

SECRET

Register No. 5

SUPPLEMENT
to
THE HARBOR DEFENSE PROJECT
of
NEW YORK

1. This is a REGISTERED DOCUMENT (Par. 33 AR 380-5), and consists of 8 Annexes.
2. The SHORT TITLE of this document is HDNY-AN-44 (Par. 34 a, AR 380-5).
3. This document will be accounted for on 30 June and 31 December of each year to The Commanding General, Harbor Defense of New York, Fort Hancock, New Jersey (Par. 37 a, AR 380-5).
4. Prompt report will be submitted when this document is transferred from one person to another (Par. 38 a, AR 380-5).
5. This document supersedes the documents with Short Titles as follows:

~~CCA-AN-SE~~ ~~CCA-AN-ENY~~ ~~CCA-AN-SNY~~

Revised Title Page
HDNY-AN-44
1 September 1944

SECRET

Authority MND 760162
BY WDR/MAVA/DRE 7/15/60

SECRET

DISTRIBUTION LIST

REGISTER NO.	OFFICE OF RECORD
1	Chief of Engineers
2	Chief Signal Officer
3	Chief of Ordnance
4	Commanding General, Army Service Forces (Planning Division)
5	The Adjutant General (For Assistant Chief of Staff, Operations Division)
6	Commanding General, Army Ground Forces (Ground Requirements Section)
7	Chief Signal Officer
8	Chief of Chemical Warfare Service
9	Commanding General, Army Ground Forces (Attention Coast Artillery Board)
10	Commanding General, Eastern Defense Command
11, 12	Commanding General, Second Service Command
13, 14	Commanding General, Northeastern Sector
15	Commanding General, Southeastern Sector
16	Division Engineer, North Atlantic Division
17	District Engineer, New York District
18	Chief of Ordnance, for Commanding Officer Submarine Mine Depot, Fort Monroe, Va.
19, 20	Commanding General, Harbor Defense of New York

SECRET
II

Authority MND 76062
By WDR NARA Date 7/5/00

SECRET

TABLE OF CONTENTS

- Annex A - ARMAMENT
- Annex B - FIRE CONTROL
- Annex C - SEACOAST SEARCHLIGHTS
- Annex D - UNDERWATER DEFENSE
- Annex E - ANTI-AIRCRAFT ARTILLERY (Harbor Defense)
- Annex F - GAS DEFENSE
- Annex G - EQUIPMENT
- Annex H - REAL ESTATE REQUIREMENTS

RECORDED
Authority AND 76012
By WDP/NARA Date: 7/15/00

SECRET

ANNEXES

TO

HARBOR DEFENSE PROJECT

HARBOR DEFENSES OF NEW YORK

1944

AUTHORITIES

1. This document is a supplement to the document entitled "Harbor Defense Projects for Harbor Defenses included in the New York-Harragansett Bay Area, Parts I to V", (Short Title CCA-P-MNB). The latter document was approved by the Secretary of War, 11 August 1932.

a. References:

- (1) Letter War Department, AGO, AG 660.2 (9/12/40) M-WPD-M, 27 September 1940, subject, "Modernization of Harbor Defense Projects Continental United States".
- (2) Letter, War Department, AGO, AG 660.2 (11/12/42) OB-S-E, 13 November 1942, Subject, "Seacoast Modernization Program".
- (3) Letter, War Department, AGO, AG 660.2 (4/12/43) OB-S-SPDDO-M, 17 April 1943, subject "Defense of Harbors Against Motor Torpedo Boats".
- (4) Third Indorsement, War Department, AGO, AG 660.3 (11/13/43) OB-S-E, 17 January 1943, on letter, Headquarters, Harbor Defenses of New York, 660.3/10 x 334(HD), 13 November 1942, subject, "Revision of Underwater Defense Projects", as revised by letter War Department, AGO, AG 660.3(5/17/43) OB-S-E, 20 May 1943, subject, "Revision of Underwater Defense Projects, Harbor Defenses of New York".
- (5) Letter, War Department, AGO, AG 660.2(10/23/40) M-OCCA, 1 November 1940, subject, "Revision of Antiaircraft Annex Harbor Defense Projects".

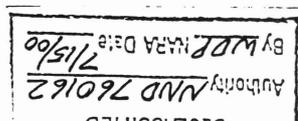
2. a. The original Annexes to Harbor Defense Projects, Harbor Defenses of Sandy Hook were prepared by a Board of Officers appointed by paragraph 5, S.O. No. 248, Headquarters Second Corps Area, 22 October 1932. The original annexes were approved by the Secretary of War in the 15th Indorsement, AG 660.2 (9-4-34)(Misc.) E, dated 27 August 1937.

b. The original Annexes to Harbor Defense Projects, Harbor Defenses of Southern New York were prepared by a Board of Officers appointed by paragraph 5, S.O. No. 248, Headquarters Second Corps Area, 22 October 1932. The original Annexes were approved by the Secretary of War in the 15th Indorsement, AG 660.2 (7-3-34) (Misc.) E, dated 23 June 1937.

c. The original Annexes to Harbor Defense Projects, Harbor Defenses of Eastern New York were prepared by a Board of Officers appointed by paragraph 5, S.O. No. 248, Headquarters Second Corps Area, 22 October 1932. The original Annexes were approved by the Secretary of War in the 4th Indorsement, AG 660.2 (1-12-37)(Misc.) E, dated 28 July 1937.

IV

SECRET



SECRET

3. a. The abolition of the former Harbor Defenses of Sandy Hook, the former Harbor Defenses of Southern New York, and the former Harbor Defenses of Eastern New York and the activation of the Harbor Defenses of New York, constituted by the armament of these three former harbor defenses, was accomplished by General Orders No. 5, Headquarters New York-Philadelphia Sector, 4 May 1942, pursuant to the authority contained in 2nd Ind., War Department, AG 660.2 (4-7-42)MC-E, dated 27 April 1942, on letter Mod. File x 000, Headquarters New York-Philadelphia Sector, subject "Modernization of Harbor Defense Projects, Continental United States", dated 7 April 1942.

b. This revision of Annexes to Harbor Defense Project, Harbor Defenses of New York, was directed in letter CA 660.2-992 Headquarters Eastern Defense Command and First Army, subject "Preparation of Supplement to Harbor Defense Basic Projects", dated 10 July 1943, modified verbally to permit the exclusion from the supplement of all references to elements of the harbor defenses to be abandoned upon the completion of the modernization program. This supplement was approved by paragraph 2, secret letter, Headquarters, Army Service Forces, file SPOPS 660, subject: "Supplement to Harbor Defense Project, Harbor Defenses of New York", dated 3 August 1944.

v

SECRET

Authority MND 760162
By WDR MAAA Date 2/15/60

SECRET

ANNEX A

ARMAMENT

INDEX

SECTION I - GENERAL

- Paragraph 1 - References to Basic Project
- 2 - Purpose of Supplement
- 3 - Mission of Harbor Defenses
- 4 - Tactical Organization

SECTION II - SEACOAST ARTILLERY

- Paragraph 5 - Armament
- 6 - War Reserve and Battle Allowances of Ammunition

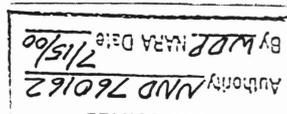
SECTION III - MISCELLANEOUS

- Paragraph 7 - Defense Against Motor Torpedo Boats
- 8 - Protective Concealment
- 9 - Government-Owned or Leased Reservations
- 10 - Land Acquisition

EXHIBITS

- 1-A-1 - Harbor Defense Elements; Location 1 to Location 6
- 1-A-2 - Harbor Defense Elements; Location 7 to Location 8
- 1-A-3 - Harbor Defense Elements; Location 9 to Location 12
- 1-A-4 - Harbor Defense Elements; Location 13 to Location 21
- 2-A - Fields of Fire of all Major Caliber Guns
- 3-A - Fields of Fire of all Medium Caliber Guns
- 4-A - Fields of Fire of Anti-Motor Torpedo Boat Batteries
- 5-A - Basic Tactical Organization, Harbor Defenses of New York

SECRET



ANNEX A

SECTION I - GENERAL

1. REFERENCES TO BASIC PROJECT.

These Annexes pertain to Harbor Defense Projects for Harbor Defenses included in the New York-Harragansett Bay Area, Parts I-V (Short Title: CGA-P-HYMB). As modified by the correspondence listed under "Authorities" Page IV, Paragraph 1.

2. PURPOSE OF SUPPLEMENT.

This supplement amplifies the Basic Project and are intended to furnish a concise record of the status both of existing harbor defense fortification construction and equipment, and of similar items which have been approved by the Secretary of War for future accomplishment. One of the principal purposes is to provide the basis for advanced procurements of funds and materials necessary to complete approved items. A second important purpose is to make available, to those concerned, information of a technical and tactical nature which is not otherwise available in usable form.

3. MISSION OF HARBOR DEFENSES.

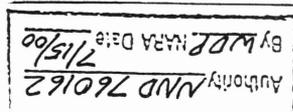
The mission of the harbor defenses is:

- a. To insure to our Navy and friendly shipping the use of New York Bay and harbor secure from naval gunfire and to prevent bombardment of harbor facilities of New York Harbor.
- b. To cover the debouchment of our naval vessels from New York Harbor.
- c. To deny entrance to Ambrose Channel or Lower New York Bay by enemy vessels.
- d. To support the defense against landing attack within range of the armament.
- e. To meet the attack of submarine or other small vessels which might succeed in getting past the Harbor Defenses of Long Island Sound.

4. TACTICAL ORGANIZATION.

a. The basic tactical organization of the harbor defenses is based on:

- (1) The defense of the seaward approaches to the harbor entrance by long and medium range artillery sited on the seacoast and organized into two battalions responsible directly to the harbor defense commander.
- (2) The defense of the lower bay and its immediate approaches by secondary armament and submarine mines organized into a group.
- (3) The defense of the eastern approach to the harbor by secondary armament organized into a battalion responsible directly to the harbor defense commander
- (4) The antiaircraft defense of the harbor defense elements by antiaircraft artillery under a single commander responsible directly to the harbor defense commander.



b. COOPERATIVE ARRANGEMENTS WITH THE NAVY AND AIR CORPS.

- (1) Navy. Joint Army and Navy action to deny hostile action in the defensive coastal area is achieved by the operation of:
 - (a) Harbor Entrance Control Post, Fort Wadsworth, New York.
 - (b) Advanced Harbor Entrance Control Post No. 1, Fort Hancock, New Jersey.
 - (c) Advanced Harbor Entrance Control Post No. 2, Fort Tilden, New York.
- (2) Air Corps. Joint action with the Air Force is achieved through the Headquarters Northeastern Sector.

c. LIST OF ARMAMENT IN ORDER OF TACTICAL IMPORTANCE.

Order of Importance Name of Battery Tactical No. No. & Cal. of Guns

1	Lewis	2	2-16" BC
2	Harris	23	2-16" BC
3	Kingman	4	2-12" BC
4	Mills	3	2-12" BC
5	Const. No. 219	1	2-6" BC
6	Const. No. 220	24	2-6" BC
7	Peck	5	2-6" BC
8	Kessler	22	2-6" BC
9	Const. No. 218	13	2-6" BC
10	Mines	10	11 gp.
11	Mines	25	13 gp.
12	Livingston	17	2-6" BC
13	Mines	15	5 gp.
14		7	4-90 mm
15		21	4-90 mm
16		8	4-90 mm
17		19	4-90 mm
18		11	4-90 mm
19		12	2-90 mm
20	Morris	9	4-3" BC

SECRET

Order of Importance Name of Battery Tactical No. No. & Cal. of Guns

21	Urnston	6	2-3" BC
22		20	2-3" BC
23		18	4-3" BC
24	Turnbull	14	4-3" BC
25	Griffin	16	2-3" BC
26	Burns	27	2-3" BC
27	Baker	26	2-3" BC

d. Supporting 37MM automatic AMTB weapons.

<u>Battery Tactical #</u>	<u>Number of Weapons</u>
7	2
8	2
11	2
12	2
19	2
21	2

SECRET

DECLASSIFIED
Authority MND 760162
By WDR/NARA Date 7/15/00

ANNEX A

SECTION II - SEACOAST ARTILLERY

5. ARMAMENT.

a. Seacoast Armament.

<u>Btry. No.</u>	<u>Name</u>	<u>No. Guns (Groups)</u>	<u>Cal. & Model</u>	<u>Model of Mount</u>	<u>Range (yds) Max. Elev.</u>	<u>Location</u>	<u>Existing or Projected</u>	<u>Enplaced</u>	<u>Status on Completion of Modern.</u>	<u>Exhibit</u>
1	Const. #219	2	6"-1903A2	M 1	27,500	Navesink (7)	Existing	Yes	To be retained	2-B-1
2	Lewis	2	16"-MK2M1	M-4	44,000	Navesink (7)	Existing ^{MC}	Yes	To be retained	2-B-2
3	Mills	2	12"-1895	M1917	29,300	Hancock (8)	Existing	Yes	To be retained	2-B-3
4	Kingman	2	12"-1895	M1917	29,300	Hancock (8)	Existing	Yes	To be retained	2-B-4
5	Peck	2	6"-M1900	M1900	17,000	Hancock (8)	Existing	Yes	To be retained	2-B-5
6	Urmston	2	3"-1903	M1903	11,000	Hancock (8)	Existing	Yes	To be retained	2-B-6
7	-	4	90 mm M1	2 fixed 2 mobile	8,000 #	Hancock (8)	Existing	Yes	To be retained	2-B-7
8	-	4	90 mm M1	2 fixed 2 mobile	8,000 #	Hancock (8)	Existing	Yes	To be retained	2-B-8
9	Morris	4	3"-M1903	M1903	11,000	Hancock (8)	Existing	Yes	To be retained	2-B-9

- 4 -

SECRET

SECRET

 UNCLASSIFIED
 Authority: AND 760162
 By: WDP, NARA Date 7/15/00

<u>Btry. No.</u>	<u>Name</u>	<u>No. Guns (Groups)</u>	<u>Cal. & Model</u>	<u>Model of Mount</u>	<u>Range (yds) Max. Elev.</u>	<u>Location</u>	<u>Existing or Projected</u>	<u>Emplaced</u>	<u>Status on Completion of Modern.</u>	<u>Exhibit</u>
10	Mine	11 gp				Hancock (8)	Existing	Yes	To be retained	2-B-10
11	-	4	90 mm M1	2 fixed 2 mobile	8,000 #	Miller Field (9)	Existing	Yes	To be retained	2-B-11
12	-	2	90 mm M1	2 fixed	8,000 #	Swinburne Island (9A)	Existing	Yes	To be retained	2-B-12
13	Const #218	2	6"-1903A2	M 1	27,500	Wadsworth (10)	UC	No	To be retained	2-B-13
14	Turnbull	4	3"-M1903	M1903	11,000	Wadsworth (10)	Existing	Yes	To be retained	2-B-14
15	Mine	5 gp				Wadsworth (10)	Existing	Yes	To be retained	2-B-15
16	Griffin	2	3"-M1903	M1903	11,000	Hamilton (11)	Existing	Yes	To be retained	2-B-16
17	Livingston	2	6"-M1900	M1900	17,000	Hamilton (11)	Existing	Yes	To be retained	2-B-17
18	Catlin	4	3"-M1902	M1902	11,000	Norton (12) Point	Existing	Yes	To be retained	2-B-18
19	-	4	90 mm M1	2 fixed 2 mobile	8,000 #	Norton (12) Point	Existing	Yes	To be retained	2-B-19
20	-	2	3"-M1902	M1902	11,000	Rockaway Point (13)	Existing	Yes	To be retained	2-B-20

- 5 -

SECRET

SECRET

UNCLASSIFIED
Authority NND 760162
By WDP/KARA Date 7/15/00

<u>Btry. No.</u>	<u>Name</u>	<u>No. Guns (Groups)</u>	<u>Cal. & Model</u>	<u>Model of Mount</u>	<u>Range (yds) Max. Elev.</u>	<u>Location</u>	<u>Existing or Projected</u>	<u>Emplaced</u>	<u>Status on Completion of Modern.</u>	<u>Exhibit</u>
21	-	4	90 mm M1	2 fixed 2 mobile	8,000 #	Rockaway Point (13)	Existing	Yes	To be retained	2-B-21
22	Kessler	2	6"-M1900	M1900	17,000	Tilden (14)	Existing	Yes	To be retained	2-B-22
23	Harris	2	16"-M1919	M1919	44,680	Tilden (14)	Existing	Yes	To be retained	2-B-23
24	Const.#220	2	6"-1903A2	M1	27,500	Tilden (14)	UC	No	To be retained	2-B-24
25	Mine *	13 gp				Tilden (14)	Existing	Yes	To be retained	2-B-25
26	Baker	2	3"-M1902	M1902	11,000	Totten (21)	Existing	Yes	To be retained	2-B-26
27	Burns	2	3"-M1902	M1902	11,000	Totten (21)	Existing	Yes	To be retained	2-B-27

LEGEND:

Assumed Maximum Range as AMTB Battery

* Materiel located at Hancock; casemate, plotting room and base end stations at Tilden.

SUPPORTING 37MM AUTOMATIC AMTB WEAPONS

<u>Assigned to Btry Tactical #</u>	<u>No. of Guns</u>	<u>Range, (Yds) Max. Elev.</u>	<u>Location</u>	<u>Exhibit</u>
7	2	2,000	Btry Area	2-B-28
8	2	2,000	Btry Area	2-B-29
11	2	2,000	Btry Area	2-B-30
12	2	2,000	Btry Area	2-B-31
19	2	2,000	Btry Area	2-B-32
21	2	2,000	Btry Area	2-B-33

UNCLASSIFIED
Authority: NND 760162
By: WLP/MARA Date: 7/15/00

SECRET

5. b. Remarks pertaining to individual Batteries.

(1) Existing Armament.

Tactical No.	Name or Const. No.	Emplacement	E.C. Station	Armament	Power Plant	F.C. Equipment	Signal Cable and Equipment	Fire Control Towers
1	Const 219	C	C	C	C	C	C	C
2	Lewis	C	C	C	C	C	C	C
3	Mills	C	C	C	C	C	C	C
4	Kingman	C	C	C	C	C	C	C
5	Peck	C	C	C	C	C	C	C
6	Urmoston	C	C	C	N	C	C	N
7	None (90mm)	C	C	C	C	C	C	N
8	None (90mm)	C	C	C	C	C	C	N
9	Morris	C	C	C	N	C	C	N
10	Mines	Complete						
11	None (90mm)	C	C	C	C	C	C	N
12	None (90mm)	C	C	C	C	C	C	N
13	Const 218	C	C	B	C	C	C	C
14	Turnbull	C	C	C	N	C	C	N
15	Mines	Complete						
16	Griffin	C	C	C	N	C	C	N
17	Livingston	C	C	C	C	C	C	C
18	Catlin	C	C	C	N	C	C	N
19	None (90mm)	C	C	C	C	C	C	N
20	None (3")	C	C	C	N	C	C	N
21	None (90mm)	C	C	C	C	C	C	N
22	Kessler	C	C	C	C	C	C	C
23	Harris	C	C	C	C	C	C	C
24	Const 220	C	C	B	C	C	C	C
25	Mines	Complete						
26	Baker	C	C	C	N	C	C	N
27	Burns	C	C	C	N	C	C	N

C - Complete N - Not authorized B - Installation in progress

SECRET

Authority AND 76012
2/15/00
BY WDR/NARA Date

SECRET

- 5. b. (2) Projected fixed armament. All Projected fixed armament is under construction.
- (3) Mobile armament not emplaced. The only mobile armament not emplaced are two mobile 90 mm mounts authorized for AMTB defense. It being impracticable to install a four-gun AMTB batter at Location No. 9A (Swinburne Island), two fixed mounts only are installed at this battery. Under authority of the Commanding General, Eastern Defense Command and First Army, the two mobile mounts are retained in the harbor defenses as a reserve to replace similar guns withdrawn from service for maintenance occasioned by abnormal conditions.

c. The following table indicates the existing emplacements and major items of materiel pertaining to batteries which are "no longer required", "have been abandoned", or are to be abandoned upon completion of the modernization program.

Battery Name	No. of Guns	Cal. and Model of Guns	Model of Mount	Location by Fort	Remarks
Richardson	2	12"-M1895M1	M1901	DC Hancock	Note 5
Bloomfield	2	12"-M1888	M1896	DC Hancock	Note 5
Alexander	2	12"-M1888M1	M1896	DC Hancock	Note 2
Halleck	2	10"-M1888	M1896	DC Hancock	Note 2
Granger	2	10"-M1888	M1896	DC Hancock	Note 3
Gunnison	2	6"-M1903	M1903	DC Hancock	Note 4
Fergusson	2	6"-M1900	M1900	Tilden	Note 1
Gilmore	4	10"-M1895 M1888	M1896	DC Hamilton	Note 2
Upton	2	10"-M1888	M1896	DC Wadsworth	Note 2
Richmond	2	12"-M1888MII	M1896	DC Wadsworth	Note 2
Hudson	2	12"-M1888MII	M1896	DC Wadsworth	Note 2
Ayers	2	12"-M1888MII	M1897	Wadsworth	Note 2
Dix	2	12"-M1900	M1901	Wadsworth	Note 5
Mills	1	6"-M1897	M1898	Wadsworth	Note 5
Johnston	2	6"-1897M1	M1898	Hamilton	Note 5
Brown	2	12"-M1888MII	M1897	Hamilton	Note 5
Doubleday	2	12"-M1888M1	M1897	Hamilton	Note 5

Note 1.

Letter AG 660.2((-12-40)M-WPD-M, TAGO, dated 27 September 1940, subject "Modernization of Harbor Defense Projects, Continental United States", authorizes abandonment of this battery upon completion of modernization pro-

SECRET

Authority AND 760162
2/15/00
By WDR/KRA Date

SECRET

gram. Magazines and emplacements currently in use as part of the battery.

Note 2.

Letter CA-662, Hq, EDC & FA, dated 12 November 1942, subject "Salvage of Fixed Batteries in United States Harbor Defenses", authorized the salvaging of this battery. Guns and mounts have been removed and disposed of in accordance with directive contained in letter cited above. Magazines and emplacements are existing.

Note 3.

1st Ind. AG 400.7(1-19-43) OB-S-3PDDO, TAGO, to letter CA 440.93, Hq. EDC & FA, dated 19 January 1943, subject "Salvage of Fixed Batteries", authorized salvaging of this battery. Guns and mounts have been removed and disposed of in accordance with directive contained in letter cited above. Magazines and emplacements are existing.

Note 4.

Letter cited in Note 1, above, authorized abandonment of this battery upon completion of the modernization program. Pursuant to authority contained in letter AG 660.2 (2-18-43) OB-S-E, TAGO, dated 22 February 1943, subject "Relocation of Battery Peck (Modernization of Harbor Defense Project, Harbor Defenses of New York)", the guns and mounts of Battery Peck were relocated in the emplacements of Battery Gunnison. The magazines and emplacements of the old Battery Peck position have been modified and are in use by Battery No. 8.

Note 5.

2d Ind. SPRES 660.2 (23 Oct 43), Hq, ASF, Washington, D.C., to letter ENGR 660.2/95 x Mod. File, Hq. NY-Philadelphia Sector, Ft. Hamilton, N.Y., dated 23 October 1943, subject: "Salvage of Fixed Batteries in the Harbor Defenses of New York", authorizes salvage of this battery. Guns and mounts have been removed and disposed of in accordance with letter cited above. Magazines and emplacements are existing.

6. WAR RESERVE AND BATTLE ALLOWANCES OF AMMUNITION.

The following authorities are cited:

a. For 3" BC, 6" BC, 12" BC and 16" BC:

Letter, War Department, AGO 471 (28 January 44) OB-S-D, 11 February 1944, Subject, "War Reserve Ammunition Seacoast Artillery".

b. (1) In view of the fact that ammunition allowances for 90mm and 37mm AMTB weapons are revised and published at frequent intervals in current War Department directives, (Letter, AGO, AG 471 (9 June 44) OB-S-DM, 10 June 1944, subject, "Day of Supply for Ammunition"), detailed entries of the amounts of various types of ammunition for these particular weapons are omitted.

(2) Current authority governing the above mentioned allowances is contained in letter, ORD 471/711, Hq. EDC, dated 10 August 1944, subject, "Combat Levels of Ammunition for Ground Units of the Eastern Defense Command in the Continental United States".

- 9 -

SECRET

By WDR
7/15/60
Authority AND 76162

SECRET

<u>BTRY NO.</u>	<u>CAL. OF GUNS</u>	<u>NO. OF GUNS</u>	<u>WEIGHT & TYPE OF PROJECTILE</u>	<u>W/R ROUNDS</u>	<u>STORED AT BATTERY</u>	<u>CENTRAL STORAGE</u>
1	6"	2	105 lb AP 90 lb HE	400 300	300 200	100 100
2	16"	2	2240 lb AP	300	200	100
3	12"	2	975 lb AP 700 lb HE	450 50	300 50	150
4	12"	2	975 lb AP 700 lb HE	450 50	300 50	150
5	6"	2	108 lb AP 90 lb HE	900 300	600 200	300 100
6	3"	2	15 lb HE	600	400	200
7	90MM (Fixed)	2	See Par. b, above			
	90MM (Mobile)	2				
8	90MM (Fixed)	2	See par. b, above			
	90MM (Mobile)	2				
9	3"	4	15 lb HE	1200	800	400
10	Mines	11 gp	3000 lb TNT 128,700 lbs Stored in Igloo Magazines, #s 3, 4, & 9, Ft Hancock.			
11	90MM (Fixed)	2	See Par. b, above			
	90MM (Mobile)	2				
12	90MM (Fixed)	2	See Par. b, above			
13	6"	2	105 lb AP 90 lb HE	400 300	300 200	100 100
14	3"	4	15 lb HE	1200	*200	400
15	Mines	5 gp	3000 lb TNT 58,500 lb Stored in Igloo Magazines, #s 3, 4, & 9, Ft Hancock.			
16	3"	2	15 lb HE	600	400	200
17	6"	2	108 lb AP 90 lb HE	900 300	600 200	300 100
18	3"	4	15 lb HE	1200	800	400
19	90MM (Fixed)	2	See Par. b, above			
	90MM (Mobile)	2				

SECRET

AUTHORITY AND 76162
 BY WDR Date 7/15/60

SECRET

BTRY NO.	CAL. OF GUNS	NO. OF GUNS	WEIGHT & TYPE OF PROJECTILE	W/R ROUNDS	STORED AT BATTERY	CENTRAL STORAGE
20	3"	2	15 lb HE	600	400	200
21	90MM (Fixed)	2	See Par. b, above			
	90MM (Mobile)	2				
22	6"	2	108 lb AP 90 lb HE	900 300	600 2000	300 100
23	16"	2	2100 lb AP	300	200	100
24	6"	2	105 lb AP 90 lb HE	900 -300	600 200	300 100
25	Mines	13 gp	3000 lb TNT	152,100lb	Stored in Igloo Magazines, #s 3, 4, & 9, Ft Hancock	
26	3"	2	15 lb HE	600	400	200
27	3"	2	15 lb HE	600	400	200

* 600 Rounds stored in Hudson #2 magazines.

Under Column headed "War Reserve" figure quoted represents 30% Authorized Reserve Supply of TNT for Ground Mines.

6. c. There are no unusual instructions pertaining to shipment or storage of ammunition.

d. The current storage regulations of TM 9-1900 are being complied with in all cases except the following:

Battery Tactical #16	Battery Griffin, Fort Hamilton	Magazines located within 250' of a public highway.
Battery Tactical #17	Battery Livingston, Fort Hamilton	Magazines are located within 475' of a public highway.
Battery Tactical #18	Norton Point, Seagate, N.Y.	Magazines are located within 100' of inhabited buildings and public highway. See paragraph 116 b(1) TM 9-1900.
Battery Tactical #19	Norton Point, Seagate, N.Y.	Magazines are located within 100' of inhabited buildings and public highway. See paragraph 116 b(1) TM 9-1900.

e. Correspondence has been initiated to obtain authority to depart from the provisions of TM 9-1900.

SECRET

By WDR/NARA Date: 7/15/00
 Authority: NND 760162

SECRET

ANNEX A

Section III - Miscellaneous

7. DEFENSE AGAINST MOTOR TORPEDO BOATS.

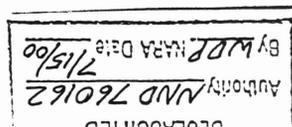
a. Following are the citations of authority for the construction of batteries and the allocation of armament especially for this purpose.

- (1) Batteries numbered 7, 8, 11, 12, 19 and 21, were allocated in letter AG 452.5 (10-16-42)OB-S-SPDDO-M, The Adjutant General's Office, subject "Distribution of Anti-Motor Torpedo Boat Weapons", dated 7 October 1942. They were installed pursuant to 1st Ind. CA-381, Hq. EDC & FA, dated 20 November 1942, on Letter PPO 381/128 Gen., Hq. NY-Phila. Sector, subject "Defense of Harbors Against Motor Torpedo Boats", dated 7 November 1942.
- (2) Battery No. 20 (2 guns ex-Battery Catlin) was emplaced at Location No. 13 pursuant to authority contained in letter AG 660.2(2-12-42)MSC-E, TAGO, dated 21 February 1942, subject "Defense of Harbors Against Motor Torpedo Boats".
- (3) Batteries Nos. 6, 14 and 18, were relocated to their present sites pursuant to the authority contained in letter CA 660.2, Headquarters Eastern Defense Command and First Army, subject "Defense of Harbors Against Motor Torpedo Boats", dated 9 April 1942.

b. The following tabulation shows the armament to be employed in defense against motor torpedo boats:

<u>BTRY. NO.</u>	<u>NUMBER OF GUNS</u>	<u>CAL. OF GUNS</u>	<u>TYPE OF MOUNT</u>	<u>EMPLACED</u>	<u>LOCATION NUMBER OF SITE</u>	<u>EXHIBIT NUMBER</u>
6	2	3"	BC	Yes	8	4-A
7	2	90 mm	Fixed	Yes	8	4-A
	2	90 mm	Mobile	Yes	8	4-A
8	2	90 mm	Fixed	Yes	8	4-A
	2	90 mm	Mobile	Yes	8	4-A
9	4	3"	BC	Yes	8	4-A
11	2	90 mm	Fixed	Yes	9	4-A
	2	90 mm	Mobile	Yes	9	4-A
12	2	90 mm	Fixed	Yes	9A	4-A
14	4	3"	BC	Yes	10	4-A
16	2	3"	BC	Yes	11	4-A
18	4	3"	BC	Yes	12	4-A

SECRET



SECRET

<u>BTRY. NO.</u>	<u>NUMBER OF GUNS</u>	<u>CAL. OF GUNS</u>	<u>TYPE OF MOUNT</u>	<u>EMPLACED</u>	<u>LOCATION NUMBER OF SITE</u>	<u>EXHIBIT NUMBER</u>
19	2	90 mm	Fixed	Yes	12	4-A
	2	90 mm	Mobile	Yes	12	4-A
20	2	3"	BC	Yes	13	4-A
21	2	90 mm	Fixed	Yes	13	4-A
	2	90 mm	Mobile	Yes	13	4-A
26	3	3"	BC	Yes	21	4-A
27	2	3"	BC	Yes	21	4-A

8. PROTECTIVE CONCEALMENT.

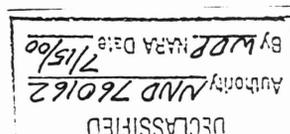
a. The camouflage and concealment program as projected by the Chief of Engineers in letter, file C. of E. 618,33 (Second Corps Area), W.D. Office of the Chief of Engineers, dated 8 January 1942, subject "Camouflage and Concealment", together with indorsements and inclosures thereto, is being accomplished in the Harbor Defenses. Full use of planting, painting and camouflage nets has been made. Protective concealment of project batteries under construction has been provided for in construction costs and will in effect consist of planting all scarred earth areas, toning down of exposed concrete surfaces and the use of camouflage nets where necessary. For existing batteries included in the modernization program and to be retained upon completion of the program, use has been made of camouflage nets, pattern painting and planting of shrubs and trees around emplacement areas. Essentially the same program has been followed for existing batteries which are scheduled to be abandoned upon completion of the modernization program.

9. GOVERNMENT OWNED OR LEASED RESERVATIONS.

The following tabulation shows the tracts of government owned and leased land pertaining to the Harbor Defenses:

<u>LOC. NO.</u>	<u>GEOGRAPHIC LOCATION</u>	<u>ACREAGE</u>	<u>DATE OF PROC.</u>	<u>AUTHORITY</u>	<u>PURPOSE</u>	<u>EXHIBIT</u>
1	Seagirt, N.J.	U.S. Govt. Res. Camp	Military Edison, N.J.		F.C. Tower	8-B-1
2	Shark River, New Jersey.	.45	3/3/43	Exp Prog FY-1943	F.C. Tower	8-B-2
3	Elberon, N.J.	.17	*	Exp Prog FY-1943	F.C. Tower	8-B-3
3	Elberon, N.J.	.06	6/25/30	#Elberon Mil. Res.	SCR-296	8-B-3
3	Elberon, N.J.	14000 sq. ft.	1/3/42	#	Housing	8-B-3
4	North Long Branch, N.J.	5000 sq. ft.	*	Exp Prog FY 1943	F.C. Tower SCR-296	8-B-4
5	Monmouth Beach, New Jersey.	2500 sq. ft.	1/11/43	Exp Prog FY 1943	SCR-296	8-B-5

SECRET



SECRET

LOC. NO.	GEOGRAPHIC LOCATION	ACREAGE	DATE OF PROC.	AUTHORITY	PURPOSE	EXHIBIT
6	Seabright, New Jersey.	.25	1/2/42	Exp Prog FY 1942	S.C. SLT	8-B-6
6	Seabright, New Jersey.	.5	6/30/42	Exp Prog FY 1942	S.C. SLT	8-B-6
6	Seabright, New Jersey.	2.4	3/1/42	Exp Prog FY 1942	AA SLT Position	8-B-6
7	Navesink, New Jersey.	225.12	*	Unknown	Btry Site F.C. Stations SCR-296	8-B-7
7	Navesink, New Jersey.	4500 sq. ft.	*	Unknown	F.C. Station SCR-582	8-B-7
8	Fort Hancock, New Jersey.	1676	1806	U.S. Military Reservation		8-B-8
9	Miller Field, New York.	213.65	1919	U.S. Military Reservation	Btry Site S.C. SLTS F.C. Tower SCR-296	8-B-9
9A	Swinburne Island	.561	7/6/43	Note 1	Btry Site	8-B-9A
9B	Hoffman Island			Note 1	S.C. SLT	8-B-9B
10	Ft. Wadsworth	226	1847	U.S. Military Reservation		8-B-10
11	Ft. Hamilton	189.68	1814	U.S. Military Reservation		8-B-11
12	Norton Point, New York.	3.2	7/28/43	Unknown	Btry Site	8-B-12
12	Norton Point, New York.	.261	7/28/43	Unknown	Housing	8-B-12
12	Norton Point, New York.	5000 sq. ft.	#	Exp Prog FY 1943	F.C. Tower SCR-296	8-B-12
12	Norton Point, New York.	20000 sq. ft.	5/7/42	Unknown	Housing	8-B-12
12	Norton Point, New York.	120000 sq. ft.	5/18/42	Unknown	Btry Site	8-B-12
13	Rockaway Pt., New York.	.03	*	Dir. EDC 910 NY-137	S.C. SLT	8-B-13
13	Rockaway Pt., New York.	66.41	6/26/43	Unknown	Btry Site S.C. SLTS F.C. Tower	8-B-13
13	Rockaway Pt., New York.	$\frac{1}{4}$ acre \pm	#	Unknown	F.C. Tower	8-B-13
14	Fort Tilden	309.9	1917	U.S. Military Reservation		8-B-14
15	Seaside, N.Y.	5000 sq. ft.	1942	Exp Prog FY 1942	F.C. Tower SCR-296	8-B-15

SECRET

AUTHORITY AND DATE
 7/15/00
 BY WDR/NARA DTS
 DECLASSIFIED

SECRET

LOC. NO.	GEOGRAPHIC LOCATION	ACREAGE	DATE OF PROC.	AUTHORITY	PURPOSE	EXHIBIT
16	Arverne, N.Y.	.21 ⁺	1/8/43	Exp Prog FY 1942	SCR-296	8-B-16
17	Atlantic Beach, N.Y.	.57 ⁺	6/1/42	Exp Prog FY 1943	F.C. Tower S.C. SLTS	8-B-17
18	Long Beach, New York.	2500 sq. ft.	5/8/42	Exp Prog FY 1943	F.C. Tower	8-B-18
18	Long Beach, New York.	.115 ⁺	5/27/29	45 Stat. 1301,1305	SCR-296	8-B-18
19	Short Beach, New York.	U.S. Coast Guard Reservation			F.C. Tower	8-B-19
20	Zachs Bay, New York.	.058	6/19/40	#	F.C. Tower	8-B-20
21	Ft. Totten, New York.	136.35	1857	U. S. Military Reservation		8-B-21

* Negotiations and/or payments not completed.

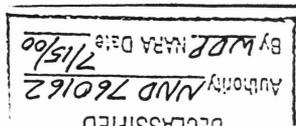
Unknown

Note 1: For Defense of Harbor Against Motor Torpedo Boats.

10. LAND ACQUISITION.

Details as to real estate to be acquired will be found in Annex H.

SECRET



Cable Areas
The cable areas that fall within the limits of this "star scale charts are shown thereon and are not repeated on this chart.

CAUTION

Temporary changes affecting Lights, Buoys and Day Beacons Aids which have been destroyed or removed, but which will be reestablished and are temporarily replaced by aids of different characteristics, are indicated in color by the following abbreviations:

- D Destroyed to be reestablished
 T R B Temporarily replaced by a red buoy
 T B B Temporarily replaced by a black buoy
 T F B Temporarily replaced by a fixed white light buoy
 T F R B Temporarily replaced by a fixed red light buoy
 T F L B Temporarily replaced by a flashing white light buoy
 T F L R B Temporarily replaced by a flashing red light buoy.

ABBREVIATIONS

Lights: F fixed; FL flashing; Qk quick; 1Qk interrupted quick; SL short-light; Occ occulting; Alt alternating; Gp group; W white; R red; G green; M magenta; min minutes; sec seconds; ex every; vis visible; M.S. magnetic; 180° onward; AERO astronomical light; V.B. vertical beam also.

Buoys: C con; 4 min; 3 star; REF reflector; Day beacons; Lights: Range and maximum are white unless otherwise indicated.

- R Bn radiobeacon; R C radio direction finder station

C.G. Coast Guard Station; R.T. radio tower; P.D. position doubtful; C.D. existence doubtful

C. data; Co coral; G gravel; Gs grass; M mud; Rk rock; S sand; Sh shells; M.A. Mack; M.B. M. broken; M.G. M. green; G.G. gray; rd red; wh white; Y yellow; Hk hard; Rk rocky; S.S. soft; S.S. sticky; Obstr obstruction; Wk break; Wk or obstruction; S.S. clear to depth indicated.

HEIGHTS in feet above high water

AUTHORITIES

Surveys to 1941
 Notices by U. S. Engineers to 1943 and other sources

RULES OF THE ROAD for Inland Waters

must be followed for harbor masters of a line from Rockaway Point Coast Guard Station to Ambrose Lightship, thence to Narrows Light.

STORM WARNINGS

The U. S. Weather Bureau displays storm warnings at:
 Fire Island Sandy Hook Red Bank
 Jones Inlet Hoffman Island Long Branch
 Rockaway Pt. New York City Shark River
 Sheepshead Bay Port Newark

TIME BALLS

A time ball is dropped at noon, 75th meridian time, from the Neumans Church Institute, 25 South St. N. Y. City.

CAUTION

reared Channels
 Improvements are shown by broken lines. If the channel, on the date given, is channel, or in a separate note, but no depth is given. Because of possible changes, it must not be inferred that the boat the entire width of the improvement unless so stated, or that it laces across the entire width.

PREPARED BY
 N.Y.-P. SECTOR

EX. NO. 1-A-1

Location 1 - Location 6

HARBOR DEFENSE ELEMENTS

NEW YORK

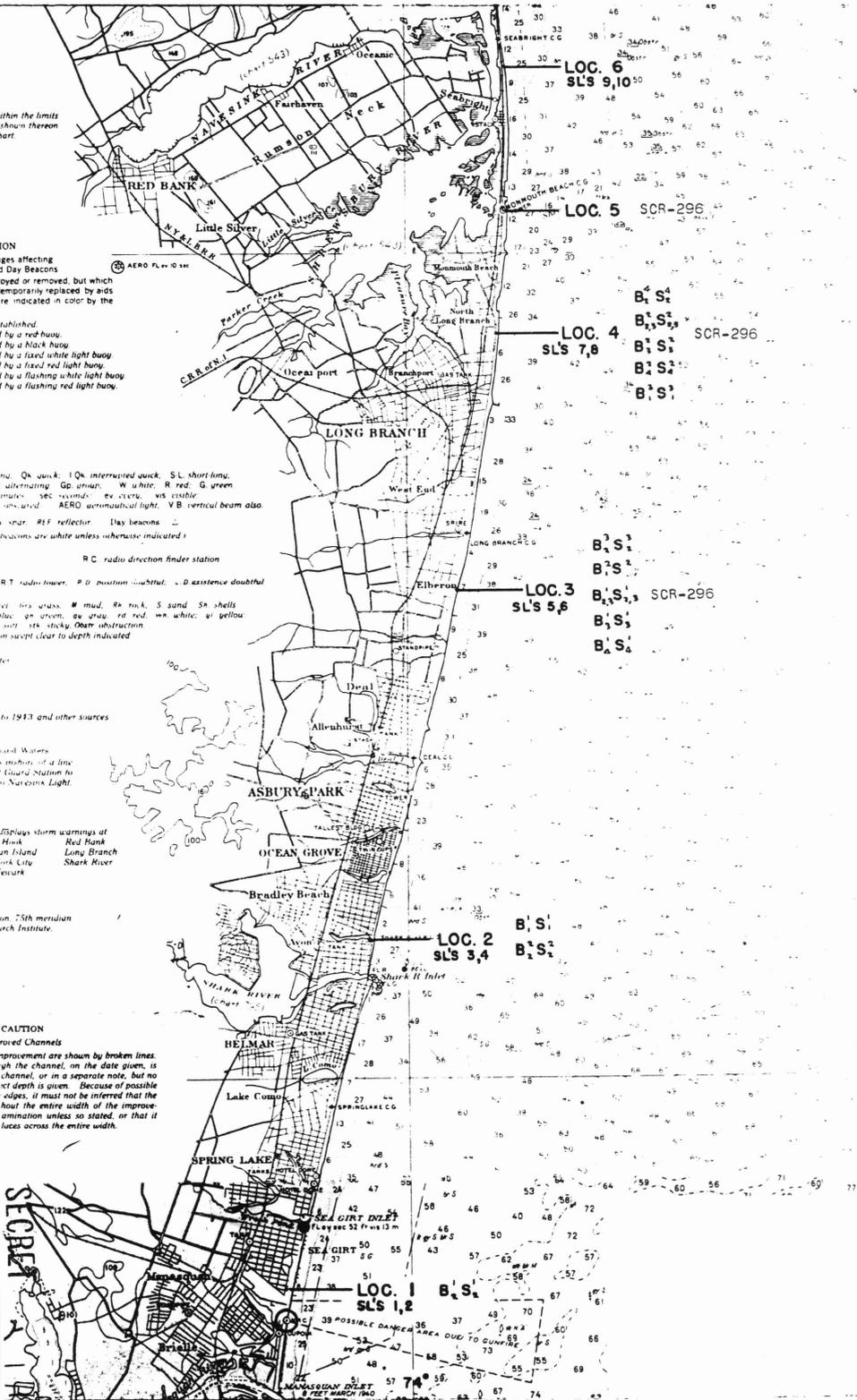
HARBOR DEFENSES OF

REVISED DATE

AUGUST, 1943

SECRET

SECRET



LOC. 6
 SL'S 9,10

LOC. 5
 SCR-296

LOC. 4
 SL'S 7,8

LOC. 3
 SL'S 5,6

LOC. 2
 SL'S 3,4

LOC. 1
 SL'S 1,2

B₁ S₁
 B₂ S₁
 B₁ S₁
 B₁ S₁
 B₁ S₁

B₁ S₁
 B₁ S₁
 B₁ S₁
 B₁ S₁
 B₁ S₁

B₁ S₁
 B₁ S₁

B₁ S₁

MANHATTAN DILET
 8 FEET MARCH 1940



MINE CASEMATE
 F.C. SWED #2
 NET STA #1
 TIDE STA.
 HDGP-OP
 GP-4 CP-OP
 GP-3 CP-OP
 SP-7 CP

BTRY #3, 4, 5, 6, 7, 8, 9, 10
 AA #1
 AA #2
 B.S.
 B.S.
 M.S.
 S.S.
 SCR-602
 ALL SLT'S 11-17
 SP-7 CP

B.S.
 B.S.
 B.S.
 SCR-296

B.S.
 B.S.
 BC
 BC
 B.S.
 B.S.
 B.S.
 BTRY #1-CONST #219
 BTRY #2-LEWIS
 SCR-582
 SCR-296

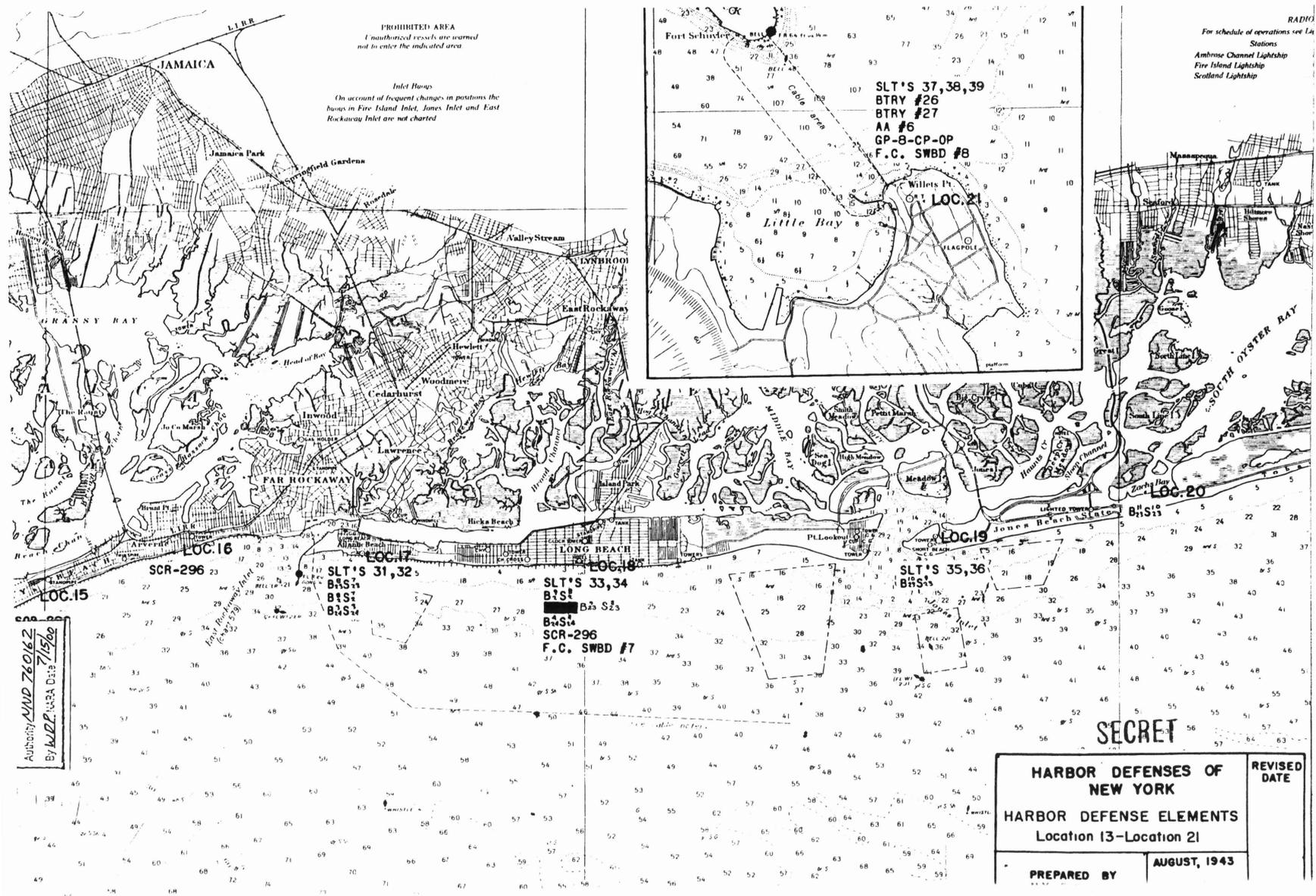
LOC. 8 ON R.F.

LOC. 8A

LOC. 7

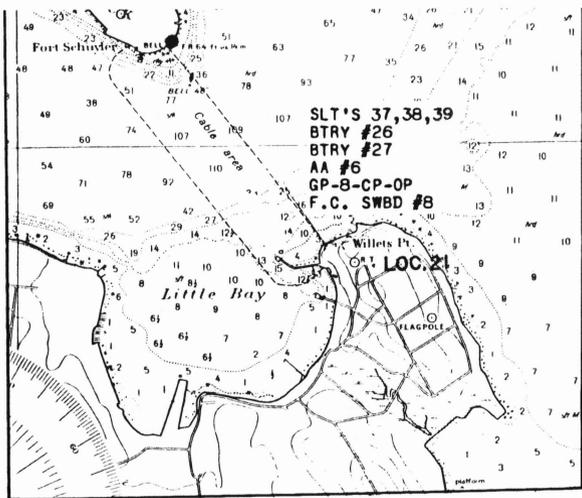
SECRET

HARBOR DEFENSES OF NEW YORK		REVISE DATE
HARBOR DEFENSE ELEMENTS Location 7 - Location 8 - B 8A		
PREPARED BY HARBOR DEFENSES NEW YORK	AUGUST, 1943 EX NO. 1-A-2	



PROHIBITED AREA
 Unauthorized vessels are warned
 not to enter the indicated area

Inlet Buoys
 On account of frequent changes in positions the
 buoys in Fire Island Inlet, Jones Inlet and East
 Rockaway Inlet are not charted

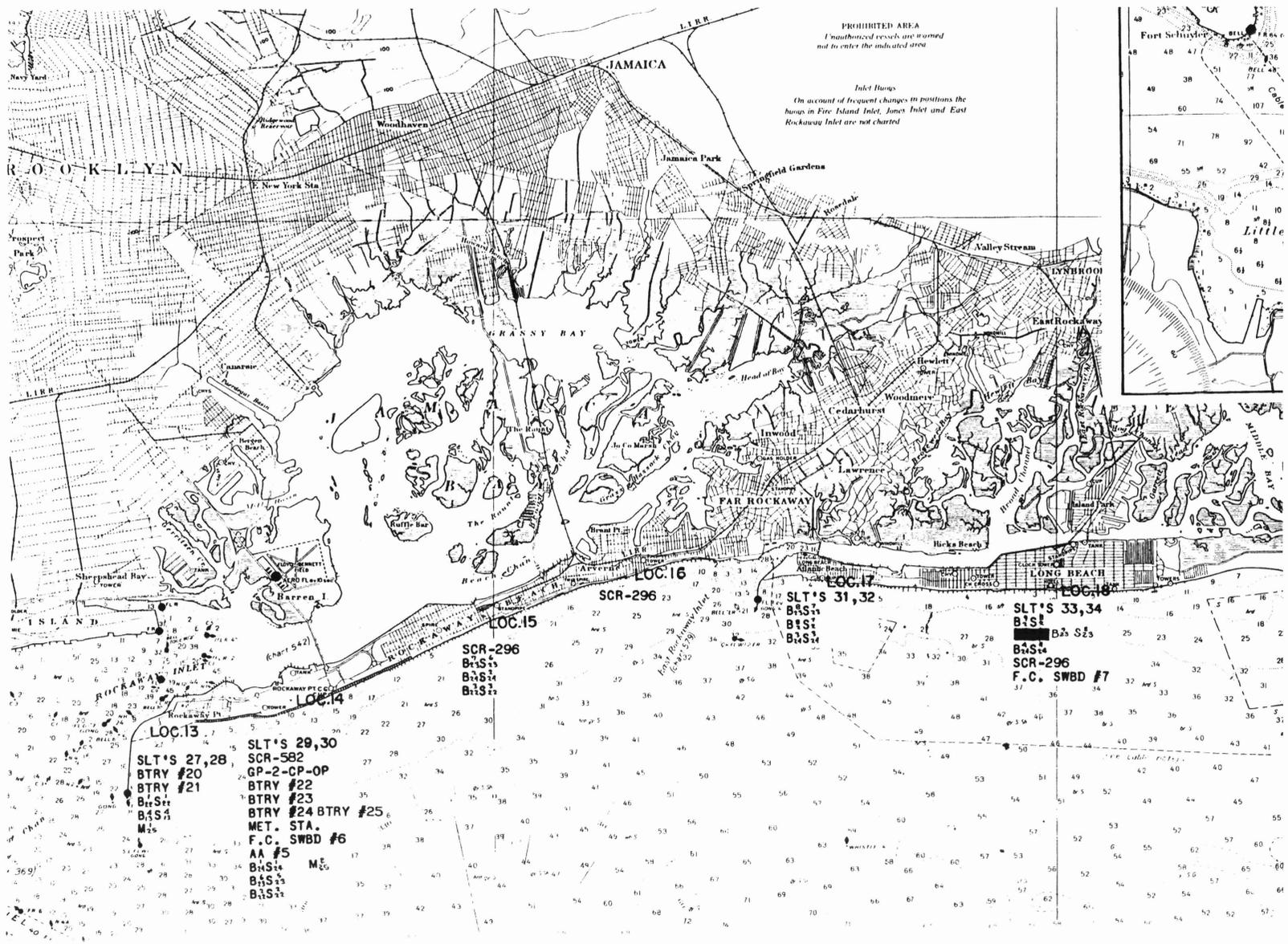


RADIO
 For schedule of operations see La
 Stations
 Ambrose Channel Lightship
 Fire Island Lightship
 Scotland Lightship

Authority MND 760162
 By MDP:USA Date 7/15/40

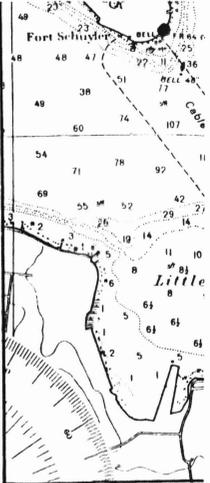
SECRET

HARBOR DEFENSES OF NEW YORK		REVISED DATE
HARBOR DEFENSE ELEMENTS Location 13-Location 21		
PREPARED BY		AUGUST, 1943



PROHIBITED AREA
 Unauthorized vessels are warned
 not to enter the indicated area

Inlet Buoys
 On account of frequent changes in positions the
 buoys in Fire Island Inlet, Jones Inlet and East
 Rockaway Inlet are not charted



LOC.13
 SLT'S 27,28
 BTRY #20
 BTRY #21
 B:SS
 B:SS
 M:SS

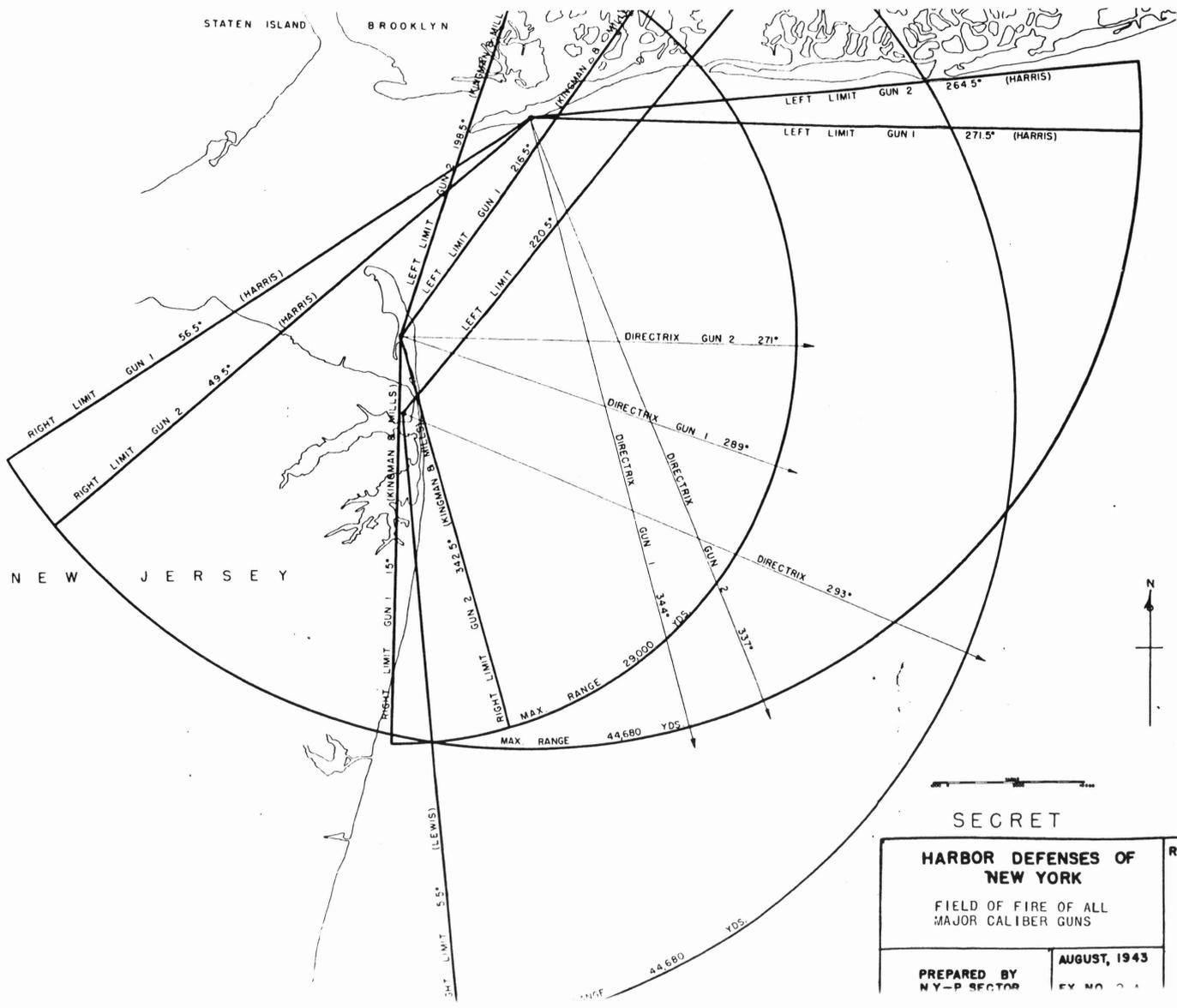
LOC.14
 SLT'S 29,30
 SCR-582
 GP-2-CP-OP
 BTRY #22
 BTRY #23
 BTRY #24 BTRY #25
 MET. STA.
 F.C. SWBD #6
 AA #5
 B:SS
 B:SS
 B:SS

SCR-296
 B:SS
 B:SS
 B:SS

LOC.15
SCR-296
 B:SS
 B:SS
 B:SS

LOC.16
SLT'S 31,32
 B:SS
 B:SS
 B:SS

LOC.17
LOC.18
SLT'S 33,34
 B:SS
 B:SS
 B:SS
 SCR-296
 F.C. SWBD #7



SECRET

**HARBOR DEFENSES OF
NEW YORK**

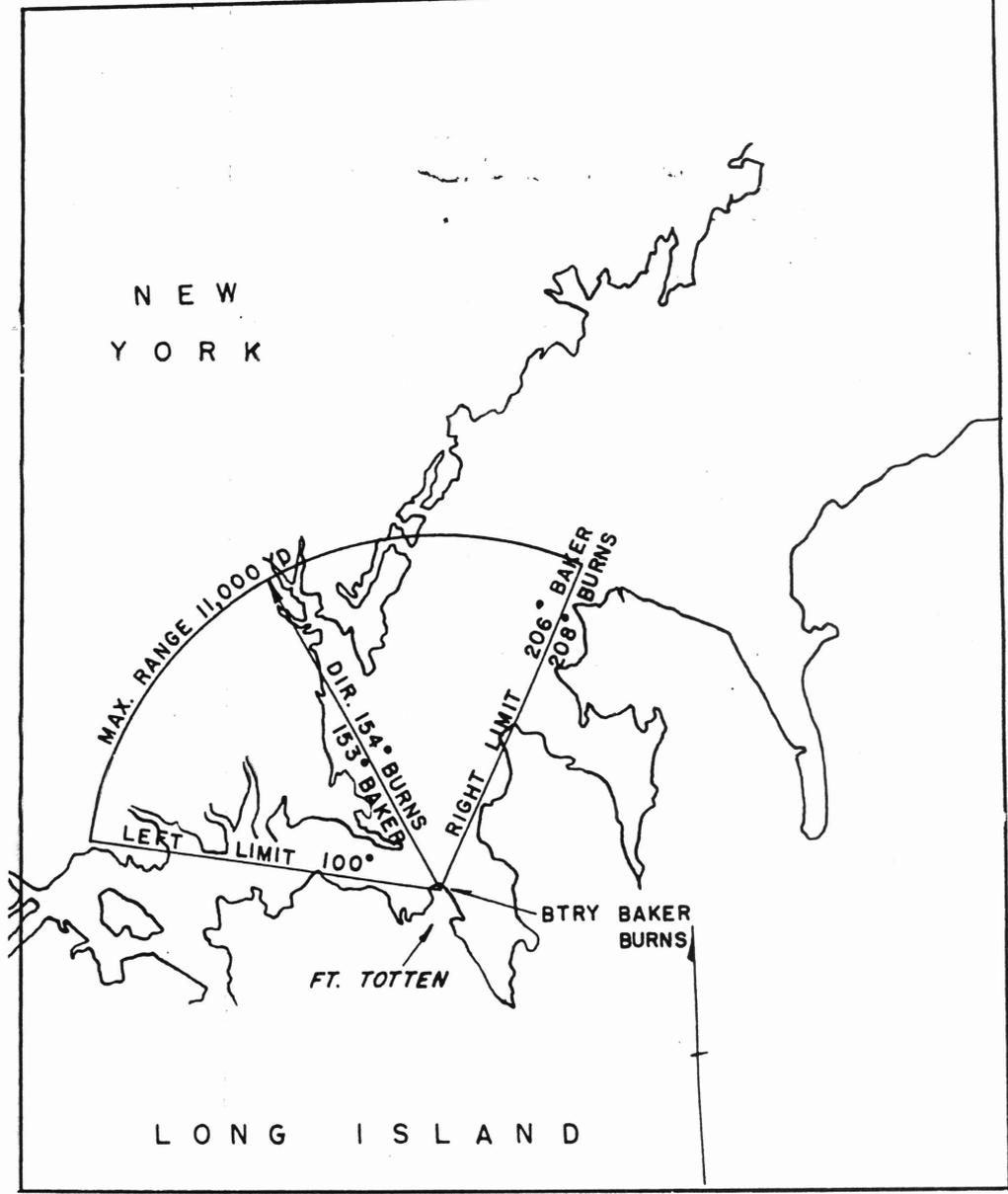
FIELD OF FIRE OF ALL
MAJOR CALIBER GUNS

REVISED
DATE

PREPARED BY
NY-P SECTOR

AUGUST, 1943

EX NO. 2



SECRET

HARBOR DEFENSES OF NEW YORK		REVISE DATE
ANTI TORPEDO BOAT BATTERIES FIELDS OF FIRE		
PREPARED BY NY-P SECTOR	AUGUST, 1943 EX. NO. 4-A	

DECLASSIFIED

Authority UND 76012

By WDP NARA Date 7/15/00

PROCESSED AT THE NATIONAL ARCHIVES

HARBOR DEFENSE

C-1
AMBROSE
CRUISE DIVISION

BN #8
RAPID FIRE
BATTALION

- 26 BAKER 2-3"
- 27 ~~TURNBULL~~ 2-3"

BN #7
AA
BATTALION

- AA 1 SPERMAGETI 3-3"
- AA 2 HANCOCK 3-3"
- AA 3 WADSWORTH 3-3"
- AA 4 HAMILTON 3-3"
- AA 5 TILDEN 3-3"
- AA 6 TOTTEN 3-3"

BN #6
GUN
BATTALION

- 13 CONST 218 2-6"
- 17 LIVINGSTON 2-6"

BN #5
RAPID FIRE
BATTALION

- 11 MILLER FLD 4-90MM
- 12 SWINBURNE 2-90MM
- 14 TURNBULL 4-3"
- 16 GRIFFIN 2-3"
- 18 CATLIN 4-3"
- 19 NORTON 4-90MM
- 20 ROCK. PT 2-3"
- 21 ROCK. PT

BN #4
RAPID FIRE
BATTALION

- 6 URMSTON 2-3"
- 7 HANCOCK 4-90MM
- 8 HANCOCK 4-90MM
- 9 MORRIS 4-3"

BN #3
MINE
BATTALION

- 10 MINE BTRY HANCOCK
- 15 MINE BTRY WADSWORTH
- 25 MINE BTRY TILDEN

BN #2
GUN
BATTALION

- 22 KESSLER 2-6"
- 23 HARRIS 2-16"
- 24 CONST 220 2-6"

BN #1
GUN
BATTALION

- 1 CONST 219 2-6"
- 2 LEWIS 2-16"
- 3 MILLS 2-12"
- 4 KINGMAN 2-12"
- 5 PECK 2-6"

HARBOR DEFENSES OF
NEW YORK

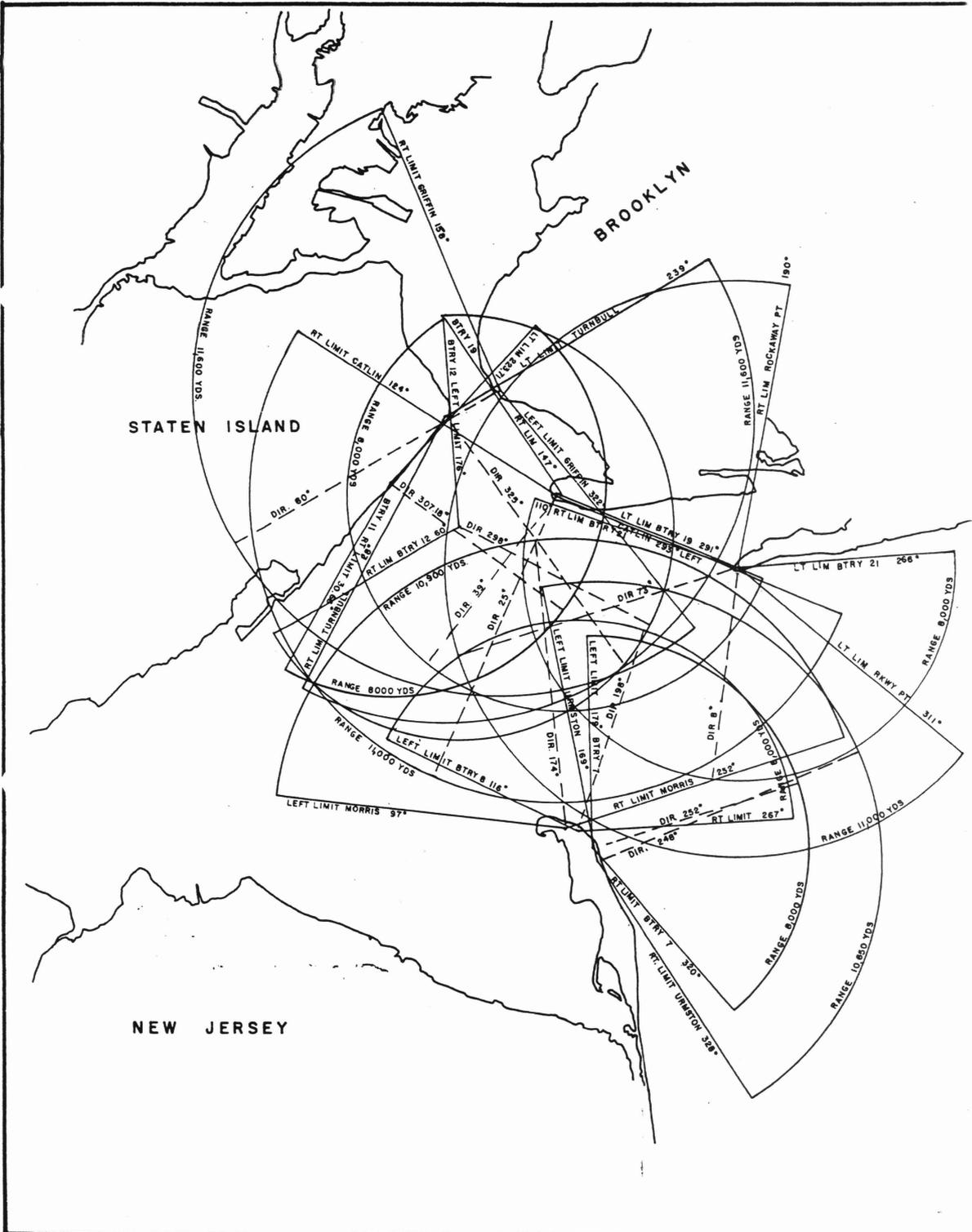
BASIC TACTICAL ORGANIZATION

PREPARED BY
NY-P SECTOR

AUGUST, 1943
EX. NO. 5-A

SECRET

REVISE
DATE



STATE ISLAND

BROOKLYN

NEW JERSEY

RT LIMIT BRUSH 152°

RANGE 11,600 YDS.

RT LIMIT CATLIN 124°

RANGE 8,000 YDS

DIR 80°

BTRY 12

BTRY 12 LEFT

11,300 YD 11

RT LIM 14°

LEFT LIMIT SHEPIN 325°

DIR 325°

DIR 298°

DIR 39°

DIR 23°

DIR 75°

DIR 199°

DIR 172°

DIR 169°

DIR 252°

DIR 248°

DIR 338°

239°

RANGE 11,600 YDS

RT LIM ROCKAWAY PT

190°

RANGE 8,000 YDS

RT LIM MORRIS

RT LIMIT 267°

RANGE 8,000 YDS

RANGE 10,800 YDS

RANGE 11,000 YDS

RANGE 10,800 YDS

RANGE 11,000 YDS

RANGE 8,000 YDS

RANGE 11,000 YDS

DIR 307.18°

DIR 298°

DIR 39°

DIR 23°

DIR 75°

DIR 199°

DIR 172°

DIR 169°

DIR 252°

DIR 248°

DIR 338°

DIR 307.18°

DIR 298°

DIR 39°

DIR 23°

DIR 75°

DIR 199°

DIR 172°

DIR 169°

DIR 252°

DIR 248°

DIR 338°

DIR 307.18°

DIR 298°

DIR 39°

DIR 23°

DIR 75°

DIR 199°

DIR 172°

DIR 169°

DIR 252°

DIR 248°

DIR 338°

DIR 307.18°

DIR 298°

DIR 39°

DIR 23°

DIR 75°

DIR 199°

DIR 172°

DIR 169°

DIR 252°

DIR 248°

DIR 338°

DIR 307.18°

DIR 298°

DIR 39°

DIR 23°

DIR 75°

DIR 199°

DIR 172°

DIR 169°

DIR 252°

DIR 248°

DIR 338°

DIR 307.18°

DIR 298°

DIR 39°

DIR 23°

DIR 75°

DIR 199°

DIR 172°

DIR 169°

DIR 252°

DIR 248°

DIR 338°

DIR 307.18°

DIR 298°

DIR 39°

DIR 23°

DIR 75°

DIR 199°

DIR 172°

DIR 169°

DIR 252°

DIR 248°

DIR 338°

DIR 307.18°

DIR 298°

DIR 39°

DIR 23°

DIR 75°

DIR 199°

DIR 172°

DIR 169°

DIR 252°

DIR 248°

DIR 338°

DIR 307.18°

DIR 298°

DIR 39°

DIR 23°

DIR 75°

DIR 199°

DIR 172°

DIR 169°

DIR 252°

DIR 248°

DIR 338°

DIR 307.18°

DIR 298°

DIR 39°

DIR 23°

DIR 75°

DIR 199°

DIR 172°

DIR 169°

DIR 252°

DIR 248°

DIR 338°

DIR 307.18°

DIR 298°

DIR 39°

DIR 23°

DIR 75°

DIR 199°

DIR 172°

DIR 169°

DIR 252°

DIR 248°

DIR 338°

DIR 307.18°

DIR 298°

DIR 39°

DIR 23°

DIR 75°

DIR 199°

DIR 172°

DIR 169°

DIR 252°

DIR 248°

DIR 338°

DIR 307.18°

DIR 298°

DIR 39°

DIR 23°

DIR 75°

DIR 199°

DIR 172°

DIR 169°

DIR 252°

DIR 248°

DIR 338°

DIR 307.18°

DIR 298°

DIR 39°

DIR 23°

DIR 75°

DIR 199°

DIR 172°

DIR 169°

DIR 252°

DIR 248°

DIR 338°

DIR 307.18°

DIR 298°

DIR 39°

DIR 23°

DIR 75°

DIR 199°

DIR 172°

DIR 169°

DIR 252°

DIR 248°

DIR 338°

DIR 307.18°

DIR 298°

DIR 39°

DIR 23°

DIR 75°

DIR 199°

DIR 172°

DIR 169°

DIR 252°

DIR 248°

DIR 338°

DIR 307.18°

DIR 298°

DIR 39°

DIR 23°

DIR 75°

DIR 199°

DIR 172°

DIR 169°

DIR 252°

DIR 248°

DIR 338°

DIR 307.18°

DIR 298°

DIR 39°

DIR 23°

DIR 75°

DIR 199°

DIR 172°

DIR 169°

DIR 252°

DIR 248°

DIR 338°

DIR 307.18°

DIR 298°

DIR 39°

DIR 23°

DIR 75°

DIR 199°

DIR 172°

DIR 169°

DIR 252°

DIR 248°

DIR 338°

DIR 307.18°

DIR 298°

DIR 39°

DIR 23°

DIR 75°

DIR 199°

DIR 172°

DIR 169°

DIR 252°

DIR 248°

DIR 338°

DIR 307.18°

DIR 298°

DIR 39°

DIR 23°

DIR 75°

DIR 199°

DIR 172°

DIR 169°

DIR 252°

DIR 248°

DIR 338°

DIR 307.18°

DIR 298°

DIR 39°

DIR 23°

DIR 75°

DIR 199°

DIR 172°

DIR 169°

SECRET

ANNEX B
FIRE CONTROL

SECRET

Authority AND 760162
By WDR/MSRA Date 7/5/60

SECRET

ANNEX B

INDEX

- Paragraph 1 - General
- 2 - Orientation Data
- 3 - Command and Fire Control Elements other than Battery Fire Control System
- 4 - Post Telephone System
- 5 - Teletype
- 6 - Radio Communications News
- 7 - Battery Fire Control Elements
- 8 - Datum Points
- 9 - Land Acquisition
- 10 - Radar Equipment, other than Antiaircraft

EXHIBITS

- 1-B - Omitted. Data included in Exhibits 1-A-1 to 1-A-4.
- 2-B-1 - Fields of Fire - Tactical No. 1
- 2-B-2 - Fields of Fire - Tactical No. 2
- 2-B-3 - Fields of Fire - Tactical No. 3
- 2-B-4 - Fields of Fire - Tactical No. 4
- 2-B-5 - Fields of Fire - Tactical No. 5
- 2-B-6 - Fields of Fire - Tactical No. 6
- 2-B-7 - Fields of Fire - Tactical No. 7
- 2-B-8 - Fields of Fire - Tactical No. 8
- 2-B-9 - Fields of Fire - Tactical No. 9
- 2-B-10 - Mine Fields - Tactical No. 10
- 2-B-11 - Fields of Fire - Tactical No. 11
- 2-B-12 - Fields of Fire - Tactical No. 12
- 2-B-13 - Fields of Fire - Tactical No. 13
- 2-B-14 - Fields of Fire - Tactical No. 14
- 2-B-15 - Mine Fields - Tactical No. 15
- 2-B-16 - Fields of Fire - Tactical No. 16
- 2-B-17 - Fields of Fire - Tactical No. 17
- 2-B-18 - Fields of Fire - Tactical No. 18
- 2-B-19 - Fields of Fire - Tactical No. 19
- 2-B-20 - Fields of Fire - Tactical No. 20
- 2-B-21 - Fields of Fire - Tactical No. 21
- 2-B-22 - Fields of Fire - Tactical No. 22
- 2-B-23 - Fields of Fire - Tactical No. 23
- 2-B-24 - Fields of Fire - Tactical No. 24
- 2-B-25 - Mine Fields - Tactical No. 25
- 2-B-26 - Fields of Fire - Tactical No. 26
- 2-B-27 - Fields of Fire - Tactical No. 27
- 2-B-28 - Fields of Fire - 37MM AMTB
- 3-B - Local Lambert Grid for Sandy Hook Area
- 3-B-1 - Orientation Data
- 4-B-1 - Circuit Diagram - Fort Hancock-Navesink Area
- 4-B-2 - Circuit Diagram - Madsworth-Hamilton-Nortons Point
- 4-B-3 - Circuit Diagram - Tilden-Rockaway-Long Island Area
- 5-B-1 - Main Cable Routings - Location 1-Location 12
- 5-B-2 - Main Cable Routings - Location 13-Location 20
- 6-B - Schematic Layout Main Cables
- 7-B - Overlay USC & GS Charts 1215 and 1213 Showing Principal Datum Points
- 8-B-1 - Fire Control Installations at Location 1
- 8-B-2 - Fire Control Installations at Location 2
- 8-B-3A - Fire Control Installations at Location 3
- 8-B-3B - Fire Control Installations at Location 3
- 8-B-4 - Fire Control Installations at Location 4
- 8-B-5 - Fire Control Installations at Location 5
- 8-B-6 - Fire Control Installations at Location 6
- 8-B-7 - Fire Control Installations at Location 7

SECRET

BY WDR/MRA Date: 7/15/00
Authority: NND 760162

SECRET

EXHIBITS (Cont'd)

- 8-B-8A - Fire Control Installations at Location 8A
- 8-B-8B - Fire Control Installations at Location 8
- 8-B-8C - Fire Control Installations at Location 8
- 8-B-8D - Fire Control Installations at Location 8
- 8-B-9 - Fire Control Installations at Location 9
- 8-B-9A - Fire Control Installations at Location 9A
- 8-B-10 - Fire Control Installations at Location 10
- 8-B-11 - Fire Control Installations at Location 11
- 8-B-12 - Fire Control Installations at Location 12
- 8-B-13 - Fire Control Installations at Location 13
- 8-B-14 - Fire Control Installations at Location 14
- 8-B-15 - Fire Control Installations at Location 15
- 8-B-16 - Fire Control Installations at Location 16
- 8-B-17 - Fire Control Installations at Location 17
- 8-B-18 - Fire Control Installations at Location 18
- 8-B-19 - Fire Control Installations at Location 19
- 8-B-20 - Fire Control Installations at Location 20
- 8-B-21 - Fire Control Installations at Location 21
- 9-B - Radio Net and Frequency Assignment
- 10-B - Area of Detection of SCR Units and Primary Assignments

SECRET

Authority: AND 760162
BY WDR/MARA Date: 7/15/00

SECRET

ANNEX B

FIRE CONTROL

1. GENERAL

The following remarks pertain to the general limitations of equipment and to local conditions which determines the nature and extent of the fire control system:

a. The accuracy limitations of the plotting boards when the angle of intersection of the plotting arms is less than 15 degrees combined with visibility limitations due to atmospheric conditions require for the long range batteries a multiplicity of horizontal baselines.

b. The average limit of visibility in this area, due to atmospheric conditions, and based on Weather Bureau statistics is approximately 14,000 yards with a small percentage of incidence of visibility beyond 20,000 yards.

c. With the exception of the hill mass at Navesink (250') the terrain in this area is generally very low. Range finding by the depression position finder is feasible at Navesink where four depression position finders should be sited, giving an instrument height of approximately 350 feet. Depression position finders mounted in the outmoded steel towers (100') are considered useful mainly for target identification. Under any conditions, the use of the depression position finder in this area is limited due to the absence of and the impracticability of establishing datum points in the Atlantic Ocean.

d. On the ocean shore the terrain is favorable to the operation of radar equipment. One surface craft detector is sited with an antenna height of approximately 350 feet and one general surveillance detector is sited with an antenna height of approximately 230 feet. Within the lower bay the terrain is less favorable due to echos produced by terrestrial objects.

e. In general, radar is considered to be the principal method of emergency fire control with the vertical base system as an alternate method.

f. All local requirements for coordination with the Navy, Coast Guard, and Air Force have been provided, with the exception that some construction, not yet authorized, should be provided for the efficient operation of the system of harbor entrance control posts.

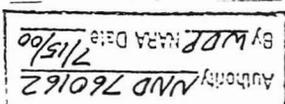
2. ORIENTATION DATA.

a. Grid system. The Special Lambert Grid System for Sandy Hook has a central meridian at $74^{\circ} 00'$ west and standard parallels at latitudes $40^{\circ} 09'$ and $40^{\circ} 51'$ north, along which parallels the scale is exact. The system has been computed to extend from 40° to 41° north latitude with maximum scale errors not greater than one part in fifty thousand. The coordinates of the point of origin, 40° north latitude and 74° west longitude, are:

X - 100,000.00 yds. Y - 0.00 yds.
The grid system is indicated on Exhibit 3-B-1.

b. Coordinates of fire control elements. The coordinates of fire control elements are tabulated in Exhibit 3-B-2.

SECRET



SECRET

3. COMMAND AND FIRE CONTROL ELEMENTS OTHER THAN BATTERY FIRE CONTROL SYSTEM.

a. Description of existing facilities:

- 2 -

SECRET

Authority: NND 76012
By WDP/NARA Date: 7/15/60

3. Command and Fire Control Elements other than Battery Fire Control.

Element	Location	Degree of Protection	Ground Elevation MSL	Height of In. MSL	Arc of View Degrees	Manning Detail	Gas Proofing	Type of Struct.	Status	D.P.F. Req.	Exhibit No.	Remarks
HDCP	8 Ft. Hancock	Splinter-proof	*15'			60	Installed	Modernized Emplacement	Exist.	0	8-B-8C	
HECP (Main)	10 Ft. Wadsworth	Splinter proof	*145'	*168'	*180	90	No	Wood Splinterproof	Exist.	0	8-B-10	Manning detail comprised of Army and Navy. Station to be combined with C-1 Ambrose Group.
HECP#1 (Advance)	8 Ft. Hancock	None	*15'	*56'		30	No	Wood	Exist.	0	8-B-8C	Manning detail of Army and Navy
HECP#2 (Advance)	14 Ft. Tilden	Splinter-proof	*10'			30	Installed	New Concrete	Exist.	0	8-B-14	Manning detail of Army and Navy
C-1 Ambrose Group.	10 Ft. Wadsworth	None	*145'	*160'		16	No	Wood	Exist.	1 DPF M1 CL 2	8-B-10	Temporary location pending approval of new HECP and CP
Bn. 1 C.P.	7 Navesink, N.J.	Splinter-proof	*205'	*210'	253	8	No	Concrete dug-in	Exist.	1 DPF M1 CL 3	8-B-7	
Bn. 2 C.P.	14 Ft. Tilden	Splinter-proof	*10'			8	Installed	New Concrete	Exist.	0	8-B-14	Combined with Adv. HECP #2
Bn. 3 C.P.	8 Ft. Hancock	Splinter-proof	*10'	33.122'	240	8	No	Concrete	Exist.	0	8-B-8D	On mine casemate Fort Hancock
Bn. 4 C.P.	8 Ft. Hancock	None	*15'	51.278'		8	No	Wood	Exist.	0	8-B-8C	On old Btry. Potter emplacement
Bn. 5 C.P.	12 Norton Point	Splinter-proof	*10'	42.35'	262	20	No	Concrete F.C. Tower	Exist.	0	8-B-12	

Authority: UND 760162
By W.D.P. WAPA Date 7/15/00

Elements	Location	Degree of Protection	Ground Elevation MSL	Height of Instrument MSL	Arc of View Degrees	Manning Detail	Gas Proofing	Type of Structure	Status	D.P.F. Required	Exhibit No.	Remarks
Bn. 6 C.P.	10 Ft. Wadsworth	Splinter-proof	*154'	*159'	180	8	No	Brick and Concrete	Exist.	1 DPF M1 CL 2	8-B-10	Former Building H-84
Bn. 7 C.P.	8 Ft. Hancock	None	*15'			15	No	Concrete	Exist.	0	8-B-80	A.A. CP
Bn. 8 C.P.	21 Ft. Totten	Splinter-proof	*33'	*38'	250	4	No	Concrete	Exist.	0	8-B-21	
Signal Stations		See notes on H. E. C. P.										
Tide Station	8 Ft. Hancock	None					No	Wood	Exist.	0		
Tide Station	10 Ft. Wadsworth	None					No	Wood	Exist.	0		
Met. Station #1	8 Ft. Hancock	None	*55'			4	No	Wood and concrete	Exist.	0	8-B-80	Atop abandoned Battery Potter
Met. Station #2	10 Ft. Wadsworth	None	*155'			4	No	Wood	Exist.	0	8-B-10	Atop Fort Tompkins
Met. Station #3	14 Ft. Tilden	None	*40'			4	No	Wood	Exist.	0	8-B-14	Located atop Ordnance Storage Building #20, Fort Tilden
Switch-Board Room #1	7 Navesink	Bomb-proof				8	Installed	Concrete Bombproof	Exist.	0	8-B-7	Located in same structure with Battery Lewis plotting room

Authority UND 760162
By W.P. NARA Date 7/15/60

700

SECRET

SECRET

Element	Location	Degree of Protection	Ground Elevation MSL	Height of Instrument MSL	Arc of View - Degrees	Manning Detail	Gas Proofing	Type of Structure	Status	D.P.F. Required	Exhibit No.	Remarks
Swbd Room #2	8 Ft. Hancock	Splinter-proof	*15'			9	Installed	Modernized old emplace.	Exist.	0	8-B-8C	Located in same structure with HDOP.
Swbd Room #3	10 Ft. Wadsworth	Bombproof	*130'			9	Installed	Modernized old emplace.	Exist.	0	8-B-10	Located in abandoned Btry. Richmond.
Swbd Rm #4	11 Ft. Hamilton	Bombproof	*40'			6	Installed	Modernized	Exist.	0	8-B-11	Located in abandoned Btry Keary
Swbd Room #5	12 Norton Point	Splinter-proof	10'			4	No	Concrete Splinterproof	Exist.	0	8-B-12	Located at SCR-296, installation Seagate.
Swbd Room #6	14 Ft. Tilden	Bombproof	*15'			7	Installed	See Remarks	Exist.	0	8-B-14	Located in plotting room struct. of Btry Harris
Swbd Rm #7	18 Long Beach	Splinter-proof	*10'			2	No	Concrete F.C. Tower	Exist.	0	8-B-18	Located in Fire Control Tower.
Swbd Room #8	21 Ft. Totten	Splinter-proof				2	No		See Remarks	0	8-B-21	Located in En 8 CP. See Footnote I, Page 6.

SECRET

SECRET

Repeater Stations None in HDNY

<u>Cable Hut</u>	<u>Type</u>	<u>Location(See Footnote II)</u>
A	Concrete	Near Battery Potter, Fort Hancock.
B	Concrete	Camp Lowe, Bay side, Fort Hancock.
C	Concrete	Foot of Hillside Ave., Highlands, New Jersey.
D	Concrete	Outside Main Gate, Fort Hancock, New Jersey.
E	Concrete	Main Road opposite Btry entrance Kingman & Mills, Fort Hancock, New Jersey.
F	Concrete	Main Road $\frac{1}{2}$ mile South of Station Hospital, Fort Hancock, New Jersey.
G	Concrete	Bay side, $\frac{1}{2}$ mile from main gate, Fort Hancock, N.J.
H	Concrete	North end of Sandy Hook, Slt #17, Fort Hancock, N.J.
I	Concrete	Monmouth Tower - Monmouth Beach Coast Guard.
J	Concrete	Gunnison Tower, Fort Hancock.
L	Concrete	Ocean side, Camp Lowe, Fort Hancock, N.J.
M	Concrete	Ocean side, $\frac{1}{2}$ mile east of Btry Kingman & Mills, Fort Hancock, N.J. - Signal Corp Area.
O	Concrete	Bay side between Btry Kingman & Mills, Fort Hancock, New Jersey.
T	Concrete	Navesink, near Main Gate
U	Concrete	Navesink, near Officer's Quarters.
R	Concrete	50' South of Btry Kessler CRF - Fort Tilden.
M4	Concrete	Breezy Point.
Cable Hut-Ft Hamilton	Concrete	Grimes Road & Sterling Drive West (Opposite Grimes Road) - Ft Hamilton

* Approximate data.

Footnote I. The switchboard installed at Fort Totten for fire control purposes is required only for mobile equipment and two minor caliber batteries. The equipment ordinarily authorized for a "Fire Control Switchboard Room" is not required for this location.

Footnote II. See Exhibits 5-B-1
5-B-2

SECRET

Authority: NND 760122
2/15/00
BY WDR/MSRA DRS

SECRET

4. POST TELEPHONE SYSTEM.

a. Each fort in the Harbor Defenses of New York has a common battery post telephone switchboard capable of acting as a secondary or emergency means of tactical communication. These boards are, with the exception of Fort Totten, connected to each other by tie lines. Extensions from the post switchboards to all group, battalion and battery command posts have been provided.

b. In addition to the regular switchboard Fort Hancock and Fort Tilden have emergency switchboards capable of handling a portion of the lines in the event of a failure of the main board. This emergency service provides communications for all tactical extensions and key administrative and supply departments.

c. The following tabulation shows details of the regular and emergency post telephone switchboards;

FORT	POST TELEPHONE					
	NO. OF POS.	LINE CAP.	MFR.	EXT. TACT.	TYPE HOUSING	TYPE
Hancock	6	700	S.C.	Yes	Non-splinter-	Mult.
Tilden	3	400	Automatic Elec.	Yes	Non-splinter-proof	Mult.
Wadsworth	3	400	S.C.	Yes	Bombproof	Mult. 15 Unit
Hamilton	5	400	605 W.E.	Yes	Non-splinter-proof	Mult.
Totten	2	240	Weston	Yes	Non-splinter-proof	Non-Mult.

EMERGENCY POST TELEPHONE

Hancock	2	200	Leich	Yes	Splinter-proof	Non-Mult.
Tilden	2	200	Kellogg	Yes	Splinter-proof	Non-Mult.
Wadsworth	None					
Hamilton	None					
Totten	None					

5. TELETYPE SERVICE.

a. All of the forts in the Harbor Defenses are equipped with teleprinters served from the teletypewriter exchange service of the Bell Telephone System.

b. Western Union teleprinter telegraph service is also provided at all posts; and Fort Wadsworth, Fort Hamilton, Fort Tilden, and Fort Totten are, in addition, provided with Postal Telegraph Service.

c. The following tabulation shows the distribution of the teletype and telegraph service in the Harbor Defenses:

SECRET

Authority NND 760122
By WDR:KRA Date: 7/15/00

SECRET

TELEPRINTERS

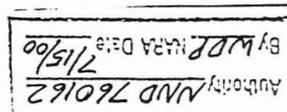
<u>FORT</u>	<u>W.U.</u>	<u>TEL. CO.</u>		<u>POSTAL</u>
	<u>NO.</u>	<u>NO. TWX</u>	<u>NO. TWPL</u>	<u>NO.</u>
Hancock	2	2	1	0
Tilden	1	0	0	1
Wadsworth	1	3	2	1
Hamilton	1	3		1
Totten	1	0	0	1

6. THE HARBOR DEFENSE RADIO NET IS SHOWN IN EXHIBIT 9-B.

7. BATTERY FIRE CONTROL ELEMENTS.

a. The tabulations on the following pages show pertinent data and information relative to the Battery Fire Control Elements by Batteries:

SECRET



TACTICAL #1 BATTERY Const. #219 EXHIBIT 2-3-1

Station	Location No.	Location	Structure	Ground Elev.	Height Instru.	Arc of View in Degrees	Instruments Required	Protection	Other Stations in Structure
B ¹	2	Shark River	2a	17'	39.25'	262	1-Az Inst M2	Splinterproof	B ₂ ² S ₂ ²
S ¹	2	Shark River	2a		40.29'	202	1-M1910A1 AZ		
B ²	3	Elberon	3b	28'	50.75'	262	1-Az Inst M2	Splinterproof	B ₂ ³ S ₂ ³ B ₂₃ ¹ S ₂₃ ¹ B ₃ ¹ S ₃ ¹ B ₄ ¹ S ₄ ¹
S ²	3	Elberon	3b		51.79'	202	1-M1910A1 AZ		
B ³	4	North Long Branch	4a	10'	39.75'	262	1-Az Inst M2	Splinterproof	B ₂ ⁴ S ₂ ⁴ B ₂₃ ² S ₂₃ ² B ₃ ² S ₃ ² B ₄ ² S ₄ ²
S ³	4	North Long Branch	4a		40.79'	202	1-M1910A1 AZ		
B ⁴	7	Levysink	7b	80'	85.58'	253	1-Az Inst M2	Splinterproof	B ₂ ⁵ S ₂ ⁵ B ₂ ² OP B ₁ ² OP

9

Authority MND 760162
By WDP:WARA Date 7/15/00

SECRET

SECRET

TACTICAL #1 BATTERY Const. #219 EXHIBIT 2-B-1

Station	Location No.	Location	Structure	Ground Elev.	Height Instru.	Arc of View in Degrees	Instruments Required	Protection	Other Stations in Structure
S ⁴	7	Navesink	7b		86.62'	183	1-M1910A1 AZ		
B ⁵	7	Navesink	7d	250'	343.83'	248	1-DPFM2 CL4		B ₂ ⁶
B ⁶	8	Hancock	8j	20'	33.25'	262	1-Az. Inst. M2	Splinterproof	B ₂₃ ⁴ B ₅ ³ M ₁₀ ¹
S ⁵	8	Hancock	8j		34.29'	202	1-M1910A1 AZ		
3C	7	Navesink	7b	78'	80.00'	253	1-DPFM2 CL1 1-Az. Inst. M2	Splinterproof	B ₂ ⁵ S ₂ ⁵ B ₁ ⁴ S ₁ ⁴ BC ₂ OP

BASE LINES

	From	To	Range in yards	Azimuth in degrees
1.	B ¹	B ²	9,217.56	193.48
2.	B ²	B ³	5,917.81	188.24
3.	B ³	B ⁴	8,560.52	176.65
4.	B ⁴	B ⁶	9,843.97	171.98
5.	S ¹	S ²	9,217.48	193.48

Authority AND 760162
By WDL:KASA Date 7/15/00

SECRET

SECRET

UNCLASSIFIED
 Authority: NND 760162
 By: WRL/KARA Date: 7/15/00

SECRET

- 11 -

TACTICAL #1 BATTERY Const. #219 EXHIBIT 2-B-1

BASE LINES

	<u>From</u>	<u>To</u>	<u>Range in yards</u>	<u>Azinuth in degrees</u>
6.	S ²	S ³	5,917.81	188.24
7.	S ³	S ⁴	8,560.16	176.65
8.	S ⁴	S ⁶	9,843.29	171.98

SECRET

Authority NND 760162
 By WDL/KARA Date 7/15/00

SECRET

TACTICAL #2 BATTERY Lewis EXHIBIT 2-B-2

Station	Location No.	Location	Structure	Ground Elev.	Height Instru.	Arc of View in Degrees	Instruments Required	Protection	Other Stations in Structure
B ¹	1	Manasquan	1a	20'	34.79'	203	1-Az. Inst. M2	Splinterproof	
S ¹	1	Manasquan	1a		34.79'	203	1-M1910A1 AZ		
B ²	2	Shark River	2a	17'	39.25'	262	1-Az. Inst. M2	Splinterproof	B ₁ ¹ S ₁ ¹
S ²	2	Shark River	2a		40.29'	202	1-M1910A1 AZ		
B ³	3	Elberon	3b	28'	66.75'	262	1-Az. Inst. M2	Splinterproof	S ₁ ¹ S ₂₃ ¹ B ₁ ¹ S ₃ ¹ B ₃ ¹ S ₃ ¹ B ₄ ¹ S ₄ ¹ B ₁ ² S ₁ ²
S ³	3	Elberon	3b		67.79'	202	1-M1910A1 AZ		
B ⁴	4	North Long Branch	4a	10'	55.75'	262	1-Az. Inst. M2	Splinterproof	B ₂₃ ² S ₂₃ ² B ₃ ² S ₃ ² B ₄ ² S ₄ ² B ₃ ³ S ₁ ³
S ⁴	4	North Long Branch	4a		56.79'	202	1-M1910A1 AZ		

SECRET

TACTICAL #2 BATTERY Lewis EXHIBIT 2-B-2

<u>Station</u>	<u>Location No.</u>	<u>Location</u>	<u>Structure</u>	<u>Ground Elev.</u>	<u>Height Instru.</u>	<u>Arc of View in Degrees</u>	<u>Instruments Required</u>	<u>Protection</u>	<u>Other Stations in Structure</u>
B ⁵	7	Navesink	7b	80'	85.58'	253	1-Az. Inst. M2	Splinterproof	B ₁ ⁴ S ₁ ⁴ BC ₂ OP BC ₁ OP
S ⁵	7	Navesink	7b		86.62'	183	1-M1910A1 AZ		
B ⁶	7	Navesink	7d	250'	345.33'	183	1-DFFM2CL 4	Splinterproof	B ₁ ⁵ B ₂₃ ⁴
B ⁷	8A	Hancock	8a	18'	35.25'	262	1-Az. Inst. M2	Splinterproof	B ₃ ⁴ S ₃ ⁴ B ₄ ⁴ S ₄ ⁴ B ₅ ² S ₅ ²
S ⁶	8A	Hancock	8a		36.29'	202	1-M1910A1 AZ		
B ⁸	17	Atlantic Beach	17a	10'	60.00'	262	1-Az. Inst. M2	Splinterproof	B ₂₃ ⁸ S ₂₃ ⁷ B ₂₄ ³ S ₂₄ ³
S ⁷	17	Atlantic Beach	17a		61.04'	202	1-M1910A1AZ		
B ⁹	18	Long Beach	18a	10'	54.00'	262	1-Az. Inst. M2	Splinterproof	B ₂₃ ⁹ S ₂₃ ⁸ B ₂₄ ⁴ S ₂₄ ⁴

Authority MWD 760162
By WDR. NARA Date 7/15/00

SECRET

SECRET

TACTICAL #2 BATTERY Lewis EXHIBIT 2-B-2

<u>Station</u>	<u>Location No.</u>	<u>Location</u>	<u>Structure</u>	<u>Ground Elev.</u>	<u>Height Instru.</u>	<u>Arc of View in Degrees</u>	<u>Instruments Required</u>	<u>Protection</u>	<u>Other Stations in Structure</u>
S ⁸	18	Long Beach	18a		55.04'	202	1-M1910A1AZ		
BC	7	Navesink	7b	78'	80.00'	252	1-M1910A1AZ 1-DPF M2 CL 1	Splinterproof	B ₂ ⁵ S ₂ ⁵ B ₁ ⁴ S ₁ ⁴ BC ₁ OP

BASE LINES

	<u>From</u>	<u>To</u>	<u>Range in yards</u>	<u>Azimuth in degrees</u>
1.	B ¹	B ²	8,935.37	193.26
2.	B ²	B ³	9,217.58	193.48
3.	B ³	B ⁴	5,917.89	188.24
4.	B ⁴	B ⁵	8,560.47	176.65
5.	B ⁵	B ⁷	5,505.17	181.54
6.	B ⁸	B ⁹	7,568.02	274.97
7.	S ¹	S ²	8,937.87	193.25
8.	S ²	S ³	9,217.49	193.48
9.	S ³	S ⁴	5,917.89	188.24

SECRET

Audited MND 760162
By WPC MRA Date 7/15/00

Authority NND 760162
By WDP WAPA Date 7/15/00

SECRET

- 15 -

TACTICAL #2 BATTERY Lewis EXHIBIT 2-B-2

BASE LINES

	<u>From</u>	<u>To</u>	<u>Range in yards</u>	<u>Azimuth in degrees</u>
10.	S ⁴	S ⁵	8,560.47	176.65
11.	S ⁵	S ⁷	5,505.29	181.54
12.	S ⁷	S ⁸	7,567.79	274.97

SECRET

TACTICAL #3 BATTERY Mills EXHIBIT 2-B-3

Station	Location No.	Location	Structure	Ground Elev.	Height Instru.	Arc of View in Degrees	Instruments Required	Protection	Other Stations in Structure
B ¹	3	Elberon	3b	28'	58.75'	262	1-Az. Inst. #2	Splinterproof	B ₂ ³ S ₂ ³ B ₂₃ ¹ S ₂₃ ¹ B ₄ ¹ S ₄ ¹ B ₁ ² S ₁ ²
S ¹	3	Elberon	3b		59.79'	202	1-M1910 A1 AZ		
B ²	4	North Long Branch	4a	10'	47.75'	262	1-AZ. Inst. #2	Splinterproof	B ₂ ⁴ S ₂ ⁴ B ₂₃ ² S ₂₃ ² B ₄ ² S ₄ ² B ₁ ³ S ₁ ³
S ²	4	North Long Branch	4a		48.79'	203	1-M1910 A1 AZ		
B ³	7	Navesink	7e	200'	207.5'	253	1-DRFA2CL 3	Splinterproof	Battalion 1 CP & OP
S ³	7	Navesink	7e		207.5'	253	1-M1910 A1 AZ		
B ⁴	8A	Hancock	8a	18'	43.75'	262	1-Az. Inst. #2	Splinterproof	B ₄ ⁴ S ₄ ⁴ B ₂ ⁷ S ₂ ⁶ B ₅ ² S ₅ ²

Authority MWD 760162
By WDR. NARA Dis. 7/15/00

SECRET

- 16 -

SECRET

Authority MND 760162
 By WDL:WARA Date 7/15/00

TACTICAL #3 BATTERY Mills EXHIBIT 2-B-3

Station	Location No.	Location	Structure	Ground Elev.	Height Instru.	arc of View in Degrees	Instruments Required	Protection	Other Stations in Structure
S ⁴	8A	Hancock	8a		44.79'	203	1-M1910 A1 AZ	Splinterproof	
B ⁵	8	Hancock	8e	10'	79.24'	260	1-Az. Inst. M2	None	B ₄ ⁵ S ₄ ⁵
S ⁵	8	Hancock	8e		79.24'	260	1-M1910 A1 AZ	None	
BC	8	Hancock	Btry. Empl.				2-M1910 A1 AZ	Splinterproof	

BASE LINES

	From	To	Range in yards	Azimuth in degrees
1.	B ¹	B ²	5,917.89	188.24
2.	B ²	B ³	9,046.86	175.89
3.	B ³	B ⁴	5,036.60	183.37
4.	B ⁴	B ⁵	3,675.24	154.68
5.	B ³	B ⁵	8,446.97	171.31
6.	S ¹	S ²	5,917.89	188.24
7.	S ²	S ³	9,148.06	175.90
8.	S ³	S ⁴	5,035.00	183.35
9.	S ⁴	S ⁵	3,674.67	154.70
10.	S ³	S ⁵	8,445.45	171.31

SECRET

Authority: AND 760162
 By: WDR, NARA Date 7/15/00

SECRET

TACTICAL #4 BATTERY MINGHAN EXHIBIT 2-3-4

Station	Location no.	Location	Structure	Ground Elev.	Height Instru.	Arc of View in Degrees	Instruments Required	Protection	Other Stations in Structure
B ¹	3	Liberon	3b	28'	58.75'	262	1-Az. Inst. 1 ²	Splinterproof	S ₂ ³ S ₂ ³ B ₂₃ ¹ S ₂₃ ¹ S ₃ ¹ B ₃ ¹ B ₁ ² S ₁ ²
S ¹	3	Liberon	3c		59.79'	262	1-11910 Al Az		
B ²	4	North Long Branch	4a	10'	47.75'	262	1-Az. Inst. 1 ²	Splinterproof	S ₂ ⁴ S ₂ ⁴ S ₂₃ ² S ₂₃ ² B ₃ ² S ₃ ² B ₁ ³ S ₁ ³
B ^{2a}	7	Navesink	7d	258'	343.63'	207	1-DFF 12 C1 4	Splinterproof	S ₁ ⁵ S ₂ ⁶ B ₂₃ ⁵
S ²	4	North Long Branch	4a		48.79'	202	1-11910 Al Az		
B ³	7	Navesink	7b	216'	213.00'	253	1-DFF 2 C1 3	Splinterproof	
S ³	7	Navesink	7		213.00'	253	1-11910 Al Az		
B ⁴	8A	Hancock	8a	18'	43.75'	262	1-Az. Inst. 1 ²	Splinterproof	S ₃ ⁴ S ₃ ⁴ B ₂ ⁷ S ₂ ⁶ B ₅ ⁶ S ₅ ⁶

SECRET

TACTICAL #4 BATTERY Kingman EXHIBIT 2-B-4

Station	Location No.	Location	Structure	Ground Elev.	Height Instru.	Arc of View in Degrees	Instruments Required	Protection	Other Stations in Structure
S ⁴	8 A	Hancock	8a		44.79'	202	1-M1910 A1 AZ	Splinterproof	
B ⁵	8	Hancock	8e	10'	90.76'	260	1-DPFM2C1 1	None	B ⁵ ₃ S ⁵ ₃
S ⁵	8	Hancock	8e		90.76'	260	1-M1910 A1 AZ	None	
BC	8	Hancock	Btry. Empl.				2-M1910 A1 AZ	Splinterproof	

BASE LINES

	<u>From</u>	<u>To</u>	<u>Range in Yards</u>	<u>Azimuth in Degrees</u>
1.	B ¹	B ²	5,917.81	188.24
2.	B ²	B ³	9,056.80	175.86
3.	B ³	B ⁴	5,022.50	183.45
4.	B ⁴	B ⁵	3,677.50	154.69
5.	B ³	B ⁵	8,434.19	171.34
6.	S ¹	S ²	5,917.81	188.24
7.	S ²	S ³	9,058.13	175.86
8.	S ³	S ⁴	5,020.77	183.43
9.	S ⁴	S ⁵	3,676.93	154.71
10.	S ³	S ⁵	8,432.53	171.34

SECRET

Authority UND 760162
By WDL:KARA Date 7/15/00

SECRET

TACTICAL #5 BATTERY Peck EXHIBIT 2-B-5

Station	Location No.	Location	Structure	Ground Elev.	Height Instru.	Arc of View in Degrees	Instruments Required	Protection	Other Stations in Structure
B ¹	7	Navesink	7a	90'	93.00'	253	1-DPF M1 CL 1	Splinterproof	B ₂₃ ³ S ₂₃ ³
S ¹	7	Navesink	7a		94.04'	183	1-M1910A1 AZ		
B ²	8A	Hancock	8a	18'	35.25'	262	1-M1910A1 AZ	Splinterproof	B ₄ ⁴ S ₄ ⁴ B ₃ ⁴ S ₃ ⁴ B ₇ ² S ₂ ⁶ B ₂ ² S ₂ ²
S ²	8A	Hancock	8a		36.29'	202	1-M1910A1 AZ		
B ³	8	Hancock	8j	20'	33.25'	262	1-M1910A1 AZ	Splinterproof	B ₁ ⁶ S ₁ ⁵ M ₁₀ ¹
S ³	8	Hancock	8o(1)	10'	30.00'	220	1-M1910A1 AZ	Splinterproof	
BC	8	Hancock	Btry. Empl.	10'	28.39'	220	2-M1910A1 AZ	Splinterproof	None
CRF	8	Hancock	8f	8'	26.73'	260	1-CRF 15'	None	CRF 6

SECRET

Authority MND 760162
By WDP:WRA Date 7/15/00

SECRET

TACTICAL #5 BATTERY Peck EXHIBIT 2-B-5

BASE LINES

	<u>From</u>	<u>To</u>	<u>Range in Yards</u>	<u>Azimuth in Degrees</u>
1.	B ¹	B ²	5,525.63	181.71
2.	B ²	B ³	4,511.20	160.28
3.	s ¹	s ²	5,523.18	181.71
4.	s ²	s ³	5,202.89	154.66

SECRET

Authority NWD 760162
By WDR:NERA Dts: 7/15/00

Authority MND 760162
 By WDR Date 7/15/00

SECRET

- 22 -

TACTICAL #6 BATTERY Umston EXHIBIT 2-B-6

<u>Station</u>	<u>Location</u> <u>No.</u>	<u>Location</u>	<u>Structure</u>	<u>Ground</u> <u>Elev.</u>	<u>Height</u> <u>Instru.</u>	<u>Arc of View</u> <u>in Degrees</u>	<u>Instruments</u> <u>Required</u>	<u>Protection</u>	<u>Other Stations</u> <u>in Structure</u>
BC	8	Hancock	8f	8'	26.728'	260	2-M1910 41 AZ	None	CRF ₅
CRF	8	Hancock	8f	8'	26.728'	260	1-CRF 15'		

SECRET

Authority MND 760162
 By WDR Date 7/15/60

SECRET

TACTICAL #7 BATTERY 90 mm EXHIBIT 2-B-7

<u>Station</u>	<u>Location No.</u>	<u>Location</u>	<u>Structure</u>	<u>Ground Elev.</u>	<u>Height Instru.</u>	<u>Arc of View in Degrees</u>	<u>Instruments Required</u>	<u>Protection</u>	<u>Other Stations in Structure</u>
RC	8	Hancock	Btry, Empl.			360	1-AA, BC Telescope 2-MICROSCOPE	None	None

SECRET

TACTICAL #8 BATTERY 90mm EXHIBIT 2-B-8

<u>Station</u>	<u>Location</u> <u>No.</u>	<u>Location</u>	<u>Structure</u>	<u>Ground</u> <u>Elev.</u>	<u>Height</u> <u>Instru.</u>	<u>Arc of View</u> <u>in Degrees</u>	<u>Instruments</u> <u>Required</u>	<u>Protection</u>	<u>Other Stations</u> <u>in Structure</u>
BC	8	Hancock	Btry. Empl.	20'			1-AA BC Telescope 2-M1910A1	None	None

SECRET

- 24 -

Authority MND 760162
By WDL:WARA Date 7/15/00

SECRET

SECRET

TACTICAL #9 BATTERY Morris EXHIBIT 2-B-9

<u>Station</u>	<u>Location No.</u>	<u>Location</u>	<u>Structure</u>	<u>Ground Elev.</u>	<u>Height Instru.</u>	<u>arc of View in Degrees</u>	<u>Instruments Required</u>	<u>Protection</u>	<u>Other Stations in Structure</u>
BC	8	Hancock	8q	10'	28.07'	260	2-M1910 A1 AZ	None	CRF 9
CRF	8	Hancock	8q		28.07'	260	1-CRF 9'	None	BC 9

SECRET

TACTICAL #10 BATTERY Mine EXHIBIT 2-B-10*

<u>Station</u>	<u>Location No.</u>	<u>Location</u>	<u>Structure</u>	<u>Ground Elev.</u>	<u>Height Instru.</u>	<u>arc of View in Degrees</u>	<u>Instruments Required</u>	<u>Protection</u>	<u>Other Stations in Structure</u>
M1	8	Hancock	8j	20'	34.29'	202	1-M1910 A1 AZ	Splinterproof	B ₁ ⁶ S ₁ ⁵ B ₅ ³
M2	8	Hancock	8s	10'	29.92'	360	1-M1910 A1 AZ	Splinterproof	B ₅ ⁴ S ₅ ⁴
M0	8	Hancock	8r	30'	33.12'	240	2-M1910 A1 AZ	Splinterproof	Bn 3 CP & OP

BASE LINES

<u>From</u>	<u>To</u>	<u>Range in Yards</u>	<u>Azimuth in Degrees</u>
M1	M2	1815.58	105.16

* See Exhibit 1-D for Under Water Defenses.

Authority NND 760162
By W.P. WARA Date 7/15/00

SECRET

SECRET

Authority NND 76012
 By WDL NARA Date 7/15/00

SECRET

TACTICAL #11 BATTERY 90 mm EXHIBIT 2-B-11

<u>Station</u>	<u>Location No.</u>	<u>Location</u>	<u>Structure</u>	<u>Ground Elev.</u>	<u>Height Instru.</u>	<u>Arc of View in Degrees</u>	<u>Instruments Required</u>	<u>Protection</u>	<u>Other Stations in Structure</u>
BC	9	Miller Field	Btry. Empl.	10'			1-AA BC Telescope 2-MIGIOAI	None	None

SECRET

UNCLASSIFIED
 Authority NND 760162
 By WDP NARA Date 7/15/00

SECRET

TACTICAL #12 BATTERY 90 mm EXHIBIT 2-B-12

<u>Station</u>	<u>Location No.</u>	<u>Location</u>	<u>Structure</u>	<u>Ground Elev.</u>	<u>Height Instru.</u>	<u>Arc of View in Degrees</u>	<u>Instruments Required</u>	<u>Protection</u>	<u>Other Stations in Structure</u>
BC	9A	Swinburne Island	Btry. Empl.	10'			1-1A BC Telescope 2-M191C 21.5...	None	None

SECRET

TACTICAL #13 BATTERY Const. #218 EXHIBIT 2-B-13

Station	Location No.	Location	Structure	Ground Elev.	Height Instru.	Arc of View in Degrees	Instruments Required	Protection	Other Stations in Structure
B ¹	9	Miller Field	9a	10'	47.25'	262	1-AE Inst M2	Splinterproof	B ₁₇ ¹ S ₁₇ ¹
S ¹	9	Miller Field	9a		48.29'	202	1-M1910 A1 AZ		
B ²	10	Wadsworth	10d	140'	144.77'	180	1-DPF M2 CL 2	Splinterproof	
S ²	10	Wadsworth	10d		144.77'	180	1-M1910 A1 AZ		
B ³	12	Norton Point	12b	10'	42.35'	262	1-Az Inst M2	Splinterproof	Bn. 5 CP B ₁₇ ⁴ S ₁₇ ³
S ³	12	Norton Point	12b		43.29'	202	1-M1910 A1 AZ		
B ⁴	13	Rockaway Point	13b	10'	30.5'	260	1-Az Inst M2	Splinterproof	M ₂₅ ¹ B ₂₂ ¹ S ₂₂ ¹
S ⁴	13	Rockaway Point	13b		31.5'	260	1-M1910A1 AZ		
BC	10	Wadsworth	10e	70'	91.5'	260	1-M1910 A1 AZ 1-DPF M2 CL 1	Splinterproof	

BASE LINES

	From	To	Range in Yards	Azimuth in Degrees
1.	B ¹	B ²	5,339.06	215.79
2.	B ²	B ³	6,171.13	303.28

AUTHORITY: NND 760162
 By WDR NARA Date 7/15/00

SECRET

TACTICAL #13 BATTERY Const. #218 EXHIBIT 2-B-13

BASE LINES

	<u>From</u>	<u>To</u>	<u>Range in Yards</u>	<u>Azimuth in Degrees</u>
3.	B ³	B ⁴	7,341.89	281.14
4.	S ¹	S ²	5,339.10	215.81
5.	S ²	S ³	6,170.50	303.27
6.	S ³	S ⁴	7,342.16	281.14

SECRET

Authority NND 760162
 By WDP Date 7/15/60

SECRET

TACTICAL #14 BATTERY Turnbull EXHIBIT 2-B-14

<u>Station</u>	<u>Location No.</u>	<u>Location</u>	<u>Structure</u>	<u>Ground Elev.</u>	<u>Height Instru.</u>	<u>Arc of View in Degrees</u>	<u>Instruments Required</u>	<u>Protection</u>	<u>Other Stations in Structure</u>
BC	10	Wadsworth	10h	30'	47.17'	260	2-H1910 A1 AZ	Splinterproof	CRF 14
CRF	10	Wadsworth	10h		48.67	260	1-CRF, 9 ¹		BC 14

Authority NND 760162
By W.D. NARA Date 7/15/00

SECRET

SECRET

TACTICAL #15 BATTERY MINE EXHIBIT 2-3-15

<u>Station</u>	<u>Location No.</u>	<u>Location</u>	<u>Structure</u>	<u>Ground Elev.</u>	<u>Height Instru.</u>	<u>Arc of View in Degrees</u>	<u>Instruments Required</u>	<u>Protection</u>	<u>Other Stations in Structure</u>
M ¹	9B	Hoffman	9B ¹		20.00'	262	1-M1910 A1 AZ	Splinterproof	None
M ²	12	Norton Point	12c			260	1-M1910 A1 AZ	Splinterproof	None
MC	10	Wadsworth	10c	145'	159.79'	180	2-M1910 A1 AZ		None

BASE LINES

	<u>From</u>	<u>To</u>	<u>Range in Yards</u>	<u>Azimuth in Degrees</u>
1.	M ¹	M ²	3765.82	272.071

NOTE: See Exhibit 1-D for underwater defenses.

UNCLASSIFIED

Authority AND 760162

By WDR NARA Date 7/15/00

SECRET

32

SECRET

DECLASSIFIED

Authority UND 760162
 By WDP NARA Date 7/15/00

SECRET

- 33 -

TACTICAL #16 BATTERY Griffin EXHIBIT 2-B-16

<u>Station</u>	<u>Location No.</u>	<u>Location</u>	<u>Structure</u>	<u>Ground Elev.</u>	<u>Height Instru.</u>	<u>Arc of View in Degrees</u>	<u>Instruments Required</u>	<u>Protection</u>	<u>Other Stations in Structure</u>
BC	11	Hamilton	11b	45'	45'	180	2-M1910 A1 A2	Splinterproof	CRF 16
CRF	11	Hamilton	11b			136	1-CRF, 9 ¹		BC 16
DPF*	11	Hamilton	A-12		76'	144.5	DPF A2	Brick Construction	None

* Secondary means of Fire Control.

* Secondary means of Fire Control.
 Authorized by 3d Ind., Office of the Commanding General, Army Service Forces, Washington, D.C., file SFOFS 602 (14 Oct 44) dated 18 October 1944, on letter Headquarters Harbor Defenses of New York, file 665.2/24, dated 6 October 1944, subject, "Observing Station, Building No. 12, Ft. Hamilton, N.Y."

SECRET

TACTICAL #17 BATTERY Livingston EXHIBIT 2-B-17

Station	Location No.	Location	Structure	Ground Elev.	Height Instru.	Arc of View in Degrees	Instruments Required	Protection	Other Stations in Structure
B ¹	9	Miller Field	9a	10'	47.25'	262	1-M1910 A1 AZ	Splinterproof	B ¹ ₁₃ S ¹ ₁₃
S ¹	9	Miller Field	9a		48.29'	202	1-M1910 A1 AZ		
B ²	10	Wadsworth	10f	140'	144.807'	150	1-D.F M1 CL 2	Splinterproof	
S ²	10	Wadsworth	10f		144.807'	150	1-M1910 A1 AZ		
B ³	11	Hamilton	11e		31.00'		1-M1910 A1 AZ	Splinterproof	BC 17
B ⁴	12	Norton Point	12b	10'	34.35'	262	1-M1910 A1 AZ	Splinterproof	CRF 17 B ³ ₁₃ S ³ ₁₃ En. 5 CP
S ³	12	Norton Point	12b		35.391'	202	1-M1910 A1 AZ		S ⁴ ₂₃ B ⁵ ₂₃
BC	11	Hamilton	11e		31.00'		2-M1910 A1 AZ 1-CRF	Splinterproof	B ³ ₁₇ CRF 17

Authority NND 760162
By WRL WRA Date 7/15/60

SECRET

SECRET

SECRET

- 35 -

TACTICAL #17 BATTERY Livingston EXHIBIT 2-B-17

<u>BASE LINES</u>				
	<u>From</u>	<u>To</u>	<u>Range in Yards</u>	<u>Azimuth in Degrees</u>
1.	B ¹	B ²	5,404.18	215.98
2.	B ²	B ³	3,226.99	258.90
3.	B ³	B ⁴	4,473.50	333.80
4.	S ¹	S ²	5,352.85	215.90
5.	S ²	BC	3,230.31	258.91
6.	BC	S ³	4,471.55	338.80

SECRET

UNCLASSIFIED
 Authority: MND 760162
 By: WDP NARA Date: 7/15/00

SECRET

- 36 -

TACTICAL #18 BATTERY Catlin EXHIBIT 2-B-18

<u>Station</u>	<u>Location No.</u>	<u>Location</u>	<u>Structure</u>	<u>Ground Elev.</u>	<u>Height Instru.</u>	<u>Arc of View in Degrees</u>	<u>Instruments Required</u>	<u>Protection</u>	<u>Other Stations in Structure</u>
BC	12	Norton Point	12a	10'	29.00'	260	2-M1910 A1 AZ	Splinterproof	CRF ₁₈
CRF	12	Norton Point	12a		30.50'	260	1-CRF 9'	Splinterproof	BC ₁₈

SECRET

TACTICAL #19 BATTERY 90 mm EXHIBIT 2-B-19

<u>Station</u>	<u>Location No.</u>	<u>Location</u>	<u>Structure</u>	<u>Ground Elev.</u>	<u>Height Instru.</u>	<u>Arc of View in Degrees</u>	<u>Instruments Required</u>	<u>Protection</u>	<u>Other Stations in Structure</u>
BC	12	Norton Point	Btry. Empl.	10'			1-AA BC Telescope 2-M1910	None	None

SECRET

- 37 -

Authority AND 760162
By WDR NARA Date 7/15/00

SECRET

TACTICAL #20 BATTERY Rockaway EXHIBIT 2-E-20

<u>Station</u>	<u>Location</u> <u>no.</u>	<u>Location</u>	<u>Structure</u>	<u>Ground</u> <u>Elev.</u>	<u>Height</u> <u>Instru.</u>	<u>Arc of View</u> <u>in Degrees</u>	<u>Instruments</u> <u>Required</u>	<u>Protection</u>	<u>Other Stations</u> <u>in Structure</u>
BC	13	Rockaway Point	13a	10'	24.67'	260	2-M1910 A1 AZ	Splinterproof	CRF ₂₀
CRF	13	Rockaway Point	13a		26.17'	260	1-CRF 9'		BC ₂₀

- 85 -

AUTHORITY NND 760162
 BY WDL NSRA Date 7/15/00

SECRET

DECLASSIFIED

Authority AND 760162

By WDR, NARA Date 7/15/00

SECRET

- 39 -

TACTICAL #21 BATTERY 90 fm EXHIBIT 2-B-21

<u>Station</u>	<u>Location No.</u>	<u>Location</u>	<u>Structure</u>	<u>Ground Elev.</u>	<u>Height Instru.</u>	<u>Arc of View in Degrees</u>	<u>Instruments Required</u>	<u>Protection</u>	<u>Other Stations in Structure</u>
BC	13	Rockaway Point	Btry. Empl.	10'			1-AA BC Telescope 2-151910	None	None

SECRET

UNCLASSIFIED

Authority UND 760162
By WDP NARA Date 7/15/00

SECRET

TACTICAL #22 BATTERY Kessler EXHIBIT 2-B-22

Station	Location No.	Location	Structure	Ground Elev.	Height Instru.	Arc of View in Degrees	Instruments Required	Protection	Other Stations in Structure
B ¹	13	Rockaway Point	13b	10'	40.00'	260	1-M1910 A1 AZ	Splinterproof	B ¹ ₂₅ B ⁴ ₁₃ S ⁴ ₁₃
S ¹	13	Rockaway Point	13b		39.00'	202	1-M1910 A1 AZ		
B ²	14	Tilden	14a	10'	33.00'	260	1-M1910 A1 AZ	Splinterproof	M ² ₂₅ B ⁶ ₂₃ S ⁵ ₂₃ B ¹ ₂₄ S ¹ ₂₄
S ²	14	Tilden	14a		34.04'	202	1-M1910 A1 AZ		
B ³	15	Seaside	15a	10'	42.00'	260	1-M1910 A1 AZ	Splinterproof	B ⁷ ₂₃ S ⁶ ₂₃ B ² ₂₄ S ² ₂₄
S ³	15	Seaside	15a		43.04'	202	1-M1910 A1 AZ		
B ⁰	14	Tilden	14d	10'	28.06'	260	2-M1910 A1 AZ	Splinterproof	CRF ²²
CRF	14	Tilden	14d		28.06'	260	1-CRF, 22'		

SECRET

SECRET

- 41 -

TACTICAL #22 BATTERY Kessler EXHIBIT 2-B-22

BASE LINES

	<u>From</u>	<u>To</u>	<u>Range in Yards</u>	<u>Azimuth in Degrees</u>
1.	B ¹	B ²	2,484.36	280.46
2.	B ²	B ³	7,386.33	247.28
3.	S ¹	S ²	2,481.43	280.42
4.	S ²	S ³	7,386.07	247.28

SECRET

TACTICAL #23 BATTERY Harris EXHIBIT 2-B-23

Station	Location No.	Location	Structure	Ground Elev.	Height Instru.	Arc of View in Degrees	Instruments Required	Protection	Other Stations in Structure	
S ¹	3	Elberon	3b	28'	66.75'	262	1-Az. Inst. M ²	Splinterproof	B ₂ ³	S ₂ ³
									B ₃ ¹	S ₃ ¹
									B ₄ ¹	S ₄ ¹
									B ₁ ²	S ₁ ²
S ¹	3	Elberon	3b		67.79'	202	1-M1910 A1 AZ			
B ²	4	North Long Branch	4a	10'	55.75'	262	1-Az. Inst. M ²	Splinterproof	B ₂ ⁴	S ₂ ⁴
									B ₃ ²	S ₃ ²
									B ₄ ²	S ₄ ²
									B ₁ ³	S ₁ ³
S ²	4	North Long Branch	4a		56.79'	202	1-M1910 A1 AZ			
B ³	7	Navesink	7a	90'	93.00'	253	1-Az. Inst. M ²	Splinterproof	B ₅ ¹	S ₅ ¹
S ³	7	Navesink	7a			183	1-M1910 A1 AZ			
B ⁴	7	Navesink	7d	250'	345.33'	185	1-DPF M2 CL4	Splinterproof	B ₁ ⁵	B ₂ ⁶
S ⁴	12	Norton Point	12b	10'	43.29'	202	1-M1910 A1 A2	Splinterproof	B ₁₃ ³	S ₁₃ ³
B ⁵	12	Norton Point	12b	10'	42.25'	262	1-Az. Inst. M ²		B ₁₇ ⁴	B ₁₇ ⁴

- 42 -

SECRET

Authority: NND 760162
By: WDP, NARA Date: 7/15/00

SECRET

Bn 5 CP

TACTICAL #23 BATTERY Harris EXHIBIT 2-B-23

Station	Location No.	Location	Structure	Ground Elev.	Height Instru.	Arc of View in Degrees	Instruments Required	Protection	Other Stations in Structure
B ⁶	14	Tilden	14a	10'	41.50'	262	1-Az. Inst. M ²	Splinterproof	M ² ₂₅ B ¹ ₂₄ S ¹ ₂₄ B ² ₂₂ S ² ₂₂
S ⁵	14	Tilden	14a		42.54'	202	1-M1910 A1 AZ		
B ⁷	15	Seaside	15a	10'	50.00'	262	1-Az. Inst. M ²	Splinterproof	B ² ₂₄ S ² ₂₄ B ³ ₂₂ S ³ ₂₂
S ⁶	15	Seaside	15a		51.04'	202	1-M1910 A1 AZ		
B ⁸	17	Atlantic Beach	17a	10'	60.00'	262	1-Az. Inst. M ²	Splinterproof	B ⁸ ₂ S ⁷ ₂ B ³ ₂₄ S ³ ₂₄
S ⁷	17	Atlantic Beach	17a		61.04'	202	1-M1910A1AZ		
B ⁹	18	Long Beach	18a	10'	54.00'	262	1-Az. Inst. M ²	Splinterproof	B ⁹ ₂ S ⁸ ₂ B ⁴ ₂₄ S ⁴ ₂₄
S ⁸	18	Long Beach	18a		55.04'	202	1-M1910 A1 AZ		
B ¹⁰	19	Short Beach	19a	10'	36.75'	262	1-Az. Inst. M ²	Splinterproof	
S ⁹	19	Short Beach	19a		37.79'	202	1-M1910 A1 AZ		
B ¹¹	20	Zachs Bay	20a	10'	115.00'	360	1-DPFI20L2		

Authority MND 760162
By W.D. NARA Date 7/15/00

SECRET

SECRET

TACTICAL #23 BATTERY Harris EXHIBIT 2-B-23

<u>Station</u>	<u>Location No.</u>	<u>Location</u>	<u>Structure</u>	<u>Ground Elev.</u>	<u>Height Instru.</u>	<u>Arc of View in Degrees</u>	<u>Instruments Required</u>	<u>Protection</u>	<u>Other Stations in Structure</u>
S ¹⁰	20	Zachs Bay	20a		115.00'	360	1-M1910 A1 AZ		
BC	14	Tilden	14b	10'	85.714'	360	1-M1910 A1 AZ 1-DPF M2 CL 1		G2 O.P.

BASE LINES

	<u>From</u>	<u>To</u>	<u>Range in Yards</u>	<u>azimuth in Degrees</u>
1.	B ¹	B ²	5,917.81	188.24
2.	B ²	B ³	8,544.03	176.53
3.	B ⁶	B ⁷	7,383.83	247.27
4.	B ⁷	B ⁸	7,700.61	262.25
5.	B ⁸	B ⁹	7,568.06	274.98
6.	B ⁹	B ¹⁰	9,742.13	265.41
7.	B ¹⁰	B ¹¹	8,713.10	258.29
8.	S ¹	S ²	5,917.81	188.24
9.	S ²	S ³	8,543.80	176.53
10.	S ⁶	S ⁷	7,701.08	262.25
11.	S ⁷	S ⁸	7,567.83	274.98
12.	S ⁸	S ⁹	9,742.01	265.41
13.	S ⁹	S ¹⁰	8,713.06	258.29

Authority NND 760162
By W.D.P. Date 7/15/00

TACTICAL #24 BATTERY Const. #220 LEMBIT 2-3-24

<u>Station</u>	<u>Location No.</u>	<u>Location</u>	<u>Structure</u>	<u>Ground Elev.</u>	<u>Height Instru.</u>	<u>Arc of View in Degrees</u>	<u>Instruments Required</u>	<u>Protection</u>	<u>Other Stations in Structure</u>
B ¹	14a	Tilden	14a	10'	33.00'	262	1-AZ. Inst. M2	Splinterproof	M ² ₂₅ B ⁶ ₂₃ S ⁵ ₂₃ B ² ₂₂ S ² ₂₂
S ¹	14	Tilden	14a		34.04'	202	1-M1910 Al AZ		
B ²	15	Seaside	15a	10'	50.00'	262	1-AZ. Inst. A2	Splinterproof	B ⁷ ₂₃ S ⁶ ₂₃ S ³ ₂₂ S ³ ₂₂
S ²	15	Seaside	15a		51.04'	202	1-M1910 Al AZ		
S ³	17	Atlantic Beach	17a	10'	52.00'	262	1-AZ. Inst. A2	Splinterproof	B ⁵ ₂₃ S ⁷ ₂₃ B ⁶ ₂ S ⁷ ₂
S ³	17	Atlantic Beach	17a		53.04'	202	1-M1910 Al AZ		
B ⁴	18	Long Beach	18a	10'	46.00'	262	1-AZ. Inst. A2	Splinterproof	B ⁹ ₂₃ S ⁶ ₂₃ S ⁹ ₂ S ⁶ ₂
S ⁴	18	Long Beach	18a		47.04'	202	1-M1910 Al AZ		
BC	14	Tilden	14f	10'	60.00'	260	2-M1910 Al AZ 1-CRF	Splinterproof	

- 54 -

Authenticity NND 760162
By W.P. NARA Date 7/15/00

SECRET

SECRET

SECRET

- 46 -

TACTICAL #24 BATTERY Const. #220 EXHIBIT 2-B-24

		<u>BASE LINES</u>			
	<u>From</u>	<u>To</u>	<u>Range in Yards</u>	<u>Azimuth in Degrees</u>	
1.	B ¹	B ²	7,388.75	247.28	
2.	B ²	B ³	7,700.54	262.26	
3.	B ³	B ⁴	7,568.02	274.97	
4.	S ¹	S ²	7,388.49	247.28	
5.	S ²	S ³	7,701.00	262.26	
6.	S ³	S ⁴	7,567.79	274.97	

SECRET

TACTICAL #25 BATTERY Mine EXHIBIT 2-B-25*

Station	Location No.	Location	Structure	Ground Elev.	Height Instru.	Arc of View in Degrees	Instruments Required	Protection	Other Stations In Structure
M ¹	13	Rockaway Point	13b	10'	39.00'	260	1-M1910 Al AZ	Splinterproof	B ₂₂ ¹ S ₂₂ ¹ B ₁₃ ⁴ S ₁₃ ⁴
M ²	14	Filden	14a	10'	41.50'	262	1-M1910 Al AZ	Splinterproof	B ₂₃ ⁵ S ₂₃ ⁵ D ₂₄ ¹ S ₂₄ ¹ B ₂₂ ² S ₂₂ ²

BASE LINES

From	To	Range in Yards	Azimuth in Yards
M ¹	M ²	2,481.22	230.45

* See Exhibit 1-D for Underwater Defenses.

Authority NND 760162
By W.P.P. WARA Date 7/15/60

SECRET

SECRET

TACTICAL #26 BATTERY Baker EXHIBIT 2-B-26

<u>Structure</u>	<u>Location No.</u>	<u>Location</u>	<u>Structure</u>	<u>Ground Elev.</u>	<u>Height Instru.</u>	<u>Arc of View in Degrees</u>	<u>Instruments Required</u>	<u>Protection</u>	<u>Other Stations in Structure</u>
BC	21	Totten	21b	25'	30.00'	250	2-1.1910 A1 AZ	Wood	GRF 27
GRF	21	Totten	21b		30.00'	250	1-CRF, 9'	Wood	BC 27

- 84 -

UNCLASSIFIED

Authority NND 760162

By WDP Date 7/15/00

SECRET

SECRET

UNCLASSIFIED
 Authority NND 760162
 By WDL NARA Date 7/15/00

SECRET

- 64 -

TACTICAL #27 BATTERY Burns EXHIBIT 2-B-27

<u>Station</u>	<u>Location No.</u>	<u>Location</u>	<u>Structure</u>	<u>Ground Elev.</u>	<u>Height Instru.</u>	<u>Arc of View in Degrees</u>	<u>Instruments Required</u>	<u>Protection</u>	<u>Other Stations in Structure</u>
BC	21	Totten	21b	25'	30.00'	250	2-M1910 A1 AZ	Wood	CRF 26
CAF	21	Totten	21b		30.00'	250	1-CRF 9'	Wood	BC 27

SECRET

JK

7 b.

DESCRIPTION OF FIRE CONTROL STATIONS

HARBOR DEFENSES OF NEW YORK

LOCATION	LOCATION NUMBER	STRUCTURE NUMBER	DESCRIPTION OF STRUCTURE	PEDESTAL	ASSIGNMENT	EXHIBIT
Manasquan	1	1a	Existing single deck concrete, visual fire control station near Sea Girt Rifle Range.	Right Left	Lewis S1 Lewis B1	8-B-1
Shark River	2	2a	Existing single deck concrete, visual fire control station on Shark River Coast Guard property	Right Rear Right Front Left Front Left Rear	Lewis S ² Lewis B ² Const. 219 B ¹ Const. 219 S1	8-B-2
Elberon	3	3a	Existing 100' steel visual fire control tower, Location of SCR-296	SCR-296 Primary Assignment: Alternate Assignment:	Mills Kingman Harris	8-B-3A
		3b	Existing triple deck concrete visual fire control tower at foot of Park Ave.	Right Front Right Rear Left Front Left Rear Right Front Right Rear Left Front Left Rear Right Front Right Rear Left Front Left Rear	Top Lewis B ³ Lewis S ³ Harris B ¹ Harris S1 Middle Mills B ¹ Mills S1 Kingman B1 Kingman S1 Lower Spare Spare Const. 219 B ² Const. 219 S2	8-B-3B

- 50 -

SECRET

UNCLASSIFIED

 Authority: AND 760162
 By WDP Date 7/15/00

SECRET

7. b. Continued

LOCATION	LOCATION NUMBER	STRUCTURE NUMBER	DESCRIPTION OF STRUCTURE	PEDESTAL	ASSIGNMENT	EXHIBIT
Long Branch	4	4a	Existing triple deck concrete visual fire control tower about 1.6 miles south of Monmouth CG Station.	Top		8-B-4
				Right Front	Lewis B ⁴	
				Right Rear	Lewis S ⁴	
				Left Front	Harris B ²	
				Left Rear	Harris S ²	
				Middle		
				Right Front	Mills B ²	
				Right Rear	Mills S ²	
				Left Front	Kingman B ²	
				Left Rear	Kingman S ²	
				Lower		
				Right Front	Spare	
				Left Front	Const. 219 B ³	
				Right Rear	Spare	
Left Rear	Const. 219 S ³					
		4b	100' standard steel tower for SCR-296 in rear of 4a.	SCR-296		8-B-4
				Primary Assignment:	Const. 219	
				Alternate Assignment:	Lewis	
					Harris	
					Kingman	
					Mills	
Monmouth Beach	5	5a	Existing 100' steel visual fire control tower on Monmouth Beach CG Property. Location of SCR-296.	SCR-296		8-B-5
				Primary Assignment:	Kingman	
				Alternate Assignment:	Const. 219	
					Lewis	
					Harris	
					Mills	
					Peck	

SECRET

- 51 -

SECRET

UNCLASSIFIED
 Authority: NND 760162
 By: WLP Date: 7/15/00

7. b. Continued.

LOCATION	LOCATION NUMBER	STRUCTURE NUMBER	DESCRIPTION OF STRUCTURE	PEDESTAL	ASSIGNMENT	EXHIBIT
Navesink	7	7a	Authorized single dug-in visual fire control station about 400' NE of Gun #1, Const. 219	Right Front Right Rear Left Front Left Rear	Peck B1 Peck S1 Harris B3 Harris S3	8-B-7
Navesink	7	7b	Authorized double dug-in visual fire control station about 75' NE of 7a.	Top Right Front Right Rear Left Front Left Rear Lower Right Left	Lewis B5 Lewis S5 Const. 219 B4 Const. 219 S4 Lewis BC OP Const. 219 BC OP	8-B-7
Navesink	7	7c	Fire control switchboard in Plotting Room Structure of Battery Lewis.			8-B-7
Navesink	7	7d	100' steel visual fire control tower on 250' hill, (Former Short Beach Tower).	Right Front Right Rear Left Front Left Rear	Const. 219 B5 Lewis B6 Kingman B2a Harris B4	8-B-7
			Roof of tower is location for SCR-296 antenna.	SCR-296 Primary assignment: Alternate assignment:	Lewis Const. 219 Harris	

- 52 -

SECRET

SECRET

7. b. Continued.

LOCATION	LOCATION NUMBER	STRUCTURE NUMBER	DESCRIPTION OF STRUCTURE	PEDESTAL	ASSIGNMENT	EXHIBIT
Navesink	7	7c	Existing double dug-in visual fire control station on ridge N of 7a.	Right	Upper	8-B-7
				Left	Mills B ³	
					Mills S ³	
					Lower	
Navesink	7	7f	Existing 20' frame tower for SCR-562 erected over 7c.	Right	G1 - CO	8-B-7
				Left	G1 - OP	
Navesink	7	7g	Existing single dug-in visual fire control station about 50' N of 7c.	Harbor Defense General Surveillance	Kingman B ³	8-B-7
Hancock	8A	8a	Existing double deck concrete visual fire control tower south of Signal Corps Area.	Right	Kingman S ³	8-B-8A
				Left		
				Upper		
				Right Front	Kingman B ⁴	
				Right Rear	Kingman S ⁴	
				Left Front	Mills B ⁴	
				Left Rear	Mills S ⁴	
				Lower		
Right Front	Lewis B ⁷	8-B-8A				
Right Rear	Lewis S ⁶					
Left Front	Peck B ²					
Left Rear	Peck S ²					
Hancock	8	8b	75' standard steel tower for SCR-296 in rear of 8a.	SCR-296		8-B-8A
				Primary Assignment:	Peck	
				Alternate Assignment:	Lewis	
					Kingman	
					Mills	
					Const. 218	

- 53 -

SECRET

SECRET

Authority MND 760162
By W.P.P. Date 7/15/60

7. b. Continued.

LOCATION	LOCATION NUMBER	STRUCTURE NUMBER	DESCRIPTION OF STRUCTURE	PEDESTAL	ASSIGNMENT	EXHIBIT
Fort Hancock	8	8e	Existing 100' steel visual fire control tower (former "L" or Gunnison tower).	Middle Right Left Top Harbor Defense Lower Right Left	Kingman 3 ⁵ Kingman 3 ⁵ SCR-682	8-3-80
Fort Hancock	8	8f	Existing 89-SCRF Station Entry Urnston. Secondary fire control system for Battery Peck	Center	SCR-4-80 Urnston Peck	8-3-80
Fort Hancock	8	8g	Existing Harbor Defense Command Post located in corridors of abandoned mortar Battery McCook-Reynolds.			8-3-80
Fort Hancock	8	8h	Existing Harbor Defense Observation Post (former "F" tower in rear of 8g)		HD-01	8-3-80
Fort Hancock	8	8i	Existing fire control switchboard in same structure as 8g.			8-3-80
Fort Hancock	8	8j	Existing single deck concrete visual fire control station near Officers' Beach Club.	Right Front Right Rear Left Front Left Rear	Const. 219 3 ⁶ Const. 219 3 ⁵ Peck 3 ³ Line 1 ¹	8-3-80

Authority UND 760162
By W.D.P. WAPA Data 7/15/00

SECRET

- 75 -

SECRET

7. b. Continued.

LOCATION	LOCATION NUMBER	STRUCTURE NUMBER	DESCRIPTION OF STRUCTURE	PEDESTAL	ASSIGNMENT	EXHIBIT
Fort Hancock	8	8-1	Existing AAD command post (rectangular concrete bldg N of 8k)			8-B-8C
Fort Hancock	8	8m	Existing Advanced HECP #1, Battery Potter (former B ¹ Peck and B ¹ Mine)		HECP #1 - OP	8-B-8C
Fort Hancock	8	8n	Existing B'tln station, Battery Potter (former F2 Station)		Bn 4 CP	8-B-8C
Fort Hancock		8o	Existing Meteorological Station Battery Potter			8-B-8C
Fort Hancock	8	8o(1)	Existing S ₅ ³ in former BC Alexander			8-B-8D
Fort Hancock	8	8q	Existing BC-SCRF station Battery Morris	Center	Morris CRF	8-B-8D
Fort Hancock	8	8r	Existing mine casemate and mine command post.		Bn 3	8-B-8D
Fort Hancock	8	8s	Existing single concrete visual fire control station W of Western Union Tower.	Right Front Left Front Left Rear	Mine M ²	8-B-8D
Miller Field	9	9a	Existing triple deck concrete visual fire control station.	Top Right Front Right Rear Left Front Left Rear	Const. 218 B ¹ Const. 218 S ¹ Livingston B ¹ Livingston S ¹	8-B-9

- 55 -

SECRET

SECRET

Authority MND 760162
By WDP:WARA Date 7/15/00

7. b. Continued.

LOCATION	LOCATION NUMBER	STRUCTURE NUMBER	DESCRIPTION OF STRUCTURE	PEDESTAL	ASSIGNMENT	EXHIBIT
Miller Field	9	9b	Authorized Standard 100' steel tower for SCR-296 SCR-296 in rear of 9a.		Primary Assignment: Livingston Alternate Assignment: Const. 218	8-B-9
Hoffman Island	9B	9Ba	Authorized single visual fire control station.		Mines M ¹	8-B-9L
Wadsworth	10	10b	Fire Control Switchboard in abandoned Battery Richmond			8-B-10
Wadsworth	10	10c	Mine casemate in abandoned Battery Richmond.			8-B-10
Wadsworth	10	10d	Existing single visual fire control station on Artillery Hill (former bldg H87).	Right Left	Const. 218 B ² Const. 218 S ²	8-B-10
Wadsworth	10	10e	Existing BC station, Const. 218 on Battery Emplacement	Right Left	Const. 218 BC Const. 218 OP	8-B-10
Wadsworth	10	10f	Existing single visual fire control station on Artillery Hill (former bldg. H86)	Right Left	Livingston B ² Livingston S ²	8-B-10
Wadsworth	10	10h	BC-SCRF station Battery Turnbull	Center Front	CRF14 BC 14	8-B-10
Wadsworth	10	10i	Existing Bn 6 Cp in former bldg H84			8-B-10

- 56 -

SECRET

SECRET

7. b. Continued.

<u>LOCATION</u>	<u>LOCATION NUMBER</u>	<u>STRUCTURE NUMBER</u>	<u>DESCRIPTION OF STRUCTURE</u>	<u>PEDestal</u>	<u>ASSIGNMENT</u>	<u>AFIDIT</u>
Wadsworth	10	10k	Existing mine BC station, Fort Tompkins (former bldg F63)	Right	Mine BC	8-3-10
Wadsworth	10	10-1	Existing Ambrose Group CP in single visual station, Fort Tompkins (former bldg. F64)(Temporary Location)	Right Left	Bn CO Bn OP	8-3-10
Wadsworth	10	10m	Existing H.MCP, Fort Tompkins (former bldg. F62)(Temporary Location)			8-3-10
Wadsworth	10	10n	Existing meteorological station Fort Tompkins, (former bldg F68)			8-3-10
Hamilton	11	11a	Existing for command station (former bldg A-13)	Right Left	Fort CO Fort OP	8-3-11
Hamilton	11	11b	Existing BC-SCRF station Battery Griffin.	Right Left	Griffin BC Griffin CCF	
Hamilton	11	A-12	DPF - Secondary means of Fire Control Battery Griffin		DPF A2 Griffin	8-3-11
Hamilton	11	11d	Fire Control Switchboard in abandoned Battery Neary.			8-3-11
Hamilton	11	11e	Existing BC station, Battery Livingston.	Right Left	Livingston B ³ Livingston BC	8-3-11
Norton Point	12	12a	Existing BC-SCRF station, Battery Catlin	Center Right	Catlin CCF Catlin BC	8-3-12

SECRET

SECRET

DECLASSIFIED

Authority NND 760162
By WDL/WARA Date 7/15/00

7 b. Continued.

LOCATION	LOCATION NUMBER	STRUCTURE NUMBER	DESCRIPTION OF STRUCTURE	PEDESTAL	ASSIGNMENT	EXHIBIT
Norton Point	12	12b	Double deck concrete visual fire control tower	Top	Harris B ⁵ S ⁴ Bn. 5 CP-OP	8-B-12
				Lower		
				Right Front	Const. 218 B ³	
				Right Rear	Const. 218 S ³	
				Left Front	Livingston B ⁴	
Left Rear	Livingston S ³					
Norton Point	12	12c	Standard 100' steel tower for SCR-296 in rear of 12b	SCR-296	Const. 218 Alternate Assignment: Livingston Harris	8-B-12
Norton Point	12	12e	authorized splinter mine Station	M ²		8-B-12
Rockaway Point	13	13a	Existing BC-SCRF station for 3" Battery	Center Right	SCRF BC	8-B-13
Rockaway Point	13	13b	Existing double deck concrete visual fire control tower	Top		8-B-13
				Right Front	Mine M ¹	
				Right Rear	Kessler B ¹	
				Left Front	Kessler S ¹	
				Lower		
				Right Front	Const. 218 B ⁴	
Right Rear	Const. 218 S ⁴					
Left Front	Spare					

- 58 -

Authority: AND 760162
By WRL NARA Date 7/15/00

SECRET

SECRET

7. b. Continued

LOCATION	LOCATION NUMBER	STRUCTURE NUMBER	DESCRIPTION OF STRUCTURE	PEDESTAL	ASSIGNMENT	EXHIBIT
Tilden	14	14a	Existing double deck concrete visual fire control station (replacement for A tower)	TOP	Mine 2	8-B-14
				Right Front	25	
				Right Rear	Spare	
				Left Front	Harris B ⁶	
				Left Rear	Harris S ⁵	
				LOWER		
				Right Front	Const. 220 B ¹	
				Right Rear	Const. 220 S ¹	
				Left Front	Kessler B ⁶	
				Left Rear	Kessler S ²	
Tilden	14	14b	Existing 100' steel visual fire control tower (former "A" tower)	Top		8-B-14
				HD SCR-582		
				Middle		
				Right	Harris BC	
				Left	Harris OP	
				Lower		
Right	Bn 2 OP					
Left	Spare					
Tilden	14	14c	Existing now mine casemate			8-B-14
Tilden	14	14d	Existing BC-SCRF Station Battery Kessler	Center Front	SCRF Kessler BC	8-B-14
Tilden	14	14e	Existing fire control switchboard			8-B-14
Tilden	14	14f	authorized BC station Const. 220 on top of battery casemate	Right Left	Const. 220 BC Const. 220 OP	8-B-14

- 59 -

UNCLASSIFIED
 Authority: MND 760162
 By: WDP, NARA Date: 7/15/00

7. b. Continued.

LOCATION	LOCATION NUMBER	STRUCTURE NUMBER	DESCRIPTION OF STRUCTURE	PEDESTAL	ASSIGNMENT	EXHIBIT
Tilden	14	14g	Combined Battalion CP and Advance HECP #2 600' E of Gun #2 Const. 220	Right Left	Battalion 2 CO Battalion 2 OP	8-B-14
Tilden	14	14g (1)	(Former M Tower) Signal Tower, Advance HECP #2			8-B-14
Tilden	14	14h	Existing meteorological station on roof of ordnance storage bldg #20.			8-B-14
Seaside	15	15a	Existing double deck visual fire	Top Right Front Right Rear Left Front Left Rear Lower Right Front Right Rear Left Front Left Rear	Harris B ^T Harris S ⁶ Const. 220 S ³ Const. 220 S ³ Spare Spare Kessler B ³ Kessler S ³	8-B-15
Seaside	15	15b	Standard 100' steel tower for SCR-296 in rear of 15a.	SCR-296	Primary assignment: Kessler Alternate assignment: Harris Const. 220	8-B-15
Arverne	16	16a	Existing steel tower 100'. Visual fire control tower proposed location for SCR-296.	SCR-296	Primary assignment: Const. 220 Alternate Assignment: Harris Mills	8-B-16

Authority: AND 760162
By WDR NARA Date 7/15/66

SECRET

- 09 -

SECRET

7. b. Continued.

LOCATION	LOCATION NUMBER	STRUCTURE NUMBER	DESCRIPTION OF STRUCTURE	PEDESTAL	ASSIGNMENT	EXHIBIT
Arverne	16	16a		Alternate Assignment:	(Continued) Kingman Lewis Kessler	
Atlantic Beach	17	17a	Double deck concrete visual fire control tower	Top Right Front Right Rear Left Front Left Rear Lower Right Front Right-Rear Left Front Left Rear	Harris B ⁸ Harris S ⁷ Lewis B ⁸ Lewis S ⁷ Spare Spare Const. 220 B ³ Const. 220 S ³	8-B-17
Long Beach	18	18a	Double deck concrete visual fire control tower with fire control switchboard in lower room.	Top Right Front Right Rear Left Front Left Rear Lower Right Front Right Rear Left Front Left Rear	Harris B ⁹ Harris S ⁸ Lewis B ⁹ Lewis S ⁸ Spare Spare Const. 220 B ⁴ Const. 220 S ⁴	8-B-18
Long Beach	18	18b	Existing 100' Steel visual fire control tower. Proposed location for SCR-296.	SCR-296 Primary Assignment: Alternate Assignment:	Harris Lewis Const. 220	8-B-18

- 19 -

Authority: NND 760162
By WDP WAPA Date 7/15/00

SECRET

SECRET

7. b. Continued.

LOCATION	LOCATION NUMBER	STRUCTURE NUMBER	DESCRIPTION OF STRUCTURE	PEDESTAL	ASSIGNMENT	EXHIBIT
Short Beach	19	19a	Single deck concrete visual fire control tower	Right Front Right Rear Left Front Left Rear	Harris B ¹⁰ Harris S ⁹ Spare Spare	8-B-19
Zachs Bay	20	20a	Existing 100' steel visual control tower.	Left Right	Harris B ¹¹ Harris S ¹⁰	8-B-20
Totten	21	21a	Existing Battalion CP in rear of Battery Baker (former BC-SCRF station Battery Baker)	Battalion 8		8-B-21
Totten	21	21b	Existing BC-SCRF station, Battery Baker W of Battery.			8-B-21
Totten	21	21c	Existing fire control switchboard			8-B-21

Authority NND 760162
By WDP:WAPA Date 7/15/66

SECRET

SECRET

SECRET

8. Exhibit 7-B shows location of all datum points in use in the Harbor Defenses. It may be noted that full use of towers, flagpoles, tall buildings, smoke stacks, and other outstanding land marks has been made. The following tabulation to accompany Exhibit 7-B indicates datum points that can be observed from individual stations:

LOCATION NUMBER OF OBSERVING STATION	DATUM POINTS THAT CAN BE SEEN FROM THESE OBSERVING STATIONS
1 a	Spring Lake Hotel
2 a	Spring Lake Hotel Asbury Park Berkeley Hotel Allenhurst Tank Deal Incinerator Stack
3 a & 3 b	Asbury Park Berkeley Hotel Allenhurst Tank Deal Incinerator Stack Monmouth Tower Center
4 a & 4 b	Monmouth Tower Center Sea Bright Coast Guard Cupola
5 a	North Tower Twin Lights
7 a & 7 b	Monmouth Tower Center Sea Bright Coast Guard Cupola
7 d	Monmouth Tower Center Sea Bright Coast Guard Cupola Spermaceti Coast Guard Cupola Sandy Hook Lighthouse Romer Shoals Lighthouse Romer Shoals Datum Point
7 e, 7 f, & 7 g	Monmouth Tower Center Sea Bright Coast Guard Cupola Spermaceti Coast Guard Cupola
8 a, 8 b, 8 c, & 8 d	North Tower Twin Lights Sandy Hook Lighthouse Romer Shoals Lighthouse Romer Shoals Datum Point
8 e	North Tower Twin Lights Sandy Hook Lighthouse Romer Shoals Lighthouse Half Moon Hotel Cupola A Tower Tilden Center
8 f	North Tower Twin Lights Romer Shoals Lighthouse Romer Shoals Datum Point Half Moon Hotel Cupola A Tower Tilden Center
8 h	North Tower Twin Lights Romer Shoals Lighthouse Romer Shoals Datum Point

SECRET

DECLASSIFIED

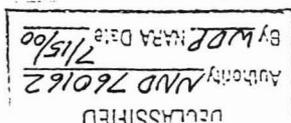
Authority: NND 760162

By WDR/ARA Date: 7/15/00

SECRET

LOCATION NUMBER OF OBSERVING STATION	DATUM POINTS THAT CAN BE SEEN FROM THESE OBSERVING STATIONS
8 j, 8 k, & 8 m	North Tower Twin Lights Romer Shoals Lighthouse Romer Shoals Datum Point Half Moon Hotel Cupola A Tower Tilden Center
8 n, 8 o, & 8 o (1)	Romer Shoals Lighthouse Romer Shoals Datum Point Half Moon Hotel Cupola A Tower Tilden Center
8 p, 8 q, & 8 r	West Bank Lighthouse West Bank Datum Point Romer Shoals Lighthouse Romer Shoals Datum Point Norton's Point Lighthouse Norton's Point Datum Point
8 s	Old Orchard Lighthouse West Bank Lighthouse West Bank Datum Point Romer Shoals Lighthouse Romer Shoals Datum Point Norton's Point Lighthouse Hoffman Island Chimney
9 a & 9 b	Old Orchard Lighthouse West Bank Lighthouse West Bank Datum Point Romer Shoals Lighthouse Romer Shoals Datum Point Norton's Point Lighthouse Norton's Point Datum Point Hoffman Island Chimney Hoffman Island Datum Point
10 a, 10 d, 10 e, 10 f; 10 g, 10 h, 10 i, 10 j; 10 k, 10 l, 10 m, 10 n; 11 a, 11 b, 11 c, 11 e, 12 a, 12 b, & 12 c	West Bank Lighthouse West Bank Datum Point Romer Shoals Lighthouse Romer Shoals Datum Point Norton's Point Lighthouse Norton's Point Datum Point Hoffman Island Chimney Hoffman Island Datum Point
10 o	Romer Shoals Lighthouse Romer Shoals Datum Point Norton's Point Lighthouse Norton's Point Datum Point
12 d & 12 e	West Bank Lighthouse Romer Shoals Lighthouse Hoffman Island Chimney
13 a	Romer Shoals Lighthouse Rockaway Jetty Beacon
13 b	Romer Shoals Lighthouse Rockaway Jetty Beacon A Tower Tilden Center Marine Bridge South Light

SECRET



SECRET

LOCATION NUMBER
OF OBSERVING
STATION

DATUM POINTS THAT CAN BE SEEN
FROM THESE OBSERVING STATIONS

14 a, 14 b, 14 d, 14 f, & 14 h	Romer Shoals Lighthouse Rockaway Jetty Beacon Marine Bridge South Light
15 a & 15 b	Rockaway Jetty Beacon A Tower Tilden Center Atlantic Beach Jetty
16 a	A Tower Tilden Center Marine Bridge South Light atlantic Beach Jetty
17 a	Arverne Tower Center Long Beach Tower Center
18 a & 18 b	Long Beach Hotel Point Lookout Coast Guard Tower
19 a	Point Lookout Coast Guard Tower Long Beach Tower Center
20 a	Short Beach Coast Guard Tower Jones Beach Lighted Tower
21 a & 21 b	Execution Rocks Lighthouse Stepping Stones Lighthouse

9. There are no Real Estate Requirements.

- 65 -

SECRET

Authority MND 760162
By WDR NARA Date: 7/15/60

10. a. Radar equipment (other than anti-aircraft). Authorities:

(1) 2nd Indorsement--C of E 665 (New York) CM 22738 SPEOF, Office of the Chief of Engineers, dated 22 December 1942, on letter PPO 413.68/81 x 334 x 000, Headquarters New York-Philadelphia Sector, dated 30 November 1942, subject "Radio Sets SCR 296 and SCR 582".

(2) T/O & E 4-260-1.

b. The following tabulation is furnished showing pertinent data:

TYPE RADAR	LOCATION	LOCATION STRUCTURE		COORDINATES		PRIMARY ASSIGNMENT	ALT RATE ASSIGNMENT	HEIGHT OF GROUND	HEIGHT OF ANTENNA	EXHIBIT
		NO.	NO.	X	Y					
SCR-296	Elberon	3	3A	100831.6	31854.1	Mills	Kingman Harris	30'	130'	10-B
SCR-296	N. Long Branch	4	4b	102111.0	38438.0	Const. #219	Lewis Harris Kingman Mills	10'	110'	10-B
SCR-296	Monmouth Beach	5	5A	102357.0	41501.4	Kingman	Const. #219 Lewis Harris Mills Peck	10'	120'	10-B
SCR-296	Navesink	7	7D	100503.3	47511.7	Lewis	Const. #219 Harris	250'	355'	10-B
SCR-582	Navesink	7	7F	101470.0	47457.0	HD	---	210'	230'	10-B
SCR-296	Hancock	8A	8B	101758.0	52485.0	Peck	Lewis Kingman Mills Const. #218	10'	85'	10-B

- 99 -

Authority: UND 760162
By WDR Date 7/15/60

SECRET

SECRET

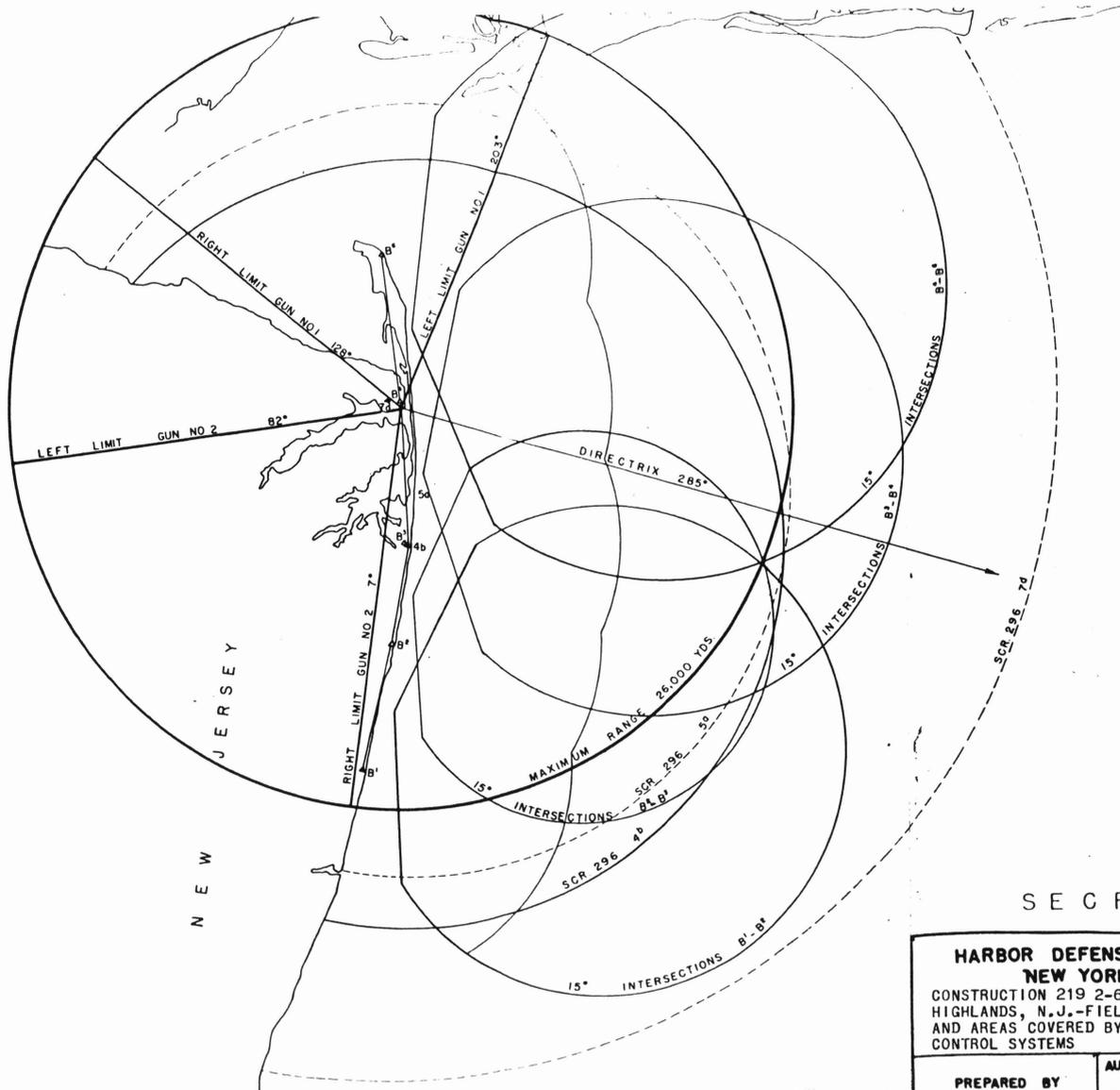
Authority UND 760162
By WDP NARA Date 7/15/00

SECRET

- 67 -

TYPE RADAR	LOCATION	LOCATION STRUCTURE		COORDINATES		PRIMARY ASSIGNMENT	ALTERNATE ASSIGNMENT	HEIGHT OF HEIGHT		EXHIBIT
		NO.	NO.	X	Y			GROUND	ANTENNA	
SCR-682	Hancock	8	8E	100193.7	55808.5	HD	---	10'	120'	10-B
SCR-296	Miller Field	9	9B	91289.0	68630.0	Livingston	Const. #218	20'	120'	10-B
SCR-296	Norton Point	12	12C	99580.0	69580.0	Const. #218	Livingston Harris	20'	120'	10-B
SCR-582	Tilden	14	14B	109217.6	67818.5	HD	---	10'	120'	10-B
SCR-296	Seaside	15	15B	116036.0	70566.0	Kessler	Harris Const. #220	20'	120'	10-B
SCR-296	Arverne	16	16A	119554.5	71824.7	Const. #220	Harris Mills Kingman Lewis Kessler	10'	120'	10-B
SCR-296	Long Beach	18	18B	132747.9	71031.6	Harris	Lewis Const. #220	10'	120'	10-B

SECRET



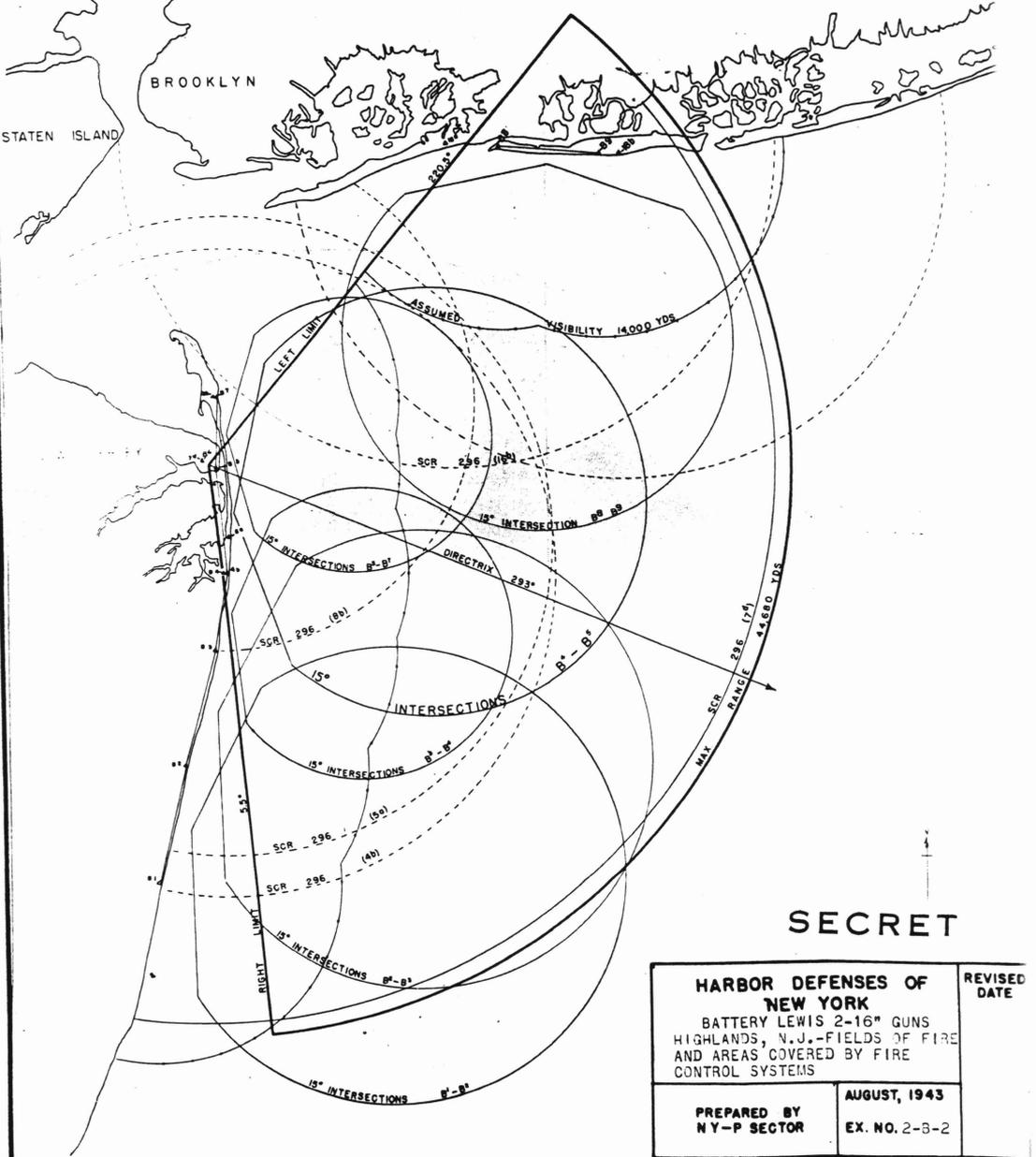
SECRET

HARBOR DEFENSES OF NEW YORK CONSTRUCTION 219 2-6" GUNS HIGHLANDS, N.J.-FIELDS OF FIRE AND AREAS COVERED BY FIRE CONTROL SYSTEMS		REVISED DATE
PREPARED BY NY-P SECTOR	AUGUST, 1943 EX. NO. 2-B-1	



STATEN ISLAND

BROOKLYN



SECRET

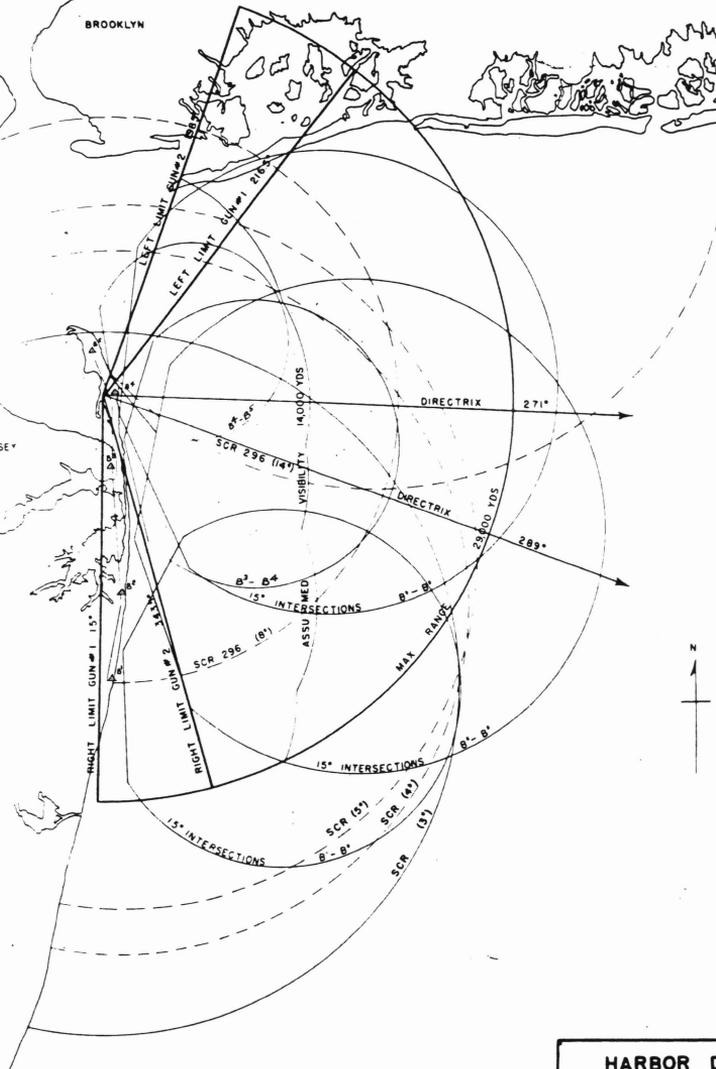
HARBOR DEFENSES OF NEW YORK	REVISED DATE
BATTERY LEWIS 2-16" GUNS HIGHLANDS, N.J.-FIELDS OF FIRE AND AREAS COVERED BY FIRE CONTROL SYSTEMS	AUGUST, 1943
PREPARED BY NY-P SECTOR	EX. NO. 2-8-2

LONG ISLAND

BROOKLYN

STATEN ISLAND

NEW JERSEY

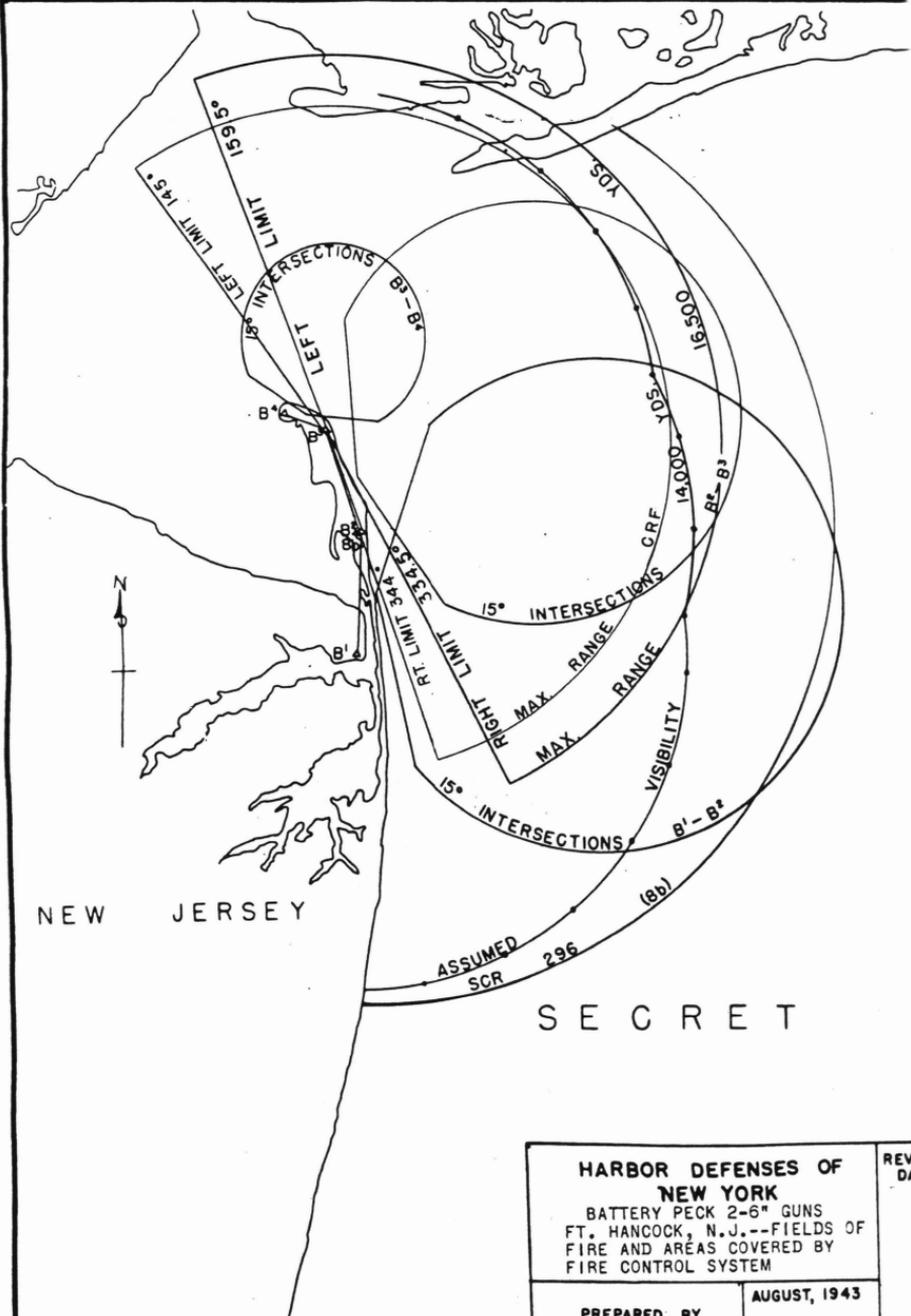


**HARBOR DEFENSES OF
NEW YORK**
 BATTERY MILLS 2-12" GUNS
 FT. HANCOCK, N.J.--FIELDS OF
 FIRE AND AREAS COVERED BY
 FIRE CONTROL SYSTEMS

REVISED
DATE

PREPARED BY
N.Y.-P SECTOR

AUGUST, 1943
EX. NO. 2-B-3



S E C R E T

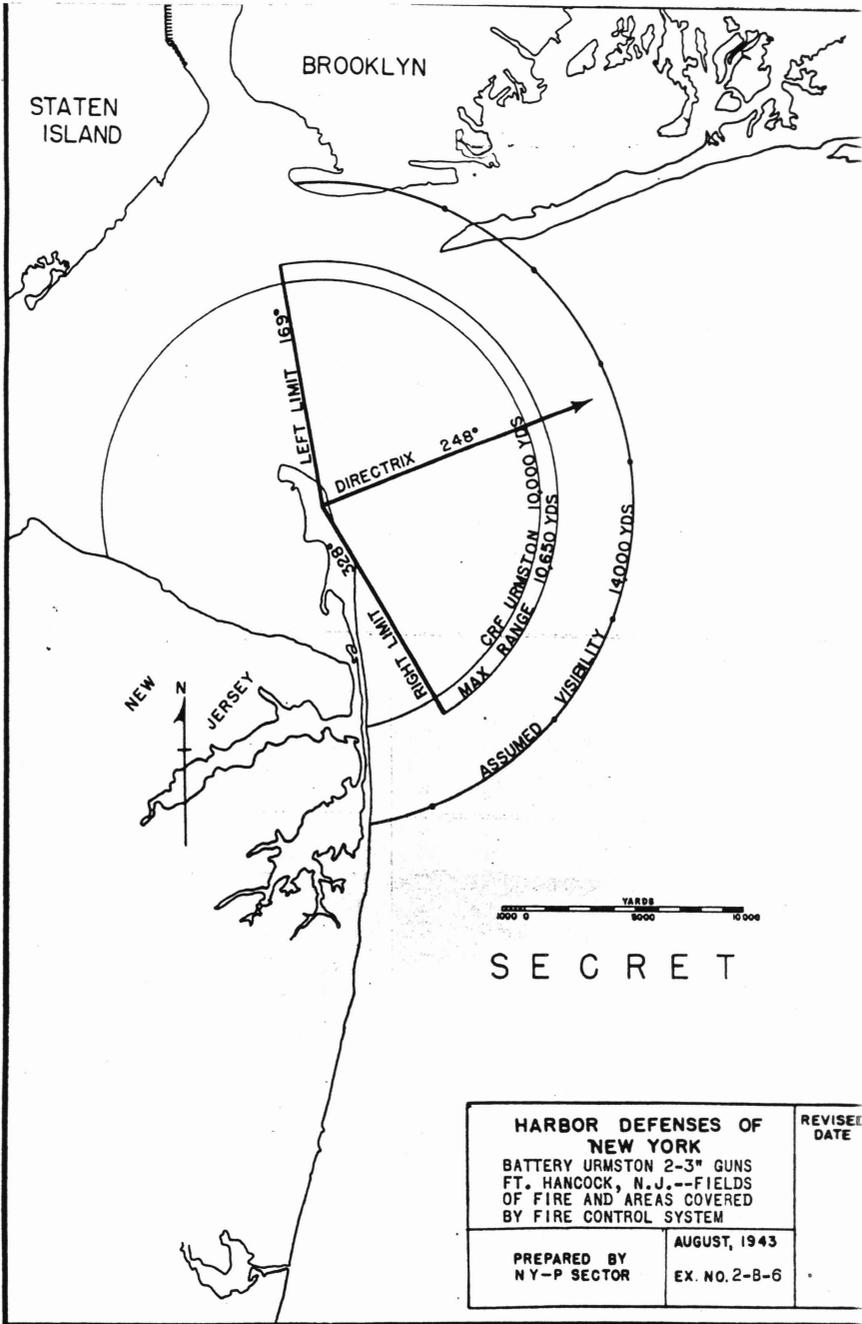
**HARBOR DEFENSES OF
NEW YORK**
BATTERY PECK 2-6" GUNS
FT. HANCOCK, N.J.--FIELDS OF
FIRE AND AREAS COVERED BY
FIRE CONTROL SYSTEM

REVISE
DATE

PREPARED BY
NY-P SECTOR

AUGUST, 1943
EX. NO. 2-B-5



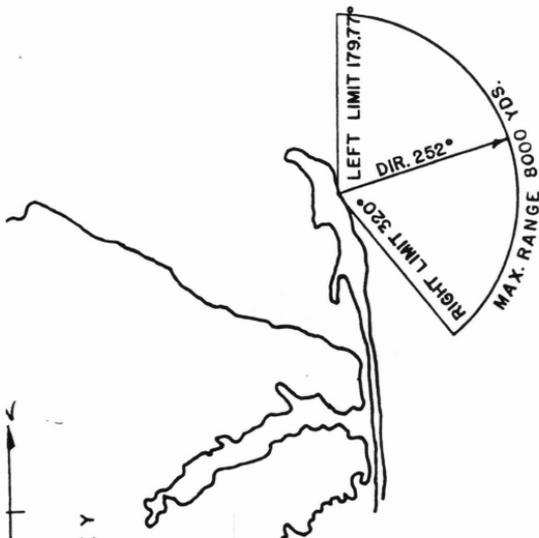


S E C R E T

HARBOR DEFENSES OF NEW YORK BATTERY URMSTON 2-3" GUNS FT. HANCOCK, N. J.--FIELDS OF FIRE AND AREAS COVERED BY FIRE CONTROL SYSTEM		REVISED DATE
PREPARED BY NY-P SECTOR	AUGUST, 1943 EX. NO. 2-B-6	

STATEN
ISLAND

BROOKLYN



NEW
JERSEY

SECRET

HARBOR DEFENSES OF
NEW YORK
B'TRY NO.7- 4-90MM GUNS.
FT. HANCOCK, N.J.
FIELD OF FIRE

REVISED
DATE

PREPARED BY
NY-P SECTOR

AUGUST, 1943
EX. NO.2-B-7



TATEN
SLAND

BROOKLYN

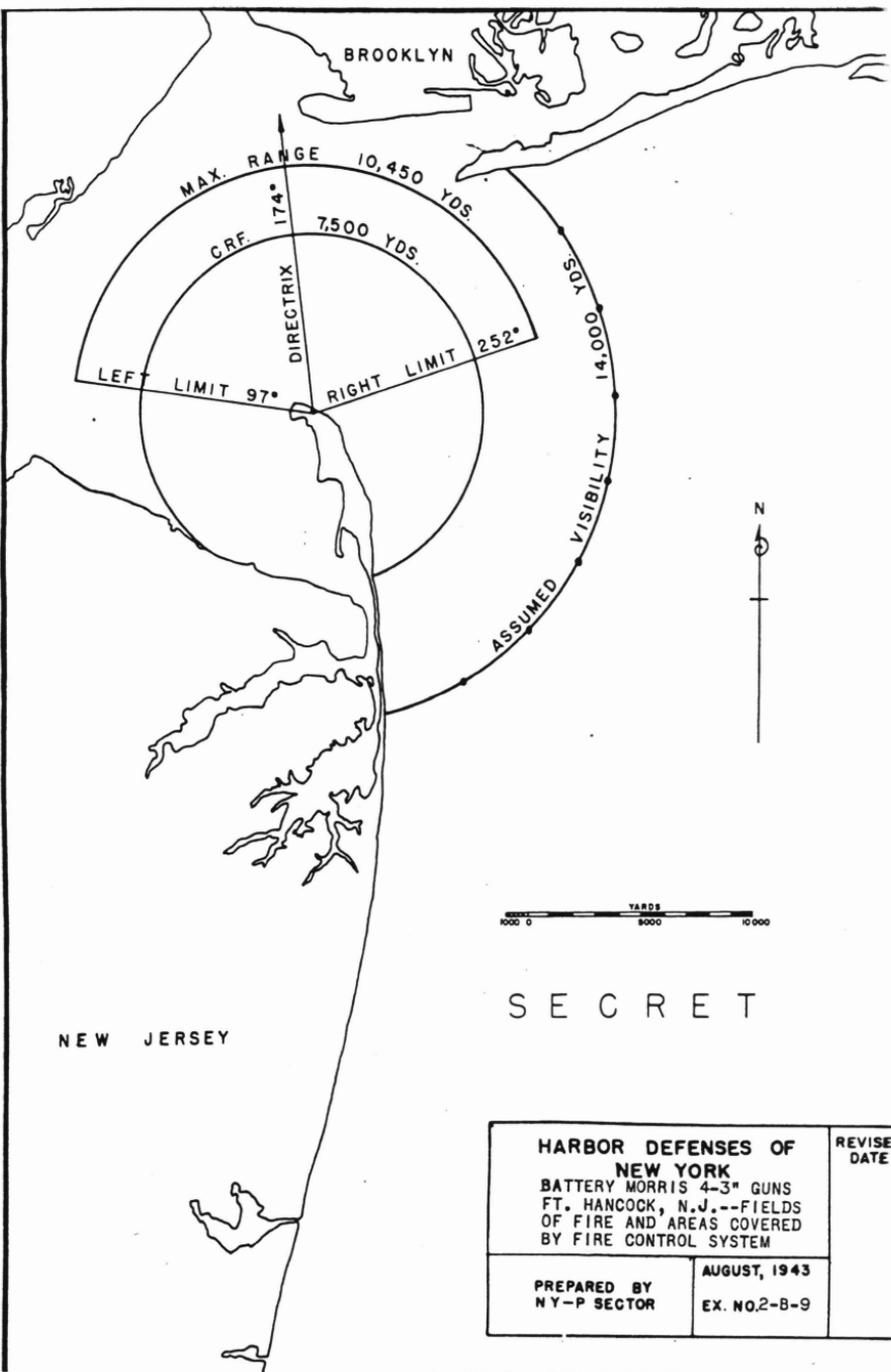


NEW
JERSEY

SECRET

HARBOR DEFENSES OF NEW YORK B'TRY NO. 8 - 4-90MM GUNS FT. HANCOCK, N.J. FIELD OF FIRE		REVISED DATE
PREPARED BY NY-P SECTOR	AUGUST, 1943 EX NO. 2-B-8	





NEW JERSEY

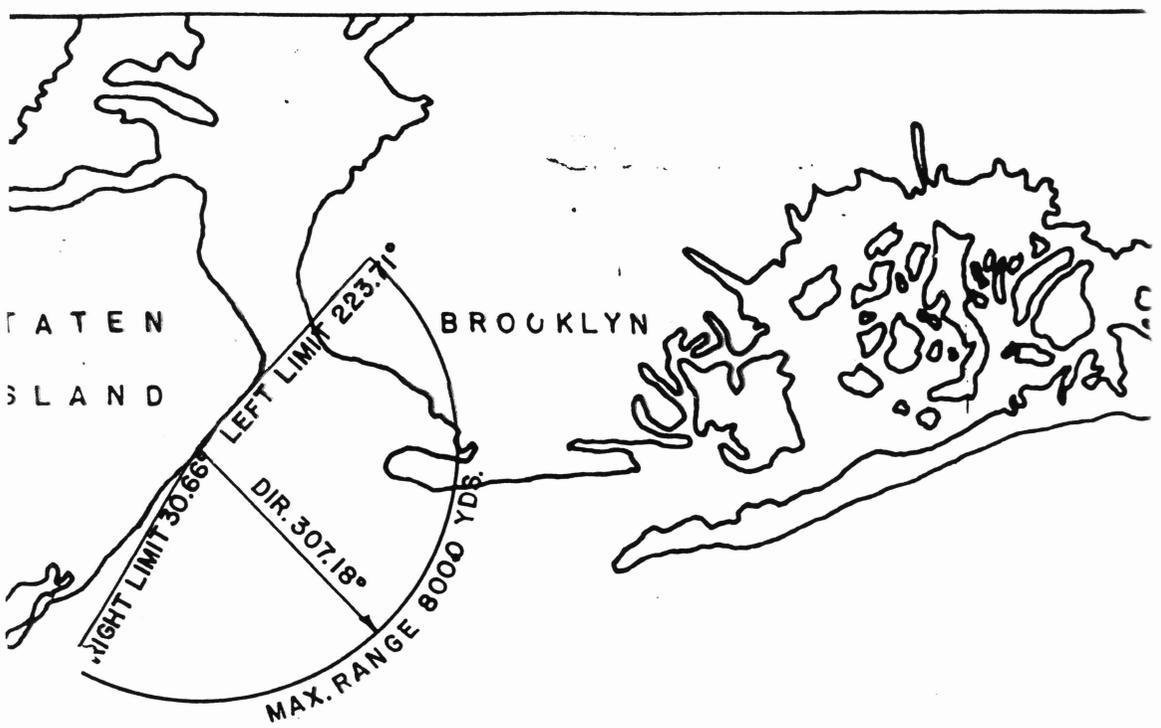
S E C R E T

HARBOR DEFENSES OF NEW YORK BATTERY MORRIS 4-3" GUNS FT. HANCOCK, N.J.--FIELDS OF FIRE AND AREAS COVERED BY FIRE CONTROL SYSTEM		REVISED DATE
PREPARED BY NY-P SECTOR	AUGUST, 1943 EX. NO.2-B-9	

SEE EXHIBIT No. 1-D

EX- No. 2-B-10

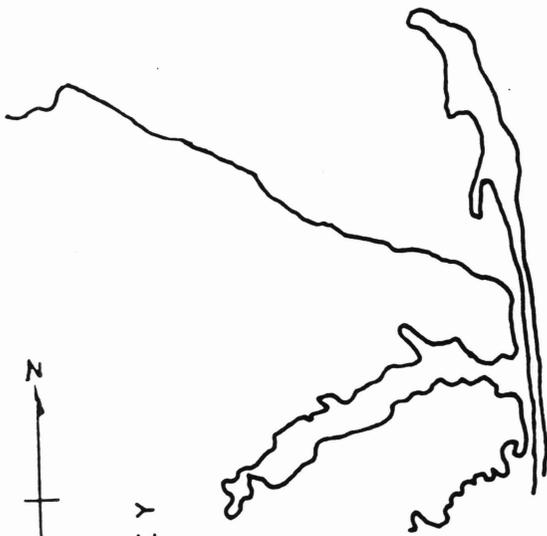
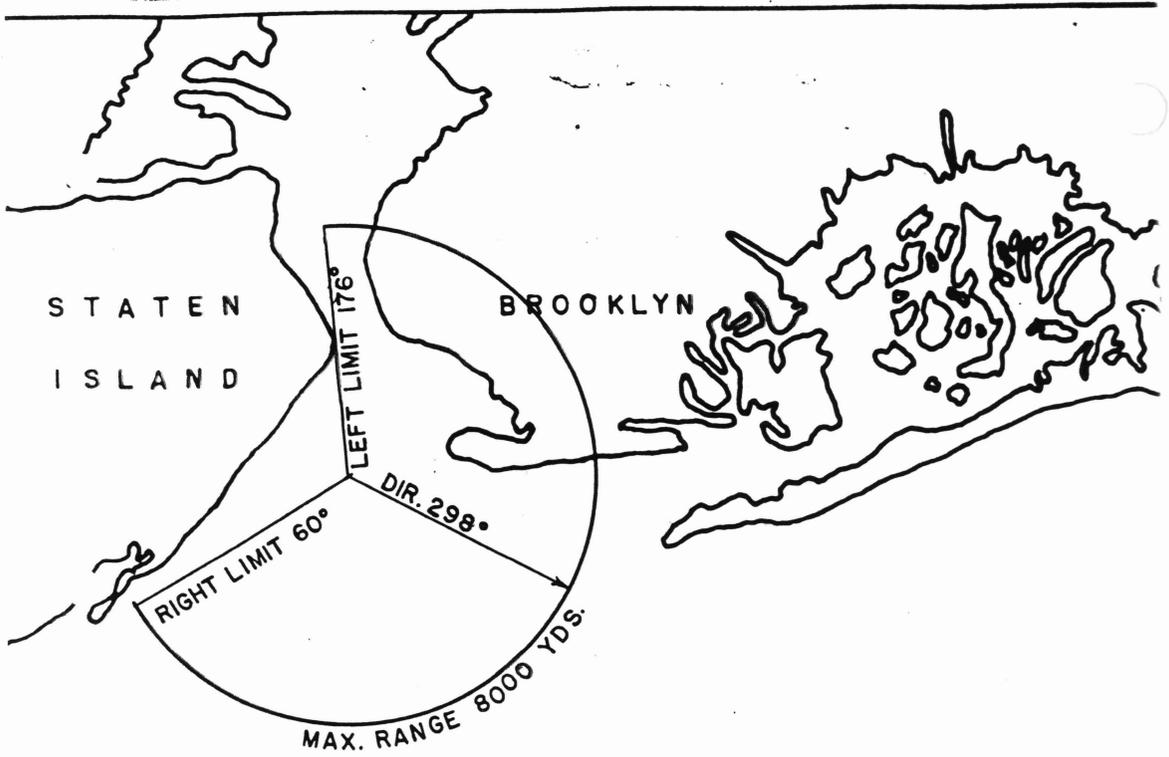
Authority: MND 760162
By WDP: NARA Date: 7/5/00



SECRET

HARBOR DEFENSES OF NEW YORK B'TRY NO.11- 4-90MM GUNS MILLER FIELD, N.Y. FIELD OF FIRE		REVISED DATE
PREPARED BY NY-P SECTOR	AUGUST, 1943 EX. NO.2B-11	





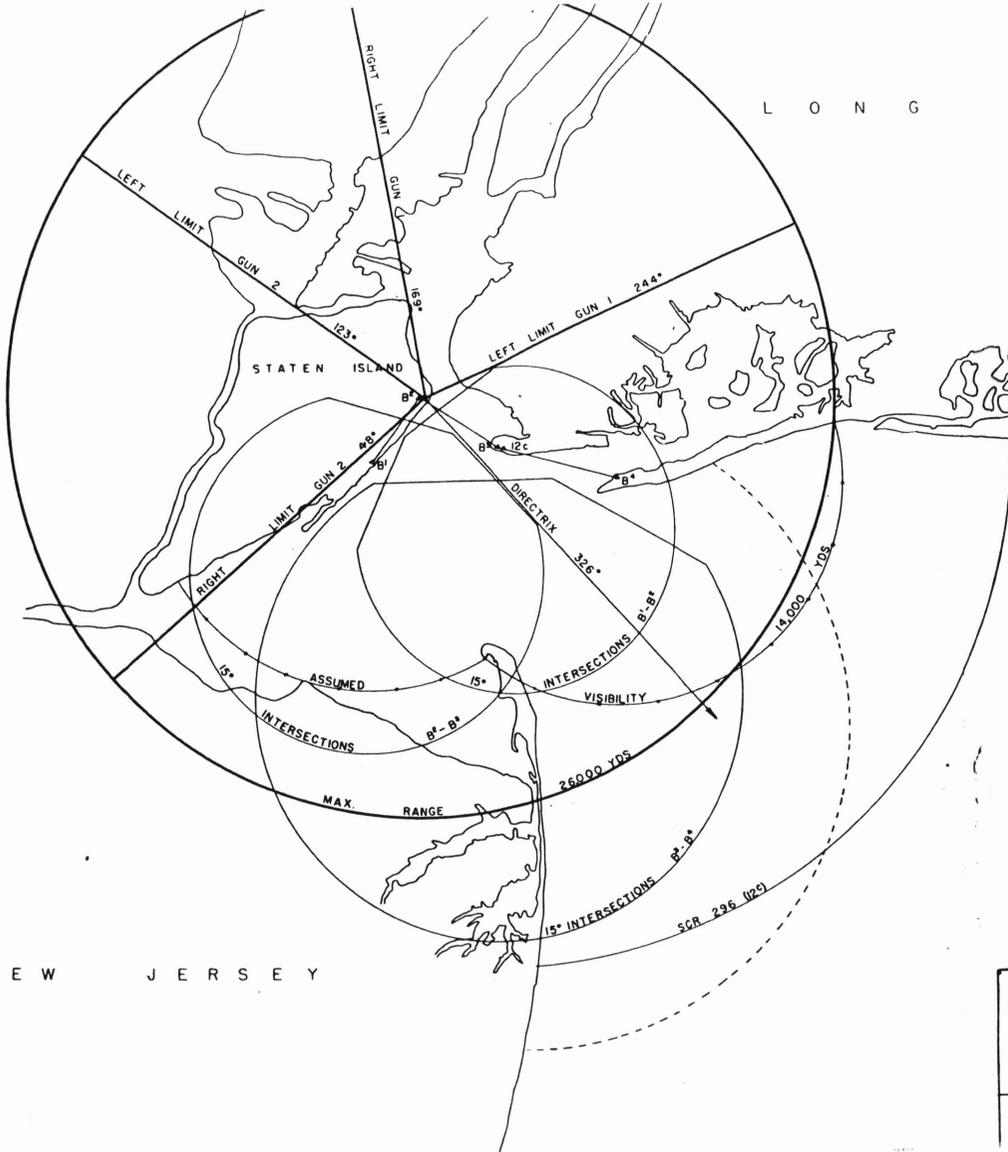
NEW JERSEY

SECRET

HARBOR DEFENSES OF NEW YORK BTRY NO.12- 2-90MM GUNS SWINBURNE IS., N.Y. FIELD OF FIRE		REVISED DATE
PREPARED BY NY-P SECTOR	AUGUST, 1943 EX. NO.2-B-12	



L O N G I S L A N D

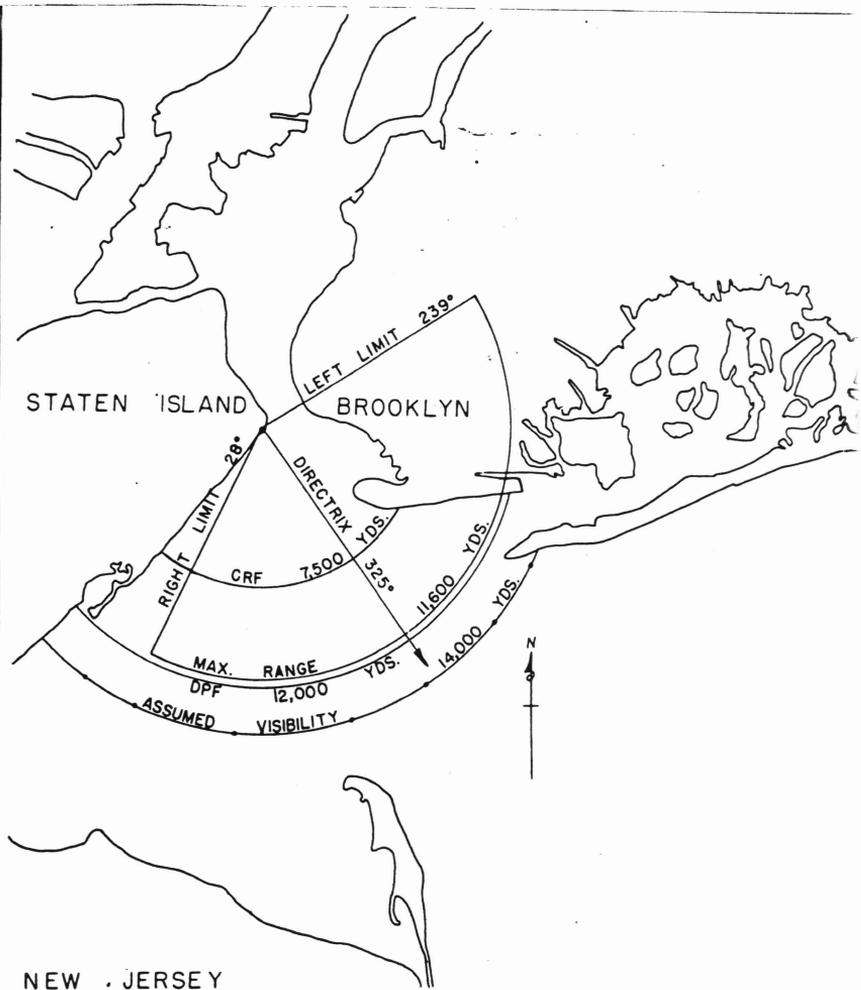


N E W J E R S E Y



S E C R E T

HARBOR DEFENSES OF NEW YORK		REVISED DATE
CONSTRUCTION 218 2-6" GUNS FT. WADSWORTH, N.Y.--FIELDS OF FIRE AND AREAS COVERED BY FIRE CONTROL SYSTEM		
PREPARED BY NY-P SECTOR	AUGUST, 1943	EX NO 2-B-13



SECRET

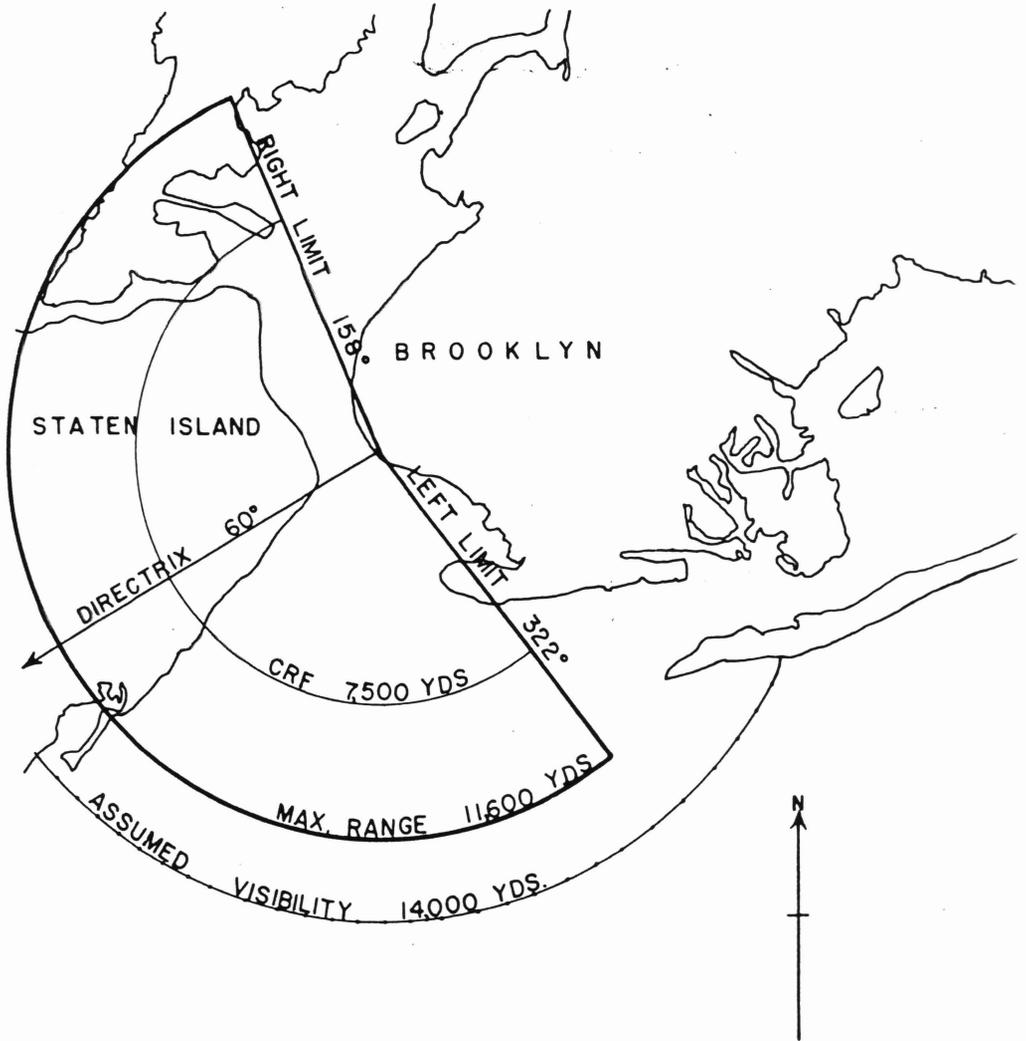
<p>HARBOR DEFENSES OF NEW YORK BATTERY TURNBULL 4-3" GUNS FT. WADSWORTH, N.Y.--FIELDS OF FIRE AND AREAS COVERED BY FIRE CONTROL SYSTEM</p>	<p>REVISED DATE</p>
<p>PREPARED BY N Y - P SECTOR</p>	<p>AUGUST, 1943 EX. NO.2-B-14</p>



SEE EXHIBIT No. 1-D

EX. No. 2-B-15

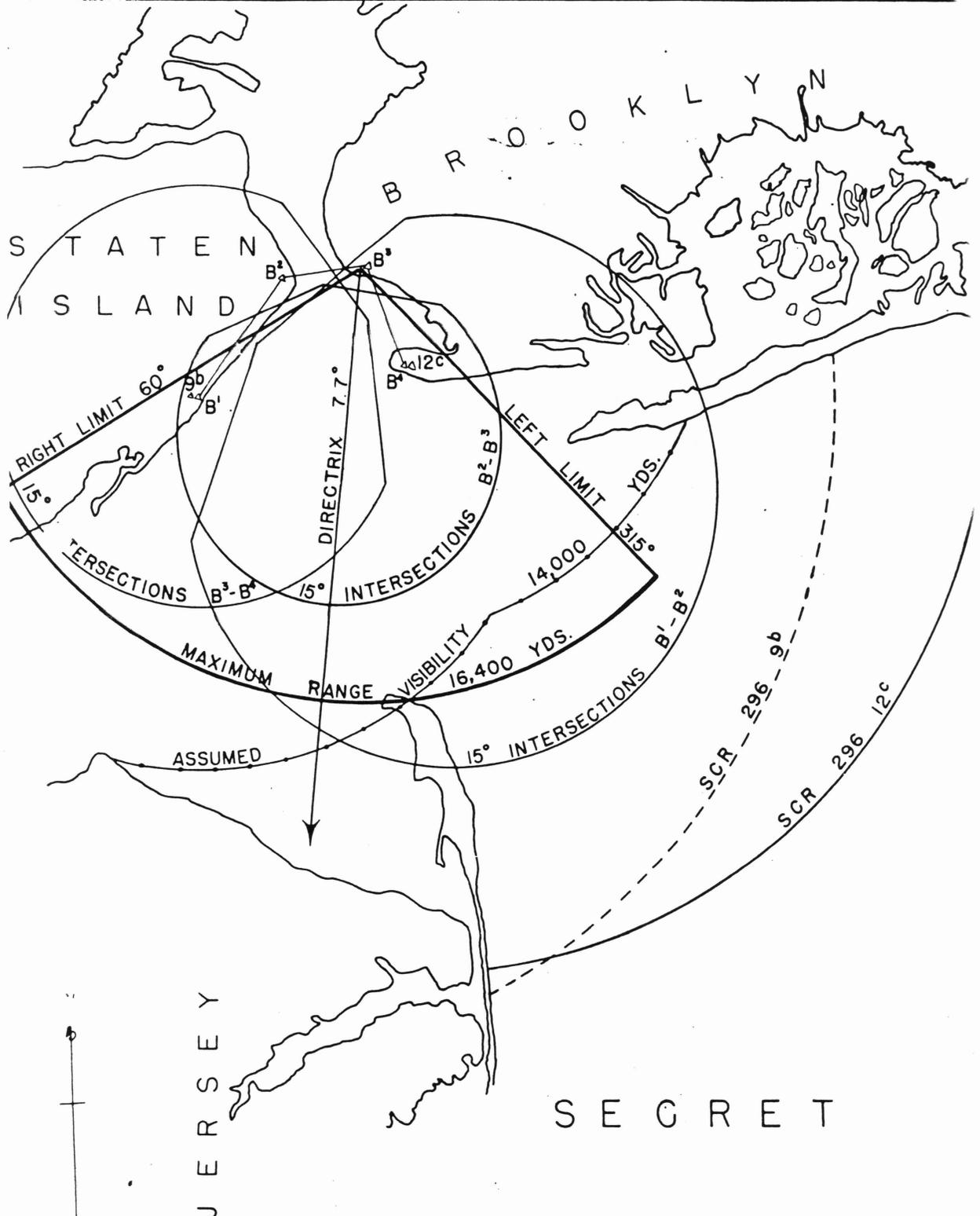
Authority: NND 760162
By WDR/NARA Date: 7/15/00



S E C R E T

HARBOR DEFENSES OF NEW YORK BATTERY GRIFFIN 2-3" GUNS FT. HAMILTON, N.Y.--FIELDS OF FIRE AND AREAS COVERED BY FIRE CONTROL SYSTEM		REVISED DATE
PREPARED BY NY-P SECTOR	AUGUST, 1943 EX. NO. 2-B-16	

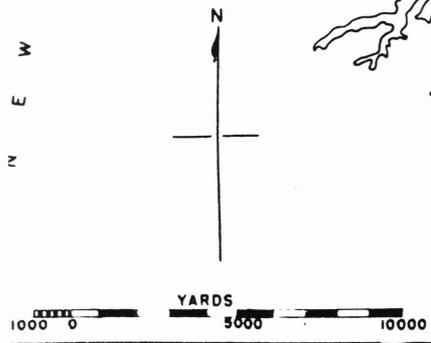
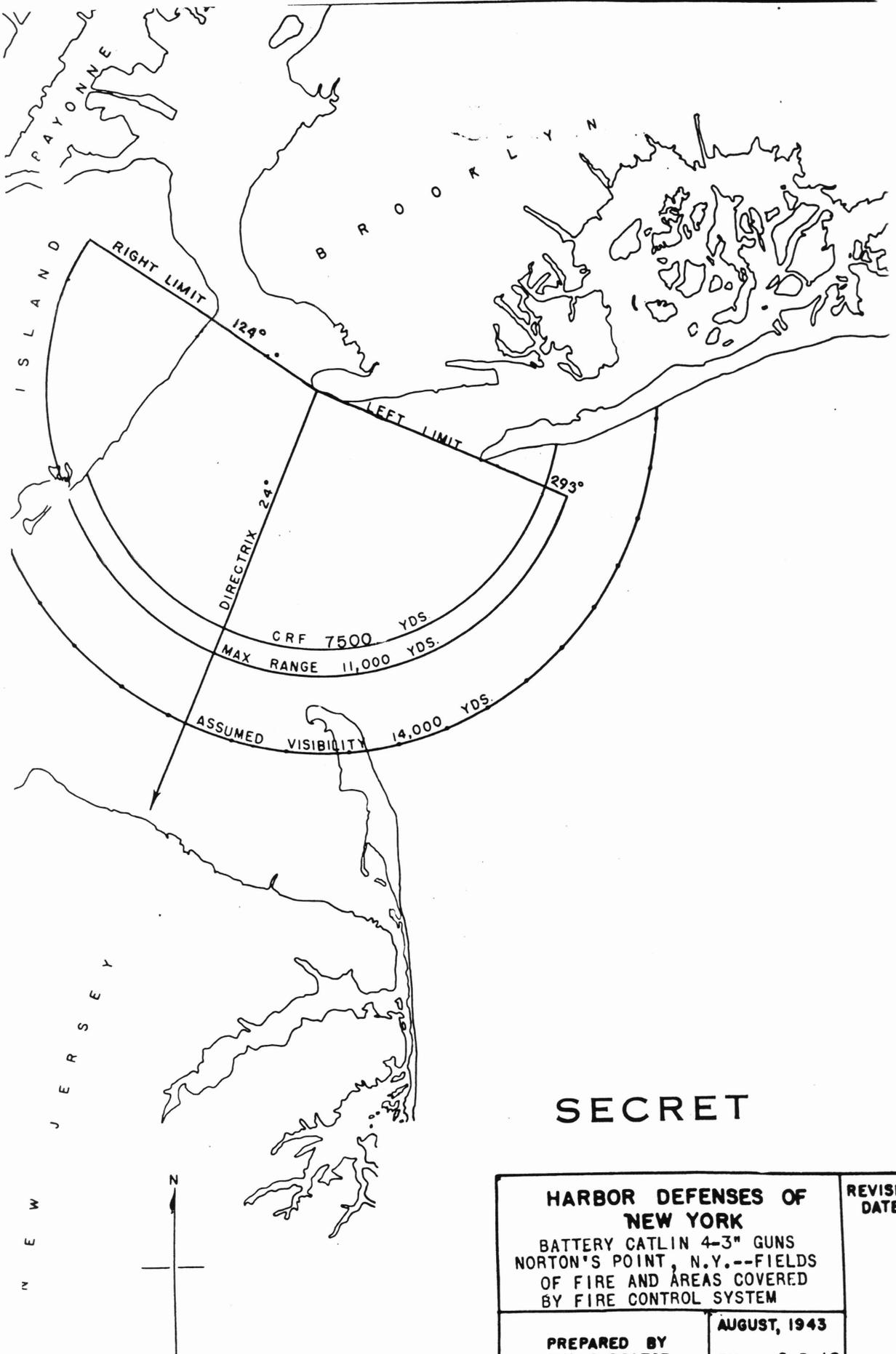




S E C R E T

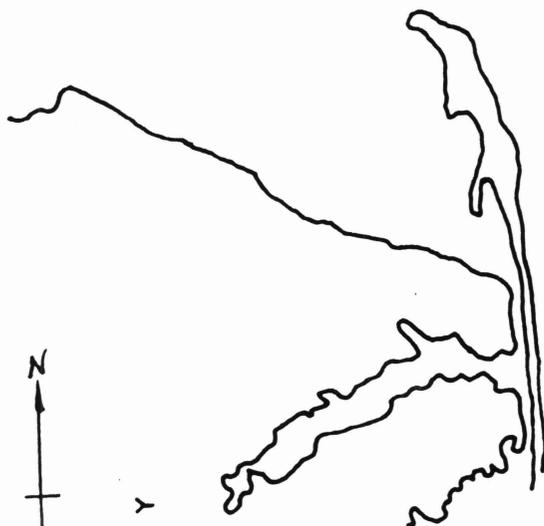
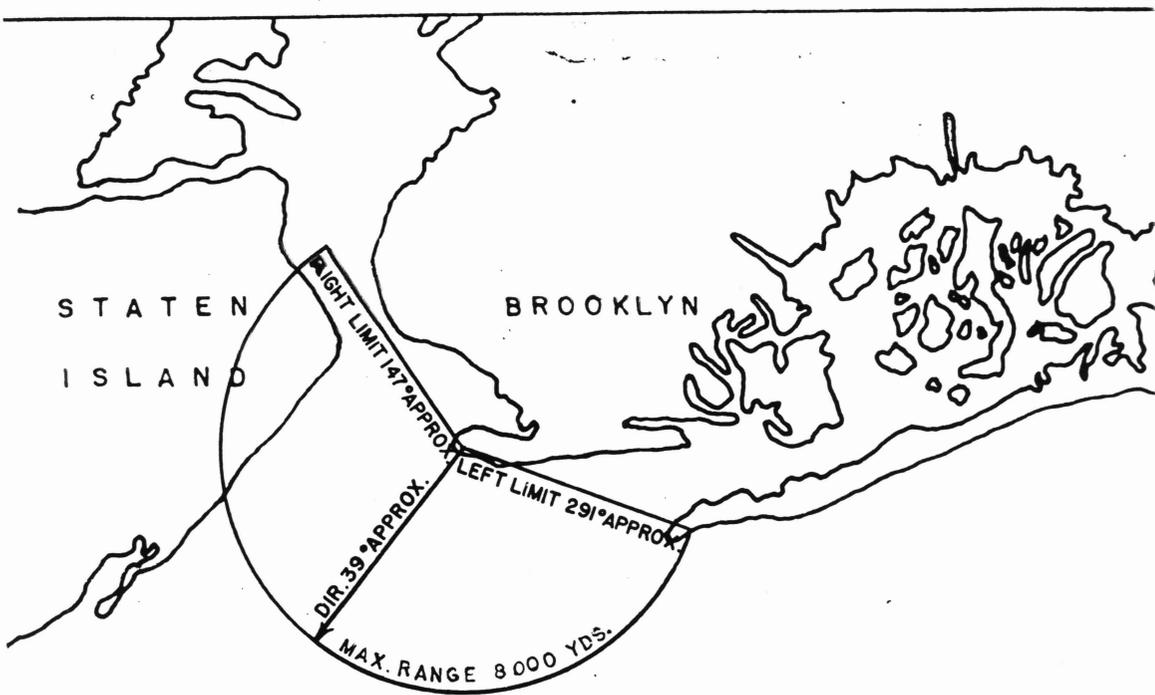


HARBOR DEFENSES OF NEW YORK BATTERY LIVINGSTON 2-6" GUNS FT. HAMILTON, N.Y.--FIELDS OF FIRE AND AREAS COVERED BY FIRE CONTROL SYSTEM		REVISED DATE
PREPARED BY NY-P SECTOR	AUGUST, 1943 EX. NO. 2-B-17	



SECRET

<p>HARBOR DEFENSES OF NEW YORK</p> <p>BATTERY CATLIN 4-3" GUNS NORTON'S POINT, N.Y.--FIELDS OF FIRE AND AREAS COVERED BY FIRE CONTROL SYSTEM</p>		<p>REVISED DATE</p>
<p>PREPARED BY NY-P SECTOR</p>	<p>AUGUST, 1943</p>	<p>EX. NO.2-B-18</p>

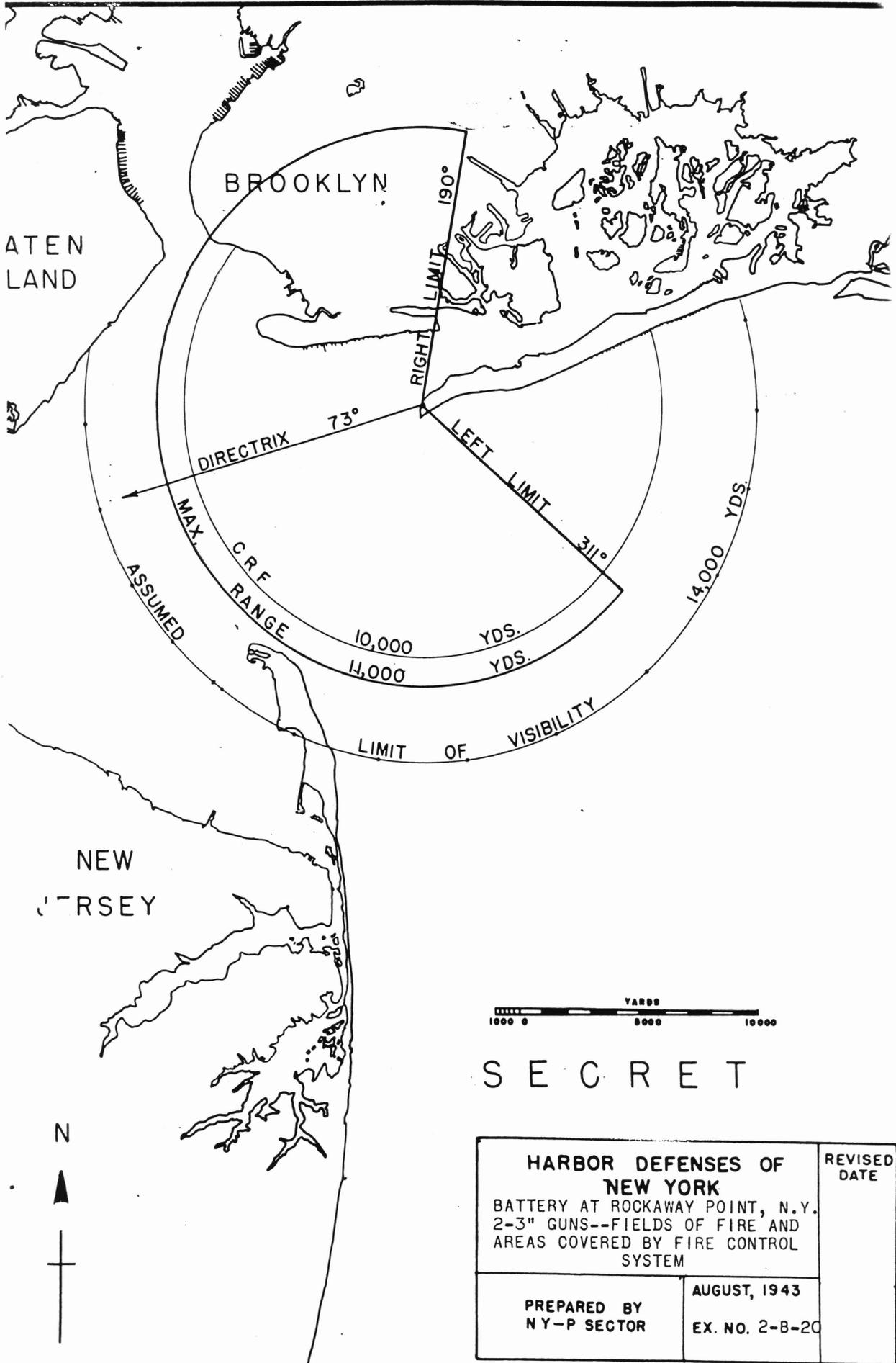


NEW JERSEY

SECRET

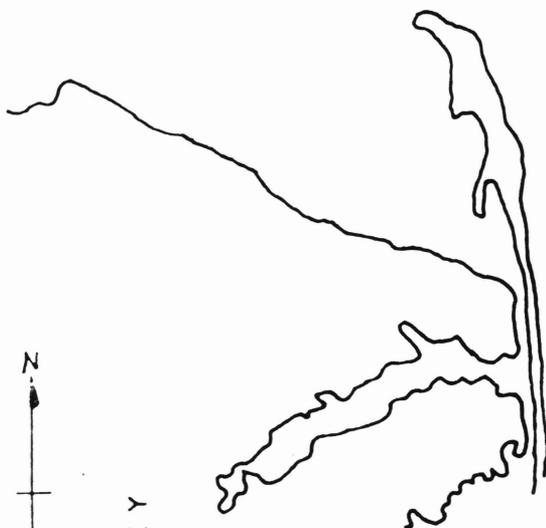
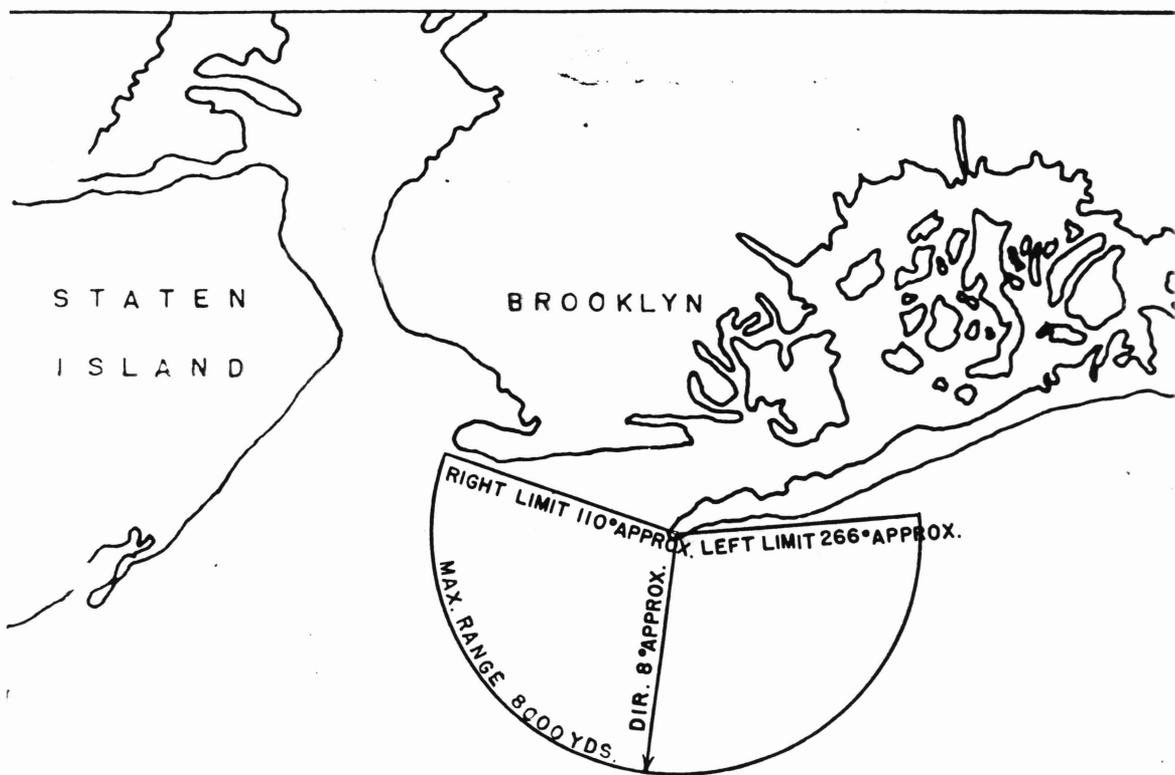
HARBOR DEFENSES OF NEW YORK B'T'RY NC. 19- 4 - 90MM GUNS NORTON'S POINT, N.Y. FIELD OF FIRE		REVISED DATE
PREPARED BY NY-P SECTOR	AUGUST, 1943 EX NO. 2-B 19	





S E C R E T

HARBOR DEFENSES OF NEW YORK BATTERY AT ROCKAWAY POINT, N.Y. 2-3" GUNS--FIELDS OF FIRE AND AREAS COVERED BY FIRE CONTROL SYSTEM		REVISED DATE
PREPARED BY NY-P SECTOR	AUGUST, 1943 EX. NO. 2-B-20	

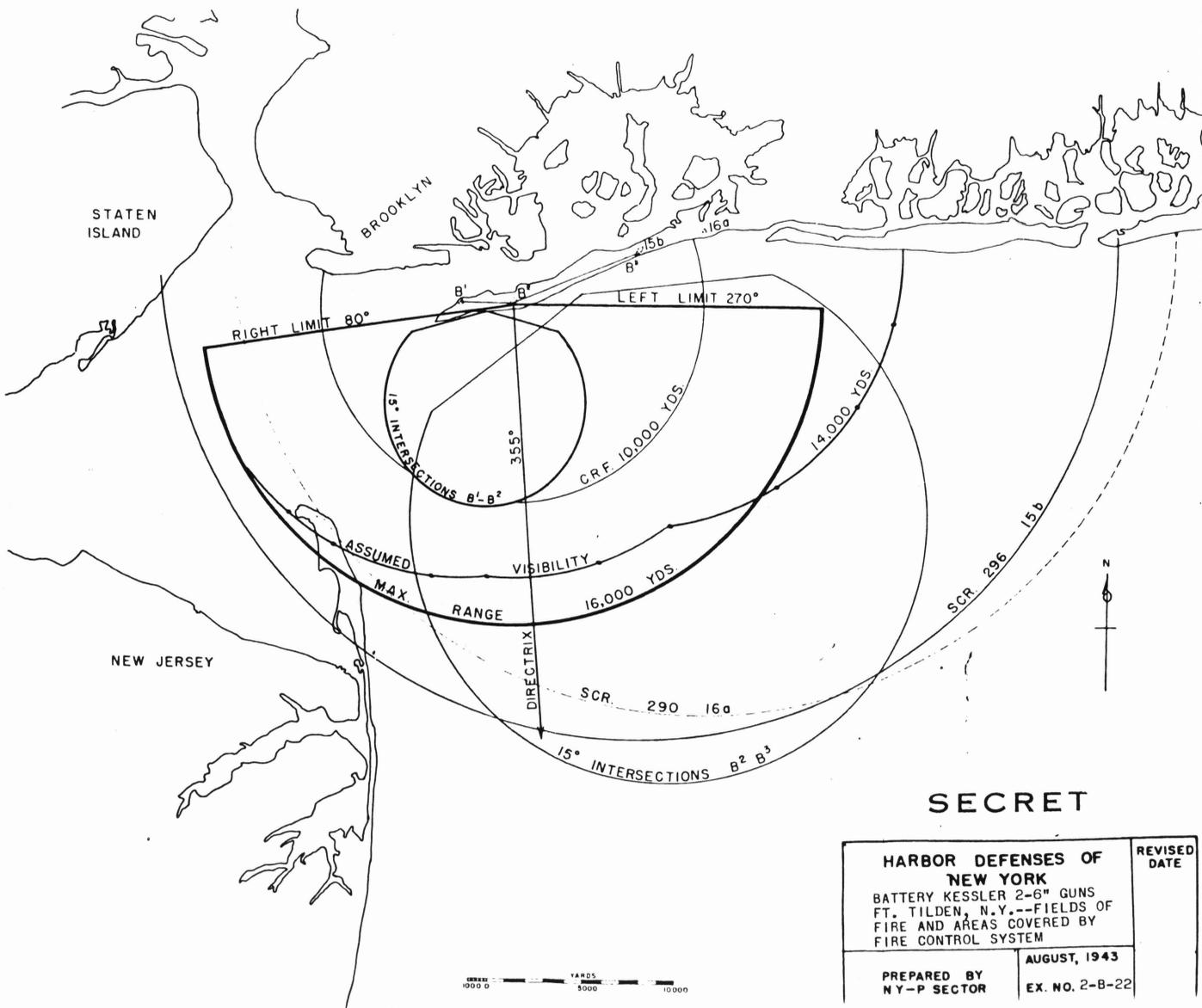


NEW JERSEY

SECRET

HARBOR DEFENSES OF NEW YORK B'T'RY NO. 21 - 4 - 90-MM GUNS ROCKAWAY POINT, N. Y. FIELD OF FIRE		REVISED DATE
PREPARED BY NY-P SECTOR	AUGUST, 1943 EX NO. 2-B-21	



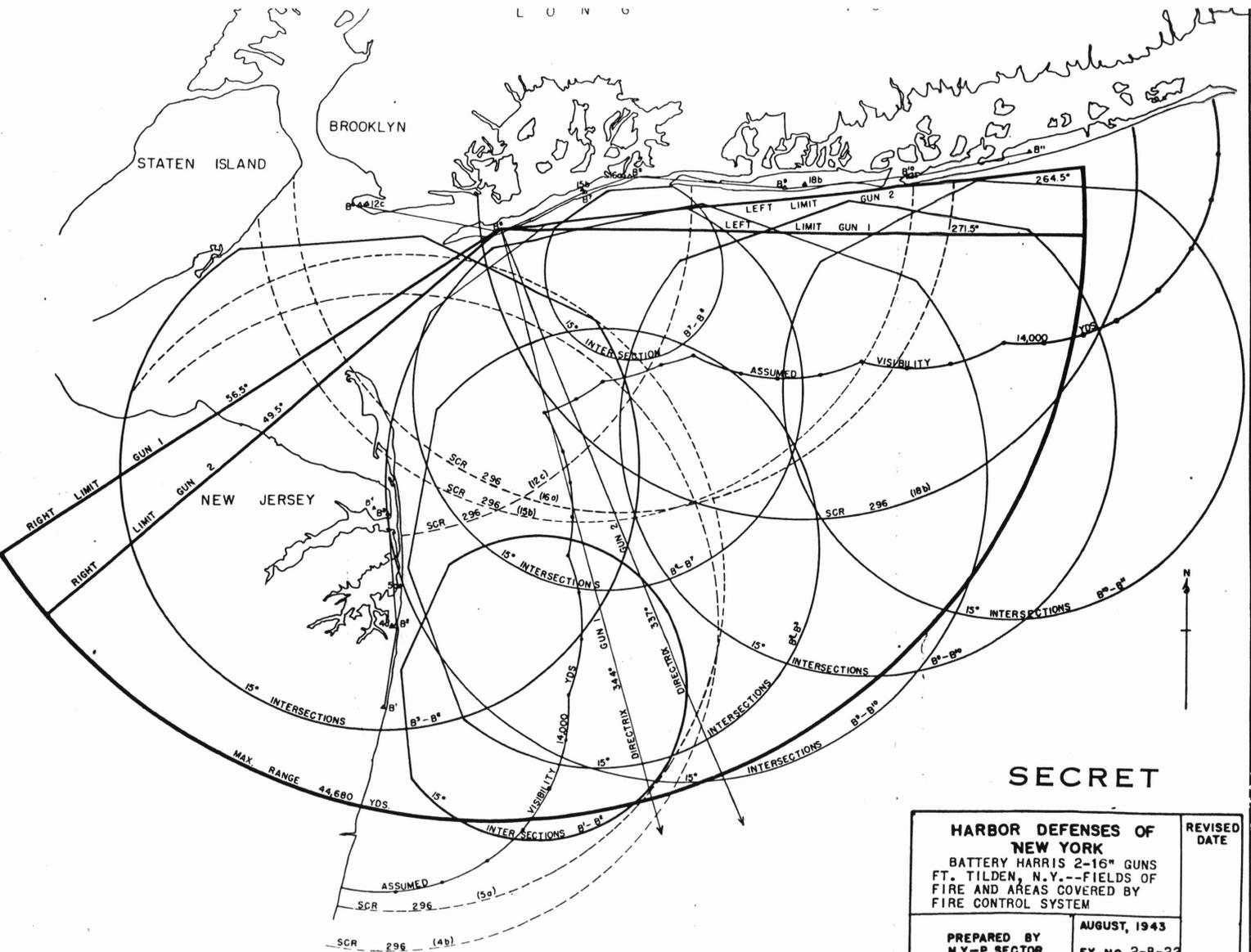


SECRET

HARBOR DEFENSES OF NEW YORK BATTERY KESSLER 2-6" GUNS FT. TILDEN, N.Y.--FIELDS OF FIRE AND AREAS COVERED BY FIRE CONTROL SYSTEM		REVISED DATE
PREPARED BY NY-P SECTOR	AUGUST, 1943 EX. NO. 2-B-22	

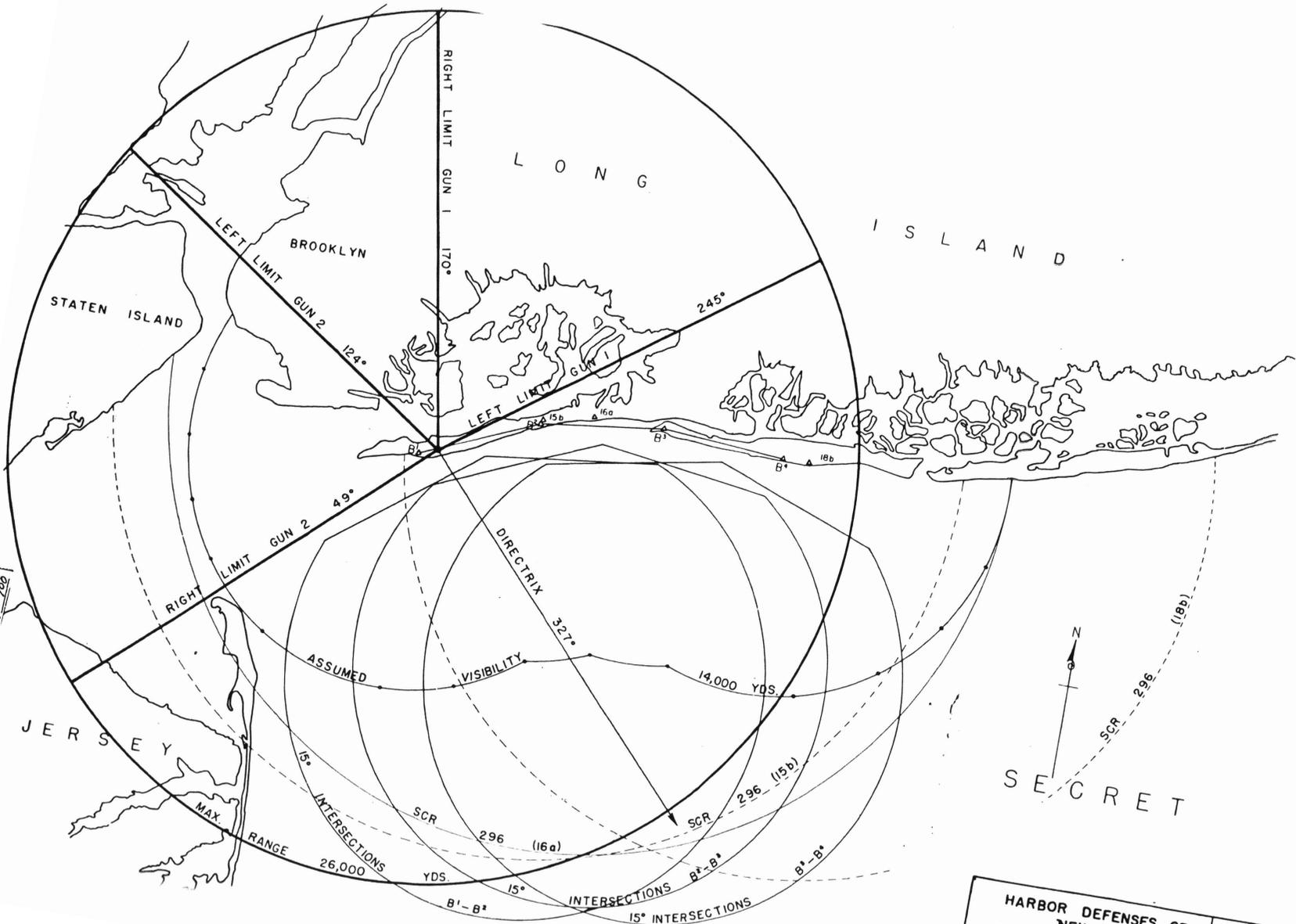


L U N G



SECRET

HARBOR DEFENSES OF NEW YORK BATTERY HARRIS 2-16" GUNS FT. TILDEN, N.Y.--FIELDS OF FIRE AND AREAS COVERED BY FIRE CONTROL SYSTEM		REVISED DATE
PREPARED BY NY-P SECTOR	AUGUST, 1943 EX. NO. 2-B-23	



SECRET

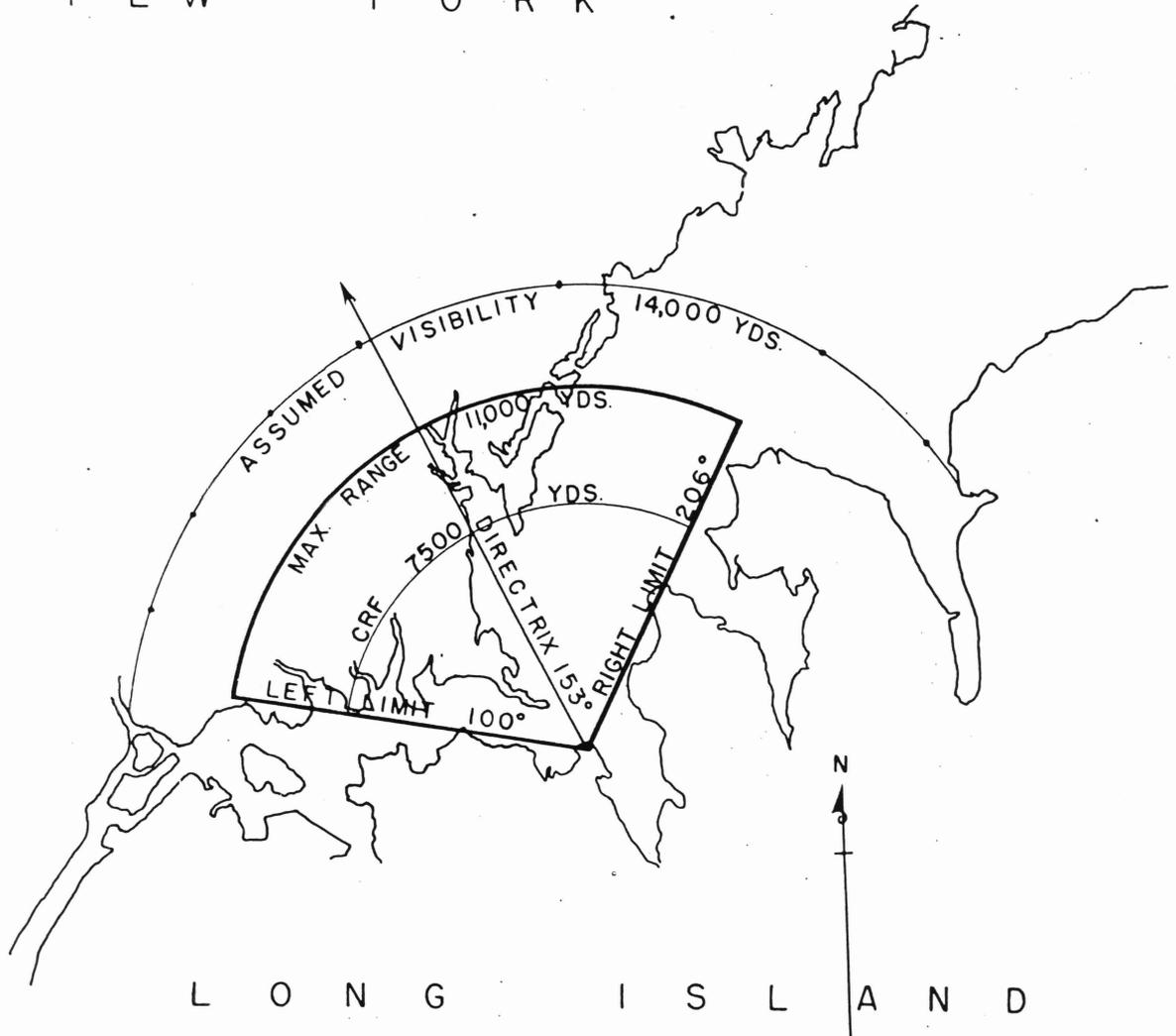
HARBOR DEFENSES OF NEW YORK CONSTRUCTION 220 2-6" GUNS FT. TILDEN, N.Y.--FIELDS OF FIRE AND AREAS COVERED BY FIRE CONTROL SYSTEM		REVISED DATE
PREPARED BY NY-P SECTOR	AUGUST, 1943 EX. NO. 2-B-24	

SEE EXHIBIT No. 1-D

EX. No. 2-B-25

Authority NND 760162
By WDR NARA Date: 7/15/00

I E W Y O R K



L O N G I S L A N D

SECRET

HARBOR DEFENSES OF NEW YORK		REVISED DATE
BATTERY BAKER 2-3" GUNS FT. TOTTEN, N.Y.--FIELDS OF FIRE AND AREAS COVERED BY FIRE CONTROL SYSTEM		
PREPARED BY NY-P SECTOR	AUGUST, 1943	
	EX. NO 2-B-26	



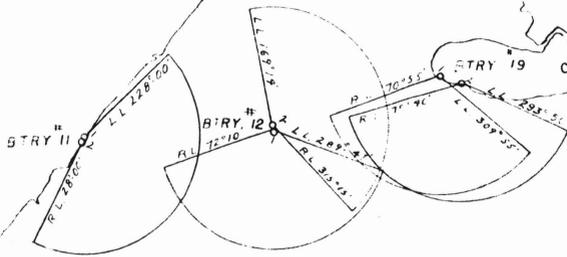


SECRET

HARBOR DEFENSES OF NEW YORK BATTERY BURNS 2-3" GUNS FT. TOTTEN, N.Y.--FIELDS OF FIRE AND AREAS COVERED BY FIRE CONTROL SYSTEM		REVISED DATE
PREPARED BY NY-P SECTOR	AUGUST, 1943 EX. NO. 2-8-27	

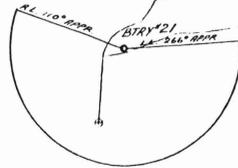


STATEN ISLAND

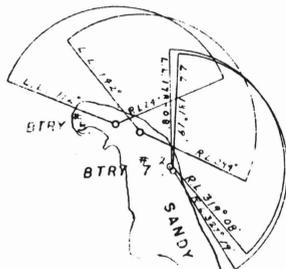


CONEY ISLAND

BTRY #19



ROCKAWAY BEACH



SANDY HOOK

SCALE: 1:80,000

YARDS



HARBOR DEFENSES OF
NEW YORK
AUTOMATIC WEAPONS
A.M.T.B. BATTERIES
FIELDS OF FIRE

REVISED
DATE

PREPARED BY
H. D. N. Y.

APRIL 1944
EX. NO - 2 - B - 28

SECRET

ELEMENT	LOCATION & STRUCTURE NO.			LAMBERT COORDINATES	
	DECK	PEDESTAL	X	Y	
H.D.C.P.	8g		*99,865.00	*56,035.00	
H.D.O.P.	8h		99,824.35	56,031.52	
H.D. SCR-582	7f		*101,470.00	*47,457.10	
H.D. SCR-682	8e		100,193.66	55,808.45	
H.D. SCR-582	14b		109,217.58	67,818.52	
HECP	10m				
Adv. HECP No. 1	8m		99,792.21	56,651.23	
Adv. HECP No. 2	10i				
Amb. Group CP & OP	10 1		*94,785.00	73,395.00	
	(Temporary)				
Fort Hamilton CP & OP	11a		96,978.73	73,847.00	
Battalion 1 CP	7g	Lower Right	101,476.97	47,456.62	
Battalion 1 OP	7e	Lower Left	101,476.96	47,458.24	
Battalion 2 CP	14g		*110,593.00	*68,136.00	
Battalion 2 OP	14b	Lower Right	109,217.31	67,816.13	
Battalion 3 CP & OP	8r		99,008.95	57,167.35	
Battalion 4 CP & OP	8n		99,772.53	56,690.36	
Battalion 5 CP & OP	12d				
Battalion 5 CP & OP	12b		99,580.13	69,568.56	
Battalion 6 CP & OP	10i		94,472.79	72,999.23	
Battalion 7 CP	8l		*99,710.00	56,630.00	
Battalion 8 CP & OP	21a		120,236.65	96,648.98	
Const. 219 DF	7		101,500.81	46,897.46	
	BC	7b Lower Left	101,625.43	46,981.96	
	B ¹	2a Left Front	99,124.94	23,615.44	
	B ²	3b Lower Left Front	101,274.10	32,578.94	
	B ³	4a Lower Left Front	102,121.83	38,435.72	
	B ⁴	7b Top Left Front	101,621.10	46,981.58	
	B ⁵	7d Right Front	100,504.12	47,510.30	
	B ⁶	8j Right Front	100,248.30	56,729.35	

SECRET

AUTHORITY AND 760162
 BY WDR NARA DATE 7/15/00

SECRET

ELEMENT	LOCATION & STRUCTURE NO. DECK PEDESTAL			LAMBERT COORDINATES	
				X	Y
Primary SCR	4b			102,121.8	38,435.7
Alternate SCR	5a			102,357.0	41,501.4
Alternate SCR	7d			100,504.1	47,510.3
Lewis DP	7			100,951.47	47,175.55
BC	7b	Lower	Right	101,625.65	46,979.47
B ¹	1a		Left	97,074.54	14,915.93
B ²	2a		Right Front	99,124.37	23,613.00
B ³	3b	Top	Right Front	101,273.67	32,576.48
B ⁴	4a	Top	Right Front	102,121.89	38,433.26
B ⁵	7b	Top	Right Front	101,621.32	46,979.09
B ⁶	7d		Right Rear	100,502.40	47,510.77
B ⁷	8a	Lower	Right Front	101,769.33	52,482.26
B ⁸	17a	Top	Left Front	123,667.00	71,591.43
B ⁹	18a	Top	Left Front	131,206.50	70,935.09
Primary SCR	7d			100,502.4	47,510.8
Alternate SCR	4b			102,121.9	38,433.3
Alternate SCR	5a			102,357.0	41,501.4
Alternate SCR	8b			101,769.3	52,482.3
Alternate SCR	16a			119,554.5	71,824.7
Alternate SCR	18b			132,747.9	71,031.6
Mills DP	8			100,706.24	52,706.51
BC	8c			100,680.00	52,755.00
B ¹	3b	Middle	Right Front	101,273.67	32,576.48
B ²	4a	Middle	Right Front	102,121.89	38,433.26
B ³	7e	Upper	Right	101,473.47	47,456.85
B ⁴	8a	Upper	Left Front	101,769.33	52,484.76
B ⁵	8e	Lower	Right	100,197.42	55,906.88

EXHIBIT 3-B-1

- 2 -

SECRET

Authority AND 760162
 BY WDR NARA Date 7/15/00

REPRODUCED FROM THE NATIONAL ARCHIVES

SECRET

ELEMENT	LOCATION & STRUCTURE NO.			LAMBERT COORDINATES	
	DECK	PEDESTAL	X	Y	
Primary SCR	3a		100,832.2	31,853.7	
Alternate SCR	4b		102,121.9	38,433.3	
Alternate SCR	5a		102,360.7	41,501.2	
Alternate SCR	8b		101,769.3	52,484.8	
Alternate SCR	16a		119,553.6	71,821.9	
Kingman	DP	8	100,718.61	53,096.28	
	BC	8d	100,720.00	53,166.00	
	B ¹	3b Middle Left Front	101,274.10	32,578.94	
	B ²	4a Middle Left Front	102,121.83	38,435.72	
	B ³	7e Right	101,467.32	47,468.84	
	B ⁴	8a Upper Right Front	101,769.33	52,482.26	
	B ⁵	8e Middle Right	100,197.42	55,806.88	
Primary SCR	5a		102,360.7	41,501.2	
Alternate SCR	3a		100,832.2	31,853.7	
Alternate SCR	4b		102,121.8	38,435.7	
Alternate SCR	8b		101,769.3	52,482.3	
Alternate SCR	16a		119,553.6	71,821.9	
Peck	DP	8	100,421.15	55,818.78	
	BC	8	100,407.16	55,839.62	
	CRF	8f	100,392.53	55,893.75	
	B ¹	7a Right Front	101,604.13	46,961.55	
	B ²	8a Lower Left Front	101,769.33	52,484.76	
	B ³	8j Left Front	100,246.88	56,731.42	
Primary SCR	8b		101,769.3	52,484.8	
Alternate SCR	5a		102,357.0	41,501.4	
Urnston	DP	8	100,440.63	55,942.98	
	CRF	8f	100,392.53	55,893.75	

- 3 -

EXHIBIT 3-B-1

SECRET

AUTHORITY AND 760162
 BY WDR NARA DATE 7/15/00

SECRET

ELEMENT	LOCATION & STRUCTURE NO.			LAMBERT COORDINATES	
	DECK	PEDESTAL	X	Y	
90 mm South		8		100,298.94	56,367.91
90 mm North		8		99,447.35	57,227.25
Morris	DP	8		99,258.88	57,203.61
	BC-CRF	8g		99,288.43	57,209.36
Mine	MC	8r		99,008.95	57,167.35
	M ¹	8j	Left Rear	100,245.79	56,730.65
	M ²	8s	Right Front	98,493.42	57,205.54
90 mm	DP	9		*91,325.28	*68,672.37
90 mm	DP	9A			
Con. #218	DP	10		94,548.33	76,675.00
	BC	10e		94,572.94	72,697.23
	B ¹	9a	Top Right Front	91,296.15	68,624.16
	B ²	10d	Right	94,418.54	72,955.01
	B ³	12b	Lower Right Front	99,580.13	69,568.56
	B ⁴	13b	Lower Right Front	106,781.15	68,150.06
Primary SCR		12c		99,577.6	69,568.8
Alternate SCR		8b		101,769.3	52,484.8
Alternate SCR		9b		91,296.2	68,624.2
Turnbull	DP	10		94,849.24	72,826.74
	CRF	10n	Center	94,851.12	72,870.70
	BC	10h	Front	94,852.02	72,869.95
Mine	MC	10y			
	M ¹	9B-a		*95,036.56	*70,313.23
	M ²	12e		*98,800.06	*70,177.47
Griffin	DP	11		96,873.53	73,858.58
	BC-CRF	11b			
Livingston	DP	11		97,529.53	73,586.40
	BC	11e	Left	97,603.64	73,582.29
	CRF	11e	Center	97,602.65	73,584.14
	B ¹	9a	Top Left	91,297.55	68,626.24

SECRET

AUTHORITY AND 760162
 BY WDR NARA DATE 7/15/00

SECRET

ELEMENT	LOCATION & STRUCTURE NO.			PEDESTAL	LAMBERT COORDINATES	
	DECK				X	Y
Livingston B ²	10f			Right	94,433.63	72,961.07
B ³	11e			Right	97,602.26	73,582.51
B ⁴	12b	Lower		Left Front	99,577.64	69,568.78
Primary SCR	9b				91,297.6	68,626.2
Alternate SCR	12c				99,577.6	69,568.8
Catlin DP	12				98,966.02	69,773.97
BC	12a			Right		
CRF	12a			Center		
90 mm DP	12				*99,225.01	*69,690.63
Rockaway Point DP	13				105,573.71	66,975.40
BC	13a			Right		
CRF	13a			Center		
90 mm DP	13				*105,913.53	*67,104.76
Kessler DP	14				109,474.96	67,739.61
CRF	14d			Center	109,347.65	67,724.47
BC	14d			Front	109,348.46	67,722.27
B ¹	13b	Top		Right Rear	106,780.56	68,151.34
B ²	14a	Lower		Left Front	109,223.67	67,700.52
B ³	15a	Lower		Left Front	116,036.70	70,553.68
Primary SCR	15b				116,036.7	70,553.7
Alternate SCR	16a				119,554.5	71,824.7
Harris DP	14				109,601.93	68,028.64
BC	14b	Middle		Right	109,217.31	67,816.13
B ¹	3b	Top		Left Front	101,274.10	32,578.94
B ²	4a	Top		Left Front	102,121.83	38,435.72
B ³	7a			Left Front	101,604.13	46,964.05
B ⁴	7d			Left Rear	100,502.98	47,512.92
B ⁶	14a	Top		Left Front	109,223.67	67,700.52
B ⁷	15a	Top		Right Front	116,034.26	70,553.02

SECRET

AUTHORITY AND 760162
 BY WDR NARA DATE 7/15/00

SECRET

ELEMENT	LOCATION & STRUCTURE NO.			PEDESTAL	LAMBERT COORDINATES	
	DECK				X	Y
Harris	B ⁸	17a	Top	Right Front	123,664.51	71,591.64
	B ⁹	18a	Top	Right Front	131,204.01	70,934.87
	B ¹⁰	19a		Right Front	140,914.91	71,714.25
	B ¹¹	20a		Left	149,446.5	73,483.4
Primary SCR		18b			132,747.9	71,031.6
Alternate SCR		3a			100,832.2	31,853.7
Alternate SCR		4b			102,121.8	38,435.7
Alternate SCR		5a			102,357.4	41,501.9
Alternate SCR		7d			100,503.0	47,512.9
Alternate SCR		12c			99,580.1	69,568.6
Alternate SCR		15b			116,034.3	70,553.0
Alternate SCR		16a			119,555.0	71,824.3
Const. #220 DP		14			110,333.33	68,043.33
	BC	14f			110,358.33	68,065.13
	B ¹	14a	Lower	Right Front	109,221.23	67,700.09
	B ²	15a	Top	Left Front	116,036.70	70,553.68
	B ³	17a	Lower	Left Front	123,667.00	71,591.43
	B ⁴	18a	Lower	Left Front	131,206.50	70,935.09
Primary SCR		16a			119,554.52	71,824.68
Alternate SCR		15b			116,036.7	70,553.7
Alternate SCR		18b			132,747.9	71,031.6
Mine	M ¹	13b	Top	Right Front	106,781.15	68,150.6
	M ²	14a	Top	Right Front	109,221.23	67,700.09
Baker	DP	21			120,248.28	96,674.53
	BC-CRF	21b			120,212.3	96,657.6
Burns	DP	21			120,155.88	96,604.81

* Indicates Approximate Data.

EXHIBIT 3-B-1

SECRET

DECLASSIFIED
 Authority: NND 760162
 BY WDR/ARA Date: 7/15/00

LOC. 4B
N. LONG BRANCH

Primary Const. #219
Alternate Lewis
" Harris
" Kingman
" Mills

715 AFTER INTERCEPTION AT NAVESINK
CABLE NO. 925 FROM FORT HANCOCK TO
CABLE NO. 926 FROM NAVESINK TO

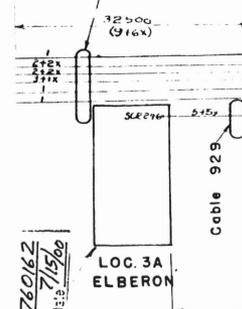
716 AFTER INTERCEPTION AT ELBERON
BECOME ULTIMATE CABLE NO. 928 FROM
ELBERON (NORTH TOWER) AND ULTIMATE
ELBERON (NORTH TOWER) TO ELBERON

717 IN EACH CABLE (#714, #551) FOR
ASSIGNMENTS OF ALTERNATE ASSIGNMENT.

LOC. 4A
N. LONG BRANCH

Cable 1084
576.4 GEN

Cable 1083
SPKB 676.4 GEN

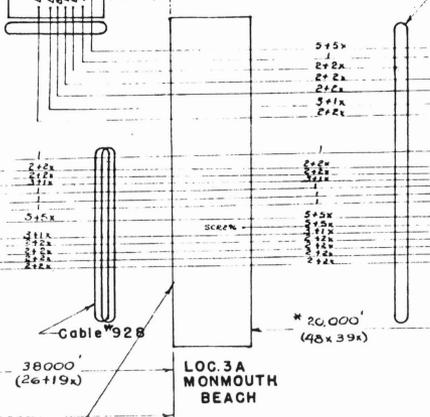


LOC. 3A ELBERON
LOC. 3B ELBERON
Primary Mills
Alternate Kingman
" Harris
LEGEND

- INDICATES PATCHING THROUGH TO OTHER FIRE CONTROL
PANELS OR SWITCHBOARDS TO ALTERNATE ASSIGNMENTS.
- INDICATES SPARE.
- FIRE CONTROL SWITCHBOARD.
- FIRE CONTROL SWITCHBOARD & POST TELEPHONE SWITCHBOARD.
- INDICATES COMMERCIAL CIRCUIT.

LOC. 3A MONMOUTH BEACH

Cable #926



Primary Kingman
Alternate Const. #219
" Lewis
" Harris
" Mills
" Peck

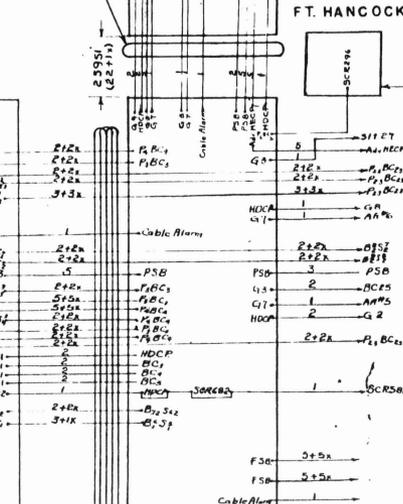


Primary Lewis
Alternate Const. #219
" Harris

Cable #910

ROMER SHOALS

LOC. 8B
FT. HANCOCK



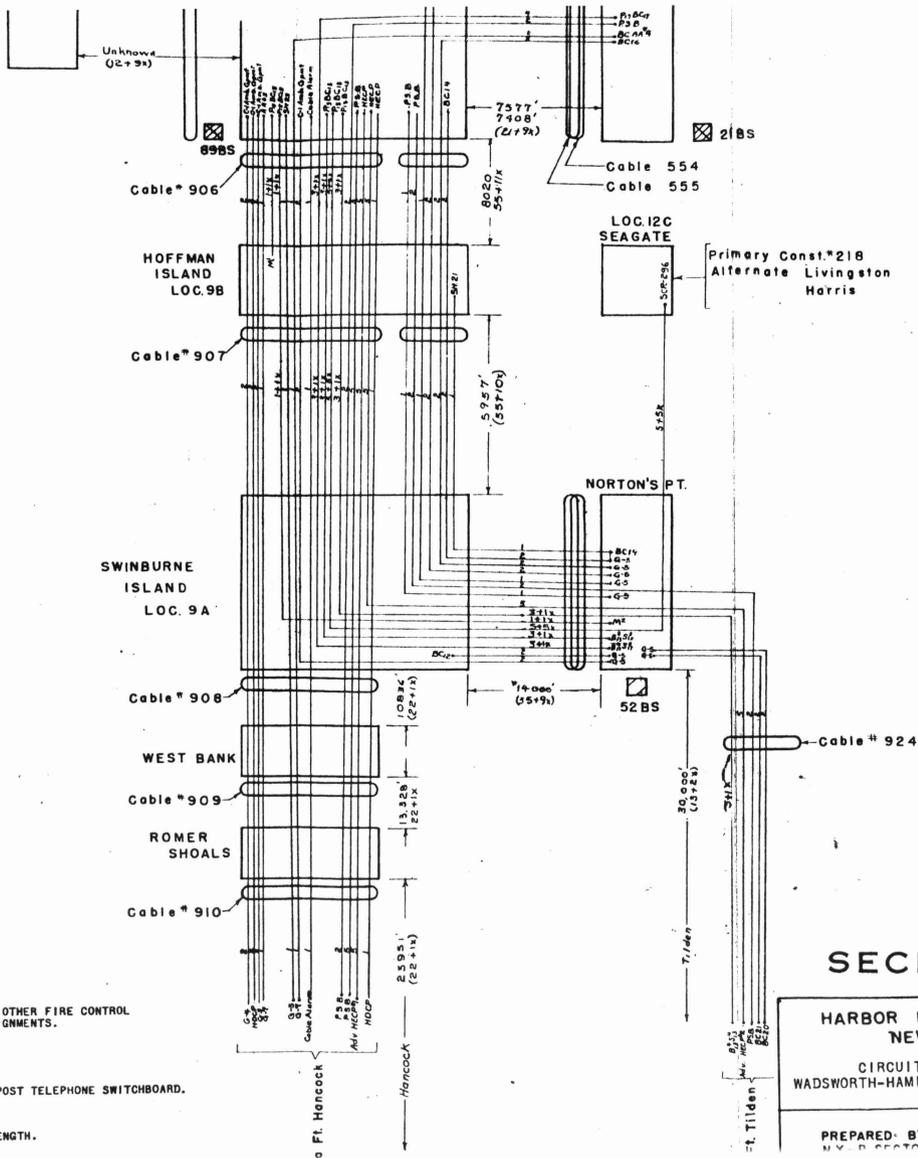
Primary Peck
Alternate Lewis
" Kingman
" Mills
Const. 218

SECRET

HARBOR DEFENSES OF NEW YORK		REVISED DATE
CIRCUIT DIAGRAM FT. HANCOCK-NAVESINK AREA		
PREPARED BY NY-8 SECTOR	AUGUST, 1943 EX. NO. 4-2-1	

Authority: AND 76012
 By: ADP, WPA Dis. 7/15/50

Primary Livingstone
Alternate Const. #218



LEGEND

- X — INDICATES PATCHING THROUGH TO OTHER FIRE CONTROL SWITCHBOARDS TO ALTERNATE ASSIGNMENTS.
- - - - - INDICATES SPARE.
- INDICATES FIRE CONTROL SWITCHBOARD.
- ⊠ INDICATES FIRE CONTROL SWITCHBOARD AND POST TELEPHONE SWITCHBOARD.
- - - - - INDICATES COMMERCIAL CIRCUIT.
- X INDICATES APPROXIMATE CABLE LENGTH.

SECRET

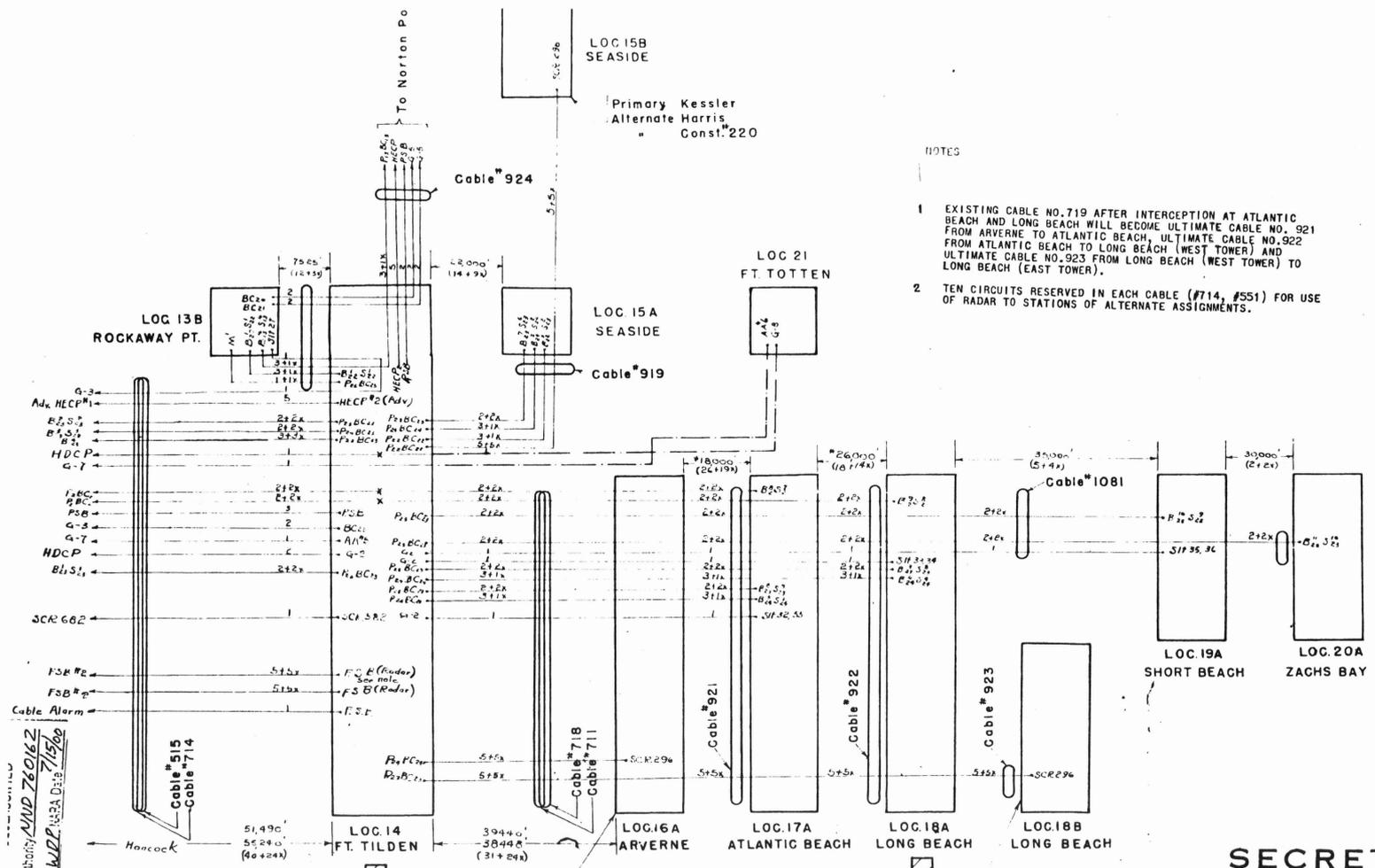
HARBOR DEFENSES OF
NEW YORK
CIRCUIT DIAGRAM
WADSWORTH-HAMILTON-NORTONS PT.

REVISED
DATE

AUGUST, 1943

PREPARED BY
NY DISTRICT

EX NO. 1, B. 2



LOC 15B SEASIDE
 Primary Kessler
 Alternate Harris
 Const. #220

NOTES

- EXISTING CABLE NO. 719 AFTER INTERCEPTION AT ATLANTIC BEACH AND LONG BEACH WILL BECOME ULTIMATE CABLE NO. 921 FROM ARVERNE TO ATLANTIC BEACH, ULTIMATE CABLE NO. 922 FROM ATLANTIC BEACH TO LONG BEACH (WEST TOWER) AND ULTIMATE CABLE NO. 923 FROM LONG BEACH (WEST TOWER) TO LONG BEACH (EAST TOWER).
- TEN CIRCUITS RESERVED IN EACH CABLE (#714, #551) FOR USE OF RADAR TO STATIONS OF ALTERNATE ASSIGNMENTS.

Authority MND 76016 Z
 BY W.P. H.S.A. Date 7/15/49

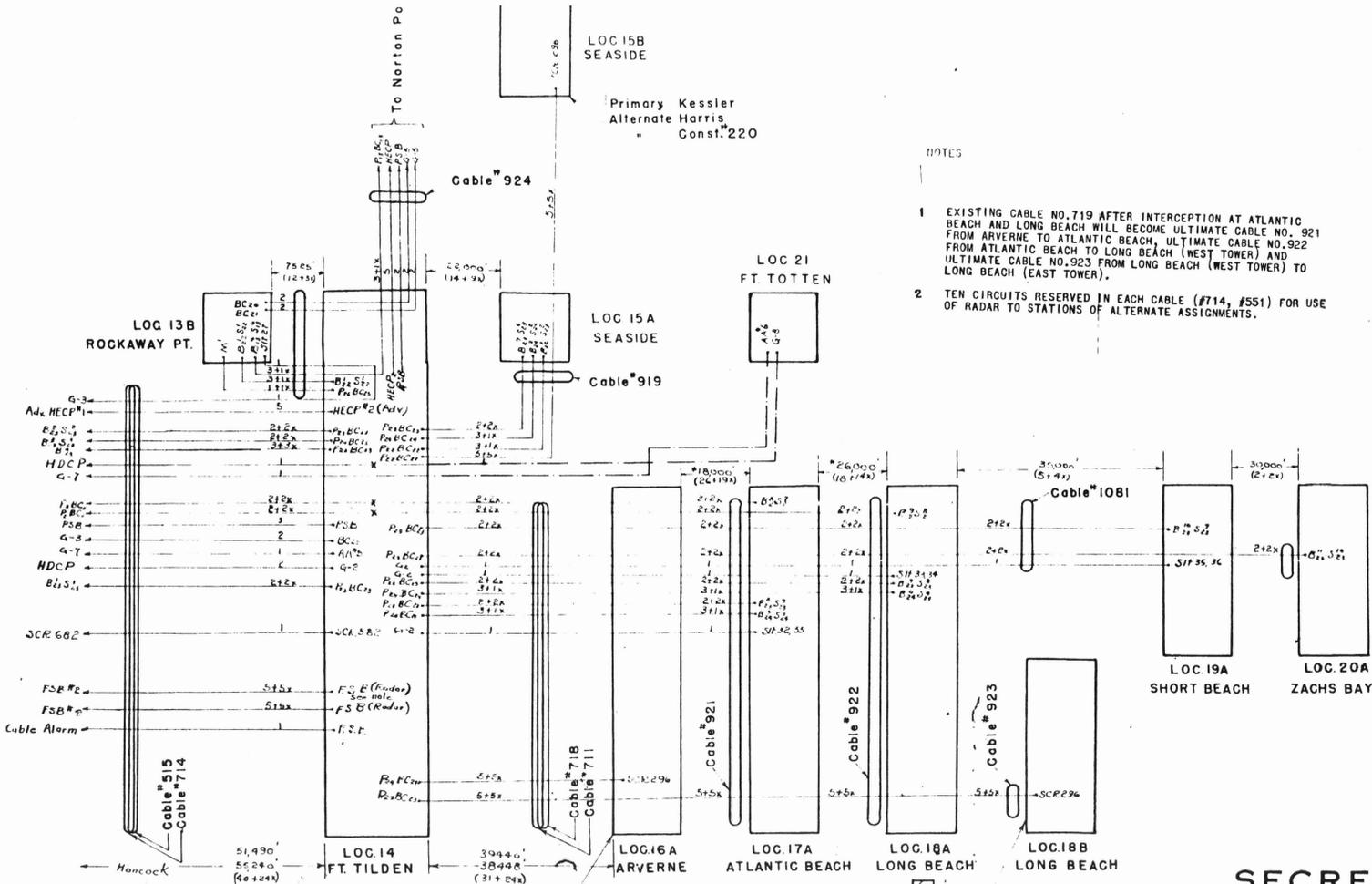
- LEGEND
- X INDICATES PATCHING THROUGH TO OTHER FIRE CONTROL SWITCHBOARDS TO ALTERNATE ASSIGNMENTS.
 - INDICATES SPARE.
 - FIRE CONTROL SWITCHBOARD.
 - FIRE CONTROL SWITCHBOARD & POST TELEPHONE SWITCHBOARD.
 - INDICATES COMMERCIAL CIRCUIT.
 - * INDICATES APPROXIMATE CABLE LENGTH.

- Primary Const. #220
 Alternate Harris
- " Mills
 - " Kingman
 - " Lewis
 - " Kessler

- Primary Harris
 Alternate Lewis
 Const. #220

SECRET

HARBOR DEFENSES OF NEW YORK		CIRCUIT DIAGRAM TILDEN-ROCKAWAY-LONG IS. AREA	REVISED DATE
PREPARED BY			



LOC 15B
SEASIDE

Primary Kessler
Alternate Harris
Const. #220

NOTES

- EXISTING CABLE NO. 719 AFTER INTERCEPTION AT ATLANTIC BEACH AND LONG BEACH WILL BECOME ULTIMATE CABLE NO. 921 FROM ARVERNE TO ATLANTIC BEACH, ULTIMATE CABLE NO. 922 FROM ATLANTIC BEACH TO LONG BEACH (WEST TOWER) AND ULTIMATE CABLE NO. 923 FROM LONG BEACH (WEST TOWER) TO LONG BEACH (EAST TOWER).
- TEN CIRCUITS RESERVED IN EACH CABLE (#714, #551) FOR USE OF RADAR TO STATIONS OF ALTERNATE ASSIGNMENTS.

LOC 13B
ROCKAWAY PT.

LOC 21
FT. TOTTEN

LOC 15A
SEASIDE

Cable #919

51,490'
56,240'
(90+24)

LOC 14
FT. TILDEN

39,440'
38,490'
(31+24)

LOC 16A
ARVERNE

LOC 17A
ATLANTIC BEACH

LOC 18A
LONG BEACH

LOC 18B
LONG BEACH

LOC 19A
SHORT BEACH

LOC 20A
ZACHS BAY

LEGEND
137BS

Primary Const. #220
Alternate Harris
" Mills
" Kingman
" Lewis
" Kessler

Primary Harris
Alternate Lewis

Const. #220

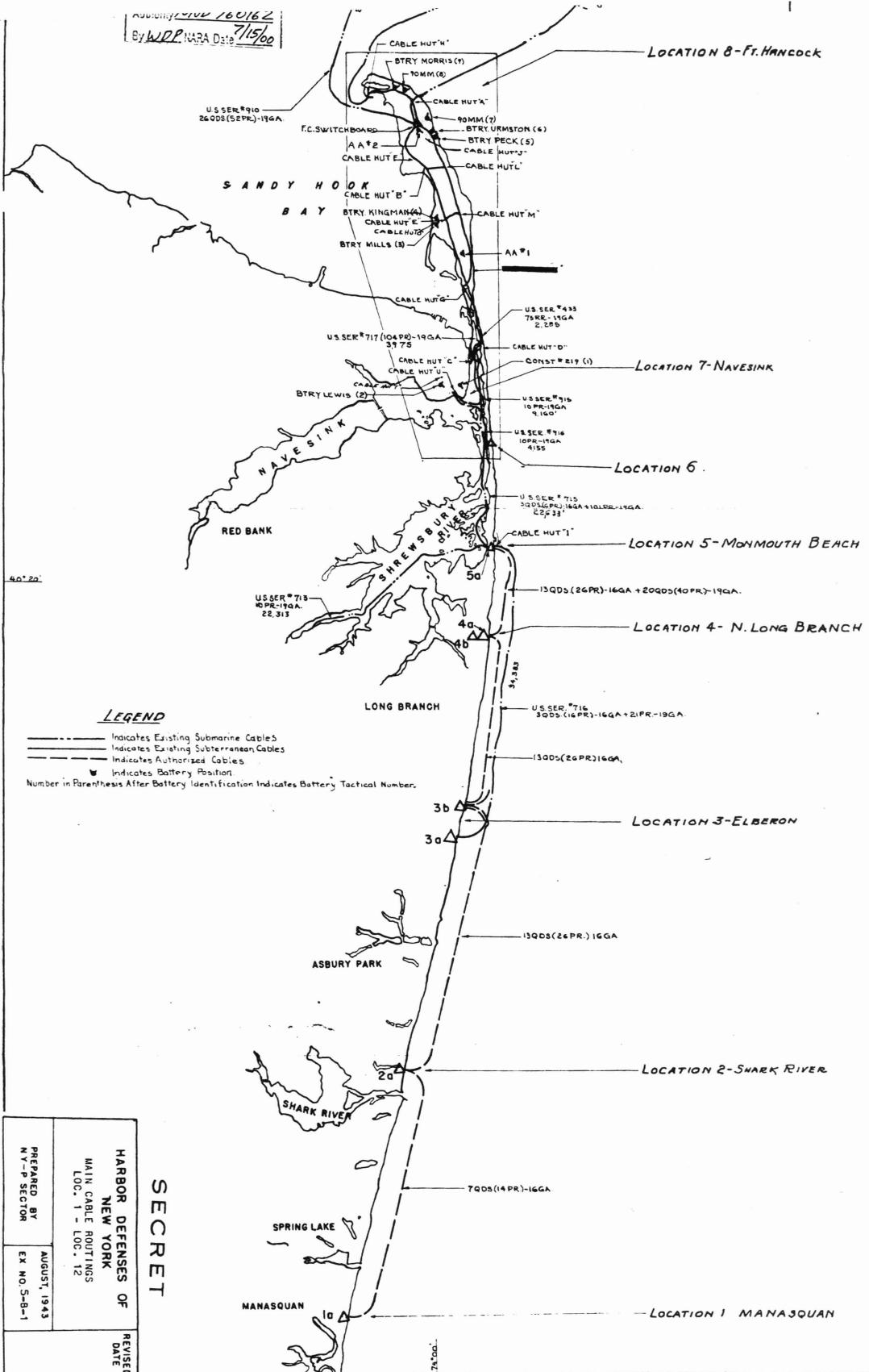
SECRET

HARBOR DEFENSE
NEW YORK
CIRCUIT DIAGR
TILDEN-ROCKAWAY-LONG

PREPARED BY

AUC

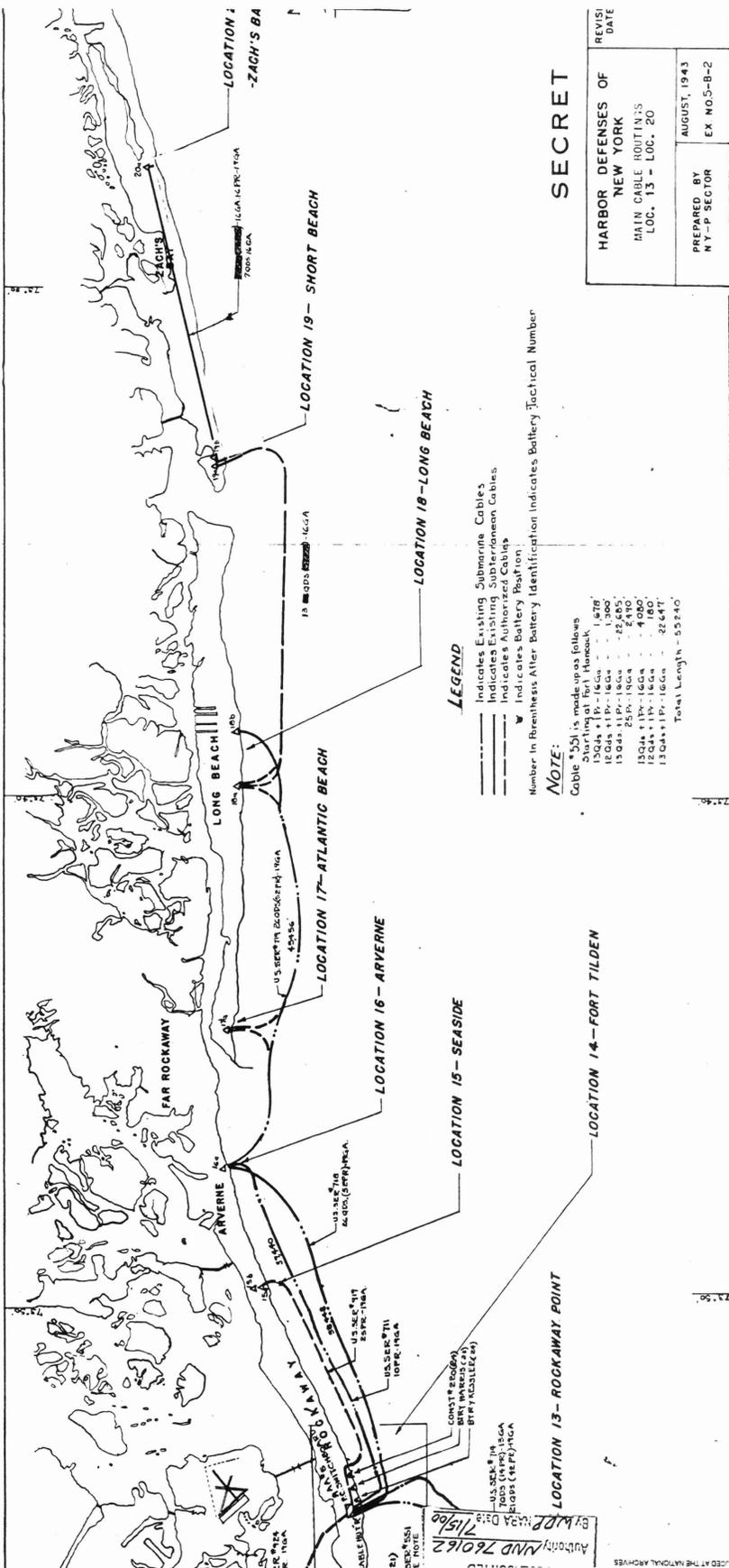
NAVY FORM 160162
By WDP:KARA Date 7/15/60



LEGEND

- Indicates Existing Submarine Cables
- Indicates Existing Subterranean Cables
- Indicates Authorized Cables
- ▲ Indicates Battery Position
- Number in Parenthesis After Battery Identification Indicates Battery Tactical Number.

PREPARED BY N.Y.-P SECTION	AUGUST 1943 EX NO. 5-B-1	REVISED DATE
HARBOR DEFENSES OF NEW YORK		
MAIN CABLE ROUTINGS LOC. 1 - LOC. 12		



LEGEND

- Indicates Existing Submarine Cables
- - - Indicates Existing Subterranean Cables
- ==== Indicates Authorized Cables
- ▲ Indicates Battery Position

Number in Parentheses After Battery Identification Indicates Battery Tactical Number

NOTE:

Cable #559 is made up as follows
 Starting at Fort Hancock
 13Q4s 11P-16GA - 1,578'
 16GA 11P-16GA - 2,280'
 13Q4s 25P-19GA - 2,410'
 13Q4s 11P-16GA - 4,080'
 13Q4s 11P-16GA - 2,647'
 13Q4s 11P-16GA - 2,647'

Total Length - 55,940'

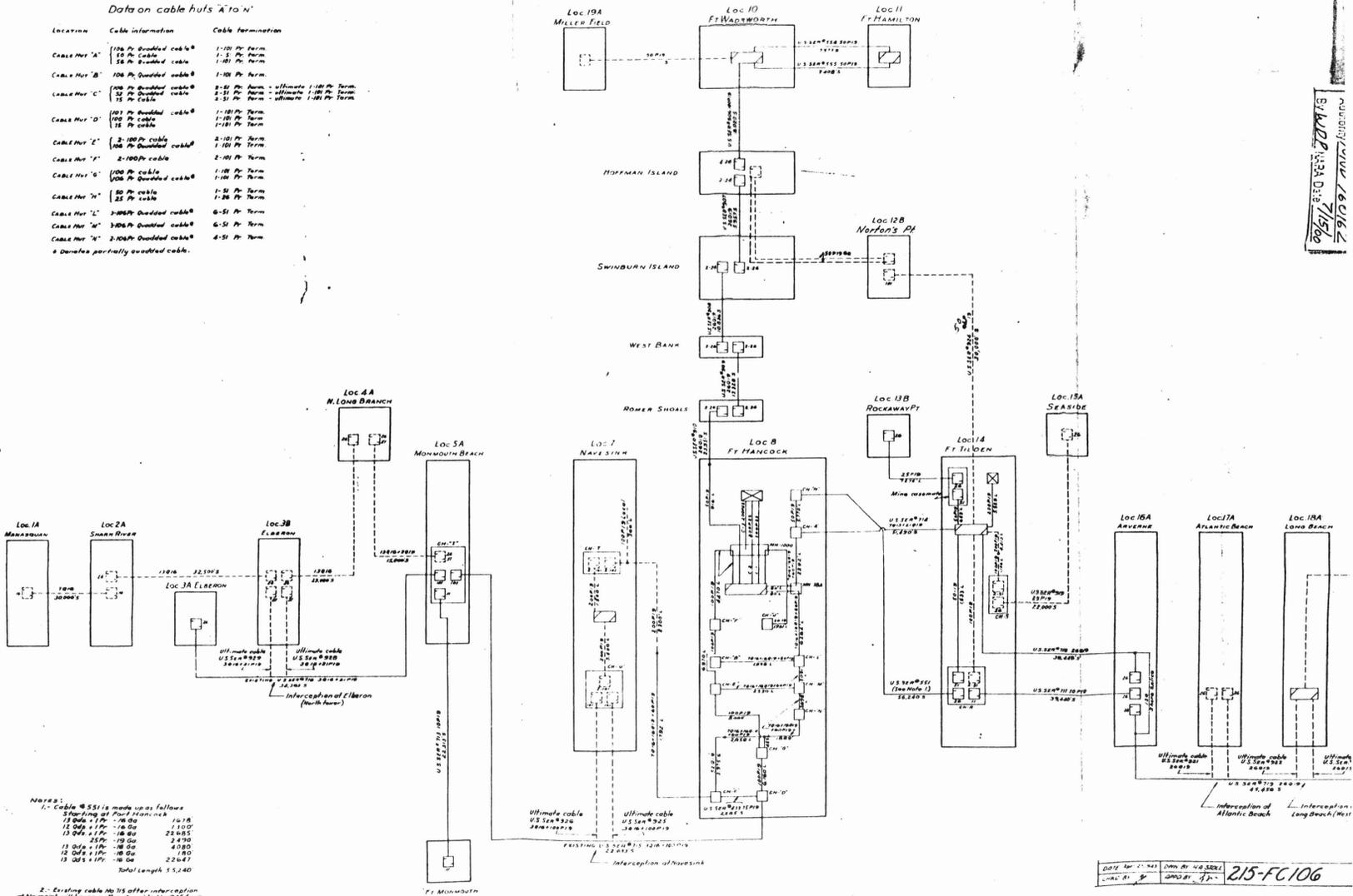
SECRET

HARBOR DEFENSES OF NEW YORK MAIN CABLE ROUTINGS LOC. 13 - LOC. 20	REVISION DATE
	AUGUST, 1943 EX. NO. 5-B-2
PREPARED BY N Y-P SECTOR	AUTHORITY MND 760162 7/15/40

Data on cable hulls A to N

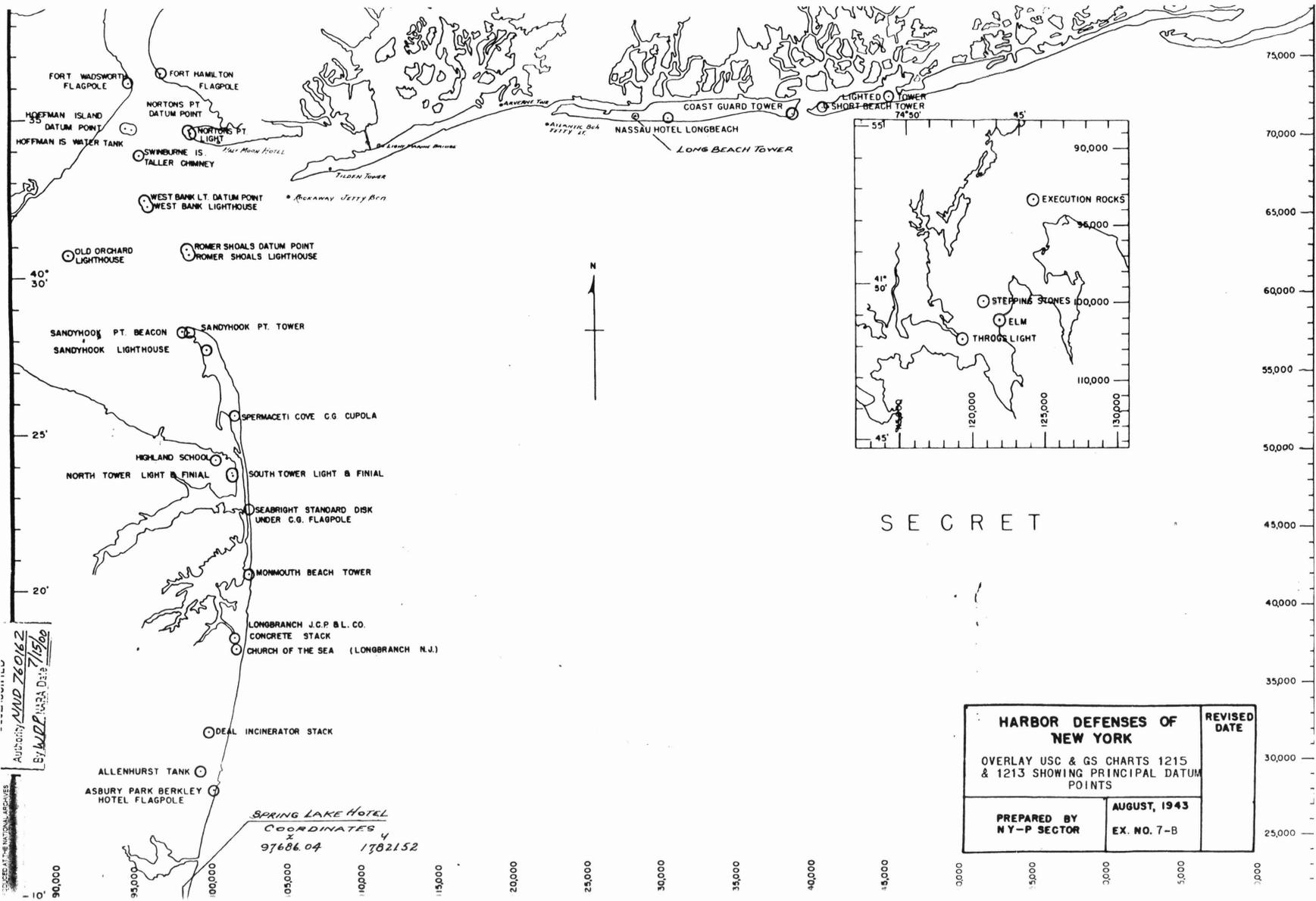
LOCATION	Cable information	Cable termination
CABLE HULL "A"	100 P# Doublet cable ¹ 50 P# Cable	1-100 P# Term 1-50 P# Term
CABLE HULL "B"	100 P# Doublet cable ¹	1-100 P# Term
CABLE HULL "C"	100 P# Doublet cable ¹ 50 P# Doublet cable 50 P# Cable	2-50 P# Term ultimate 1-100 P# Term 1-50 P# Term ultimate 1-100 P# Term 2-50 P# Term ultimate 1-100 P# Term
CABLE HULL "D"	100 P# Doublet cable ¹ 100 P# Cable 10 P# Cable	1-100 P# Term 1-100 P# Term 1-10 P# Term
CABLE HULL "E"	2-100 P# Cable 100 P# Doublet cable ¹	2-100 P# Term 1-100 P# Term
CABLE HULL "F"	2-100 P# Cable	2-100 P# Term
CABLE HULL "G"	100 P# Cable 100 P# Doublet cable ¹	1-100 P# Term 1-100 P# Term
CABLE HULL "H"	50 P# Cable 25 P# Cable	1-50 P# Term 1-25 P# Term
CABLE HULL "I"	2-100 P# Doublet cable ¹	2-50 P# Term
CABLE HULL "J"	2-100 P# Doublet cable ¹	2-50 P# Term
CABLE HULL "K"	2-100 P# Doublet cable ¹	2-50 P# Term

1 Denotes partially gauded cable.



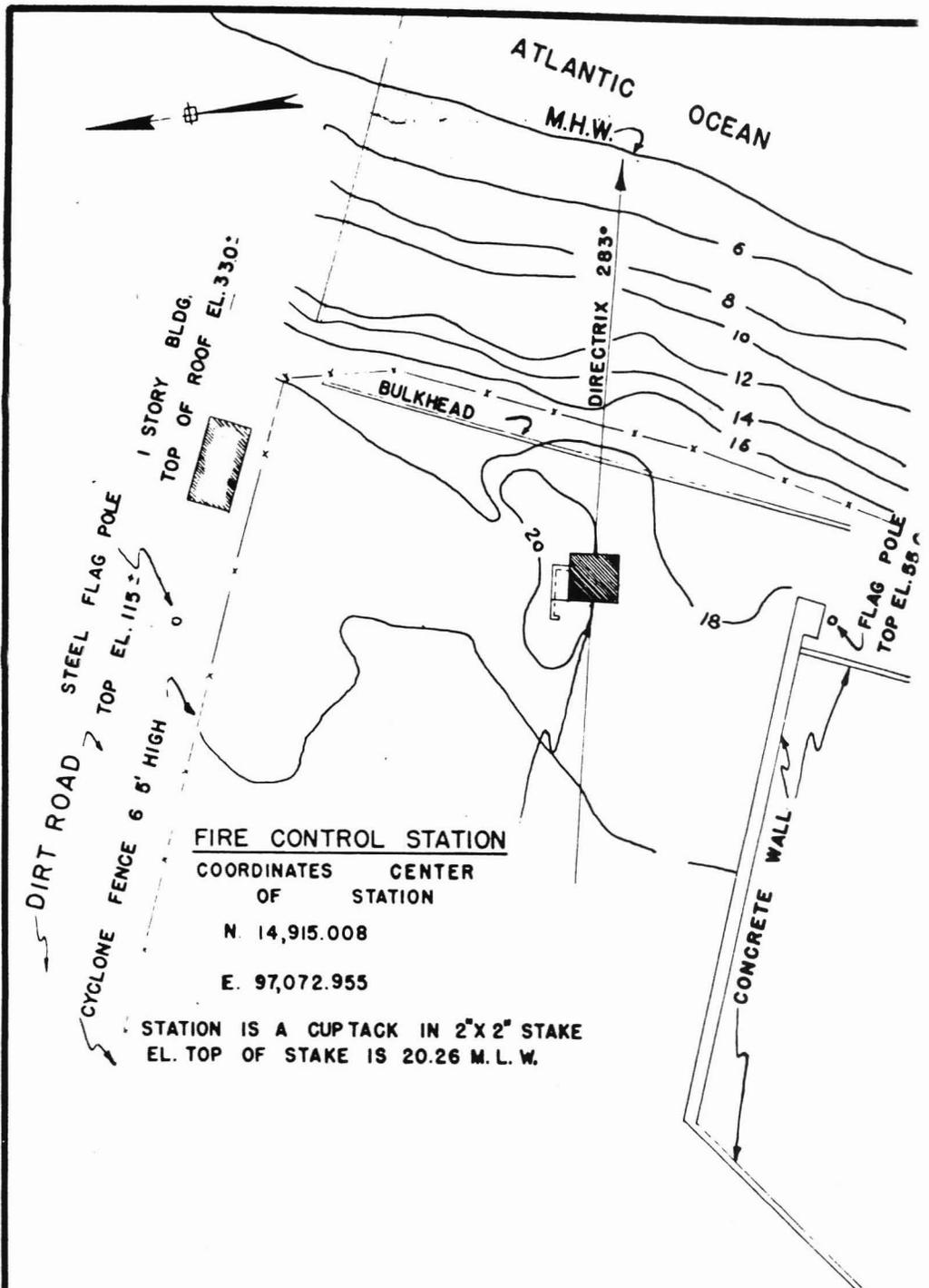
DATE: 11/15/60 BY: 16016/2
 CHECKED BY: 16016/2
 215-FC-106

SECRET



AUTHORITY AND ZONE
 BY W.D. W.A. Date: 7/15/60
 REPRODUCED FROM THE NATIONAL ARCHIVES

SECRET



FIRE CONTROL STATION

COORDINATES CENTER OF STATION

N. 14,915.008

E. 97,072.955

STATION IS A CUP TACK IN 2' X 2' STAKE
EL. TOP OF STAKE IS 20.26 M. L. W.

SCALE

1" = 40'

40' 0' 40' 80'

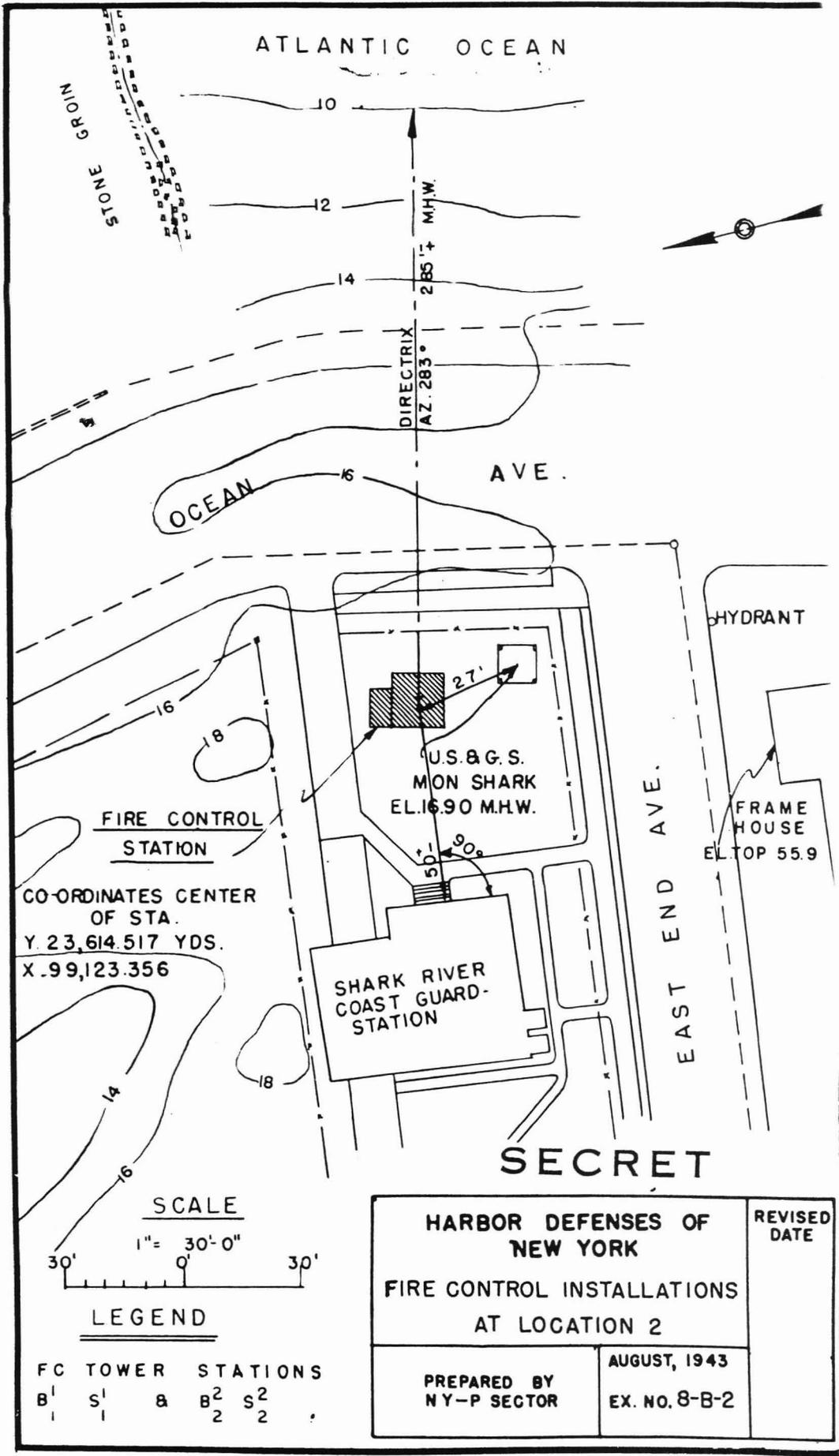
SECRET

LEGEND

FC TOWER STATIONS
B₂ S₂

<p>HARBOR DEFENSES OF NEW YORK</p> <p>FIRE CONTROL INSTALLATIONS AT LOCATION I</p>		<p>REVISE DATE</p>
<p>PREPARED BY NY-P SECTOR</p>	<p>AUGUST, 1943</p> <p>EX. NO. 8-B-1</p>	

UNCLASSIFIED
 Authority: NND 760162
 By: WDP/MSA Date: 7/15/00



HARBOR DEFENSES OF NEW YORK		REVISED DATE
FIRE CONTROL INSTALLATIONS AT LOCATION 2		
PREPARED BY NY-P SECTOR	AUGUST, 1943 EX. NO. 8-B-2	

By WDR NARA Date 7/15/00
Authority MND 76012

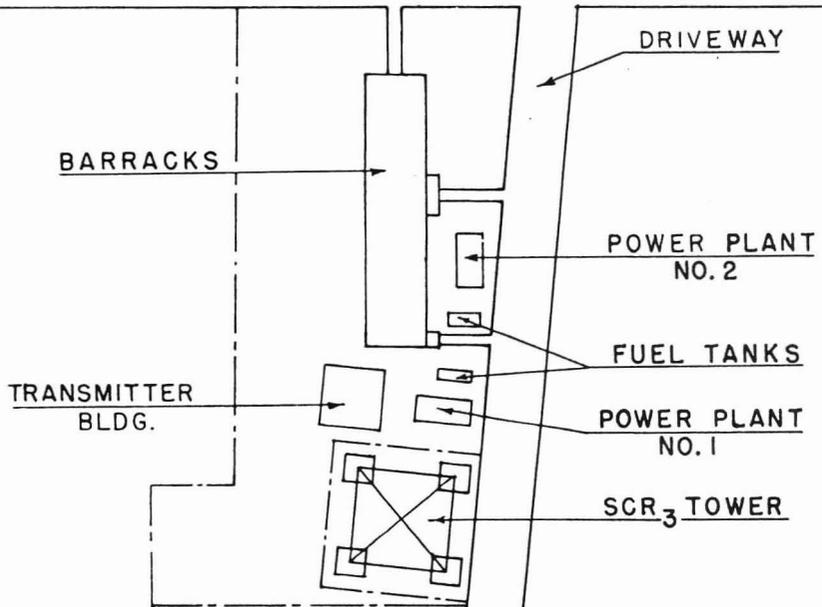
LEGEND

CENTER OF TOWER CO-ORDINATES
X 100,831.6 YDS.
Y 31,854.1 YDS.

A T L A N T I C O C E A N

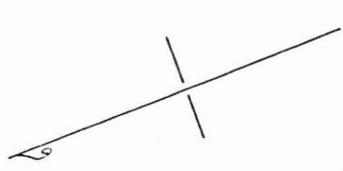
O C E A N P A R K W A Y

CURB LINE



SCALE: 1 IN. = 50 FT.
50 0 50

SECRET



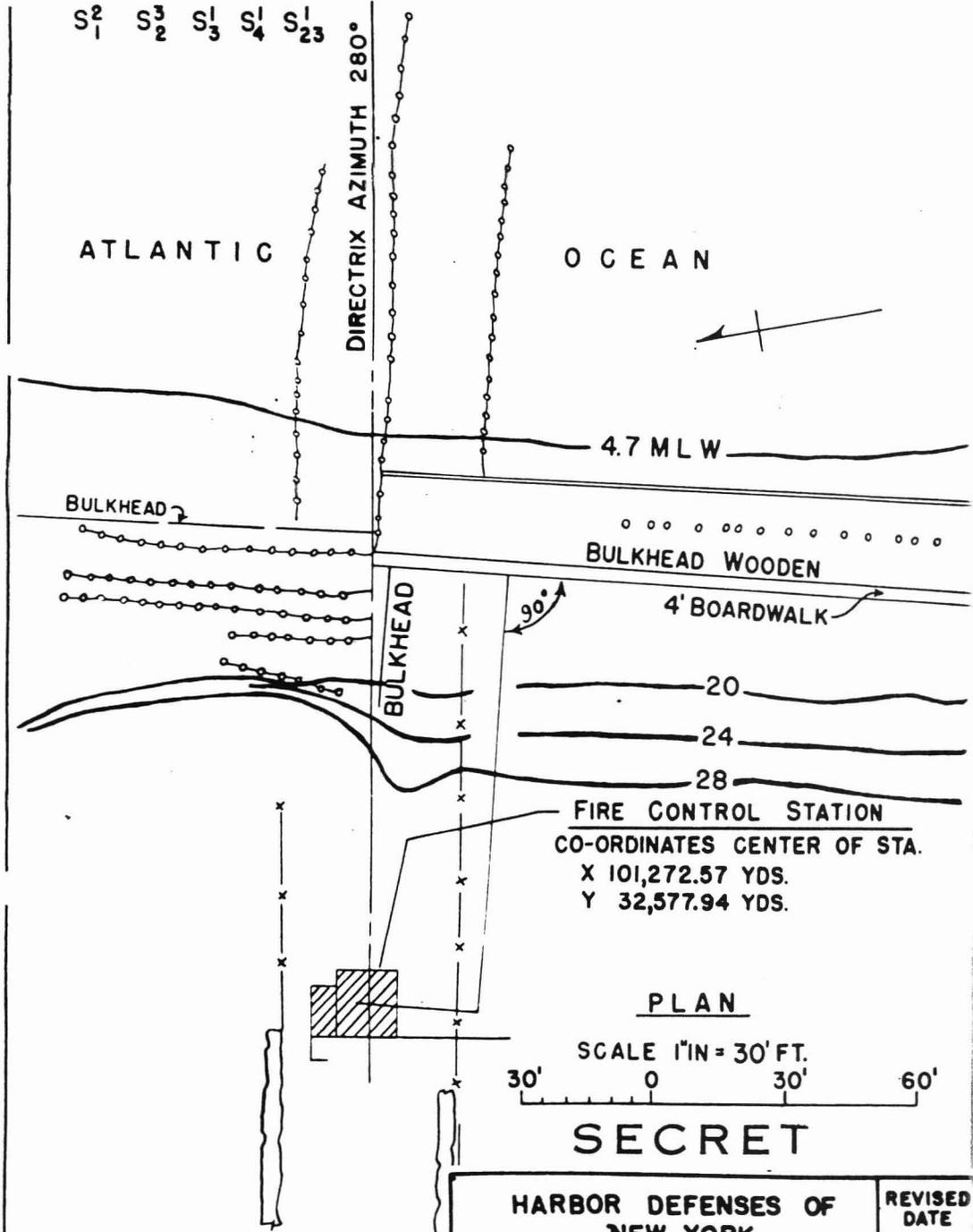
HARBOR DEFENSES OF NEW YORK		REVISE DATE
FIRE CONTROL INSTALLATIONS AT LOCATION 3		
PREPARED BY NY-P SECTOR	AUGUST, 1943 EX. NO. 8-B-3A	

By WDP: NAPA Date: 7/15/60
Authority: NND 76012
RECORDED

LEGEND

B₁² B₂³ B₃¹ B₄¹ B₂₃¹

S₁² S₂³ S₃¹ S₄¹ S₂₃¹



PLAN

SCALE 1" = 30' FT.



SECRET

<p>HARBOR DEFENSES OF NEW YORK</p>		<p>REVISED DATE</p>
<p>FIRE CONTROL INSTALLATIONS AT LOCATION 3</p>		
<p>PREPARED BY NY-P SECTOR</p>	<p>AUGUST, 1943</p>	<p>EX. NO. 8-B-3B</p>

Authority: MND 76012
By WDR: MRA Date: 7/15/60

LEGEND:

F. C. TOWER STATIONS — $B_2^4 S_2^4$; $B_{23}^2 S_{23}^2$;

$B_3^2 S_3^2$; $B_4^2 S_4^2$; $B_1^3 S_1^3$.

CENTER OF TOWER CO-ORDINATES -

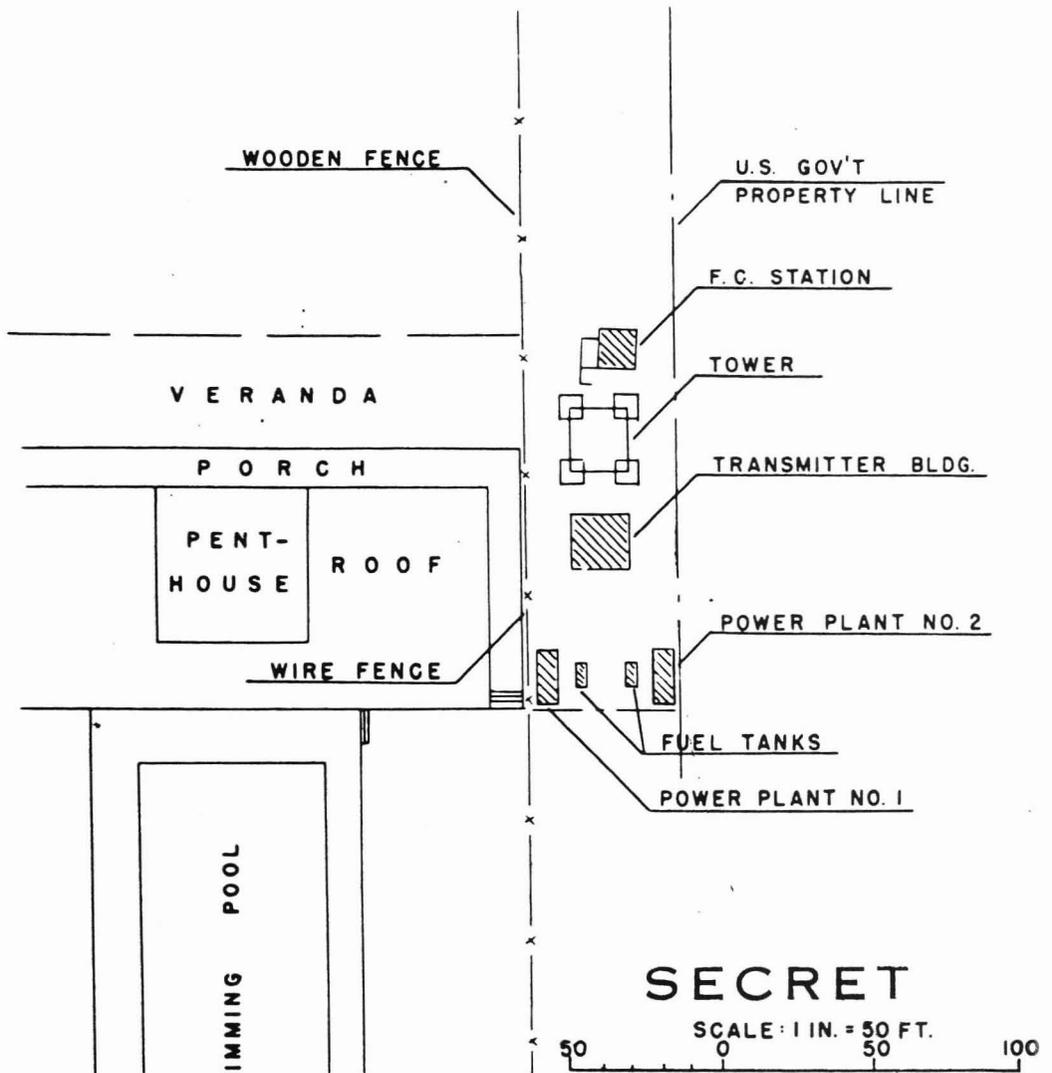
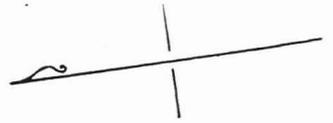
X 102,120.80 YDS.

Y 38,434.72 YDS.

CENTER OF SCR TOWER CO-ORDINATES -

X 102,111 YDS.

Y 38,438 YDS.



SECRET

SCALE: 1 IN. = 50 FT.

50 0 50 100

HARBOR DEFENSES OF NEW YORK		REVISED DATE
FIRE CONTROL INSTALLATIONS AT LOCATION 4		
PREPARED BY NY-P SECTOR	AUGUST, 1943 EX. NO. 8-B-4	

Authority: NND 760162
 By WDR: NARA Date: 7/15/00

ATLANTIC

OCEAN

LEGEND

CO-ORDINATES F. C. TOWER

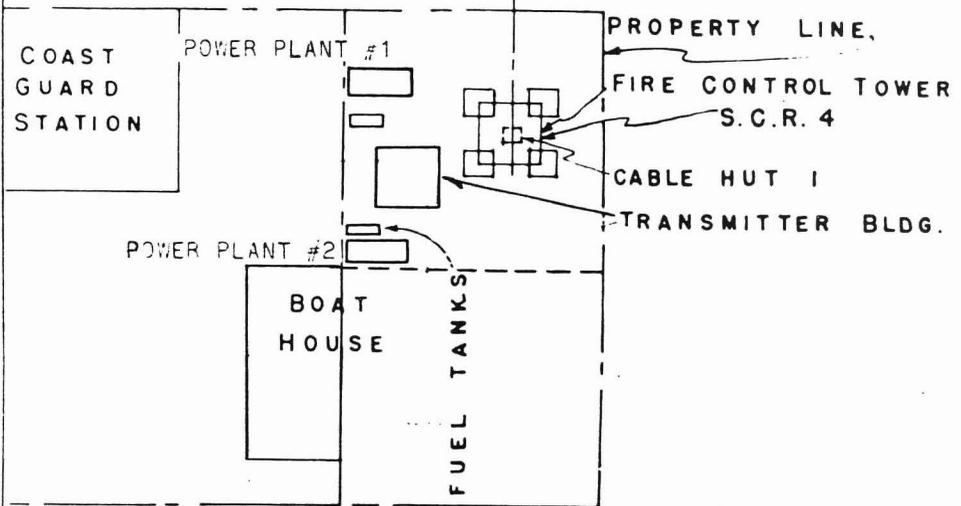
X - 102,357.0

Y - 41,501.4

DIRECTRIX 270°

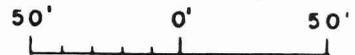
OCEAN

AVENUE



SECRET

SCALE-1"=50'

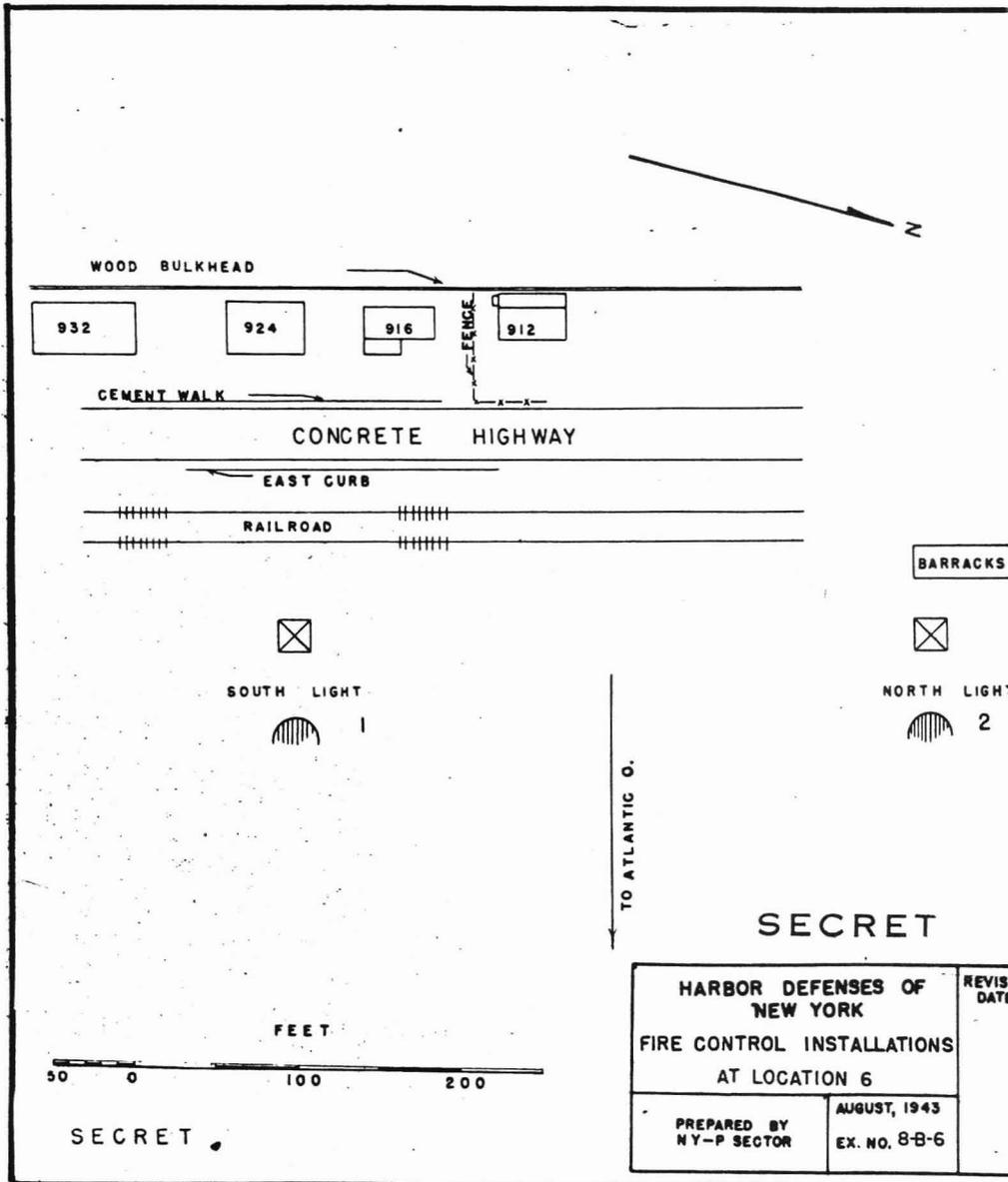


<p>HARBOR DEFENSES OF NEW YORK</p> <p>FIRE CONTROL INSTALLATIONS AT LOCATION 5</p>		REVISED DATE
<p>PREPARED BY NY-P SECTOR</p>	<p>AUGUST, 1943</p> <p>EX. NO. 8-B-5</p>	

REPRODUCED BY THE NATIONAL ARCHIVES

Authority AND 760162

BY WDR: NARA Date: 2/15/00

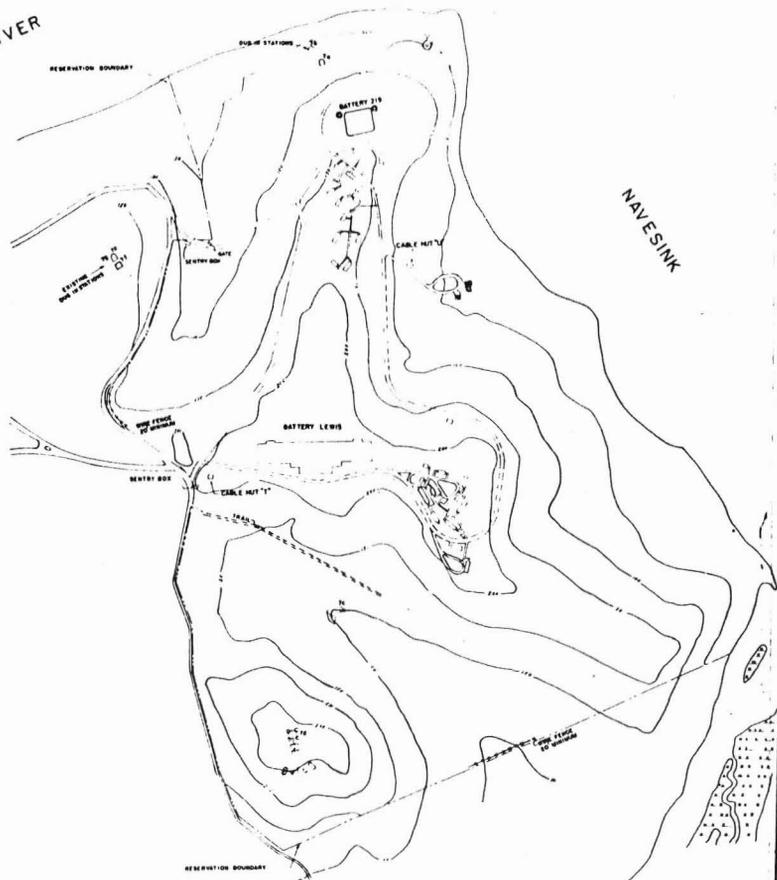


HARBOR DEFENSES OF NEW YORK		REVISED DATE
FIRE CONTROL INSTALLATIONS AT LOCATION 6		
PREPARED BY NY-P SECTOR	AUGUST, 1943 EX. NO. 8-B-6	

AUTHORITY: MND 76062
 BARRACKS DATA: 7/5/40

SHREWSBURY

RIVER



SECRET

LEGEND			
LOCATION	DESCRIPTION OF STATION	STATIONS	CO-ORDINATES
7a	CENTER OF STATION	46 46 31 N 74 02 00 W	T = 48,242.8 E = 42,807.8
7b	UPPER LEVEL	46 46 31 N 74 02 00 W	T = 48,242.8 E = 42,807.8
7c	LOWER LEVEL	46 46 31 N 74 02 00 W	T = 48,242.8 E = 42,807.8
7d	CENTER SPREAD	46 46 31 N 74 02 00 W	T = 48,242.8 E = 42,807.8
7e	CENTER OF TOWER	46 46 31 N 74 02 00 W	T = 48,242.8 E = 42,807.8
7f	UPPER LEVEL	46 46 31 N 74 02 00 W	T = 48,242.8 E = 42,807.8
7g	LOWER LEVEL	46 46 31 N 74 02 00 W	T = 48,242.8 E = 42,807.8
7h	CENTER OF TOWER	46 46 31 N 74 02 00 W	T = 48,242.8 E = 42,807.8
7i	CENTER OF STATION	46 46 31 N 74 02 00 W	T = 48,242.8 E = 42,807.8

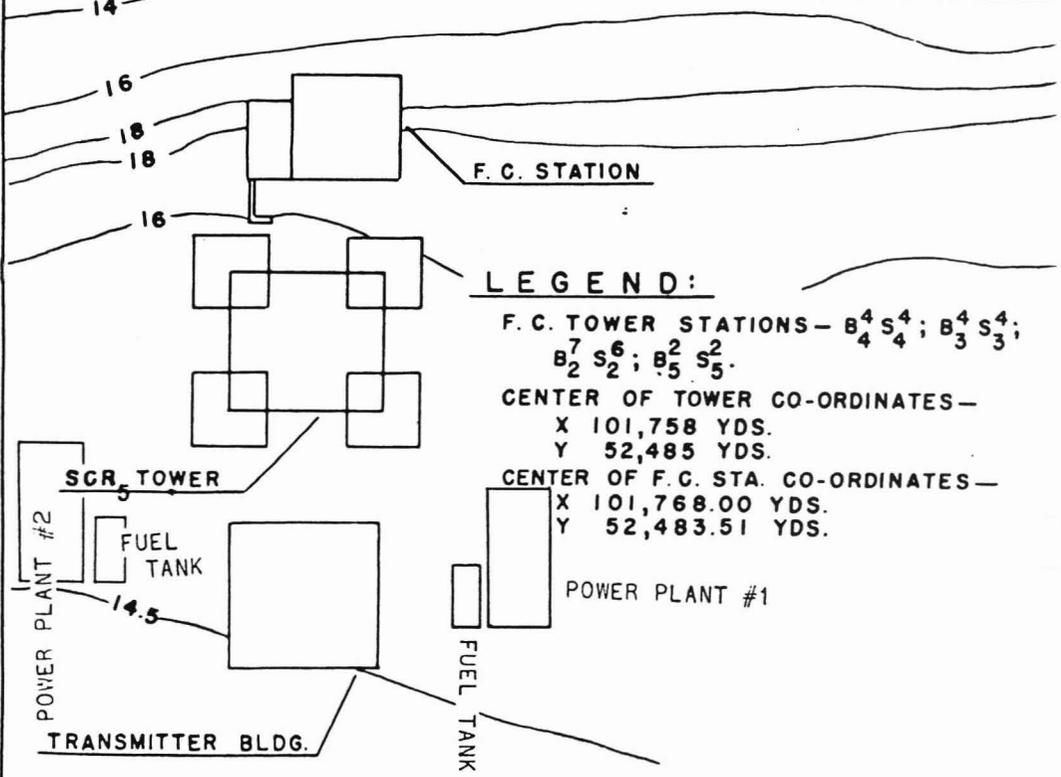
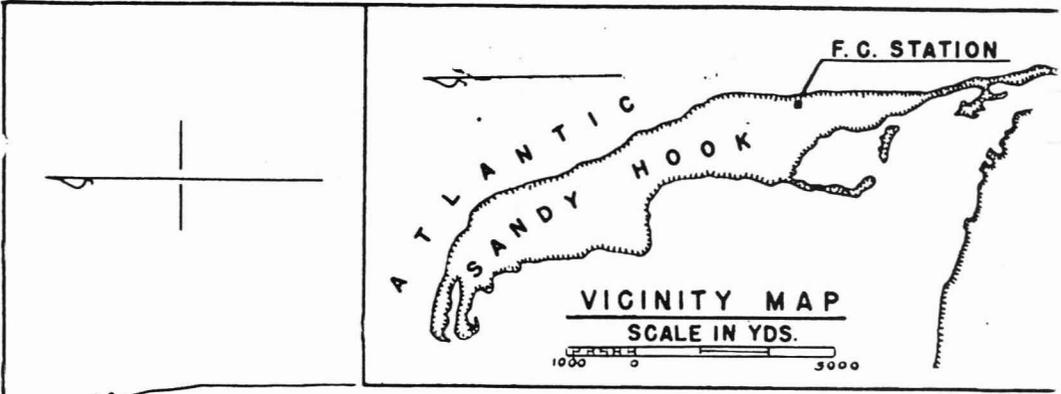
SECRET

HARBOR DEFENSES OF
NEW YORK
FIRE CONTROL INSTALLATION
AT LOCATION 7

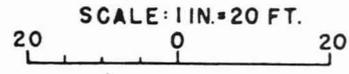
REVISED
DATE

PREPARED BY
NY-P SECTOR

AUGUST, 1943
EX. NO. 8-B-7



SECRET



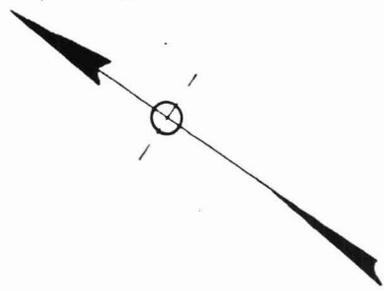
HARBOR DEFENSES OF NEW YORK		REVISED DATE
FIRE CONTROL INSTALLATIONS AT LOCATION 8A		
PREPARED BY NY-P SECTOR	AUGUST, 1943 EX. NO. 8-B-8A	

AUTHORITY AND 760162
 BY WDR/MRA Date 7/15/60
 DECLASSIFIED

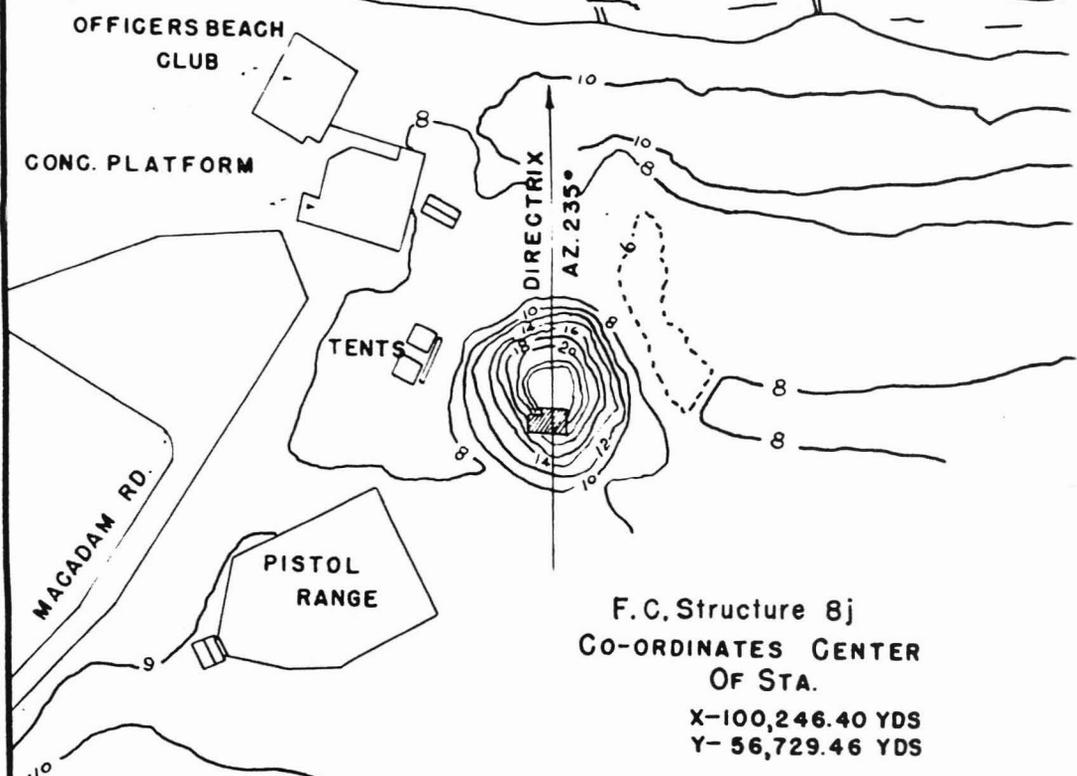
LEGEND

F.C. TOWER STATIONS

B₁⁶ S₁⁵; B₅³; M₁₀¹

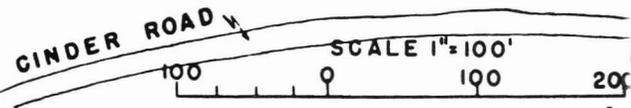


ATLANTIC OCEAN



F.C. Structure 8j
 CO-ORDINATES CENTER
 OF STA.
 X-100,246.40 YDS
 Y- 56,729.46 YDS

SECRET

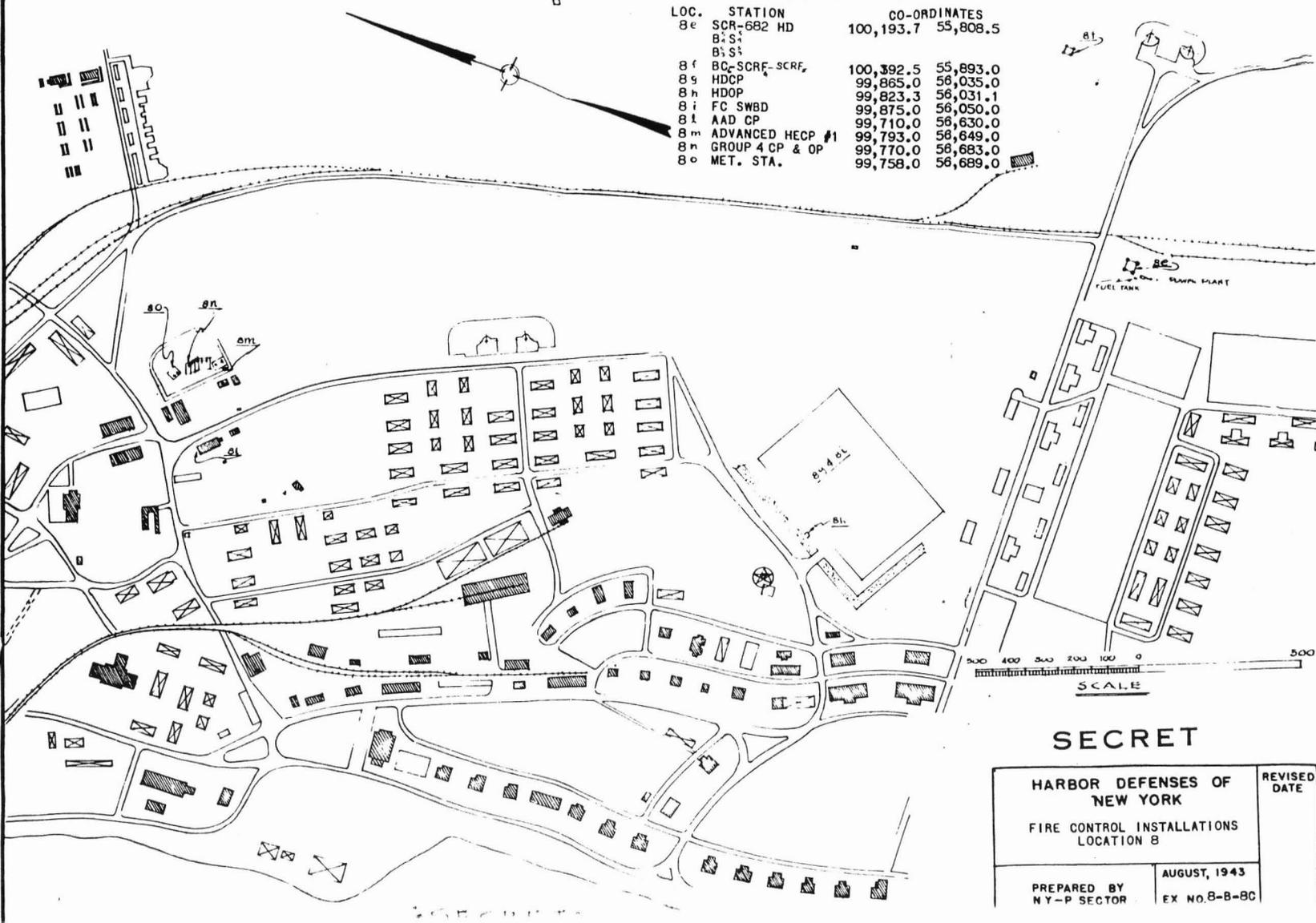


HARBOR DEFENSES OF NEW YORK FIRE CONTROL INSTALLATIONS AT LOCATION 8		REVISED DATE
PREPARED BY NY-P SECTOR	AUGUST, 1943 EX. NO. 8-B-8B	

AUTHORITY AND 76012
 BY WDP NARA DATE 7/15/00

LEGEND

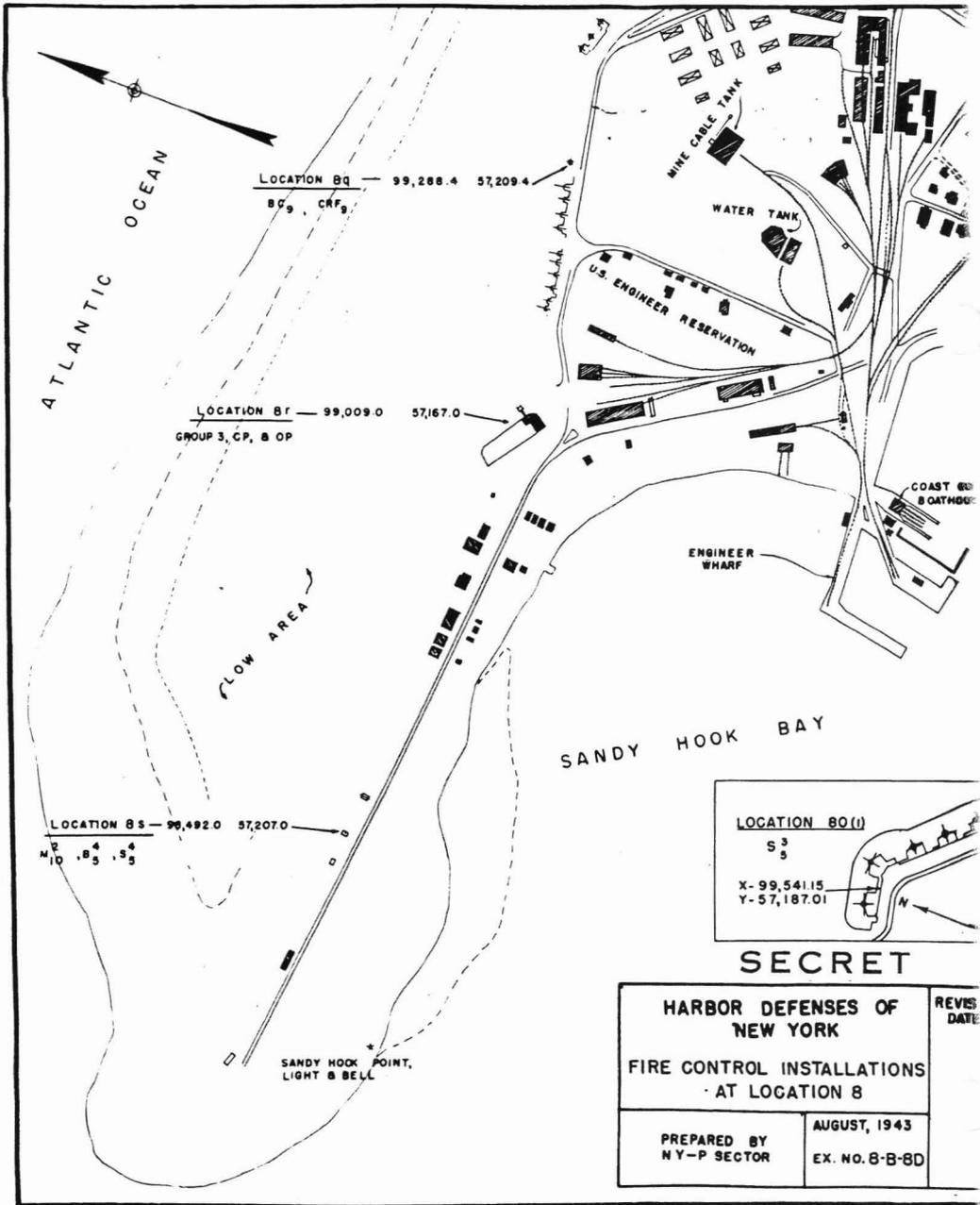
LOC.	STATION	CO-ORDINATES
B e	SCR-682 HD	100,193.7 55,808.5
	B: S 1	
	B: S 2	
B f	BC-SCRF-SCRF	100,392.5 55,893.0
B g	HDOP	99,865.0 56,035.0
B h	HDOP	99,823.3 56,031.1
B i	FC SWBD	99,875.0 56,050.0
B l	AAD CP	99,710.0 56,630.0
B m	ADVANCED HECP #1	99,793.0 56,649.0
B n	GROUP 4 CP & OP	99,770.0 56,683.0
B o	MET. STA.	99,758.0 56,689.0



SECRET

HARBOR DEFENSES OF NEW YORK		REVISED DATE
FIRE CONTROL INSTALLATIONS LOCATION B		
PREPARED BY NY-P SECTOR	AUGUST, 1943 EX NO. B-B-BC	

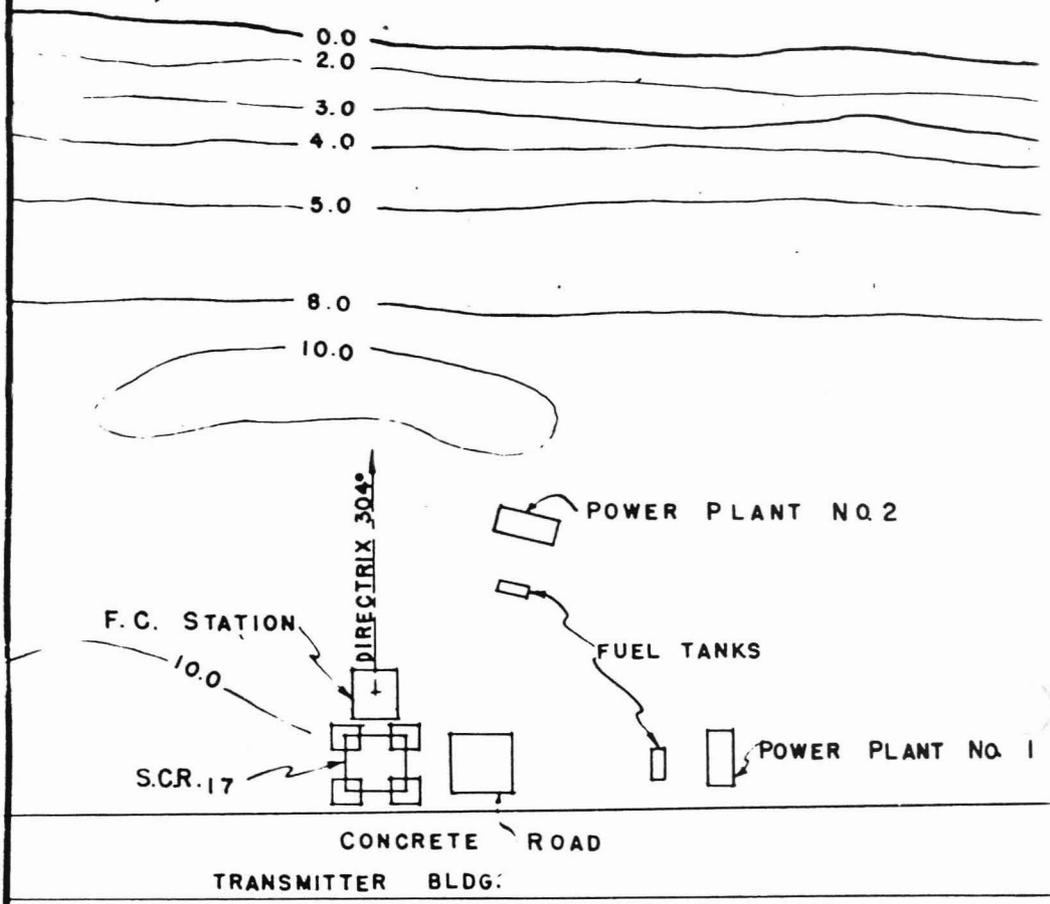
Authority AND 760162
 By WDP: USA Date 7/5/60



By W.D. WEAVER 7/15/60
 Author: W.D. 76012



ATLANTIC OCEAN



HANGAR NO. 33

LEGEND

COORDINATES S.C.R. 17

X- 91,289 Y- 68,630

COORDINATES CENTER OF STA

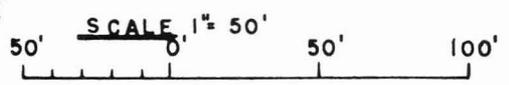
X-91,295.74 YDS.

Y-68,625.95 YDS.

F.C. TOWER STATIONS

B₁₃¹ S₁₃¹ & B₁₇¹ S₁₇¹

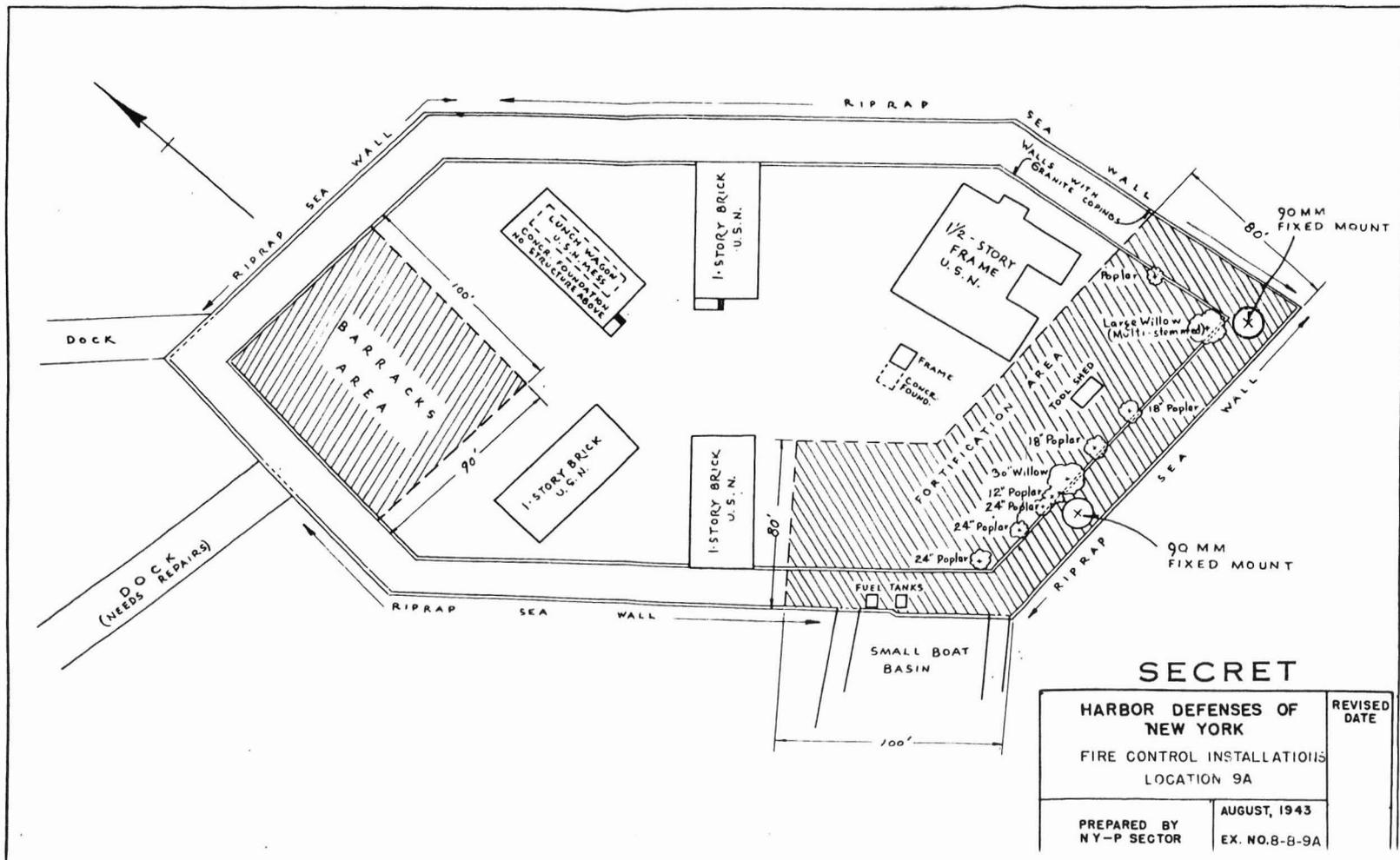
SECRET



HARBOR DEFENSES OF NEW YORK FIRE CONTROL INSTALLATIONS AT LOCATION 9		REVISED DATE
PREPARED BY NY-P SECTOR	AUGUST, 1943 EX. NO. 8-B-9	

AUTHORITY AND 76012
 BY WDP: NMA Date: 7/15/60

Authenticity: **AND 780162**
 By **WDF** (USA) Date **7/15/60**



SECRET

**HARBOR DEFENSES OF
 NEW YORK**
 FIRE CONTROL INSTALLATIONS
 LOCATION 9A

REVISED
 DATE

PREPARED BY
 NY-P SECTOR

AUGUST, 1943
 EX. NO. 8-B-9A

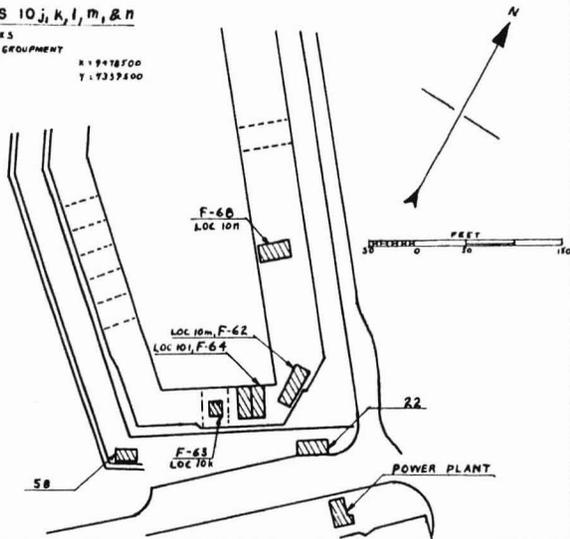
LOCATION 10h

COORDINATES
BC₁ + CRF₁ X: 94,857.12
Y: 72,870.70

JN #4

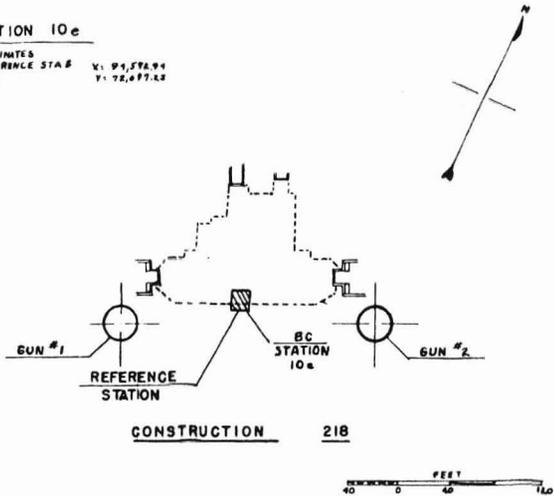
LOCATIONS 10j, k, l, m, & n

COORDINATES
AMSRON GROUPMENT
CPROP X: 94,787.00
Y: 73,394.00



LOCATION 10e

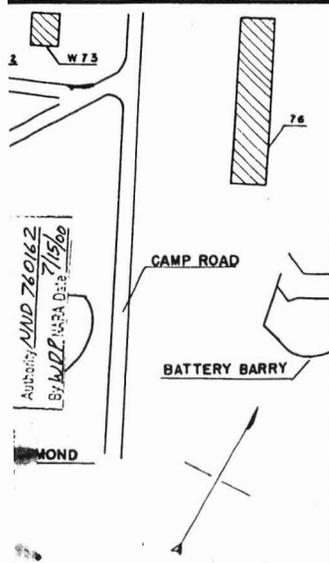
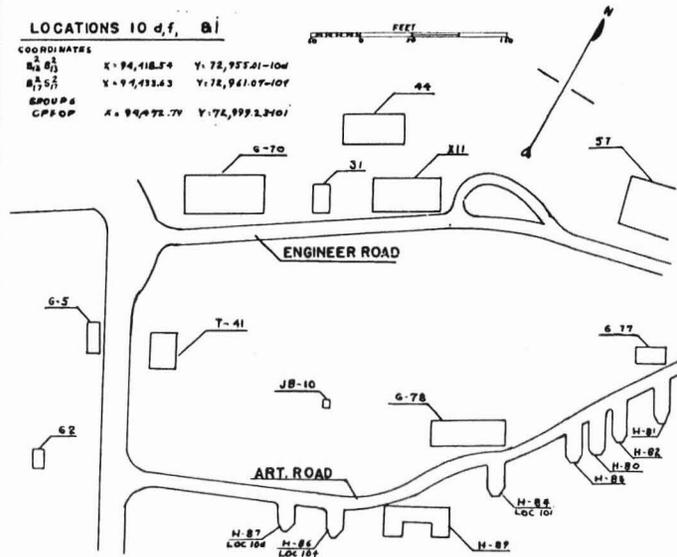
COORDINATES
REFERENCE STA B
BC₁ X: 94,576.94
Y: 72,497.42



CONSTRUCTION 218

LOCATIONS 10d, f, & i

COORDINATES
BC₁ + B₁ X: 94,118.24 Y: 72,955.21-104
B₂ + S₁ X: 94,433.43 Y: 72,941.07-107
GROUP 6
CPROP X: 94,975.77 Y: 72,992.24-101



Auth: LIND 760162
By: WDP, LUSA D, 7/15/60

SECRET

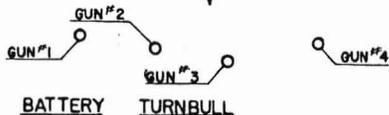
HARBOR DEFENSES OF NEW YORK		REVISED DATE
FIRE CONTROL INSTALLATION LOCATION 10		
PREPARED BY N Y - P SECTOR	AUGUST, 1943 EX NO. 8-B-10	

CRF STA
LOCATION 10h

LOCATION 10h

COORDINATES
BC₁₀ CRF₁₀ X: 74,857.12
Y: 72,870.70

DIRECTRIX
A = 309.83°

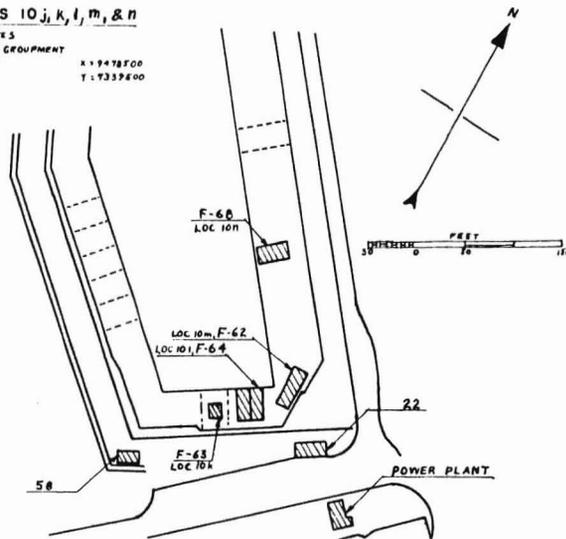


BATTERY TURNBULL

FEET
0 50 100

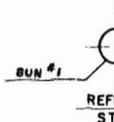
LOCATIONS 10j, k, l, m, & n

COORDINATES
AMBROS GROUP
CP&OP X: 9478700
Y: 7339400



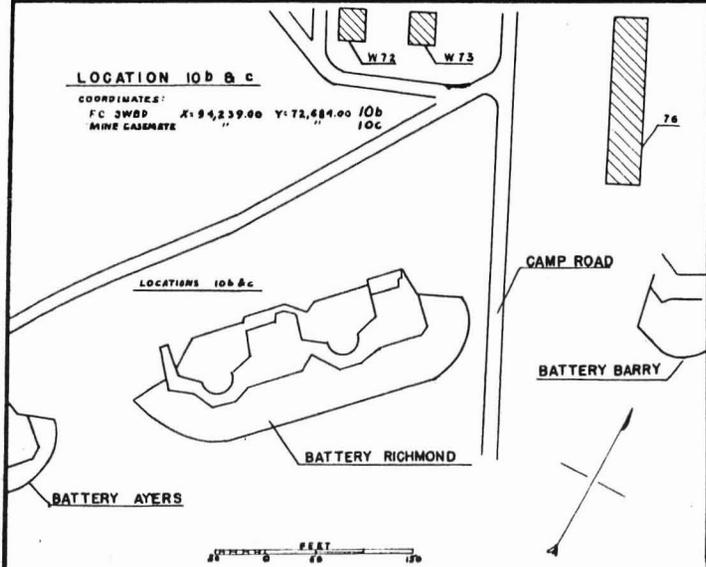
LOCATION 10e

COORDINATES
REFERENCE STA # BC₁₀ X: 94
Y: 72



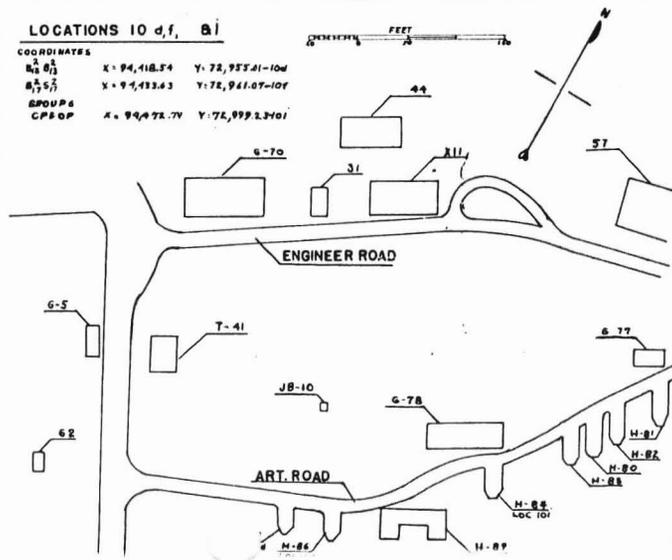
LOCATION 10b & c

COORDINATES:
FC 3WBP X: 94,239.00 Y: 72,684.00 10b
MINE CASEMATE " " " " " " 10c

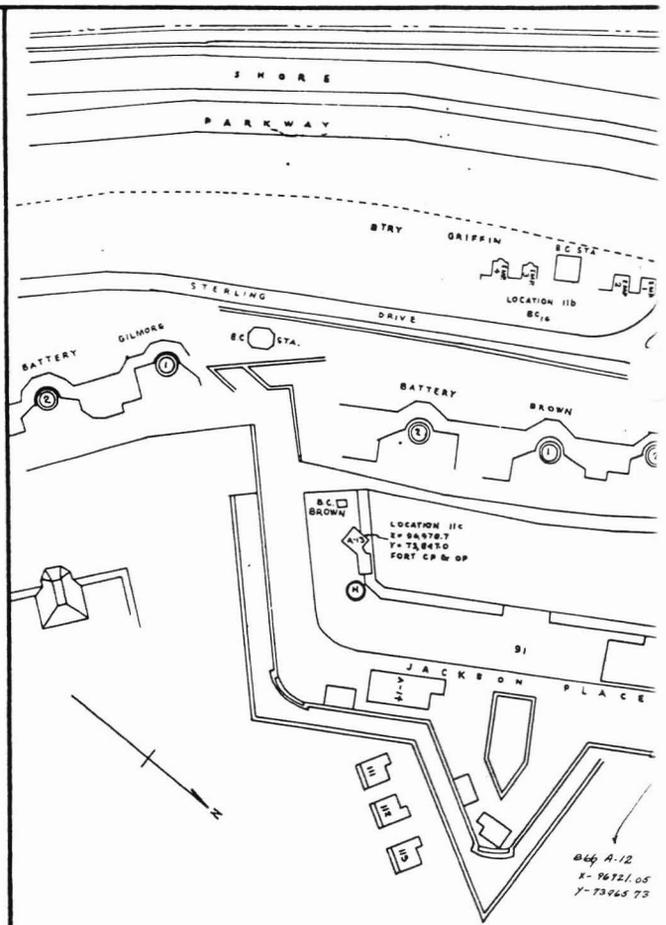
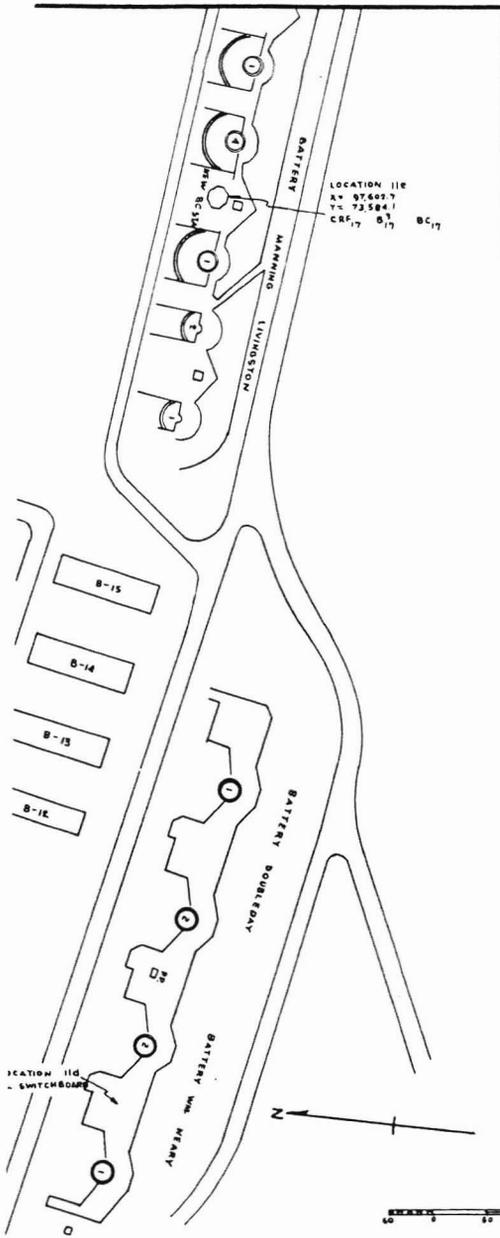


LOCATIONS 10d, f, & i

COORDINATES
G₁₀ G₁₁ X: 94,418.24 Y: 72,955.41-10d
G₁₂ G₁₃ X: 94,433.43 Y: 72,941.07-10f
GROUP # CP&OP X: 94,472.77 Y: 72,999.23-10i



Authentic AND 760162
By ANDP, Date 7/15/00



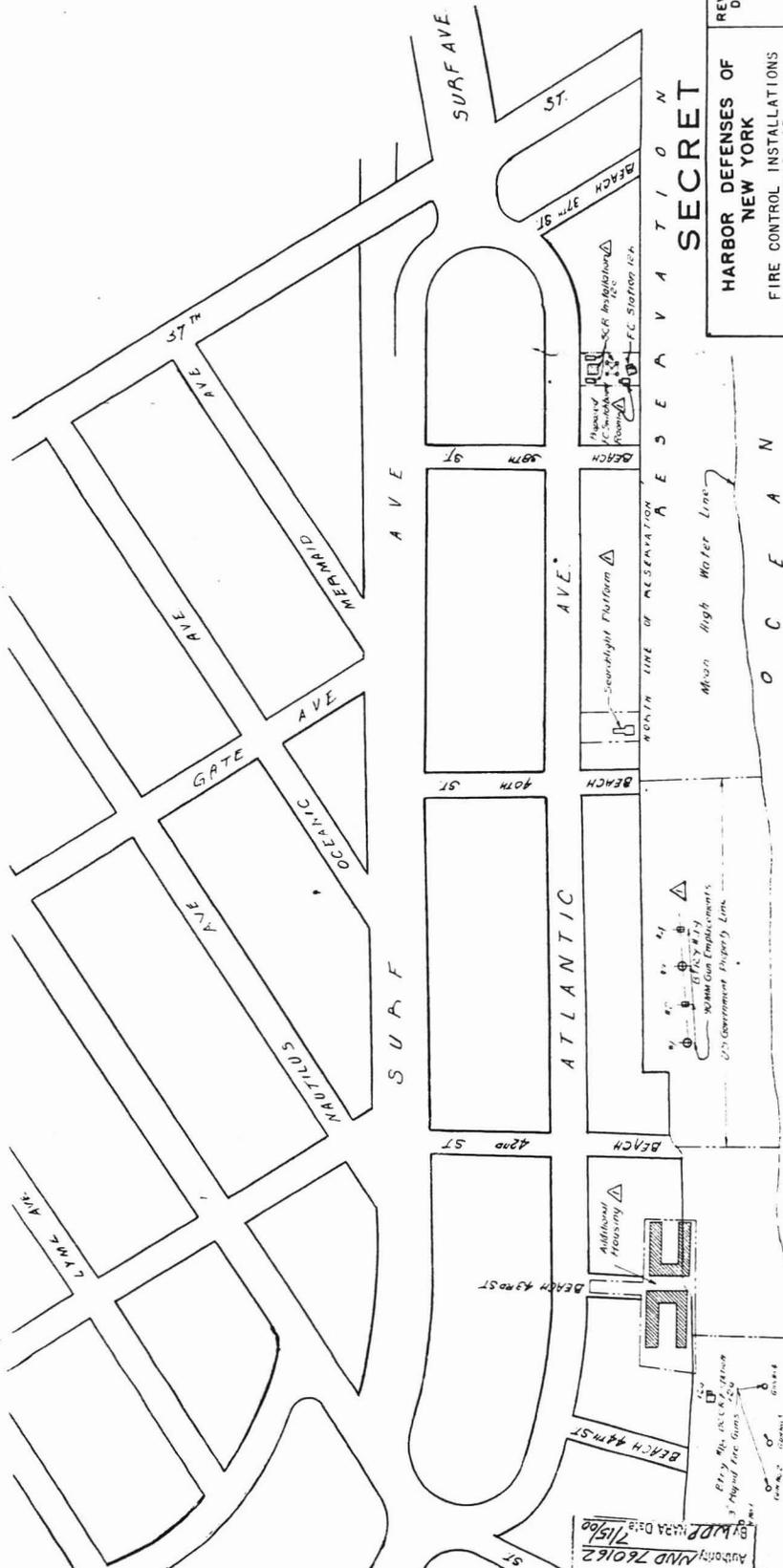
SECRET

HARBOR DEFENSES OF NEW YORK		REV. DA
FIRE CONTROL INSTALLATION LOCATION 11		
PREPARED BY NY-P SECTOR	AUGUST, 1943 EX. NO. 8-5-11	

AUTHORITY NYP 76162
 BY WPC/MSA DTS 7/5/50

LEGEND

- 12 a. BC-SCRF 8TRY # 18
- 12 b. DOUBLE DECK F.C. STATION
- 12 c. SCR-296
- 12 e. AUTHORIZED MINE VISUAL STATION



SECRET

HARBOR DEFENSES OF NEW YORK FIRE CONTROL INSTALLATIONS LOCATION 12	REVISED DATE
	PREPARED BY NY-P SECTOR EX. NO. B-8-12

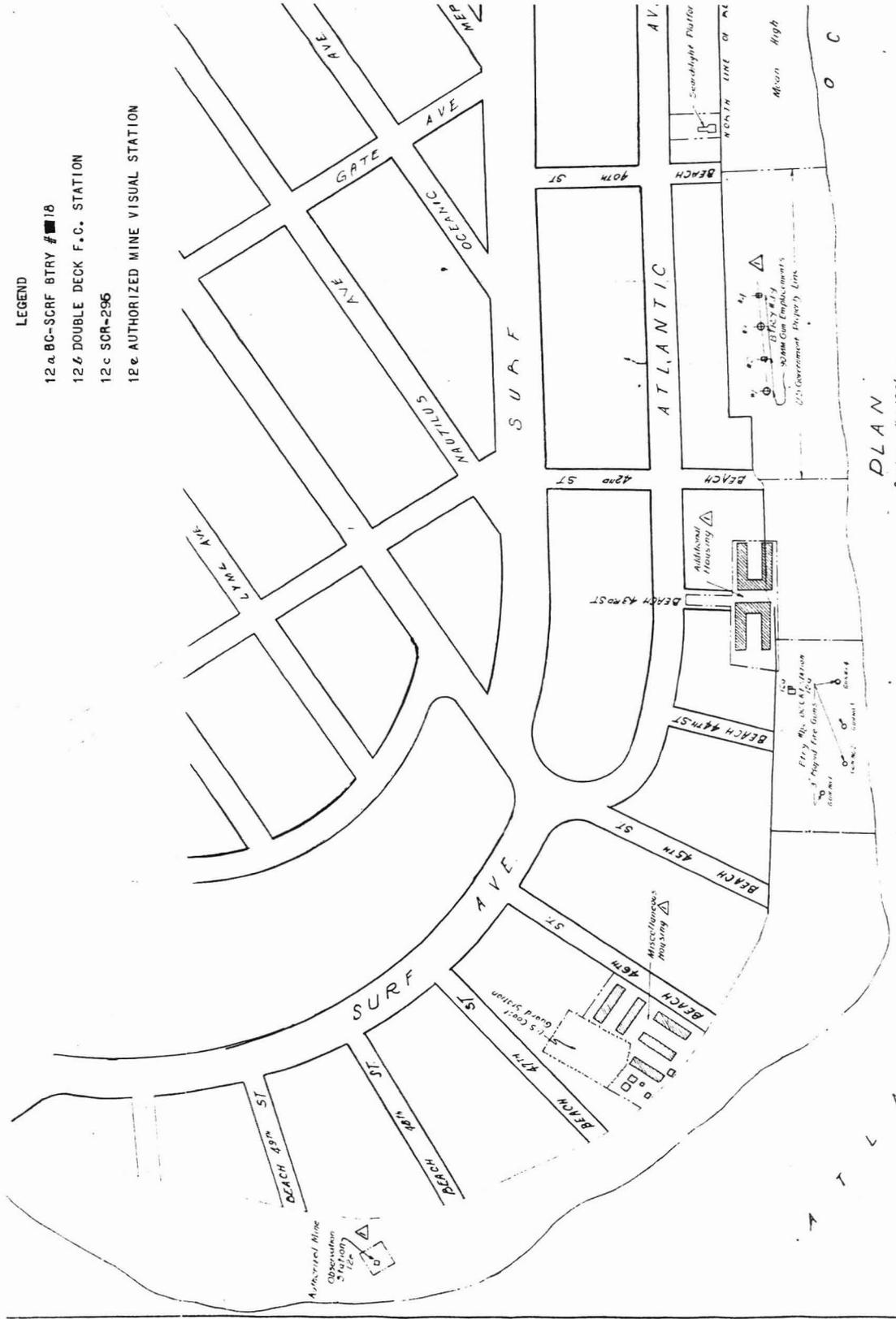
PLAN
 Scale: 1"=100'
 0 100 200'

Author: AND 76012
 Date: 7/15/50

SAFE 1/1

LEGEND

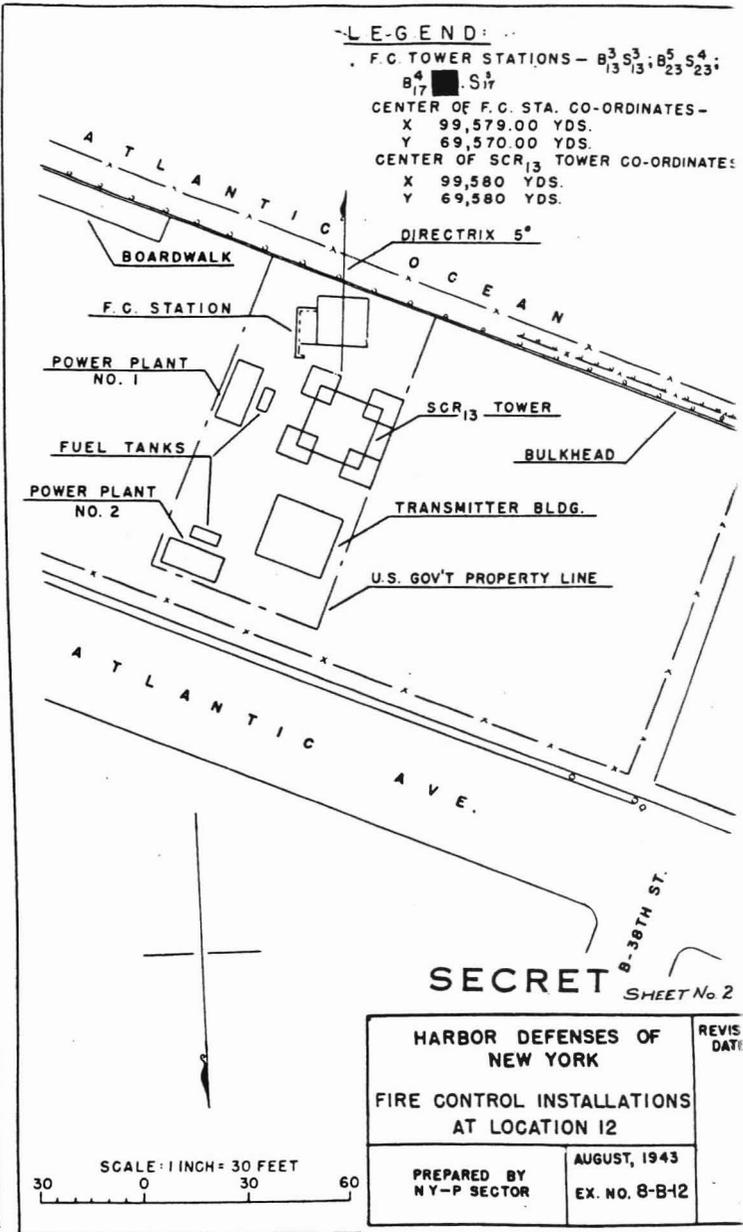
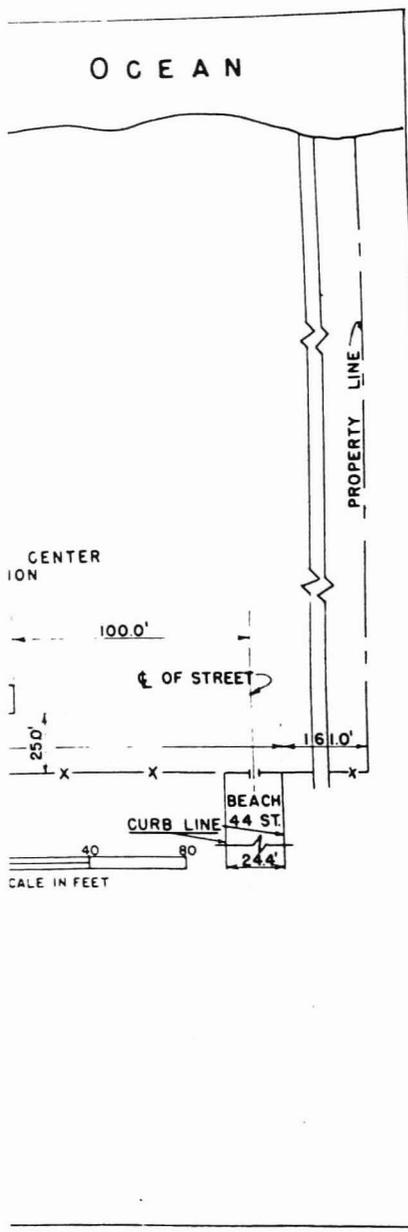
- 12 a BC-SCRF BTRY # 18
- 12 b DOUBLE DECK F.C. STATION
- 12 c SCR-296
- 12 e AUTHORIZED MINE VISUAL STATION



PLAN

Scale: 1" = 100' 200'

Approved: MVD 760162
 BY: WDR: MVA Date: 7/15/60

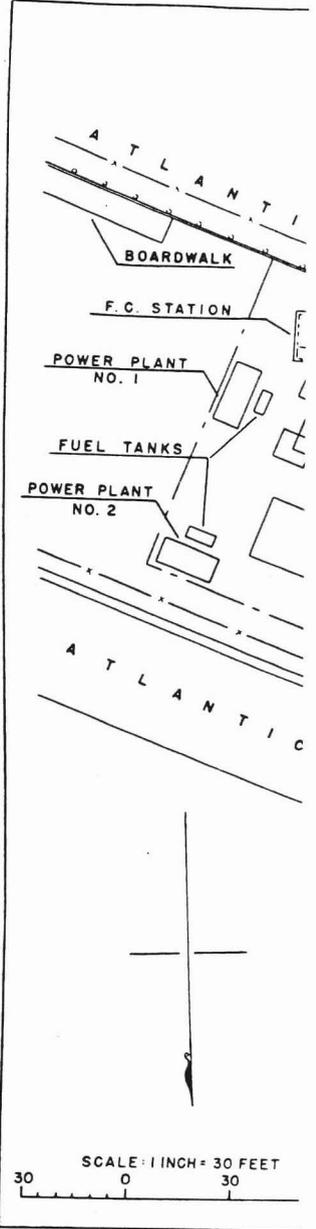
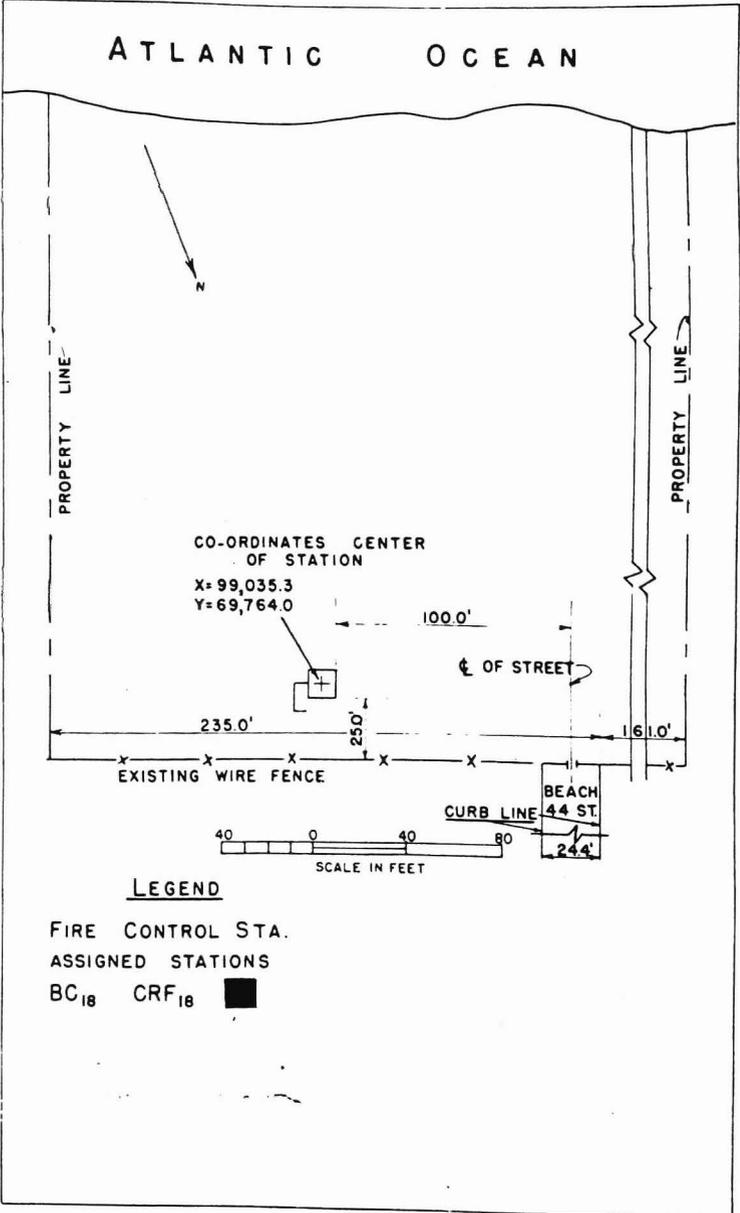


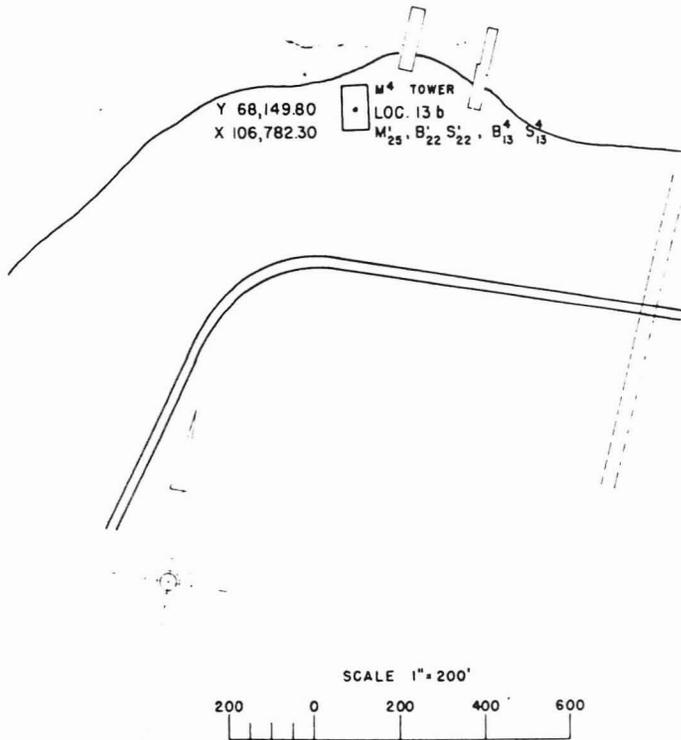
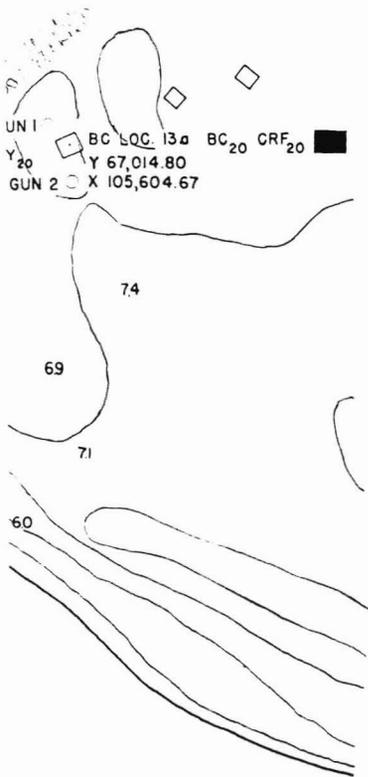
LEGEND:
 F.C. TOWER STATIONS - $B_{13}^3 S_{13}^3; B_{23}^5 S_{23}^4;$
 $B_{17}^4 S_{17}^5$
 CENTER OF F.C. STA. CO-ORDINATES -
 X 99,579.00 YDS.
 Y 69,570.00 YDS.
 CENTER OF SCR₁₃ TOWER CO-ORDINATES:
 X 99,580 YDS.
 Y 69,580 YDS.

SECRET SHEET No 2

HARBOR DEFENSES OF NEW YORK		REVIS DATE:
FIRE CONTROL INSTALLATIONS AT LOCATION 12		
PREPARED BY NY-P SECTOR	AUGUST, 1943	
	EX. NO. 8-B-12	

Authenticity: MND 76162
 BY: MND 76162
 Date: 7/15/60

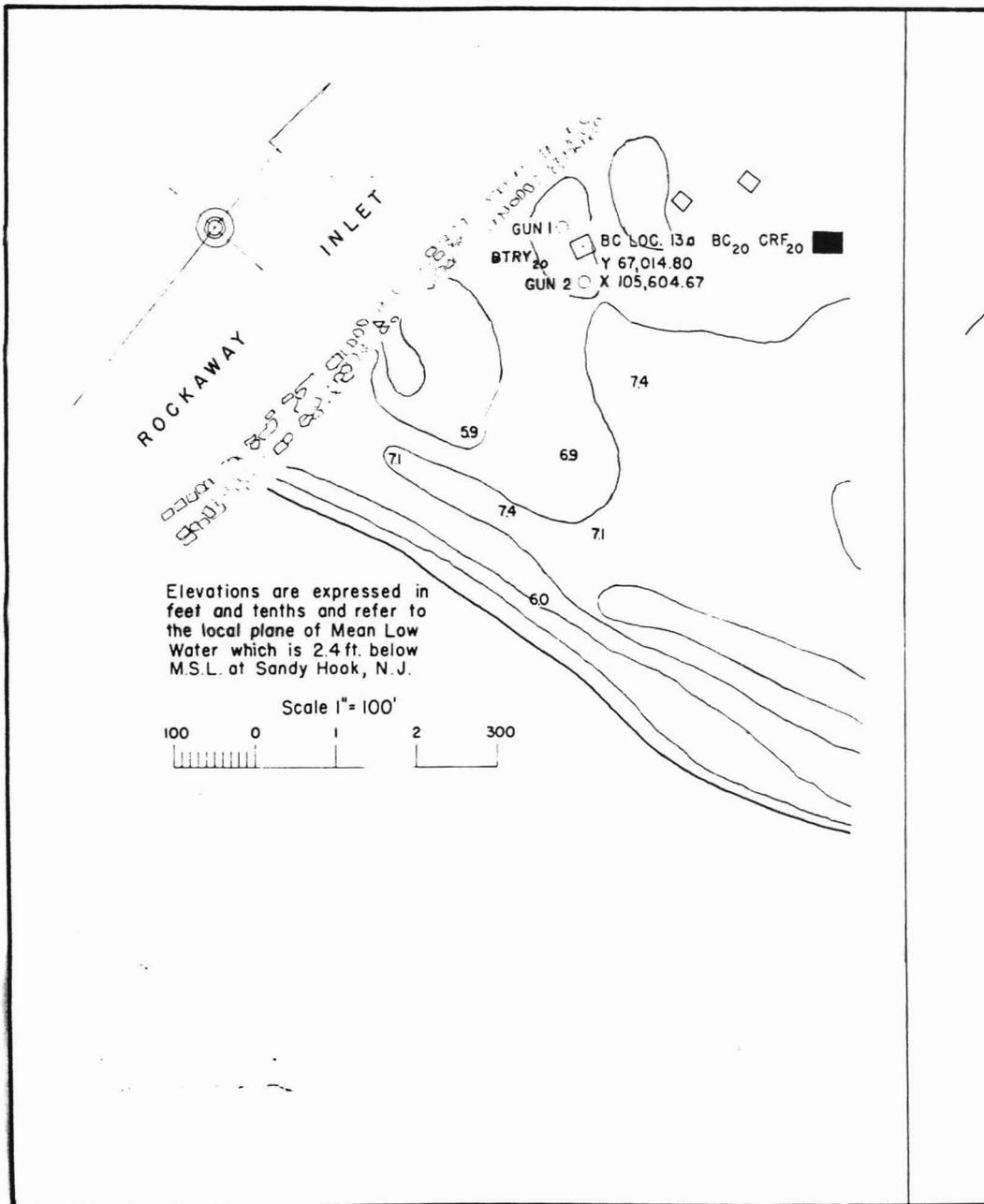


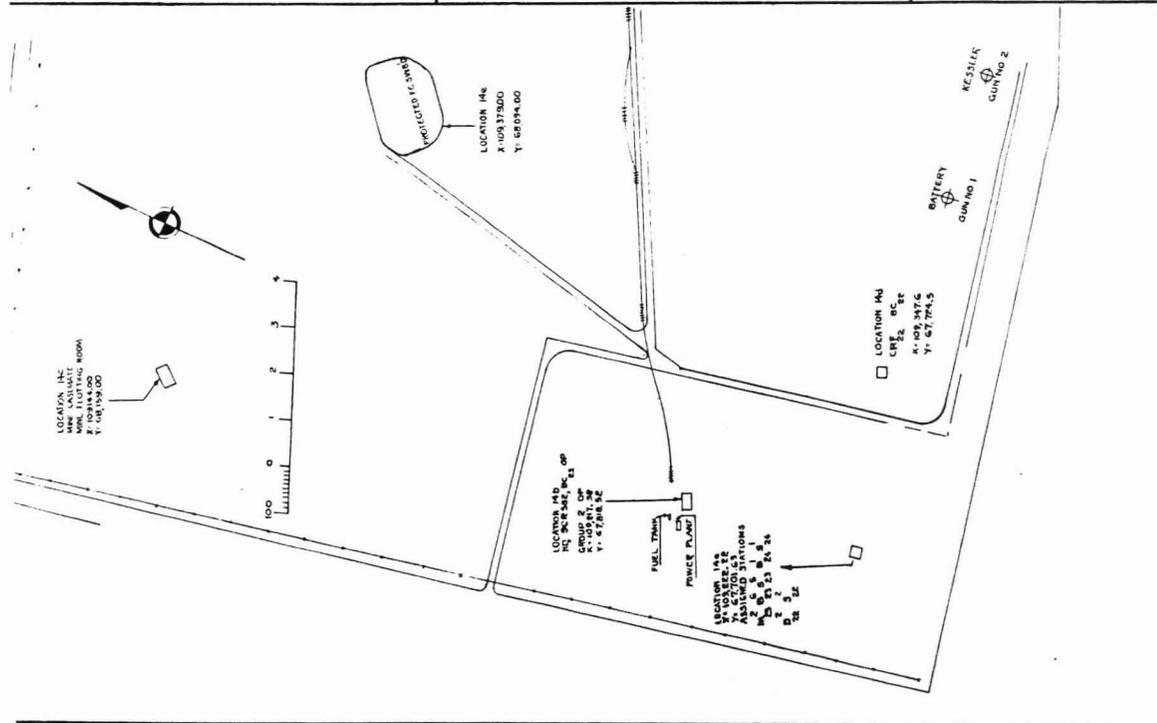
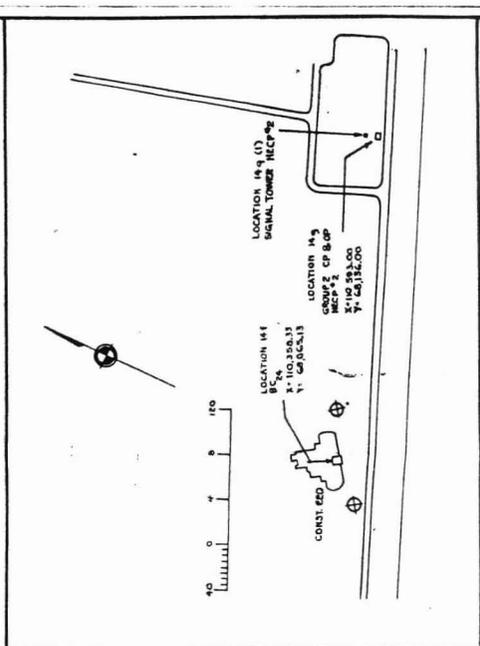
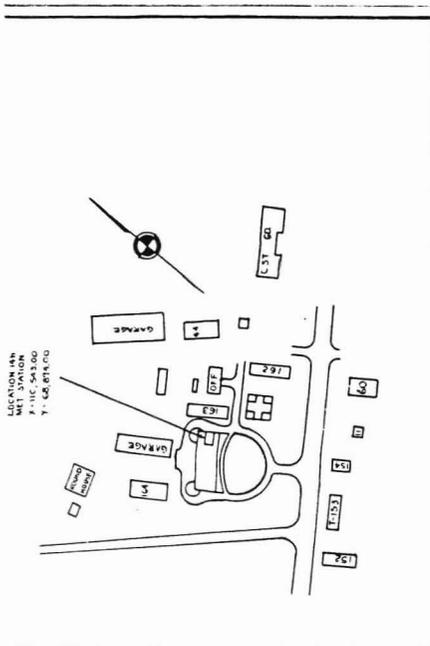


SECRET

HARBOR DEFENSES OF NEW YORK FIRE CONTROL INSTALLATION LOCATION 13	
PREPARED BY NY-P SECTOR	AUGUST, 1943 EX. NO. 8-B-13

Approved
 MND 76062
 7/5/50
 By WDR:VMA Date





SECRET

<p>HARBOR DEFENSES OF NEW YORK</p> <p>FIRE CONTROL INSTALLATION LOCATION 14.</p>	<p>REVISED DATE</p>
<p>PREPARED BY NY-P-SFC:TOR</p>	<p>AUGUST, 1943 FY NARL-R-1A</p>

LEGEND:

COORDINATES SCR 22

X - 116,036.0

Y - 70,566.0

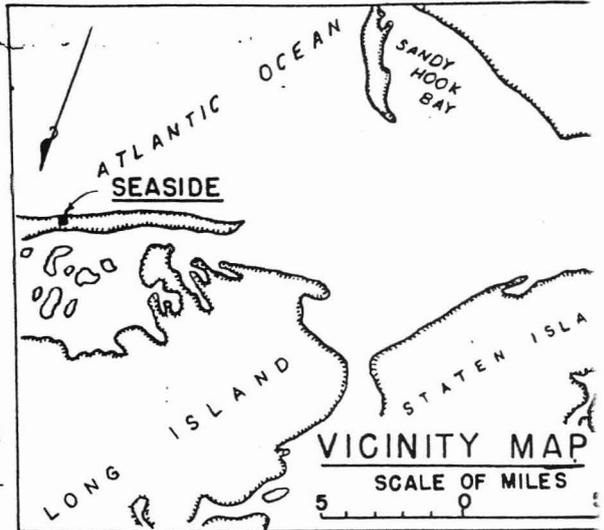
COORDINATES FC STA.

X - 116,035.1

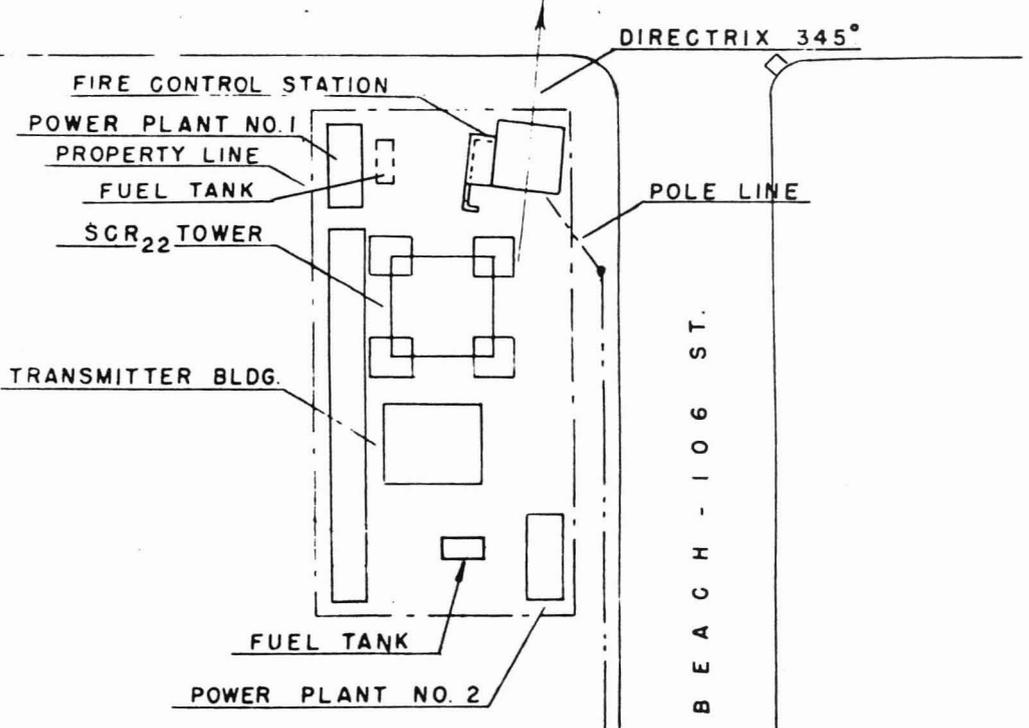
Y - 70,554.6

STATIONS

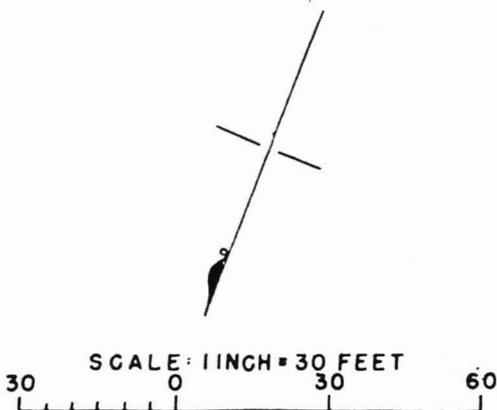
B₂₃⁷ S₂₃⁶, B₂₄² S₂₄², B₂₂³ S₂₂³



BOULEVARD ALONG OCEAN FRONT

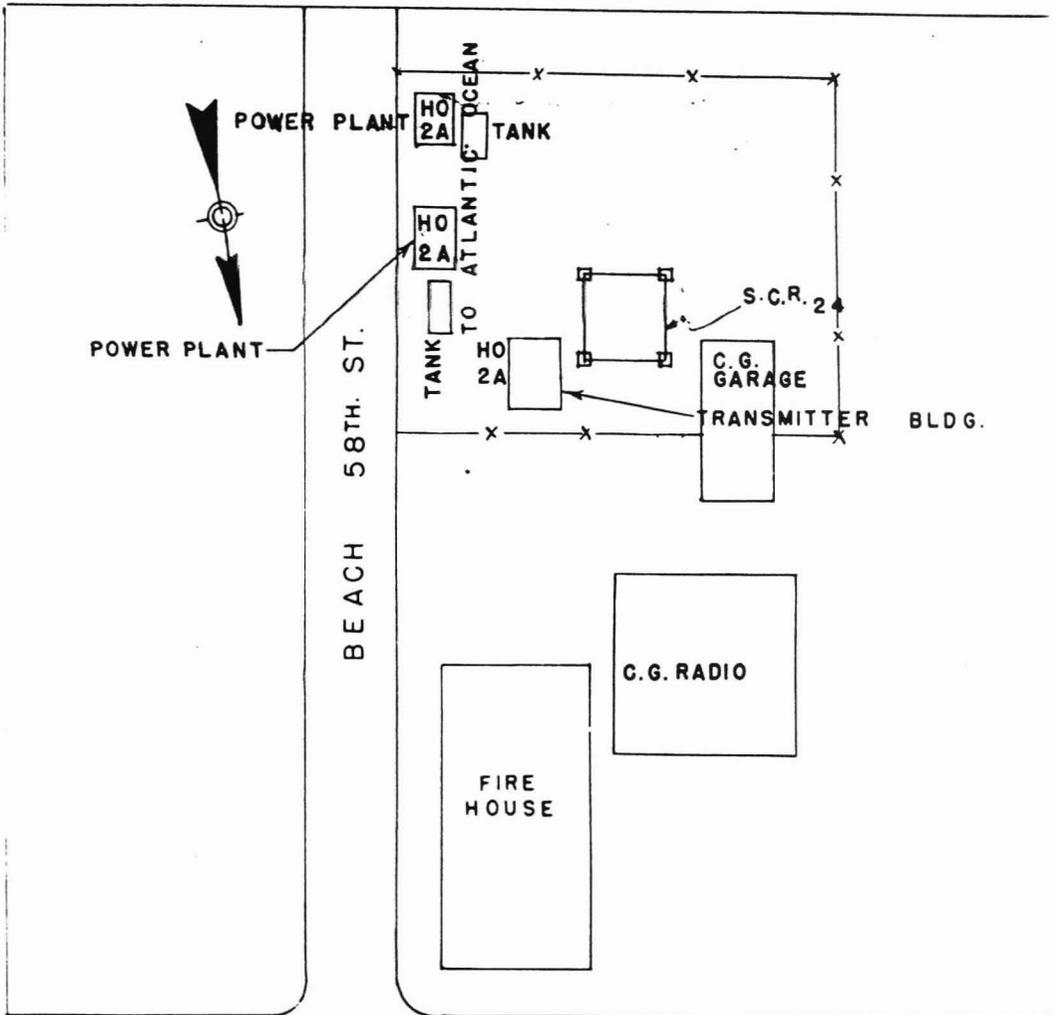


SECRET



HARBOR DEFENSES OF NEW YORK		REVISE DATE
FIRE CONTROL INSTALLATIONS LOCATION 15		
PREPARED BY NY-P SECTOR	AUGUST, 1943	EX. NO. 8-B-15

By WDR: NARA Date: 7/15/00
Authority: NND 760162



ROCKAWAY BEACH BLVD.

LONG ISLAND RAILROAD

SCALE 1 IN. = 50 FT.
50 0 50

LEGEND

COORDINATES CENTER OF
SCR 24

X — 119,554.5

Y — 71,824.7

SECRET

HARBOR DEFENSES OF NEW YORK		REVISED DATE
FIRE CONTROL INSTALLATIONS AT LOCATION 16		
PREPARED BY NY-P SECTOR	AUGUST, 1943 EX. NO. 8-B-16	

Authority MND 760162
BY WDR NARA Date: 7/15/00

LEGEND:

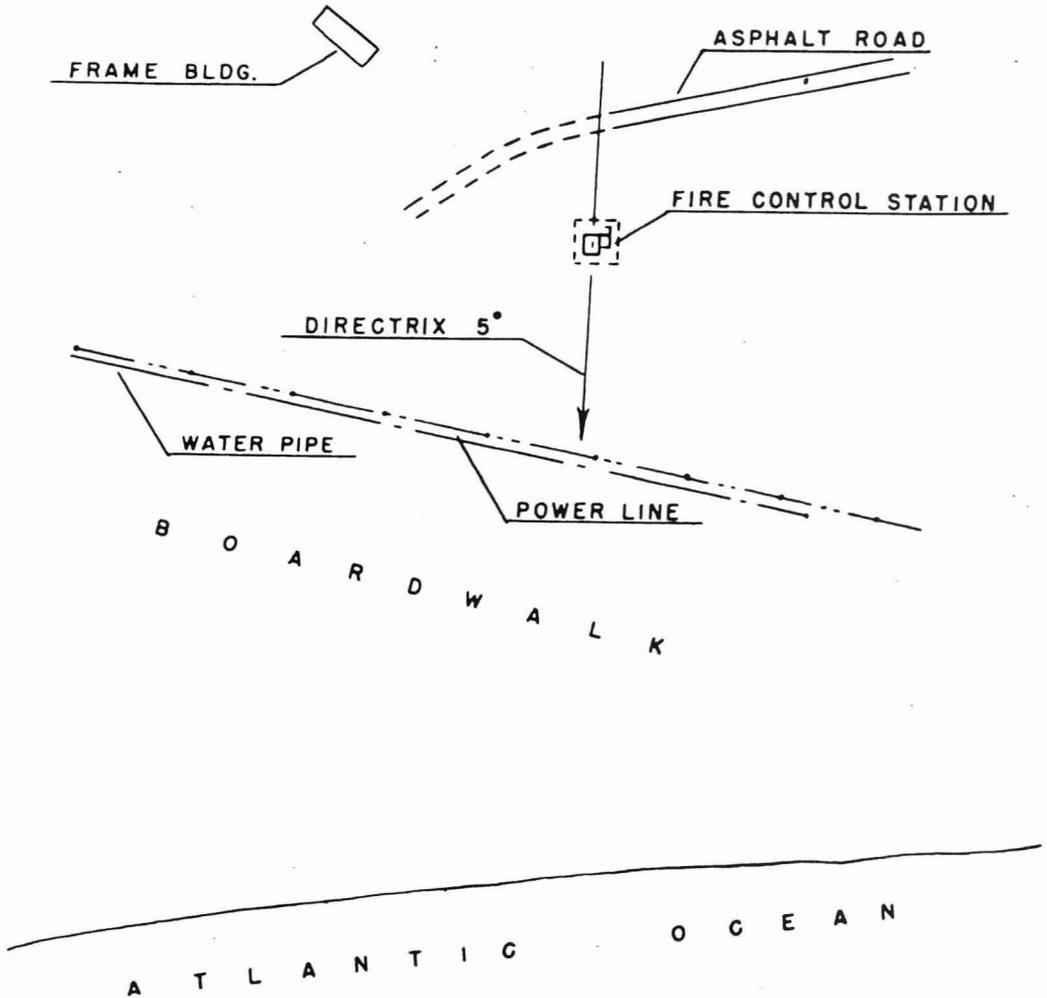
F. C. TOWER STATIONS - $B_{23}^8 S_{23}^7$;

$B_{22}^8 S_{22}^7$; $B_{24}^3 S_{24}^3$.

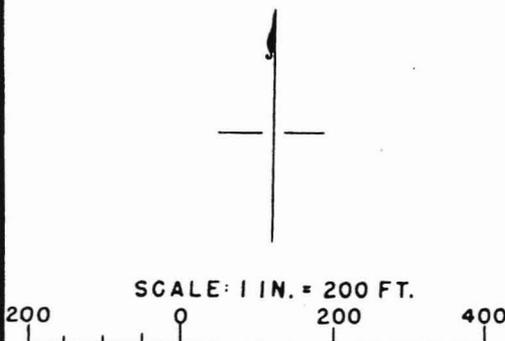
CENTER OF F. C. STA. CO-ORDINATES-

X 123,665.87 YDS.

Y 71,592.87 YDS.



SECRET



HARBOR DEFENSES OF NEW YORK		REVISE DATE
FIRE CONTROL INSTALLATIONS AT LOCATION 17		
PREPARED BY NY-P SECTOR	AUGUST, 1943 EX. NO. 8-B-17	

AUTHORITY: AND 760162
 BY WDP: NARA DATE: 7/15/00

ATLANTIC OCEAN

L K

FIRE CONTROL STATION

WOODEN PLATFORM

PROPERTY LINE

FRONT STREET

LIDO INN

POWER PLANT 1.

POWER PLANT 2.

FUEL TANKS

SCR 23

TRANSMITTER BLDG.

NEPTUNE BLVD

BROADWAY

LEGEND

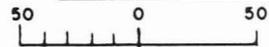
COORDINATES CENTER OF
SCR 23

X - 132,747.9

Y - 71,031.6

SECRET

SCALE 1 IN. = 50 FT.

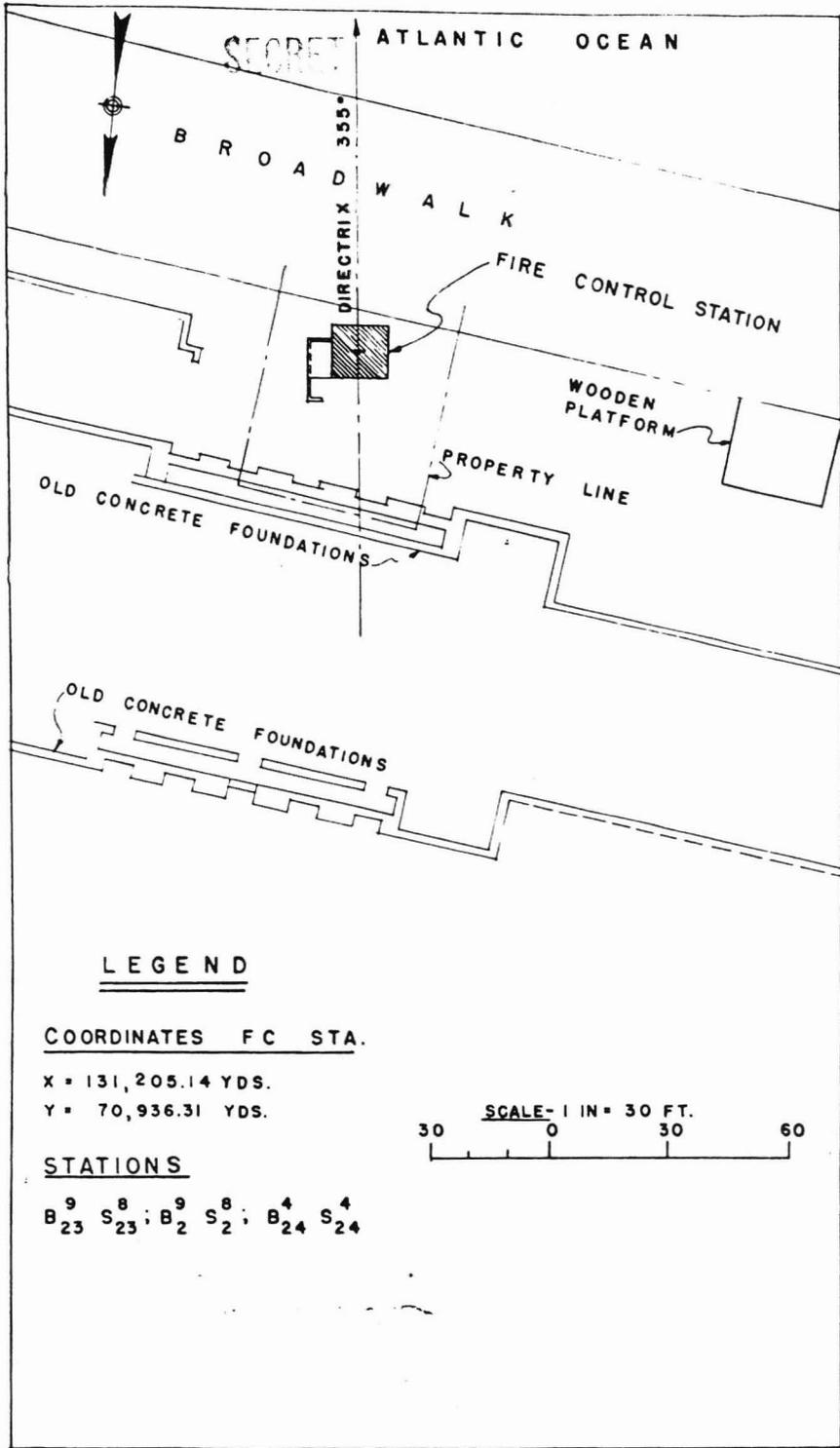


SCALE - 1 IN. = 30 FT.



HARBOR DEFENSES OF NEW YORK		REVISE DATE
FIRE CONTROL INSTALLATIONS AT LOCATION 18		
PREPARED BY N Y - P SECTOR	AUGUST, 1943 EX. NO. 8-B-18	

BY WDR: NARA DATE 7/5/90
Authority AND 760162



LEGEND

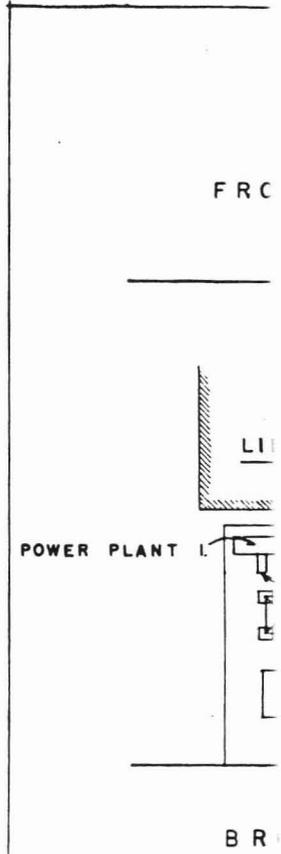
COORDINATES FC STA.

X = 131,205.14 YDS.
 Y = 70,936.31 YDS.

STATIONS

B₂₃⁹ S₂₃⁸; B₂⁹ S₂⁸; B₂₄⁴ S₂₄⁴

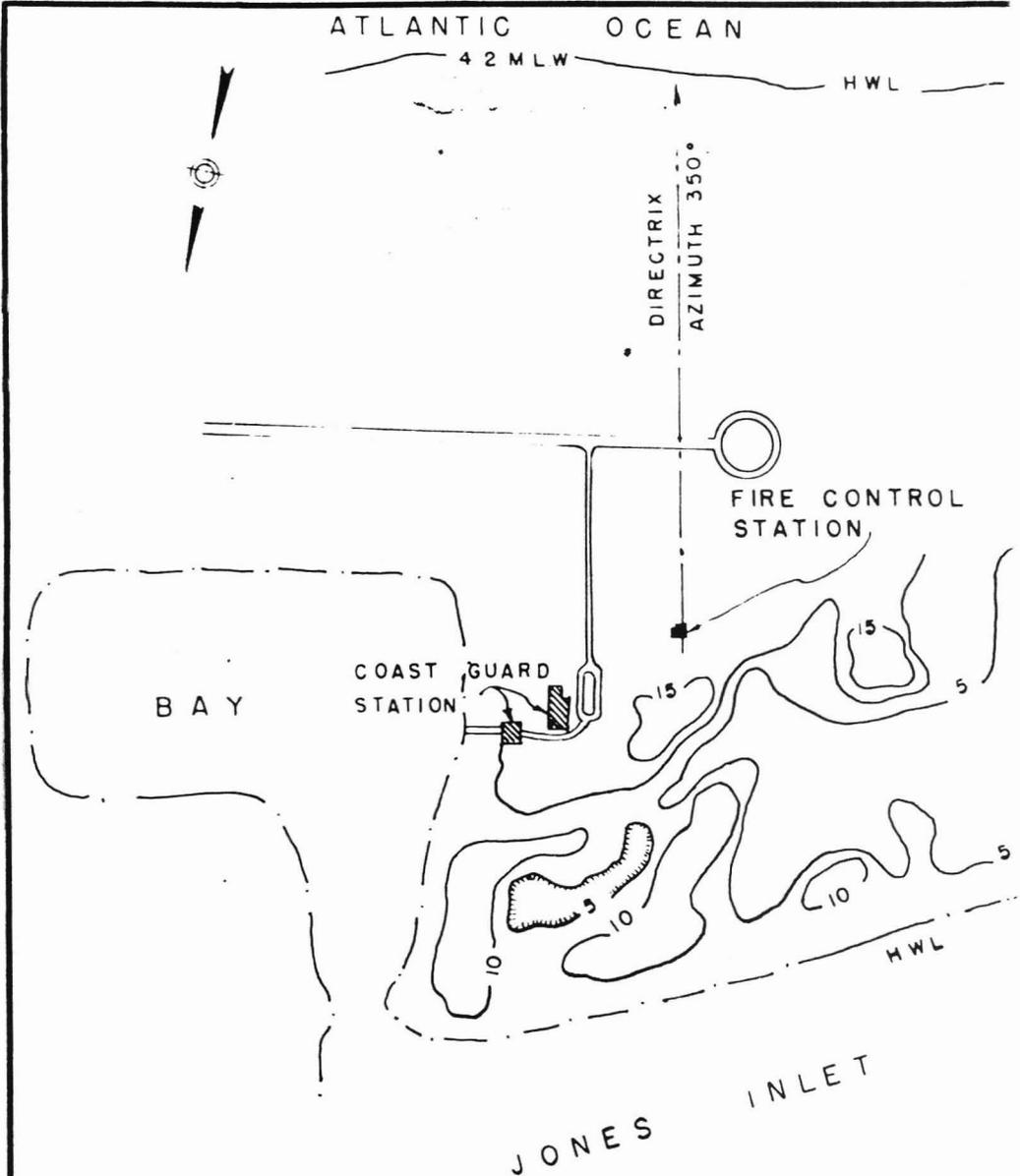
SCALE - 1 IN = 30 FT.
 30 0 30 60



LEGEND

COORDINATES CENTER SCR 23

X - 132,747.9
 Y - 71,031.6



LEGEND

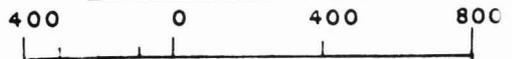
COORDINATES CENTER OF
F.C. STATION

X - 140,915 91 YDS
Y - 71,715 78 YDS.

STATIONS

10 9
B 23 S 23

SCALE 1 IN = 400 FT.



HARBOR DEFENSES OF NEW YORK		REVISED DATE
FIRE CONTROL INSTALLATIONS AT LOCATION 19		
PREPARED BY NY-P SECTOR	AUGUST, 1943	EX. NO. 8-B-19

AUTHORITY MND 760162
 BY WDR MAPA Date 7/15/60

LEGEND

COORDINATES F.C. STA.

X = 149 446.01

Y = 73 483.64

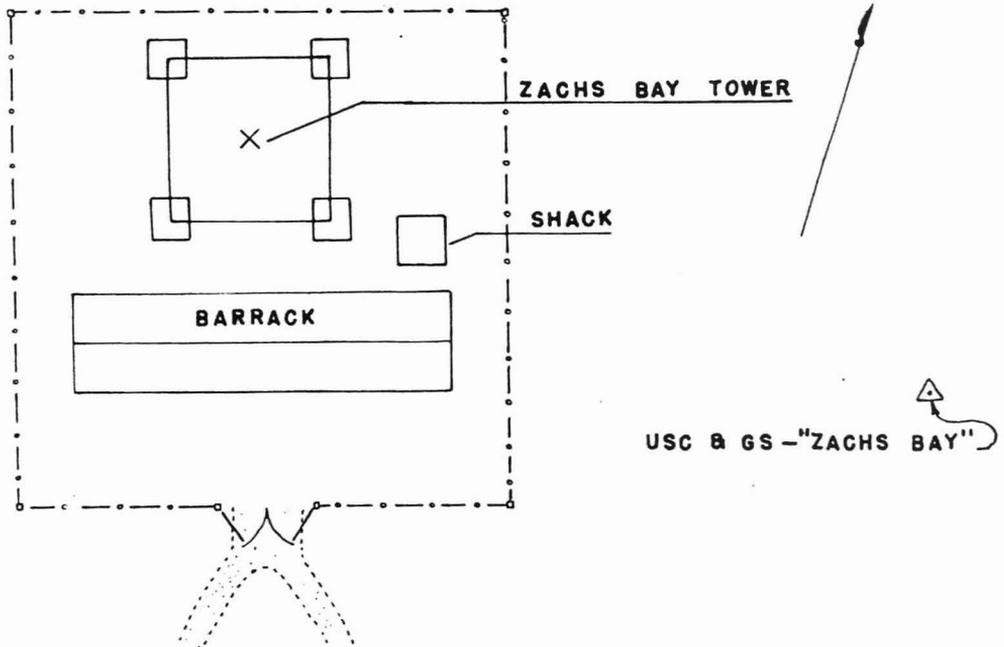
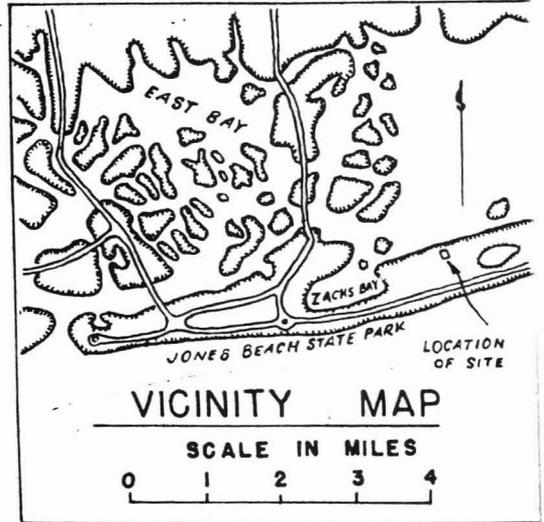
COORDINATES USC & GS MARKER

X = 149 494.20

Y = 73 479.99

STATIONS

10
B 23 S 23



SECRET

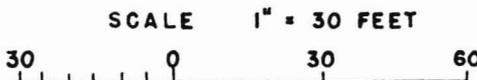
HARBOR DEFENSES OF
NEW YORK
FIRE CONTROL INSTALLATIONS
LOCATION 20

REVISED
DATE

PREPARED BY
NY-P SECTOR

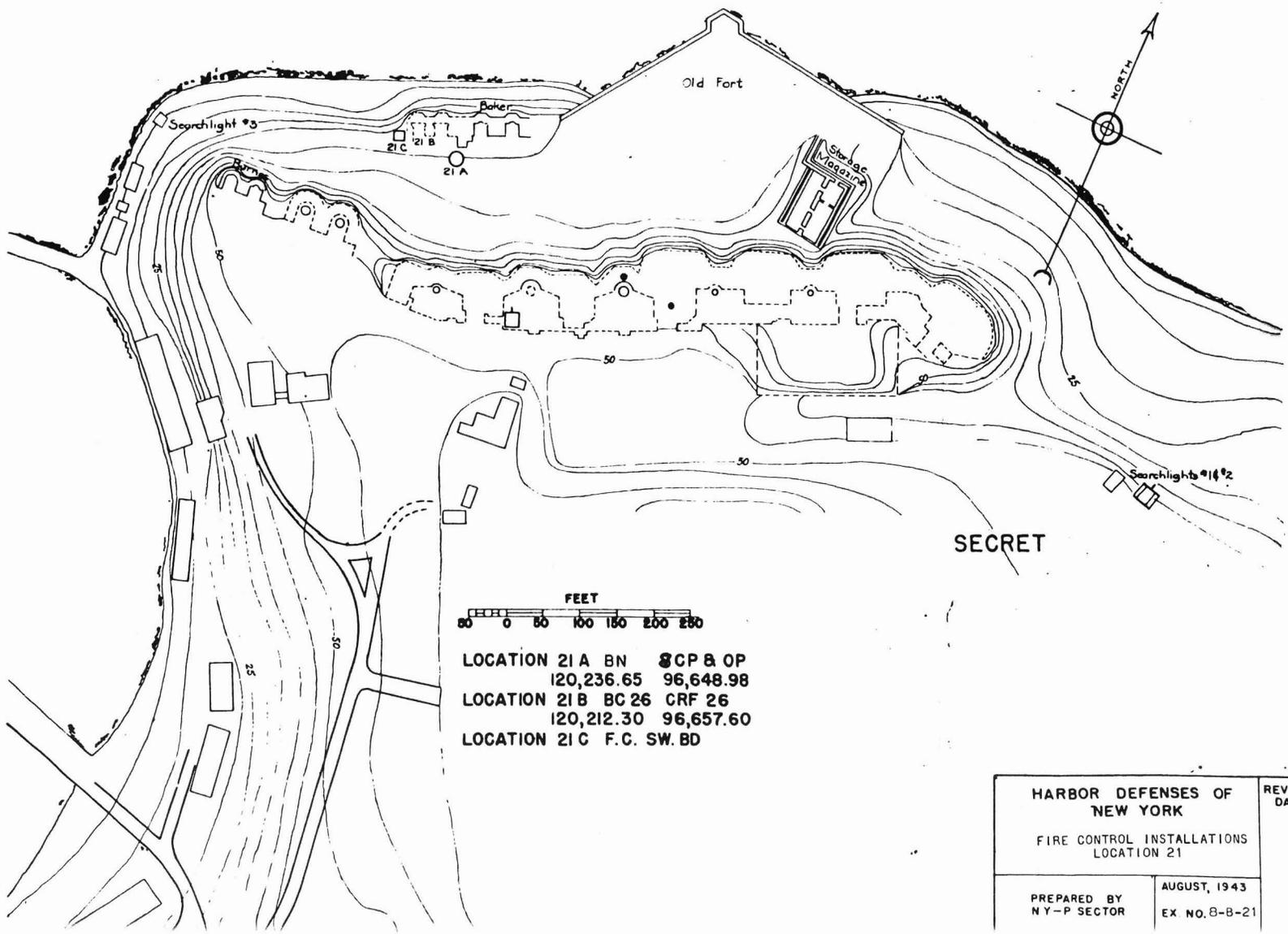
AUGUST, 1943

EX. NO. 8-B-20



By WDP: NARA Date 7/15/00
Authority: NND 760162

Authority: MND 76016 Z
 By: W.D.P. DATA DATE: 7/15/60



SECRET



LOCATION 21 A BN 3 CP & OP
 120,236.65 96,648.98
 LOCATION 21 B BC 26 CRF 26
 120,212.30 96,657.60
 LOCATION 21 C F.C. SW. BD

HARBOR DEFENSES OF NEW YORK		REVISI DATE
FIRE CONTROL INSTALLATIONS LOCATION 21		
PREPARED BY NY-P SECTOR	AUGUST, 1943 EX NO. 8-B-21	

SCR-296
LIVINGSTON

LOCATION NO. 12 C
SCR-296
CONST. NO. 218

SCR-296
KESSLER

CONST. NO. 220

LOCATION NO. 14
SCR-582
HD

KESSLER

LOCATION NO. 8
SCR-682
HD

PECK

KINGMAN-MILLS

LOCATION NO. 8
SCR-296
PECK

LOCATION NO. 7
SCR-296
LEWIS

LEWIS

LOCATION NO. 7
SCR-582
HD

CONST. NO. 219

LOCATION NO. 5
SCR-296
KINGMAN

LOCATION NO. 4
SCR-296
CONST. NO. 219

LOCATION NO. 3
SCR-296
MILLS

HORIZON OF SCR 582 AT 12°

HORIZON SCR 296 AT 120° EL

MAX RANGE 18" GUNS 28000 YDS

HORIZON OF SCR 582 AT 220° ELEV

MAX RANGE 8" GUNS 22000 YDS

HORIZON OF SCR 296 AT 120° ELEV

HORIZON OF SCR 296 AT 330° ELEV

MAX RANGE 18" GUNS 44000 YDS



SECRET

HARBOR DEFENSES OF
NEW YORK
AREA OF DETECTION OF SCR
UNITS & PRIMARY ASSIGNMENTS

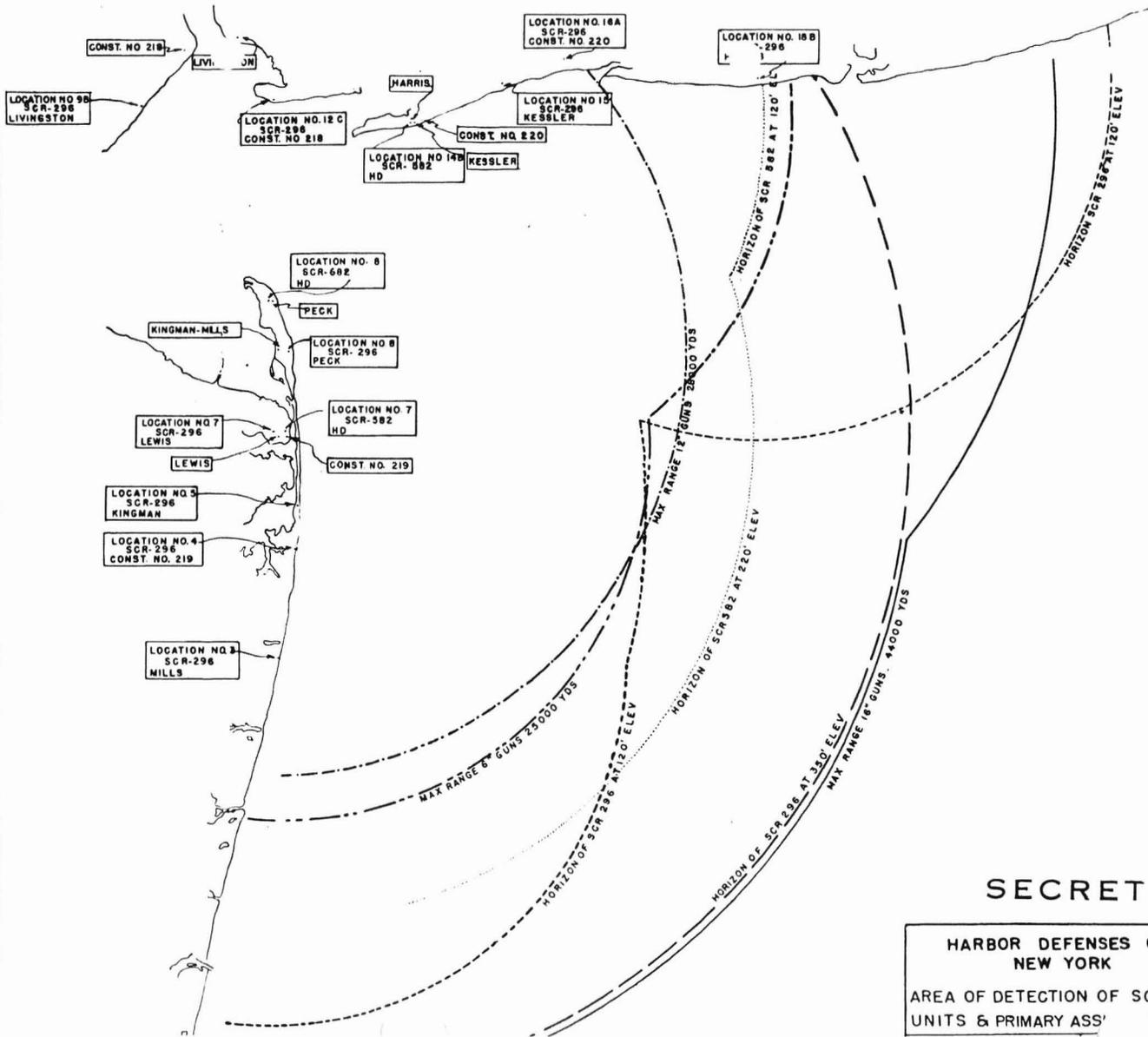
REVISED
DATE

PREPARED BY
NY-P SECTOR

AUGUST, 1943

EX. NO. 10-B





SECRET

HARBOR DEFENSES OF NEW YORK		REVISED DATE
AREA OF DETECTION OF SCR UNITS & PRIMARY ASS'GMENTS		

SECRET

ANNEX C

SEACOAST SEARCHLIGHTS

SECRET

RECORDED
Authority AND 760162
By WDR/KARA Date 7/15/00

SECRET

ANNEX C

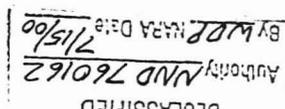
INDEX

Paragraph 1 - General
2 - Tactical Organization and Assignments
3 - Tabulation of Data
4 - Construction Requirements
5 - Land Acquisition

EXHIBITS

1-C - Plan of Illumination
2-C - Tabulation of Searchlight Data.

SECRET



ANNEX C

SEACOAST SEARCHLIGHTS

1. GENERAL:

a. In conformity with the provisions contained in letter PFO 381/203 Gen. x 420.3, Headquarters New York-Philadelphia Sector, dated 1 July 1943, subject "Requirements for Harbor Defense Searchlights", and approved by the War Department in 2nd Indorsement thereto, file SPFMS 470.3 (1 July 43), Headquarters Army Service Forces, Washington, D. C., the searchlight project of the Harbor Defenses of New York consists generally of 14 fixed seacoast searchlights and 27 portable seacoast searchlights (including those intended for AMTB purposes) located as shown on Exhibit 1-C.

b. The following considerations affect the searchlight project:

- (1) The normal maximum effective range of seacoast searchlights in this area is about 8000 yards.
- (2) Searchlights are so placed that all water areas within 7000 yards of the shoreline can be illuminated up to the limits of the range of the armament.
- (3) The individual lights of a pair are, in general, so sited that each can cover the field of illumination of the other.
- (4) Searchlights are, in general, controlled from nearby fire control towers. Searchlights are sited at as low an elevation as is consistent with good illumination in order that maximum concealment from air and sea observation can be obtained.
- (5) Searchlight positions and arcs of illumination are shown on Exhibit 1-C.

2. TACTICAL ORGANIZATION AND ASSIGNMENT.

With the exception of AMTB searchlights which are assigned directly to the AMTB batteries, seacoast searchlights are assigned to Battalion commanders for control. A tabulation of assignment follows:

Battalion 1	- Searchlights 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14.
Battalion 2	- Searchlights 29 to 36, inclusive.
Battalion 3	- Searchlights 17, 23, 27.
Battalion 5	- Searchlights 18, 25, 26.
Battalion 6	- Searchlights 22, 24.
Battalion 8	- Searchlights 37, 38, 39.
AMTB Battery No. 7	- Searchlight 15.
8	- Searchlight 16.
11	- Searchlight 19.
12	- Searchlight 20.
19	- Searchlight 21.
21	- Searchlight 28.

3. SEARCHLIGHT DATA.

A tabulation of searchlight data is shown on Exhibit 2-C.

4. CONSTRUCTION REQUIREMENTS.

Other than towers and platforms already supplied and constructed, there are no approved requirements.

SECRET

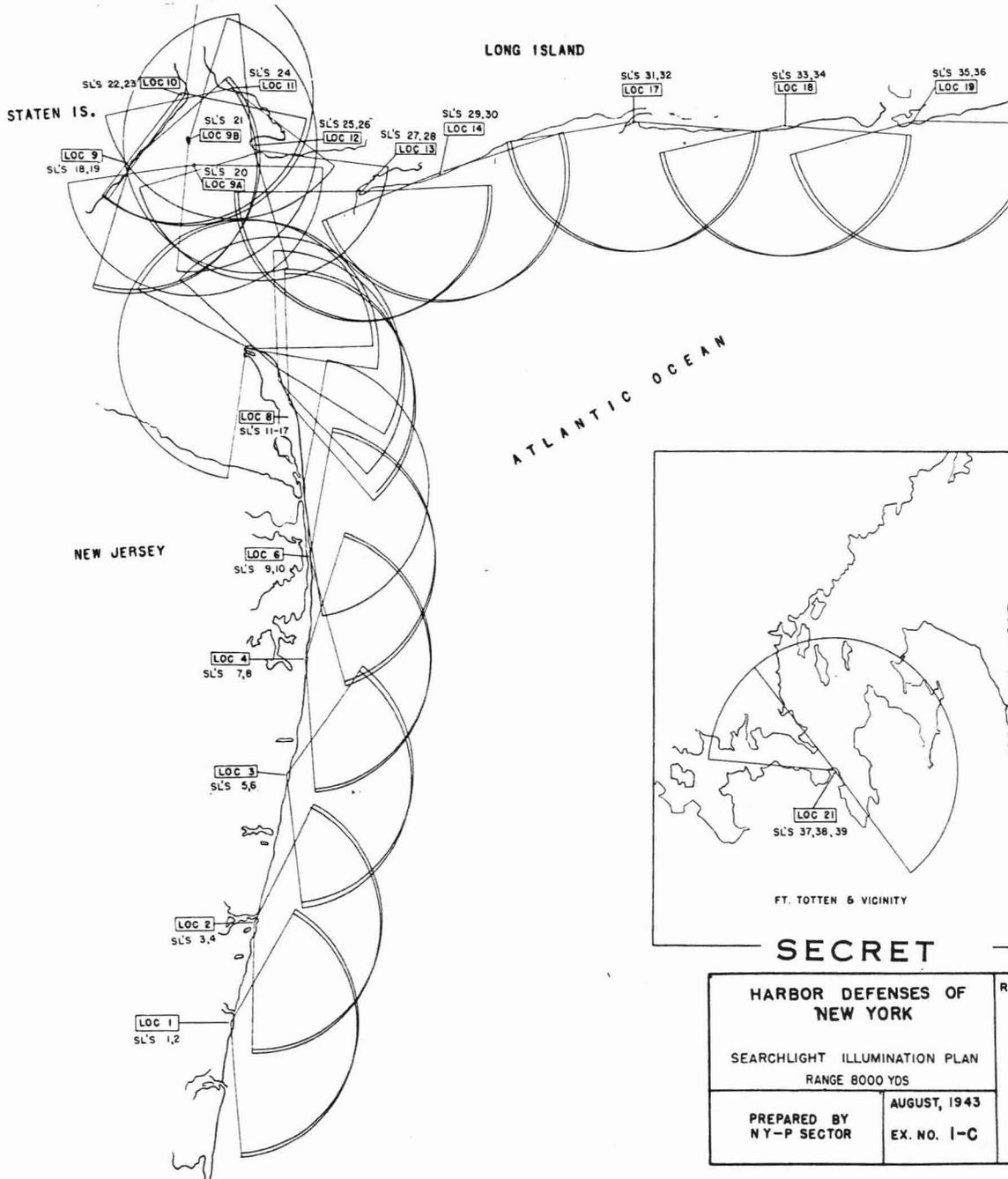
5. LAND ACQUISITION.

Details as to real estate to be acquired will be found in Annex H.

- 2 -

SECRET

BY WDP/NARA DATE 7/15/00
Authority: NND 760162
REPRODUCED



SECRET

**HARBOR DEFENSES OF
NEW YORK**

SEARCHLIGHT ILLUMINATION PLAN
RANGE 8000 YDS

PREPARED BY
NY-P SECTOR

AUGUST, 1943

EX. NO. I-C

REVIS
DAT

SECRET

- 1 -

Tactical Location		Type	Type	Ht. in	Location of	Type	Location	Place of	Status	
No.	No.	Location	Light	Mounting	Oper. Pos.	Control	Power Plant	Power Plant	Of Light	
1	1	Seagirt, N.J.	P	10' Plat- form	*20'	F.C. Station	1-16 KW Portable	Adjacent to light	Loc. 8A T-13	On hand
2	1	Seagirt, N.J.	P	10' Plat- form	*20'	F.C. Station	1-16 KW Portable	Adjacent to light	Loc. 8A T-13	On hand
3	2	Shark River, N.J.	P	None	*20'	F.C. Station	1-16 KW Portable	Adjacent to light	Loc. 8A T-13	On hand
4	2	Shark River, N.J.	P	None	*20'	F.C. Station	1-16 K Portable	Adjacent to light	Loc. 8A T-13	On hand
5	3	Elberon, N.J.	P	10' Plat- form	*20'	F.C. Station	1-16 KW Portable	Adjacent to light	Loc. 8A T-13	On hand
6	3	Elberon, N.J.	P	10' Plat- form	*20'	F.C. Station	1-16 KW Portable	Adjacent to light	Loc. 8A T-13	On hand
7	4	N. Long Branch, N.J.	P	10' Plat- form	*15'	F.C. Station	1-16 KW Portable	Adjacent to light	Loc. 8A T-14	On hand
8	4	N. Long Branch, N.J.	P	10' Plat- form	60'	F.C. Station	1-16 KW Portable	Adjacent to light	Loc. 8A T-14	On hand
9	6	Seabright, N.J.	P	50' Tower	60'	Light Position	1-16 KW Portable	Base of Tower	Loc. 8A T-14	On hand
10	6	Seabright, N.J.	P	50' Tower	60'	Light Position	1-16 KW Portable	Base of Tower	Loc. 8A T-14	On hand

SECRET

SECRET

- 2 -

Tactical No.	Location No.	Location	Type Light	Type Mounting	Ht. in Oper. Pos.	Location of Control	Type Power Plant	Location Power Plant	Place of Shelter of Light	Status
11	8	Hancock	F	Ry. Bascule	40'	Top of Adjacent car	2-25 KW Fixed	Adjacent car	On tower	On hand
12	8A	Hancock	F	Bascule	70'	S/L Control Room Atlantic Drive	2-25 KW Fixed	Brick Shelter Adjacent to Light	Bldg. Adjacent to Light	On hand
13	8	Hancock	F	Bascule	70'	S/L Control Room Atlantic Drive	2-25 KW Fixed	Brick Shelter Adjacent to Light	Bldg. Adjacent to Light	On hand
14	8	Hancock	F	Wood Bldg. on Mound	35'	S/L Control Room Atlantic Drive	2-25 KW Fixed	Brick Shelter Adjacent to Light	In Position	On hand
15	8	Hancock	P	10' Platform	25'	F.C. Station	1-16 KW Port.	Adjacent to Platform	Loc. 8A In T-14 Position	On hand
16	8	Hancock	P	On Ground	35'	BC Btry #8	1-16 KW Port.	Adjacent to Light	In Loc. 8A T-16 Position	On hand
17	8	Hancock	F	Wooden Bldg.	45'	M ² Station	2-25 KW Fixed	In Bldg	Shelter in Position	On hand

EXHIBIT 2-C

SECRET

Tactical Location		Location	Type	Type	Ht. in	Location of	Type	Location	Place of	Status
No.	No.		Light	Mounting	Oper. Pos.	Control	Power Plant	Power Plant	Shelter	
18	9	Miller Field	P	10' Plat-form	20'	F.C. Station	1-16 KW Port.	Adjacent to Light	Bldg 76-3 In Loc. 10 Position	On hand
19	9	Miller Field	P	10' Plat-form	20'	BC Btry #11	1-16 KW Port.	Adjacent to Light	Bldg 76-3 Loc. 10	On hand
20	9A	Swinburne Island	P	10' Plat-form	*20'	BC Btry #12	1-16 KW Port.	Adjacent to Light	In Position	On hand
21	9B	Hoffman Island	P	20' Plat-form	*30'	Adjacent to Light	1-16 KW Port.	Adjacent to Light	In Position	On hand
22	10	Wadsworth	F	32' Tower	130'	Bldg 11-89	2-25 KW Fixed	Btry Ayres	Wood Bldg. In Position	On hand
23	10	Wadsworth	F	Elevator in Pit	140'	BC Btry #15	2-25 KW Fixed	Btry Duane	Wood Bldg. In Position	On hand
24	11	Hamilton	F	50' Tower	75'	BC Btry #17	2-25 KW Fixed	Battery Fendershall	Wood Bldg. In Position	On hand
25	12	Norton Point	P	10' Plat-form	25'	BC Btry #18	1-16 KW Port.	Base of Platform	Bldg. C-38 Ft. Hamilton	On hand
26	12	Norton Point	P	10' Plat-form	25'	F.C. Station	1-16 KW Port.	Base of Platform	Bldg. C-38 Ft. Hamilton	On hand
27	13	Rockaway Point	F	35' Tower	45'	BC Btry #20	2-25 KW Fixed	Base of Tower	Balloon Hanger, Ft. Tilden	On hand

SECRET

SECRET

UNCLASSIFIED
 Authority: NND 760162
 By: WDL/ARA Date: 7/15/00

Tactical Location		Type	Type	Ht. in	Location of	Type	Location	Place of	Status	
No.	No.	Location	Light	Mounting	Oper. Pos.	Control	Power Plant	Power Plant	Of Light	
28	13	Rockaway Point	P	10' Plat-form	20'	3C Btry #21	1-16 KW Port.	Wood Shelter N of Light	Balloon Hanger, Ft. Tilden	On hand
29	14	Tilden	F	40' Tower	45'	Bn 2	2-25 KW Fixed	Concrete Shelter NE of Light	Base of Tower	On hand
30	14	Tilden	F	40' Tower	45'	300' E of Light	1-25 KW Fixed	Concrete Shelter W of Light	Base of Tower	On hand
31	17	Atlantic Beach, N.Y.	P	50' Tower	65'	F.C. Tower	1-16 KW Port.	Base of Tower	Balloon Hanger, Ft. Tilden	On hand
32	17	Atlantic Beach, N.Y.	P	50' Tower	65'	F.C. Tower	1-16 KW Port.	Base of Tower	Balloon Hanger, Ft. Tilden	On hand
33	18	Long Beach, P N.Y.	P		*20'	F.C. Tower	1-16 KW Port.	In rear of Boardwalk	Balloon Hanger, Ft. Tilden	On hand
34	18	Long Beach, P N.Y.	P		*20'	F.C. Tower	1-16 KW Port.	In rear of Boardwalk	Balloon Hanger, Ft. Tilden	On hand

Authority NND 760162
 By WPP NSARA Date 7/15/00

SECRET

SECRET

Authority: AND 760162
By WDR WARA Date 7/15/60

SECRET

- 5 -

Tactical Location		Location	Type	Type	Ht. in	Location of	Type	Location	Place of	Status
No.	No.		Light	Mounting	Oper. Pos.	Control	Power Plant	Power Plant	Shelter	
35	19	Short Beach	P	10' Platform	*20'	F.C. Tower	1-16 KW Port.	Adjacent to Light	Balloon Hanger, Ft. Tilden	On hand
36	19	Short Beach	P	10' Platform	*20'	F.C. Tower	1-16 KW Port.	Adjacent to Light	Balloon Hanger, Ft. Tilden	On hand
37	21	Totten	F	RR Carriage	60'	Bn 8 CP	1-25 KW Fixed	150 yds SE of Light	Brick Shelter Adjacent to Light	On hand
38	21	Totten	F	RR Carriage	60'	Bn 8 CP	1-25 KW Fixed	150 yds SE of Light	Brick Shelter Adjacent to Light	On hand
39	21	Totten	F	RR Carriage	20'	Bn 8 CP	2-25 KW Fixed	Battery Graham	Brick Shelter Adjacent to Light	On hand

Two (2) spare type P Lights on Maintenance Reserve

* Estimated Height

NOTE:

Authorized replacement of fourteen (14) fixed seacoast lights by portable searchlights is contained in letter, Subject: "Replacement of Fixed Type Searchlights Installed in Harbor Defenses", War Department, AGO, AG 470.3 (OB-S-3, 14 April 1944).

EXHIBIT 2-C

SECRET

SECRET

ANNEX D

UNDERWATER DEFENSE

SECRET

DECLASSIFIED
Authority: NND 760162
By WDR/NARA Date: 7/5/00

SECRET

ANNEX D

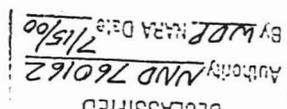
INDEX

- Paragraph 1 - Authorities.
2 - General Description of Project.
3 - Shore Facilities.
4 - Mine Field Protection.
5 - Explosives.
6 - Land Acquisition.

EXHIBITS

- 1-D - Underwater Defenses New York Harbor and Vicinity
2-D-1A - Mine Shore Installations, Fort Hancock, New Jersey.
2-D-1B - TNT Magazines at Fort Hancock, New Jersey.
2-D-2 - Submarine Mine Shore Installations, Fort Wadsworth.
2-D-2A - Submarine Mine Shore Installations, Hoffman Island.
2-D-2B - Mine Observation Station, Norton Point.
2-D-3 - Mine Shore Installations, Fort Tilden, New York.

SECRET



SECRET

ANNEX D

UNDERWATER DEFENSE

1. authorities.

a. Letter AG 660.3 (9-29-42) OB-S-E, Office of the Adjutant General, subject "Revision of Underwater Defense Projects", dated 20 October 1942.

b. Letter 660.3/10 x 334-HD, Headquarters Harbor Defenses of New York, subject "Revision of Underwater Defense Projects", dated 13 November 1942, AGO file AG 660.3 (11-13-42) OB-S-E.

c. Proceedings, Local Joint New York Subsector-Third Naval District Planning Committee, dated 9 November 1942.

d. Proceedings, Local Joint New York Subsector-Third Naval District Planning Committee, dated 13 February 1943.

2. a. (1) As approved by the Secretary of War in the 3rd Indorsement of reference 1 b, above, the project generally consists of 29 groups of M-4 type submarine ground mines located as shown on Exhibit 1-D
- (2) For routings of shore cables from distribution boxes to cable huts. See Exhibit 1-D.
- (3) Location of cable huts are as shown on Exhibit 1-D
- (4) adjacent naval underwater defense elements are as shown on Exhibit 1-D

b. The following tabulation shows details of the submarine mine flotilla:

<u>NAME</u>	<u>LENGTH</u>	<u>BEAM</u>	<u>DRAFT</u>	<u>SUITABILITY</u>
USAMP E.O.C. Ord	165'	32'	13'	Satisfactory
L-92	64'	18'	6 1/2'	Equipment Excellent
L-93	64'	18'	6 1/2'	Equipment Excellent
L-94	64'	18'	6 1/2'	Equipment Excellent
L-96	64'	18'	6 1/2'	Equipment Excellent
L-99	64'	18'	6 1/2'	Equipment Excellent
L-76	64'	18'	6 1/2'	Equipment Excellent
MT-55	26'	7'6"	2'6"	Excellent
MT-56	26'	7'6"	2'6"	Excellent
MT-61	26'	7'6"	2'6"	Excellent
MT-62	26'	7'6"	2'6"	Excellent
M-368	26'	7'6"	2'6"	Excellent
M-397	26'	7'6"	2'6"	Excellent
M-398	26'	7'6"	2'6"	Excellent
M-399	26'	7'6"	2'6"	Excellent
M-400	26'	7'6"	2'6"	Excellent
M-401	26'	7'6"	2'6"	Excellent
M-402	26'	7'6"	2'6"	Excellent
M-403	26'	7'6"	2'6"	Excellent

c. In accordance with authority granted in 1st indorsement by Headquarters, Army Service Forces, dated 22 May 1945, to secret letter, Headquarters, Harbor Defenses of New York, file Doc/81, subject: "Revised Copy of Supplement to Harbor Defense Project of New York (Short Title: HDNY-AN-44)", dated 10 May 1945, the following requirements are set forth for vessels of the mine flotilla necessary to plant and maintain the groups of mines comprising the approved project.

SECRET

UNCLASSIFIED
 Authority: NND 76012
 BY WDR/NASA Date: 7/15/00

SECRET

<u>Vessel</u>	<u>Number Required</u>
Mine Planter	2
D.B. Boat	4
Mine Yawl	12

3. Shore facilities existing and authorized for submarine mine purposes are as follows:

a. Wharfing facilities, channels and turning basins at Fort Hancock are adequate and suitable to the requirements for servicing of the Hancock and Tilden groups of mines. For location see Exhibit 2-D-1A attached. There is a wharf at Fort Wadsworth servicing the Wadsworth Mine Group. See Exhibit 2-D-2 for location.

b. Boathouse No. 1 and No. 2 at Fort Hancock are suitable and adequate for mine yawls required for the Hancock and Tilden fields. Boathouse No. 1 has a capacity for 5 yawlboats. Boathouse No. 2 has a capacity of 4 yawlboats. The small boat basin at Fort Hancock has a capacity of 6 L-boats and 6 yawlboats and no additional facilities are required. The boathouse at Fort Wadsworth is located on the wharf referred to in paragraph 3 a, above, and is in need of the same repairs or rebuilding as the wharf. At present there is storage space for 4 yawlboats.

c. Loading rooms.

Loading rooms No. 1 and No. 2 at Fort Hancock located as shown on Exhibit 2-D-1A attached are adequate and suitable for service of the Fort Hancock and Fort Tilden groups. The loading room at Fort Wadsworth located as shown on Exhibit 2-D-2 attached is suitable and adequate for the Wadsworth controlled field.

d. The mine storehouse as shown on Exhibit 2-D-1A for Fort Hancock and Fort Tilden groups and on Exhibit 2-D-2 for Fort Wadsworth are suitable and of sufficient capacity. Ample storage facilities are afforded for mines, land cable raising and mooring ropes, and all miscellaneous submarine mine property.

e. Four igloo type magazines located at Fort Hancock afford storage facilities for all TNT for the 29 groups of mines in the project. The capacity of these magazines total 400 tons. No additional storage facilities are required at this time. However, it is pointed out that the peacetime storage requirements may be some 335 tons more than the present available capacity inasmuch as the 29 groups of mines carry a total of 565 tons of TNT which with the 30% authorized reserve would require storage should it become necessary to raise the entire field. The provisions of TM 9-1900 with regard to safety requirements are being complied with. For location of these magazines see Exhibit 2-D-1B attached.

f. The mine casemates at Fort Hancock, Fort Tilden, and Fort Wadsworth are adequate and suitable. The group control facilities are as follows:

Fort Hancock	15 groups
Fort Tilden	12 groups
Fort Wadsworth	7 groups

g. For location of cable huts and land cable connections see Exhibit 1-D attached. As shown on Exhibit 1-D a mine cable hut is required at Rockaway Point, New York and also one on Hoffman Island as shown on Exhibit 2-D-2A.

h. The plotting rooms of Fort Hancock, Fort Tilden, and Fort Wadsworth are suitable and there are no requirements. For location see Exhibits 2-D-1A, 2-D-2, 2-D-3.

- 2 -

SECRET

BY WDR:KRA Date: 7/15/00
 Authority: NND 760162
 RECORDED

SECRET

i. The mine group commander's station is located in fire control structure 8-R, Fort Hancock. Tactical control of the three mine batteries, i.e., Fort Hancock, Fort Tilden, and Fort Wadsworth is centralized at this station. Locations of group and battery commander's stations are indicated on Exhibits 2-D-1A and 2-D-2.

j. The location of mine observing stations are as shown on Exhibit 1-D attached. Additional stations of concrete splinterproof construction have been approved for Morton Point, New York, and Hoffman Island as shown on Exhibit 1-D.

4. The mine group commander through the tactical organization of the Harbor Defenses of New York is afforded the required seacoast gun and searchlight defenses for the mine fields. See Exhibit 5-B.

5. a. The location of the cable hut and observation station on Hoffman Island is approved as shown on Exhibit 2-D-2A.

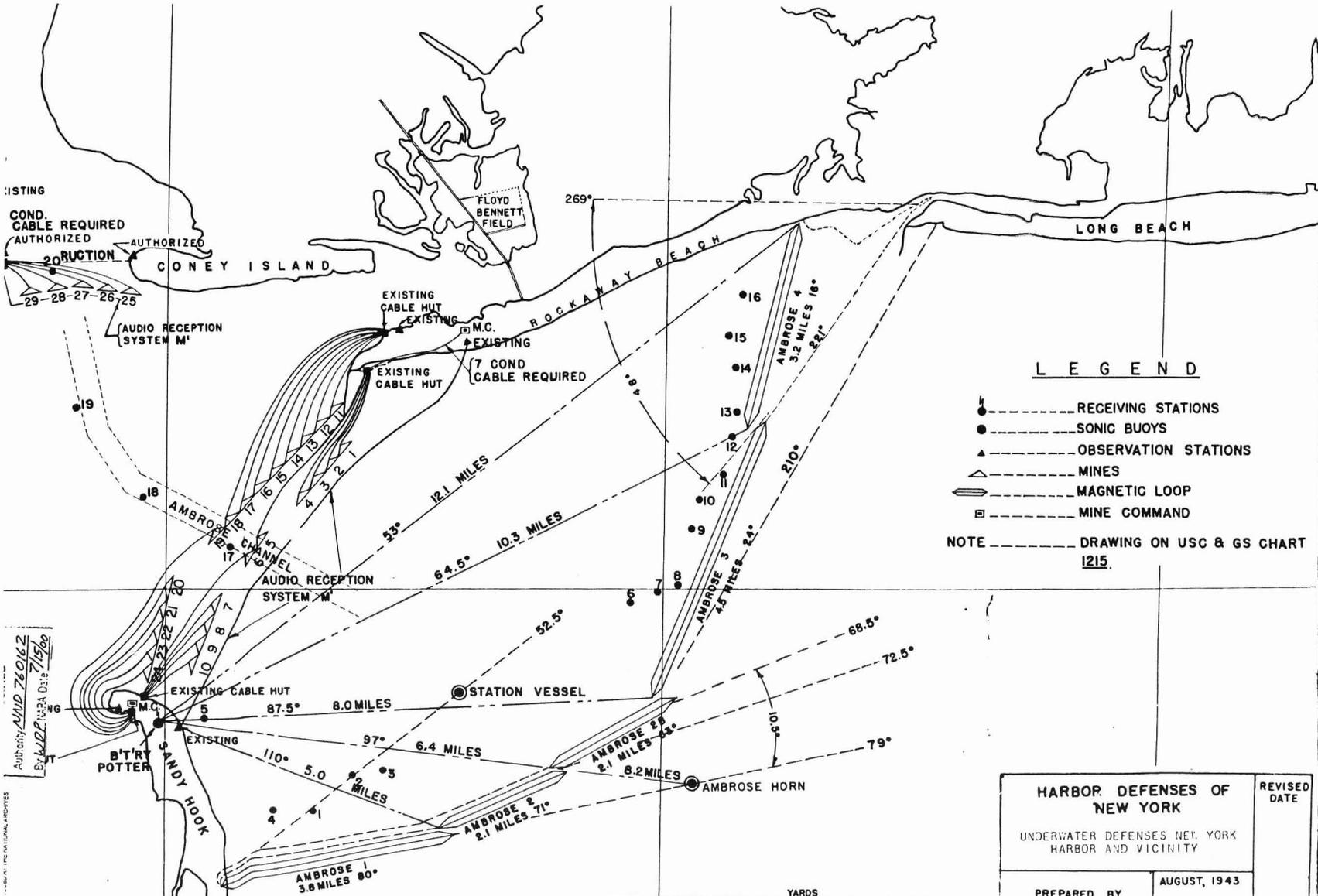
b. The location of the cable hut on Rockaway Point is as shown on Exhibit 1-D.

c. There are no other real estate requirements.

SECRET

Authority: NND 760162
2/15/60
BY WDP/MSA Date

DECLASSIFIED



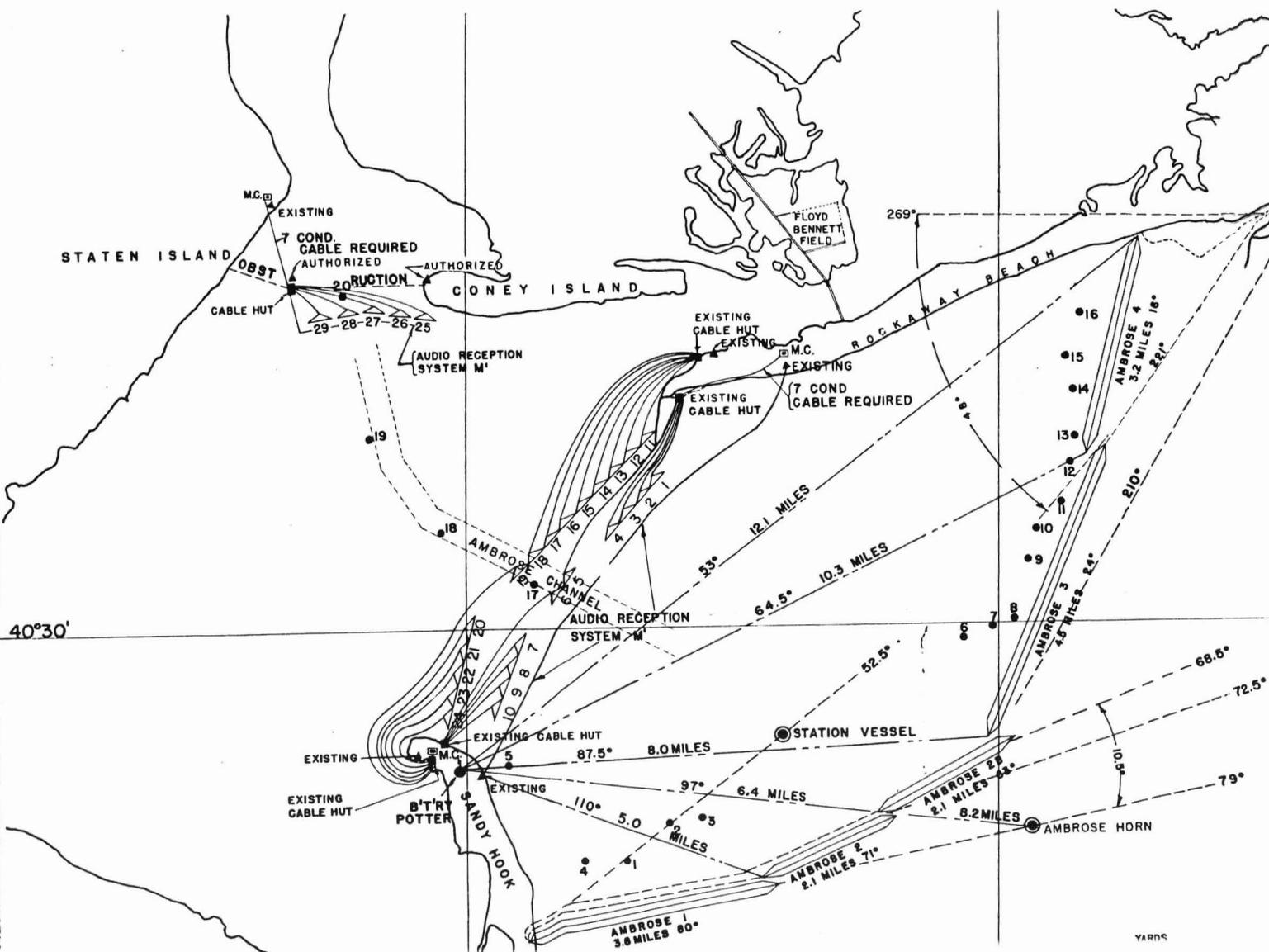
LEGEND

- RECEIVING STATIONS
- SONIC BUOYS
- ▲ OBSERVATION STATIONS
- ▲ MINES
- ▭ MAGNETIC LOOP
- ▭ MINE COMMAND

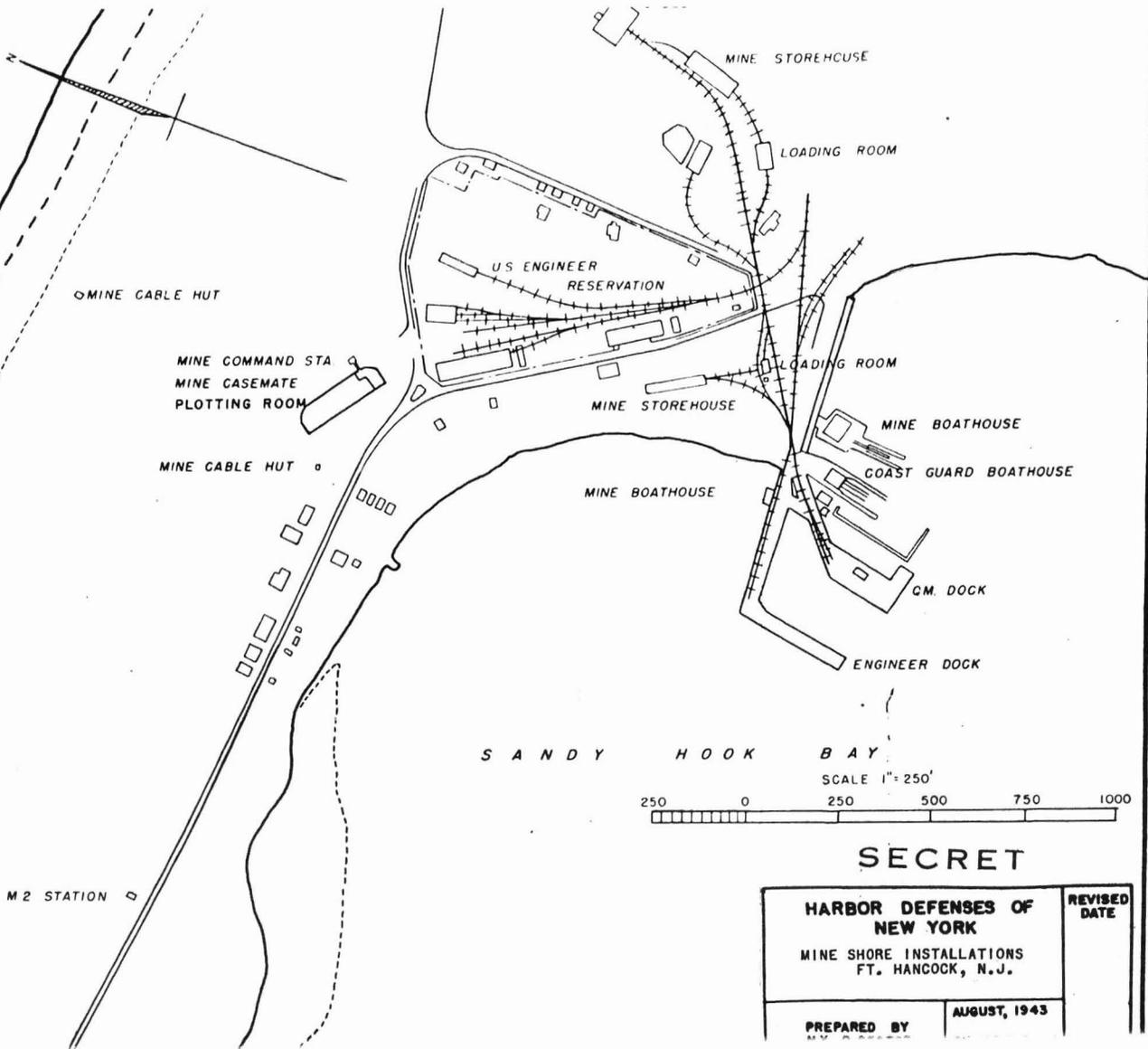
NOTE DRAWING ON USC & GS CHART 1215.

Authority: **UND 760162**
 By: **UND 71500**
 Date: **7/15/60**

HARBOR DEFENSES OF NEW YORK		REVISED DATE
UNDERWATER DEFENSES NEW YORK HARBOR AND VICINITY		
PREPARED BY	AUGUST, 1943	



YARDS



OMINE CABLE HUT

MINE COMMAND STA
 MINE CASEMATE
 PLOTTING ROOM

MINE CABLE HUT

M 2 STATION

MINE STOREHOUSE

LOADING ROOM

U.S. ENGINEER
 RESERVATION

LOADING ROOM

MINE STOREHOUSE

MINE BOATHOUSE

COAST GUARD BOATHOUSE

MINE BOATHOUSE

CM. DOCK

ENGINEER DOCK

SANDY HOOK BAY

SCALE 1" = 250'

250 0 250 500 750 1000

SECRET

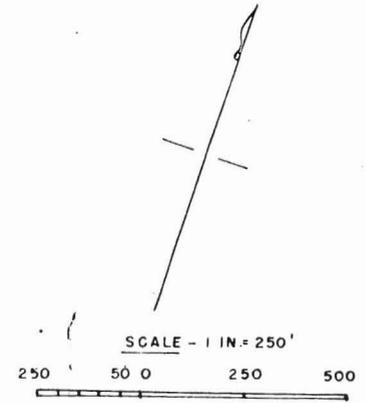
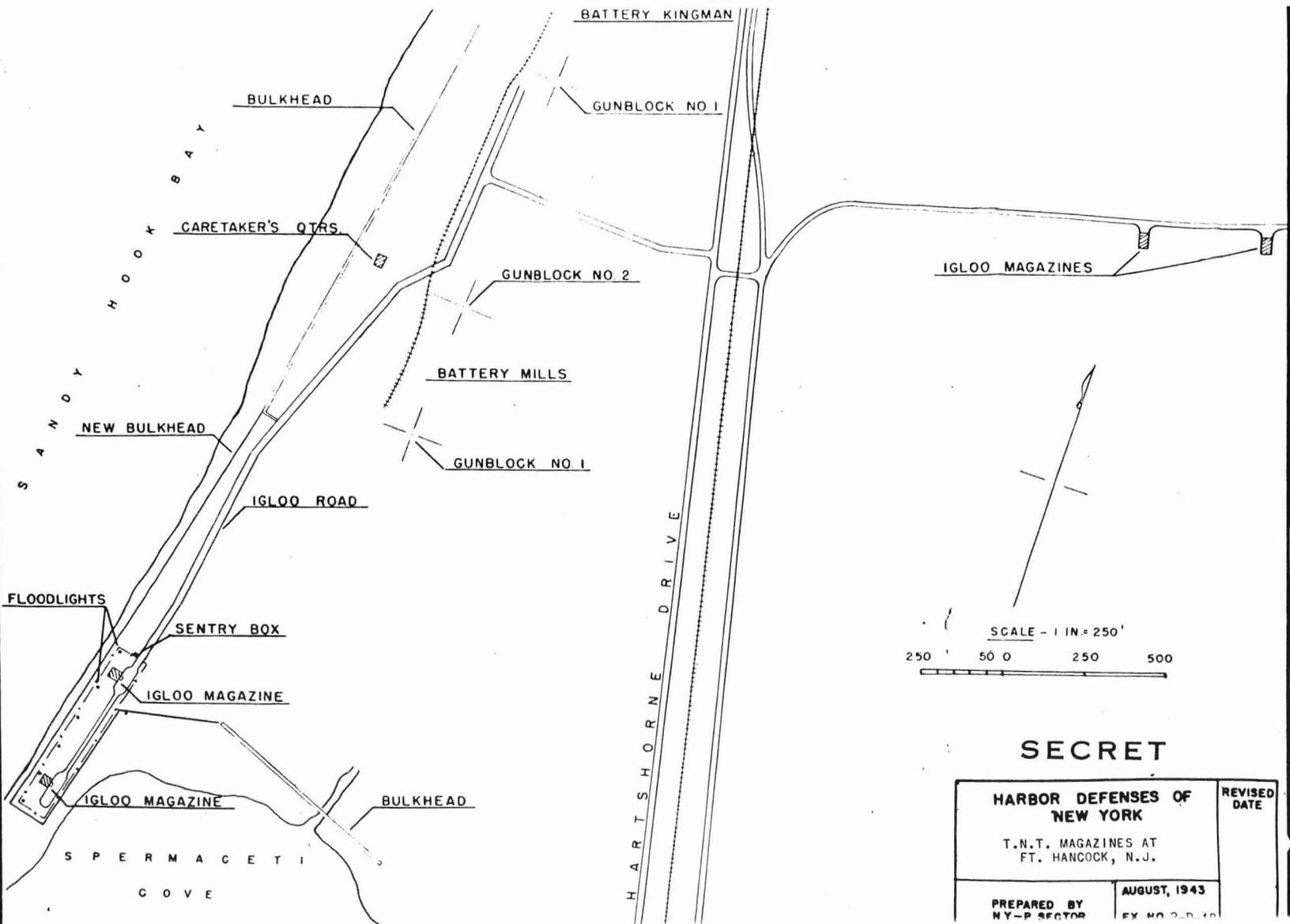
**HARBOR DEFENSES OF
 NEW YORK**

MINE SHORE INSTALLATIONS
 FT. HANCOCK, N.J.

REVISED
 DATE

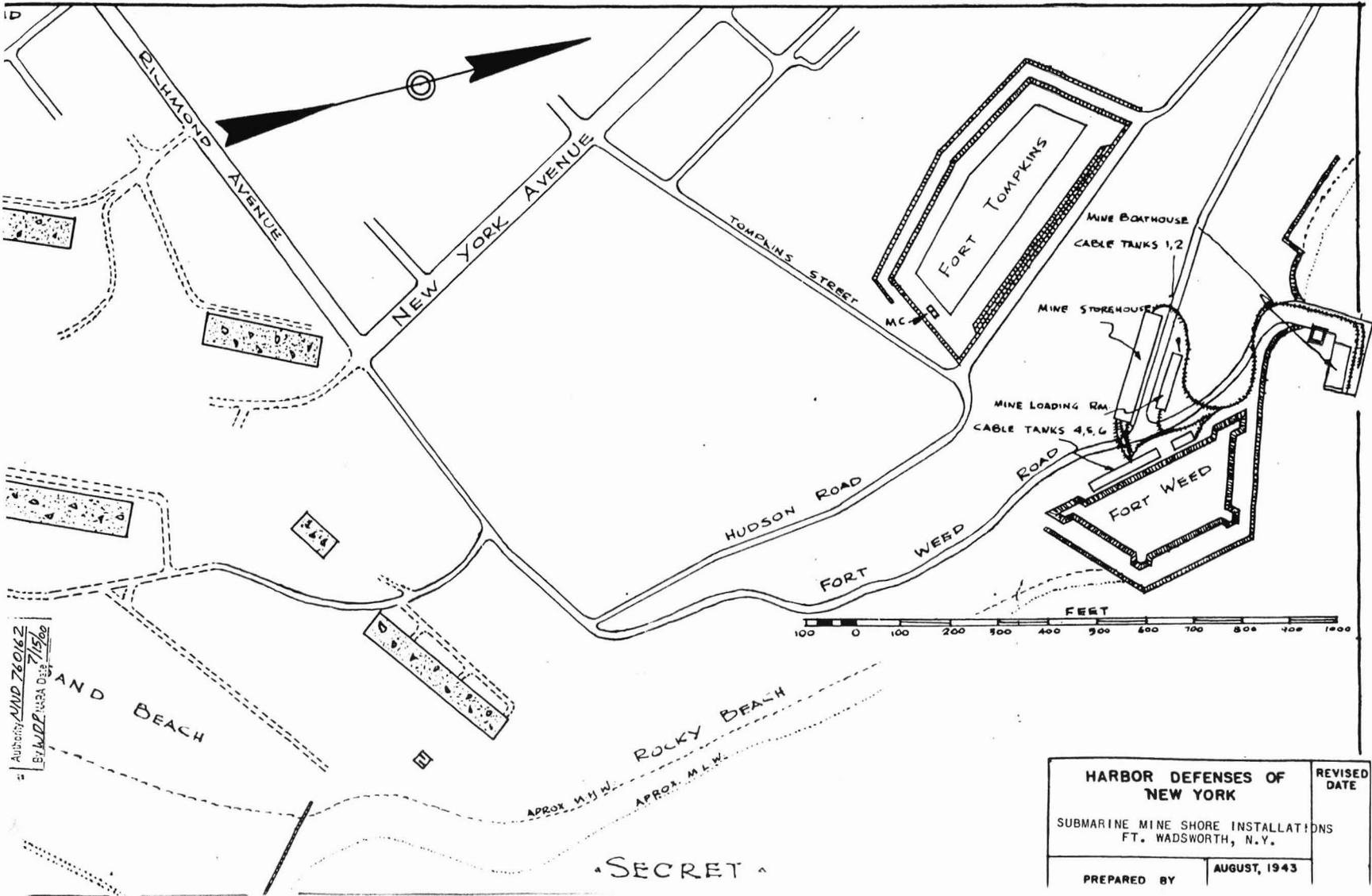
AUGUST, 1943

PREPARED BY



SECRET

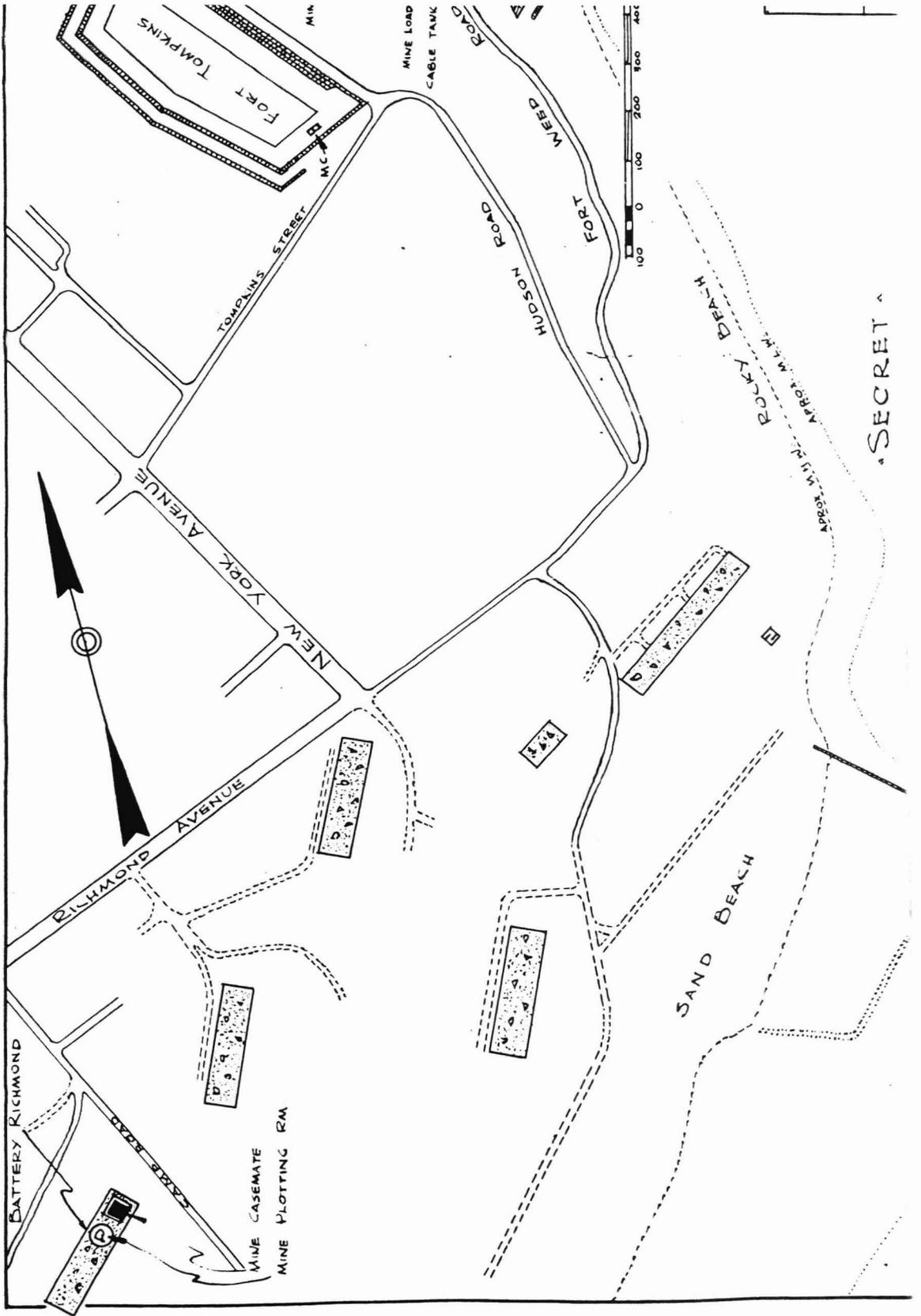
HARBOR DEFENSES OF NEW YORK		REVISED DATE
T.N.T. MAGAZINES AT FT. HANCOCK, N.J.		
PREPARED BY NY-P SECTOR	AUGUST, 1943 EX NO 2-D-10	



Authority: **AND 76016 Z**
 By: **ANDP** USA Date: **7/15/43**

SECRET

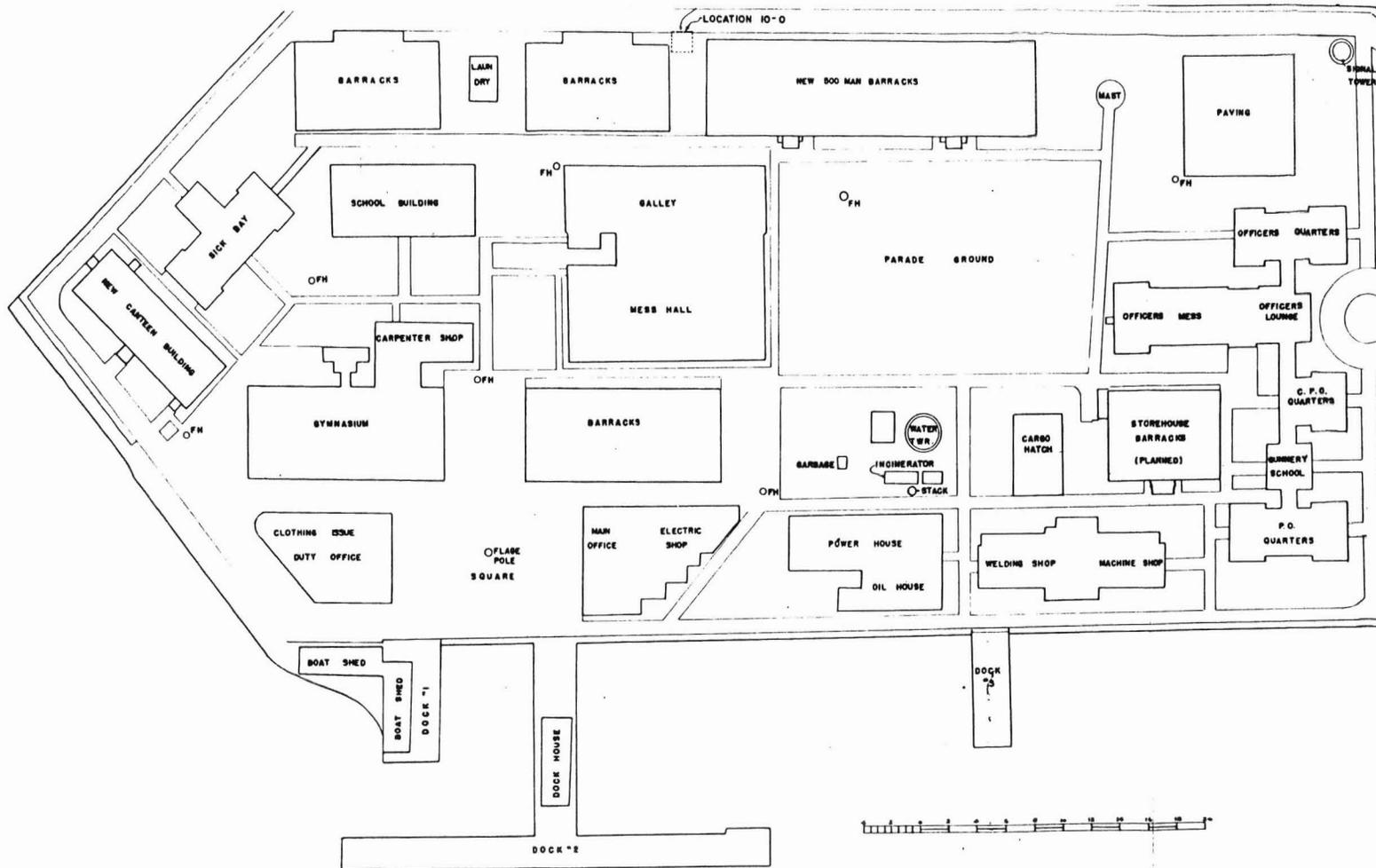
HARBOR DEFENSES OF NEW YORK		REVISED DATE
SUBMARINE MINE SHORE INSTALLATIONS FT. WADSWORTH, N.Y.		
PREPARED BY	AUGUST, 1943	



Authenticity MND 76012
 By WDR/MSA Date 7/15/00

SECRET

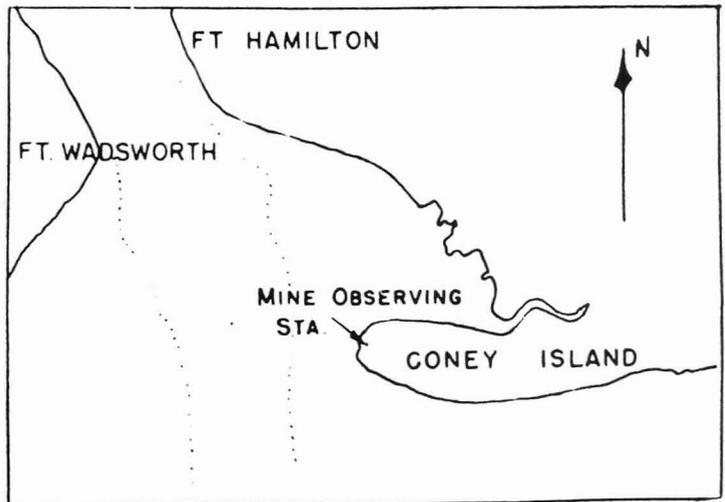
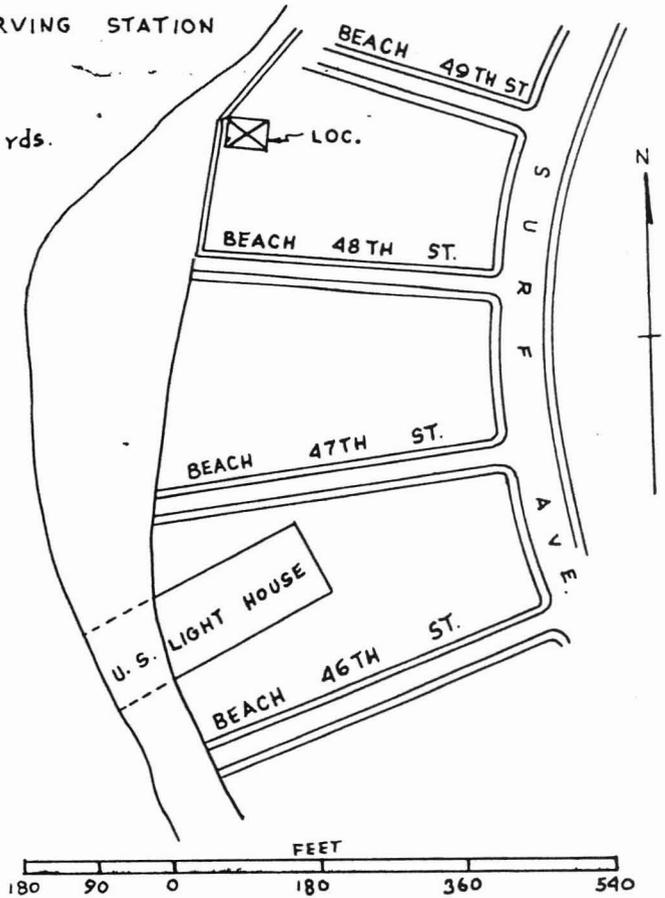
Authority **NAV 760162**
STANDARD DATA DATE **7/15/60**



MINE OBSERVING STATION

M₁₅⁵

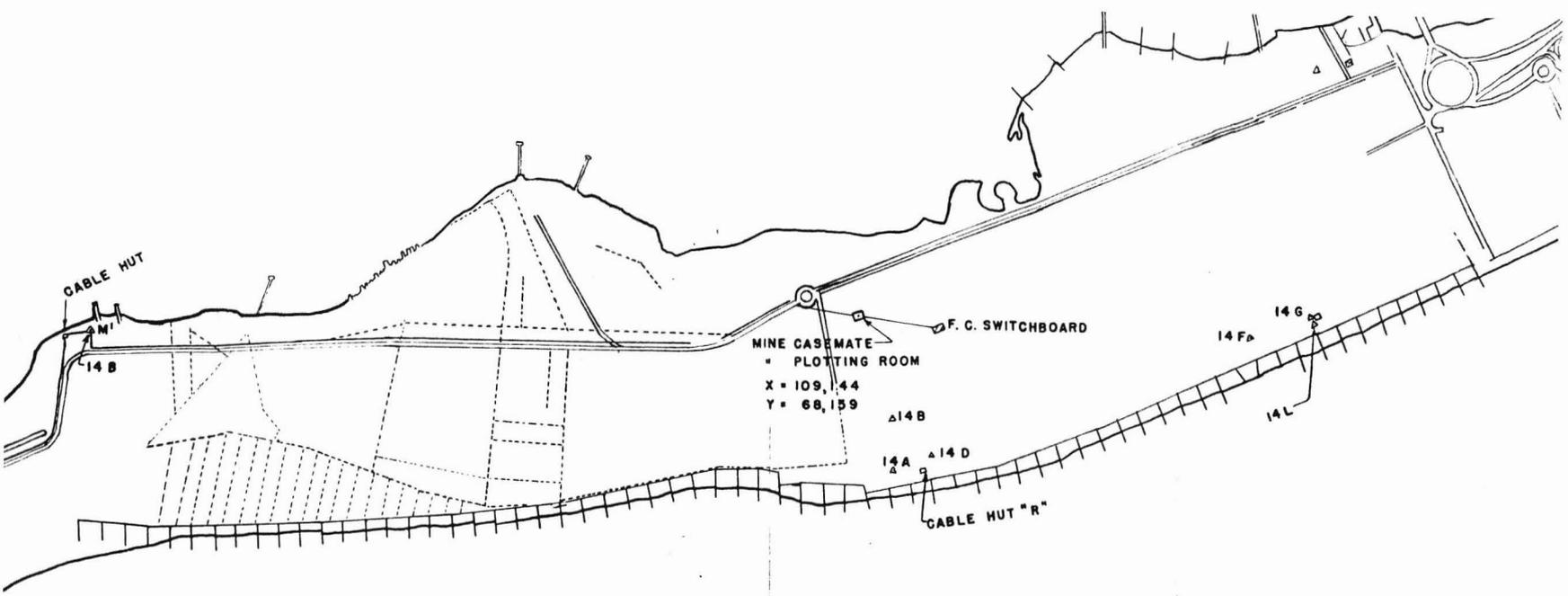
X 98800.06 yds.
Y 70177.47



SECRET

HARBOR DEFENSES OF NEW YORK MINE OBSERVATION STATION NORTON'S POINT		REVISED DATE
PREPARED BY NY-P SECTOR	AUGUST, 1943 EX. NO.2-D-2B	

AUTHORITY: MND 760162
 BY WDR: NARA Date: 7/15/00
 REPRODUCED AT THE NATIONAL ARCHIVES



Authority: **AND 760162**
 By: **W.D.P.** Date: **7/15/50**

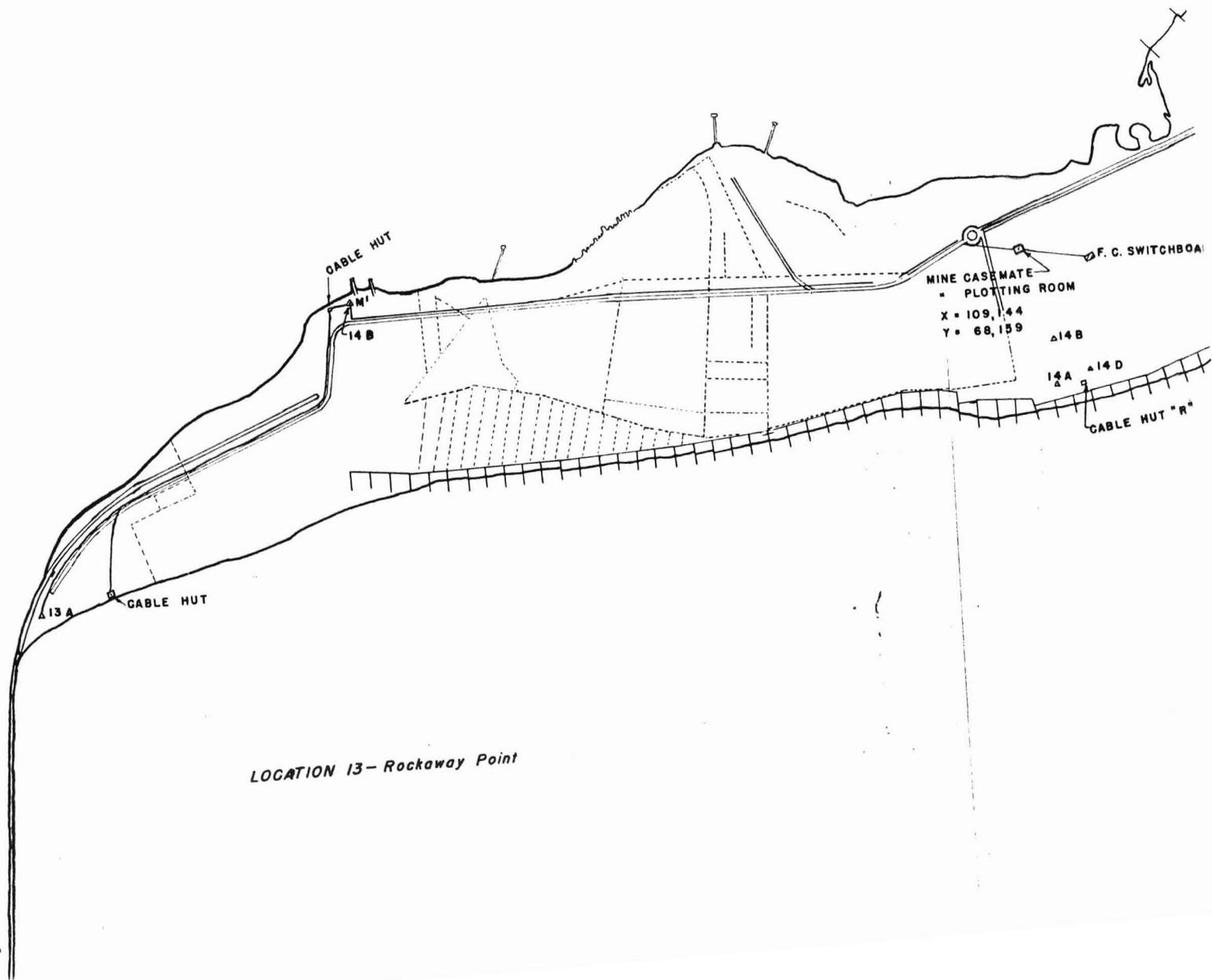
13 - Rockaway Point



SECRET

HARBOR DEFENSES OF NEW YORK		REVIS DAT
MINE SHORE INSTALLATIONS FT. TILDEN, N.Y.		
PREPARED BY NY-P SECTOR	AUGUST, 1943 EX. NO. 2-D-3	

AUGUST 1942
BY W.D. NARA D-13 7/15/60



LOCATION 13 - Rockaway Point

SECRET

ANNEX E

ANTI-AIRCRAFT ARTILLERY (H.D.)

SECRET

By WDP/HARA Date 7/15/60
Authority AND 760162

SECRET

ANNEX E

INDEX

- Paragraph 1 - Tactical Organization
2 - Relations to other echelons
3 a - Gun Defense
b - Searchlights, Radar and Sound Locators
c - Automatic weapons
d - AAAIS
e - Telephone net
f - Radio net
g - Storage facilities
4 a - Ammunition allowances and storage
b - Ammunition for automatic weapons
5 - Land acquisition

EXHIBITS

- 1-E - Location of elements and arcs of fire
2-E - Communications diagram
3-E - Radio net

SECRET

Authority: AND 760162
BY WDR/NARA Date: 7/15/00
DECLASSIFIED

SECRET

ANNEX E

ANTI-AIRCRAFT ARTILLERY (HD)

1. The anti-aircraft artillery defenses of the Harbor Defenses of New York are organized as a separate Battalion included in the tactical organization as shown on Exhibit 5-A.

2. In the event category of defense D or E is approved for the Harbor Defenses, it is considered that the following mobile reinforcing will be required:

Fort Hancock-Mavesink Area - 1 Battalion 90 mm AA
 Fort Tilden-Fort Wadsworth -
 Hamilton Area - 1 Battalion 90 mm AA

3. a. Letter AG 660.2 AA(10-23-40)M-OCOA TAGO, dated 1 November 1940, subject "Revision of Anti-aircraft Annex, Harbor Defense Project", authorizes the following AA Armament:

Harbor Defenses of Eastern New York - 1 Btry of 3-3" guns
 Harbor Defenses of Southern New York - 2 Btry of 3-3" guns
 Harbor Defenses of Sandy Hook - 3 Btry of 3-3" guns -

The three above mentioned Harbor Defenses have been consolidated and are now the Harbor Defenses of New York. Accordingly, the above authorized AA gun batteries are located as follows:

Fort Hancock 2 Batteries -
 Fort Tilden 1 Battery
 Fort Wadsworth 1 Battery
 Fort Hamilton 1 Battery
 Fort Totten 1 Battery

Locations of the above mentioned batteries are shown on Exhibit 1-E. Each battery is equipped with one radar SCR-268(B) in accordance with T/O & E 4-260-1.

b. In accordance with authority contained in letter cited in paragraph 3 a, above, the searchlight support consists of the following authorized units:

Fort Hancock, N.J. - 2 platoons of 5 lights each
 Fort Tilden, N.Y. - 1 platoon of 5 lights each
 Fort Wadsworth, N.Y. - 1 platoon of 5 lights each
 Fort Hamilton, N.Y. - 1 platoon of 5 lights each
 Fort Totten, N.Y. - 1 platoon of 5 lights each

Locations of AA searchlights are as shown on Exhibit 1-E.

Three radar units SCR-268-B or equivalent per AA Searchlight platoon are authorized in T/O & E 4-260-1.

c. Anti-aircraft Weapons for Fixed Seacoast Installations

	Gun Auto, 40MM, AA,		Gun, Machine, Cal.,	
	Auth.	On Hand	Auth.	On Hand
Battery Lewis	4	4	4	4
Battery Harris	4	4	4	4
Battery Mills	4	4	3	3
Battery Kingman	4	4	3	3
Battery Const. #218	2	2	2	2
Battery Const. #219	2	2	2	2

Authority MND 760162
 BY WDR/NSA Date 7/15/00

SECRET

	Gun Auto, 40MM, AA, M1		Gun, Machine, Cal., .50, M2 W.C.	
	Auth.	On Hand	Auth.	On Hand
Battery Const. #220	2	2	2	2
Battery Peck	2	2	2	2
Battery Kessler	2	2	2	2
Battery Livingston	2	2	2	2
Battery Morris			2	2
Battery Urmston			2	2
Battery Burns			2	2
Battery Baker			2	2
Battery Turnbull			2	2
Battery Griffin			2	2
Battery Catlin			2	2
Battery Rockaway Point			2	2
Battery #7 - Hancock			4	4
Battery #8 - Hancock			4	4
90MM Swinburne Island			4	4
90MM Miller Field			4	4
90MM Forton Point			4	4
90MM Rockaway Point			4	4

d. Antiaircraft Artillery Intelligence service is maintained by local observation posts. Other sources of AAIS:

Eastern Defense Command
Third Naval District
Local Coast Guard units
Civilian agencies

e. The permanent fire control communications system is utilized in so far as the tactical organization of the antiaircraft defense permits. Exhibit 2-3 shows local communications when under emergency control.

Where it is impractical to provide circuits either in cables or by the use of field wire, available commercial circuits can be leased.

f. Radio Net. See Exhibit 3E.

g. Adequate peacetime storage facilities are available at the posts on which the material is located.

4. Ammunition Allowance and Storage.

a. In view of the fact that ammunition allowances for anti-aircraft weapons are revised and published at frequent intervals in current War Department directives, (Letter, AGO, AG 471 (9 June 1944) OB-S-D-M, 10 June 1944, subject, "Day of Supply for Ammunition"), detailed entries of the amounts of various types of ammunition for these particular weapons.

b. The current governing authority on these allowances is letter, EDC, file ORD 471/711, subject, "Combat levels of ammunition for ground units of EDC in the continental United States", dated 10 August 1944.

c. The ammunition for each battery is suitably located and complies with provisions of TM 9-1900.

d. The following tabulation shows materiel authorized, on hand and that remaining to be procured. Also see Annex G

- 2 -

SECRET

Authority MND 760162
BY WDP NARA Date: 7/15/60

Authority NND 760162
 By WDP/KARA Date 7/15/00

SECRET

- 3 -

	<u>AA#1</u>			<u>AA#2</u>			<u>AA#3</u>			<u>AA#4</u>			<u>AA#5</u>			<u>AA#6</u>			<u>Totals</u>		
	Auth.	O.H.	T.B.P.	Auth.	O.H.	T.B.P.															
Guns, 3", AA Fixed M- 1917(AII)	3	3	0	3	3	0	3	3	0	3	3	0	3	3	0	3	3	0	18	18	0
Director's M4 or M7 ALB1	1	0	0	1	1	0	1	1	0	1	1	0	1	1	0	1	1	0	6	6	0
Height Finder M1 or Radio Set SCR- 547	1	1	0	1	1	0	1	1	0	1	1	0	1	1	0	1	1	0	6	6	0
AA BC Telescope	1	1	0	1	1	0	1	1	0	1	1	0	1	1	0	1	1	0	6	6	0
Gun, Ma- chine 50 cal.	4	4	0	4	4	0	4	4	0	4	4	0	4	4	0	4	4	0	24	24	0
Radio SCR-268	4	4	0	4	4	0	4	4	0	4	2	2	4	3	1	4	0	4	24	17	7
Search- light 60" AA	5	5	0	5	5	0	5	5	0	5	5	0	5	5	0	5	5	0	30	30	0

Adequate peacetime storage facilities are available at the posts to which the materiel is assigned.

Legend: Auth. - Authorized O.H. - On Hand T.B.P. - To be Procured

SECRET

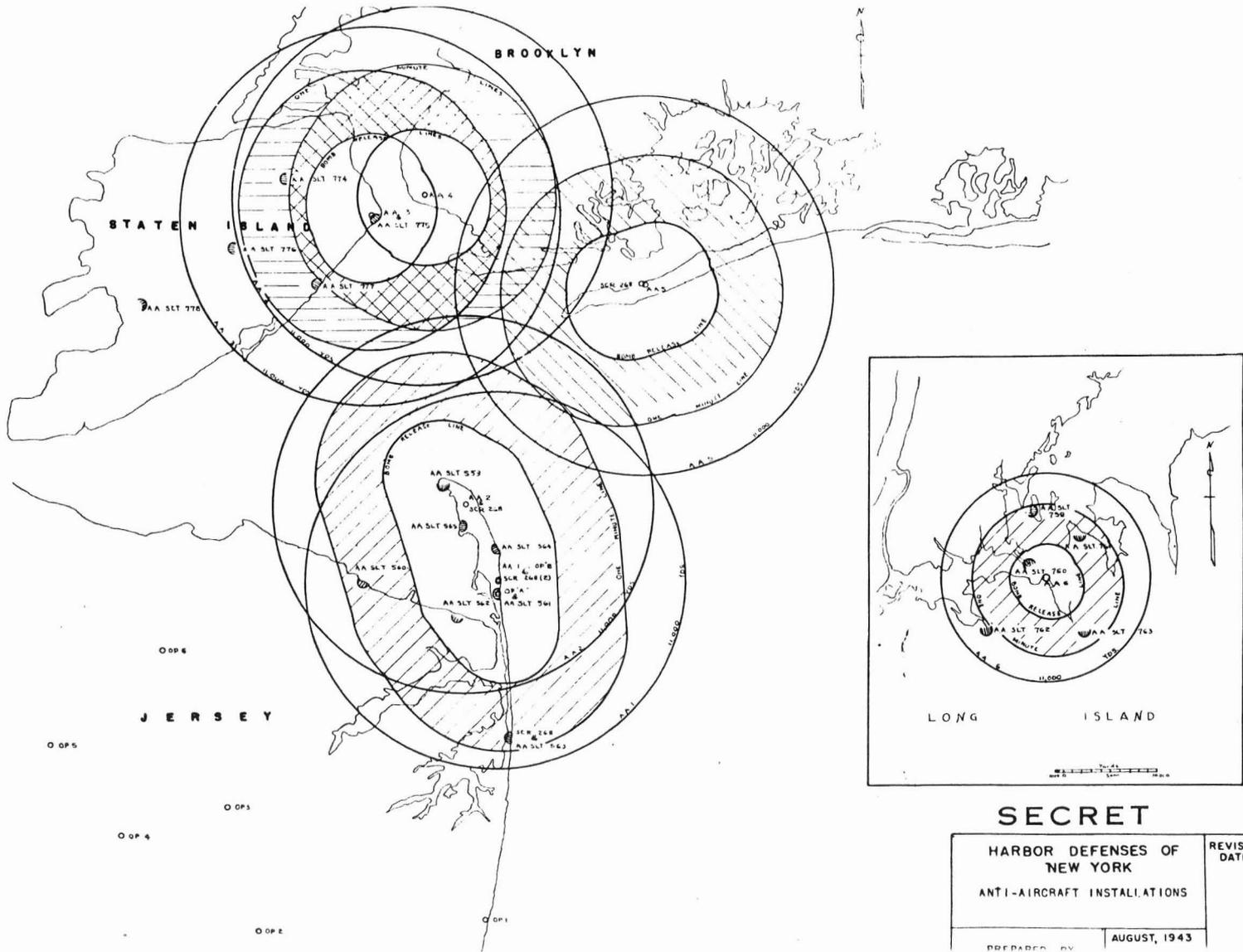
SECRET

5. There are no requirements for acquisition of Real Estate.

-4-

SECRET

DECLASSIFIED
Authority: NND 760162
By WDR/KARA Date 7/15/00



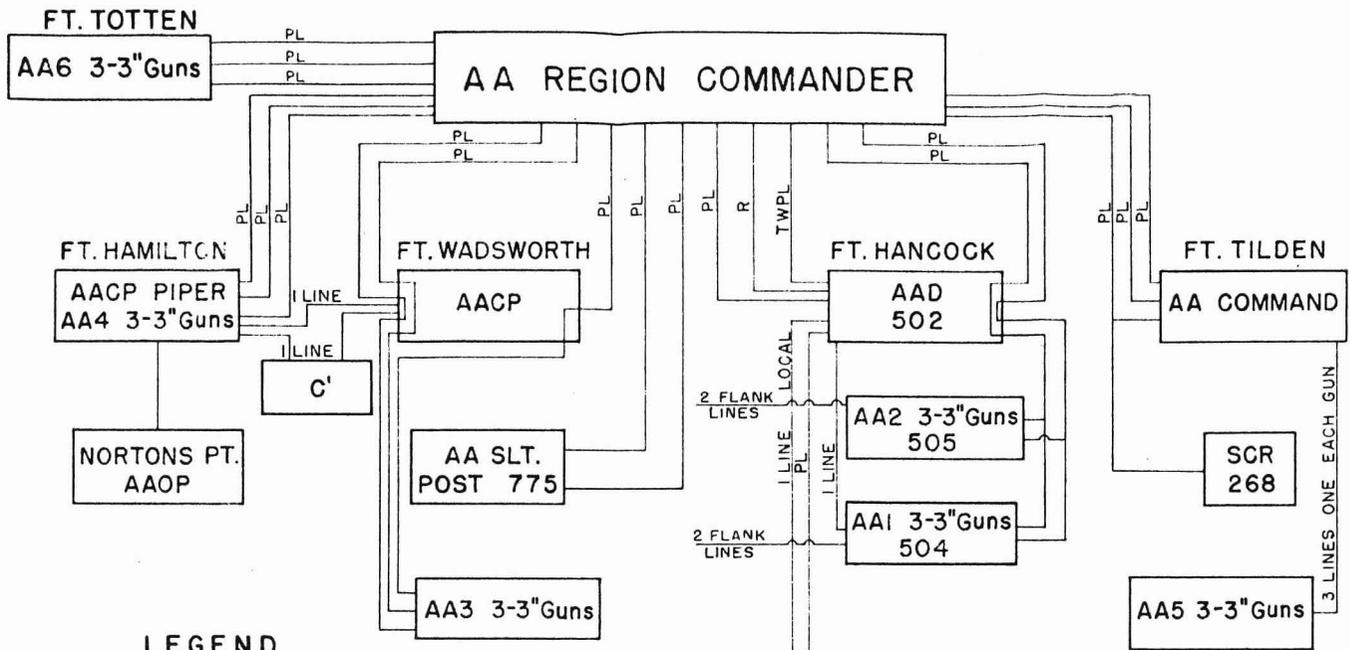
SECRET

**HARBOR DEFENSES OF
NEW YORK
ANTI-AIRCRAFT INSTALLATIONS**

REVISED
DATE

AUGUST, 1943

PREPARED BY



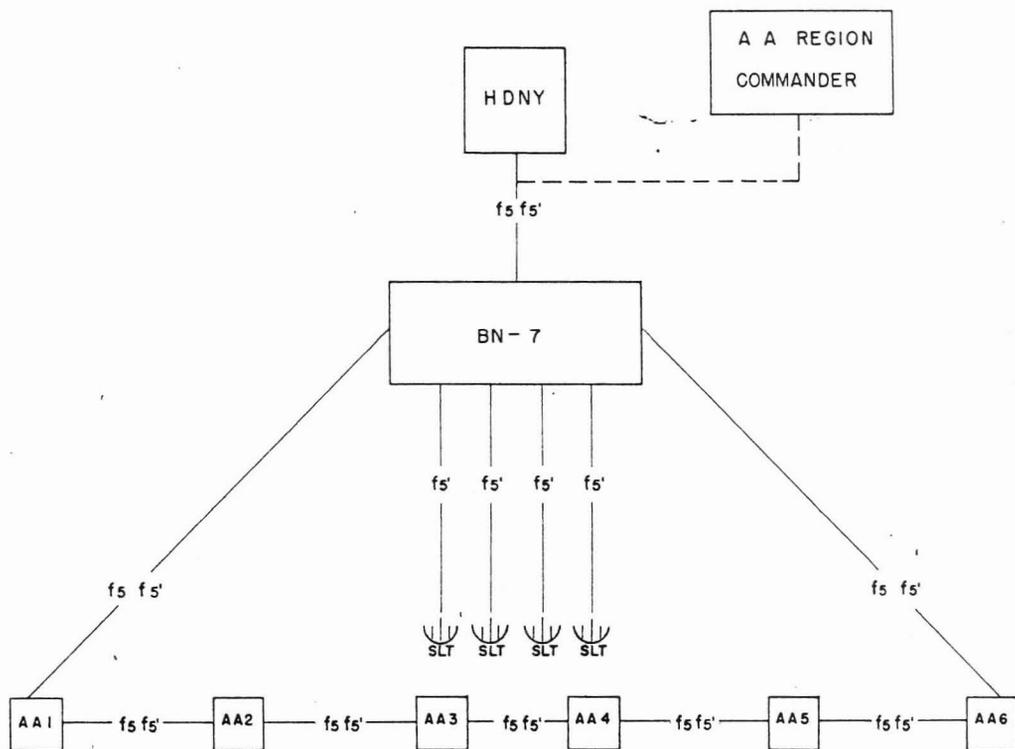
LEGEND

PL	ORD.	IN & OUT
PL	INT.	IN & OUT
PL	INT.	IN & OUT
PL	ORD.	IN & OUT
PL	LIAISON	IN & OUT
PL	4 PR. CIRCUIT	2 IN-2 OUT
PL	ORD.	IN & OUT
PL		ONE LINE
PL	ORD.	IN & OUT
PL	INT.	IN & OUT
PL	ORD.	IN & OUT
PL		IN & OUT
PL	HOT LOOP	IN & OUT
R		INTERCEPTOR
T.W.P.L.		TELETYPE

- AA SEARCHLIGHTS
1,2,3,4,5,6,7
- AAOP
1,2,3,4,5,6
- 4 SCR 268

SECRET

HARBOR DEFENSES OF NEW YORK		REVISED DATE
A. A. A. COMMUNICATIONS THROUGH FIXED FIRE CONTROL SYSTEM		
PREPARED BY NY-P SECTOR	AUGUST, 1944 EX. NO. 2-E	



LEGEND

————— NORMAL CONTROL
 - - - - - EMERGENCY CONTROL

fs ——— 2754 KC

fs' ——— 4350 KC

□ ——— SCR-593

⌋ ——— SCR-694

TOTAL SEARCHLIGHTS — 30

HARBOR DEFENSES OF NEW YORK A A RADIO NET		REVISED DATE
PREPARED BY HDNY	APRIL 1944 EX. NO. 3E	

SECRET

ANNEX F
GAS DEFENSE

SECRET

Authentic AND 260162
EXPIRES USA DATE 2/5/00

SECRET

ANNEX F

INDEX

- Paragraph 1 - Unusual Requirements
- 2 - Installations for which gas-proofing
has been authorized.

SECRET

DECLASSIFIED
Authority: NND 760162
BY WDP/NARA Date: 7/15/00

ANNEX F
GAS DEFENSE

1. There are no unusual requirements for protection against chemical attack in the Harbor Defenses of New York.
2. The following tabulation shows installations in the Harbor Defenses of New York for which gas-proofing has been authorized and completed:

<u>Installation</u>	<u>Location</u>	<u>Type Structure</u>	<u>Degree of Protection</u>	<u>Volume of Cu. Ft.</u>	<u>Collective Protectors Installed</u>	<u>Reserve Canisters Required</u>	<u>Probable No. of Men</u>	<u>Maximum Allowable No. of Men</u>
Plotting Room and Switchboard Room, Battery Harris.	Ft. Tilden	Modernized Plotting Room	Bombproof	12,225	2	4	35	40
Mine Casemate	Ft. Tilden	New Concrete	Bombproof	11,150	4	8	40	60
Fire Control Switchboard and Post Telephone Switchboard Room, Battery Neary	Ft. Hamilton	Modernized Magazine	Bombproof	8,900	1	2	15	20
Fire Control Switchboard and Post Telephone Switchboard Room, Battery Richmond	Ft. Wadsworth	Modernized Magazine	Bombproof	12,600	2	4	25	40
Plotting Room, Battery Kingman	Ft. Hancock	Casemated Battery	Bombproof	3,680	1	2	15	20
Plotting Room, Battery Mills	Ft. Hancock	Casemated Battery	Bombproof	3,680	1	2	15	20
Latrine, Battery Kingman	Ft. Hancock	Casemated Battery	Bombproof	1,725	1	2	10	20
Latrine, Battery Mills	Ft. Hancock	Casemated Battery	Bombproof	1,725	1	2	10	20

UNCLASSIFIED
 Authority: NND 760162
 BY WDL/NRA Date: 7/15/00

-1-
SECRET

SECRET

<u>Installation</u>	<u>Location</u>	<u>Type Structure</u>	<u>Degree of Protection</u>	<u>Volume of Cu. Ft.</u>	<u>Collective Protectors Installed</u>	<u>Reserve Canisters Required</u>	<u>Probable No. of Men</u>	<u>Maximum Allowable No. of Men</u>
Plotting Room, Battery Const. #219 and Latrine	Navesink	New Battery	Bombproof	4,400	1	2	15	20
Latrine, Battery Lewis (Const. #116)	Navesink	New Battery	Bombproof	2,200	1	2	15	20
Plotting Room and Latrine, Battery Const. #218	Ft. Wadsworth	New Battery	Bombproof	4,400	1	2	15	20
Plotting Room and Latrine, Battery Const. #220	Ft. Tilden	New Battery	Bombproof	4,400	1	2	15	20
Mine Casemate, Battery Richmond	Ft. Wadsworth	Modernized Magazine	Bombproof	15,200	2	3	25	40
Plotting Room and Fire Control Switchboard Room Battery Lewis Const. #116	Navesink	New Battery	Bombproof	12,400	2	3	35	40
Plotting Room, CRF Station, Battery Kessler	Ft. Tilden	CRF Station	Splinter-Proof	3,300	1	1	10	20
Harbor Defense Command Post, Battery McCook-Reynolds	Ft. Hancock	Modernized Magazine	Splinter-Proof	42,000	8	16	160	160
Mine Casemate - Telephone Room and Message Center	Ft. Hancock	Modernized Magazine	Splinter-Proof	2,800	1	1	20	20

SECRET

SECRET

UNCLASSIFIED
 Authority MND 760162
 By WDP/MRA Date 7/15/00

<u>Installation</u>	<u>Location</u>	<u>Type Structure</u>	<u>Degree of Protection</u>	<u>Volume of Cu. Ft.</u>	<u>Collective Protectors Installed</u>	<u>Reserve Canisters Required</u>	<u>Probable No. of Men</u>	<u>Maximum Allowable No. of Men</u>
Office and Operations Room Mine Casemate	Ft. Hancock	Modernized Magazine	Splinter- Proof	5,100	1	2	10	20
Plotting Room Mine Casemate	Ft. Hancock	Modernized Magazine	Splinter- Proof	2,300	1	2	12	20
Harbor Entrance Control Post	Ft. Tilden	New Battery	Splinter- Proof	10,230	1	1	20	20
Plotting Room, Battery Gunnison	Ft. Hancock	Battery	Bombproof	3,125	1	2	15	20

Note: The number of Collective Protector Units was based on a Unit's capacity of 20 men or 10,000 Cu. Ft. of space.

Authority MND 760162
By WDR NARA Date 7/15/60

SECRET

SECRET

SECRET

ANNEX G
EQUIPMENT

SECRET

DECLASSIFIED
Authority: NND 760162
By: WDR/MSA Date: 2/15/00

SECRET

ANNEX G

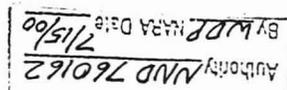
INDEX

Paragraph 1 - References to Authority.

EXHIBITS

- Exhibit 1-G - Consolidated Summary of H.D. Elements
- Exhibit 2-G - Consolidated Summary of Battery Elements
- Exhibit 3-G-1 - Consolidated Summary of Major Items of Equipment
(Signal)
- Exhibit 3-G-2 - Consolidated Summary of Major Items of Equipment
(Chemical Warfare)
- Exhibit 3-G-3 - Consolidated Summary of Major Items of Equipment
(Engineer)
- Exhibit 3-G-4 - Consolidated Summary of Major Items of Equipment
(Ordnance)

SECRET



SECRET

ANNEX G

EQUIPMENT

1. References to authority:

- a. Local Board Proceedings Harbor Defenses of Sandy Hook 1941, approved by War Department in 6th Indorsement O.C. of E, file 662 (Sandy Hook) CM 8626, dated May 1942.
- b. Local Board Proceedings, Harbor Defenses of Southern New York approved by the Secretary of War in 7th Indorsement AG 660 (10-30-41)MC-E, The Adjutant General's Office, dated 23 March 1942.
- c. Letter AG 660.2 (2-12-42) MSC-E, The Adjutant General's Office, dated 21 February 1942, subject "Defense of Harbors Against Motor Torpedo Boats".
- d. T/O & E 4-260-1.
- e. Letter AG 660.2 (4-12-43)OB-S-SPDDO-M, TAGO, dated 17 April 1943, subject "Defense of Harbors Against Motor Torpedo Boats".

- 1 -

SECRET

BY WDP/NARA Date: 7/5/00
Authority: NND 760162
DECLASSIFIED

SECRET

CONSOLIDATED SUMMARY OF HARBOR DEFENSE ELEMENTS

HARBOR DEFENSES OF NEW YORK

1 AUGUST 1943

<u>INSTALLATION</u>	<u>NUMBER</u>
H. D. Command Post	1
H.D. Observation Post	1
Harbor Entrance Control Post	3
Group Command Post	1
Group Observation Post	1
Long Range Battalion Command Post	2
Other Gun Battalion Command Post	4
Antiaircraft Gun Battalion Command Post	1
H.D. & Fort Signal Station (See (HECP)	3
Forts	5
Fire Control Switchboard Installations	7
Searchlight Command Post	1
Meteorological Station	3
Mine Battalion Command Post	1
Mine Plotting Room	3
Mine Casemate	3
Mine Planters	2
D.B. Boats	4
Mine Yawls	12
Group of Mines, Buoyant	0
Group of Mines, Ground	29
Portable Antiaircraft Searchlights	30
Portable Seacoast Searchlights	27 (See Note I)
Fixed Seacoast Searchlights	14
Searchlight Oper. (Cont.) Post (F or P)	39
SCR-582	2
SCR-682	1

Note I - Two in reserve for maintenance

EXHIBIT L-G

SECRET

DECLASSIFIED
Authority: NND 76162
BY WDR/NARA DRS 7/5/00

SECRET

CONSOLIDATED SUMMARY OF BATTERY INSTALLATIONS S C

HARBOR DEFENSES OF NEW YORK

28 September 1944

Battery	Notes	Flank		Other	Obs.	Sta.	BC	BC	Spot-	Maga-	Bat-	Power	SCR-
		90	125	2 & 3	74	74	ft.	ft.					
1		2	3	4	5	6	7	8	9	10			
Const. 219	(abd)	0	1	5	1	0	5	2	1	1			
Lewis	(a)	0	1	8	1	0	8	2	1	1			
Mills	(a)	0	1	4	0	1	5	2	1	1			
Kingman	(a)	1	1	3	0	1	5	2	1	1			
Const. 218	(abd)	0	1	3	1	0	4	2	1	1			
Harris	(ac)	1	1	9	1	0	10	6	3	1			
Const. 220	(abd)	0	0	4	0	1	4	2	1	1			
Peck	(d)	1	0	2	0	1	3	1	1	1			
Mines(Hancock)		0	0	2	0	1	0	0	0	0			
Livingston	(d)	0	1	3	0	1	3	1	1	1			
Mines Wadsworth		0	0	2	0	1	0	0	0	0			
Kessler	(d)	0	0	3	0	1	3	2	1	1			
Mines Tilden		0	0	2	0	0	0	0	0	0			
Turnbull	(e)	0	0	0	0	1	0	1	0	0			
Urnston	(e)	0	0	0	0	1	0	1	0	0			
Morris	(e)	0	0	0	0	1	0	1	0	0			
Griffin	(e)	0	0	0	0	1	0	1	0	0			
Catlin	(e)	0	0	0	0	1	0	1	0	0			
Rockaway	(e)	0	0	0	0	1	0	1	0	0			
Baker	(e)	0	0	0	0	1	0	1	0	0			
Burns	(e)	0	0	0	0	1	0	1	0	0			

- Note (a) To be furnished with Data Computer.
 (b) Power Plants are Diesel Engines.
 (c) Only one power plant and two (2) magazines are considered in computing the signal equipment requirements for Battery Harris.
 (d) Only one magazine is considered in computing signal communication equipment requirements for 6-inch batteries.
 (e) The magazines of Batteries Turnbull, Urnston, Morris, Griffin, Catlin, Rockaway, Baker, and Burns are not considered in computing signal communication equipment requirements.

EXHIBIT 2-G

SECRET

AUTHORITY AND 76012
 BY WDR/NARA DATE 7/15/00
 UNCLASSIFIED

SECRET

CONSOLIDATED SUMMARY OF HARBOR DEFENSE ELEMENTS

SIGNAL REQUIREMENTS FOR COMPLETE PROJECT

28 September 1944

STOCK NUMBER	ARTICLE	REQUIREMENT
42309	Bell MC-9	10
4H113	Bell MG-153	125
4B303	Box BE-63	238
	Case CS-119 or CS-39	639
4B417-3	Chest Set EP-3	933
6E1009	Converter M-209	9
3C 114-A	Cutl C - 114 - A	25
3E 1478	Cord CD - 478	120
6A1826B	Flag kit M-26-B	6
6A1144	Flag MC-44	12
2C1411	Frequency meter set SCR-211 ()	1
6Z4809	Gloves LC-9	3
8A1350	Gloves PH-46	7
4B1112A	Handset TS-12A	190
2B830C	Headset HS-30	933
6M567	Holder M-167	36
7A1334	Hydrogen Regulator ML-193	6
2B1630	Microphone T-30	933
4E3675	Panel BD-75	12
3H4065	Panel BD-65	7
	Radio set AN/MPG-1	6
2S268	Radio set SCR-268 ()	18
2S281	Radio set SCR-281	15
2S296	Radio set SCR-296	10
2S536	Radio set SCR-536	19
2S543	Radio set SCR-543	19

- 1 -

EXHIBIT 3-G-1

SECRET

DECLASSIFIED
Authority NND 760162
BY WDR/NARA Date 7/15/00

SECRET

CONSOLIDATED SUMMARY OF HARBOR DEFENSE ELEMENTS

SIGNAL REQUIREMENTS FOR COMPLETE PROJECT

28 September 1944

STOCK NUMBER	ARTICLE	REQUIREMENT
2S582	Radio set SCR-582	2
2S584	Radio set SCR-584	6
2S593	Radio set SCR-593	13
2S682	Radio set SCR-662	1
2S694	Radio set SCR-694	37
2S808	Radio set SCR-808	1
2S828	Radio set SCR-828	4
6H6231	Reel Unit RL-31	36
3A4698-128	Rectifier Power Unit PP-128	1
2C7600	Remote Control Equipment RC-290	36
6B818	Signal Lamp Equipment EE-88	6
4C9971	Switchboard BD-71	12
4C9972	Switchboard BD-72	6
4C9974	Switchboard BD-74A	5
4C9774	Switchboard BD-74H	6
4C9774	Switchboard BD-74J	13
4C9774	Switchboard BD-74K	1
4C9995.4	Switchboard BD-95	49
4H3086	Time Interval Apparatus EE-86	7
4E5008	Telephone EE-8 (or EE-5)	639
4B8191	Telephone Box EE-91	911
	Terminal Strip TM-184	24
3F4065	Test Set EE-65 or T/S 26	7
3F4049	Test Set I-49	1
6R38056.1	Tool equipment TE-56	2
	Trailer K-38	2
6K1688	Typewriter MC-88	2
3F6050	Voltameter I-50	53
	Wind Equipment Set	3
6R51123	Wire pike MC-123	6
	Meteorological Observation Set SCM-12	3

- 2 -

EXHIBIT 3-G-1

SECRET

BY WDR:MAPA Date 7/15/60
Auth: MND 760162

SECRET

CONSOLIDATED SUMMARY OF MAJOR ITEMS OF EQUIPMENT

CHEMICAL WARFARE REQUIREMENTS

28 September 1944

<u>STOCK NUMBER</u>	<u>ARTICLE</u>	<u>TOTAL NO. REQUIRED</u>
	Protector, collective, M-1	36
	Spare canisters for above	72

EXHIBIT 3-G-2

SECRET

Authority AND 760162
By WDR NARA Date 7/15/00

SECRET

CONSOLIDATED SUMMARY OF MAJOR ITEMS OF EQUIPMENT
ENGINEER REQUIREMENTS FOR COMPLETE PROJECT

1 AUGUST 1943

STOCK NUMBER	ARTICLE	TOTAL REQUIRED
	Searchlight, fixed, SC, 60" complete with power plant and control equip- ment.	14
	Searchlight, AA 60" complete with power plant and control equipment	30
	Searchlight, SC, 60" complete with power plant and control equipment	27
	Camouflage Net Set:	
	No. 3	40
	No. 4	42
	Kit, Spread beam attachment, Searchlight, 60" Portable Type 1	47
	Searchlight, Set No. 1, 60" Portable	6
	Trailer, Tilting type, Searchlight, 60", 4 wheel, M1	1
	Gage, tide	2

EXHIBIT 3-G-3

SECRET

Authority AND 760162
2915/00
BY WDP NARA DES
7/15/00

SECRET

CONSOLIDATED SUMMARY OF MAJOR ITEMS OF EQUIPMENT
ORDNANCE REQUIREMENTS FOR COMPLETE PROJECT

28 September 1944

STOCK NUMBER	ARTICLE	REQUIRED
	Gun, 3" AA M1917	18
	Gun, 90 mm M1 on AMTB mount M-3	12
	Gun, 90 mm mobile on M1A1 mount	12
	Gun, 3" SC M1902 on BC mount M1902	10
	Gun, 3" SC M1903 on BC mount M1903	12
	Gun, 6" M1900 on BC mount M1900	6
	Gun, 6" M1903A2 on mount M1	2
	Gun, 6" M1 on mount M4	4
	Gun, 12" M1895M1A2 on BC mount	4
	Gun, 16" Navy MKII Model 1 on BC mount	2
	Gun, 16" M1919 Model 1 on BC mount	2
	Gun, machine, cal .30 M1917A1	174
	Tripod machine gun cal .30 M1917A	174
	Gun, machine, cal .50 AA	92
	Mount machine gun cal .50	92
	Gun, 37 mm AA M1A2 or 40 mm	28
	Gun, 40 mm AMTB	12
	Arm, scale M1906 W/arm scale center	
F-251	Scale 1:80000	20
F-251	Scale 1:62500	20
F-185	Board, Plotting M3	8
F-185	Board, Plotting M4	2
F-309	Board, Plotting M9C	3
F-306	Board, Plotting M8C	6
F-19	Board, Deflection M1	10
F-81	Board, Correction, Range M1A1	10
F-116	Board, Fire Adjustment M1	7
F-201	Board, Spotting M3	6

- 1 -

SECRET

EXHIBIT 3-G-4

Authority MND 760162
BY WDR NARA Date 7/15/00

SECRET

CONSOLIDATED SUMMARY OF MAJOR ITEMS OF EQUIPMENT
ORDNANCE REQUIREMENTS FOR COMPLETE PROJECT

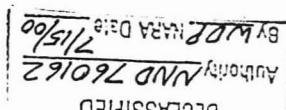
28 September 1944

STOCK NUMBER	ARTICLE	REQUIRED
F-201	Board, Spotting M7	4
F-103	Corrector, percentage M1	24
F-203	Computers, gun data M1	4
F-273	Computers, gun data M8	3
F-98	Clinometer M1912A1	6
F-190	Data Transmission System M5	2
F-190	Data Transmission System M7	1
F-190	Data Transmission System M10	2
F-209	Director, AA, M5A2	50
F-167	Director, AA, M7A1B1 (or M4)	8
F-243	Director, AA, M9A2	8
F-88	Finder, Range, self contained	12
F-171	Finder, Height, AA, M1 or M2	12
F-84	Instruments, Azimuth M1910A1	134
	Instruments, Azimuth M2	36
F-58	Instruments, Observation, AA, BC, M1	13
F-182	Set, control equip. AA M1	6
F-168	Tester, stereoscopic M1A1	12
	Tool Set, General mechanics	6
	Scale, Prediction, M1	10
	Motor Generator M6	1
	Thermometer, Powder Temperature M1	20
F-290	Unit Generating M17	70
F-221	Trailer M18	1
	Truck, 5-6 ton 4 x 4 tractor	1
	Unit, Generating M18	12
F-95	Predictor, mine M1916	3

- 2 -

EXHIBIT 3-G-4

SECRET



SECRET

CONSOLIDATED SUMMARY OF MAJOR ITEMS OF EQUIPMENT

ORDNANCE REQUIREMENTS FOR COMPLETE PROJECT

28 September 1944

STOCK NUMBER	ARTICLE	REQUIRED
F-111	Finder, Depression Position M1	5
F-111	Finder, Depression Position M2	13
F-46	Finder, Depression Position Warner & Swasey	1
F-284	Indicator, Powder Temperature M12	28
F-284	Indicator, Powder Temperature M13	12
F-287	Indicator, Range MKI	40
T/a 4-4	Mine Equipment	3

- 3 -

EXHIBIT 3-G-4

SECRET

Authority: AND 760162
By WDP NARA Date: 7/15/60

RECORDED IN THE NATIONAL ARCHIVES

SECRET

ANNEX H

REAL ESTATE REQUIREMENTS

SECRET

Authority: NND 760162
BY WDP/NARA Date: 7/15/00

SECRET

ANNEX H

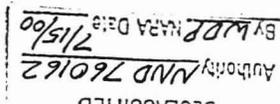
INDEX

EXHIBITS

- 1-H-1 - Data Requirements at Manasquan, N.J. Location No. 1
- 1-H-2 - Data Requirements at Shark River, N.J. Location No. 2
- 1-H-3 - Data Requirements at Elberon, N.J. Location No. 3
- 1-H-4 - Data Requirements at North Long Branch, N.J. Location No. 4
- 1-H-5 - Data Requirements at Long Beach, N.Y. Location No. 18
- 1-H-6 - Data Requirements at Short Beach, N.Y. Location No. 19
- 1-H-7 - Data Requirements at Norton Point, N.Y. Location No. 12

- 2-H-1 - Plot Plan Requirements at Manasquan, N.J. Location No. 1
- 2-H-2 - Plot Plan Requirements at Shark River, N.J. Location No. 2
- 2-H-3 - Plot Plan Requirements at Elberon, N.J. Location No. 3
- 2-H-4 - Plot Plan Requirements at North Long Branch, N.J.
Location No. 4
- 2-H-5 - Plot Plan Requirements at Long Beach, N.Y. Location No. 18
- 2-H-6 - Plot Plan Requirements at Short Beach, N.Y. Location No. 19
- 2-H-7 - Plot Plan Requirements at Norton Point, N.Y.
Location No. 12

SECRET



SECRET

ANNEX H

PRELIMINARY DATA FOR REAL ESTATE PROCUREMENT

1. For installation of, Seacoast Searchlight #2 Location No. 1
 2. Place (Local name) Seagirt
Town Manasquan County Monmouth State New Jersey
 3. Owner: Name
Address
 4. Location of tract: * X 96704.00 Y 15545.00
 5. Area to be acquired: 1 $\frac{1}{2}$ acre
 6. Site is: Developed
 7. Site is part of: Active Summer Resort
 8. Active shore lot development: Yes
 9. Does site include buildings: No
 10. Is site contiguous to public road: Yes
 11. Is easement required for right of way: No
 12. Is easement required for cable: Yes. Approx. 700' cable R/W
to F.C. Tower
 13. Assessed value of Land:
 14. What utilities must be removed: None
 15. Do you believe condemnation proceedings necessary: No
- * Approximate Lambert Coordinates of plot required

SECRET

EXHIBIT 1-H-1

RECORDED
Authority MND 760162
BY WDR NARA Date 7/15/00

PRODUCED AT THE NATIONAL ARCHIVES

SECRET

ANNEX H

PRELIMINARY DATA FOR REAL ESTATE PROCUREMENT

1. For installation of Seacoast Searchlights #3 and #4
Location No. 2
2. Place (Local name) Shark River, New Jersey.
Town Shark River County Monmouth State New Jersey
3. Owner: Name Ray H. Stillman (Agent)
Address Eatontown, New Jersey.
4. Location of tract: * X 99124.00 * Y 23615.00
5. Area to be acquired: Approximately 360 Lineal Feet of Boardwalk
6. Site is: Developed (Boardwalk)
7. Site is part of: Summer Resort
8. Active shore lot development: Yes.
9. Does site include buildings: No.
10. Is site contiguous to public road: Yes.
11. Is easement required for right of way: No.
12. Is easement required for cable: Yes. 220' to F.C. Tower for cable.
13. Assessed value of Land:
14. What utilities must be removed: None
15. Do you believe condemnation proceedings necessary: No
* Approximate coordinates (Lambert)

EXHIBIT 1-H-2

SECRET

Authority: MND 760162
By WDR/NARA Date: 7/15/00

SECRET

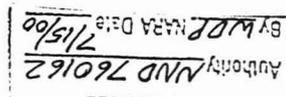
ANNEX H

PRELIMINARY DATA FOR REAL ESTATE PROCUREMENT

1. For installation of Seacoast Searchlights #5 and #6
Location No. 3
2. Place (Local name) Elberon
Town Elberon County Monmouth State New Jersey
3. Owner: Name
Address
4. Location of tract: #5 * X 101243.00 Y 32018.00
#6 X 101285.00 Y 32207.00
5. Area to be acquired: $\frac{1}{2}$ acre
6. Site is: Undeveloped
7. Site is part of: Beach Front
8. Active shore lot development: No
9. Does site include buildings: No
10. Is site contiguous to public road: Yes
11. Is easement required for right of way: Yes, approx. 200' to site
12. Is easement required for cable: Yes, approx. 200' cable R/W
to F.C. Tower
13. Assessed value of Land:
14. What utilities must be removed: None
15. Do you believe condemnation proceedings necessary: No.
* Approximate Lambert coordinates for each light position.

EXHIBIT 1-H-3

SECRET



SECRET

ANNEX H

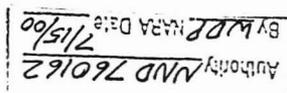
PRELIMINARY DATA FOR REAL ESTATE PROCUREMENT

1. For installation of Seacoast Searchlight #7 Location No. 4
2. Place (Local name) North Long Branch
Town North Long Branch County Monmouth State New Jersey
3. Owner: Name
Address
4. Location of tract: * X 101936.00 Y 38118.00
5. Area to be acquired: 50' x 50'
6. Site is: Undeveloped.
7. Site is part of: Beach Front
8. Active shore lot development: No
9. Does site include buildings: No
10. Is site contiguous to public road: No
11. Is easement required for right of way: Yes. 175' to FC Tower
12. Is easement required for cable: Yes. 175' to FC Tower
13. Assessed value of Land:
14. What utilities must be removed: None
15. Do you believe condemnation proceedings necessary: No

* Approximate Lambert coordinates

EXHIBIT 1-H-4

SECRET



RECORDED IN THE NATIONAL ARCHIVES

SECRET

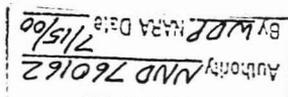
ANNEX H

PRELIMINARY DATA FOR REAL ESTATE PROCUREMENT

1. For installation of Seacoast Searchlights #33 and #34
Location No. 18
 2. Place (Local name) Long Beach
Town Long Beach County Nassau State New York
 3. Owner: Name
Address
 4. Location of tract: #33 - *X 130852.00 Y 70935.00
#34 - *X 131476.00 Y 70866.00
 5. Area to be acquired: Easement to 2-50 ft. sections of Boardwalk
 6. Site is: Developed
 7. Site is part of: Boardwalk (Long Beach)
 8. Active shore lot development: Yes
 9. Does site include buildings: No
 10. Is site contiguous to public road: Yes
 11. Is easement required for right of way: No
 12. Is easement required for cable: Yes. 500' \pm from Slt 33 north
to FC Tower and 400' \pm from Slt
34 south to FC Tower
 13. Assessed value of Land:
 14. What utilities must be removed: None
 15. Do you believe condemnation proceedings necessary: No
- * Approximate Lambert Coordinates for each light position

SECRET

EXHIBIT 1-H-5



SECRET

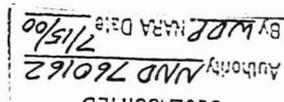
ANNEX H

PRELIMINARY DATA FOR REAL ESTATE PROCUREMENT

1. For installation of Seacoast Searchlights #35 and #36
Location No. 19
2. Place (Local name) Short Beach
Town County Nassau State New York
3. Owner: Name
Address
4. Location of tract: * #35 - X 140514.00 Y 70904.00
#36 - X 141580.00 Y 71039.00
5. Area to be acquired: 2 plots 50' x 50'
6. Site is: Undeveloped
7. Site is part of: Beach Front
8. Active shore lot development: No
9. Does site include buildings: No
10. Is site contiguous to public road: Yes
11. Is easement required for right of way: No
12. Is easement required for cable: Yes. Approx. 400' from each
light to FC Tower
13. Assessed value of Land:
14. What utilities must be removed: None
15. Do you believe condemnation proceedings necessary: No.
* Approximate Lambert coordinates for each plot required.

EXHIBIT 1-H-6

SECRET



SECRET

ANNEX H

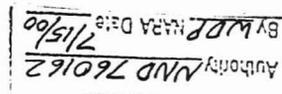
PRELIMINARY DATA FOR REAL ESTATE PROCUREMENT

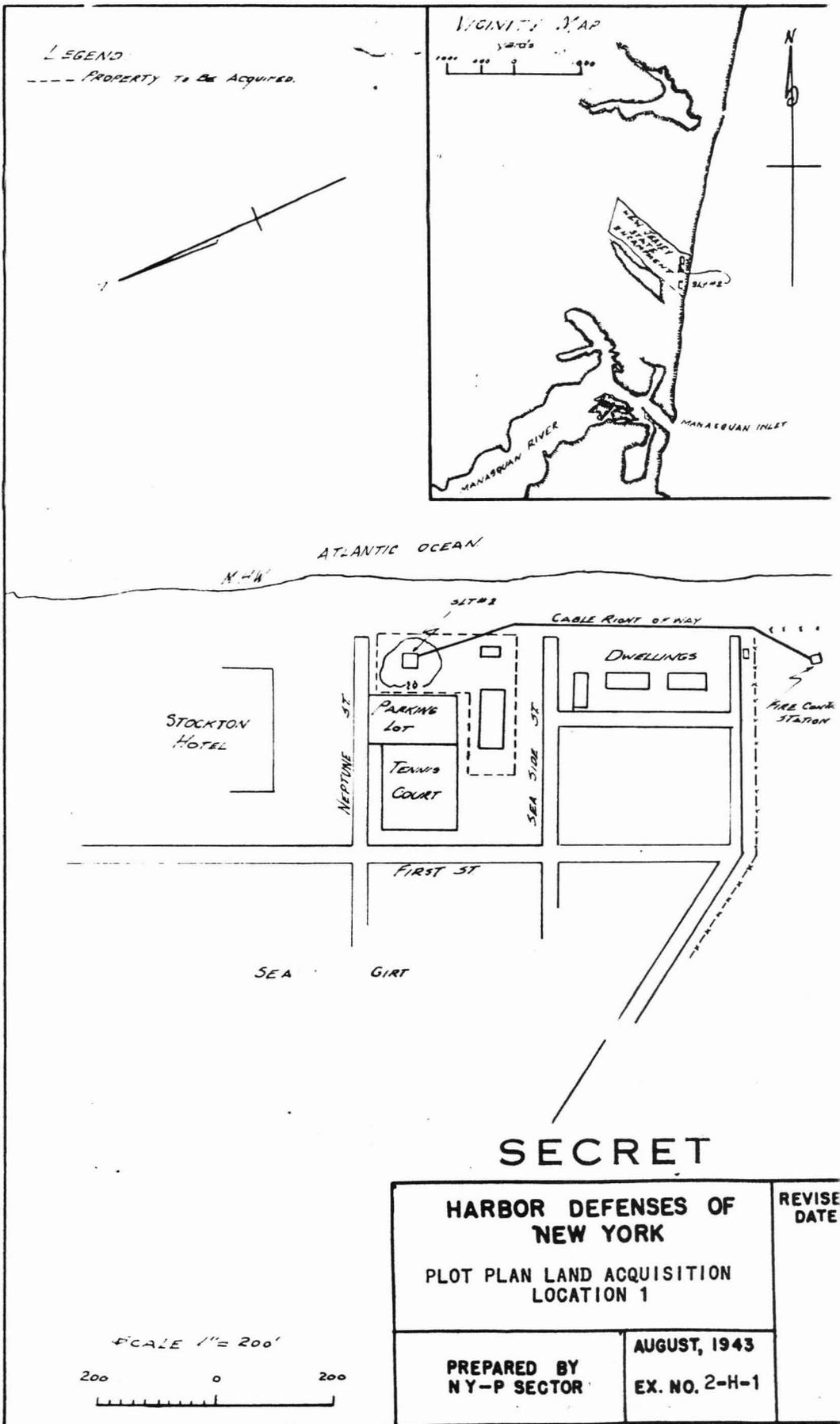
1. For installation of Mine Observing Station Location No. 12
2. Place (Local name) Norton Point
Town Seagate County Kings State New York
3. Owner: Name Seagate Association
Address Seagate, Coney Island, New York
4. Location of tract: 74°-00'-46" 40°-34'-40"
5. Area to be acquired: 50' x 50'
6. Site is: Undeveloped.
7. Site is part of: Summer Estate
8. Active shore lot development: Yes
9. Does site include buildings: No
10. Is site contiguous to public road: Yes
11. Is easement required for right of way: No
12. Is easement required for cable: Yes
13. Assessed value of Land: See Note 1.
14. What utilities must be removed: None
15. Do you believe condemnation proceedings necessary: No

Note 1. Lst Ind. NA 601.1 (Norton Point, Seagate, N.Y.)-2 Office
Division Engineer, North Atlantic Division, New York, dated
10 April 1943, quotes estimate of \$1.00 for lease for duration
plus 6 months.

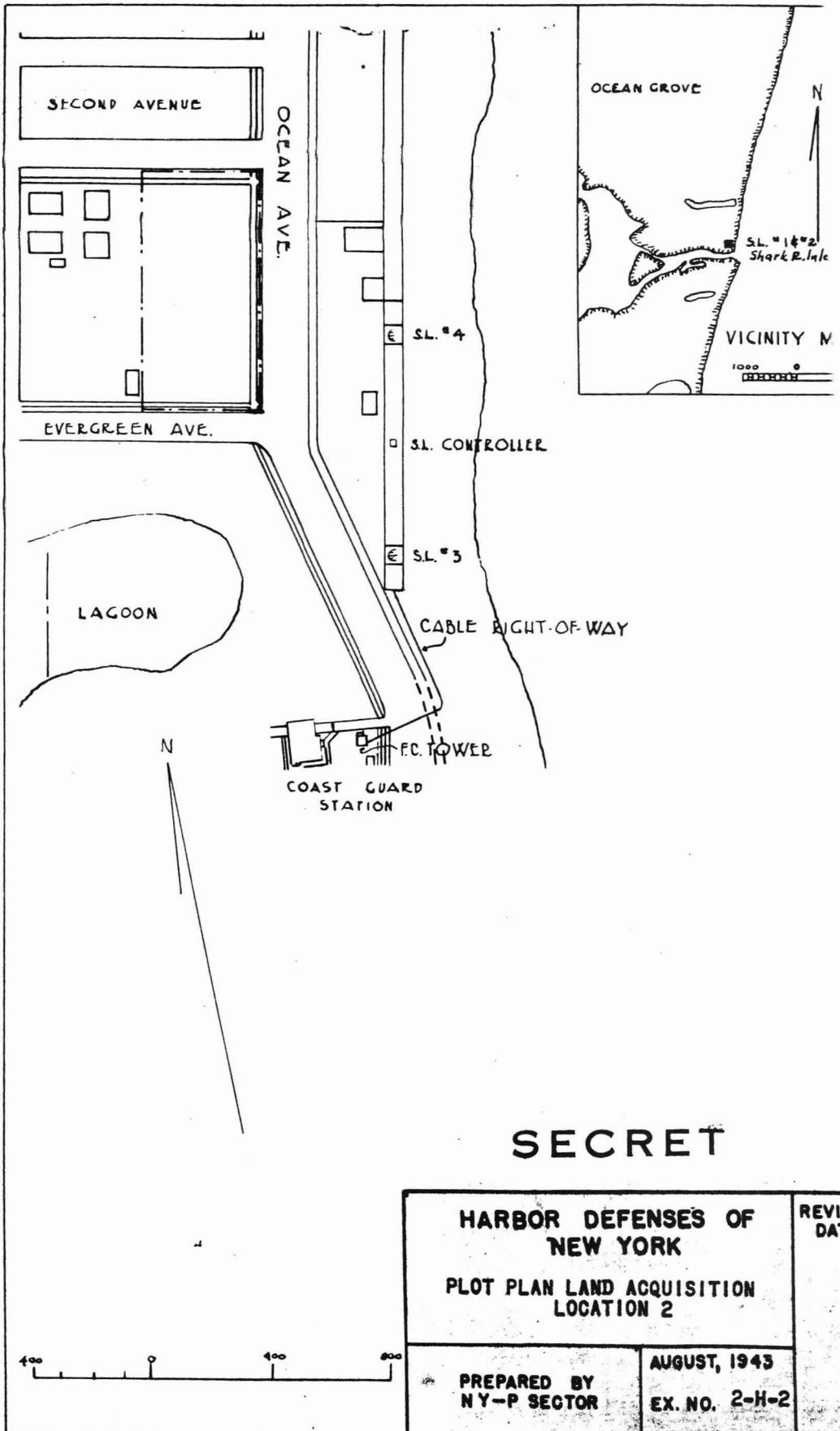
EXHIBIT 1-H-7

SECRET





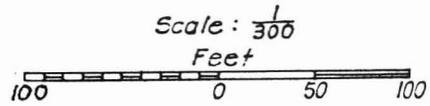
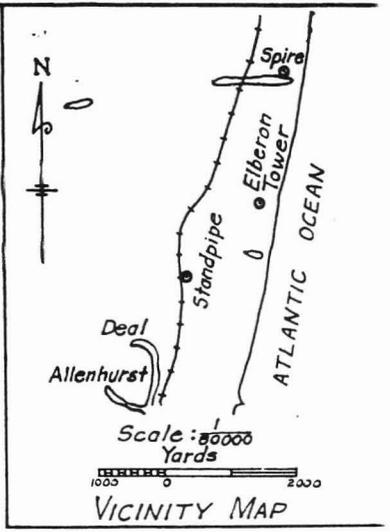
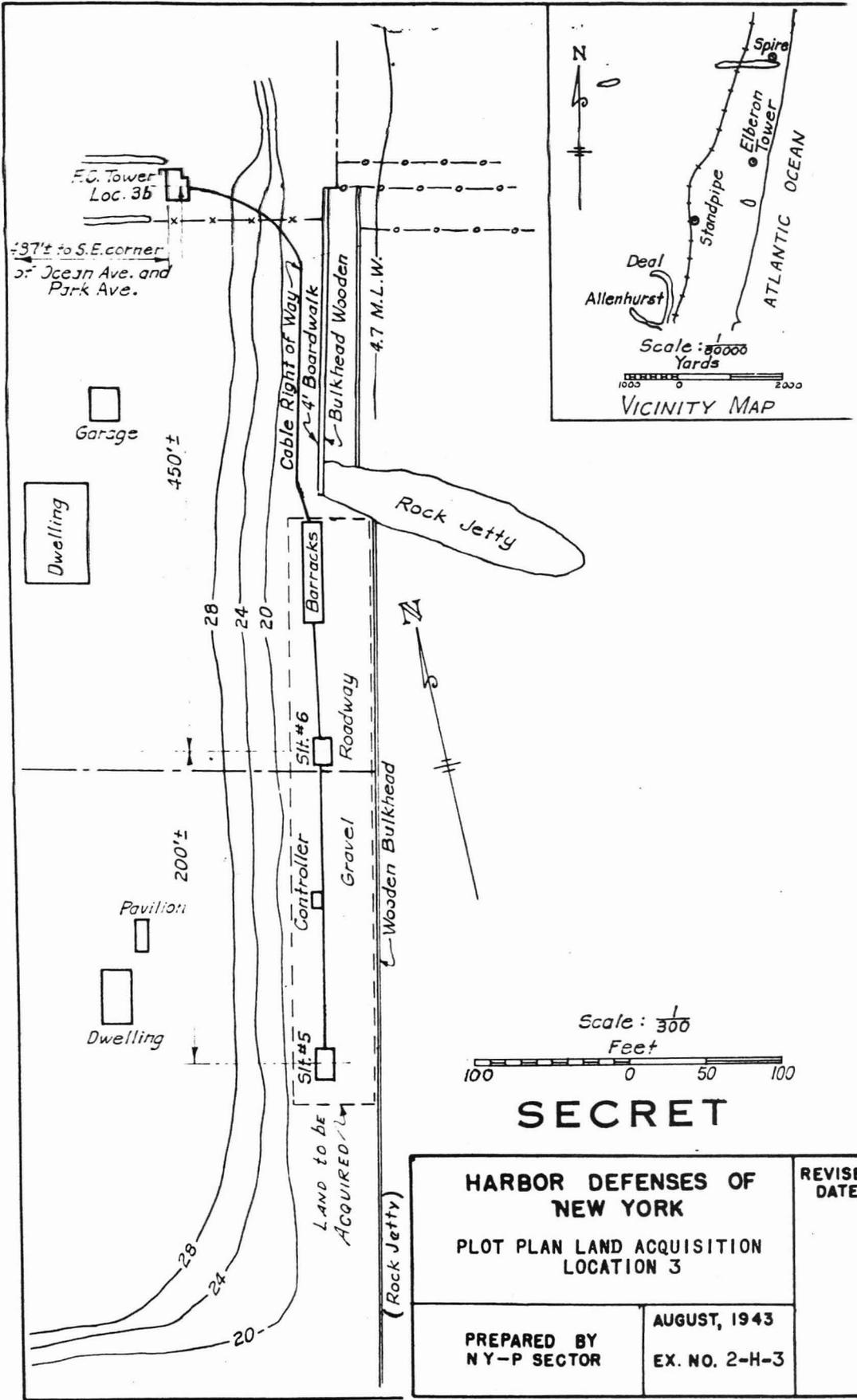
BY WDR:WARA Date 7/15/00
 Authority AND 760162



SECRET

HARBOR DEFENSES OF NEW YORK		REVISE DATE
PLOT PLAN LAND ACQUISITION LOCATION 2		
PREPARED BY NY-P SECTOR	AUGUST, 1943 EX. NO. 2-H-2	

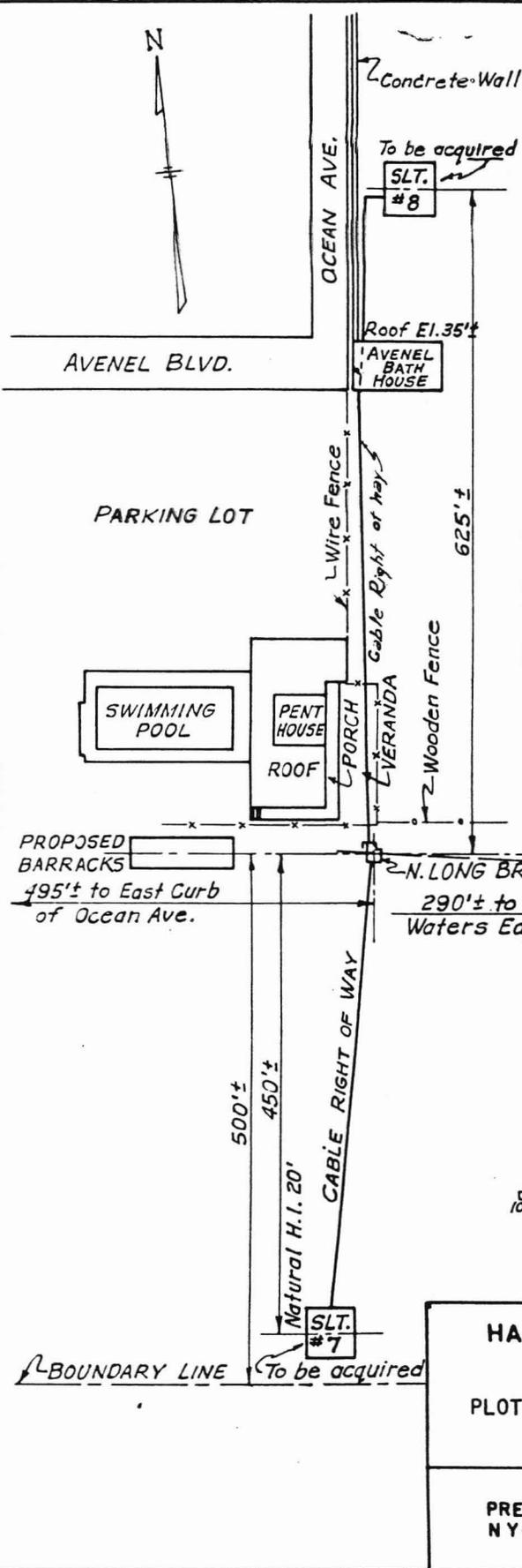
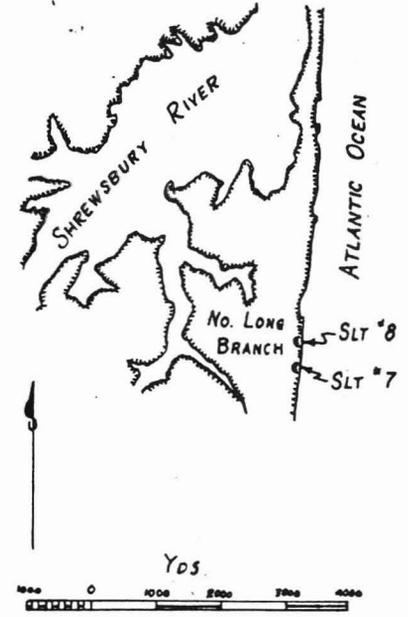
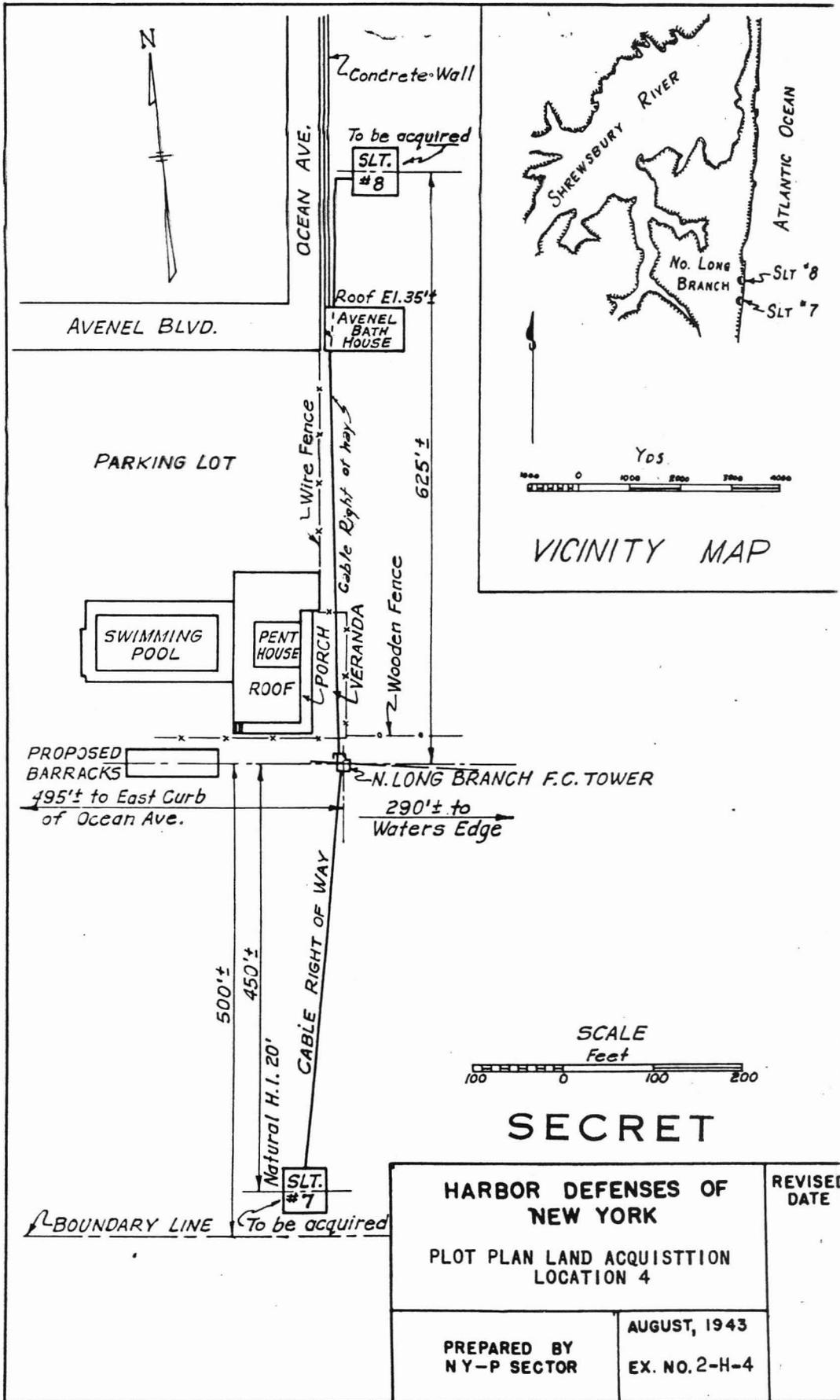
AUTHORITY MND 760162
 BY WDR NARA DATE 7/15/00

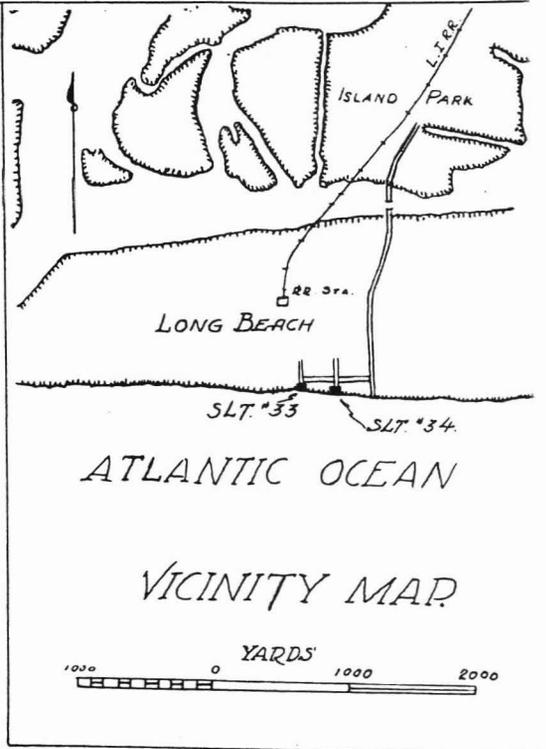
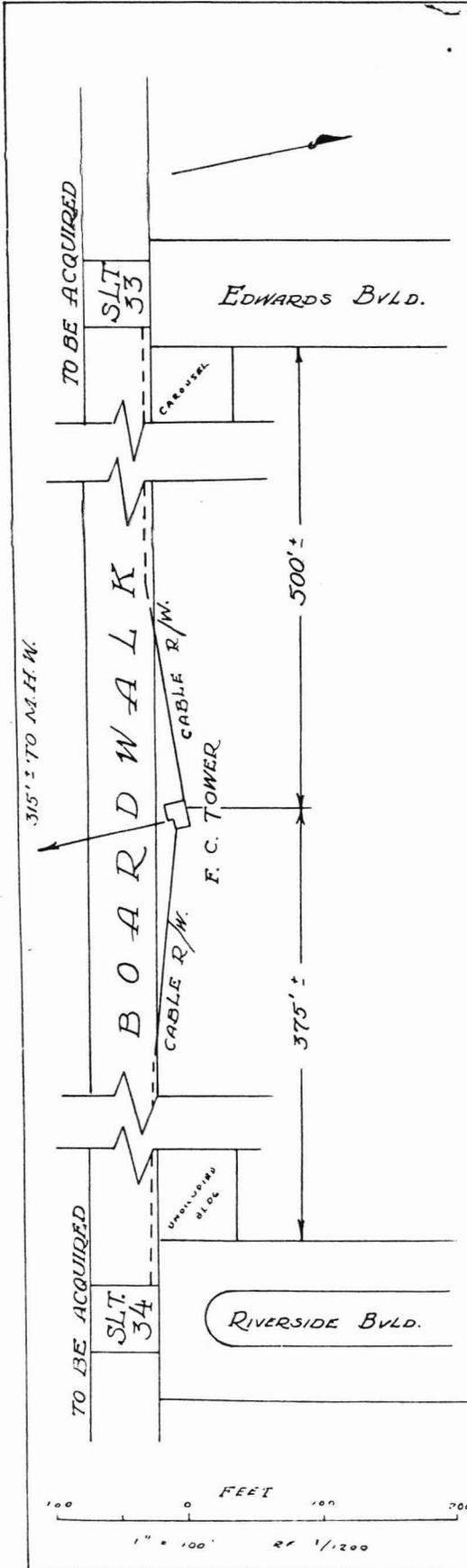


SECRET

HARBOR DEFENSES OF NEW YORK		REVISE DATE
PLOT PLAN LAND ACQUISITION LOCATION 3		
PREPARED BY NY-P SECTOR	AUGUST, 1943 EX. NO. 2-H-3	

Authority AND 760162
 BY WDR: NARA Date 7/15/00

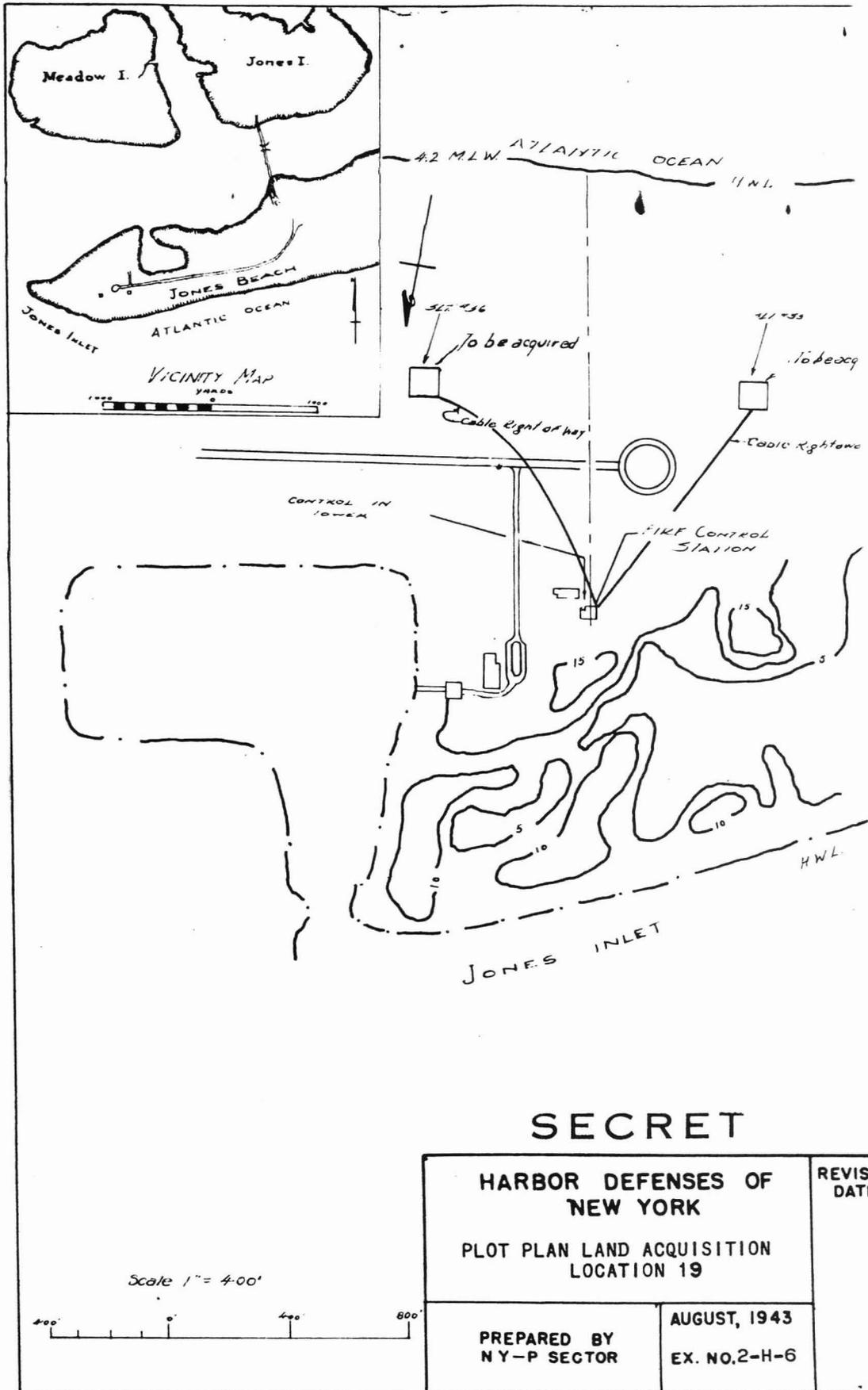




SECRET

<p>HARBOR DEFENSES OF NEW YORK</p> <p>PLOT PLAN LAND ACQUISITION LOCATION 18</p>		<p>REVISE DATE</p>
<p>PREPARED BY NY-P SECTOR</p>	<p>AUGUST, 1943</p> <p>EX. NO. 2-H-5</p>	

Authority AND 760162
BY WDR: MAA Date: 7/15/00



SECRET

HARBOR DEFENSES OF NEW YORK		REVISI DATE
PLOT PLAN LAND ACQUISITION LOCATION 19		
PREPARED BY NY-P SECTOR	AUGUST, 1943	
		EX. NO. 2-H-6

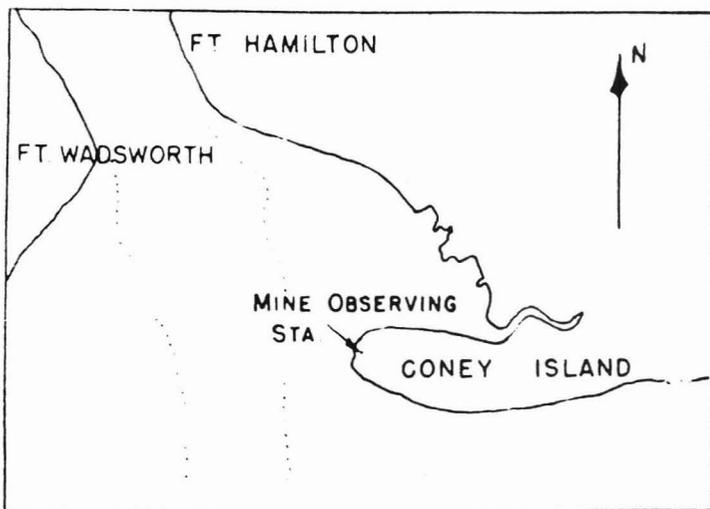
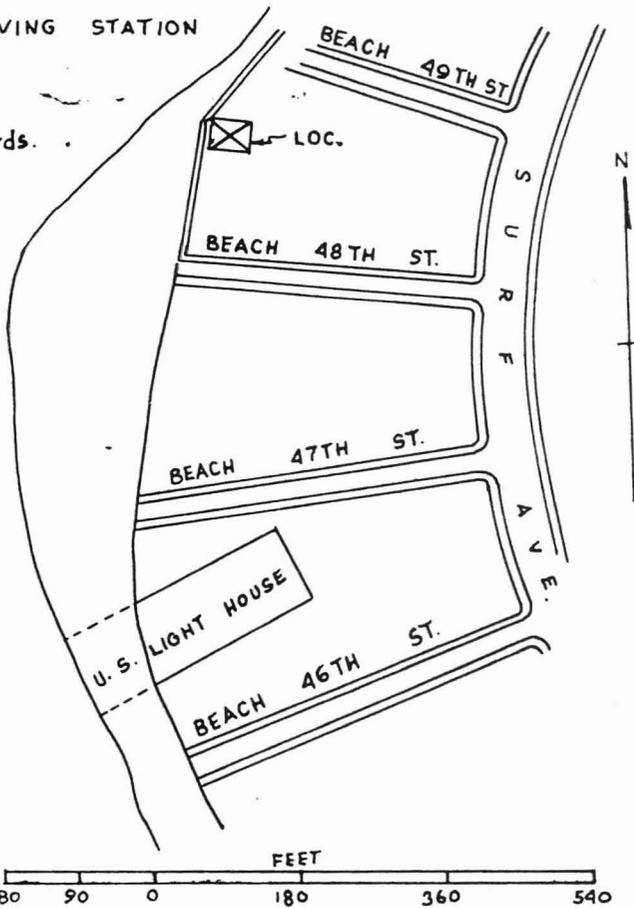
BY WDR: NARA Date: 7/15/00
 Authority: NND 760162
 DECLASSIFIED

RECORDED AT THE NATIONAL ARCHIVES

MINE OBSERVING STATION

M₁₅⁵

X 98800.06 yds.
Y 70177.47



SECRET

HARBOR DEFENSES OF NEW YORK		REVISED DATE
PLAN LAND ACQUISITION LOCATION 12		
PREPARED BY NY-P SECTOR	AUGUST, 1943 EX NO. 2-H-7	

By WDR:KARA Date: 7/15/00
Authority: MND 760162
DECLASSIFIED

