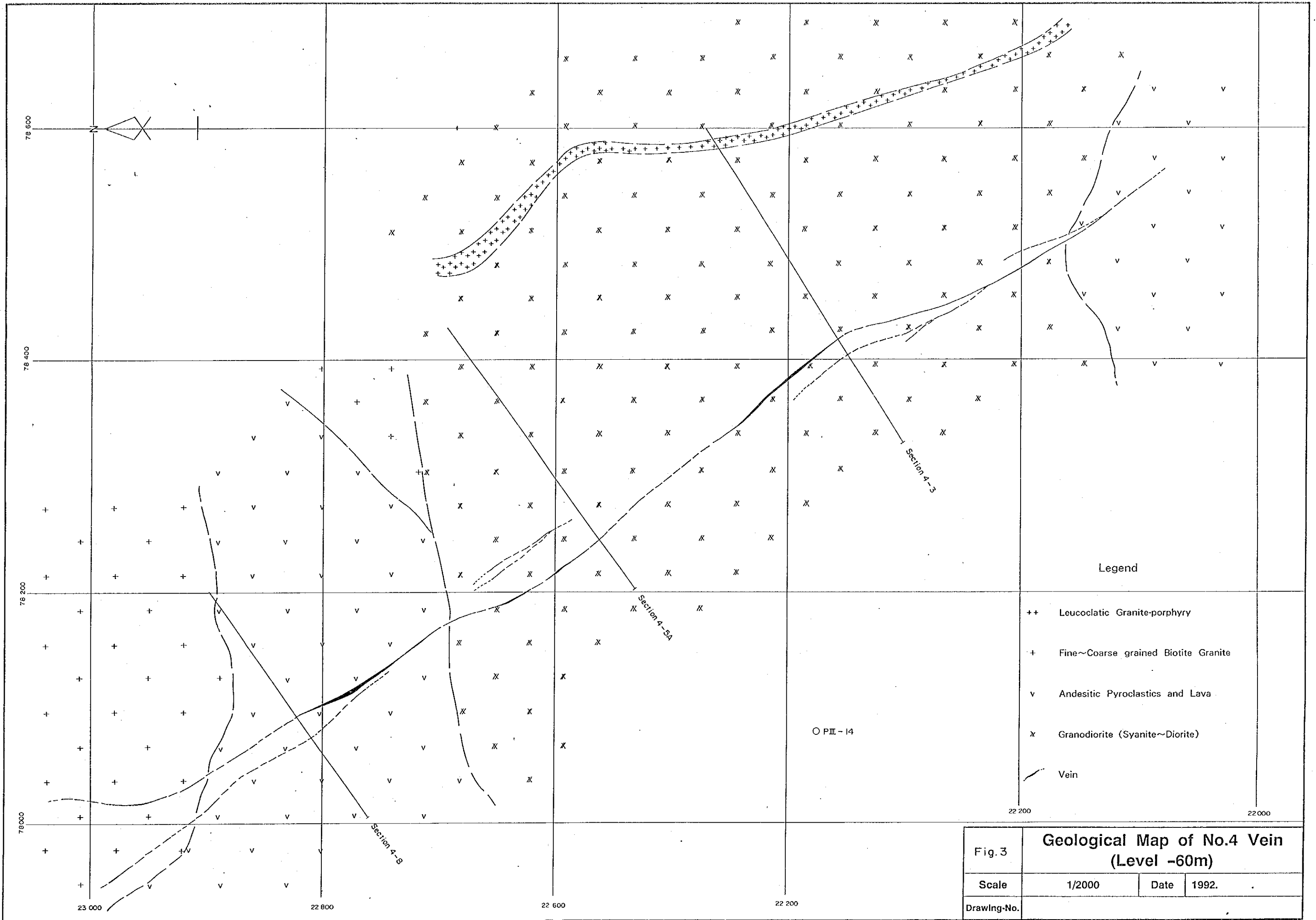


Fig.2	Geological Map of No.4 Vein		
Scale	1/2000	Date	1992.
Drawing-No.			



Legend

- ++ Leucocratic Granite-porphry
- + Fine~Coarse grained Biotite Granite
- v Andesitic Pyroclastics and Lava
- x Granodiorite (Syanite~Diorite)
- Vein

Fig. 3	Geological Map of No.4 Vein (Level -60m)		
Scale	1/2000	Date	1992.
Drawing-No.			

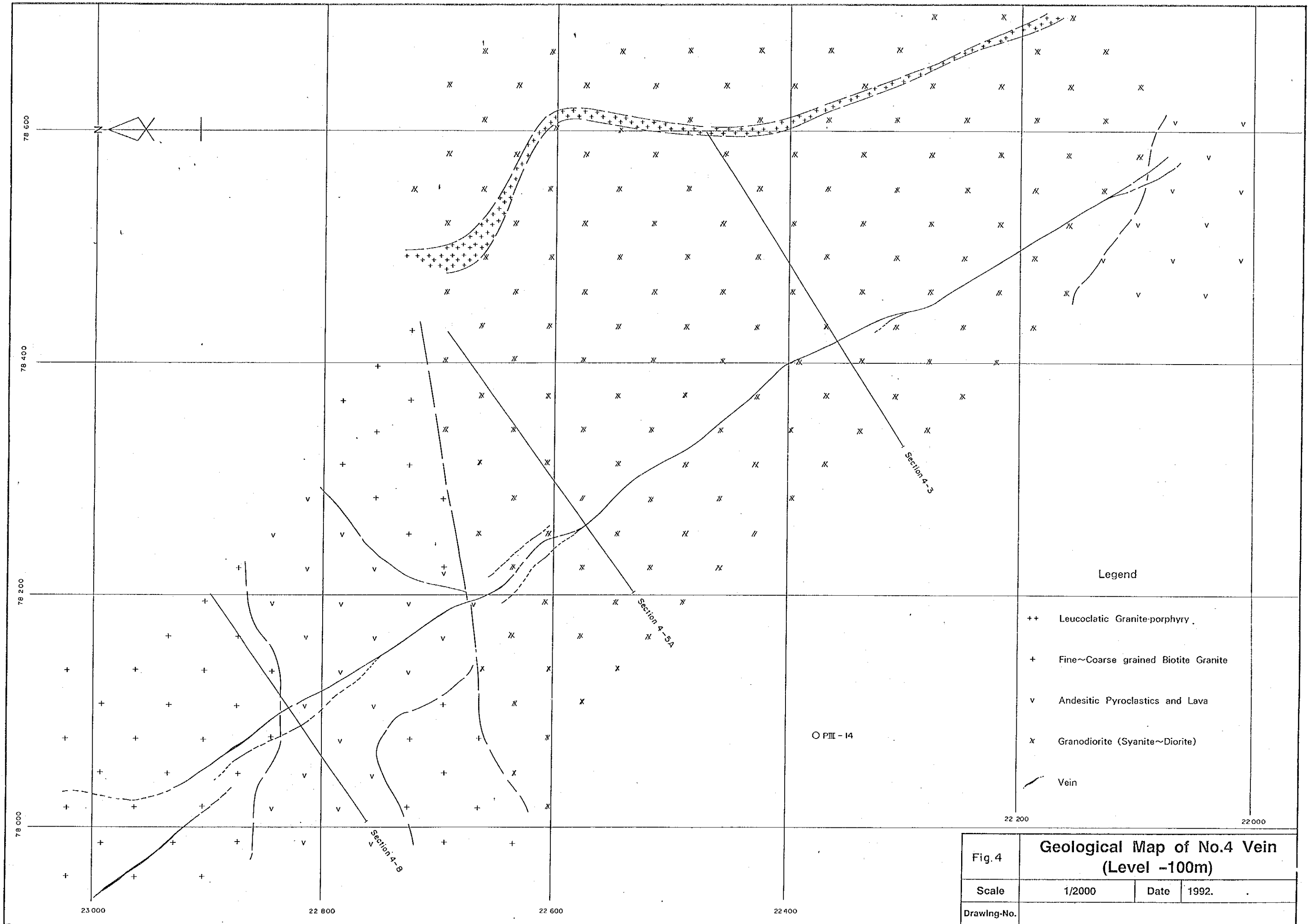
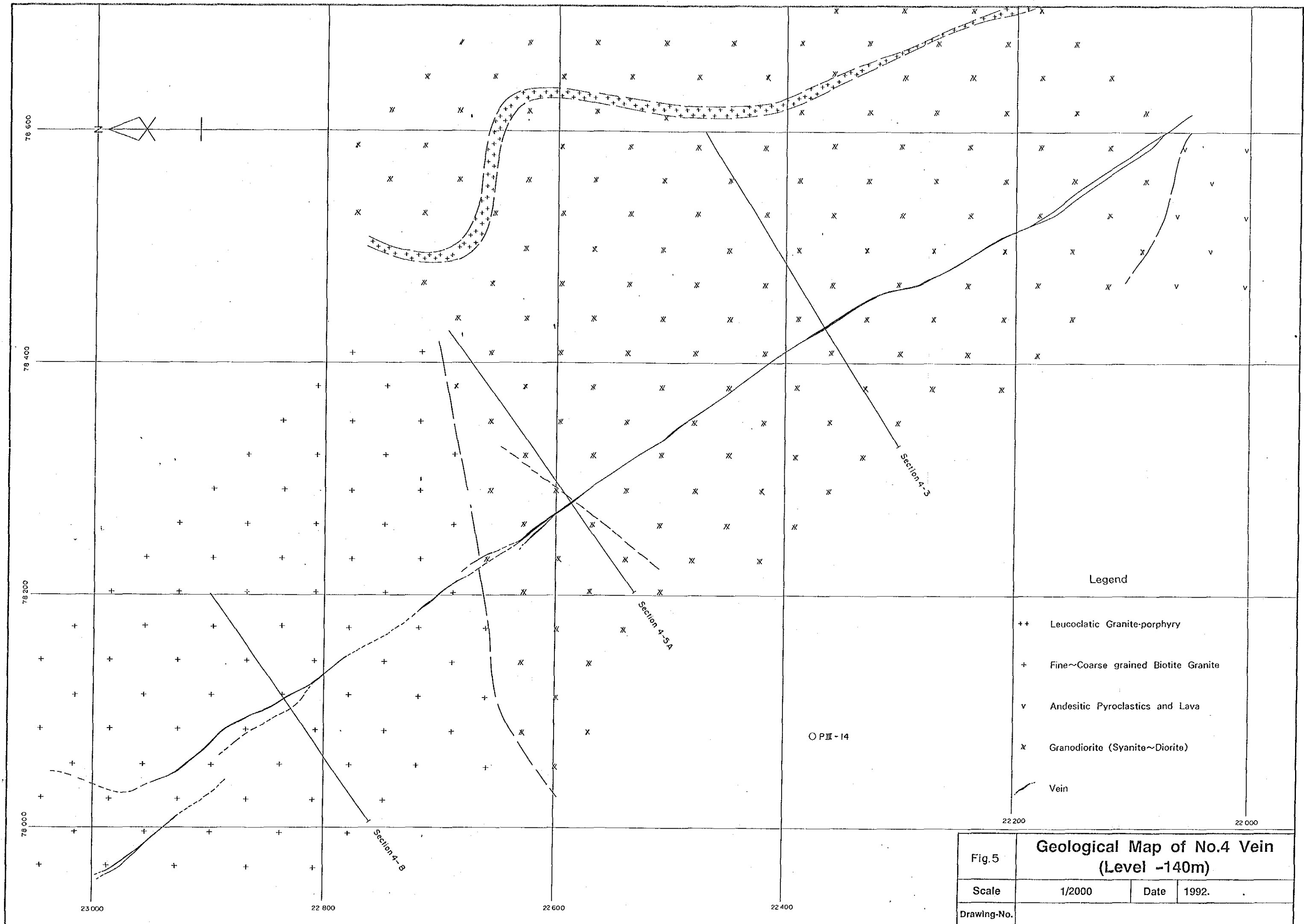


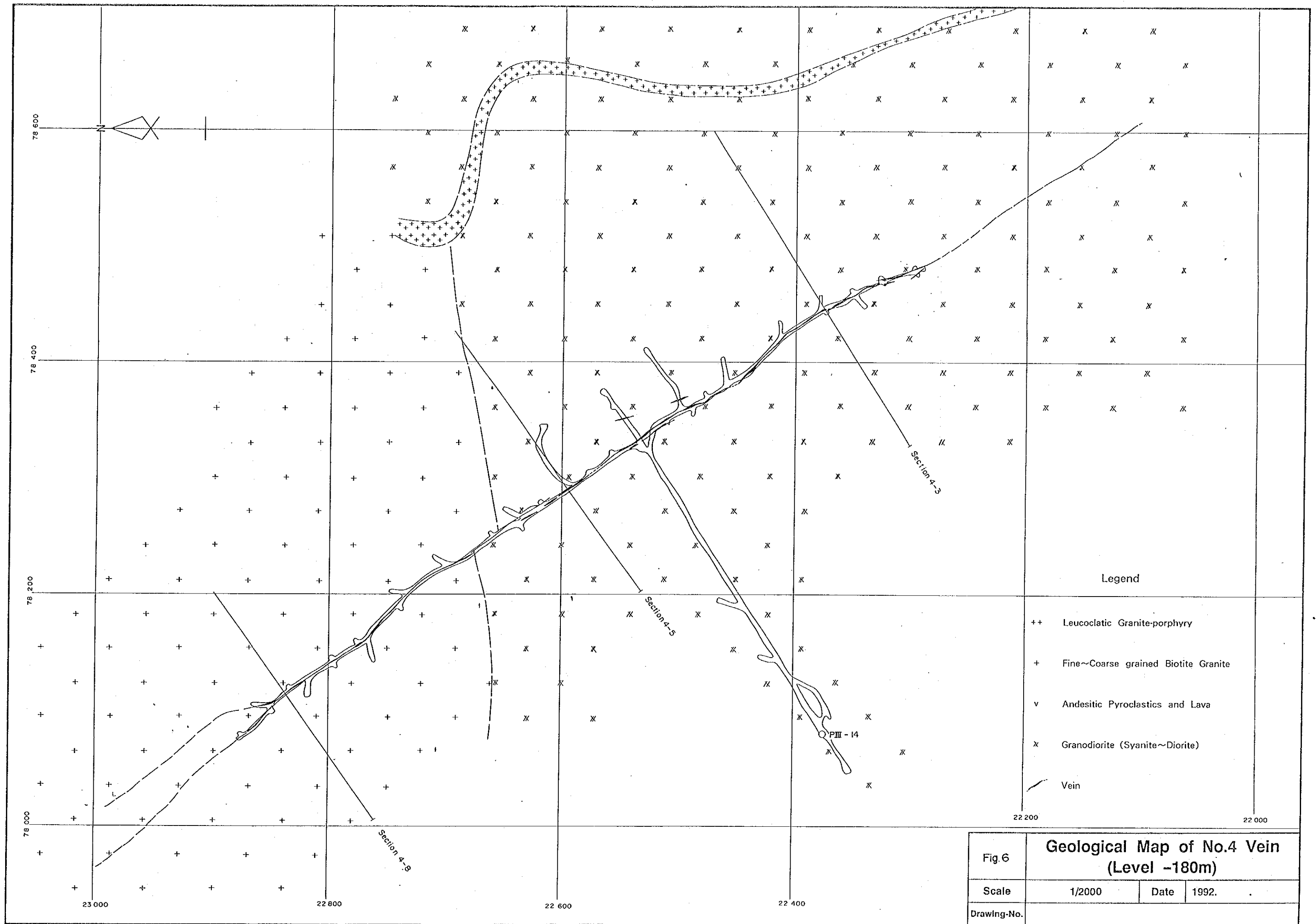
Fig. 4	Geological Map of No.4 Vein (Level -100m)		
Scale	1/2000	Date	1992.
Drawing-No.			



Legend

- ++ Leucoclastic Granite-porphry
- + Fine~Coarse grained Biotite Granite
- v Andesitic Pyroclastics and Lava
- x Granodiorite (Syanite~Diorite)
- Vein

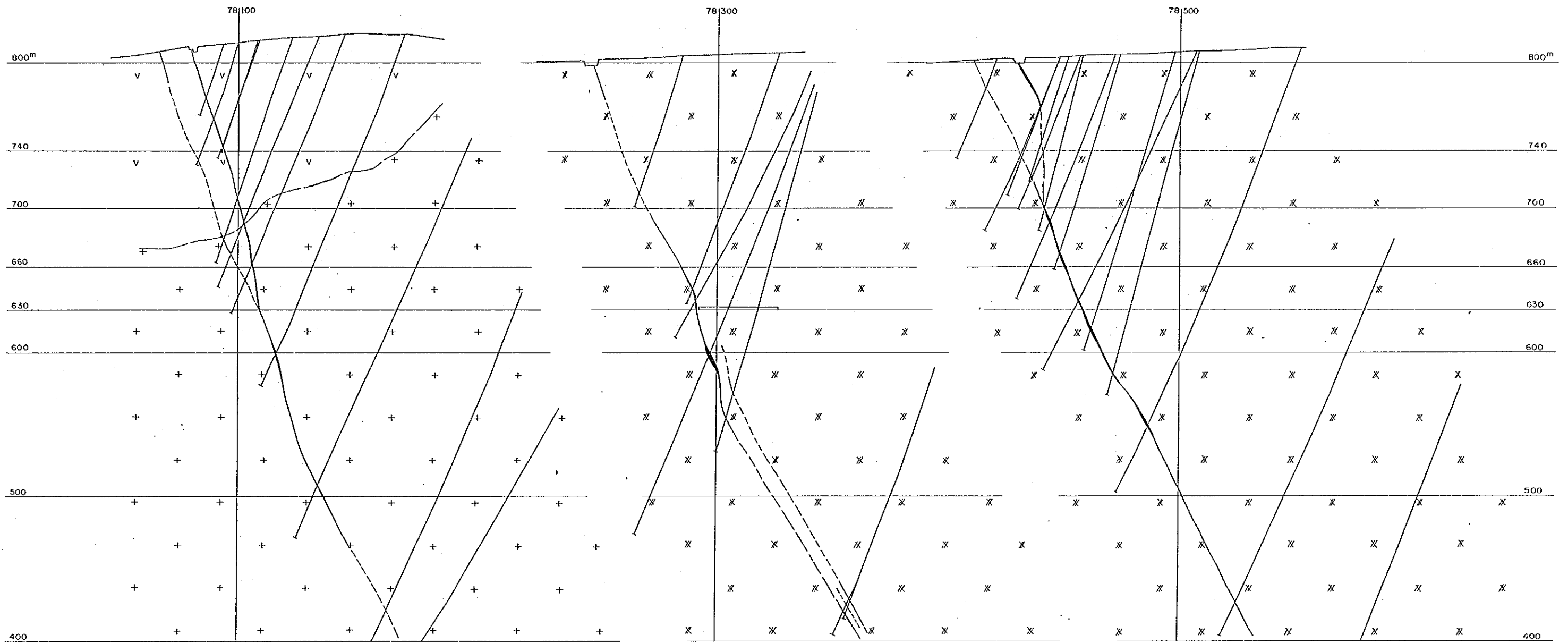
Fig.5		Geological Map of No.4 Vein (Level -140m)	
Scale	1/2000	Date	1992.
Drawing-No.			



Section 4-8

Section 4-5A

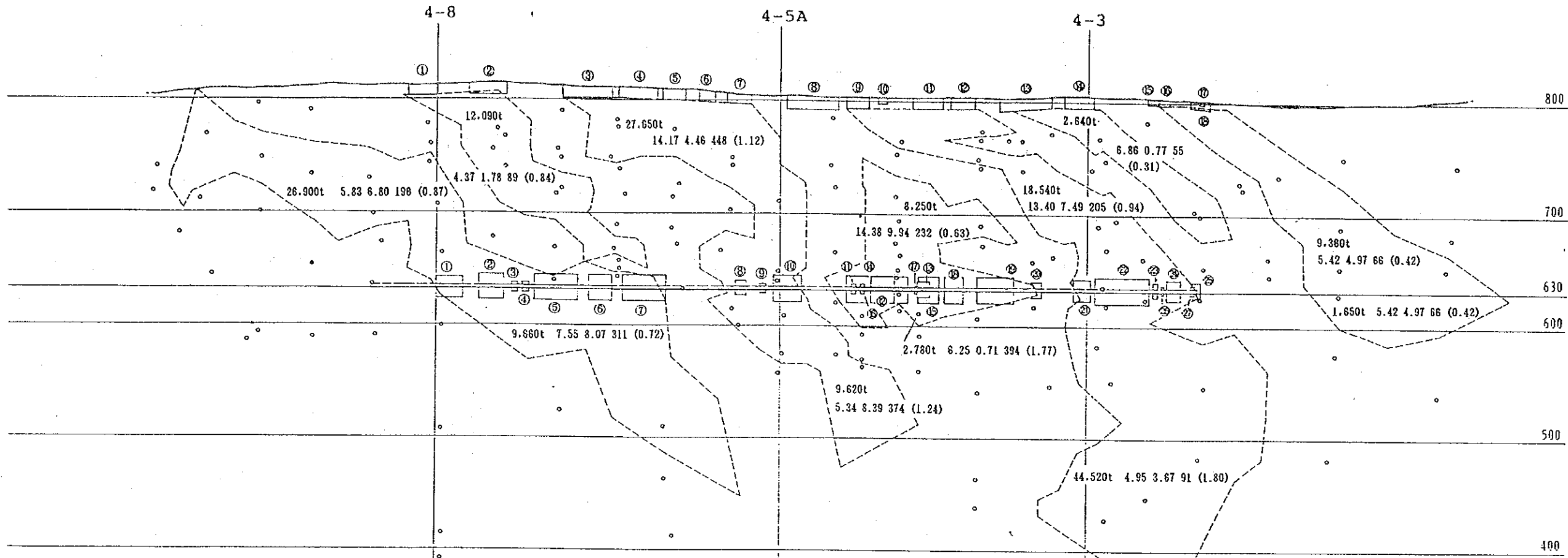
Section 4-3



Legend

- + Fine~Coarse grained Biotite Granite
- v Andesitic Pyroclastics and Lava
- x Granodiorite (Syanite~Diorite)
- Vein

Fig. 7	Geological Section of No.4 Vein		
Scale	1/2000	Date	1992.
Drawing-No.			



Surface

-180m Level

①	420	12.13	1.14	147	(0.57)
②	1,710	19.07	3.77	325	(1.63)
③	1,890	11.06	1.61	182	(1.13)
④	1,270	17.30	1.01	222	(1.06)
⑤	1,250	8.69	1.27	110	(1.67)
⑥	780	16.54	0.36	167	(1.31)
⑦	660	12.25	0.31	149	(0.74)
⑧	1,030	11.13	0.11	165	(0.77)
⑨	690	9.50	0.19	115	(0.92)
⑩	150	12.63	0.35	374	(1.03)
⑪	740	8.68	0.12	117	(0.83)
⑫	320	10.77	0.10	252	(0.54)
⑬	820	14.18	0.19	144	(0.61)
⑭	360	15.24	0.18	362	(0.48)
⑮	50	6.08	0.14	148	(0.35)
⑯	120	10.87	0.12	318	(0.85)
⑰	10	5.11	0.09	197	(0.53)
⑱	100	7.68	0.11	140	(0.30)

①	380	5.93	6.95	126	(0.54)
②	1,870	11.49	4.26	365	(1.56)
③	60	7.42	4.64	118	(0.87)
④	20	9.99	9.93	109	(0.38)
⑤	3,140	6.64	7.42	141	(1.31)
⑥	820	6.35	6.07	195	(0.69)
⑦	1,750	6.36	3.46	352	(0.73)
⑧	140	2.32	5.19	74	(0.48)
⑨	70	2.09	3.38	85	(1.00)
⑩	1,550	3.75	2.67	271	(0.74)
⑪	40	4.37	5.69	90	(0.55)
⑫	330	7.87	5.36	899	(0.28)
⑬	150	10.48	2.58	485	(0.53)
⑭	3,310	8.47	5.36	273	(0.79)
⑮	1,050	13.23	3.22	493	(0.70)
⑯	30	0.62	3.92	18	(0.45)
⑰	90	2.83	8.66	107	(0.40)
⑱	2,380	4.36	3.96	130	(1.99)
⑲	1,240	5.66	3.73	89	(0.69)
⑳	220	4.14	1.49	32	(0.75)
㉑	510	7.95	10.10	129	(0.77)
㉒	3,030	10.55	9.97	324	(0.92)
㉓	230	10.52	8.57	217	(0.77)
㉔	680	5.24	6.97	77	(0.99)
㉕	510	2.66	2.25	92	(1.70)
㉖	30	3.11	0.94	35	(0.50)
㉗	40	15.05	3.09	213	(0.63)

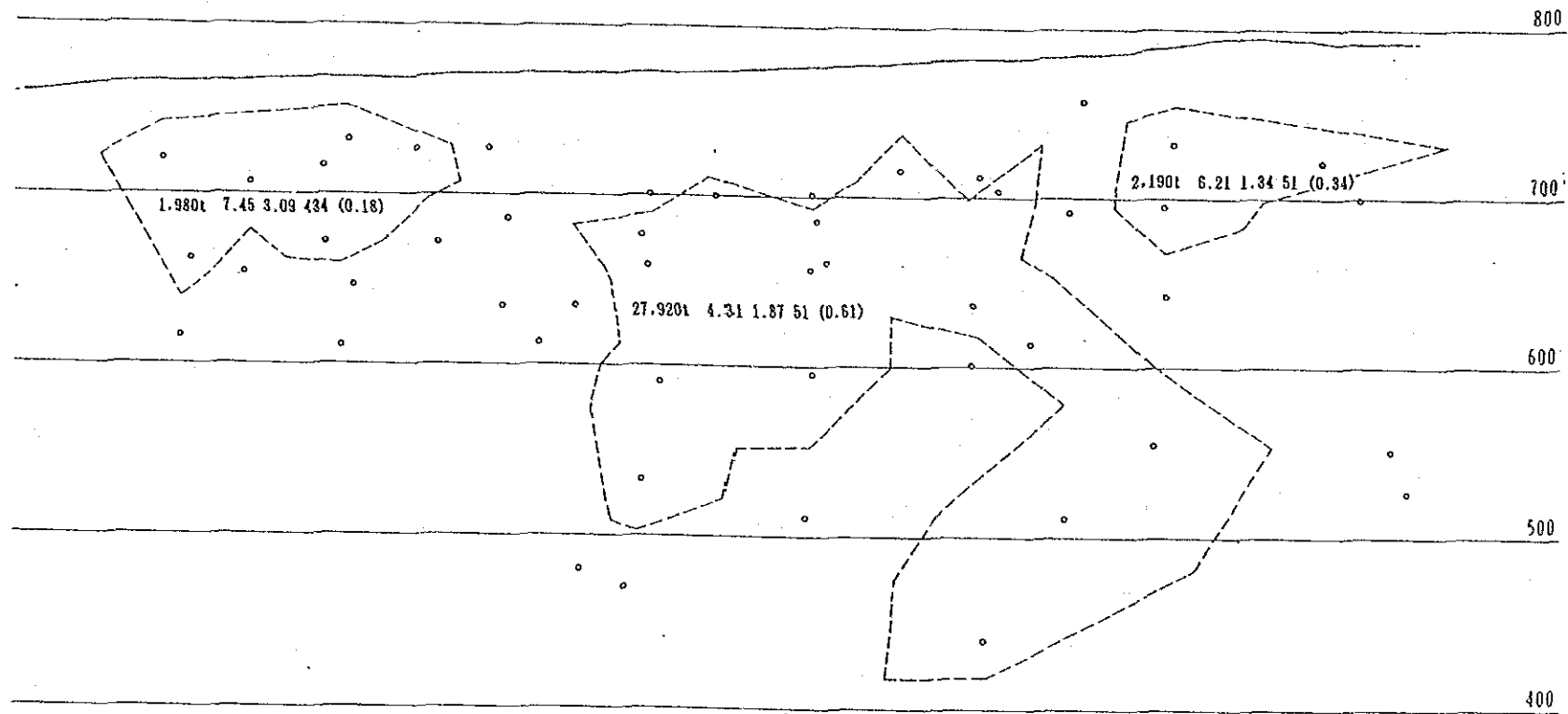
LEGEND

Probable Reserve

Possible Reserve

Quantity Pb % Zn % Ag g/t (width, m)
1,650t 5.42 4.97 66 (0.42)

Profile of the Ore Reserve Estimation No.4 Vein (Main Area)	
Scale 1/4,000	Date 1992
Fig.8	

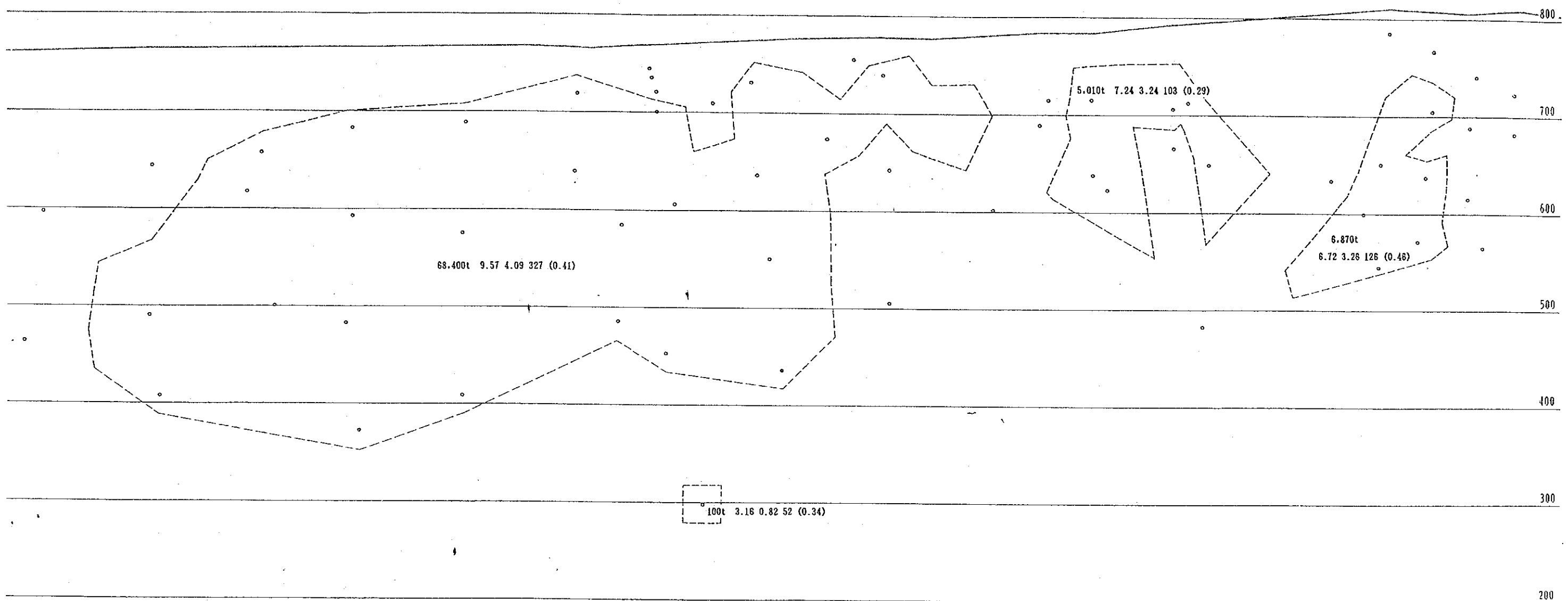


LEGEND

		Probable Reserve
		Possible Reserve

Quantity	Pb %	Zn %	Ag g/t	(width, m)
1,650t	5.42	4.97	66	(0.42)

Profile of the Ore Reserve Estimation No.4 Vein (Northern Area)	
Scale 1/4,000	Date 1992
Fig.9	



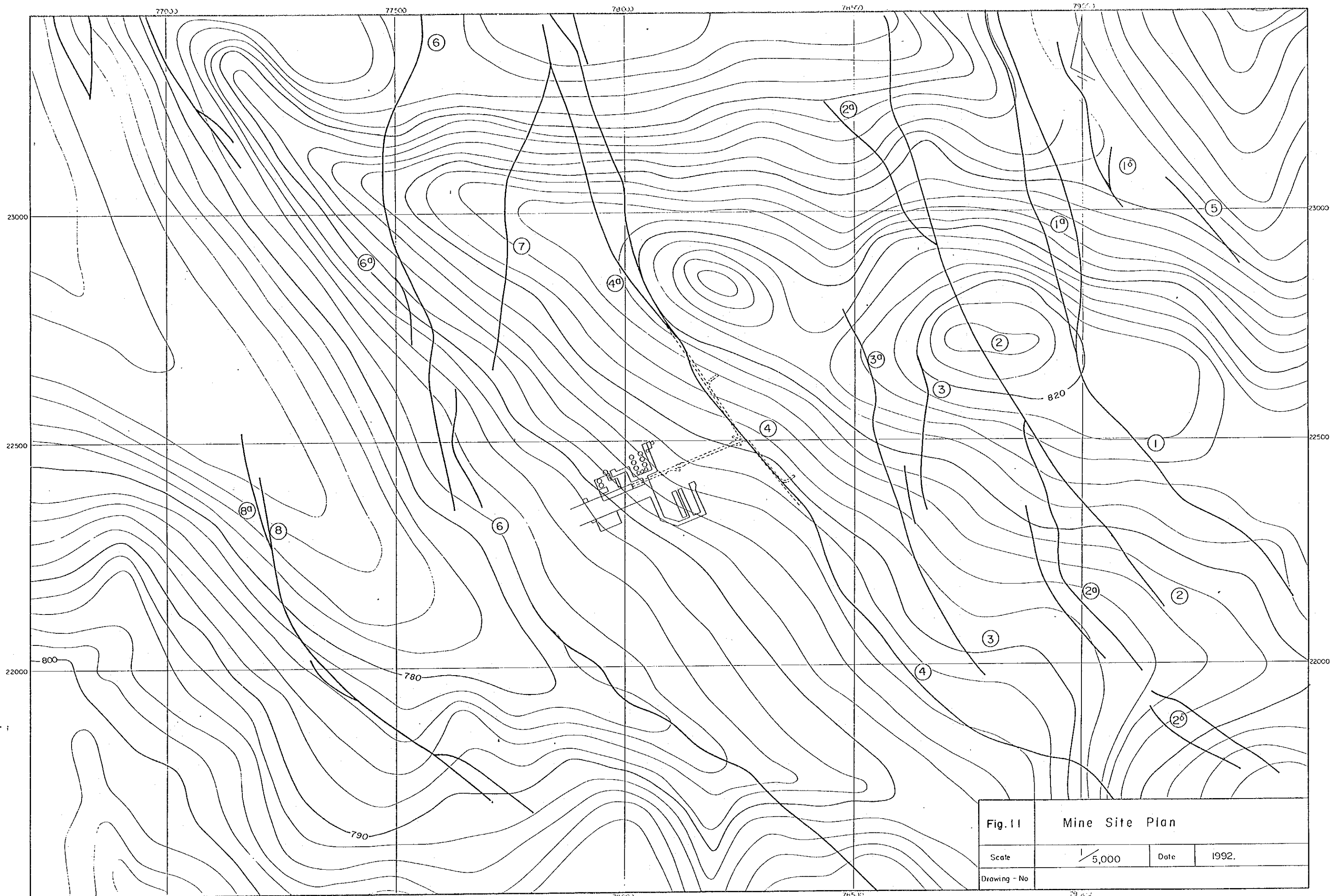


Fig. 11	Mine Site Plan		
Scale	1/5,000	Date	1992.
Drawing - No			

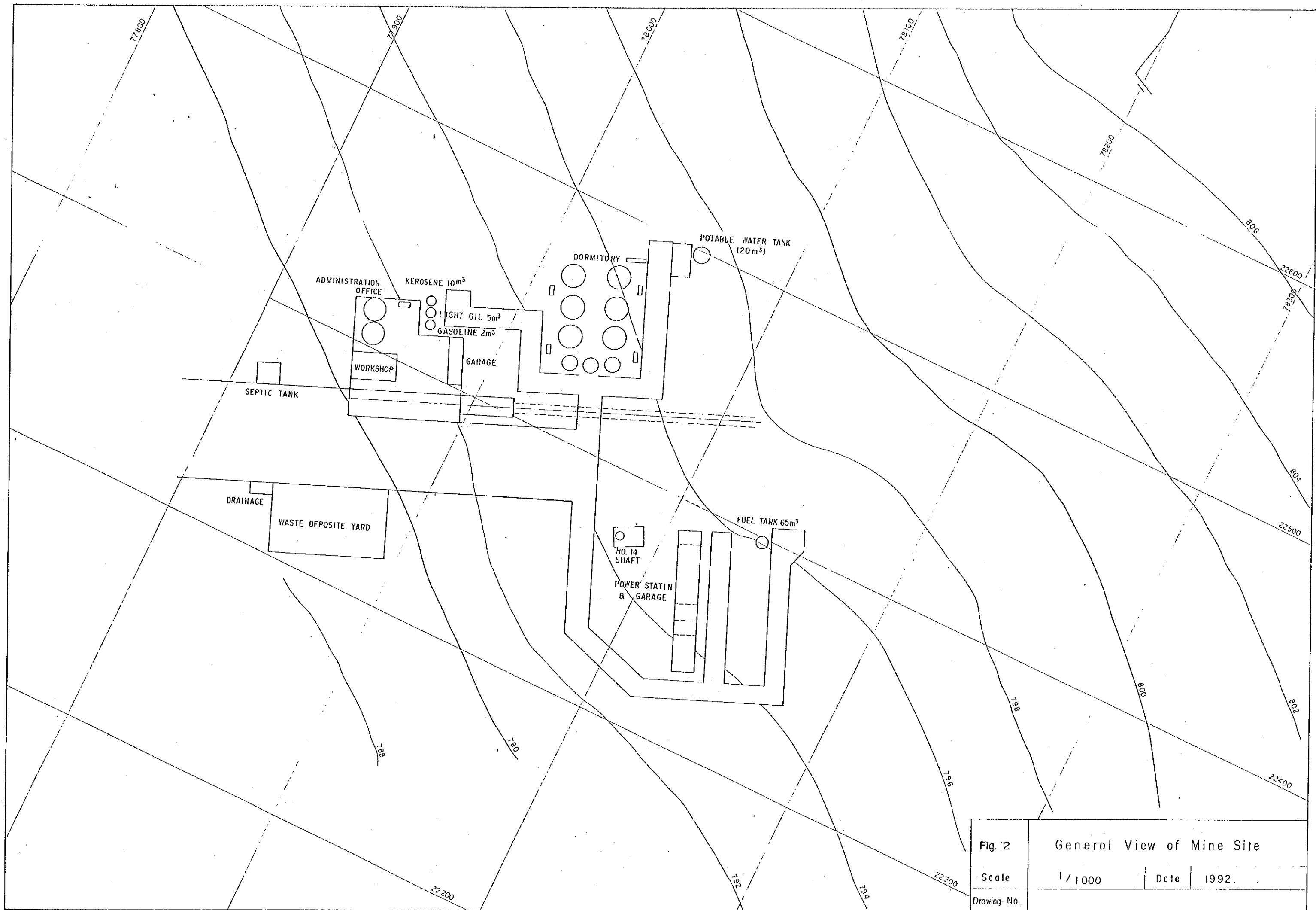


Fig.12	General View of Mine Site		
Scale	1/1000	Date	1992.
Drawing- No.			

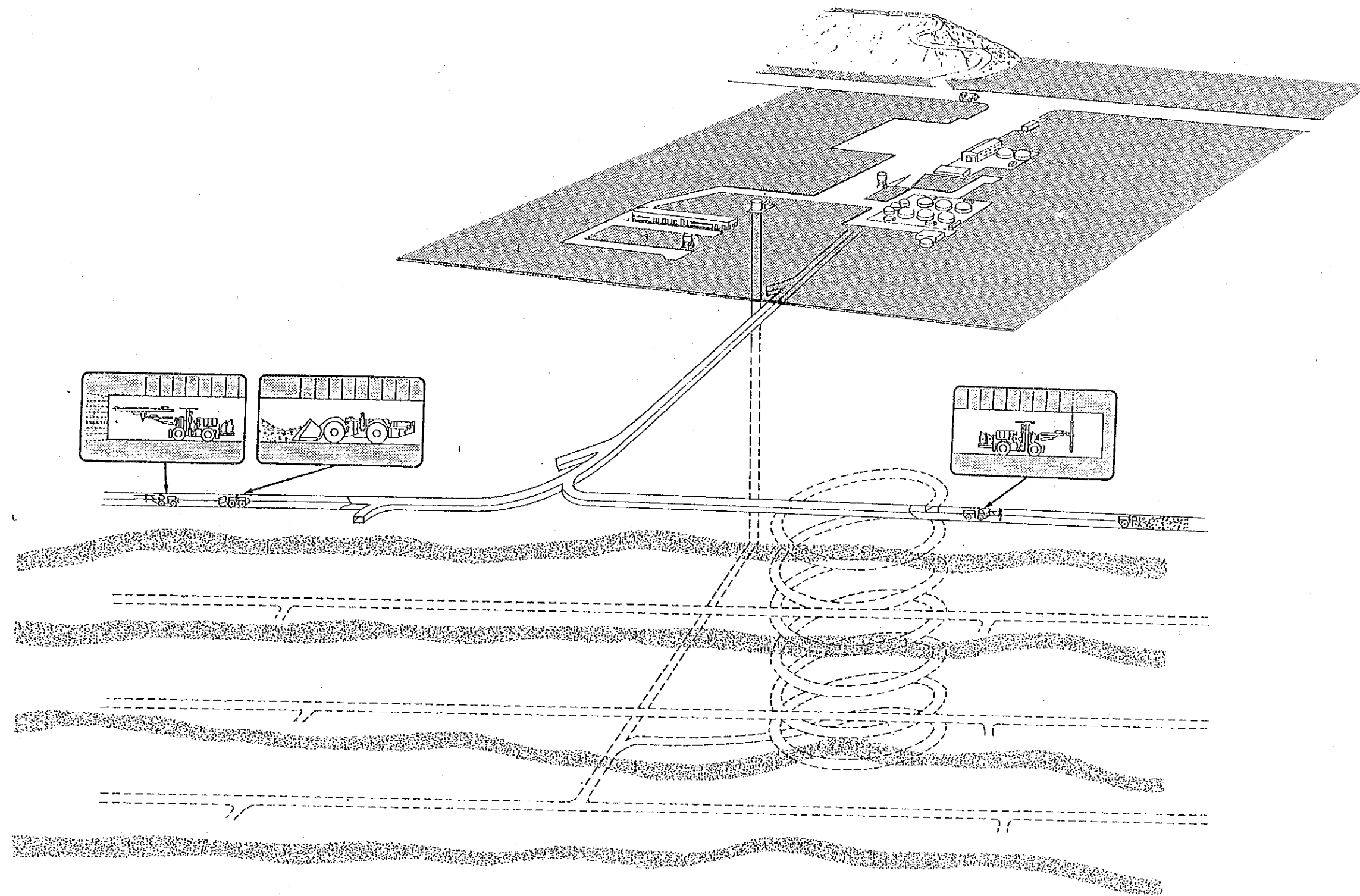
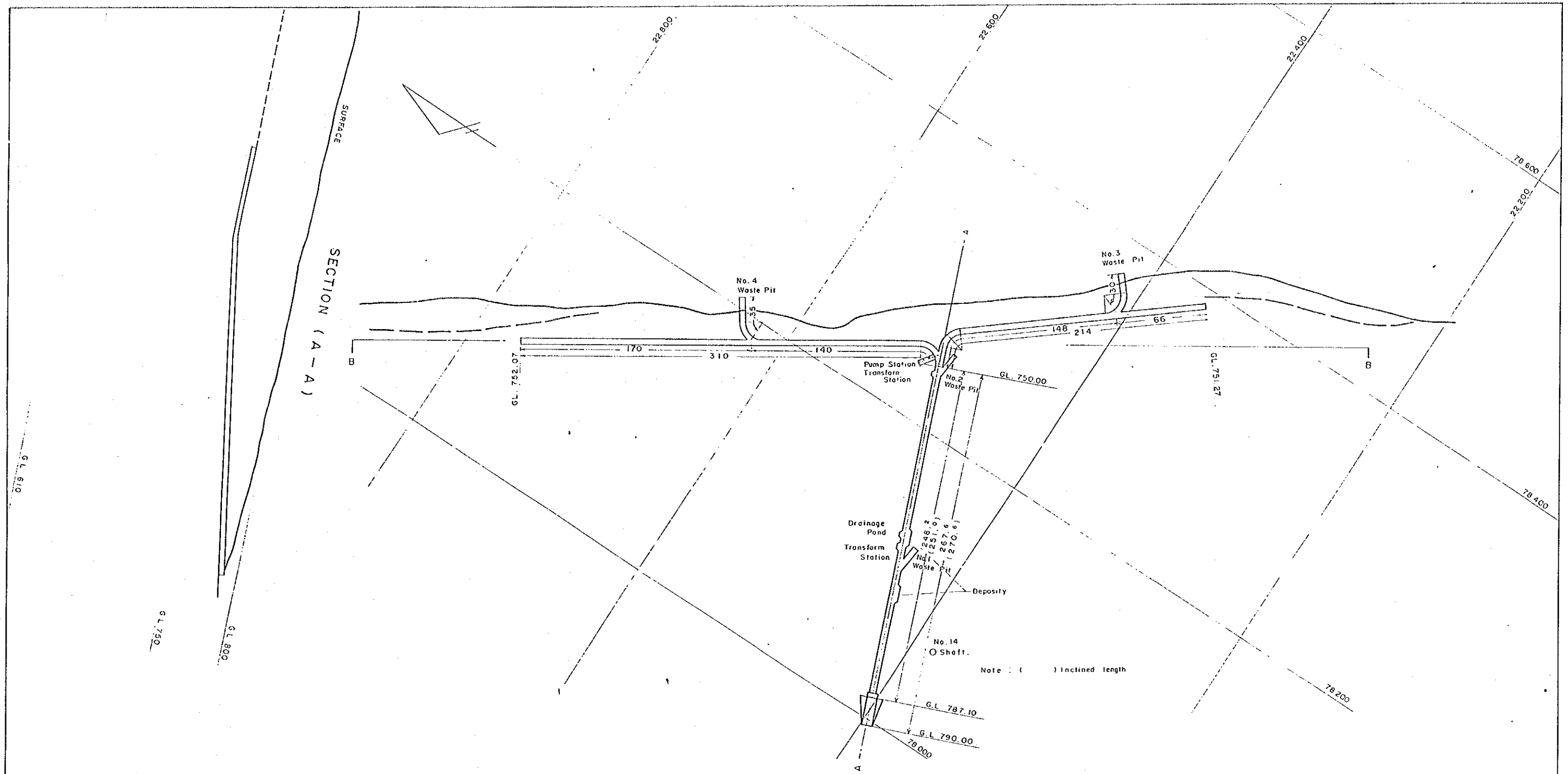


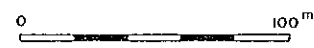
Fig. 13	Mine Site Facilities		
Scale		Date	1992.
Drawing-No			



SECTION (A-A)

SECTION (B-B)

Note: () inclined length



Place	Quantity	Note
Inclined Shaft	251 ^m	8° 30' (degree) (Mine Mouth 3.6 ^m)
Waste pit	30	15 ^m x 2
Pump Station	15	15° (degree)
Transform Station	(30) ^m	15 ^m x 2
Drainage Pond	(15)	15 x 1
Depository	(130)	65 x 2 (for Jumbo & LHD)
Drift	524 ^m	
Waste pit	65	

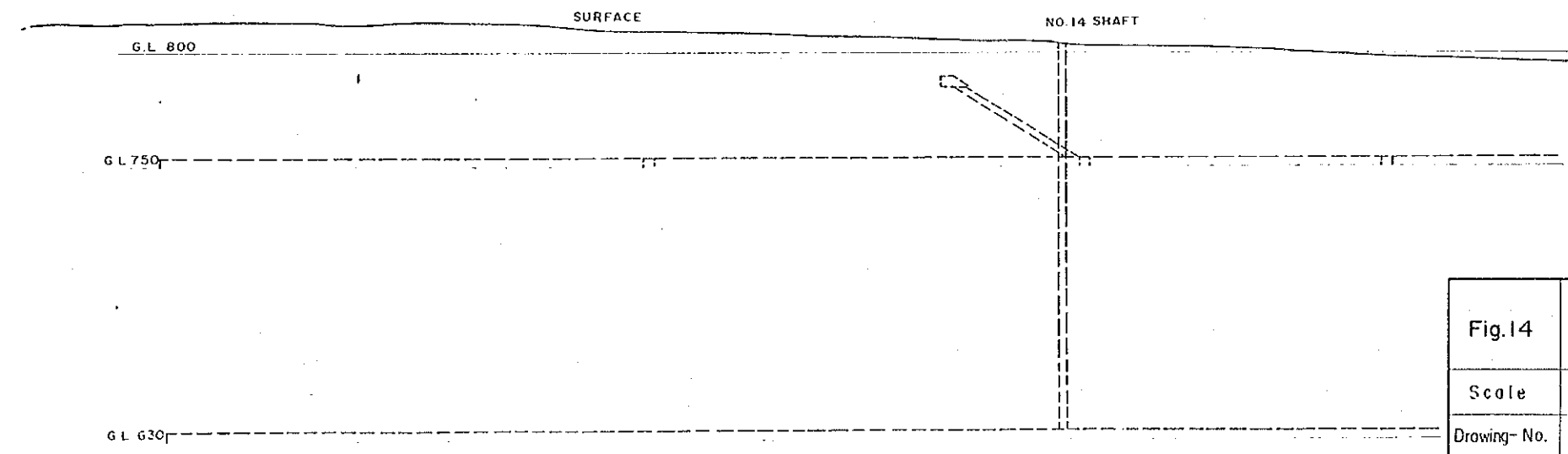
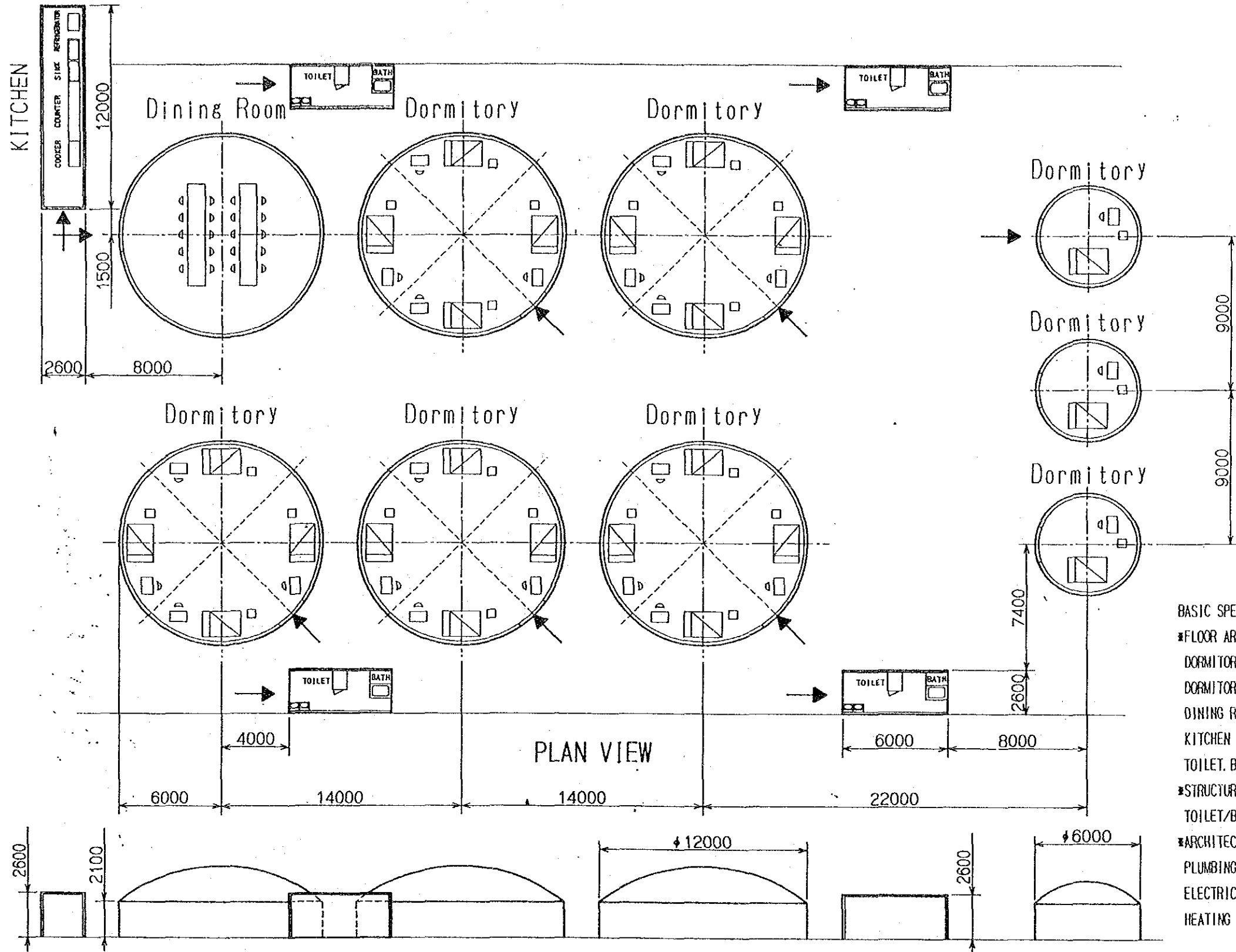
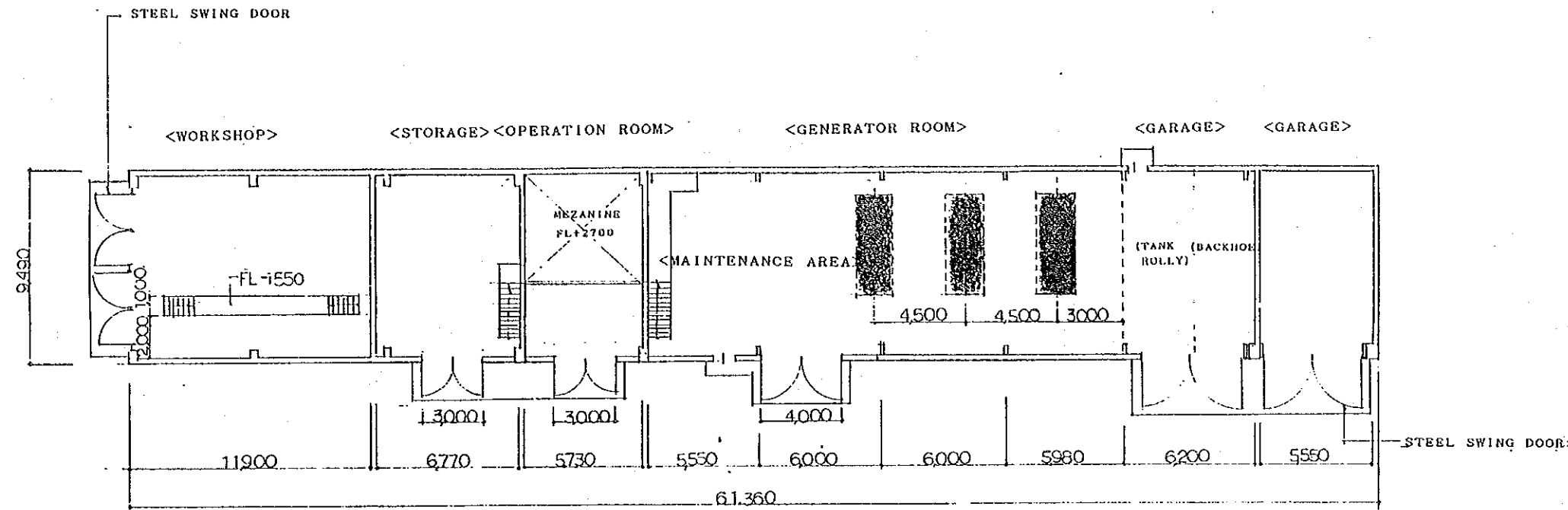


Fig.14	Underground Development Plan		
Scale	1/2000	Date	1992.
Drawing- No.			

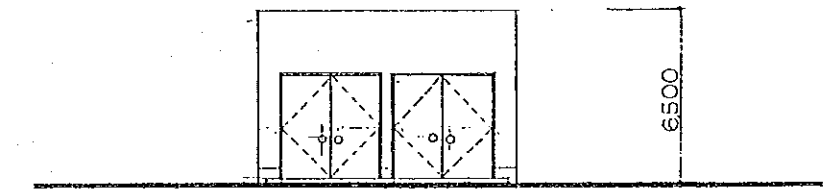


- BASIC SPECIFICATIONS**
- *FLOOR AREA
 - DORMITORY FOR STAFF : 565.2 m²
 - DORMITORY FOR STAFF : 84.8 m²
 - DINING ROOM : 113.0 m²
 - KITCHEN : 31.2 m²
 - TOILET, BATH : 62.4 m²
 - *STRUCTURE : 'PAO'
 - TOILET/BATH/KITCHEN : PREFABRICATED UNIT INSTALLED IN CONTAINER
 - *ARCHITECTURAL EQUIPMENT
 - PLUMBING/SANITARY WORKS : HOT-WATER, BATH, SEPTIC TANK
 - ELECTRICAL WORKS : LIGHTING, RECEPTACLE, COMMUNICATION EQUIPMENT
 - HEATING : KEROSENE HEATER, ELECTRIC HEATER

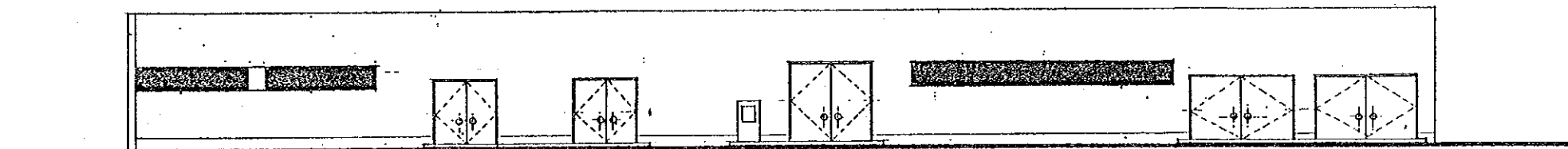
Fig.15	Dormitories		
SCALE	1:250	DATE	
DWG. No.			



FLOOR PLAN



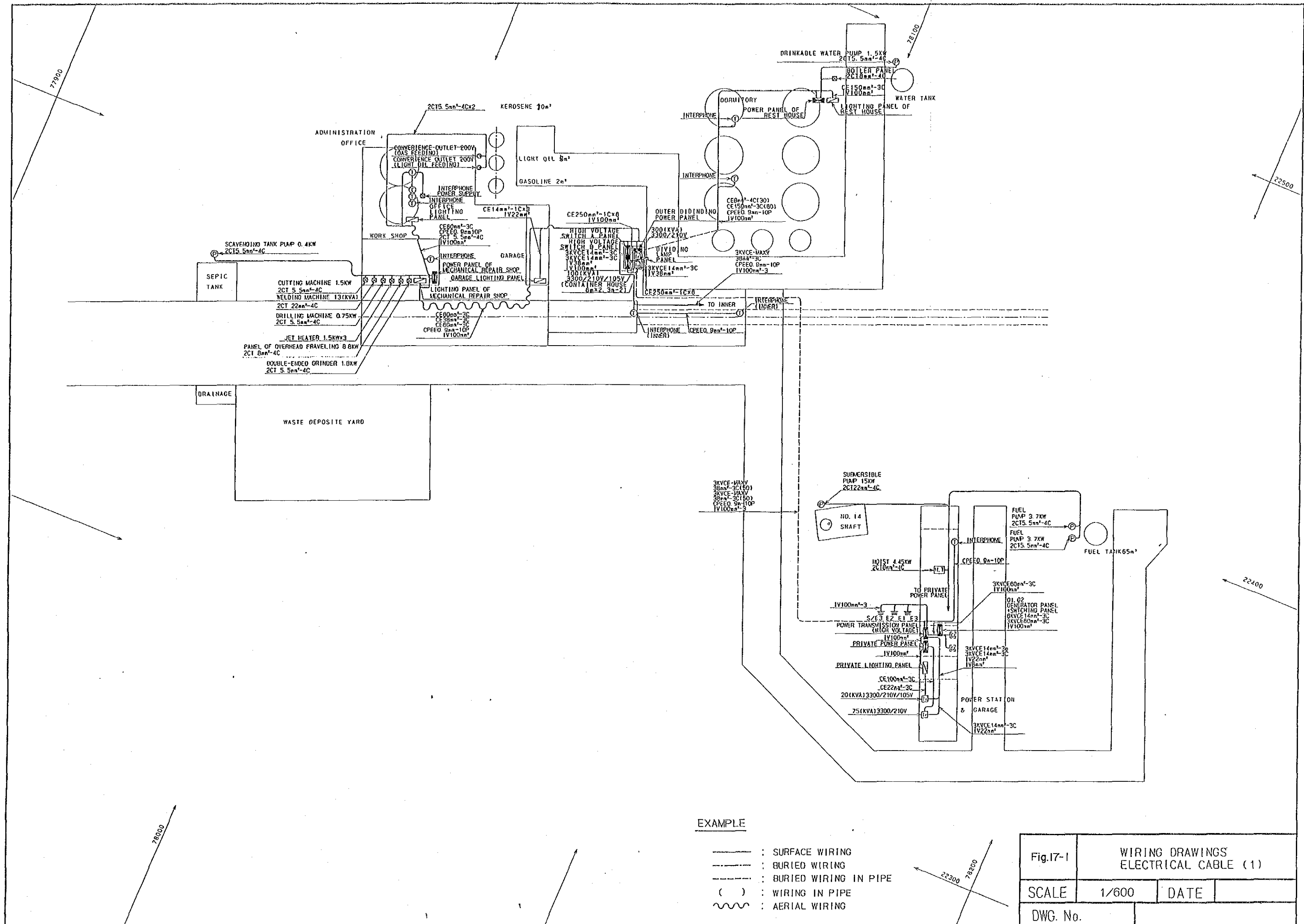
SOUTH ELEVATION



EAST ELEVATION

FUNDAMENTAL SPECIFICATIONS
 MODIFICATION AND REPAIR OF AN EXISTING
 REINFORCED CONCRETE BUILDING (582.3m²).
 INCLUDING FOLLOWING WORKS:
 * EXTERIOR WALL (BRICK WALLS, STEEL SWING DOORS)
 * FLOOR (BACK FILLING OF EXISTING PITS)
 * OTHER MISCELLANEOUS WORKS

Fig.16	Power Station Detailed Layout		
Scale	1/200	Date	1992
Drawing-NO.			



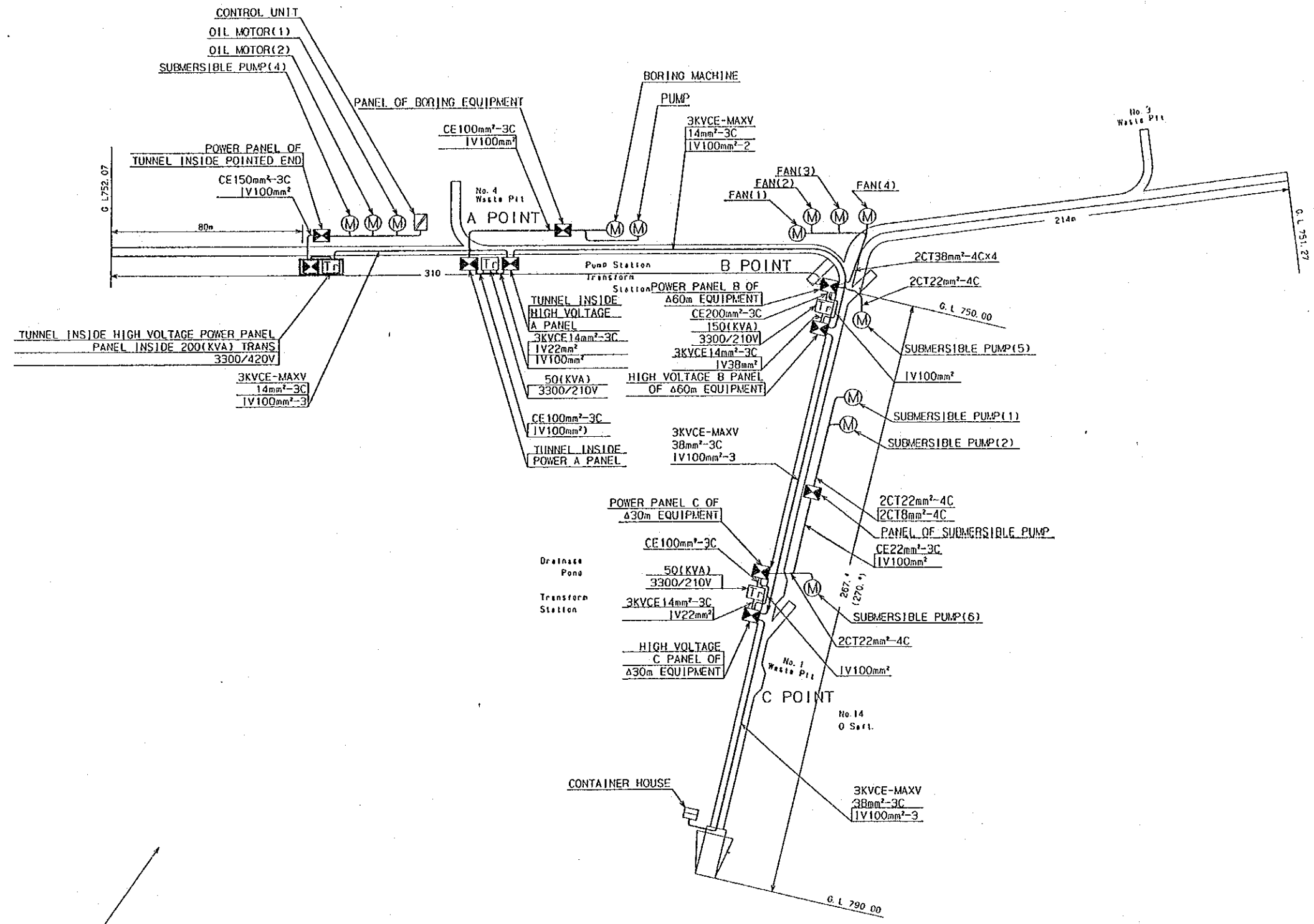
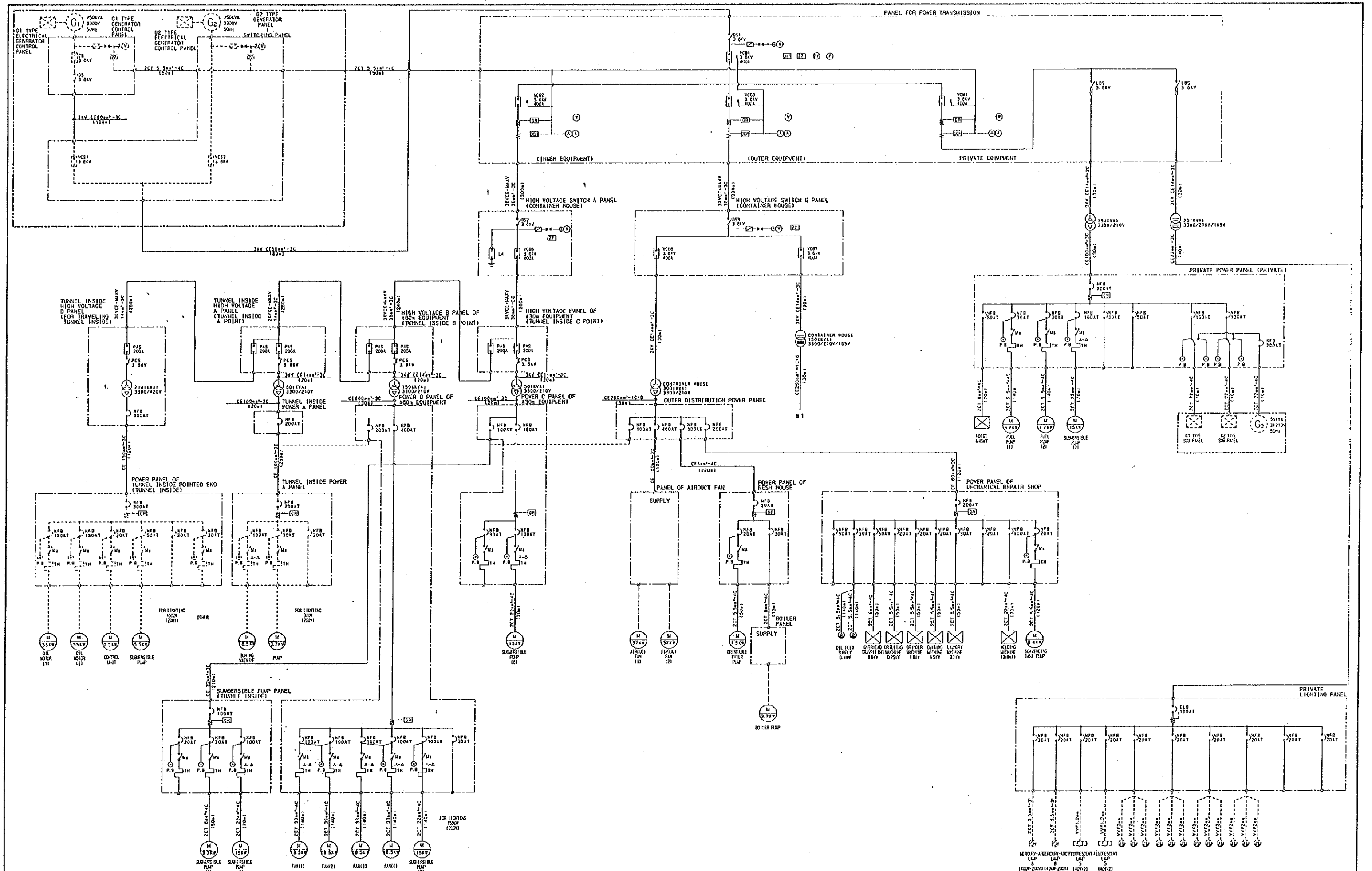


Fig.17-2	WIRING DRAWINGS ELECTRICAL CABLE (2)		
SCALE	1/1500	DATE	
DWG. No.			



IN ALL PANEL (V100mm² WIRE FOR EARTHING

Fig.18-1	SINGLE LINE DIAGRAM (1)	
SCALE		DATE
DWG. No.		

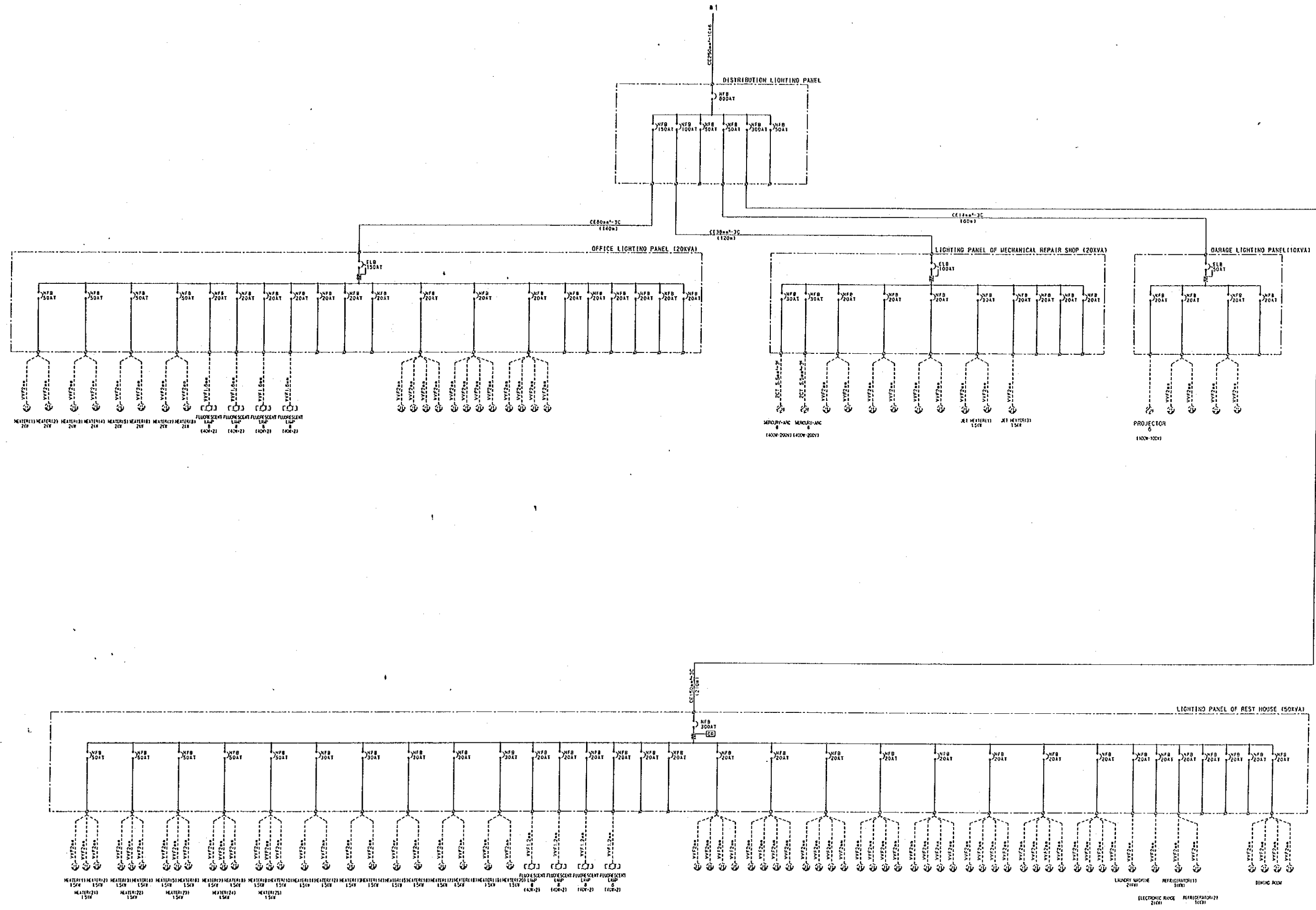
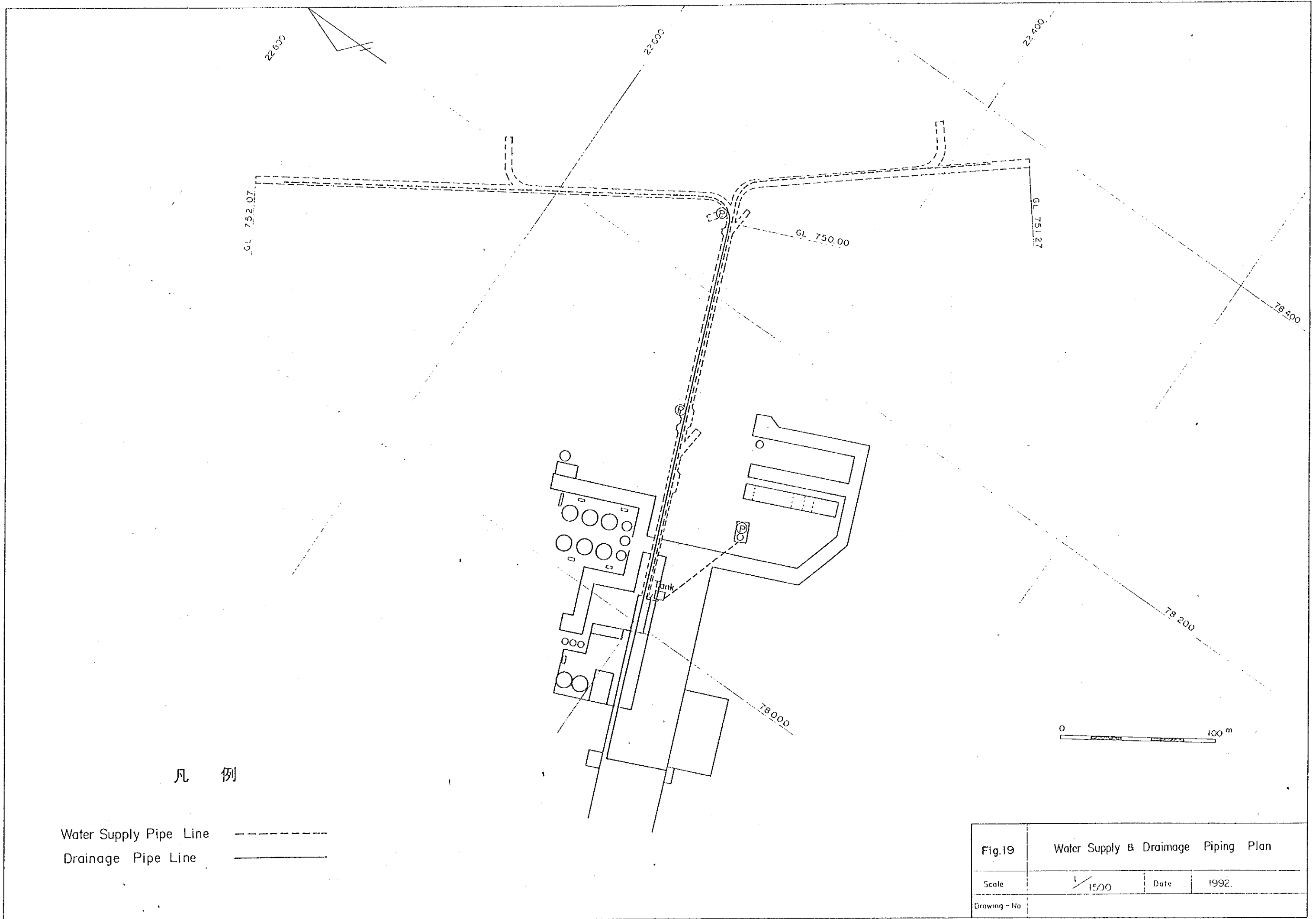


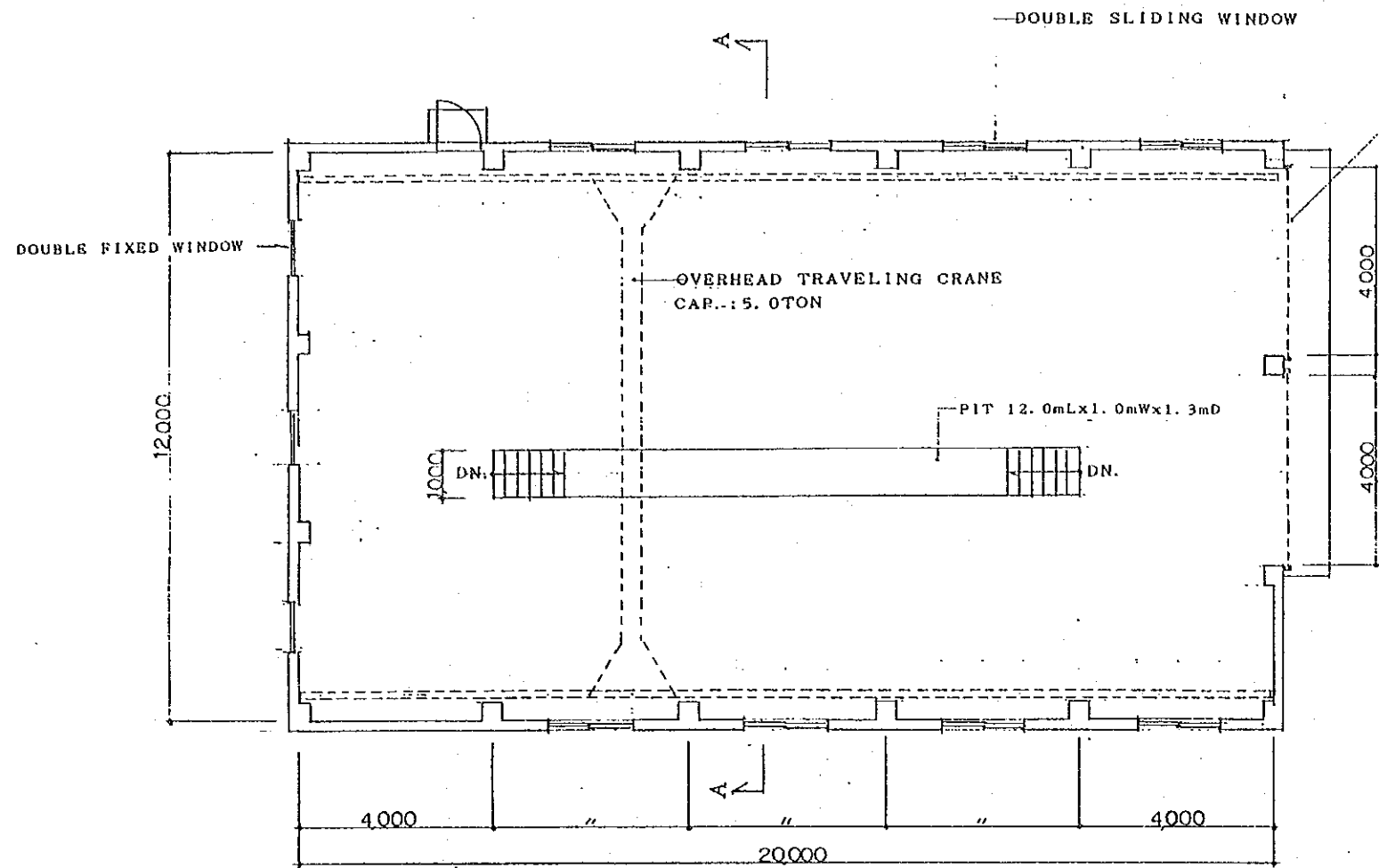
Fig.18-2	SINGLE LINE DIAGRAM (2)	
SCALE		DATE
DWG. No.		



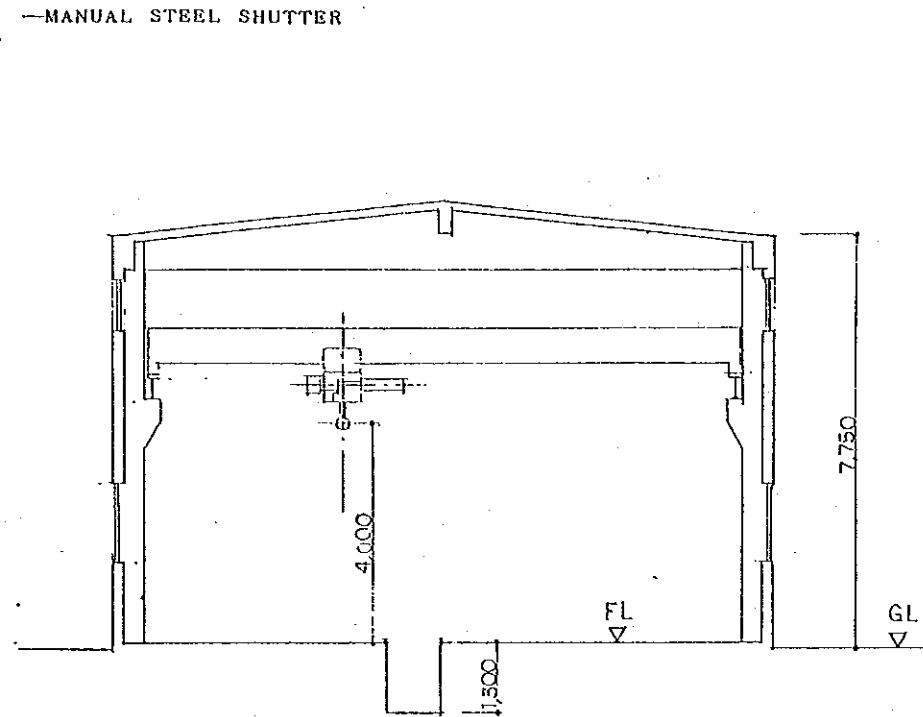
凡 例

Water Supply Pipe Line - - - - -
 Drainage Pipe Line —————

Fig.19	Water Supply & Drainage Piping Plan		
Scale	1/1500	Date	1992.
Drawing - No			



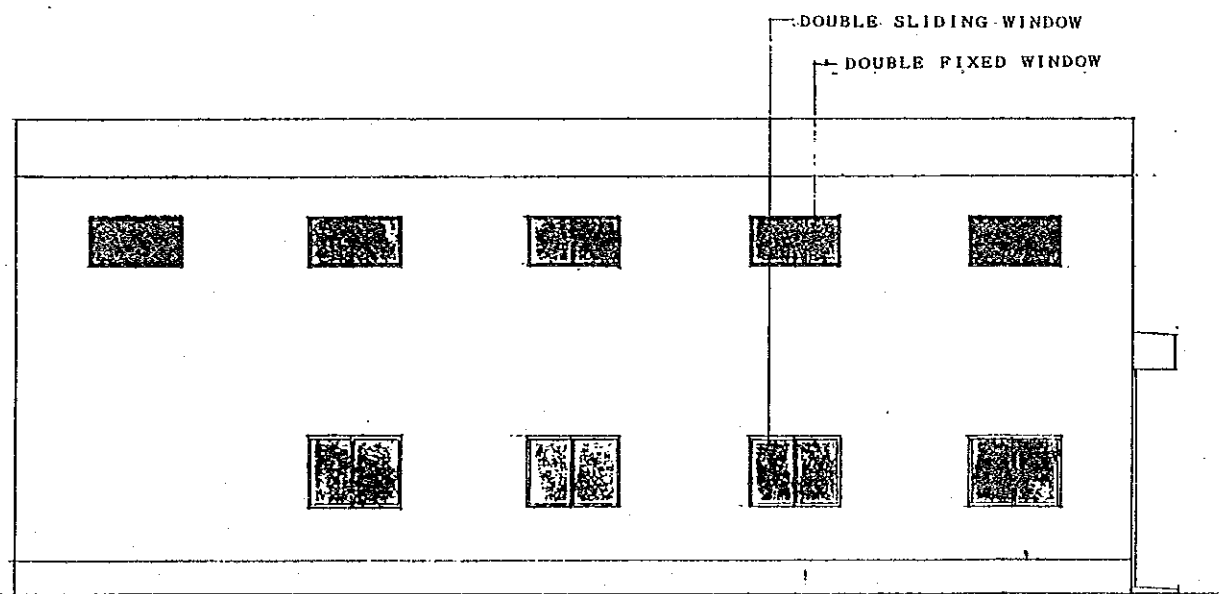
FLOOR PLAN



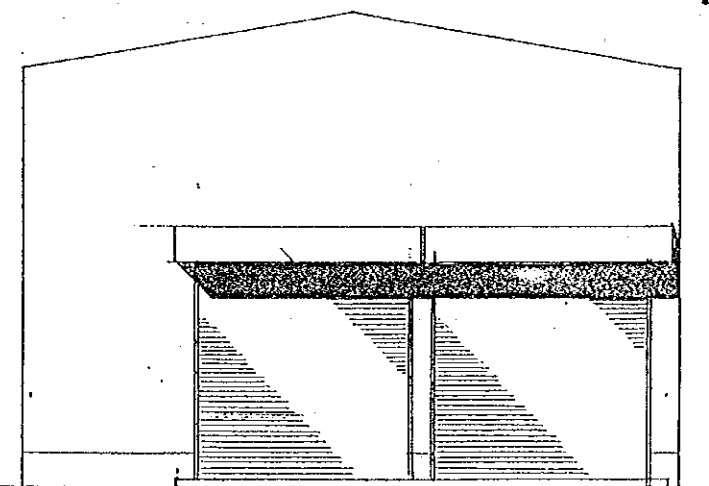
A~A SECTION

FUNDAMENTAL SPECIFICATIONS

- FLOOR AREA : 240.0m²
- STRUCTURE
 - FOUNDATION/FRAME : REINFORCED CONCRETE
 - FLOOR/ROOF SLAB : REINFORCED CONCRETE
 - WALL : MASONRY BRICK
- EXTERIOR FINISH
 - WALL : CEMENT MORTAR
 - ROOF : WATER PROOF MORTAR
 - WINDOW : DOUBLE ALUMINIUM SASH
 - DOOR : MANUAL STEEL SHUTTER, OIL PAINT
- INTERIOR FINISH
 - FLOOR : CEMENT MORTAR
 - WALL : CEMENT MORTAR
 - CEILING : ARCHITECTURAL CONCRETE
- ARCHITECTURAL EQUIPMENT
 - ELECTRICAL WORK : LIGHTING, RECEPTACLE

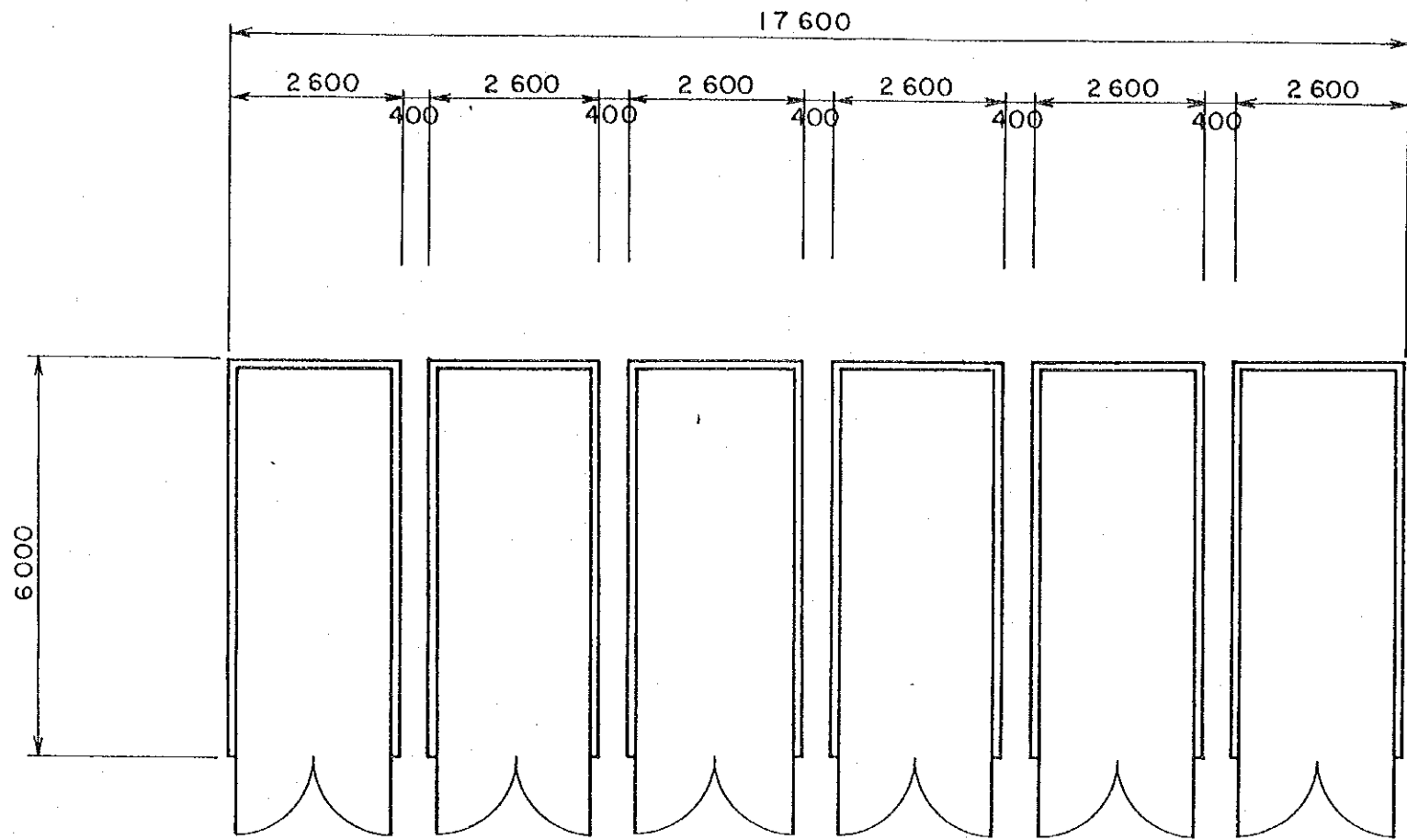


SOUTH ELEVATION

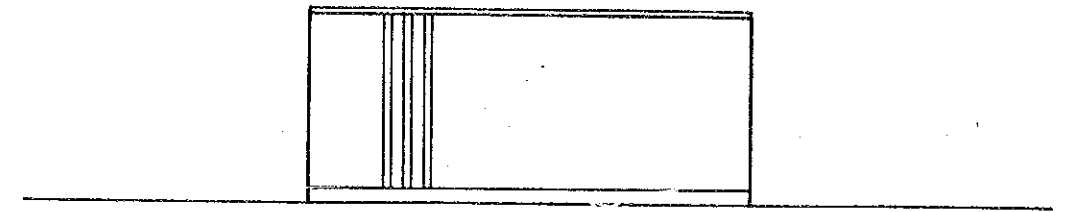


EAST ELEVATION

Fig.20	Workshop		
Scale	1/100	Date	1992.
Drawing-NO.			



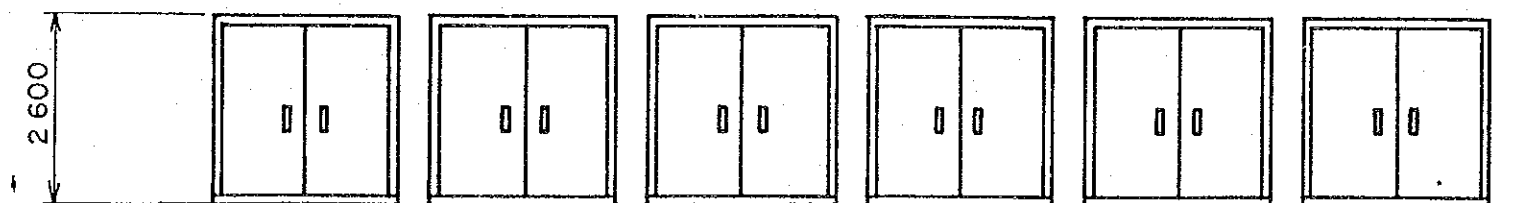
FLOOR PLAN



SOUTH ELEVATION

FUNDAMENTAL SPECIFICATIONS

- * FLOOR AREA : 106 m²
- * STRUCTURE : CONTAINER
- * ARCHITECTURAL EQUIPMENT : LIGHTING RECEPTACLE
- ELECTRICAL WORK : LIGHTING RECEPTACLE



WEST ELEVATION



Fig.21	Garage		
Scale	1/100	Date	1992.
Drawing - No			

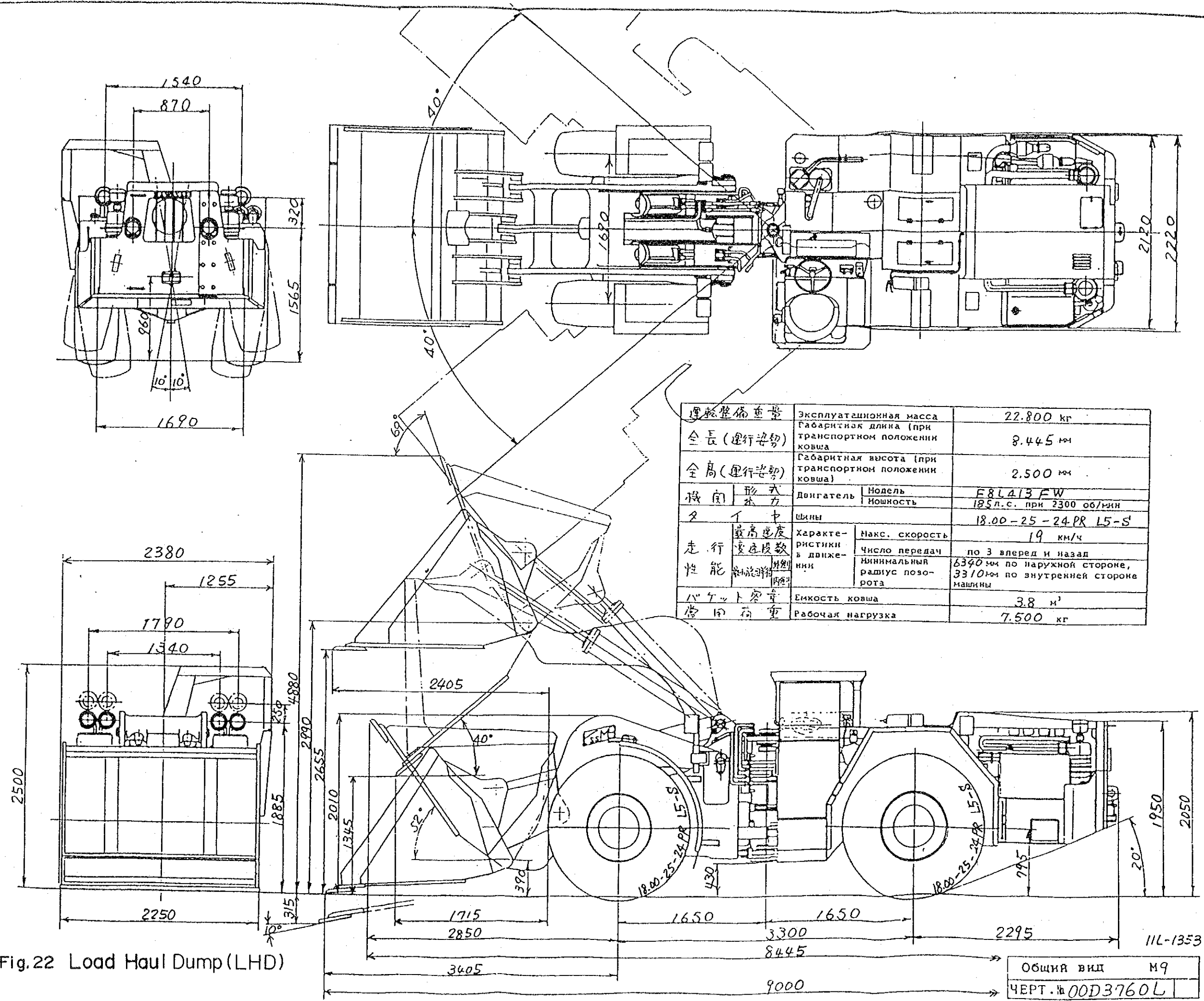


Fig.22 Load Haul Dump (LHD)

Общая вид М9
 ЧЕРТ. № 00D3760L

修正履歴 CHANGE		
記号	通番	日付
SYMBOL	NOISE NO.	DATE
△		
△		
△		
△		
△		

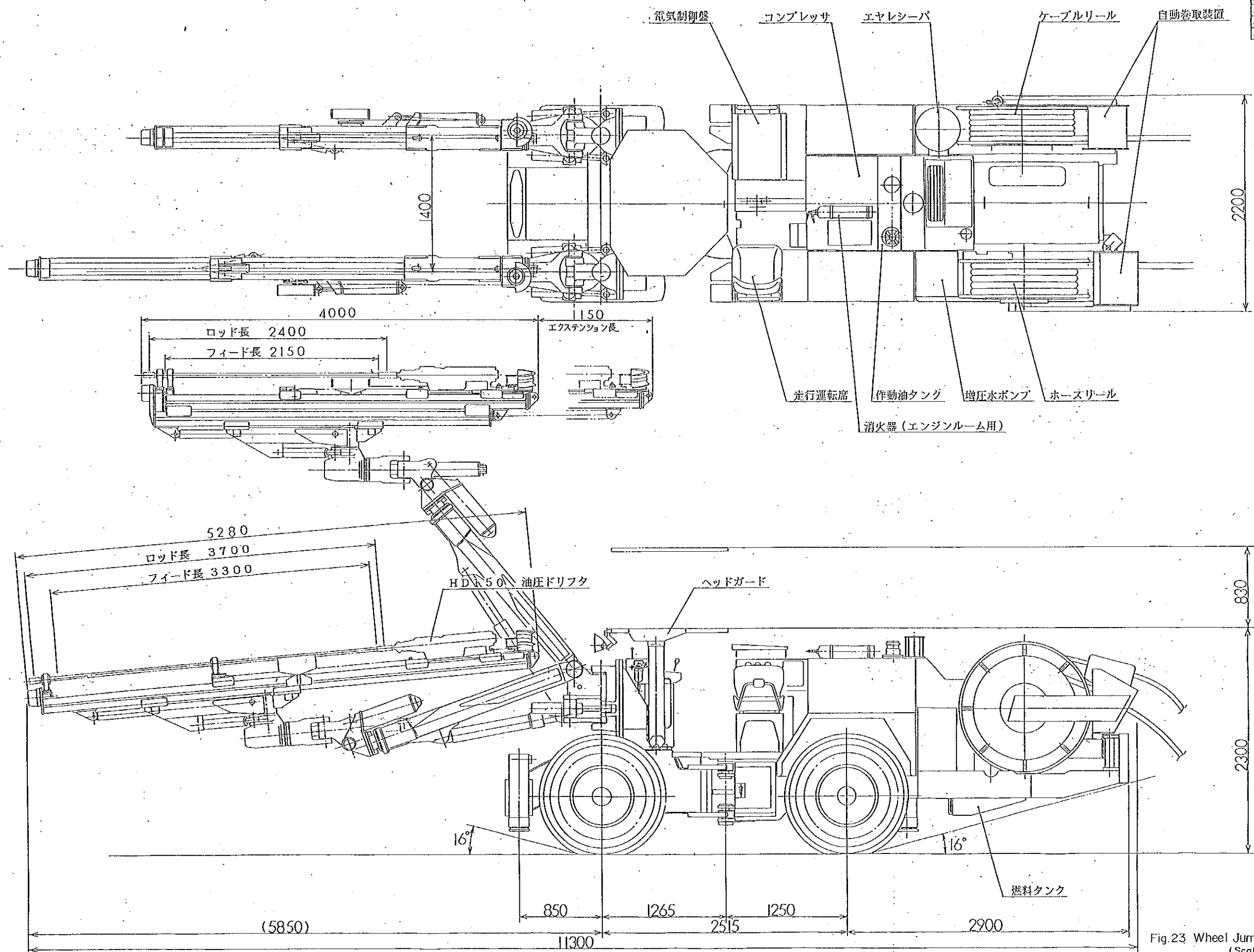
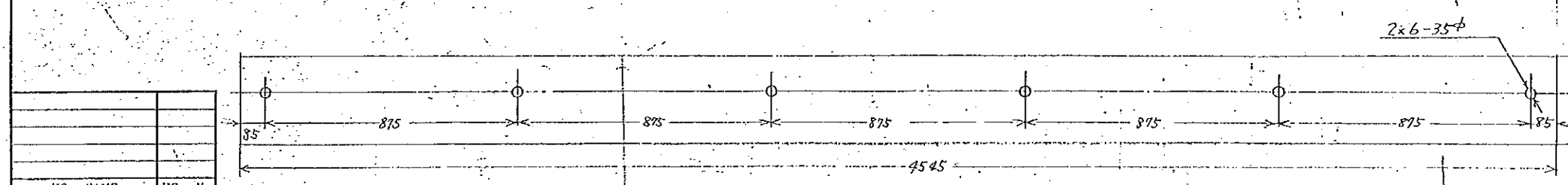
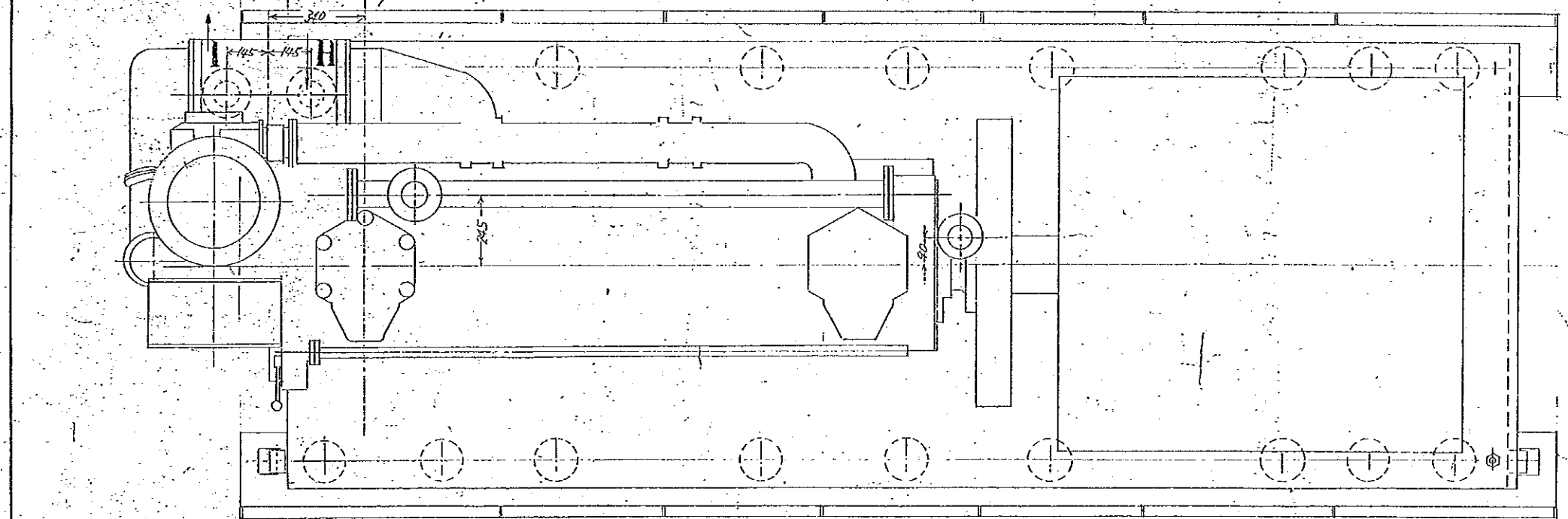
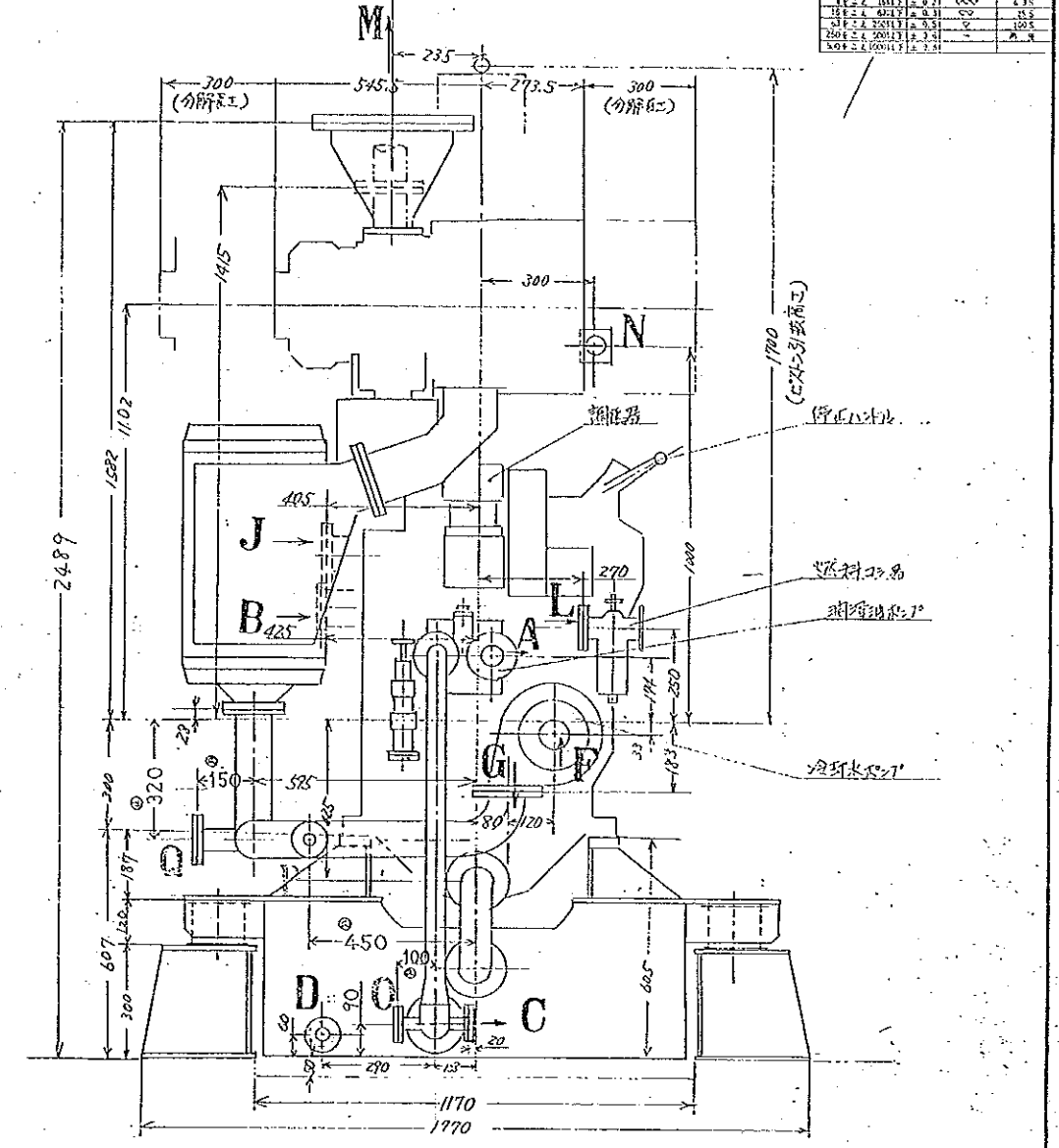
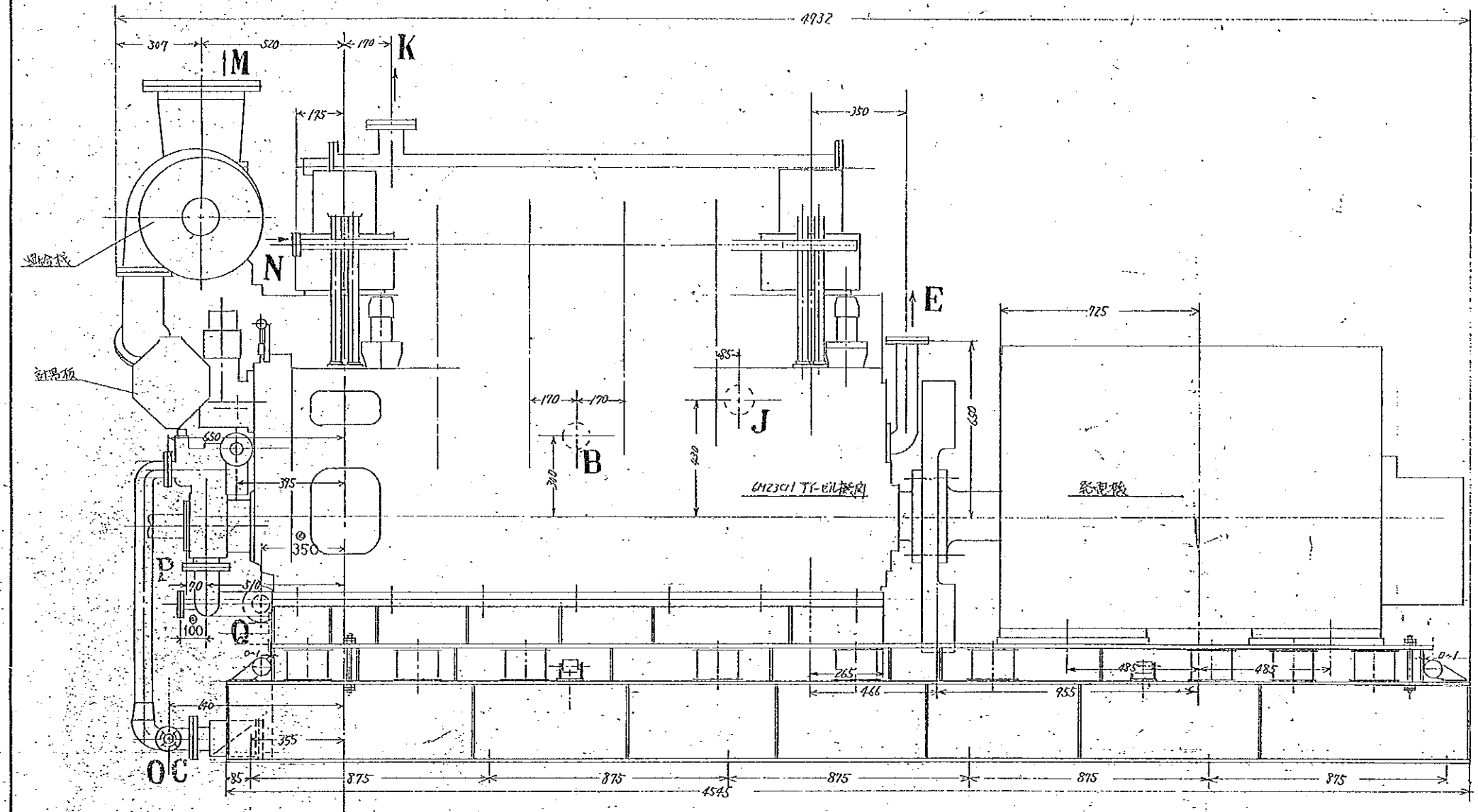


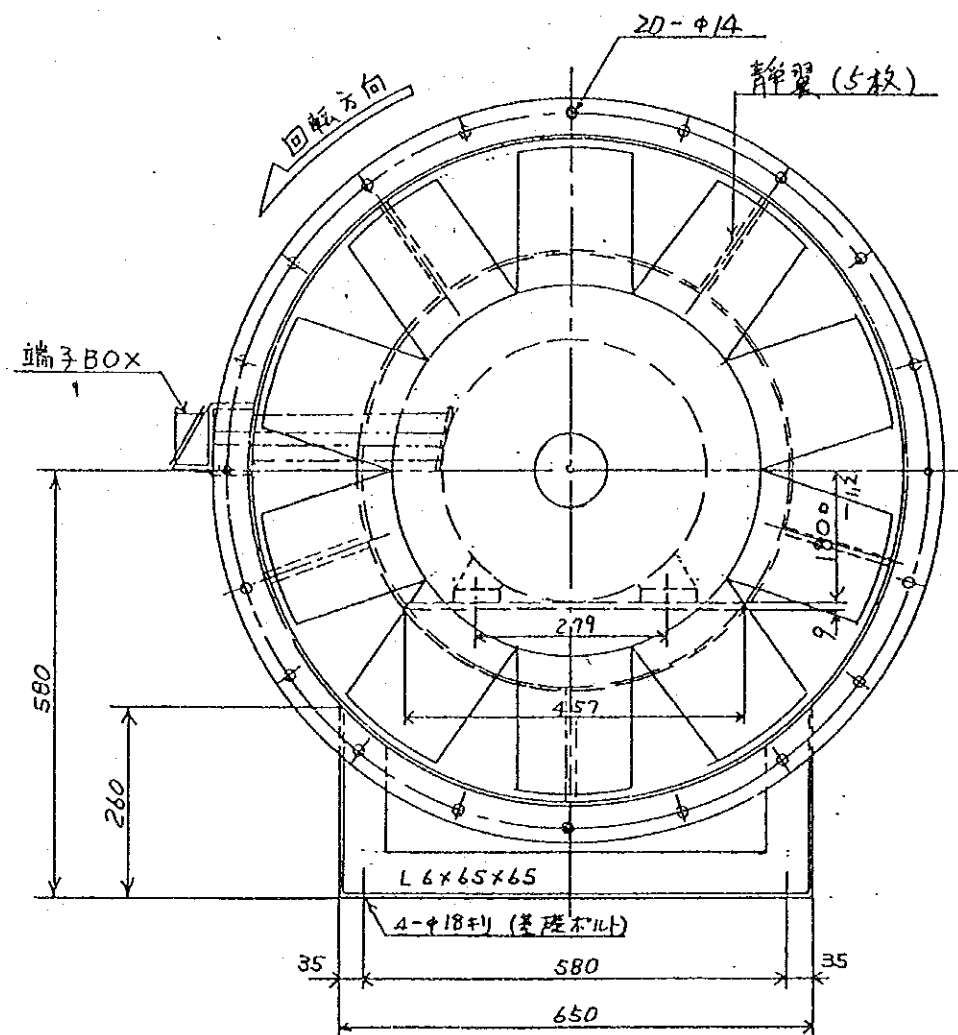
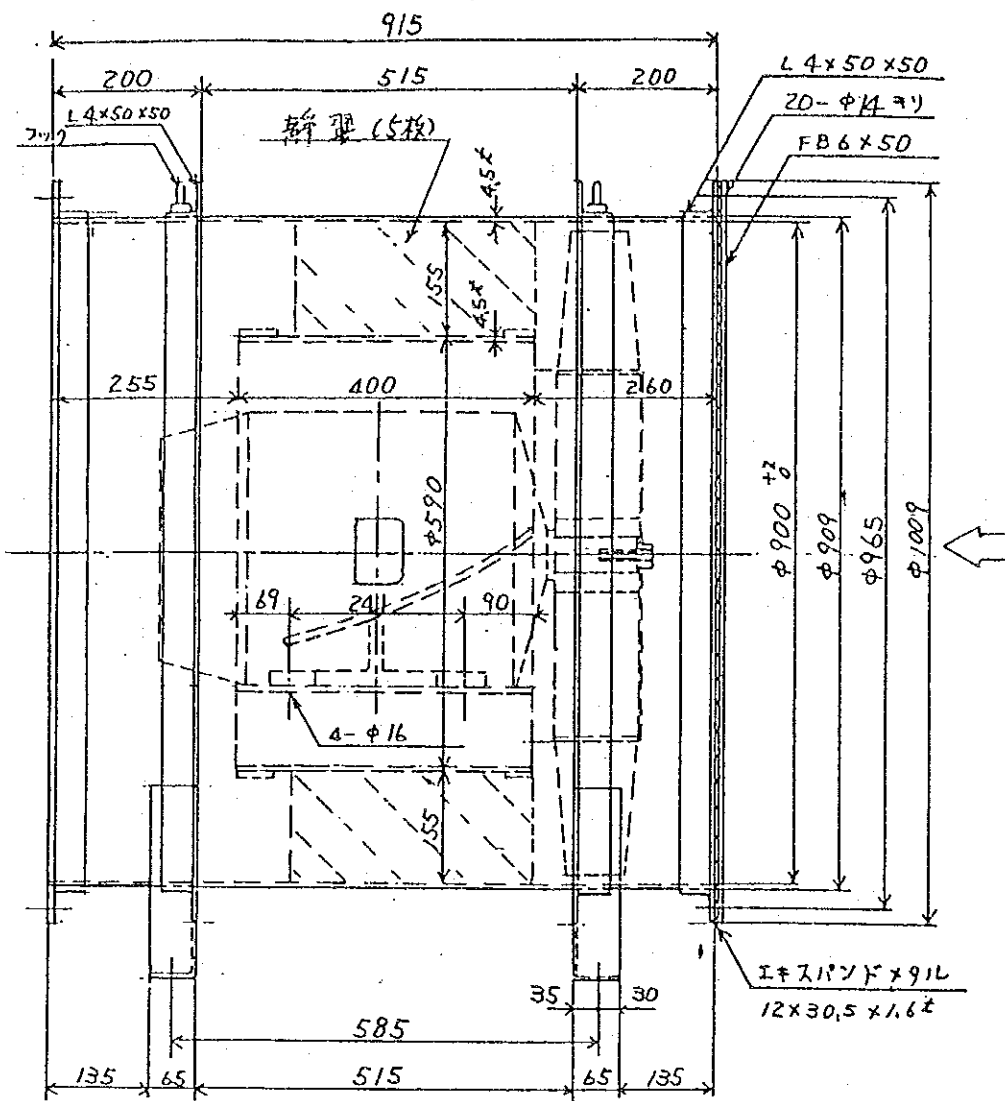
Fig.23 Wheel Jumbo Drill (Scale 1/20)

材料	規格	数量	備註
鋼板	SS400	...	...
銅板	...	...	...
銅管	...	...	...
銅線	...	...	...
銅螺絲	...	...	...
銅墊圈	...	...	...
銅螺母	...	...	...
銅銷	...	...	...
銅釘	...	...	...
銅墊	...	...	...
銅管	...	...	...
銅線	...	...	...
銅螺絲	...	...	...
銅墊圈	...	...	...
銅螺母	...	...	...
銅銷	...	...	...
銅釘	...	...	...
銅墊	...	...	...



Q	冷却水出口	50A SGP	パイパスラインへ
P	冷却水入口	25A SGP	7/17°へ
O	潤滑油出口	25A SGP	7/17°へ
N	推力油入口	40A SGP	7/17°へ
M	推力油出口	300A SGP	
L	推力油入口	25A SGP	
K	冷却水出口	30A SGP	
J	冷却水入口	30A SGP	
I	冷却水出口	50A SGP	
H	冷却水入口	30A SGP	
G	冷却水出口	30A SGP	冷却水へ
F	冷却水入口	30A SGP	
E	推力油出口	45A SGP	外へ
D	推力油入口	25A SGP	外へ
C	推力油出口	25A SGP	冷却水へ
B	推力油入口	50A SGP	冷却水へ
A	推力油出口	50A SGP	冷却水へ
符号	名称	規格	備註

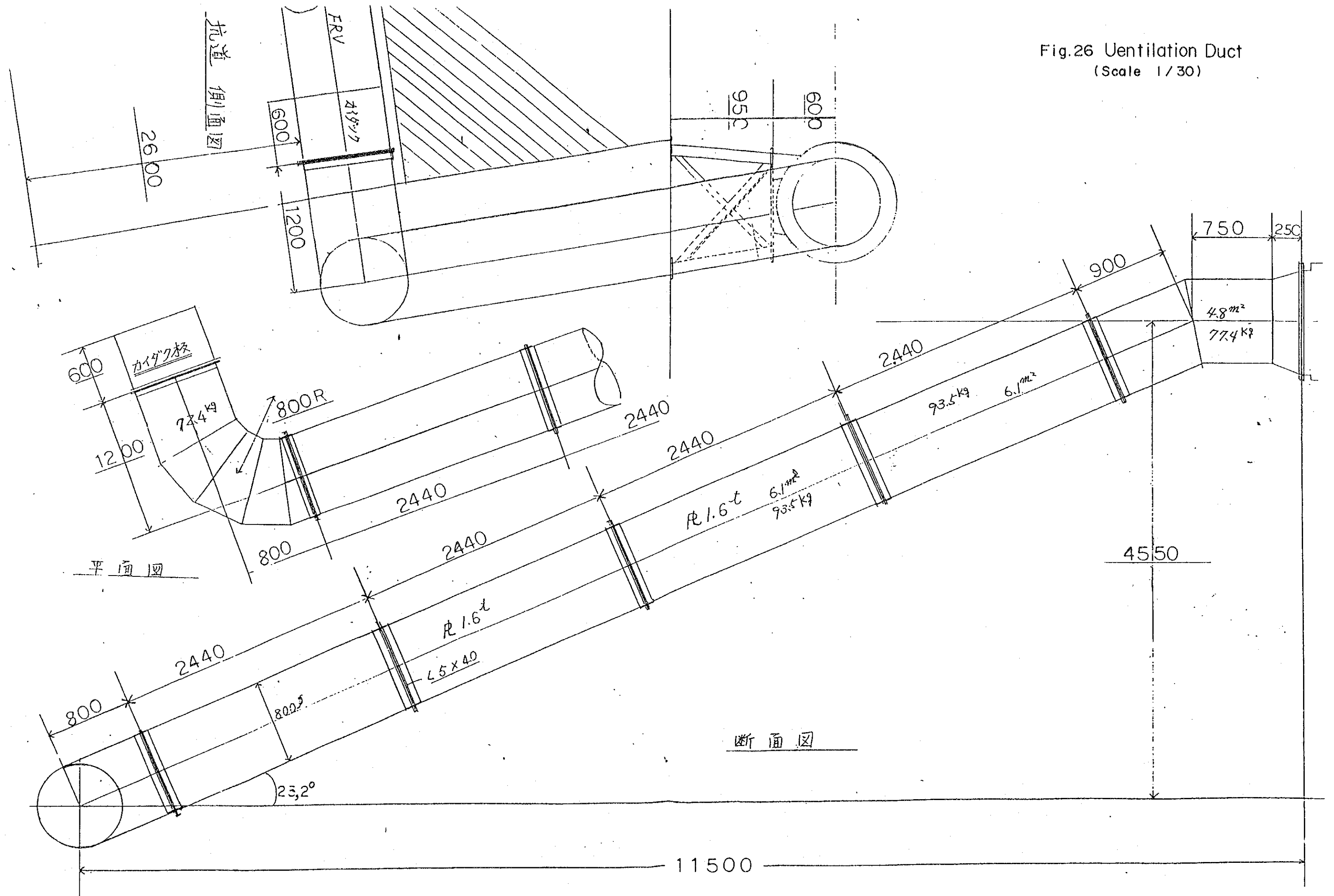
Fig. 24 Electric Generator (Scale 1/10)



番号	NO. E-900A		
送風機仕様	取扱ガス温度	20	℃
	風量	500	m ³ /min
	静圧	90	mmAq
	回転数	1430	RPM
	軸動力	14.9	BKw
電動機仕様	出力	18.5	Kw
	極数	4	P
	電圧	200	V
	周波数	(50)	60 Hz
付属品	電動機	全閉、防滴	
	V7-リ	F風	有 (○)
		M風	有 (○)
	Vベルト	有 (○)	
	ベルトカバー	有 (○)	
	共通架台	有 (○)	
	二重架台	有 (○)	
	防振ゴム	有 (○)	
	点検口	有 (○)	
	ドレン抜き	有 (○)	
相フランジ	有 (○)		
標準色	マンセル8.0Y4.5/0.5		

Fig.25 Electric Propeller Fan

Fig.26 Ventilation Duct
(Scale 1/30)



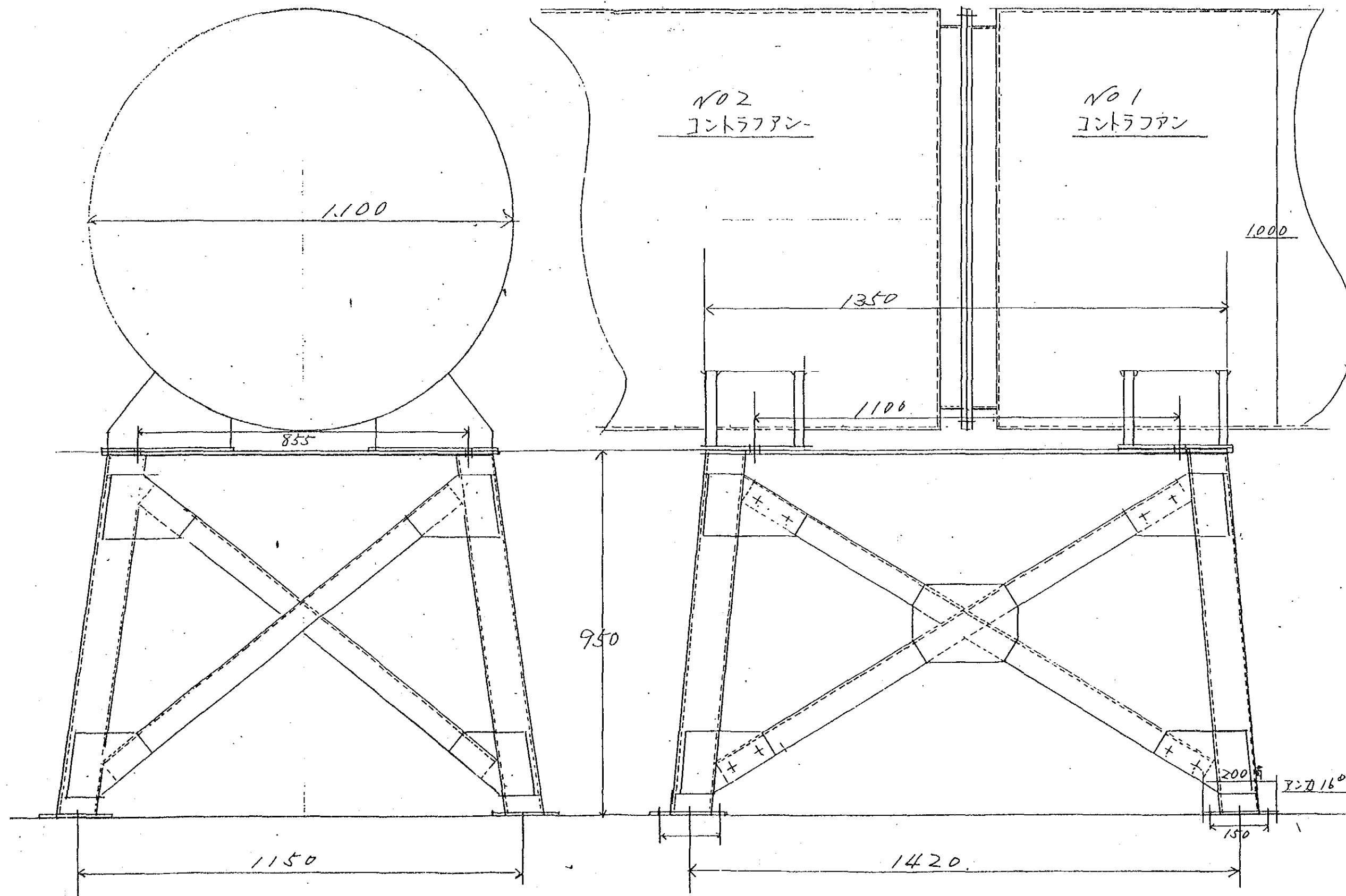
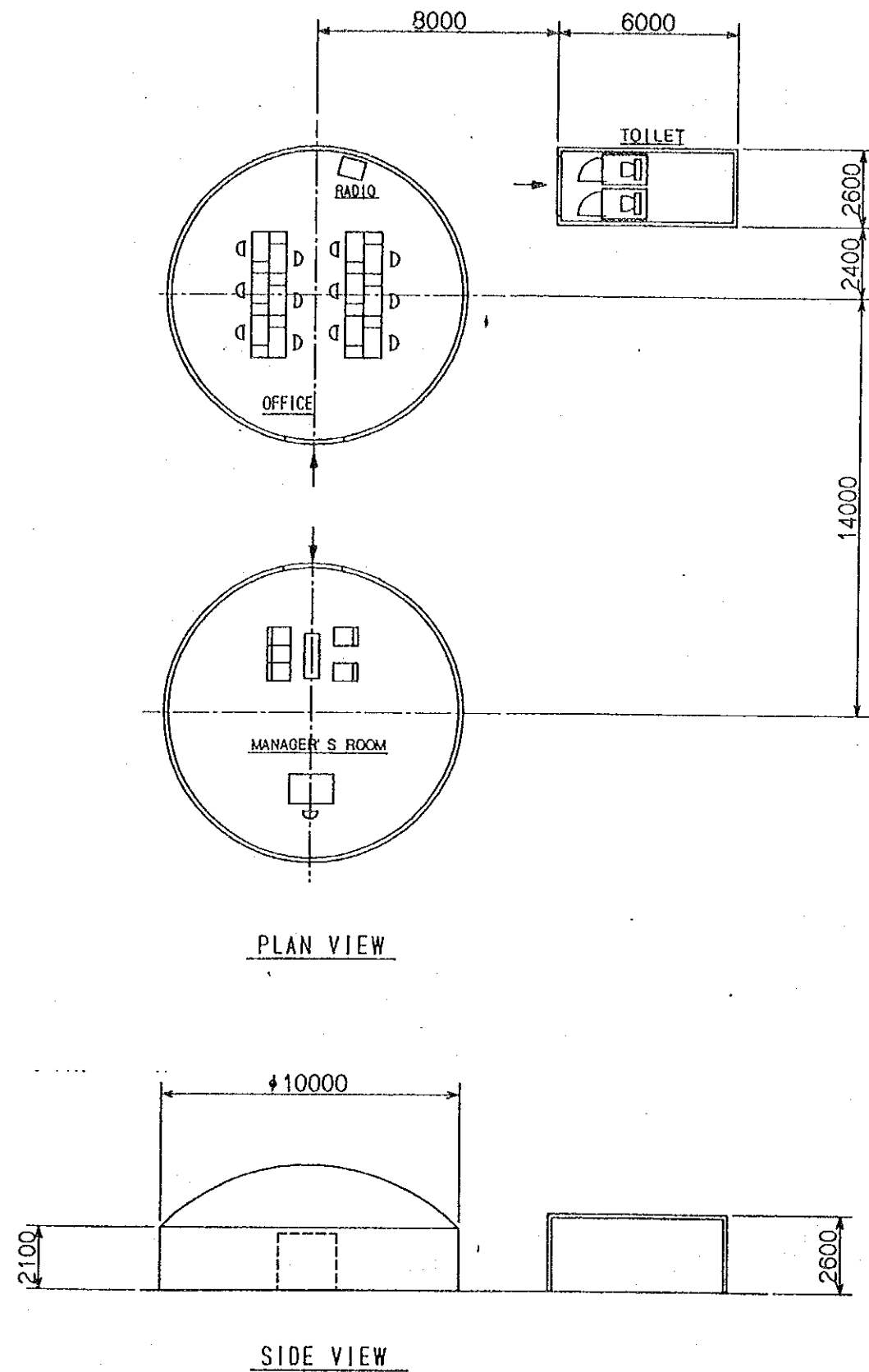


Fig. 27 Electric Contra - Fan



BASIC SPECIFICATIONS

*FLOOR AREA

OFFICE : 157.0m²

TOILET : 13.8m²

*STRUCTURE

OFFICE : 'PAO'

TOILET : PREFABRICATED UNIT INSTALLED IN CONTAINER

*ARCHITECTURAL EQUIPMENT

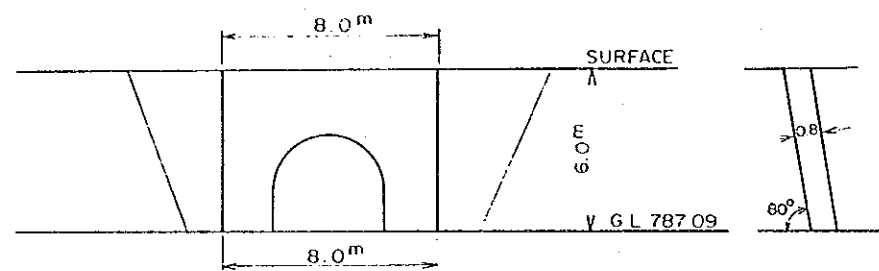
PLUMBING/SANITARY WORKS : SEPTIC TANK

ELECTRICAL WORKS : LIGHTING, RECEPTACLE, COMMUNICATION EQUIPMENT

HEATING : KEROSENE HEATER, ELECTRIC HEATER

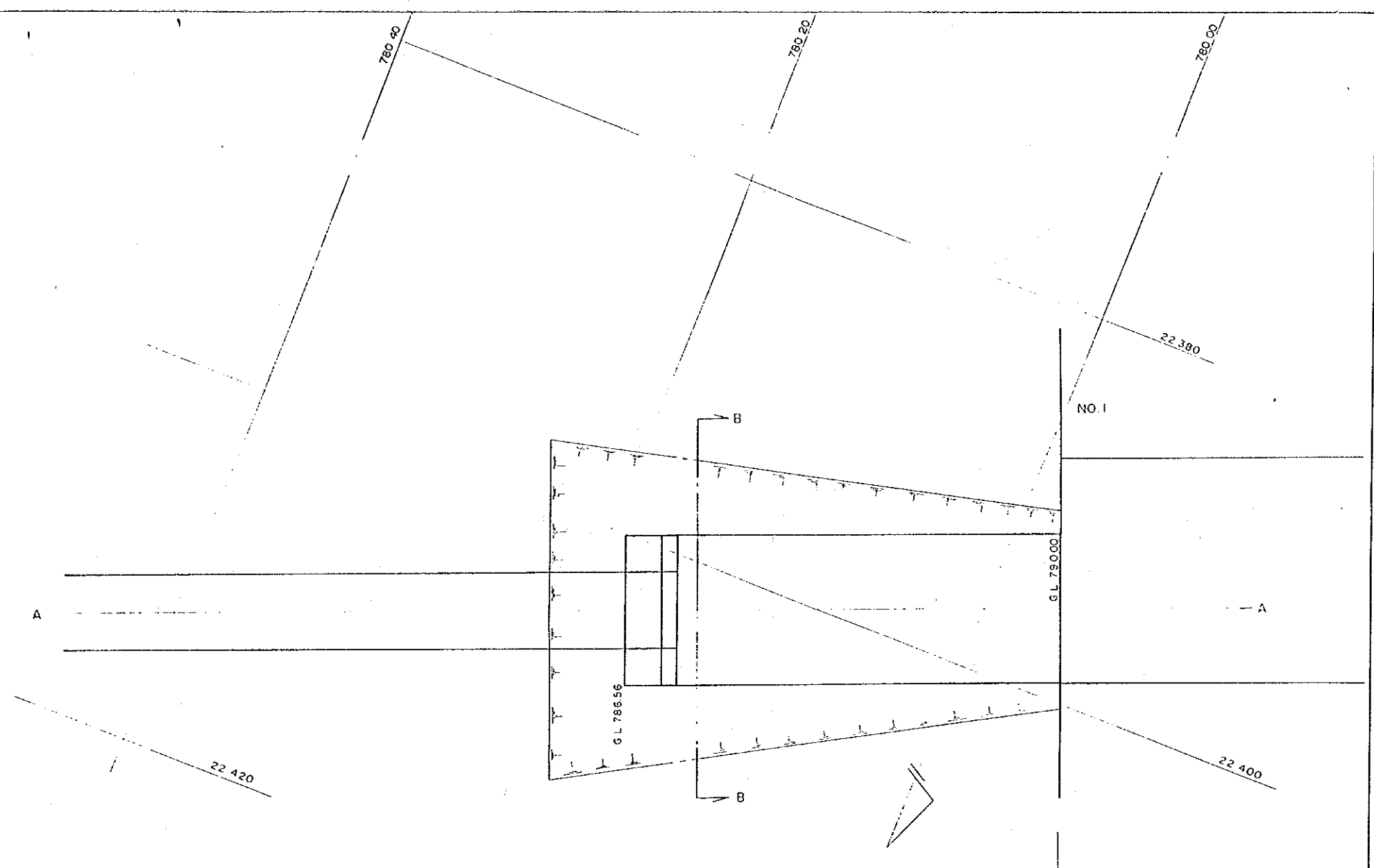
Fig.28	Administration Office		
SCALE	1:200'	DATE	
DWG. No.			

a part of mine portal



B - B SECTION

A - A SECTION



SURFACE

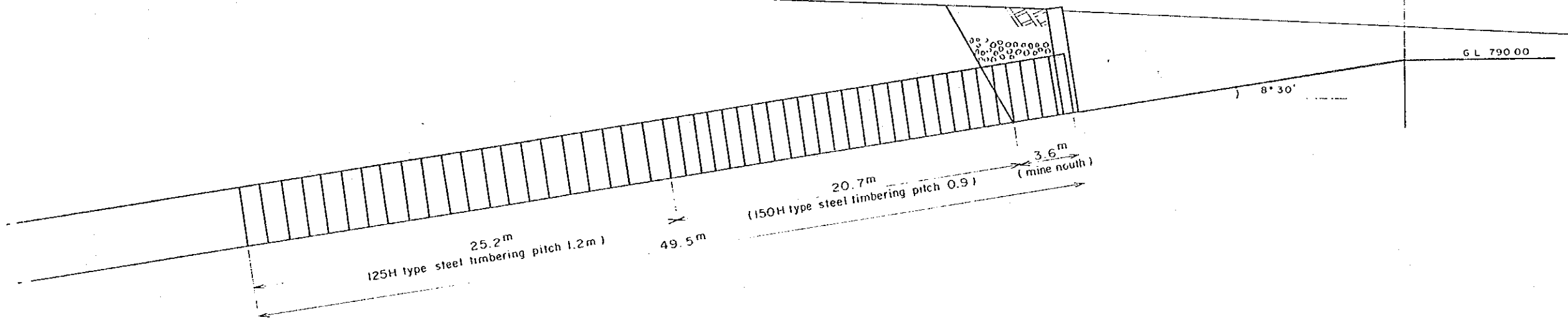
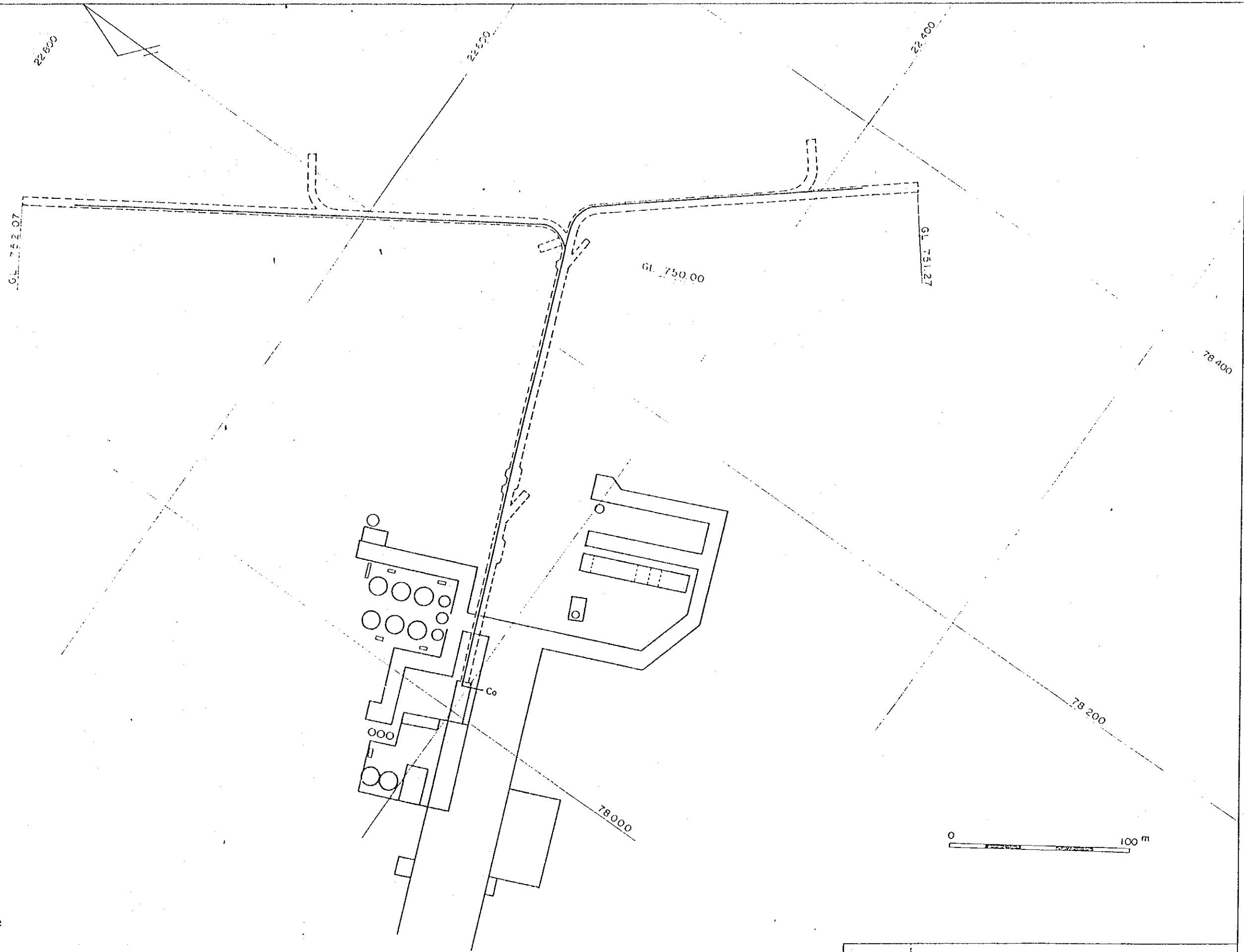


Fig.29	Mine Portal		
Scale	1/200	Date	1992.
Drawing No			



凡 例

—— 4" air Pipe
Co Compressor

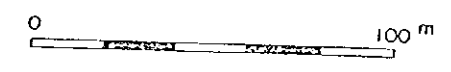
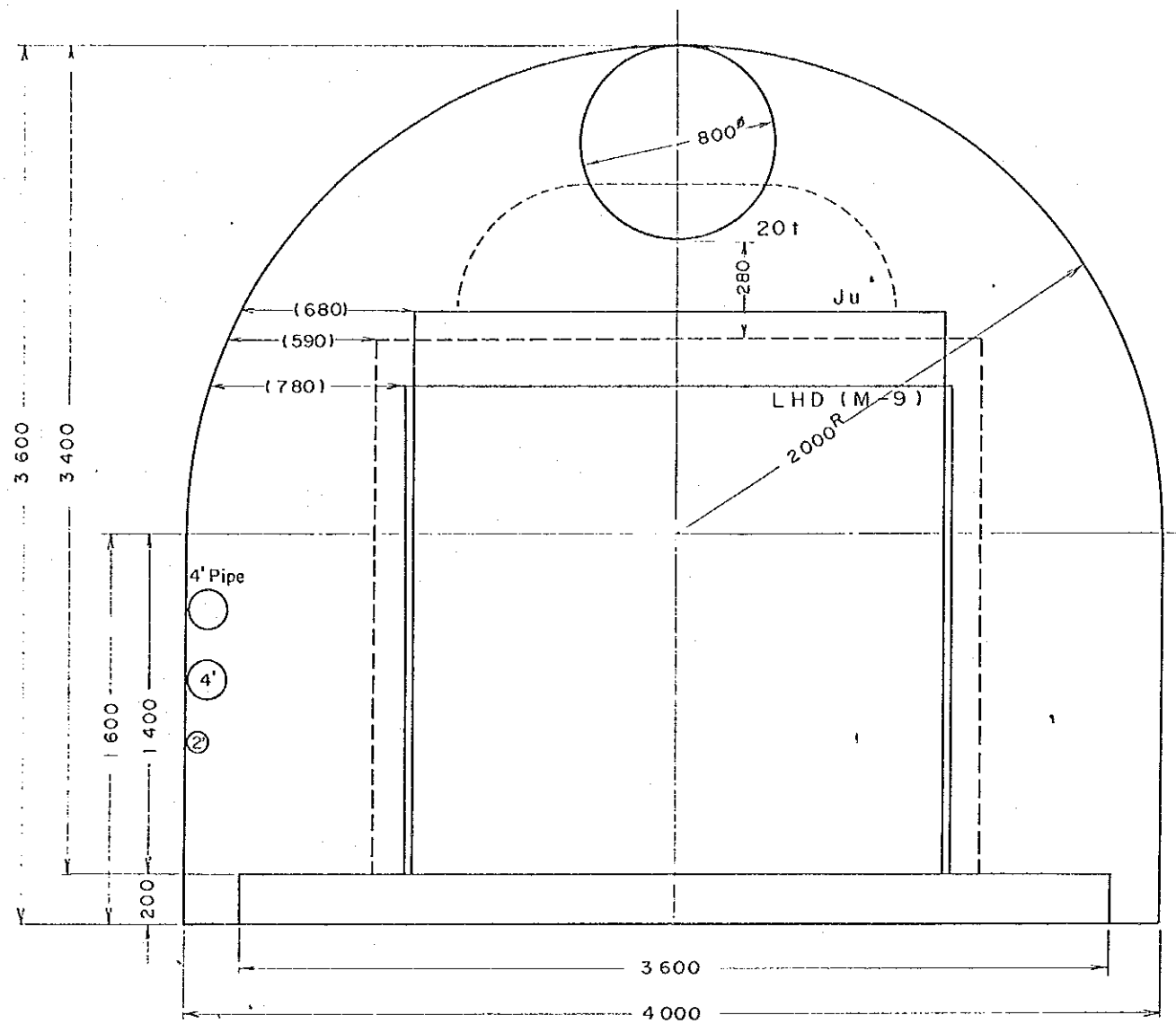
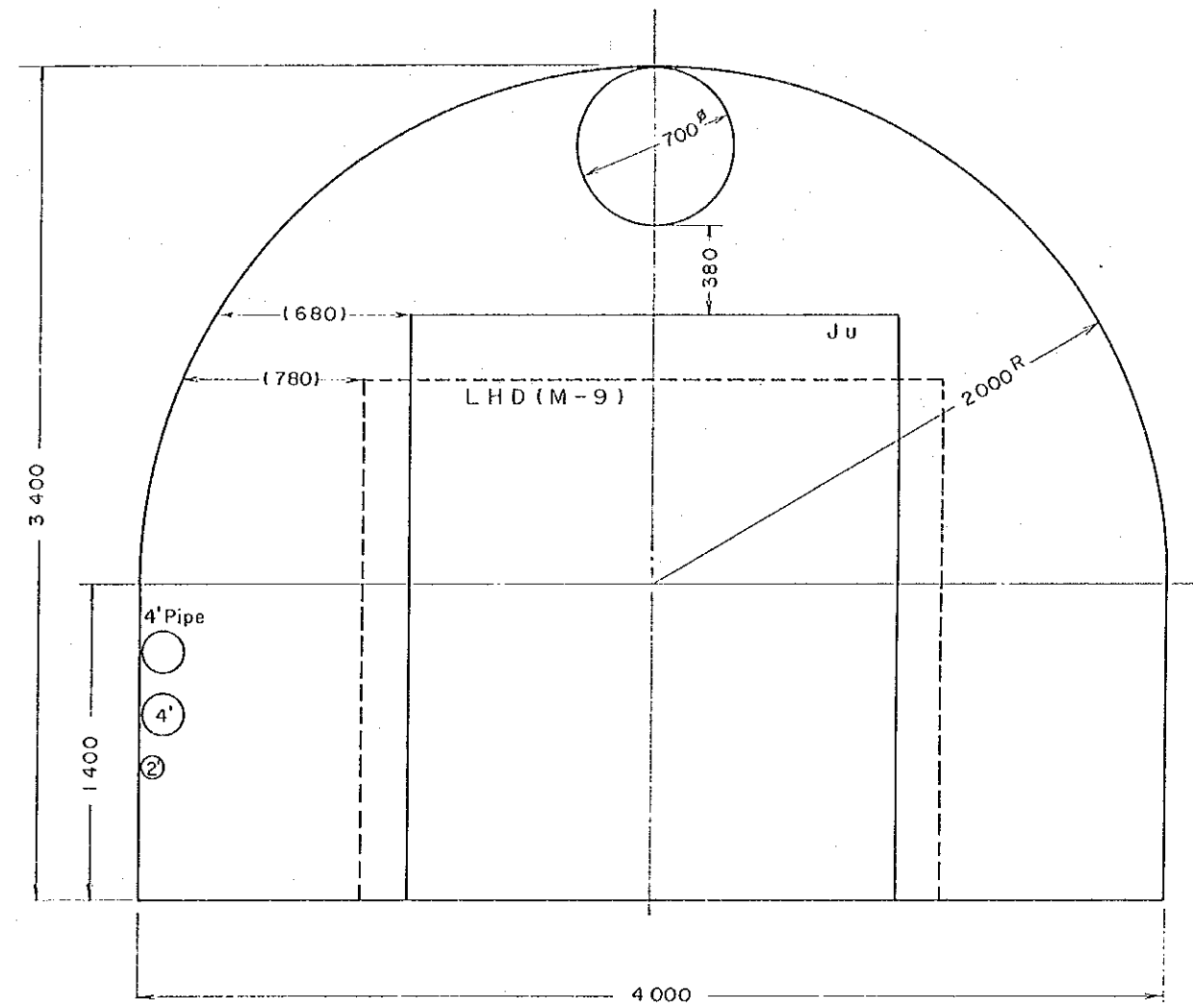


Fig. 30	Compressed Air Piping Plan		
Scale	1/1500	Date	1992.
Drawing - No			

Inclined Shaft & Drift Section



Inclined Shaft Section



Drift Section

Fig.31-1	Detailed Plan of Drift (I)		
Scale	1/20	Date	1992.
Drawing-No.			

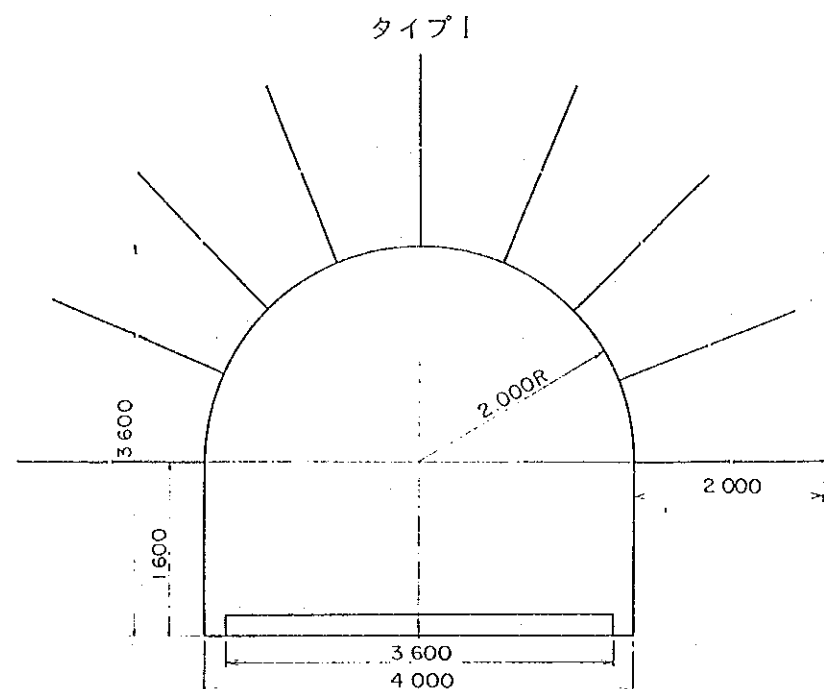
坑道開削断面仕様

(斜坑)

開削断面

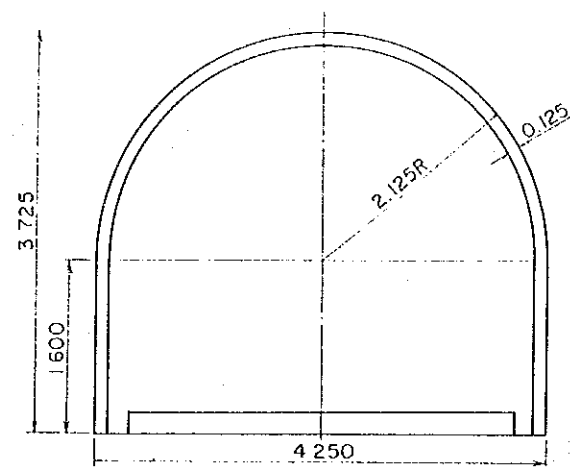
断面積

適用箇所
支保



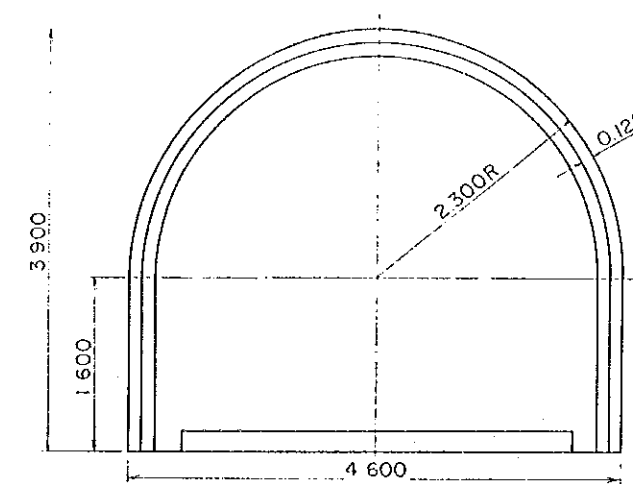
設計断面 $\frac{2.0^2 \pi}{2} + 1.6 \times 4.0 - 0.2 \times 3.6 = 11.96 \text{ m}^2$
 開削断面 $\frac{2.0^2 \pi}{2} + 1.6 \times 4.0 = 12.68 \text{ m}^2$
 支払断面 $\frac{2.1^2 \pi}{2} + 1.7 \times 4.2 = 14.07 \text{ m}^2$ (余量0.1m)
 適用箇所 自立状態が非常に良い(地山等級A・B)
 支保 ロックボルトD22×2.0m×9本(ピッチ1.5m)

タイプII



設計断面 $\frac{2.0^2 \pi}{2} + 1.6 \times 4.0 - 0.2 \times 3.6 = 11.96 \text{ m}^2$
 開削断面 $\frac{2.125^2 \pi}{2} + 1.6 \times 4.25 = 13.89 \text{ m}^2$
 支払断面 $\frac{2.225^2 \pi}{2} + 1.7 \times 4.45 = 15.34 \text{ m}^2$ (余量0.1m)
 適用箇所 素底部の肌落ちが著しい地山(地山等級C)
 支保 鋼棒 125H鋼(ピッチ1.5m)

タイプIII



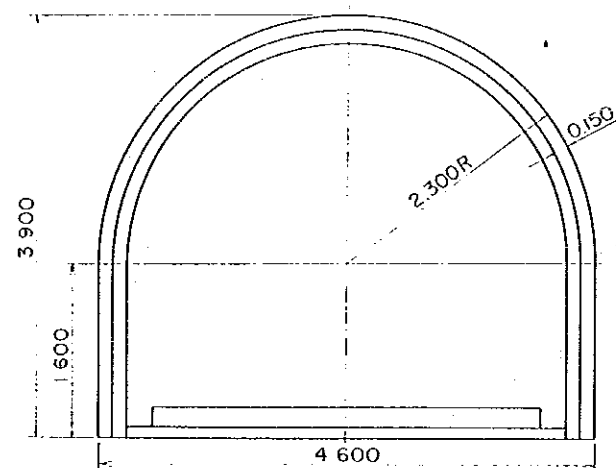
設計断面 $\frac{2.0^2 \pi}{2} + 1.6 \times 4.0 - 0.2 \times 3.6 = 11.96 \text{ m}^2$
 開削断面 $\frac{2.3^2 \pi}{2} + 1.6 \times 4.6 = 15.67 \text{ m}^2$
 支払断面 $\frac{2.4^2 \pi}{2} + 1.7 \times 4.8 = 17.21 \text{ m}^2$ (余量0.1m)
 適用箇所 坑口部 25.2m(地山等級D)
 支保 鋼棒 125H鋼(ピッチ1.2m)

開削断面

断面積

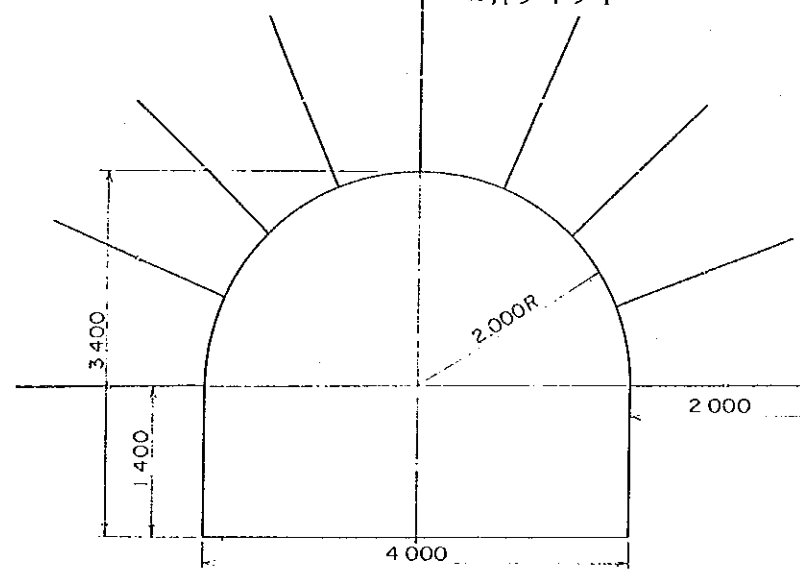
適用箇所
支保

タイプIV



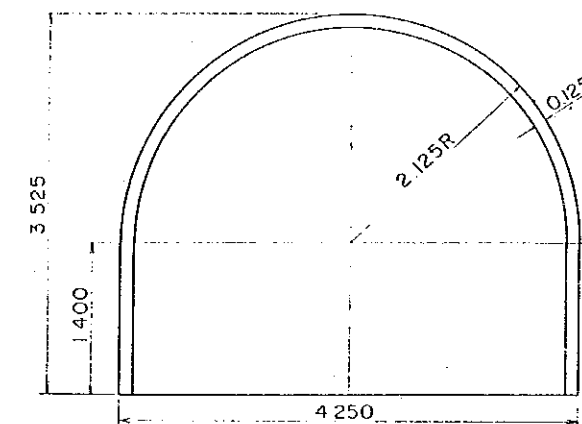
設計断面 $\frac{2.0^2 \pi}{2} + 1.6 \times 4.0 - 0.2 \times 3.6 = 11.96 \text{ m}^2$
 開削断面 $\frac{2.3^2 \pi}{2} + 1.6 \times 4.6 = 15.67 \text{ m}^2$
 支払断面 $\frac{2.4^2 \pi}{2} + 1.7 \times 4.8 = 17.21 \text{ m}^2$ (余量0.1m)
 適用箇所 坑口部 24.3m(地山等級D)
 支保 鋼棒 150H鋼(ピッチ0.9m)

ヒ押タイプI



設計断面 $\frac{2.0^2 \pi}{2} + 1.4 \times 4.0 = 11.88 \text{ m}^2$
 開削断面 $\frac{2.0^2 \pi}{2} + 1.4 \times 4.0 = 11.88 \text{ m}^2$
 支払断面 $\frac{2.1^2 \pi}{2} + 1.5 \times 4.2 = 13.23 \text{ m}^2$
 適用箇所 鍾押坑道で自立状態が非常に良い(地山等級A・B)
 支保 ロックボルトD22×2.0m×9本(ピッチ1.5m)

ヒ押タイプII



設計断面 $\frac{2.0^2 \pi}{2} + 1.4 \times 4.0 = 11.88 \text{ m}^2$
 開削断面 $\frac{2.125^2 \pi}{2} + 1.4 \times 4.25 = 13.04 \text{ m}^2$
 支払断面 $\frac{2.225^2 \pi}{2} + 1.5 \times 4.45 = 14.45 \text{ m}^2$
 適用箇所 鍾押坑道で素底部の肌落ちが著しい地山(地山等級C)
 支保 鋼棒 125H鋼(ピッチ1.5m)

Fig.31-2

Detailed Plan of Drift (2)

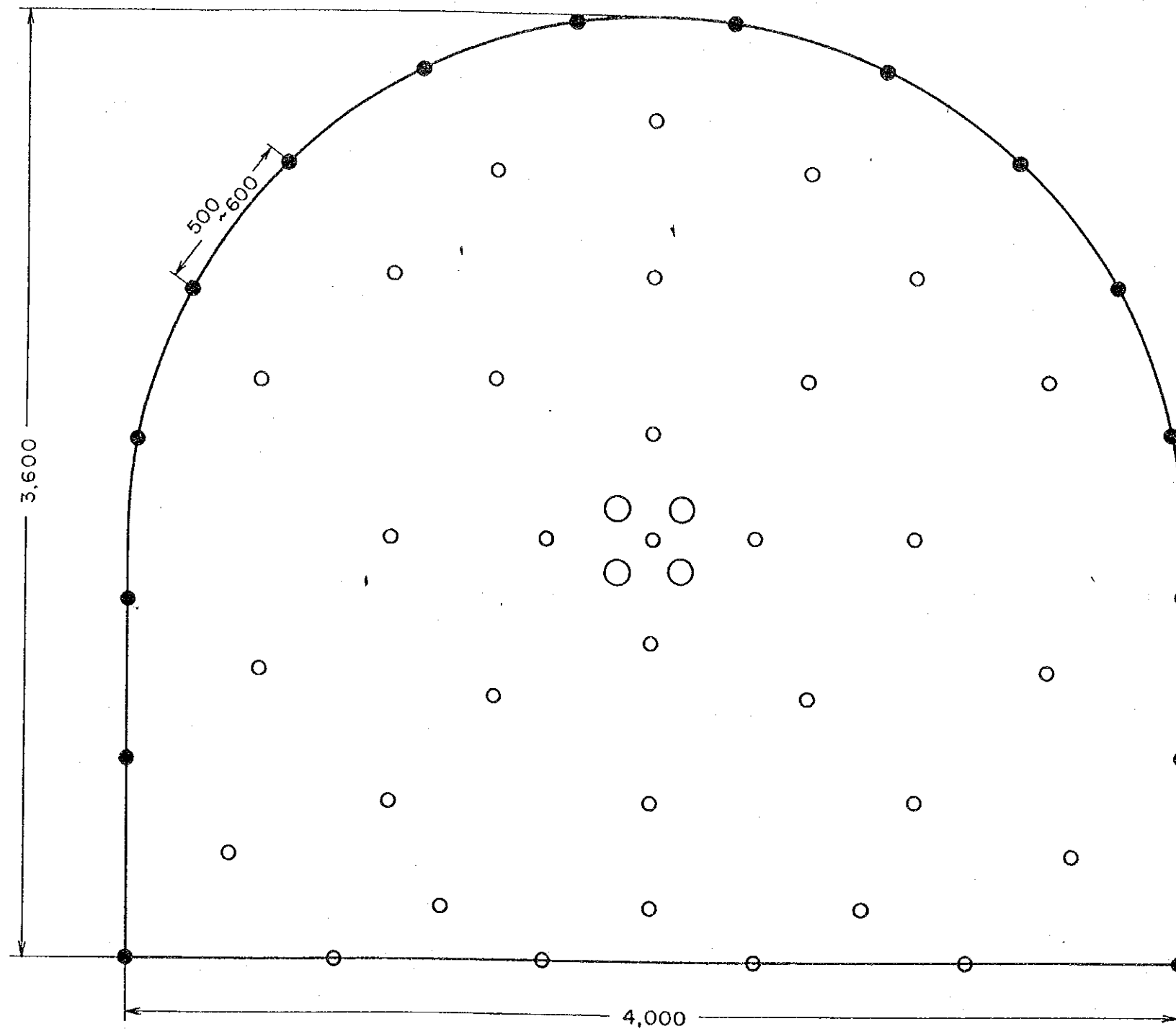
Scale

1/50

Date

1992

Drawig-No



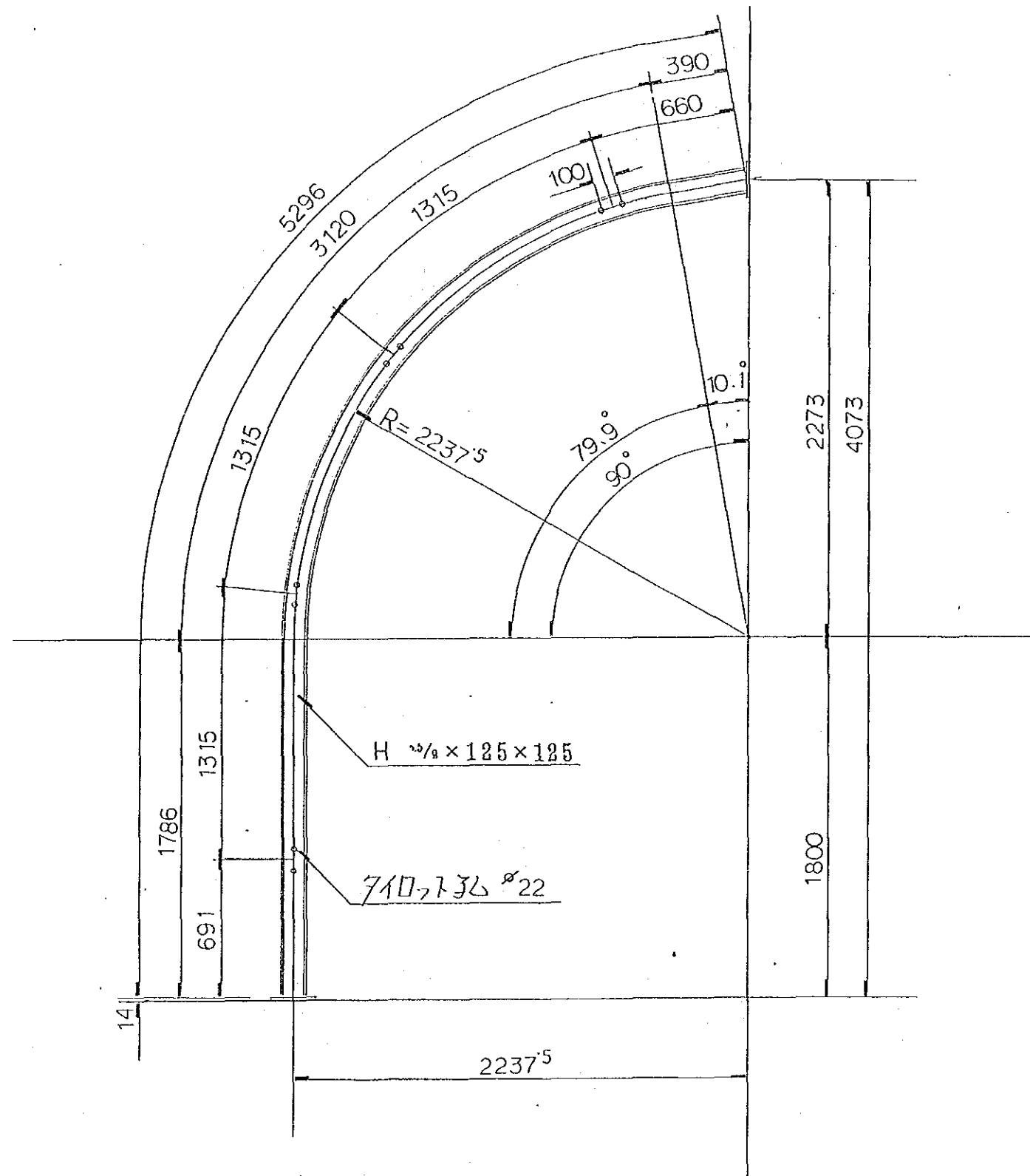
空 孔 4本 ○
 実 孔 33本 ◯
 S · B孔 16本 ●



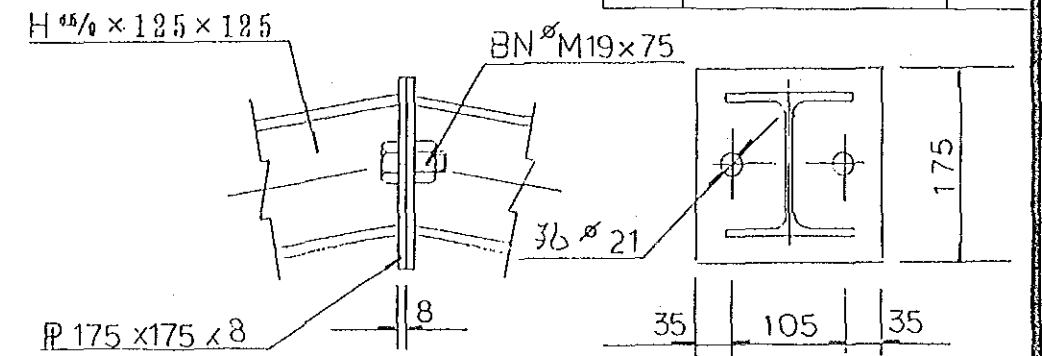
Fig.32	Drilling Hole Arrangement		
Scale	1/20	Date	1992.
Drawing-No			

Fig.33-2 I25 H Steel Timberings $S=1/20$

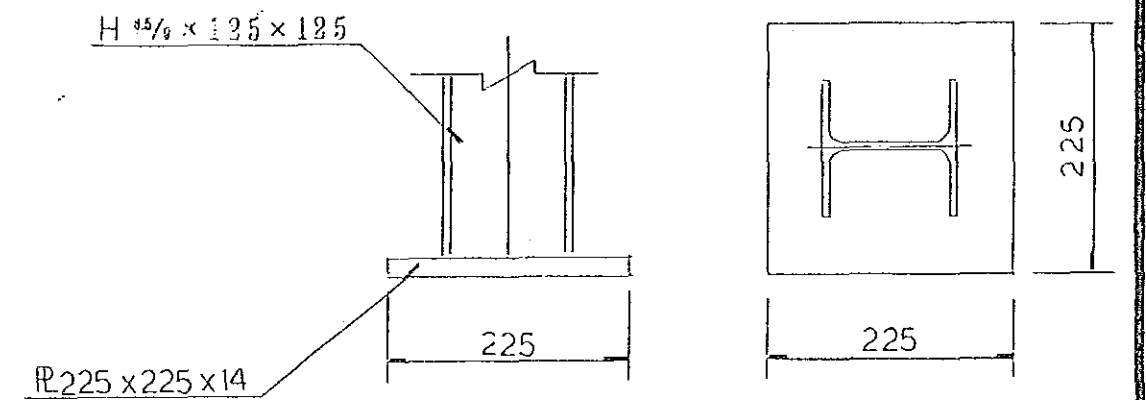
斜坑タイプ III



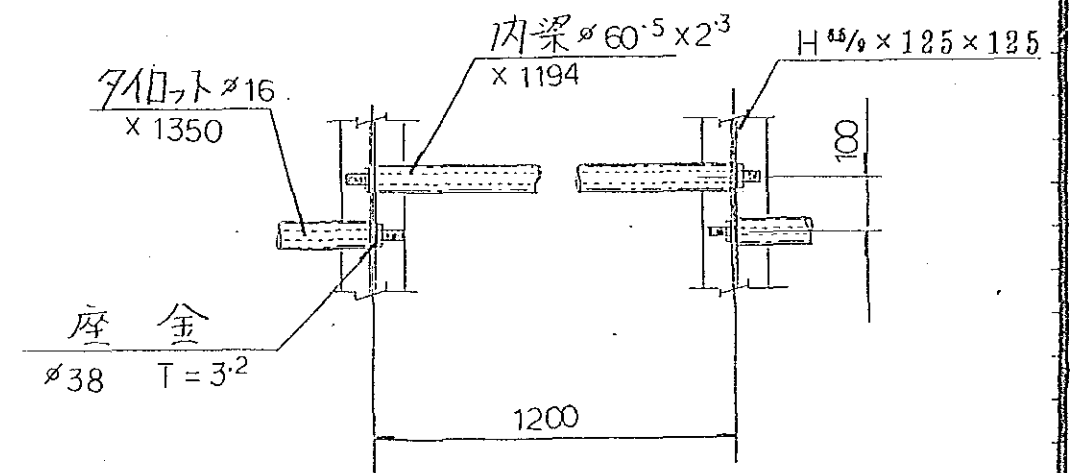
頂部詳細図 $S=1/5$



底部詳細図



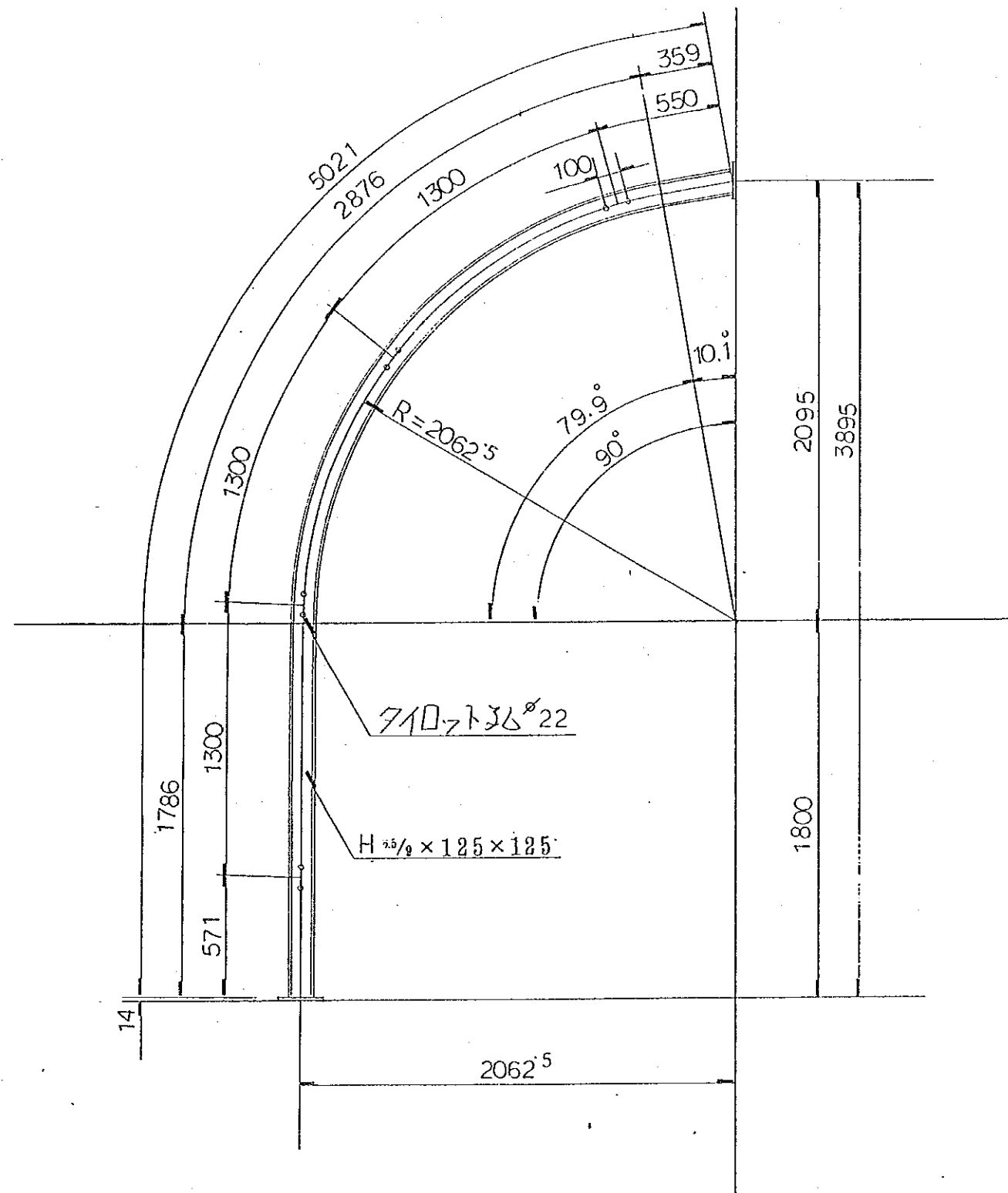
710-7 内梁詳細図 $S=1/10$



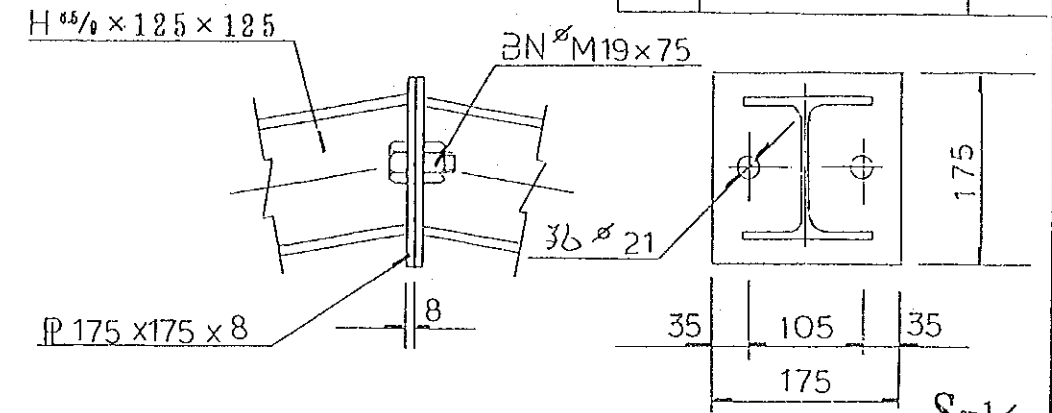
		0162	2
承認	NO	製図	
H 年 月 日			
斜坑タイプ III			

Fig.33-3 I25H Steel Timberings $S=1/20$

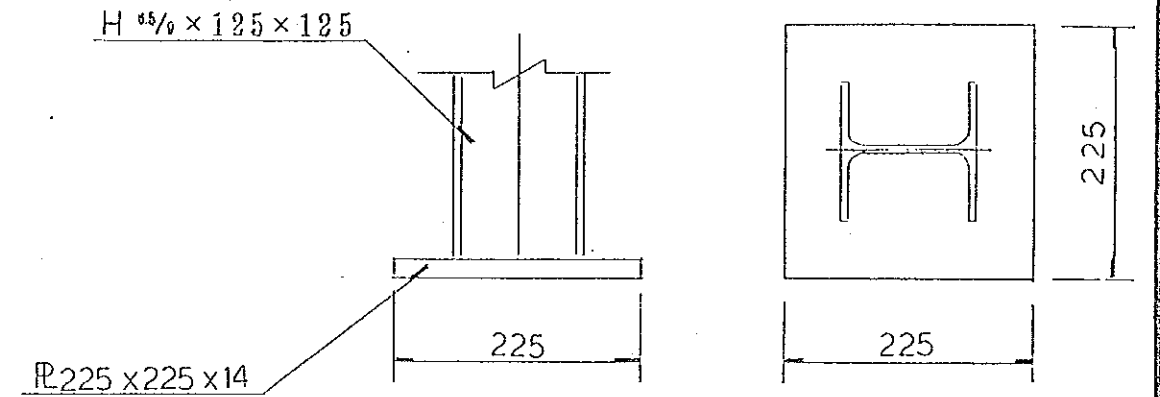
斜坑タイプ II



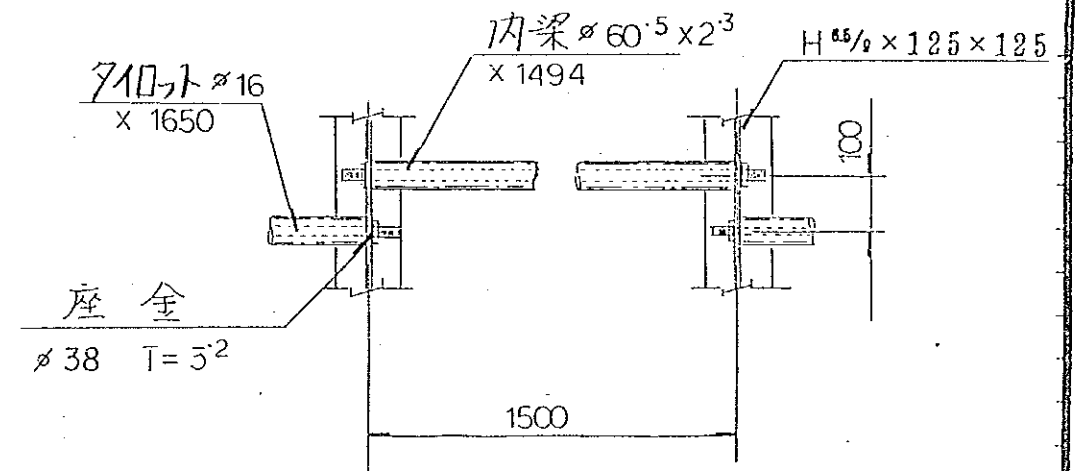
頂部詳細図 $S=1/5$



底部詳細図



710-7ト内梁詳細図 $S=1/10$



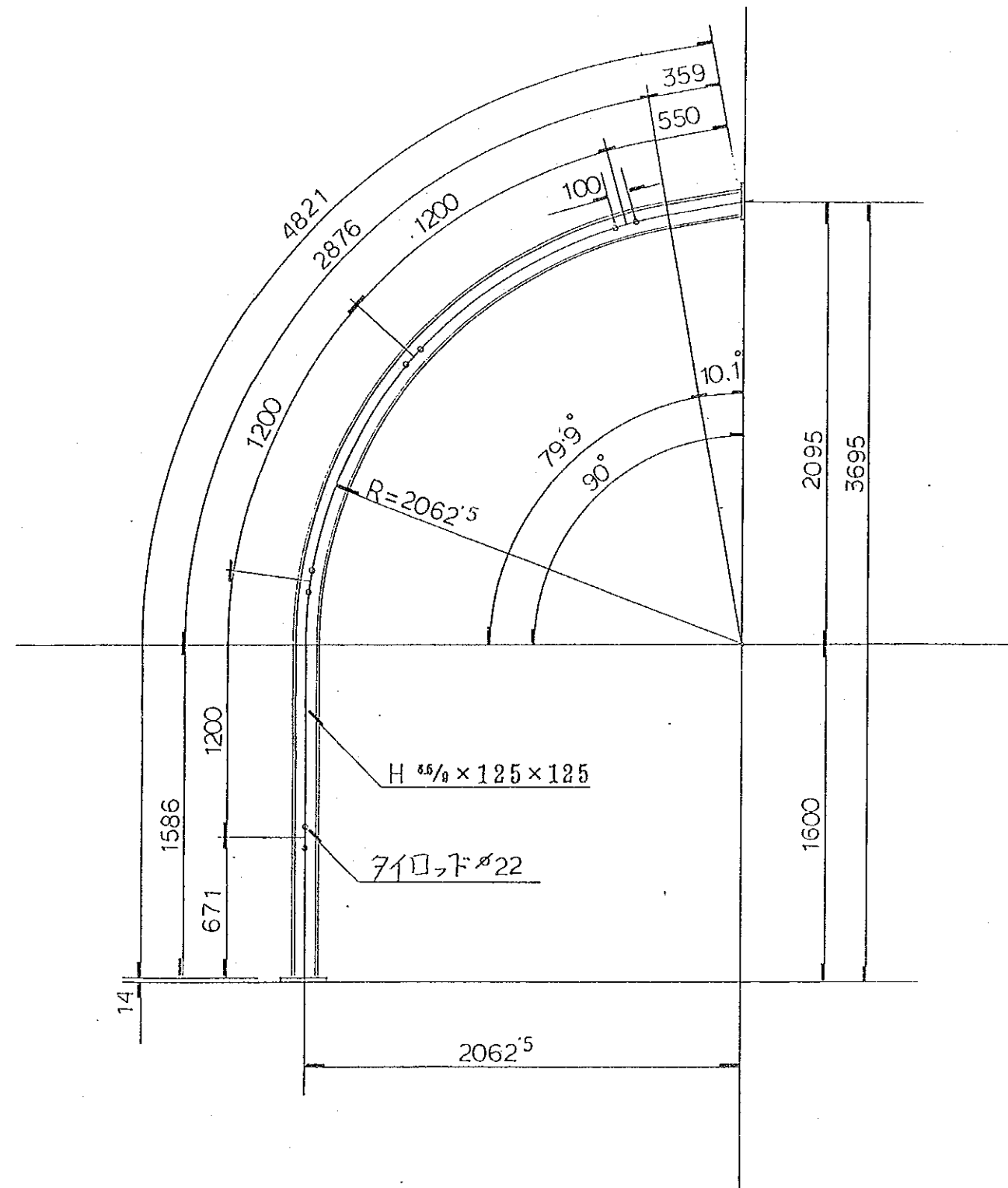
		0162	4

承認	NO	製図
H	年	月

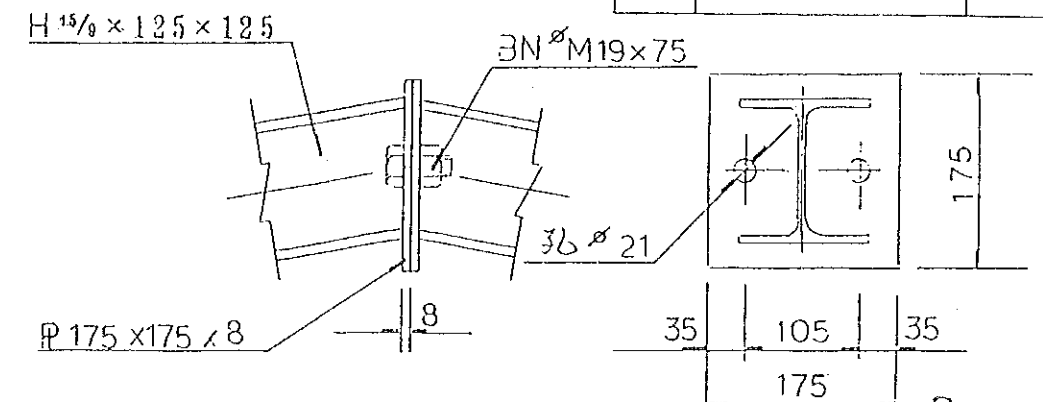
斜坑タイプ II

Fig.33-4 125H Steel Timberings $S=1/20$

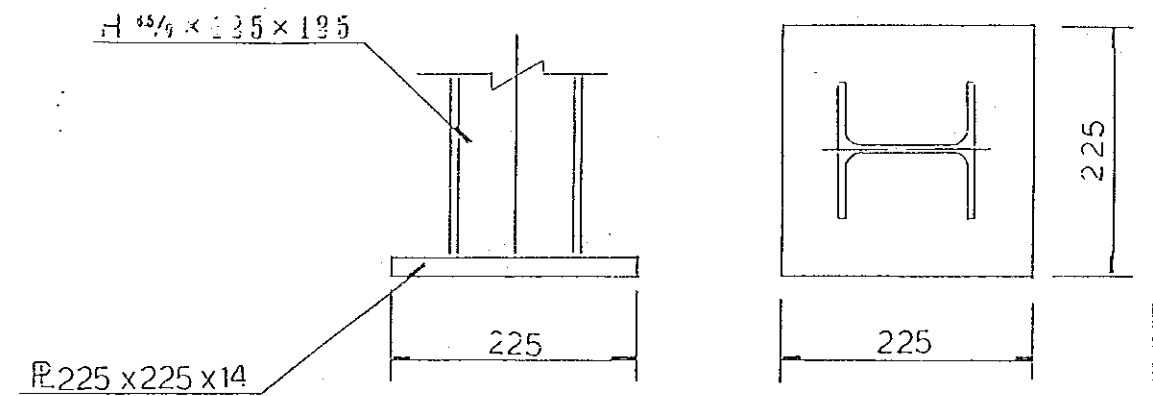
鈎押タイプ II



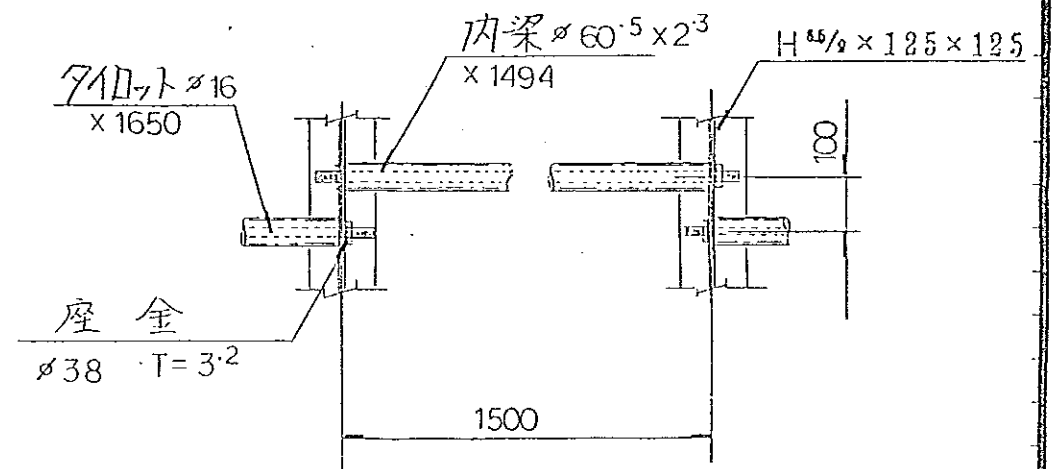
頂部詳細図 $S=1/5$



底部詳細図

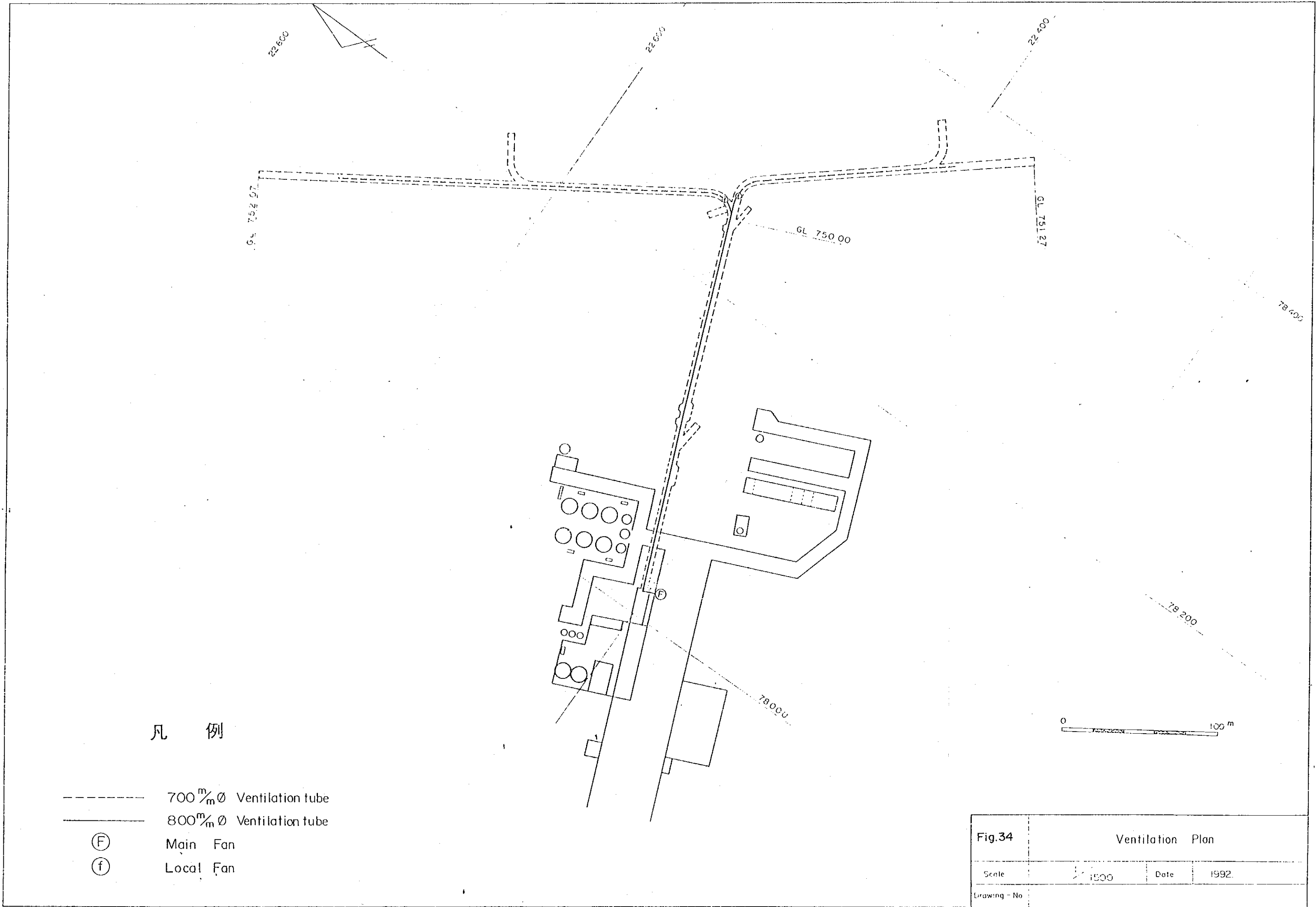


710mm 内梁詳細図 $S=1/10$



				0162	1

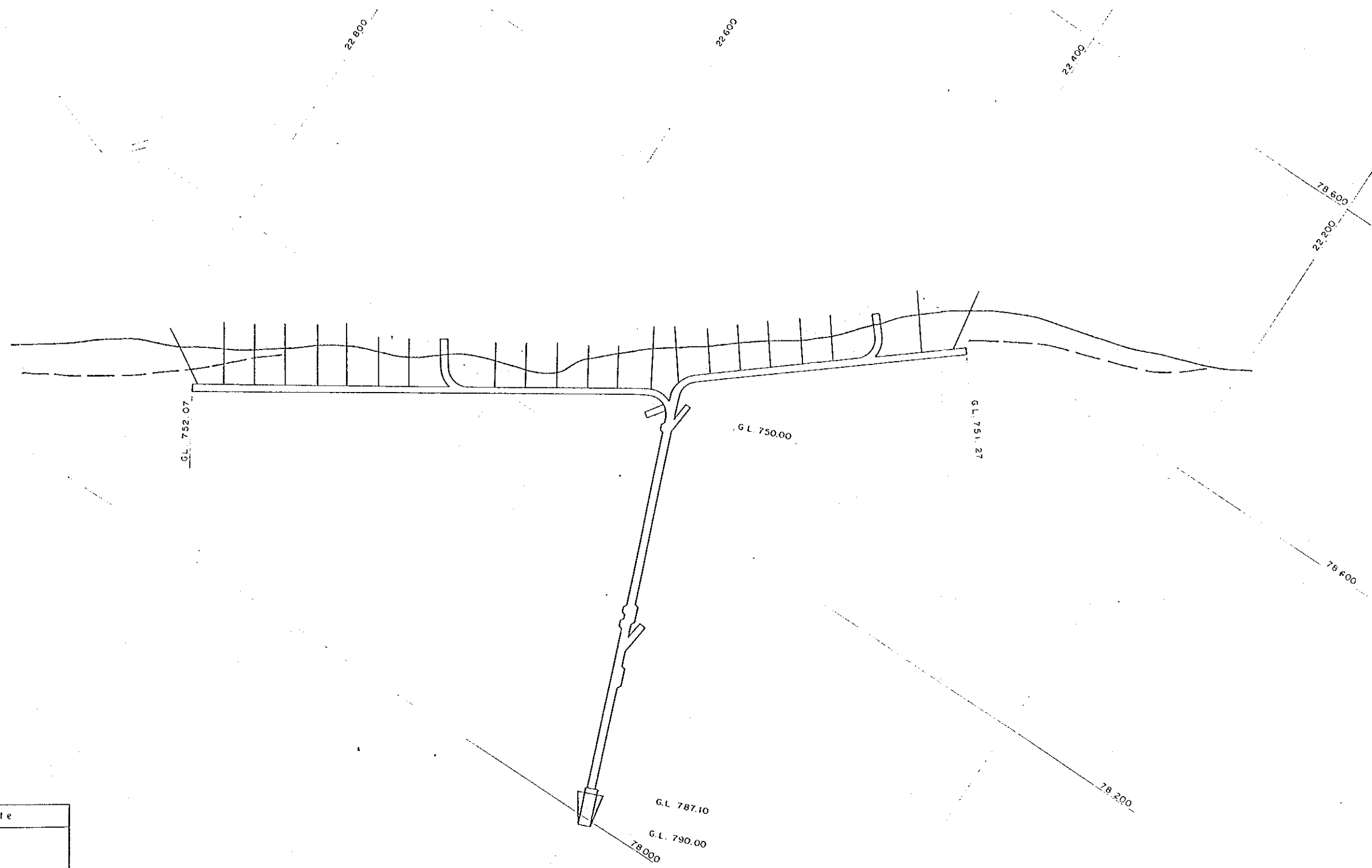
承認	NO	異図
H	年	月
鈎押タイプ II		



凡 例

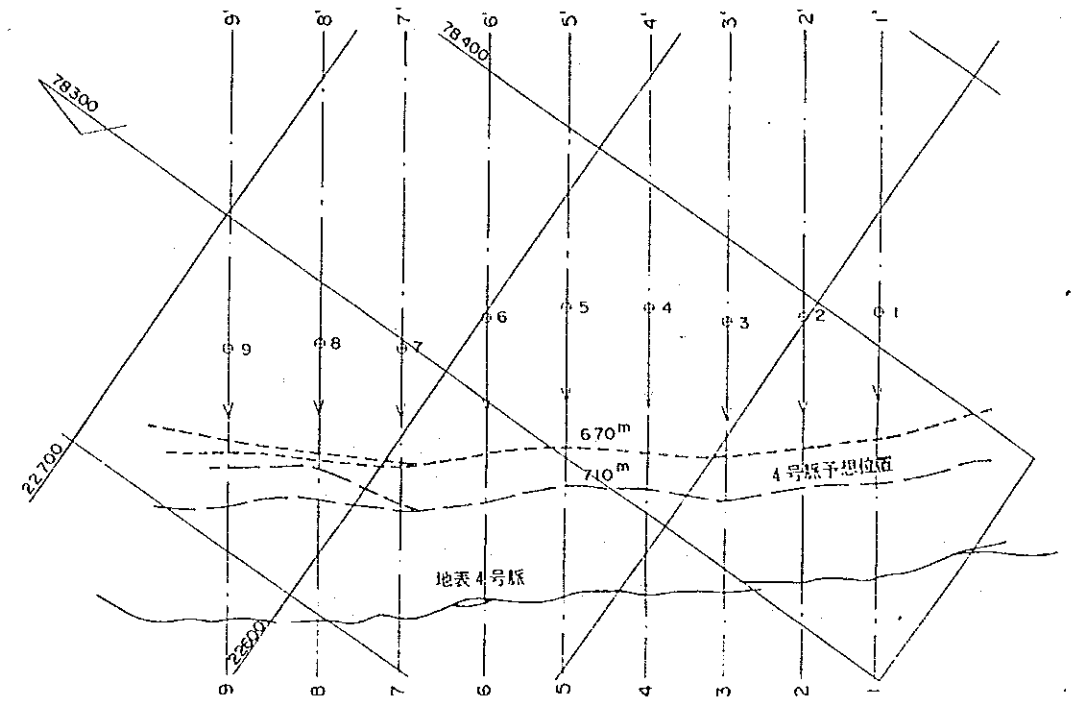
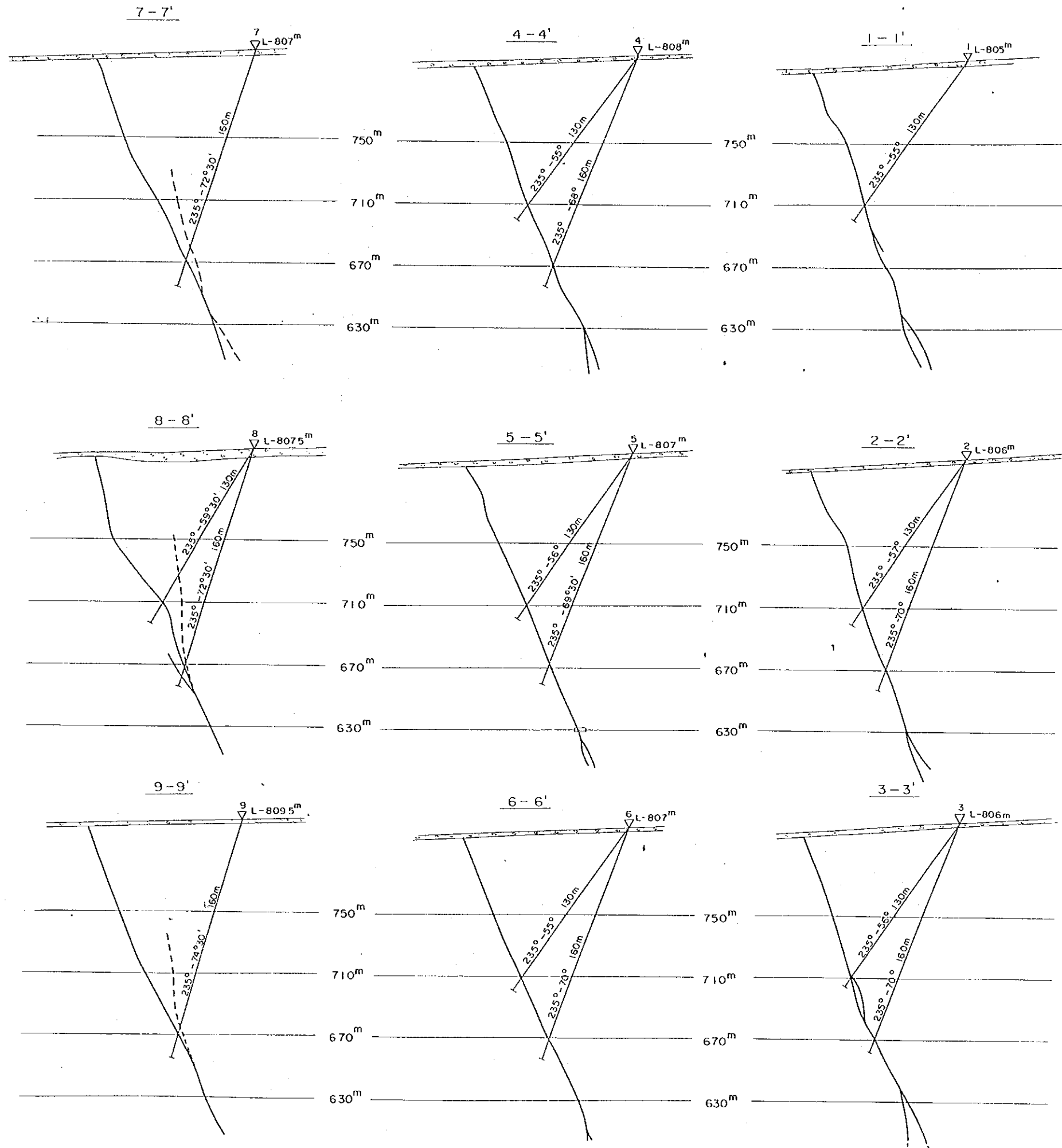
- 700^m∅ Ventilation tube
- 800^m∅ Ventilation tube
- ⊕ Main Fan
- ⊙ Local Fan

Fig.34	Ventilation Plan		
Scale	1:500	Date	1992.
Drawing - No			



Boring	Quantity	Note
Level -100m, -140m	2,190 m (15 pie) 130 ^m x 70 ^{pie}	Down
Level - 60m	7,600 m (22 pie) 40 ^m x 10 ^{pie} 30 x 12	Horizontal

Fig.35-1	Drilling Plan (Underground)		
Scale	1/2000	Date	1992.
Drawing No.			



試錐計画一覧表

試錐計画 ライン	穿孔方向	傾斜	穿孔長 m	計 m	着床準 m
1-1'	235°	-55°	130	130	710
2-2'	235°	-57°	130	290	710
		-70°	160		670
3-3'	235°	-56°	130	290	710
		-70°	160		670
4-4'	235°	-55°	130	290	710
		-68°	160		670
5-5'	235°	-56°	130	290	710
		-69°30'	160		670
6-6'	235°	-55°	130	290	710
		-70°	160		670
7-7'	235°	-72°30'	160	160	670
		-72°30'	160		670
8-8'	235°	-59°30'	130	290	710
		-72°30'	160		670
9-9'	235°	-74°30'	160	160	670
		-74°30'	160		670
9ライン		15		2190 ^m	

1 : 2,000
0 100m

Fig35-2

Drilling Plan (Surface)

Scale

1 / 2000

Date

1992.

Drawing -No

UNIT	ASSEMBLY	DWG. NO.
	T18	
	HA-98 4x717	

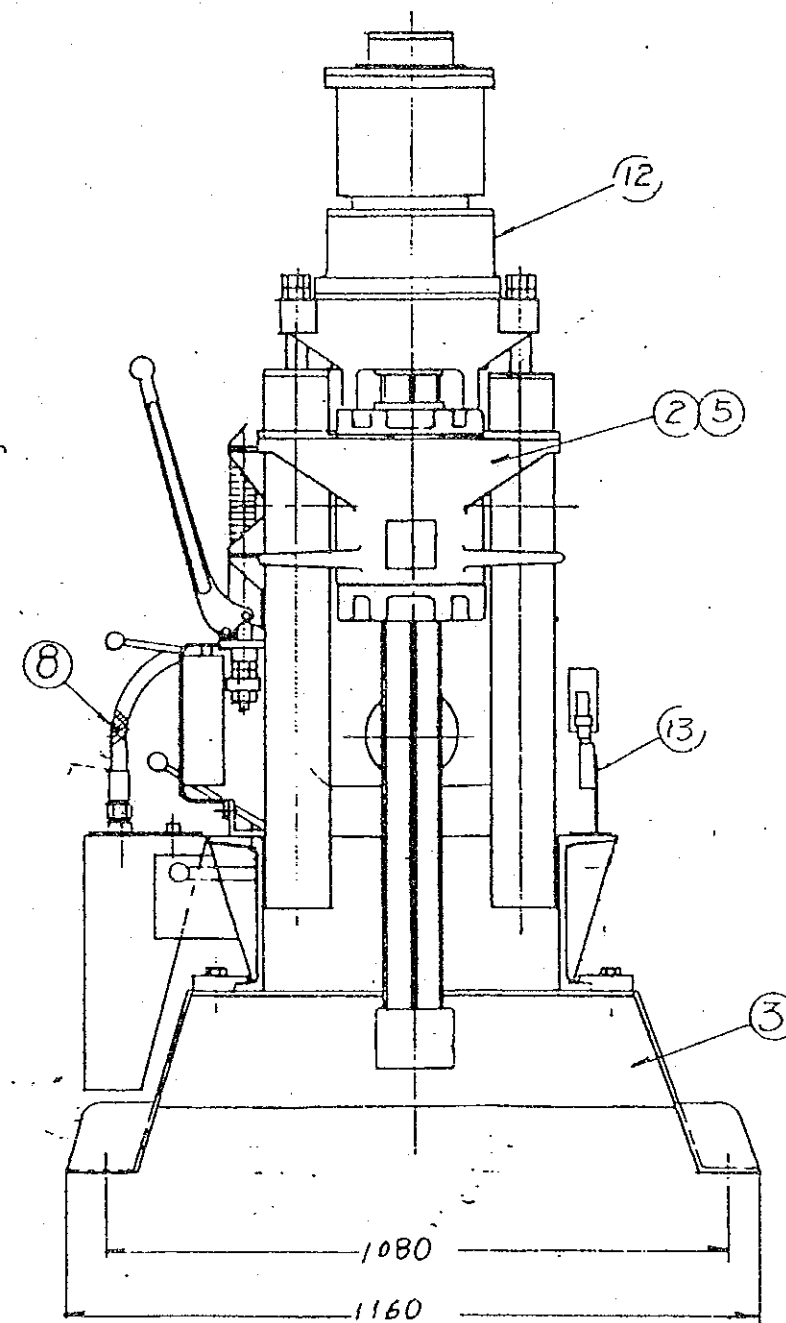
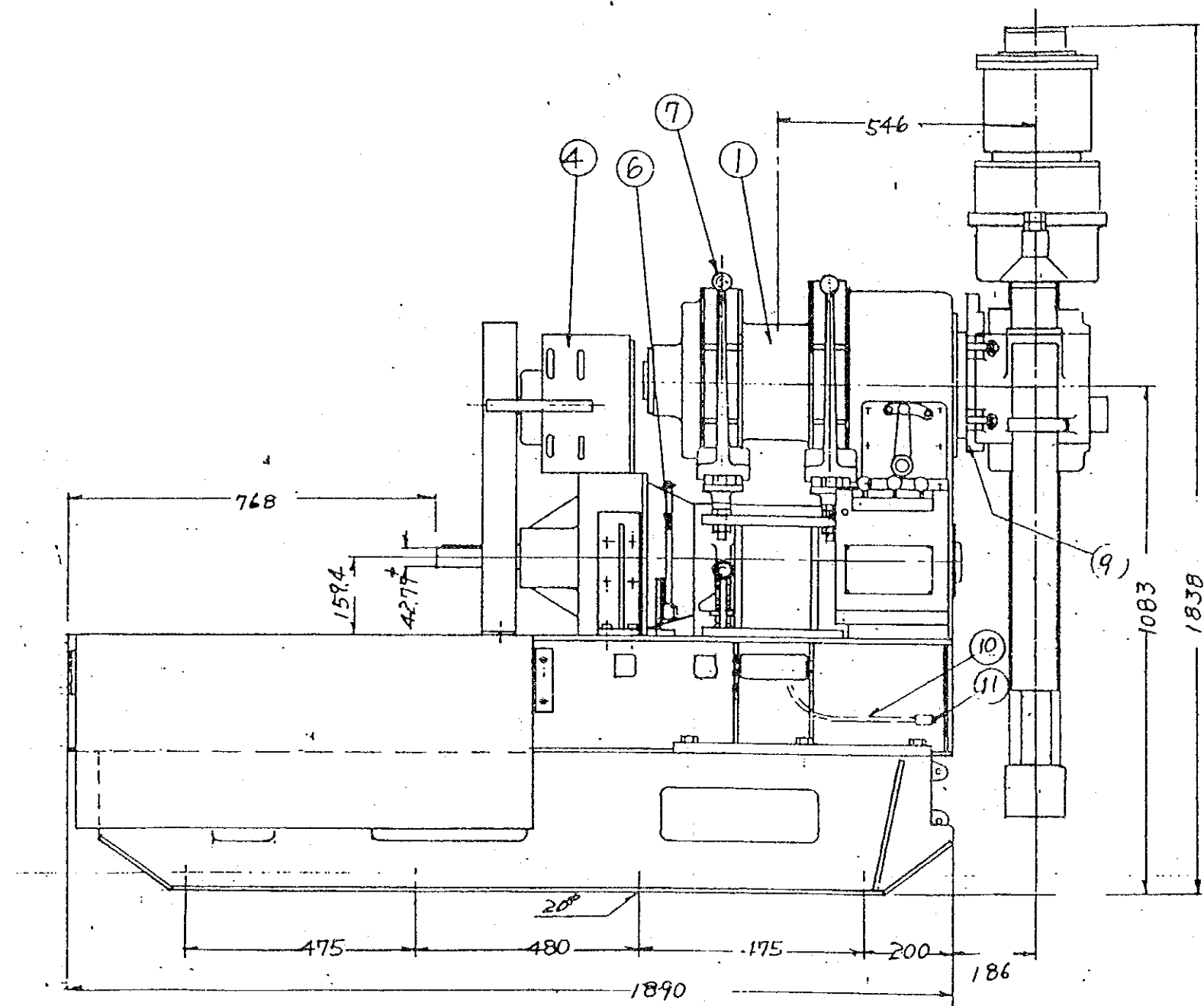


Fig. 36-1
Drilling Machine (1)

UNIT	ASSEMBLY	DWG. NO.

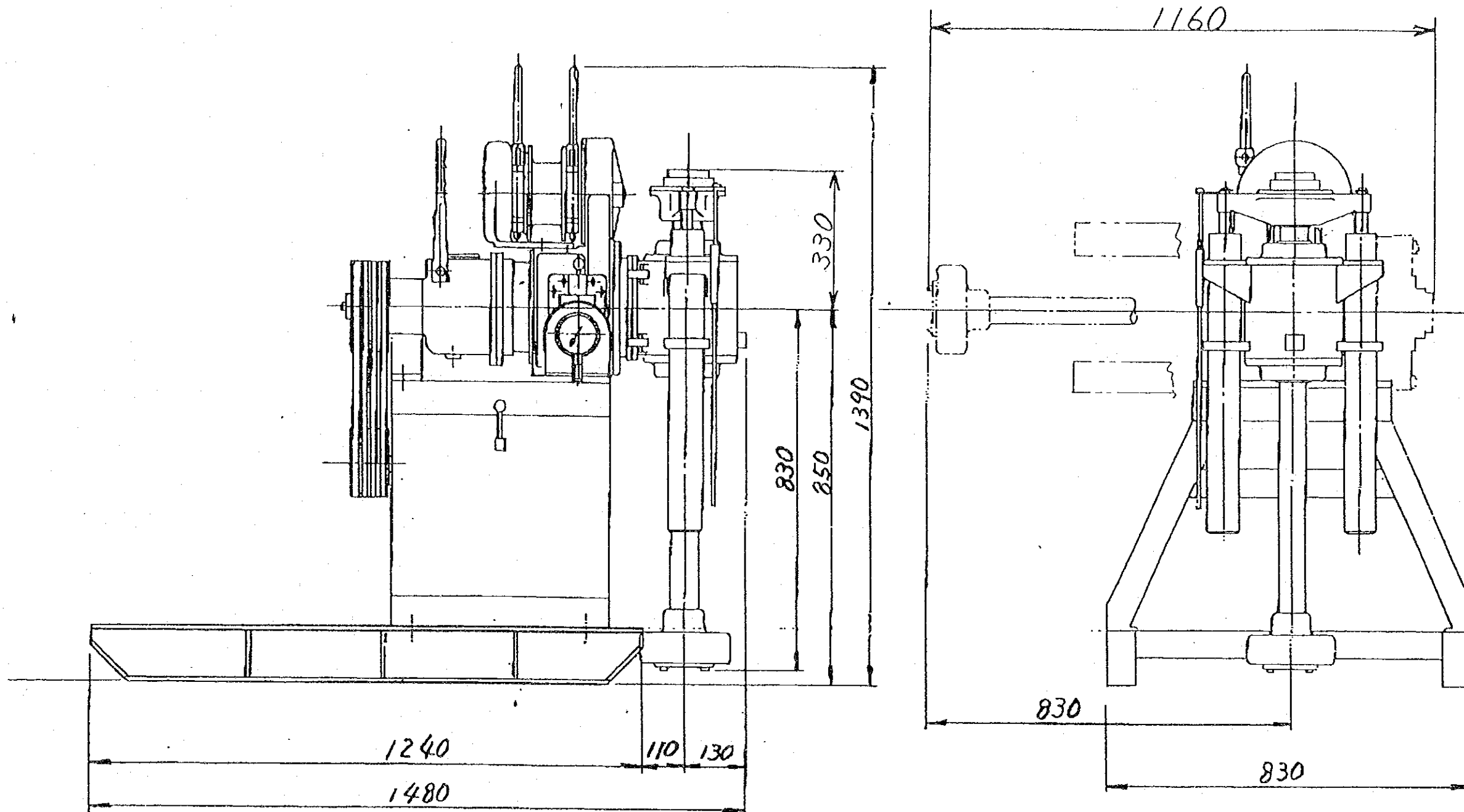


Fig.36-2
Drilling Machine (2)

