



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

# Public Notice

Public Notice No.

Date

CENAP-OP-R-2015-508, 2015-510 and 2015-511

AUG 03 2015

Application No.

File No.

In Reply Refer to:

REGULATORY BRANCH

This District has received an application for a Department of the Army permit pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) and Section 404 of the Clean Water Act (33 U.S.C. 1344).

The purpose of this notice is to solicit comments and recommendations from the public concerning issuance of a Department of the Army permit for the work described below.

**APPLICANT:** New Jersey Department of Transportation  
Office of Maritime Resources  
P.O. Box 600  
Trenton, New Jersey 08625-0600  
Attn: Ms. Genevieve Clifton

**WATERWAY:** High Bar Harbor, Double Creek Inlet Channel, and Barnegat Light Stake Channel.

**LOCATION:** Dredging is proposed in 3 different waterways within Barnegat Bay, Ocean County, New Jersey. The course grained dredged material would be disposed on the Barnegat Light House State Park and the fine grained material within a confined disposal facility located on the Oyster Creek Excelon property in Lacey Township, Ocean County, New Jersey (see Enclosure 1-3).

**ACTIVITY:** The applicant proposes to hydraulically dredge accumulated sediment from within 3 separate waterways (see Enclosure 4-17). The 3 projects being advertised for separate Department of the Army authorizations are Double Creek Inlet Channel project (CENAP-OP-R-2015-508-35), High Bar Harbor Channel (CENAP-OP-R-2015-510-35), and Barnegat Light Stake Channel (CENAP-OP-R-2015-511-35). The projects consists of maintenance dredging within the Double Creek Inlet Channel (#126) located in Ocean and Long Beach Townships, High Bar Harbor Channel (#127) located in Ocean Township, and the Barnegat Light Stake Channel (#129) located in the Borough of Barnegat Light, Ocean County. This maintenance dredging event is limited to dredged material comprised primarily of sand (Double Creek Inlet Channel Station 143+00 to 151+00 and Station 160+00 to 169+00 and Barnegat Light Stake Channel Station 15+00 to 26+00).

Maintenance dredging in the Double Creek Inlet Channel (#126) shall consist of hydraulic dredging of approximately fifty three thousand one hundred and forty eight six cubic yards (~53,148 yds<sup>3</sup>) of sediment comprised of sand, silt and clay, from approximately seventeen

thousand linear feet (~4,800'). The project depth in the Double Creek Inlet Channel is seven feet below mean low water (-7' MLW), plus one foot (1') of allowable overdredge. The channel design width is 100'. Channel side slopes are 3:1. Maintenance dredging of the channel was last conducted in 1990.

Maintenance dredging in the High Bar Harbor Channel (#127) shall consist of hydraulic dredging of approximately thirty six thousand one hundred fifty six cubic yards (~36,156 yds<sup>3</sup>) of sediment comprised primarily of silt and clay, from approximately seven thousand four hundred linear feet (5,800'). The project depth in the Barnegat Light Stake Channel is seven feet below mean low water (-7' MLW), plus one foot (1') of allowable overdredge. The channel design width varies from 50' to 100'. Channel side slopes are 3:1. Maintenance dredging of the channel was last conducted in 1990.

Maintenance dredging in the Barnegat Light Stake Channel (#129) shall consist of hydraulic dredging of approximately two thousand six hundred and fifty six (~3,230 yds<sup>3</sup>) of sediment comprised primarily of sand, from approximately one thousand linear feet (~1,100'). The project depth in the Barnegat Light Stake Channel is five feet below mean low water (-5' MLW), plus one foot (1') of allowable overdredge. The channel design width varies from 50' to 100'. Channel side slopes are 3:1. Maintenance dredging of the channel was last conducted in 1993.

Material will be hydraulically dredged and transported via pipeline to either the beach stockpile area at the Barnegat Light State Park or the Excelon Oyster Creek CDF. The dredge pipeline to the dewatering sites will be floating except at channel crossings where it will be submerged to avoid a hazard or hindrance to navigation. The pipeline shall be marked as per USCG regulations.

The applicant has requested a 10-year maintenance dredging provision be authorized.

**PURPOSE:** The applicant's stated purpose is to provide safe navigation for both commercial and recreational vessels.

A preliminary review of this application indicates that the proposed work will not effect threatened and endangered species. While Atlantic Sturgeon (Acipenser oxyrinchus), Kemp's ridley sea turtle (Lepidochelys kempii), loggerhead sea turtle (Caretta caretta), green sea turtle (Chelonia mydas), leatherback sea turtle (Dermochelys coriacea) and hawksbill sea turtle (Eretmochelys imbricate) are in the vicinity, due to the water depths and boating activity, these species are not likely present.

The decision whether to issue a permit will be based on an evaluation of the activity's probable impact including its cumulative impacts on the public interest. The decision will reflect the national concern for both protection and utilization of important resources. The benefits which reasonably may be expected to accrue from the work must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the work will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production,

mineral needs and welfare of the people. A Department of the Army permit will be granted unless the District Engineer determines that it would be contrary to the public interest.

The Corps of Engineers is soliciting comments from the public; Federal, State, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Comments on the proposed work should be submitted, in writing, within 15 days to the District Engineer, U.S. Army Corps of Engineers, Philadelphia District, Wanamaker Building, 100 Penn Square East, Philadelphia, Pennsylvania 19107-3390.

Review of the National Register of Historic Places indicates that no registered properties or properties listed as eligible for inclusion therein are located within the permit area of the work. The permit area has been so extensively modified that little likelihood exists for the proposed project to impact a historic property.

The Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Sustainable Fisheries Act 1996 (Public Law 104-267), requires all Federal agencies to consult with the National Marine Fisheries Service on all actions, or proposed actions, permitted, funded, or undertaken by the agency that may adversely effect Essential Fish Habitat (EFH). A preliminary assessment of the species listed in the "Guide to Essential Fish Habitat Designations in the Northeastern United States, Volume IV: New Jersey and Delaware", dated March 1999, indicates that the project may adversely affect EFH. In order to avoid or minimize impacts to EFH species, specifically Winter Flounder (*Pseudopleuronectes americanus*), from the dredging, no in-water work will be authorized between January 1<sup>st</sup> and May 31<sup>st</sup> of any given year. Additionally, in order to avoid impacts to Summer Flounder (*Paralichthys dentatus*), no dredging may occur between April 15<sup>th</sup> to October 15<sup>th</sup> where submerged aquatic vegetation beds are located immediately adjacent the channels.

In accordance with Section 307(c) of the Coastal Zone Management Act of 1972, applicants for Federal Licenses or Permits to conduct an activity affecting land or water uses in a State's coastal zone must provide certification that the activity complies with the State's Coastal Zone Management Program. The applicant has stated that the proposed activity complies with and will be conducted in a manner that is consistent with the approved State Coastal Zone Management (CZM) Program. No permit will be issued until the State has concurred with the applicant's certification or has waived its right to do so. Comments concerning the impact of the proposed and/or existing activity on the State's coastal zone should be sent to this office, with a copy to the State's Office of Coastal Zone Management.

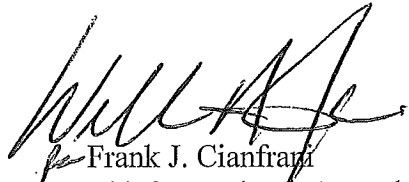
In accordance with Section 401 of the Clean Water Act, a Water Quality Certificate is necessary from the State government in which the work is located. Any comments concerning

the work described above which relate to Water Quality considerations should be sent to this office with a copy to the State.

The evaluation of the impact of the work described above on the public interest will include application of the guidelines promulgated by the Administrator, U.S. Environmental Protection Agency, under authority of Section 404(b) of the Clean Water Act.

Any person may request, in writing, to the District Engineer, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for a public hearing shall state in writing, with particularity, the reasons for holding a public hearing.

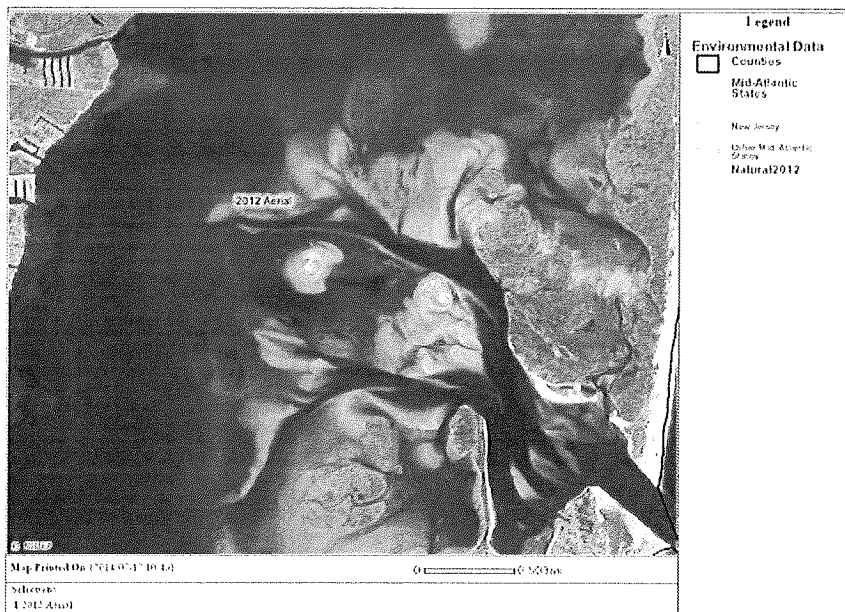
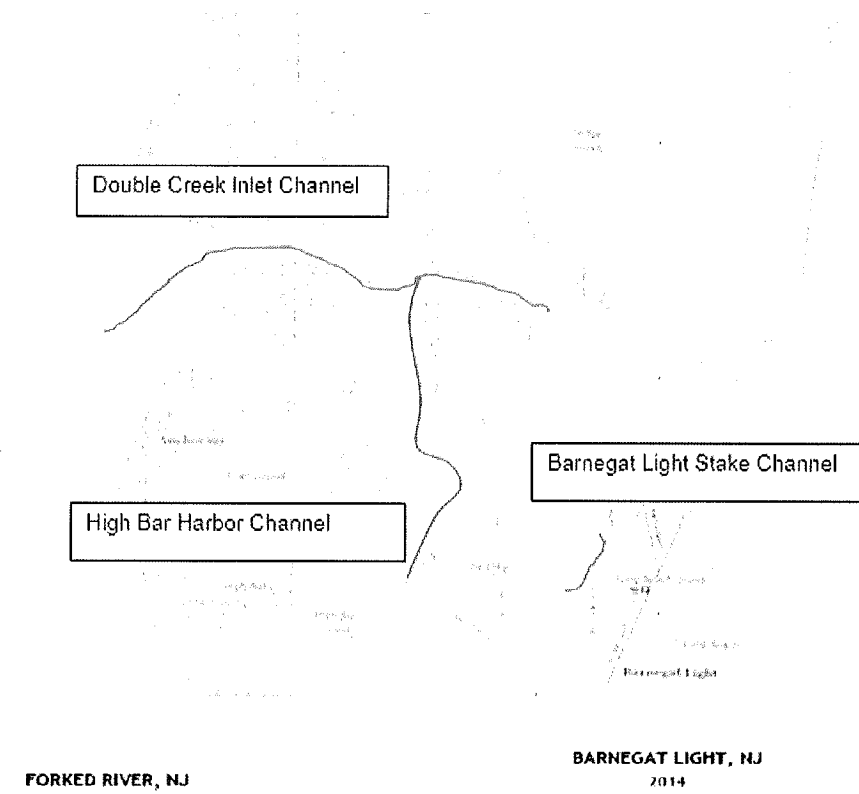
Additional information concerning this permit application may be obtained by calling Mr. Michael H. Hayduk at 215-656-5822, via email at [michael.h.hayduk@usace.army.mil](mailto:michael.h.hayduk@usace.army.mil), or writing this office at the above address.

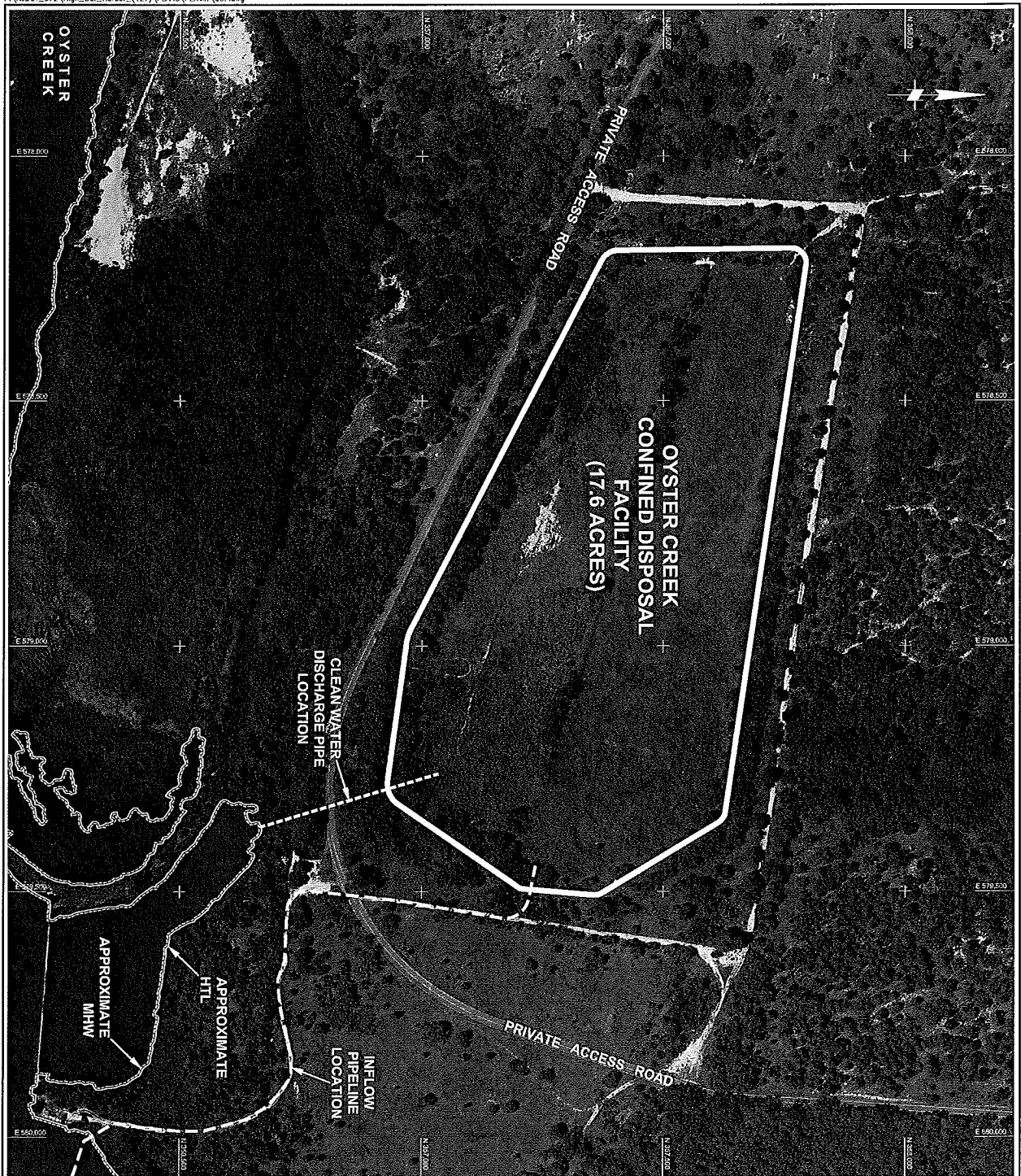


Frank J. Cianfrani  
Chief, Regulatory Branch

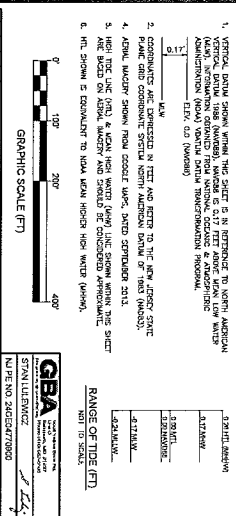
# Project Location Map

## USGS Quad Map

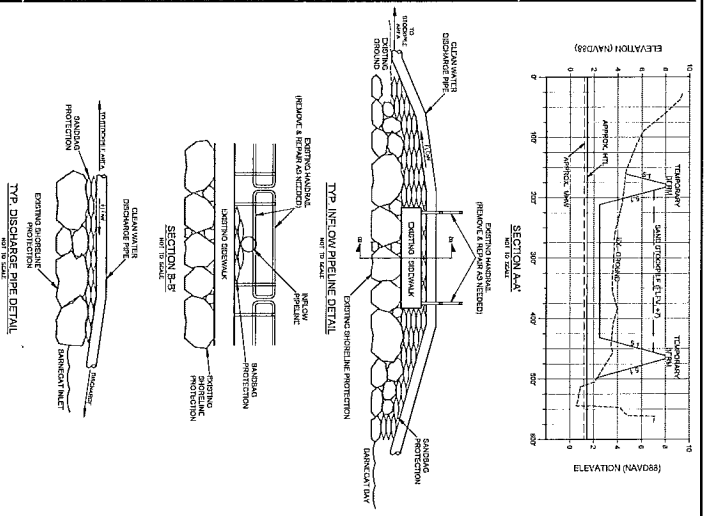




REV.	DATE	DESCRIPTION	BY	APP.
1	7/15/15	AS SHOWN	100	100
STATE OF NEW JERSEY				
NJDOT OFFICE OF MARITIME RESOURCES				
TITLE: MAINTENANCE DREDGING AND CHANNEL IMPROVEMENTS FOR HIGH BAR HARBOR CHANNEL PROPOSED CONFINED DISPOSAL FACILITY				
PROJECT: HIGH BAR HARBOR CHANNEL, TOWNSHIP OF OCEAN, OCEAN COUNTY, NEW JERSEY				
DRAWN BY: SEB				
CHECKED BY: JMS				
SCALE: AS SHOWN				
BOYS				
DESIGNED BY: JMS				
CERTIFICATION OF AUTHORIZATION: <i>John J. Shaw</i>				
NEW JERSEY PROFESSIONAL ENGINEER				
NO AMENDMENTS				
PROJECT NO. 144				
SHEET 6 OF 8				
DATE OF PERMIT: 7/15/15				





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**GBA**  
STATE OF NEW JERSEY  
NJ P.E. NO. 3402477000

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**STATE OF NEW JERSEY**  
**NJDOT OFFICE OF MARITIME RESOURCES**

**TITLE:** MAINTENANCE DREDGING AND CHANNEL IMPROVEMENTS FOR BARNEGAT LIGHT STAGE CHANNEL  
**PROPOSED PIPELINE ROUTE**

**PROJECT:** BARNEGAT LIGHT STAGE CHANNEL  
BARNEGAT LIGHT STAGE CHANNEL, DEAN COUNTY, NEW JERSEY

**DESIGNED BY:** [Signature]  
**CHECKED BY:** [Signature]  
**DATE:** 10/1/2010  
**NO.:** 10/1/2010

**LEGEND**

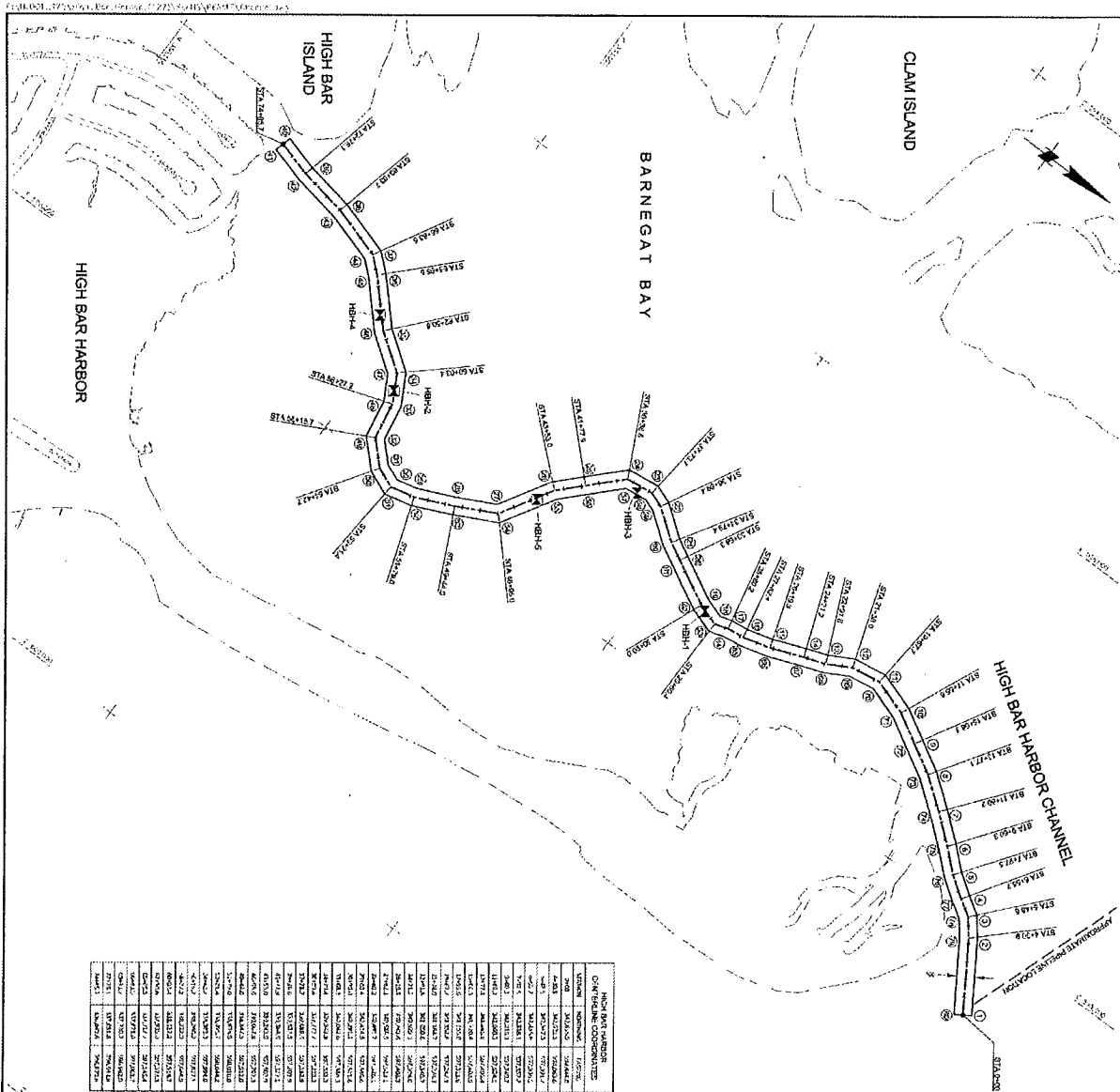
- SAND STOCKPILE PLACEMENT AREA
- PROPOSED PIPELINE ROUTE
- BARNEGAT LIGHT STAGE CHANNEL

**GRAPHIC SCALE (FT)**

0 100 200 300 400 500

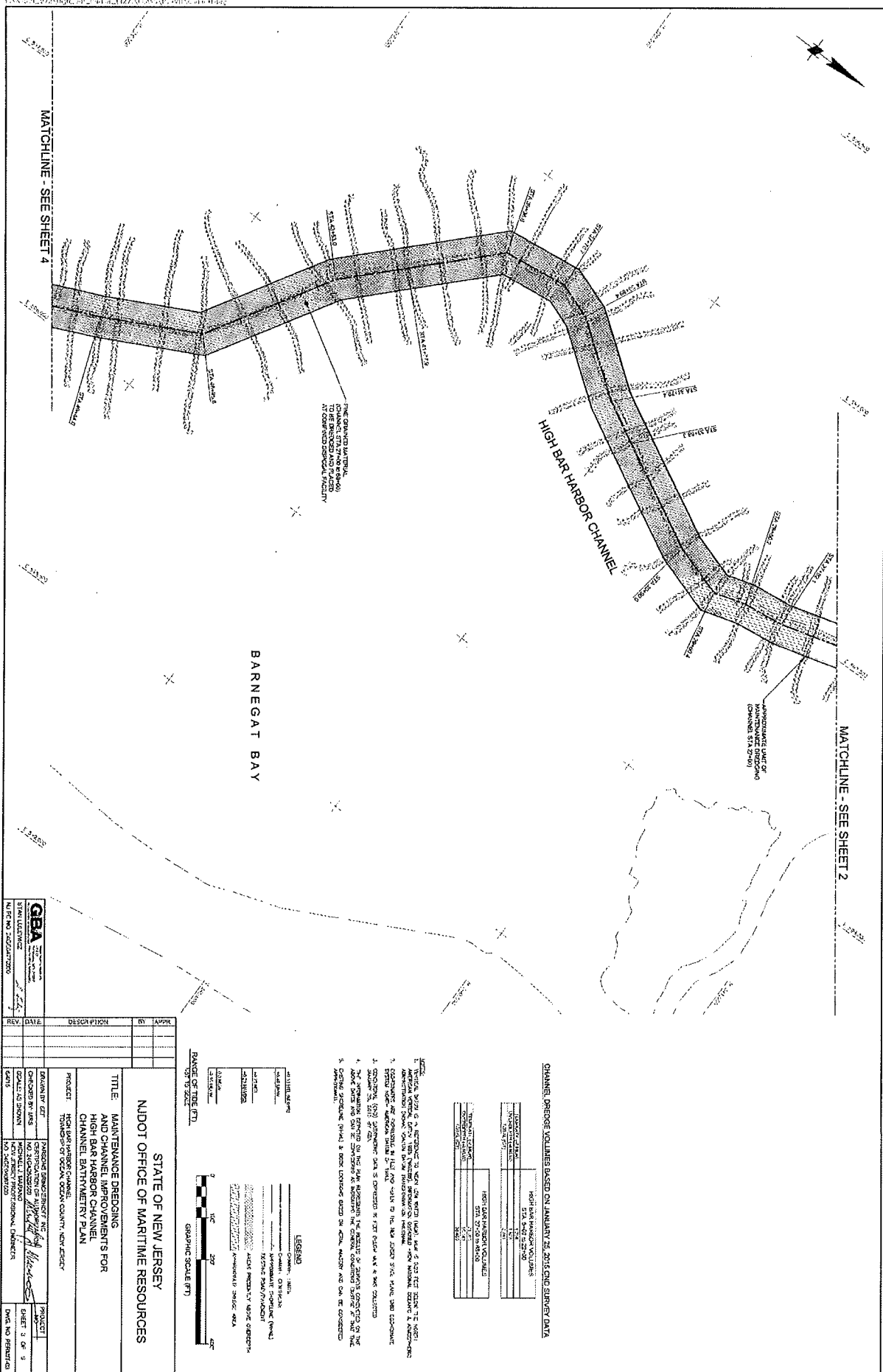
**NOTES**

1. BARNEGAT LIGHT STAGE CHANNEL (L.S.) IMPROVEMENTS, BASED ON EXISTING DATA, SHOWN ON MAPS, ARE SHOWN ON THIS MAP.
2. THE PROPOSED PIPELINE ROUTE IS SHOWN ON THIS MAP.
3. THE PROPOSED PIPELINE ROUTE IS SHOWN ON THIS MAP.
4. THE PROPOSED PIPELINE ROUTE IS SHOWN ON THIS MAP.



STATION	DEPTH	REMARKS
10+00	10.0	10.0
10+10	10.1	10.1
10+20	10.2	10.2
10+30	10.3	10.3
10+40	10.4	10.4
10+50	10.5	10.5
10+60	10.6	10.6
10+70	10.7	10.7
10+80	10.8	10.8
10+90	10.9	10.9
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11+10	11.1	11.1
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11+30	11.3	11.3
11+40	11.4	11.4
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11+70	11.7	11.7
11+80	11.8	11.8
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41+00	41.0	41.0
41+10	41.1	41.1
41+20	41.2	41.2
41+30	41.3	41.3
41+40	41.4	41.4
41+50	41.5	41.5
41+60	41.6	41.6
41+70	41.7	41.7
41+80	41.8	41.8
41+90	41.9	41.9
42+00	42.0	42.0
42+10	42.1	42.1
42+20	42.2	42.2
42+30	42.3	42.3
42+40	42.4	42.4
42+50	42.5	42.5
42+60	42.6	42.6
42+70	42.7	42.7
42+80	42.8	42.8
42+90	42.9	42.9
43+00	43.0	43.0
43+10	43.1	43.1
43+20	43.2	43.2
43+30	43.3	43.3
43+40	43.4	43.4
43+50	43.5	43.5
43+60	43.6	43.6
43+70	43.7	43.7
43+80	43.8	43.8
43+90	43.9	43.9
44+00	44.0	44.0
44+10	44.1	44.1
44+20	44.2	44.2
44+30	44.3	44.3
44+40	44.4	44.4
44+50	44.5	44.5
44+60	44.6	44.6
44+70	44.7	44.7
44+80	44.8	44.8
44+90	44.9	44.9
45+00	45.0	45.0
45+10	45.1	45.1
45+20	45.2	45.2
45+30	45.3	45.3
45+40	45.4	45.4
45+50	45.5	45.5
45+60	45.6	45.6
45+70	45.7	45.7
45+80		



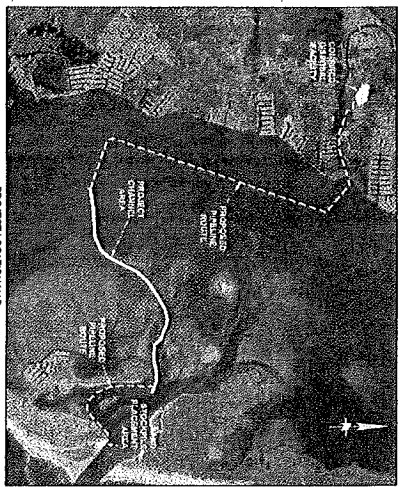
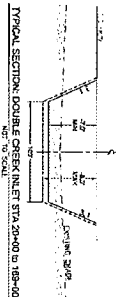
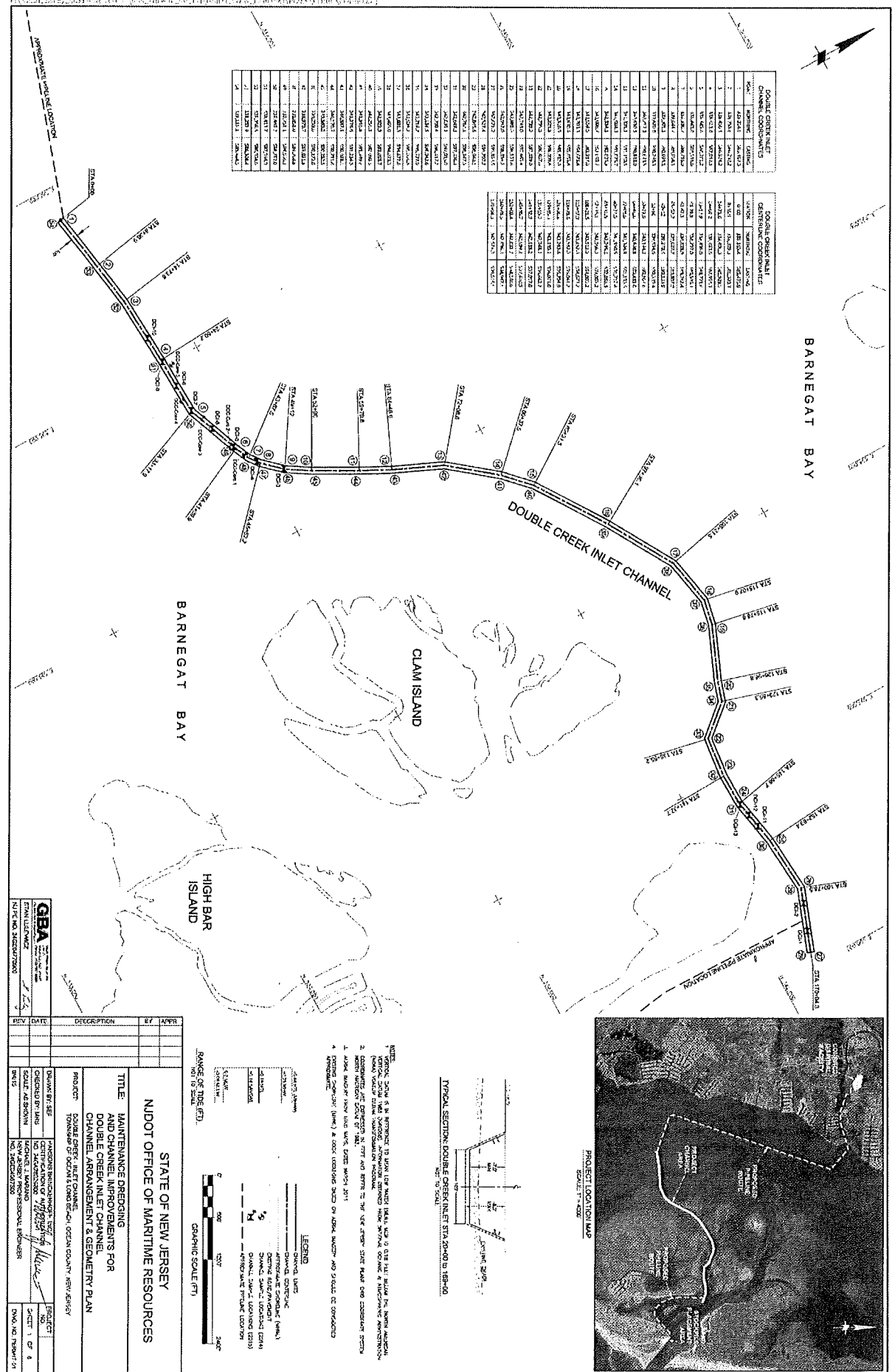










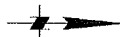




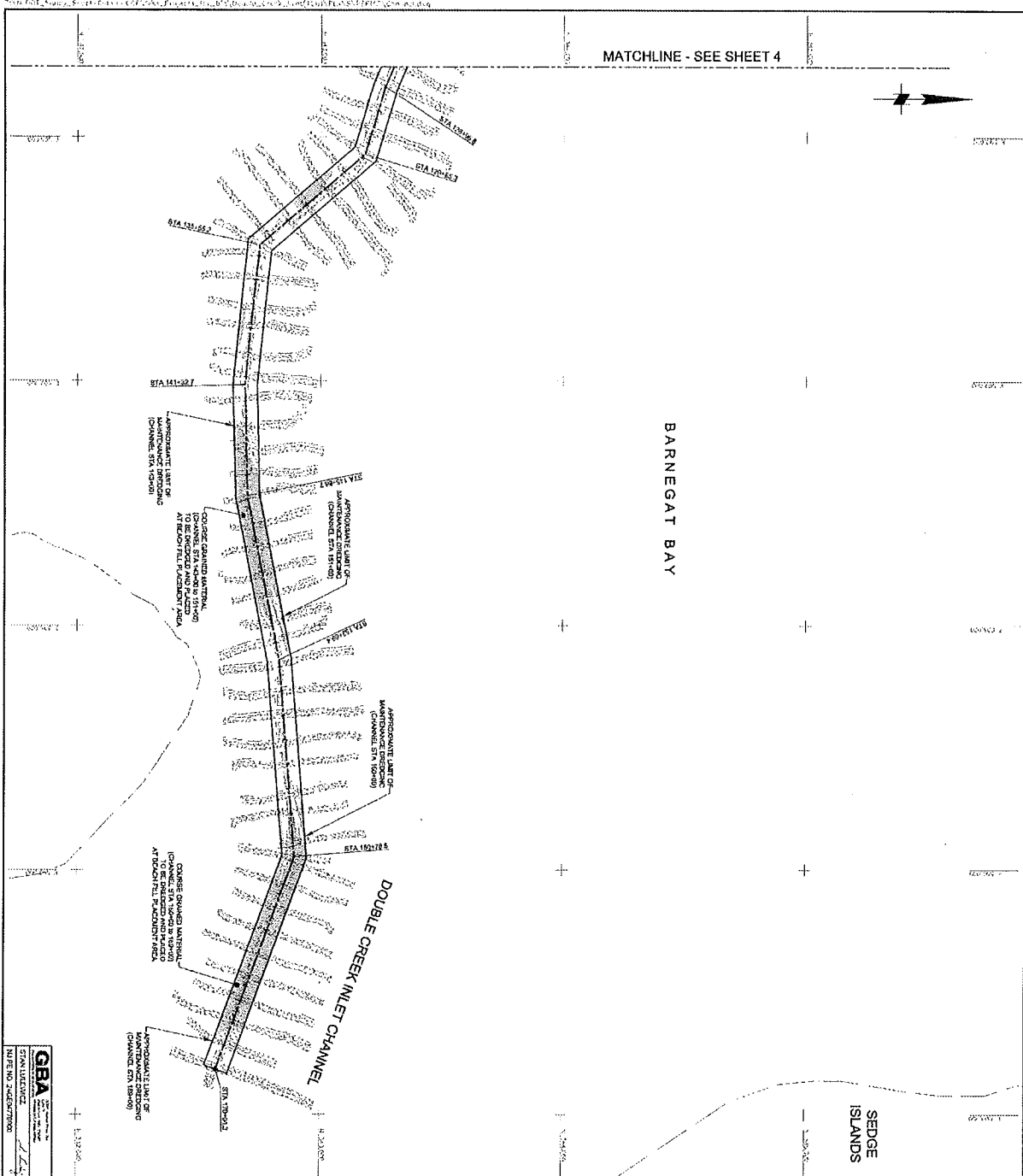




MATCHLINE - SEE SHEET 4



# BARNEGAT BAY



SEDGE ISLANDS

CHANNEL DREDGE VOLUMES BASED ON JANUARY 23, 2015 DSD SURVEY DATA

DOUBLE CREEK INLET CHANNEL	
STATION	STA 100+00 TO STA 140+00
DREDGE VOLUME	1,100,000 CY
STATION	STA 100+00 TO STA 140+00
DREDGE VOLUME	1,100,000 CY
STATION	STA 100+00 TO STA 140+00
DREDGE VOLUME	1,100,000 CY
STATION	STA 100+00 TO STA 140+00
DREDGE VOLUME	1,100,000 CY

1. THE DREDGE VOLUME IS BASED ON THE DSD SURVEY DATA.
2. THE DREDGE VOLUME IS BASED ON THE DSD SURVEY DATA.
3. THE DREDGE VOLUME IS BASED ON THE DSD SURVEY DATA.
4. THE DREDGE VOLUME IS BASED ON THE DSD SURVEY DATA.
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9. THE DREDGE VOLUME IS BASED ON THE DSD SURVEY DATA.
10. THE DREDGE VOLUME IS BASED ON THE DSD SURVEY DATA.

RANGE OF TIDE (FT)



GRAPHIC SCALE (FT)

## LEGEND

Channel, Dredge	Channel, Dredge
Channel, Dredge	Channel, Dredge
Channel, Dredge	Channel, Dredge
Channel, Dredge	Channel, Dredge
Channel, Dredge	Channel, Dredge
Channel, Dredge	Channel, Dredge
Channel, Dredge	Channel, Dredge
Channel, Dredge	Channel, Dredge
Channel, Dredge	Channel, Dredge
Channel, Dredge	Channel, Dredge

REV	DATE	DESCRIPTION	BY	APP'D
1	01/23/15	Channel Dredge Volumes	J. J. J.	J. J. J.
2	01/23/15	Channel Dredge Volumes	J. J. J.	J. J. J.
3	01/23/15	Channel Dredge Volumes	J. J. J.	J. J. J.
4	01/23/15	Channel Dredge Volumes	J. J. J.	J. J. J.
5	01/23/15	Channel Dredge Volumes	J. J. J.	J. J. J.
6	01/23/15	Channel Dredge Volumes	J. J. J.	J. J. J.
7	01/23/15	Channel Dredge Volumes	J. J. J.	J. J. J.
8	01/23/15	Channel Dredge Volumes	J. J. J.	J. J. J.
9	01/23/15	Channel Dredge Volumes	J. J. J.	J. J. J.
10	01/23/15	Channel Dredge Volumes	J. J. J.	J. J. J.

GBA  
STATE OF NEW JERSEY  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
OFFICE OF MARITIME RESOURCES

STATE OF NEW JERSEY  
OFFICE OF MARITIME RESOURCES  
TITLE: MAINTENANCE DREDGING  
AND CHANNEL IMPROVEMENTS FOR  
DOUBLE CREEK INLET CHANNEL  
CHANNEL BATHYMETRY PLAN  
PROJECT: DOUBLE CREEK INLET CHANNEL  
DESIGNED BY: J. J. J.  
CHECKED BY: J. J. J.  
SCALE: AS SHOWN  
DATE: 01/23/15  
DRAWN BY: J. J. J.  
PROJECT: DOUBLE CREEK INLET CHANNEL  
DESIGNED BY: J. J. J.  
CHECKED BY: J. J. J.  
SCALE: AS SHOWN  
DATE: 01/23/15  
DRAWN BY: J. J. J.



<b>GBA</b>	Geographic Boundary Analysis
STUDY AREA	1.1.1
DATE	1/15/11
BY	J. J. J.
FOR	NO PRESENTATION

DATE	1/15/11	BY	J. J. J.	APPROVED	
<p align="center"><b>STATE OF NEW JERSEY</b>  <b>NJDOT OFFICE OF MARITIME RESOURCES</b></p>					
<p><b>TITLE: MAINTENANCE IMPROVING AND CHANNEL IMPROVEMENTS FOR DOUBLE CREEK INLET CHANNEL</b></p>					
<p><b>PROJECT: DOUBLE CREEK INLET CHANNEL IMPROVEMENTS AND CHANNEL IMPROVEMENTS FOR DOUBLE CREEK INLET CHANNEL</b></p>					
<p><b>DESIGNED BY: J. J. J.</b></p>					
<p><b>CHECKED BY: J. J. J.</b></p>					
<p><b>DATE: 1/15/11</b></p>					
<p><b>NO PRESENTATION</b></p>					
<p><b>PROJECT: NO</b></p>					
<p><b>SHEET: 6 OF 8</b></p>					
<p><b>DWG. NO. PRESENTATION</b></p>					

**LEGEND**

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- PIPE (12-18" DIA)
- PIPE (18-24" DIA)
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- PIPE (2388-2394" DIA)
- PIPE (2394-2400" DIA)
- PIPE (2400-2406" DIA)
- PIPE (2406-2412" DIA)
- PIPE (2412-2418" DIA)
- PIPE (2418-2424" DIA)
- PIPE (2424-2430" DIA)
- PIPE (2430-2436" DIA)
- PIPE (2436-2442" DIA)
- PIPE (2442-2448" DIA)
- PIPE (2448-2454" DIA)
- PIPE (2454-2460" DIA)
- PIPE (2460-2466" DIA)
- PIPE (2466-2472" DIA)
- PIPE (2472-2478" DIA)
- PIPE (2478-2484" DIA)
- PIPE (2484-2490" DIA)
- PIPE (2490-2496" DIA)
- PIPE (2496-2502" DIA)
- PIPE (2502-2508" DIA)
- PIPE (2508-2514" DIA)
- PIPE (2514-2520" DIA)
- PIPE (2520-2526" DIA)
- PIPE (2526-2532" DIA)
- PIPE (2532-2538" DIA)
- PIPE (2538-2544" DIA)
- PIPE (2544-2550" DIA)
- PIPE (2550-2556" DIA)
- PIPE (2556-2562" DIA)
- PIPE (2562-2568" DIA)
- PIPE (2568-2574" DIA)
- PIPE (2574-2580" DIA)
- PIPE (2580-2586" DIA)
- PIPE (2586-2592" DIA)
- PIPE (2592-2598" DIA)
- PIPE (2598-2604" DIA)
- PIPE (2604-2610" DIA)
- PIPE (2610-2616" DIA)
- PIPE (2616-2622" DIA)
- PIPE (2622-2628" DIA)
- PIPE (2628-2634" DIA)
- PIPE (2634-2640" DIA)
- PIPE (2640-2646" DIA)
- PIPE (2646-2652" DIA)
- PIPE (2652-2658" DIA)
- PIPE (2658-2664" DIA)
- PIPE (2664-2670" DIA)
- PIPE (2670-2676" DIA)
- PIPE (2676-2682" DIA)
- PIPE (2682-2688" DIA)
- PIPE (2688-2694" DIA)
- PIPE (2694-2700" DIA)
- PIPE (2700-2706" DIA)
- PIPE (2706-2712" DIA)
- PIPE (2712-2718" DIA)
- PIPE (2718-2724" DIA)
- PIPE (2724-2730" DIA)
- PIPE (2730-2736" DIA)
- PIPE (2736-2742" DIA)
- PIPE (2742-2748" DIA)
- PIPE (2748-2754" DIA)
- PIPE (2754-2760" DIA)
- PIPE (2760-2766" DIA)
- PIPE (2766-2772" DIA)
- PIPE (2772-2778" DIA)
- PIPE (2778-2784" DIA)
- PIPE (2784-2790" DIA)
- PIPE (2790-2796" DIA)
- PIPE (2796-2802" DIA)
- PIPE (2802-2808" DIA)
- PIPE (2808-2814" DIA)
- PIPE (2814-2820" DIA)
- PIPE (2820-2826" DIA)
- PIPE (2826-2832" DIA)
- PIPE (2832-2838" DIA)
- PIPE (2838-2844" DIA)
- PIPE (2844-2850" DIA)
- PIPE (2850-2856" DIA)
- PIPE (2856-2862" DIA)
- PIPE (2862-2868" DIA)
- PIPE (2868-2874" DIA)
- PIPE (2874-2880" DIA)
- PIPE (2880-2886" DIA)
- PIPE (2886-2892" DIA)
- PIPE (2892-2898" DIA)
- PIPE (2898-2904" DIA)
- PIPE (2904-2910" DIA)
- PIPE (2910-2916" DIA)
- PIPE (2916-2922" DIA)
- PIPE (2922-2928" DIA)
- PIPE (2928-2934" DIA)
- PIPE (2934-2940" DIA)
- PIPE (2940-2946" DIA)
- PIPE (2946-2952" DIA)
- PIPE (2952-2958" DIA)
- PIPE (2958-2964" DIA)
- PIPE (2964-2970" DIA)
- PIPE (2970-2976" DIA)
- PIPE (2976-2982" DIA)
- PIPE (2982-2988" DIA)
- PIPE (2988-2994" DIA)
- PIPE (2994-3000" DIA)

**RANGE OF TIDE (FT.)**

**GRAPHIC SCALE (FT.)**

**1" = 100'**

**2" = 200'**

**3" = 300'**

**4" = 400'**

**5" = 500'**

**6" = 600'**

**7" = 700'**

**8" = 800'**

**9" = 900'**

**10" = 1000'**

**11" = 1100'**

**12" = 1200'**

**13" = 1300'**

**14" = 1400'**

**15" = 1500'**

**16" = 1600'**

**17" = 1700'**

**18" = 1800'**

**19" = 1900'**

**20" = 2000'**

**21" = 2100'**

**22" = 2200'**

**23" = 2300'**

**24" = 2400'**

**25" = 2500'**

**26" = 2600'**

**27" = 2700'**

**28" = 2800'**

**29" = 2900'**

**30" = 3000'**

**31" = 3100'**

**32" = 3200'**

**33" = 3300'**

**34" = 3400'**

**35" = 3500'**

**36" = 3600'**

**37" = 3700'**

**38" = 3800'**

**39" = 3900'**

**40" = 4000'**

**41" = 4100'**

**42" = 4200'**

**43" = 4300'**

**44" = 4400'**

**45" = 4500'**

**46" = 4600'**

**47" = 4700'**

**48" = 4800'**

**49" = 4900'**

**50" = 5000'**

**51" = 5100'**

**52" = 5200'**

**53" = 5300'**

**54" = 5400'**

**55" = 5500'**

**56" = 5600'**

**57" = 5700'**

**58" = 5800'**

**59" = 5900'**

**60" = 6000'**

**61" = 6100'**

**62" = 6200'**

**63" = 6300'**

**64" = 6400'**

**65" = 6500'**

**66" = 6600'**

**67" = 6700'**

**68" = 6800'**

**69" = 6900'**

**70" = 7000'**

**71" = 7100'**

**72" = 7200'**

**73" = 7300'**

**74" = 7400'**

**75" = 7500'**

**76" = 7600'**

**77" = 7700'**

**78" = 7800'**

**79" = 7900'**

**80" = 8000'**

**81" = 8100'**

**82" = 8200'**

**83" = 8300'**

**84" = 8400'**

**85" = 8500'**

**86" = 8600'**

**87" = 8700'**

**88" = 8800'**

**89" = 8900'**

**90" = 9000'**

**91" = 9100'**

**92" = 9200'**

**93" = 9300'**

**94" = 9400'**

**95" = 9500'**

**96" = 9600'**

**97" = 9700'**

**98" = 9800'**

**99" = 9900'**

**100" = 10000'**