DUFFIELD
ASSOCIATES
Consultants in the Geosciences

Duffield Associates, Inc.
5400 Limestone Road
Wilmington, DE 19808-1232
Phone: 302.239.6634
Fax: 302.239.8485
duffnet.com

December 23, 2010

Via Overnight Mail and
Via Electronic Mail

Ms. Nicole Minnichbach
U.S. Army Corps of Engineers
Philadelphia District
Wanamaker Building
100 Penn Square East
Philadelphia, PA 19107

RE: Project No. 7441.LB (Duffield Associates)
Yank Marine Services, LLC
Application for an Individual Permit for
CENAP-OP-R-2008-01007-75 (IP)

Dear Ms. Minnichbach:

On behalf of our client, Yank Marine Services, LLC (Yank Marine Services), Duffield Associates, Inc. (Duffield Associates), has prepared this response to the request for a marine archaeological survey for the above-referenced project area. We are submitting this information to demonstrate that the proposed project area has been historically disturbed through utilization of the site and near shore area as a boat service, docking, and repair facility since at least the 1940s. Evidence of historic disturbance in the area is included for your review and further discussion.

Attachment 1 is a copy of the Delaware Bay Shipbuilding Company's permit applications from 1946 and 1953. It is our opinion that the structures depicted in the permit applications were constructed and are visible on the aerial photographs depicted on Historic Site Plan (included as Attachment 2 to this correspondence). The Historic Site Plan includes five (5) historic aerial photographs (1963, 1972, 1995, 2002, and 2007), which indicate the general configuration of what was proposed in the 1946 and 1953 permit applications, as well as more recent disturbance including fixed and floating docks and associated pilings.

As part of the New Jersey Department of Environmental Protection (NJDEP) Waterfront Development Permit application process (approved permit, dated May 21, 2010, included as Attachment 3), three (3) vibracore borings were conducted in 2009 to characterize the sediment proposed for removal. The logs are included as Attachment 4 and locations of the borings are shown on the 2007 aerial. The vibracore borings were located within the proposed dredge area and were advanced from 6 to 8 feet below the "mudline," which corresponded to elevations ranging between -8 feet and -15 feet (MLW). The logs indicate sandy soils and no refusal. Refusal would have been expected, if solid objects within the dredge area were encountered during the sampling process.

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DUFFIELD ASSOCIATES

It is our opinion, the attached information provides sufficient evidence that the area has been highly disturbed over at least the past 50 years, and the likelihood that a shipwreck is present in the proposed area is extremely low. Therefore, we respectfully request that the U. S. Army Corps of Engineers reconsider the previous request for a marine archeological survey, which would represent an undue financial burden on our client, Yank Marine Services.

Should you have any questions regarding this submittal, please do not hesitate to contact me at 302-239-6634.

Very truly yours,

DUFFIELD ASSOCIATES, INC.

PETER G. KEARNEY/for

Jennifer M. Egan, P.G.
Project Scientist

JE\PGK:bac
WORD\7441LB.1210-HistoricUSACE.COR

Enclosures:
- Attachment 1 Permit Applications from 1946 and 1953
- Attachment 2 Historic Site Plan (includes aerial images from 1963, 1972, 1995, 2002, and 2007)
- Attachment 3 NJDEP Waterfront Development Permit
- Attachment 4 Vibracore Logs (C-1, C-2, C-3)

cc: Bill Jenkins – USACE
Todd Schiable – USACE
Vincent Maresca – NJHPO
David Risilia – NJDEP
Yank Marine Services, LLC

ATTACHMENT 1

PERMIT APPLICATIONS FROM 1946 AND 1953

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C-6810

(Form of Permit)

FORM "C"

STATE OF NEW JERSEY
DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT
DIVISION OF PLANNING AND DEVELOPMENT
BUREAU OF NAVIGATION
1060 Broad Street
Newark 2, N. J.

DELAWARE BAY SHIPBUILDING COMPANY
P. O. Box 68
River Road
Leesburg, New Jersey

May 13, 1953

SIR--The Department of Conservation and Economic Development, Division of Planning and Development, Bureau of Navigation acting under Title 12, Chapter 3, Section 12:3-3 of the Revised Statutes of New Jersey hereby grants permit to carry out work in accordance with your application dated [illegible] and in accordance with plans and specifications accompanying same. This permit is subject to the conditions and stipulations hereinafter written which are definitely agreed to by the permittee upon his acceptance of this permit.

The application in general contemplates the following work: Construction of two (2) wharves and a marine railway in Maurice River about 1/2 mile downstream from Dorchester, Maurice River Township, Cumberland County, New Jersey.

The plan provides for constructing two (2) parallel timber wharves each 16 feet wide and extending 70 feet channelward from the southeasterly high water line of the river. A marine railway extending approximately the same distance channelward is to be constructed between the wharves. Said work to be located within the lines of the permittee's grant. As shown on two (2) plans marked 1-2-421 and 1-2-421-A, filed with the former Department of Conservation, Division of Navigation February 14, 1946.

This permit is issued subject to the approval of the Department of the Army.

This is a renewal of the permit issued by the former Department of Conservation, Division of Navigation on April 11, 1946.

(over)

Stock No. 134
T 3

Form "A"

APPLICATION FOR PERMIT

Date 14 March 1953

6810A

DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT.
DIVISION OF PLANNING AND DEVELOPMENT.
BUREAU OF NAVIGATION.
1060 Broad Street.
Newark 2, N. J.

MAKE CHECKS FOR $10.00 PERMIT FEE
PAYABLE TO STATE OF N. J. - NAVIGATION BUREAU

Gentlemen:-Application is hereby made for a permit to carry out the following work:

Applicant: (Name) Delaware Bay Shipbuilding Co.

(Address) P.O. Box #88 (River Road), Leesburg, New Jersey

(Business) Shipbuilding and repair

Location of Work: (Municipality) Dorchester, N.J. (County) Cumberland

(Name of Waterway) Maurice River (Location)

What the structures are to be used for mooring and drydocking small boats

General description of work contemplated plans same as submitted and approved 11 April 1946

How work is to be done, contract, etc. time and material

Estimated cost

Date when work is contemplated to be started or contract advertised

Length of time to complete work

Name of owners of adjoining property on each side. South - Paul Barnes

North - John Price

General remarks.

There are submitted herewith, in addition to the above information, specifications and detailed plans in triplicate, showing construction and location with reference to property lines of the work for which permit is herewith requested.

37-53 F.M.

Respectfully yours,

William J. Eisele

William J. Eisele, Treas.

January 22, 1953

SUBJECT: DELAWARE BAY SHIPBUILDING COMPANY, INC., permit to construct two wharves and marine railway in Maurice River about 1/2 mile downstream from Dorchester, Maurice River Township, Cumberland County, New Jersey - File: 6810

Delaware Bay Shipbuilding Co., Inc.
Leesburg
New Jersey

Dear Sirs:

This is to advise that the Bureau is in receipt of Public Notice dated January 19, 1953, advising that your company has applied for an extension of time to complete the above work.

The former Department of Conservation, Division of Navigation issued a permit for said work to your company on April 11, 1946. Said permit expired on April 11, 1947. In accordance therewith, it will be necessary for your company to make application for renewal of same. Permit application forms are enclosed herewith.

Unless there is a change in the plan submitted by your company in 1946, it will not be necessary to file new plans.

Very truly yours,

Joseph P. Chapman
Principal Engineer
Bureau of Navigation

JPC:if

1810.
FORM C

(Form of Permit)

STATE OF NEW JERSEY

DEPARTMENT OF CONSERVATION, DIVISION OF NAVIGATION

1060 BROAD STREET
NEWARK 2, N. J.

April 11, 1946.

DELAWARE BAY SHIPBUILDING COMPANY, INC.,
Leesburg, New Jersey.
P. O. Box 68 (River Road)

SIR—The Department of Conservation, Division of Navigation, acting under Title 13, Chapter 1A, Section 13: 1A-29 and Title 12, Chapter 5, Section 12: 5-3 of the Revised Statutes of New Jersey, hereby grants permit to carry out work in accordance with your application dated 2-4-46 and in accordance with plans and specifications accompanying same. This permit is subject to the conditions and stipulations hereinafter written which are definitely agreed to by the permittee upon his acceptance of this permit.

The application in general contemplates the following work: Construction of two (2) wharves and a marine railway in Maurice River about 1/2 mile downstream from Dorchester, Maurice River Township, Cumberland County, New Jersey.

The plan provides for constructing two (2) parallel timber wharves each 16 feet wide and extending 70 feet channelward from the southeasterly high water line of the river. A marine railway extending approximately the same distance channelward is to be constructed between the wharves. Said work to be located within the lines of the permittee's grant. As shown on two (2) plans marked 1-2-421-and 1-2-421-A, filed with the Department of Conservation, Division of Navigation February 14, 1946.

This permit is issued subject to the approval of the War Department.

The granting of this permit shall not be construed to in any way affect the title or ownership of property, and shall not make the Department of Conservation, or the State a party in any suit or question of ownership of property.

The granting of this permit shall not affect any title the State or any municipality has or may have in any lands or property.

The granting of this permit shall not relieve the permittee from the necessity of his observing any and all laws and ordinances.

The granting of this permit shall in no way make the Department of Conservation, or the State responsible for the sufficiency or correctness of the design of any structure or structures. The Department of Conservation, or the State shall in no way be responsible or become a party to any action for loss of life or property, or for damage to persons or property which may occur by the carrying out of the work covered by this permit.

The permittee shall notify the Director of the Division of Navigation three days before the actual work under this permit is contemplated to be begun.

The permittee shall allow the Department of Conservation, or its authorized representatives, free access to all parts of the work at all times and shall provide free of charge all necessary facilities for inspection.

No change in plans or specifications shall be made except with the written permission of the Division of Navigation.

A copy of this permit shall be kept at the work and shall be exhibited upon request.

The permittee shall sign and return to the Director of the Division of Navigation, upon receipt of this permit the form of acceptance of permit herewith enclosed.

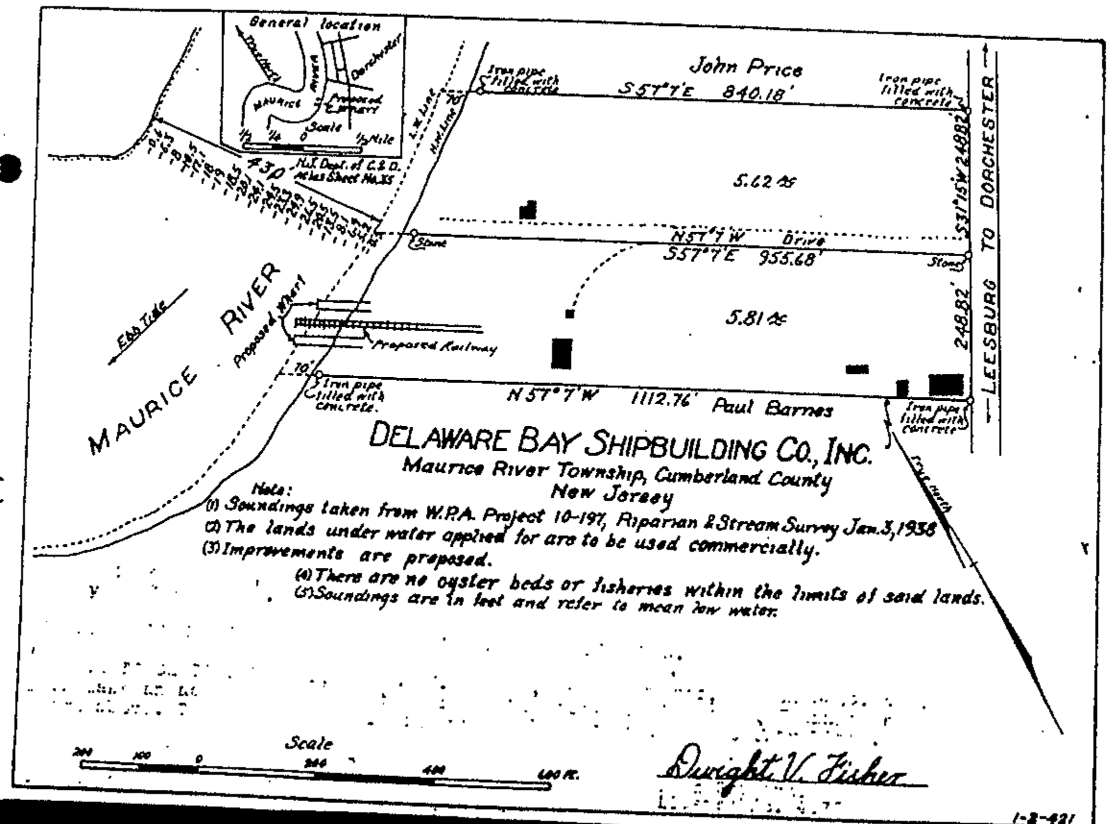
This permit shall be in force for one year from its date, unless revoked, and no longer.

Application for renewal shall be made on form of application for permit.

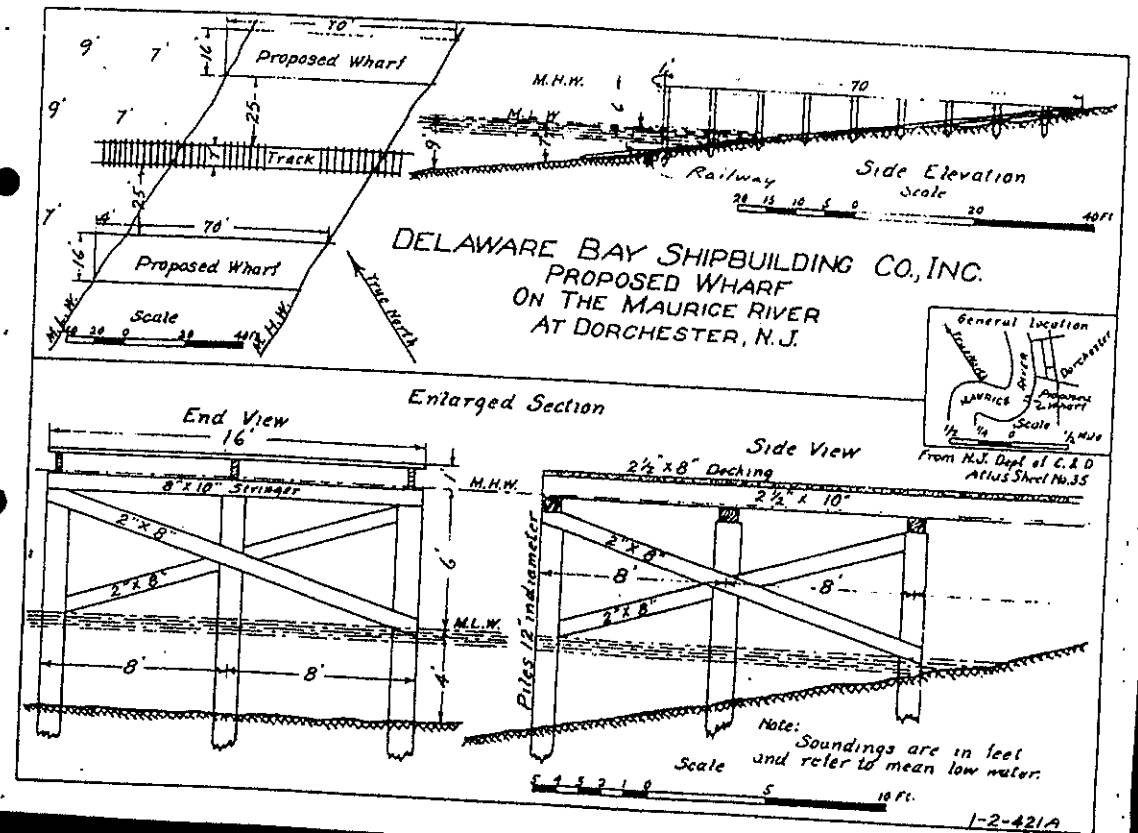
J. SPENCER SMITH
Chairman.

PETER J. GANNON
Assistant Director.

(SEAL)



General location
Proposed Wharf
Scale
1/2 Mile
N.J. Dept. of C.& D. Atlas Sheet No. 35
430
John Price
S 57°7'E 840.18'
Iron pipe filled with concrete
5.62 Ac
N 57°7'W Drive
S 57°7'E 955.68'
Stone
5.81 Ac
S 31°15'W 248.82'
248.82'
LEESBURG TO DORCHESTER
MAURICE RIVER
Ebb Tide
Proposed Wharf
Proposed Railway
N 57°7'W 1112.76' Paul Barnes
True North
DELAWARE BAY SHIPBUILDING CO., INC.
Maurice River Township, Cumberland County
New Jersey
Note:
(1) Soundings taken from W.P.A. Project 10-197, Riparian & Stream Survey Jan. 3, 1938
(2) The lands under water applied for are to be used commercially.
(3) Improvements are proposed.
(4) There are no oyster beds or fisheries within the limits of said lands.
(5) Soundings are in feet and refer to mean low water.
Scale
200 100 0 200 400 600 Ft.
Dwight V. Fisher
1-2-421


DELAWARE BAY SHIPBUILDING CO., INC.
PROPOSED WHARF
ON THE MAURICE RIVER
AT DORCHESTER, N.J.
Proposed Wharf
Track
Proposed Wharf
Scale
True North
M.H.W.
M.L.W.
Railway
Side Elevation
Scale
General location
Dorchester
Proposed Wharf
Scale
From N.J. Dept of C.&D. Atlas Sheet No.35
Enlarged Section
End View
16'
8"x10" Stringer
2"x8"
2"x8"
M.H.W.
M.L.W.
8'
8'
Side View
2½"x8" Decking
2½"x10"
2"x8"
2"x8"
8'
8'
Piles 12" in diameter
Note: Soundings are in feet and refer to mean low water.
Scale
10 Ft.
1-2-421A

Stock No. 184
T 8

Form "A"

APPLICATION FOR PERMIT

DEPARTMENT OF CONSERVATION, DIVISION OF NAVIGATION,
1060 Broad Street
Newark 2, N. J.

Date February 4, 1946

Gentlemen:—Application is hereby made in accordance with Title 18, Chapter 1A, Section 13: 1A-29 and Title 12, Chapter 5, Section 12: 5-3 of the Revised Statutes of New Jersey, for a permit to carry out the following work:

Applicant.

(Name) Delaware Bay Shipbuilding Co. Inc.
(Address) Leesburg, New Jersey
(Business) Shipbuilding, etc.

Where work is contemplated.

(City or Municipality) Township of Maurice River
(County) Cumberland County
(Name of Waterway) Maurice River
(Location) East bank of Maurice River downstream from Dorchester

What the structures are to be used for.

Marine railway and wharves

General description of work contemplated.

Marine railway and wharves as shown on attached sketch

How work is to be done, contract, etc.

Work will be done by applicant

Estimated cost.

$4,000.00

Date when work is contemplated to be started or contract advertised.
Length of time to complete work.

March 10, 1946 if approved, six weeks.

Name of owners of adjoining property on each side.

North side John Price
South side Paul Barnes

General remarks.

Riparian grant was recently made to permit this work and application has been made to United States District Engineer Office for permit.

There are submitted herewith, in addition to the above information, specifications and drawings, plans in triplicate, showing construction and location with reference to property lines of the work for which permit is herewith requested; together with copy of any special permits or licenses from the United States Government which are necessary to the carrying out of this work.

Respectfully yours,
DELAWARE BAY SHIPBUILDING CO. INC.
BY
KARL D. CHURCH, Attorney and Agent

ATTACHMENT 2

HISTORIC SITE PLAN

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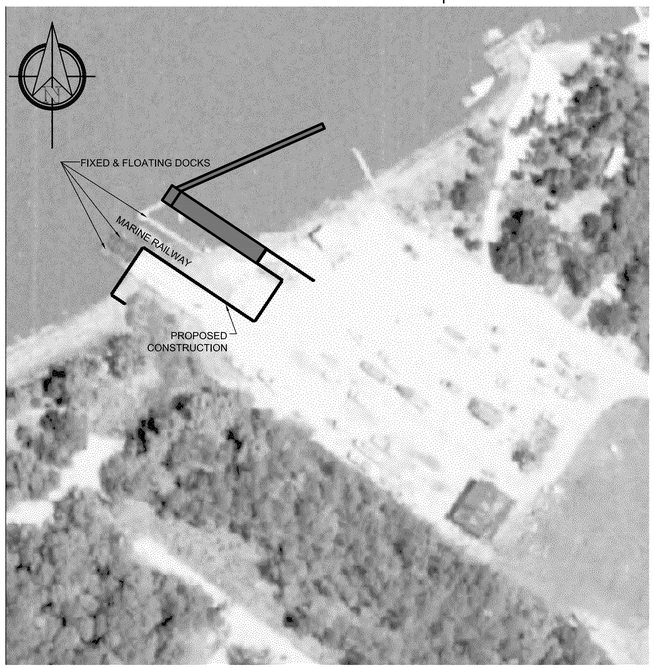
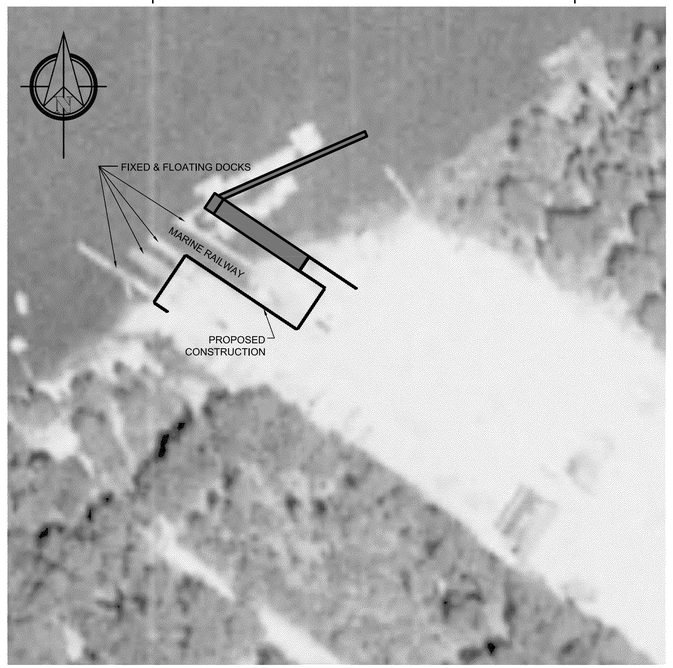
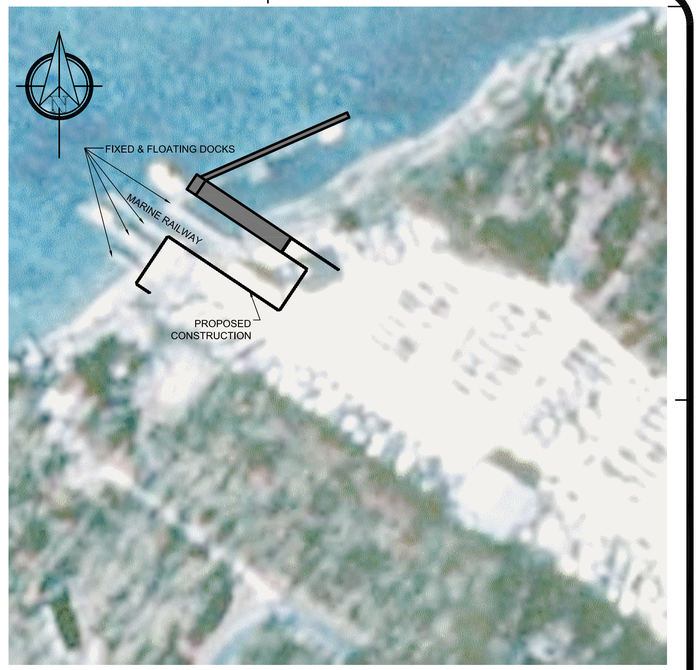


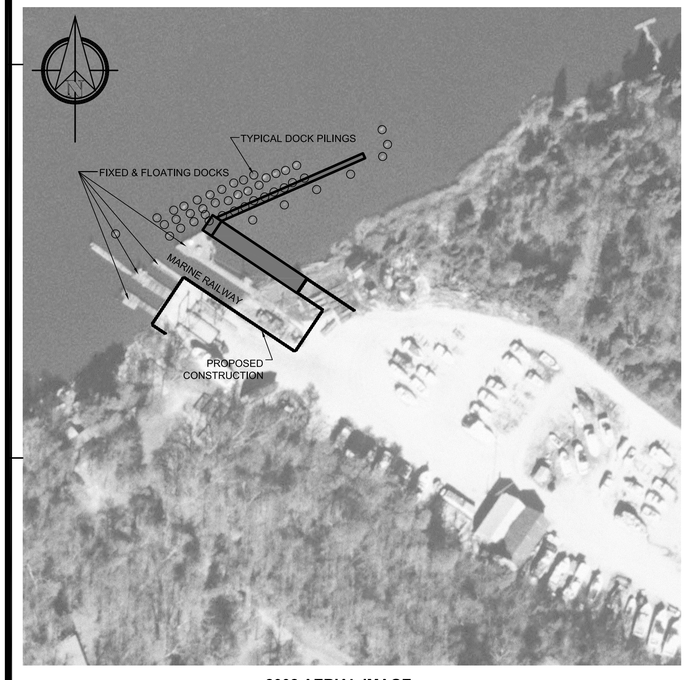
1963 AERIAL IMAGE



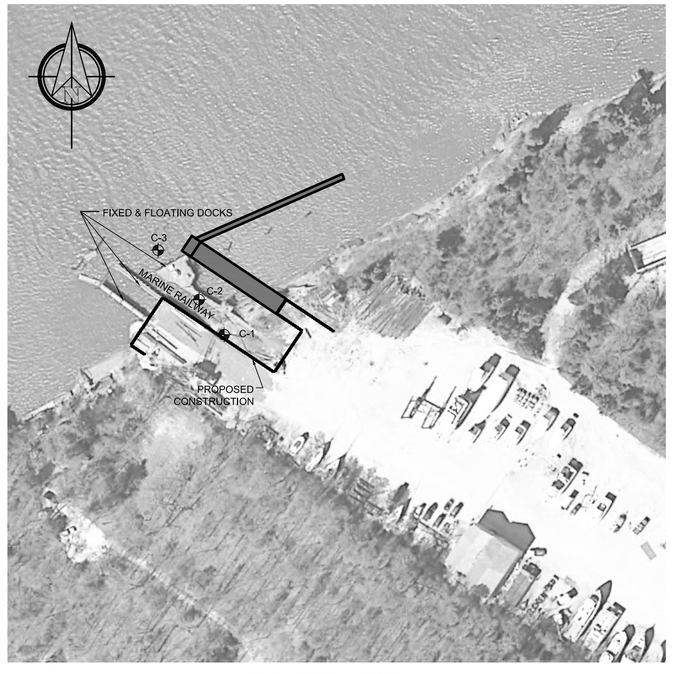
1972 AERIAL IMAGE



1995 AERIAL IMAGE



2002 AERIAL IMAGE



2007 AERIAL IMAGE

NOTES:

1. 1963 AND 1972 AERIAL IMAGES PURCHASED FROM HISTORICAERIALS.COM. 1995, 2002, AND 2007 AERIAL IMAGES DOWNLOADED FROM NEW JERSEY GIS DATABASE.

DUFFIELD ASSOCIATES
Consultants in the Geosciences
5400 LIMESTONE ROAD
WILMINGTON, DE 19808-1232
TEL. (302)239-6634
FAX (302)239-8485
OFFICES IN DELAWARE, MARYLAND, PENNSYLVANIA AND NEW JERSEY
E-MAIL: DUFFIELD@DUFFNET.COM

No.	REVISION	CHK'D BY DATE
-		

DESIGNED BY: PGK
DRAWN BY: PGK
CHECKED BY: DSS
FILE NAME: D-7441LB

OWNER:

HISTORIC SITE PLAN

YANK MARINE SERVICES, LLC

DORCHESTER~CUMBERLAND COUNTY~NEW JERSEY

DATE: 22 DECEMBER 2010
SCALE: 1" = 80'
PROJECT NO. 7441.LB
SHEET: 1 OF 1

ATTACHMENT 3

NJDEP WATERFRONT DEVELOPMENT PERMIT

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State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Chris Christie
Governor

Bob Martin
Commissioner

Office of Dredging and Sediment Technology
P.O. Box 028
Trenton, NJ 08625
(609) 292-1250
FAX (609) 777-1914

May 21, 2010

Mr. Peter G. Kearney
Duffield Associates
5400 Limestone Rd.
Wilmington, DE 19808

Re: Waterfront Development Permit / Acceptable Use Determination
File No: 0609-09-0009.1 WFD090001 IP
Project: Yank Marine Services, LLC
Maurice River Township, Cumberland County

Dear Mr. Kearney:

Enclosed, please find an approved construction permit. Please read the permit and its terms and Conditions carefully. If you consider yourself aggrieved by our decision regarding your application, you may request a hearing by completing the requirements of the attached *administrative hearing request checklist and tracking form.* Unless you request a hearing to contest this permit or its conditions, you have accepted its terms and conditions.

You are required to keep a copy of your permit and the approved drawings at the construction site for the duration of the project. Failure to do so is a violation of the permit.

If you are required to record a Grant of Conservation Restriction/Easement, you must present the Department with proof that you have recorded it within ninety (90) days of issuance of this permit. You may NOT COMMENCE CONSTRUCTION until you have properly recorded the Division of Land Use Regulation approved Grant of Conservation Restriction/Easement documents and fulfilled the pre-construction conditions of this permit.

If a tidelands grant, lease or license is required as a condition of this permit, you may not begin construction until the Bureau of Tidelands Management has delivered the necessary conveyances. Construction prior to the receipt of the necessary conveyances is in violation of State law and will subject you to fines up to $1,000.00 plus $100.00 per day. Furthermore, the cost for the tidelands instrument may be higher since the property claimed will be appraised as improved property. You may be required to remove any unauthorized structures placed in tidelands claimed areas.

Please do not hesitate to contact the Office's project manager, listed on the first page of the permit, to discuss any concerns or questions you may have. Thank you for working with the staff of the Office to protect our state's natural resources.

Sincerely,

Suzanne U. Dietrick, Chief
Office of Dredging and Sediment Technology
Site Remediation Program

w/attachments

RECEIVED
MAY 28 2010
DUFFIELD ASSOCIATES, INC.

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
SITE REMEDIATION PROGRAM
OFFICE OF DREDGING AND SEDIMENT TECHNOLOGY
401 East State Street, P.O. Box 028
Trenton, NJ 08625

PERMIT

In accordance with the laws and regulations of the State of New Jersey, the Department of Environmental Protection hereby grants this permit to perform the activities described below. This permit is revocable with due cause and is subject to the limitations, terms and conditions listed below and on the attached pages. For the purpose of this document, "permit" means "approval, certification, registration, authorization, waiver, etc." Violation of any term, condition or limitation of this permit is a violation of the implementing rules and may subject the permittee to enforcement action.	Approval Date: May 21, 2010 Expiration Date: May 20, 2015

Permit Number/s	Type of Approval/s	Enabling Statute/s
0609-09-0009.1 WFD090001 IP	Waterfront Development – IP In Water; Quality Certificate; Acceptable Use Determination	NJSA 12:5-3 NJSA 58:10A

Applicant	Project Location
Yank Marine Services, LLC PO Box 271, Tuckahoe NJ 08250	276 Main St. Dorchester, Cumberland County Block 276, Lot 4

Description of Authorized Activities and Limit of Disturbance

Remove existing timber dock, marine railway and vinyl /steel bulkhead; install approximately 322 L.F. of new steel sheet piling encompassing two 20' wide x 180' long pile supported concrete decks to be constructed to serve a new 600-ton boat lift; construct a new 12' wide by 20 long fixed timber dock at the waterward limit of the northern pile deck and construct a 175' long x 6' wide fixed pier for work vessel parking outshore of the extant floating dock to be removed; mechanically dredge approximately 2,000 cu. yd. of sediment to a maximum depth of -12' MLW; dewater on-site within a temporary 100-x-150' containment area and subsequently apply dredged material on-site; install a bench and fenced access way along the northeast portion of the site to serve as public access to the waterfront; create 5,000 sq. ft. of intertidal/subtidal shallows via excavation of areas above the High Tide Line to include approximately 3,100 sq. ft. of tidal wetlands to mitigate for 4,916 sq. ft. of shallows and 3,100 sq. ft. of wetlands lost by dredging activities.

The project is authorized under, and in compliance with the Rules of Coastal Zone Management (N.J.A.C. 7:7E) governing; Navigation Channels (7:7E-3.7); Intertidal and Subtidal Shallows (7:7E-3.15); Wetlands (7:7E-3.37); Wild and Scenic River Corridors (7:7E-3.46); Docks and Piers for Cargo & Commercial Fisheries (7:7E-4.4); New Dredging (7:7E-4.7), Dredged Material Placement on Land (7:7E-7.12) and Public Trust Rights (7:7E-8.11).

Prepared By: _____ May 21, 2010
David Q. Risalia Date

THIS PERMIT IS NOT EFFECTIVE AND NO CONSTRUCTION APPROVED BY THIS PERMIT, OR OTHER REGULATED ACTIVITY, MAY BE UNDERTAKEN UNTIL THE APPLICANT HAS SATISFIED ALL PRE-CONSTRUCTION CONDITIONS AS SET FORTH IN THIS PERMIT PURSUANT TO N.J.A.C. 7:7E-1.5(b)4.

Received or Recorded by County Clerk

This permit is not valid unless authorizing signature appears on the last page.

STANDARD CONDITIONS:

1. **Extent of approval:**

   a. This document grants permission to perform certain activities that are regulated by the State of New Jersey. The approved work is described by the text of this permit and is further detailed by the approved drawings listed herein. All work must conform to the requirements, conditions and limitations of this permit and all approved drawings.

   b. If you alter the project without prior approval, or expand work beyond the description of this permit, you may be in violation of State law and may be subject to fines and penalties. Approved work may be altered only with the prior written approval of the Department.

   c. You must keep a copy of this permit and all approved drawings readily available for inspection at the work site.

2. **Acceptance of permit:** If you begin any activity approved by this permit, you thereby accept this document in its entirety, and the responsibility to comply with the terms and conditions. If you do not accept or agree with this document in its entirety, **do not begin** construction. You are entitled to request an appeal within a limited time as detailed on the attached *Administrative Hearing Request Checklist and Tracking Form.*

3. **Recording with County Clerk:** You must record this permit in the Office of the County Clerk for each county involved in this project. You must also mail or fax a copy of the front page of this permit to the Department showing the received stamp from each County Clerk within 30 days of the issuance date

4. **Notice of Construction:** You must notify the Department in writing at least 7 days before you begin any work approved by this permit by submitting the attached construction report. The Construction Reports are also available at www.nj.gov/dep/landuse.

5. **Expiration date:** All activities authorized by this permit must be completed by the expiration date shown on the first page unless otherwise extended by the Division. At that time, this permit will automatically become invalid and none of the approved work may begin or continue until a replacement permit is granted. (Some permits may qualify for an extension of the expiration date. Please contact the Department for further information.)

6. **Rights of the State:**

   a. This permit is revocable and subject to modification by the State with due cause.

   b. Representatives from the State have the statutory authority to enter and inspect this site to confirm compliance with this permit and may suspend construction or initiate enforcement action if work does not comply with this permit.

   c. This permit does not grant property rights. The issuance of this permit shall not affect any action by the State on future applications, nor affect the title or ownership of property, nor make the State a party in any suit or question of ownership.

7. **Other responsibilities:** You must obtain all necessary local, Federal and other State approvals before you begin work. All work must be stabilized in accordance with the *Standards for Soil Erosion and Sediment Control in New Jersey,* and all fill material must be free of toxic pollutants in toxic amounts as defined in section 307 of the Federal Act.

SPECIAL CONDITIONS IN ADDITION TO THE STANDARD CONDITIONS:

8. The permittee shall immediately inform the Department of any unanticipated adverse effects on the environment not described in the application or in the conditions of this permit.

9. Any regulated activities undertaken on the site before a copy of this recorded restriction is submitted to the Department will be considered in violation of the implementing rules and this permit.

10. All necessary local, Federal, and other State approvals must be obtained by the applicant prior to the commencement of the herein-permitted activities. This permit is approved, subject to the permittee obtaining and compliance with, a tidelands dredging license. Issuance of this permit does not in any way relinquish the State's ownership interest in the property, if any exists. The subject site has an existing Tidelands license (# 0609-09-0009.1 TD1090002 Renewal) issued March 2, 2010.

The approved plans consist of four (4) sheets entitled: "PROPOSED 600 TON BOAT LIFT YANK MARINE SERVICESS LLC, Dorchester Cumberland County, New Jersey, specifically: sheet P4 – "Site Plan PROPOSED RECONFIGURATION SITE MODIFICATIONS"; sheet P5 - "DREDGING AND TEMPORARY DEWATERING AREA"; sheet P6 – "PROPOSED WETLANDS RESTORATION"; sheet P7 - "TYPICAL CROSS SECTIONS"; each prepared by Duffield Associates, Inc. dated 17, December 2009, last revised 4/16/10.

OTHER CONDITIONS RELATED TO ACTIVITY

A. Prior to any access, staging or work proposed on privately held lands or tidelands, the permittee must obtain written access agreements.

B. The permittee is responsible for the dredging operations including dewatering, transfer/truck loading and transport of the dredged materials to the disposal site.

C. All efforts shall be taken to minimize sedimentation or turbidity from entering surrounding waters, wetlands and buffers. This shall include, but is not limited to, reducing the rates of production, berming and other types of stabilization as necessary.

D. To minimize impacts to anadramous fish runs, dredging, including any sediment or hydro acoustic generating activity, is prohibited from March 1, and June 30 of any given year.

E. All dredged sediment shall be deliberately placed within the on-site dewatering feature. All free water associated with dewatering shall be managed on-site and discharged back to the river only within the ship basin.

F. All material used for backfilling intertidal and subtidal shallows areas shall clean fill and shall be have physical properties combatable with that of adjacent shallows areas.

G. Restoration at a ratio of 1:1 (loss of intertidal subtidal shallows to restoration) is required. Therefore, the permittee shall restore all of the 4,916 sq. ft. of intertidal and subtidal shallows areas impacted by work actions occurring from the spring high water line to a depth of -4' below the mean low water line. Said intertidal and subtidal shallows areas shall be restored via excavation of upland areas above the high tide line within one week of completion of dredging; in addition 3,100 sq. ft. of tidal wetlands shall be created to mitigate for 2,499 sq. ft. of wetlands destroyed by dredging activities.

H. The Permittee shall perform a post-restoration bathymetric survey prepared by a certified hydrographer or licensed surveyor documenting successful restoration of shallows areas and additional documentation of wetlands plantings with color photographs. This material shall be submitted as a restoration package to ODST within 10 days of completion.

I. Any additional disturbance of subtidal and intertidal shallows and wetlands and/or failure to successfully restore the said areas and within 30-days of completion of construction shall be considered a violation of the Coastal Zone Management Rules (N.J.A.C. 7:7E).

ACCEPTABLE USE DETERMINATION

The Office of Dredging and Sediment Technology has determined that the dredged material associated with this project and proposed to be reused on-site meets applicable Soil Remediation standards. This shall serve as the Department's Acceptable Use Determination for the disposal of dredged material as described in this permit and shown on the referenced plans.

This permit authorizes the placement of approximately two thousand cubic yards (2,000 yds^3) of dredged material from Maurice River within the footprint of the subject facility identified as Block 276; Lot 4 Dorchester, Cumberland County.

1. This determination shall only apply to the characterized sediments authorized to be dredged by this permit. Any dredging beyond the depth or scope authorized by this permit shall require a separate Acceptable Use Determination commensurate with the physical and chemical characteristics of the additional material.

2. If the permittee elects to dispose/use the dredged material from this project at an alternate location, written authorization must be obtained from the Office of Dredging and Sediment Technology prior to the transport of any dredged material to said alternative disposal/use location. Any alternate disposal/use location must obtain all required state, local and federal permits before the Office would grant a modification of this permit to transport dredged material to the alternate location.

5/21/10
DATE

Suzanne U. Dietrick, Chief
Office of Dredging and Sediment Technology

Dr/d/permits/YankMarineRevisedWDP

ATTACHMENT 4

VIBRACORE BORING LOGS
C-1, C-2, AND C-3

Printed on Recycled Stock ♻

DUFFIELD ASSOCIATES
Consultants in the Geosciences

TEST BORING C-1

Yank Marine Services, LLC
Proposed Waterfront Reconfiguration
Dorchester, New Jersey
Project No. 7441.LB

Date Started	: February 19, 2009	Drilling Equipment	: P3 Vibracore
Date Completed	: February 19, 2009	Drilling Methods	: Vibrational Core
Logged by	: EBS	Surface Elevation	: 2 feet MLW
Weather	: Clear, 40's	Northing	: 159,155 NJ - NAD 83
Driller/Agency	: Aqua Survey	Easting	: 355,300 NJ - NAD 83

Depth in feet	Surf. Elev. 2 ft	GRAPHIC	USCS	Sample Condition / Water Levels / DESCRIPTION	SAMPLES	Sample Number	Blows per 6 inches	Recovery (ft)	Moisture Content (%)	Percent Passing 200 Sieve	WATER LEVEL
0	2		GP	Dark gray GRAVEL, some fine to medium sand, little silt, trace shell fragments, trace organics							
			SP-SM	Light gray fine SAND, trace silt, trace gravel, trace organics							
2	0										
4	-2		SP	Light brown, light gray fine SAND, trace silt, trace medium to coarse sand							
6	-4										
8	-6		SP	Reddish yellow fine to coarse SAND, trace silt, trace gravel							
10	-8										
12	-10										
14	-12										

NOTES:
1. Soil description and USCS classifications according to Visual-Maunal Procedure (ASTM D 2488).
2. Sample depths are based on core recovery lengths.
3. Core penetrated to an approximate depth of 17 feet below the mudline. Approximately 10 feet of sample was recovered. Additional attempts to recover deeper material were unsuccessful.

TBLOGPASSIM% 7441LB-1.GPJ DUFFIELD.GDT 12/22/10

DUFFIELD ASSOCIATES
Consultants in the Geosciences

TEST BORING C-2

Yank Marine Services, LLC
Proposed Waterfront Reconfiguration
Dorchester, New Jersey
Project No. 7441.LB

Date Started	: February 19, 2009	Drilling Equipment	: P3 Vibracore
Date Completed	: February 19, 2009	Drilling Methods	: Vibrational Core
Logged by	: EBS	Surface Elevation	: -2 feet MLW
Weather	: Clear, 40's	Northing	: 159,190 NJ - NAD 83
Driller/Agency	: Aqua Survey	Easting	: 355,285 NJ - NAD 83

Depth in feet	Surf. Elev. -2 ft	GRAPHIC	USCS	Sample Condition / Water Levels / DESCRIPTION	SAMPLES	Sample Number	Blows per 6 inches	Recovery (ft)	Moisture Content (%)	Percent Passing 200 Sieve	WATER LEVEL
0	-2										
2	-4		SP	Light brown fine to coarse SAND, trace silt							
4	-6		SP	Light brown fine to coarse SAND, trace gravel, trace silt							
6	-8										
8	-10		SP	Yellow fine to coarse SAND, trace gravel, trace, silt Light brown fine to coarse SAND, trace to little silt							
10	-12										
12	-14										
14	-16										

NOTES:
1. Soil description and USCS classifications according to Visual-Maunal Procedure (ASTM D 2488).
2. Soil depths are based on core recovery lengths.
3. Core penetrated to an approximate depth of 10.5 feet below the mudline. Approximately 10 feet of sample was recovered.

TBLOGPASSM% 7441LB-1.GPJ DUFFIELD.GDT 12/22/10

DUFFIELD ASSOCIATES
Consultants in the Geosciences

TEST BORING C-3

Yank Marine Services, LLC
Proposed Waterfront Reconfiguration
Dorchester, New Jersey
Project No. 7441.LB

Date Started	: February 19, 2009	Drilling Equipment	: P3 Vibracore
Date Completed	: February 19, 2009	Drilling Methods	: Vibrational Core
Logged by	: EBS	Surface Elevation	: -8 feet MLW
Weather	: Clear, 40's	Northing	: 159,235 NJ - NAD 83
Driller/Agency	: Aqua Survey	Easting	: 255,265 NJ - NAD 83

Depth in feet	Surf. Elev. -8 ft	GRAPHIC	USCS	Sample Condition / Water Levels / DESCRIPTION	SAMPLES	Sample Number	Blows per 6 inches	Recovery (ft)	Moisture Content (%)	Percent Passing 200 Sieve	WATER LEVEL
0	-8										
2	-10		SP	Gray, brown fine to coarse SAND, trace gravel, trace silt							
4	-12										
6	-14			Light gray fine to coarse SAND, trace gravel, trace silt							
			SP	Light brown coarse to fine SAND, little gravel, trace silt							
8	-16										
10	-18										
12	-20										
14	-22										

NOTES:
1. Soil description and USCS classifications according to Visual-Maunal Procedure (ASTM D 2488).
2. Sample depths are based on core recovery lengths.
3. Core penetrated to an approximate depth of 10 feet below the mudline. Approximately 7.5 feet of sample was recovered.

TBLOGPASSIM% 7441LB-1.GPJ DUFFIELD.GDT 12/22/10