

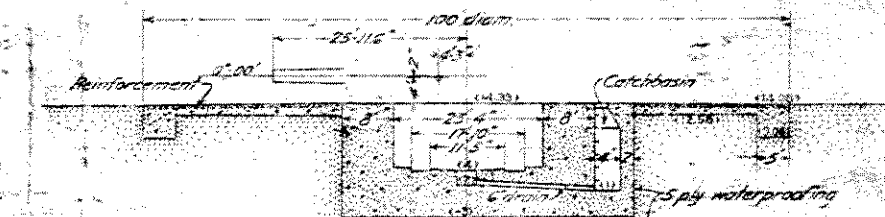
Keys on Battery Kingman.
Fort Hancock, N.J.
on Feb 7, 1917

Room	Key No.	Type
South Plotting Room	1302	Single lock
North	1303	
C. of H. Entrance Room	2A24602B	Double lock
N. Entrance	2A24602B	
N. S. "	2A24602B	
N. Main Indicator Room	2A24602B	
L. Latrine	2A24602B	
Toilet	2A24602B	
Store room	2A24602B	
Implement Room	2A24602B	
N. Quarters	19	
S. Quarters	N. 6	
Power Room	6H40	Single lock
Radiator	6H59	
#1 Gun Shelter	N133	Single lock
#2 "	N198	
Gasoline tank	230	Double lock
Total: 20 Locks.		
1513 different keys.		
57 types of Locks.		

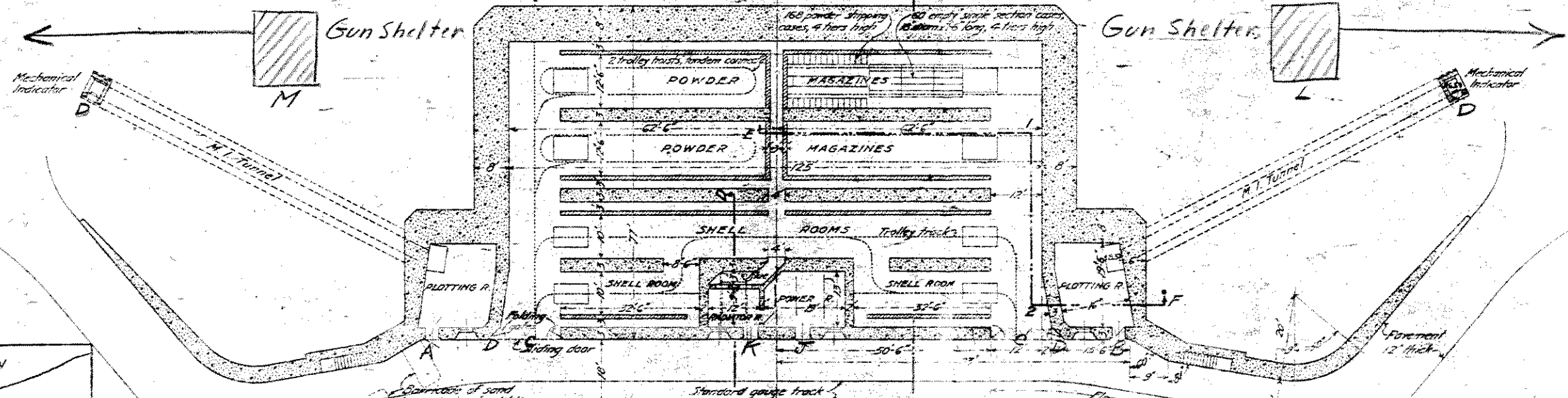
J.W.C.
174 CE

KINGMAN.

PLAN

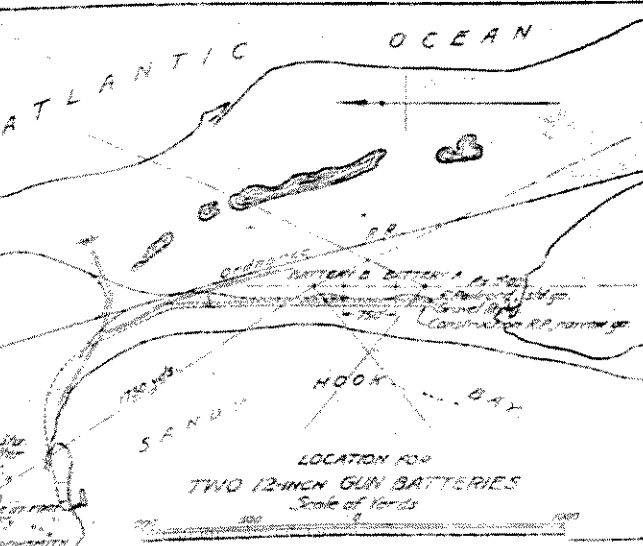


SECTION G-H
Office Chief of Engineers,
U.S. Army.
February 7, 1917.
Submitted to the Secretary of War;
approval recommended.
Th. W. Black
Chief of Engineers.



War Department, Feb. 7, 1917
Approval recommended.
W. H. S. ...
Chief of Coast Artillery.

War Department, Feb. 15, 1917
Approved.
By order of the Secretary of War:
J. G. ...
Maj. Gen. Chief of Staff.



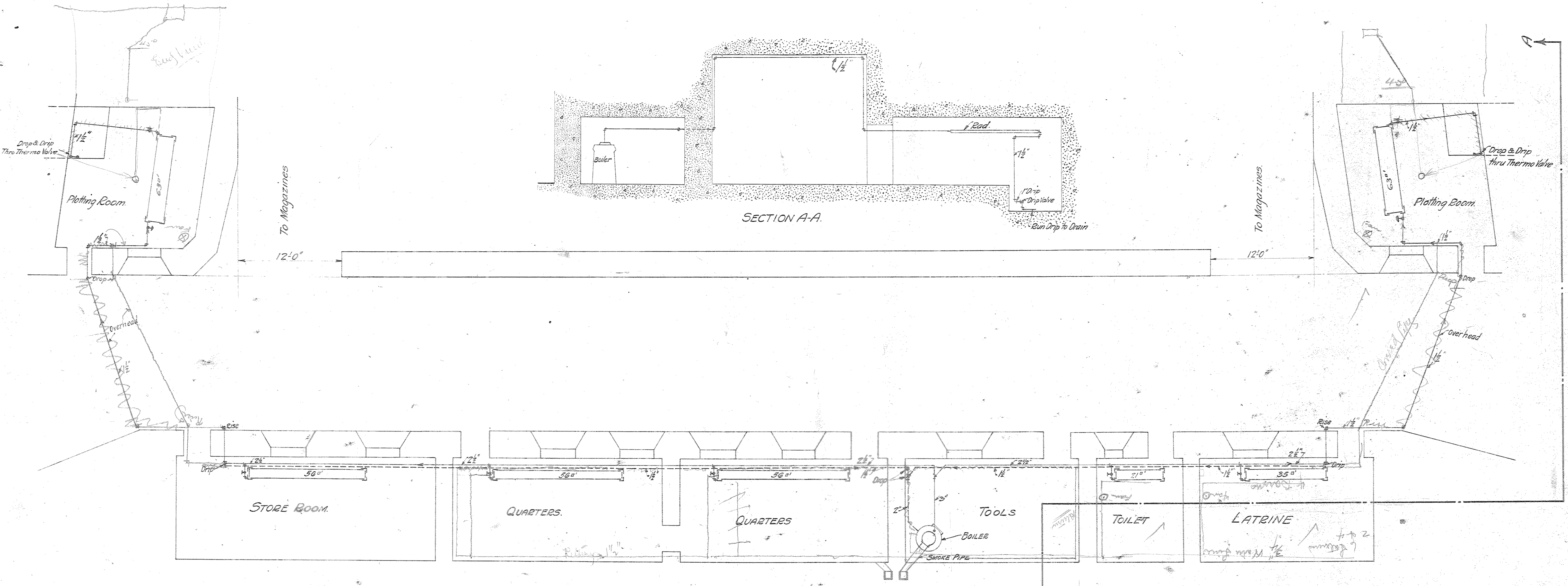
SECTIONAL PLAN

ELEVATION

SECTION E-I 2-F

Dimensions and etc. refer to plans of **PLAN**
FORT HANCOCK, N.J.
BATTERIES A AND B
FOR
TWO 12 IN. GUNS ON BARBETTE CARRIAGES, MODEL 1917
GENERAL DESIGN
ONE SHEET SCALE 1/8"=1'-0"
U.S. ENGINEER OFFICE, SECOND DISTRICT, NEW YORK CITY, FEB. 3, 1917
Submitted by: *R. C. ...* Captain, Corps of Engineers
Approved: *W. H. S. ...* Colonel, Corps of Engineers
Transmitted with letter
Drawn by: *A. G. L.* File No. *100-41-206* dated February 2, 1917

B-44A-2-1.



A-7-33

FORT HANCOCK, N.J.
HEATING PLANT FOR
BATTERIES KINGMAN & MILLS.

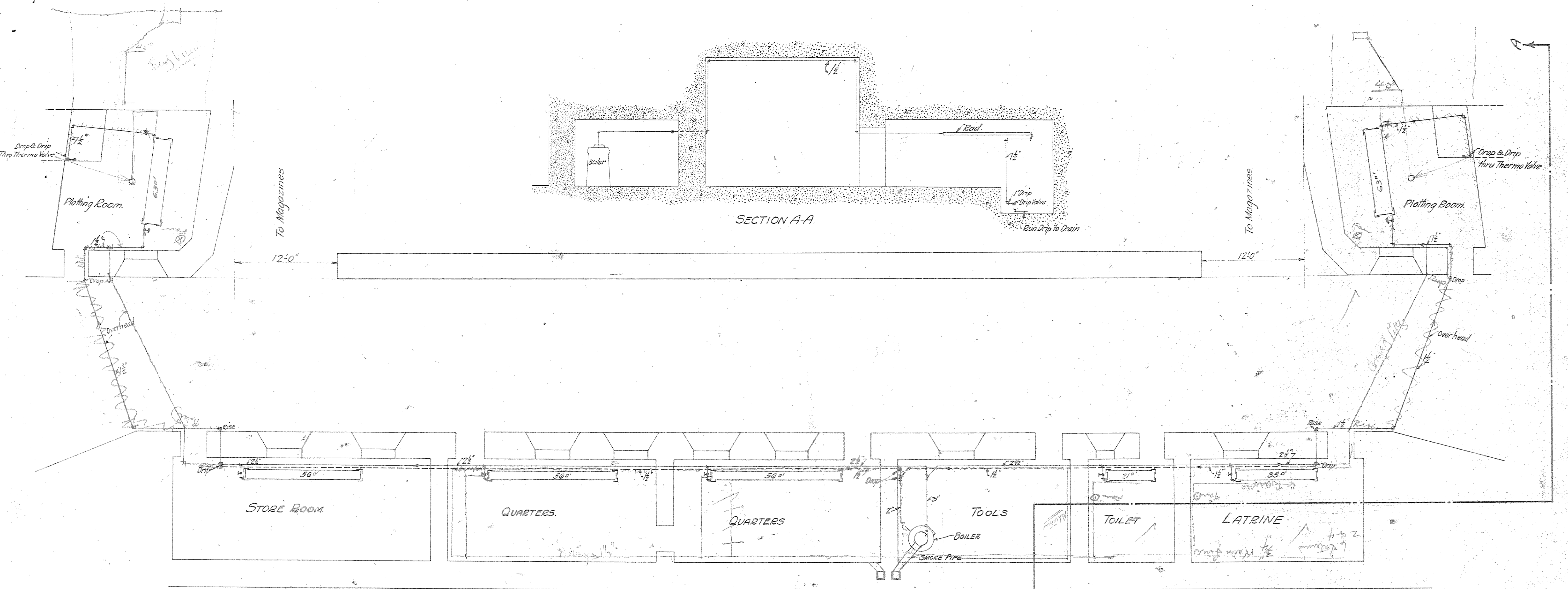
U.S. ENGINEER'S OFFICE, SECOND DISTRICT, NEW YORK, CITY. SEPT. 29, 1919.

SUBMITTED: ROBT. W. CRAWFORD, LT. COL. OF ENGINEERS. SCALE: 3/8" = 1'-0"
 APPROVED: *W. Chauffit*, COL. CORPS OF ENGRS, U.S.A.

DRAWN BY: M.S.
 TRACED BY: M.S.
 CHECKED BY: *[Signature]*

See 2016

B-44A-2-1.



A-7-33

FORT HANCOCK, N.J.
HEATING PLANT FOR
BATTERIES KINGMAN & MILLS.

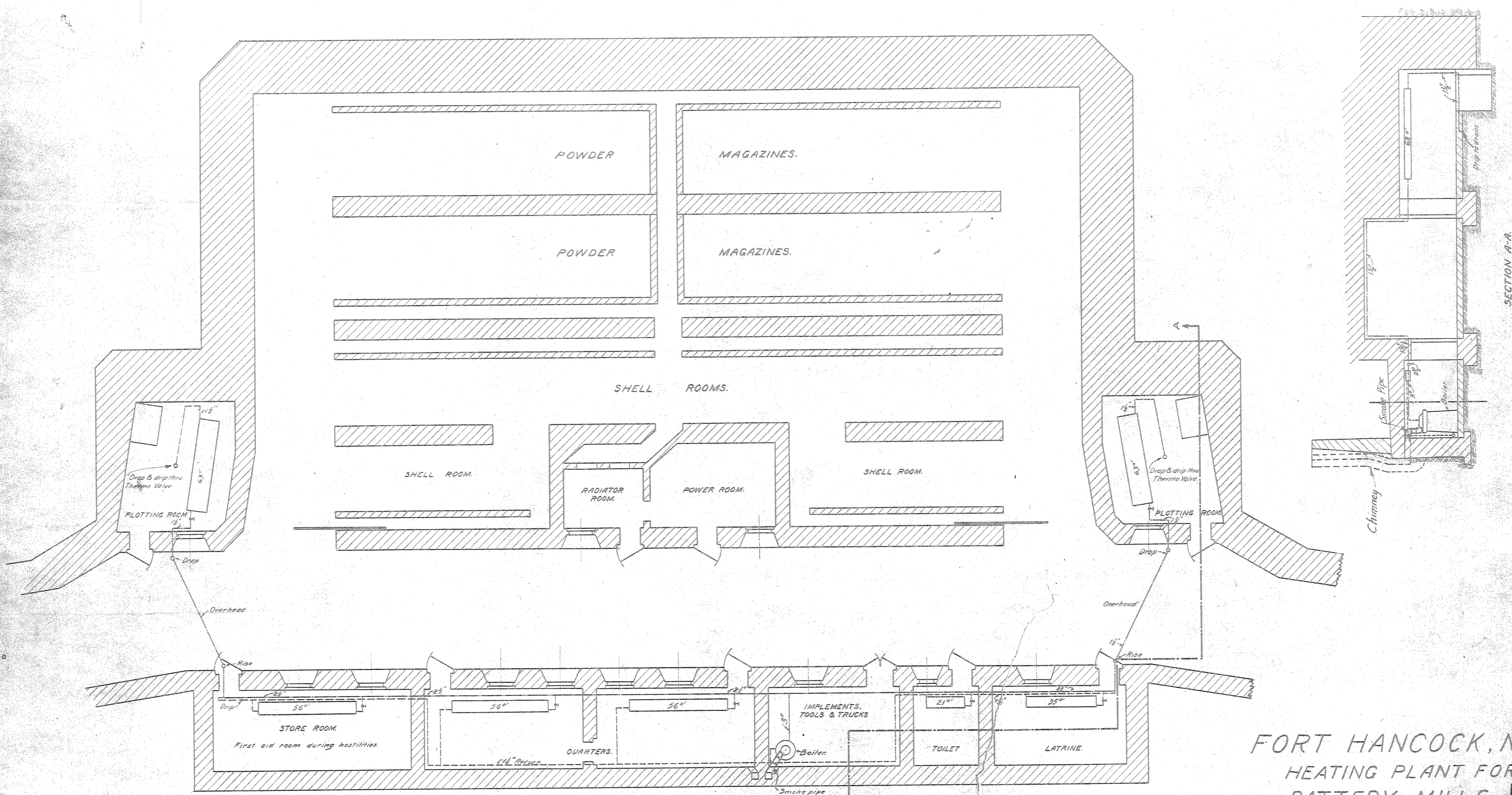
U.S. ENGINEERS' OFFICE, SECOND DISTRICT, NEW YORK, CITY. SEPT. 29, 1919.

SUBMITTED: _____ SCALE: $\frac{3}{16}'' = 1'-0''$
 ROBT. W. CRAWFORD,
 LT. COL. OF ENGINEERS.

APPROVED: *W. Chauffitt*
 COL. CORPS OF ENGRS. U.S.A.

DRAWN BY: M.S.
 TRACED BY: M.S.
 CHECKED BY: *W.C.*

John S.H.



SECTIONAL PLAN.

FORT HANCOCK, N.J.
 HEATING PLANT FOR
 BATTERY MILLS

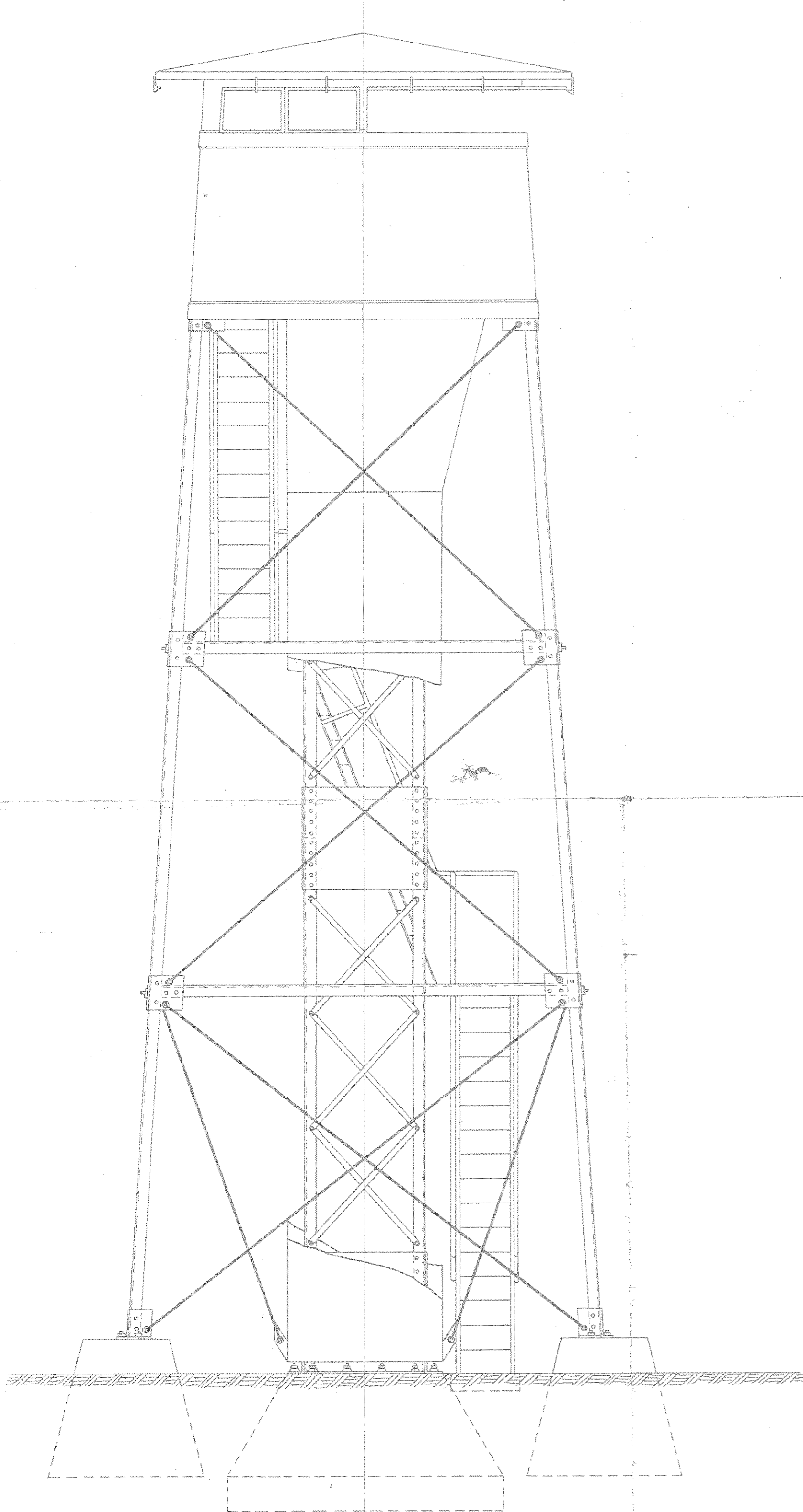
A-77
45

ONE SHEET. SCALE 1/8"=1'

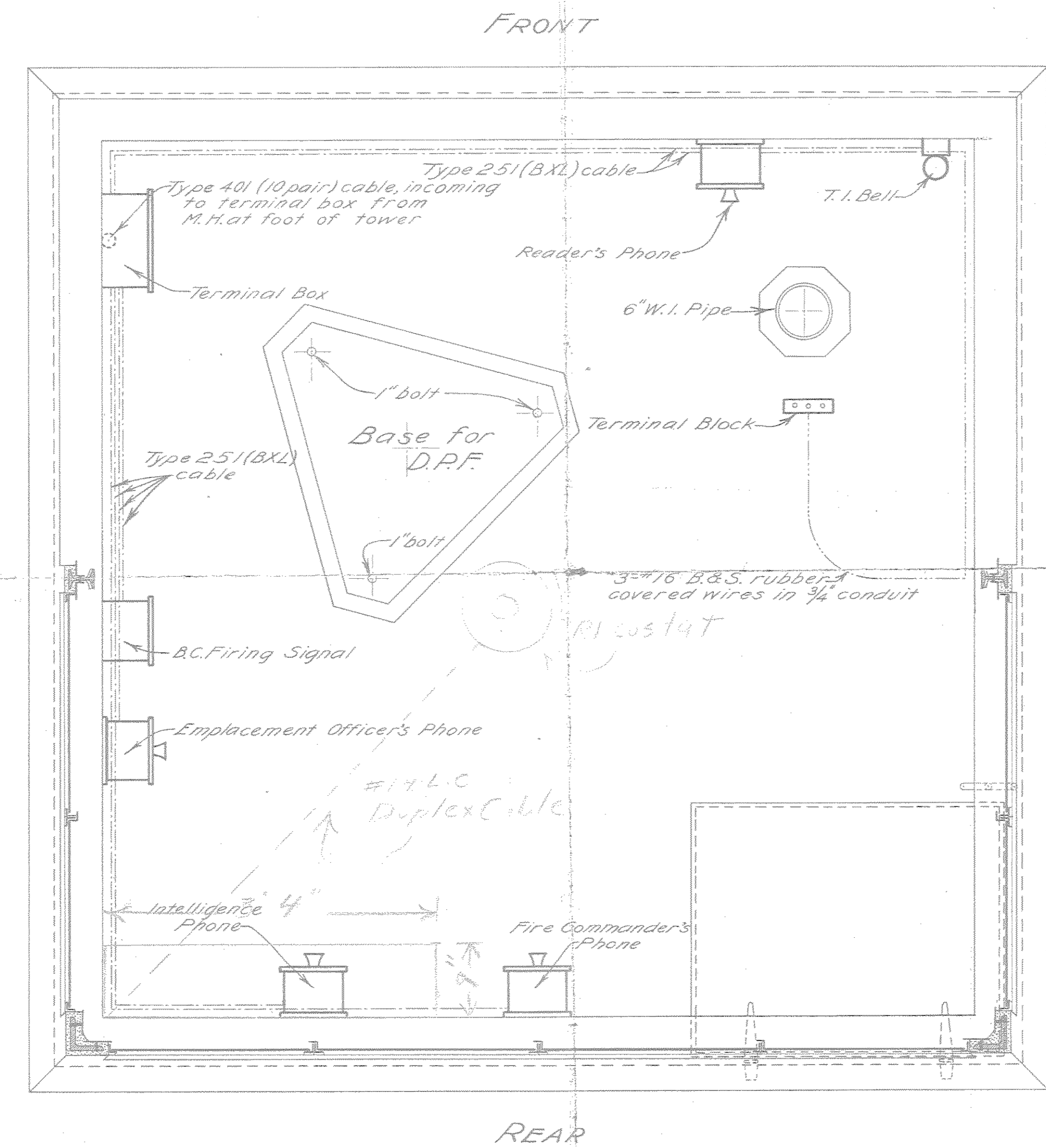
NOTE: Main Steam pipes, shown thus: ————
 Return Steam pipes, shown thus: - - - - -
 Valves, shown thus: ◯
 Main Steam pipes enter Radiators at South Ends;
 Return pipes enter Radiators at North Ends.

Approved by C. of E. under 2nd ind. dated
 July 21, 1921; file C. of E. 662 B (SH-Hancock) F35.

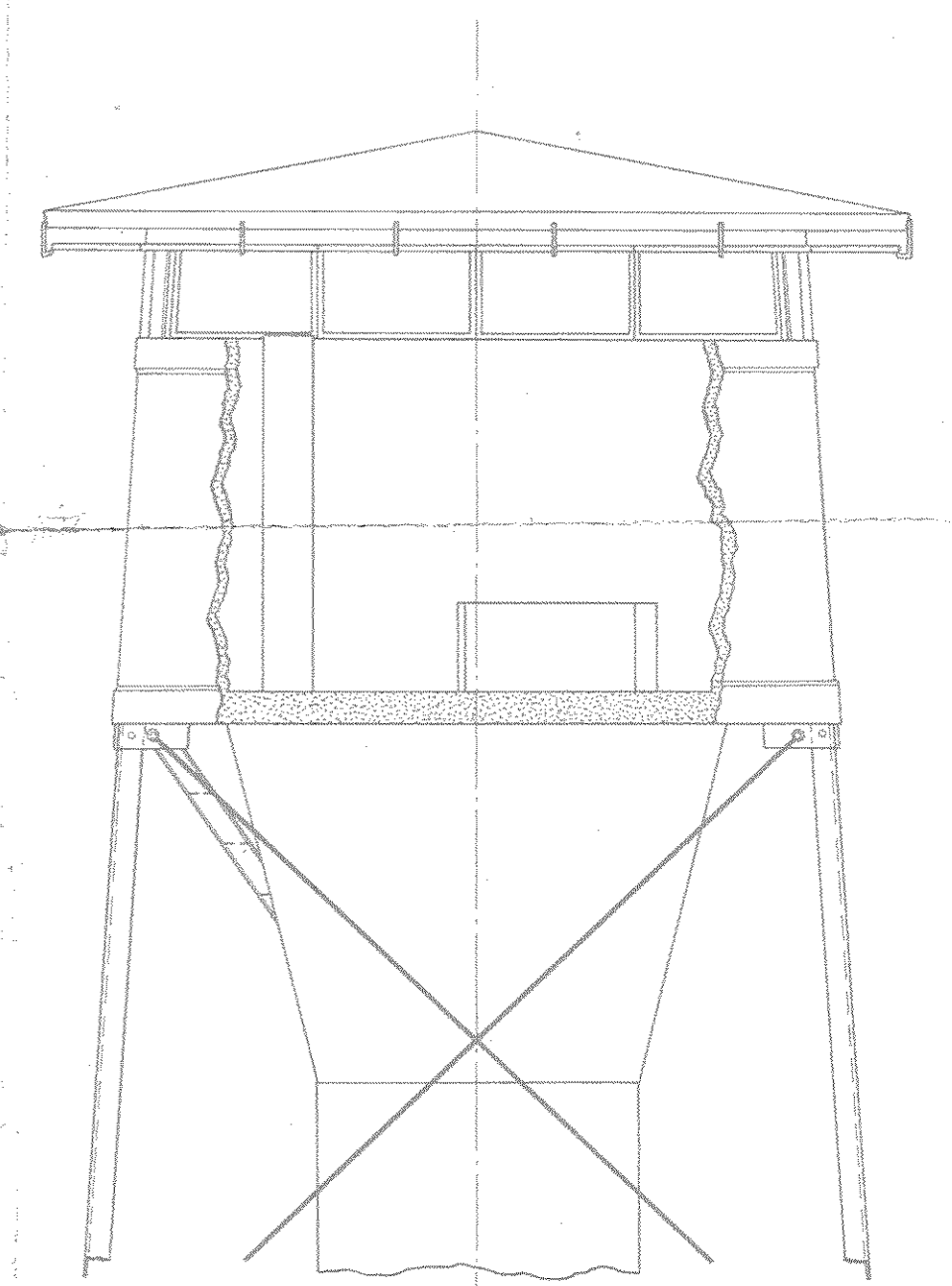
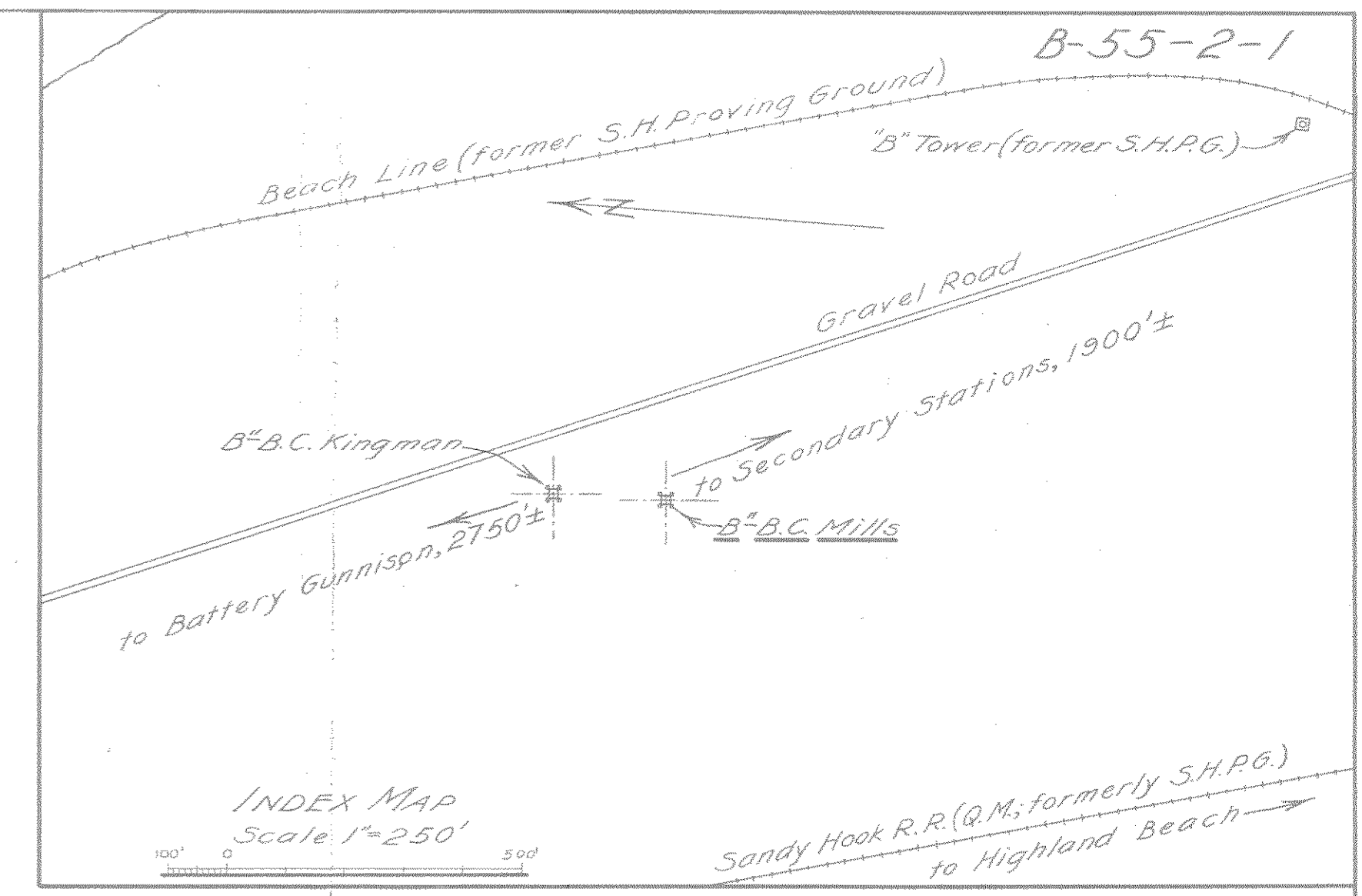
U.S. ENGINEER OFFICE, THIRD DISTRICT, NEW YORK CITY, JULY 11, 1921.
 SUBMITTED: *F. Williams* Junior Engineer
 APPROVAL RECOMMENDED: *E. J. ...* Colonel, Corps of Engineers, U.S.A.
 Drawn by *McK. ...* Assistant Engineer
 Traced by *McK.*
 Checked by *J. W.* File No. Han. A1/393.1
 Transmitted with letter dated July 16, 1921



SOUTH OR SIDE ELEVATION
Scale $\frac{3}{8}'' = 1'-0''$



SECTIONAL PLAN
At ELEVATION OF D.P.F. AXIS
All Front Windows Shown Open
Scale $1'' = 1'-0''$



EAST OR FRONT ELEVATION
Showing Part of Front Wall Removed
Scale $\frac{3}{8}'' = 1'-0''$

FORT HANCOCK, N. J.
COMBINED B' — B.C. STATION
BATTERY MILLS

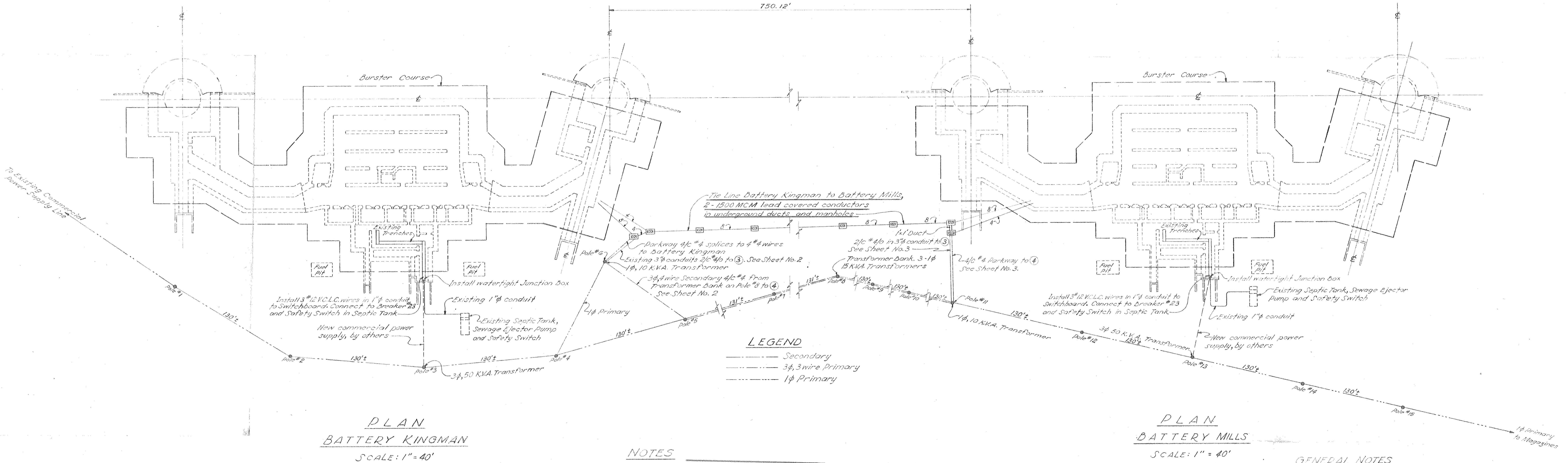
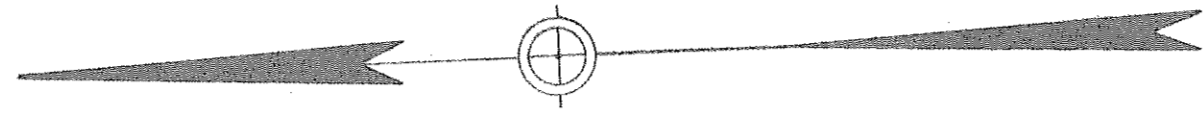
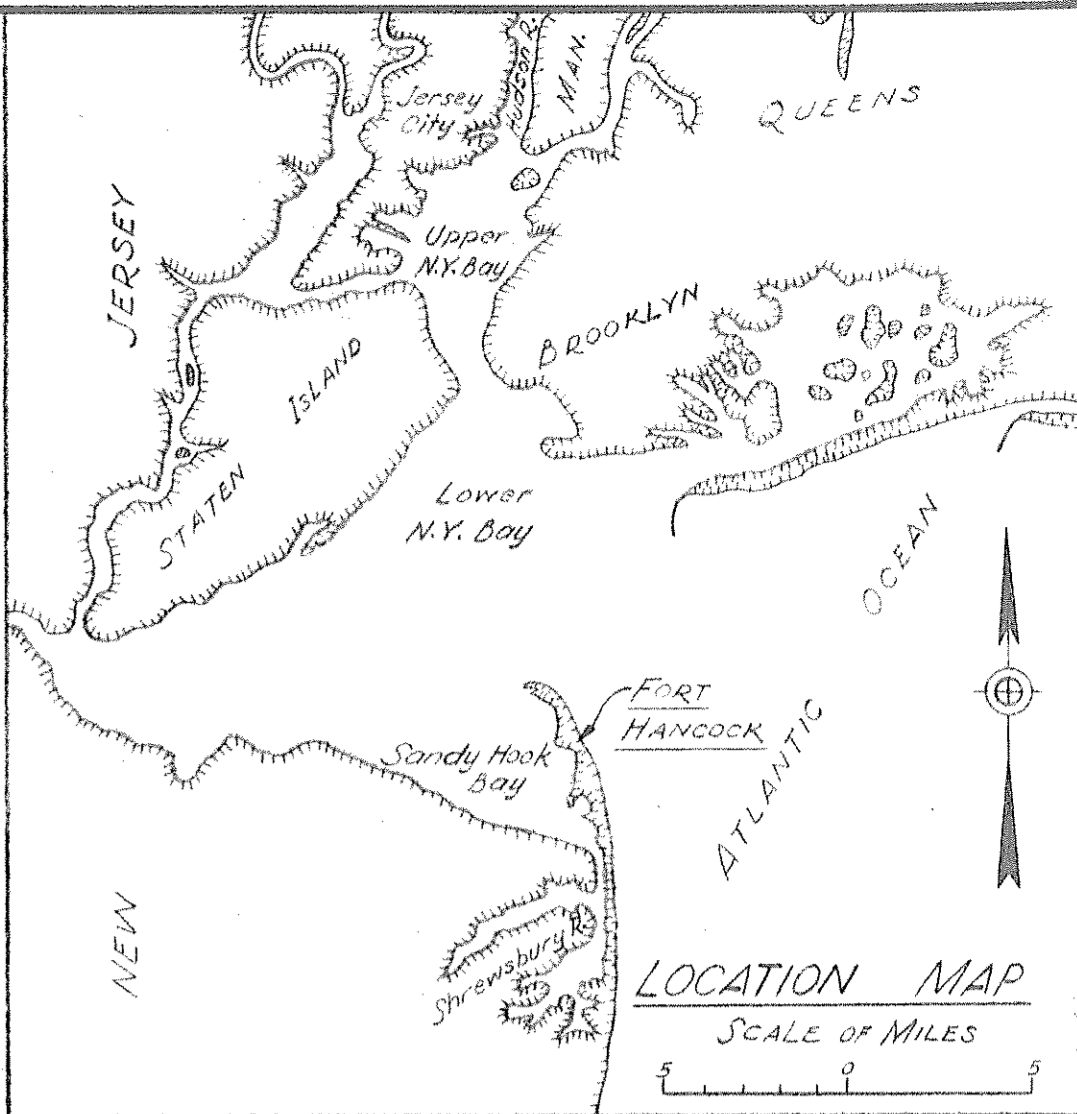
IN ONE SHEET SCALES AS INDICATED

United States Engineer Office, Third District, New York City, Feb. 28, 1922.

Submitted *H. W. H. H.* Approved *E. J. L. U. S. A.*
Assistant Engineer Colonel, Corps of Engineers.

Drawn by *L. S.*
Traced by *L. S.*
Checked by *H. W. H. H.*
File No. *B-55-2-1* Transmitted with Letter dated Feb. 28, 1922.

Battery Mills
 Blue Print
 Feb. 25, 1922



PLAN
BATTERY KINGMAN

SCALE: 1" = 40'



PLAN
BATTERY MILLS

SCALE: 1" = 40'

LEGEND

- Secondary
- 3φ, 3 wire Primary
- 1φ Primary

NOTES

- Disconnect the 2φ, 1500 MCM tie line between the double pole, double throw, switches in Batteries Kingman and Mills. Remove the conductors and store as directed by the Contracting Officer.
- Remove the 4#4 wires between Pole #6 and the transformer bank on Pole #8.
- Remove the Primary line between Pole #2 and Pole #6.
- Remove the transformer on Pole #6.
- Remove the cable between the transformer on Pole #6 and the double pole, double throw switch in Battery Kingman.
- Remove Pole #6 and conduit to manhole.
- Install wiring for sewer ejector motors for Batteries Kingman & Mills.
- Remove the 4#4 wires between Pole #8 and Pole #11.
- Remove the transformer bank and all wires not in use on Pole #8 and store as directed by the Contracting Officer.
- Remove transformer and all wires not in use from Pole #11.
- Remove the 2φ #4/6 cable between transformer on Pole #11 and the double pole, double throw switch in the D.C. Power Room, Battery Mills.

GENERAL NOTES

- All work shall be so arranged that power for light and water is available at all times.
- Where conduits are removed from manholes, the remaining holes shall be plugged water-tight.
- Spare conduit and cable taps in panel boxes shall be plugged.
- Cables shall be racked as required in all manholes.
- Maximum spacing of cable hangers shall not exceed 24".
- Caulk all cables passing thru headwalls.

ADVANCE COPY

INDEX TO DRAWINGS

SHEET NO.	TITLE	FILE NO.
1	GENERAL PLAN AND INDEX	FNY-2984
2	PLAN AND DETAILS NO. 1	FNY-2985
3	PLAN AND DETAILS NO. 2	FNY-2986

CONFIDENTIAL

THIS DOCUMENT CONTAINS INFORMATION AFFECTING THE NATIONAL DEFENSE OF THE UNITED STATES WITHIN THE MEANING OF THE ESPIONAGE ACT, U.S.C. 50: 31 AND 32. ITS TRANSMISSION OR REVELATION TO AN UNAUTHORIZED PERSON IS PROHIBITED BY LAW.

CONFIDENTIAL

HARBOR DEFENSES OF NEW YORK
BATTERIES KINGMAN AND MILLS
ALTERATIONS TO ELECTRICAL SYSTEM
GENERAL PLAN AND INDEX

FORT HANCOCK NEW JERSEY
IN 3 SHEETS SHEET NO. 1

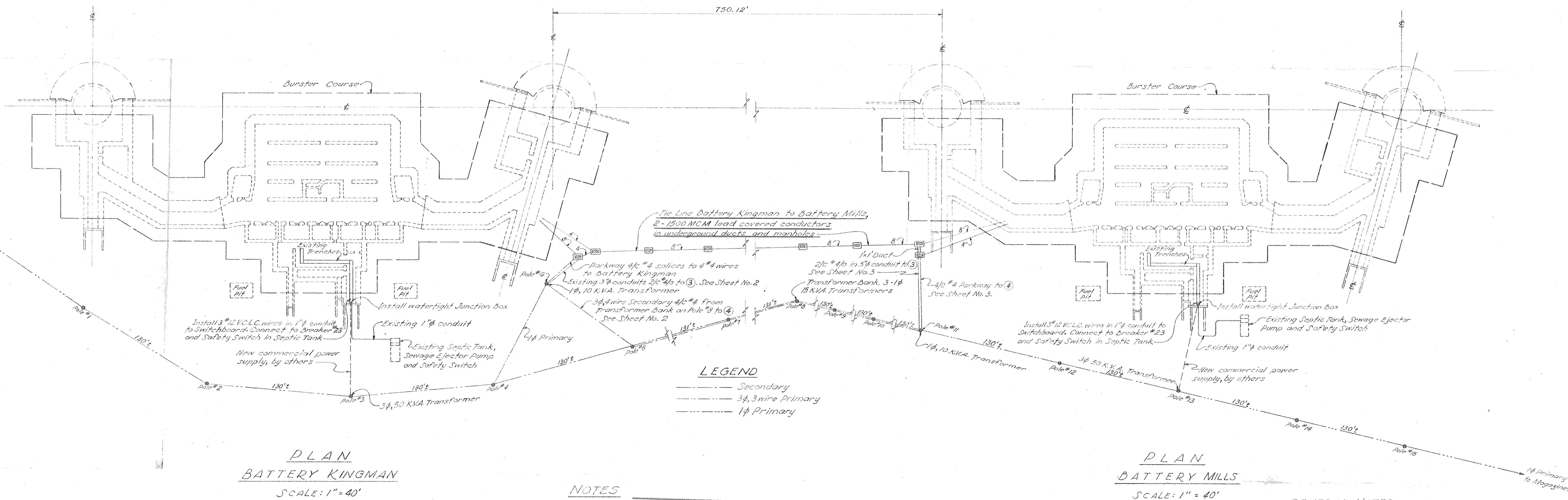
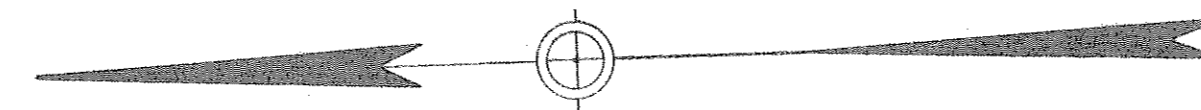
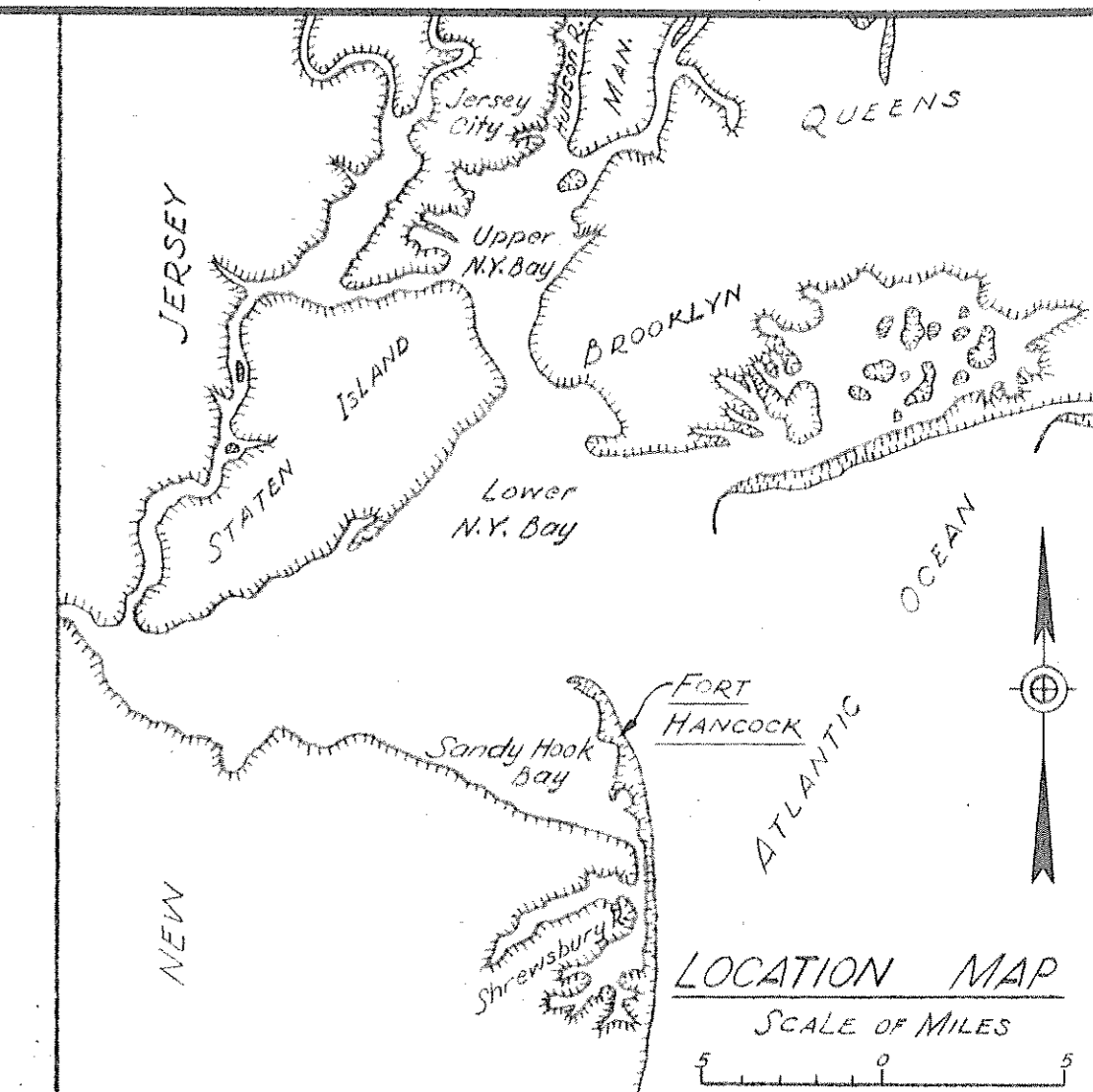
SCALE AS SHOWN

U.S. ENGINEER OFFICE, NEW YORK DISTRICT, NEW YORK, N.Y. JUNE 1943.

Submitted: Recommended: Approved:

Senior Engineer. Lt. Col., Corps of Engineers. Colonel, Corps of Engineers.

DATE	REV. NO.	REVISION	REV. BY	APP. BY



PLAN
BATTERY KINGMAN
SCALE: 1" = 40'

PLAN
BATTERY MILLS
SCALE: 1" = 40'

LEGEND
 - - - - - Secondary
 ———— 3# 3-wire Primary
 - - - - - 1# Primary

NOTES
 Disconnect the 2/c, 1500 MCM tie line between the double pole, double throw switches in Batteries Kingman and Mills. Remove the conductors and store as directed by the Contracting Officer.
 Remove the 4 #4 wires between Pole #6 and the transformer bank on Pole #3.
 Remove the Primary line between Pole #4 and Pole #6.
 Remove the transformer on Pole #6.
 Remove the cable between the transformer on Pole #6 and the double pole, double throw switch in Battery Kingman.
 Remove Pole #6 and conduit to manhole.
 Install wiring for sewer ejector motors for Batteries Kingman & Mills.
 Remove the 2 #4 wires between Pole #8 and Pole #11.
 Remove the transformer bank and all wires not in use on Pole #8 and store as directed by the Contracting Officer.
 Remove transformer and all wires not in use from Pole #11.
 Remove the 2/c #4/c cable between transformer on Pole #11 and the double pole, double throw switch in the D.C. Power Room, Battery Mills.

GENERAL NOTES
 All work shall be so arranged that power for light and meters is available at all times.
 Where conduits are removed from manholes, the remaining holes shall be plugged water-tight.
 Spare conduit and cable taps in panel boxes shall be plugged.
 Cables shall be racked as required in all manholes.
 Maximum spacing of cable hangers shall not exceed 2'-6".
 Caulk all cables passing thru headwalls.

ADVANCE COPY

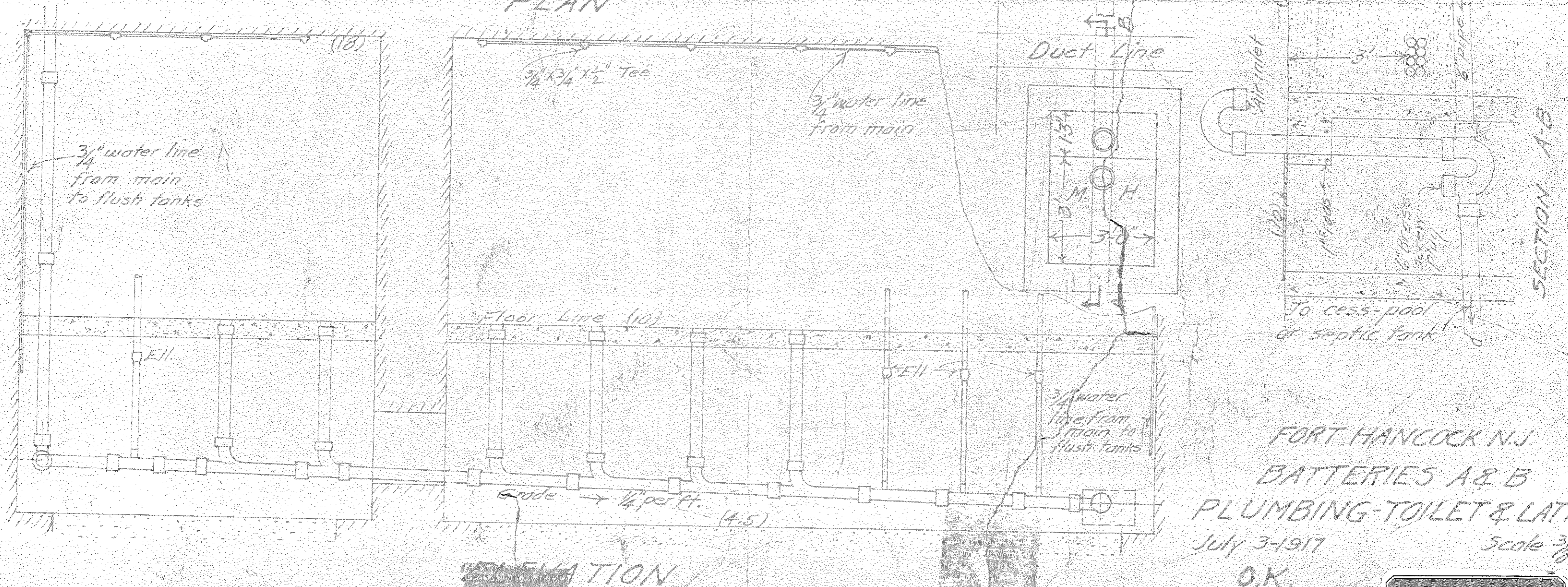
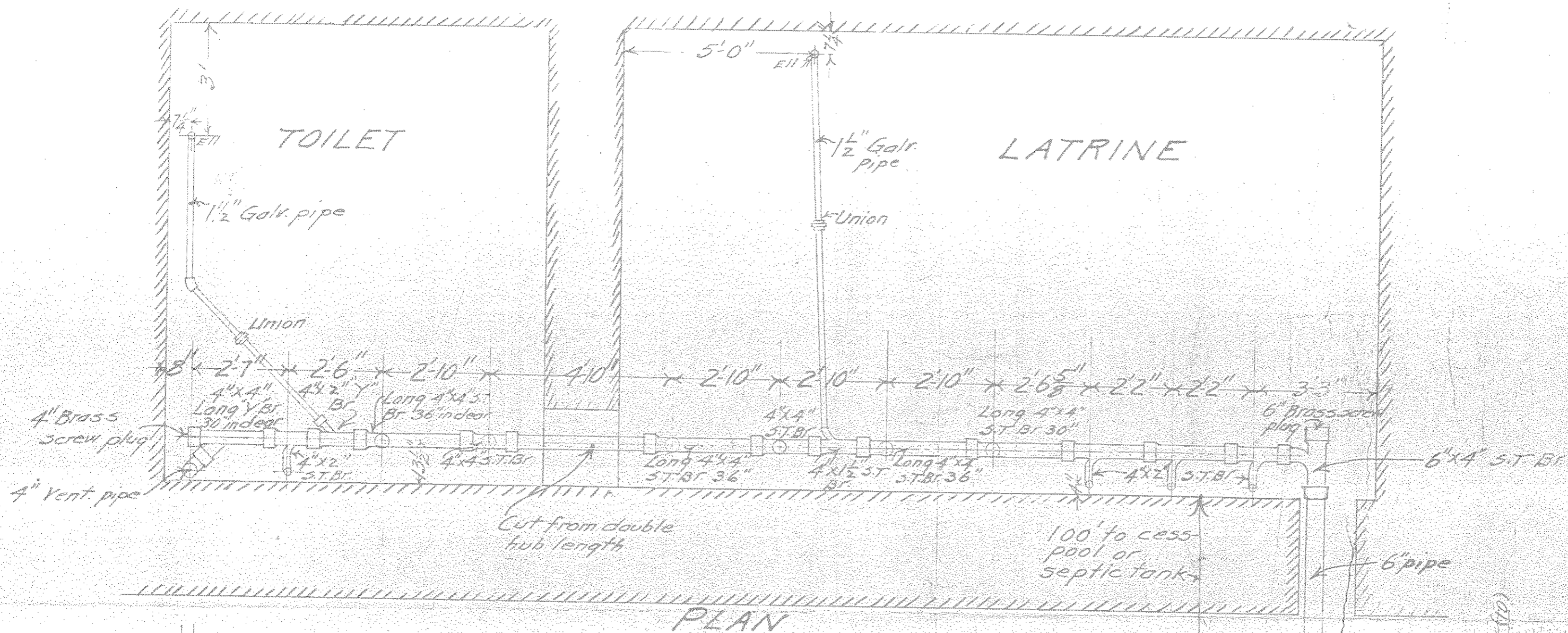
INDEX TO DRAWINGS

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CONFIDENTIAL
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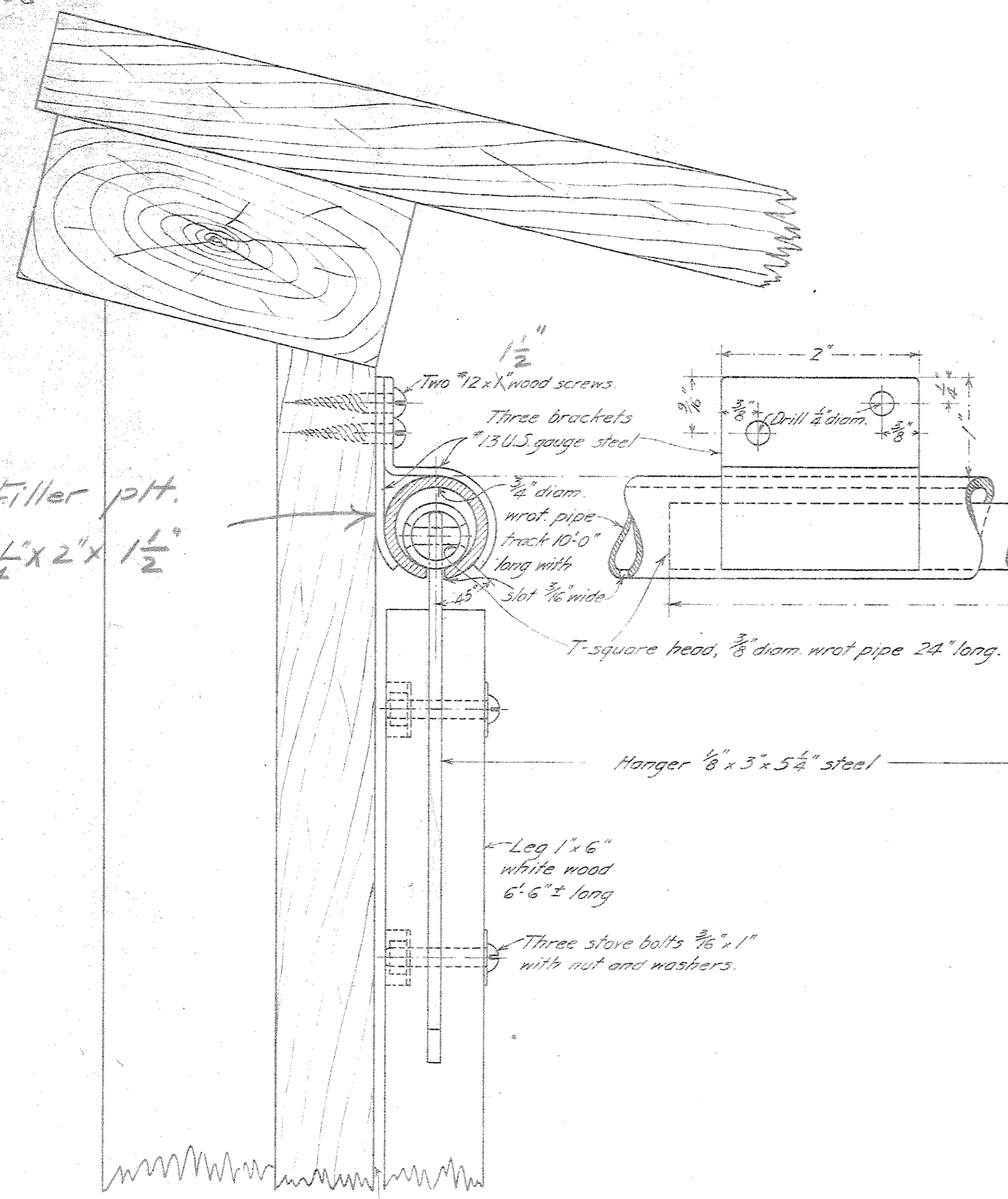
CONFIDENTIAL
 HARBOR DEFENSES OF NEW YORK
BATTERIES KINGMAN AND MILLS
 ALTERATIONS TO ELECTRICAL SYSTEM
 GENERAL PLAN AND INDEX
 FORT HANCOCK NEW JERSEY
 IN 3 SHEETS SHEET NO. 1
 SCALE AS SHOWN
 U.S. ENGINEER OFFICE, NEW YORK DISTRICT, NEW YORK, N.Y. JUNE 1943.
 Submitted: Recommended: Approved:
 Senior Engineer. Lt. Col., Corps of Engineers. Colonel, Corps of Engineers.

DATE	REV. NO.	REVISION	REV. BY	APP. BY

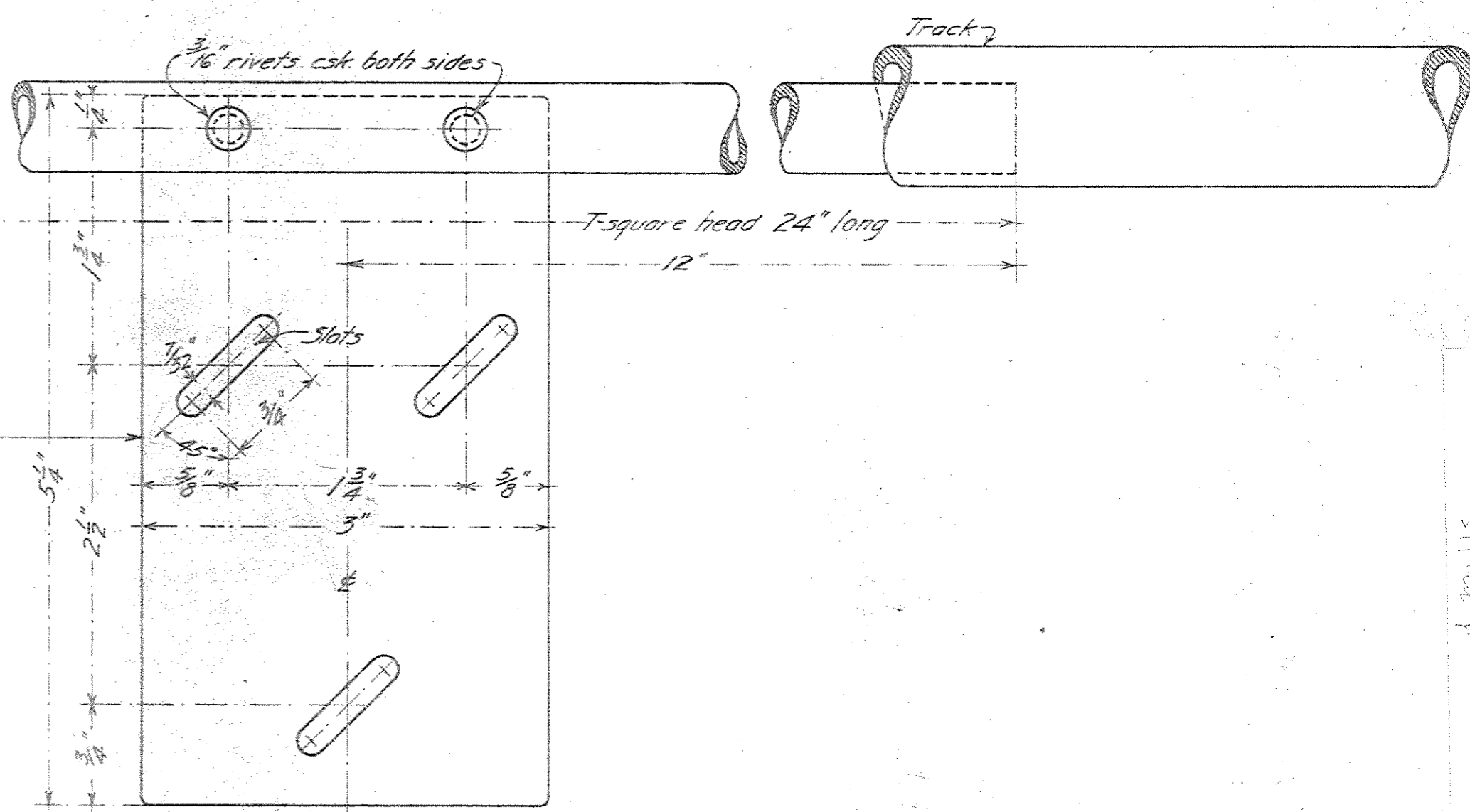


FORT HANCOCK N.J.
 BATTERIES A & B
 PLUMBING-TOILET & LATRINE
 July 3-1917
 Scale 3/8"-1"
 O.K.
 Jett

Filler pth.
 $\frac{1}{4} \times 2 \times \frac{1}{2}$



Face of Time-Range board.
END VIEW
 SHOWING ASSEMBLY.



FRONT VIEW
 T-SQUARE LEG NOT SHOWN.

Note: Install a metal rod on T-square leg with slide and pointer, also friction clips near lower end, as described in Artillery Bulletin No. 85 (Serial No. 114), December 17, 1913.

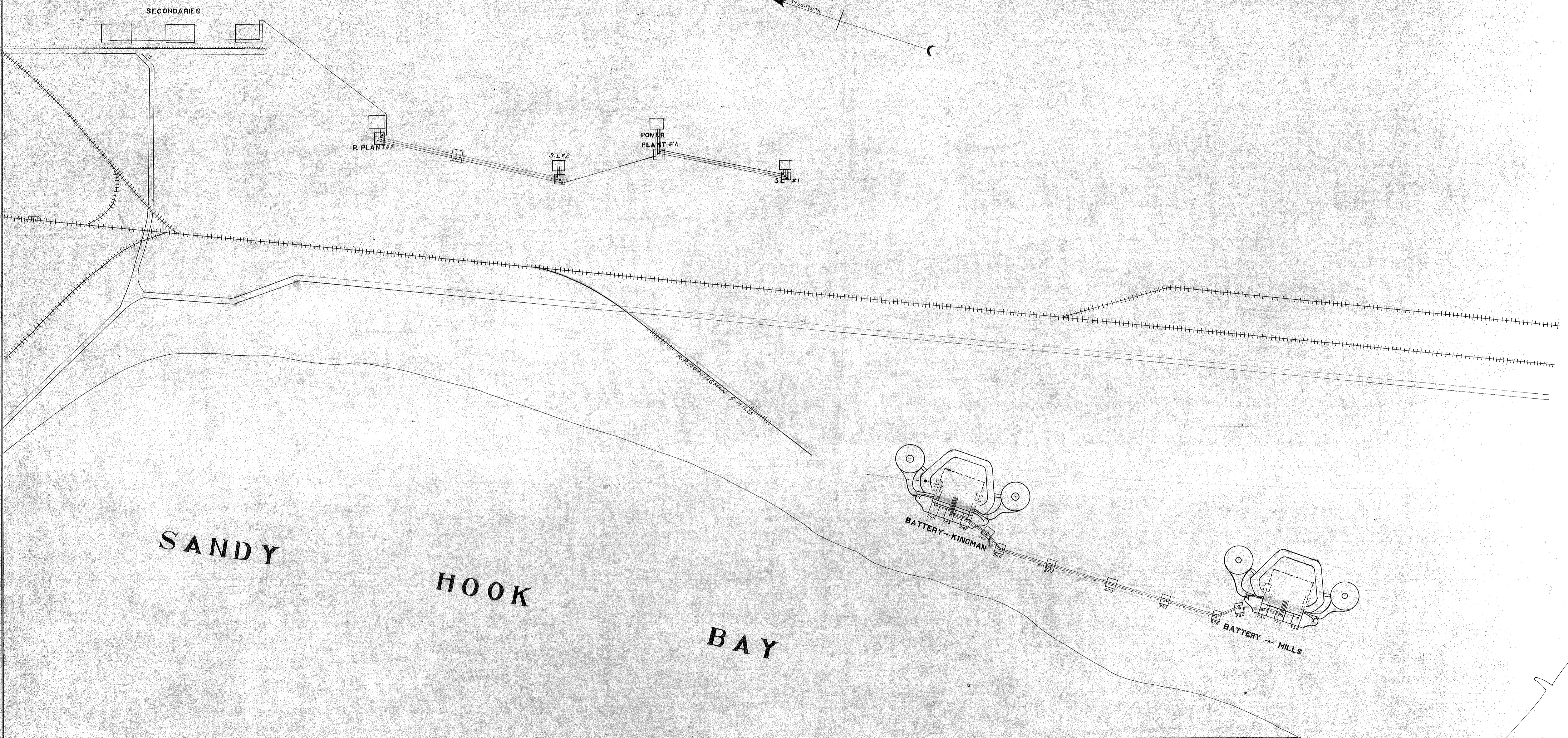
MILLS & KINGMAN
 FT HANCOCK 11/30/17

T-SQUARE FOR TIME-RANGE BOARD
 Scale Full Size.

A-77-32

U.S. Engineer Office,
 New York District No. 2,
 New York, N.Y., April 1, 1914.
 Submitted to the Chief of Engineers, with
 letter of this date, approval recommended.

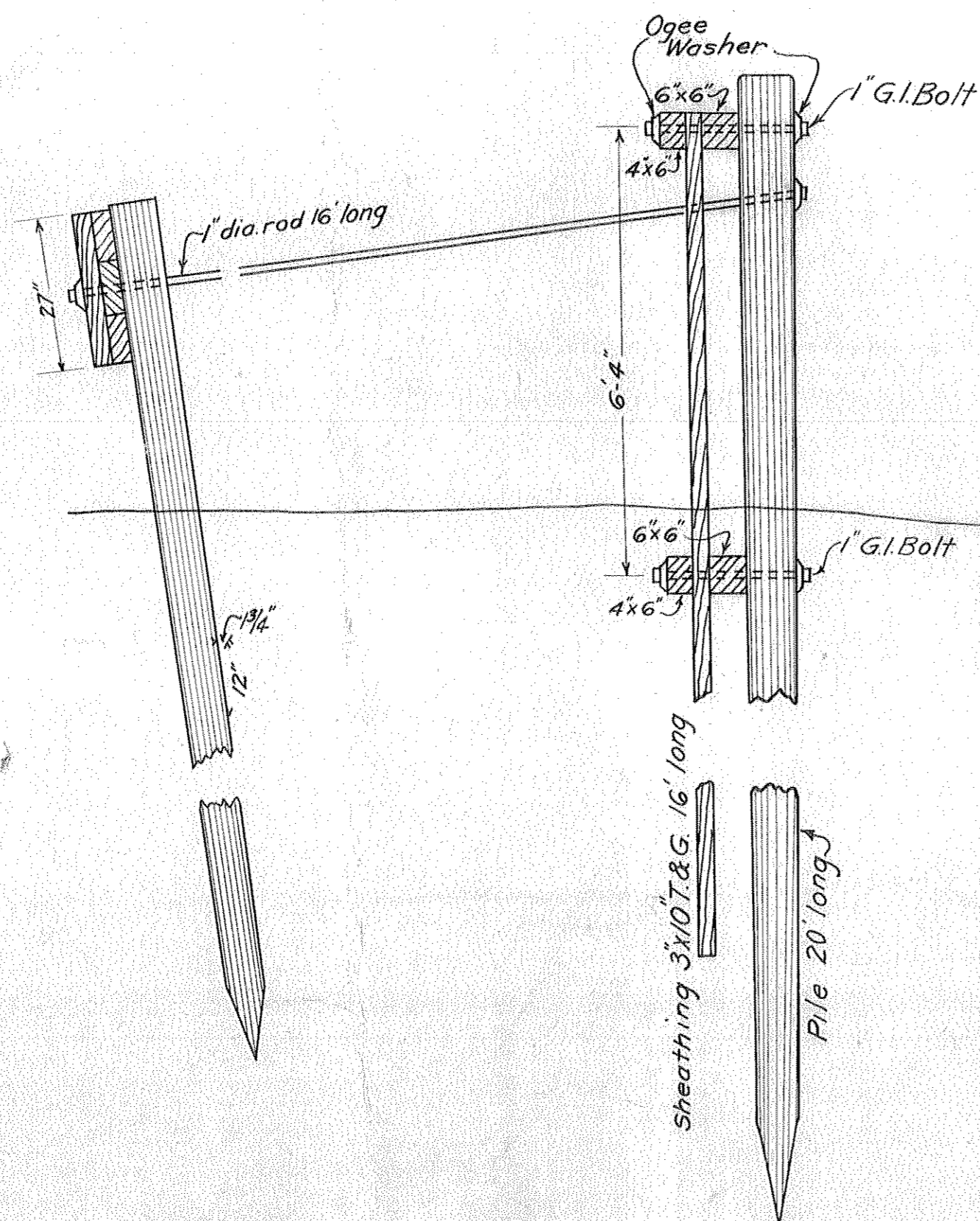
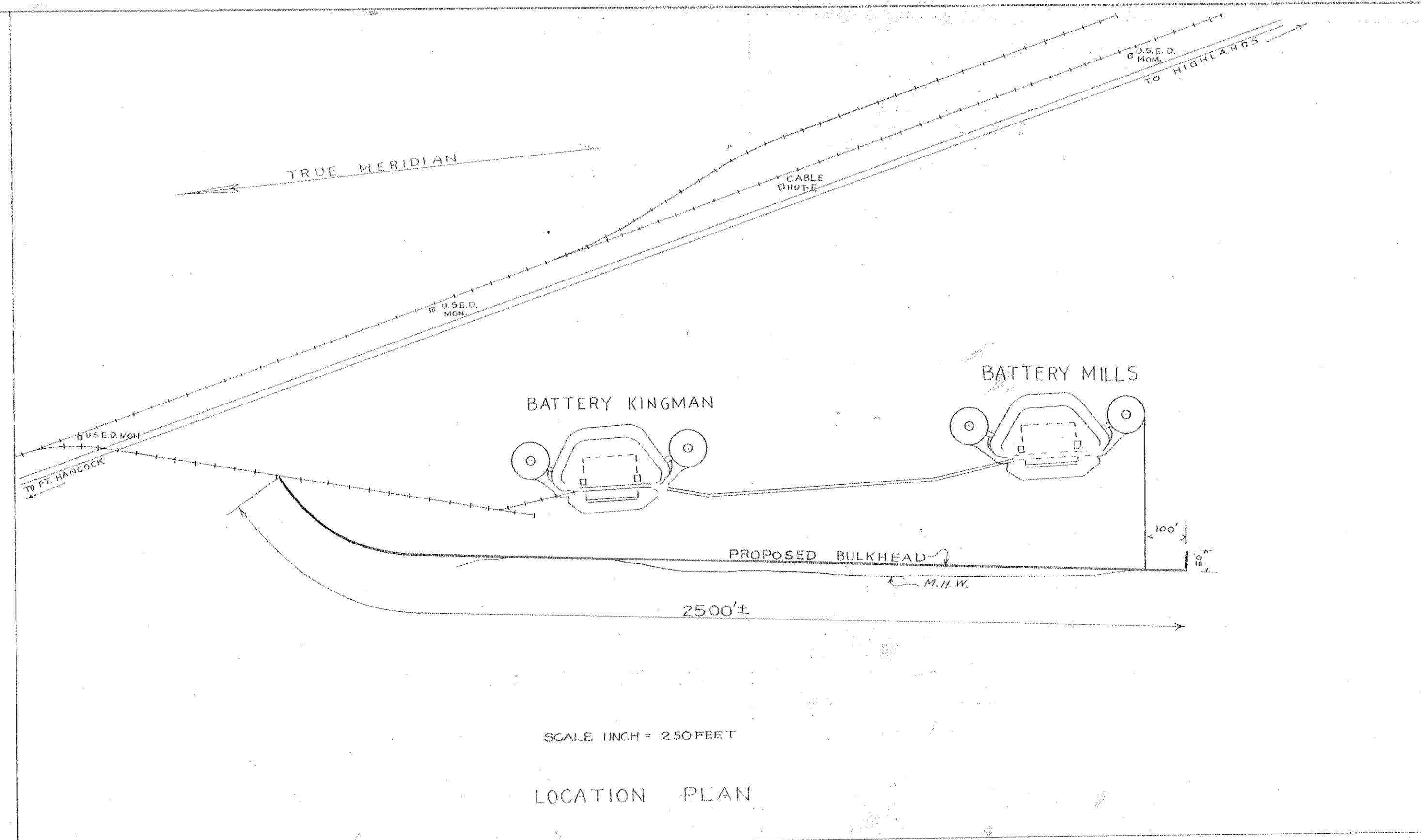
S. W. Roessler
 Colonel, Corps of Engineers, U.S.A.



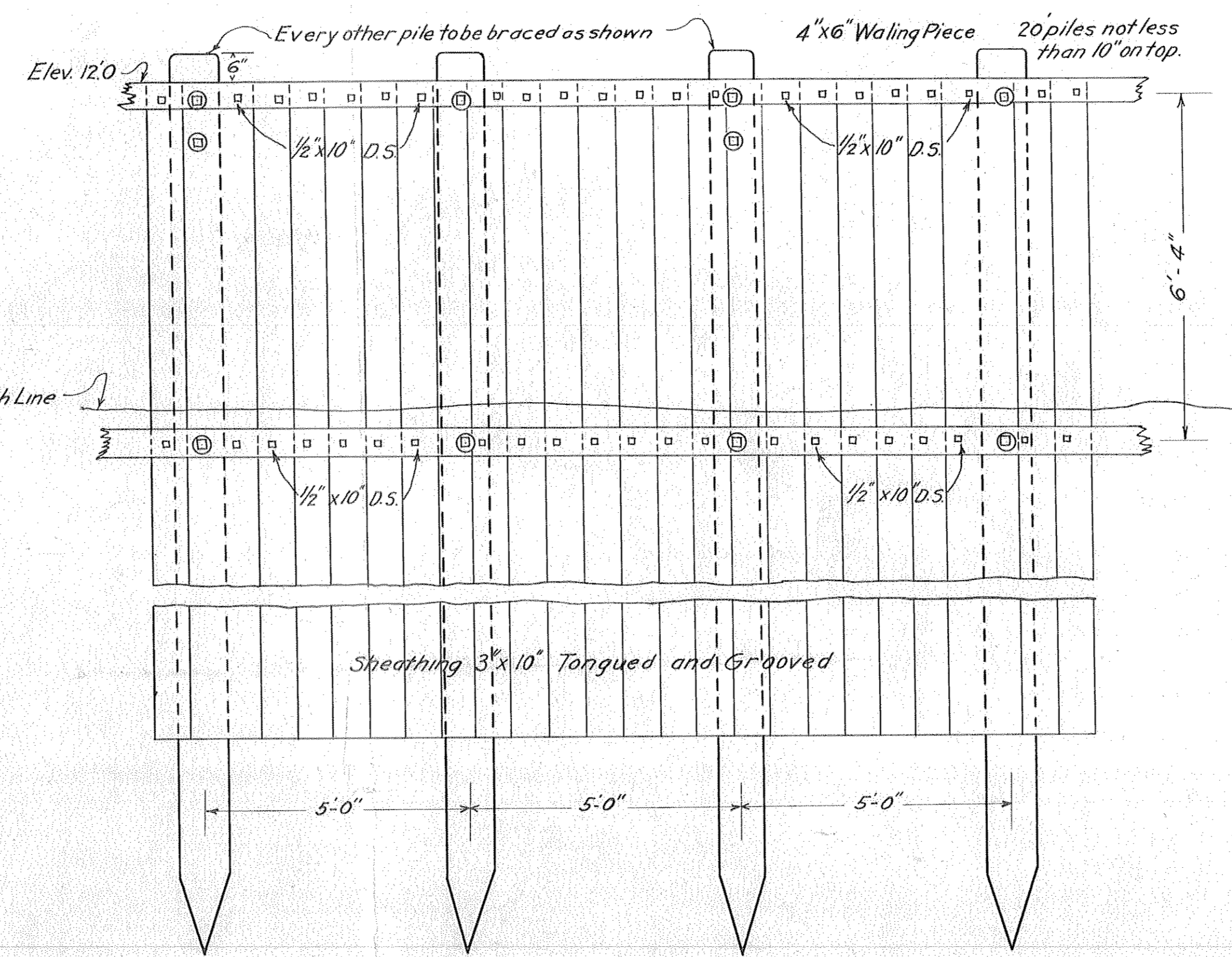
SANDY
HOOK
BAY

FORT HANCOCK, N. J.
ELECTRIC LIGHTING & POWER CABLES
(FORTIFICATION)
CABLE LINES & CONNECTIONS

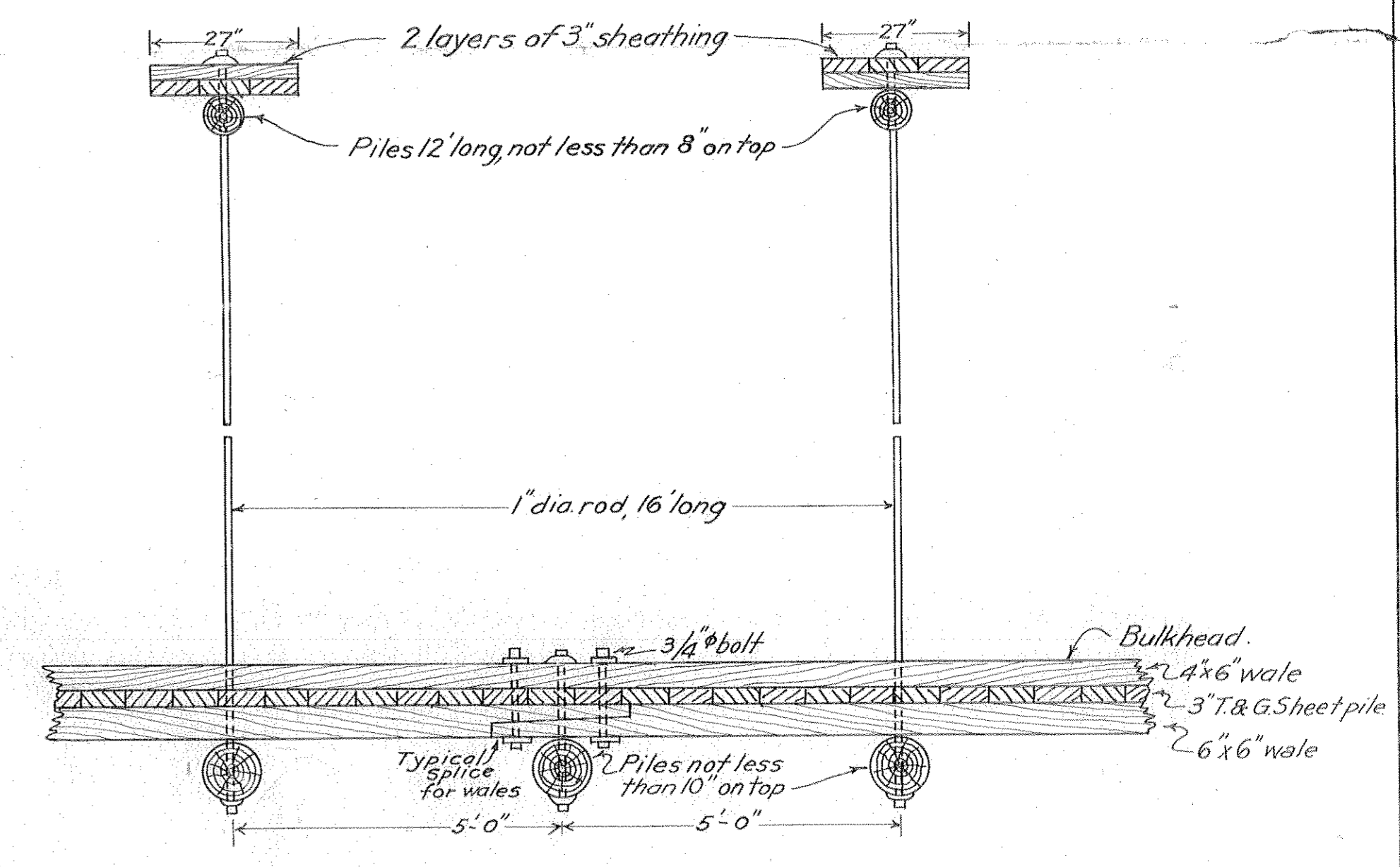
IN SHEETS SHEET NO. _____
 Headquarters Second Corps Area, Office of Engineer Governors Island NY 1934
 Submitted by _____ Approved by _____
 Associate Engineer _____ Colonel, Corp of Engineers
 Drawn by *Chas. Sigas*
 Checked by _____ Transmitted with letter dated 1934



SECTION



ELEVATION



PLAN

FORT HANCOCK N. J.
PROPOSED BULKHEAD IN REAR OF BATTERIES MILLS AND KINGMAN

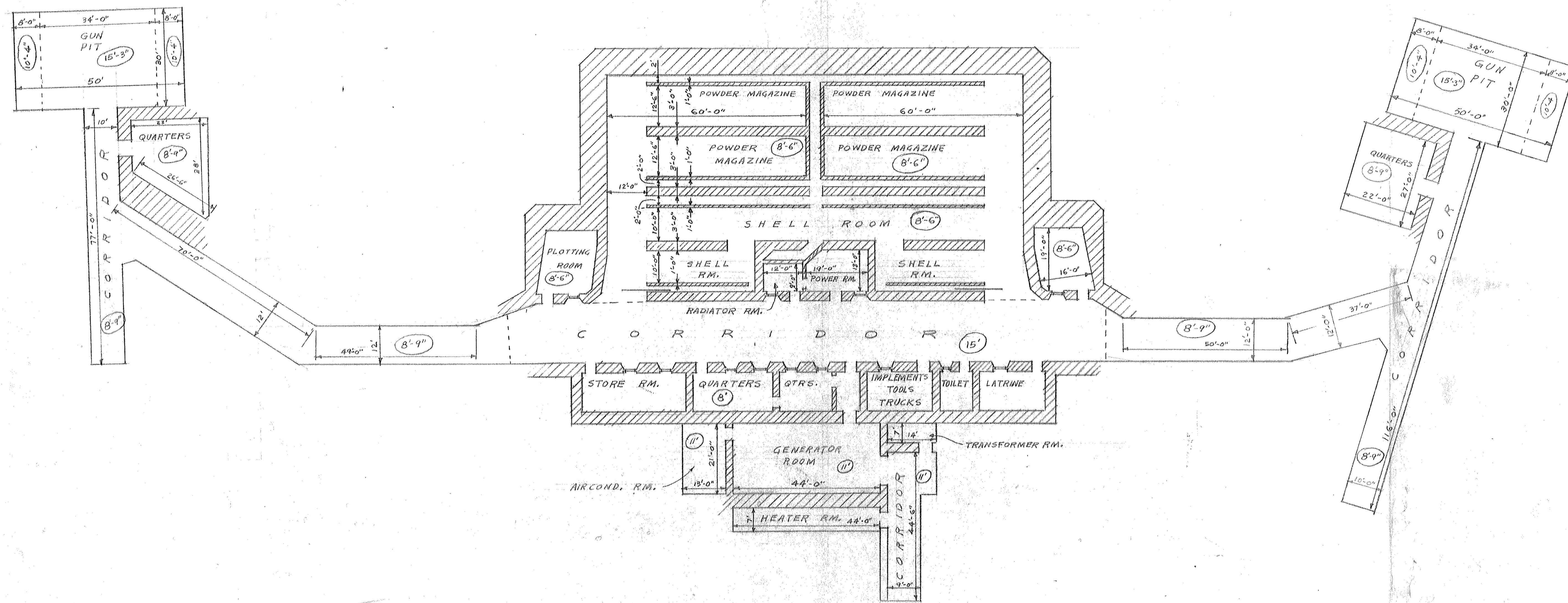
SCALES 1/2 INCH = 1 FOOT

Headquarters Second Corps Area, Office of the Engineer, Governors Island, N.Y. August 27, 1937.

Submitted by *A. G. Swift* Approved by *C. B. Seelye*
 Associate Engineer 1st Lieut., Corps of Engineers.

Drawn by
 Checked by *A. G. I.*

Transmitted with 6th ed. dated August 27, 1937.



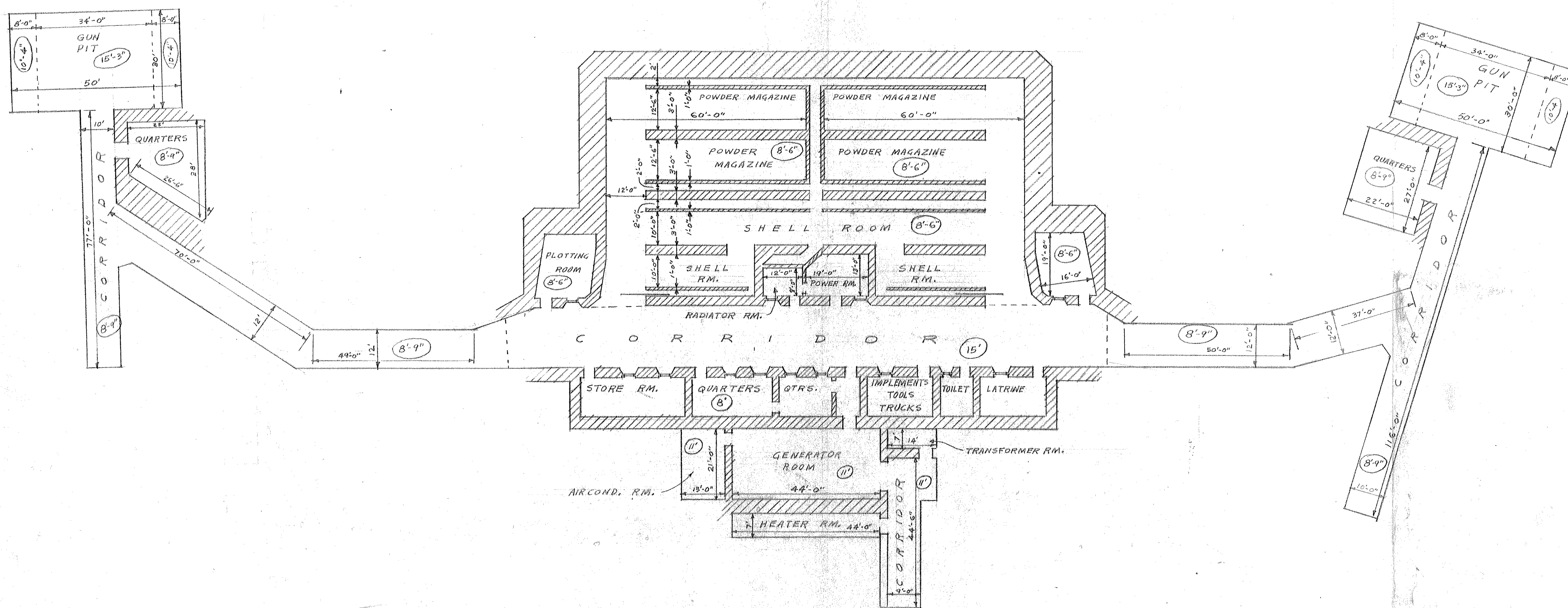
NOTE:

1. ALL DIMENSIONS & ROOM LOCATIONS ARE APPROXIMATE. THIS FLOOR PLAN DRAWN FOR USE IN COMPUTATIONS FOR FALLOUT SHELTER ANALYSIS.
2. UNDER ASSUMPTION BATTERY MILLS FLOOR PLAN IS THE SAME.

LEGEND

ALL FIGURES CIRCLED INDICATE CEILING HEIGHT

REVISION	DATE	DESCRIPTION
OFFICE OF THE POST ENGINEER FORT HANCOCK, N. J.		
DRAWN BY		FLOOR PLAN of BATTERY KINGMAN
CHECKED BY		
SUBMITTED		
DATE		
RECOMMENDED	SCALE APPROX 1/2" = 1'-0"	
APPROVED	DRAWING NUMBER 22-298 155-39	



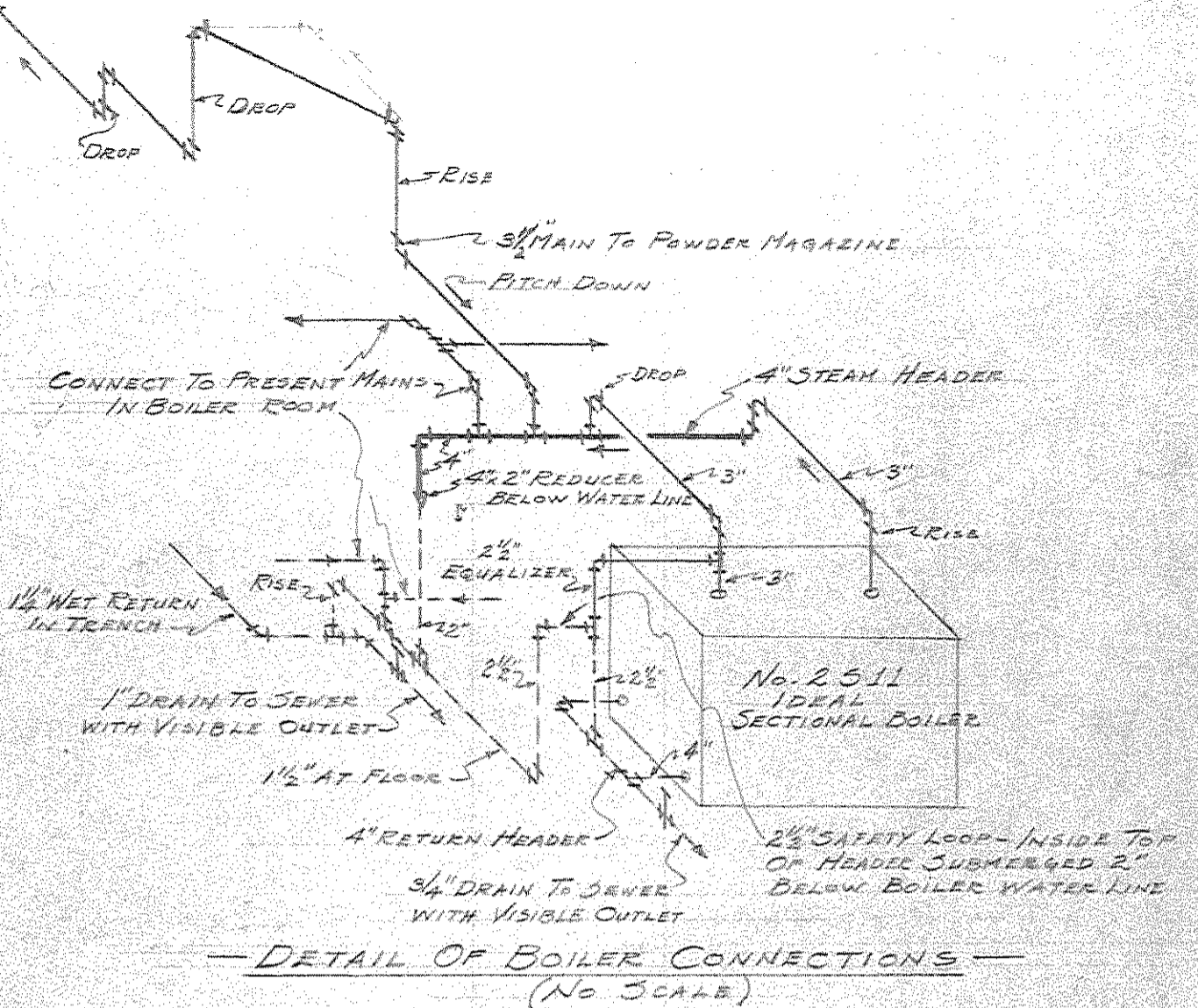
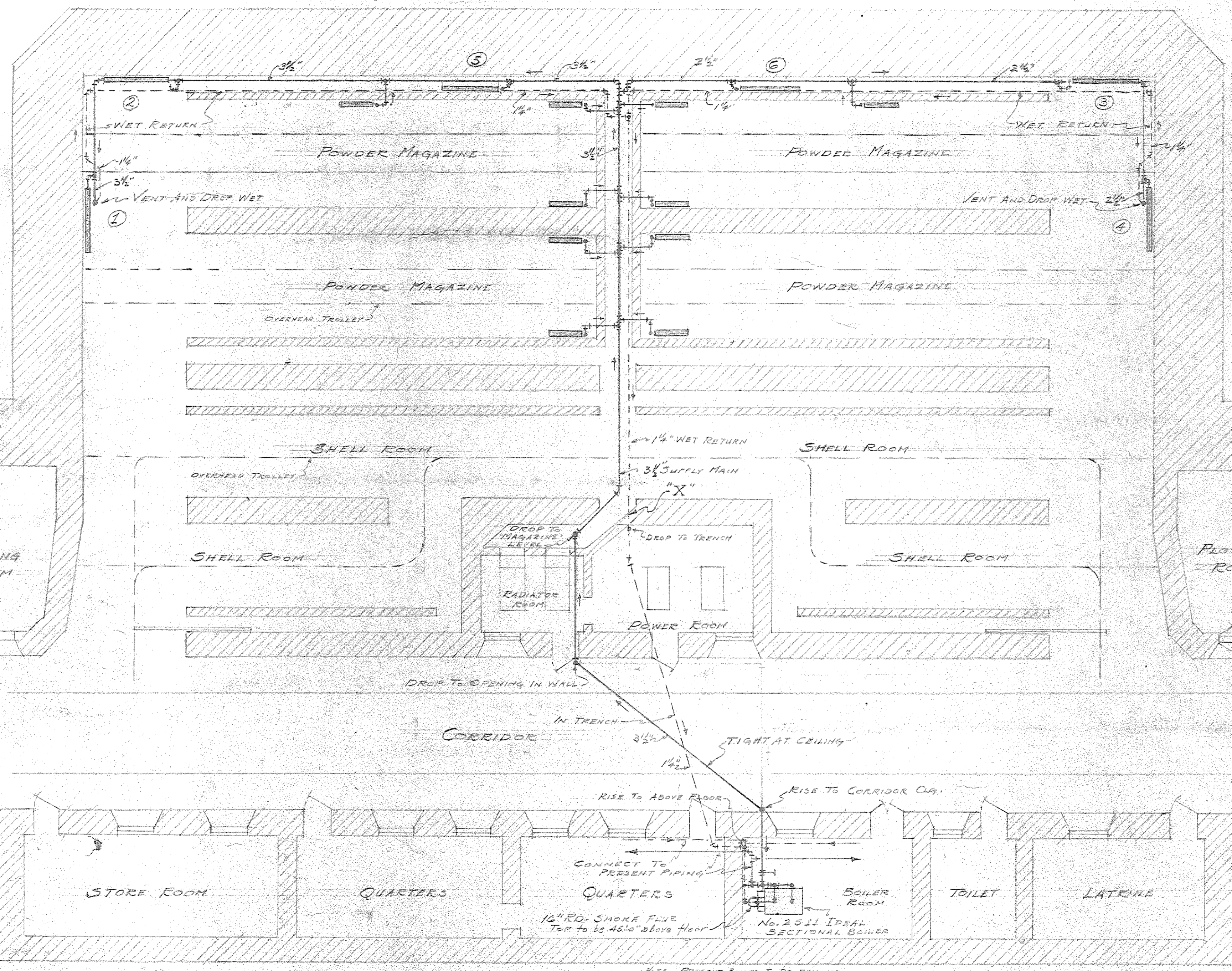
NOTE:

1. ALL DIMENSIONS & ROOM LOCATIONS ARE APPROXIMATE. THIS FLOOR PLAN DRAWN FOR USE IN COMPUTATIONS FOR FALLOUT SHELTER ANALYSIS.
2. UNDER ASSUMPTION BATTERY MILLS FLOOR PLAN IS THE SAME.

LEGEND

ALL FIGURES CIRCLED INDICATE CEILING HEIGHT

REVISION	DATE	DESCRIPTION
OFFICE OF THE POST ENGINEER FORT HANCOCK, N. J.		
DRAWN BY		FLOOR PLAN OF BATTERY KINGMAN
CHECKED BY		
SUBMITTED		
DATE		
RECOMMENDED	SCALE	APPROX 1/8" = 1'-0"
APPROVED	DRAWING NUMBER	
	222-298	



DETAIL OF BOILER CONNECTIONS
(NO SCALE)

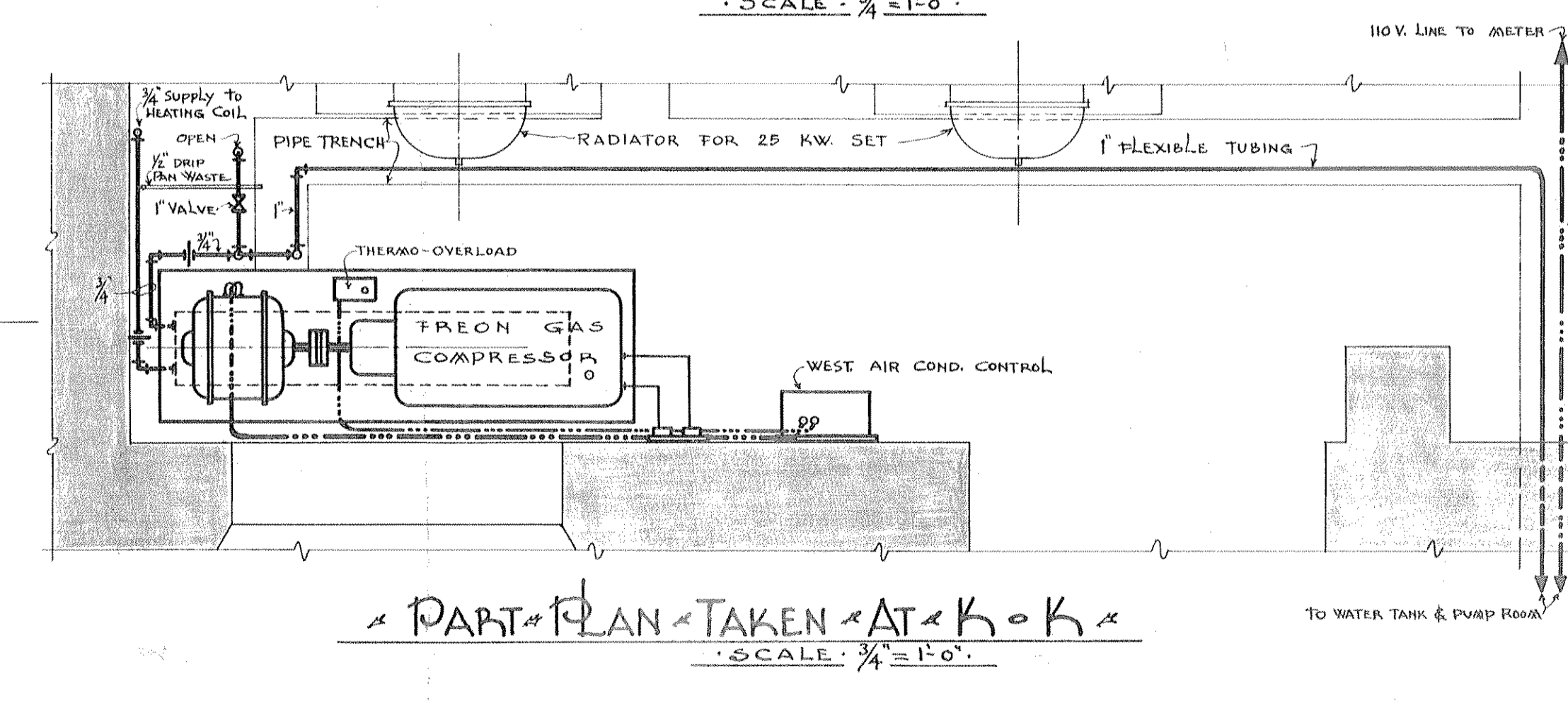
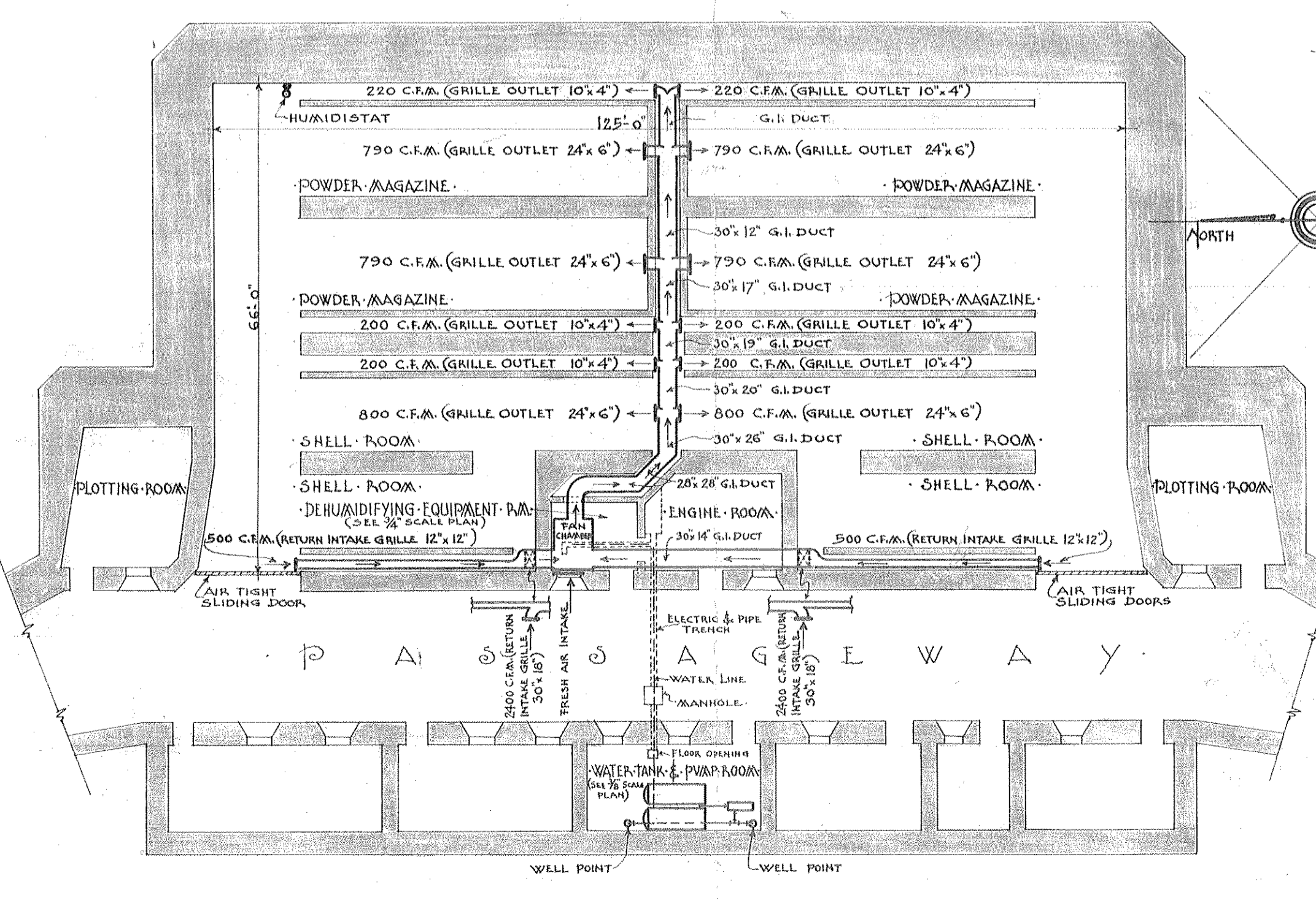
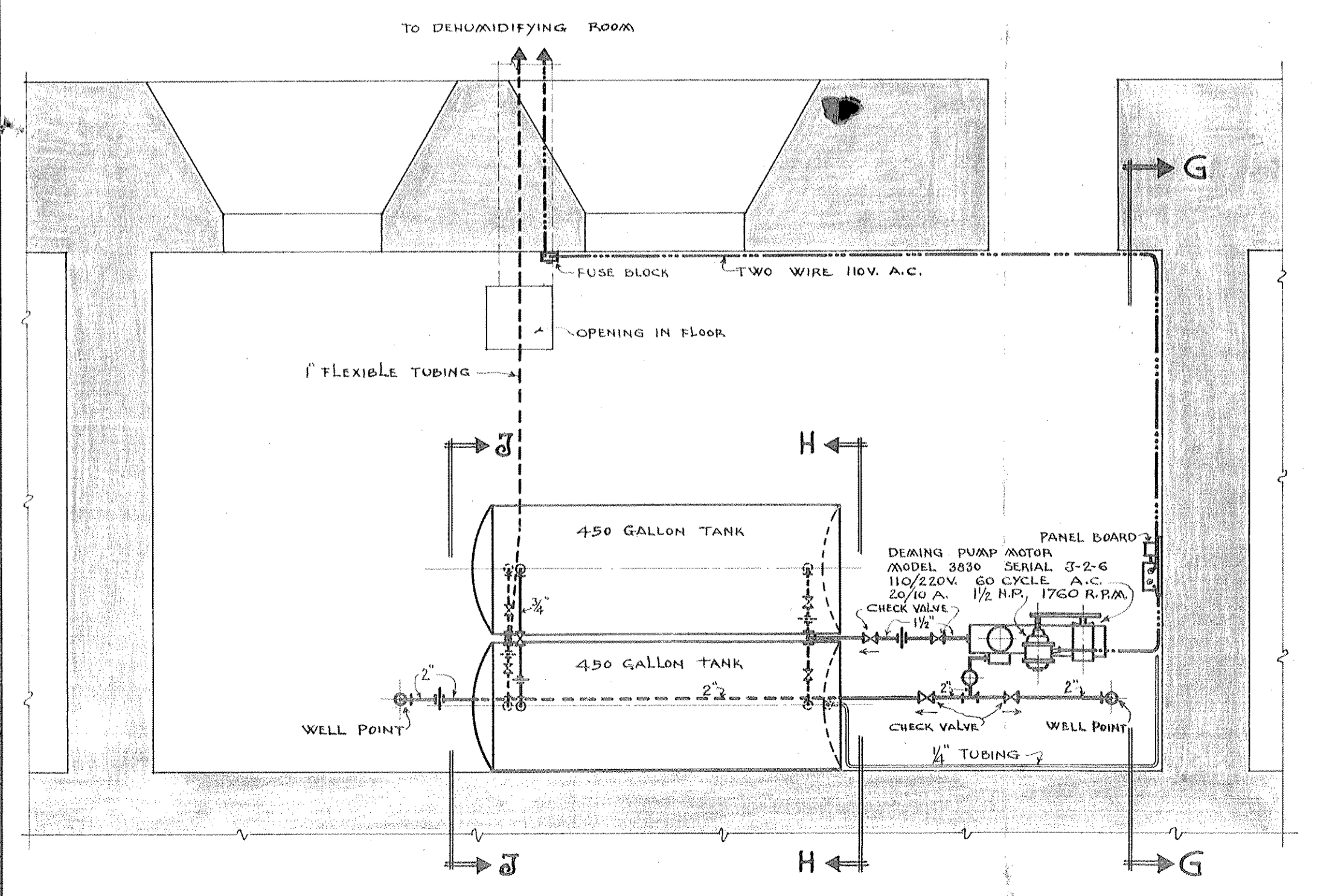
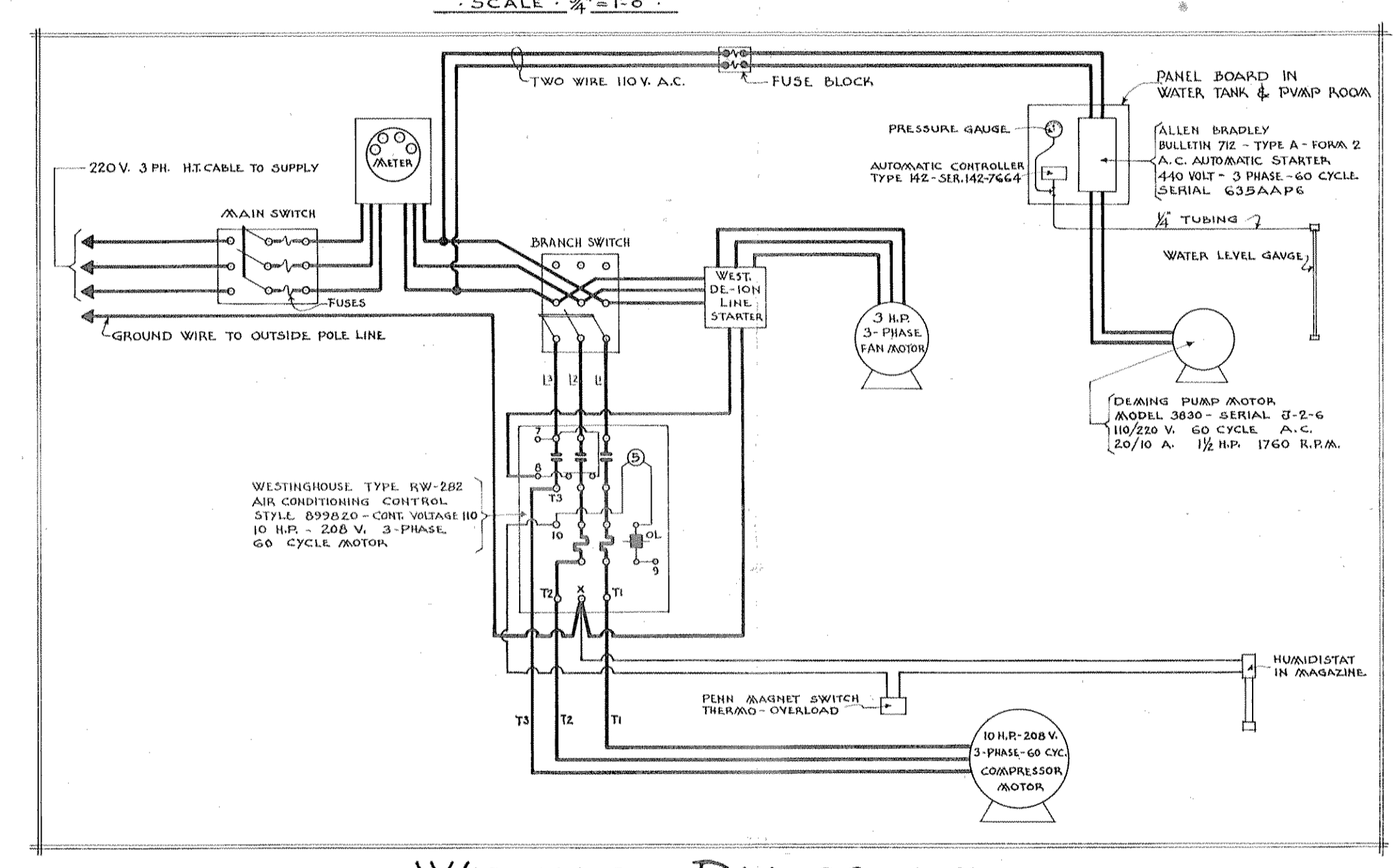
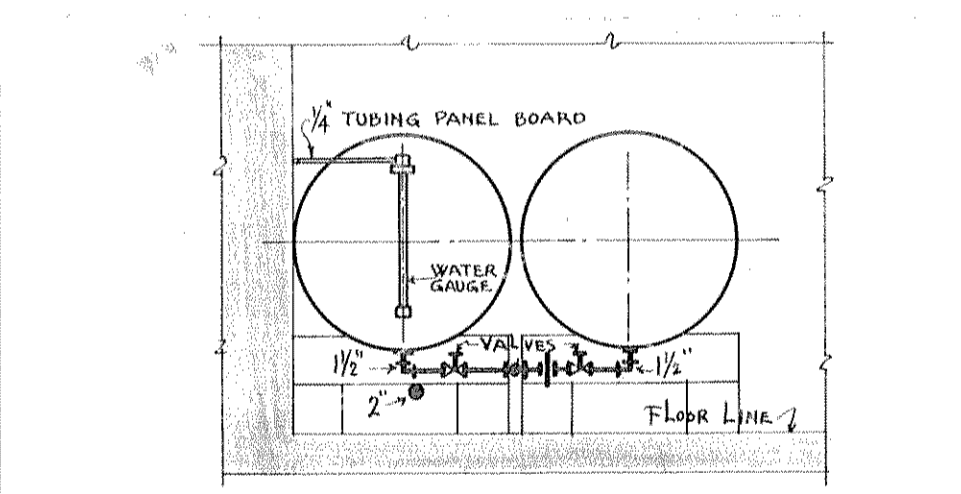
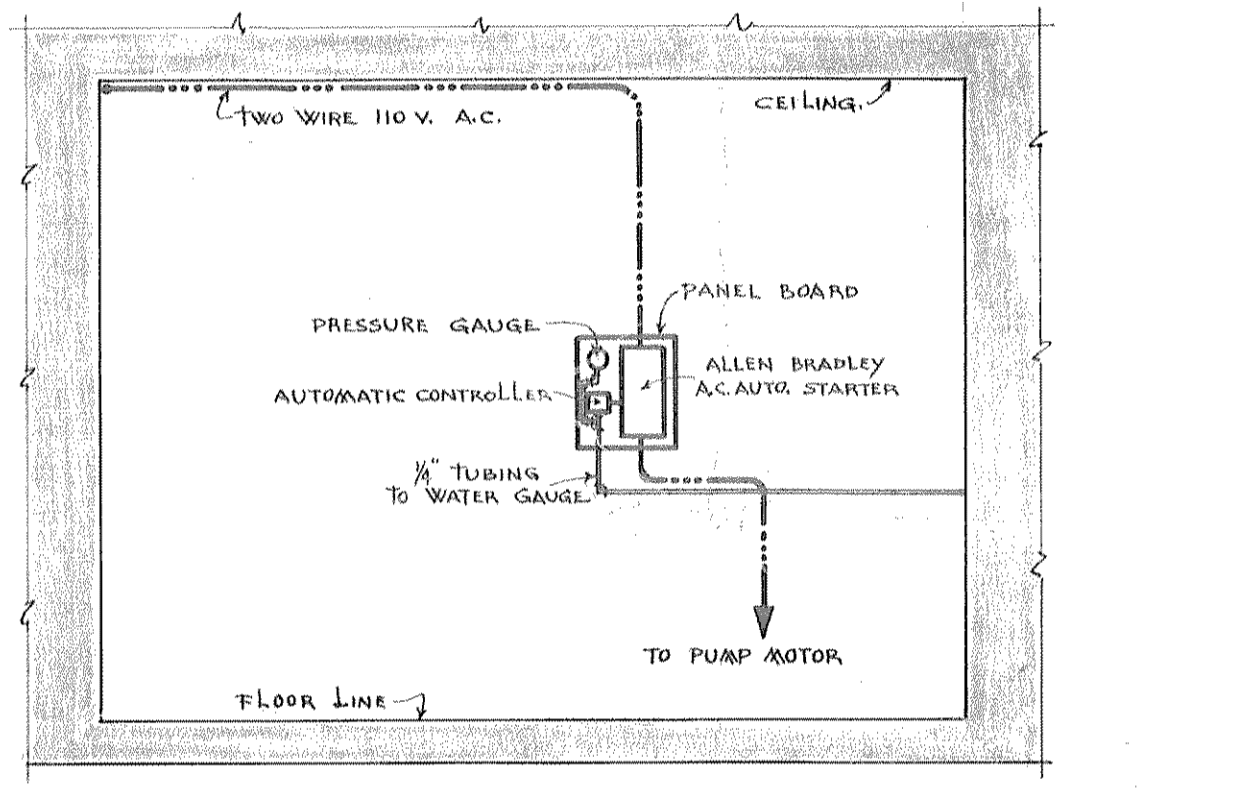
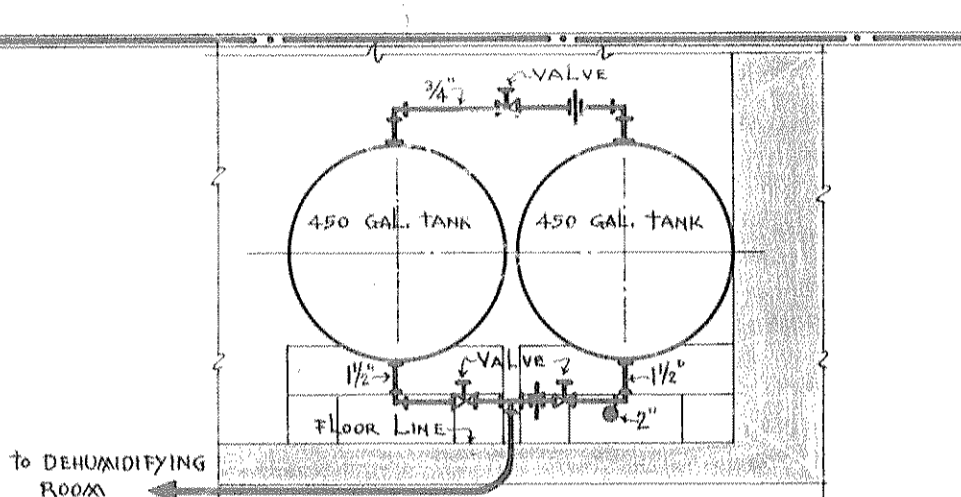
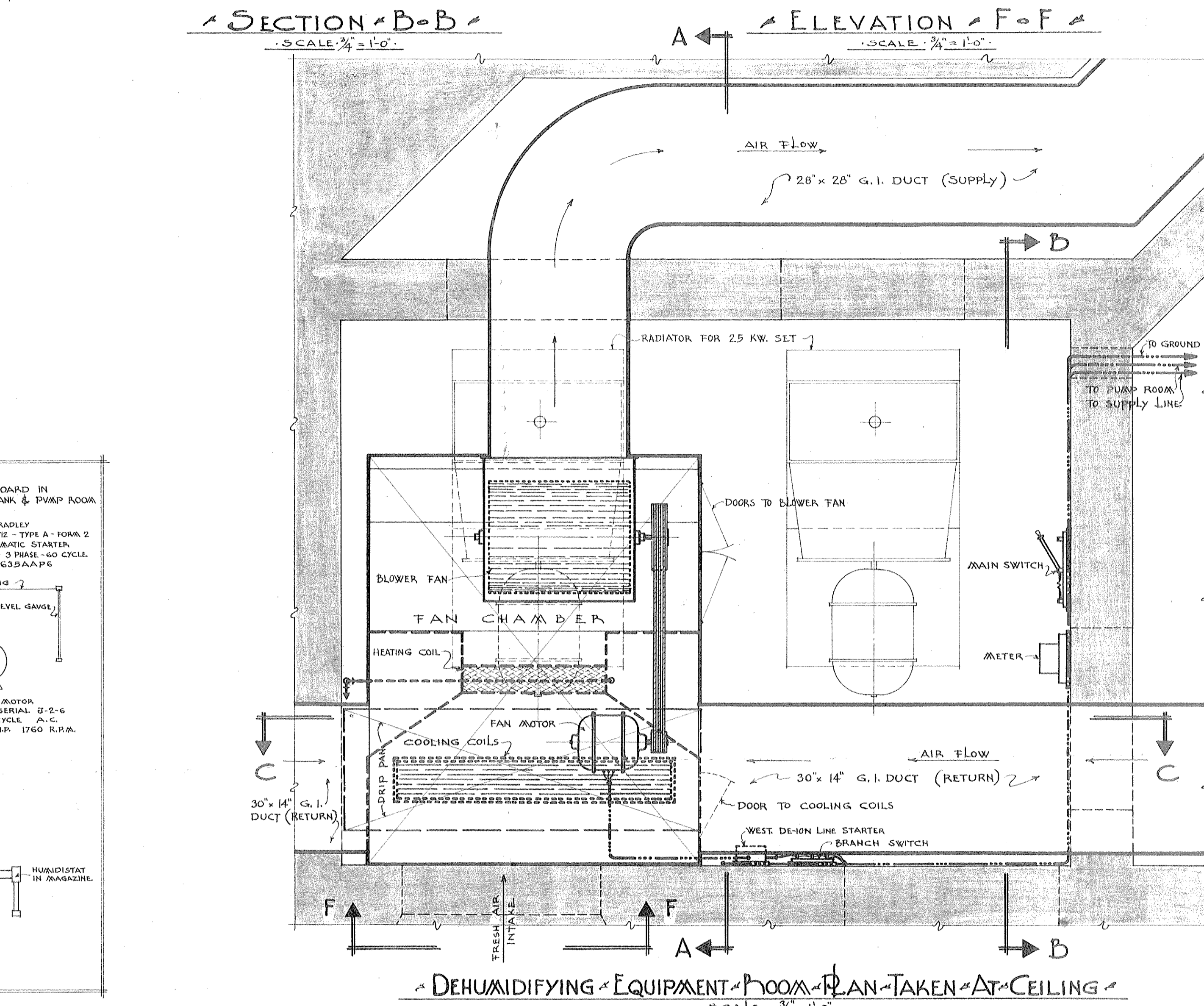
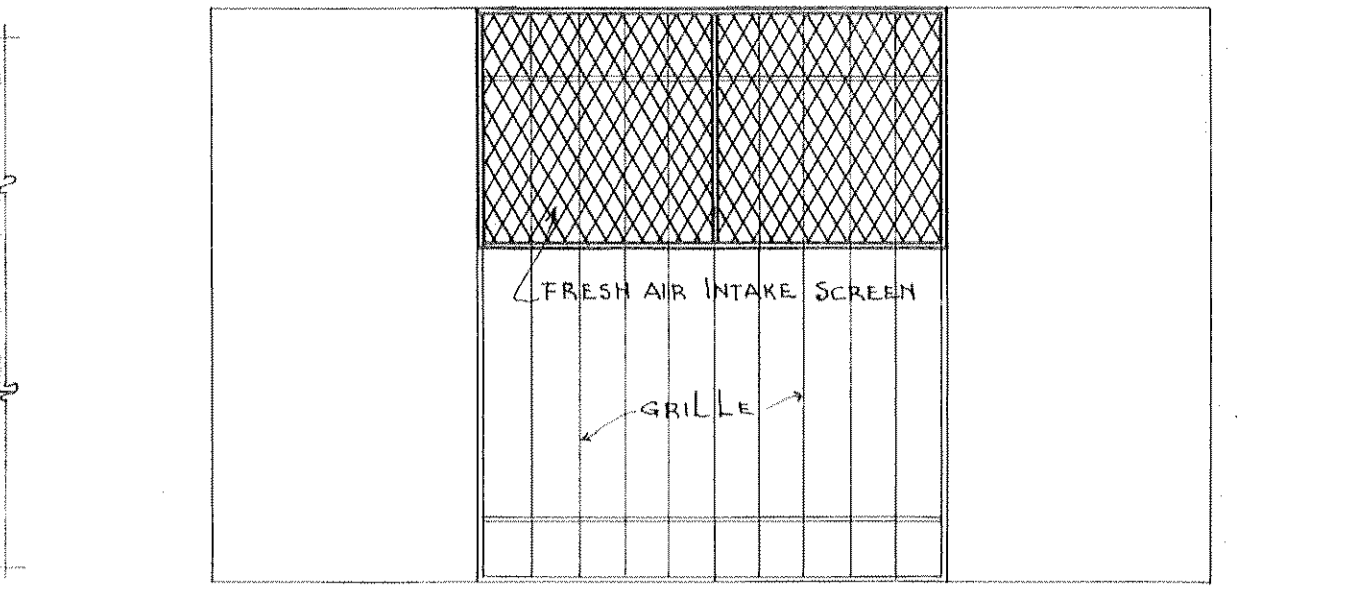
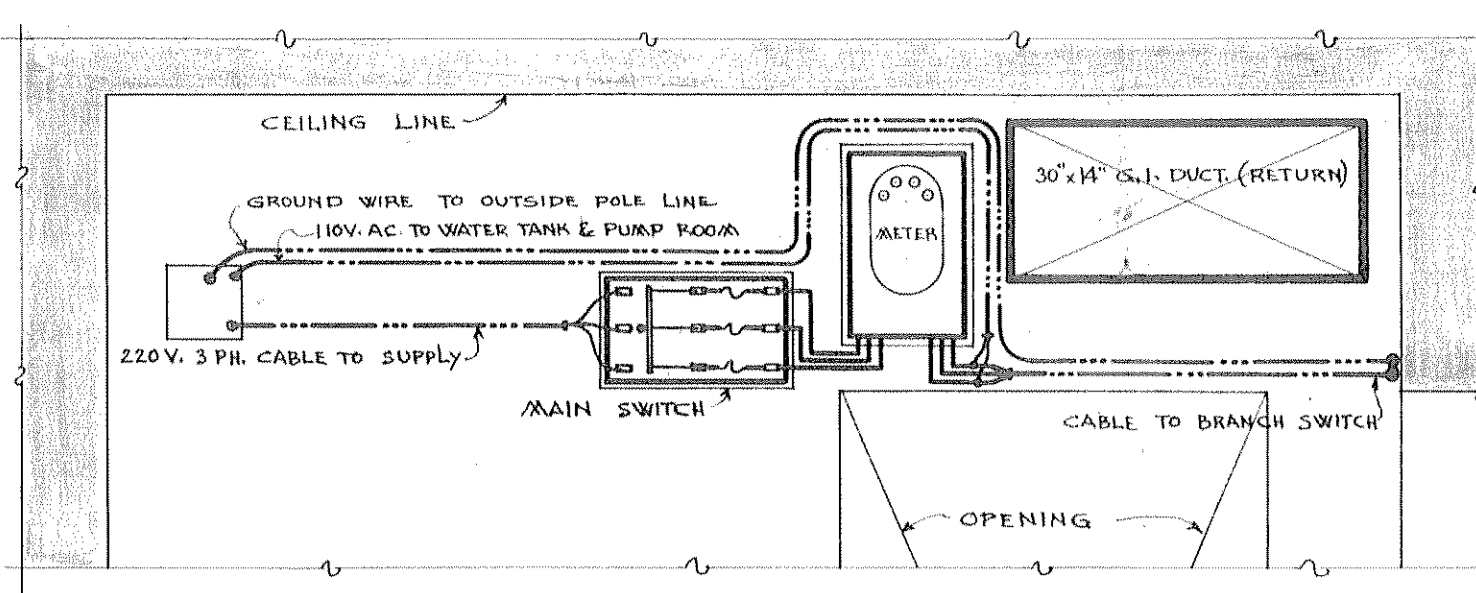
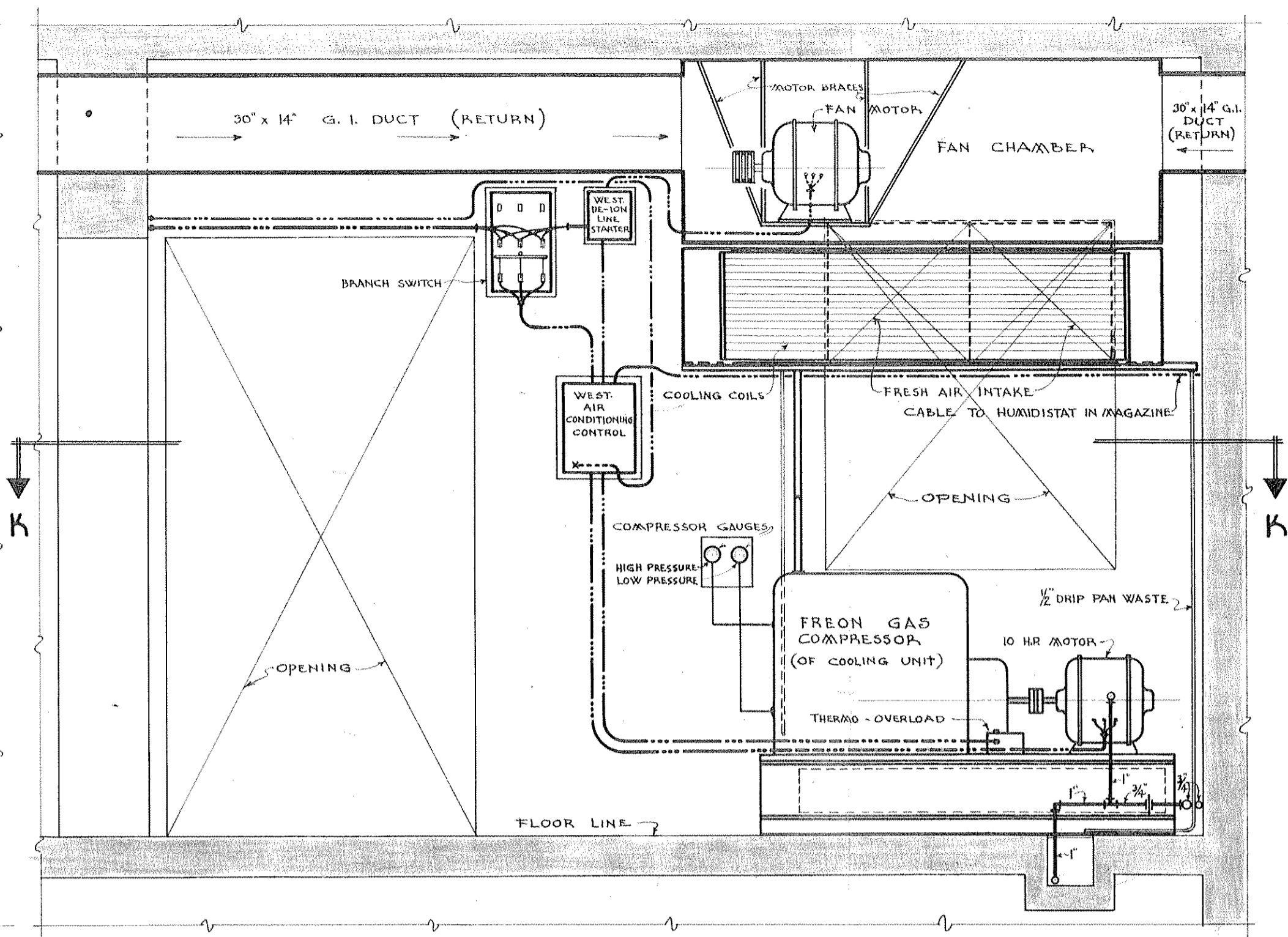
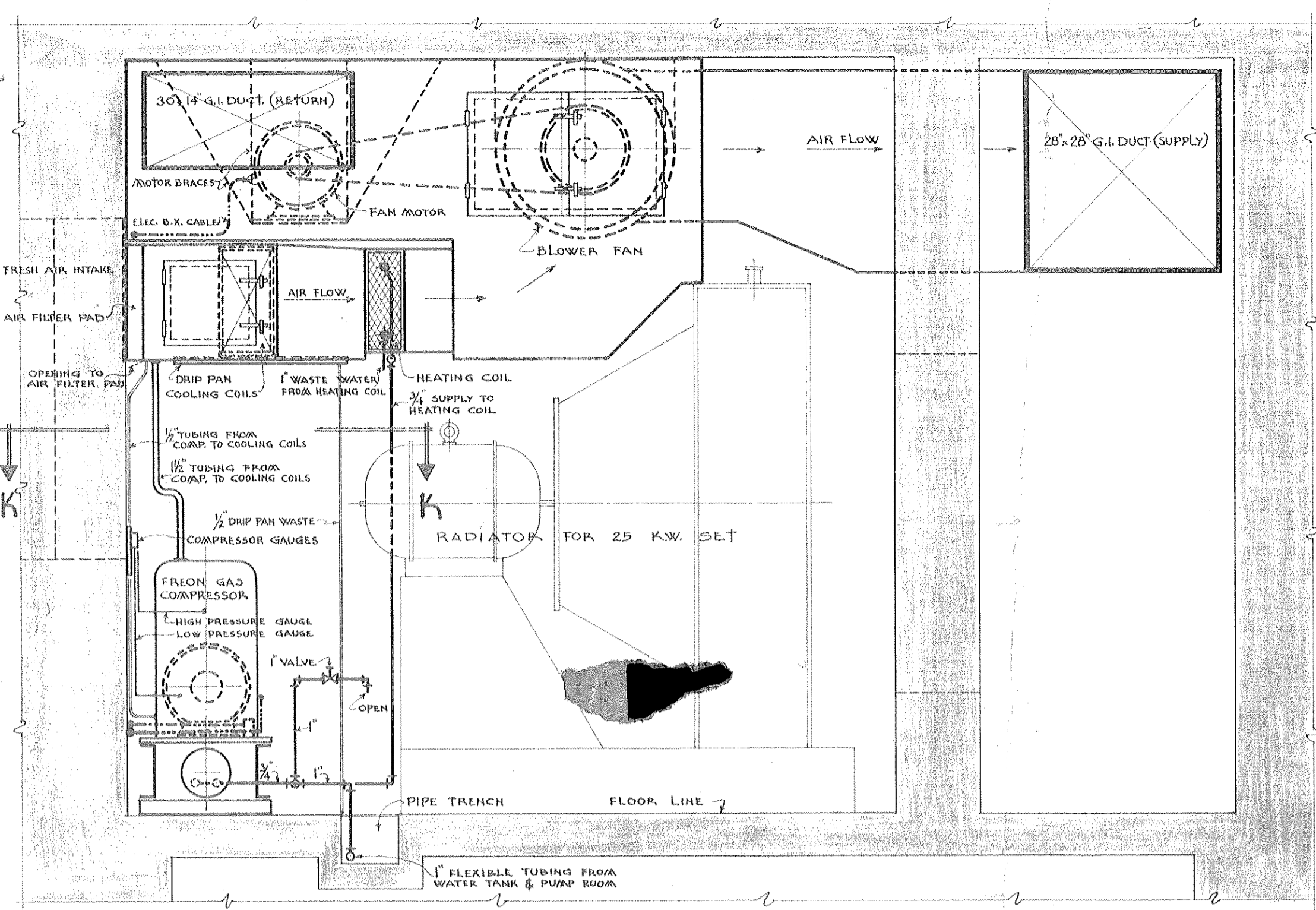
GENERAL NOTES

- FITCH MAINS DOWN IN DIRECTION OF ARROWS.
 - TAKE ALL CONNECTIONS OFF TOP OF MAIN AT 45 DEG.
 - DRIP ENDS OF MAINS FULL SIZE TO POINT BELOW WATER LINE
 - USE IDEAL QUICK VENT VALVES NO. 815
 - ALL RETURNS TO BE WET.
 - ENDS OF MAINS TO BE AT LEAST 24" AND PREFERABLY 30" ABOVE WATER LINE OF BOILER.
 - ALL FITTINGS ON HORIZONTAL MAINS WHERE CHANGE IN SIZE OCCURS, SHALL BE OF THE ECCENTRIC PATTERN, KEEPING THE FLOW LINE OF MAINS CONSTANT.
 - ALL RADIATORS TO BE HUNG NEAR CEILING.
 - ALL RADIATORS TO HAVE 1/4" TAPPING AND VALVE, 1/2" BRANCH FROM MAIN, NO. 500 IDEAL AIRID SIPHON AIR VALVE AND ARCO PACKLESS SUPPLY VALVE.
 - RADIATORS NOS. 1 TO 6 INCLUSIVE TO BE EACH 7 SECTIONS-FIB. 718 7 1/2 WALL-49 5/8 FT.
 - ALL OTHER RADIATORS TO BE EACH 20 SECTIONS 4 TUBE 20" HIGH LEGLESS-45 3/8 FT. AMERICAN CORTO.
 - ALL PIPING IN CORRIDOR AND ALL SUPPLY PIPING IN BOILER ROOM TO BE COVERED.
 - WET RETURN IN POWDER MAGAZINE TO BE RUN AS DIRECTED, EITHER ON FLOOR, OR ELSE AT HEIGHT SUFFICIENT TO PASS THROUGH OPENING AT POINT "X"
- THIS DIAGRAM TO SERVE AS A GUIDE ONLY. CONTRACTOR SHALL CALCULATE ALL DETAILS AND HE IS RESPONSIBLE FOR PROPER WORKING OF THE APPARATUS.

FORT HANCOCK, N.J.
PROPOSED MODIFICATIONS TO
BATT BATTERY MILLS
FOR IMPROVED DRYNESS
12/20/27

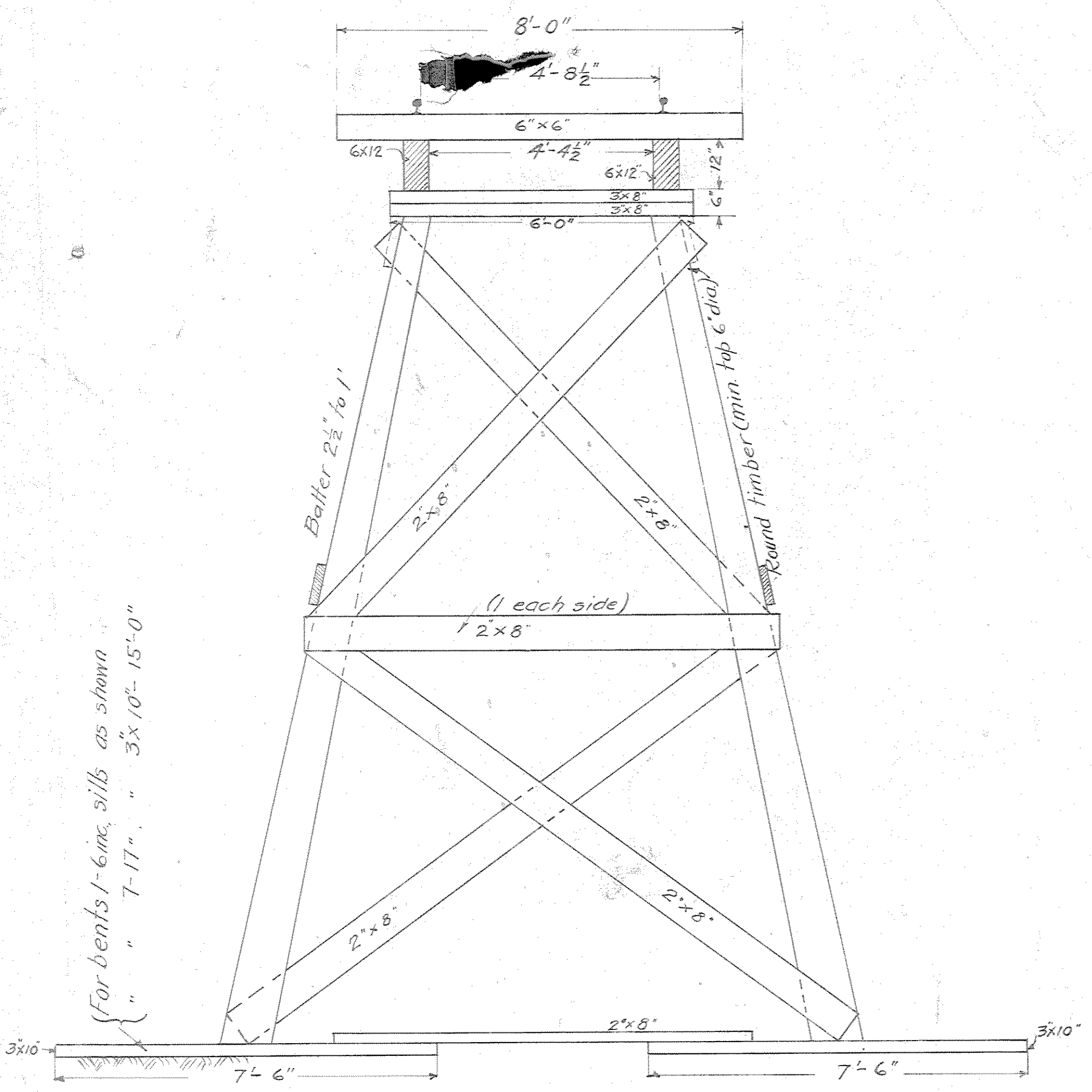
NOTE - PRESENT BOILER TO BE REMOVED

PLAN - SCALE 1/8" = 1'-0"

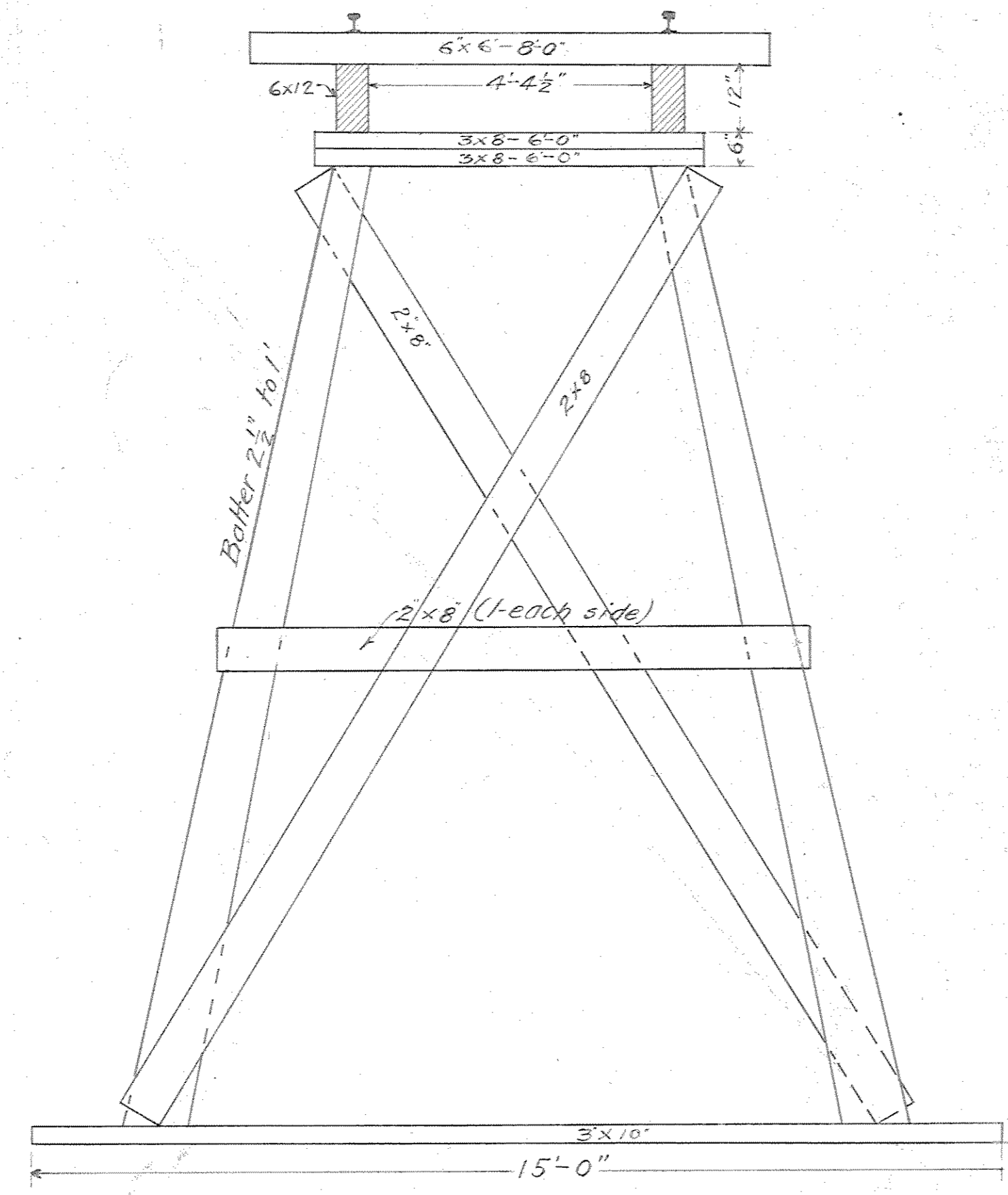


FORT HANCOCK, N. J.
BATTERY MILLS
INSTALLATION OF AIR CONDITIONING
DEHUMIDIFYING EQUIPMENT & AIR DUCTS

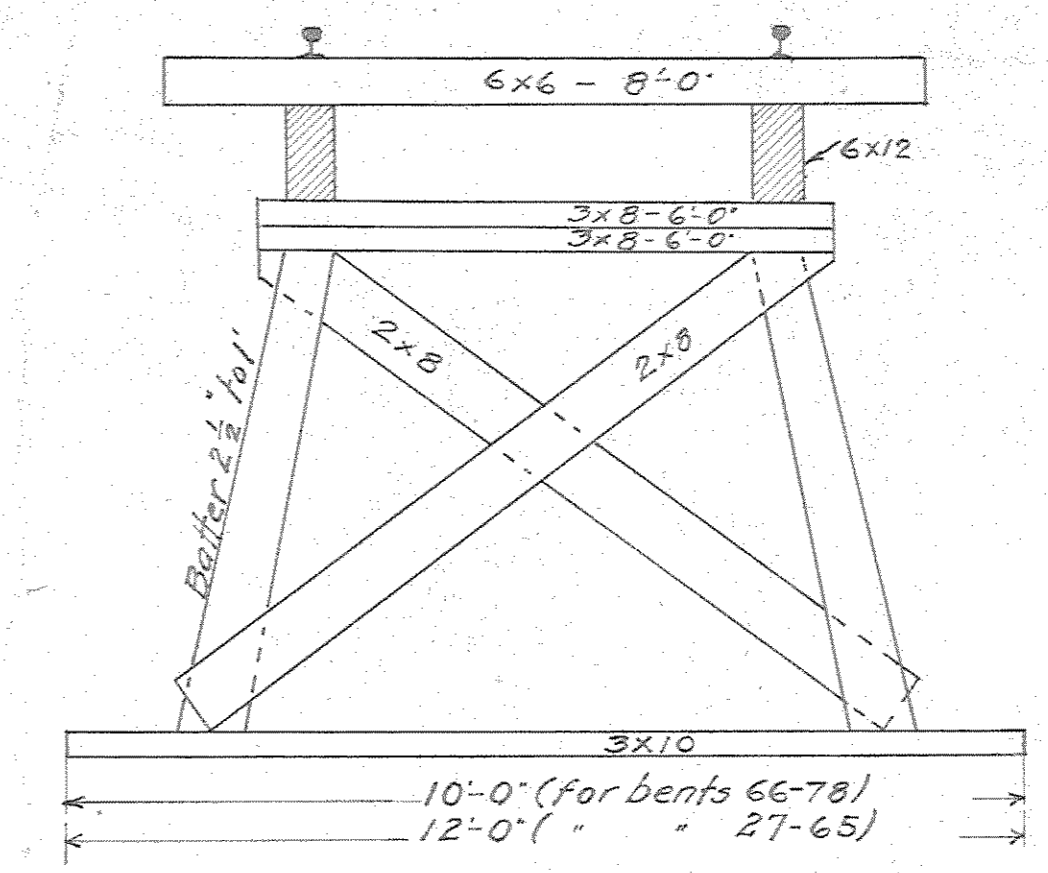
SCALES AS SHOWN
Headquarters Second Corps Area, Office of the Engineer, Governors Island, N.Y., June 2, 1937.
Submitted by *A. C. Swift* Associate Engineer. Approved by *R. E. Howard* Colonel, Corps of Engineers.
Drawn by *C. F. D.*
Checked by *A. G. S.* Transmitted with Invt. dated June 3 1937.



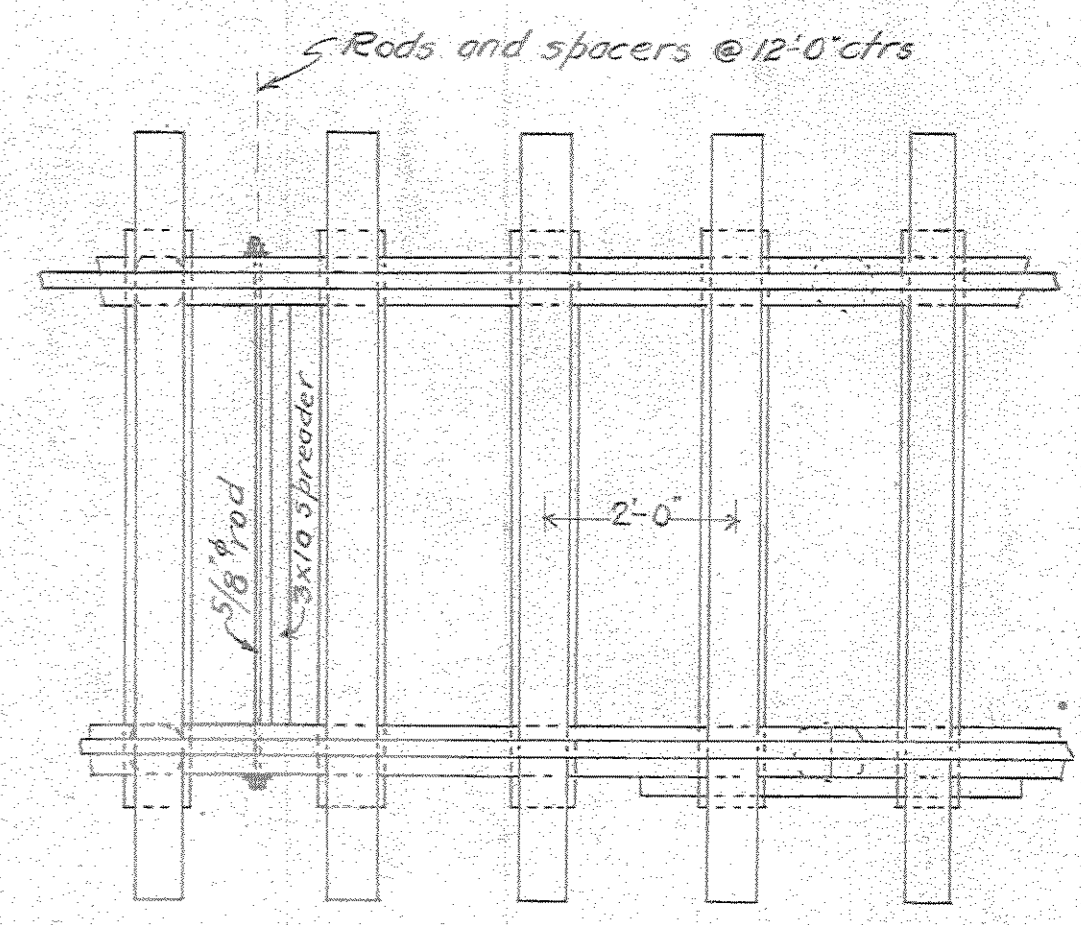
Typical Section, Bents 1-17 inc.
 Scale 1/2" = 1'-0"



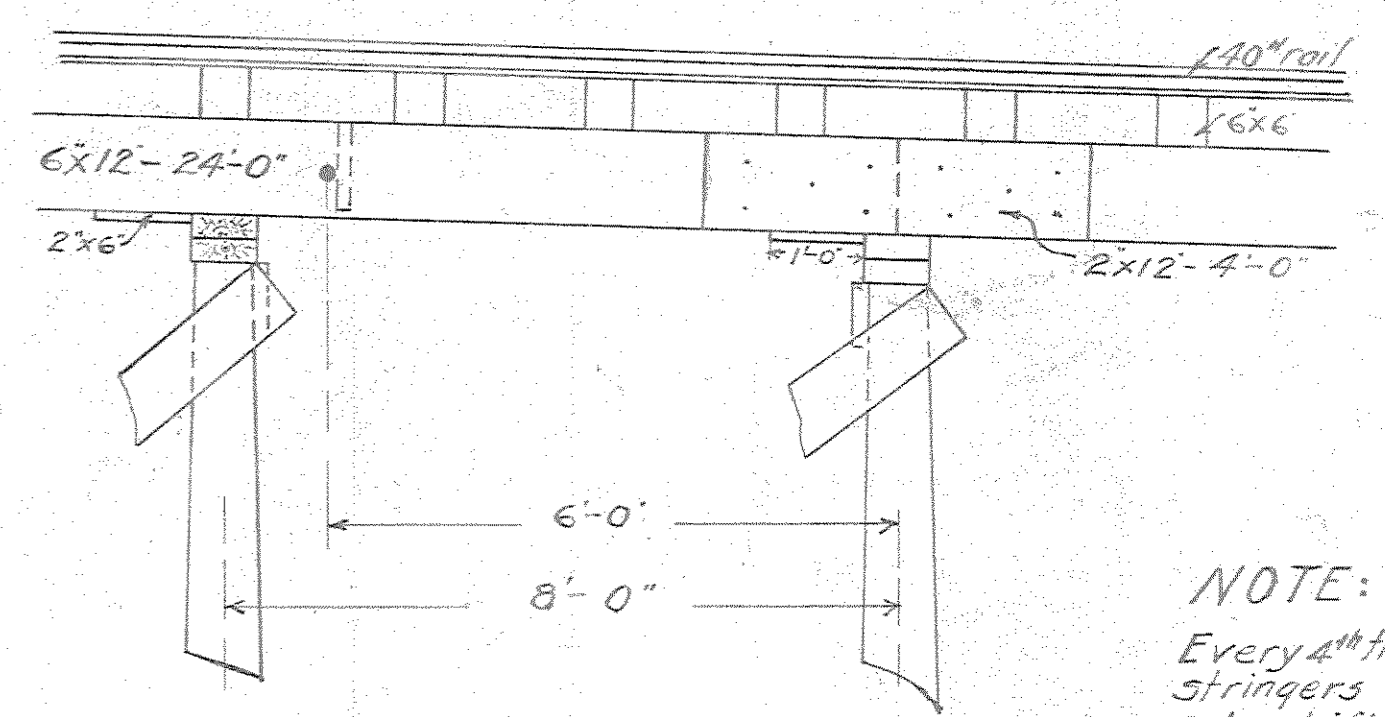
Typical Section - Bents 18-26 inc



Typical Section - Bents 27-78 inc.

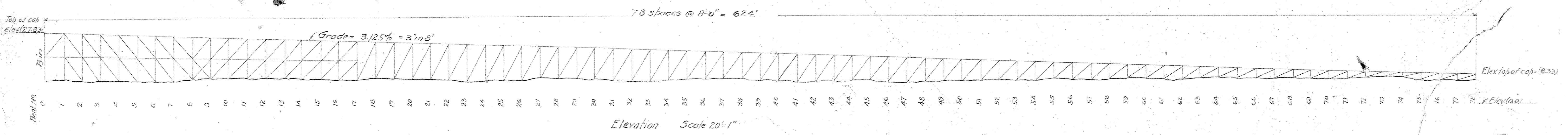


Plan.

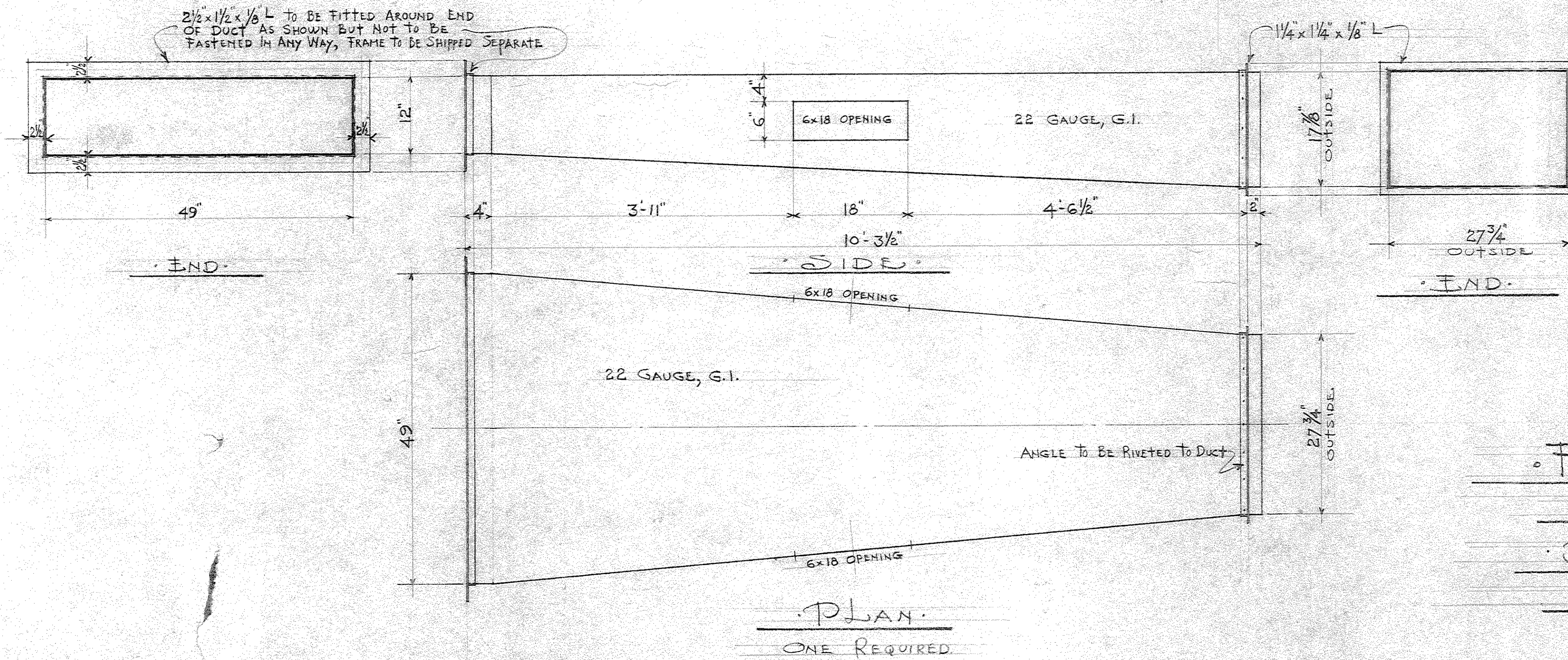
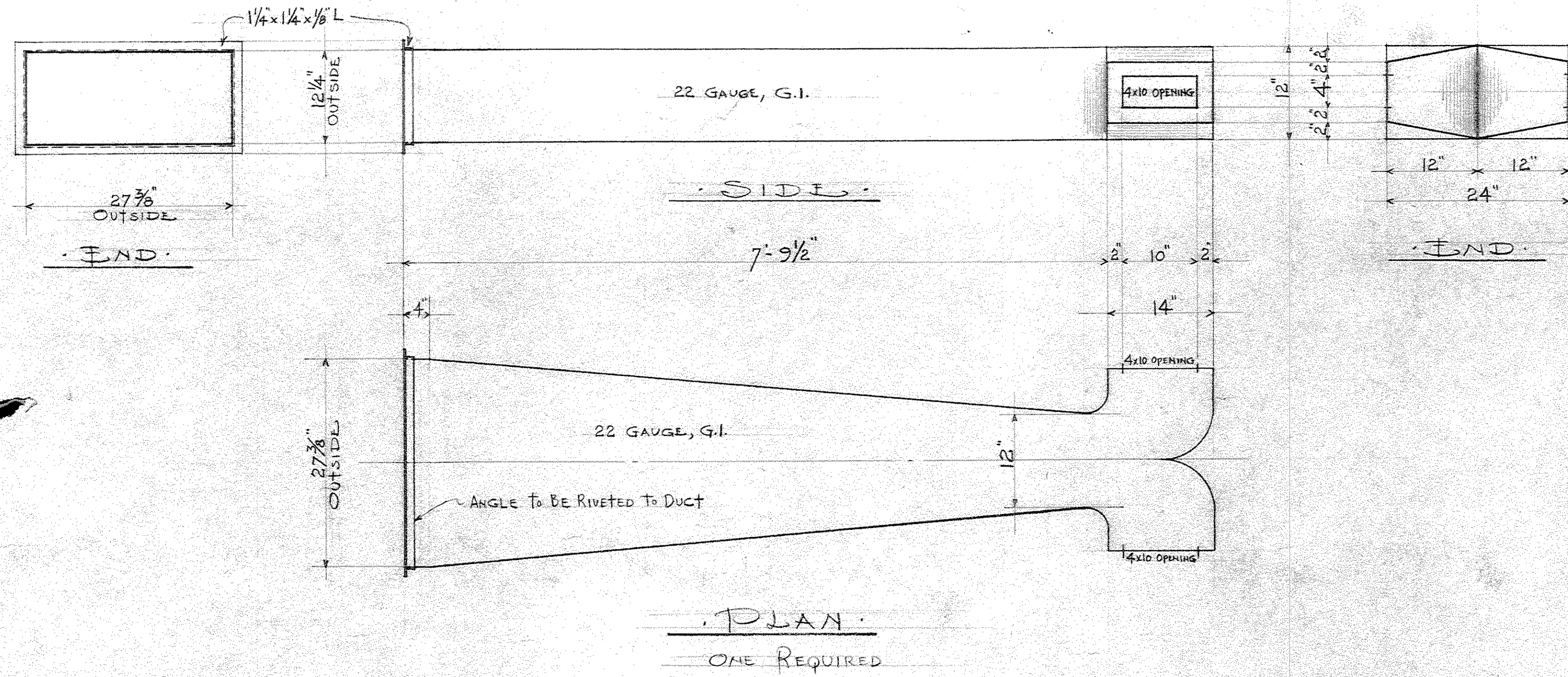


Elevation

NOTE:
 Every 4th tie drifted to stringers by 1/2" x 12" drift pins.
 Caps drifted to round timbers by 1/2" x 12" drift pins.
 Stringers drifted to caps at each bent by 1/2" x 18" drift pins.



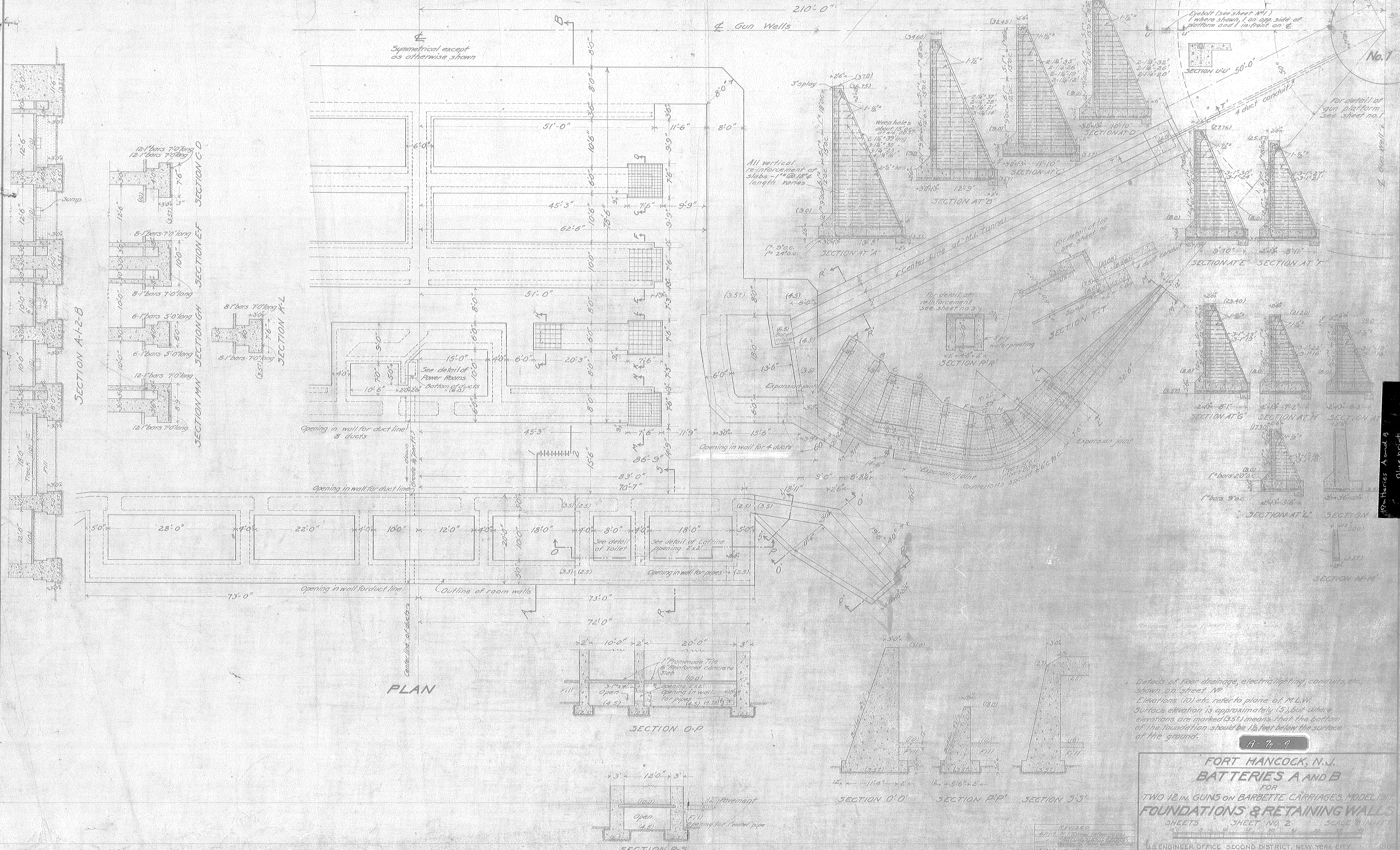
Elevation Scale 20" = 1'



FORT HANCOCK
 NEW JERSEY
 BATTERY KINGMAN
 DUCT DETAILS

LAYOUT
 SCALE: 1" = 1'-0"
 DATE: MAY 11, 1939

Battery Kingman Duct Layout
 Blue Print
 May 11, 1939



Details of floor drainage, electric lighting, conduits, etc., shown on sheet No. 1
 Elevations (10) etc. refer to plane of M.L.V.
 Surface elevation is approximately (5), but where elevations are marked (3.5) means that the bottom of the foundation should be 1/2 feet below the surface of the ground.

FORT HANCOCK, N.J.
BATTERIES A AND B
 FOR

TWO 12 IN. GUNS ON BARBETTE CARRIAGES, MODEL 1917
FOUNDATIONS & RETAINING WALLS

SHEETS SHEET NO. 2 SCALE 1/4" = 1'-0"

U.S. ENGINEER OFFICE, SECOND DISTRICT, NEW YORK CITY

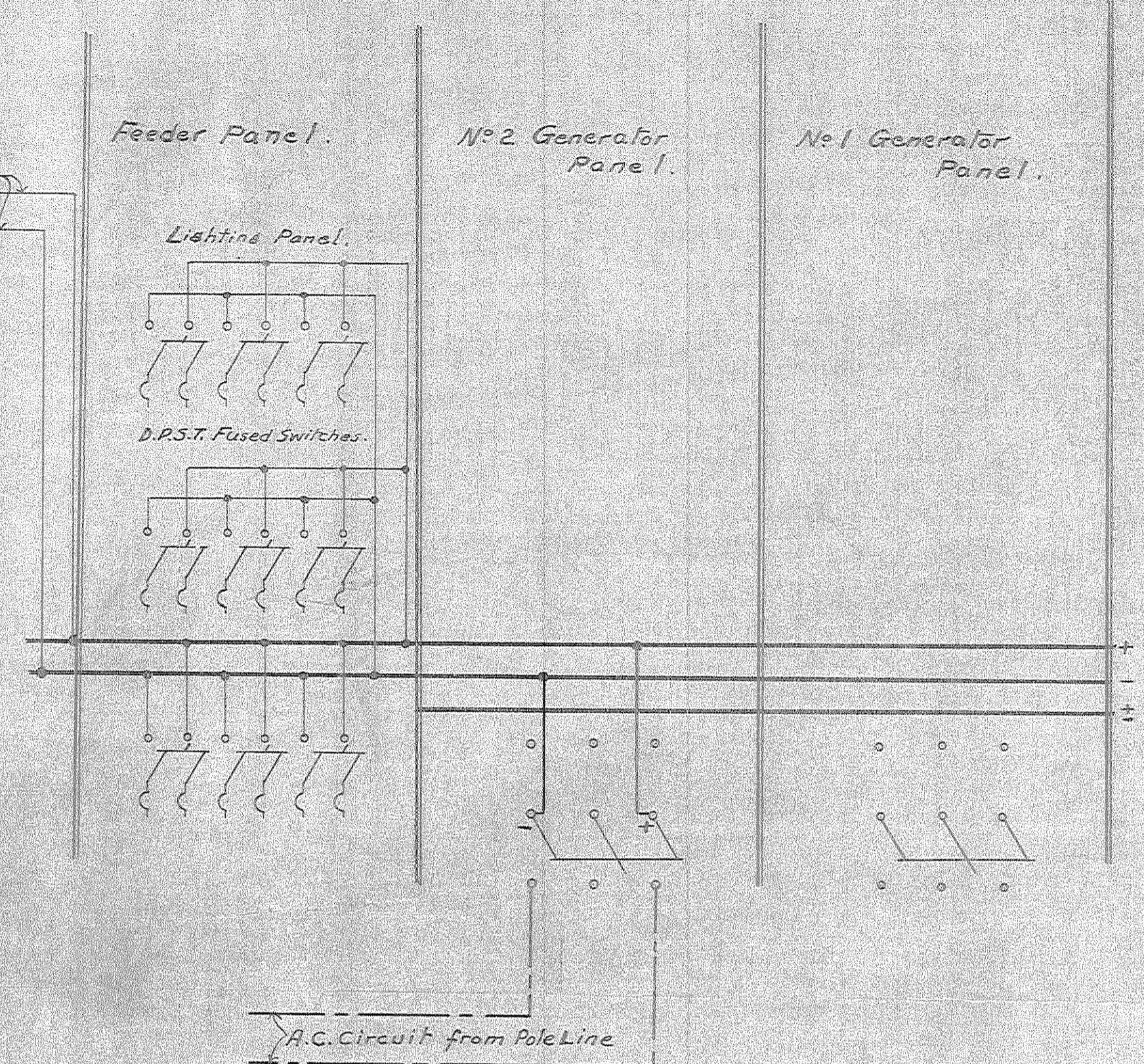
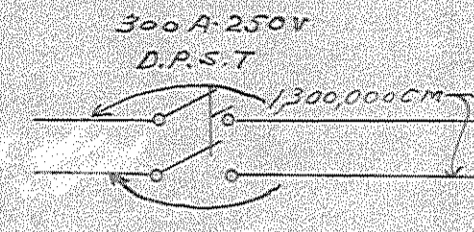
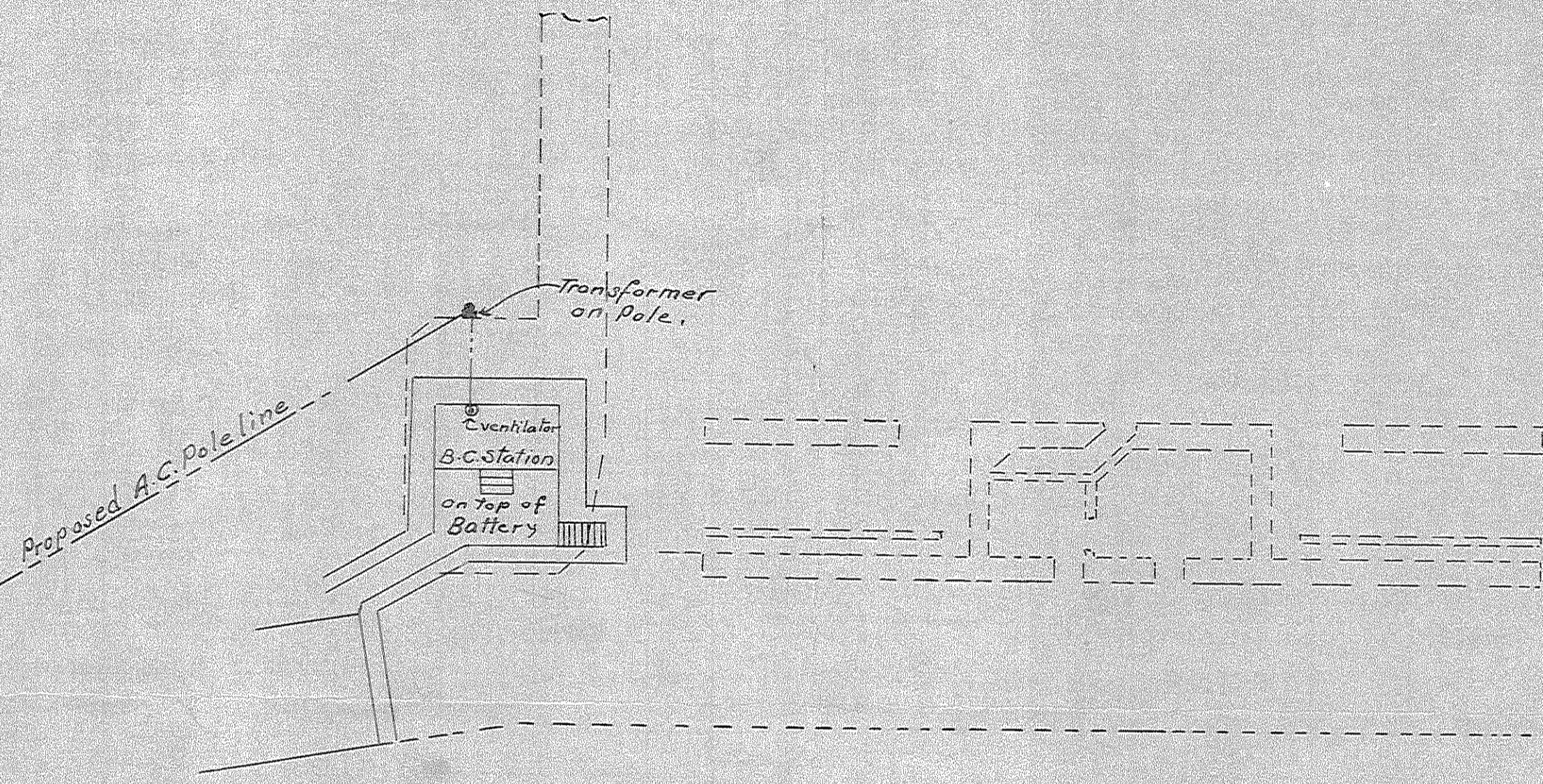
Submitted: Approved:

Captain, Corps of Engineers. Colonel, Corps of Engineers.

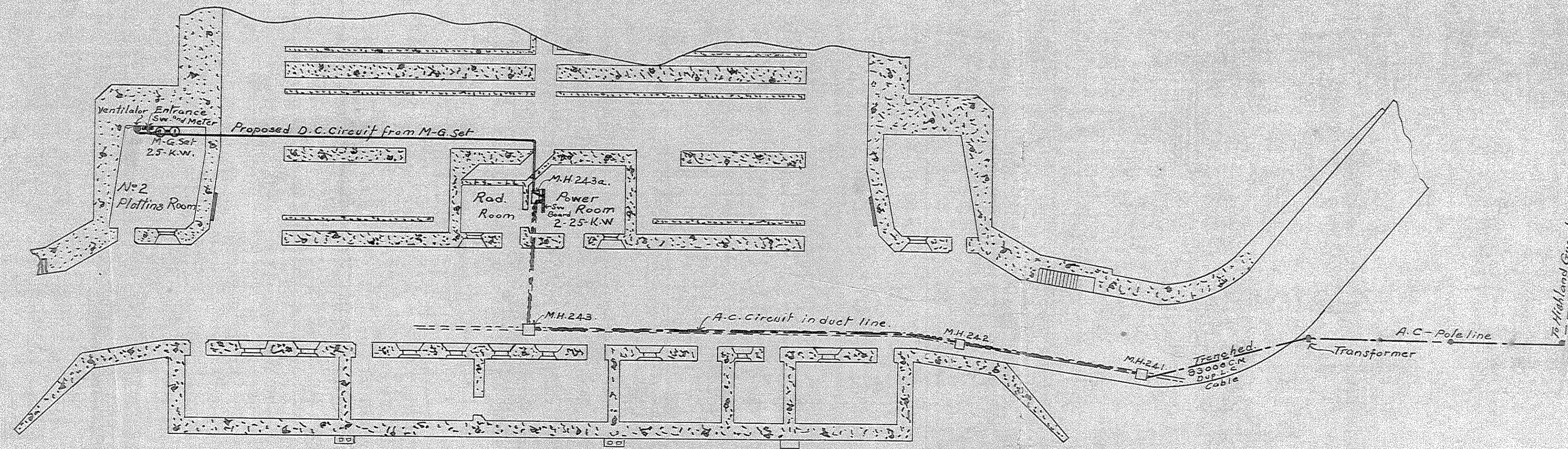
REVISION	DATE	BY	FOR
1			
2			
3			
4			

Isa. Herries A and B
 Blue Print
 No. Date

76-B-3-1



Present A.C. connection to Power Plant Switchboard.



Proposed Location for M-G. Set and Connecting Circuit to Switchboard.

Present Unauthorized A.C. Circuit.

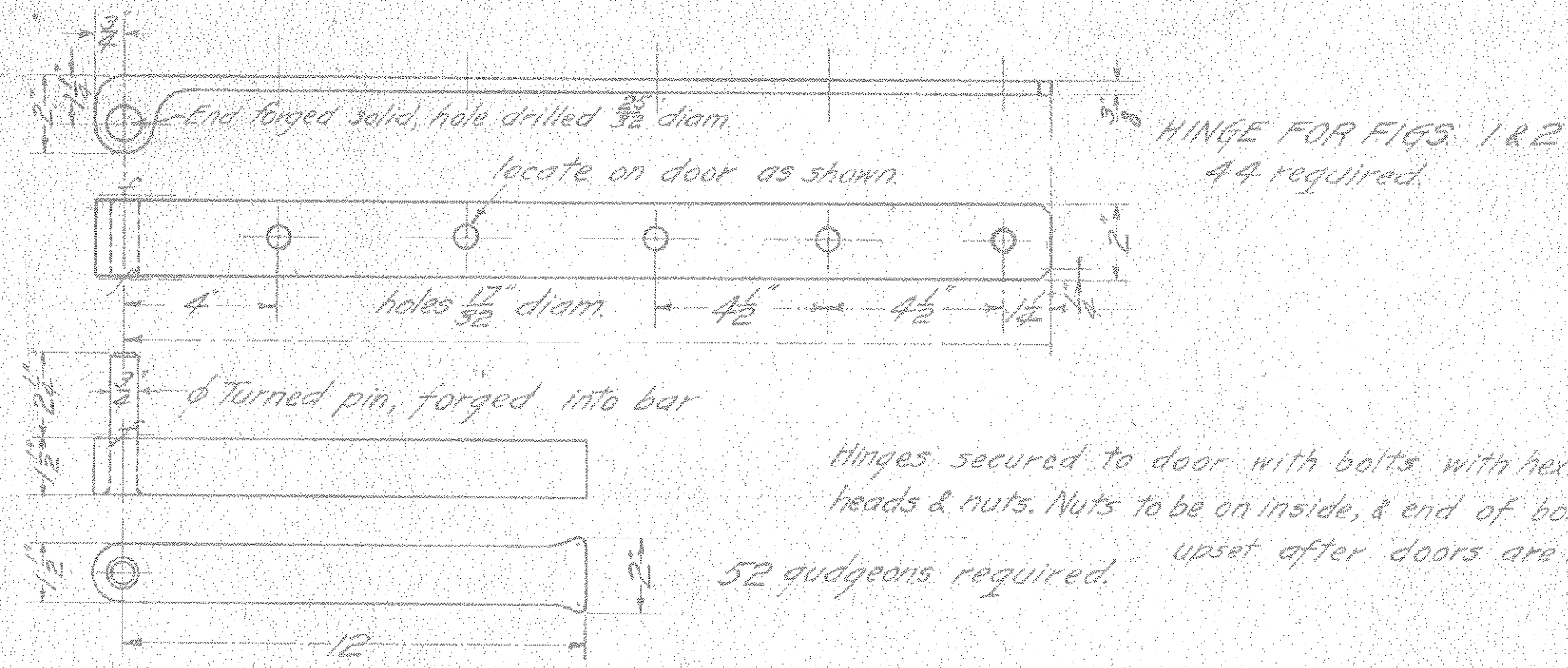
FORT HANCOCK, N. J.
HARBOR DEFENSES OF SANDY HOOK
**ALTERNATING CURRENT CIRCUITS
KINGMAN AND MILLS**

United States Engineer Office, Third District, New York City, May 20, 1928.

Submitted *H. M. Lindner* Associate Engineer, Electrical. Approved *W. J. Barden* Colonel, Corps of Engineers, District Engineer.

File No. Han. 5/196 To accompany 33rd Ind. dated May 23, 1928.
File No. C. of E. 675.1 (S.H.) 103 Drawn by *H. M. Q.*

Alternating current circuits for
 Battery Kingman and Mills
 Blue print
 May 20, 1928

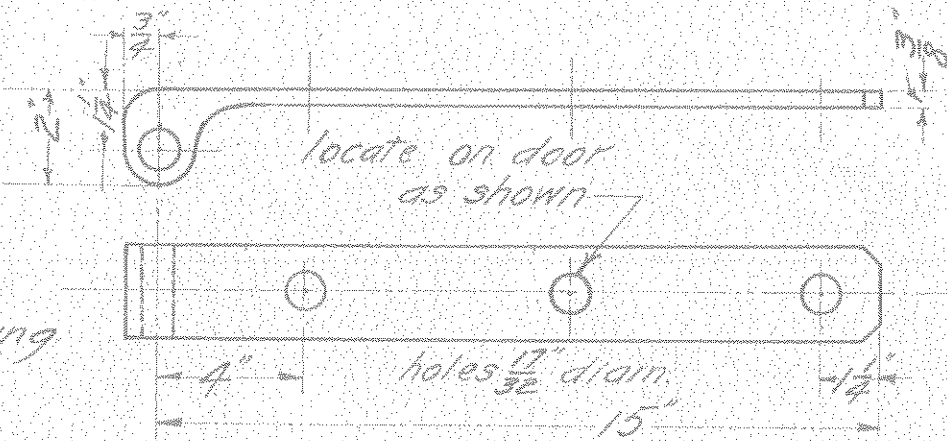


HINGE FOR FIGS. 1 & 2
44 required.

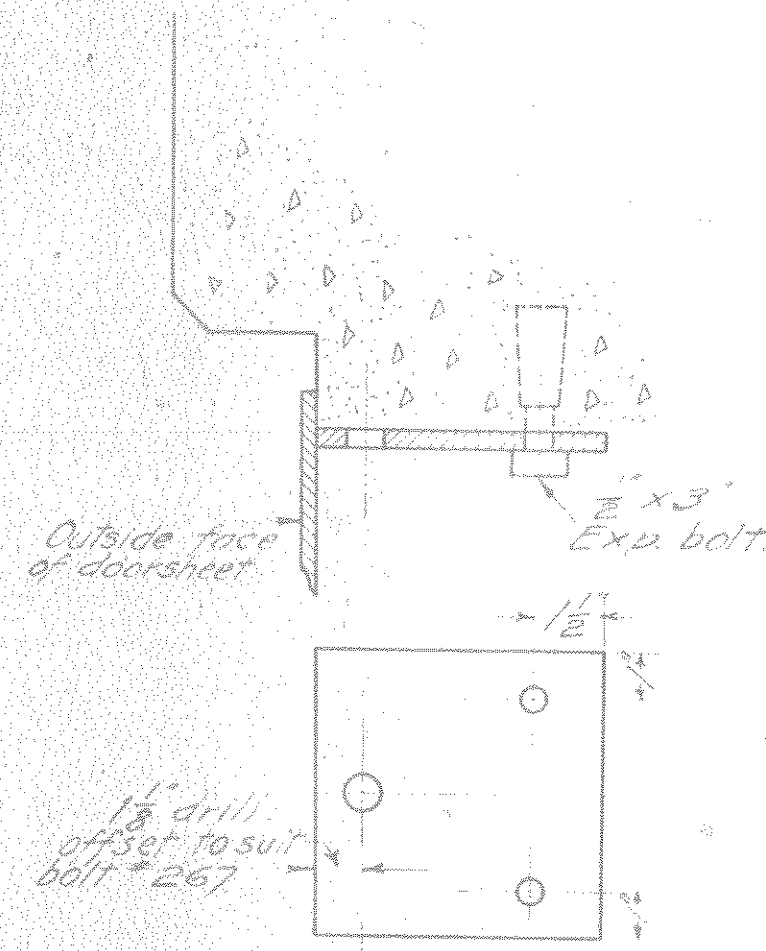
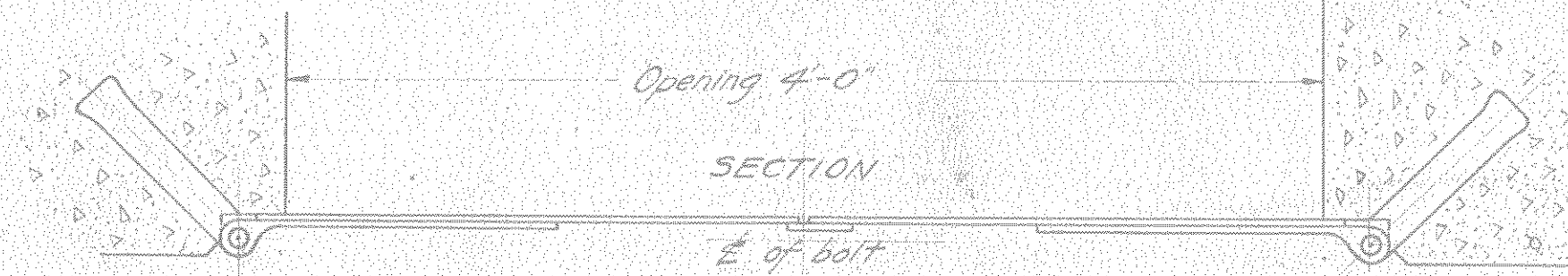
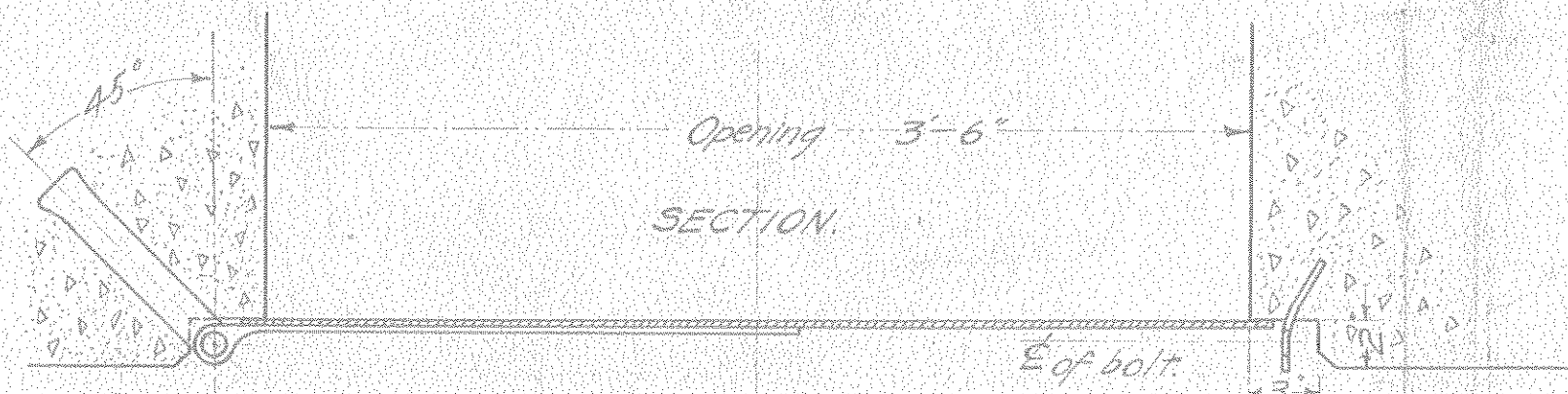
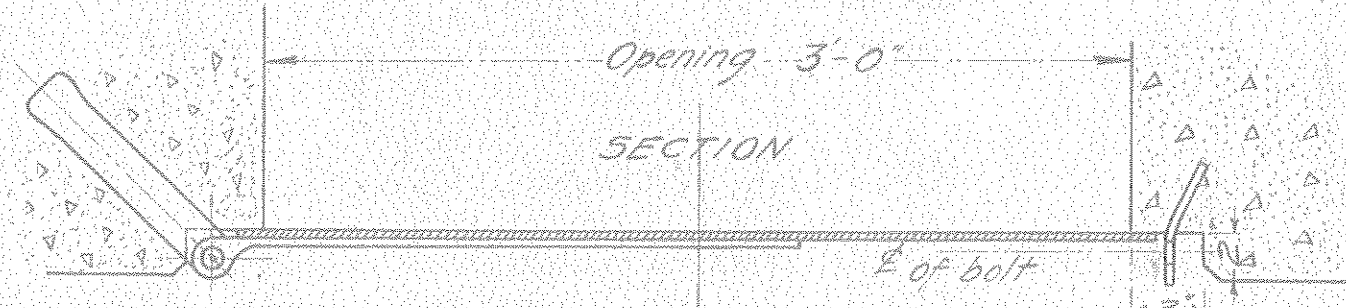
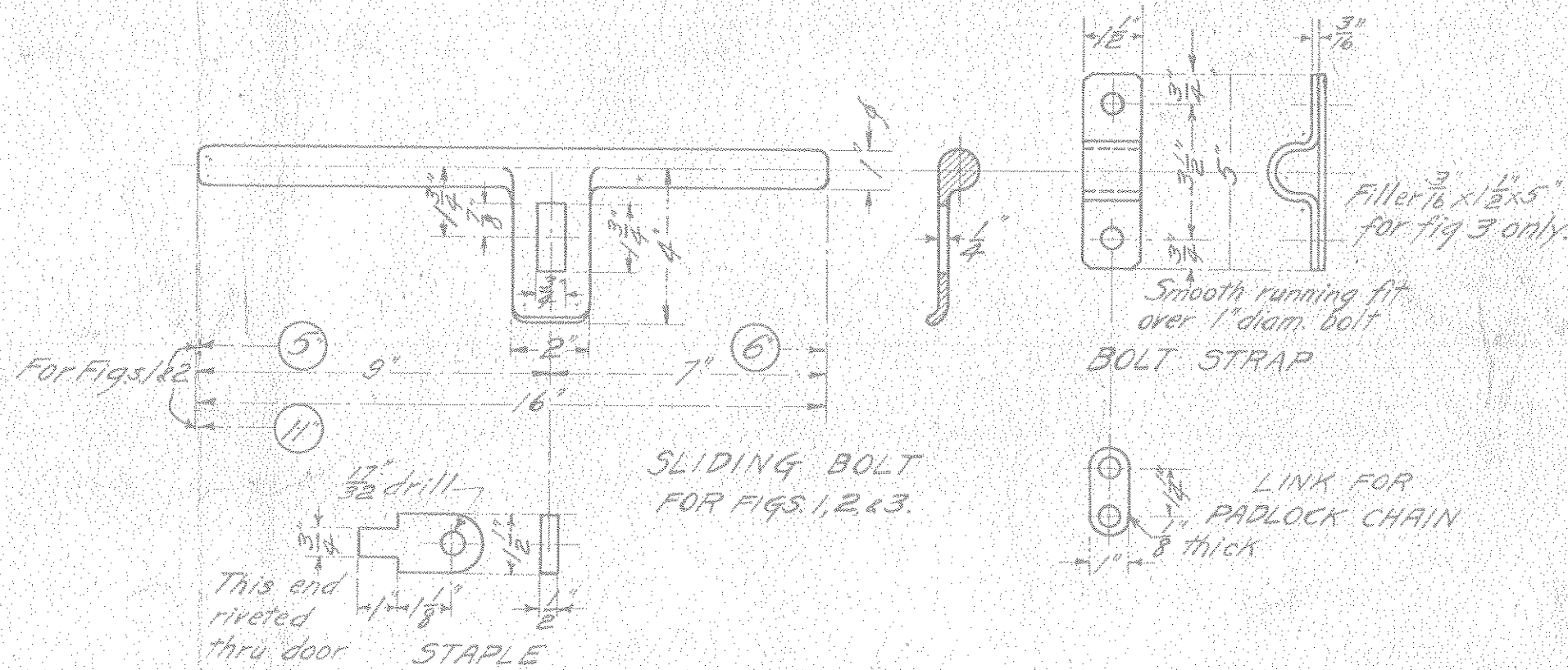
Furnish: 250 bolts $\frac{1}{2}$ " x $\frac{1}{2}$ "
hex heads and nuts (6 spare)

Detail Scale 3"-1'-0"

NOTES:
All materials of steel; rivets $\frac{1}{2}$ " diam; open holes $\frac{3}{8}$ " diam except as otherwise noted.
Rivets shall be accurately spaced and aligned with full size heads.
Surfaces in contact shall be painted before they are riveted together.
Before shipment materials shall be cleaned and painted one coat.
Machined surfaces shall be coated with white lead and tallow.
Paint shall be best quality red lead and linseed oil.



HINGE FOR FIG. 3. 8 required
gudgeon & offsets same as on figs 1 & 2.



Top Strike Plate
6" x 6" x $\frac{3}{8}$ " (for fig. 3 only)

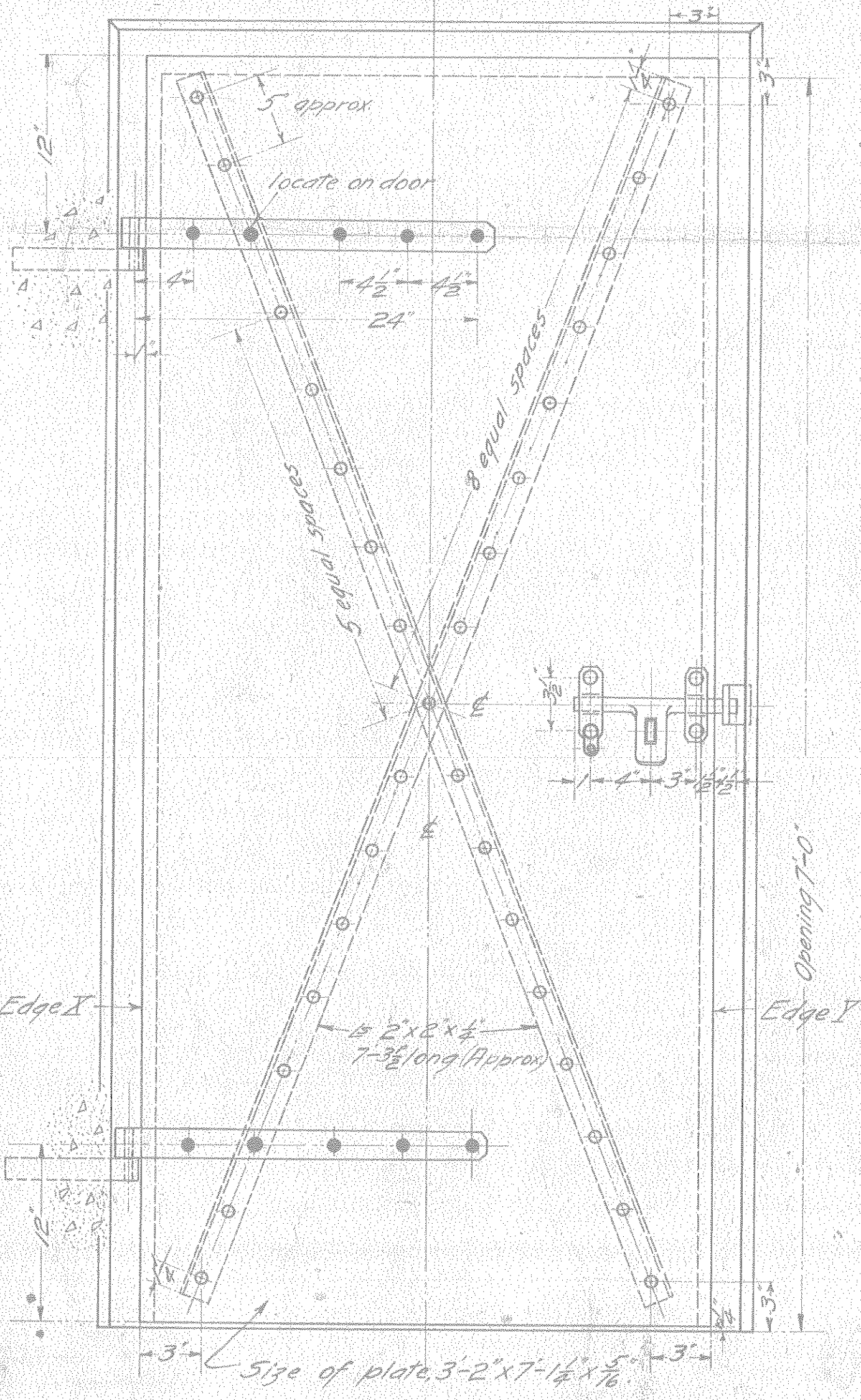


FIG. 1. OUTSIDE ELEVATION.

18 like this.
16 as drawn, with hinges on Edge I & bolt on Edge I.
2 oppos. hand, " " " " " I " " X.

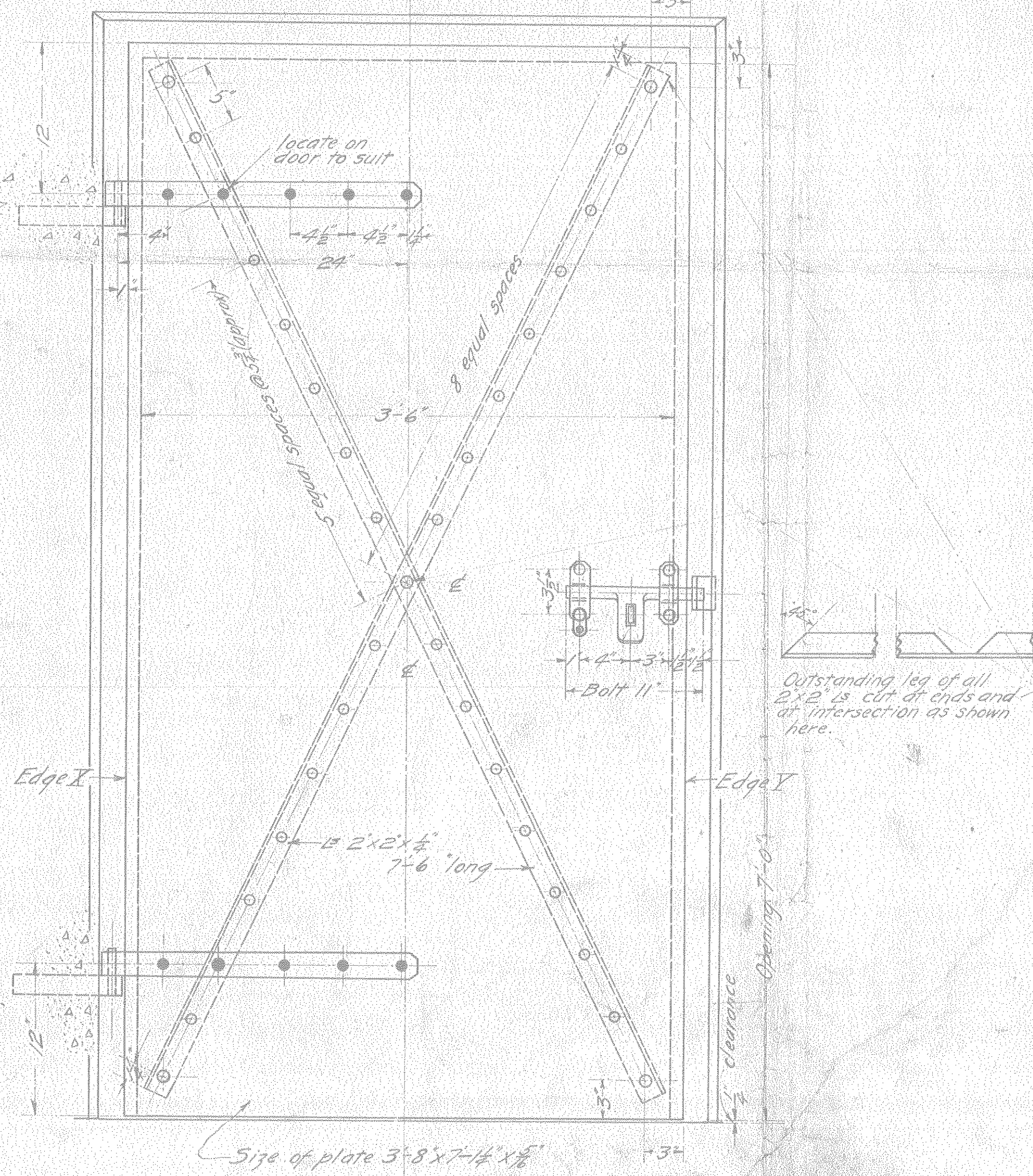


FIG. 2. OUTSIDE ELEVATION.

Four like this:
2 as drawn, with hinges on Edge I and bolt on Edge I
2 oppos. hand, " " " " " I " " X

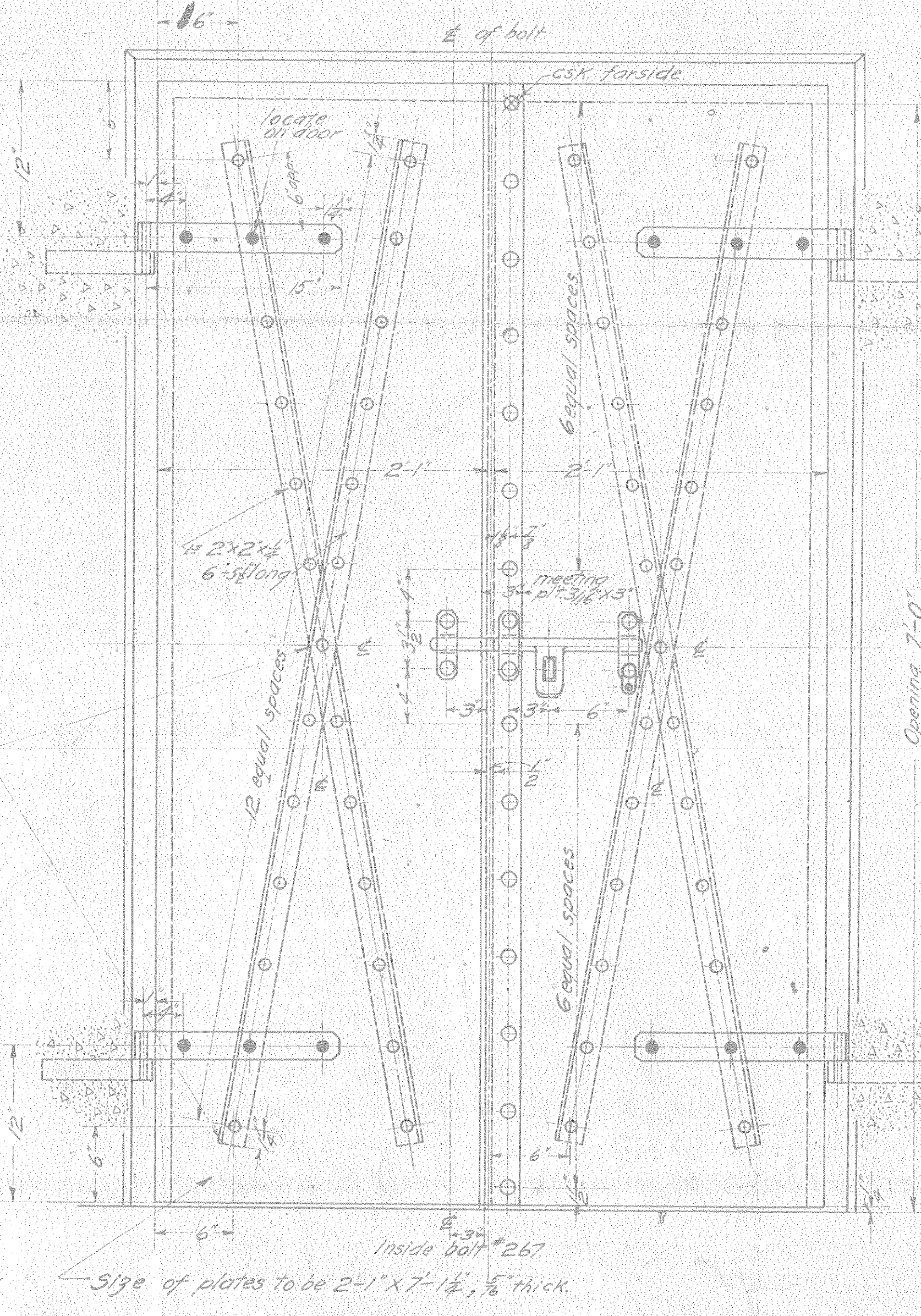
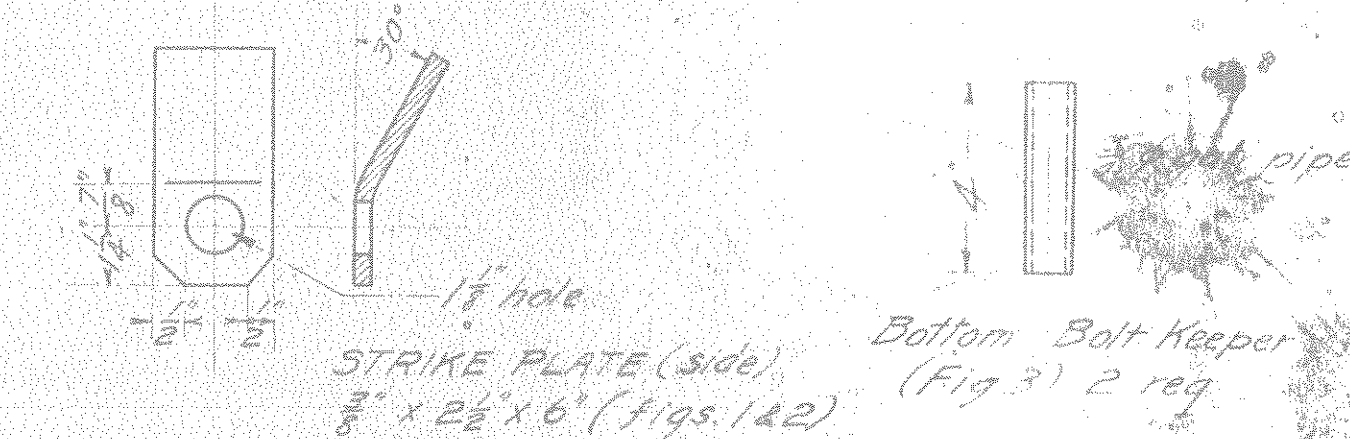


FIG. 3. OUTSIDE ELEVATION.

2 like this:
Two inside bolts Corbin # 267, shall be fitted to inside of left hand leaf of Fig. 3. The top bolt to be flush with top of door, when locked, and bottom bolt to project 1/2" below bottom of door when locked; bolts to be shipped loose with rivets for attaching to door.



Detail Scale 3"-1'-0"

41-77-17

FORT HANCOCK
BATTERIES A AND B
FOR
TWO 12 IN. GUNS ON BARBETTE CARRIAGES, MODEL 1917
STEEL DOORS

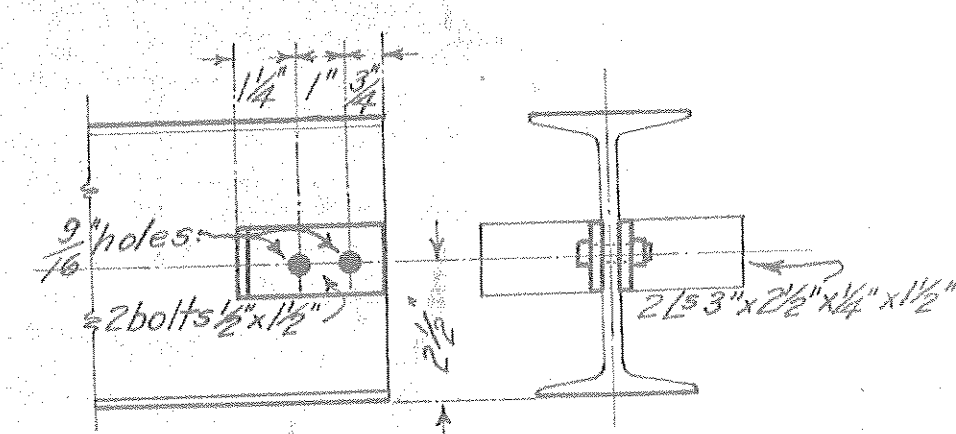
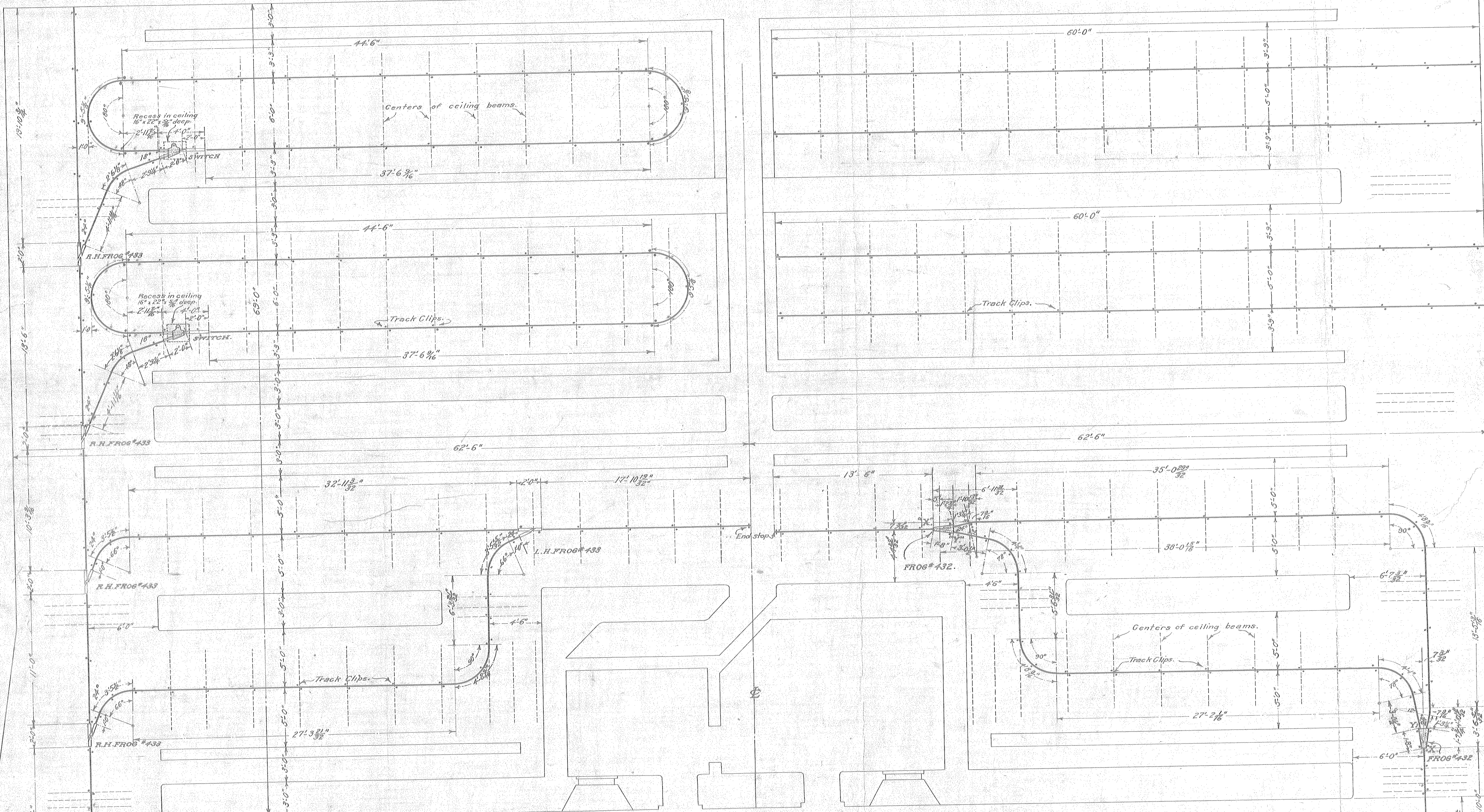
3 SHEETS SHEET 4 OF 3 0

SCALE 1/2" = 1'-0"

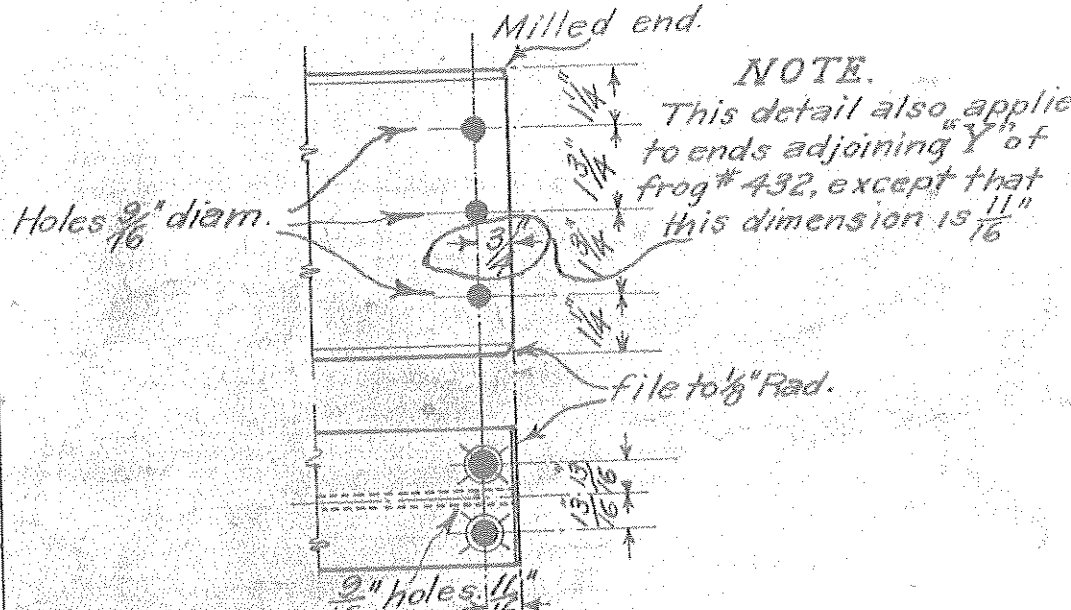
U.S. ENGINEER OFFICE, SECOND DISTRICT, NEW YORK CITY, JULY 2, 1917

Submitted by: R. C. Genesee
Captain, Corps of Engineers

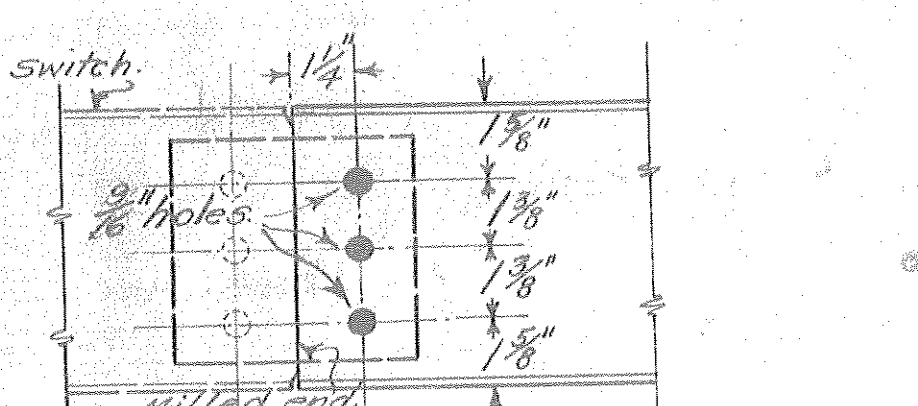
Checked by: F. W. N. No. 1072



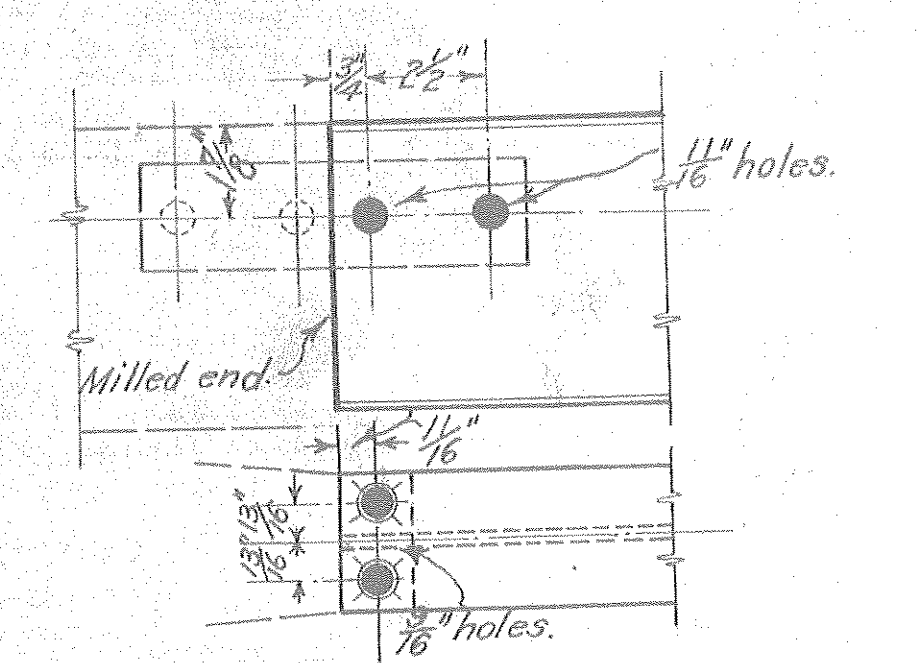
ENDS OF TRACK ADJOINING RIGHT & LEFT HAND FROGS #433.
Scale 3" = 1ft.
15 like this (See Note above)



ENDS OF TRACK ADJOINING END "X" OF FROG #432.
Scale 3" = 1ft.
2 like this.



TYPICAL TRACK SPLICE.
Scale 3" = 1ft.

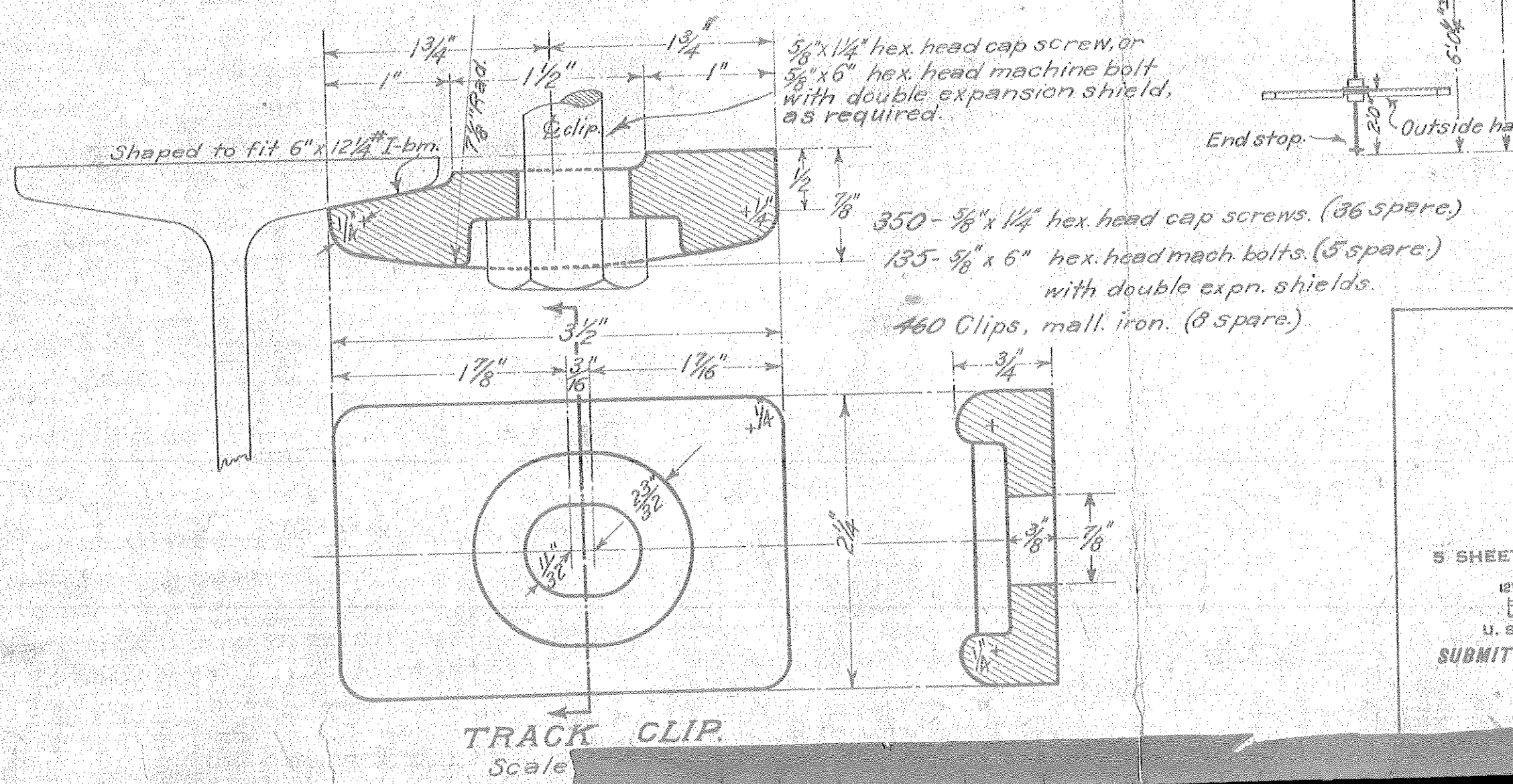
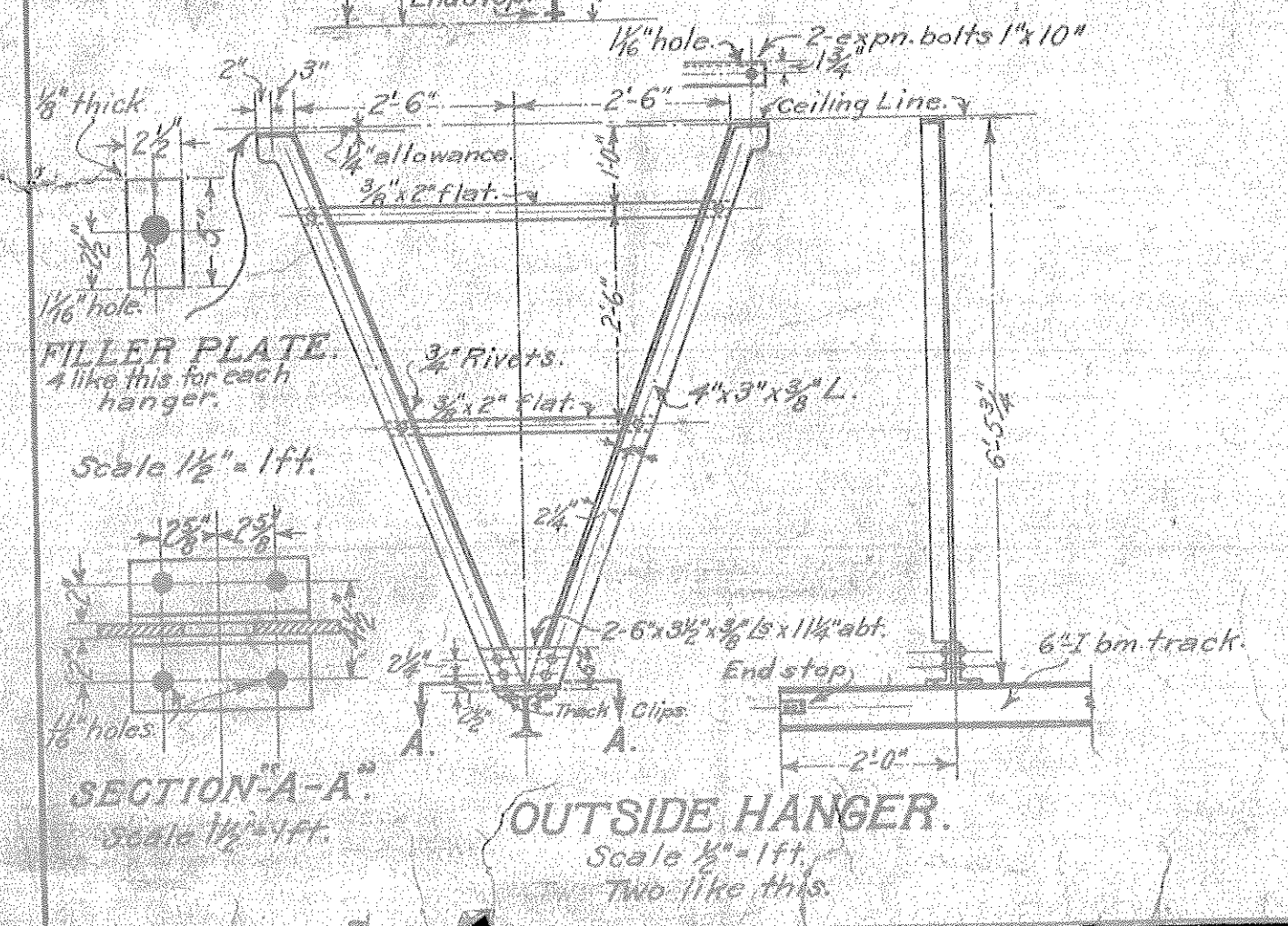


This splice to be used for all splices, except as otherwise noted. Splices shall be made only in straight sections of track.

PLAN OF TRACKS

GENERAL NOTES:-

Materials of steel except as noted. Rivets and open holes as noted. Drawing shows center line of track. Track to be of 6"x12 1/2" I-Beam. Frogs are malleable iron, switches are steel. Both are manufactured by Chisholm & Moore Mfg. Co. and are shown in detail on sheets 2, 3, & 4. Radii of all curves 3'-0". Location of splices shall be shown on a shop drawing prepared by the contractor, and every piece of track in each set shall have a distinguishing mark painted thereon. This shop drawing shall be submitted for approval before work is begun. Track shall be painted one heavy coat of best quality red lead and linseed oil before shipment. Approx. length of track = 775.0' ± excluding frogs & switches.



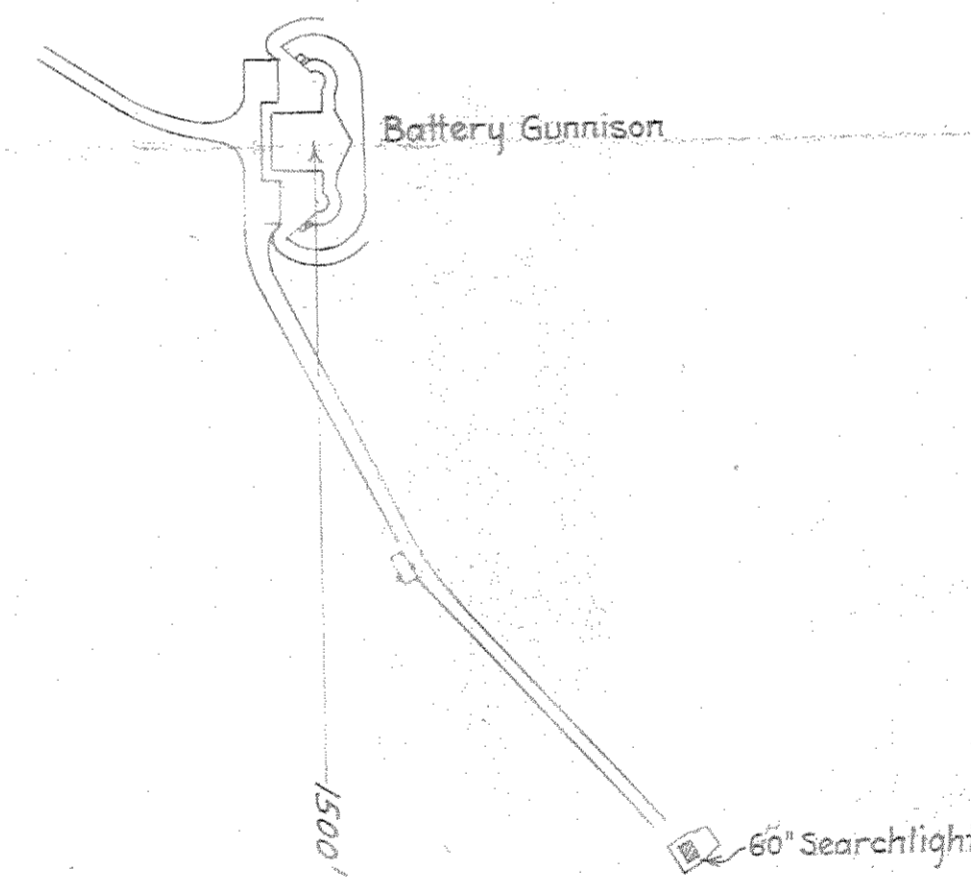
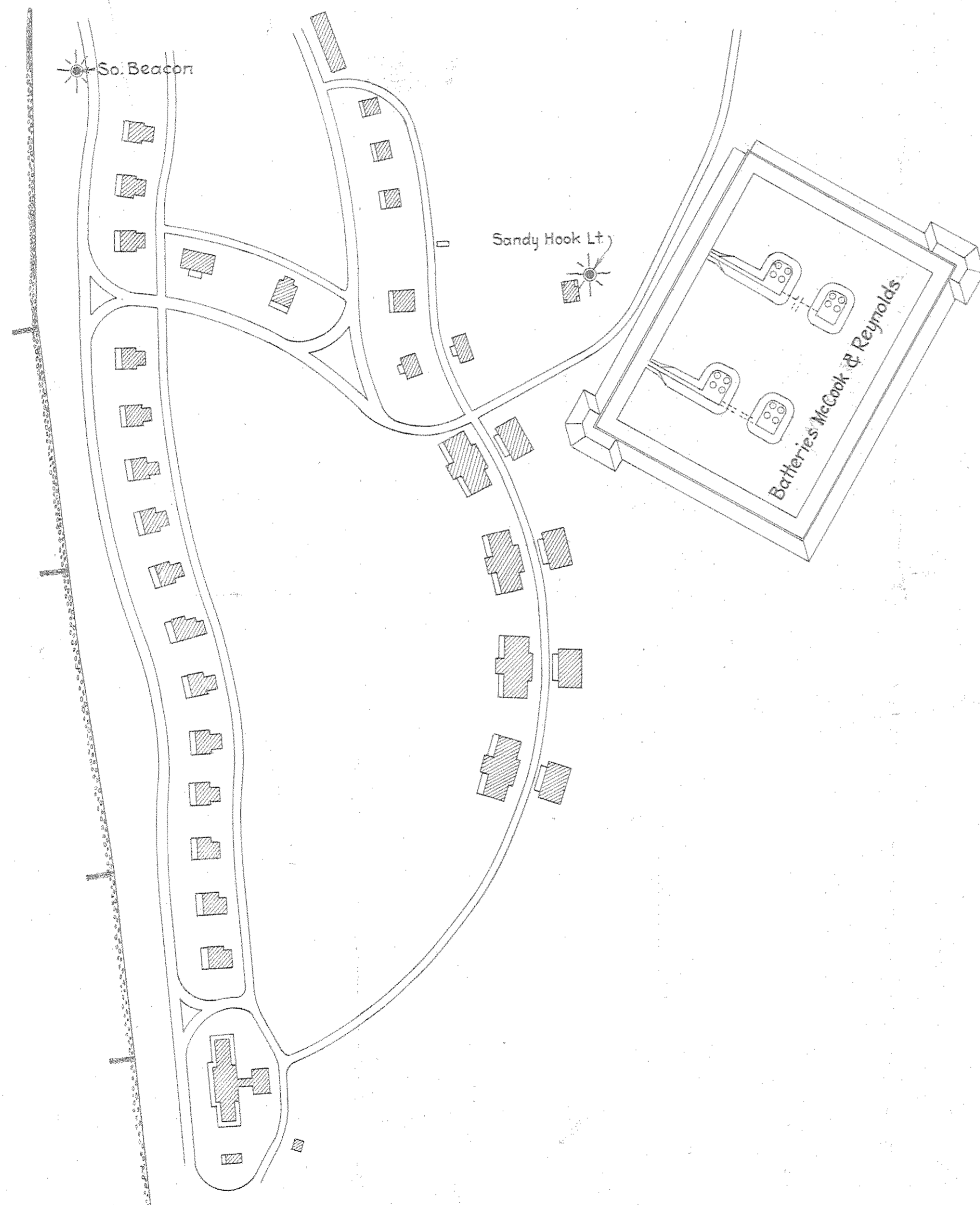
FORT HANCOCK, N. J. BATTERIES A AND B EXPERIMENTAL TROLLEY SYSTEM GENERAL PLAN

5 SHEETS SHEET NO. 1 GENERAL SCALE 1/4" IN. = 1 FT.

U. S. ENGINEER OFFICE, SECOND DISTRICT, NEW YORK CITY.
SUBMITTED: [Signature] APPROVED: [Signature]

Transmitted with dated

SANDY HOOK BAY

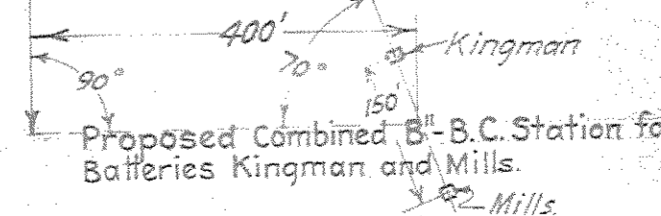


ATLANTIC OCEAN

A-7-7-36

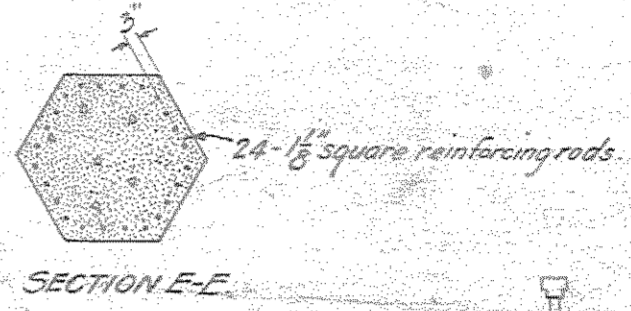
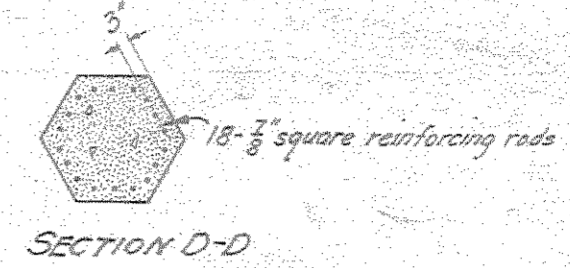
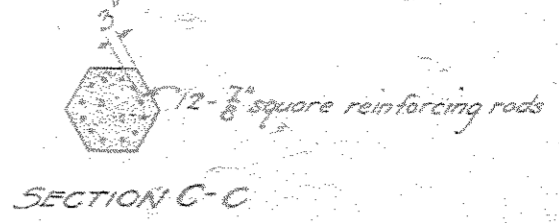
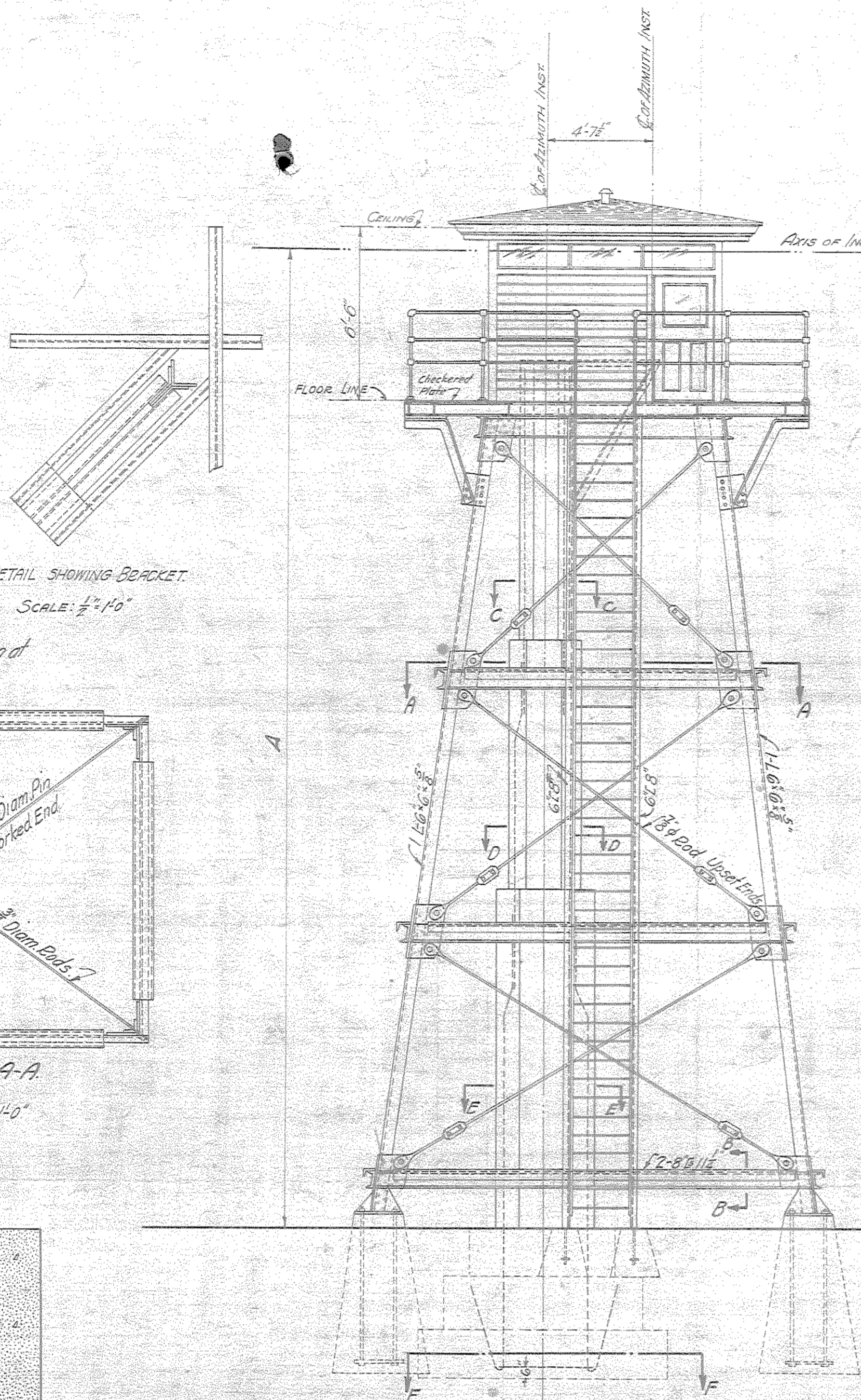
FORT HANCOCK, N. J.
LOCATIONS OF PROPOSED SITE
FOR B¹-B. C. OBSERVING STATION FOR
BATTERIES KINGMAN AND MILLS

SCALE 1 INCH = 200 FEET

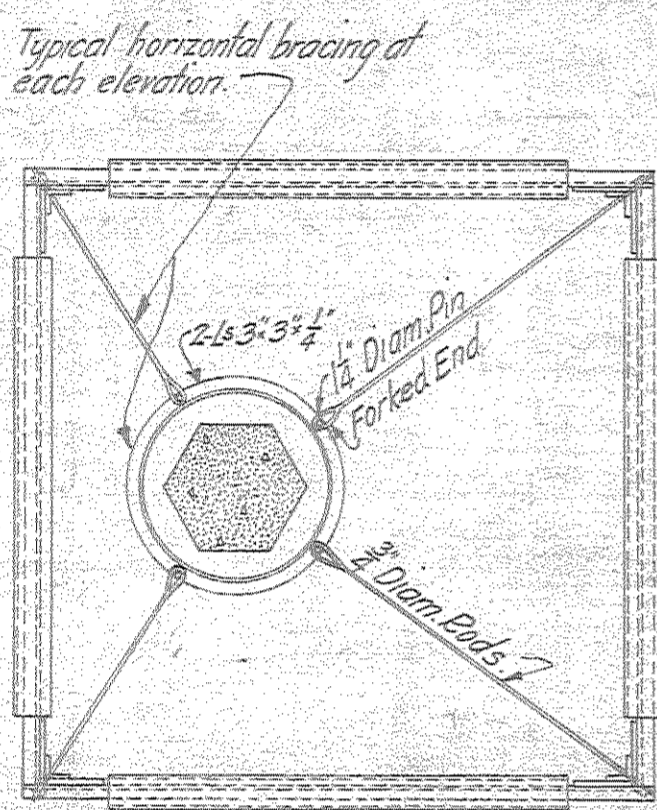


U. S. ENGINEER OFFICE, SECOND DISTRICT, NEW YORK CITY. 3919.
 SUBMITTED: *Robert W. Crawford* CAPT. CORPS OF ENGINEERS, U.S.A. APPROVED: *C. S. Carman* COL. CORPS OF ENGINEERS, U.S.A.
 Drawn by: *S. Williams, Jr.* ENGR. ASSIST. ENGINEER
 Traced by: *S. Williams, Jr.* ENGR. ASSIST. ENGINEER
 Checked by: *CBC* FILE NO. *Haa-1* TRANSMITTED WITH REPORT
 dated: _____ 1919.

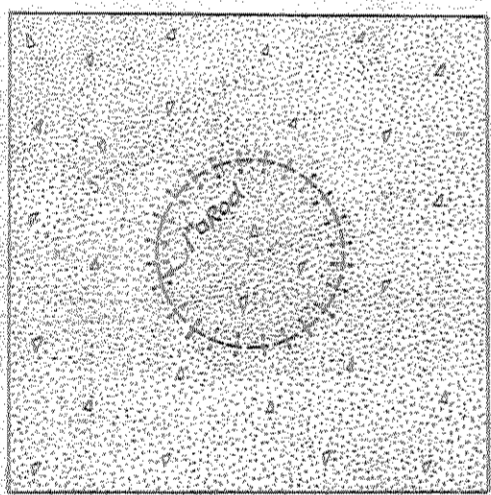
Batteries Kingman and Mills
Blue Print
July 19, 1919



DETAIL SHOWING BRACKET.
SCALE: 1/2" = 1'-0"

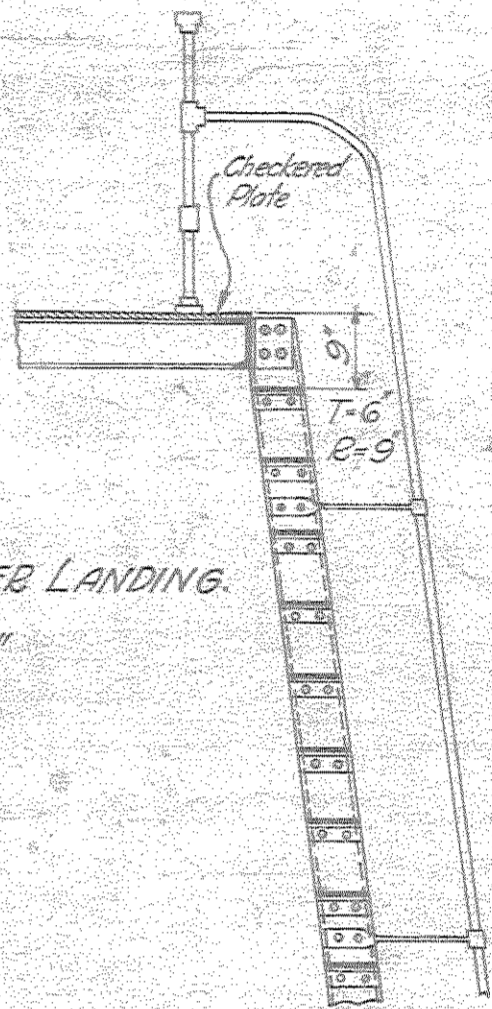


SECTION A-A
SCALE: 1/4" = 1'-0"

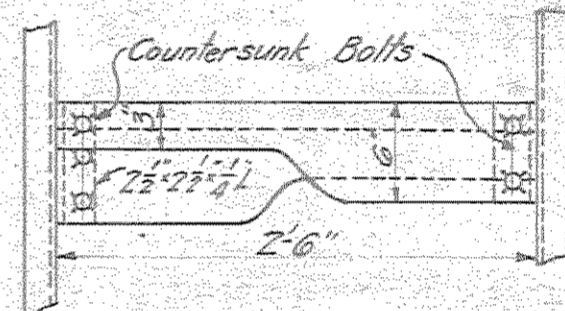


SECTION F-F

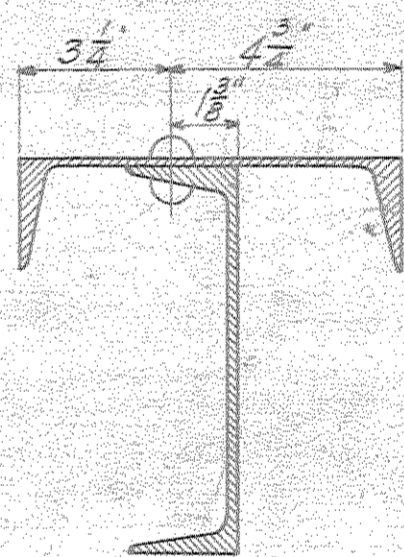
NOTE:-
DIMENSION 'A' FOR B-B-C BATTERY MILLS 34'-3"
" " " " " KINGMAN 39'-3"



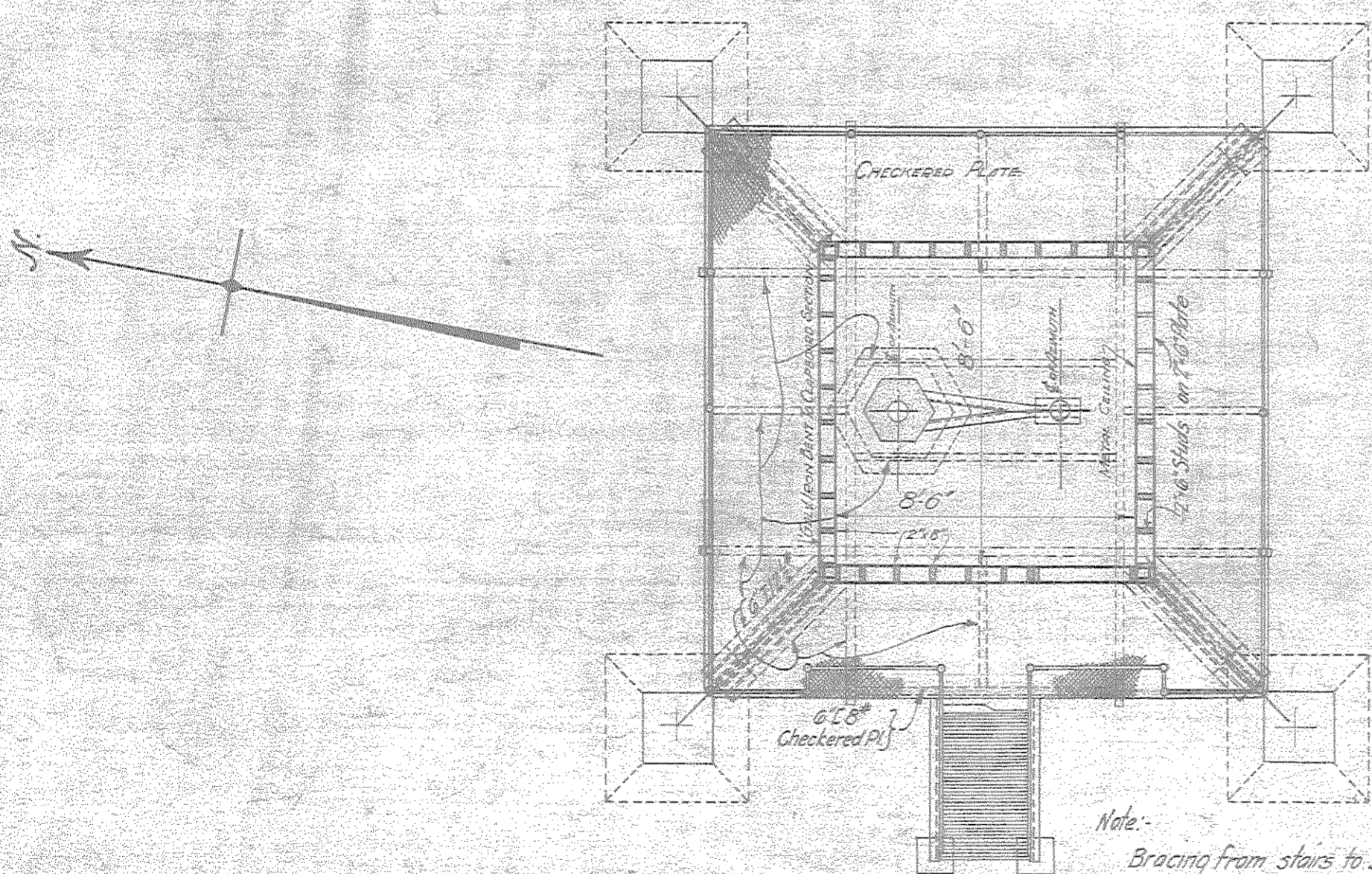
DETAILS OF UPPER LANDING.
SCALE: 1/2" = 1'-0"



DETAIL OF TREAD.
CHECKERED PLATE.
SCALE: 1/2" = 1'-0"



SECTION B-B
SCALE: 5" = 1'-0"

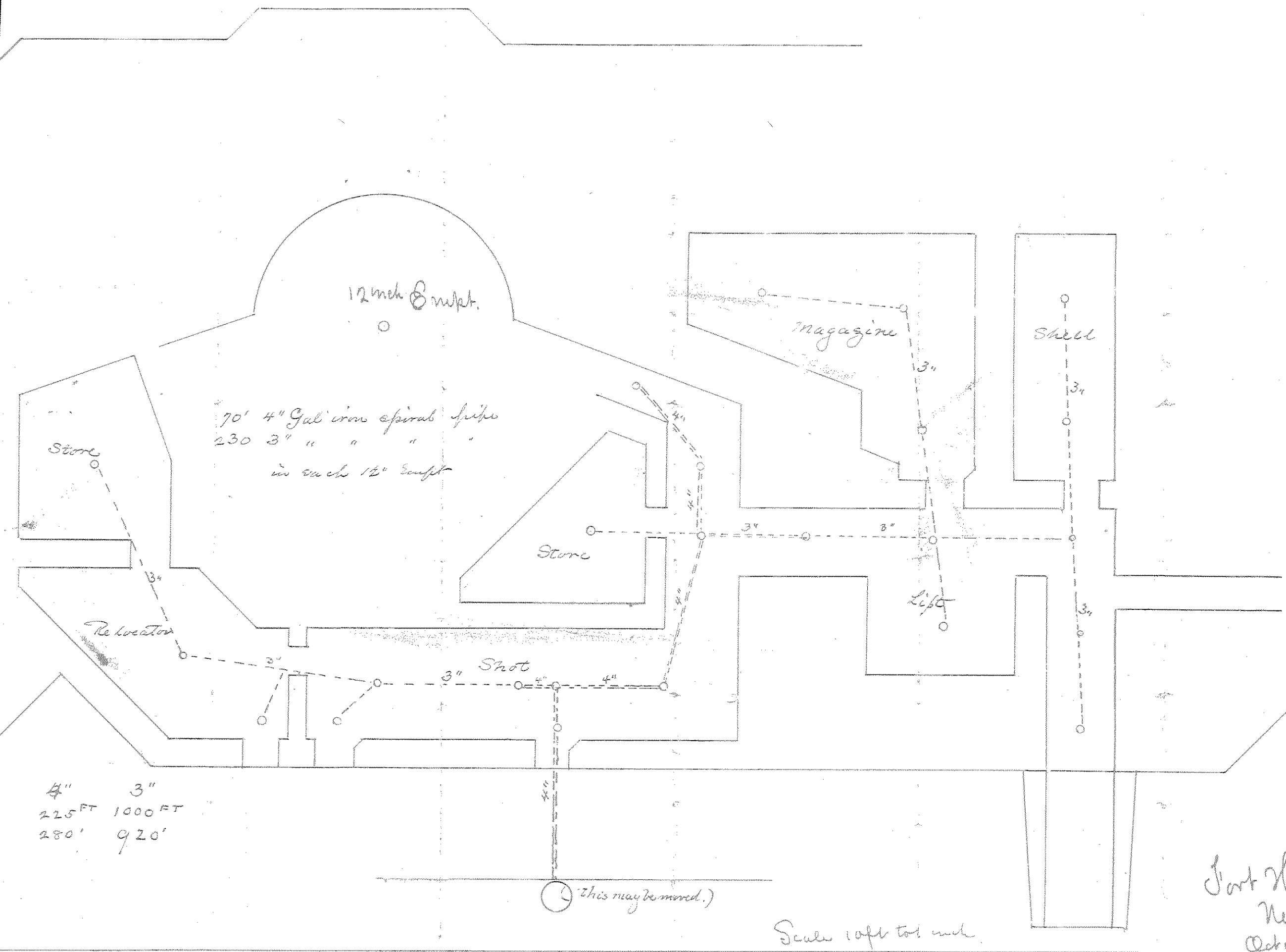


Note:-
Bracing from stairs to struts on tower at each elevation.

REVISER:
APPROVED: *W. Chauffeur*
COL. CORPS OF ENGRS. U.S.A.
NOV. 1918.

C-40-14-2
FORT HANCOCK, N.J.
TYPE OF COMBINED B-B.C. STA.
FOR
BATTERIES KINGMAN & MILLS.
6-SHEETS SHEET 4. SCALE: 1/4" = 1'-0"

SUBMITTED: *W. Chauffeur* ASSIST. ENGR.
APPROVED: *J. Sanford* COLONEL U.S.A.
DRAWN BY: *A. A. E.*
TRACED BY: *A. A. E.* IN REPLY TO FIRST INDORSEMENT COPE 662(34)115, JULY 19, 1919.
CHECKED: *A. A. E.* TO ACCOMPANY SECOND. JAN 1/31/20 NOV 28, 1918.



4" 225 FT
 3" 1000 FT
 280' 920'

(This may be moved.)

Scale 10ft to 1 inch

Fort Hancock
 New Jersey
 October 1902