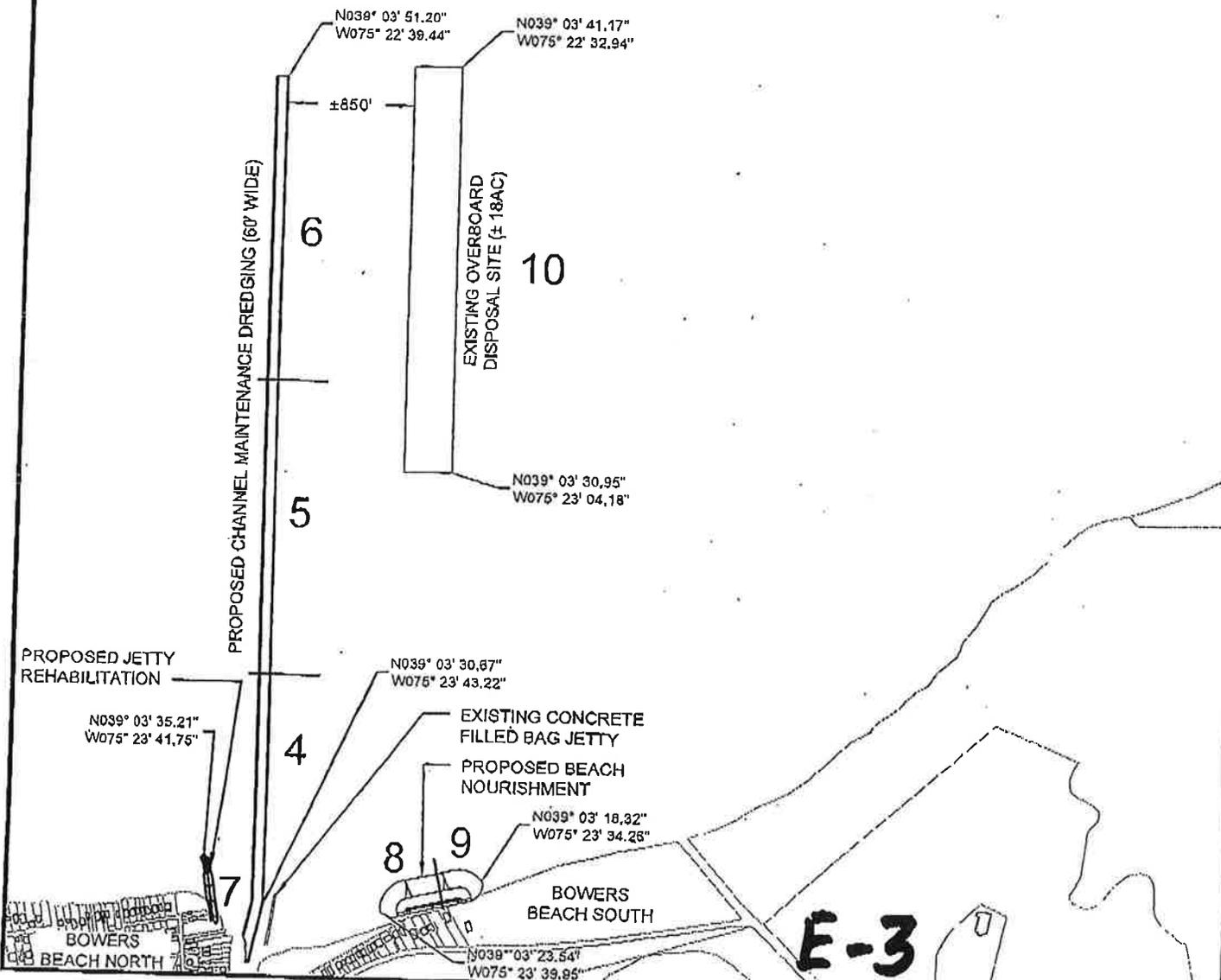
IN: DELAWARE BAY
AT: BOWERS BEACH / SOUTH BOWERS
KENT COUNTY, DELAWARE
APPL. BY: DNREC - DIVISION OF
WATERSHED STEWARDSHIP
DATE: AUGUST 2013
REVISED: NOV. 2013

KEY PLAN

Scale: 1" = 1000'



DELAWARE BAY



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SHEET 4 OF 12

Proposed Maintenance Dredging, Beach Nourishment, Jetty Rehabilitation

MATCHLINE - SEE SHEET 5

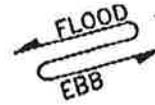
IN: DELAWARE BAY
AT: BOWERS BEACH / SOUTH BOWERS
KENT COUNTY, DELAWARE
APPL. BY: DNREC - DIVISION OF
WATERSHED STEWARDSHIP

DATE: AUGUST 2013
REVISED: NOV. 2013

DREDGING SITE PLAN

Scale: 1" = 200'
0' 200'

PROPOSED JETTY
REHABILITATION
SEE SHEET 7



PROPOSED MAINTENANCE DREDGING TO -8' MLLW OF "FEDERAL CHANNEL". (BEACH QUALITY SAND BETWEEN STA. 0+00 TO STA. 37+00 TO BE USED FOR BEACH NOURISHMENT; UNSUITABLE MATERIAL BETWEEN STA. 39+00 TO STA. 58+39 TO BE DEPOSITED OVERBOARD AT DISPOSAL AREA. TRANSITION FROM BEACH QUALITY TO SILT STA. 37+00 TO 39+00.

DELAWARE BAY

GRAB SAMPLES, TYP.

DELAWARE BAY

NOTE: BEACH QUALITY SAND MATERIAL SHALL BE DREDGED FROM THE CHANNEL AND HYDRAULICALLY TRANSFERRED TO THE BEACH OF SOUTH BOWERS AND MACHINE GRADED PER "TYPICAL BEACH NOURISHMENT SECTION" ON SHEET 12. SEE SHEETS 8-9. SILTY MATERIAL UNSUITABLE FOR BEACH FILL SHALL BE HYDRAULICALLY DEPOSITED AT THE 18 AC OVERBOARD DISPOSAL SITE (SHEET 10)

EXISTING CONCRETE FILLED BAG JETTY

PROPOSED BEACH NOURISHMENT
SEE SHEETS 8-9

0.0'-MLLW

0.0'-MLLW

0.0'-MLLW

BOWERS BEACH NORTH

BOWERS BEACH SOUTH

E-4

2013-1033

SMS

MATCHLINE - SEE SHEET 6

DREDGING SITE PLAN

Scale: 1" = 200'



PROPOSED MAINTENANCE DREDGING TO -8' MLLW OF "FEDERAL CHANNEL". (BEACH QUALITY SAND BETWEEN STA. 0+00 TO STA. 37+00 TO BE USED FOR BEACH NOURISHMENT; UNSUITABLE MATERIAL BETWEEN STA. 39+00 TO STA. 58+39 TO BE DEPOSITED OVERBOARD AT DISPOSAL AREA. TRANSITION FROM BEACH QUALITY TO SILT STA. 37+00 TO 39+00.

60' WIDE

±850' TO EXISTING OVERBOARD DISPOSAL SITE

BAY

GRAB SAMPLES, TYP.

DELAWARE

5439'

38+00
37+00
36+00
35+00
34+00
33+00
32+00
31+00
30+00
29+00
28+00
27+00
26+00
25+00
24+00
23+00
22+00
21+00
20+00

SHEET 5 OF 12

Proposed Maintenance Dredging, Beach Nourishment, Jetty Rehabilitation

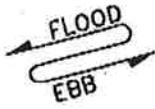
IN: DELAWARE BAY
AT: BOWERS BEACH / SOUTH BOWERS
KENT COUNTY, DELAWARE
APPL. BY: DNREC - DIVISION OF
WATERSHED STEWARDSHIP

DATE: AUGUST 2013
REVISED: NOV. 2013

MATCHLINE - SEE SHEET 4

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2013-1033



DREDGING SITE PLAN

Scale: 1" = 200'



±850' TO EXISTING OVERBOARD DISPOSAL SITE

PROPOSED MAINTENANCE DREDGING TO -8' MLLW OF "FEDERAL CHANNEL". (BEACH QUALITY SAND BETWEEN STA. 0+00 TO STA. 37+00 TO BE USED FOR BEACH NOURISHMENT; UNSUITABLE MATERIAL BETWEEN STA. 39+00 TO STA. 58+39 TO BE DEPOSITED OVERBOARD AT DISPOSAL AREA. TRANSITION FROM BEACH QUALITY TO SILT STA. 37+00 TO 39+00.

60' WIDE

DELAWARE BAY

GRAB SAMPLES, TYP.

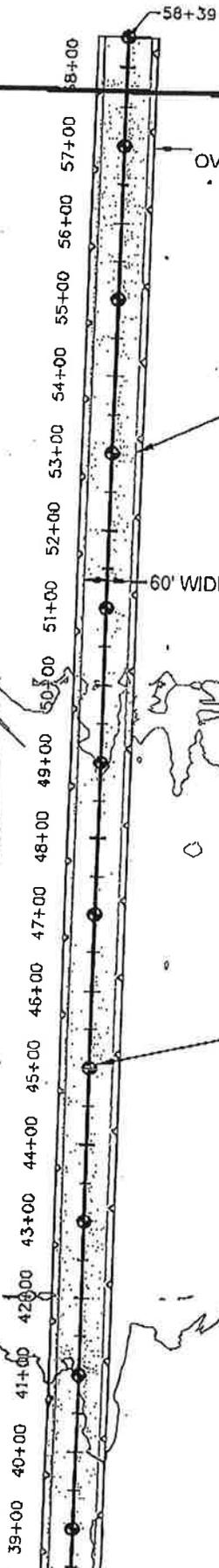
Proposed Maintenance Dredging, Beach Nourishment, Jetty Rehabilitation

IN: DELAWARE BAY
AT: BOWERS BEACH / SOUTH BOWERS
KENT COUNTY, DELAWARE
APPL. BY: DNREC - DIVISION OF WATERSHED STEWARDSHIP
DATE: AUGUST 2013
REVISED: NOV, 2013

MATCHLINE - SEE SHEET 5

E-6

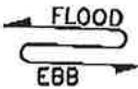
2013-1033



DELAWARE BAY

JETTY SITE PLAN

Scale: 1" = 50'



PROPOSED STEEL PILE WITH WARNING SIGN
300' MAX

PROPOSED JETTY
REHABILITATION
300' MAX

EXISTING
JETTY

GRAB SAMPLE, TYP.

SEE SHEET 2 FOR PROPERTY
OWNER INFORMATION, TYP

PROPOSED MAINTENANCE
DREDGING, SEE SHEETS 4-6

EX BLDG

SHEET 7 OF 12

**Proposed Maintenance
Dredging, Beach Nourishment,
Jetty Rehabilitation**

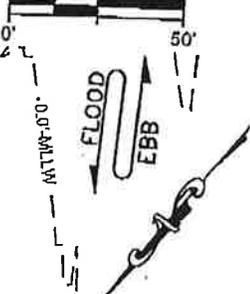
IN: DELAWARE BAY
AT: BOWERS BEACH / SOUTH BOWERS
KENT COUNTY, DELAWARE
APPL. BY: DNREC - DIVISION OF
WATERSHED STEWARDSHIP
DATE: AUGUST 2013 REVISED: NOV. 2013

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2013-1033

SOUTH BOWERS BEACH NOURISHMENT SITE PLAN

Scale: 1" = 50'



MATCHLINE - SEE SHEET 9

SEE SHEET 2 FOR PROPERTY OWNER INFORMATION, TYP.

PROPOSED
CAPE-AMERICAN
BEACH GRASS

STA. 5+35

STA. 5+25±

END OF BASE BID

DELAWARE BAY

BENEFICIAL USE OF DREDGED
MATERIAL FROM MURDERKILL
RIVER DREDGING (+695 LF)

±180'

220' MAX

PROPOSED DUNE SYSTEM

PROPERTY OF STATE
OF DELAWARE

SHEET 8 OF 12
**Proposed Maintenance
Dredging, Beach Nourishment,
Jetty Rehabilitation**

PROPOSED BEACH
NOURISHMENT MATERIAL

IN: DELAWARE BAY
AT: BOWERS BEACH / SOUTH BOWERS
KENT COUNTY, DELAWARE
APPL. BY: DNREC - DIVISION OF
WATERSHED STEWARDSHIP
DATE: AUGUST 2013 REVISED: NOV. 2013

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2013-1033

SOUTH BOWERS BEACH NOURISHMENT SITE PLAN

Scale: 1" = 50'
0' 50'



DELAWARE BAY

BENEFICIAL USE OF DREDGED MATERIAL FROM MURDERKILL RIVER DREDGING (±695 LF)

STA. 8+75
START OF BASE BID

SHEET 9 OF 12
**Proposed Maintenance
Dredging, Beach Nourishment,
Jetty Rehabilitation**

IN: DELAWARE BAY
AT: BOWERS BEACH / SOUTH BOWERS
KENT COUNTY, DELAWARE
APPL. BY: DNREC - DIVISION OF
WATERSHED STEWARDSHIP
DATE: AUGUST 2013 REVISED: NOV. 2013

PROPOSED BEACH NOURISHMENT MATERIAL

PROPOSED 'CAPE' AMERICAN BEACH GRASS

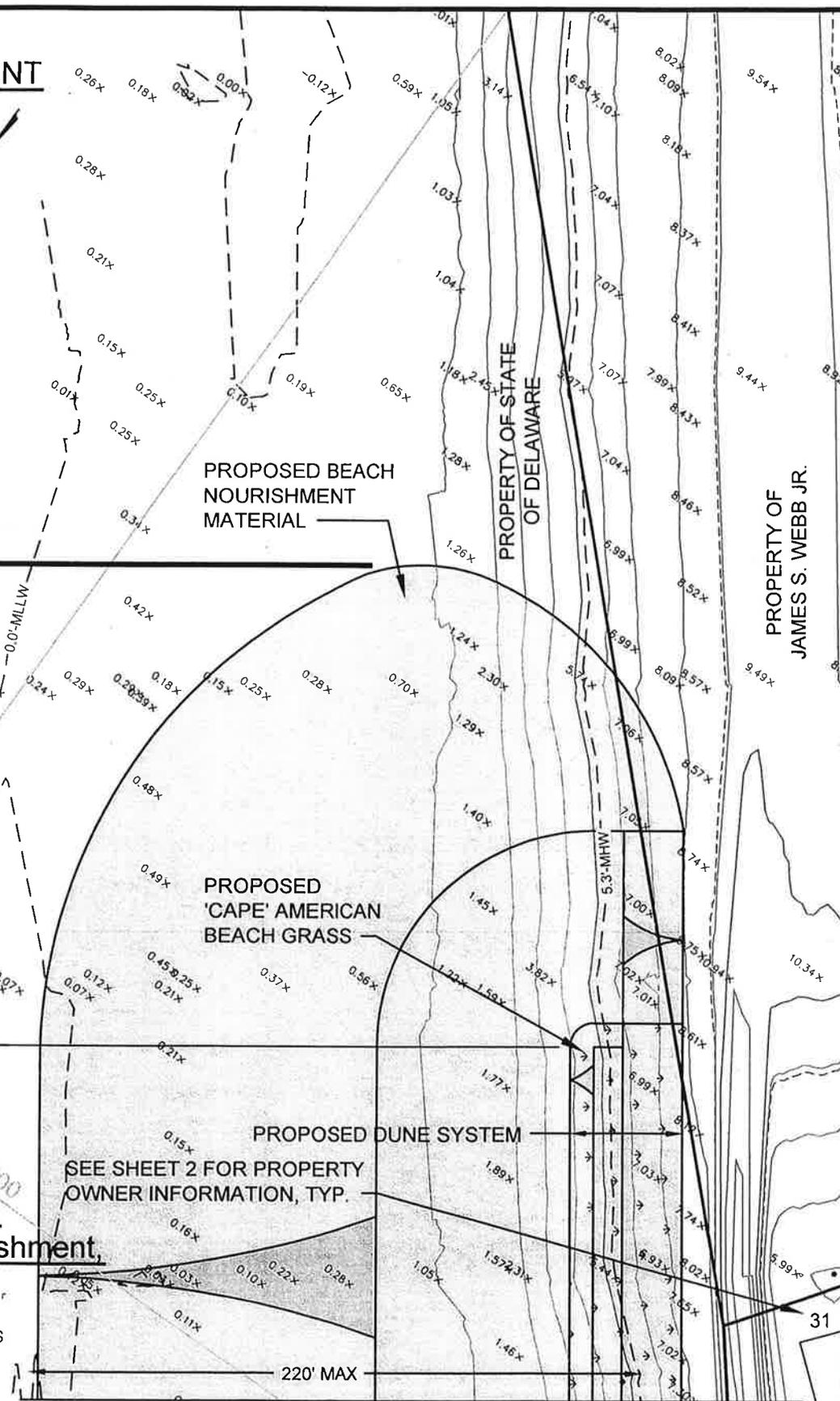
PROPOSED DUNE SYSTEM

SEE SHEET 2 FOR PROPERTY OWNER INFORMATION, TYP.

MATCHLINE - SEE SHEET 8

PROPERTY OF STATE OF DELAWARE

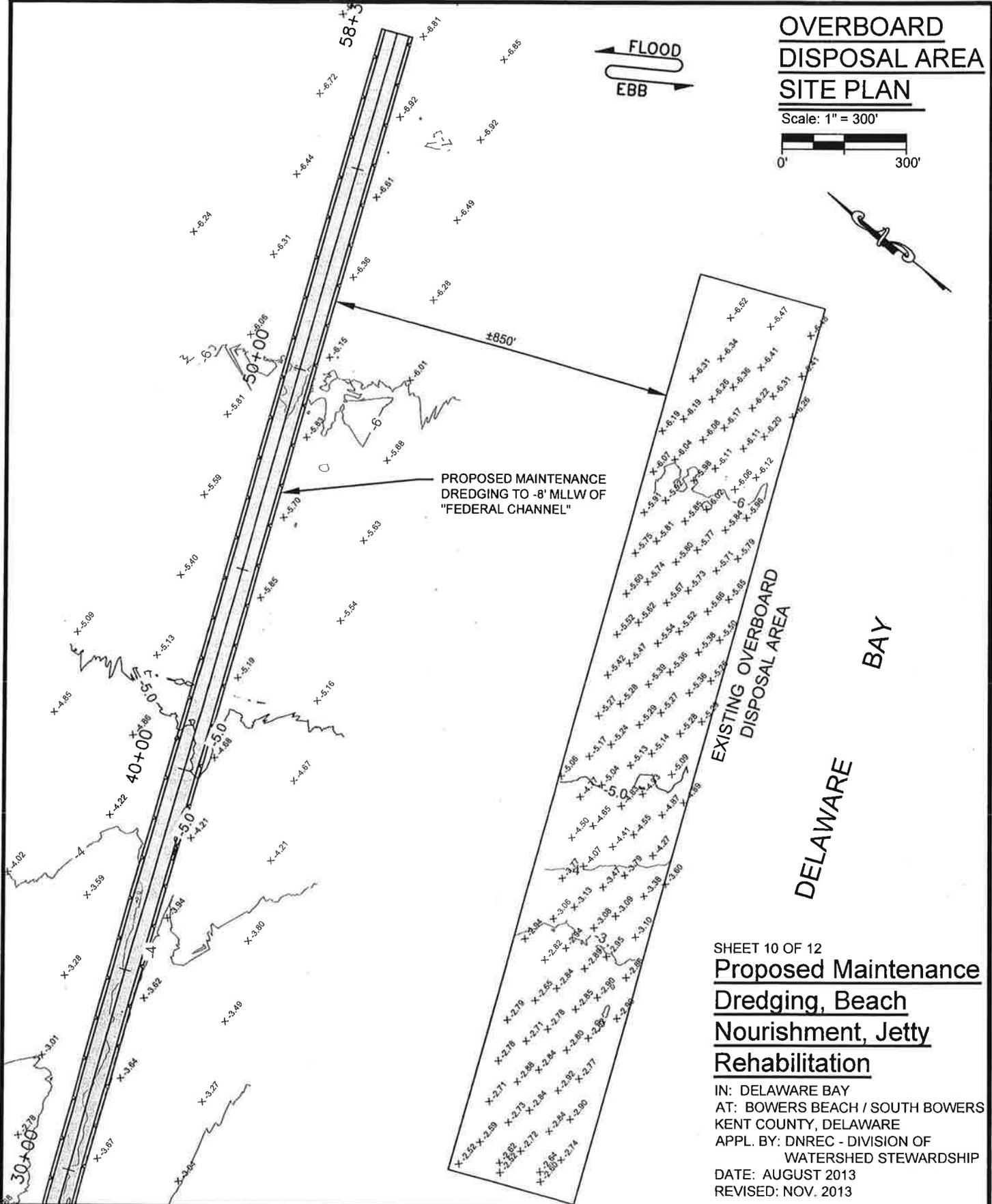
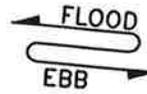
PROPERTY OF JAMES S. WEBB JR.



E-10

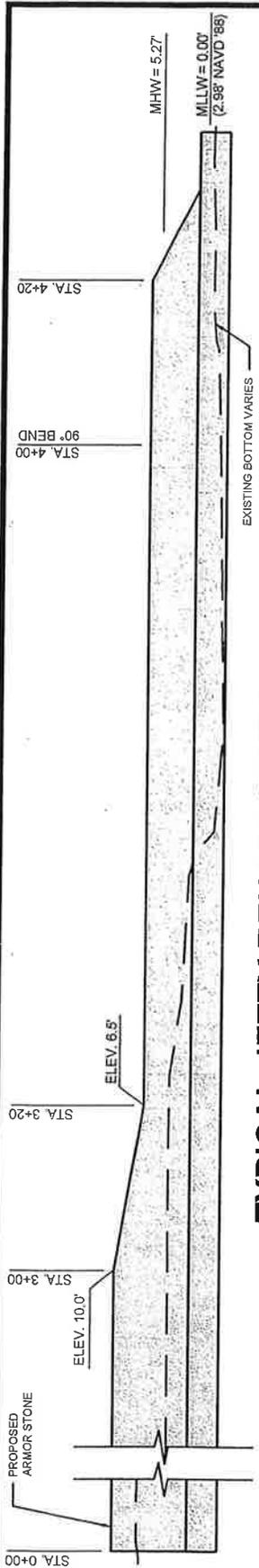
OVERBOARD DISPOSAL AREA SITE PLAN

Scale: 1" = 300'

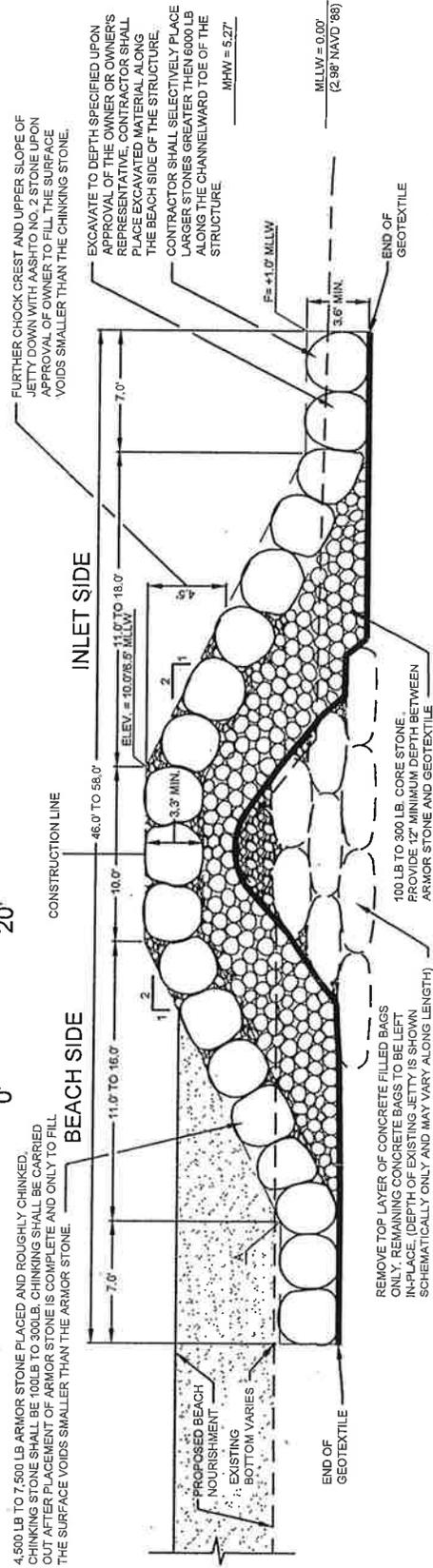
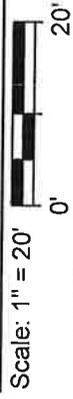


SHEET 10 OF 12
Proposed Maintenance
Dredging, Beach
Nourishment, Jetty
Rehabilitation
 IN: DELAWARE BAY
 AT: BOWERS BEACH / SOUTH BOWERS
 KENT COUNTY, DELAWARE
 APPL. BY: DNREC - DIVISION OF
 WATERSHED STEWARDSHIP
 DATE: AUGUST 2013
 REVISED: NOV. 2013

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TYPICAL JETTY REHABILITATION PROFILE



4,500 LB TO 7,500 LB ARMOR STONE PLACED AND ROUGHLY CHINKED. CHINKING STONE SHALL BE 100LB TO 300LB. CHINKING SHALL BE CARRIED OUT AFTER PLACEMENT OF ARMOR STONE IS COMPLETE AND ONLY TO FILL THE SURFACE VOIDS SMALLER THAN THE ARMOR STONE.

EXCAVATE TO DEPTH SPECIFIED UPON APPROVAL OF THE OWNER OR OWNER'S REPRESENTATIVE. CONTRACTOR SHALL PLACE EXCAVATED MATERIAL ALONG THE BEACH SIDE OF THE STRUCTURE. CONTRACTOR SHALL SELECTIVELY PLACE LARGER STONES GREATER THEN 6000 LB ALONG THE CHANNELWARD TOE OF THE STRUCTURE.

MHW = 5.27

MLLW = 0.00' (2.98' NAVD 88)

REMOVE TOP LAYER OF CONCRETE FILLED BAGS ONLY. REMAINING CONCRETE BAGS TO BE LEFT IN PLACE. (DEPTH OF EXISTING JETTY IS SHOWN SCHEMATICALLY ONLY AND MAY VARY ALONG LENGTH)

TYPICAL JETTY REHABILITATION SECTION STA. 0+00 TO 3+50



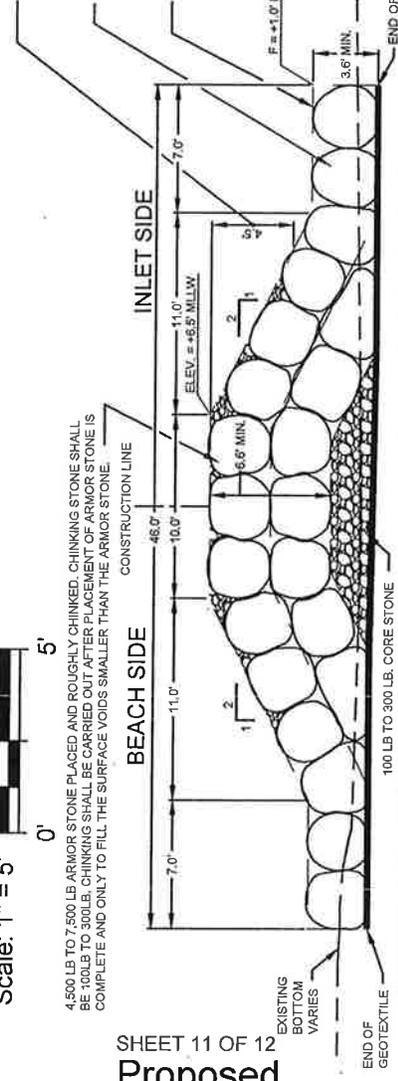
FURTHER CHOCK CREST AND UPPER SLOPE OF JETTY WITH AASHTO NO. 2 STONE UPON APPROVAL OF OWNER TO FILL THE SURFACE VOIDS SMALLER THAN THE CHINKING STONE.

EXCAVATE TO DEPTH SPECIFIED UPON APPROVAL OF THE OWNER OR OWNER'S REPRESENTATIVE. CONTRACTOR SHALL PLACE EXCAVATED MATERIAL ALONG THE BEACH SIDE OF THE STRUCTURE.

CONTRACTOR SHALL SELECTIVELY PLACE LARGER STONES GREATER THEN 6000 LB ALONG THE CHANNELWARD TOE OF THE STRUCTURE.

MHW = 5.27

MLLW = 0.00' (2.98' NAVD 88)



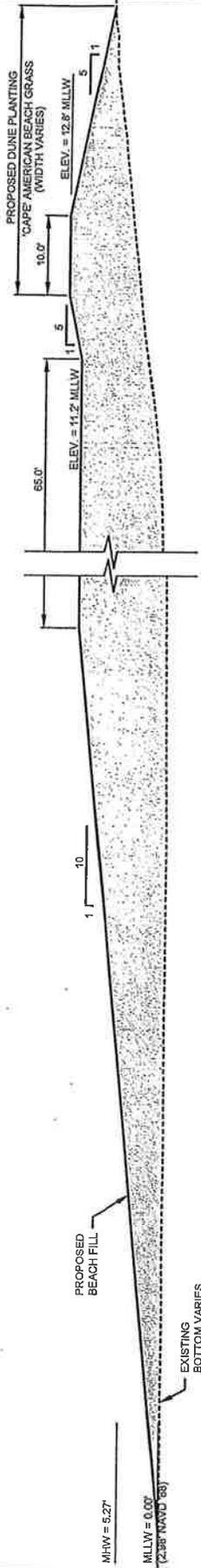
TYPICAL JETTY REHABILITATION SECTION STA. 3+50 TO 4+20



SHEET 11 OF 12
Proposed
Maintenance
Dredging, Beach
Nourishment, Jetty
Rehabilitation

IN: DELAWARE BAY
 AT: BOWERS BEACH / SOUTH BOWERS
 KENT COUNTY, DELAWARE
 APPL. BY: DNREC - DIVISION OF WATERSHED STEWARDSHIP
 DATE: AUGUST 2013
 REVISED: NOV. 2013

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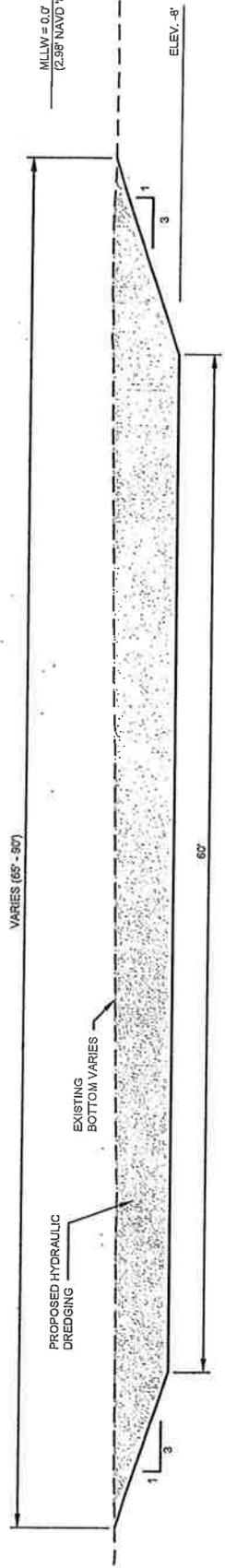


TYPICAL BEACH NOURISHMENT SECTION

Scale: 1" = 20'

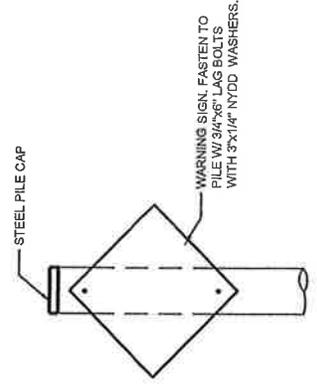
MHW = 5.27'

MLLW = 0.0'
(2.98' NAVD 88)



TYPICAL CHANNEL MAINTENANCE DREDGING SECTION

Scale: 1" = 5'



TYPICAL STEEL PILE W/ WARNING SIGN
NOT TO SCALE

SHEET 12 OF 12
Proposed
Maintenance
Dredging, Beach
Nourishment, Jetty
Rehabilitation

IN: DELAWARE BAY
 AT: BOWERS BEACH / SOUTH BOWERS
 KENT COUNTY, DELAWARE
 APPL. BY: DNREC - DIVISION OF
 WATERSHED STEWARDSHIP
 DATE: AUGUST 2013
 REVISED: NOV. 2013

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: Delaware Division of Watershed Stewardship	File No: CENAP-OP-R-2013-1033	Date: DEC 06 2013
Attached is:		See Section below
<input checked="" type="checkbox"/>	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A
<input type="checkbox"/>	PROFFERED PERMIT (Standard Permit or Letter of permission)	B
<input type="checkbox"/>	PERMIT DENIAL	C
<input type="checkbox"/>	APPROVED JURISDICTIONAL DETERMINATION	D
<input type="checkbox"/>	PRELIMINARY JURISDICTIONAL DETERMINATION	E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at <http://usace.army.mil/inet/functions/cw/cecwo/reg> or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the Philadelphia District Engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations (JD) associated with the permit.
- **OBJECT:** If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the Philadelphia District Engineer. Your objections must be received by the Philadelphia District Engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the Philadelphia District Engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the Philadelphia District Engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the Philadelphia District Engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the North Atlantic Division Engineer, ATTN: CENAD-ET-O, Fort Hamilton Military Community, Building 301, General Lee Avenue, Brooklyn, NY 11252-6700. This form must be received by the North Atlantic Division Engineer within 60 days of the date of this notice with a copy furnished to the Philadelphia District Engineer.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the North Atlantic Division Engineer, ATTN: CENAD-ET-O, Fort Hamilton Military Community, Building 301, General Lee Avenue, Brooklyn, NY 11252-6700. This form must be received by the North Atlantic Division Engineer within 60 days of the date of this notice with a copy furnished to the Philadelphia District Engineer.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- **ACCEPT:** You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- **APPEAL:** If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the North Atlantic Division Engineer, ATTN: CENAD-ET-O, Fort Hamilton Military Community, Building 301, General Lee Avenue, Brooklyn, NY 11252-6700. This form must be received by the North Atlantic Division Engineer within 60 days of the date of this notice with a copy furnished to the Philadelphia District Engineer.

ENCLOSURE 3

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:

U.S. Army Corps of Engineers, Philadelphia District
ATTN: CENAP-OP-R
Wanamaker Building, 100 Penn Square East
Philadelphia, PA 19107-3390
Telephone:

If you only have questions regarding the appeal process you may also contact:

Michael G. Vissichelli
Regulatory Appeals Review Officer
North Atlantic Division, U.S. Army Corps of Engineers
Fort Hamilton Military Community
General Lee Avenue, Building 301
Brooklyn, NY 11252-6700
Telephone: (718) 765-7150
E-mail: Michael.G.Vissichelli@usace.army.mil

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

<hr/> Signature of appellant or agent.	Date:	Telephone number:
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STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES & ENVIRONMENTAL CONTROL
OFFICE OF THE SECRETARY

DELAWARE COASTAL
MANAGEMENT PROGRAM

5 E. REED STREET, SUITE 201
DOVER, DELAWARE 19901

Phone: (302) 739- 9283
Fax: (302) 739-2048

November 12, 2013

Gary O. Williams
Andrews, Miller & Associates
106 North Washington Street, Suite 103
Easton, Maryland 21601

RE: Delaware Coastal Management Program Federal Consistency Determination
Murderkill River Channel Dredging (FC 2014.0001)

Dear Mr. Williams:

The Delaware Coastal Management Program (DCMP) has received and reviewed your consistency determination for the modification to the above referenced project. Based upon our review and pursuant to National Oceanic & Atmospheric Administration regulations (15 CFR 930), the DCMP concurs with your request to hydraulically dredge 45,000 c.y. of the existing federal authorized channel leading into the Murderkill River, Bowers Beach, Delaware, to a depth of -8 ft MLLW including overboard disposal in existing disposal area south of south jetty and beneficial use of dredged material; nourish and area of South Bowers Beach measuring approximately 220 ft by 1700 ft using 34,000 c.y. of sand obtained from dredging and an additional 51,000 c.y. of sand hydraulically dredged from the offshore borrow area; nourish and areas of North Bowers Beach measuring approximately 220 ft by 1200 ft using 58,000 c.y. of sand hydraulically dredged from the offshore borrow area; and raise, widen and lengthen the existing northern jetty with quarry stone to 46 to 58 ft wide by 470 ft long including the placement of a steel piling at the water ward end with warning signals.

This concurrence is conditioned upon the issuance of all required permits and adherence to the restrictions and/or conditions placed on any and all permits issued to you for this project, and adherence to any and all lease restrictions for use of the site. If you have any questions, please contact me or Bonnie Arvay of my staff at (302) 739-9283.

Sincerely,

A handwritten signature in black ink, appearing to read "Sarah W. Cooksey".

Sarah W. Cooksey, Administrator
Delaware Coastal Management Program

SWC/bwa

cc: File 2014.0001
Scott Figurski - DNREC Division of Water