

8 October 2003

SUBJECT: Survey of World War II (WW II) Harbor Defense Sites on Hoffman and Swinburne Islands

On 28 August 2003 the Gateway National Recreation Area (GNRA) allowed Jim Bournazos, Alex Holder, Gary Paliwoda, and Leo Polaski (all students of United States harbor defense history) to visit Hoffman and Swinburne Islands. The purpose of the effort was to locate and determine the condition of three WW II U. S. Army harbor defense sites--specifically the mine observation station on Hoffman Island and the two 90mm gun blocks on Swinburne Island.

Hoffman Island (mine observation station). During WW II the Harbor Defenses of New York deployed a large number of controlled submarine mines. These were U.S. Army mines organized into three tactical commands, Tactical 10 at Fort Hancock, Tactical 25 at Fort Tilden, and Tactical 15 at Fort Wadsworth. Tactical 15 had five groups of mines (usually 19 mines per group) controlled from the mine casemate located in disarmed Battery Richmond. The command station for Tactical 15 (MC 15) was located on Fort Tompkins. Two observation stations were used to track target vessels. The plotting room at the mine casemate used data from the observation stations to determine target location. This, in turn, allowed selection of the appropriate mine to be fired by the operating room, also located at the mine casemate. One observation station (M 2/15) was at Norton Point, Coney Island, and the other (M 1/15) on Hoffman Island. Both stations were concrete, one story, above ground, and practically identical in size and appearance. See TAB A for detailed and general information regarding Hoffman Island's mine observation station and its relation to other parts of the controlled mine defenses of New York during WW II.

Status (28 August 2003) of mine observation station, Hoffman Island. The mine station was located near the seawall on the eastern side of the island. See TAB A, sheets A-3 and A-4(b.). Only concrete foundation ruins remain. Apparently the station was deliberately demolished along with all other structures on the island. Positive identification of the site was made using a plan of the station. The steel circular mount for the azimuth instrument post and the iron steam radiator remain as shown on the plan. See TAB A, sheet A-4(c.), and photos (print and 35mm slide) at TAB C.

Swinburne Island (two 90mm gun blocks). Six 90mm anti-motor torpedo boat (AMTB) batteries were employed by the Harbor Defenses of New York during WW II. Two were at Fort Hancock, and one each was at Rockaway Point, Norton Point, Miller Field, and Swinburne Island. The purpose of these batteries was close in defense against enemy surface craft and protection of controlled mine fields. Each battery usually had two fixed 90mm guns, two mobile 90mm guns and two 37mm or 40mm guns. Swinburne Island's AMTB battery, however, had only two fixed 90mm guns which were mounted on concrete gun blocks, 14 feet in diameter. See TAB B, sheet B-3(b.). TAB B contains general and detailed information regarding Swinburne Island's 90mm guns.

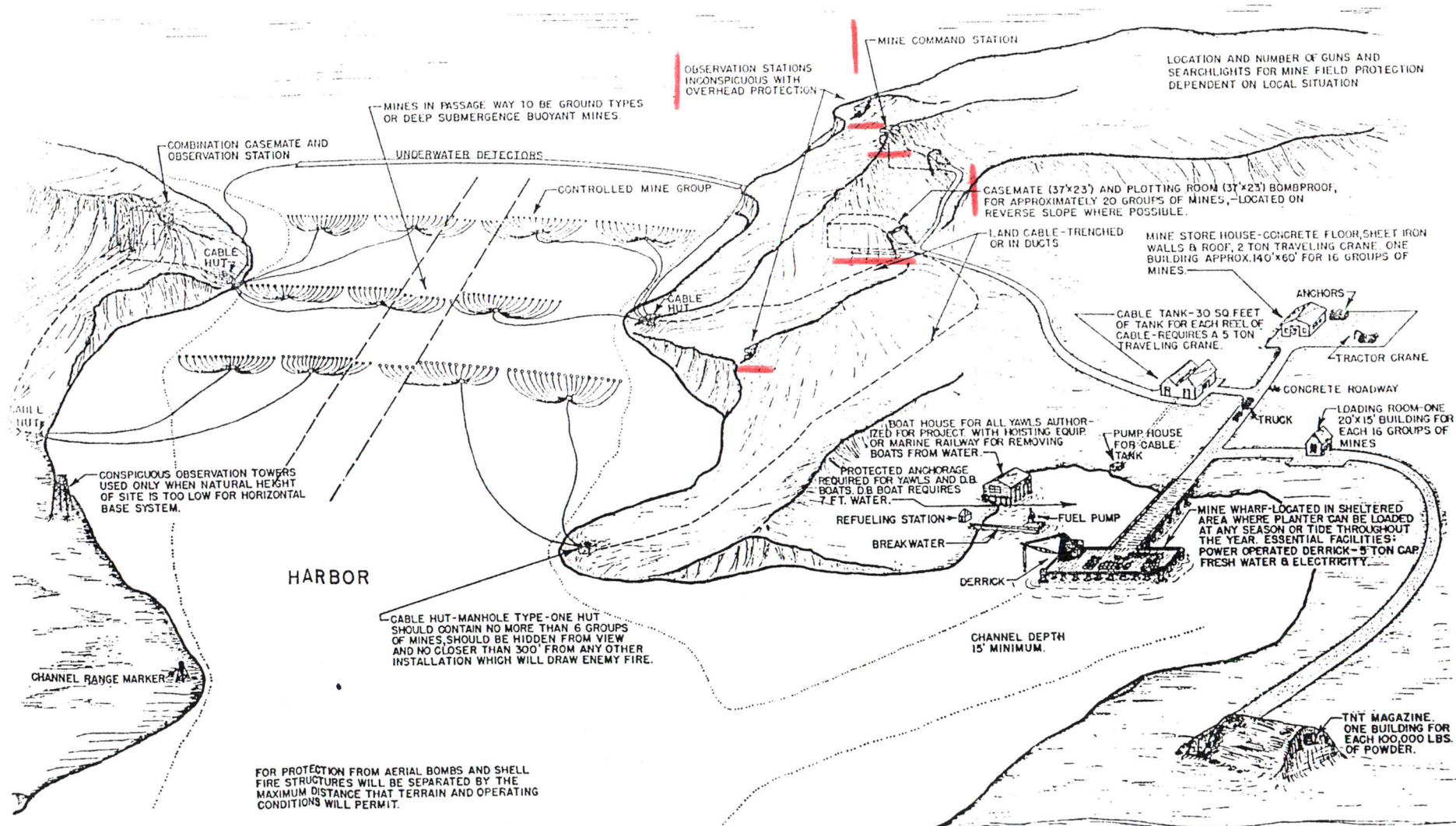
Status (28 August 2003) of the two 90mm gun blocks, Swinburne Island. The two gun blocks are located at the southern end of the island. See TAB B, sheet B-2. Wave action has badly damaged the riprap seawall and has torn away the wooden crib and earth fill that originally surrounded the gun blocks. The number one gun block has not yet shifted; however, the number two gun block has been undermined and has tilted forward. Should the seawall be restored, both gun blocks would most likely be covered. See photos (both prints and 35mm slides) at TAB C.

All who participated in this historical site survey of Hoffman and Swinburne Islands appreciate and give special thanks to Felice Ciccione, Chief Curator of GNRA, and Phil Melfi, Park Ranger, GNRA, for their efforts in coordinating both necessary permissions and transportation. Thanks also to Tom O'Connell, Supervisory Park Ranger, GNRA, who as boat captain provided safe and efficient transportation to the islands.

This report prepared by Alex Holder, 19 Harbor Heights Road, Scituate, MA 02066.

TAB A (HOFFMAN ISLAND)

Sheet Number	Subject
A-1	General description, U.S. Army controlled mines
A-2	WW II controlled mines, New York
A-3	Plan of Hoffman Island
A-4	Mine observation station, Hoffman Island
A-5	Mine command station , Fort Wadsworth
A-6	Mine casemate, Fort Wadsworth
A-7	Mine observation station, Norton Point



ELEMENTS OF A TYPICAL MINE PROJECT (US ARMY) DURING WW II
Illustration from FM 4-6, 1942

[illegible]

600.910 (149) 86994
REPORT OF COMPLETED WORKS - SEACOAST FORTIFICATIONS
(Fire Control or Submarine Mine Structure)

HARBOR DEFENSES OF ... NEW YORK
PORT ... HOFFMAN ISLAND, NEW YORK
STRUCTURE ... MINE STRUCTURE
OBSERVATION STATION

SPEXIM-1

Part II Corrected to 3, APRIL 1944

STRUCTURE: Special Lambert Center of Station
Projection (S.H.) x 95,036.00 yds.) Approx.
Location (by coordinates) y 70,313.00 yds.) only
Location (by site description) At East Seawall
Date of transfer 15 January 1944
Cost to that date \$ 4,596.36
Type (for observing stat.-tower, dug-in,
cottage, etc.) Dug-In
Type of construction
(a) Roof Concrete
(b) Remainder of bldg. Concrete
How concealed Camouflage Paint
How protected Splinterproof Concrete
Height above concealment None
Height above protection 8 ft. above ground
Conspicuous at 500 yards

UTILITIES:

Electric Power
Source of Commercial
Characteristics: Voltage 115 Ac or DC Phase 1
Kilowatts required 1.0
Type of lighting fixtures Commercial Standard - CSF
Heat
How heated Steam Heat - (Central Heating Plant)
Water Sewer
Connected to water mains No
Connected to sewer No
Type latrine None

REFERENCE:

Reference of site Mean Low Water
Reference of instrument axis EL. 17.25 M.L.W.
where (Type and Capacity of Crane None
applicable (Max. dia. of unhandled

INSTRUMENTS & EQUIPMENT

Type of observing inst. Azimuth
Type of plotting board

DATA TRANSMISSION:

Type Telephone
Date of transfer

TIDE STATION:

Give description of tide gauge

DATUM POINTS:

Give Forts from which visible

QUARTERS:

Give stations served

CABLE HUT:

Give S.C. Type

(Where applicable)

SECRET

21

REPRODUCED AT THE NATIONAL ARCHIVES

DECLASSIFIED

NHP 760026

By NARS, Date 10-4-46

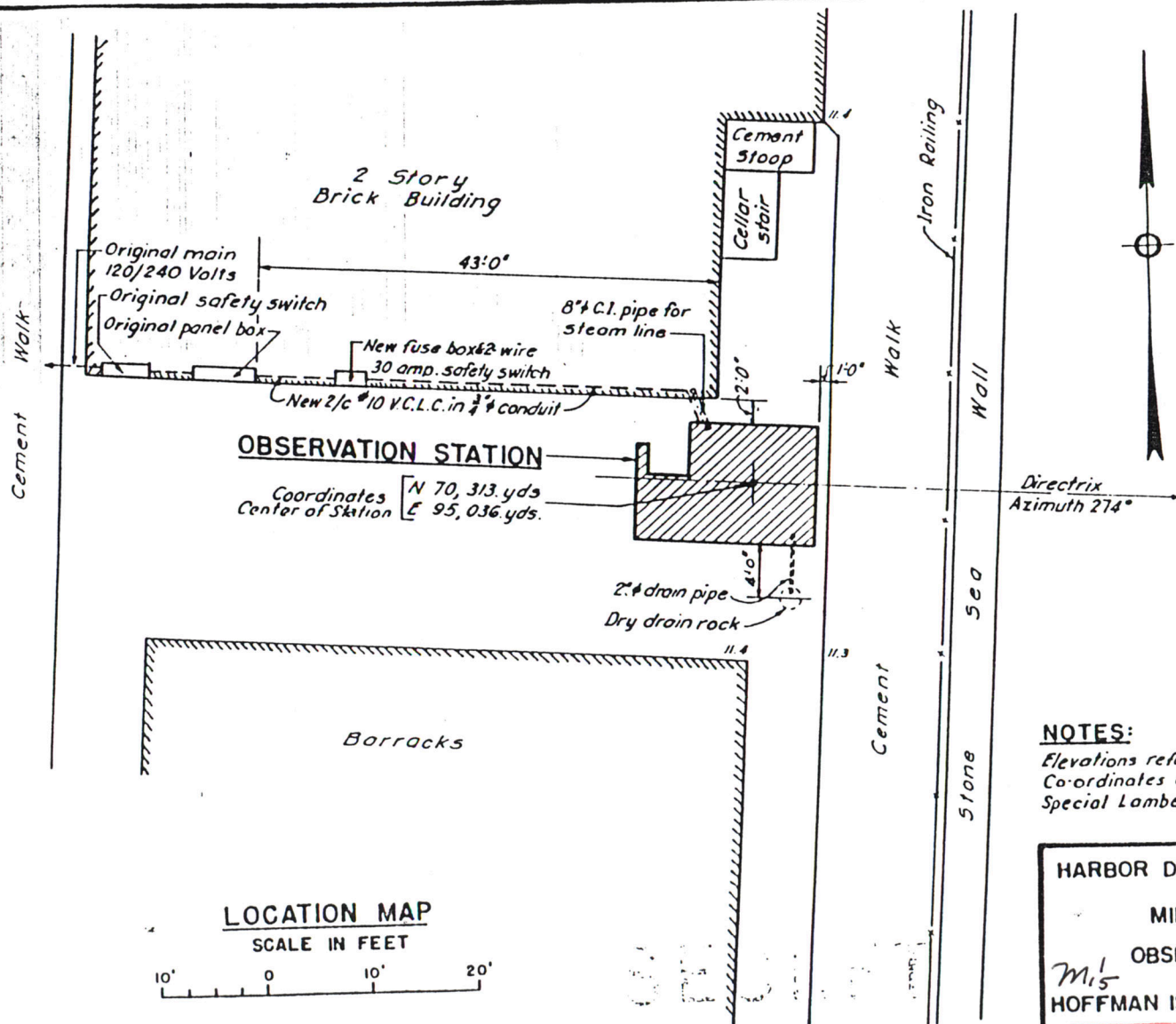
A-4(a)

WAR DEPARTMENT

CORPS OF ENGINEERS, U.S. ARMY

REPRODUCED AT THE NATIONAL ARCHIVES

By *T. J. J.* NARS, Date *10-4-41*



NOTES:

Elevations refer to Mean Low Water Datum.
Coordinates are in yds. and refer to the
Special Lambert Projection (Sandy Hook).

HARBOR DEFENSES OF NEW YORK

MINE STRUCTURE

OBSERVATION STATION

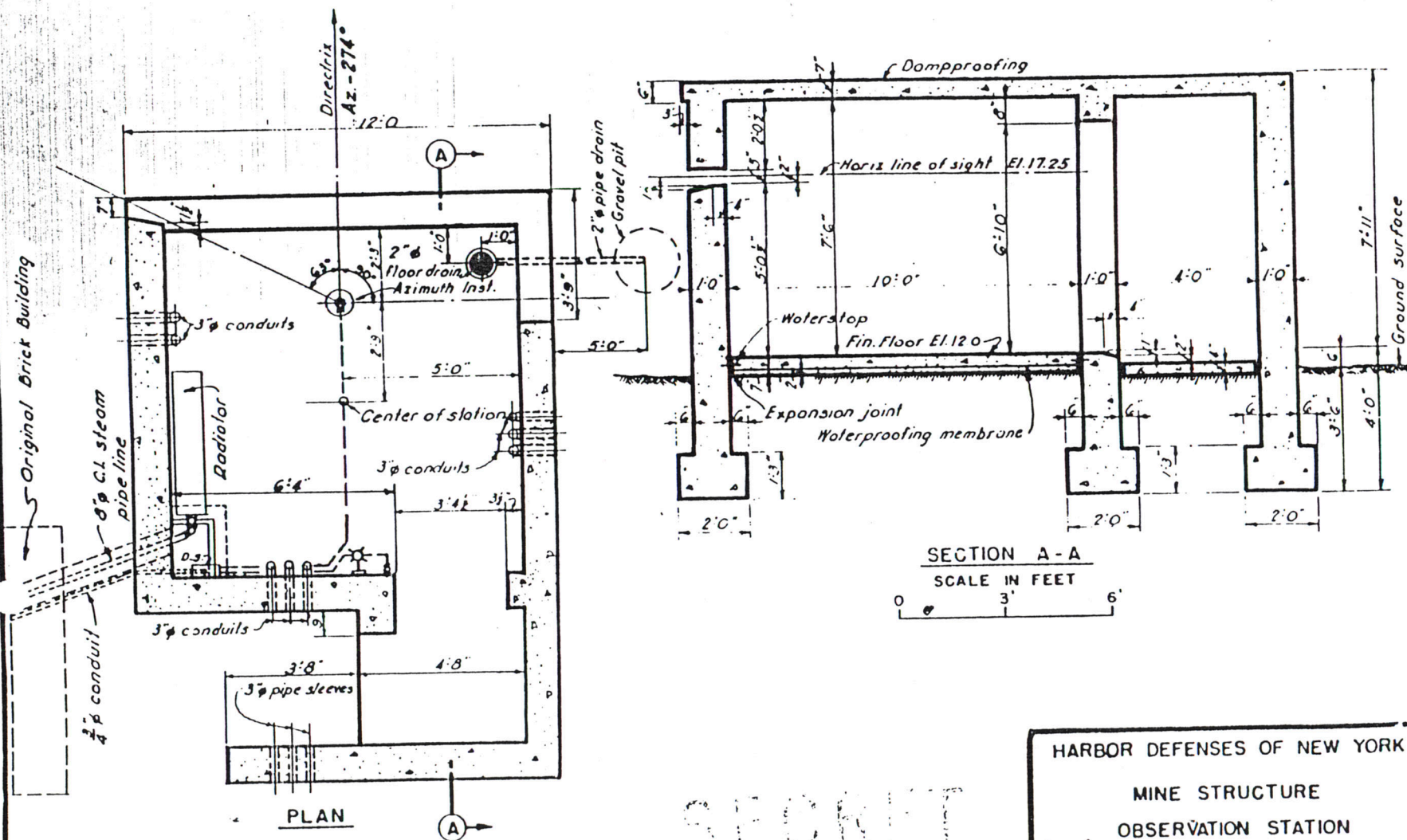
M15
HOFFMAN ISLAND

NEW YORK

A-4(b)

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SECRET

HARBOR DEFENSES OF NEW YORK
MINE STRUCTURE
OBSERVATION STATION
m₁₅
HOFFMAN ISLAND NEW YORK

A-4C.

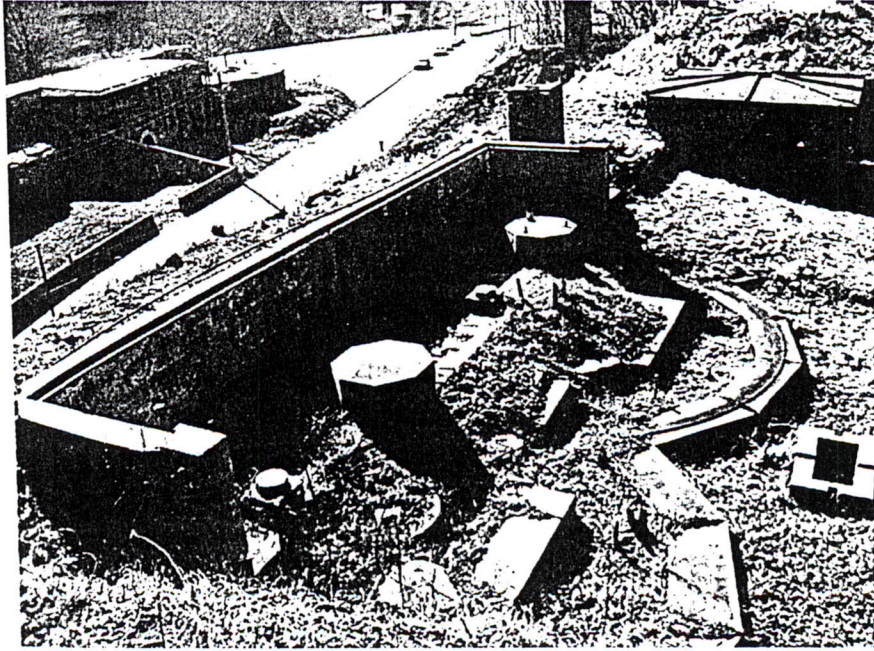


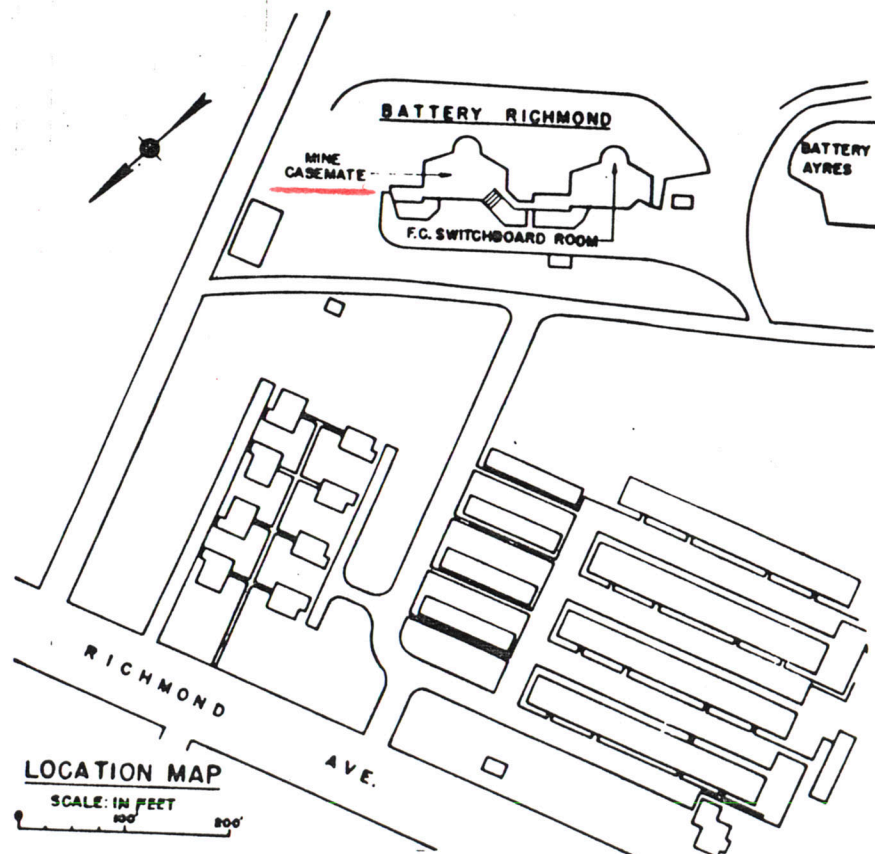
Photo by Roger Davis

"MC15"
FOUNDATION RUINS OF DOUBLE MINE PRIMARY
STATION BUILT EARLY 1900s AND USED DURING
WORLD WAR II AS COMMANDER'S STATION FOR
"TACTICAL 15" GROUPS OF MINES. ATOP SOUTH-
EAST CORNER OF FORT TOMPKINS.

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LOCATION MAP

SCALE: IN FEET

100' 200'

HARBOR DEFENSES OF NEW YORK

BATTERY RICHMOND

LOCATION PLAN

FORT WADSWORTH

NEW YORK

7-6(12)



HARBOR DEFENSES OF NEW YORK

BATTERY RICHMOND

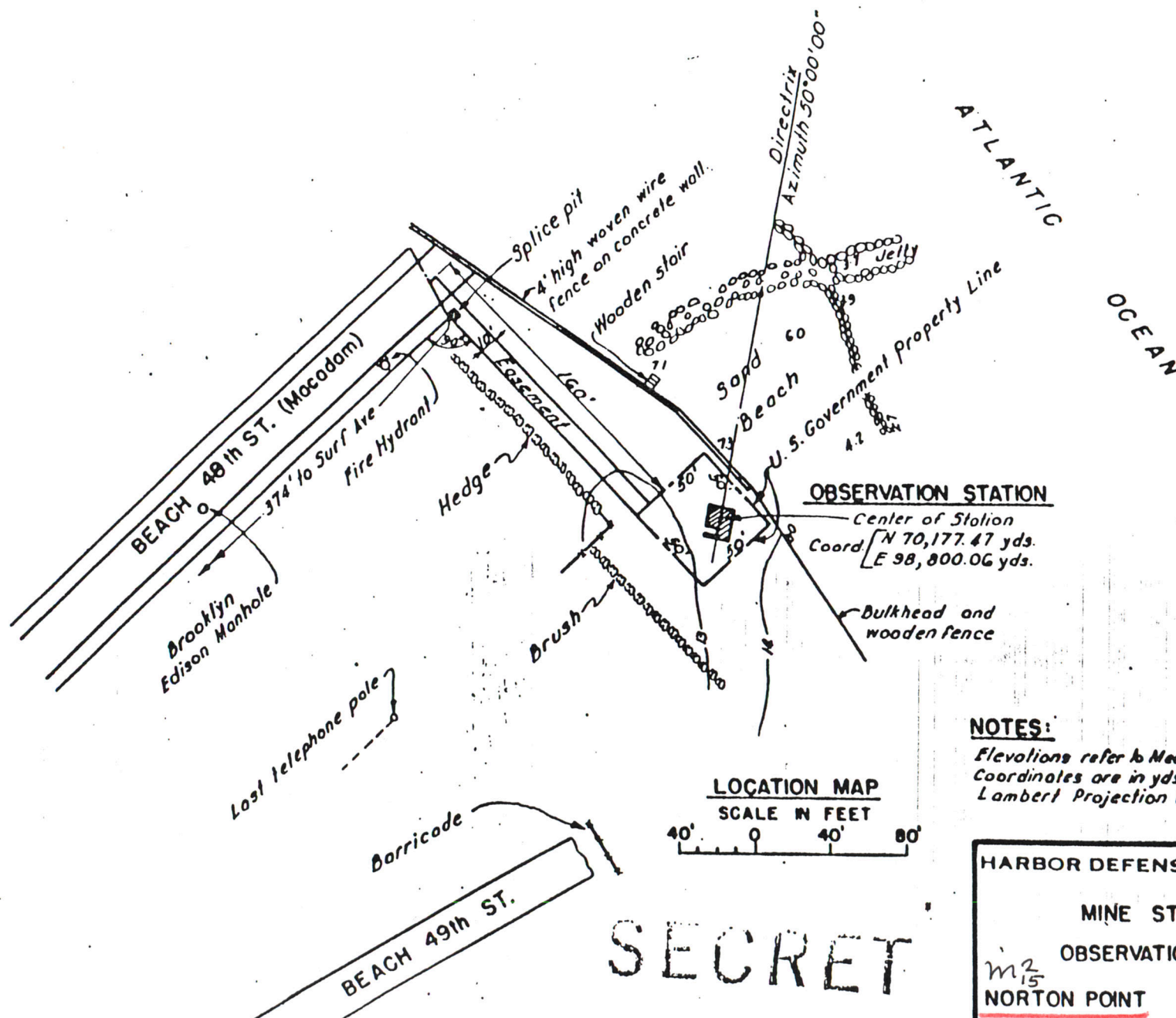
RELOCATION OF MINE CASEMATE

FORT WADSWORTH NEW YORK

0' 5' 10' 20'

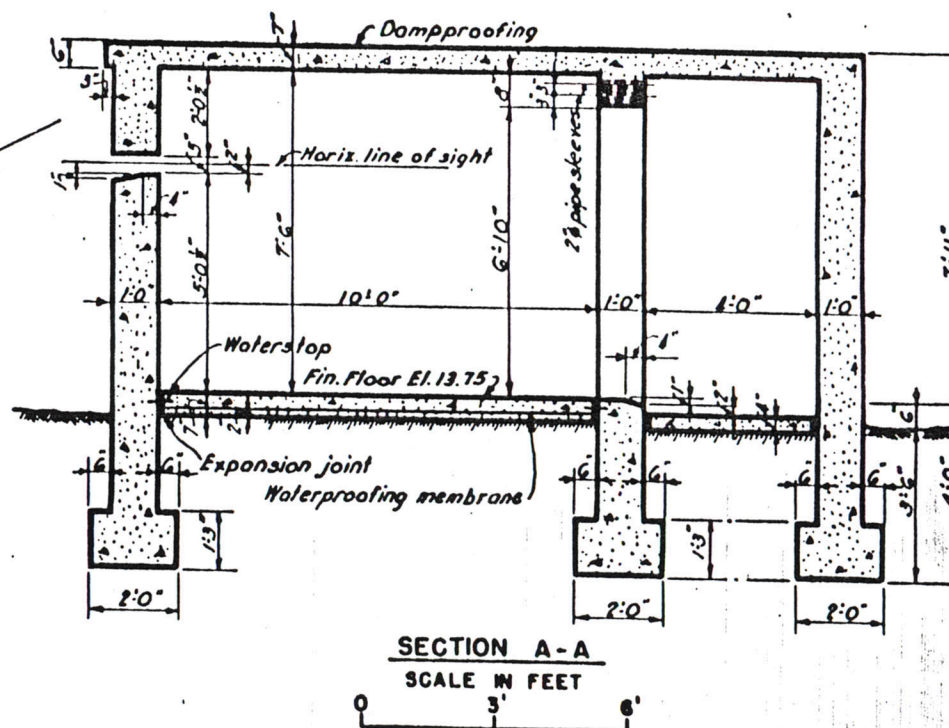
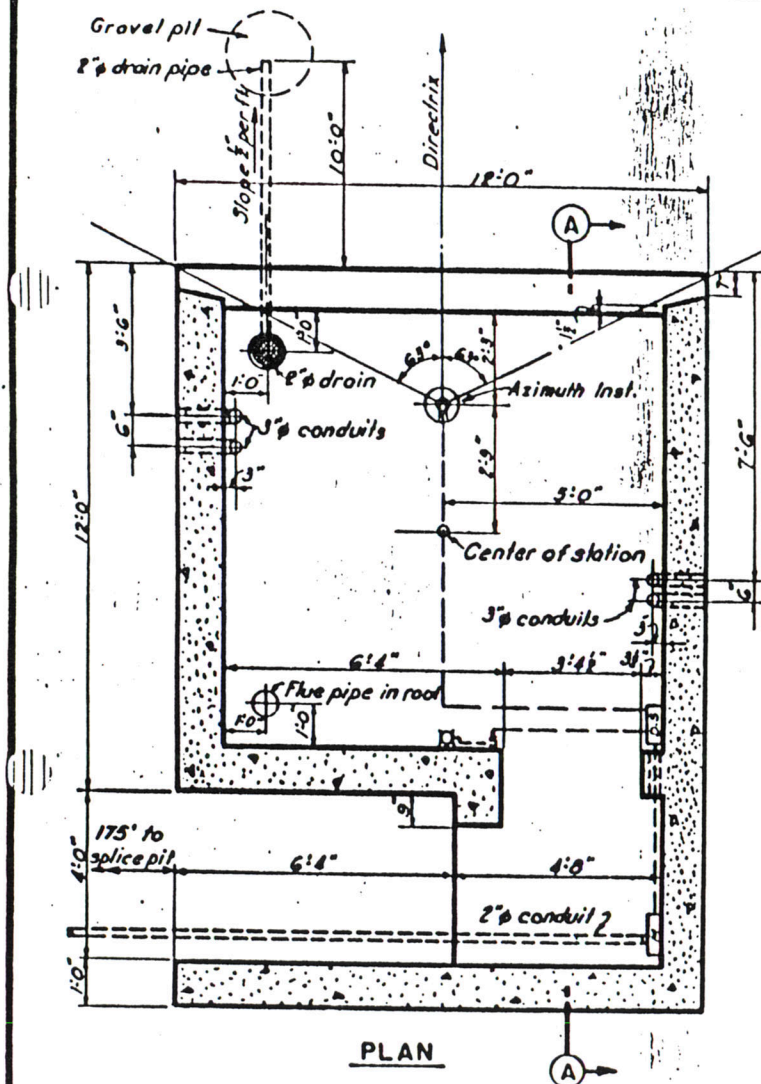
REPRODUCED AT THE NATIONAL ARCHIVES

$$A-6(b)$$



SECRET

CORPS OF ENGINEERS, U.S. AF



SECRET

HARBOR DEFENSES OF NEW YORK

MINE STRUCTURE

OBSERVATION STATION

7M₁₅²
NORTON POINT

NEW YORK

 $A - 7(h)$

TAB B (SWINBURNE ISLAND)

Sheet Number

B-1

B-2

B-3

Subject

General description, fixed 90-mm gun

Plan of Swinburne Island

90mm battery, Swinburne Island

Usual guns: M1

Carriages Built:??

Original Emplacements:
about 225

Time Emplaced: 1943-1946

Number of Bolts: 16

Circle Diameter: 3' 10"

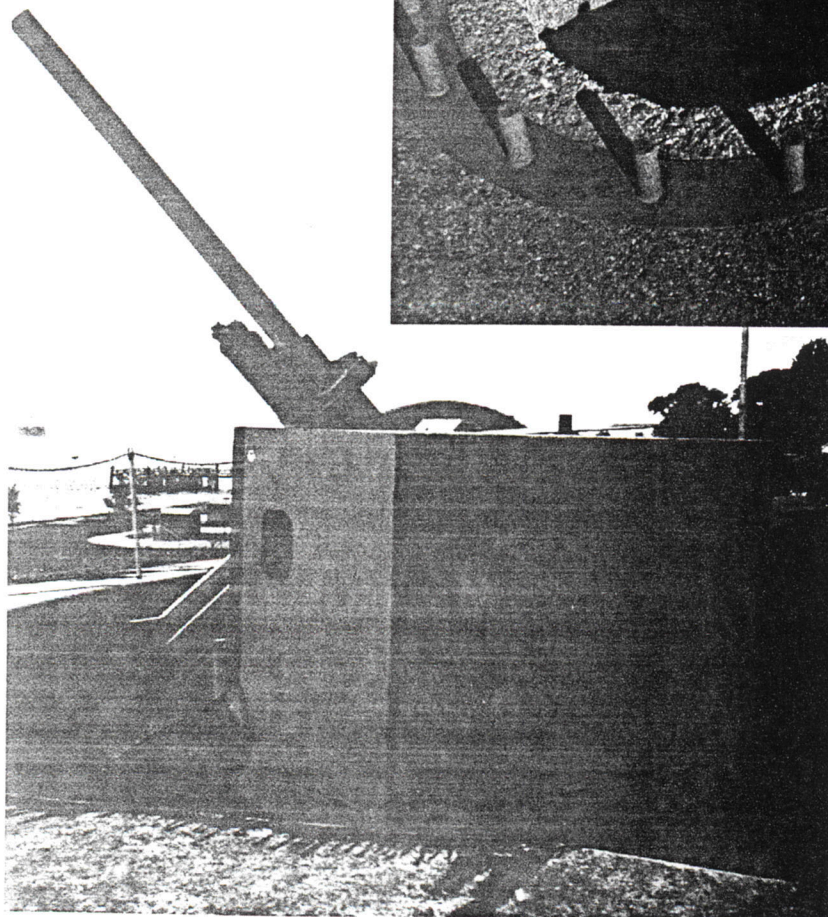
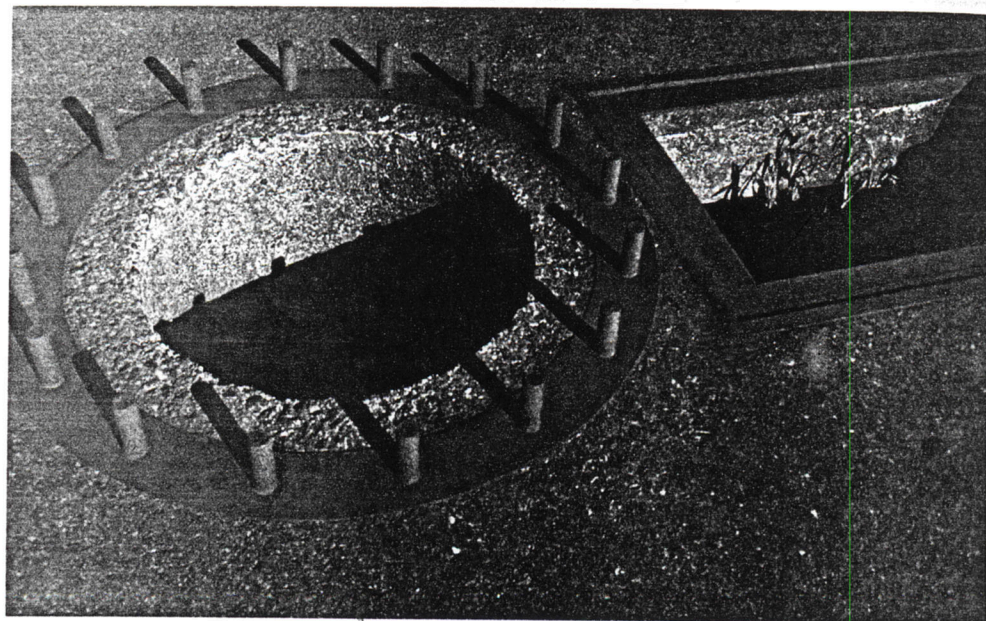
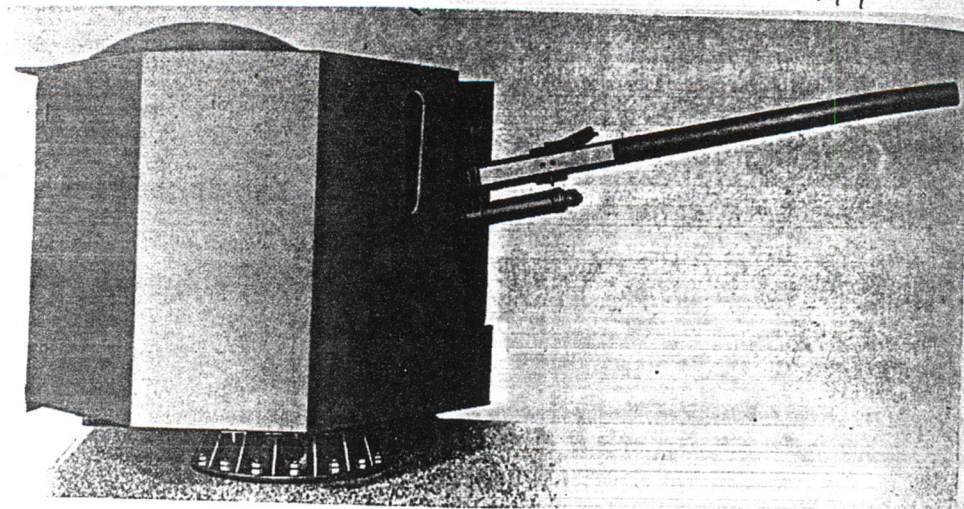
Notes: concrete block 14 feet in diameter, often with collar remaining, and a rectangular conduit hatch adjacent to bolt circle.

Complete AMTB battery consisted of two 90 mm guns on fixed mounts, two 90 mm gun on mobile (M1A1) mounts and two 37 mm or 40 mm guns on mobile mounts. Some AMTB batteries featured only mobile armament.

The mobile mounts M1, M2 and M1A1 are not shown in this guide.

M3 Fixed Mount for 90 mm Gun

Published by
CDS& Press
1999



Carriage weight: 4115 lbs
Maximum/minimum elevation:
+80 / -10 degrees
Turning radius: 360 degrees

gun: M1
Weight: 1,495 lbs
Length: 50 calibers

Top: From TM 4-210

Middle: AMTB Clatsop Spit, Fort Stevens,
HD Columbia River, 1992. (MAB)

Bottom: In Battery Parrot, at Fort Monroe,
1990. (TM)



AUGUST, 1943

EX. NO. 8-9-9A

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600,914 (New York) CH 71995
 REPORT OF COMPLETED WORKS - SEACOAST FORTIFICATIONS
 (Batteries)

HARBOR DEFENSES OF NEW YORK
 PORT SWINBURNE ISLAND, NEW YORK (74th) (74th)
 BATTERY No. of Guns 2
 Caliber 90 MM Carriage

Part I Corrected to 8 December 1943

GENERAL:

Battery commenced 20 April 1943
 Battery completed 3 July 1943
 Date of transfer 24 November 1943
 Cost to date of transfer \$18,284.68
 Materials of construction Concrete Platform
 Timber Sheet Piling
 Battery new or modernized New
 (If modernized give detailed statement
 on reverse side)
 Trunnion elevation in btry. El. 19.87 M.L.W.
 Datum plane Mean Low Water

UTILITIES:

WATER SUPPLY

Source of None
 Alternate source --
 Size of Main --

SEWER

Connected to sewer No.
 Type of Disposal 3" drain to gravel pit
 Type of Latrine None

UTILITIES (Cont'd.)

ELECTRIC POWER

Sources of Engine Generator
 Procured & installed by (OCE or ORD) Cra.
 Characteristics: Voltage 125 Ac or DC Phase 3
 No. of units and capacity 1 - 25 KVA
 Max. K.W. required for utilities None
 Max. K.W. required for non-battle conditions None
 Commercial power provided (yes or no) No Capacity
 Auxiliary power unit provided (yes or no) No Capacity
 Type of lighting fixtures None
 Dehumidifying Unit.. Make and capacity None
 Rooms Wet or Dry --
 How ventilated Exposed
 How heated None
DATA TRANSMISSION
 Type Telephone

REMARKS

Gun platforms exposed

APPENDIX

SECRET

Emplacement No.	Cal.	Length	Model	Guns		Mounted	Carriages			
				Serial No.	Manufacturer		Type	Model	Serial No.	Manufacturer
1	90M	186.15"	M1	6975	Chev. Motors		Fixed	T3	4250	Chev. Motors
2	90M	186.15"	M1	15028	" "		Fixed	T3	6843	" "
3										

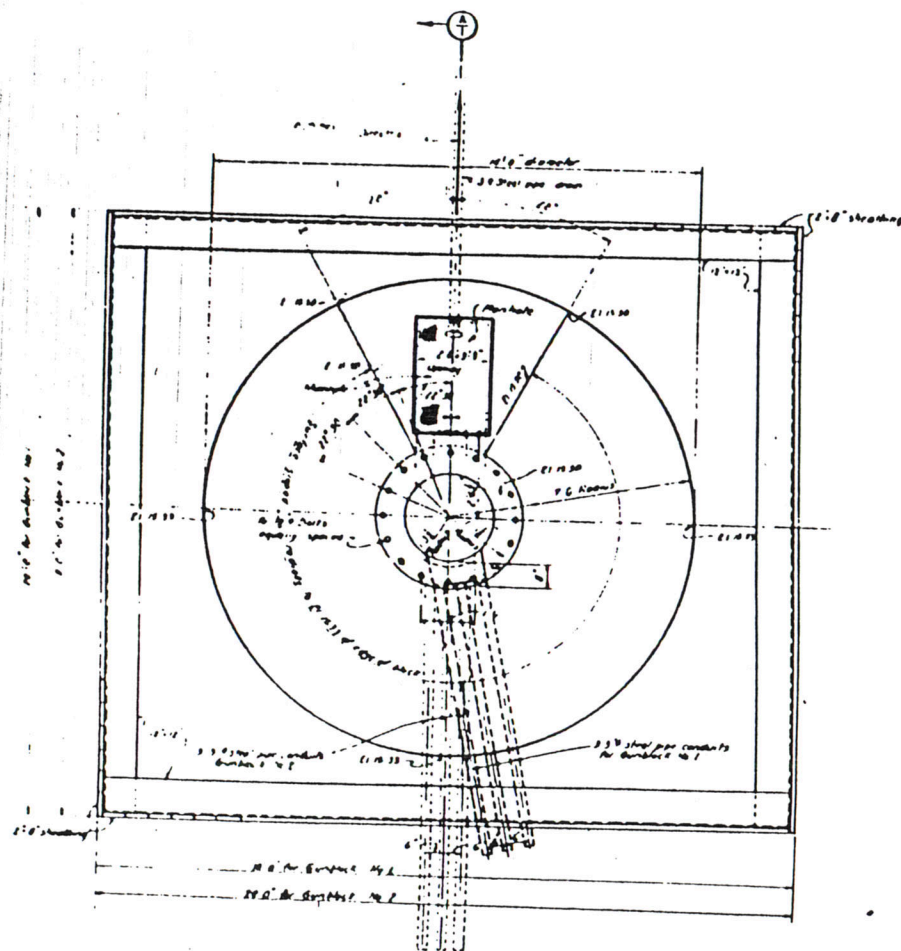
SPECM-1

6-11

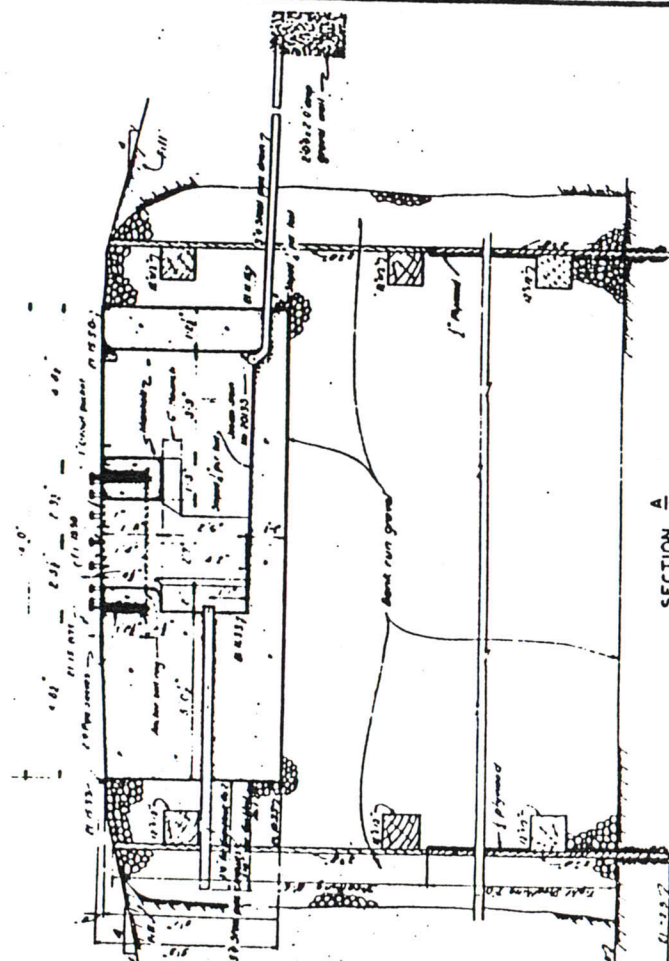
B-36)

WAR DEPARTMENT

CORPS OF ENGINEERS, U.S. ARMY



PLAN OF CONCRETE PLATFORM
2 PLATFORMS INSTALLED AS SHOWN
SCALE IN FEET



SECTION A-A
SCALE 1"=1'-0"

SECRET

NOTE

Elevations refer to Mean Low Water Datum

HARBOR DEFENSES OF NEW YORK

90MM GUN EMPLACEMENT

SWINBURNE ISLAND

NEW YORK

B-3(b.)

TAB C (PHOTOS--HOFFMAN and SWINBURNE ISLANDS)

Print #1--mine observation station, Hoffman Island
Print #2--90mm gun blocks, Swinburne Island
Print #3--90mm gun block #1, Swinburne Island
Print #4--90mm gun block #2, Swinburne Island

Slide #1--mine observation station, Hoffman Island
Slide #2--90mm gun blocks, Swinburne Island
Slide #3--90mm gun block #1, Swinburne Island
Slide #4--90mm gun block #2, Swinburne Island

Photos taken 28 August 2003 by Alex Holder

