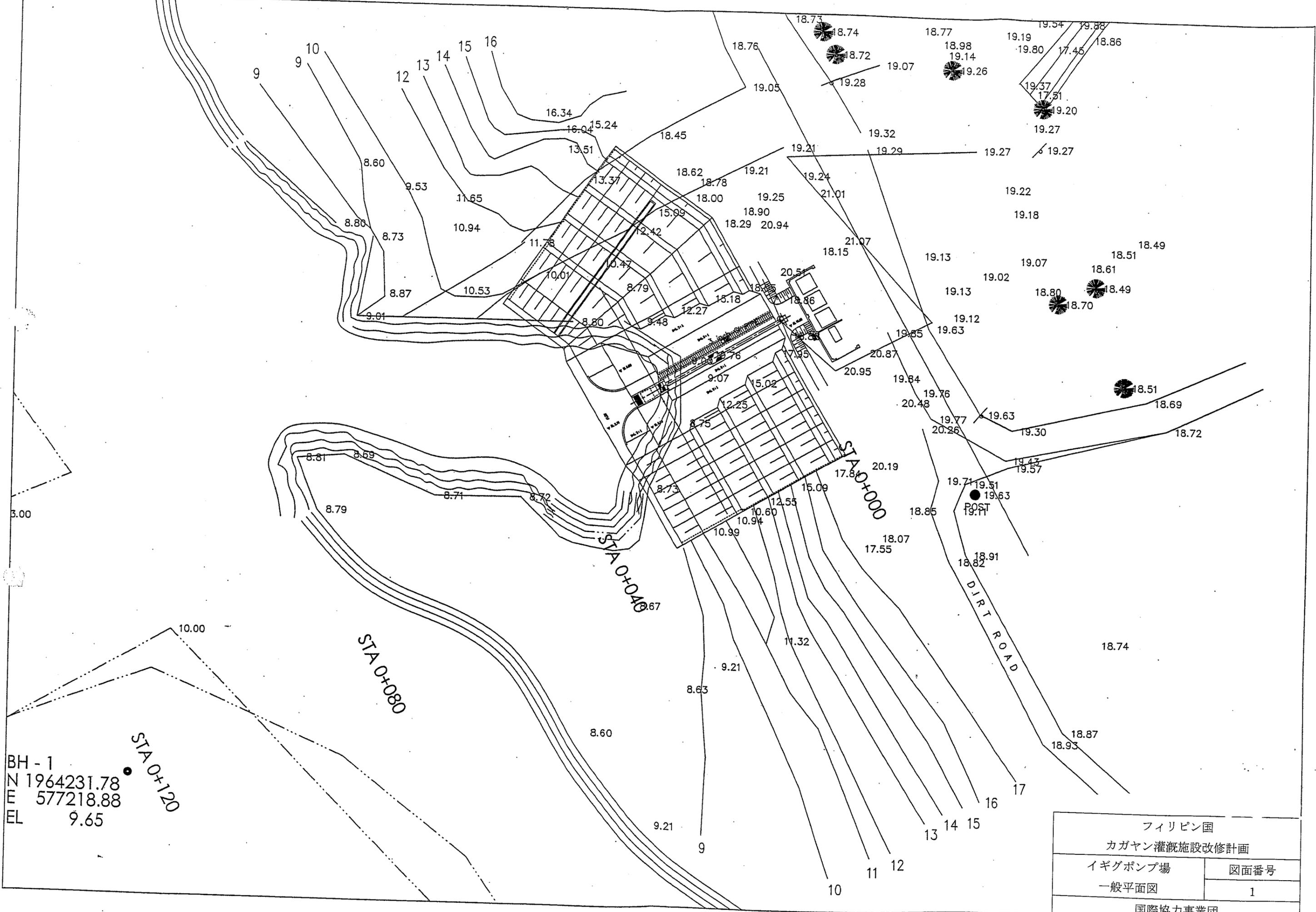
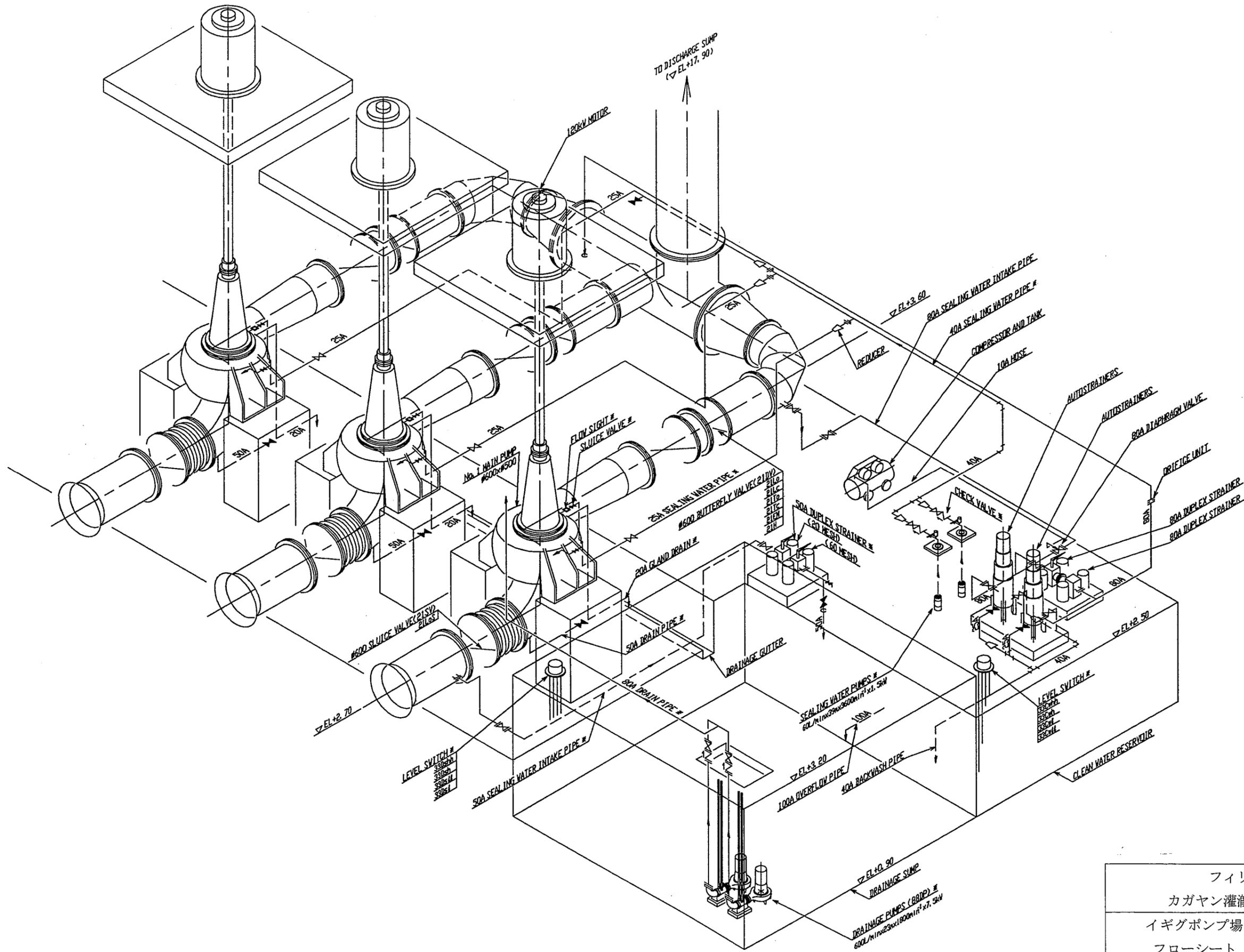


図 面 目 録

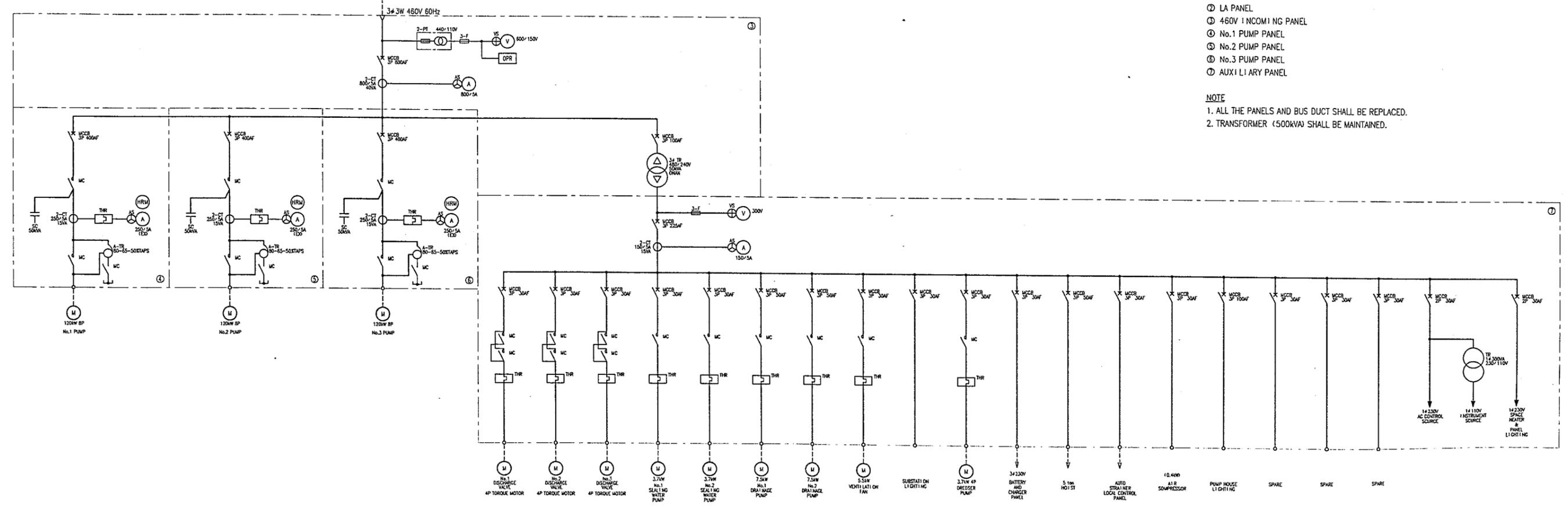
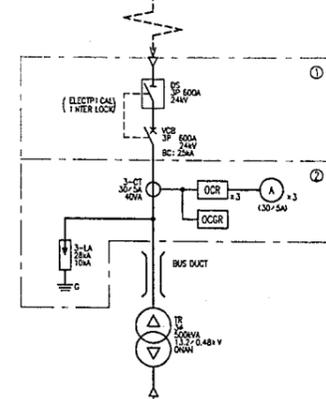
図面番号	図 面 名 称
1	イギグポンプ場 一般平面図
2	イギグポンプ場 護岸工構造図
3	イギグポンプ場 フローシート
4	イギグポンプ場 単線結線図
5	アムルングポンプ場 一般平面図
6	アムルングポンプ場 護岸工構造図
7	アムルングポンプ場 フローシート
8	アムルングポンプ場 単線結線図
9	マガピットポンプ場 フローシート
10	マガピットポンプ場 単線結線図
11	イギグ加圧ポンプ場 配置図
12	イギグ加圧ポンプ場 単線結線図
13	アムルング特高受変電設備 単線結線図
14	マガピット特高受変電設備 単線結線図





フィリピン国	
カガヤン灌漑施設改修計画	
イグポンプ場	図面番号
フローシート	3
国際協力事業団	

3φ 3W 13.2kV 60Hz
POWER TRANSMISSION LINE



ABBREVIATIONS

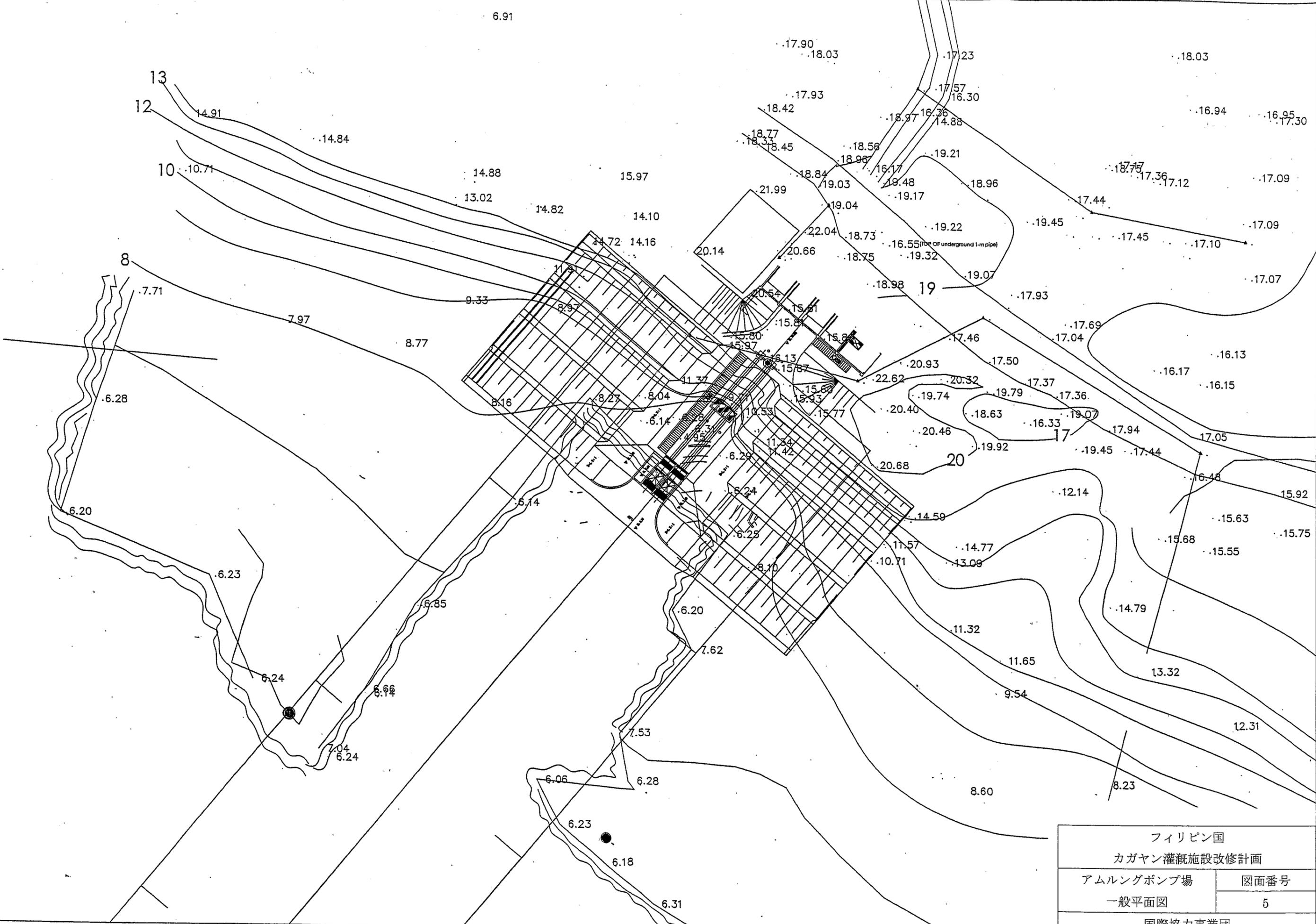
SYMBOLS	N A M E
A	AMMETER
AS	AMMETER CHANGE-OVER SWITCH
A-TR	AUTO TRANSFORMER
CT	CURRENT TRANSFORMER
DS	DISCONNECTING SWITCH
F	FUSE
HRM	HOUR METER
LA	LIGHTNING ARRESTER
MC	ELECTRO-MAGNETIC CONTACTOR
MCCB	MOLDED CASE CIRCUIT BREAKER
VCB	VACUUM CIRCUIT BREAKER
OCR	OVERCURRENT RELAY
OCGR	OVERCURRENT GROUND RELAY
SC	STATIC CONDENSER
THR	THERMAL OVERLOAD RELAY
TR	TRANSFORMER
V	VOLTMETER
VS	VOLTMETER CHANGE-OVER SWITCH
OFF	OPEN-PHASE RELAY

- PANEL SYMBOLS
- ① 13.2kV INCOMING PANEL
 - ② LA PANEL
 - ③ 460V INCOMING PANEL
 - ④ No.1 PUMP PANEL
 - ⑤ No.2 PUMP PANEL
 - ⑥ No.3 PUMP PANEL
 - ⑦ AUXILIARY PANEL

NOTE

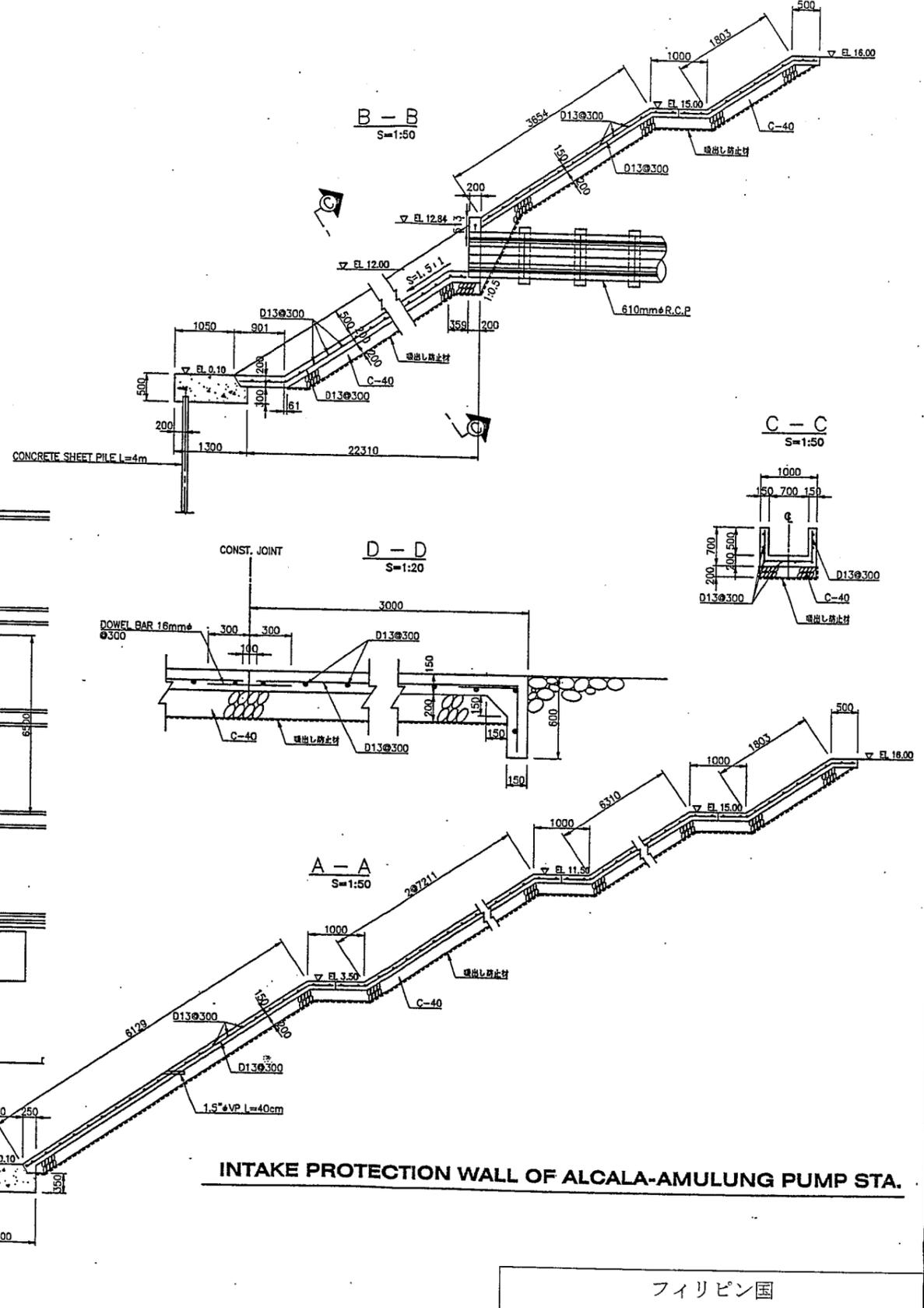
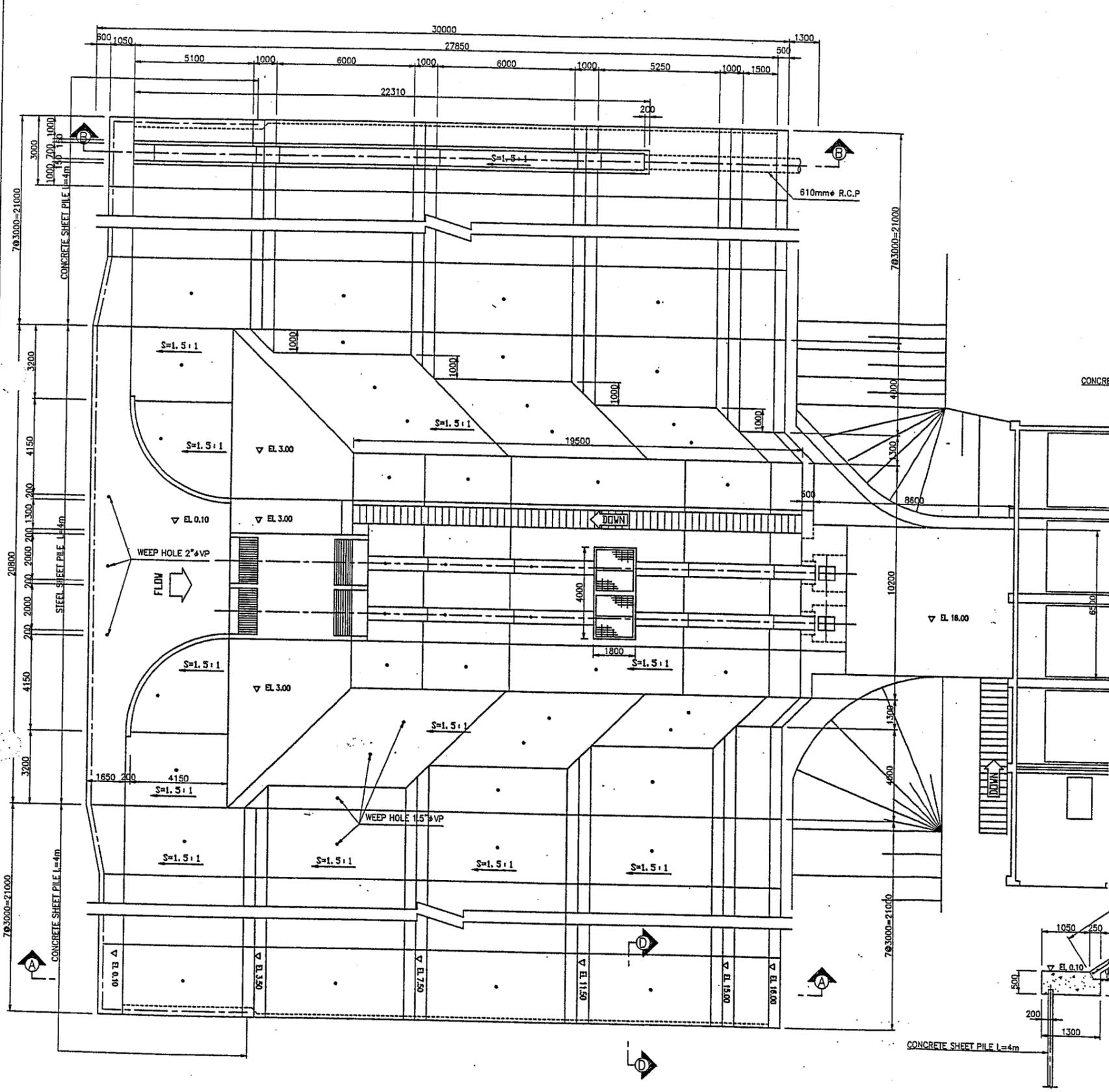
1. ALL THE PANELS AND BUS DUCT SHALL BE REPLACED.
2. TRANSFORMER (500kVA) SHALL BE MAINTAINED.

フィリピン国	
カガヤン灌漑施設改修計画	
イギグポンプ場	図面番号
単線結線図	4
国際協力事業団	



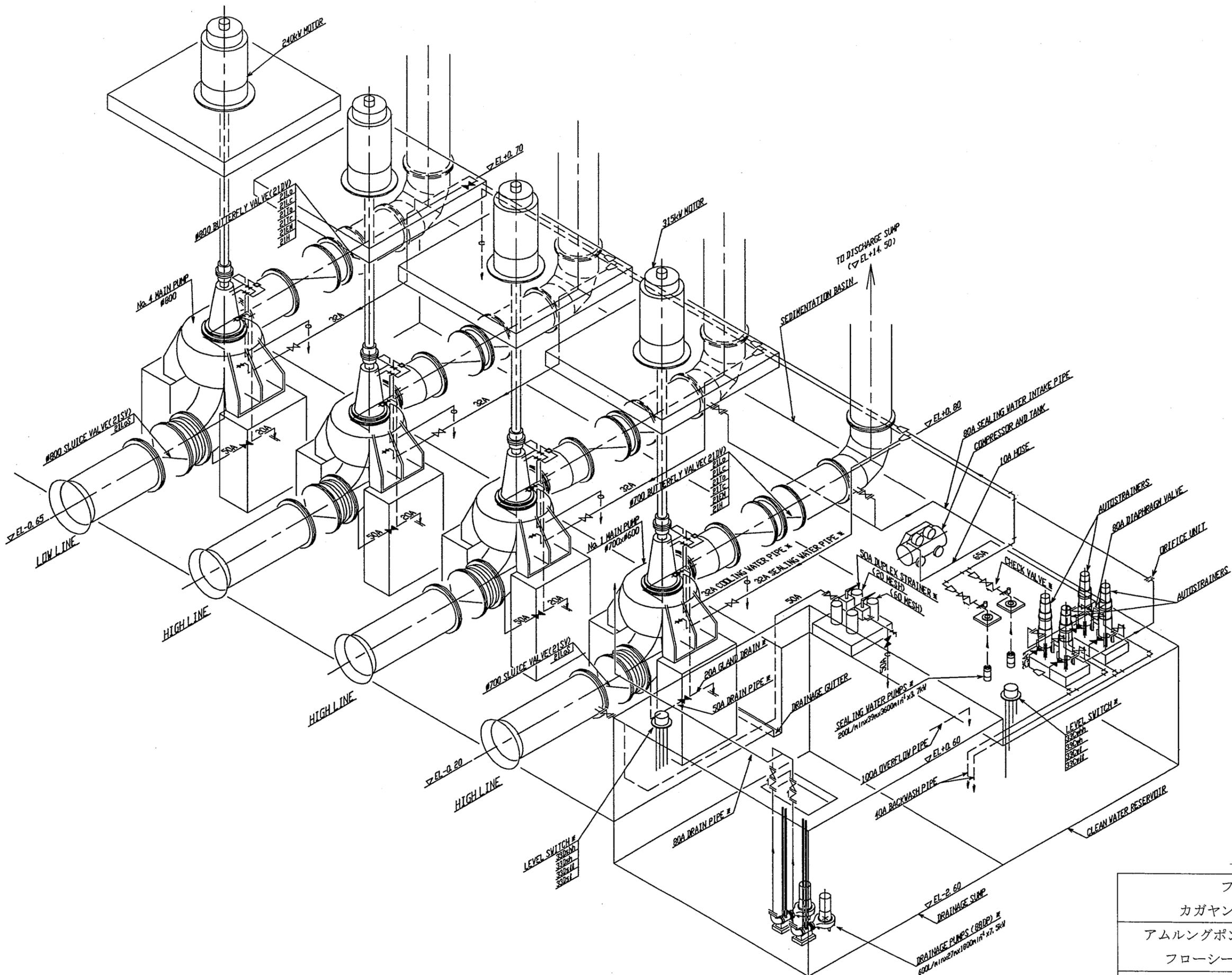
フィリピン国	
カガヤン灌漑施設改修計画	
アムルングポンプ場	図面番号
一般平面図	5
国際協力事業団	

PLAN OF PROTECTION WALL
S=1:100

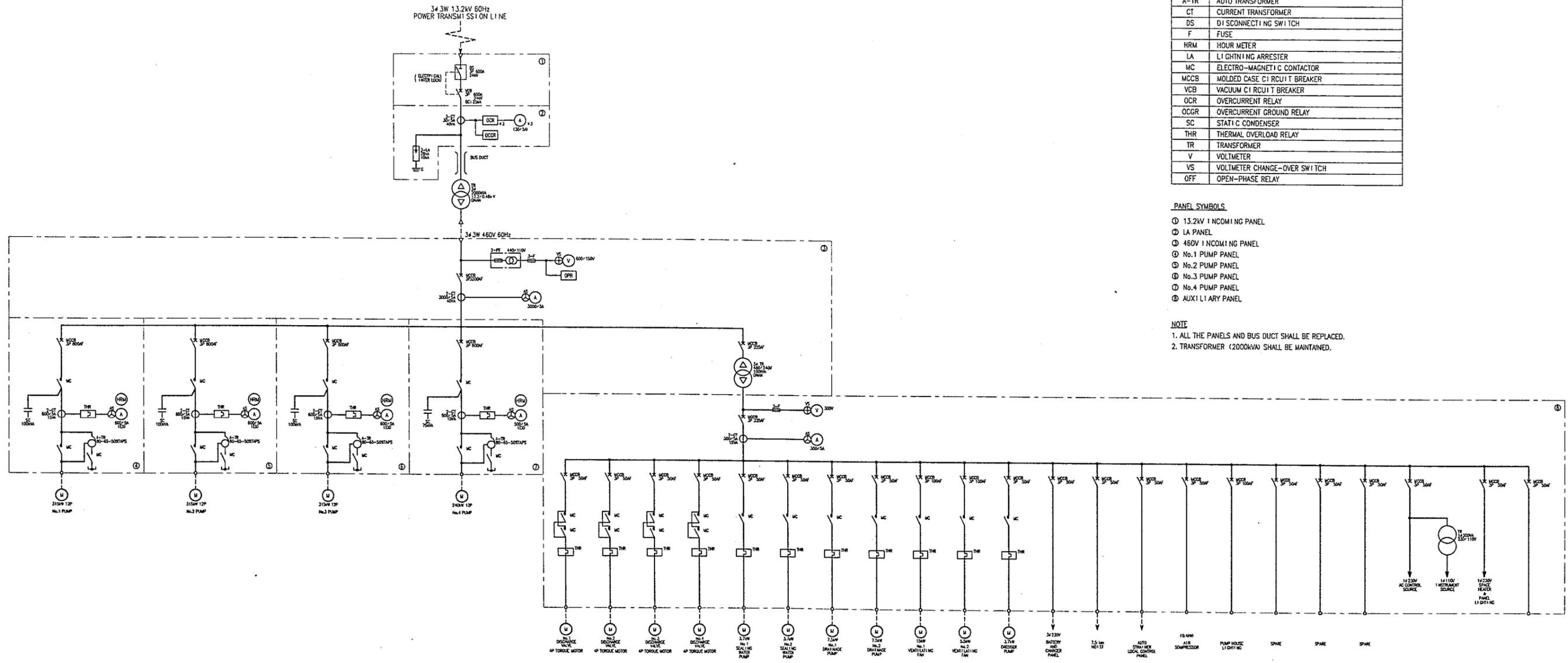


INTAKE PROTECTION WALL OF ALCALA-AMULUNG PUMP STA.

フィリピン国	
カガヤン灌漑施設改修計画	
アムルングポンプ場	図面番号
護岸工構造図	6
国際協力事業団	



フィリピン国	
カガヤン灌漑施設改修計画	
アムルングポンプ場	図面番号
フローシート	7
国際協力事業団	



ABBREVIATIONS

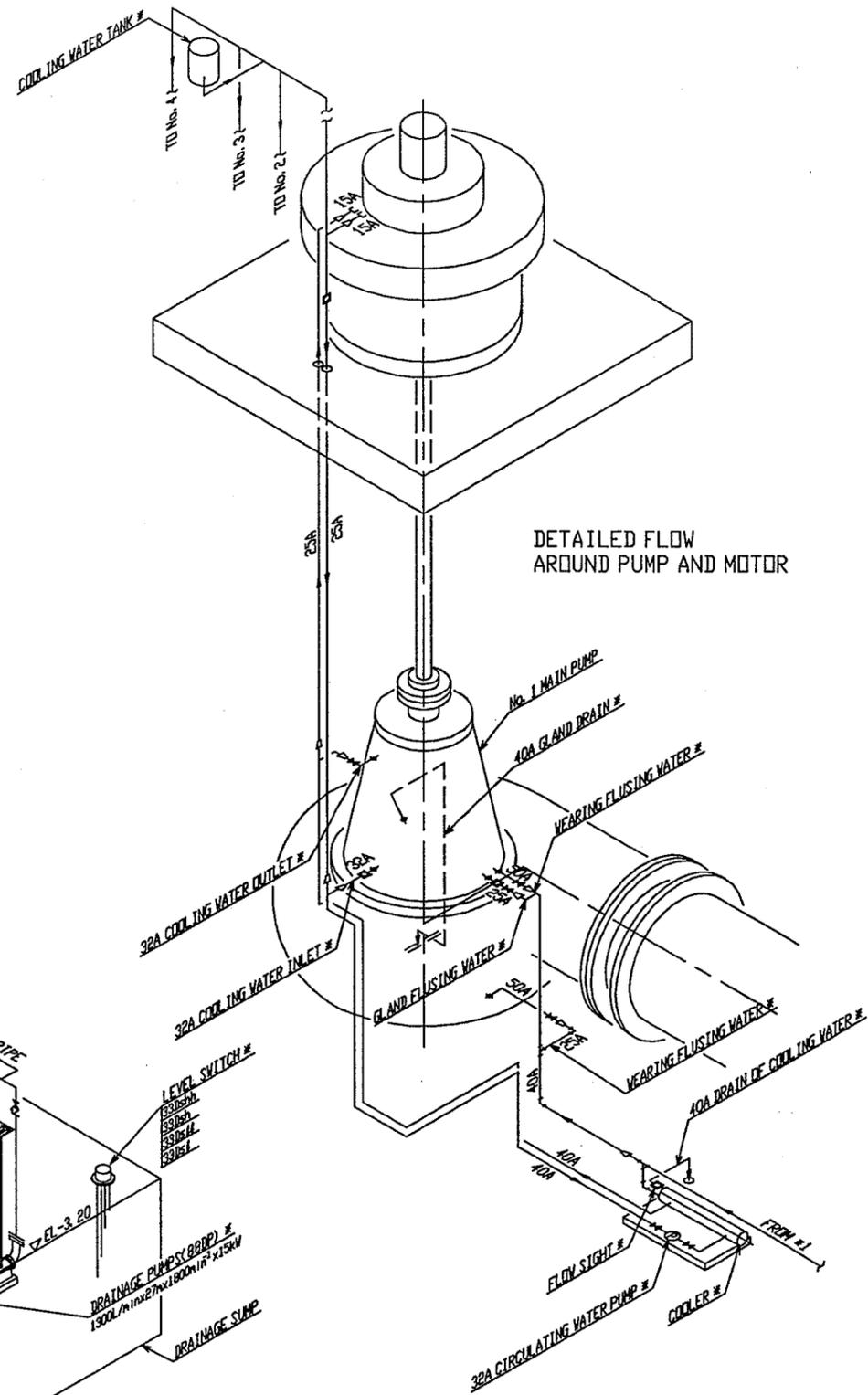
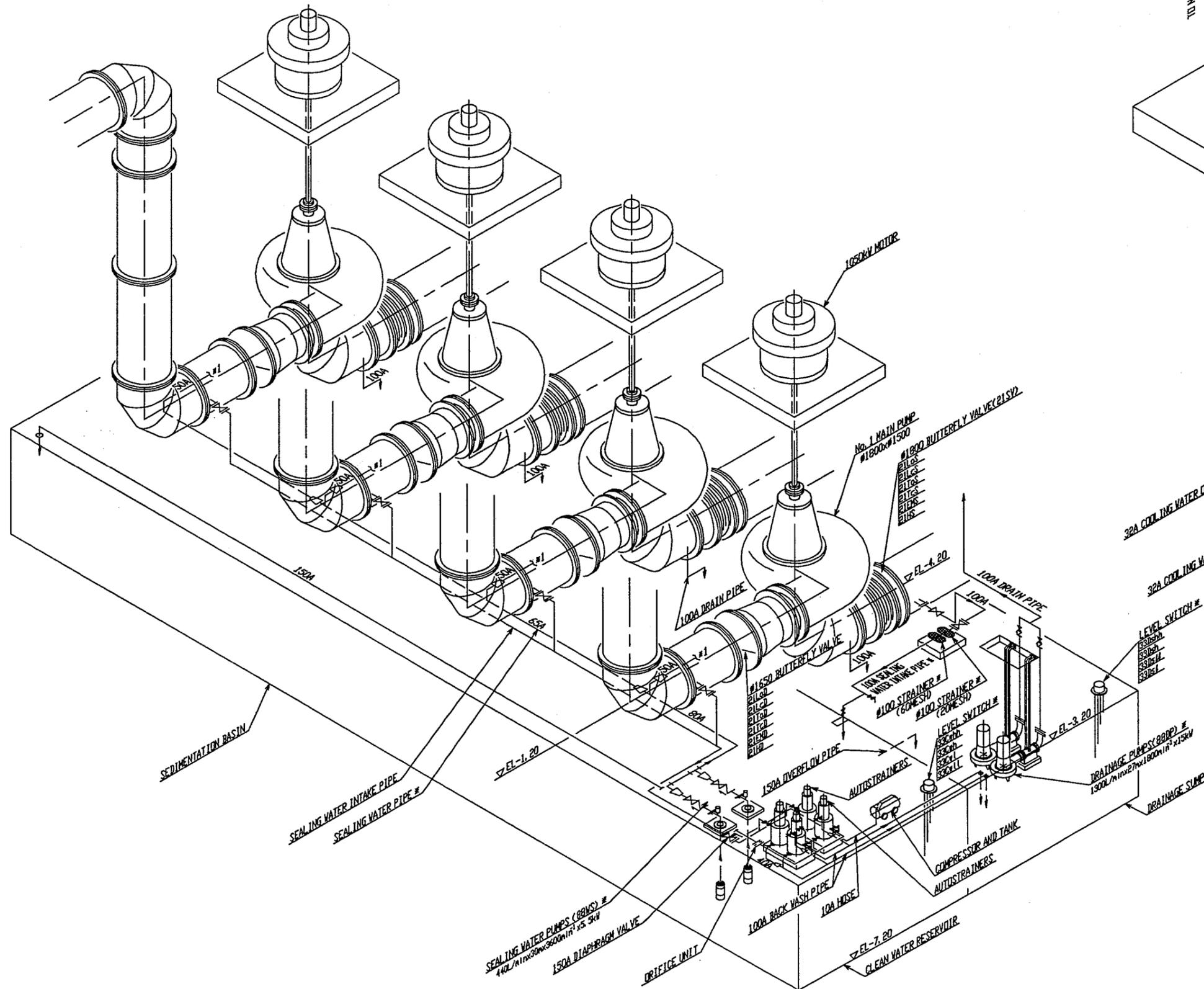
SYMBOLS	N A M E
A	AMMETER
AS	AMMETER CHANGE-OVER SWITCH
A-TR	AUTO TRANSFORMER
CT	CURRENT TRANSFORMER
DS	DISCONNECTING SWITCH
F	FUSE
HRM	HOUR METER
LA	LIGHTNING ARRESTER
MC	ELECTRO-MAGNETIC CONTACTOR
MCCB	MOLDED CASE CIRCUIT BREAKER
VCB	VACUUM CIRCUIT BREAKER
OCR	OVERCURRENT RELAY
OCGR	OVERCURRENT GROUND RELAY
SC	STATISTICAL CONDENSER
THR	THERMAL OVERLOAD RELAY
TR	TRANSFORMER
V	VOLTMETER
VS	VOLTMETER CHANGE-OVER SWITCH
OFF	OPEN-PHASE RELAY

- PANEL SYMBOLS
- ① 13.2kV INCOMING PANEL
 - ② LA PANEL
 - ③ 460V INCOMING PANEL
 - ④ No.1 PUMP PANEL
 - ⑤ No.2 PUMP PANEL
 - ⑥ No.3 PUMP PANEL
 - ⑦ No.4 PUMP PANEL
 - ⑧ AUXILIARY PANEL

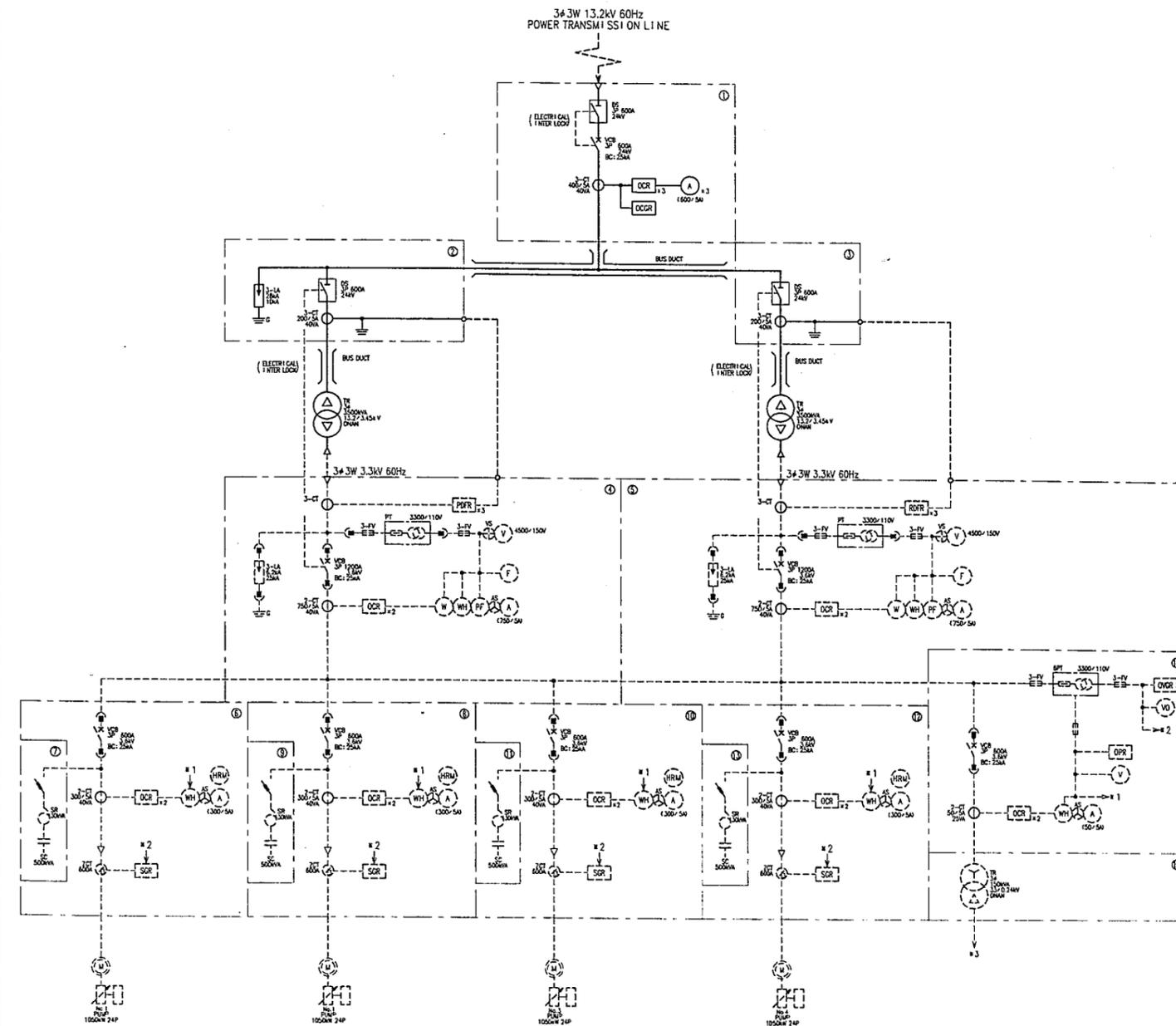
NOTE

1. ALL THE PANELS AND BUS DUCT SHALL BE REPLACED.
2. TRANSFORMER (2000kVA) SHALL BE MAINTAINED.

フィリピン国	
カガヤン灌漑施設改修計画	
アムルングポンプ場	図面番号
単線結線図	8
国際協力事業団	



フィリピン国 カガヤン灌漑施設改修計画	
マガピットポンプ場 フローシート	図面番号 9
国際協力事業団	

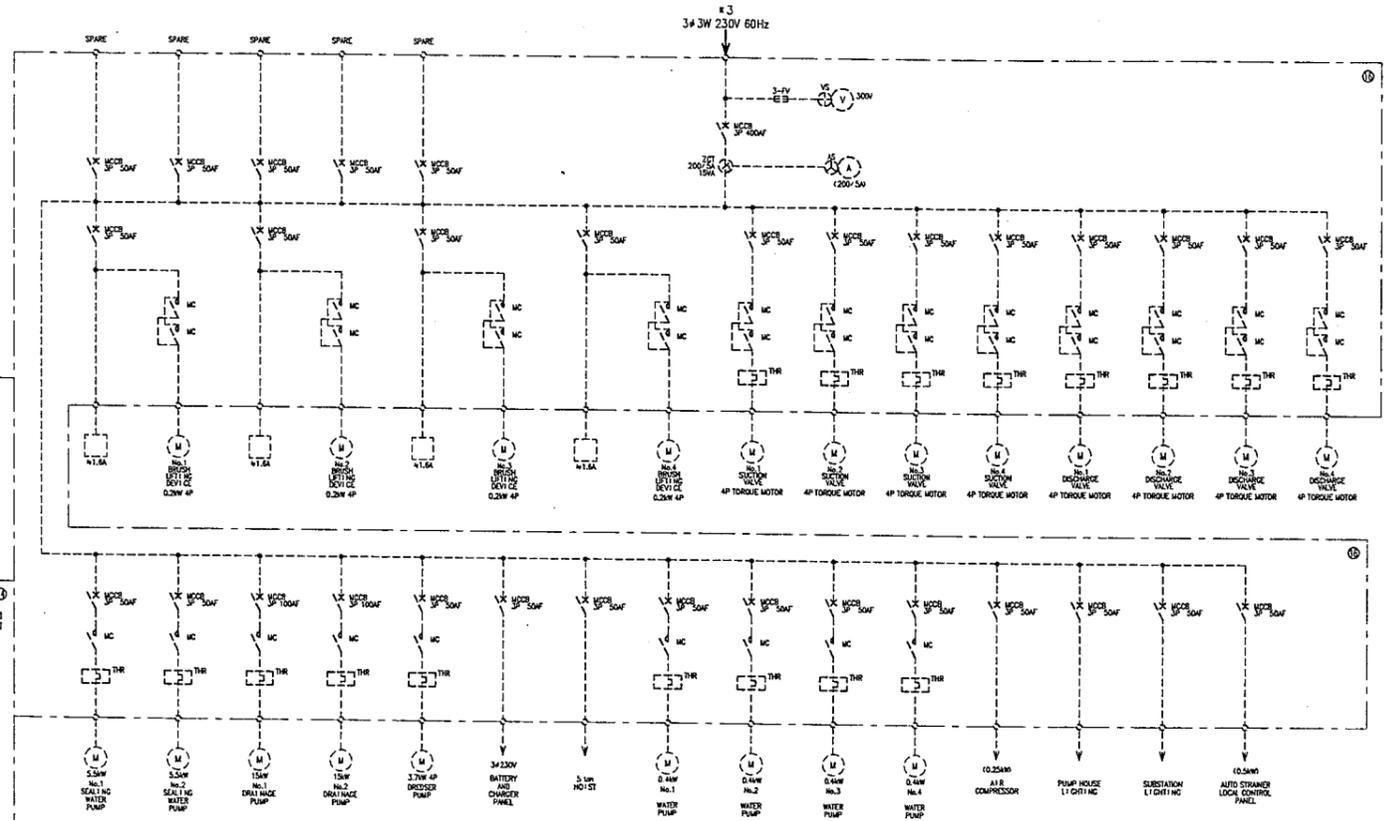


ABBREVIATIONS

SYMBOLS	N A M E	SYMBOLS	N A M E
A	AMMETER	OCR	OVERCURRENT RELAY
AS	AMMETER CHANGE-OVER SWITCH	OVR	OVERVOLTAGE GROUND RELAY
SR	SERIES REACTOR	PF	POWER FACTOR METER
CT	CURRENT TRANSFORMER	PT	VOLTAGE
SGR	SELECTIVE GROUND RELAY	PDFR	PERCENTAGE DIFFERENTIAL RELAY
DS	DISCONNECTING SWITCH	SC	STATIC CONDENSER
F	FUSE	THR	THERMAL OVERLOAD RELAY
Fv	FREQUENCY METER	TR	TRANSFORMER
GPT	GROUNDING POTENTIAL TRANSFORMER	OPR	OPEN-PHASE RELAY
HRM	HOUR METER	V	VOLTMETER
IM	INDUCTION MOTOR	VO	ZERO-PHASE SEQUENCE VOLTMETER
LA	LIGHTNING ARRESTER	VS	VOLTMETER CHANGE-OVER SWITCH
MC	ELECTRO-MAGNETIC CONTACTOR	W	WATT METER
MCB	MOLDED CASE CIRCUIT BREAKER	WH	WATT-HOUR METER
VCB	VACUUM CIRCUIT BREAKER	ZCT	ZERO-PHASE SEQUENCE CURRENT TRANSFORMER
OCGR	OVERCURRENT GROUND RELAY	CLR	CURRENT LIMITING RESISTOR

PANEL SYMBOLS

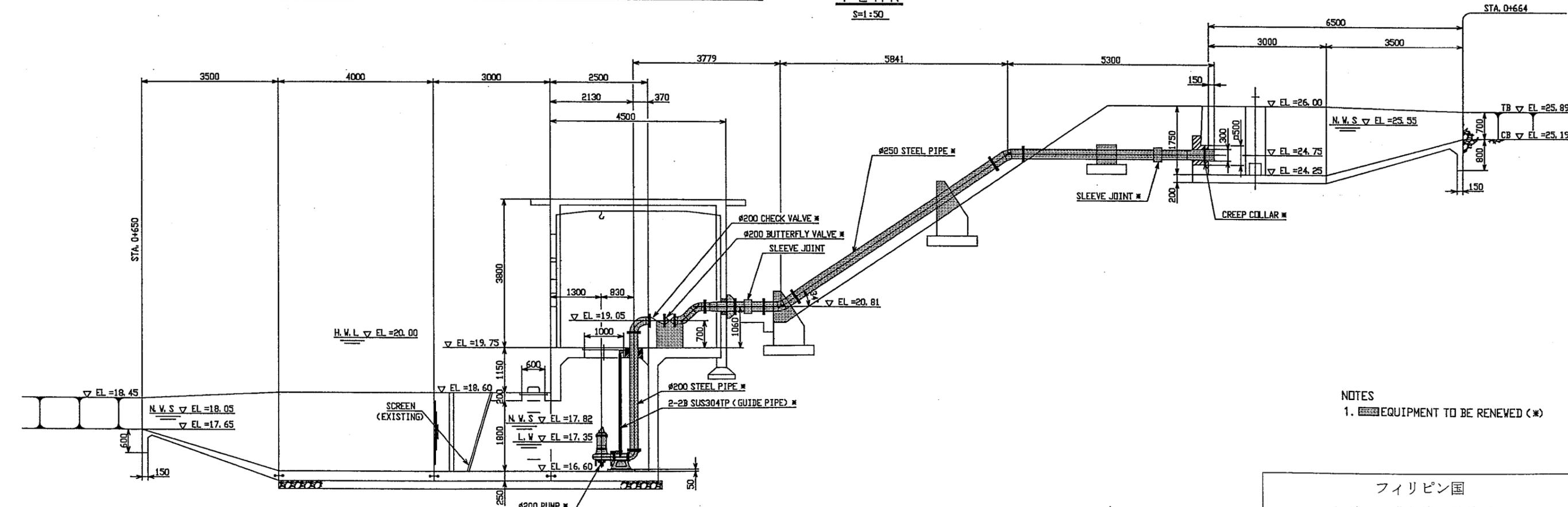
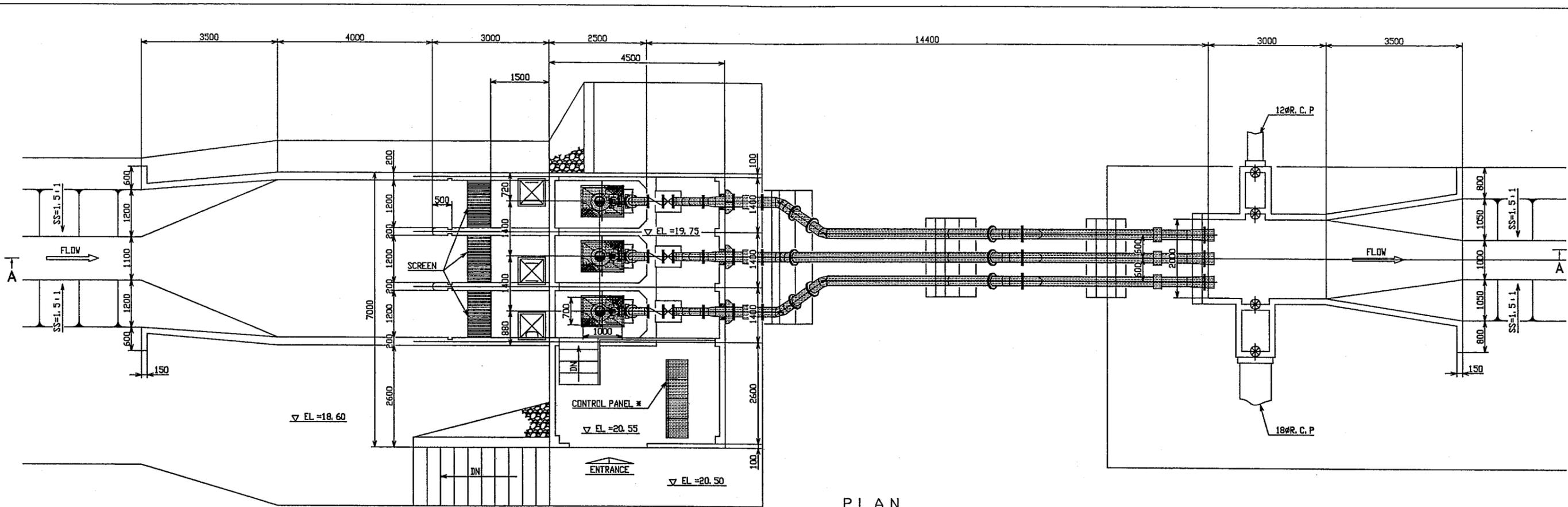
- ① 13.2kV INCOMING PANEL
- ② No.1 TR PRIM PANEL
- ③ No.2 TR PRIM PANEL
- ④ No.1 3.3kV INCOMING PANEL
- ⑤ No.2 3.3kV INCOMING PANEL
- ⑥ No.1 PUMP PANEL
- ⑦ No.1 SC PANEL
- ⑧ No.2 PUMP PANEL
- ⑨ No.2 SC PANEL
- ⑩ No.3 PUMP PANEL
- ⑪ No.3 SC PANEL
- ⑫ No.4 PUMP PANEL
- ⑬ No.4 SC PANEL
- ⑭ STA TR PRIM PANEL
- ⑮ STA TR PANEL
- ⑯ AUXILIARY PANEL



NOTE

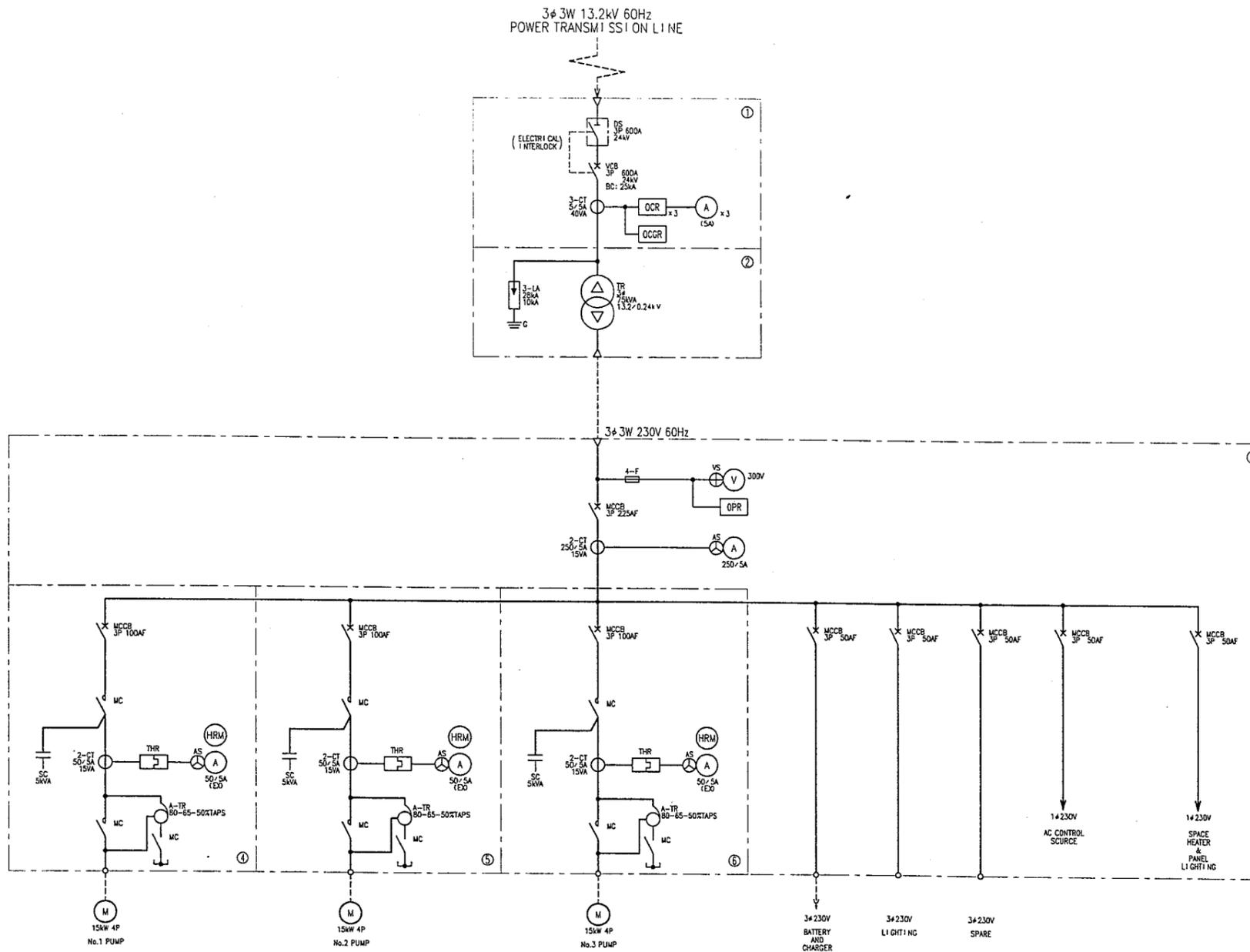
1. ALL THE PANELS AND BUS DUCTS DRAWN IN SOLID LINE SHALL BE REPLACED WITH NEW ONE.
2. TRANSFORMERS (3500kVA) SHALL BE MAINTAINED.

フィリピン国	
カガヤン灌漑施設改修計画	
マガピットポンプ場	図面番号
単線結線図	10
国際協力事業団	



NOTES
1. EQUIPMENT TO BE RENEWED (*)

フィリピン国	
カガヤン灌漑施設改修計画	
イググ加圧ポンプ場	図面番号
フローシート	11
国際協力事業団	



ABBREVIATIONS

SYMBOLS	N A M E
A	AMMETER
AS	AMMETER CHANGE-OVER SWITCH
A-TR	AUTO TRANSFORMER
CT	CURRENT TRANSFORMER
DS	DISCONNECTING SWITCH
F	FUSE
HRM	HOUR METER
I M	INDUCTION MOTOR
LA	LIGHTNING ARRESTER
MC	ELECTRO-MAGNETIC CONTACTOR
MCCB	MOLDED CASE CIRCUIT BREAKER
VCB	VACUUM CIRCUIT BREAKER
OCR	OVERCURRENT RELAY
OCGR	OVERCURRENT GROUND RELAY
SC	STATIC CONDENSER
THR	THERMAL OVERLOAD RELAY
TR	TRANSFORMER
V	VOLTMETER
VS	VOLTMETER CHANGE-OVER SWITCH
OPR	OPEN-PHASE RELAY

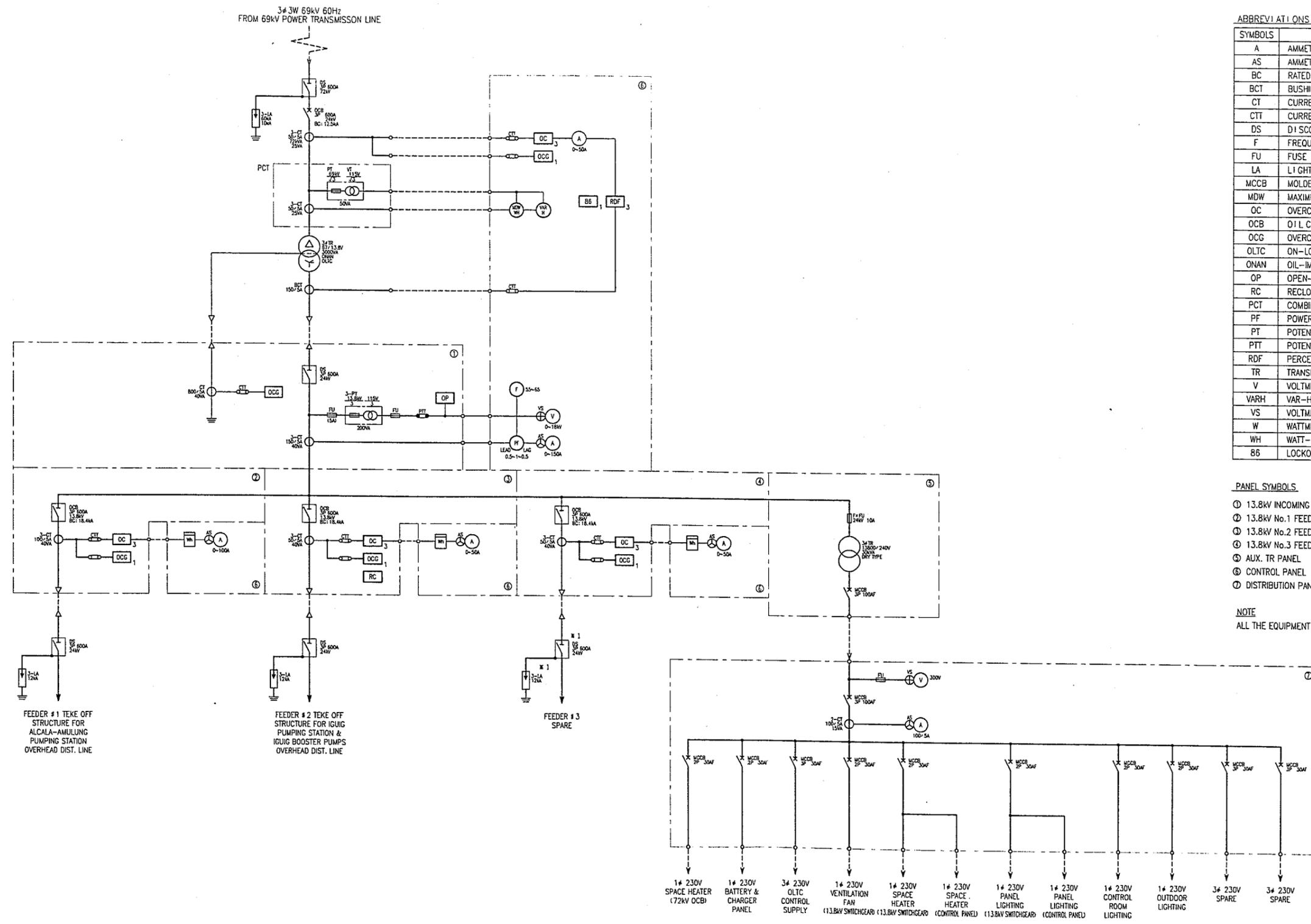
PANEL SYMBOLS

- ① 13.2KV INCOMING PANEL
- ② MAIN TR PANEL
- ③ 230V INCOMING PANEL
- ④ No.1 PUMP PANEL
- ⑤ No.2 PUMP PANEL
- ⑥ No.3 PUMP PANEL

NOTE

ALL THE PANELS SHALL BE REPLACED WITH NEW ONE.

フィリピン国 カガヤン灌漑施設改修計画	
イギグ加圧ポンプ場 単線結線図	図面番号 12
国際協力事業団	



ABBREVIATIONS

SYMBOLS	N A M E
A	AMMETER
AS	AMMETER CHANGE-OVER SWITCH
BC	RATED SHORT-CIRCUIT BREAKING CURRENT
BCT	BUSHING CURRENT TRANSFORMER
CT	CURRENT TRANSFORMER
CTT	CURRENT TESTING TERMINAL
DS	DISCONNECTING SWITCH
F	FREQUENCY METER
FU	FUSE
LA	LIGHTNING ARRESTER
MCCB	MOLDED CASE CIRCUIT BREAKER
MDW	MAXIMUM DEMAND WATTMETER
OC	OVERCURRENT RELAY
OCB	OIL CIRCUIT BREAKER
OCG	OVERCURRENT GROUND RELAY
OLTC	ON-LOAD TAP-CHANGER
ONAN	OIL-IMMERSED, SELF-COOLED
OP	OPEN-PHASE RELAY
RC	RECLOSED RELAY
PCT	COMBINED POTENTIAL CURRENT TRANSFORMER
PF	POWER FACTOR METER
PT	POTENTIAL TRANSFORMER
PTT	POTENTIAL TESTING TERMINAL
RDF	PERCENTAGE DIFFERENTIAL RELAY
TR	TRANSFORMER
V	VOLTMETER
VARH	VAR-HOUR METER
VS	VOLTMETER CHANGE-OVER SWITCH
W	WATTMETER
WH	WATT-HOUR METER
86	LOCKOUT RELAY

- PANEL SYMBOLS
- ① 13.8kV INCOMING PANEL
 - ② 13.8kV No.1 FEEDER PANEL
 - ③ 13.8kV No.2 FEEDER PANEL
 - ④ 13.8kV No.3 FEEDER PANEL
 - ⑤ AUX. TR PANEL
 - ⑥ CONTROL PANEL
 - ⑦ DISTRIBUTION PANEL (INDOOR)

NOTE
ALL THE EQUIPMENT SHALL BE MAINTAINED.

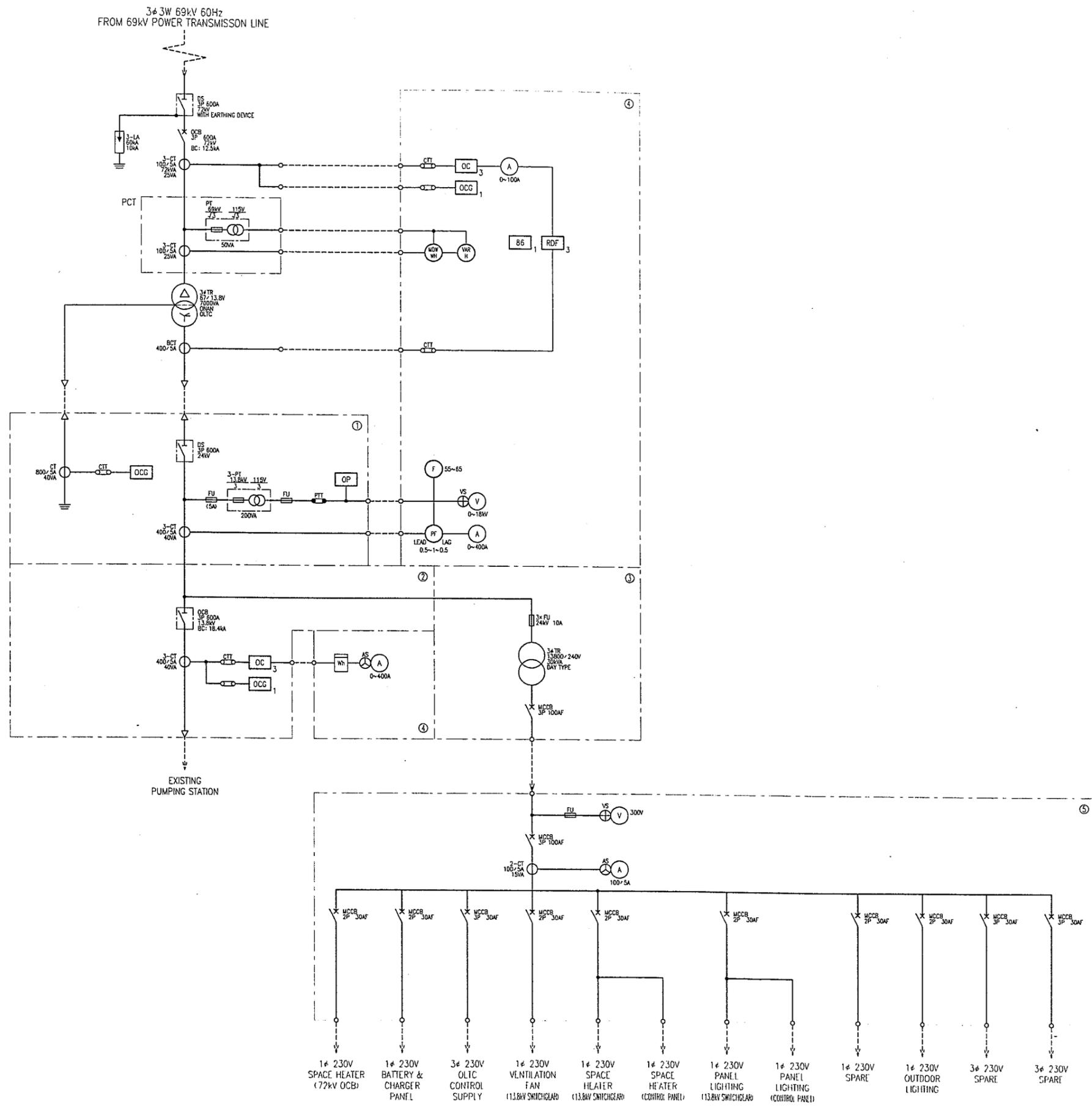
FEEDER # 1 TAKE OFF
STRUCTURE FOR
ALCALA-AMULUNG
PUMPING STATION
OVERHEAD DIST. LINE

FEEDER # 2 TAKE OFF
STRUCTURE FOR IGUG
PUMPING STATION &
IGUG BOOSTER PUMPS
OVERHEAD DIST. LINE

FEEDER # 3
SPARE

- 1x 230V SPACE HEATER (72kW OCB)
- 1x 230V BATTERY & CHARGER PANEL
- 3x 230V OLTC CONTROL SUPPLY
- 1x 230V VENTILATION FAN (11.8kV SWITCHGEAR)
- 1x 230V SPACE HEATER (11.8kV SWITCHGEAR)
- 1x 230V SPACE HEATER (CONTROL PANEL)
- 1x 230V SPACE HEATER (11.8kV SWITCHGEAR)
- 1x 230V PANEL LIGHTING (CONTROL PANEL)
- 1x 230V PANEL LIGHTING (CONTROL PANEL)
- 1x 230V CONTROL ROOM LIGHTING
- 1x 230V OUTDOOR LIGHTING
- 3x 230V SPARE
- 3x 230V SPARE

フィリピン国	
カガヤン灌漑施設改修計画	
アムルング特高受変電設備	図面番号
単線結線図	13
国際協力事業団	



ABBREVIATIONS

SYMBOLS	N A M E
A	AMMETER
AS	AMMETER CHANGE-OVER SWITCH
BC	RATED SHORT-CIRCUIT BREAKING CURRENT
BCT	BUSHING CURRENT TRANSFORMER
CT	CURRENT TRANSFORMER
CTT	CURRENT TESTING TERMINAL
DS	DISCONNECTING SWITCH
F	FREQUENCY METER
FU	FUSE
LA	LIGHTNING ARRESTER
MCCB	MOLDED CASE CIRCUIT BREAKER
MDW	MAXIMUM DEMAND WATTMETER
OC	OVERCURRENT RELAY
OCB	OIL CIRCUIT BREAKER
OCG	OVERCURRENT GROUND RELAY
OLTC	ON-LOAD TAP-CHANGER
ONAN	OIL-IMMERSED, SELF-COOLED
OP	OPEN-PHASE RELAY
PCT	COMBINED POTENTIAL CURRENT TRANSFORMER
PF	POWER FACTOR METER
PT	POTENTIAL TRANSFORMER
PTT	POTENTIAL TESTING TERMINAL
RDF	PERCENTAGE DIFFERENTIAL RELAY
TR	TRANSFORMER
V	VOLTMETER
VARH	VAR-HOUR METER
VS	VOLTMETER CHANGE-OVER SWITCH
W	WATTMETER
WH	WATT-HOUR METER
86	LOCKOUT RELAY

PANEL SYMBOLS

- ① 13.8kV INCOMING PANEL
- ② 13.8kV FEEDER PANEL
- ③ AUX. TR PANEL
- ④ CONTROL PANEL
- ⑤ DISTRIBUTION PANEL (INDOOR)

NOTE

ALL THE EQUIPMENT SHALL BE MAINTAINED.

フィリピン国	
カガヤン灌漑施設改修計画	
マガピット特高受変電設備	図面番号
単線結線図	14
国際協力事業団	