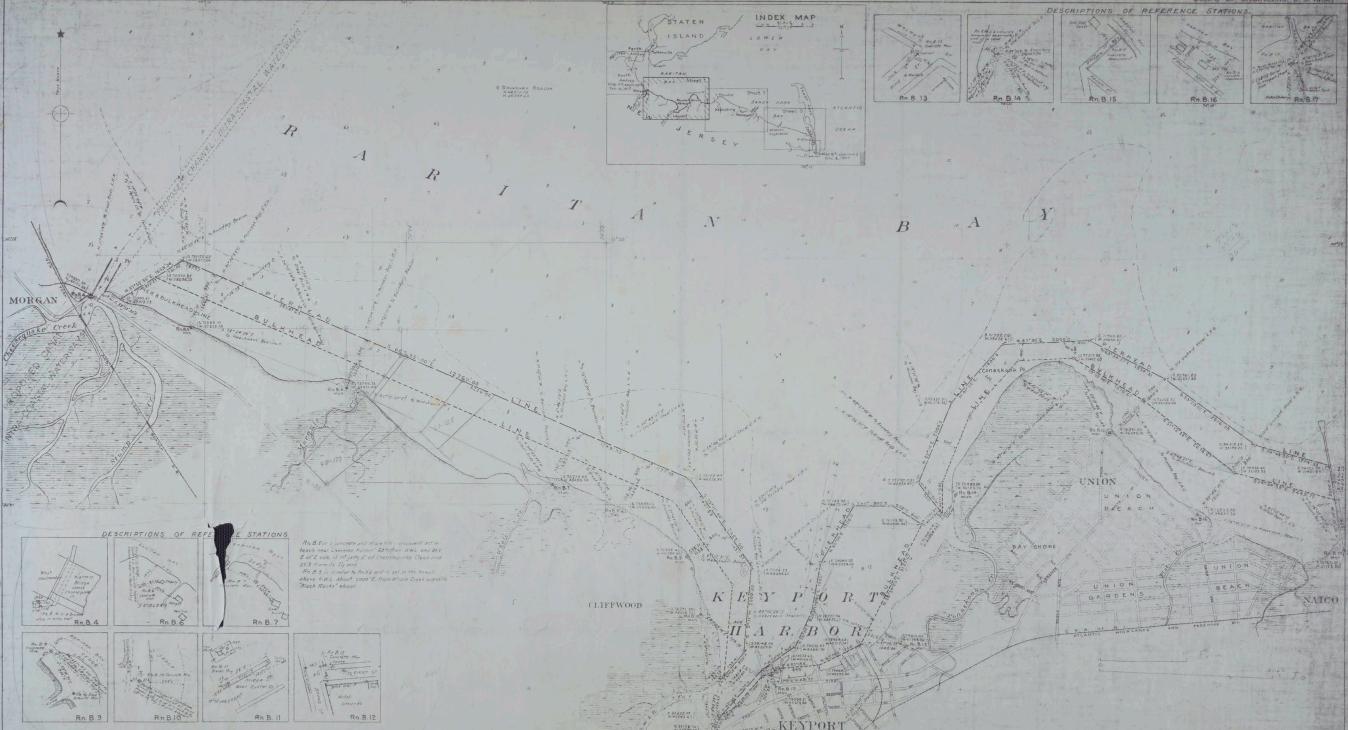
WAR DEPARTMENT

CORPS OF ENGINEERS, U. S. ARMY



Rn.B.5 is a concrete and drain tile monument set in beach near "Lawrence Harbor" 60'± from H.W.L. and 24.5 E. of E. side of 1st jetty E. of Cheesequake Creek and 27.8 from its Sly end.

Rn.B.8 is similar to Rn.B.5 and is set in the beach above H.W.L. about 2000' E. from Whale Creek opposite "Black Rocks" shoal.

### NOTE.

This map is based upon surveys by the U.S. Engineer Dept. 1912-1920, with compilations of shore line and hydrography in part from U.S.C.&G.S. Charts and of streets and roads from various sources.

Soundings refer to the plane of mean low water.

The curve of 6-ft. depth is shown thus: — — — — —

The monuments were set in 1913 and 1914 and are bronze reference plugs set in masonry or in centres of concrete monuments. Rn.B.17 was set in 1920 to replace a lost monument and is a square-topped concrete monument centered by a small iron pipe with the letters "U.S.H.L." surrounding the center.

Coordinates of points and bearings of lines hereon refer to an extension of the rectangular system used by the Borough of Richmond, New York City, with axes perpendicular and parallel to the true meridian through U.S.C.& G.S. station "Bogart" on Todt Hill, Staten Island and with its origin taken so that the coordinates of Sta. "Bogart" are South 20350 ft., West-20250 ft.

### NOTE

The harbor lines shown and described hereon conform closely to the harbor lines previously approved by the Secretary of War, except at the mouth of Cheesequake Creek, where the lines forming the east side of the entrance have been receded hereon, to provide a widened entrance to the proposed ship canal and in other portions where original indefinite curved lines have been replaced by straight lines.

The separate bulkhead line is shown thus: - - - - - - - - -

The " pierhead " " " " : ——— ——— ———

Combined pierhead and bulkhead line " : ——— . ——— . ———

The bulkhead line defines the limit for solid filling; the pierhead line, the limit to which open piled structures may be built.

The harbor lines for the territory covered by this map were originally approved by the Secretary of War, March 9, 1892, and were modified in part on the east shore of Keyport Harbor under approval dated June 10, 1913.

WAR DEPARTMENT
OFFICE OF THE CHIEF OF ENGINEERS
WASHINGTON, JAN. 6, 1922.

APPROVAL OF THE PIERHEAD AND BULKHEAD LINES AS SHOWN AND DESCRIBED HEREON IS RECOMMENDED TO SUPERSEDE ALL SUCH LINES PREVIOUSLY APPROVED FOR THIS LOCALITY.

Lansing H. Beach
MAJOR GENERAL, CHIEF OF ENGINEERS

WAR DEPARTMENT
JANUARY 7, 1922

APPROVED J. M. Wainwright
THE ASST. SECRETARY OF WAR

PIERHEAD AND BULKHEAD LINES
for the South Shores of
# RARITAN AND SANDY HOOK BAYS, N.J.
CHEESEQUAKE CREEK TO HIGHLANDS BRIDGE

IN 3 SHEETS SHEET NO. 1 SCALE 1/10000

1000 0 1000 3000 FEET

OFFICE OF THE NEW YORK HARBOR LINE BOARD, NOVEMBER 30, 1921.
*Approval recommended and transmitted with report of the above date.*

Colonel, Corps of Engineers

J. Barden
Colonel, Corps of Engineers

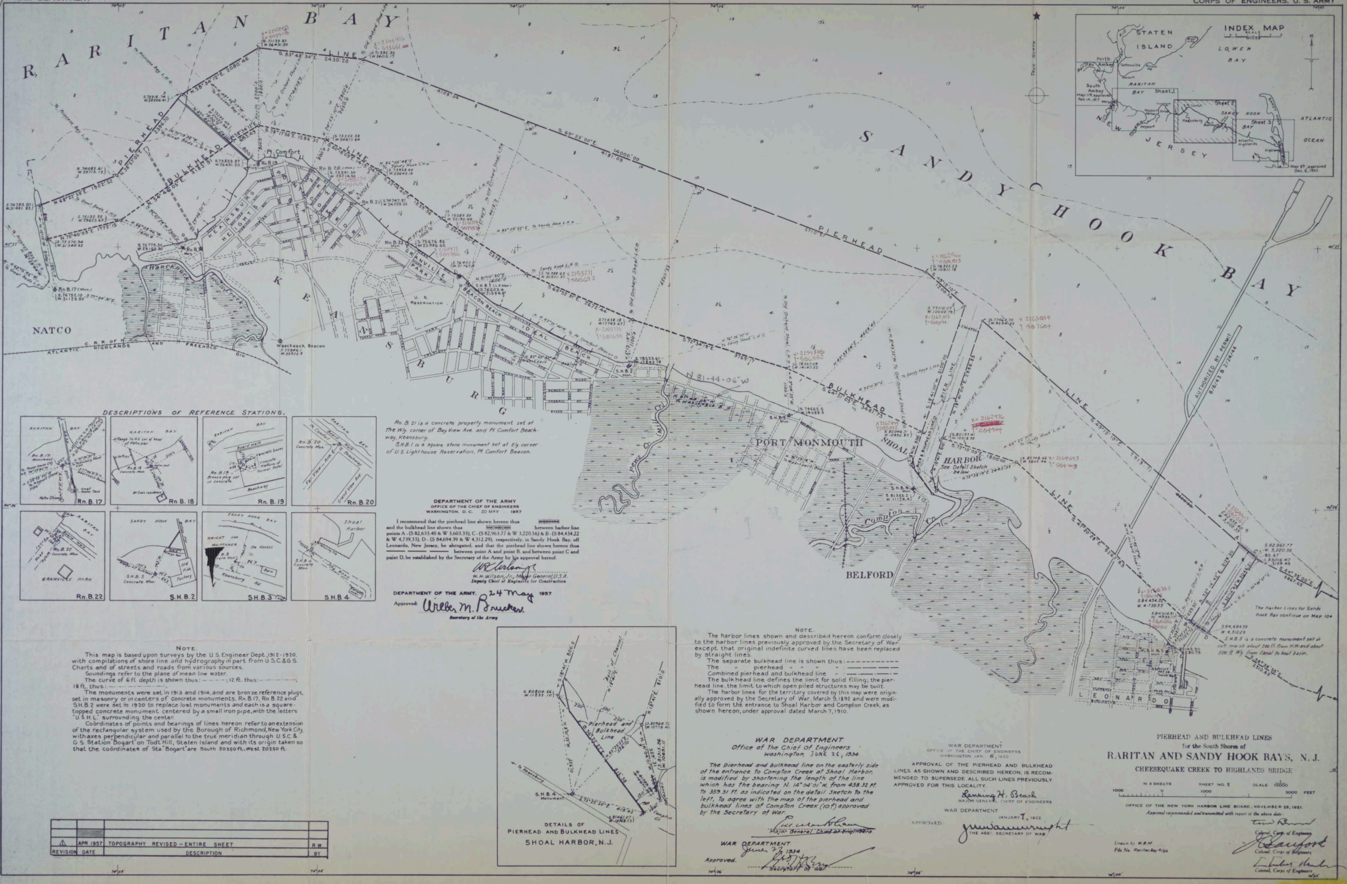
Colonel, Corps of Engineers

*Drawn by W.P.H.*
*File No. Raritan Bay 8/53*

10
28

WAR DEPARTMENT

CORPS OF ENGINEERS, U. S. ARMY



Rn. B. 21 is a concrete property monument set at the Wly. corner of Bay View Ave. and Pt. Comfort Beachway, Keansburg.

S.H.B. 1 is a square stone monument set at Ely corner of U.S. Lighthouse Reservation, Pt. Comfort Beacon.

The Harbor Lines for Sandy Hook Bay continue on Map 10e

S.H.B. 5 is a concrete monument set in salt marsh about 200 ft. from H.W. and about 500 ft. Wly. from Canal to boat basin.

**DEPARTMENT OF THE ARMY**
OFFICE OF THE CHIEF OF ENGINEERS
WASHINGTON, D. C. 20 MAY 1957

I recommend that the pierhead line shown hereon thus ╫╫╫╫╫╫ and the bulkhead line shown thus ╫╫╫╫╫╫ between harbor line points A - (S 82,633.40 & W 3,603.33), C - (S 82,963.77 & W 3,220.56) & B - (S 84,434.22 & W 4,739.33), D - (S 84,694.39 & W 4,312.29), respectively, in Sandy Hook Bay, off Leonardo, New Jersey, be abrogated, and that the pierhead line shown hereon thus ——— ——— ——— between point A and point B, and between point C and point D, be established by the Secretary of the Army by his approval hereof.

W. K. Wilson, Jr., Major General, U.S.A.
Deputy Chief of Engineers for Construction

DEPARTMENT OF THE ARMY. 24 May 1957

Approved: Wilber M. Brucker
Secretary of the Army

## NOTE

This map is based upon surveys by the U. S. Engineer Dept., 1912-1920, with compilations of shore line and hydrography in part from U.S.C.&G.S. Charts and of streets and roads from various sources.

Soundings refer to the plane of mean low water.

The curve of 6 ft. depth is shown thus: – – – –; 12 ft. thus: — – — – —; 18 ft. thus: — — — — — — —.

The monuments were set in 1913 and 1914, and are bronze reference plugs, set in masonry or in centers of concrete monuments. Rn. B. 17, Rn. B. 22 and S.H.B. 2 were set in 1920 to replace lost monuments and each is a square-topped concrete monument centered by a small iron pipe, with the letters "U.S.H.L." surrounding the center.

Coördinates of points and bearings of lines hereon refer to an extension of the rectangular system used by the Borough of Richmond, New York City, with axes perpendicular and parallel to the true meridian through U.S.C.& G.S. Station "Bogart" on Todt Hill, Staten Island and with its origin taken so that the coördinates of Sta. "Bogart" are South 20350 ft., West 20250 ft.

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| ⚠ | APR. 1957 | TOPOGRAPHY REVISED – ENTIRE SHEET | R.W. |
| REVISION | DATE | DESCRIPTION | BY |

## NOTE.

The harbor lines shown and described hereon conform closely to the harbor lines previously approved by the Secretary of War except that original indefinite curved lines have been replaced by straight lines.

The separate bulkhead line is shown thus: - - - - - - - - - - -
The " pierhead " " " " : ——— ——— ——— ———
Combined pierhead and bulkhead line " : ——·——·——·—

The bulkhead line defines the limit for solid filling; the pierhead line, the limit to which open piled structures may be built.

The harbor lines for the territory covered by this map were originally approved by the Secretary of War, March 9, 1892 and were modified to form the entrance to Shoal Harbor and Compton Creek, as shown hereon, under approval dated March 7, 1910.

*WAR DEPARTMENT*
*Office of the Chief of Engineers*
*Washington, JUNE 26, 1934*

*The pierhead and bulkhead line on the easterly side of the entrance to Compton Creek at Shoal Harbor, is modified by shortening the length of the line which has the bearing N. 14° 04' 01" W, from 438.32 ft. to 359.31 ft. as indicated on the detail sketch to the left, to agree with the map of the pierhead and bulkhead lines of Compton Creek (10f) approved by the Secretary of War.*

Major General, Chief of Engineers

*WAR DEPARTMENT*
June 27, 1934

Approved.
Secretary of War

WAR DEPARTMENT
OFFICE OF THE CHIEF OF ENGINEERS
WASHINGTON JAN. 6, 1922

APPROVAL OF THE PIERHEAD AND BULKHEAD LINES, AS SHOWN AND DESCRIBED HEREON, IS RECOMMENDED TO SUPERSEDE ALL SUCH LINES PREVIOUSLY APPROVED FOR THIS LOCALITY.

Lansing H. Beach
MAJOR GENERAL, CHIEF OF ENGINEERS

WAR DEPARTMENT
JANUARY 7, 1922

APPROVED: J. M. Wainwright
THE ASST. SECRETARY OF WAR

# PIERHEAD AND BULKHEAD LINES
for the South Shores of
# RARITAN AND SANDY HOOK BAYS, N. J.
## CHEESEQUAKE CREEK TO HIGHLANDS BRIDGE

IN 3 SHEETS SHEET NO. 2 SCALE $\frac{1}{10000}$

1000 0 1000 3000 FEET

OFFICE OF THE NEW YORK HARBOR LINE BOARD, NOVEMBER 29, 1921.
*Approval recommended and transmitted with report of the above date:*

Colonel, Corps of Engineers

J. Sanford
Colonel, Corps of Engineers

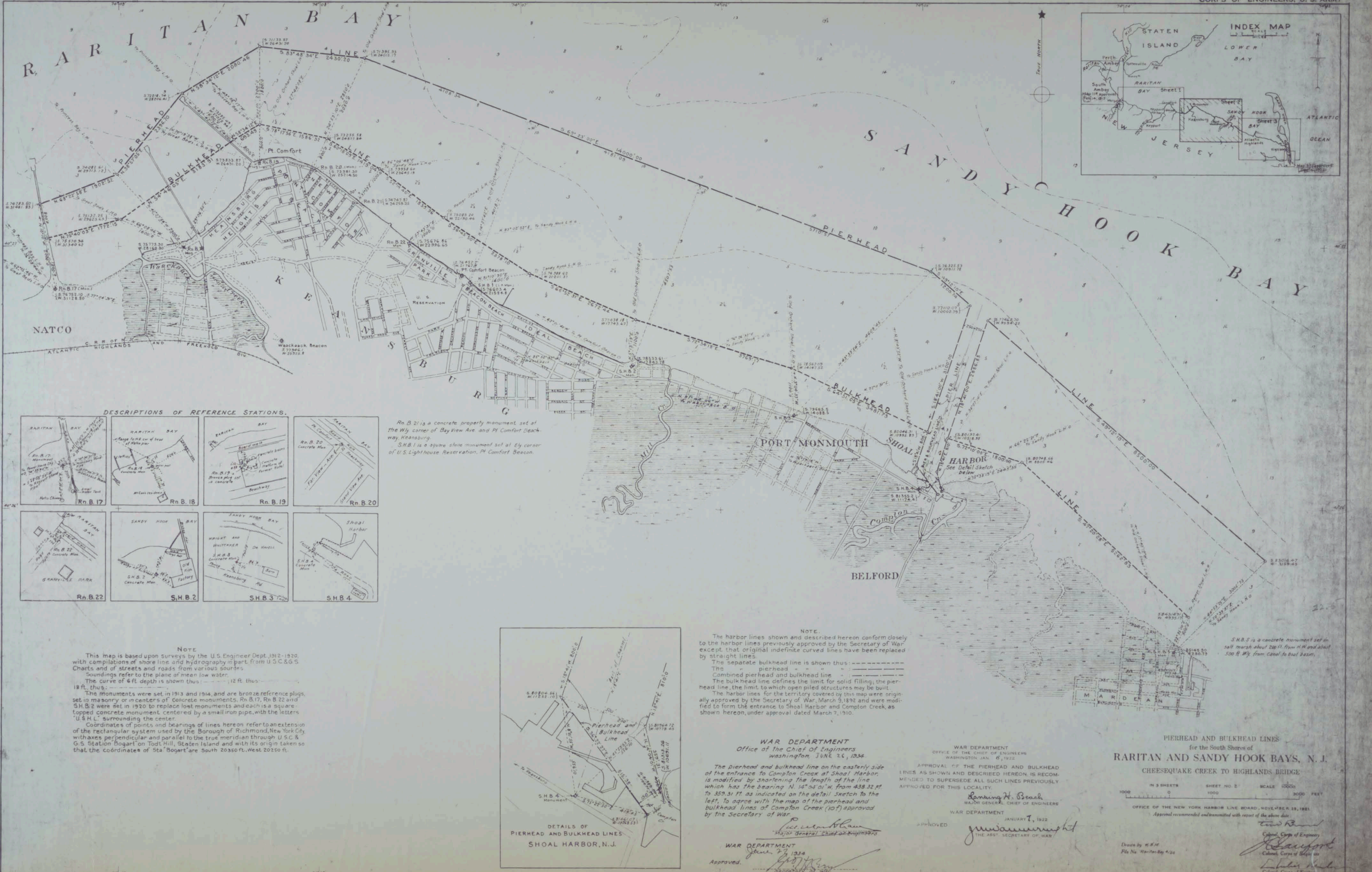
Colonel, Corps of Engineers

Drawn by W.B.M.
File No. Raritan Bay 4/54

29 (10d)

WAR DEPARTMENT

CORPS OF ENGINEERS, U. S. ARMY



DESCRIPTIONS OF REFERENCE STATIONS.

Rn.B.17 · Rn.B.18 · Rn.B.19 · Rn.B.20 · Rn.B.22 · S.H.B.2 · S.H.B.3 · S.H.B.4

Rn. B. 21 is a concrete property monument set at the Wly corner of Bay View Ave. and Pt Comfort Beachway, Keansburg.

S.H.B. 1 is a square stone monument set at Ely corner of U.S. Lighthouse Reservation, Pt Comfort Beacon.

S.H.B. 5 is a concrete monument set in salt marsh about 200 ft. from H.W. and about 500 ft. Wly from canal to boat basin.

DETAILS OF PIERHEAD AND BULKHEAD LINES
SHOAL HARBOR, N.J.

NOTE

This map is based upon surveys by the U.S. Engineer Dept., 1912-1920, with compilations of shore line and hydrography in part from U.S.C.&G.S. Charts and of streets and roads from various sources.

Soundings refer to the plane of mean low water.

The curve of 6 ft. depth is shown thus: - - - - ; 12 ft. thus: — — — ; 18 ft. thus: — — — — — — .

The monuments were set in 1913 and 1914, and are bronze reference plugs, set in masonry or in centers of concrete monuments. Rn.B.17, Rn.B.22 and S.H.B.2 were set in 1920 to replace lost monuments and each is a square-topped concrete monument centered by a small iron pipe, with the letters "U.S.H.L." surrounding the center.

Coördinates of points and bearings of lines hereon refer to an extension of the rectangular system used by the Borough of Richmond, New York City, with axes perpendicular and parallel to the true meridian through U.S.C.&G.S. Station "Bogart" on Todt Hill, Staten Island and with its origin taken so that the coördinates of Sta. "Bogart" are South 20350 ft., West 20250 ft.

NOTE.

The harbor lines shown and described hereon conform closely to the harbor lines previously approved by the Secretary of War except that original indefinite curved lines have been replaced by straight lines.

The separate bulkhead line is shown thus: - - - - - - - - - -
The " pierhead " " " " : —— —— ——
Combined pierhead and bulkhead line " : ——·——·——·—

The bulkhead line defines the limit for solid filling; the pierhead line, the limit to which open piled structures may be built.

The harbor lines for the territory covered by this map were originally approved by the Secretary of War, March 9, 1892 and were modified to form the entrance to Shoal Harbor and Compton Creek, as shown hereon, under approval dated March 7, 1910.

WAR DEPARTMENT
*Office of the Chief of Engineers*
*Washington, JUNE 26, 1934.*

*The pierhead and bulkhead line on the easterly side of the entrance to Compton Creek at Shoal Harbor, is modified by shortening the length of the line which has the bearing N. 14° 04' 01" W. from 438.32 ft. to 359.31 ft. as indicated on the detail sketch to the left, to agree with the map of the pierhead and bulkhead lines of Compton Creek (10f) approved by the Secretary of War.*

*Major General Chief of Engineers*

WAR DEPARTMENT
June 27, 1934

*Approved.*
*Secretary of War.*

WAR DEPARTMENT
OFFICE OF THE CHIEF OF ENGINEERS
WASHINGTON JAN. 6, 1922

APPROVAL OF THE PIERHEAD AND BULKHEAD LINES AS SHOWN AND DESCRIBED HEREON IS RECOMMENDED TO SUPERSEDE ALL SUCH LINES PREVIOUSLY APPROVED FOR THIS LOCALITY.

Lansing H. Beach
MAJOR GENERAL CHIEF OF ENGINEERS

WAR DEPARTMENT
JANUARY 7, 1922

APPROVED
J M Wainwright
THE ASST. SECRETARY OF WAR

# PIERHEAD AND BULKHEAD LINES
for the South Shores of
# RARITAN AND SANDY HOOK BAYS, N. J.
## CHEESEQUAKE CREEK TO HIGHLANDS BRIDGE

IN 3 SHEETS SHEET NO. 2 SCALE $\frac{1}{10000}$

1000 0 1000 3000 FEET

OFFICE OF THE NEW YORK HARBOR LINE BOARD, NOVEMBER 29, 1921.
*Approval recommended and transmitted with report of the above date*

Colonel, Corps of Engineers

Colonel, Corps of Engineers

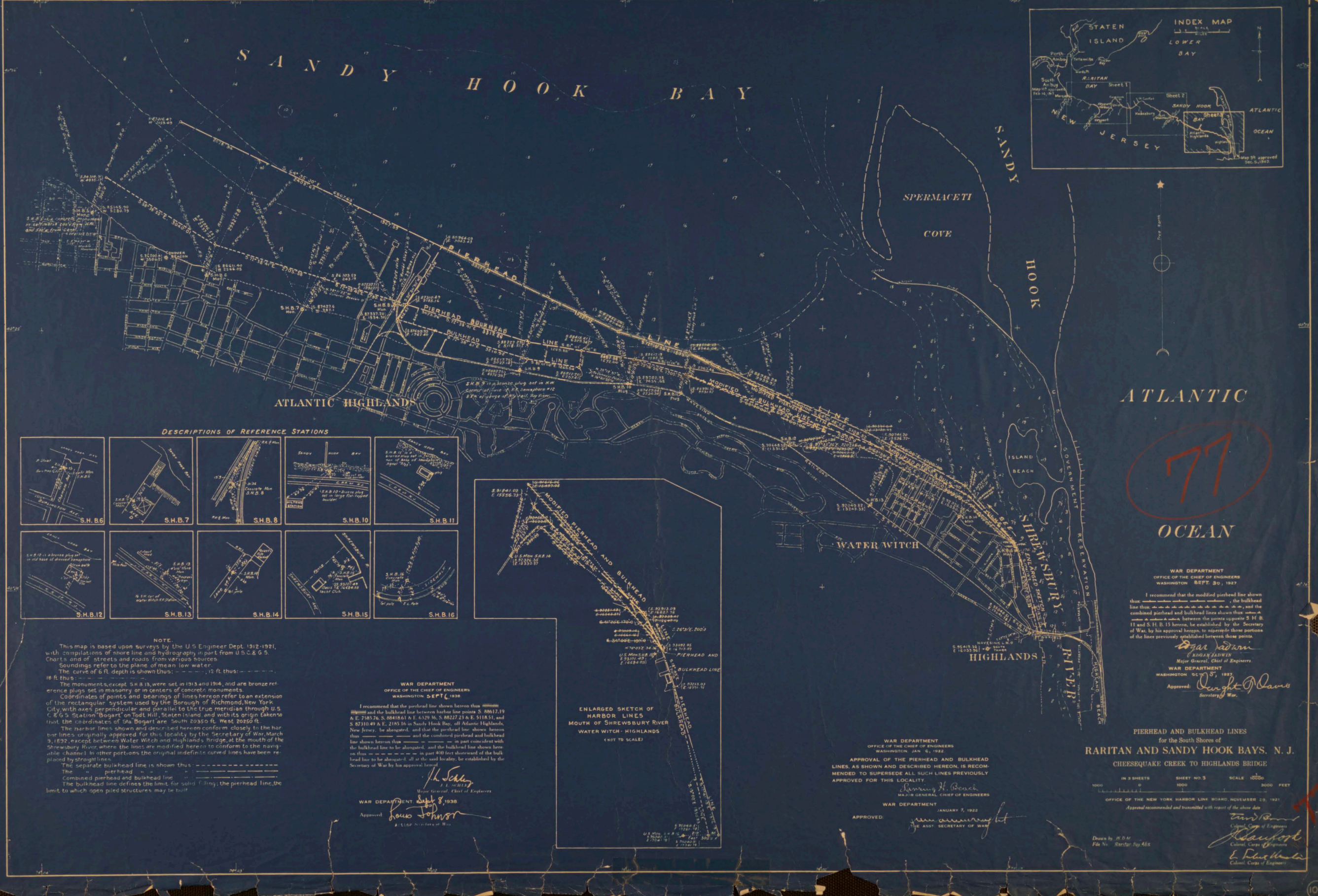
Colonel, Corps of Engineers

*Drawn by W.S.M.*
*File No. Raritan Bay 4/54*

10d 29

WAR DEPARTMENT

CORPS OF ENGINEERS, U. S. AR



77

### NOTE.

This map is based upon surveys by the U.S. Engineer Dept. 1912-1921, with compilations of shore line and hydrography in part from U.S.C.& G.S. Charts and of streets and roads from various sources.

Soundings refer to the plane of mean low water.

The curve of 6 ft. depth is shown thus: – – – – – –, 12 ft. thus: – – – – – – –, 18 ft. thus: – – – – – – – – – –.

The monuments, except S.H.B.13, were set in 1913 and 1914, and are bronze reference plugs set in masonry or in centers of concrete monuments.

Coordinates of points and bearings of lines hereon refer to an extension of the rectangular system used by the Borough of Richmond, New York City, with axes perpendicular and parallel to the true meridian through U.S. C.& G.S. Station "Bogart" on Todt Hill, Staten Island, and with its origin taken so that the coordinates of Sta. "Bogart" are South 20350 ft. West 20250 ft.

The harbor lines shown and described hereon conform closely to the harbor lines originally approved for this locality by the Secretary of War, March 9, 1892, except between Water Witch and Highlands Bridge, at the mouth of the Shrewsbury River, where the lines are modified hereon to conform to the navigable channel. In other portions the original indefinite curved lines have been replaced by straight lines.

The separate bulkhead line is shown thus: – – – – – – – – – – – – – – –

The " pierhead " " " " " : ——— ——— ——— ——— ———

Combined pierhead and bulkhead line " : ——— · ——— · ——— · ——— ·

The bulkhead line defines the limit for solid filling; the pierhead line, the limit to which open piled structures may be built.

WAR DEPARTMENT
OFFICE OF THE CHIEF OF ENGINEERS
WASHINGTON SEPT 6, 1938

I recommend that the pierhead line shown hereon thus ############ and the bulkhead line between harbor line points S. 88617.19 & E. 7585.76, S. 88418.61 & E. 6329.36, S. 88227.23 & E. 5118.51, and S. 87310.49 & E. 2185.16 in Sandy Hook Bay, off Atlantic Highlands, New Jersey, be abrogated, and that the pierhead line shown hereon thus ——— ——— ——— and the combined pierhead and bulkhead line shown hereon thus ——— – ——— – in part coincident with the bulkhead line to be abrogated, and the bulkhead line shown hereon thus – – – – – – – – – in part 400 feet shoreward of the bulkhead line to be abrogated, all at the said locality, be established by the Secretary of War by his approval hereof.

J. L. Schley
J. L. SCHLEY
*Major General, Chief of Engineers.*

WAR DEPARTMENT, Sept 8, 1938

Approved: Louis Johnson
Acting Secretary of War.

WAR DEPARTMENT
OFFICE OF THE CHIEF OF ENGINEERS
WASHINGTON JAN. 6, 1922

APPROVAL OF THE PIERHEAD AND BULKHEAD LINES, AS SHOWN AND DESCRIBED HEREON, IS RECOMMENDED TO SUPERSEDE ALL SUCH LINES PREVIOUSLY APPROVED FOR THIS LOCALITY.

Lansing H. Beach
MAJOR GENERAL, CHIEF OF ENGINEERS

WAR DEPARTMENT
JANUARY 7, 1922

APPROVED:
THE ASST. SECRETARY OF WAR

WAR DEPARTMENT
OFFICE OF THE CHIEF OF ENGINEERS
WASHINGTON SEPT. 30, 1927

I recommend that the modified pierhead line shown thus: ——┴—— ——┴—— ——┴—— ——┴—— ——┴——, the bulkhead line thus: ┴ ┴ ┴ ┴ ┴ ┴ ┴ ┴ ┴ ┴ ┴ ┴ ┴ ┴, and the combined pierhead and bulkhead lines shown thus: ——┴ ——┴——┴——┴ between the points opposite S. H. B. 11 and S. H. B. 15 hereon, be established by the Secretary of War, by his approval hereon, to supersede those portions of the lines previously established between those points.

Edgar Jadwin
EDGAR JADWIN
*Major General, Chief of Engineers.*

WAR DEPARTMENT
WASHINGTON OCT. 5, 1927

Approved: Dwight F. Davis
*Secretary of War.*

# PIERHEAD AND BULKHEAD LINES
for the South Shores of
# RARITAN AND SANDY HOOK BAYS, N. J.
## CHEESEQUAKE CREEK TO HIGHLANDS BRIDGE

IN 3 SHEETS SHEET NO. 3 SCALE $\frac{1}{10000}$

1000 0 1000 3000 FEET

OFFICE OF THE NEW YORK HARBOR LINE BOARD, NOVEMBER 29, 1921

*Approval recommended and transmitted with report of the above date*

*Colonel, Corps of Engineers*

J. Sanford
*Colonel, Corps of Engineers*

*Colonel, Corps of Engineers*

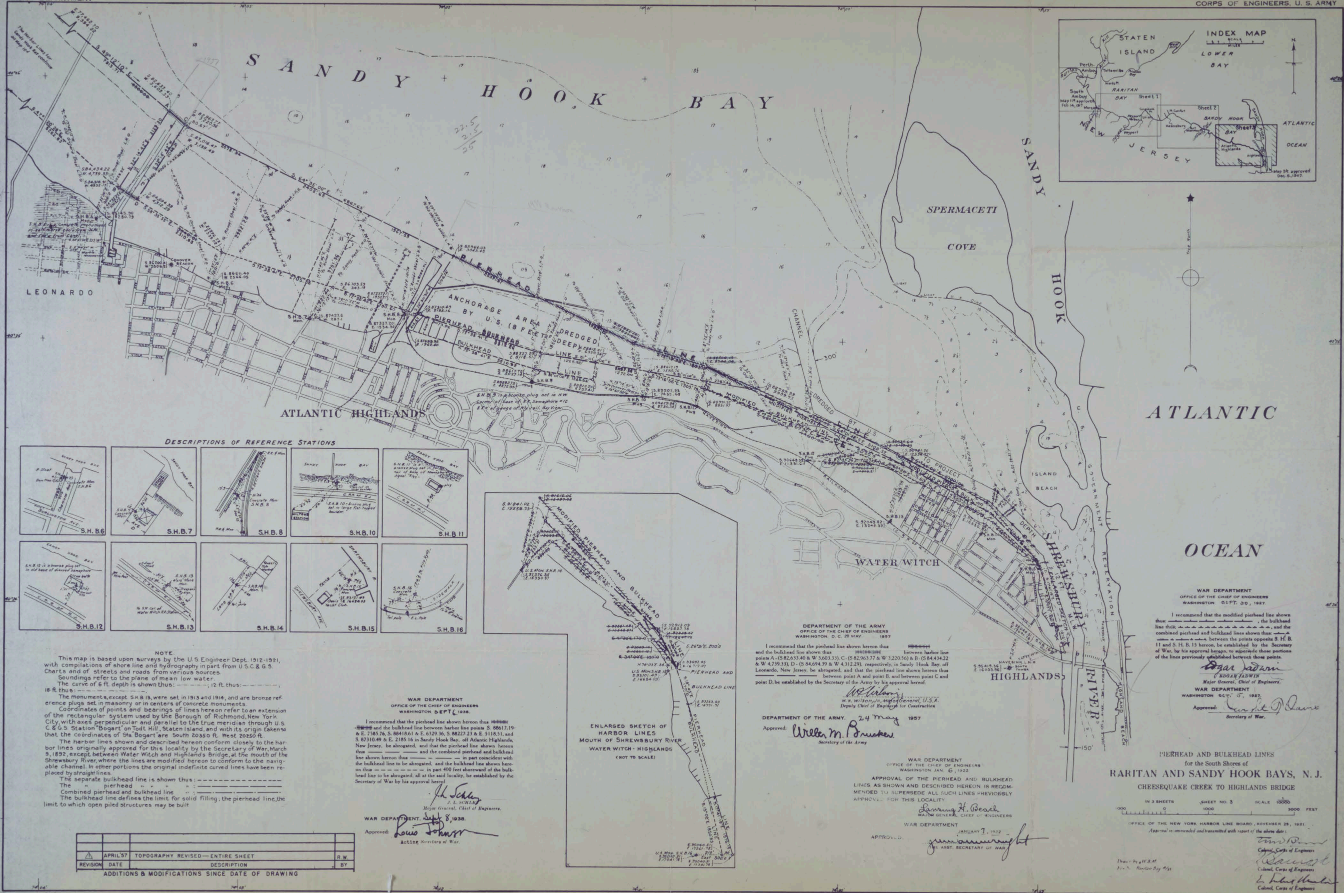
*Drawn by W. B. M.*
*File No. Raritan Bay 4&5*

77

10e

WAR DEPARTMENT

CORPS OF ENGINEERS, U. S. ARMY



**NOTE.**

This map is based upon surveys by the U.S. Engineer Dept. 1912-1921, with compilations of shore line and hydrography in part from U.S.C.&G.S. Charts and of streets and roads from various sources.

Soundings refer to the plane of mean low water.

The curve of 6 ft. depth is shown thus: – – – – – –; 12 ft. thus: – – – – – – –; 18-ft. thus: – – – — — — —.

The monuments, except S.H.B.13, were set in 1913 and 1914, and are bronze reference plugs set in masonry or in centers of concrete monuments.

Coordinates of points and bearings of lines hereon refer to an extension of the rectangular system used by the Borough of Richmond, New York City, with axes perpendicular and parallel to the true meridian through U.S. C.&G.S. Station "Bogart" on Todt Hill, Staten Island, and with its origin taken so that the coördinates of Sta. "Bogart" are South 20350 ft. West 20250 ft.

The harbor lines shown and described hereon conform closely to the harbor lines originally approved for this locality by the Secretary of War, March 9, 1892, except between Water Witch and Highlands Bridge, at the mouth of the Shrewsbury River, where the lines are modified hereon to conform to the navigable channel. In other portions the original indefinite curved lines have been replaced by straight lines.

The separate bulkhead line is shown thus: – – – – – – – – – – – – – – – –
The " pierhead " " " " : —— —— —— —— ——
Combined pierhead and bulkhead line " : ——.——.——.——.

The bulkhead line defines the limit for solid filling; the pierhead line, the limit to which open piled structures may be built

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| ⚠ | APRIL '57 | TOPOGRAPHY REVISED — ENTIRE SHEET | R.W. |
| REVISION | DATE | DESCRIPTION | BY |

ADDITIONS & MODIFICATIONS SINCE DATE OF DRAWING

WAR DEPARTMENT
OFFICE OF THE CHIEF OF ENGINEERS
WASHINGTON, SEPT 6, 1938.

I recommend that the pierhead line shown hereon thus ┼┼┼┼┼┼┼┼┼┼┼┼┼┼┼┼┼┼┼ and the bulkhead line between harbor line points S. 88617.19 & E. 7585.76, S. 88418.61 & E. 6329.36, S. 88227.23 & E. 5118.51, and S. 87310.49 & E. 2185.16 in Sandy Hook Bay, off Atlantic Highlands, New Jersey, be abrogated, and that the pierhead line shown hereon thus —— —— —— and the combined pierhead and bulkhead line shown hereon thus —— – —— – in part coincident with the bulkhead line to be abrogated, and the bulkhead line shown hereon thus – – – – – – – – – in part 400 feet shoreward of the bulkhead line to be abrogated, all at the said locality, be established by the Secretary of War by his approval hereof

J. L. Schley
J. L. SCHLEY
*Major General, Chief of Engineers.*

WAR DEPARTMENT, Sept 8, 1938.

Approved: Louis Johnson
Acting *Secretary of War.*

DEPARTMENT OF THE ARMY
OFFICE OF THE CHIEF OF ENGINEERS
WASHINGTON, D. C. 20 MAY 1957

I recommend that the pierhead line shown hereon thus ┼┼┼┼┼┼┼┼┼┼┼ and the bulkhead line shown thus ┼┼┼┼┼┼┼┼┼┼┼ between harbor line points A - (S 82,633.40 & W 3,603.33), C - (S 82,963.77 & W 3,220.56) & B - (S 84,434.22 & W 4,739.33), D - (S 84,694.39 & W 4,312.29), respectively, in Sandy Hook Bay, off Leonardo, New Jersey, be abrogated, and that the pierhead line shown hereon thus —— —— —— between point A and point B, and between point C and point D, be established by the Secretary of the Army by his approval hereof.

W K Wilson Jr
W. K. Wilson, Jr., Major General, U.S.A.
*Deputy Chief of Engineers for Construction*

DEPARTMENT OF THE ARMY. 24 May 1957

Approved: Wilber M. Brucker
*Secretary of the Army*

WAR DEPARTMENT
OFFICE OF THE CHIEF OF ENGINEERS
WASHINGTON JAN 6, 1922

APPROVAL OF THE PIERHEAD AND BULKHEAD LINES AS SHOWN AND DESCRIBED HEREON IS RECOMMENDED TO SUPERSEDE ALL SUCH LINES PREVIOUSLY APPROVED FOR THIS LOCALITY

Lansing H. Beach
MAJOR GENERAL CHIEF OF ENGINEERS

WAR DEPARTMENT
JANUARY 7, 1922

APPROVED: J Mayhew Wainwright
THE ASST. SECRETARY OF WAR

WAR DEPARTMENT
OFFICE OF THE CHIEF OF ENGINEERS
WASHINGTON SEPT. 30, 1927.

I recommend that the modified pierhead line shown thus: —┴— —┴— —┴— —┴— —┴—, the bulkhead line thus: ┴ ┴ ┴ ┴ ┴ ┴ ┴ ┴ ┴ ┴ ┴ ┴ ┴ ┴, and the combined pierhead and bulkhead lines shown thus: —┴—┴ —┴— ┴ —┴—┴ —┴—┴ between the points opposite S. H. B. 11 and S. H. B. 15 hereon, be established by the Secretary of War, by his approval hereon, to supersede those portions of the lines previously established between those points.

Edgar Jadwin
EDGAR JADWIN
*Major General, Chief of Engineers.*

WAR DEPARTMENT
WASHINGTON OCT. 5, 1927.

Approved: Dwight F. Davis
*Secretary of War.*

PIERHEAD AND BULKHEAD LINES
for the South Shores of
# RARITAN AND SANDY HOOK BAYS, N. J.
CHEESEQUAKE CREEK TO HIGHLANDS BRIDGE

IN 3 SHEETS SHEET NO. 3 SCALE $\frac{1}{10000}$

1000 0 1000 3000 FEET

OFFICE OF THE NEW YORK HARBOR LINE BOARD, NOVEMBER 29, 1921.
*Approval recommended and transmitted with report of the above date:*

*Colonel, Corps of Engineers*

*Colonel, Corps of Engineers*

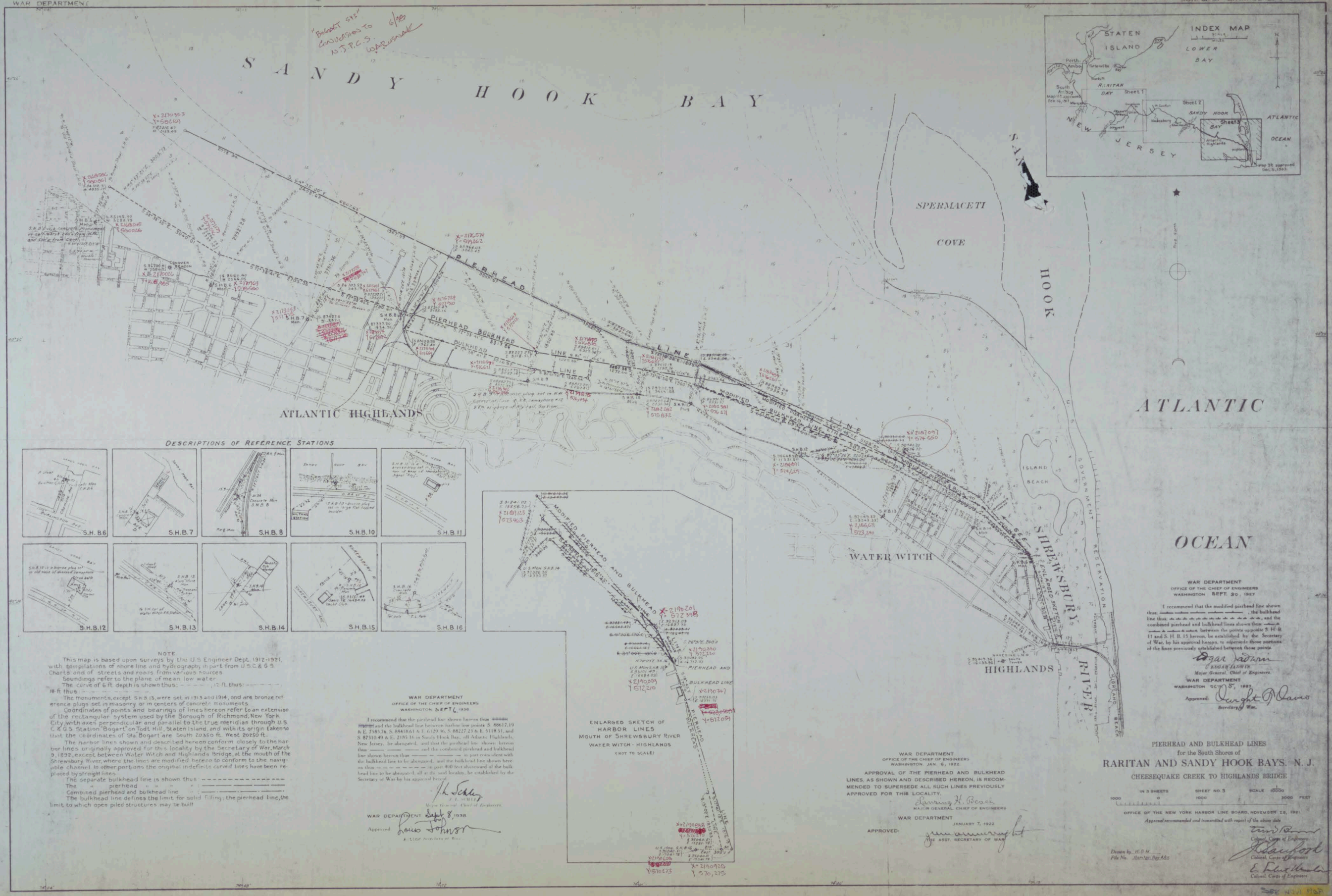
*Colonel, Corps of Engineers*

Drawn by W.B.M.
File: Raritan Bay 4/55

WAR DEPARTMENT

CORPS OF ENGINEERS, U.S. ARMY

"BOGART SYS"
CONVERSION TO 6/98
N.J.P.C.S.
WARUSNAK



ENLARGED SKETCH OF
HARBOR LINES
MOUTH OF SHREWSBURY RIVER
WATER WITCH - HIGHLANDS
(NOT TO SCALE)

NOTE

This map is based upon surveys by the U.S. Engineer Dept. 1912-1921, with compilations of shore line and hydrography in part from U.S.C.&G.S. Charts and of streets and roads from various sources.

Soundings refer to the plane of mean low water.

The curve of 6 ft. depth is shown thus: - - - - - , 12 ft. thus: - - - - - - - , 18 ft. thus: - - - - - - - - - .

The monuments, except S.H.B.13, were set in 1913 and 1914, and are bronze reference plugs set in masonry or in centers of concrete monuments.

Coordinates of points and bearings of lines hereon refer to an extension of the rectangular system used by the Borough of Richmond, New York City, with axes perpendicular and parallel to the true meridian through U.S. C.&G.S. Station "Bogart" on Todt Hill, Staten Island, and with its origin taken so that the coordinates of Sta. "Bogart" are South 20350 ft. West 20250 ft.

The harbor lines shown and described hereon conform closely to the harbor lines originally approved for this locality by the Secretary of War, March 9, 1892, except between Water Witch and Highlands Bridge, at the mouth of the Shrewsbury River, where the lines are modified hereon to conform to the navigable channel. In other portions the original indefinite curved lines have been replaced by straight lines.

The separate bulkhead line is shown thus: - - - - - - - - - - - - - - -
The " pierhead " " " " : ——— ——— ——— ——— ———
Combined pierhead and bulkhead line " : ———·———·———·———·

The bulkhead line defines the limit for solid filling; the pierhead line, the limit to which open piled structures may be built.

WAR DEPARTMENT
OFFICE OF THE CHIEF OF ENGINEERS
WASHINGTON SEPT 6, 1938

I recommend that the pierhead line shown hereon thus ▨▨▨▨ and the bulkhead line between harbor line points S. 88617.19 & E. 7585.76, S. 88418.61 & E. 6329.36, S. 88227.23 & E. 5118.51, and S. 87310.49 & E. 2185.16 in Sandy Hook Bay, off Atlantic Highlands, New Jersey, be abrogated, and that the pierhead line shown hereon thus ——— ——— ——— and the combined pierhead and bulkhead line shown hereon thus ——— — ——— — in part coincident with the bulkhead line to be abrogated, and the bulkhead line shown hereon thus — — — — — — — — in part 400 feet shoreward of the bulkhead line to be abrogated, all at the said locality, be established by the Secretary of War by his approval hereof.

J. L. Schley
J. L. SCHLEY
Major General, Chief of Engineers.

WAR DEPARTMENT Sept 8, 1938

Approved: Louis Johnson
Acting Secretary of War.

WAR DEPARTMENT
OFFICE OF THE CHIEF OF ENGINEERS
WASHINGTON, JAN. 6, 1922.

APPROVAL OF THE PIERHEAD AND BULKHEAD LINES, AS SHOWN AND DESCRIBED HEREON, IS RECOMMENDED TO SUPERSEDE ALL SUCH LINES PREVIOUSLY APPROVED FOR THIS LOCALITY.

Lansing H. Beach
MAJOR GENERAL, CHIEF OF ENGINEERS

WAR DEPARTMENT
JANUARY 7, 1922

APPROVED:
THE ASST. SECRETARY OF WAR

WAR DEPARTMENT
OFFICE OF THE CHIEF OF ENGINEERS
WASHINGTON SEPT. 30, 1927

I recommend that the modified pierhead line shown thus: —┴— —┴— —┴— —┴— —┴— , the bulkhead line thus: ┴ ┴ ┴ ┴ ┴ ┴ ┴ ┴ ┴ ┴ ┴ ┴ ┴ ┴, and the combined pierhead and bulkhead lines shown thus —┴— —┴—┴—┴—┴—┴ between the points opposite S.H.B. 11 and S.H.B. 15 hereon, be established by the Secretary of War, by his approval hereon, to supersede those portions of the lines previously established between those points.

Edgar Jadwin
EDGAR JADWIN
Major General, Chief of Engineers.

WAR DEPARTMENT
WASHINGTON OCT. 5, 1927

Approved: Dwight F. Davis
Secretary of War.

## PIERHEAD AND BULKHEAD LINES
## for the South Shores of
# RARITAN AND SANDY HOOK BAYS. N. J.
## CHEESEQUAKE CREEK TO HIGHLANDS BRIDGE

IN 3 SHEETS SHEET NO. 3 SCALE $\frac{1}{10000}$

1000 0 1000 3000 FEET

OFFICE OF THE NEW YORK HARBOR LINE BOARD, NOVEMBER 28, 1921.

*Approval recommended and transmitted with report of the above date*

Colonel, Corps of Engineers.

J. C. Sanford
Colonel, Corps of Engineers.

E. Eveleth Winslow
Colonel, Corps of Engineers.

*Drawn by* W. B. M.
*File No.* Raritan Bay 4&5

SEE NEW MAP

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