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C U R R A G H   R E S O U R C E S   I N C .

EXTRACT FROM:

LONG RANGE PLAN FOR  
FARO, VANGORDA & GRUM DEPOSITS

VOLUME II  
TECHNICAL REVIEW

PREPARED BY: KILBORN

Aug/88

5.7 VANGORDA OPEN-PIT5.7.1 Introduction

The Vangorda deposit will be the first of the Vangorda Plateau deposits developed and mined. It is intended to prestrip and mine the deposit over a period of four years from 1988 to 1991 inclusive. Table 5.7.1-1.

There is a total of 27,946,000 tonnes of material to be moved, of which 6,459,000 is considered ore. The effective stripping ratio is 3.33 to 1.

5.7.2 Mining Criteria

The Vangorda pit is based on the following criteria:

(a) Material In-Place Specific Gravities

Unconsolidated Overburden	-	2.1
Waste Rock	-	2.70
Ore (For production calculation)	-	Measured SG less 5 percent for voids
Average - 4A	-	2.83
- 4C	-	3.27
- 4EC	-	3.68
- 4E	-	3.75
- 4EG	-	3.96
- 4EH	-	3.67

(b) Bench Height

Waste	-	13.5 metres
Ore	-	4.5 metres

TABLE 5.7.1-1

ANNUAL MATERIAL MOVEMENT

VANGORDA OPEN PIT

(Tonnes Stated In Thousands)

Year	Waste Tonnes	Mill Grade Ore ( > 5% Pb + Zn)						Stockpile Grade Ore ( > 4% < 5% Pb + Zn)						
		Tonnes	% Pb+Zn	% Pb	% Zn	Ag g/t	Au g/t	Tonnes	% Pb+Zn	% Pb	% Zn	Ag g/t	Au g/t	
1988	6,666													
1989	6,029	1,595	7.81	3.33	4.48	48	.55	242	3.88	1.62	2.26	28	.41	70%
1990	8,132	3,217	8.91	3.87	5.04	54	.61	320	3.91	1.67	2.24	23	.49	116%
1991	661	1,013	8.31	3.78	4.53	54	.66	72	3.92	1.95	1.97	27	.76	117%

(c) Pit Slope Geometry

Southeast Wall	- 45° slope
Northeast Wall	- 40° slope
Southeast Wall	- 45° slope
Northwest Wall	- 45° slope
Overburden	- 35° slope

(d) Pit Ramps

Width	- 30 metres
Maximum Grade	- 8 percent

(e) Drilling and Blasting - Current Faro practice(f) Loading - Current practice(g) Haulage - All materials in 170-ton trucks5.7.3 Pit Design(a) Material Description

Surficial deposits in the pit area consist mainly of glacial till. Thicknesses of overburden range from 2 to 30 metres. The till is relatively consistent and is composed of primarily sandy silt with some sand and gravel. No permafrost was encountered in any test pits or drill holes.

The waste rock within the pit consists primarily of non-calcareous phyllites. Most phyllites, especially in the deposit footwall, are bleached, locally silicified and/or chloritic and sulphide-bearing.

(b) Pit Slope Design

Pit slopes stability will be governed primarily by the orientation of fault and foliation surfaces. Possible failure modes include plane failure on foliation surfaces and wedge failure on intersecting fault and foliation surfaces. The northeast wall, with the foliation dipping into the pit, will probably require a flatter wall. Further study will be required to determine pit slopes; however, the pit slopes contained within the criteria are realistic approximations.

5.7.4 Mining Plan Concept

The Vangorda pit will be mined as one phase. Benches will be taken to ultimate walls as the pit is mined to ultimate depth.

Overburden will be removed with scrapers. Rock stripping operations will start as soon as overburden stripping is sufficiently advanced and necessary facilities are available.

All ore will be stockpiled outside the pit and rehandled into haulage trucks to feed the crusher at the Faro Mill. Material having a combined grade above 5.0 percent (Pb+Zn) will be delivered to the crusher as required. Material with grades between 4.0 and 5.0 percent (Pb+Zn) will be left in stockpile and treated after open-pit mining is complete.

Waste from the pit will be disposed of in a single waste dump outside the pit area (see Figure 5.9.1-2).

### 5.7.5 Mining Plan

(a) Mining Plan Description [Figure 5.7.5-1]

The Vangorda open-pit will be approximately 1,000 metres in length, 400 metres in width at the widest point and 110 metres in depth. The longitudinal axis of the pit is approximately northwest/southeast with the deepest portion to the northwest end of the pit. Access to the pit will be a ramp located on the southwest pit wall which will exit the pit on the northwestern end of the pit.

(b) Current Condition

At the present, no preproduction work has been undertaken at the pit site. Site clearing, water diversion ditching and pit area dewatering have not been started. No facilities are available at site.

(c) Mining - 1987

Work at the Vangorda pit, during 1987, will consist of site clearing, water diversion and a start on pit area dewatering.

(d) Mining - 1988 [Figure 5.7.5-2]

Mining will commence at the 1,170 metre elevation at the north end of the pit. During the early part of the year, the Vangorda Creek diversion will be constructed. Some of the unconsolidated overburden will be used for the diversion dam.

By year-end, the pit will be mined down to the 1,130 metre elevation and 6.7 million tonnes of waste will have been removed.

During the year, one shovel will have been operating in this pit.

Pit status at the end of the year is shown in Figure 5.7.5-2.

(e) Mining - 1989 [Figure 5.7.5-3]

During 1989, approximately 1.8 million tonnes of ore and 6.0 million tonnes of waste will be removed from the Vangorda open-pit. Pit bottom at year-end, as shown in Figure 5.7.5-3, will be 1,110 metres elevation.

Up to 500,000 tonnes of near surface ore may be oxidized to some degree.

(f) Mining - 1990 [Figure 5.7.5-4]

During 1990, approximately 3.5 million tonnes of ore and 8.1 million tonnes of waste will be removed from the Vangorda open-pit. In order to meet these production requirements, a second shovel will be moved into the pit early in 1990.

Pit status at the end of 1990 is shown in Figure 5.7.5-4.

(g) Mining - 1991 [Figure 5.7.5-1]

During early 1991, mining of the Vangorda open-pit will be complete. Production during this period will be 1.0 million tonnes of ore and 0.7 million tonnes of waste.

Pit status at end of mining in Vangorda is shown in Figure 5.7.5-1.

## 5.8 GRUM OPEN-PIT

### 5.8.1 Introduction

The Grum deposit will be the second of the Vangorda Plateau deposits to be developed and mined. It is intended to pre-strip and mine the deposit over the period 1989 through 1997 inclusive.

The mining plan consists of three phases which are described later in this Report.

A total of 256,315,000 tonnes will be removed from the pit during a 10 year period. This total is comprised of 40,645,000 tonnes overburden, 190,677,000 tonnes waste and 24,993,000 tonnes ore. Table 5.8.1-1 gives the annual mining quantities.

### 5.8.2 Mining Criteria

The Grum open-pit is based on the following criteria:

#### (a) Material In-Place Specific Gravities

Unconsolidated Overburden	-	2.10
Waste Rock	-	2.70-
Ore (for production calculation)	-	Measured SG less 5 percent for voids
Average - 4A0	-	3.23
- 4A4/4AE	-	3.31
- 4B	-	3.00
- 4C	-	3.45
- 4D	-	3.53
- 4E	-	4.32
- 4G	-	4.42
- 4H	-	3.86
- 4J	-	3.87
- 4K	-	3.84
- 4L0	-	3.11
- 4L4/4LE	-	3.29

TABLE 5.8.1-1

ANNUAL MATERIAL MOVEMENT

GRUM OPEN PIT

(Tonnes Stated In Thousands)

Year	Waste Tonnes	Mill Grade Ore ( > 5% Pb + Zn)						Stockpile Grade Ore ( >4% < 5% Pb + Zn)					
		Tonnes	% Pb+Zn	% Pb	% Zn	Ag g/t	Au g/t	Tonnes	% Pb+Zn	% Pb	% Zn	Ag g/t	Au g/t
1988	1,334												
1989	21,500	52	5.86	2.20	3.66	36	.48						
92.1 1990	20,208	218	5.62	1.96	3.66	33	.66	51	3.81	1.27	2.54	24	.77
21.2 1991	29,190	1,377	7.37	2.66	4.71	44	.66	389	3.92	1.28	2.64	25	.53
16.7 1992	31,684	1,897	7.25	2.59	4.66	42	.62	378	3.85	1.27	2.58	24	.40
10.2 1993	34,277	3,374	7.77	2.85	4.92	47	.67	450	3.98	1.35	2.63	25	.50
7.9 1994	32,168	4,097	8.92	3.37	5.55	56	.85	481	3.91	1.54	2.37	27	.65
7.4 1995	29,423	3,958	9.58	3.53	6.05	60	.96	719	3.87	1.53	2.34	26	.63
2.7 1996	27,832	3,209	8.81	3.35	5.46	57	.88	419	3.86	1.57	2.29	28	.73
1.1 1997	3,707	3,558	8.87	3.31	5.56	59	1.01	367	3.88	1.55	2.33	27	.78

(b) Bench Height

Waste	- 13.5 metres
Ore	- 4.5 metres

(c) Pit Slope Geometry

Southeast Wall	- 40° slope
Northeast Wall	- 40° slope
Southwest Wall	- 45° slope
Northwest Wall	- 45° slope
Overburden	- 35° slope

(d) Pit Ramps

Width	- 30 metres
Maximum Grade	- 8 percent

(e) Drilling and Blasting - Current Faro practice(f) Loading - Current practice(g) Haulage - All material in 170-ton trucks5.8.3 Pit Design(a) Material Description

Surficial deposits within the pit area consists primarily of morainal and glaciofluvial deposits. Depths of this overburden material range from zero to 10 metres in the northern portion of the deposit to over 100 metres in the southern end. This material contains tills, uniform silts and gravels. Some pockets of permafrost have been encountered, but do not appear to be extensive. The overburden is known to be water-saturated in some areas, but the extent of saturation has not been defined.

Regional bedrock geology contains biotite-muscovite schists, calc-silicate gneiss and biotite-muscovite phyllites. Mineralization occurs within the phyllites.

The overall structure of the deposit is that of a broad syncline, complicated by a number of faults.

(b) Pit Slope Design

Pit wall stability will be governed primarily by the orientation of fault and foliation surfaces, and potential wedge failure on intersecting fault and foliation surfaces. The foliation on the northeast and southeast walls dips into the pit, and these walls will of necessity be of flatter slopes than the others. Slopes selected are given previously in Section 5.8.2 of this Report.

5.8.4 Mining Plan Concept

The Grum pit will be mined in three overlapping stages. The first stage of the pit, shown in Figure 5.8.4-1, will go to the 1,160 metre elevation. Concurrent with the mining of the stage one pit, stripping will begin on the second stage, shown in Figure 5.8.4-2.

The second stage will involve pushing back both the southeast and northeast walls of the stage one pit. The majority of the material will be removed from the southeast wall. The stage two pit bottom will be 1,090 metres elevation.

The stage three pit (ultimate pit) is shown in Figure 5.8.4-3. The stripping of this stage will start during the mining of stage two and will take the ultimate pit to the 1,030 metre level.

### 5.8.5 Mining Plan

#### (a) Mining Plan Description

The Grum open-pit will be ultimately 1,150 metres in length, 850 metres in width and 300 metres in depth. The longitudinal axis of the pit is approximately northwest/southeast. The ramp exit from the pit will be on the southwest corner, 220 metres above the ultimate pit bottom. Mining activities in the Grum open-pit will start in late 1988 and continue until late 1997. A total of 25 million tonnes of ore and 231 million tonnes of waste will be mined.

#### (b) Mining - 1988

Mining will begin in late 1988 with scraper removal of overburden. Stripping of the stage one pit will be started at the 1,310 metre elevation. During the year, 1.3 million tonnes of material will be removed.

#### (c) Mining - 1989 [Figure 5.8.5-1]

Early in 1989, two shovels will be available to the Grum pit. Stage one stripping will continue during the year with scrapers and shovels operating. Approximately 21.5 million tonnes of waste will be removed. A minor amount of ore (52,000 tonnes) will be mined and stockpiled.

Figure 5.8.5-1 shows the pit status at the end of the year.

#### (d) Mining - 1990 [Figure 5.8.5-2]

One shovel will be removed from the Grum pit for use at the Vangorda pit early in 1990 and replaced in the latter part of the year. By year-end, two shovels will be operating in the Grum pit. Approximately 270,000 tonnes of ore will be mined and stockpiled. Waste removal will amount to 20.2 million tonnes.

Pit status at the end of 1990 is shown in Figure 5.8.5-2.

(e) Mining - 1991 [Figure 5.8.5-3]

During 1991, 1.7 million tonnes of ore will be produced from stage one of the Grum pit along with 29.2 million tonnes of waste from stages one and two. At year-end, three shovels will be operating in the Grum pit.

Pit status at the end of 1991 is shown in Figure 5.8.5-3.

(f) Mining - 1992 [Figure 5.8.5-4]

Ore production will continue to come from the stage one pit with 2.3 million tonnes of ore being released. Stripping will continue on the stage two pit.

A total of 31.7 million tonnes of waste will be mined during the year. At completion of the Faro pit, a fourth shovel will be moved into the Grum pit.

Pit status at the end of 1992 is shown in Figure 5.8.5-4.

(g) Mining - 1993 [Figure 5.8.5-5]

During the year, ore production will come primarily from stage one with only a small portion liberated in stage two. Stripping of stage two will continue. A total of 3.8 million tonnes of ore and 34.3 million tonnes of waste will be mined.

Pit status at the end of 1993 is shown in Figure 5.8.5-5.

(h) Mining - 1994 [Figure 5.8.5-6]

During early 1994, stage one will be completed and stage two will become the primary source of ore production. During the second quarter of the year, stripping will start on stage three. A total of 4.6 million tonnes of ore and 32.2 million tonnes of waste will be mined.

Pit status at the end of 1994 is shown in Figure 5.8.5-6.

(i) Mining - 1995 [Figure 5.8.5-7]

Ore production will be 4.7 million tonnes from the stage two pit during the year. Associated waste from the stage two pit and stripping in the stage three pit will produce 29.4 million tonnes of waste during 1995. During the third quarter, a shovel will be retired from service and three shovels will be operating in the pit at the end of the year.

Pit status at the end of 1995 is shown in Figure 5.8.5-7.

(j) Mining - 1996 [Figure 5.8.5-8]

The stage two pit will be completed during the year and the stage three pit will become the ore source. A total of 3.6 million tonnes of ore and 27.8 million tonnes of waste will be mined. During the second quarter of the year, operating shovels will be reduced from three to two.

Pit status at the end of 1996 is shown in Figure 5.8.5-8.

(k) Mining - 1997 [Figure 5.8.5-9]

The Grum pit will be completed during 1997. Production will be 3.9 million tonnes of ore and 3.7 million tonnes of waste.

Pit status at the end of open pit mining in Grum is shown in Figure 5.8.5-9.

5.9 VANGORDA/GRUM SITE FACILITIES

5.9.1 General

The site development for the mining of the Vangorda and Grum deposit will consist primarily of road access, water diversion, site clearing, electrical power supply, changehouse and a shop for equipment servicing. The site plan showing pit and dump locations is given in Figure 5.9.1-1. The ore haulage road is shown on Figure 5.9.1-2.

### 5.9.2 Site

Site clearing will be undertaken during 1987. The areas to be cleared are lightly to moderately forested. There is existing road access to the site. Start of work is governed only by weather, environmental permits and mobilization time.

The two waste dump locations and final open pits are shown on Figure 5.9.1-1. Their location necessitates the redirection of a number of water courses. Ditching will be required around the upper slopes of the pits to divert water from existing water courses.

### 5.9.3 Site Facilities

The planned operation takes into consideration the continued use of maintenance facilities, warehouse and offices at the Faro site. Minimal facilities will be provided at the Vangorda/Grum site.

A two bay running maintenance and lubrication shop with a small attached ready-use warehouse. This building will be a pre-engineered structure without crane facilities. Shop dimensions will be 23 metres by 20 metres. The warehouse and office will be a 5 metre by 24 metre lean-to attached to the shop.

A prefabricated changehouse will be provided for the mining crew. Facilities will be provided for both men and women. Total locker capacity will be for 100 people.

### 5.9.4 Pit Dumps

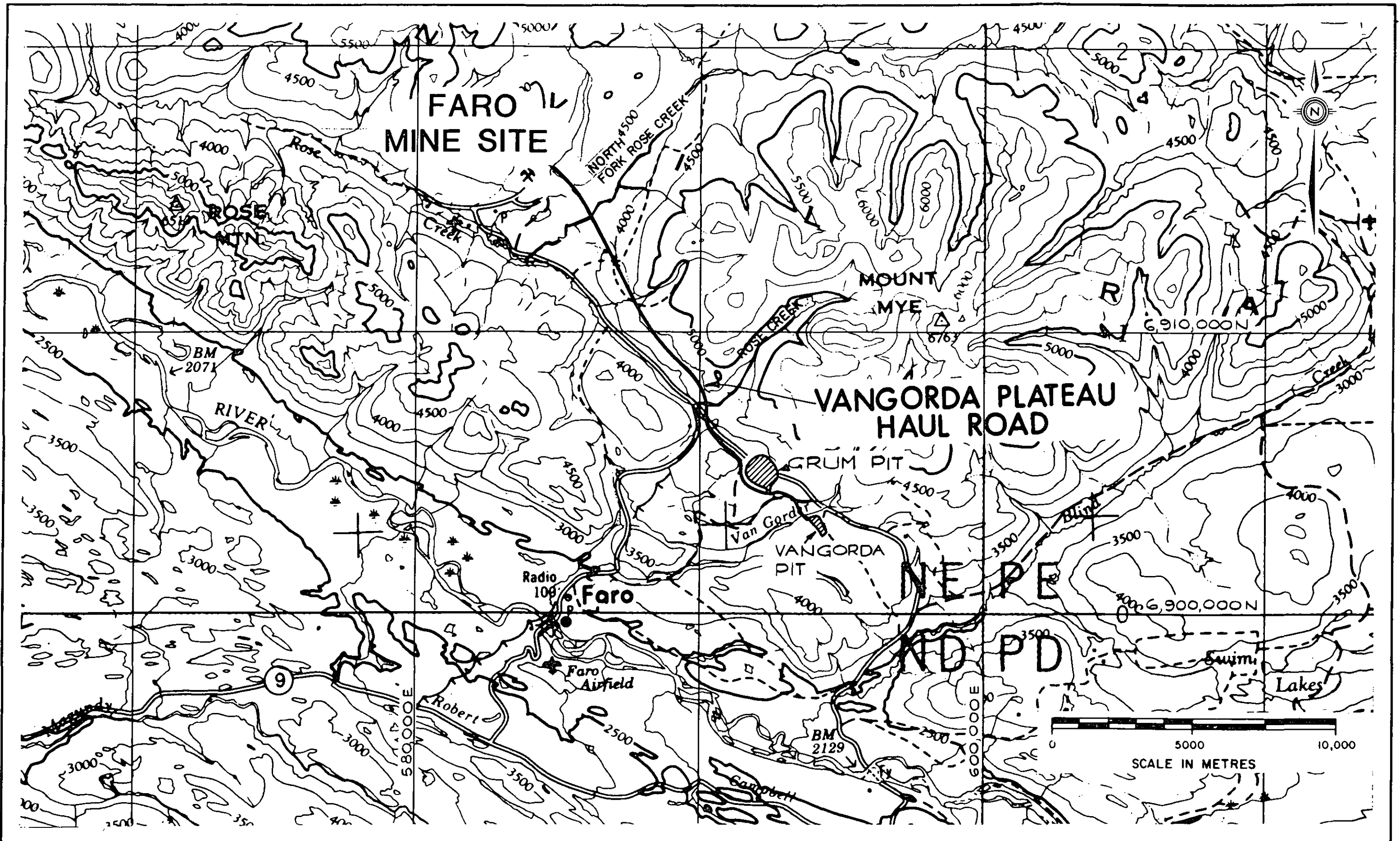
Two separate waste dumps will be provided in one common watershed. One dump will be provided for each pit. The dump sites are near the pit exits and will fill two ravines. Dump locations permit a short flat haul for waste from the pit edge.

#### 5.9.5 Ore Storage and Haulage

Ore from the Vangorda and Grum pit will be stockpiled in the pit area and hauled to the Faro Mill as required. The haulage road will be 14 kilometres in length with maximum grades of 2 percent against the load.

#### 5.9.6 Power Supply

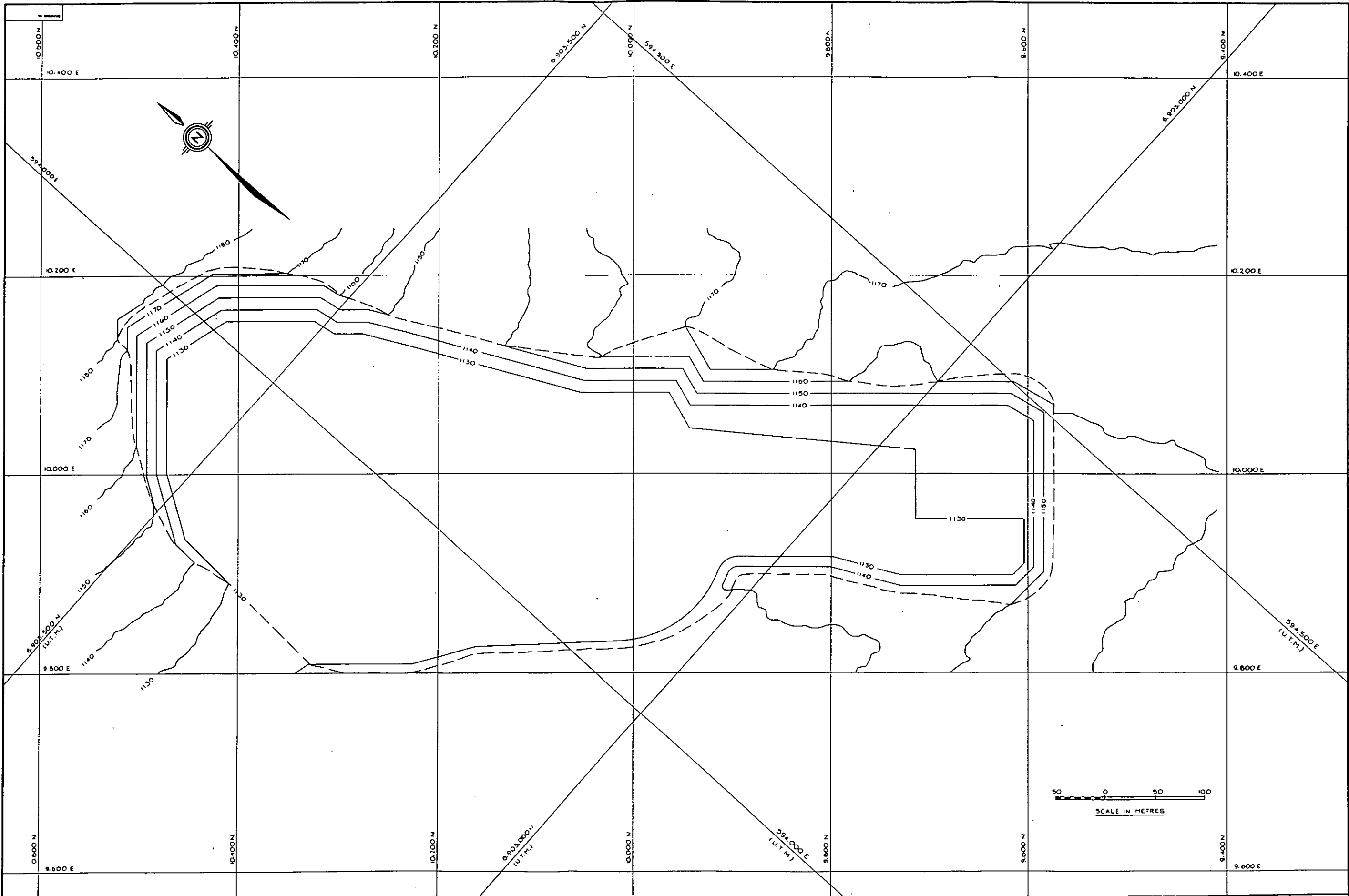
Electrical power will be provided by a short line from the main NCPC power line to the Faro Site. The power line will be 5,000 metres in length. Power will be transmitted transformed down from 138 kv to 34.5 kv and transmitted to the mine site at 34.5 kv. In the pit area, it will be further transformed to 4.16 kv for pit use.



ISSUED FOR TECHNICAL REVIEW	A MAR 87	SCALE 1:25,000	DATE	CLIENT	FARO AREA DEPOSITS VANGORDA PLATEAU HAUL ROAD
		DESIGNED J. B. F.	FEB. 87	CURRAGH RESOURCES	
		DRAWN P. A. H.	FEB. 87	LOCATION FARO, YUKON	
REVISIONS		CHECKED		<b>KILBORN</b>	
NO	DATE	BY	APPROVED	PROJ. NO. 3509-19	DWG. NO. FIG 5.9.1-2
					REV. A

K.E.B.C.9





REF. NO.	REFERENCE DRAWINGS

CLIENT	DATE	DESCRIPTION	BY	CHECK

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CLIENT	DATE	DESCRIPTION	BY	CHECK

CLIENT	DATE	DESCRIPTION	BY	CHECK

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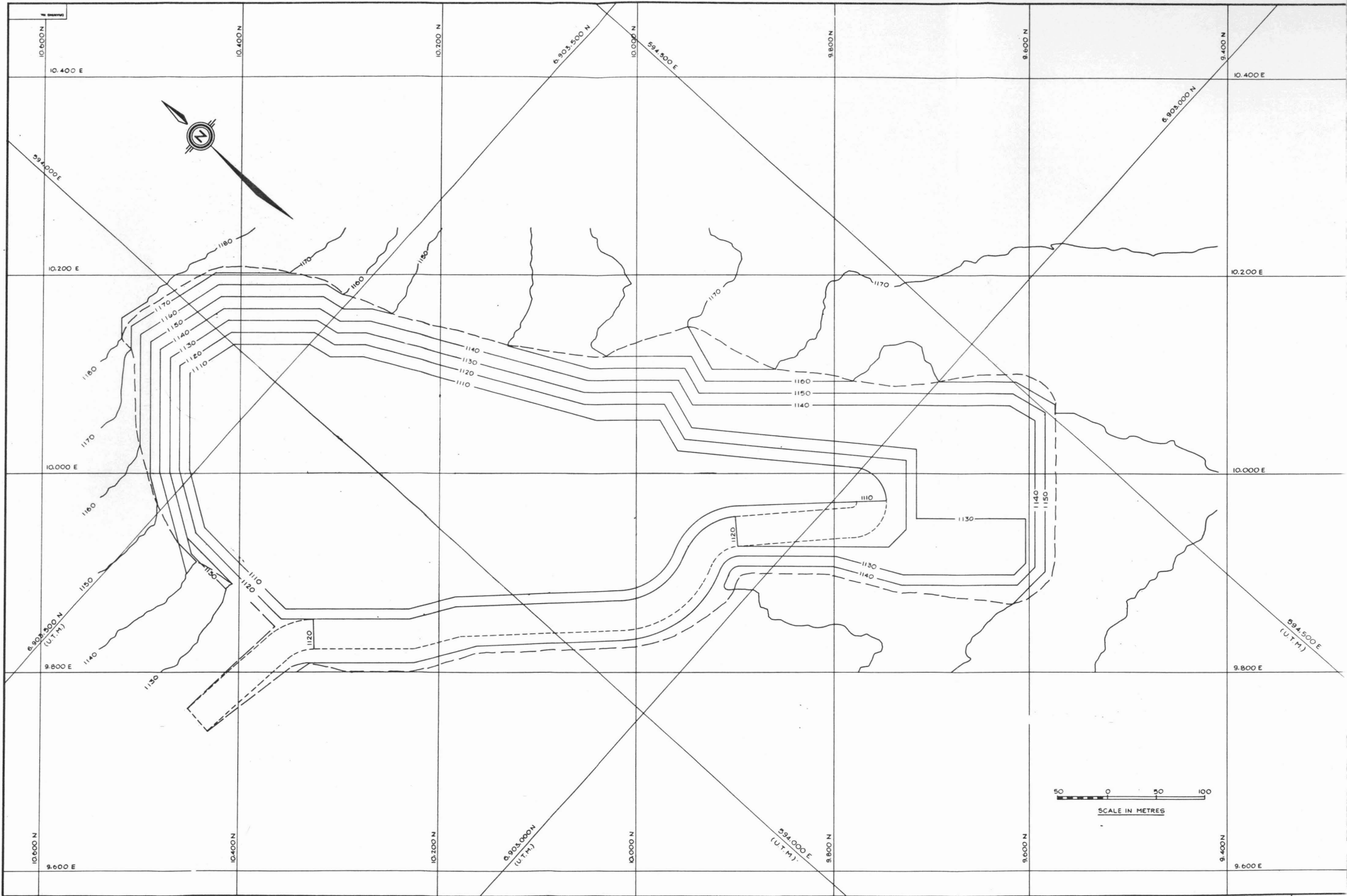
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DRAWN BY	Z.A.	DATE	FEB 87
CHECKED BY	Z.A.	DATE	FEB 87
APPROVED BY	J.B.F.	DATE	FEB 87

CLIENT: CURRAGH RESOURCES  
 LOCATION: FARO, YUKON  
**KILBORN**

TITLE: FARO AREA DEPOSITS  
 VANGORDA DEPOSIT  
 OPEN PIT PLAN  
 END OF 1988

PROJECT NO.	3509	DRAWING NO.	19
DRAWING NUMBER	FIG 575-2	REV.	A





DWG. NO.	REFERENCE DRAWINGS

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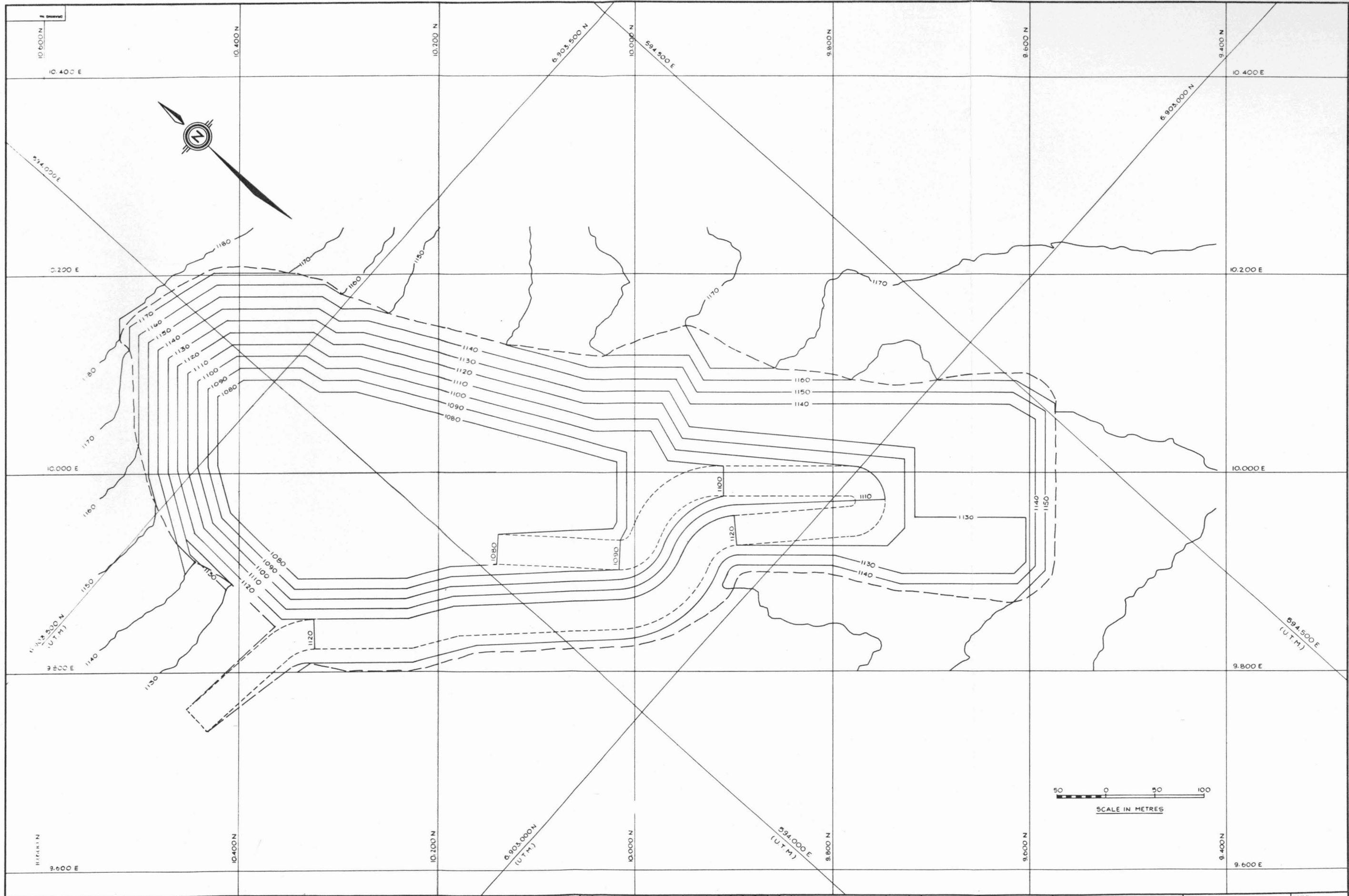
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CLIENT	DATE	DESCRIPTION

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DRAWN BY: Z.A.	FEB 87	
CHECKED BY: J.B.F.		

CLIENT: CURRAGH RESOURCES  
 LOCATION: FARO, YUKON  
**KILBORN**

TITLE	S.D.M. No.	DIVISION No.
FARO AREA DEPOSITS		
VANGORDA DEPOSIT	3509	19
OPEN PIT PLAN		
END OF 1985		
	FIG 575-3	REV A



DWG NO.	REFERENCE DRAWINGS

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CLIENT	DATE	DESCRIPTION

CLIENT	DATE	DESCRIPTION

CLIENT	DATE	DESCRIPTION

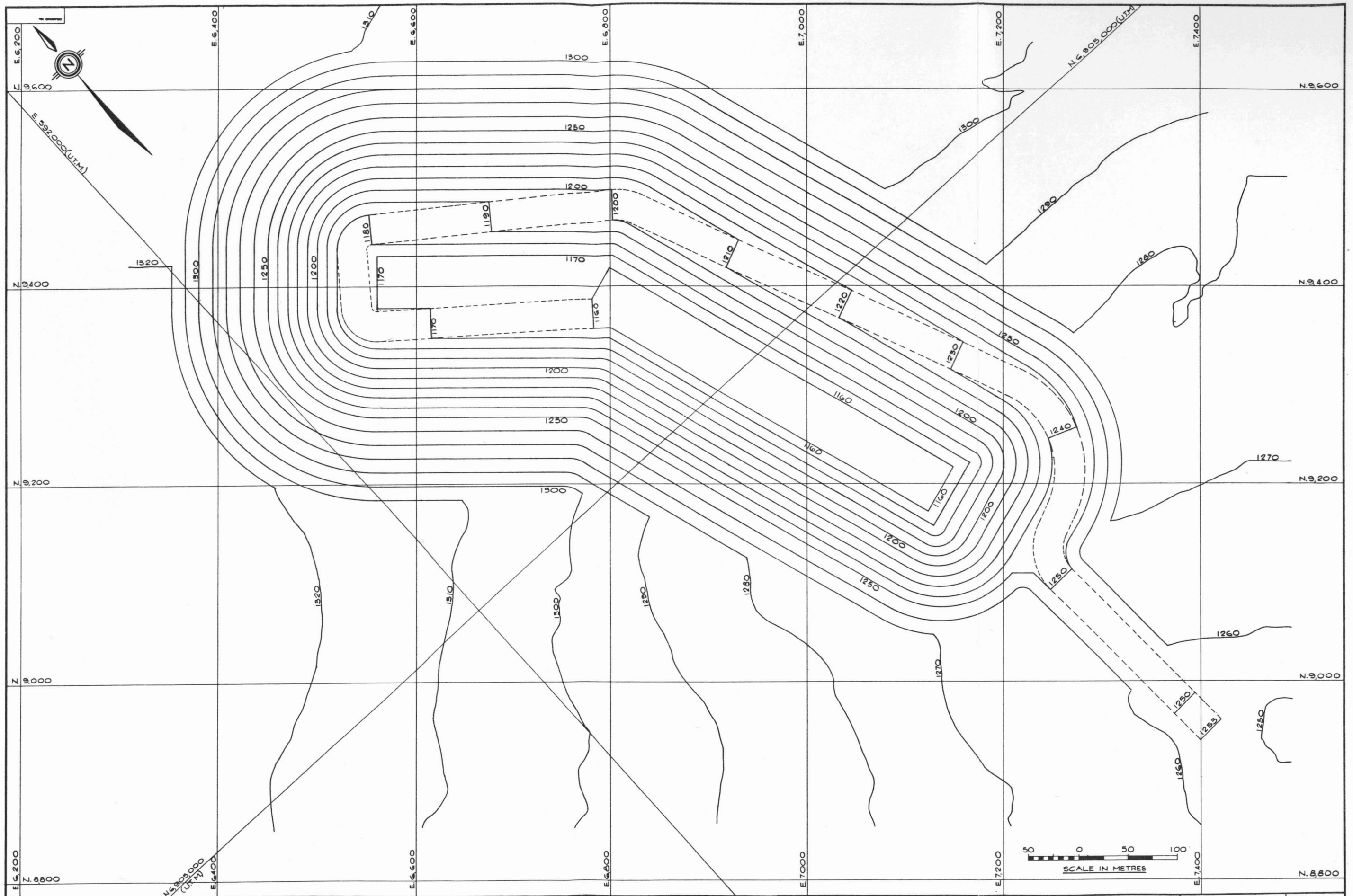
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SECTION	SCALE	DATE
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DRAWN BY	Z.A.	FEB 87
CHECKED BY		
APPROVED BY	J.B.F.	

CLIENT: CURRAGH RESOURCES  
 LOCATION: FARO, YUKON  
**KILBORN**

TITLE: FARO AREA DEPOSITS  
 VANGORDA DEPOSIT  
 OPEN PIT PLAN  
 END OF 1990

PROJECT No.	DIVISION No.
3509	19
DRAWING NUMBER	REV.
FIG 575-4	A



REF. NO.	REFERENCE DRAWING

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CLIENT	PROJ.	CHK.	DESCRIPTION	REVISIONS

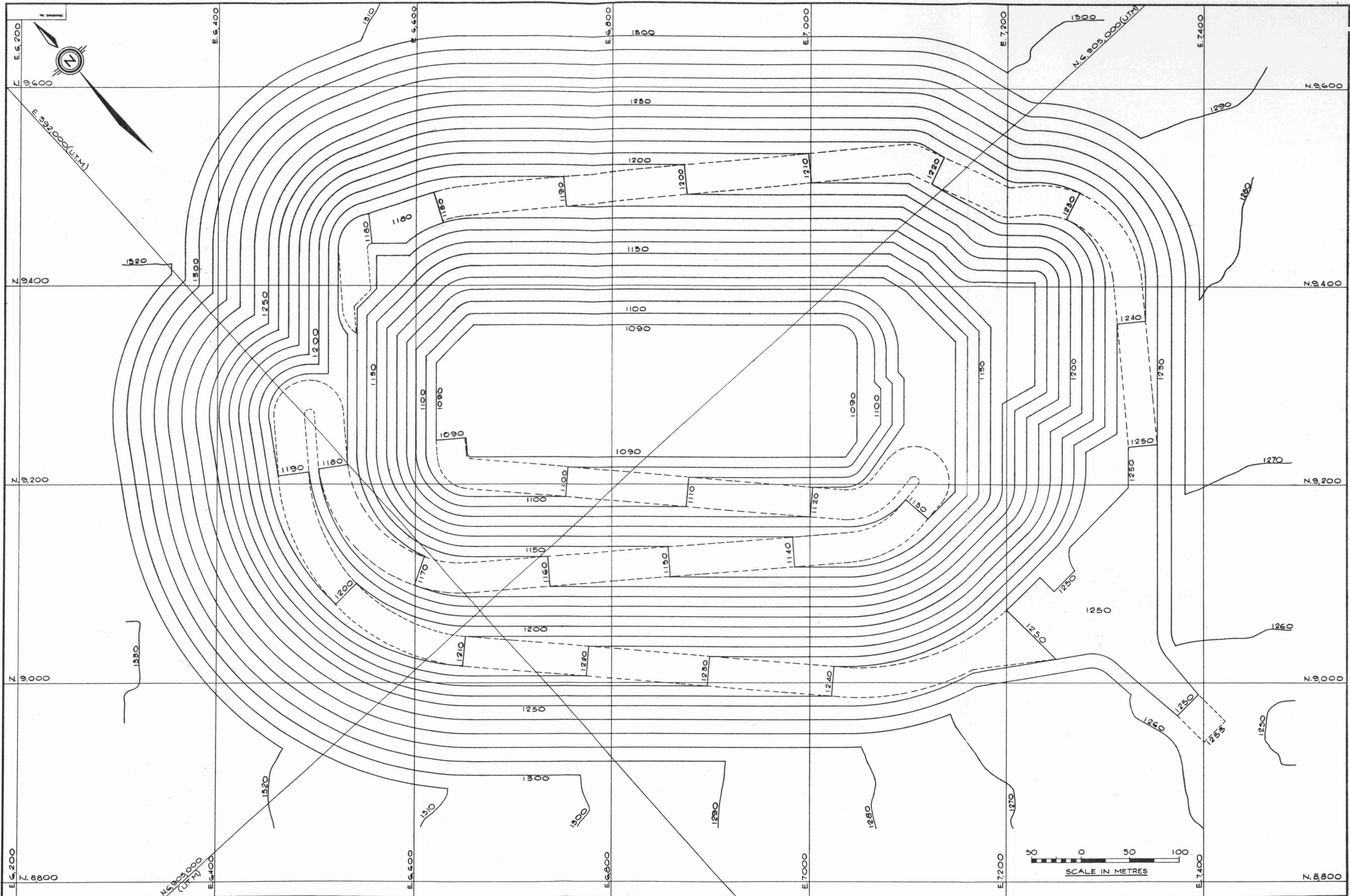
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ISSUED FOR TECHNICAL REVIEW MAR 30 1987

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 DESIGNED BY: J.B.F. FEB 87  
 DRAWN BY: P.A.H. MAR 87  
 CHECKED BY: APPROVED BY: JEF  
**KILBORN**

TITLE: FARO AREA DEPOSITS  
 GRUM DEPOSIT  
 OPEN PIT PLAN  
 STAGE I

S.O.M. No. PROJECT No. DIVISION No. DRAWING NUMBER  
 5509 19  
 FIG. 5.8.4-1  
 REV. A



DWG. NO.	REFERENCE DRAWINGS

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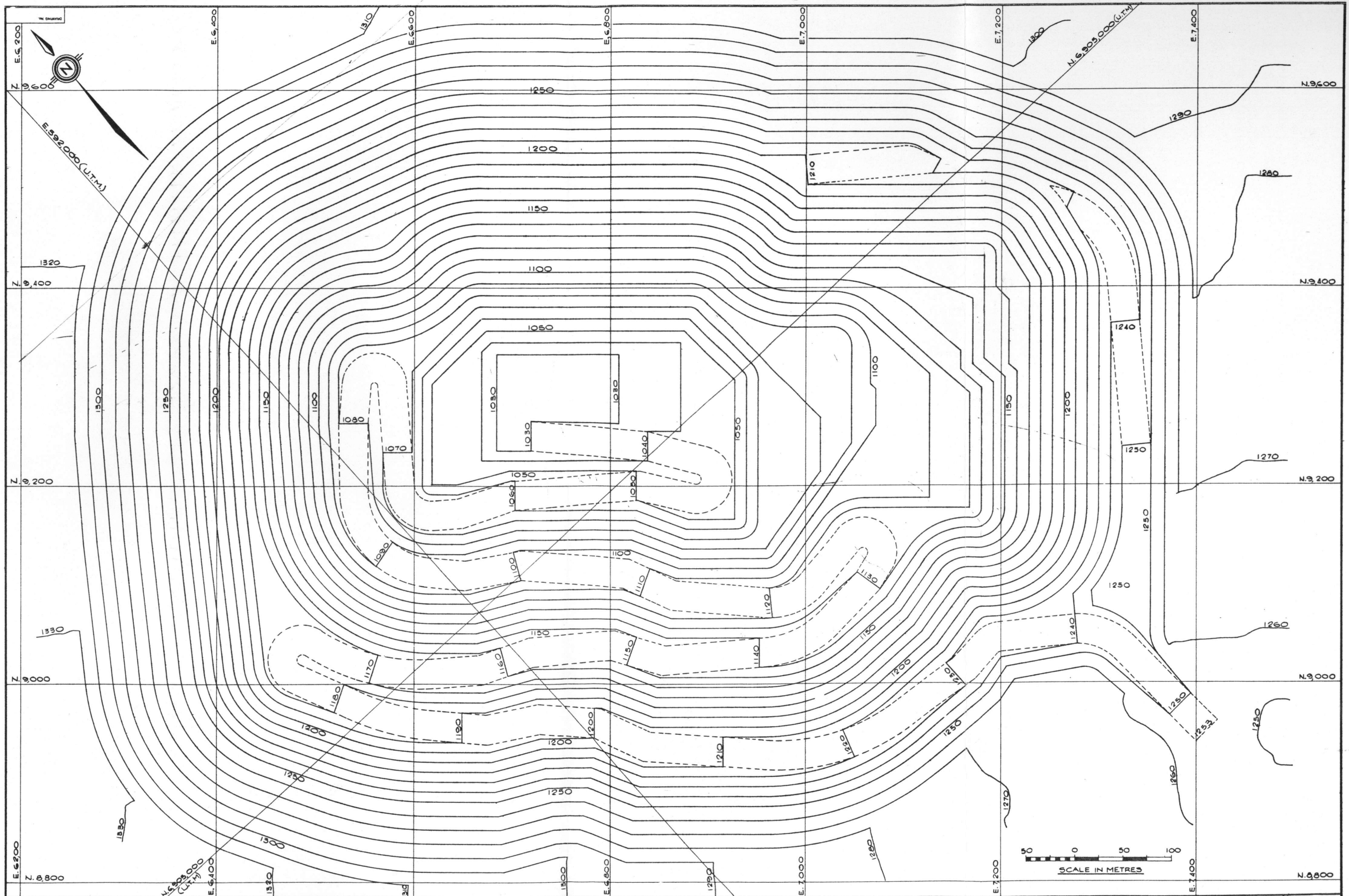
A ISSUED FOR TECHNICAL REVIEW MAR 30 1987

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CLIENT: CURRAGH RESOURCES LOCATION: FARO, YUKON  
**KILBORN**

TITLE: FARO AREA DEPOSITS  
GRUM DEPOSIT  
OPEN PIT PLAN  
STAGE II

S.D.M. No. PROJECT No. DIVISION No. DRAWING NUMBER REV. No.  
5509 19 FIG. 5.8.4-2 A



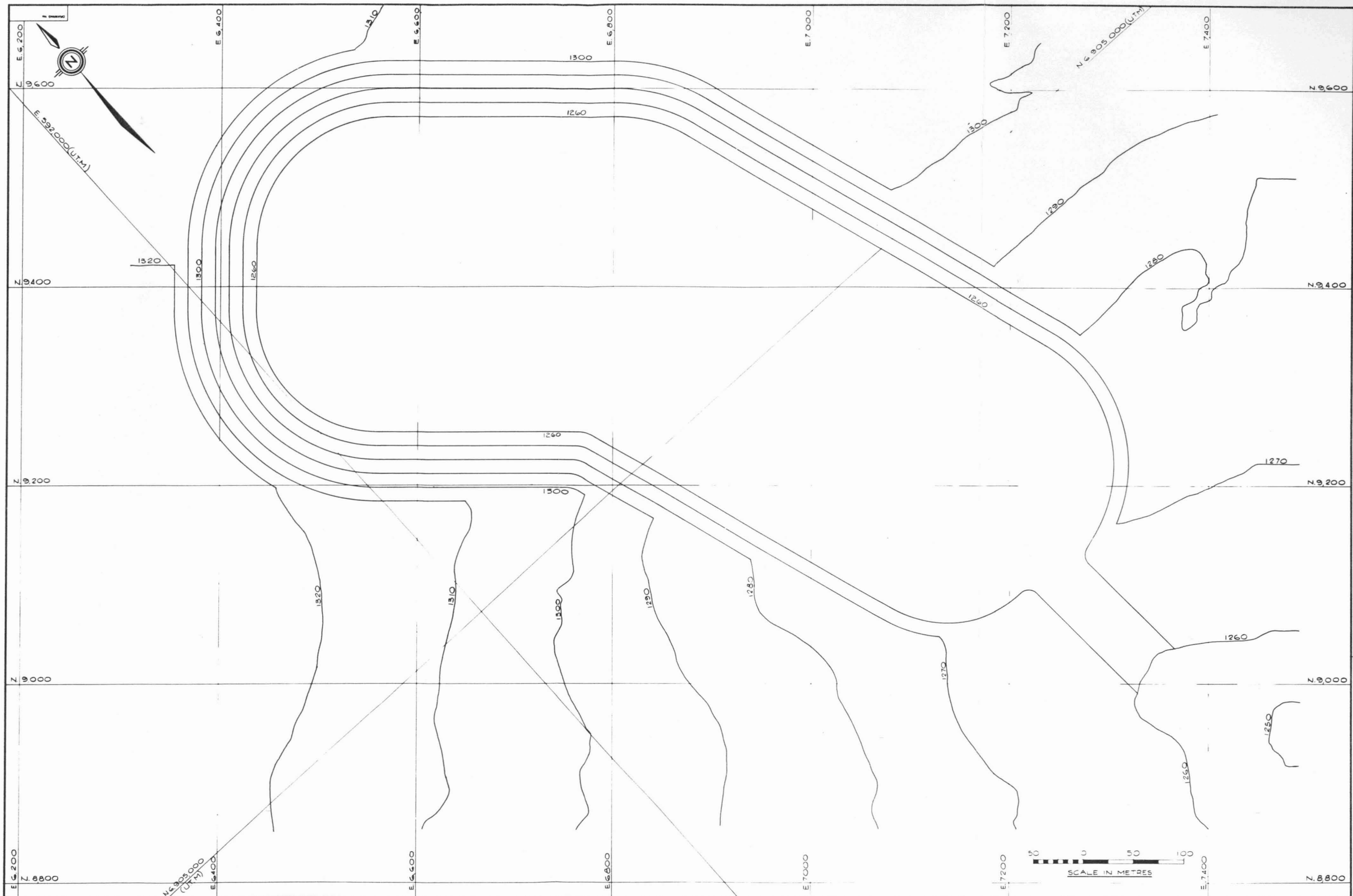
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 DRAWN BY: P.A.H.  
 CHECKED BY: J.S.F.  
 APPROVED BY: J.S.F.

CLIENT: CURRAGH RESOURCES  
 LOCATION: FARO, YUKON.  
**KILBORN**

TITLE: FARO AREA DEPOSITS  
 CRUM DEPOSIT  
 OPEN PIT PLAN  
 STAGE III - ULTIMATE

PROJECT NO. 3509 19  
 DRAWING NUMBER FIG. 5.8.4-3  
 REV. A



REF. NO.	DESCRIPTION

NO.	DESCRIPTION

NO.	DESCRIPTION

NO.	DESCRIPTION

NO.	DESCRIPTION

ISSUED FOR TECHNICAL REVIEW MAR 30, 1969

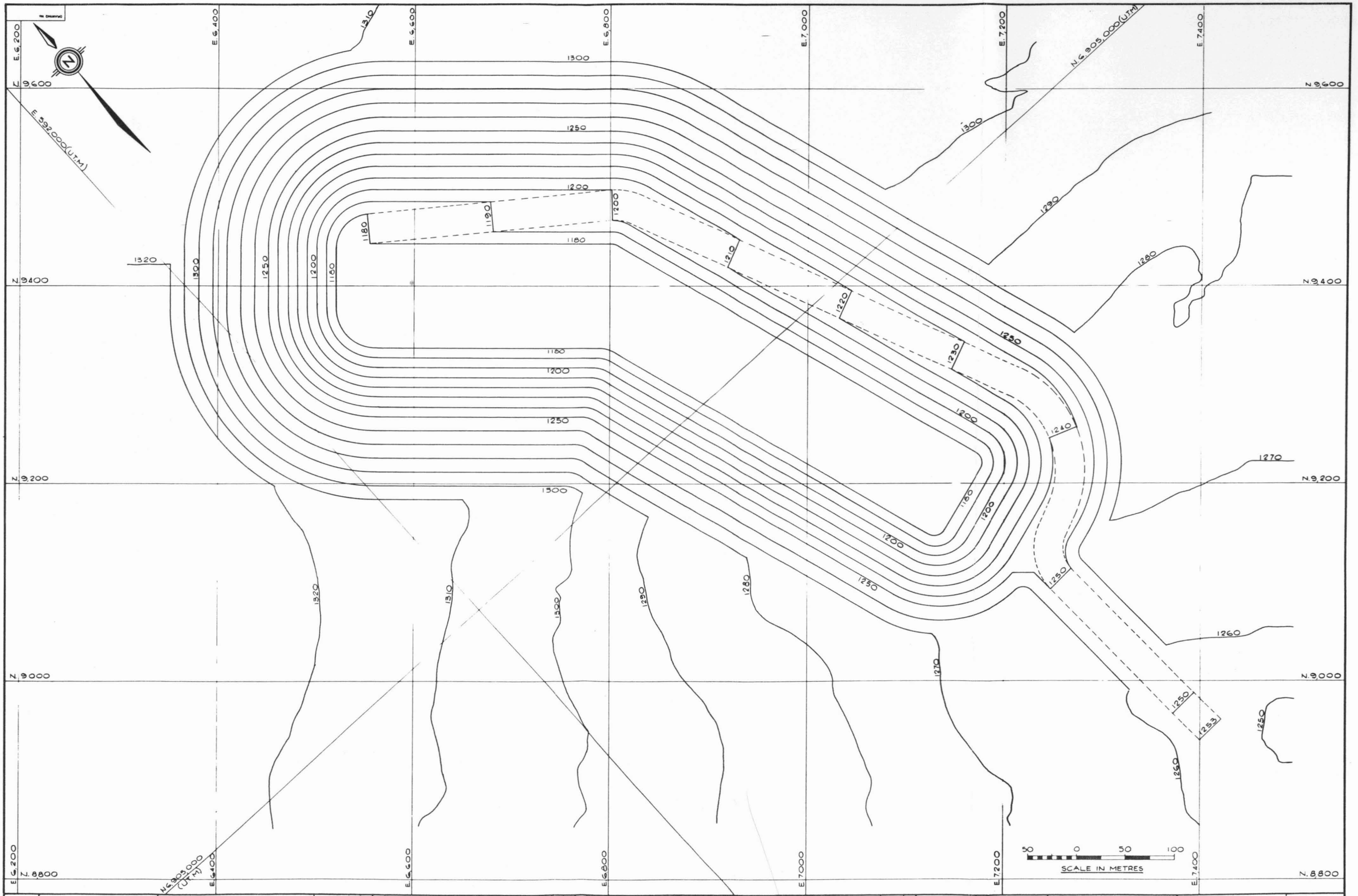
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 DATE: FEB 27 1969  
 DESIGNED BY: J.B.F. ESBY  
 DRAWN BY: P.A. HARBY  
 CHECKED BY: J.C.F.  
 APPROVED BY: J.C.F.

CLIENT: CURRAGH RESOURCES  
 LOCATION: FARO YUKON  
**KILBORN**

TITLE: FARO AREA DEPOSITS  
 GRUM DEPOSIT  
 OPEN PIT PLAN  
 END OF 1969

PROJECT No.	DIVISION No.
3509	19
DRAWING NUMBER	REV.
FIG. 5.8.5-1	A





DATE	DESCRIPTION

NO.	DESCRIPTION	REVISIONS

NO.	DESCRIPTION	REVISIONS

NO.	DESCRIPTION	REVISIONS

NO.	DESCRIPTION	REVISIONS

NO.	DESCRIPTION	REVISIONS

NO.	DESCRIPTION	REVISIONS

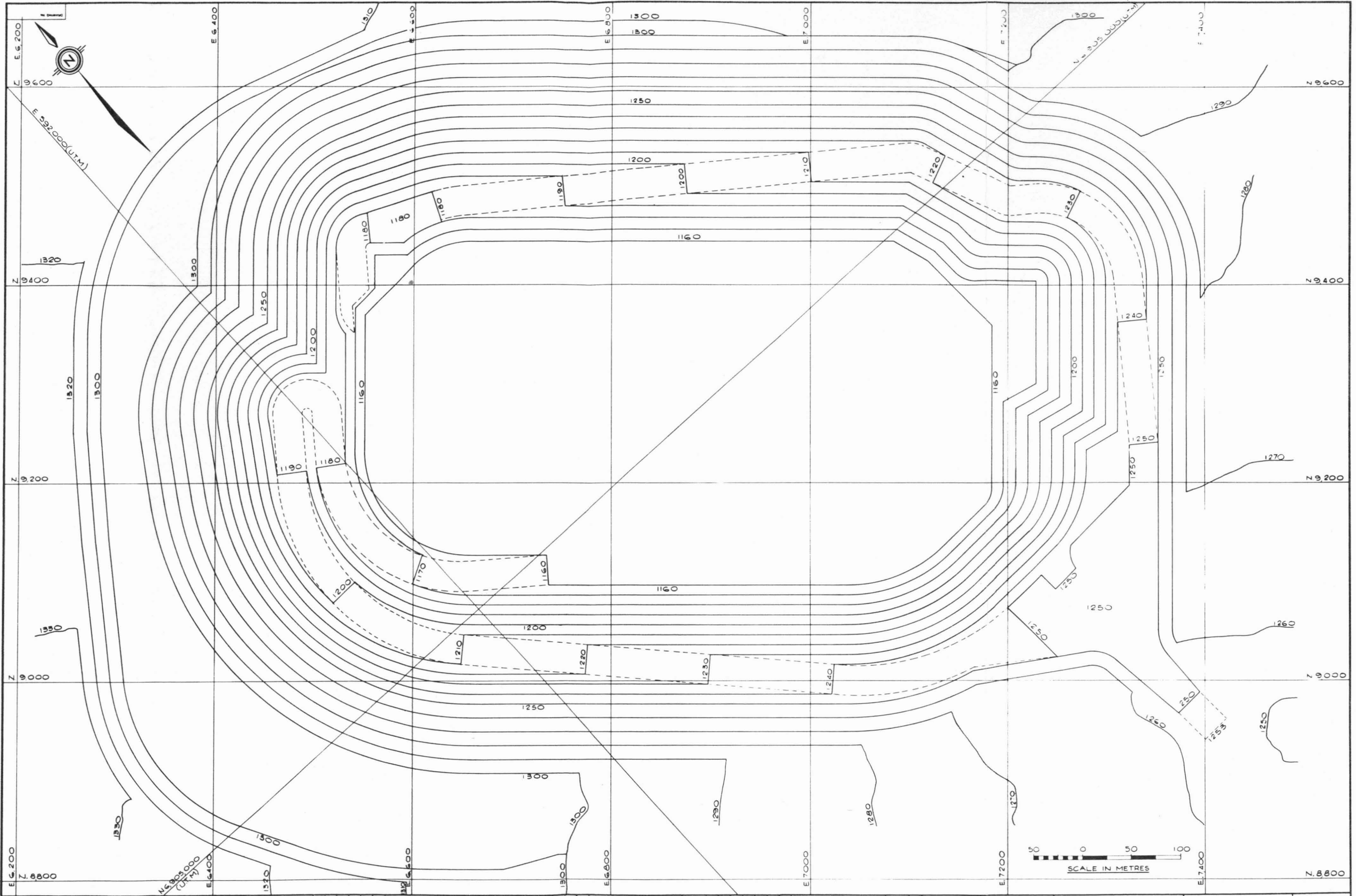
NO.	DESCRIPTION	REVISIONS

NO.	DESCRIPTION	REVISIONS

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DATE	LOCATION	GRUM DEPOSIT	DIVISION NO.
DESIGNED BY JBF FEB 87	FARO, YUKON	OPEN PIT PLAN	19
DRAWN BY PA, MAR 87	<b>KILBORN</b>	END OF 1991	DRAWING NUMBER
CHECKED BY			FIG. 5.85-3
APPROVED BY JBF			REV
			A

<u>1983</u>	<u>1982</u>	<u>1981</u>	<u>1980</u>	<u>1979</u>	<u>1978</u>
<u>SILURIAN SILTSTONE</u>					
S <sub>SS</sub>	S <sub>SS</sub>	S <sub>SS</sub>	S <sub>SS</sub> 5	5	S <sub>SS</sub>
S <sub>SX</sub>	S <sub>SX</sub>	DA <sub>SS</sub>	LD <sub>SS</sub> 6H	None	--
S <sub>SC</sub>	S <sub>SC</sub>	--	--	--	--
S <sub>SQ</sub>	S <sub>SQ</sub>	S <sub>SQ</sub>	S <sub>SS</sub> 5B, C	5A5, 5A3	--
S <sub>SB</sub>	S <sub>SB</sub>	--	--	--	--
S <sub>SL</sub>	S <sub>SL</sub>	S <sub>SL</sub>	S <sub>SS</sub> 5A	5B	--
S <sub>SS</sub>	S <sub>SS</sub>	S <sub>SS</sub>	S <sub>SS</sub> 5D	5A	S <sub>SS</sub>
S <sub>SH</sub>	S <sub>SH</sub>	S <sub>SH</sub>	S <sub>SS</sub> 5E	5A6	--
<u>SILURIAN CHERT</u>					
S <sub>RC</sub>	S <sub>RC</sub>	S <sub>RC</sub>	S <sub>RC</sub> 4K	--	--
<u>SILURIAN LIMESTONE</u>					
S <sub>RL</sub>	S <sub>RL</sub>	S <sub>RL</sub>	S <sub>L</sub> 4J	4F, 4H	O <sub>LS</sub>
<u>ROAD RIVER ORDOVICIAN SHALES</u>					
O <sub>R</sub>	O <sub>R</sub>	OS <sub>RR</sub>	OS <sub>RR</sub> 4D	4A	OS <sub>RR</sub>
O <sub>RC</sub>	O <sub>RC</sub>	OS <sub>RC</sub>	OS <sub>RC</sub> 4E	4G	--
O <sub>RG</sub>	O <sub>RG</sub>	OS <sub>RG</sub>	OS <sub>GG</sub> 4I	4C	--
O <sub>RQ</sub>	O <sub>RQ</sub>	OS <sub>RQ</sub>	OS <sub>OZ</sub> 4H	4E	--
O <sub>RR</sub>	O <sub>RR</sub>	--	--	--	--
O <sub>RD</sub>	O <sub>RD</sub>	OS <sub>RS</sub>	OS <sub>SS</sub> 4F	4B	--
O <sub>RS</sub>	O <sub>RS</sub> O <sub>RGD</sub> , L, K	--	-- 4I, L, K, O	--	--
O <sub>RL</sub>	O <sub>RL</sub>	OS <sub>RT</sub>	OS <sub>LT</sub> 4G	4D	--
O <sub>RN</sub>	O <sub>RN</sub>	--	--	--	--
<u>OSPIKA VOLCANICS</u>					
O <sub>VF</sub>	O <sub>VF</sub>	O <sub>VF</sub>	OV 3	2	O <sub>V</sub>
O <sub>VX</sub>	O <sub>VX</sub>	O <sub>VX</sub>	OV <sub>F</sub> 3E	2A2 + 2B2	--
O <sub>VT</sub>	O <sub>VT</sub>	O <sub>VT</sub>	OV <sub>BX</sub> 3D	2B1	--
O <sub>VG</sub>	O <sub>VG</sub>	O <sub>VG</sub>	OV <sub>T</sub> 3B, C	2A1 + 2B1 + 2C1	--
			OV <sub>S</sub> 3A	2C	--
<u>SKOKI FORMATION</u>					
O <sub>SK</sub>	O <sub>SK</sub>	O <sub>SK</sub>	OS <sub>K</sub> 4A, B, C	3A, B, C	--





DWG. NO.	REFERENCE DRAWING
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DATE			

NO.	DESCRIPTION	REVISIONS

CLIENT	PAH	CHECK	FF
DATE			

NO.	DESCRIPTION	REVISIONS

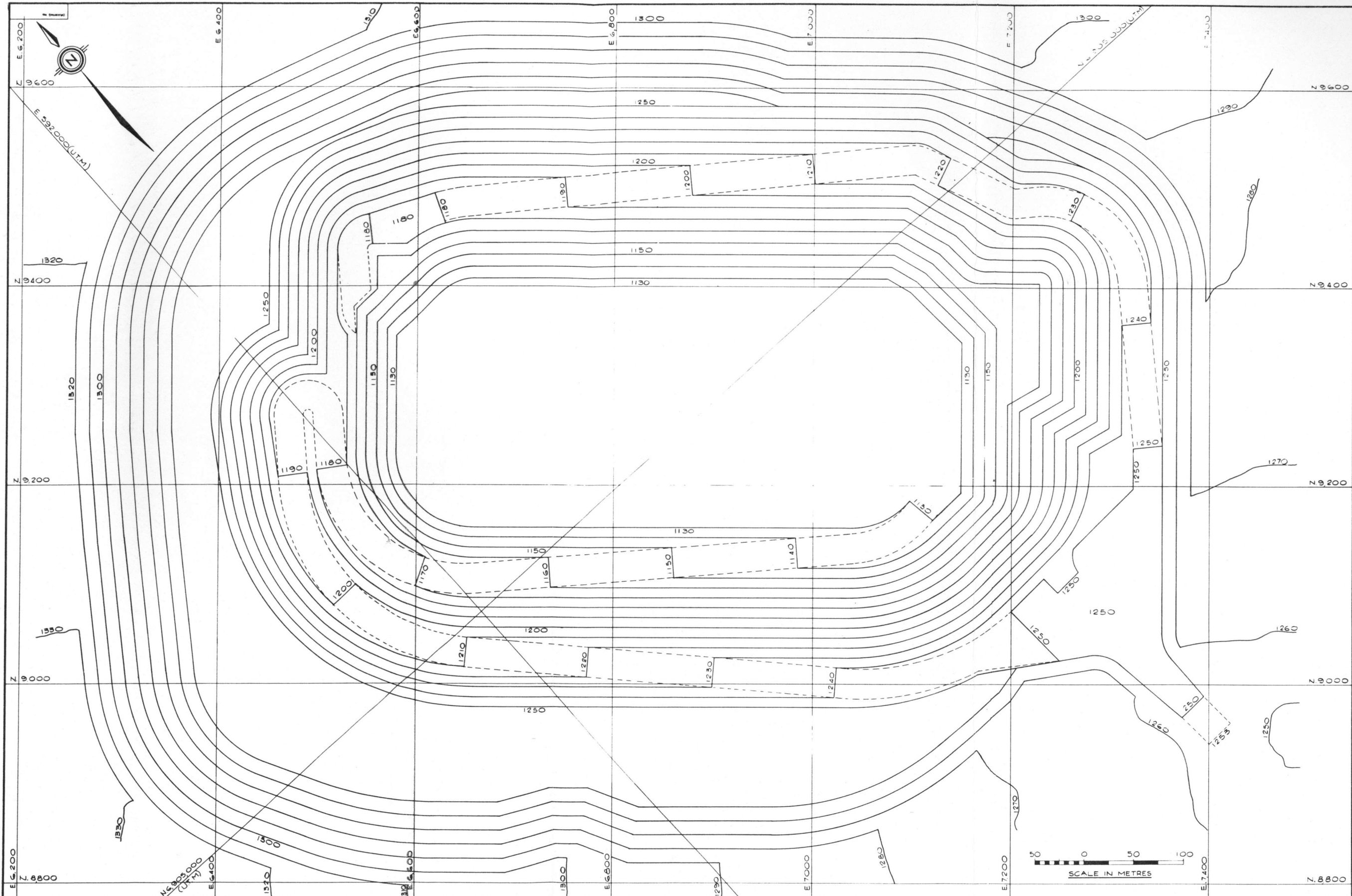
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 CHECKED BY: PAH  
 APPROVED BY: FF

CLIENT: CURRAGH RESOURCES  
 LOCATION: FARO, YUKON  
**KILBORN**

TITLE: FARO AREA DEPOSITS  
 GRUM DEPOSIT  
 OPEN PIT PLAN  
 END OF 1994

PROJECT NO.	3509
DIVISION NO.	19
DRAWING NUMBER	FIG. 5.8.5-G
REV.	A

A ISSUED FOR TECHNICAL REVIEW MAR 30 1987



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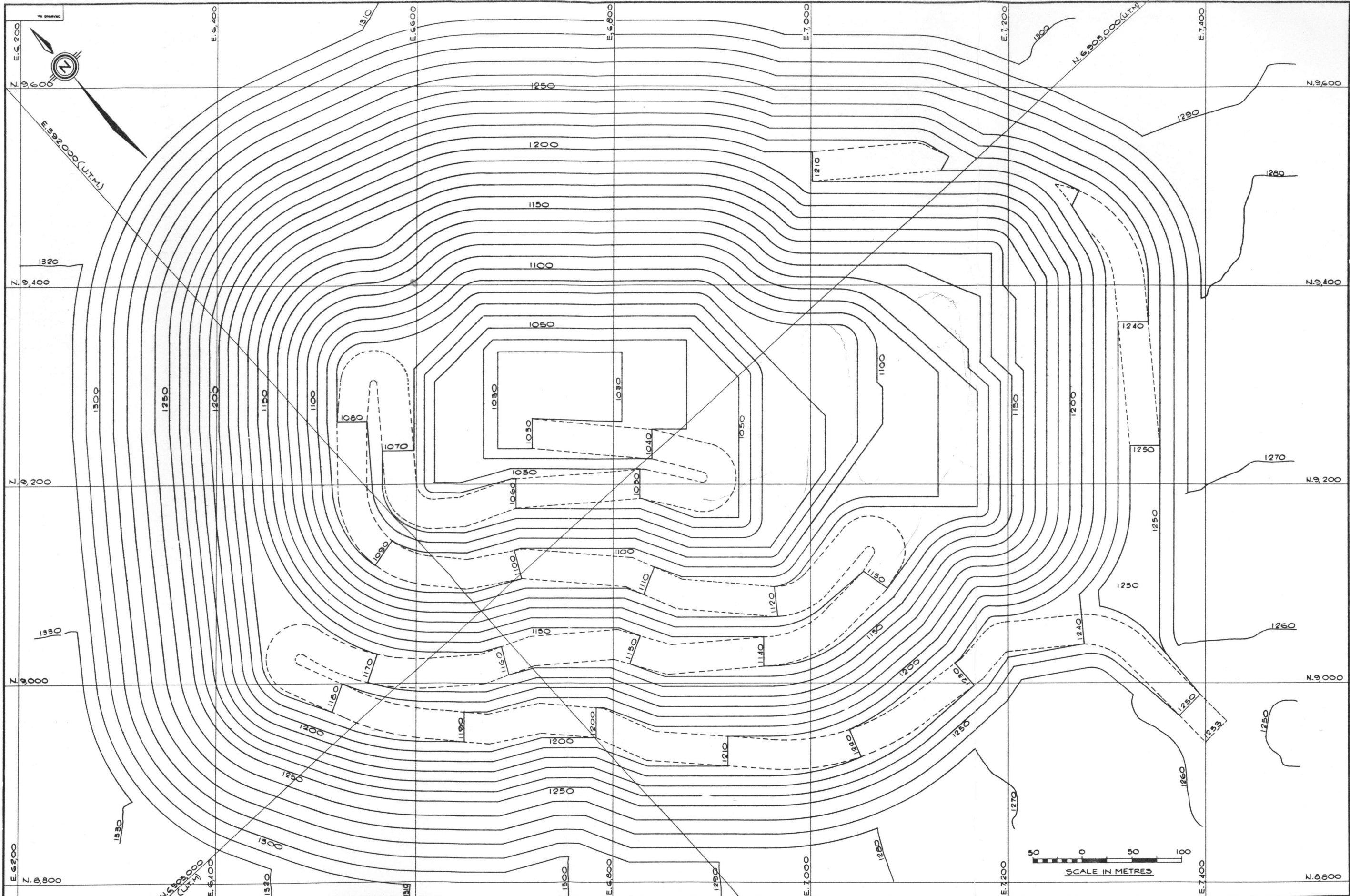
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ISSUED FOR TECHNICAL REVIEW MAR 30/95

CLIENT: CURRAGH RESOURCES  
 LOCATION: FARO, YUKON  
**KILBORN**

TITLE: FARO AREA DEPOSITS  
 GRUM DEPOSIT  
 OPEN PIT PLAN  
 END OF 1995

BOM No. 3509  
 DIVISION No. 19  
 DRAWING NUMBER FIG. 5.85-7  
 REV. A



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CLIENT	PROJ. NO.	CHECK	DESCRIPTION	REVISIONS

A ISSUED FOR TECHNICAL REVIEW MAR. 31, 87

SECTION: SCALE: 1:1200 DATE: DESIGNED BY: J.O.F. FEB. 87 DRAWN BY: R.A.H. FEB. 87 CHECKED BY: APPROVED BY: J.B.C.

CLIENT: CURRAGH RESOURCES LOCATION: FARO, YUKON. **KILBORN**

TITLE: FARO AREA DEPOSITS GRUM DEPOSIT OPEN PIT PLAN MAY 1997 - ULTIMATE

PROJECT No.	3509	DIVISION No.	19
DRAWING NUMBER	FIG. 5.8.5-9		
REV.	A		