

ACC CEB/18/5

10000/150/727

REQUEST
DEC. 1943

10000/150/727

REQUESTS FOR POWER
DEC. 1943 - APR. 1944

Subject:- Electric Railways.

Directorate of Works,
HQ. A.A.I. (Adm Ech),
C. M. F.

2057/DDW

8 Apr 44

To:- A.A.I., C.E.B., Italy. ✓

Herewith copy of letter received from D.E.M.R. for information.
This letter will be discussed at the next meeting of the Electric Power
Committee and your suggestions for providing the 4000 Kw. required would
be appreciated.

WARS/NP.

Encl.

*See Minutes of CEB.
Fourth Meeting
File 13/1*

W.A.R. Smith
W. A. R. SMITH,
Lt. Col. R.E.
for Brigadier,
D. D. W.

439

COPY

13A

ALLIED FORCE
MILITARY RAILWAY SERVICE
Office of Director General

AFD 400
5 Apr 1944.

617/4.

Subject:- Primary Service to Railway
Sub-Stations.

To:- Chairman Electric Power Committee,
c/o Local Resources Section,
HQ. A.A.I. Adm Ech.

1. In line with recent conversation with Col. James P. Crowdon, Vice Chairman, Central Electrical Board, we are completing repairs to the railway company's high line at Benevento. Within the next two or three weeks expect to have this line fully repaired and ready for connection at your S.M.E. station at Benevento. We are very anxious to have this line connected as it will be of considerable value to us, to be fed both at Benevento and Foggia in the event of interruption of primary service.
2. We also expect within approximately three weeks, to install a portable sub-station for electrification at Caserta. This is to be fed over a railway owned high line served by S.M.E. station at Santa Maria.
3. We are also starting, within the next few days, repairs to electrification on the line from Caserta to Benevento and wish primary service to our fixed sub-station at Teles. According to information we have been able to obtain, this sub-station is fed from Matese from the line which also feeds Benevento station. We have estimated our maximum demand for this section at 4000 KW with maximum daily consumption of 15,200 KWH. These figures have been made without taking into consideration the fact that this section of catenary is also fed at parallel from Caserta and from Apice from the Foggia-Benevento line which undoubtedly will reduce these estimates considerably.
4. Our estimates for demand and consumption for the Caserta loop were previously forwarded to the Central Electrical Board, Attention: Col. James P. Crowdon.
5. Will appreciate your efforts in this matter.

For the Director General:

W. J. CRABBS
Major TC
Acting Asst. Gen. Mgr. Equipment.

12

A.A.I.
CENTRAL ELECTRICAL BOARD
A.P.O. 400

Ref: CEB/18/5

31 March 1944

SUBJECT:- Primary Service to Railway Sub-stations.

TO:- A.F. Military Railway Service, APO 400.

1. Ref your letter, 617.4 dated 28 March 1944, regarding Power Demands for repaired electrified railways.
2. Your demands for power should be placed on the Electric Power Committee of the Local Resources Board (Italian).

JAMES P. CROWDON,
COLONEL, OE,
Vice Chairman, AAI - C.E.B.

437

Allied Force
 MILITARY RAILWAY SERVICE
 Office of Director General

APO # 400
 28 March 1944.

617.4

Subject: Primary Service to Railway Sub-stations.

To: Central Electrical Board, APO 400.
 ATTENTION: Col. James P. Crowdon, Vice Chairman, AAI - C.E.B.

1. In line with our recent conversation we are completing repairs to the railway company's high line at Benevento. Within the next two or three weeks expect to have this line fully repaired and ready for connection at your S.M.E. station at Benevento. We are very anxious to have this line connected as it will be of considerable value to us, to be fed both at Benevento and Foggia in the event of interruption of primary service.

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3. We are also starting, within the next few days, repairs to electrification on the line from Caserta to Benevento and wish primary service to our fixed sub-station at Telesse. According to information we have been able to obtain, this sub-station is fed from Matese from the line which also feeds Benevento station. We have estimated our maximum demand for this section at 4000 KW with maximum daily consumption of 15,200 KWH. These figures have been made without taking into consideration the fact that this section of catenary is also fed at parallel from Caserta and from Apice from the Foggia-Benevento line which undoubtedly will reduce these estimates considerably.

4. Our estimates for demand and consumption have already been furnished your office for the Caserta loop.

5. Will appreciate your efforts in this matter.

For the Director General;

F. R. HOSACK
 F. R. HOSACK
 Colonel, Transportation Corps
 Assistant General Manager - Equipment.

See (2)
 436

Allied Force
 MILITARY RAILWAY SERVICE
 Office of Director General

17.4

APO # 400
 28 March 1944.

Subject: Primary Service to Railway Sub-stations.

To: Central Electrical Board, APO 400.
 ATTENTION: Col. James P. Crowdon, Vice Chairman, AAI - C.E.B.

1. In line with our recent conversation we are completing repairs to the railway company's high line at Benevento. Within the next two or three weeks expect to have this line fully repaired and ready for connection at your S.M.E. station at Benevento. We are very anxious to have this line connected as it will be of considerable value to us, to be fed both at Benevento and Foggia in the event of interruption of primary service.

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5. Will appreciate your efforts in this matter.

For the Director General;

F. N. HOSACK
 Colonel, Transportation Corps
 Assistant General Manager - Equipment.

43534

A.A.I.
CENTRAL ELECTRICAL BOARD.
A.P.O. 400.

20 March 1944.

Subject: Restoration of second 30 KV line TUSCIANO-TORRE ANNUNZIATA

To, D/Director of Works HQ A.A.I. (Adm Ech)

1. Reference your 2052/DDW dated 8 March 1944.

2. It is not considered essential that the 30 KV line between TUSCIANO and SALERNO should be rebuilt as neither the labour nor the material is available.

3. All available material is being allotted for essential services which are required now and which will be required in the future

JAMES P. GROWDEN
COLONEL CE
Vice Chairman A.A.I.-C.E.B.

434

431

Subject: Electricity Supply at STAINO

R 18/5
Directorate of Works,
H.Q. A.I.I. (Admin Ech)
C. M. F. (9)

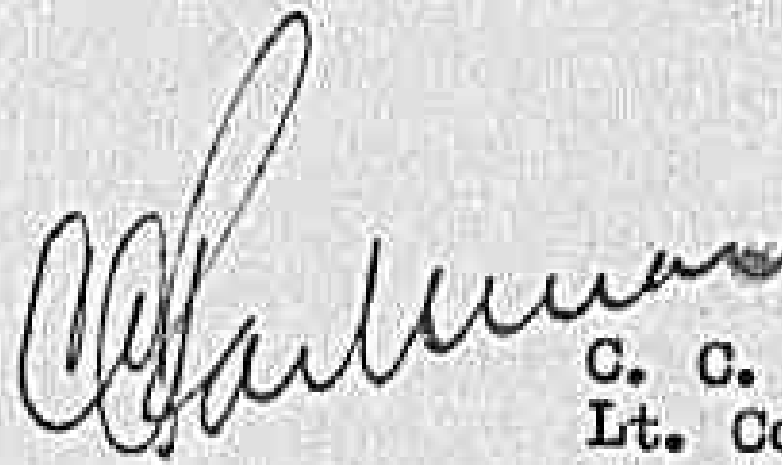
1933/DDW

16 March 44

Colonel James P. Growdon,
Central Electricity Board.

1. It is brought to your attention that the failure of the above supply to STAINO is seriously affecting the completion of vital operational stores.
2. May every effort to restore power to this Factory be made please.

CCP/roos


C. C. PARKMAN.
Lt. Col., R.E.
for Brigadier,
D. D. W.

433

SUBJECT:- Restoration of second 30 KV Line
TUSCIANO - TORRE ANNUNZIATA

Directorate of Works
HQ ACME (Adm Ech.).

2052/DDW

8 March 44

To:- C.E.B. ✓

1. No. 3 District have requested permission to repair the 30 KV line between TUSCIANO and SALERNO. TORRE ANNUNZIATO can be fed by the 60 KV line during operations.

The requirements to complete work are:-

Copper wire 30 sq mm	-	Tons 17
Insulators 30 KV		No. 500

Roy T. Harris

ROY T. HARRIS
Major RE
for Brigadier
D. D. W.

RTH/J

*no material or labour available
no reason to refuse*

432

18/8

R

JPLG (1)

HEADQUARTERS
ALLIED CONTROL COMMISSION
INDUSTRY & COMMERCE SUB-COMMISSION
APO 394

JHET/jfl/ejc

29 February 1944

Ref. AGC/5057/IG

SUBJECT: Nitrogenous fertilizer production

TO : Local Resources Section
AFHQ Adv. Adm. Echelon

1. It is considered desirable by ACC that every effort should be made to initiate the indigenous production of nitrogenous fertilizers, and in this way increase the total food production of liberated Italy during the forthcoming harvest.

2. The Montecatini Plant at Crotone can produce up to 64 tons of ammonium sulphate per day, provided it can be supplied with the necessary amount of electric power.

3. We estimate the total amount of electric power required by this plant to attain the above mentioned daily production at 90,000,000 to 100,000,000 Kwh. per annum.

4. In view of the fact that there is such a limited amount of electric power available in liberated Italy, we would ask you to be good enough to lay these facts before the Electric Power Committee of the Allied Forces Local Resources (Italian) Board with the view to getting a decision from them as to whether they can render this amount of power available as until this matter has been settled, it is of no use for us to prepare a production program for this particular type of fertilizer.

For Lieutenant General MACFARLANE:

John Stodd
for W. P. EVANS
Colonel
Director, Industry & Commerce
Sub-Commission

Copy to:

Agriculture Sub-Commission
Economic Section
Electric Power Mission
HQ ACC Reg. II
(Attn E & S Div)
AFHQ MGS (Attn Col Butterworth)

A.C.M.F.
CENTRAL ELECTRICAL BOARD

29 February 1944

SUBJECT : Power to Benevento & Luigi Razza:
TO : D.D.W. Attention Maj. Roy T. Harris.

1. The rehabilitation of the Matese-Benevento line will be added to the Agenda of the next meeting of the Board.
2. The 9 kv. Capua-Luigi Razza line is a distribution circuit and does not come within the purview of the A.C.M.F. - C.E.B. It is within the area controlled by P.B.S. with whom you should arrange for its rehabilitation.

JRG
JAMES R. GROWDON
Colonel C.E.
Vice Chairman A.C.M.F. - C.E.B.

430

Subject :- Power to BENEVENTO

File
Directorate of Works,
HQ ACMF (Admin Ech),

2052/DDW

27 Feb 44.

To: Central Electricity Board

1. Electric power is required at BENEVENTO for military uses. At the moment the amount required is 200 kw which could be put into use at night time when power demands are least.
2. Power is also required at LUIGI RAZZA for the AFHQ transmission station. The 9 kw line CAPUA - RAZZA exists but it is in poor condition. Power required is 500 kw maximum demand.
3. May these transmission lines please be given priority of allocation by the C.E.B ?

RTH/ac

Roy T. Harris
ROY T. HARRIS,
Major, R.E.
for Brigadier,
D.D.W.

R
4Memorandum for Col. Growdon

Pertusola Co. has asked a supply of 3000 KW from the 1st of February in order to operate partly their zinc factory. We have replied to Pertusola Co. that we have asked to Col. Growdon if this supply can be permitted or not.

Naples, the 26th January 1944

429

HEADQUARTERS,
A.M.G., REGION III.
AGRICULTURAL SECTION.

R (3)

TO: Electric Power Committee
(A.M.G. 15th Army Group)

3 January, 1943.

SUBJECT: Supply of Electric Power.

May the following request for power be considered by the Allied Force Local Resources Board.

300 K.W. at Idrovora di San Sossio (Villa Literno)

This power is needed by the Consorzi Riunite di Bonifica della Campania to drain approximately 2,500 hectares of Agricultural land, and anything up to 20,000 may be affected in Spring. Although I understand the power is not at present available, I believe that it may become so towards the end of January.

The land to be drained is important as regards the supply of foodstuffs and Spring sowing would be possible if the land is drained in time.

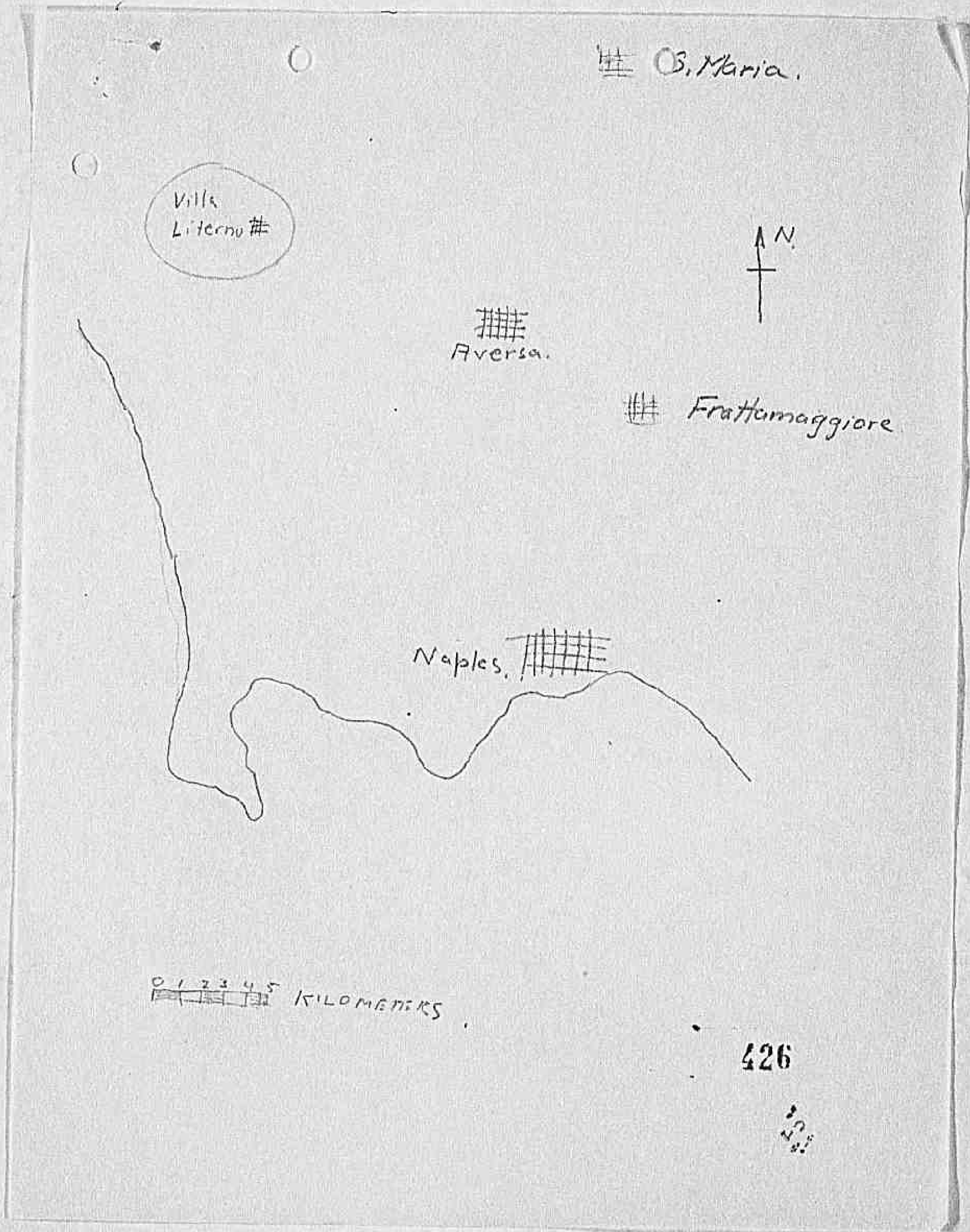
T. O. S. White

Major T.O.S. White,
Agricultural Section.

10183

- 101.137

427



○ Villa Literno apparently fed from
Frat Hamagior and S. Maria at one time.
Likely that fed from Fratta is out due to
transformers destruction at Fratta. Condition of
distribution lines feeding town unknown,
etc.

Will call SME tomorrow at 0900.

POSTAGE WILL BE PAID BY ADDRESSEE

DEPARTMENT
Hq Region 2 Allied Mil Cmt
APO 464 U.S. Army
OFFICIAL BUSINESS

Electric Power Committee.
A.M.G.
15th Army Group.
Provincial Building.

Form: appie lcu.
A46. Requir III

424

○ Major Kennedy - Chief Agricultural Officer, Region III says that the area involved is important agricultural project, that pumps have been installed and used for some time, that some were destroyed by the Germans. He says that unless pumping can be accomplished, some higher land, already planted, will be flooded out, and that the lower land will not be available for planting. He says that about 4 or 5 poles are out, due to enemy action near Villa Litera.

He asked to be kept informed of the possibility of getting power there.

VSK

2

Allied Force
MILITARY RAILWAY SERVICE
Office of Director General

453

APD #400
29 December, 1943

Subject: Electric Power Requirements.

To: Colonel Growdin, Electric Power Section, AFHQ

1. Herewith copy of estimated power requirements for the various lines which we expect to operate electrically.

For the Director General:

F. R. Hosack
F. R. HOSACK
Colonel, Transportation Corps
Assistant General Manager-Equipment

CC-Major R. T. Harris,
E & N Section, AFHQ
(British)

See 11

422

Allied Force
MILITARY RAILWAY SERVICE
Office of Director General

453

APO #400
29 December, 1943

Subject: Electric Power Requirements.

To: Colonel Growdin, Electric Power Section, AFHQ

1. Herewith copy of estimated power requirements for the various lines which we expect to operate electrically.

For the Director General:

F. R. HOSACK
Colonel, Transportation Corps
Assistant General Manager-Equipment

CC-Major R. T. Harris,
E & N Section, AFHQ
(British)

Allied Force
MILITARY RAILWAY SERVICE
Office of Director General

APO 400
28 December, 1943

INTRA-OFFICE MEMORANDUM

Subject: Power Requirements for Electric Train Operation

To: Colonel F. R. Hosack

1. Following are estimated power requirements for electric train operation on various sections.

2. Benevento - Foggia Line

Running time	6 hours
Length of line in miles	63
No. and wt. of East bound Pass. trains	3 - 335 T
" " " " " " Frt. "	8 - 625 T
" " " " West " " "	8 - 375 T
" " " " " " Pass. "	3 - 335 T
Maximum number of trains on line at one time	3 East bound and 3 West bound.
Maximum tonnage moved at one time	3000
Power demand at 2 KW per ton	6000
Ton miles per day	630630
Watt hours per ton mile	40
KW hours per day	25252

3. Salerno - Torre Line

Running Time	2 hours 30 minutes
Distance	20 miles
Number of trains each way daily	9
Gross wt. North Bound trains	600 T
Gross wt. South Bound trains	400 T
Maximum number of trains operating at one time	1 North bound 1 South bound
Maximum gross tons moving at one time	1000
Power demand at 2 KW per ton	2000
Ton miles per day	180,000
Watt hours per ton mile	40
KW hours per day	7200

4. Naples - Caserta - Loop

Distance	20 miles
Running Time	4 hours
No. and wt. North bound trains	16 - 785 T
" " " South " "	17 - 365 T
Maximum number of trains operating at one time	3 North bound 3 South bound

Maximum Gross tons moving at one time	3450
Power demand at 1.5 KW per ton	5175 KW
Ton miles per day	375300
Watt hours per ton miles	40
KW hours per day	15012

5. Bagnoli - Naples Run

Distance	6.6 miles
Passenger trains per day	52
Freight trains per day	6
Gross wt. per passenger train	500 T
" " " freight "	720 T
Maximum number of trains at one time	3 passenger 1 freight
Maximum tons moving at one time	2220
Power demand at 1 KW per ton	2220
Ton miles per day	200112
Watt hours per ton mile	40
KW hours per day	8004

1500
120
2220

6. Summary

Attached hereto is a summary of power demands and daily consumption for various activities.

A. R. WALKER
Lt. Col. TC

ESTIMATED POWER REQUIREMENTS FOR ELECTRIC TRAIN OPERATION

<u>LINE</u>	<u>APPROXIMATE DATE IN SERVICE</u>	<u>POWER REQUIREMENTS</u>	
		<u>KW DEMAND</u>	<u>KW HOURS PER DAY</u>
Bagnoli - Naples	December 19, 1943	2220	8004
Salerno - Torre	Salerno - Cava January 10, 1944	2000	7200
	Cava - Torre		
Foggia - Benevento	Foggia - Montecalvo February 10, 1944	6000	25,252
	Montecalvo - Benevento March 10, 1944		
Naples - Caserta - Loop	Via Aversa February 1, 1944	5175	15,012
	Via Concello February 20, 1944		
	<u>TOTAL</u>	<u>15,395</u>	<u>55,468</u>

20000000 kWh

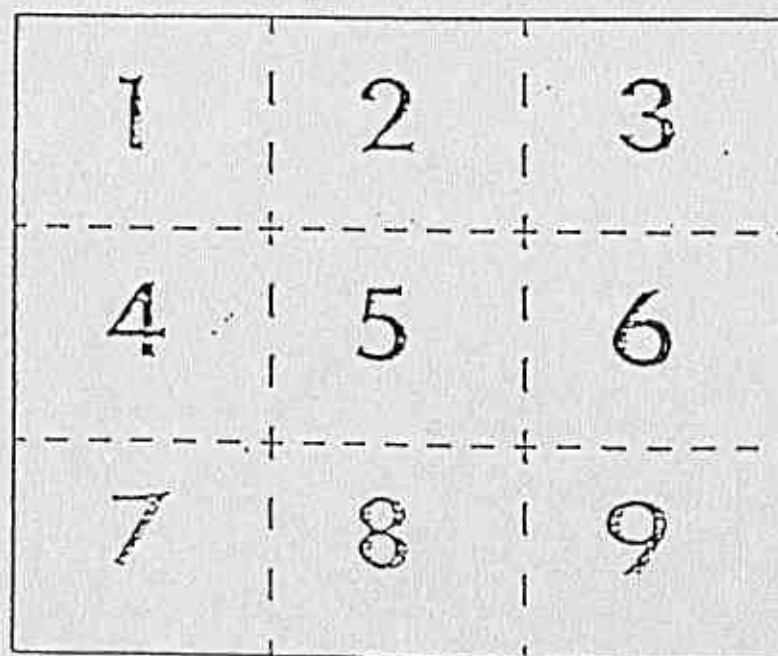
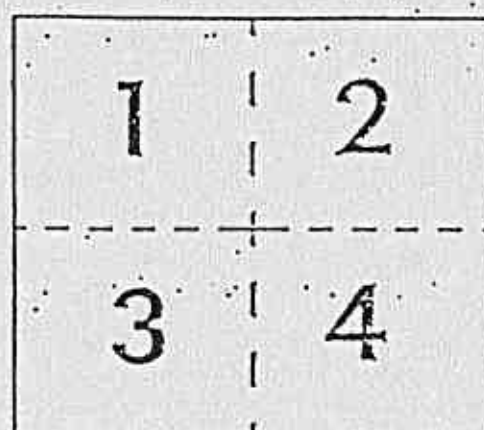
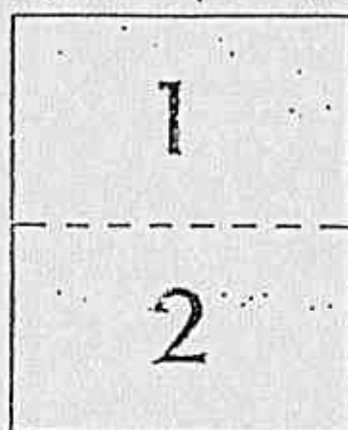
ESTIMATED POWER REQUIREMENTS FOR ELECTRIC TRAIN OPERATION

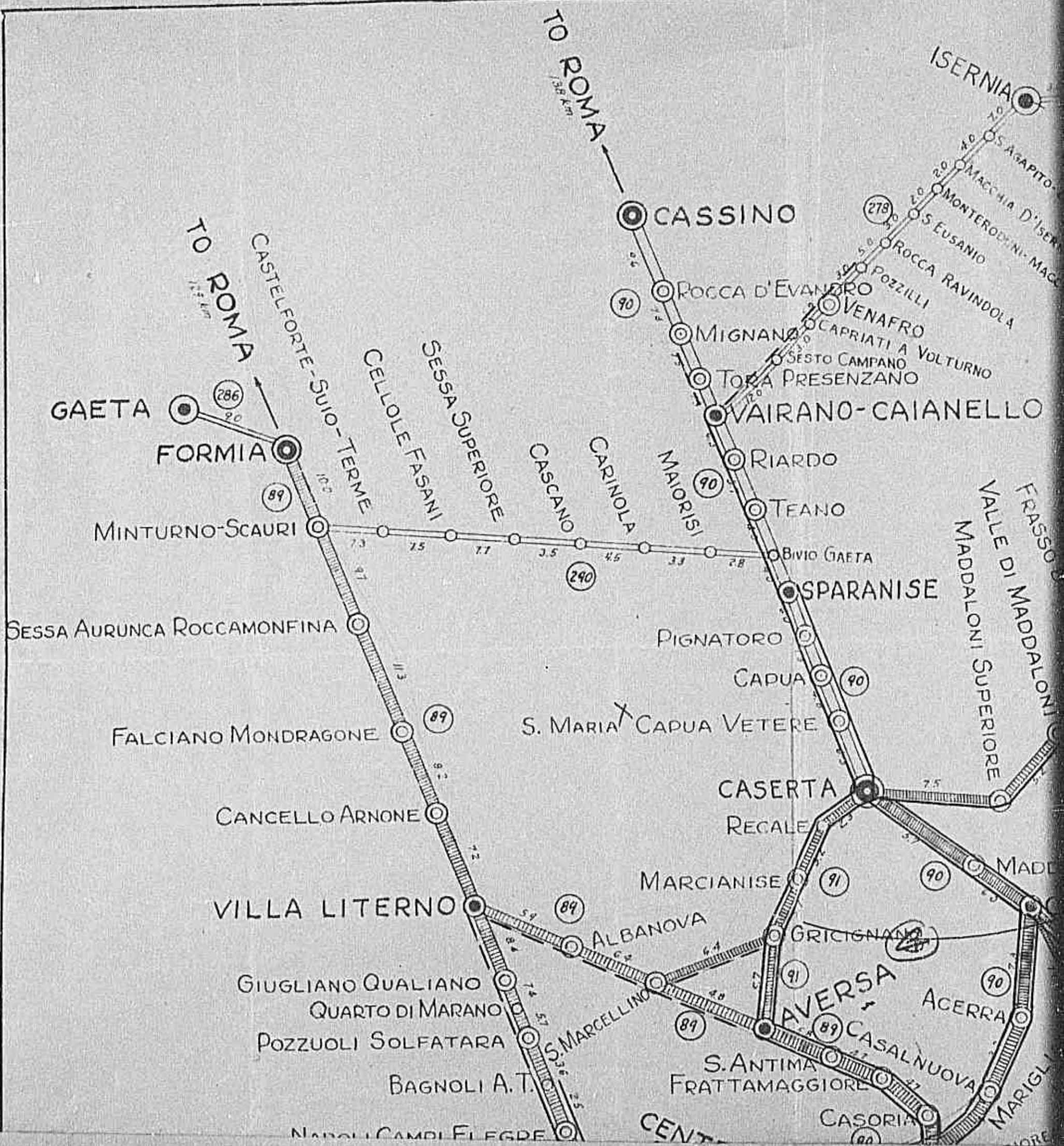
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Naples - Caserta - Loop	Via Aversa February 1, 1944	5175	15,012
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	<u>TOTAL</u>	<u>15,395</u>	<u>55,468</u>

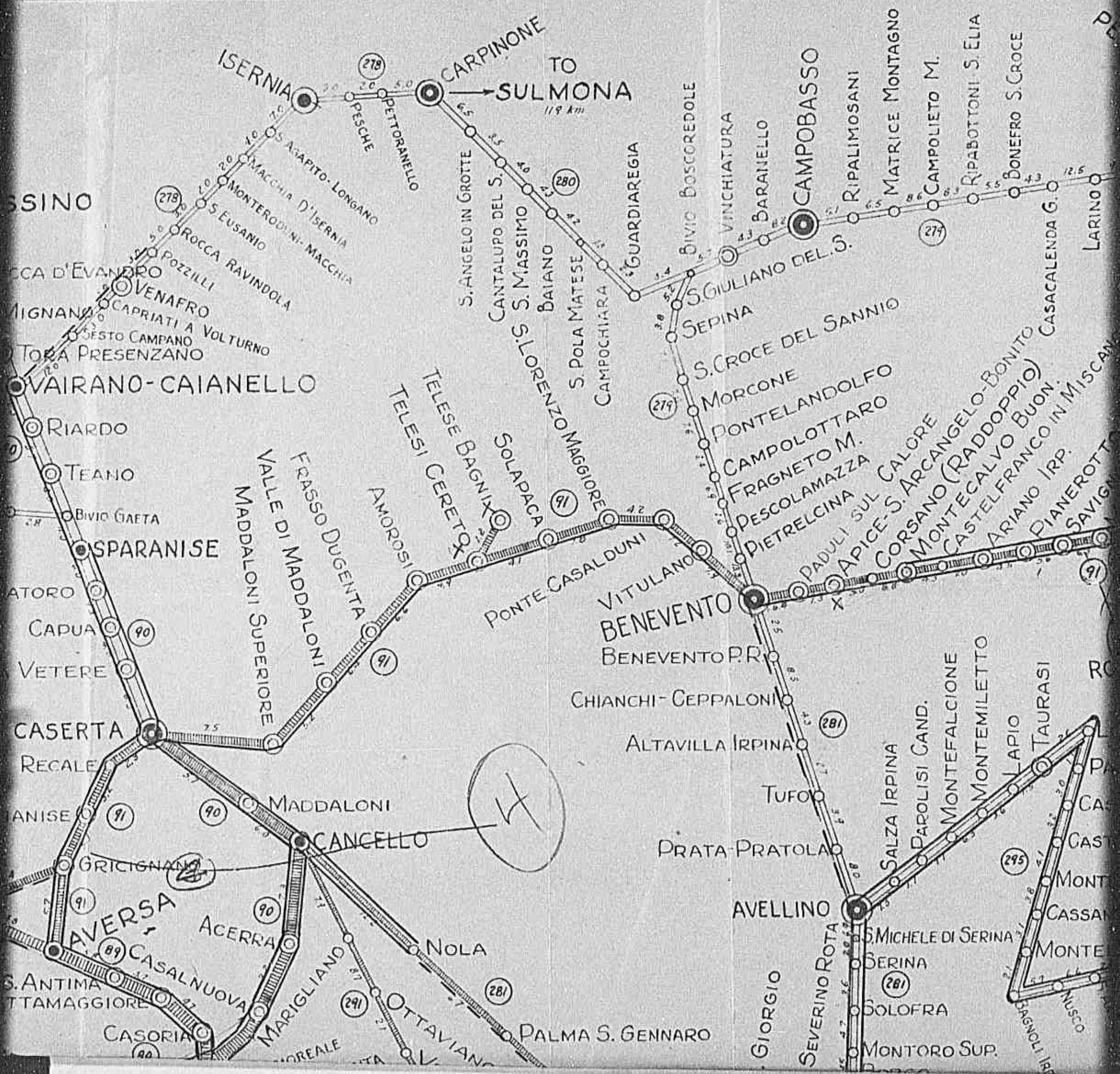
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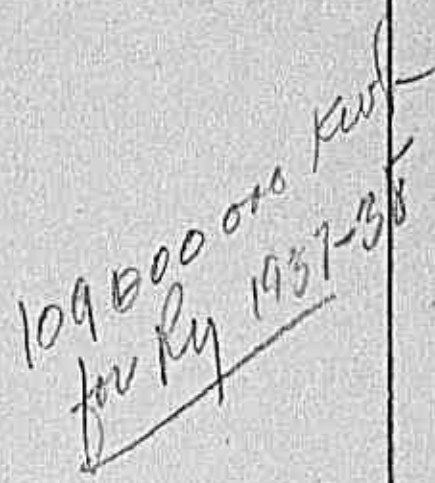
MAPS AND CHARTS TOO LARGE TO FILM
ON ONE EXPOSURE ARE FILMED CLOCKWISE
BEGINNING IN THE UPPER LEFT CORNER,
LEFT TO RIGHT, AND TOP TO BOTTOM.

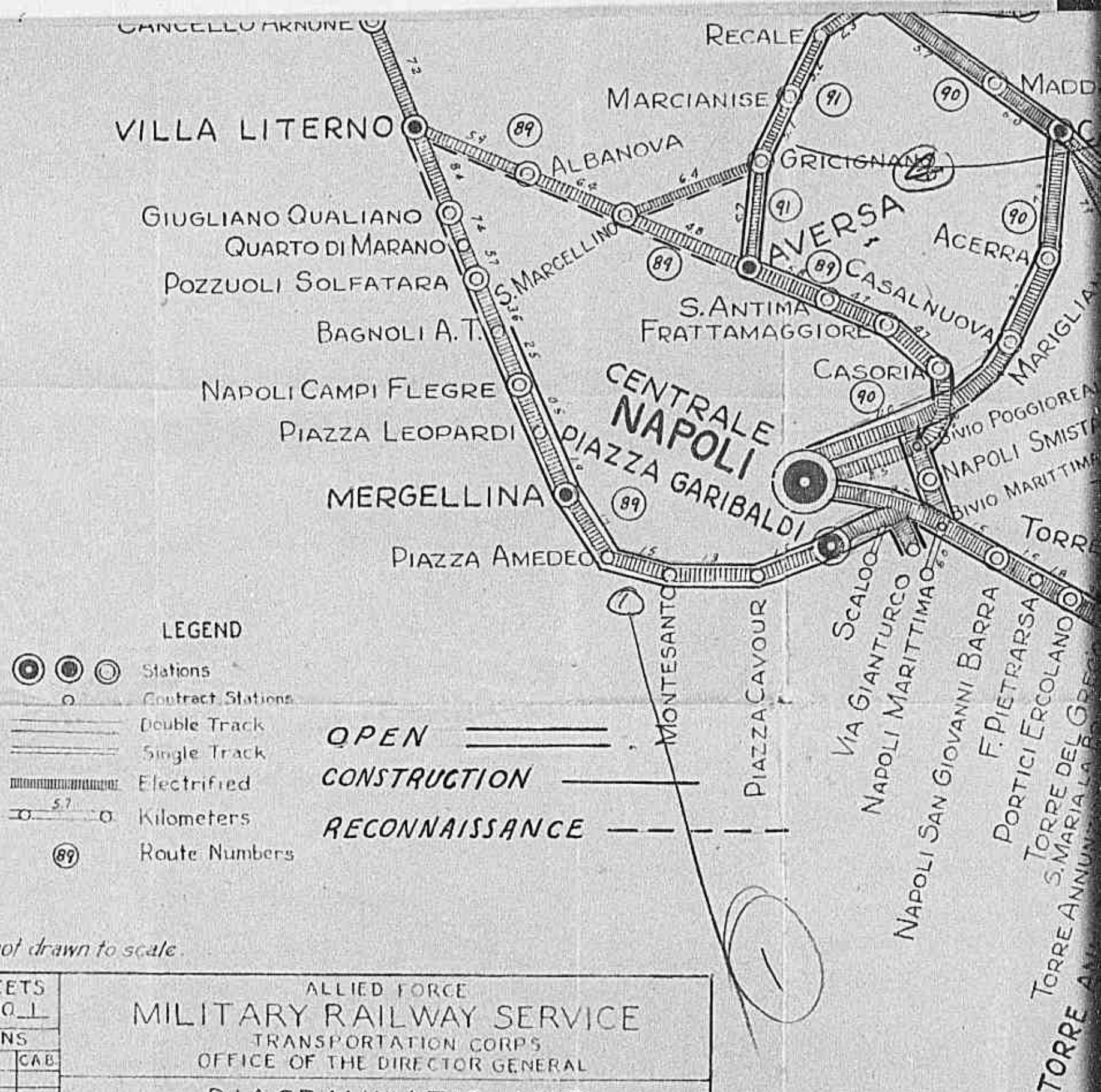
SEE DIAGRAMS BELOW.



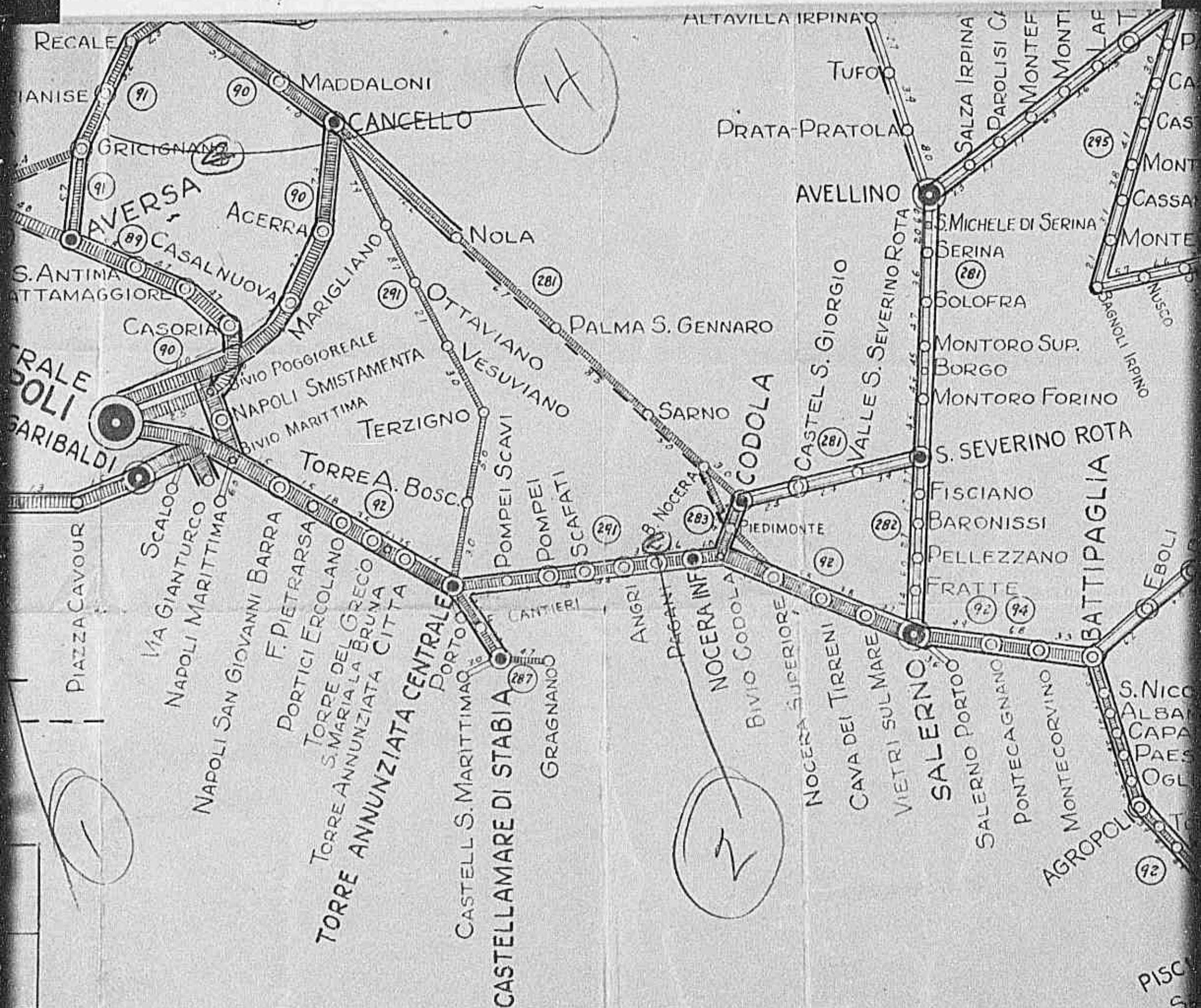




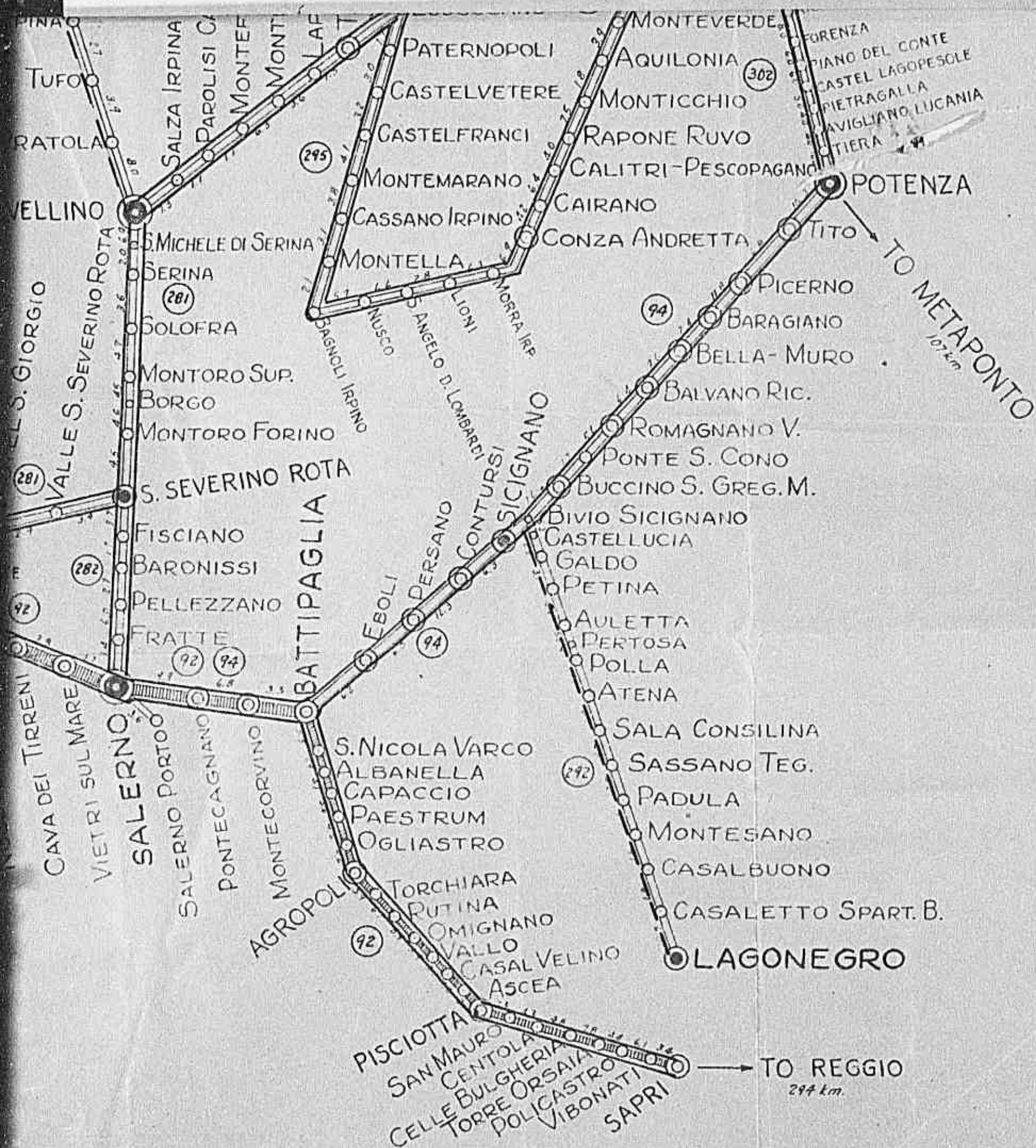




IN 1 SHEETS		ALLIED FORCE	
SHEET NO. 1		MILITARY RAILWAY SERVICE	
REVISIONS		TRANSPORTATION CORPS	
1	12-20-43	OFFICE OF THE DIRECTOR GENERAL	
		DIAGRAMMATIC MAP	
		RAILWAYS IN THE NAPLES DISTRICT	
SUBMITTED:		APPROVED:	
CAPTAIN, T.C., OFFICE ENGINEER		COLONEL, T.C., ASST GEN. MGR. ENGINEERING	
		APPROVED	
		BRIGADIER GENERAL, DIRECTOR GENERAL	
DRAWN: C.A.B. TRACED: C.A.B.		DATE	PLAN NO.
CHECKED: WK. 5		12-12-43	M 32



BRIG. GEN. CARL R. GRAY, JR.



To
Electric Power Mission

○ Hg, AMG

From: Mining Div.

HEADQUARTERS
ALLIED MILITARY GOVERNMENT
MINING DIVISION
APO 328

In reply
refer to
679.18-41ms.

23 Dec 1943

SUBJECT: Electrolytic Zinc Plant-Crotone, Italy.

TO : Acting Economic Director, Economic Directorate, HQ. A.G.

1. The electrolytic zinc plant of the Societa Mineraria e Metallurgica di Portusola (affiliate of the Ferraraya Co., an important group of French controlled mining enterprises) located at Crotone, Italy, was visited twice, for short periods, on 10 December 1943 and 23 December 1943.

2. The plant has not been damaged by bombing or other military activity.

3. The plant could be started up on short notice, as maintenance work has been adequate. Corrosion in a plant of this nature is rapid and heavy, so that constant repair work is necessary, even when not in operation.

4. The plant has a daily capacity as follows:

35	Metric tons Zn	99.96-99.97%
2	" "	Zn 99.99%
60	" "	Concentrated H_2SO_4

As a by-product, cadmium metal is produced in a quantity in proportion to the Cd content of the ores treated.

5. The principal source of zinc concentrates in normal times was drawn from the Portusola Company's mines in Sardinia, but at times other concentrates were treated over custom basis. These included products of the Trepoza mines in Yugoslavia (affiliate of the Selection Trust, London) and the zinc mines at Laurion, Greece.

6. The plant is the standard low ampere density type (as distinguished from the Taintor's process high ampere density kind) and is equipped with all adequate and reasonably modern devices.

7. The plant requires approximately 6,500 K.W. at unity power factor. This Division has been advised by the Electric Power Mission, A.G. that this block of power is not available due to the priority of military requirements for the available power in Southern Italy, and will probably not be available until such time as either military activities cease, or perhaps even not until several of the destroyed power plants are rebuilt after the end of the war.

8. The following additional information may be of interest:

a. The sulfuric acid produced by this plant was sold to the Montecchini Co at Crotone, who used it for the production of super phosphate. This latter plant has been heavily bombed and will not be in operation for some time for the above reason as well as for the fact that it requires about 40,000 K. W. of power, which is not available.

b. The price of electric power at Fertusola, prior to the shut down was:-

Up to 5,000 K.W. demand	Rate	0.05 KWH.
From 5,000 to 6,000 "	"	0.08 "
Above 6,000 "	"	0.12 "

c. The present stocks of zinc metal at Crotone are approx.:

700 metric tons	99.96-99.97% Zn.
100 "	99.99 "

9. In view of the above it is recommended that no plans be entertained at present for the re-opening of this plant.

10. Steps have been initiated to obtain necessary authorization to dispose of the stocks of zinc metal so as to make them available for the war effort.

ROBERT F. KUNNING,
Lt. Col., C. E.,
Chief, Mining Division.

cc: Electric Power Mission

0 6 1 9

0 6 1 9