They fitted with Mitsui B.& W. type Diesel engine for main engine which were manufactured in our Works.

Results in 1948:

"Tokachisan-Maru"	(Semi-cargo)	2,000 G/T
"Hikari-Maru"	(")	1,000 "
"Kuroshio-Maru"	(")	1,300 "
"Teshiosan-Maru"	(Cargo)	2,200 "
"Takaosan-Maru"	(")	2,040 "
"Koh-yo-Maru No.1"	(")	518 "
Fishing boats	6 ships	675 "
"Knurr"	(Whale catcher)	486 "
	Total:	10,222 G/T

Results in 1949 (up to Oct.)
Meiten-Maru (Cargo) 3698.12 G/T
Kensho-Maru (Cargo) 2400 G/T

b) Repairing of ships:

(1) Present capacity (per year) 499,500 G/T

(2) Results:

The maximum results of the past: in 1938 928,304 G/T

c) Marine engines:

(1) Diesel engine:

Since we had agreed the licence of sell and manufacture of B.& W. type's Diesel motor between Burmeister & Wains Co. (Denmark) and us in 1926.

Output of it amounting to ~~349,060~~ 374,810 H.P. (~~259~~ 298 sets) in total till ~~1947~~ 1948.

In the above, representative engines are 13,000 H.P. as main engine for "Hohkoku-Maru", 9,600 H.P. as main engine for "Awajisan-Maru", etc.

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

c) Marine engines: (Cont'd)

(1) Diesel engine:

After the war, 5,400 H.P. for Ten-yo-Maru" which is famous engine as biggest horse power in Japan was manufactured in our Works, and on reason of its excellence and little consumptive rate of fuel Taiyo Gyogo K. K. ordered 5,400 H.P. of same type to us for main engine of Nisshin-Maru No.1" and we completed it recently.

In addition to big type we are manufacturing small type engine (300 H.P., 250 H.P., etc.)

(2) Boiler:

We have a good reputation for skilled maker of Mitsui Howden Johnson type's boiler after we had agreed the licence between James Howden Co., England and our Company.

(3) Capacity of manufacturing:

per year 30,000 H.P.

(4) Results:

Output in 1948:	Diesel engines	11 sets	7,320 B.H.P.
	Reciprocating engine	1 set	1,800 I.H.P.

d) Casting and forging:

Capacity per year:

Casting iron	2,500 tons
Casting steel	720 "
Casting alloys	240 "
Forging steel	1,500 "

e) The other producing capacity:

Coal wagon (per month)	250 sets
Industrial machinery (per year)	2,500 tons
Repairing of rolling stocks (per year)	
Locomotives	48 locos.
Passenger car and ferry cars	60 cars

(3) Capacity of manufacturing:

per year 30,000 H.P.

(4) Results:

Output in 1948:	Diesel engines	11 sets	7,320 B.H.P.
	Reciprocating engine	1 set	1,800 I.H.P.

d) Casting and forging:

Capacity per year:

Casting iron	2,500 tons
Casting steel	720 "
Casting alloys	240 "
Forging steel	1,500 "

e) The other producing capacity:

Coal wagon (per month)	250 sets
Industrial machinery (per year)	2,500 tons
Repairing of rolling stocks (per year)	
Locomotives	48 locos.
Passenger car and ferry cars	60 cars
New construction of electric cars (per year)	10 cars
Bridge, steel tower, tank transporter.	

6. The other special facilities:

a) Testing room of material: There is equipped with every testing apparatus to guarantee the good quality of products.

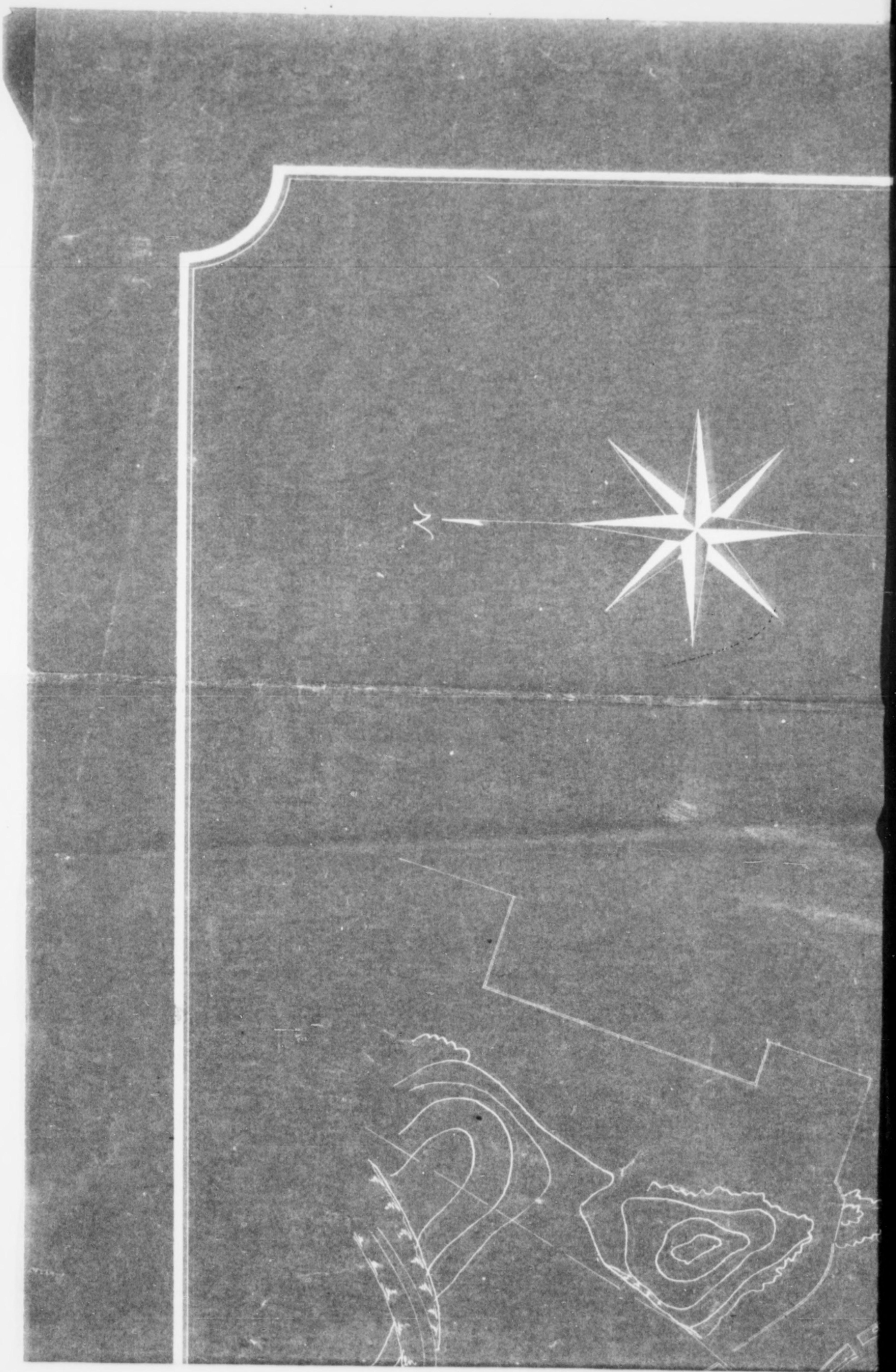
b) Dock house: There are using for which sailors stay in repairing and new ship-building.

c) Club house: There is arranged good accommodation for the visitors, staying, dining, meeting, etc.

d) Hospital: About 100 beds are get ready for sick and wounded workers.

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

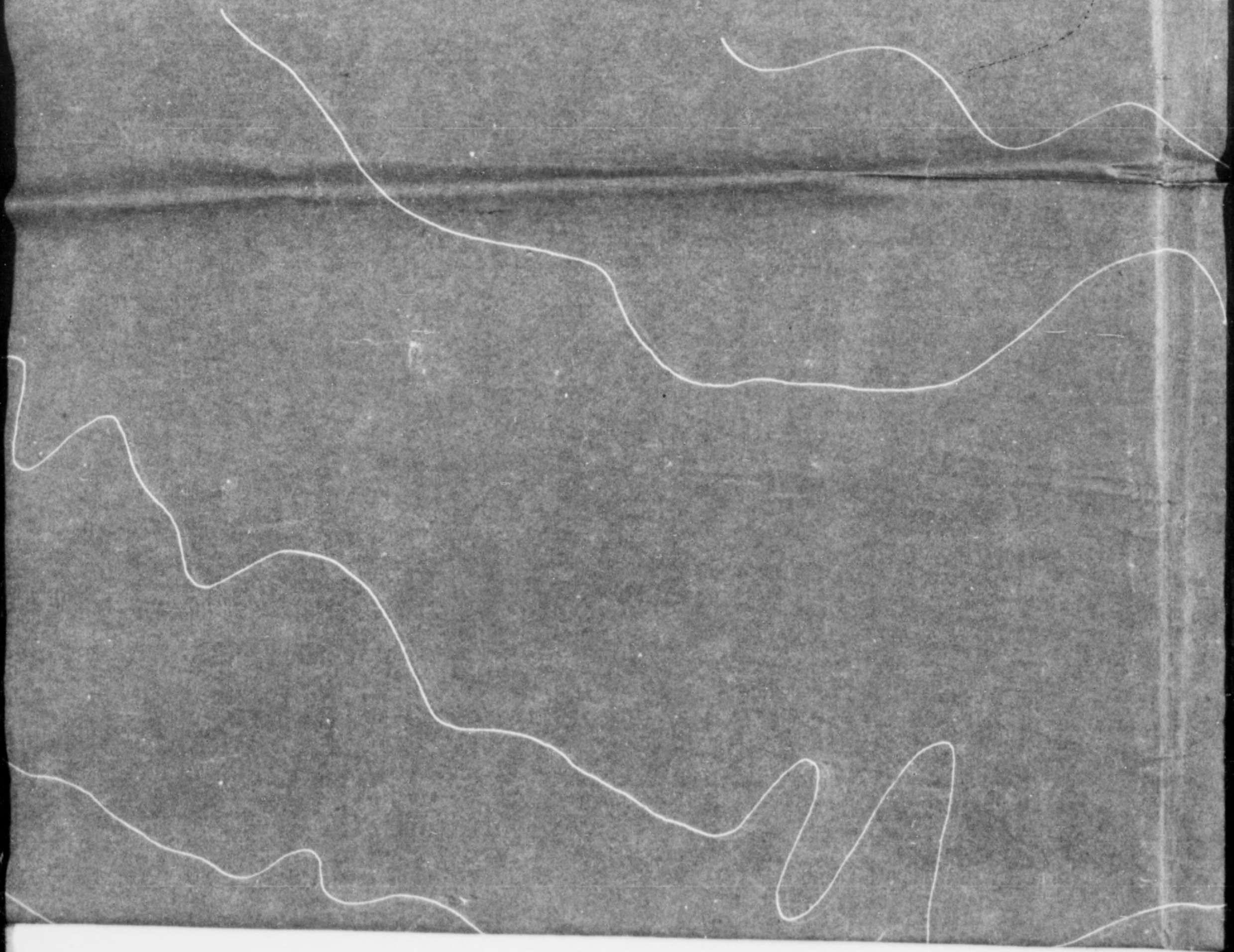
DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013



DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

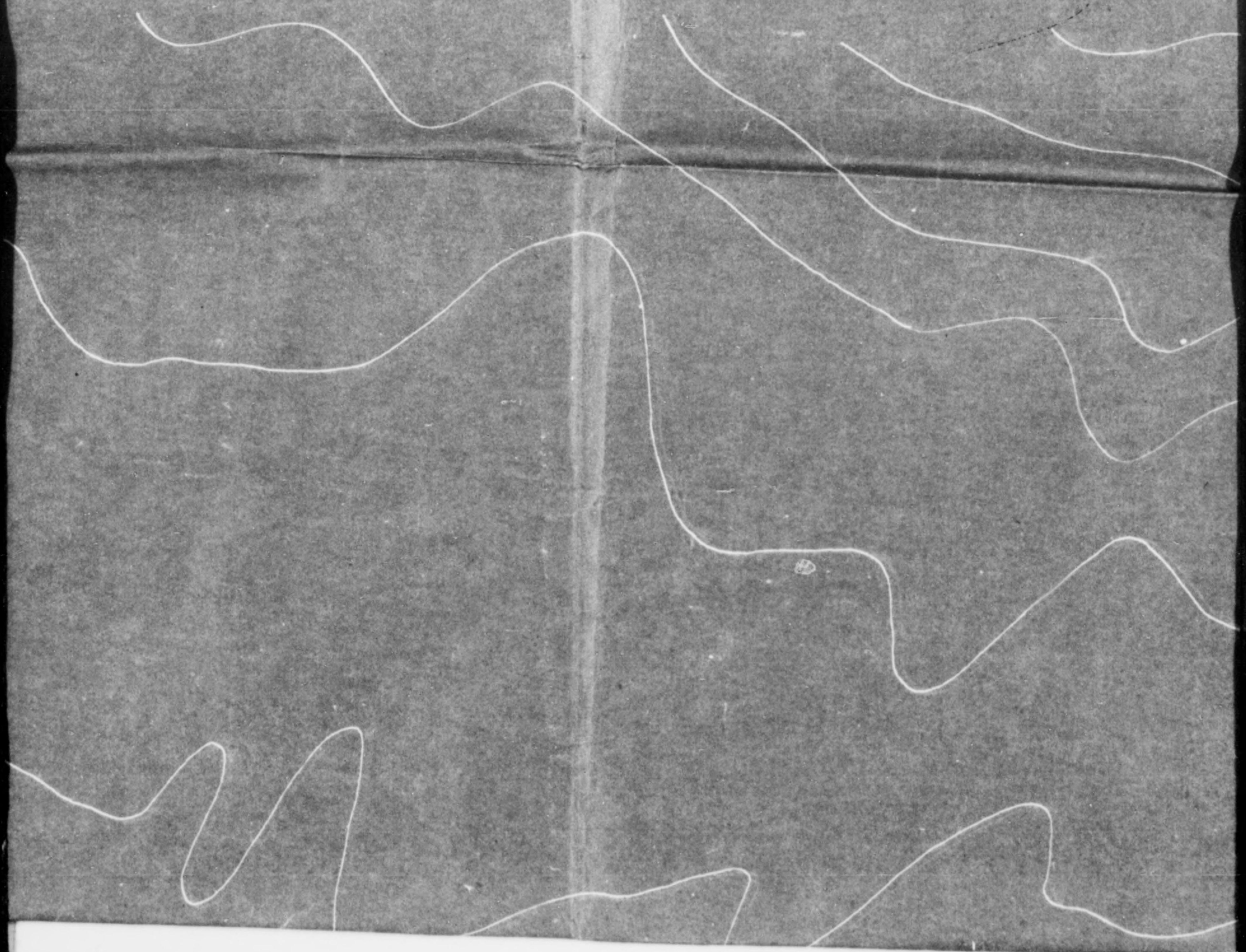
DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

ARRANGEMENTS

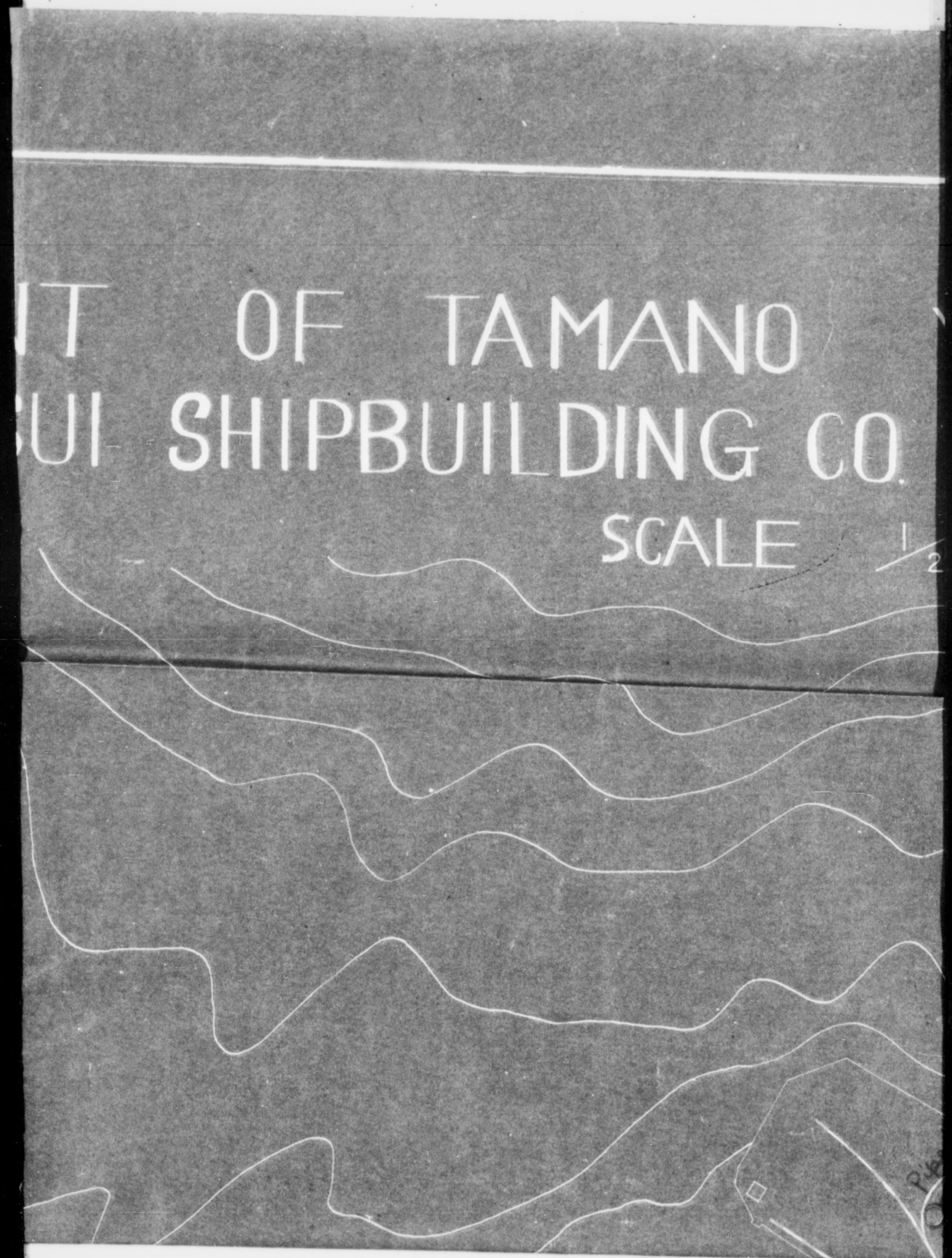


DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

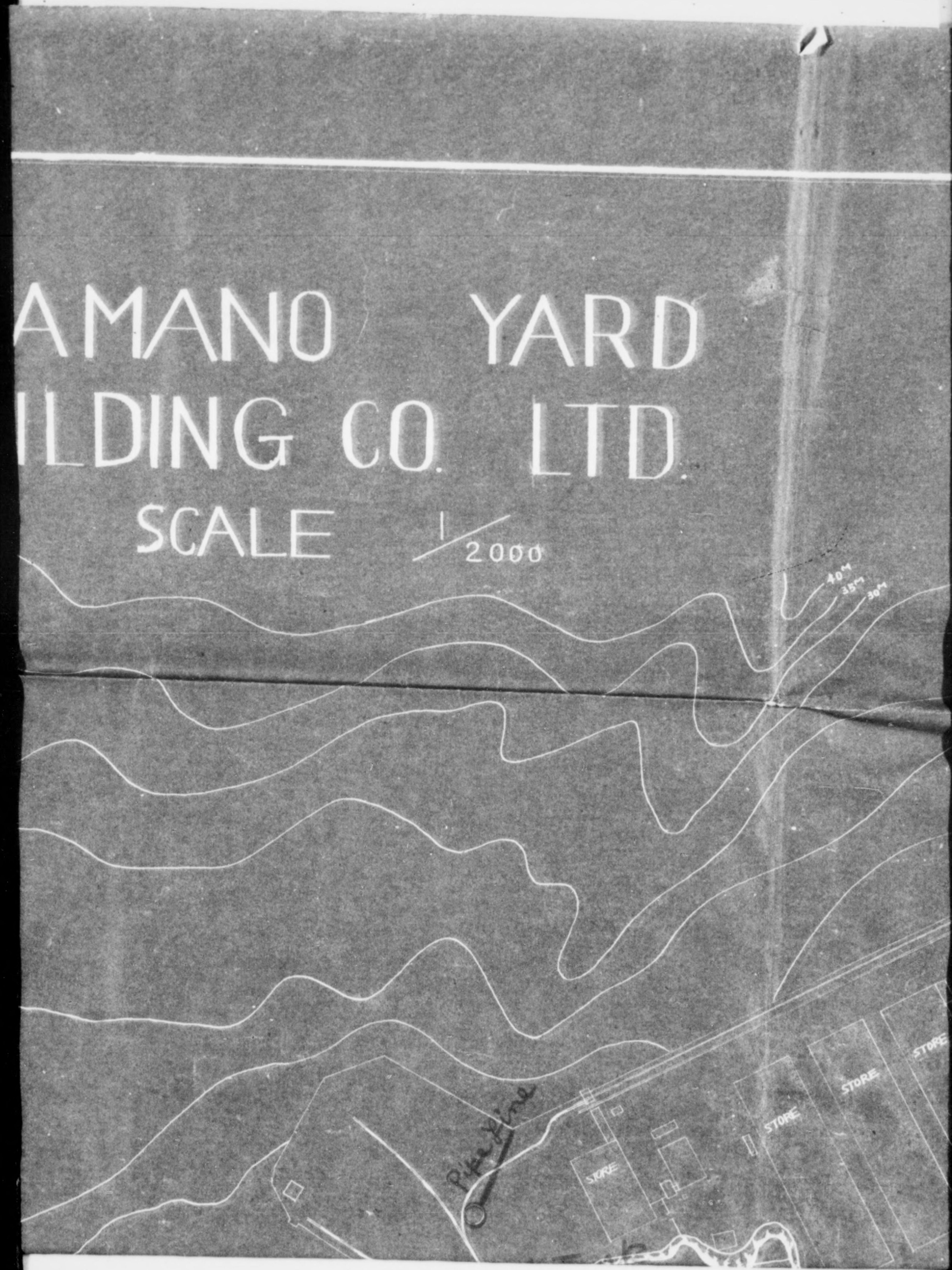
RRANGEMENT OF T
MITSUI SHIPBU



DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013



DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013



DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

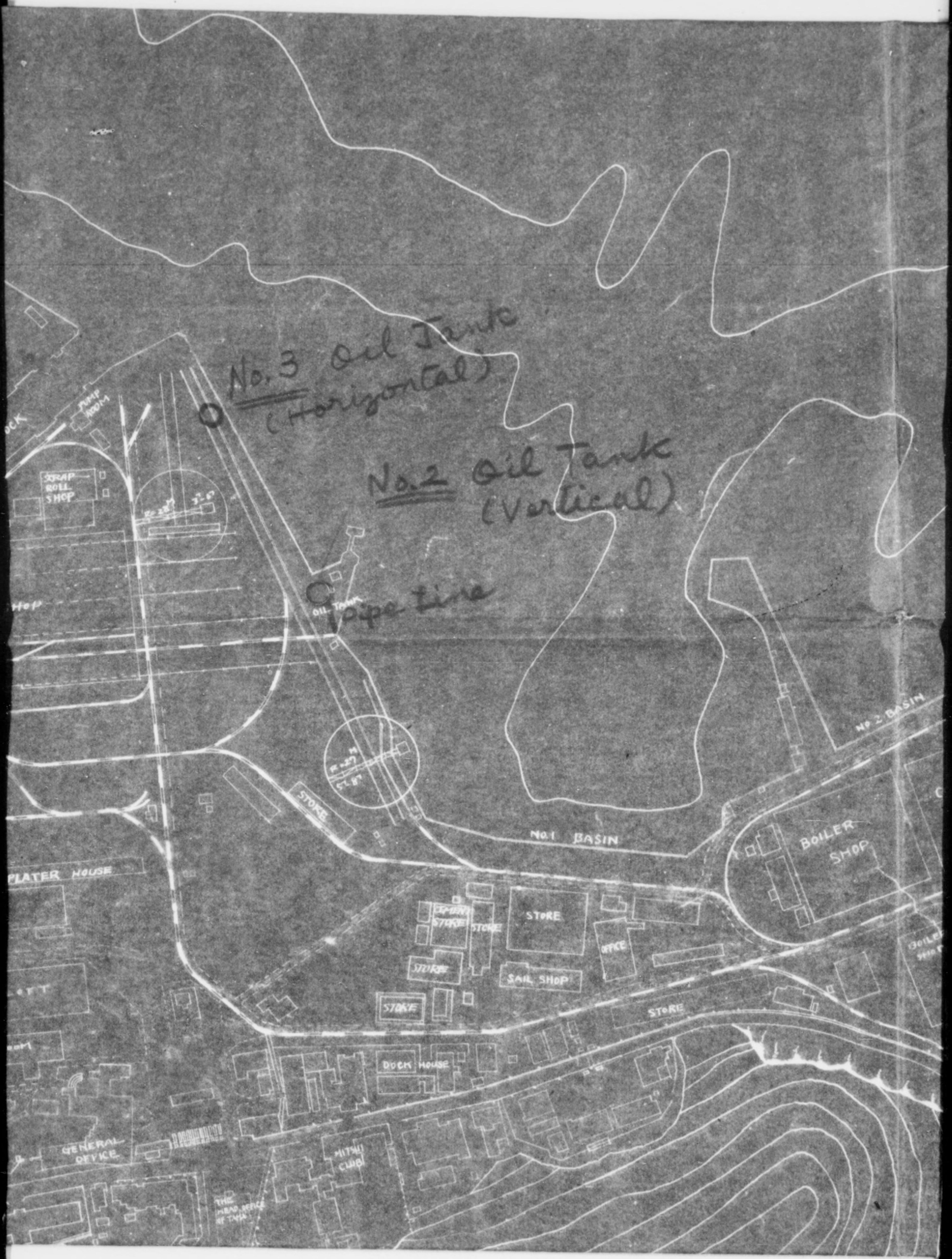
RD
TD.

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013



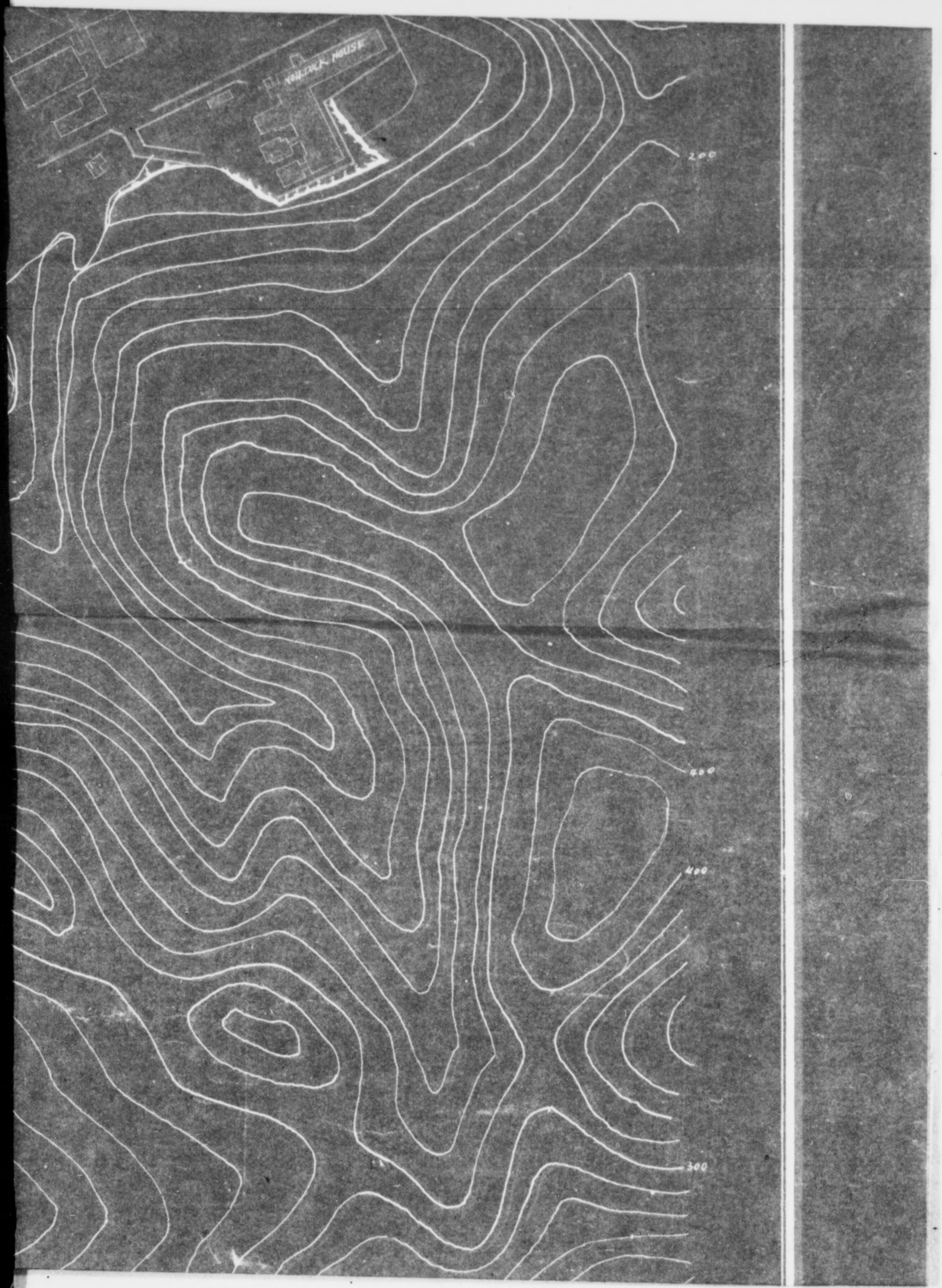
DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

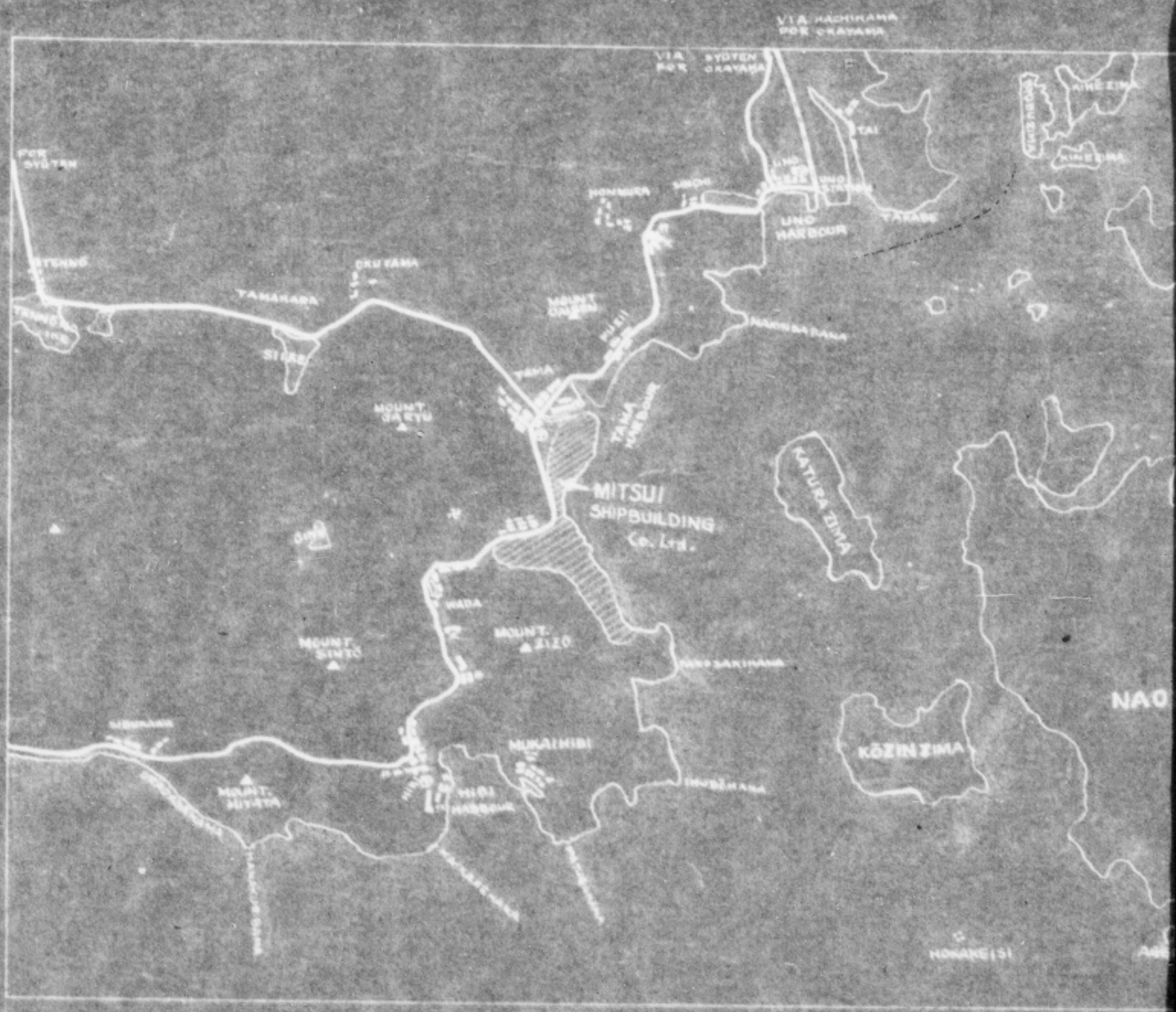
DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

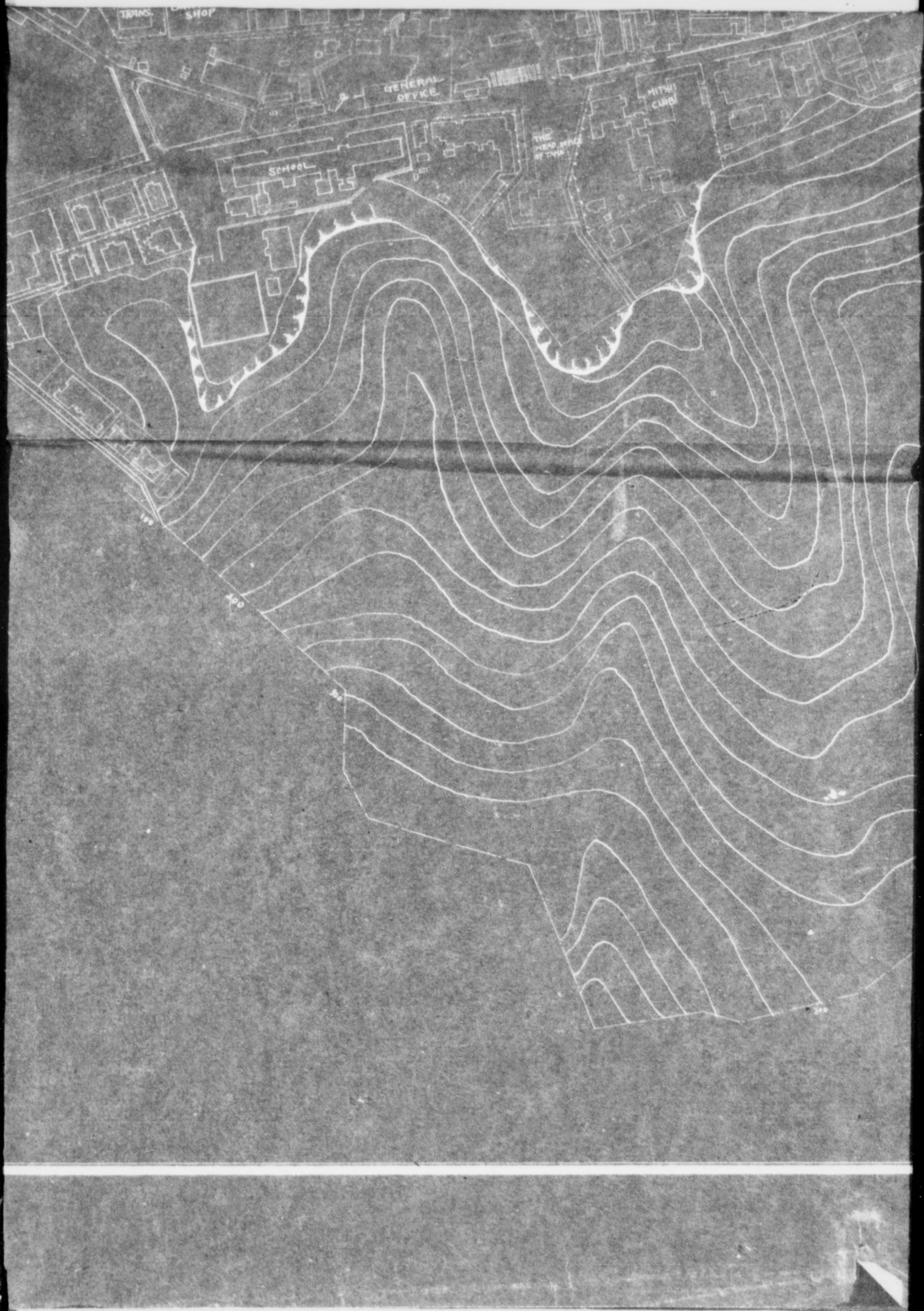


DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013



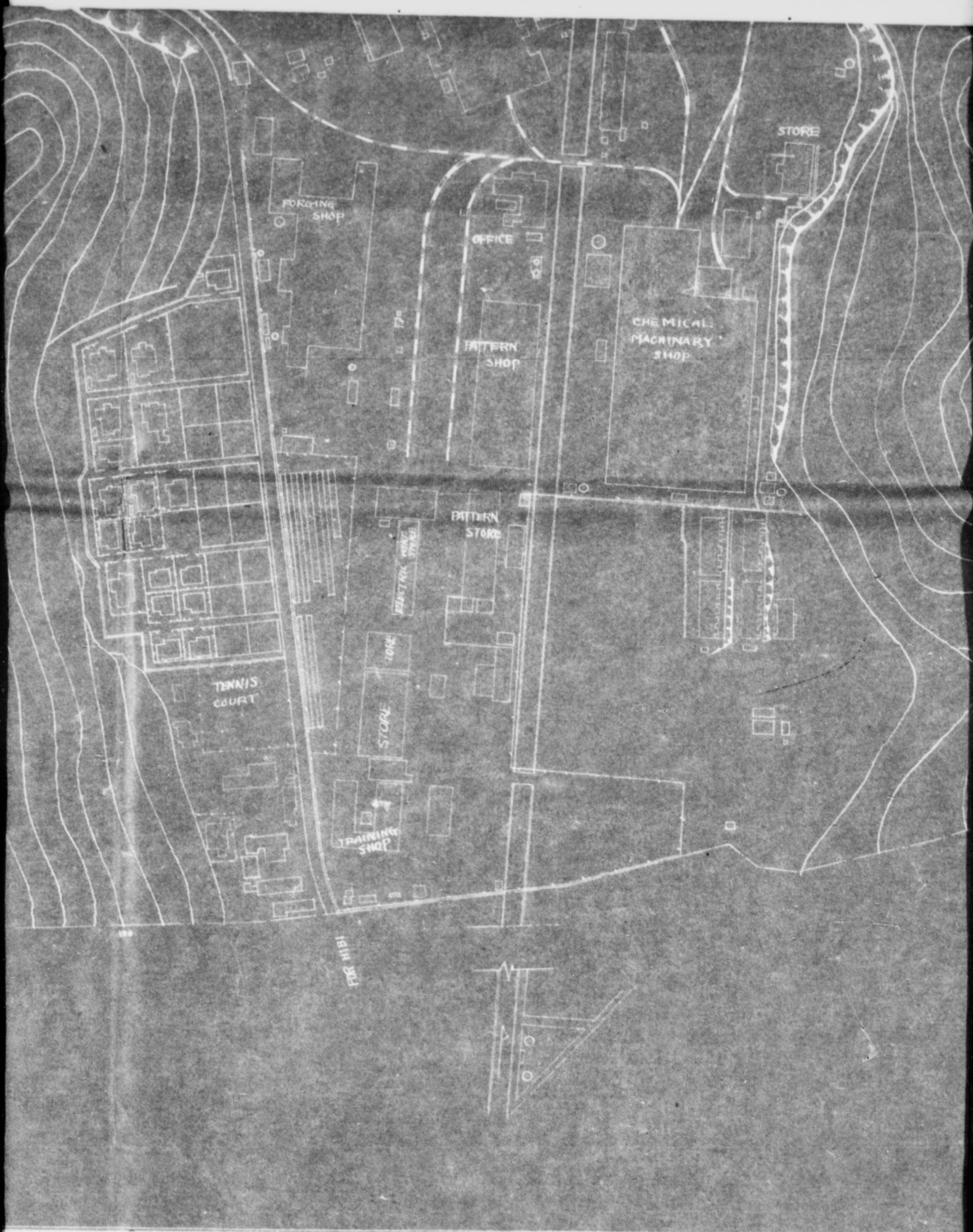
DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013



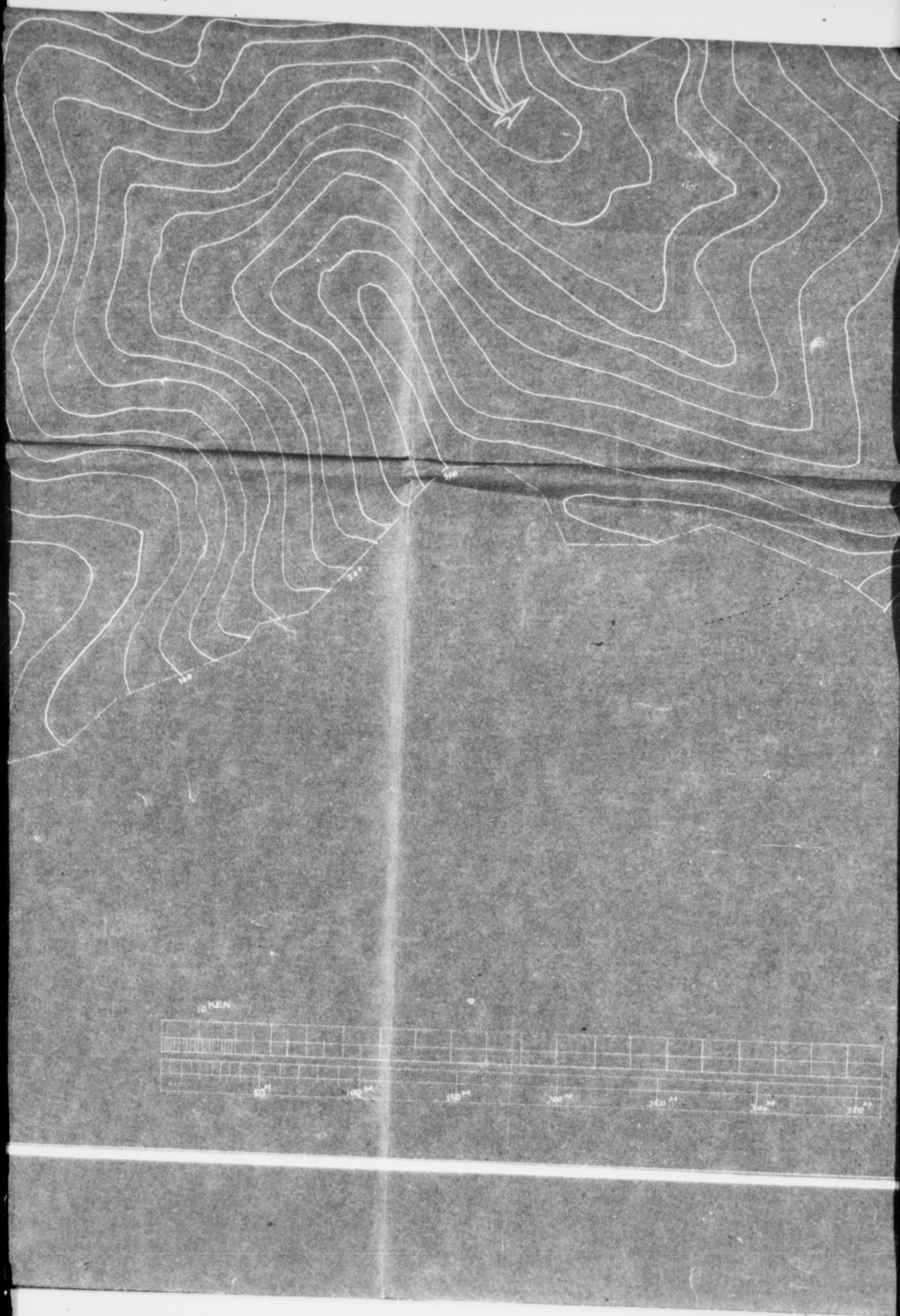
DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

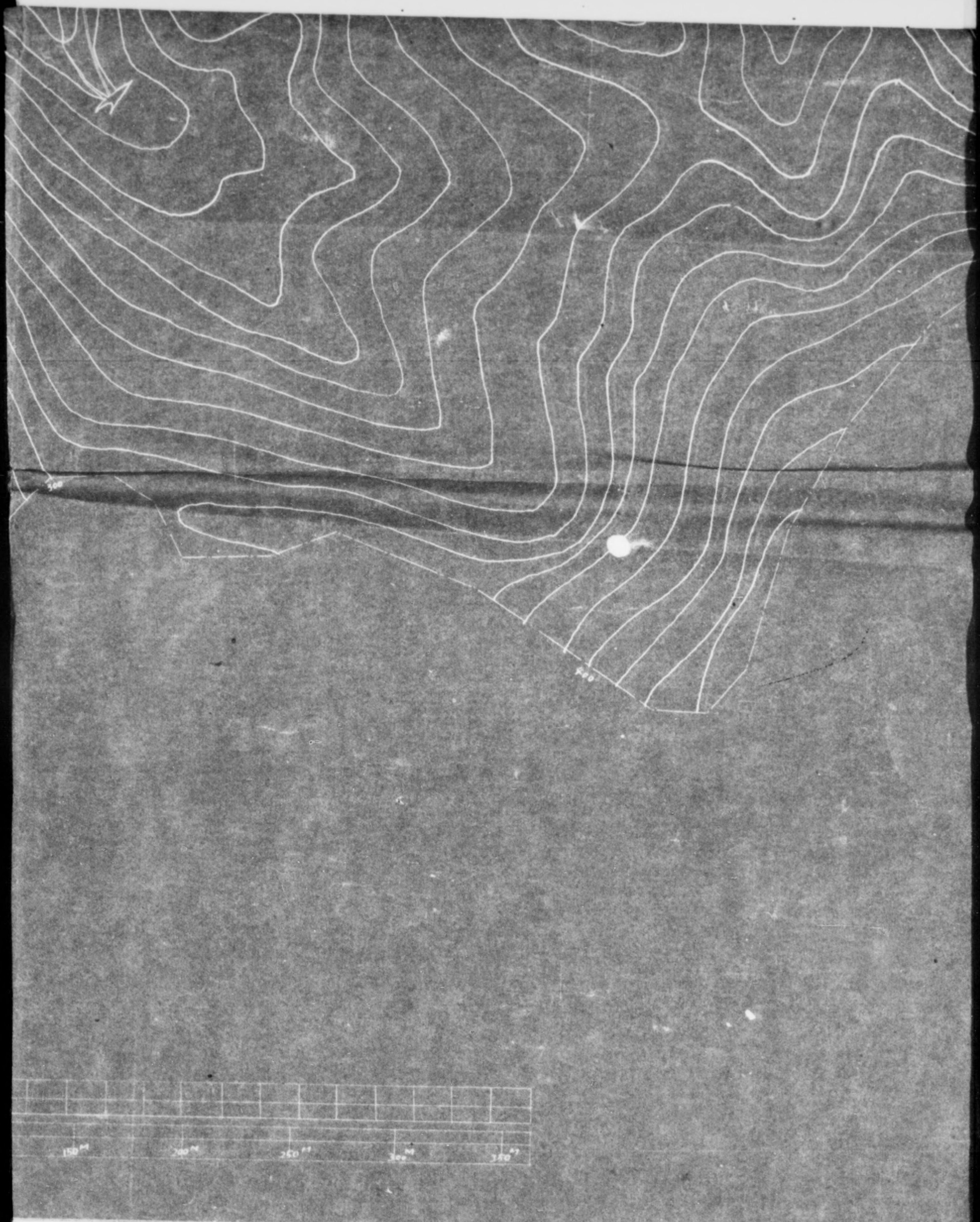


DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

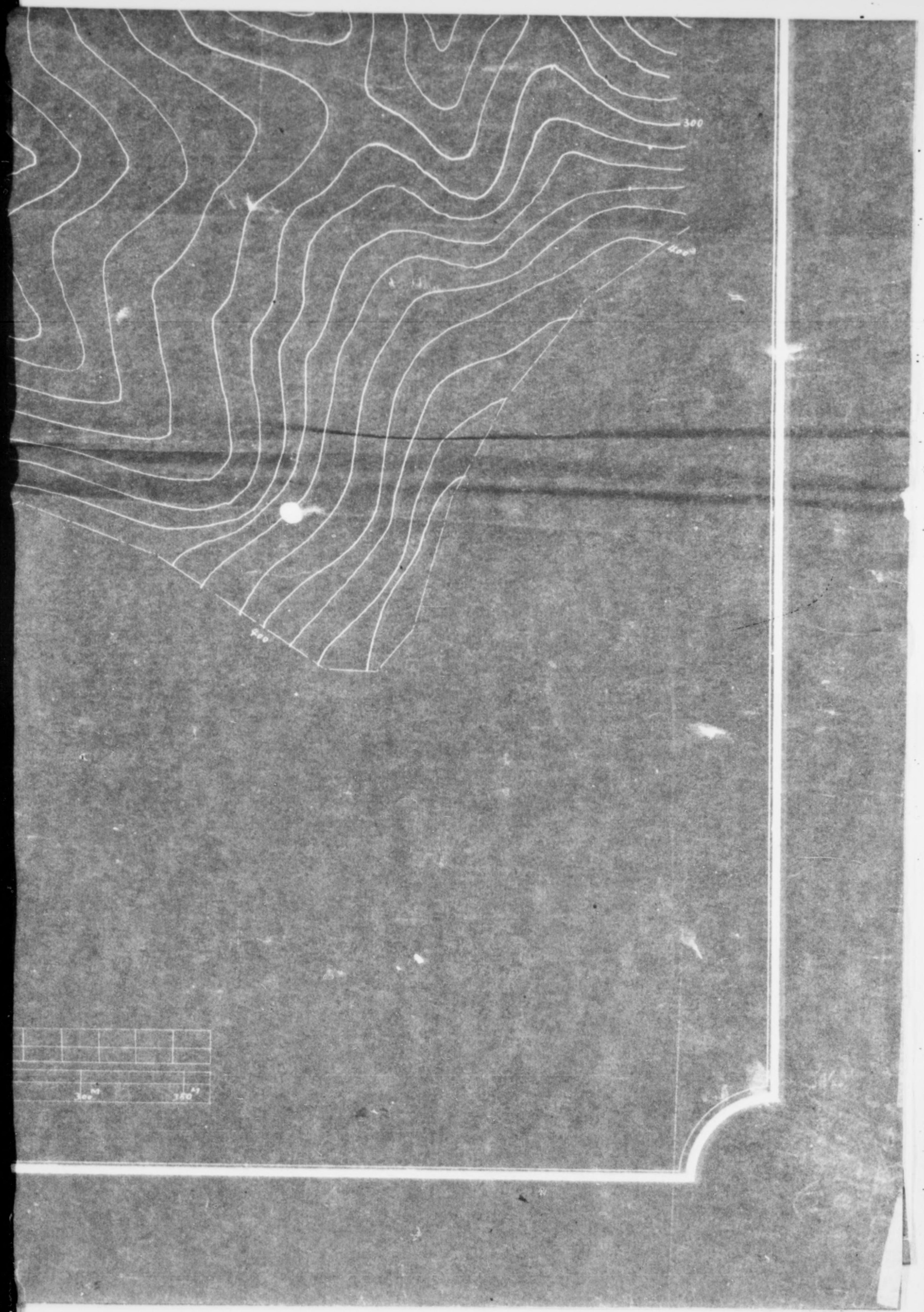
DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013



DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013



DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013



DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

BRIEF NOTE

April 1950

******
****
**

File → MITSUI SHIPBUILDING & ENGINEERING CO., LTD.,

TAMANO WORKS.

TAMANO, OKAYAMA PREFECTURE. (Japan)

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

1. Brief History of Company:

Nov. 14th, 1917.	Started as Shipbuilding Department of Mitsui Bussan K. K. at Uno temporary works.
May, 1919.	Transferred the works from Uno to present site, and began the building and repairing of ships, engines and boilers in real earnest.
May, 1926.	Made license agreement between Burmeister & Wain's Co. (DENMARK) to manufacture and sell the Burmeister & Wain type of Diesel engine.
July, 1937.	Tama Shipbuilding Works, Ltd. was established through separation from Mitsui Bussan K. K.
January, 1942.	The name of company was changed to Mitsui Shipbuilding & Engineering Co., Ltd.

2. Capital: ¥ 140-million

3. Principal Production Facilities:

Our works occupy such a splendid site with fine anchorage which can be anchored 20,000 G/T type's ship, and also which can be anchored 4 ships of 7,000 G/T type at the same time, and lie in the fine recess only 2 miles from the track of ocean-going through the Inland Sea.

The works consist of three main producting departments, Hull Dept. occupying north-eastern part, Engineering Dept. occupying south-eastern part and Chemical Machinery Manufacturing Dept. occupying south-south-western part.

Now explain briefly the outline of the facilities as follows:

A) Area of the works: About 240 acres

B) Number and total floor space of building:
208 houses, 1,265,893 sq. ft.

C) Building Berth:

	Length	Width	Building capacity
No. 1	605 ft.	80 ft.	10,000 G/T
No. 2	577 "	78 "	8,000 "
No. 3	702 "	80 "	13,000 "
No. 4	600 "	80 "	10,000 "
No. 5	515 "	80 "	6,000 "
No. 6	524 "	90 "	8,000 "

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

Attached tower crane:

	Number	Hoist capacity
Between No.1 and No.2 berth	1	10 tons
" No.2 and No.3 "	2	10 tons & 5 tons
" No.3 and No.4 "	2	20 tons & 15 tons
" No.4 and No.5 "	2	10 tons & 6 tons
" No.5 and No.6 "	1	10 tons

D) Dry Dock:

	Length	Width	Depth	Max. docking tonnage
No.1	560 ft.	74 ft.	27 ft.	9,500 G/T
No.2	480 "	74 "	29 "	9,000 "
No.3	344.3"	51.5"	18.5"	4,000 "
No.4	551 "	74 "	32 "	10,500 "

Attached facilities:

Exhaust pump:	Between No.1 and No.2	3,500	tons/hour	2 sets
	" No.1 and No.4	3,600	"	2 "
	No.3	1,500	"	1 "
Tower crane:	Between No.1 and No.2	7	tons	1
	" No.1 and No.4	10	"	1

E) Quay Wall:

	Length	Depth	Capable of mooring at the same time	
No.1 Quay Wall	535 ft.	20 ft.	On 7,000 G/T - 4,500 G/T	4 ships
			" 3,000 " - 2,000 "	6 "
			" 1,000 "	7 "
No.2 Quay Wall	312 ft.	20 ft.	On 7,000 G/T - 4,500 G/T	3 ships
			" 3,000 "	4 "
			" 2,000 "	5 "
			" 1,000 "	6 "

F) Crane:

Tower crane	20 tons-5 tons	16
Overhead crane	Above 30 tons	9
"	Under 30 "	60
Jib crane	" 6 "	11
Floating crane	120 "	1
"	60 "	1
Locomotive crane	5 "	11

G) Machine tools:

Lathe, drilling machine, etc.	about 656
Wood working machine	" 122

H) Equipment for casting and forging:

Electric furnace - 5 tons, 2 tons, etc.	4
Cupola	5
Annealing furnace and drying furnace, etc.	19
Hammer	19
Press (including 1,000-ton hydraulic press)	

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

I) Bending, shearing, punching machines 62

J) Electric welding machine about 700

K) Equipment for oxygen manufacturing:
Output per month 30,000 cub. m.

4. Number of employees and workers:
(at Tamano) on March 30th, 1950.

Employees:	Administrative staff	629
	Technical staff	715
	Sub-total:	1,344
Workers:	Male	4,380
	Female	318
	Sub-total:	4,698
	Total:	6,042

Attendance rate: 92.5 per cent

5. Capacity and results of principal production:

a) New ship construction:

(1) Present capacity (per year) 60,000 G/T

(2) Results:

Since the launch of "Kaisho Maru" (1,198 D/W) on 1918, we have constructed until present time as under:

Merchant vessels	175 ships	821,213 G/T
Small boats (including fishing boats)	943 "	35,046 "

In the above, representative ships are:
"Awajisan-Maru" 9,800 G/T Class (11,000 D/W) on cargo
"Otowasan-Maru" 9,200 " " (12,000 ") on oil-tanker
"Hohkoku-Maru" 10,500 " " (9,615 ") on passenger ship

(3) Ships being built now:

Cargo ships for Denmark	3,500 G/T Class	1 ship Completed 27 May 50
Oil-tanker for Denmark	12,500 " "	1 " 30 SEPT. EXP. COMPLETION
Cargo ship for Meiji Kaiun Co.	5,600 " "	1 " EST. DATE OCTOBER

~~and ships before laying down:~~

Cargo ships	7,000 G/T Class	2 ships 1-DEC 1950 1-FEB 1951
" "	5,600 " "	1 ship DEC. 1950

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

b) Reparing of ships:

(1) Present capacity (per year) 499,500 G/T

(2) Results:

Since 1917 until present time:

4,624 ships	14,150,764 G/T	and
152 "	130,953 D/W	

c) Marine engine:

Since we had agreed the license of manufacture and sell of B&W type's Diesel motor between Burmeister & Wain's Co. (Denmark) and us in 1926.

Output is amounting to 387,600 H.P. (312 sets) in total until present time.

In the above, representative Diesel engines are 13,000 H.P. as main engine for "Hohkoku-Maru," 9,600 H.P. as main engine for "Awajisan-Maru" and the excellent cargo ships in Japan before the war were fitted with Mitsui B&W type Diesel engine for main engine, and they had won reputation being the high-speed cargo ships.

In addition to big type engine, we are manufacturing small type engine (300 H.P., etc.) and also engine for Diesel generator.

Capacity of manufacturing is 30,000 H.P. (per year) and if the government will permit it can become 43,000 H.P. (per year).

(1) Now, Diesel engines which are manufacturing:

Main engine	5 sets	29,500 H.P.
Auxiliary engine	16 "	4,000 "

(2) Reciprocating engine:

In addition to Diesel engine, we manufactured reciprocating engines, which run up 145,877 H.P. (90 sets).

(3) Boiler:

We have a good reputation of skilled maker of Mitsui Howden Johnson type's boiler after we had agreed the license between James Howden Co. (ENGLAND) and us.

d) Casting and forging:

Capacity in a year:

Casting iron	2,500 tons
Casting steel	720 "
Casting alloys	240 "
Forging steel	1,500 "

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

e) The other products:

Outside of the above-mentioned principal products in our works we are engaged in manufacturing chemical industrial machineries, mining machineries and coal wagons.

Capacity of them in a year:

Industrial machineries	2,500 tons
Coal wagons	250 sets

6. The other special facilities:

a) Testing room of material:

There is equipped with every testing apparatus to guarantee the good quality of products.

b) Dock houses:

There are using for which sailors stay in repairing of ships and new shipbuilding.

c) Club houses:

There is arranged good accommodation for visitors, staying, dining, meeting, etc.

d) Hospital:

About 116 beds are ready for sicked and wounded workers.

******

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

Labor Unions

Formerly all employees at this shipyard were affiliated with the All-Japan Shipbuilders Union. However, during the month of December 1949 the union split into two groups which resulted in 6000 employees joining the "Sodomei" while a minority of 100 employees remained in the All-Japan Shipbuilders Union and thirty-four (34) of these have been discharged. Shipyard officials report no labor trouble since split of union.

Stockpiles of raw materials, including steel, is sufficient to meet needs of present production. However, Company officials say the decontrol of steel (expected on 1 July 1950) will place a hardship of them and other steel buyers. The price per ton for steel under Government control is ¥ 28,000. Upon decontrol and discontinuance of Government subsidy to the steel maker the price is expected to reach ¥ 35,000 per ton. If this increase in price does happen, this shipyard feels it would be cheaper for Japanese steel buyers to import from other countries. By doing this, they hope to force the steel makers to lower their prices. The increase in steel prices may, in the opinion of this shipyard, make it difficult for Japanese shipbuilders to compete with foreign builders most of whom will be paying cheaper prices for steel.

4. Conclusion:

Positive steps are being taken by this shipyard to increase efficiency and lower production costs. The recent installation of speedier vehicles for transporting materials within the yard has proven to be an economical step. In addition to this, a considerable amount of money is being spent for other reconditioning work at the yard.

5. Recommendations:

Further negotiations between steel manufacturers and steel buyers in order to reach a solution in solving the rise in steel prices.

R. P. LORD

D/RPL/fk

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

FIELD TRIP REPORT

R. P. LORD

23 June 1950

1. Purpose:

Inspection of Mitsui Steel Shipbuilding Co., Tamano City, Okayama Prefecture.

2. Background:

Surveillance in accordance with O.D. 11, 10 April 1950.

3. Discussion:

Ships under construction:

Type	Ship Owner	G/T	Auth.	Est. Date of Completion
Oil Tanker	Denmark	12,500	SCAPIN 6415A	Sept. 1950
Cargo	Meiji Kaiun	5,600	SCAPIN 7021A	Oct. 1950
Cargo	Mitsui Sempaku	7,000	SCAPIN 7021A	Dec. 1950
Cargo	Mitsui Sempaku	7,000	SCAPIN 7021A	Feb. 1951
Cargo	Matsuoka Kisen	5,600	SCAPIN 7021A	Dec. 1950

Engines under construction:

3700 G/T turbine - 2400 H.P. for Nissan Kisen Co. Auth. by SCAPIN 6393-A
2400 G/T Reciprocal - 1600 H.P. for Inni Kisen Co.Auth. by SCAPIN 6393-A

Electric Power

Month	Allocation	Consumption
March	1,382,000	1,392,000
April	1,394,000	1,225,500
May	1,166,000	1,168,840
June	1,298,000	-

Employees

Administrative Staff	-	629
Technical Staff	-	715
Male Workers	-	4380
Female Workers	-	318
TOTAL	-	6042