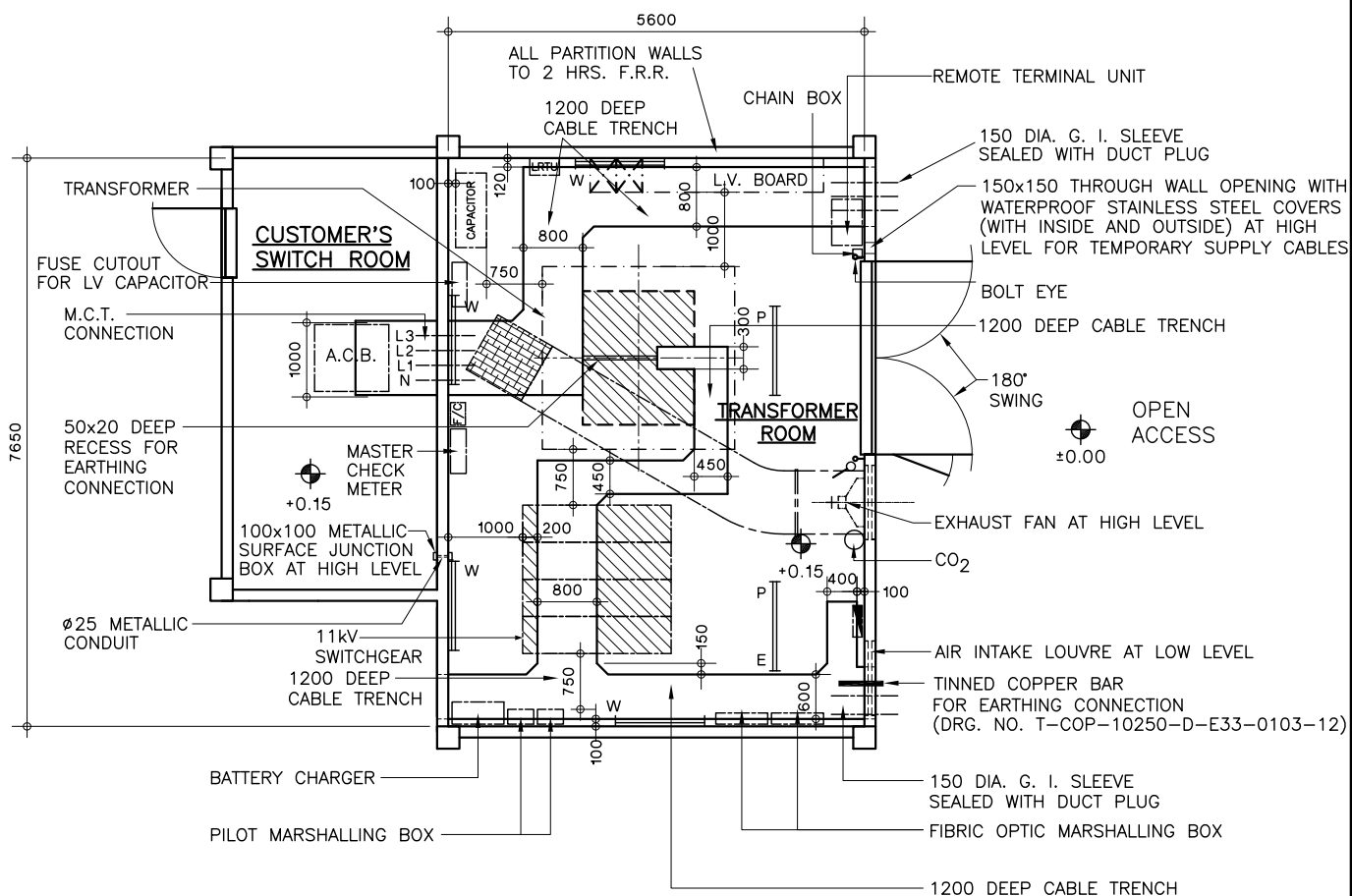


**LEGEND:**

	WALL MOUNTED LAMPS
	LAMPS SUSPENDED FROM CEILING
	LAMPS WITH EMERGENCY LIGHTING UNIT
	LIGHTING SWITCH
	FAN CONTROL PANEL
	LV MONITORING PANEL
	MCB BOARD

H	SYMBOLS, G.I. SLEEVE SIZE AND DEPTH OF CABLE TRENCH UPDATED. MASTER CHECK METER ADDED.
G	FUSE CUTOFF ADDED, DOOR, TRANSFORMER, HV SWITCHGEAR AND G.I. SLEEVE SIZE UPDATED. EMERGENCY LIGHTING ADDED.
F	CHAIN BOX ADDED AND CABLE TRENCH LADDER DELETED
E	UPDATED PHASE IDENTIFICATION, CABLE TRENCH LADDER AND E. LIGHTING ADDED
D	EMERGENCY LIGHTING UNIT DELETED. AIR INTAKE LOUVRE AND FAN CONTROL PANEL RELOCATED.
C	LRTU ADDED
B	GENERAL LAYOUT REVISION

CLP 中電

REVS.	3.4.03	3.12.04	21.12.05	3.1.06	08.08.07	16.12.09	22.03.12	18.03.14			
INITIAL	A	B	C	D	E	F	G	H	J	K	L
	K.C.C.	K.C.C.	K.C.C.	K.C.C.	K.C.C.	K.C.C.	K.C.C.	H.T.YU			

TITLE :

TYPICAL GROUND FLOOR SUBSTATION LAYOUT FOR ONE TRANSFORMER AND 11kV SWITCHGEAR

DRAWN: S. C. TO	DATE: 18-07-2002
CHECKED: K. C. CHENG	APPROVED: W. C. HO
SCALE: 1 : 100 (mm)	SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 1 0 2 H A



- | | |
|----------|---|
| H | SYMBOL, G.I. SLEEVE SIZE AND DEPTH OF CABLE TRENCH UPDATED. MASTER CHECK METER ADDED. |
| G | FUSE CUTOFF ADDED, DOOR, TRANSFORMER, HV SWITCHGEAR AND G.I. SLEEVE SIZE UPDATED. EMERGENCY LIGHTING ADDED. |
| F | CHAIN BOX ADDED AND CABLE TRENCH LADDER DELETED |
| E | UPDATED PHASE IDENTIFICATION, CBALE TRENCH LADDER AND E. LIGHTING ADDED. |
| D | EMERGENCY LIGHTING UNIT DELETED. AIR INTAKE LOUVRE AND FAN CONTROL PANEL RELOCATED. |
| C | LRTU ADDED |
| B | GENERAL LAYOUT REVISION |

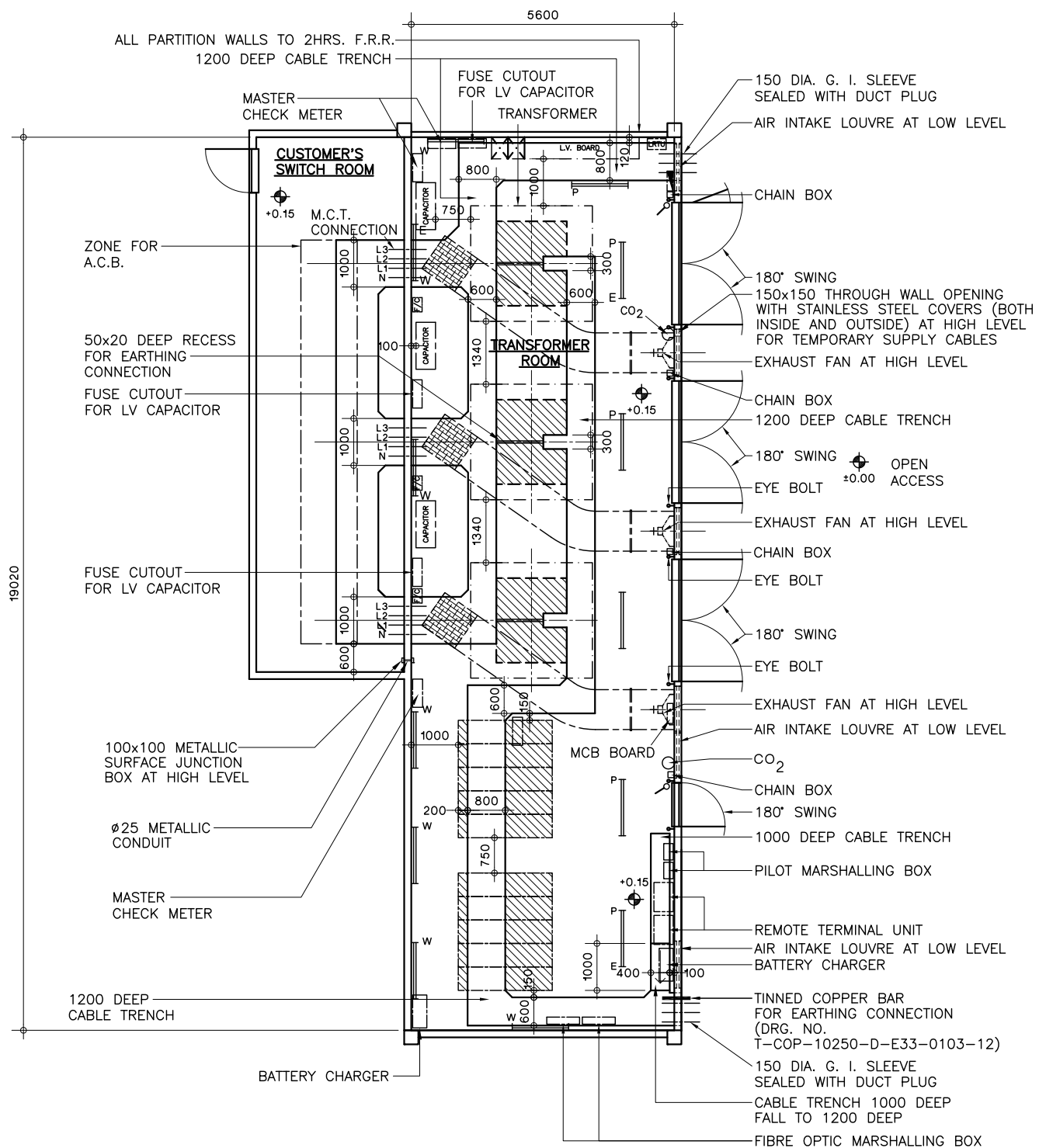


TITLE :

DRAWN: S. C. TO	DATE: 19-07-2002
CHECKED: K. C. CHENG	APPROVED: W. C. HO
SCALE: 1 : 100 (mm)	SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 1 0 3 H A

**LEGEND:**

- LIGHTING SWITCH (2-WAY/INTERMEDIATE SWITCHING CONTROL FOR MULTIPLE ENTRANCE DOORS)
 LAMPS SUSPENDED FROM CEILING
 WALL MOUNTED LAMPS
 FAN CONTROL PANEL

- LAMPS WITH EMERGENCY LIGHTING UNIT
 LV MONITORING PANEL
 MCB BOARD

J SYMBOLS, G.I. SLEEVE SIZE AND DEPTH OF CABLE TRENCH UPDATED. MASTER CHECK METER ADDED

CLP 中電

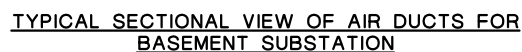
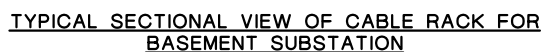
DRAWN: S. C. TO DATE: 19-07-2002
 CHECKED: K. C. CHENG APPROVED: W. C. HO
 SCALE: 1 : 125 (mm) SHEET(S) IN SET:

REVS.	3.4.03	30.11.04	21.12.05	3.1.06	13.4.06	13.8.07	16.12.09	23.03.12	18.03.14		
INITIAL	A	B	C	D	E	F	G	H	J	K	L
	K.C.C.	K.C.C.	K.C.C.	K.C.C.	K.C.C.	K.C.C.	K.C.C.	K.C.C.	H.T.YU		

TITLE :

TYPICAL GROUND FLOOR SUBSTATION
LAYOUT FOR THREE TRANSFORMERS AND
11kV SWITCHGEAR

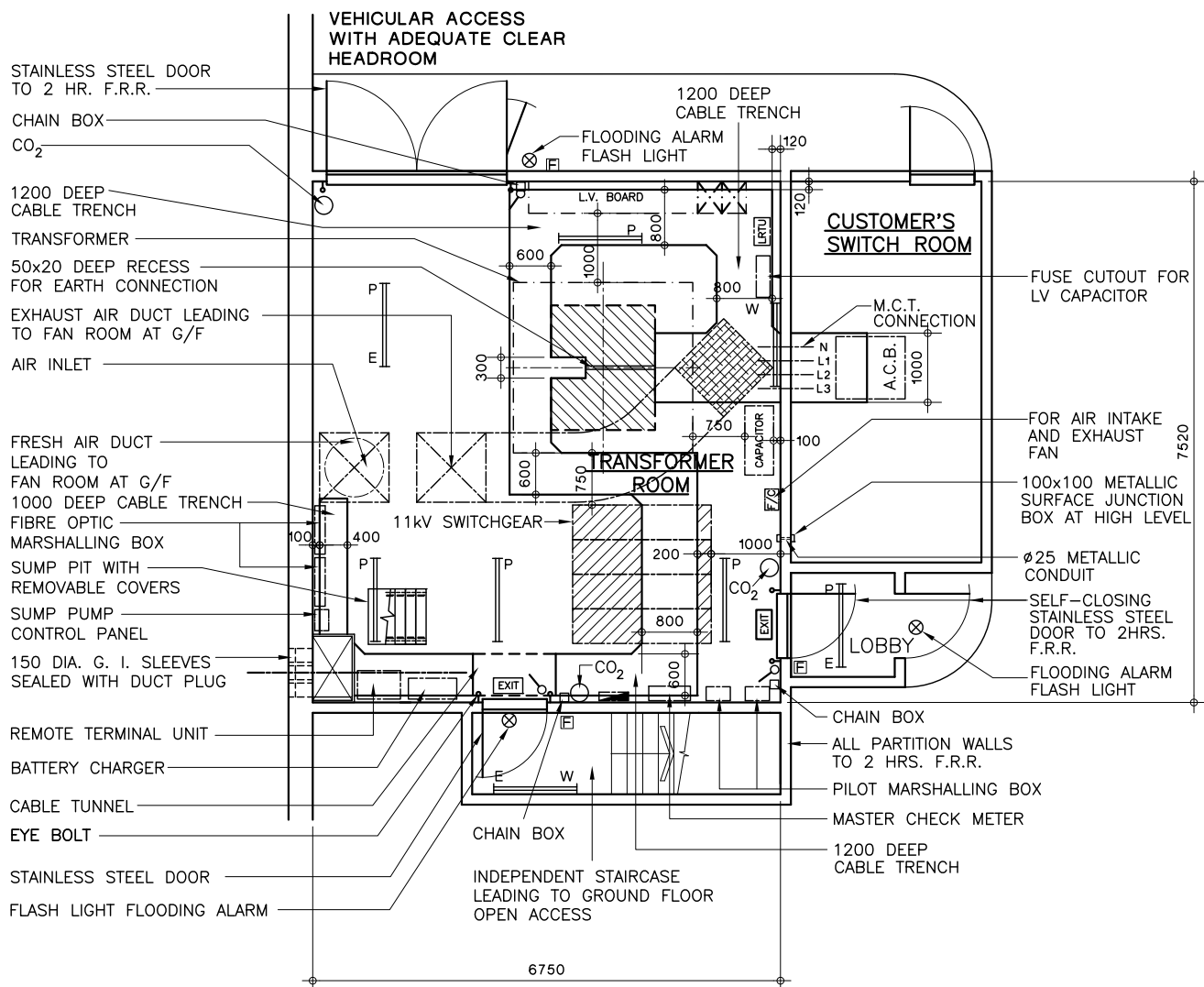
ASSET MANAGEMENT DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 1 0 4 J A



MECHANICAL VENTILATION SYSTEM SHALL BE INSTALLED TO ADEQUATELY VENTILATE THE ACCESS CORRIDOR AND STAIR LEADING TO BASEMENT SUBSTATION.



ALL RIGHTS RESERVED AND REPRODUCTION IN ANY FORM MUST BE APPROVED BY CLP POWER



LEGEND:

- | | |
|---|---|
|  | WALL MOUNTED LAMPS |
|  | LAMPS SUSPENDED FROM CEILING |
|  | LAMPS WITH EMERGENCY LIGHTING UNIT |
|  | LIGHTING SWITCH (2-WAY/INTERMEDIATE SWITCHING
CONTROL FOR MULTIPLE ENTRANCE DOORS) |
|  | FAN AUTO/MANUAL OPERATION SWITCH |
|  | FAN CONTROL PANEL |
|  | LV MONITORING PANEL |
|  | MCB BOARD |

H	SYMBOLS, G.I. SLEEVE SIZE AND DEPTH OF CABLE TRENCH UPDATED. MASTER CHECK METER ADDED.
G	FUSE CUTOUT ADDED, DOOR, TRANSFORMER, HV SWITCHGEAR AND G.I. SLEEVE SIZE UPDATED
F	CHAIN BOX ADDED AND CABLE TRENCH LADDER DELETED
E	PHASE IDENTIFICATION UPDATED SECTIONAL VIEWS AND CABLE TRENCH LADDER ADDED.
D	FAN CONTROL PANEL FOR AIR INTAKE AND EXHAUST FAN RELOCATED
C	LRTU ADDED
B	GENERAL LAYOUT REVISION



REVS.	03.08.04	08.12.04	21.12.05	5.1.06	08.08.07	16.12.09	26.03.12	18.03.14			
	A	B	C	D	E	F	G	H	J	K	L
INITIAL	K.C.C	K.C.C	K.C.C	K.C.C	K.C.C	K.C.C	K.C.C	H.YU			

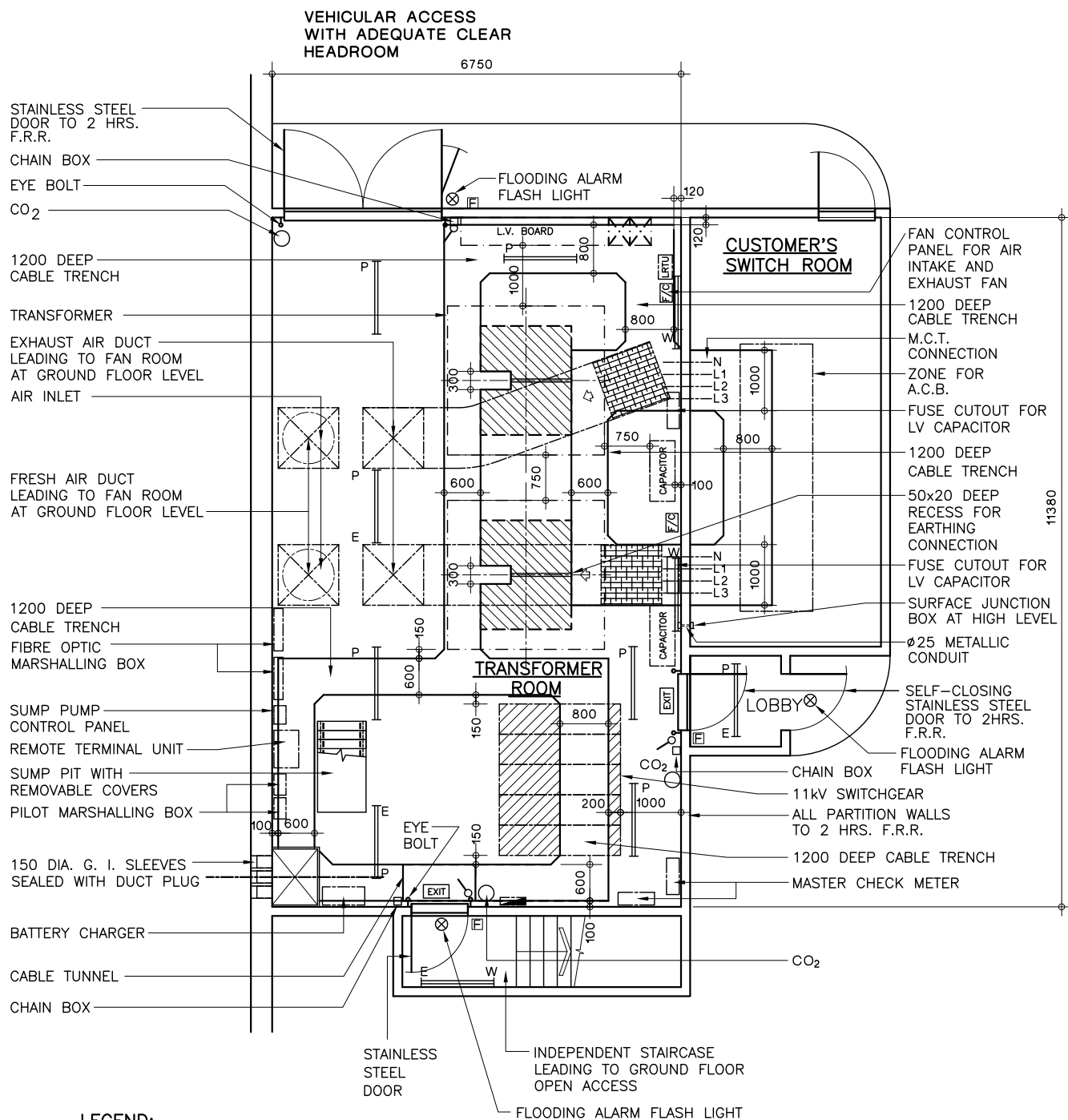
TITLE :

TYPICAL BASEMENT SUBSTATION LAYOUT FOR
ONE TRANSFORMER AND 11kV SWITCHGEAR

DRAWN: S. C. TO	DATE: 22-07-2002
CHECKED: K. C. CHENG	APPROVED: W. C. HO
SCALE: 1 : 100 (mm)	SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 1 0 6 H A



LEGEND:

- | | |
|---|--|
|  | WALL MOUNTED LAMPS |
|  | LAMPS SUSPENDED FROM CEILING |
|  | LAMPS WITH EMERGENCY LIGHTING UNIT |
|  | LIGHTING SWITCH (2-WAY/INTERMEDIATE SWITCHING CONTROL FOR MULTIPLE ENTRANCE DOORS) |
|  | FAN AUTO/MANUAL OPERATION SWITCH |
|  | FAN CONTROL PANEL |
|  | LV MONITORING PANEL |
|  | MCB BOARD |

H	SYMBOLS, G.I. SLEEVE SIZE AND DEPTH OF CABLE TRENCH UPDATED, FIRE EXTINGUISHER ADDED. MASTER CHECK METER ADDED.
G	FUSE CUTOUT ADDED, DOOR, TRANSFORMER, HV SWITCHGEAR AND G.I. SLEEVE SIZE UPDATED
F	CHAIN BOX ADDED AND CABLE TRENCH LADDER DELETED
E	PHASE IDENTIFICATION UPDATED, FAN SWITCH AND CABLE TRENCH LADDER ADDED
D	FAN CONTROL PANEL FOR AIR INTAKE AND EXHAUST FAN RELOCATED
C	LRTU ADDED
B	GENERAL LAYOUT REVISION



REVS.	03-9-04	09-12-04	21-12-05	5-1-06	16.08.07	16.12.09	26.03.12	18.03.14			
	A	B	C	D	E	F	G	H	J	K	L
INITIAL	K.C.C.	K.C.C.	K.C.C.	K.C.C.	K.C.C.	K.C.C.	K.C.C.	H.T.Y.U			

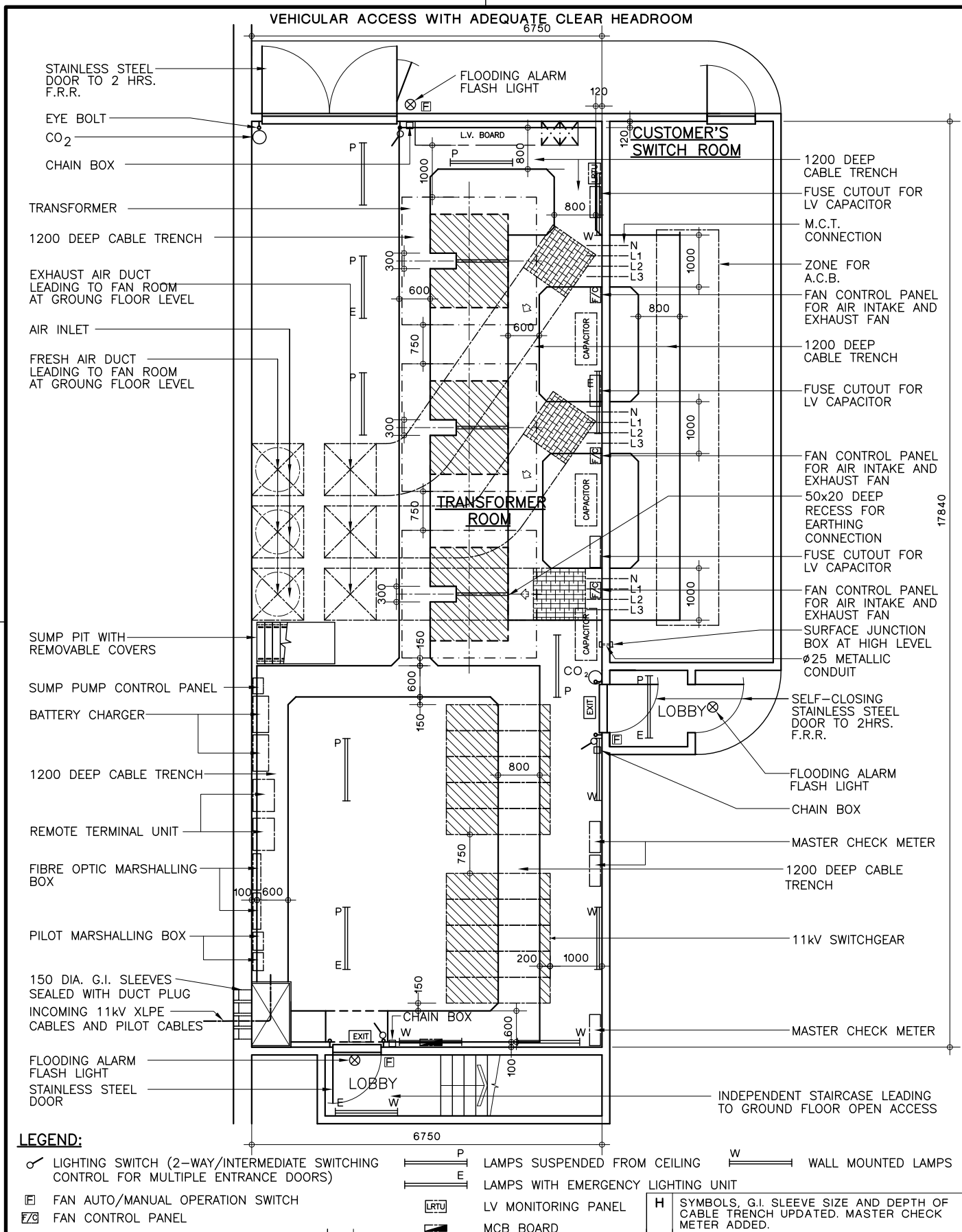
TITLE :

TYPICAL BASEMENT SUBSTATION LAYOUT FOR TWO TRANSFORMERS AND 11kV SWITCHGEAR

DRAWN: S. C. TO	DATE: 22-07-2002
CHECKED: K. C. CHENG	APPROVED: W. C. HO
SCALE: 1 : 100 (mm)	SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO.	T	C	O	P	1	0	2	5	0	D	E	3	3	0	1	0	1	0	7	H	A
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CLP 中電

REV.	3.4.03	1.12.04	21.12.05	5.1.06	16.08.07	16.12.09	26.03.12	18.03.14			
INITIAL	A	B	C	D	E	F	G	H	J	K	L
	K.C.C.	K.C.C.	K.C.C.	K.C.C.	K.C.C.	K.C.C.	K.C.C.	H.T.YU			

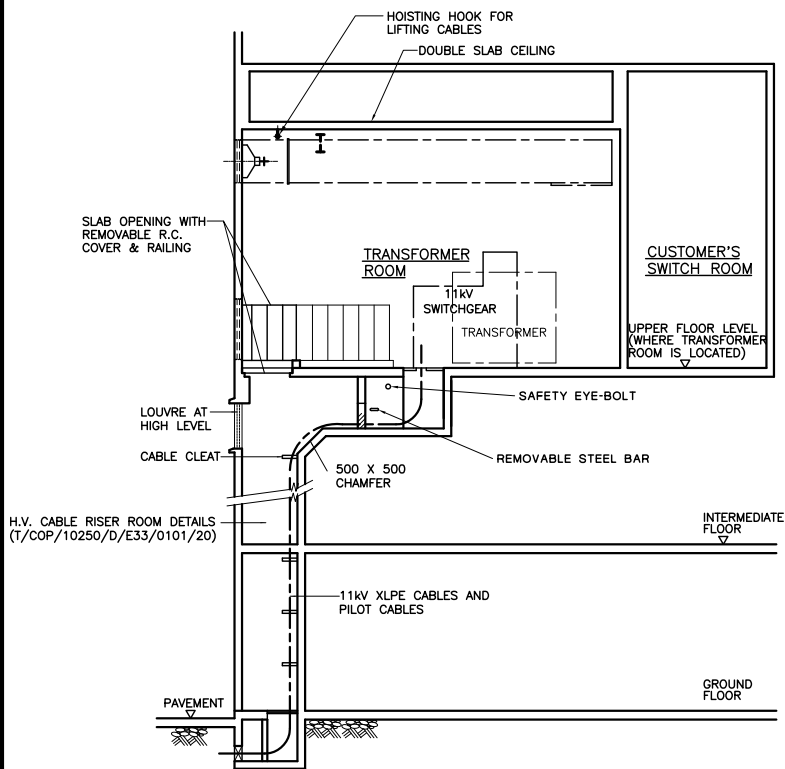
TITLE :

**TYPICAL BASEMENT SUBSTATION LAYOUT FOR
THREE TRANSFORMERS AND 11kV SWITCHGEAR**

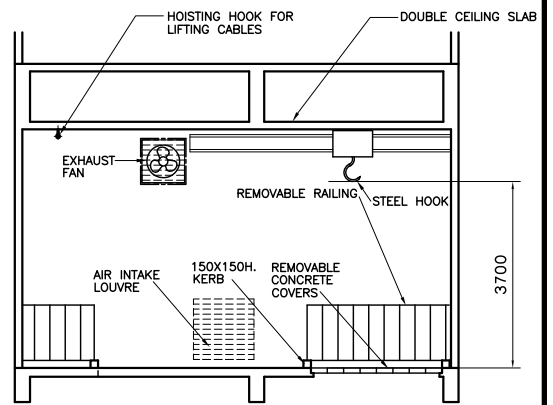
DRAWN: S. C. TO DATE: 22-07-2002
 CHECKED: K. C. CHENG APPROVED: W. C. HO
 SCALE: 1 : 100 (mm) SHEET(S) IN SET:

ASSET MANAGEMENT

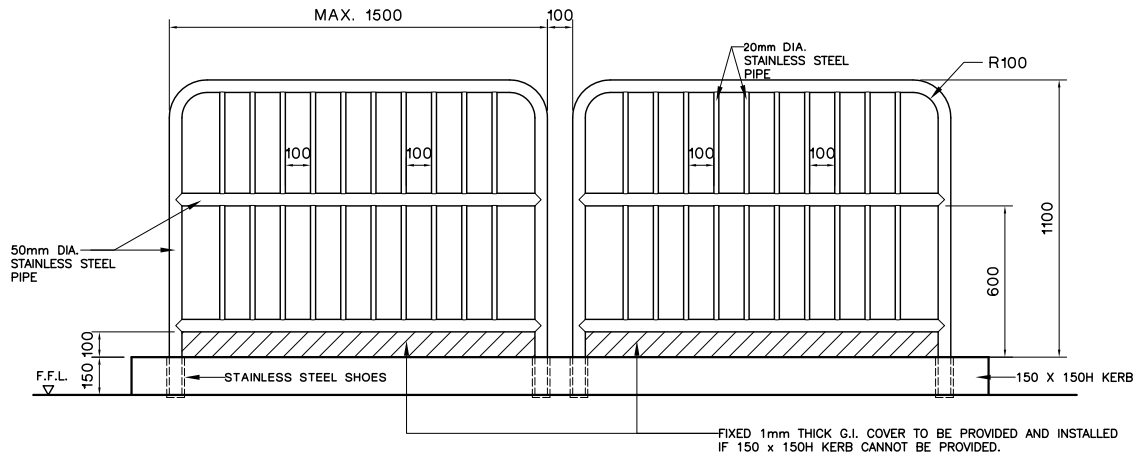
DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 1 0 8 H A



TYPICAL SECTION OF H.V. CABLE RISER



TYPICAL SECTIONAL VIEW OF UPPER FLOOR SUBSTATION WITH LIFTING SHAFT



TYPICAL ELEVATION OF REMOVABLE STAINLESS STEEL RAILING

NOTES:

- ALL METAL WORKS MUST BE BONDED TO THE EARTHING TERMINAL AT THE DISTRIBUTION BOARD WITH COPPER CONNECTOR NOT LESS THAN 6mm².
- ALL DIMENSIONS ARE IN mm

C	TYPICAL DETAIL OF REMOVABLE RAILING AND NOTE ADDED.	B	SAFETY EYE-BOLT, REMOVABLE STEEL BAR AND HOISTING HOOK ADDED
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CLP 中電

REVS.	08.01.10	26.03.12	18.03.14										
INITIAL	A	B	C	D	E	F	G	H	J	K	L		
	KCC	KCC	H.T.YU										

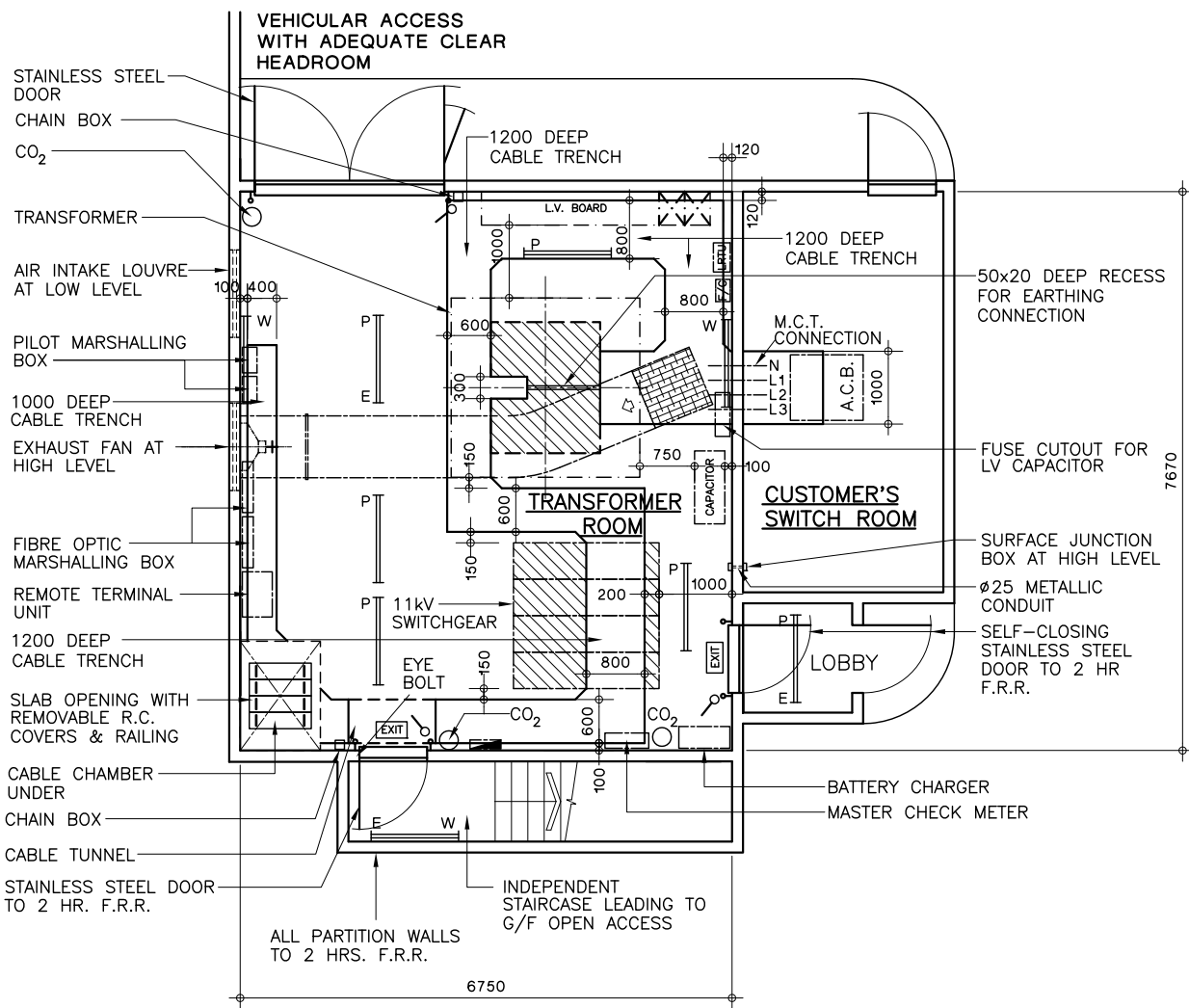
TITLE :

TYPICAL UPPER FLOOR SUBSTATION SECTIONS

DRAWN: S. C. TO DATE: 22-07-2002
 CHECKED: K. C. CHENG APPROVED: K. W. WONG
 SCALE: N. T. S. SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 1 0 9 C A

**LEGEND:**

	W	WALL MOUNTED LAMPS
	P	LAMPS SUSPENDED FROM CEILING
	E	LAMPS WITH EMERGENCY LIGHTING UNIT
		LIGHTING SWITCH (2-WAY/INTERMEDIATE SWITCHING CONTROL FOR MULTIPLE ENTRANCE DOORS)
	F/C	FAN CONTROL PANEL
	LRTU	LV MONITORING PANEL
		MCB BOARD

H	SYMBOLS, DEPTH OF CABLE TRENCH UPDATED. FIRE EXTINGUISHER, MASTER CHECK METER ADDED.
G	FUSE CUTOUT ADDED, DOOR, TRANSFORMER, HV SWITCHGEAR AND G.I. SLEEVE SIZE UPDATED
F	CHAIN BOX ADDED AND CABLE TRENCH LADDER DELETED
E	PHASE IDENTIFICATION UPDATED AND CABLE TRENCH LADDER ADDED
D	AIR INTAKE LOUVRE AND FAN CONTROL PANEL RELOCATED
C	LRTU ADDED
B	GENERAL LAYOUT REVISION

CLP 中電

REVS.	7.9.04	9.12.04	21.12.05	5.1.06	16.08.07	16.12.09	26.03.12	18.03.14			
INITIAL	A	B	C	D	E	F	G	H	J	K	L
	K.C.C	K.C.C	K.C.C	K.C.C	K.C.C	K.C.C	K.C.C	H.T.YU			

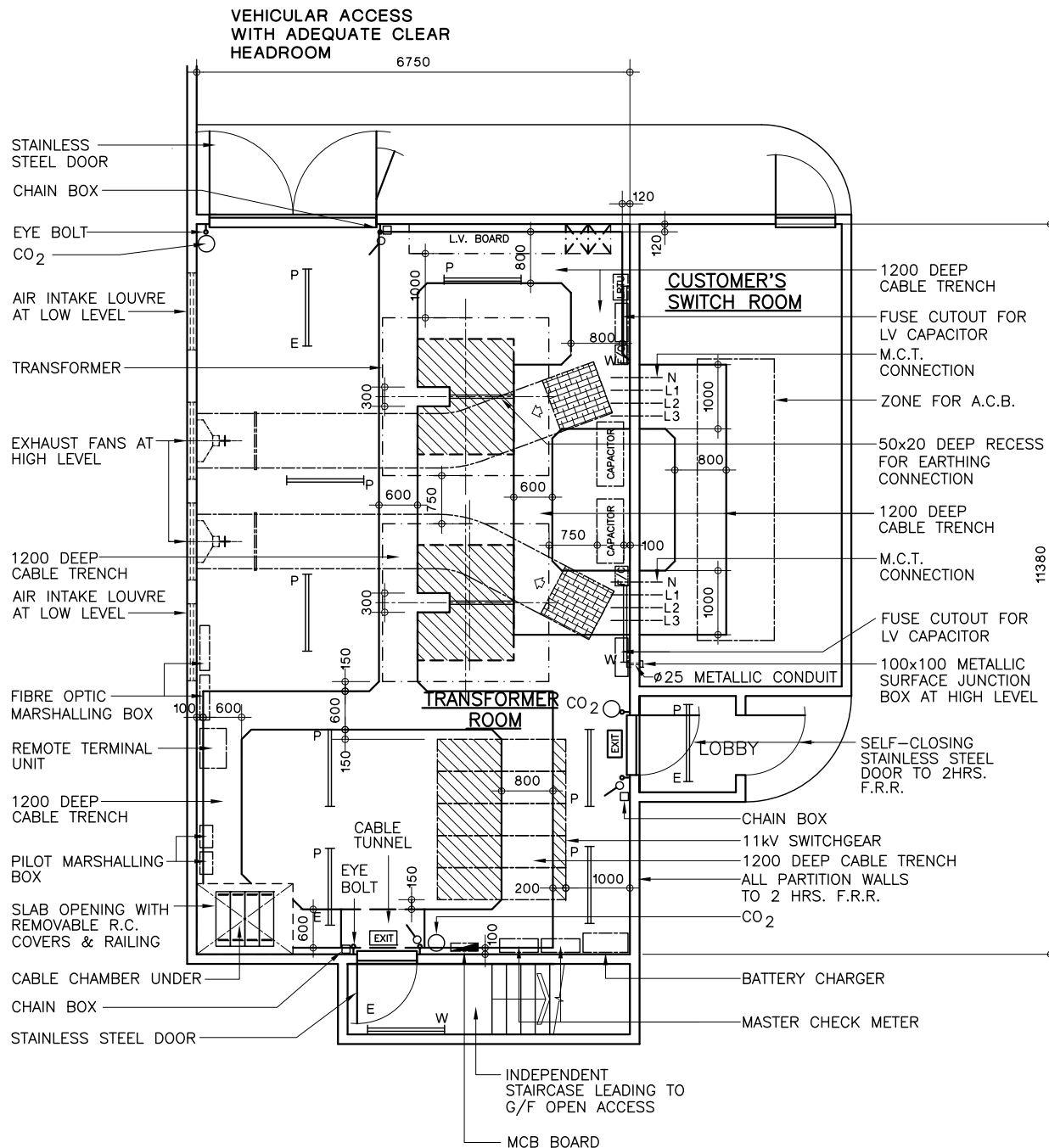
TITLE :

TYPICAL UPPER FLOOR SUBSTATION LAYOUT FOR
ONE TRANSFORMER AND 11kV SWITCHGEAR
(INDEPENDENT STAIRCASE)

DRAWN: S. C. TO	DATE: 22-07-2002
CHECKED: K. C. CHENG	APPROVED: W.C.HO
SCALE: 1 : 100 (mm)	SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 1 1 0 H A



LEGEND:

- | | |
|---|--|
|  | WALL MOUNTED LAMPS |
|  | LAMPS SUSPENDED FROM CEILING |
|  | LAMPS WITH EMERGENCY LIGHTING UNIT |
|  | LIGHTING SWITCH (2-WAY/INTERMEDIATE SWITCHING CONTROL FOR MULTIPLE ENTRANCE DOORS) |
|  | FAN CONTROL PANEL |
|  | LV MONITORING PANEL |
|  | MCB BOARD |

H	SYMBOLS, DEPTH OF CABLE TRENCH UPDATED, FIRE EXTINGUISHER, MASTER CHECK METER ADDED.
G	FUSE CUTOFF ADDED, DOOR, TRANSFORMER, HV SWITCHGEAR AND G.I. SLEEVE SIZE UPDATED
F	CHAIN BOX ADDED AND CABLE TRENCH LADDER DELETED
E	PHASE IDENTIFICATION UPDATED AND CABLE TRENCH LADDER ADDED.
D	AIR INTAKE LOUVER AND FAN CONTROL PANEL RELOCATED
C	LRTU ADDED
B	GENERAL LAYOUT REVISION



REVS.		9.12.04	21.12.05	5.1.06	20.08.07	16.12.09	26.03.12	18.03.14			
	A	B	C	D	E	F	G	H	J	K	L
INITIAL		K.C.C.	K.C.C.	K.C.C.	K.C.C.	K.C.C.	K.C.C.	HIYU			

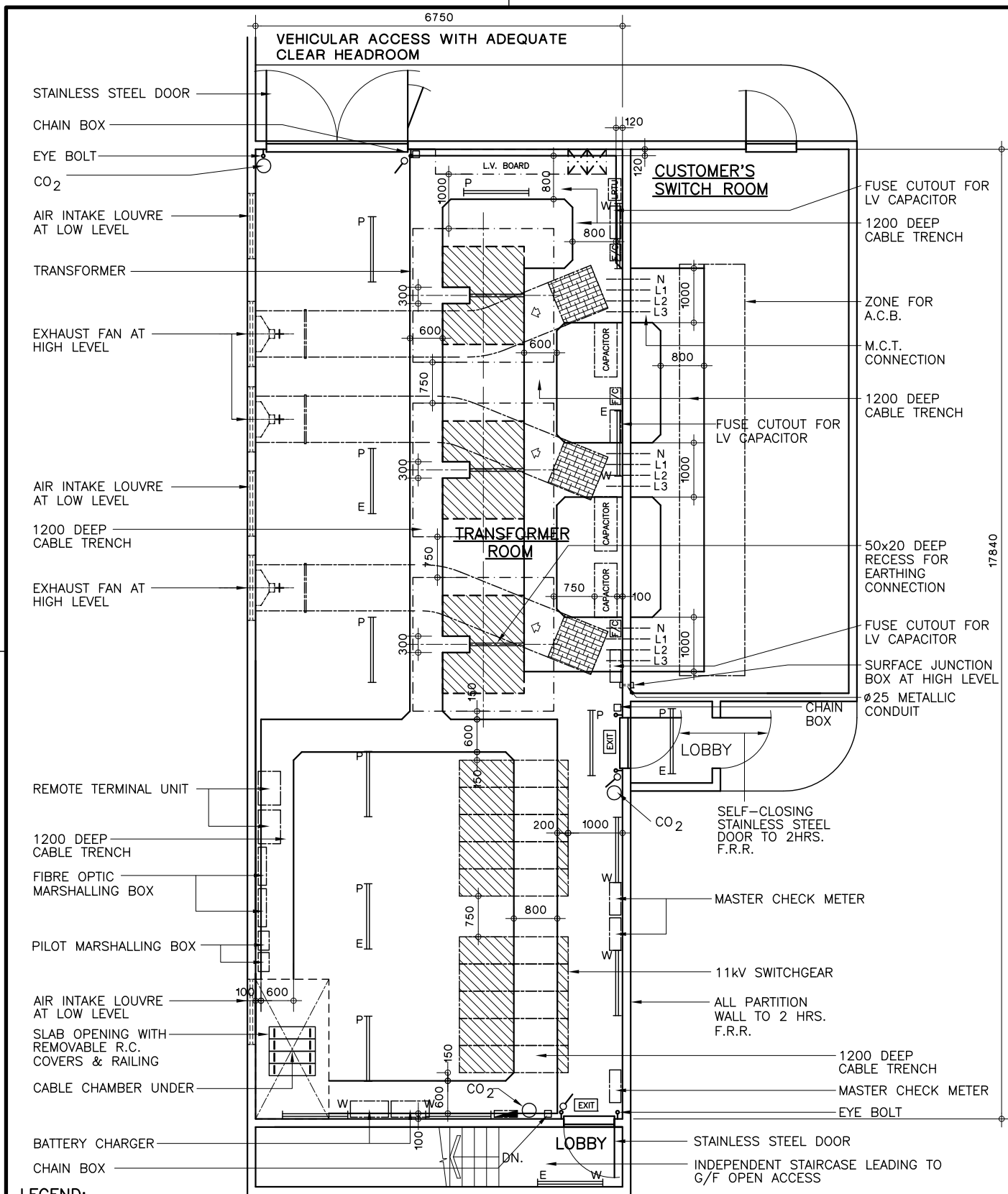
TITLE :

TYPICAL UPPER FLOOR SUBSTATION LAYOUT FOR
TWO TRANSFORMERS AND 11kV SWITCHGEAR
(INDEPENDENT STAIRCASE)

DRAWN: S. C. TO	DATE: 22-07-2002
CHECKED: K. C. CHENG	APPROVED: W C. HO
SCALE: 1 : 100 (mm)	SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO.	T	C	O	P	1	0	2	5	0	D	E	3	3	0	1	0	1	1	1	H	A
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**LEGEND:**

⌘ LIGHTING SWITCH (2-WAY/INTERMEDIATE SWITCHING CONTROL FOR MULTIPLE ENTRANCE DOORS)

F/C FAN CONTROL PANEL

LRTU LV MONITORING PANEL

P

E

W

H

MCB BOARD

SYMBOLS, DEPTH OF CABLE TRENCH

UPDATED: FIRE EXTINGUISHER, MASTER

CHECK METER ADDED.

REV. 3.4.03 10.12.04 21.12.05 5.1.06 20.08.07 16.12.09 26.03.12 18.03.14

INITIAL K.C.C. K.C.C. K.C.C. K.C.C. K.C.C. K.C.C. K.C.C. H.T.YU

TITLE :

REV. 3.4.03 10.12.04 21.12.05 5.1.06 20.08.07 16.12.09 26.03.12 18.03.14

INITIAL K.C.C. K.C.C. K.C.C. K.C.C. K.C.C. K.C.C. K.C.C. H.T.YU

TITLE :

REV. 3.4.03 10.12.04 21.12.05 5.1.06 20.08.07 16.12.09 26.03.12 18.03.14

INITIAL K.C.C. K.C.C. K.C.C. K.C.C. K.C.C. K.C.C. K.C.C. H.T.YU

TITLE :

REV. 3.4.03 10.12.04 21.12.05 5.1.06 20.08.07 16.12.09 26.03.12 18.03.14

INITIAL K.C.C. K.C.C. K.C.C. K.C.C. K.C.C. K.C.C. K.C.C. H.T.YU

TITLE :

REV. 3.4.03 10.12.04 21.12.05 5.1.06 20.08.07 16.12.09 26.03.12 18.03.14

INITIAL K.C.C. K.C.C. K.C.C. K.C.C. K.C.C. K.C.C. K.C.C. H.T.YU

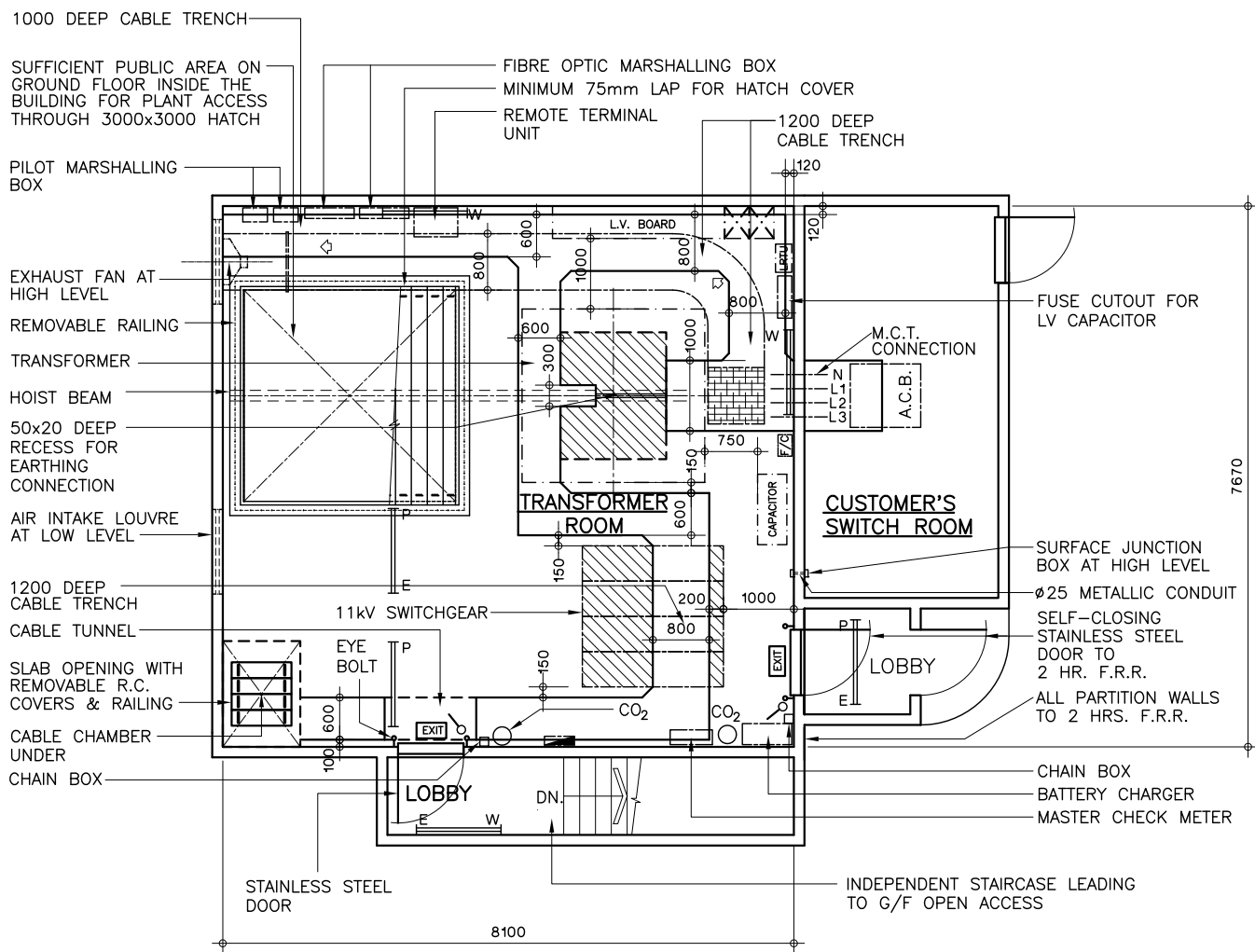
CLP 中電

DRAWN: S. C. TO DATE: 22-07-2002
 CHECKED: K. C. CHENG APPROVED: W. C. HO
 SCALE: 1 : 100 (mm) SHEET(S) IN SET:

TYPICAL UPPER FLOOR SUBSTATION LAYOUT FOR
 THREE TRANSFORMERS AND 11kV SWITCHGEAR
 (INDEPENDENT STAIRCASE)

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 1 1 2 H A

**LEGEND:**

	W	WALL MOUNTED LAMPS
	P	LAMPS SUSPENDED FROM CEILING
	E	LAMPS WITH EMERGENCY LIGHTING UNIT
		LIGHTING SWITCH (2-WAY/INTERMEDIATE SWITCHING CONTROL FOR MULTIPLE ENTRANCE DOORS)
	F/G	FAN CONTROL PANEL
	LRTU	LV MONITORING PANEL
		MCB BOARD

H	SYMBOLS, DEPTH OF CABLE TRENCH CONDUIT, FIRE EXTINGUISHER, MASTER CHECK METER ADDED.
G	FUSE CUTOFF ADDED, DOOR, TRANSFORMER, HV SWITCHGEAR AND G.I. SLEEVE SIZE UPD.
F	CHAIN BOX ADDED AND CABLE TRENCH LADDER DELETED
E	PHASE IDENTIFICATION UPDATED AND CABLE TRENCH LADDER ADDED
D	AIR INTAKE LOUVRE AND FAN CONTROL PANEL RELOCATED
C	LRTU ADDED
B	GENERAL LAYOUT REVISION

CLP 中電

REVS.	7.9.04	7.12.04	21.12.05	5.1.06	16.08.07	16.12.09	26.03.12	18.03.14			
INITIAL	A	B	C	D	E	F	G	H	J	K	L
	K.C.C	K.C.C	K.C.C	K.C.C	K.C.C	K.C.C	K.C.C	H.T.YU			

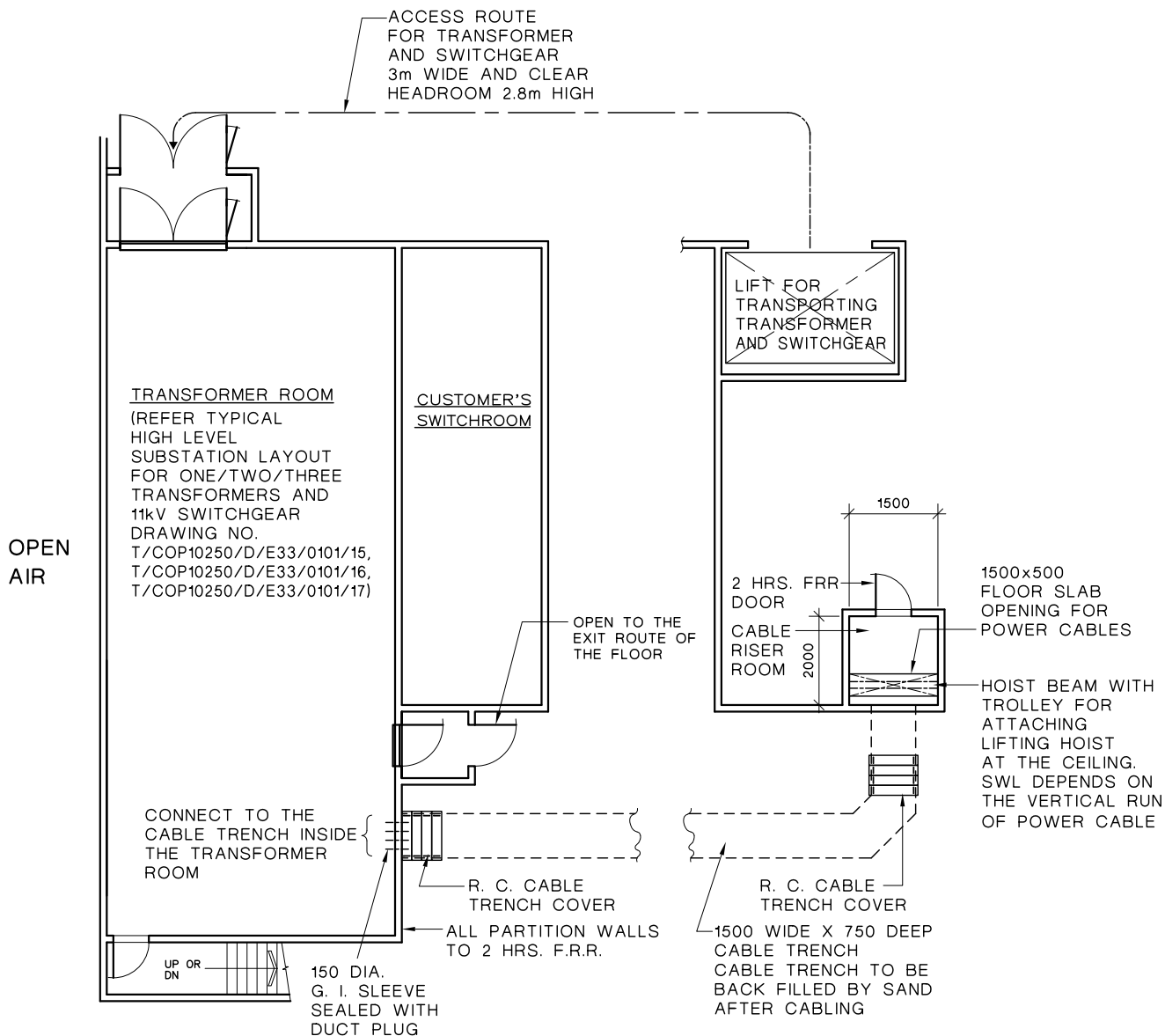
TITLE :

TYPICAL UPPER FLOOR SUBSTATION LAYOUT FOR HOUSING ONE TRANSFORMER WITHOUT VEHICULAR ACCESS (INDEPENDENT STAIRCASE)

DRAWN: S. C. TO	DATE: 22-07-2002
CHECKED: K. C. CHENG	APPROVED: W.C.HO
SCALE: 1 : 100 (mm)	SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 1 1 3 H A

**NOTES:**

1. THE TRANSFORMER ROOM SHALL BE LOCATED ON THE PERIPHERY OF THE BUILDING.
2. ALL FLOOR OPENINGS IN THE CABLE RISER ROOM TO BE SEALED UP BY CUSTOMER AFTER CABLING.
3. HOIST BEAM WITH TROLLEY FOR ATTACHING LIFTING HOIST TO BE PROVIDED BY CUSTOMER.

A GENERAL AMENDMENT

CLP 中電

REV.	18.03.14													
INITIAL	A	B	C	D	E	F	G	H	J	K	L			

TITLE :

TYPICAL HIGH LEVEL SUBSTATION LAYOUT FOR
ONE/TWO/THREE TRANSFORMERS AND
11kV SWITCHGEAR IN HIGH RISE BUILDING

DRAWN: T. Y. IP DATE: 24-07-2002
CHECKED: K. C. CHENG APPROVED: K. W. WONG
SCALE: N.T.S. SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 1 1 4 A A



F/C

WIND SHIELD DESIGN SHALL BE PROVIDED TO THE LOUVRES IN HIGH LEVEL FLOOR OF THE BUILDING IN ORDER TO PREVENT RAIN WATER INGRESS CAUSED BY STRONG WIND.

F	FUSE CUTOOUT ADDED, DOOR, TRANSFORMER, HV SWITCHGEAR AND G.I. SLEEVE SIZE UPD.
E	CHAIN BOX ADDED AND CABLE TRENCH LADDER DELETED
D	PHASE IDENTIFICATION UPDATED AND CABLE TRENCH LADDER ADDED

G	MASTER CHECK METER, FIRE EXTINGUISHER ADDED, SYMBOLS, G.I. SLEEVE SIZE AND DEPTH OF CABLE TRENCH UPDATED.
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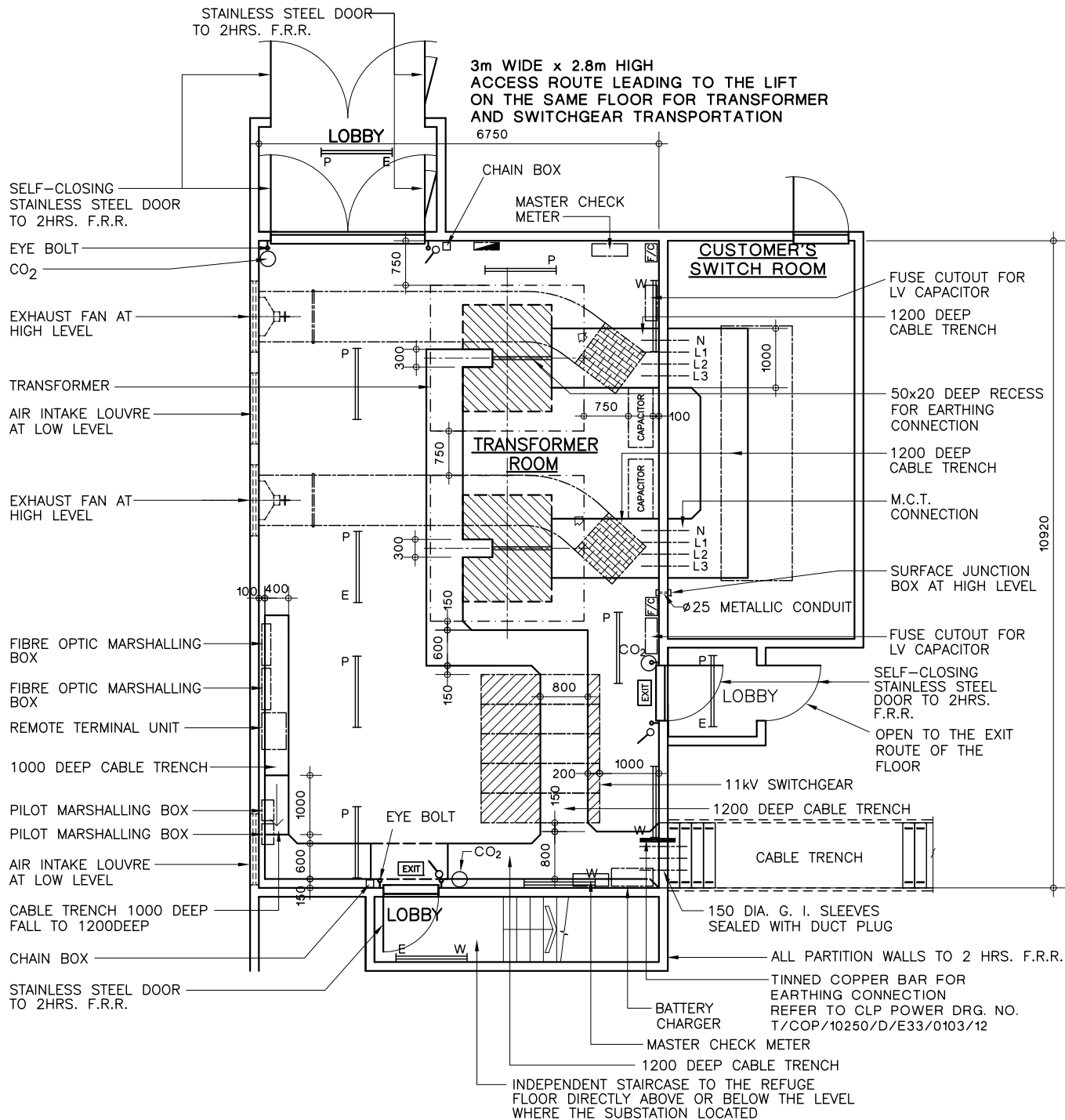
REVS.	3.4.03	8.12.04	5.1.06	16.08.07	17.12.09	26.03.12	18.03.14				
	A	B	C	D	E	F	G	H	J	K	L
INITIAL	K.C.C.	K.C.C.	K.C.C.	K.C.C.	K.C.C.	K.C.C.	HTYU				

TYPICAL HIGH LEVEL SUBSTATION LAYOUT FOR ONE TRANSFORMER AND 11kV SWITCHGEAR IN HIGH RISE BUILDING

DRAWN: S. C. TO	DATE: 8-8-2002
CHECKED: K. C. CHENG	APPROVED: W. C. HO
SCALE: 1 : 100 (mm)	SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 1 1 5 G A

**LEGEND:**

W	WALL MOUNTED LAMPS
P	LAMPS SUSPENDED FROM CEILING
E	LAMPS WITH EMERGENCY LIGHTING UNIT
⏏	LIGHTING SWITCH (2-WAY/INTERMEDIATE SWITCHING CONTROL FOR MULTIPLE ENTRANCE DOORS)
F/C	FAN CONTROL PANEL
MCB	MCB BOARD

NOTES:

WIND SHIELD DESIGN SHALL BE PROVIDED TO THE LOUVRES IN HIGH LEVEL FLOOR OF THE BUILDING IN ORDER TO PREVENT RAIN WATER INGRESS CAUSED BY STRONG WIND.

G	MASTER CHECK METER, FIRE EXTINGUISHER ADDED, SYMBOLS, G.I. SLEEVE SIZE AND DEPTH OF CABLE TRENCH UPDATED.	E	CHAIN BOX ADDED AND CABLE TRENCH LADDER DELETED
F	FUSE CUTOUT ADDED, DOOR, TRANSFORMER, HV SWITCHGEAR AND G.I. SLEEVE SIZE UPD.	D	PHASE IDENTIFICATION UPDATED AND CABLE TRENCH LADDER ADDED
		C	AIR INTAKE LOUVRE AND FAN CONTROL PANEL RELOCATED

CLP 中電

REV.	3.4.03	8.12.04	16.08.07	16.10.07	16.12.09	26.03.12	18.03.14				
INITIAL	A	B	C	D	E	F	G	H	J	K	L
	K.C.C.	K.C.C.	K.C.C.	K.C.C.	K.C.C.	K.C.C.	H.T.YU				

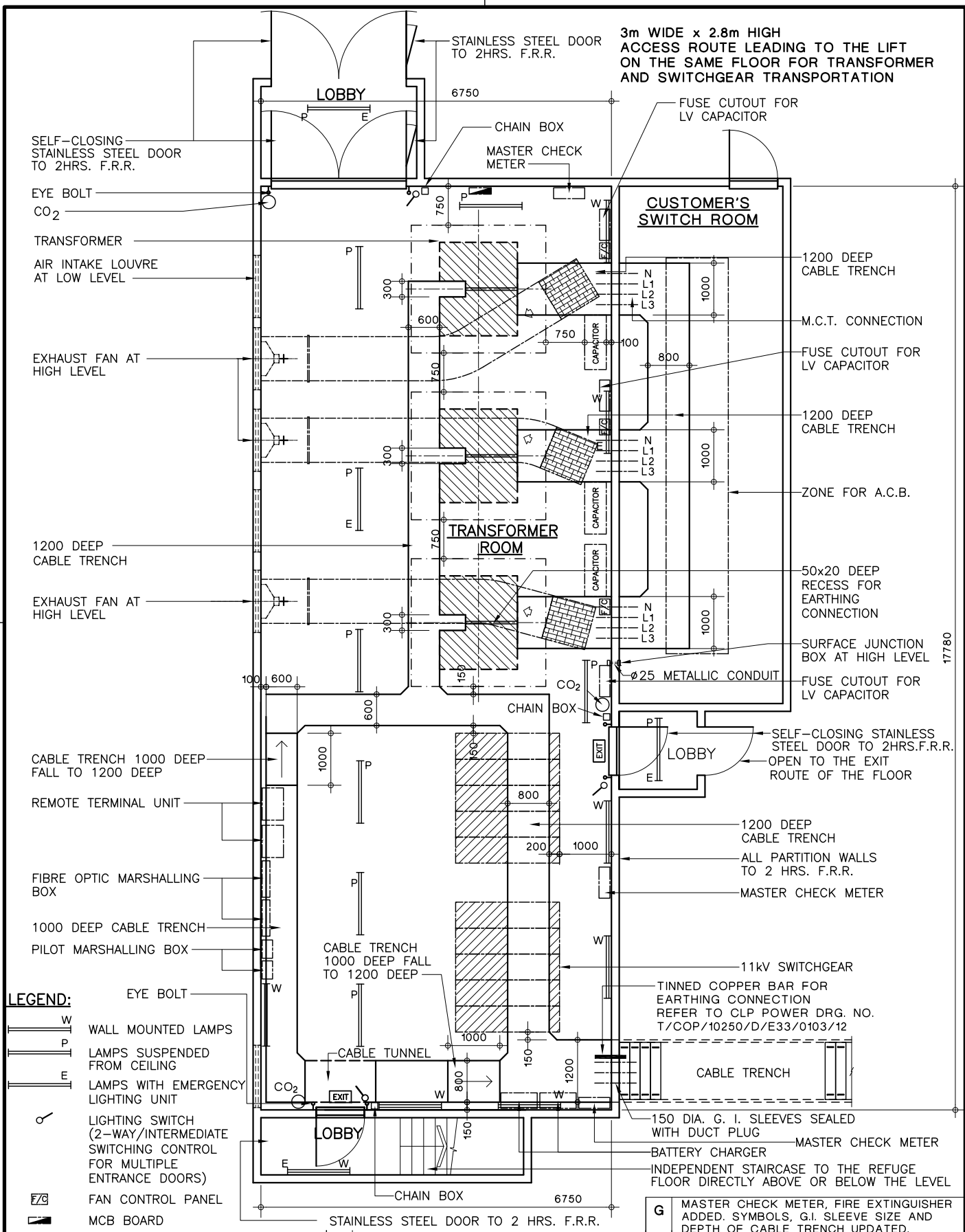
TITLE :

TYPICAL HIGH LEVEL SUBSTATION LAYOUT FOR TWO TRANSFORMERS AND 11kV SWITCHGEAR IN HIGH RISE BUILDING

DRAWN: S. C. TO	DATE: 8-8-2002
CHECKED: K. C. CHENG	APPROVED: W. C. HO
SCALE: 1 : 100 (mm)	SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 1 1 6 G A



CLP 中電

REVS.	3.4.03	10.12.04	5.1.06	16.08.07	17.12.09	26.03.12	18.03.14				
	A	B	C	D	E	F	G	H	J	K	L
INITIAL	K.C.C.	K.C.C.	K.C.C.	K.C.C.	K.C.C.	K.C.C.	H.T.YU				

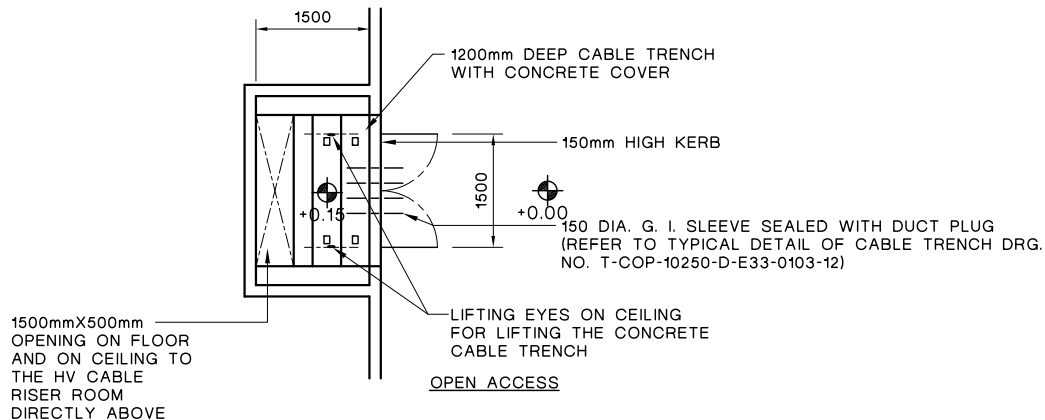
TITLE :

TYPICAL HIGH LEVEL SUBSTATION LAYOUT FOR THREE TRANSFORMERS AND 11kV SWITCHGEAR IN HIGH RISE BUILDING

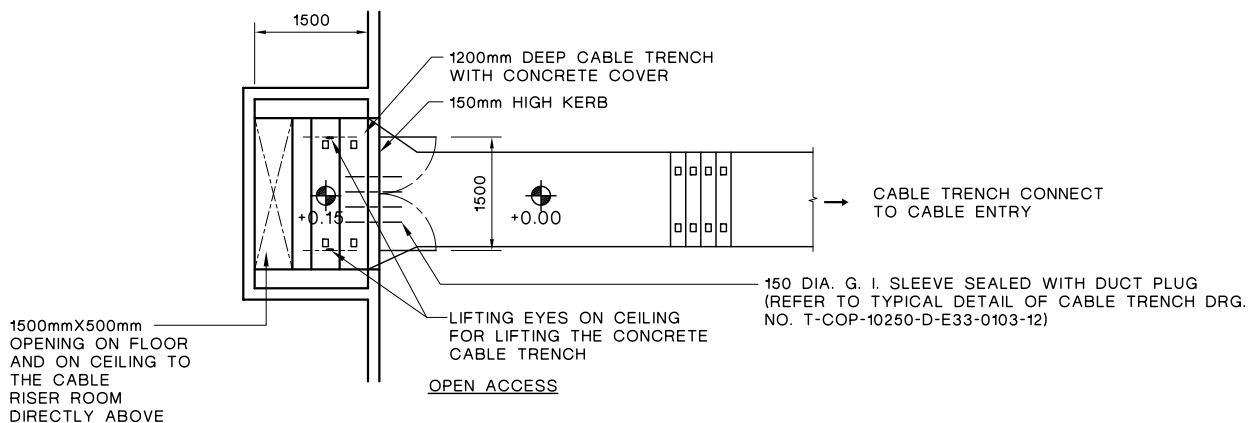
DRAWN: S. C. TO	DATE: 8-8-2002
CHECKED: K. C. CHENG	APPROVED: W. C. HO
SCALE: 1 : 100 (mm)	SHEET(S) IN SET:

ASSET MANAGEMENT

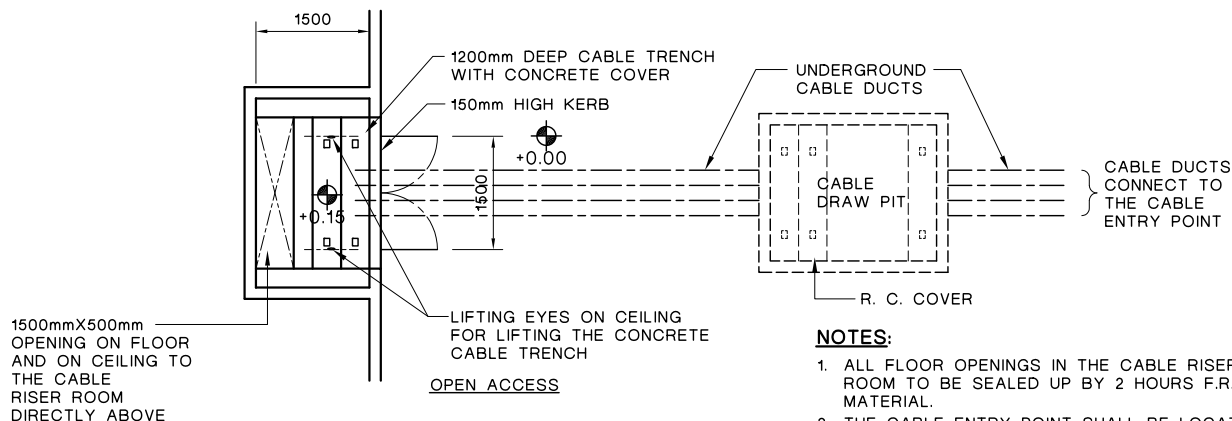
DRG. NO.	T	C	O	P	1	0	2	5	0	D	E	3	3	0	1	0	1	1	7	G	A
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**PART PLAN OF CABLE RISER ROOM LOCATED
ON GROUND FLOOR AND PERIPHERY OF THE BUILDING**



**PART PLAN OF CABLE RISER ROOM LOCATED
ON GROUND FLOOR OF THE BUILDING AND
CONNECTED TO CABLE ENTRY POINT BY CABLE TRENCH**



**PART PLAN OF CABLE RISER ROOM LOCATED
ON GROUND FLOOR OF THE BUILDING AND
CONNECTED TO CABLE ENTRY POINT
BY UNDERGROUND CABLE DUCTS**

NOTES:

1. ALL FLOOR OPENINGS IN THE CABLE RISER ROOM TO BE SEALED UP BY 2 HOURS F.R.R. MATERIAL.
2. THE CABLE ENTRY POINT SHALL BE LOCATED AT THE SITE BOUNDARY OF THE CUSTOMER'S SITE.
3. THE DIMENSIONS AND LAYOUT OF THE CABLE TRENCH AND UNDERGROUND CABLE DUCTS CONNECTING TO THE CABLE ENTRY POINT OF THE SITE TO BE DETERMINED SUBJECT TO THE NUMBER OF CABLE LAYING TO THE HIGH LEVEL SUBSTATION.

C G.I. SLEEVE SIZE UPDATED.

CLP 中電

REVS.	3.4.03	09.07.12	09.06.14										
INITIAL	A	B	C	D	E	F	G	H	J	K	L		
	K.C.C.	E. YU	H.T.YU										

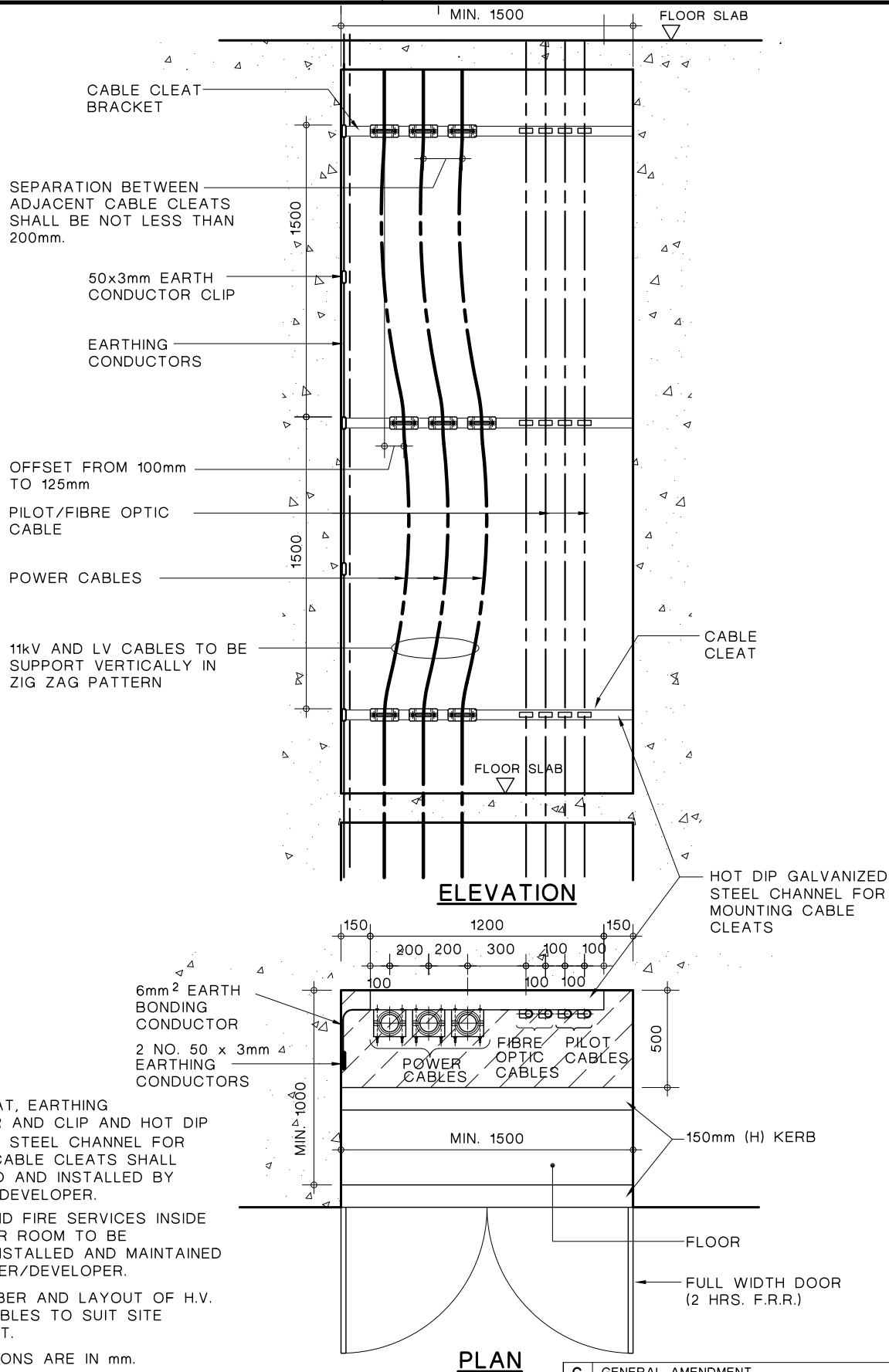
TITLE :

TYPICAL PLAN OF CABLE RISER ROOM ON GROUND
FLOOR OR FLOOR LEVEL WHERE CABLE ENTRY
(SHEET 1 OF 4)

DRAWN: T. Y. IP DATE: 9-8-2002
CHECKED: K. C. CHENG APPROVED: K. W. WONG
SCALE: 1 : 100 (mm) SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 1 1 8 C A



NOTES :-

1. CABLE CLEAT, EARTHING CONDUCTOR AND CLIP AND HOT DIP GALVANIZED STEEL CHANNEL FOR MOUNTING CABLE CLEATS SHALL BE SUPPLIED AND INSTALLED BY CUSTOMER/DEVELOPER.
2. LIGHTING AND FIRE SERVICES INSIDE CABLE RISER ROOM TO BE SUPPLIED, INSTALLED AND MAINTAINED BY CUSTOMER/DEVELOPER.
3. EXACT NUMBER AND LAYOUT OF H.V. AND L.V. CABLES TO SUIT SITE REQUIREMENT.
4. ALL DIMENSIONS ARE IN mm.

CLP 中電

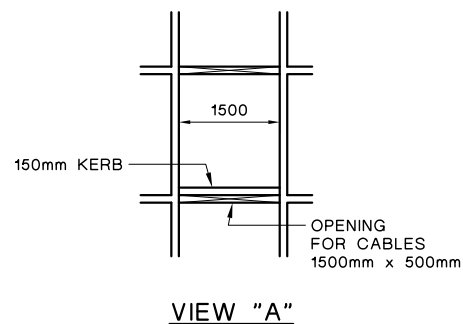
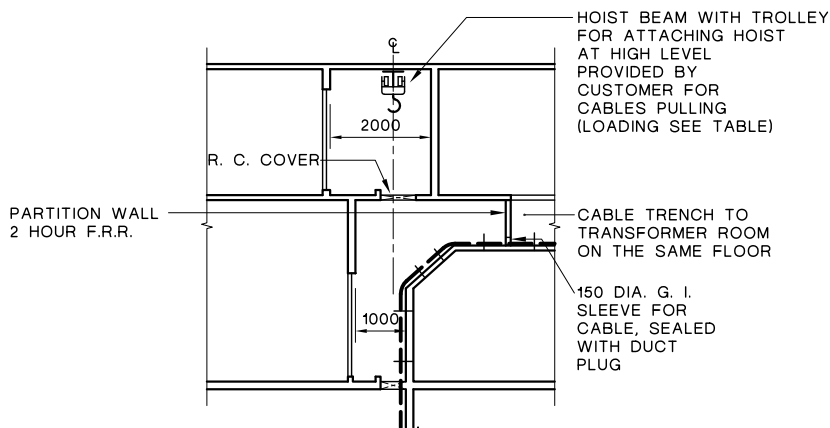
DRAWN: T. C. AU DATE: 17-09-2002
 CHECKED: K. C. CHENG APPROVED: K. W. WONG
 SCALE: 1 : 30 (mm) SHEET(S) IN SET:

REVS.	30-7-08	02-05-12	18.03.14											
INITIAL	A	B	C	D	E	F	G	H	J	K	L			
	KCC	KCC	H.T.YU											

TITLE :

TYPICAL LAYOUT OF CABLE RISER ROOM
 (SHEET 2 OF 4)

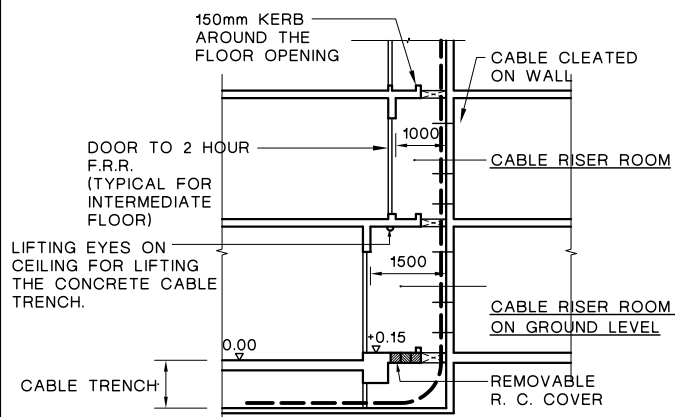
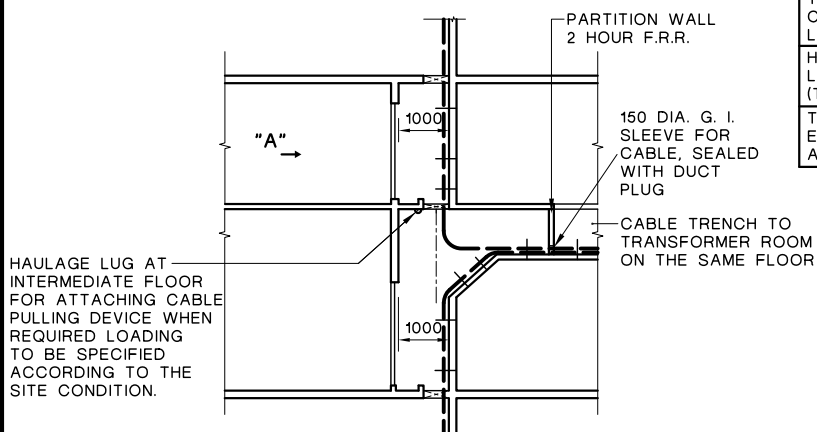
ASSET MANAGEMENT DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 1 1 9 C A



LOADING OF HOIST BEAM IN THE H. V. CABLE RISER ROOM FOR CABLE PULLING

TOTAL VERTICAL CABLE RISER LENGTH (m)	30	60	130	200	260	330
HOIST BEAM LOADING (TONNE)	2	3	4	5	6	7

THE LOADING ARE FOR REFERENCE ONLY. EXACT LOADING TO BE DETERMINED BY CLPP ACCORDING TO SITE CONDITIONS AND CABLE USED.



D G.I. SLEEVE SIZE UPDATED.

C G.I. SLEEVE SIZE UPDATED.

B HAULAGE LUG ADDED.



REVS. 03.12.04 30.10.07 09.07.12 09.06.14

INITIAL K.C.C K.C.C E. YU H.T.YU

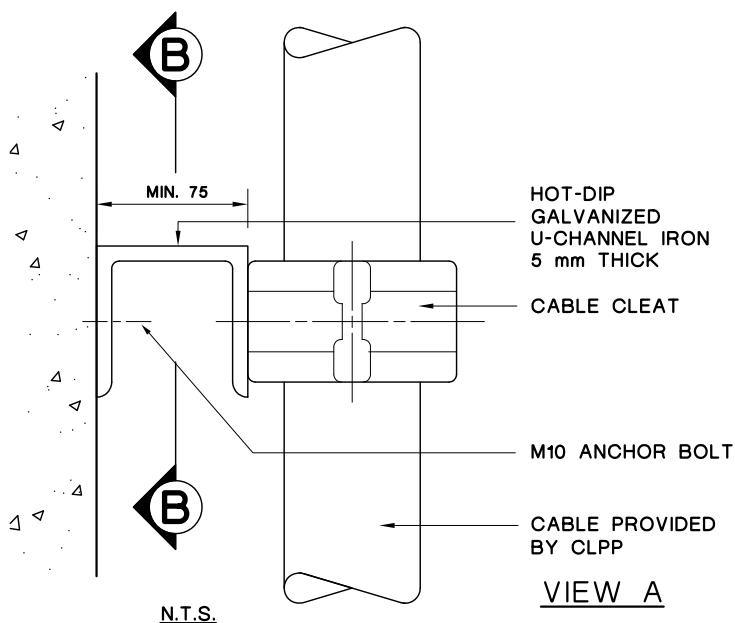
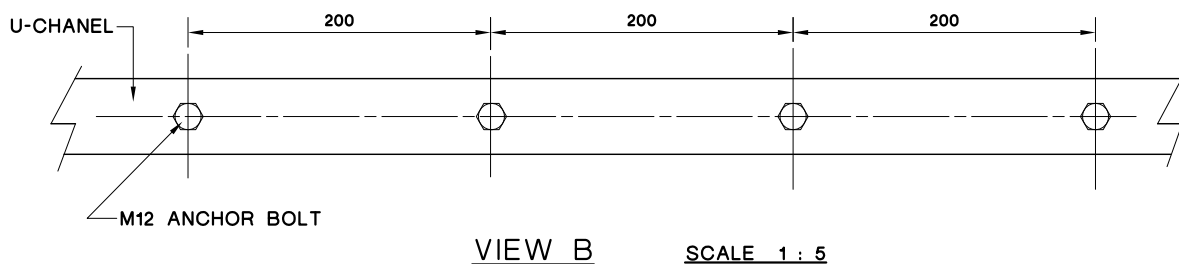
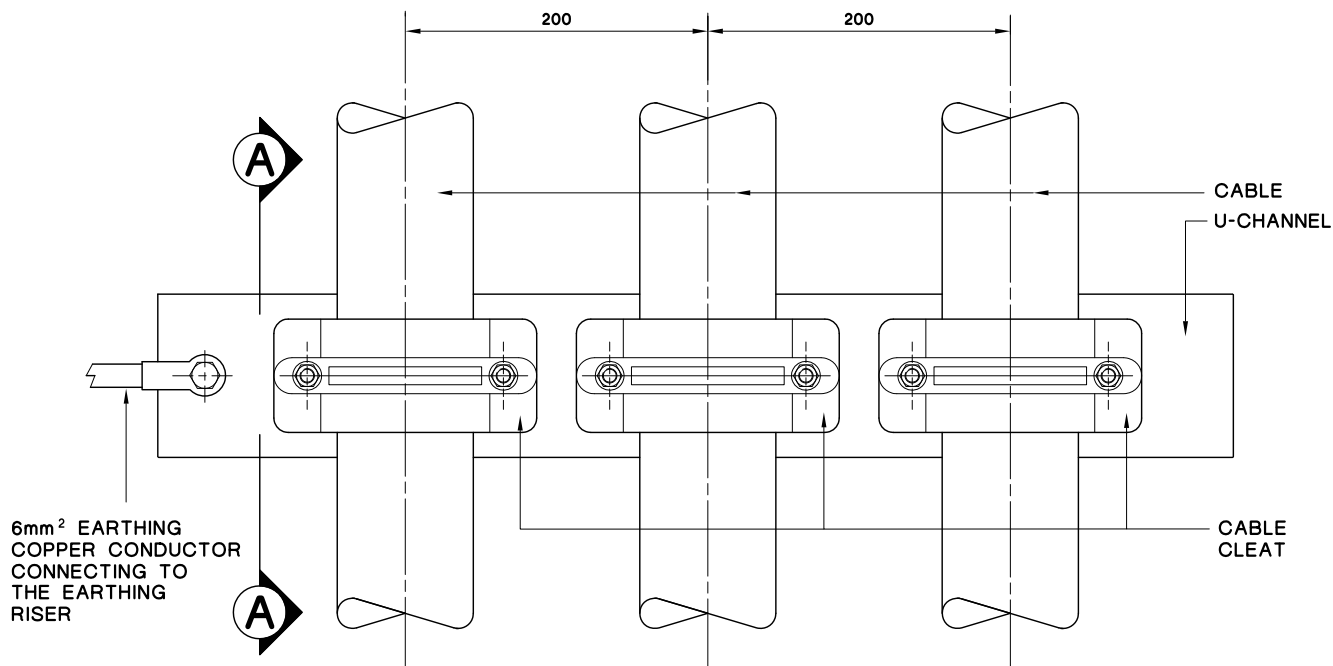
TITLE :

TYPICAL SECTIONS OF CABLE RISER ROOM (SHEET 3 OF 4)

DRAWN: T. W. LAU DATE: 12-8-2002
 CHECKED: K. C. CHENG APPROVED: W. C. HO
 SCALE: 1 : 150 (mm) SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 1 2 0 D A



NOTES :

1. TECHNICAL INFORMATION AND SAMPLES OF CABLE CLEATS SHALL BE SUBMITTED TO CLPP FOR APPROVAL.
2. WEIGHT OF POWER CABLE SHALL BE 16kg/m.
3. MATERIAL OF CABLE CLEAT AND THE ASSOCIATED BOLTS, NUTS, WASHER AND SPRING WASHERS, ETC. TO BE ALUMINIUM ALLOY OR OTHER METALS OR ALLOY WITH CORROSION RESISTANT COATING/PLATING.
4. EACH CABLE CLEAT SHALL BE TYPE TESTED TO WITHSTAND A VERTICAL SAFE WORKING LOAD (SWL) OF NOT LESS THAN 360kg (i.e. 15 x 16 kg/m x 1.5m).
5. THE HORIZONTAL MOUNTING STEEL CHANNEL SHALL BE OF HOT DIP GALVANIZED STEEL OR OTHER CORROSION RESISTANT MATERIAL AND BE DESIGNED AND CONSTRUCTED TO WITHSTAND A VERTICAL SWL OF THE TOTAL NUMBER CABLE ON IT.
6. ALL DIMENSIONS ARE IN mm

CLP 中電

REVS.	3.4.03												
INITIAL	A	B	C	D	E	F	G	H	J	K	L		
	K.C.C.												

TITLE :

TYPICAL LAYOUT OF CABLE RISER ROOM
CABLE MOUNTING DETAILS (SHEET 4 OF 4)

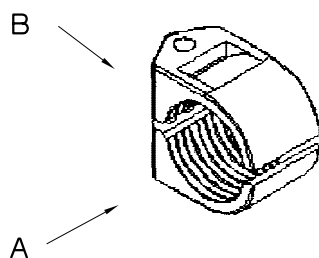
DRAWN: T. W. LAU DATE: 1-11-2002

CHECKED: K. C. CHENG APPROVED: K. W. WONG

SCALE: AS SHOWN SHEET(S) IN SET:

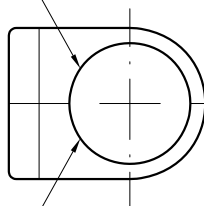
ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 1 2 1 A A

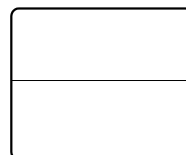


PILOT CABLE DIAMETER
32mm - 46mm

FIBRE OPTIC CABLE
DIAMETER 16mm - 25mm

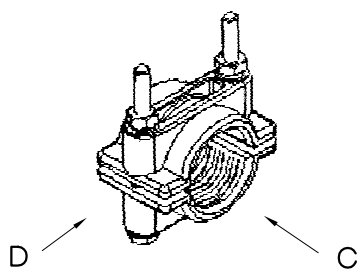


VIEW A

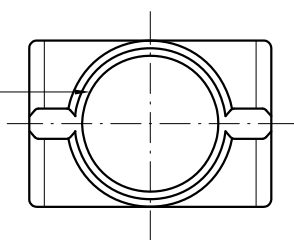


VIEW B

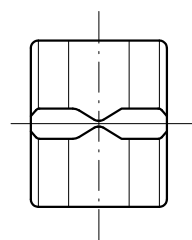
PILOT AND FIBRE OPTIC CABLE CLEATS



CABLE DIAMETER
70mm - 90mm



VIEW C



VIEW D

HV CABLES CLEATS



REVS.

INITIAL

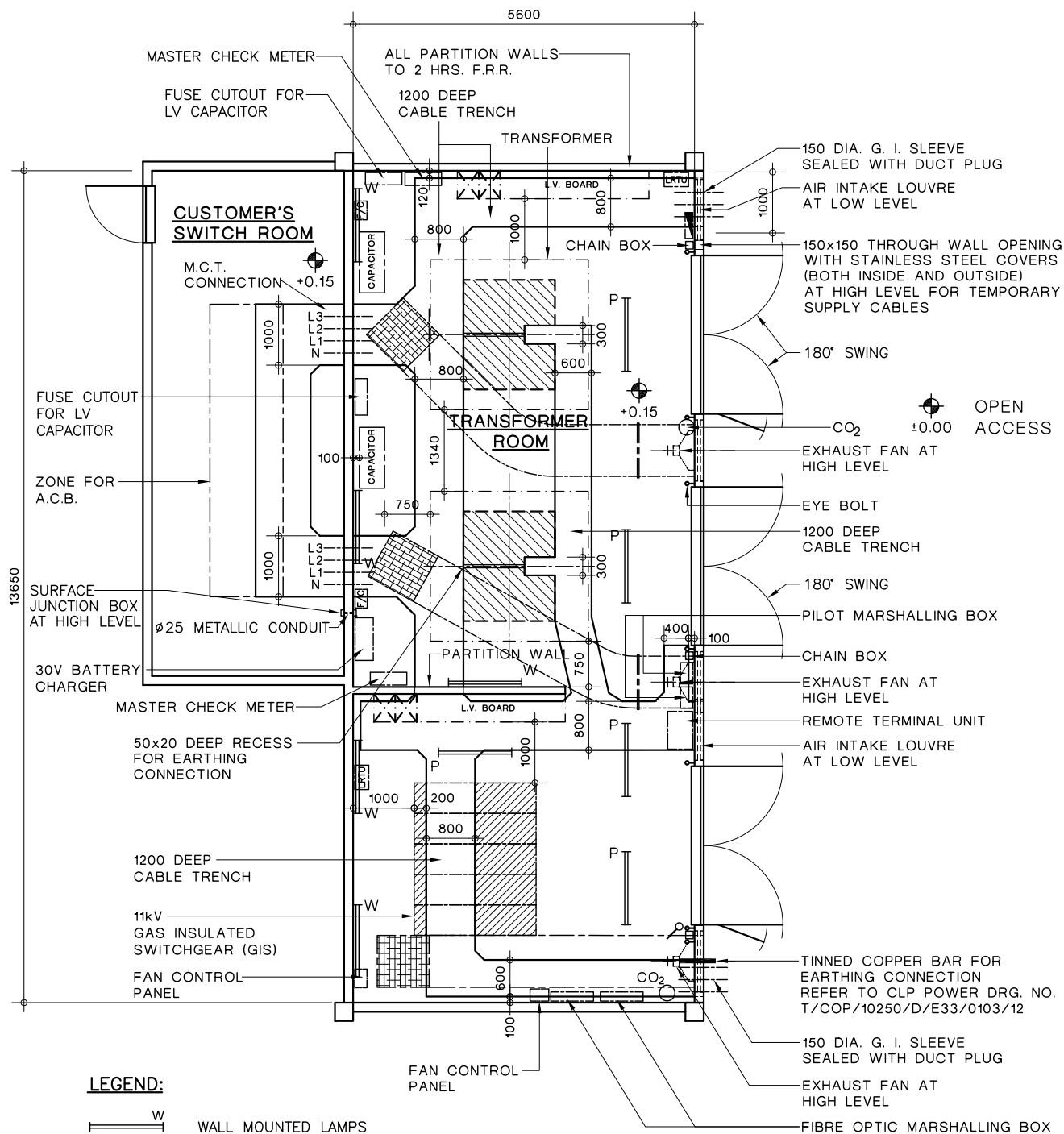
TITLE :

TYPICAL CABLE CLEATS FOR HV CABLES,
PILOT CABLES AND FIBRE OPTIC CABLES

DRAWN: T. W. LAU	DATE: 21-9-2004
CHECKED: K. C. CHENG	APPROVED: W. C. HO
SCALE: N.T.S	SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 1 2 2 - A



CLP 中電

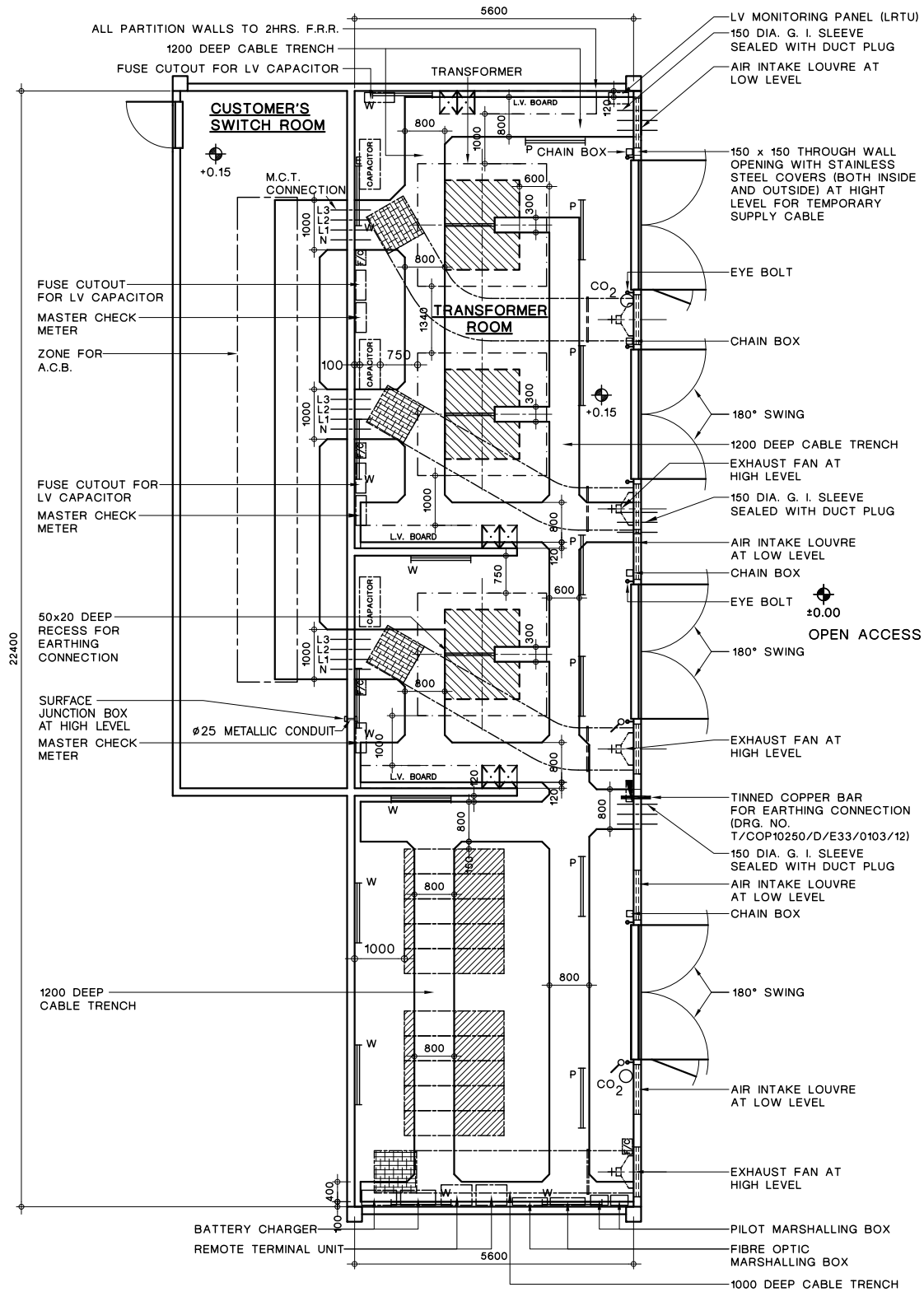
DRAWN: C W WONG DATE: 17 SEP., 2009
 CHECKED: K C CHENG APPROVED: W C HO
 SCALE: 1 : 100 (mm) SHEET(S) IN SET:

REV.	DATE	DESCRIPTION
A	24.4.12	MASTER CHECK METER, FIRE EXTINGUISHER ADDED. SYMBOLS, G.I. SLEEVE SIZE AND DEPTH OF CABLE TRENCH UPDATED.
B	18.03.14	FUSE CUTOUT ADDED, DOOR, TRANSFORMER, HV SWITCHGEAR AND G.I. SLEEVE SIZE UPDATED

TITLE :
 TYPICAL GROUND FLOOR SUBSTATION
 LAYOUT FOR TWO TRANSFORMERS AND
 11kV SWITCHGEAR (WITH TWO LV BOARDS)

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 1 2 3 B A



LEGEND:

	W	WALL MOUNTED LAMPS
	P	LAMPS SUSPENDED FROM CEILING
		LIGHTING SWITCH (2-WAY/INTERMEDIATE SWITCHING CONTROL FOR MULTIPLE ENTRANCE DOORS)

	F/C	FAN CONTROL PANEL
	LRTU	LV MONITORING PANEL
	MCB	MCB BOARD

B	MASTER CHECK METER, FIRE EXTINGUISHER ADDED. SYMBOLS, G.I. SLEEVE SIZE AND DEPTH OF CABLE TRENCH UPDATED.
A	FUSE CUTOUT ADDED, DOOR, TRANSFORMER, HV SWITCHGEAR AND G.I. SLEEVE SIZE UPDATED

CLP 中電

REVS.	24.4.12	18.03.14												
INITIAL	A	B	C	D	E	F	G	H	J	K	L			
	K.C.C.	H.T.YU												

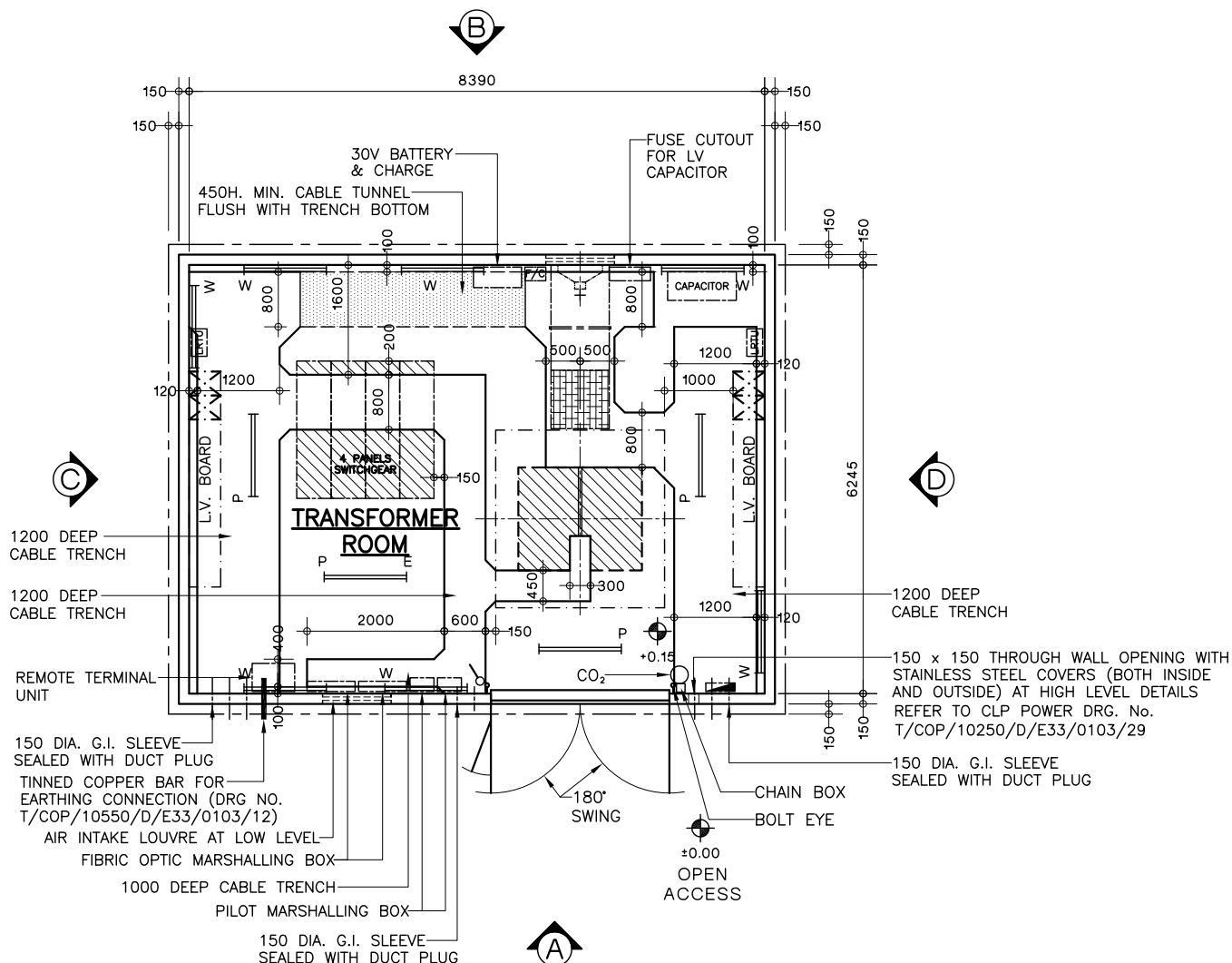
TITLE :

TYPICAL GROUND FLOOR SUBSTATION
LAYOUT FOR THREE TRANSFORMERS AND
11kV SWITCHGEAR (WITH THREE LV BOARDS)

DRAWN: C W WONG	DATE: 17 SEP., 2009
CHECKED: K C CHENG	APPROVED: W C HO
SCALE: 1 : 125 (mm)	SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 1 2 4 B A



LEGEND:

- | | |
|---|------------------------------------|
|  | WALL MOUNTED LAMPS |
|  | LAMPS SUSPENDED FROM CEILING |
|  | LAMPS WITH EMERGENCY LIGHTING UNIT |
|  | LIGHTING SWITCH |
|  | FAN CONTROL PANEL |
|  | LV MONITORING PANEL |
|  | MCB BOARD |

A	SYMBOLS, G.I. SLEEVE SIZE AND DEPTH OF CABLE TRENCH UPDATED.
---	--

[illegible]

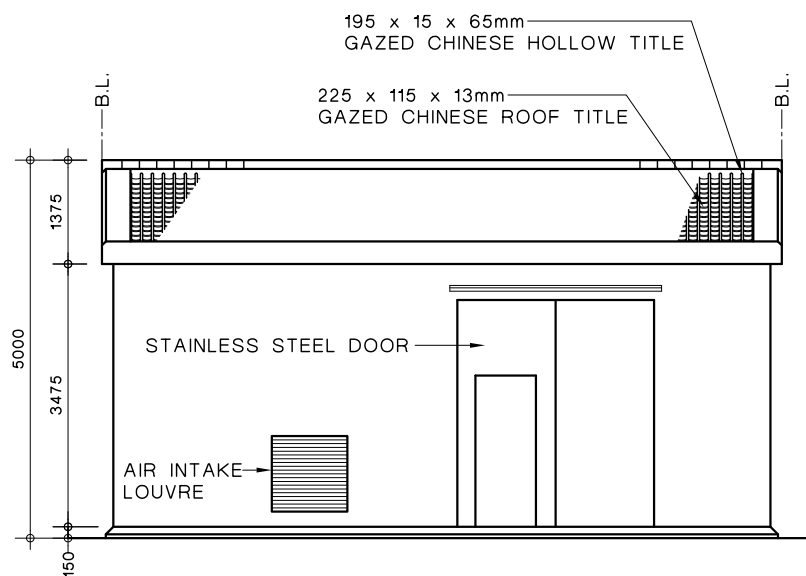
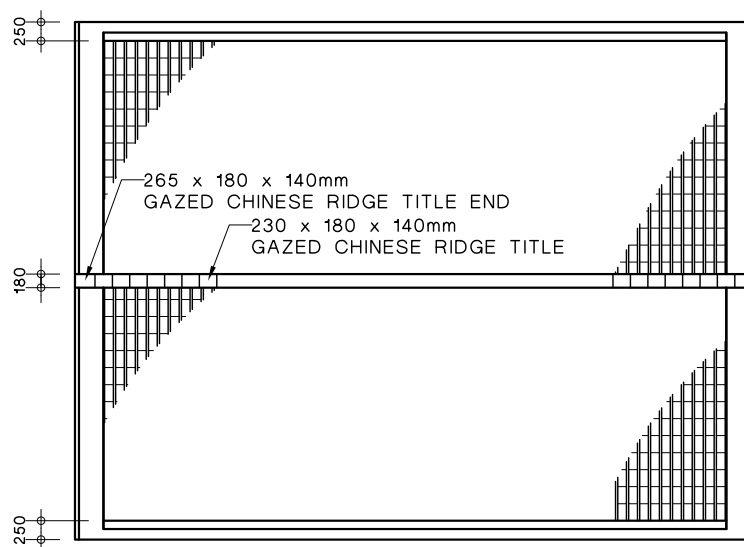
TITLE :

TYPICAL DRAWING FOR STANDALONE
SUBSTATION (SHEET 1 OF 3)

DRAWN: C W WONG	DATE: 16 APR., 2012
CHECKED: EDMOND YU	APPROVED: W. C. HO
SCALE: 1 : 100 (mm)	SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 1 2 5 A A

**VIEW A****ROOF FLOOR PLAN**

CLP 中電

DRAWN: C W WONG DATE: 16 APR., 2012

CHECKED: EDMOND YU APPROVED: W. C. HO

SCALE: 1 : 100 (mm) SHEET(S) IN SET:

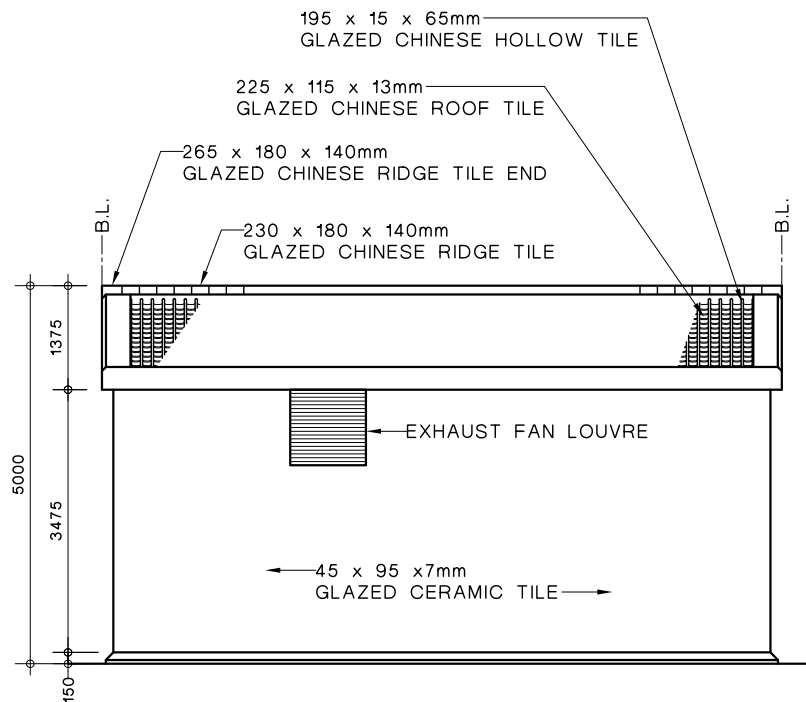
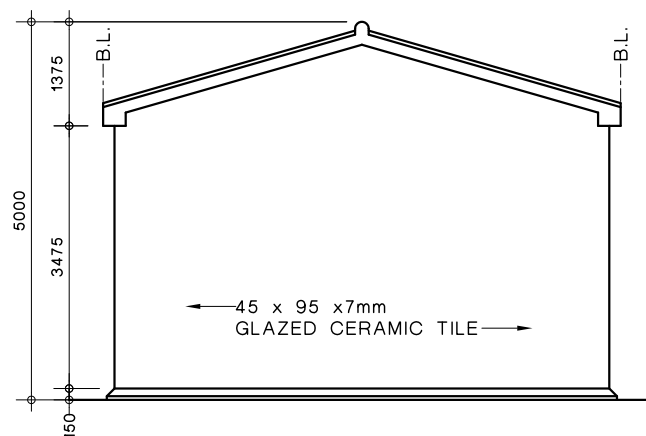
REVS.	A	B	C	D	E	F	G	H	J	K	L
INITIAL											

TITLE :

**TYPICAL DRAWING FOR STANDALONE
SUBSTATION (SHEET 2 OF 3)**

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 1 2 6 - A

VIEW BVIEW C & D

CLP 中電

REVS.

INITIAL

TITLE :

**TYPICAL DRAWING FOR STANDALONE
SUBSTATION (SHEET 3 OF 3)**

DRAWN: C W WONG

DATE: 16 APR., 2012

CHECKED: EDMOND YU

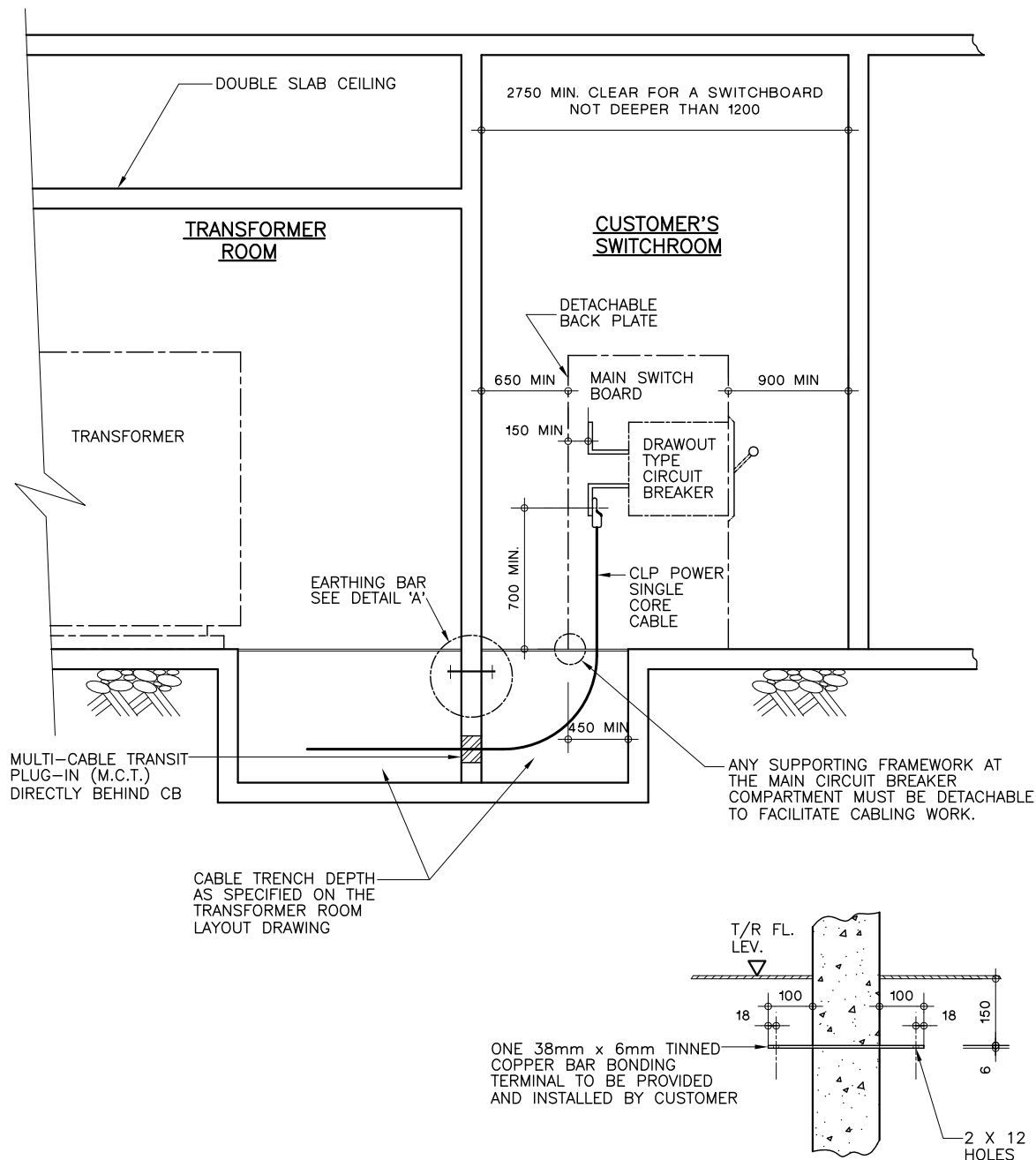
APPROVED: W. C. HO

SCALE: 1 : 100 (mm)

SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 1 2 7 - A

**DETAIL 'A'**

SCALE 1 : 15

NOTES:

1. EXACT POSITION OF ALL MAIN INCOMING CIRCUIT BREAKERS AND DETAILED CABLE TRENCH LAYOUT WITHIN CUSTOMER'S SWITCHROOM MUST BE SUBMITTED TO CLP POWER FOR APPROVAL PRIOR TO INSTALLATION.
2. REFER TO DRAWING NO. T/COP/10250/D/E33/0103/13 FOR THE CLEARANCE BEHIND THE MAIN SWITCH BOARD.
3. WATERPROOFING SHALL BE APPLIED TO THE SLAB BETWEEN THE CEILING OF THE SUBSTATION AND THE VOID.
4. DRAIN SHALL BE PROVIDED IN THE VOID TO DRAIN AWAY WATER LEAKED INTO THE VOID.
5. NO DRAIN OR OTHER WATER SERVICES PIPE SHALL RUN INTO OR CONCEAL IN THE CEILING SLAB OF THE SUBSTATION.

C	DOUBLE SLAB HEIGHT CHANGED
B	DOUBLE SLAB CEILING ADDED
A	NOTE 2 ADDED

CLP 中電

REVS.	21.11.07	08.01.10	26.03.12										
INITIAL	A	B	C	D	E	F	G	H	J	K	L		
	K.C.C.	K.C.C.	K.C.C.										

TITLE :

MINIMUM REQUIREMENTS FOR CUSTOMER MAIN
SWITCHROOM ADJACENT TO SUBSTATION FOR
SINGLE TRANSFORMER INSTALLATION

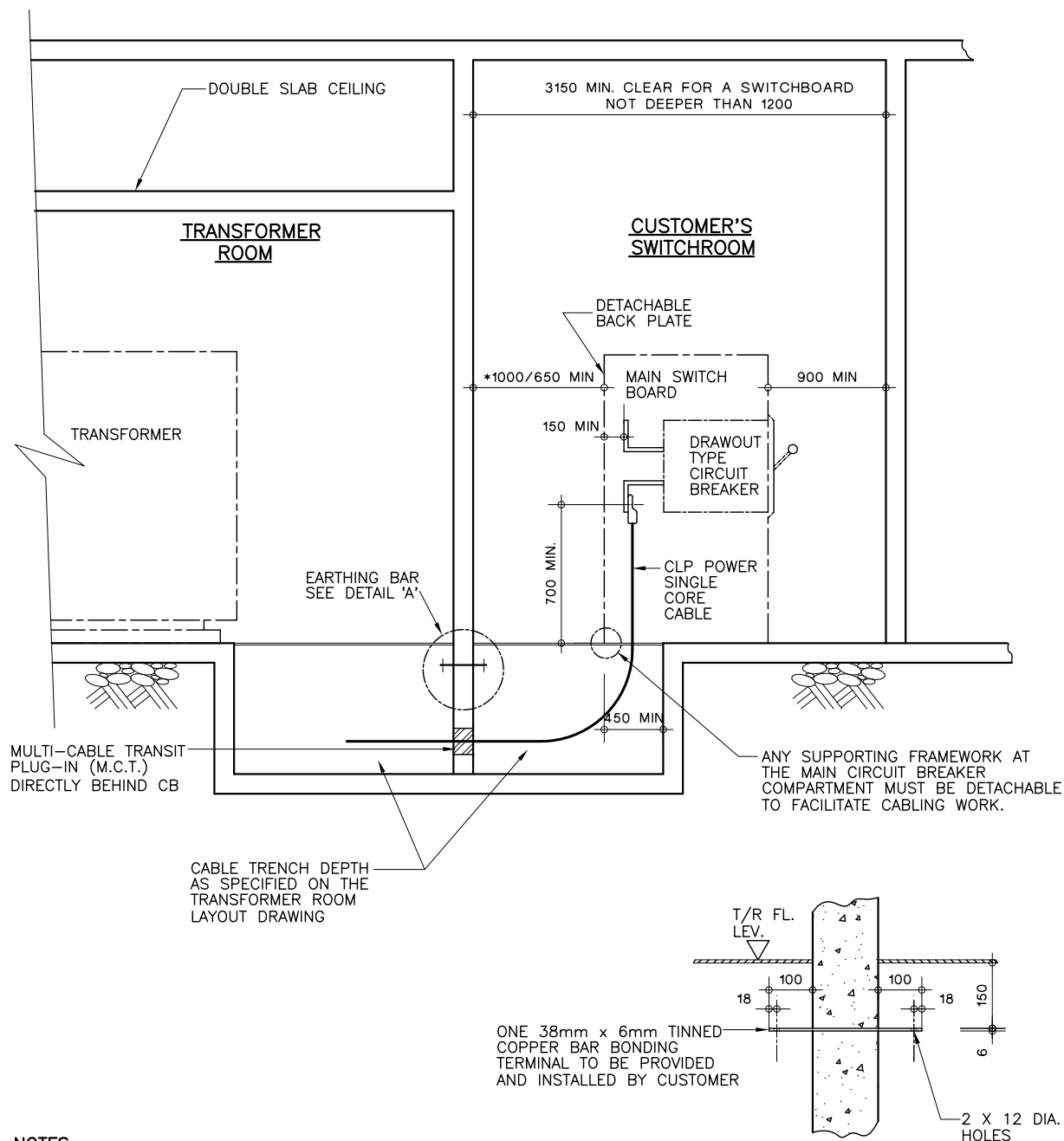
DRAWN: S. C. TO DATE: 12-8-2002

CHECKED: K. C. CHENG APPROVED: K. W. WONG

SCALE: 1 : 50 (mm) SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 2 0 1 C A

**NOTES:**

1. EXACT POSITION OF ALL MAIN INCOMING CIRCUIT BREAKERS AND DETAILED CABLE TRENCH LAYOUT WITHIN CUSTOMER'S SWITCHROOM MUST BE SUBMITTED TO CLP POWER FOR APPROVAL PRIOR TO INSTALLATION.
 2. REFER TO DRAWING NO. T-COP-10250-D-E33-0103-13 FOR THE CLEARANCE BEHIND THE MAIN SWITCH BOARD.
 3. WATERPROOFING SHALL BE APPLIED TO THE SLAB BETWEEN THE CEILING OF THE SUBSTATION AND THE VOID.
 4. DRAIN SHALL BE PROVIDED IN THE VOID TO DRAIN AWAY WATER LEAKED INTO THE VOID.
 5. NO DRAIN OR OTHER WATER SERVICES PIPE SHALL RUN INTO OR CONCEAL IN THE CEILING SLAB OF THE SUBSTATION.
- * IF THE POSITION OF THE DRAWOUT TYPE CIRCUIT BREAKER IS NOT IN LINE WITH THE RESPECTIVE TRANSFORMER, THE MINIMUM DISTANCE SHALL BE KEPT AT 1000mm.

DETAIL 'A'

SCALE 1 : 15

D	NOTE ADDED
C	DOUBLE SLAB HEIGHT CHANGED
B	DOUBLE SLAB CEILING ADDED
A	NOTE 2 ADDED

CLP 中電

REVS.	21.11.07	08.01.10	26.03.12	04.06.14										
INITIAL	A	B	C	D	E	F	G	H	J	K	L			
	K.C.C.	K.C.C.	K.C.C.	H.T.YU										

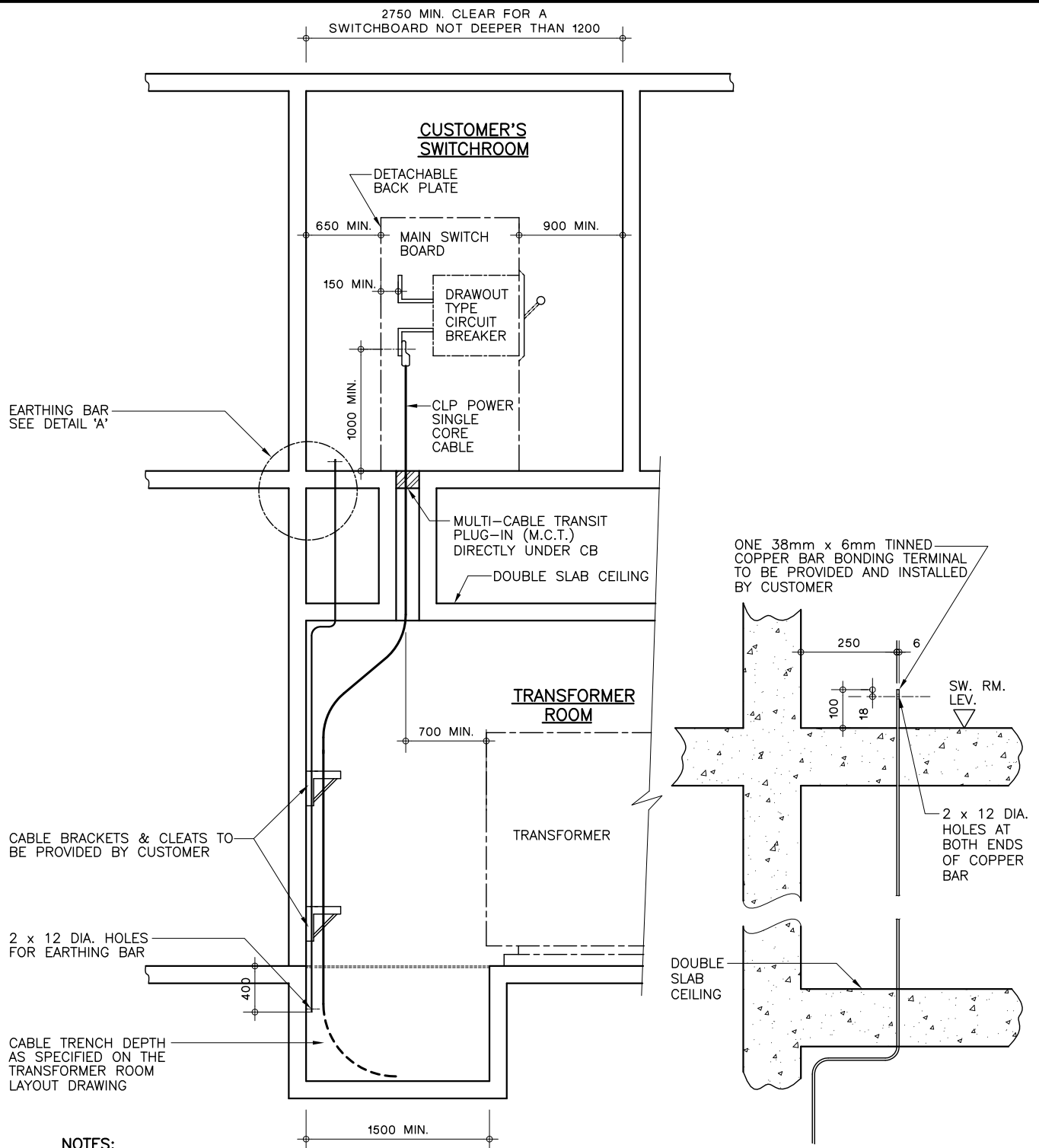
TITLE :

MINIMUM REQUIREMENTS FOR CUSTOMER MAIN SWITCHROOM ADJACENT TO SUBSTATION FOR MULTI-TRANSFORMER INSTALLATION

DRAWN: T. Y. IP	DATE: 19-07-2002
CHECKED: K. C. CHENG	APPROVED: K. W. WONG
SCALE: 1 : 50 (mm)	SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 2 0 2 D A

**NOTES:**

1. EXACT POSITION OF ALL MAIN INCOMING CIRCUIT BREAKERS AND DETAILED CABLE TRENCH LAYOUT WITHIN CUSTOMER'S SWITCHROOM MUST BE SUBMITTED TO CLP POWER FOR APPROVAL PRIOR TO INSTALLATION.
2. REFER TO DRAWING NO. T-COP-10250-D-E33-0103-13 FOR THE CLEARANCE BEHIND THE MAIN SWITCH BOARD.
3. WATERPROOFING SHALL BE APPLIED TO THE SLAB BETWEEN THE CEILING OF THE SUBSTATION AND THE VOID.
4. DRAIN SHALL BE PROVIDED IN THE VOID TO DRAIN AWAY WATER LEAKED INTO THE VOID.
5. NO DRAIN OR OTHER WATER SERVICES PIPE SHALL RUN INTO OR CONCEAL IN THE CEILING SLAB OF THE SUBSTATION.

DETAIL 'A'

SCALE 1 : 15

C	DIMENSION OF CABLE TRENCH ADDED AND DOUBLE SLAB HEIGHT CHANGED
B	DOUBLE SLAB CEILING ADDED
A	NOTE 2 ADDED

CLP 中電

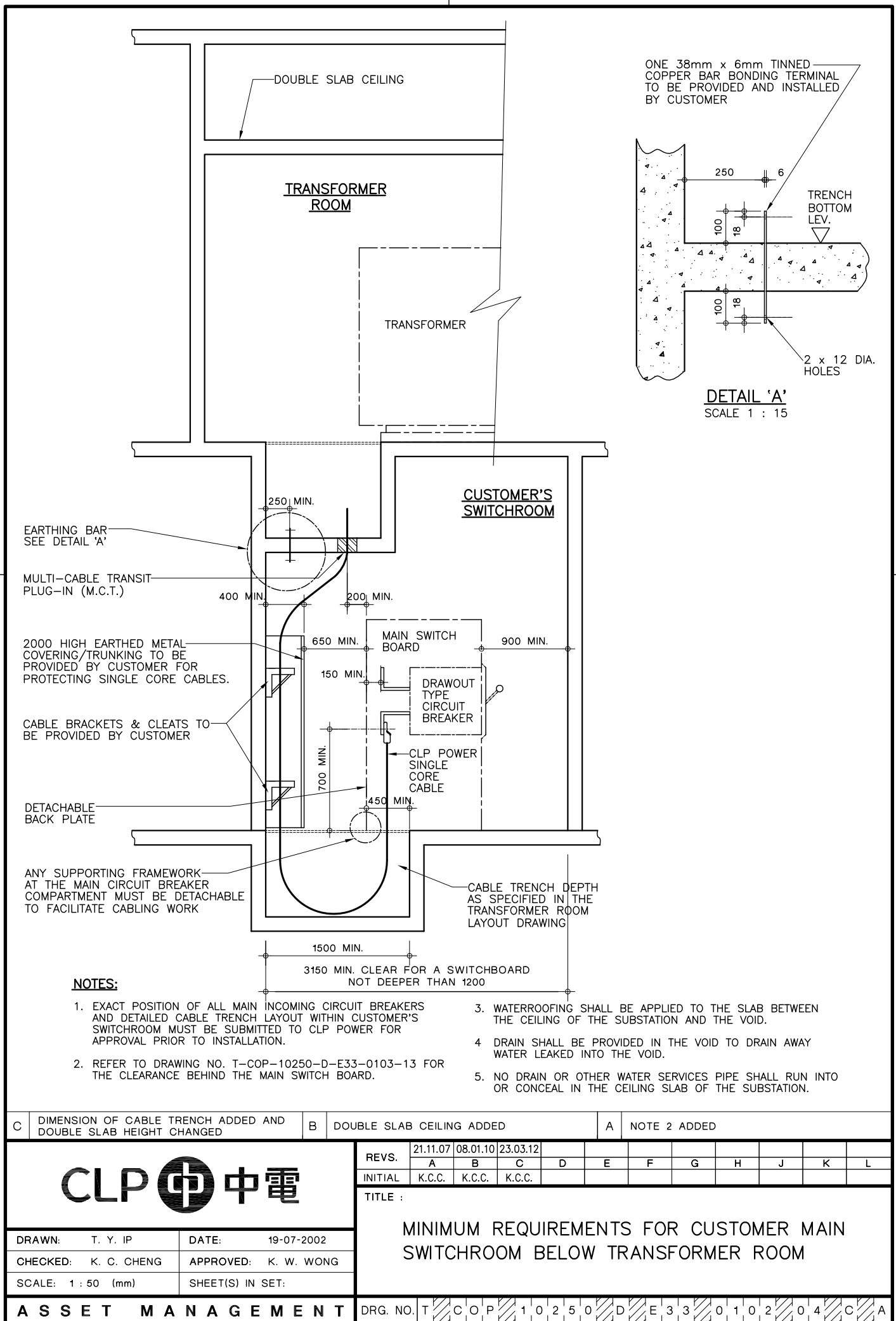
REVS.	21.11.07	08.01.10	23.03.12											
INITIAL	A K.C.C.	B K.C.C.	C K.C.C.	D	E	F	G	H	J	K	L			

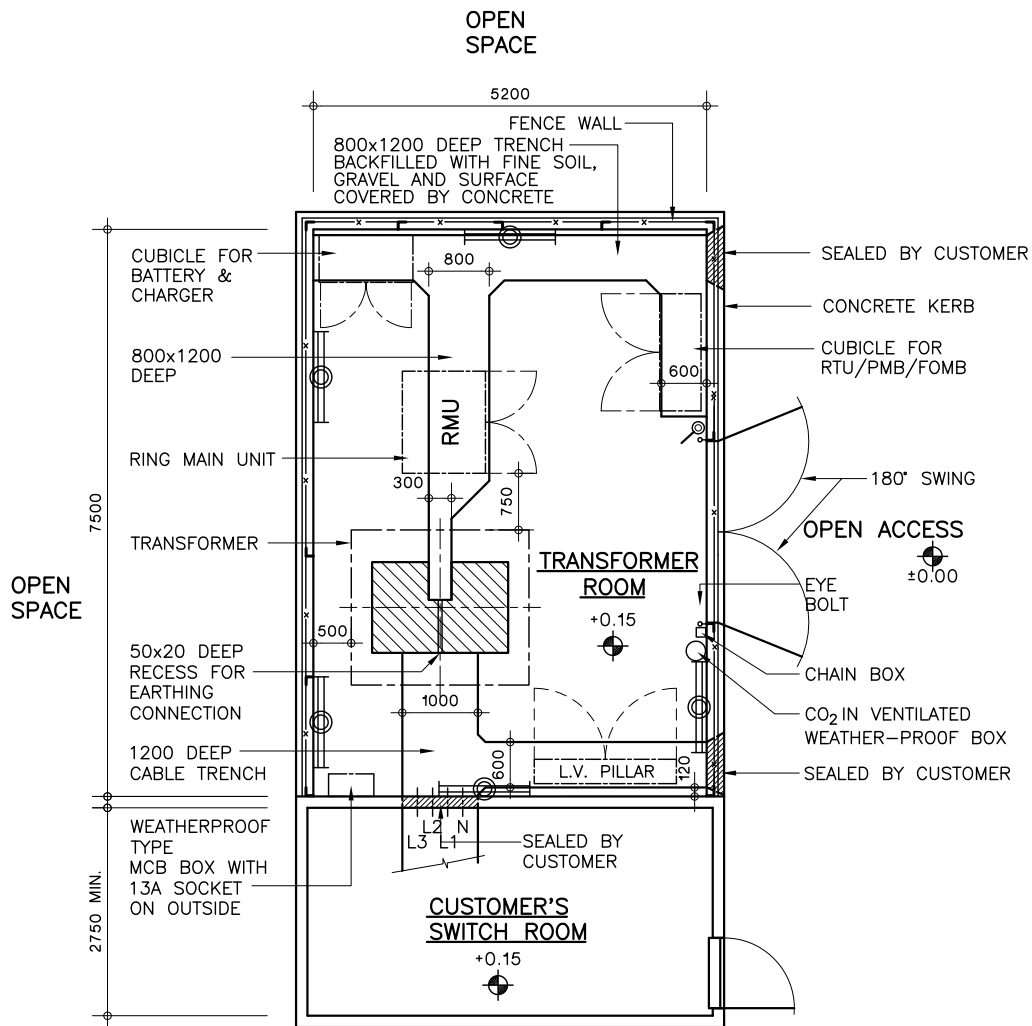
TITLE :

MINIMUM REQUIREMENTS FOR CUSTOMER MAIN SWITCHROOM ABOVE TRANSFORMER ROOM

DRAWN: S. C. TO	DATE: 12-8-2002
CHECKED: K. C. CHENG	APPROVED: K. W. WONG
SCALE: 1 : 50 (mm)	SHEET(S) IN SET:

ASSET MANAGEMENT	DRG. NO. T	COP	10250	D	E33	0102	03	C	A
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**LEGEND:**

WEATHERPROOF FLUORESCENT LAMPS



WEATHERPROOF LIGHTING SWITCH

D	DEPTH OF CABLE TRENCH AND DOOR SIZE UPDATED.
C	CHAIN BOX ADDED
B	PHASE IDENTIFICATION UPDATED



REVS.	3.4.03	16.08.07	16.12.09	18.03.14									
INITIAL	A	B	C	D	E	F	G	H	J	K	L		
	K.C.C.	K.C.C.	K.C.C.	H.T.YU									

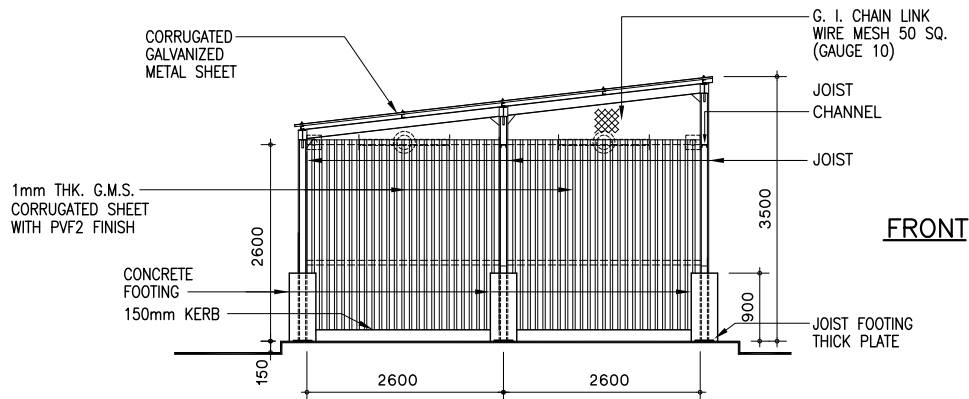
TITLE :

TYPICAL TEMPORARY OUTDOOR SUBSTATION
LAYOUT FOR ONE TRANSFORMER AND 11kV
RING MAIN UNIT

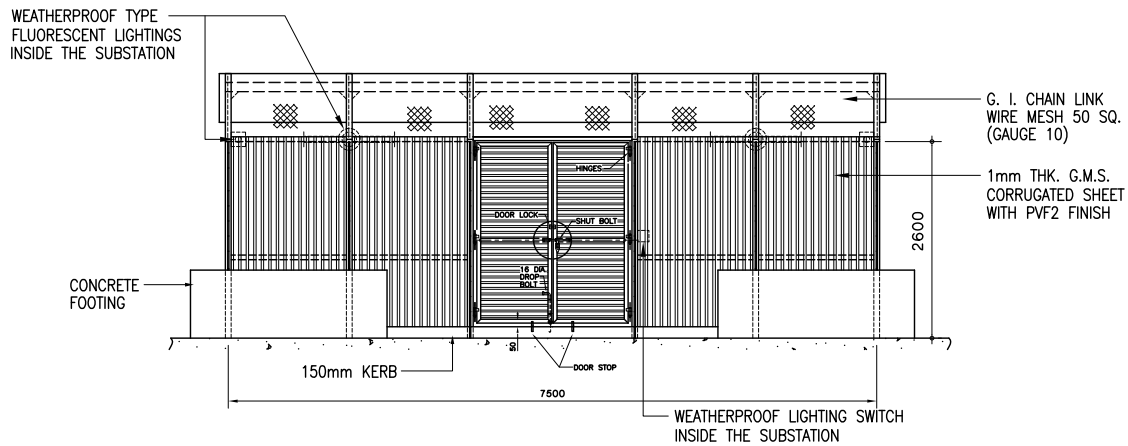
DRAWN: S. C. TO	DATE: 18-07-2002
CHECKED: K. C. CHENG	APPROVED: K. W. WONG
SCALE: 1 : 100 (mm)	SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 1 0 1 D A



SIDE VIEW

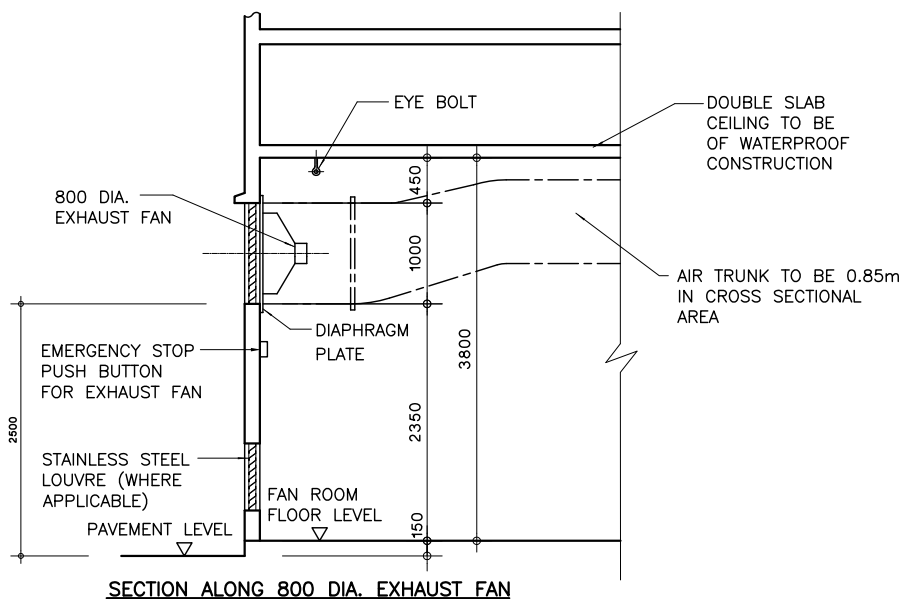
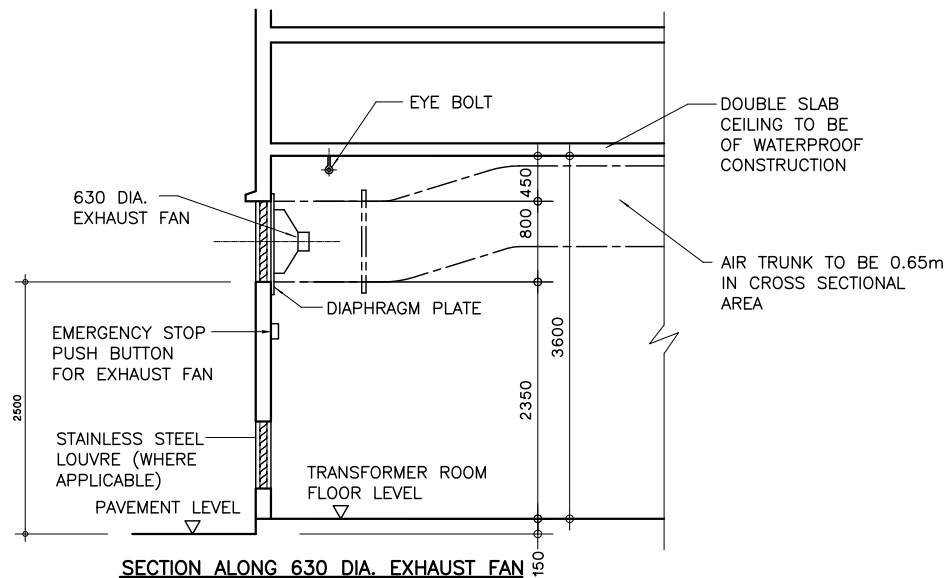


FRONT VIEW

NOTES:

1. DETAIL STRUCTURE SHALL BE DESIGNED BY COMPETENT PROFESSIONAL HIRED BY THE CUSTOMER/DEVELOPER.
2. DETAILS OF METAL GATE, DRAIN PIPE, EARTHING BAR ARRANGEMENT REFER TO DRG. NO. T-COP-10250-D-E33-0104-01
3. SUPPORTING METAL STRUCTURE SHALL BE APPLIED WITH ANTI-RUST PAINTING.
4. FLOOESCENT LIGHTINGS (WEATHERPROOF TYPE) SHALL BE INSTALLED INSIDE THE SUBSTATION.

C	DIMENSION UPDATED.										B	CHANGE FENCE WALL MATERIAL										A	CHANGE FENCE WALL									
CLP 中電															REVS.	21.12.05	16.08.07	18.03.14														
																A	B	C	D	E	F	G	H	J	K	L						
															INITIAL	K.C.C.	K.C.C.	H.T.YU														
DRAWN: T. Y. IP CHECKED: K. C. CHENG SCALE: 1 : 100 (mm)															TITLE : COVER FOR OUTDOOR SUBSTATION LOCATED INSIDE CONSTRUCTION SITE																	
															DATE: 21 Dec., 2005 APPROVED: W. C. HO SHEET(S) IN SET:																	
ASSET MANAGEMENT															DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 2 0 5 C A																	

**NOTES:**

1. WATERPROOFING SHALL BE APPLIED TO THE SLAB BETWEEN THE CEILING OF THE SUBSTATION AND THE VOID.
2. DRAIN SHALL BE PROVIDED IN THE VOID TO DRAIN AWAY WATER LEAKED INTO THE VOID.
3. NO DRAIN OR OTHER WATER SERVICES PIPE SHALL RUN INTO OR CONCEAL IN THE CEILING SLAB OF THE SUBSTATION.

C DOUBLE SLAB HEIGHT CAHNGED

B DOUBLE SLAB CEILING ADDED

D GENERAL AMENDMENT



REVS.	16.08.07	08.01.10	26.04.12	06.06.14							
	A	B	C	D	E	F	G	H	J	K	L
INITIAL	K.C.C.	K.C.C.	K.C.C.	H.T.YU							

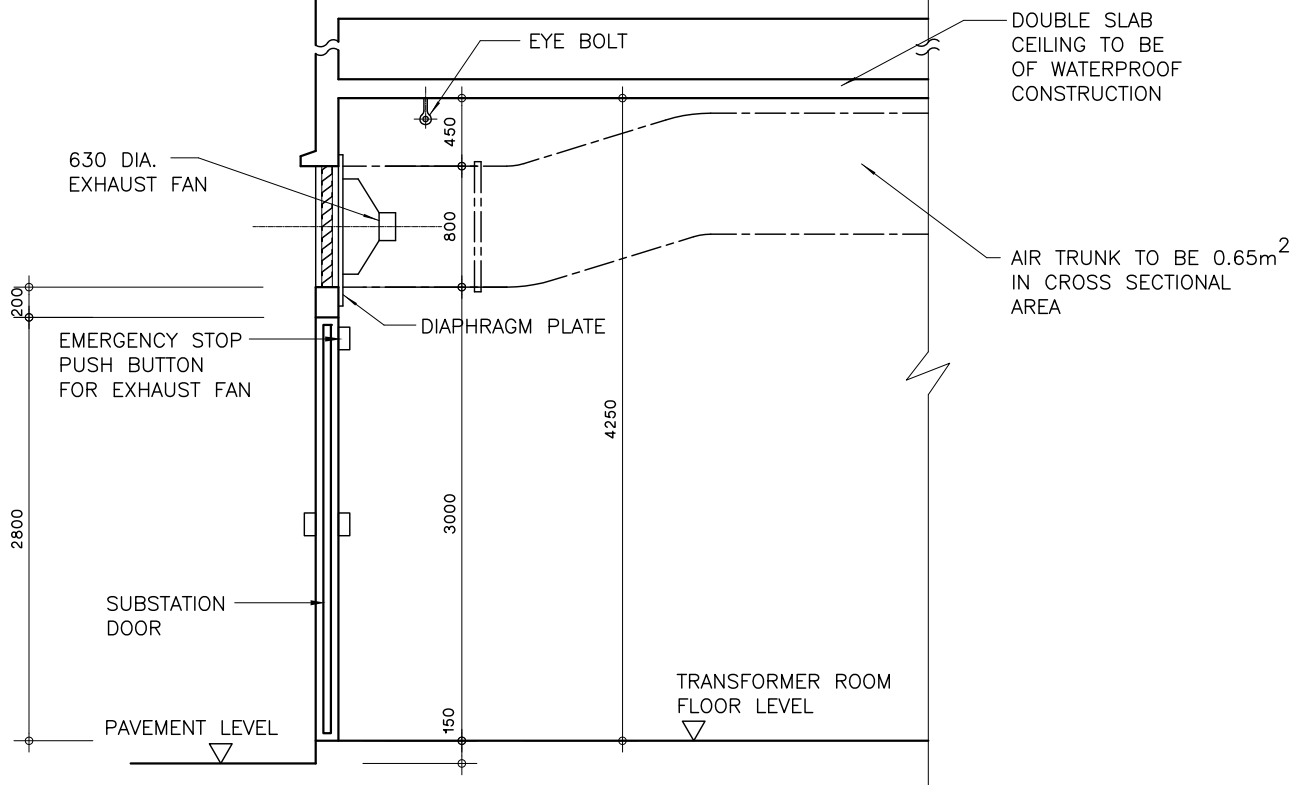
TITLE :

TYPICAL SECTIONS OF TRANSFORMER ROOM AT
EXHAUST FAN POSITION (NOT DIRECTLY ABOVE
SUBSTATION DOOR) (SHEET 1 OF 3)

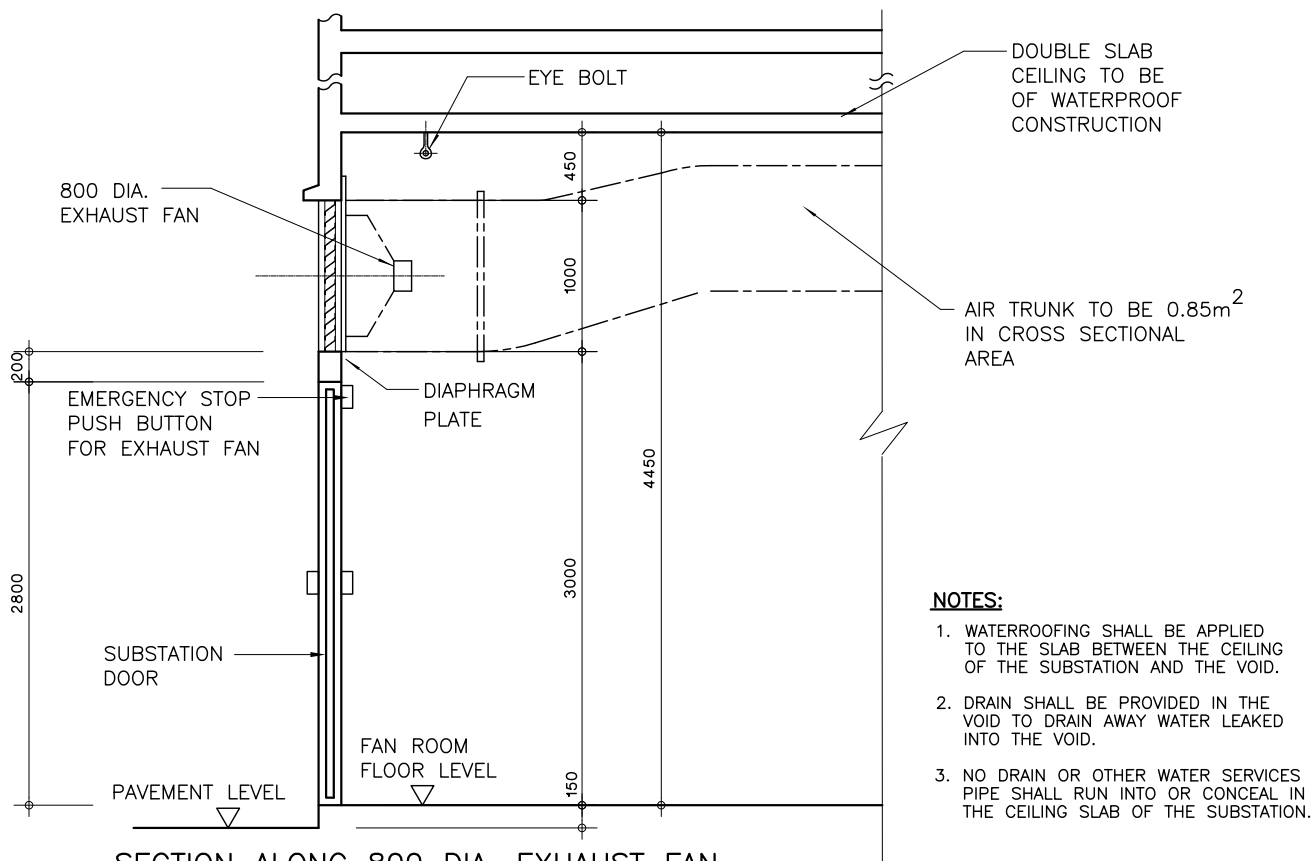
DRAWN: S. C. TO	DATE: 23-07-2002
CHECKED: K. C. CHENG	APPROVED: K. W. WONG
SCALE: 1 : 75 (mm)	SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 2 0 7 D A



SECTION ALONG 630 DIA. EXHAUST FAN

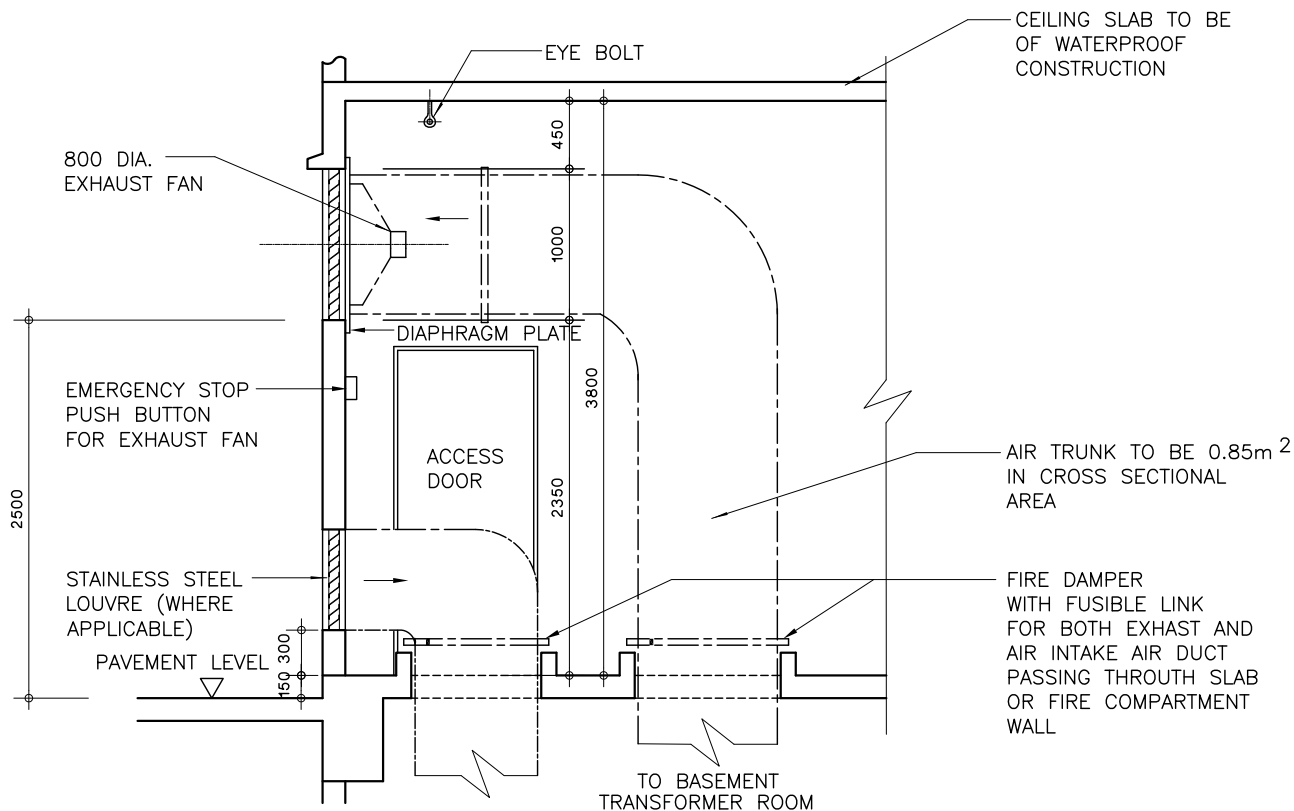


SECTION ALONG 800 DIA. EXHAUST FAN

NOTES:

1. WATERPROOFING SHALL BE APPLIED TO THE SLAB BETWEEN THE CEILING OF THE SUBSTATION AND THE VOID.
2. DRAIN SHALL BE PROVIDED IN THE VOID TO DRAIN AWAY WATER LEAKED INTO THE VOID.
3. NO DRAIN OR OTHER WATER SERVICES PIPE SHALL RUN INTO OR CONCEAL IN THE CEILING SLAB OF THE SUBSTATION.

C	GENERAL AMENDMENT										B	DOUBLE SLAB HEIGHT CHANGED										A	DOUBLE SLAB CEILING ADDED										
CLP 中電												REVS.	08.01.10	02.05.12	18.03.14																		
													A	B	C	D	E	F	G	H	J	K	L										
												INITIAL	K.C.C	K.C.C	H.T.YU																		
												TITLE :																					
												TYPICAL SECTIONS OF TRANSFORMER ROOM AT EXHAUST FAN POSITION (DIRECTLY ABOVE SUBSTATION DOOR) (SHEET 2 OF 3)																					
												DRAWN: S. C. TO		DATE: 23-07-2002																			
												CHECKED: K. C. CHENG		APPROVED: K. W. WONG																			
SCALE: 1 : 50 (mm)		SHEET(S) IN SET:																															
ASSET MANAGEMENT												DRG. NO.	T	C	O	P	1	0	2	5	0	D	E	3	3	0	1	0	2	0	8	C	A



SECTION ALONG 800 DIA. EXHAUST FAN

NOTES:

THE FOLLOWING ITEMS SHALL BE PROVIDED FOR THE FAN ROOM:

1. ACCESS DOOR WITH PROPER NOTICE
2. ADEQUATE WORKING SPACE FOR MAINTENANCE
3. ADEQUATE LIGHTING AND POWER SOCKET
4. FIRE DAMPER CAN BE OMITTED WHEN FIRE RESISTANCE AIR DUCT IS USED IN ACCORDANCE WITH THE REGULATIONS

B	LOUVRE REVISED
A	NOTE 4 ADDED



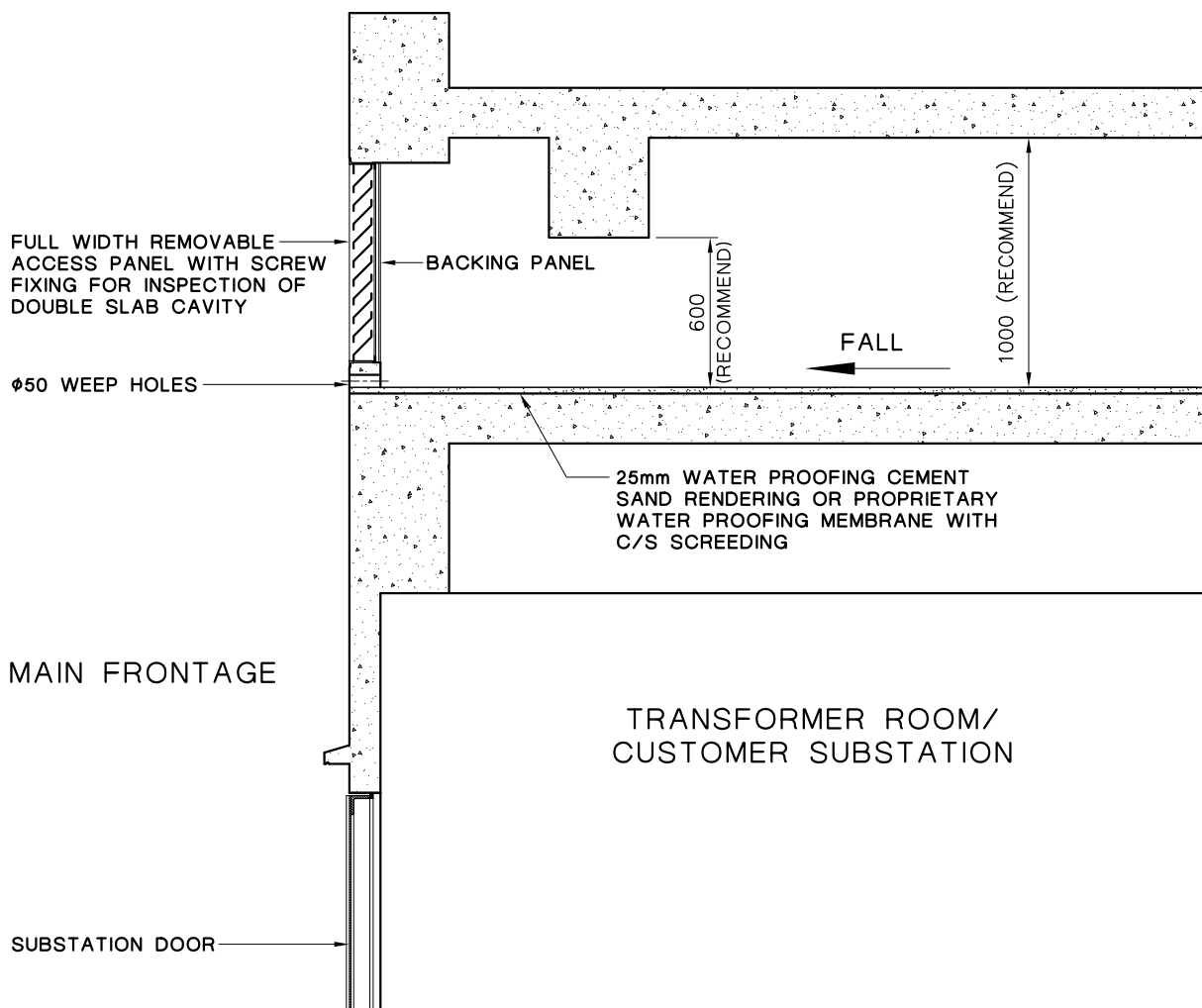
REVS.	01.12.04	16.08.07												
INITIAL	A	B	C	D	E	F	G	H	J	K	L			
	K.C.C	K.C.C												

TITLE :

TYPICAL SECTION OF FAN ROOM
(SHEET 3 OF 3)

DRAWN: S. C. TO	DATE: 23-07-2002
CHECKED: K. C. CHENG	APPROVED: W. C. HO
SCALE: 1 : 50 (mm)	SHEET(S) IN SET:

ASSET MANAGEMENT	DRG. NO. T	C	O	P	1	0	2	5	0	D	E	3	3	0	1	0	2	0	9	B	A
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NOTES:

1. NO LEFT IN TIMBER FORM WORK INSIDE THE VOID AFTER CASTING THE CONCRETE.
2. 50mm DIAMETER WEEP HOLE IS REQUIRED AT THE LOWER POINT OF FALL OR AT LEAST 2 HOLES TO BE PROVIDED WHEN IT IS NOT FALLING TO A SINGLE POINT. ALLOW AT LEAST A SLEEVE OPENING FOR EACH VOID COMPARTMENT.
3. THE FOLLOWING TESTS SHALL BE CARRIED OUT AT THE TIME OF SUBSTATION INSPECTION:
 - i. SEAL ALL OUTLETS AND CONSTRUCT SUITABLE DAM WALLS TO COMPARTMENTALISE THE TEST AREAS. DO NOT PERMIT ANY DEBRIS TO ENTER INTO DRAINAGE PIPEWORKS;
 - ii. CAREFULLY FLOOD THE LEVELS NO LESS THAN 50mm FOR UPPER SLAB AND 150mm FOR LOWER SLAB AND MAINTAIN FOR 24 HOURS;
 - iii. MARK THE TOP WATER LEVEL AT CLEARLY VISIBLE LOCATIONS AND REGULARLY INSPECT FOR LEAKS;
 - iv. SLOWLY DRAIN AND REMOVE ALL OUTLET BLOCKAGES AFTER TEST.
4. ALL DIMENSIONS ARE IN mm.

A GENERAL NOTES ADDED.



REVS.	18.03.14												
INITIAL	A	B	C	D	E	F	G	H	J	K	L		

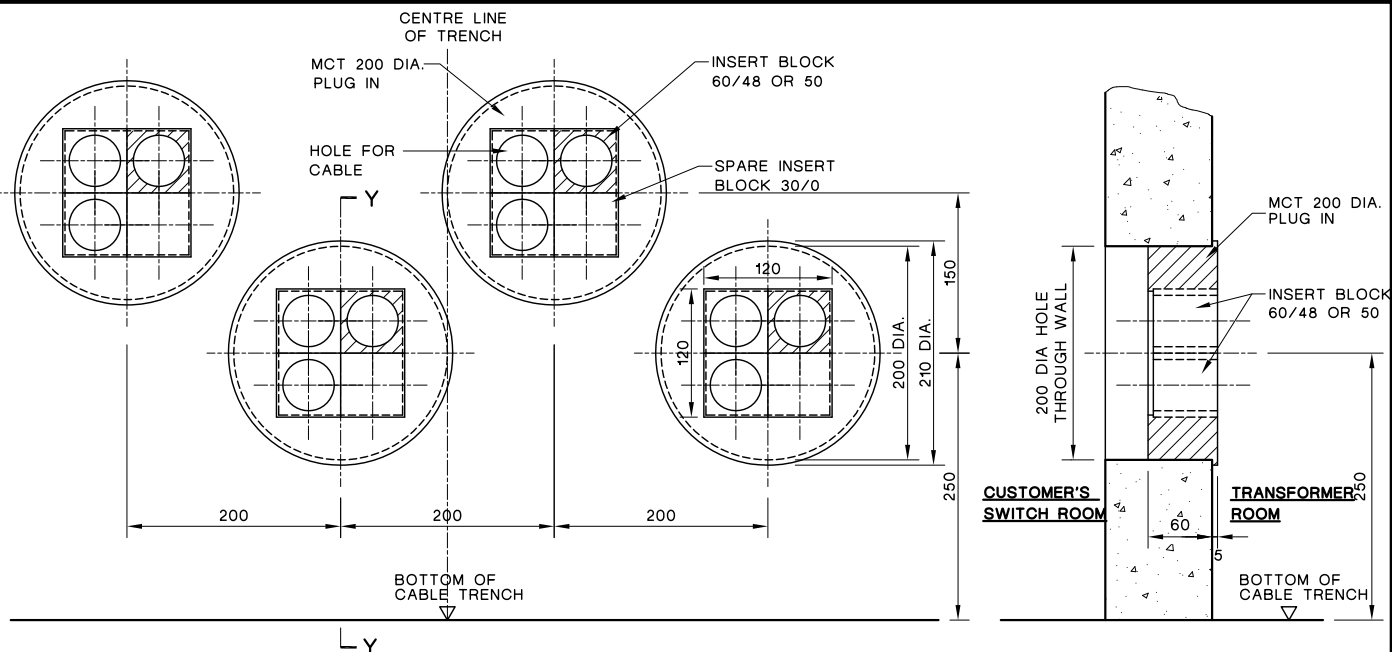
TITLE :

DOUBLE SLAB ARRANGEMENT FOR
TRANSFORMER ROOM

DRAWN: C W WONG	DATE: 2 APR., 2012
CHECKED: GARY KWOK	APPROVED: GARY KWOK
SCALE: N. T. S.	SHEET(S) IN SET:

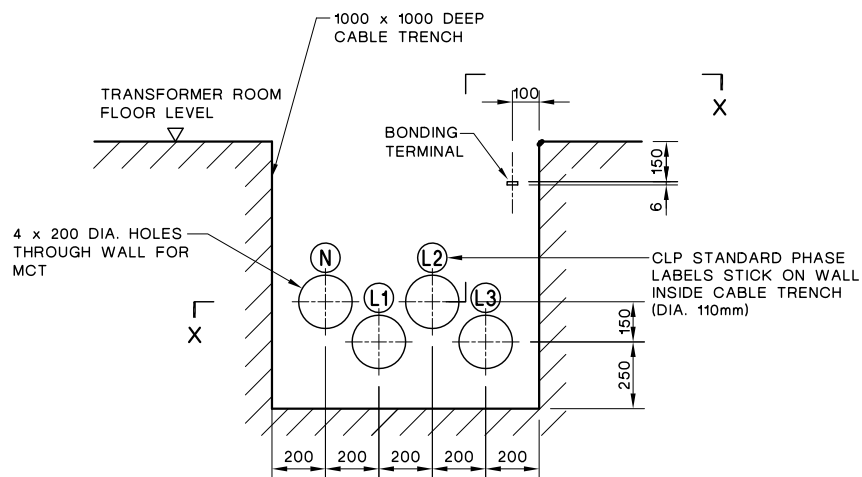
ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 2 1 0 A A

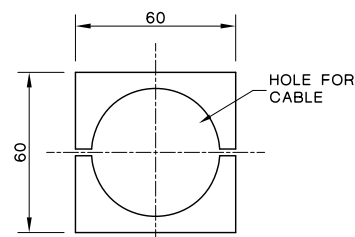


ARRANGEMENT OF MULTI-CABLE TRANSIT
(VIEW LOOKING TOWARDS WALL INSIDE TRANSFORMER ROOM)

SECTION Y-Y



ELEVATION NOTE: CHEQUER PLATE
(VIEW IN TRANSFORMER ROOM) NOT SHOWN



**DETAIL FOR INSERT
BLOCK 60/48 OR 50**

PHASE IDENTIFICATION:

L1 (BROWN)
L2 (BLACK)
L3 (GREY)
N : (NEUTRAL/BLUE)

NOTES:

- MULTI-CABLE TRANSIT PLUG-IN TO BE PROVIDED AND INSTALLED BY CLP POWER.
- THE 4 x 200 DIA. HOLES THROUGH WALL TO BE PROVIDED BY CUSTOMER.
- SOLID CABLE $\phi 48$, STRANDED CABLE $\phi 50$.
- ☒ USE SPARE INSERT BLOCK 30/0 WHEN ONLY 2 CABLES PER PHASE ARE USED.
- PHASE IDENTIFICATION LABELS TO BE APPLIED ON TRANSFORMER RM. AND CUSTOMER MAIN SWITCH RM.
- ALL DIMENSIONS ARE IN mm.

B	PHASE LABELS ADDED	A	PHASE IDENTIFICATION UPDATED
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CLP 中電

REVS.	20.08.07	12.10.09												
INITIAL	A	B	C	D	E	F	G	H	J	K	L			
	K.C.C.	K.C.C.												

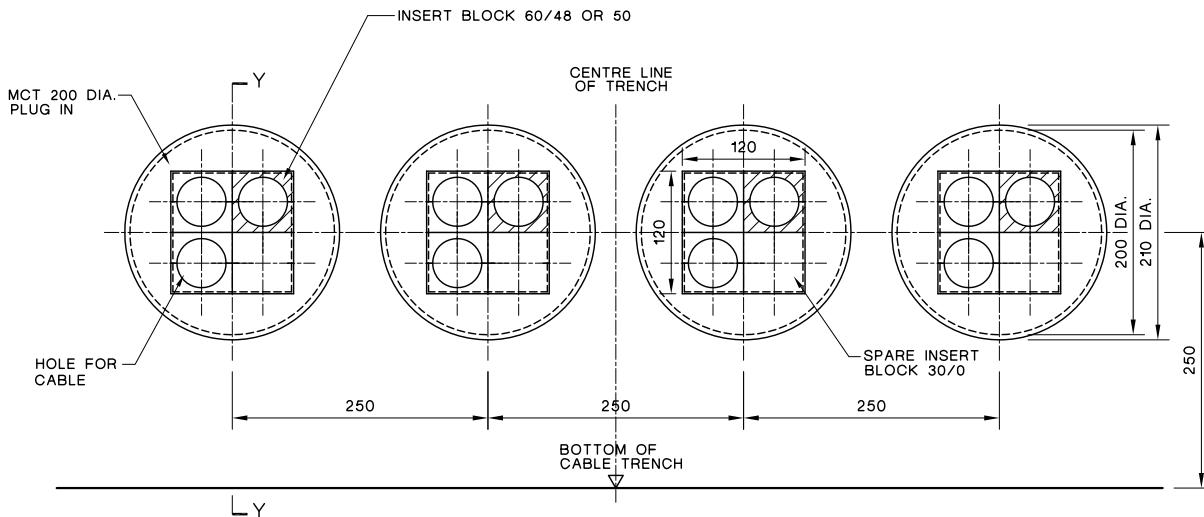
TITLE :

INSTALLATION OF FOUR "MULTI-CABLE TRANSIT"
PLUG-IN IN CABLE TRENCH IN TWO LAYERS
(FOR FULL NEUTRAL ARRANGEMENT)

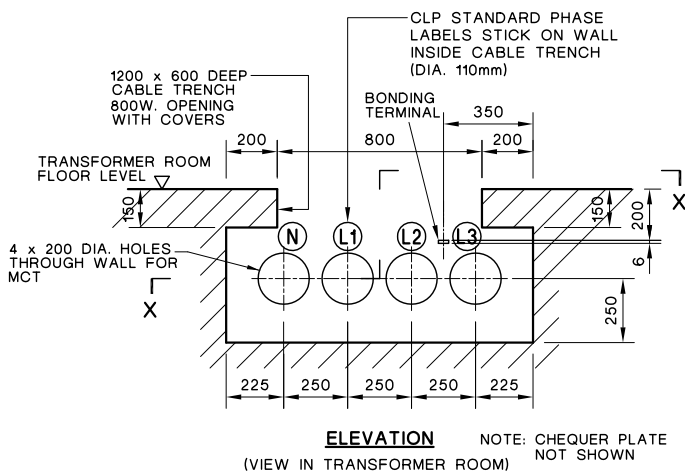
DRAWN: S. C. TO DATE: 22-07-2002
CHECKED: K. C. CHENG APPROVED: K. W. WONG
SCALE: N.T.S. SHEET(S) IN SET:

ASSET MANAGEMENT

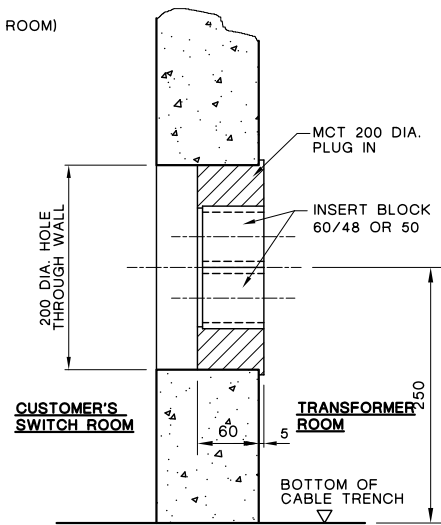
DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 3 0 1 B A



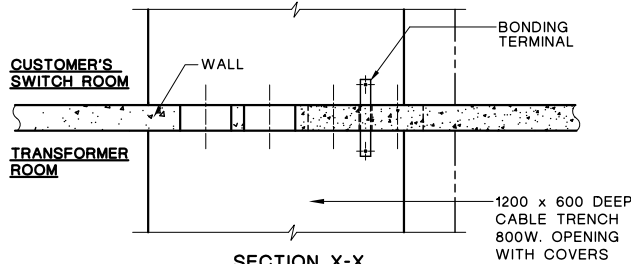
ARRANGEMENT OF MULTI-CABLE TRANSIT
(VIEW LOOKING TOWARDS WALL INSIDE TRANSFORMER ROOM)



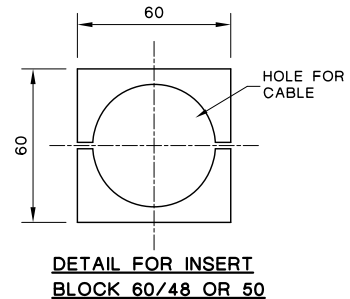
ELEVATION NOTE: CHEQUER PLATE NOT SHOWN
(VIEW IN TRANSFORMER ROOM)



SECTION Y-Y



SECTION X-X



DETAIL FOR INSERT BLOCK 60/48 OR 50

NOTES:

- MULTI-CABLE TRANSIT PLUG-IN TO BE PROVIDED AND INSTALLED BY CLP POWER.
- THE 4 x 200 DIA. HOLES THROUGH WALL TO BE PROVIDED BY CUSTOMER.
- SOLID CABLE $\phi 48$, STRANDED CABLE $\phi 50$.
- ☒ USE SPARE INSET BLOCK 30/0 WHEN ONLY 2 CABLES PER PHASE ARE USED.
- PHASE IDENTIFICATION LABELS TO BE APPLIED ON TRANSFORMER RM. AND CUSTOMER MAIN SWITCH RM.
- ALL DIMENSIONS ARE IN mm.

PHASE IDENTIFICATION:

- L1 (BROWN)
L2 (BLACK)
L3 (GREY)
N : (NEUTRAL/BLUE)

B	PHASE LABELS ADDED	A	PHASE IDENTIFICATION UPDATED
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CLP 中電

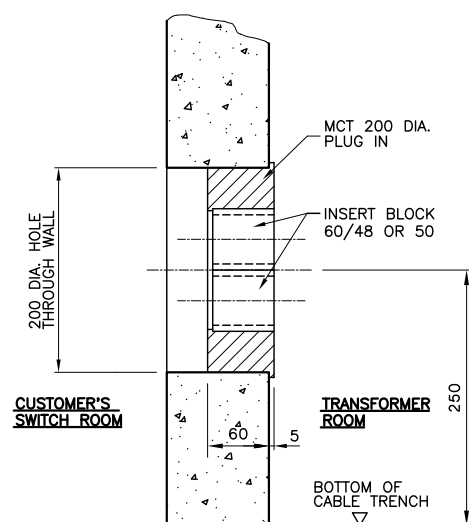
REVS.	20.08.07	12.10.09												
INITIAL	A	B	C	D	E	F	G	H	J	K	L			
	K.C.C.	K.C.C.												

TITLE :

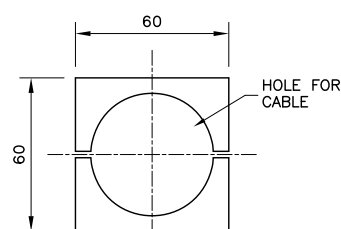
INSTALLATION OF FOUR "MULTI-CABLE TRANSIT"
PLUG-IN IN CABLE TRENCH IN LINE
(FOR FULL NEUTRAL ARRANGEMENT)

DRAWN: S. C. TO	DATE: 26-07-2002
CHECKED: K. C. CHENG	APPROVED: K. W. WONG
SCALE: N. T. S.	SHEET(S) IN SET:

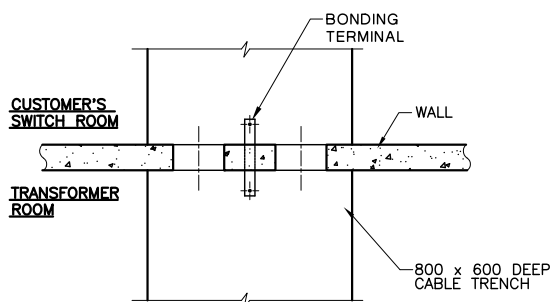
ASSET MANAGEMENT	DRG. NO. T	C	O	P	1	0	2	5	0	D	E	3	3	0	1	0	3	0	2	B	A
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SECTION Y-Y



DETAIL FOR INSERT
BLOCK 60/48 OR 50



SECTION X-X

L1 (BROWN)
L2 (BLACK)
L3 (GREY)
N : (NEUTRAL/BLUE)

1. MULTI-CABLE TRANSIT PLUG-IN TO BE PROVIDED AND INSTALLED BY CLP POWER.
2. THE 4 x 200 DIA. HOLES THROUGH WALL TO BE PROVIDED BY CUSTOMER.
3. SOLID CABLE $\phi 48$, STRANDED CABLE $\phi 50$.
4. PHASE IDENTIFICATION LABELS TO BE APPLIED ON TRANSFORMER RM. AND CUSTOMER MAIN SWITCH RM.
5. ALL DIMENSIONS ARE IN mm.

A	PHASE LABELS ADDED					
E	F	G	H	J	K	L

CLP 中電

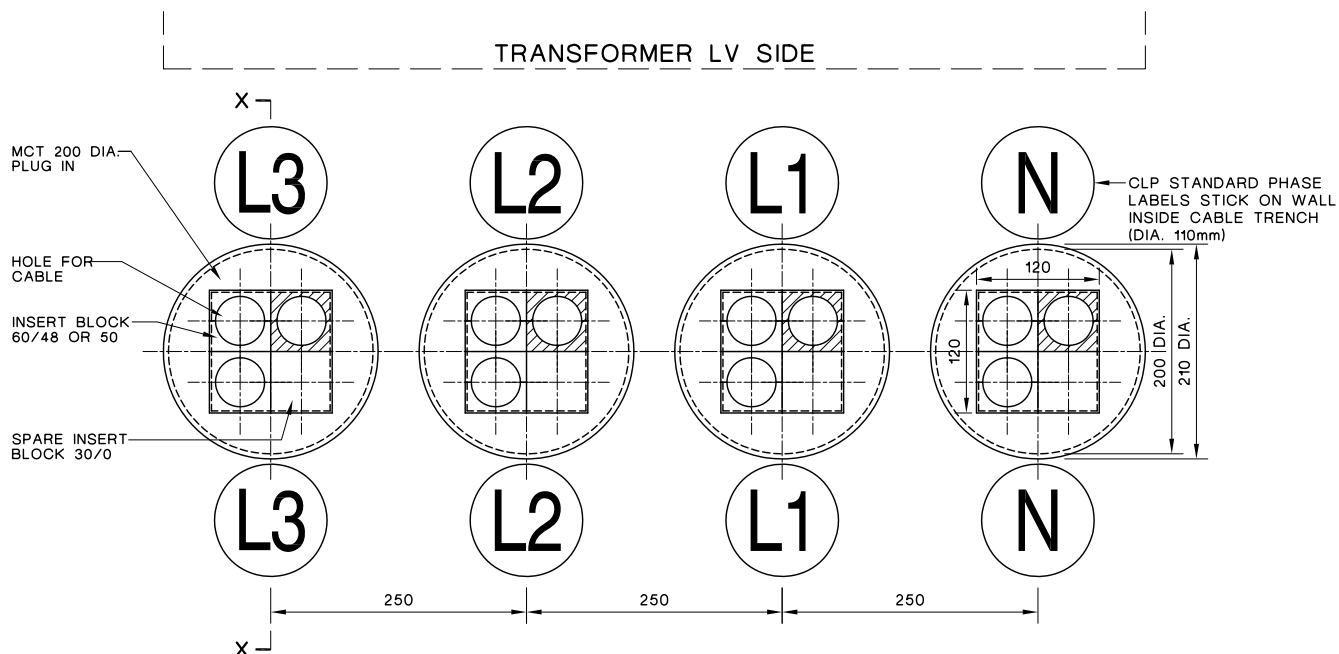
DRAWN:	S. C. TO	DATE:	12-8-2002
CHECKED:	K. C. CHENG	APPROVED:	K. W. WONG
SCALE:	N.T.S.	SHEET(S) IN SET:	

TITLE :

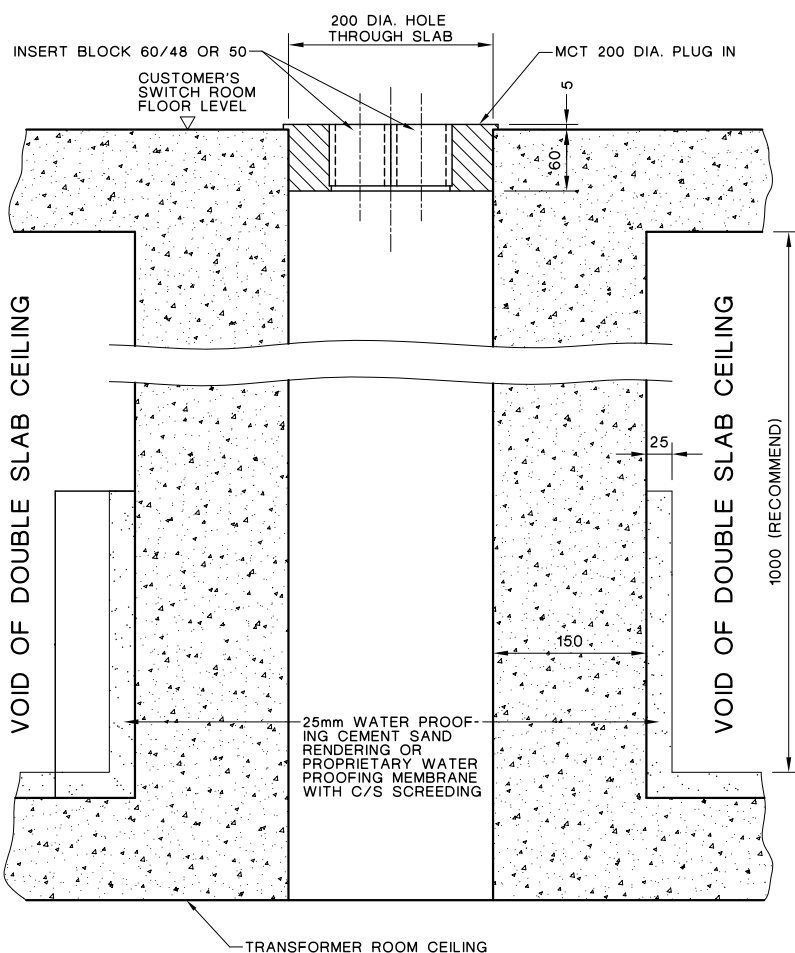
INSTALLATION OF TWO "MULTI-CABLE TRANSIT" PLUG-IN IN CABLE TRENCH IN LINE (1000kVA OR BELOW TRANSFORMER)

ASSET MANAGEMENT

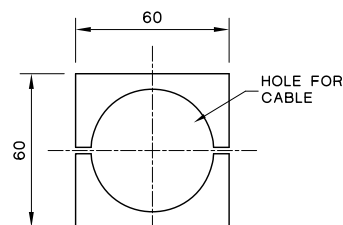
DRG. NO.	T	C	O	P	1	0	2	5	0	D	E	3	3	0	1	0	3	0	3	A	A
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PLAN VIEW SHOWING ARRANGEMENT OF MULTI-CABLE TRANSIT
(LOOKING TOWARDS FLOOR INSIDE CUSTOMER SWITCHROOM)



SECTION X - X



DETAIL FOR INSERT
BLOCK 60/48 OR 50

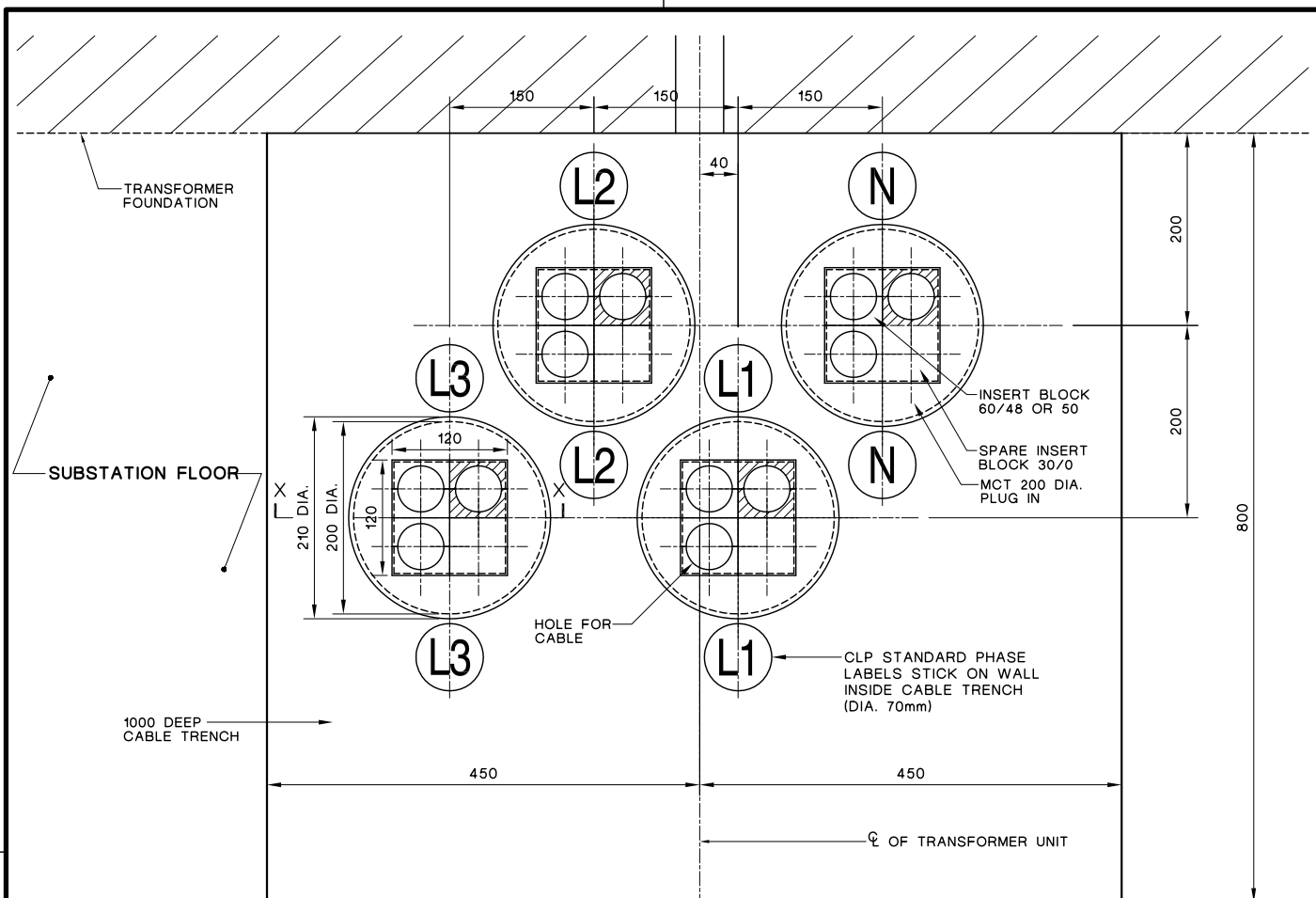
PHASE IDENTIFICATION:

- L1 (BROWN)
L2 (BLACK)
L3 (GREY)
N : (NEUTRAL/BLUE)

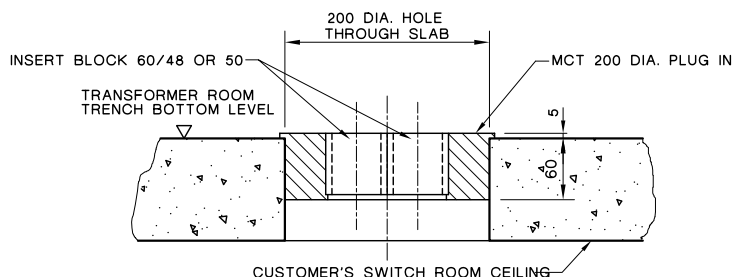
NOTES:

1. MULTI-CABLE TRANSIT PLUG-IN TO BE PROVIDED AND INSTALLED BY CLP POWER.
2. THE 4 x 200 DIA. HOLES THROUGH WALL TO BE PROVIDED BY CUSTOMER.
3. SOLID CABLE $\phi 48$, STRANDED CABLE $\phi 50$.
4.  USE SPARE INSERT BLOCK 30/0 WHEN ONLY 2 CABLES PER PHASE ARE USED.
5. PHASE IDENTIFICATION LABELS TO BE APPLIED ON TRANSFORMER RM. AND CUSTOMER MAIN SWITCH RM.
6. DETAIL AND LOCATION OF EARTHING BAR REFER TO DRAWING NO. T/COP/10250/D/E33/0102/03.
7. ALL DIMENSIONS ARE IN mm.

C		NOTE 7 ADDED, SECTION X-X REVISED				B		PHASE LABELS ADDED				D		GENERAL AMANDMENT				
CLP中電						REVS.		20.08.07	12.10.09	23.03.12	18.03.14							
								A	B	C	D	E	F	G	H	J	K	L
						INITIAL		K.C.C.	K.C.C.	E. YU	H.T.YU							
						TITLE :												
						INSTALLATION OF "MULTI-CABLE TRANSIT" PLUG-IN THROUGH SUBSTATION CEILING												
DRAWN:		S. C. TO		DATE:		22-07-2002												
CHECKED:		K. C. CHENG		APPROVED:		K. W. WONG												
SCALE:		N. T. S.		SHEET(S) IN SET:														
A S S E T M A N A G E M E N T						DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 3 0 4 D A												



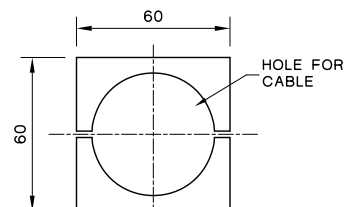
**PLAN VIEW SHOWING ARRANGEMENT OF MULTI-CABLE TRANSIT
(VIEW TOWARDS FLOOR INSIDE TRANSFORMER ROOM)**



SECTION X - X

PHASE IDENTIFICATION:

L1 (BROWN)
L2 (BLACK)
L3 (GREY)
N : (NEUTRAL/BLUE)



**DETAIL FOR INSERT
BLOCK 60/48 OR 50**

NOTES:

- MULTI-CABLE TRANSIT PLUG-IN TO BE PROVIDED AND INSTALLED BY CLP POWER.
- THE 4 x 200 DIA. HOLES THROUGH WALL TO BE PROVIDED BY CUSTOMER.
- SOLID CABLE $\phi 48$, STRANDED CABLE $\phi 50$.
- USE SPARE INSERT BLOCK 30/0 WHEN ONLY 2 CABLES PER PHASE ARE USED.
- PHASE IDENTIFICATION LABELS TO BE APPLIED ON TRANSFORMER RM. AND CUSTOMER MAIN SWITCH RM.
- DETAIL AND LOCATION OF EARTHING BAR REFER TO DRAWING NO. T/COP/10250/D/E33/0102/04.
- ALL DIMENSIONS ARE IN mm.

C NOTE 7 ADDED

B PHASE LABELS ADDED

A PHASE IDENTIFICATION UPDATED

CLP 中電

REVS.	16.08.07	12.10.09	23.03.12										
INITIAL	A K.C.C.	B K.C.C.	C K.C.C.	D	E	F	G	H	J	K	L		

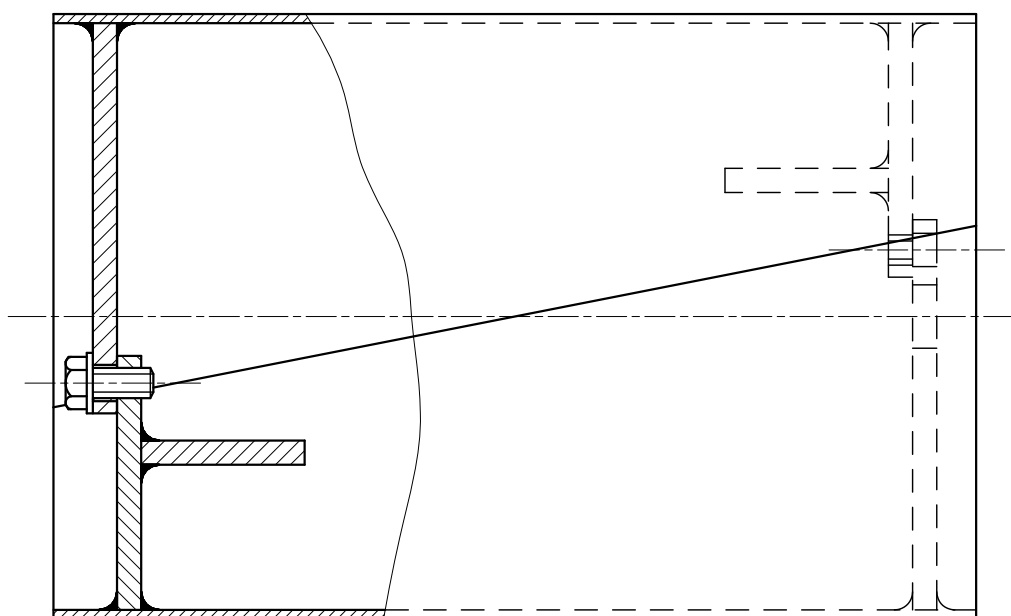
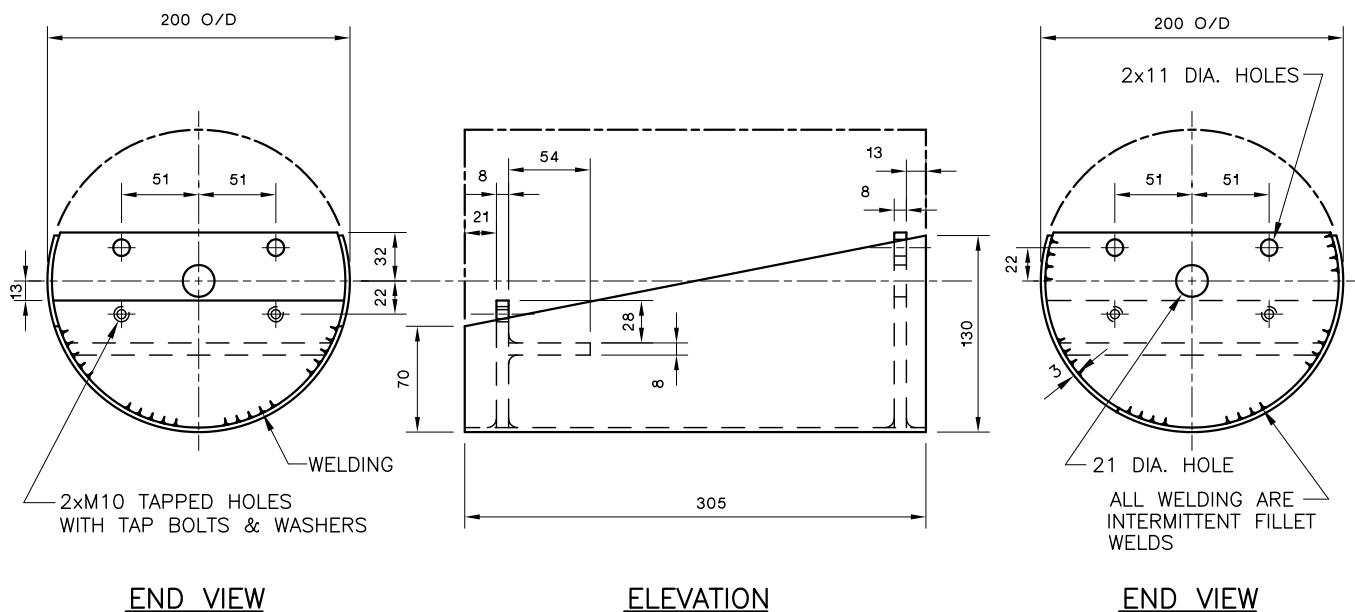
TITLE :

**INSTALLATION OF "MULTI-CABLE TRANSIT"
PLUG-IN THROUGH SUBSTATION FLOOR**

DRAWN: S. C. TO DATE: 22-07-2002
CHECKED: K. C. CHENG APPROVED: K. W. WONG
SCALE: N. T. S. SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T/COP/10250/D/E33/0103/05/C/A

**NOTES:**

1. THE COMPLETE FORMER CONSISTS OF TWO IDENTICAL HALVES.
2. MILD STEEL FORMER TO BE LOANED TO CUSTOMER BY CLP POWER DURING CONSTRUCTION PHASE.

CLP 中電

REVS.	A	B	C	D	E	F	G	H	J	K	L
INITIAL											

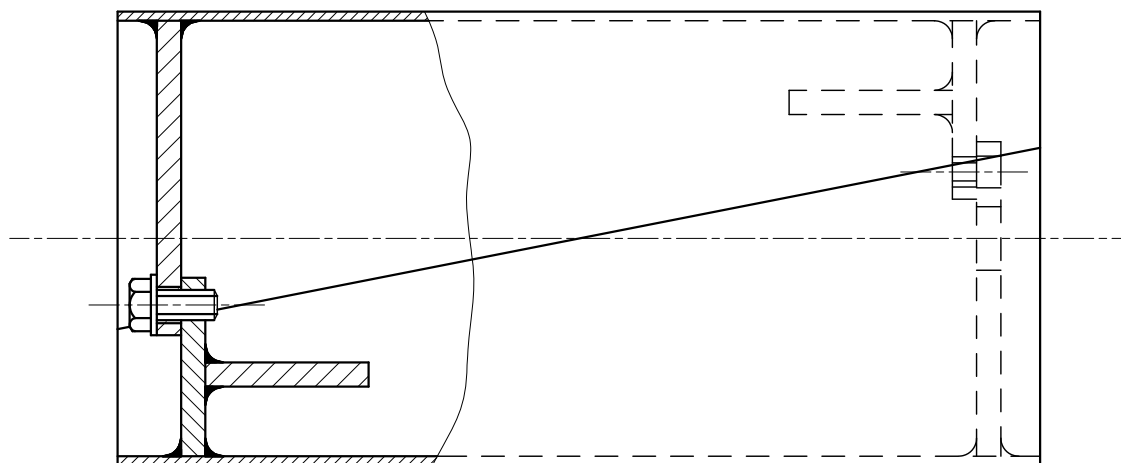
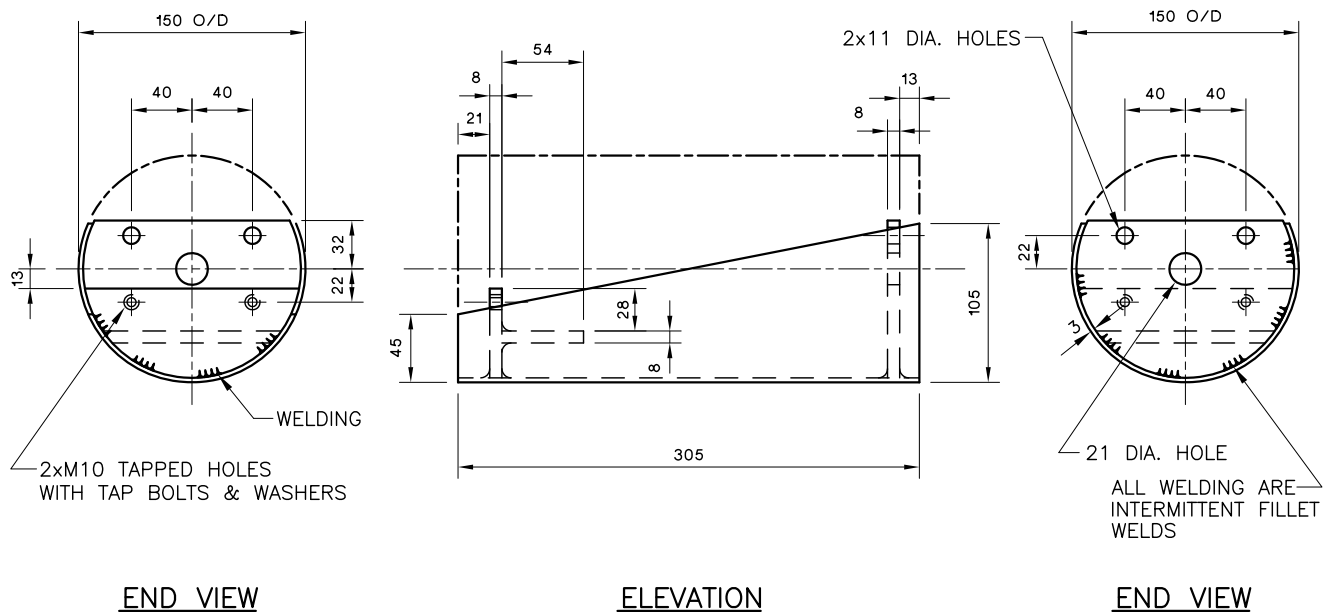
TITLE :

STEEL FORMER FOR 200mm DIA.
"MULTI-CABLE TRANSIT" HOLE

DRAWN: S. C. TO	DATE: 12-8-2002
CHECKED: K. C. CHENG	APPROVED: K. W. WONG
SCALE: 1 : 5 (mm)	SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 3 0 6 - A



ASSEMBLY VIEW (PART SECTIONED)

SCALE: 1 : 2.5

NOTES:

1. THE COMPLETE FORMER CONSISTS OF TWO IDENTICAL HALVES.
2. MILD STEEL FORMER TO BE LOANED TO CUSTOMER BY CLP POWER DURING CONSTRUCTION PHASE.

CLP 中電

REVS.	A	B	C	D	E	F	G	H	J	K	L
INITIAL											

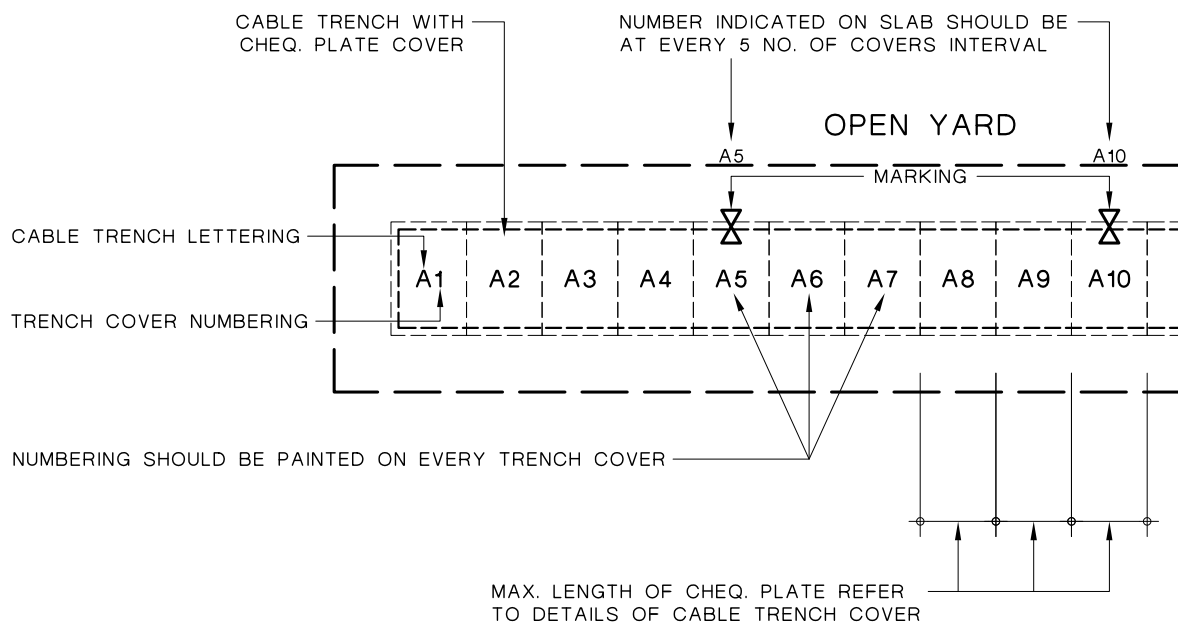
TITLE :

STEEL FORMER FOR 150mm DIA.
"MULTI-CABLE TRANSIT" HOLE

DRAWN: S. C. TO	DATE: 12-8-2002
CHECKED: K. C. CHENG	APPROVED: K. W. WONG
SCALE: 1 : 5 (mm)	SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 3 0 7 - A



B	STEP IRON DELETED
---	-------------------



REVS.	30.10.05	16.08.07											
INITIAL	A	B	C	D	E	F	G	H	J	K	L		
	K.C.C.	K.C.C.											

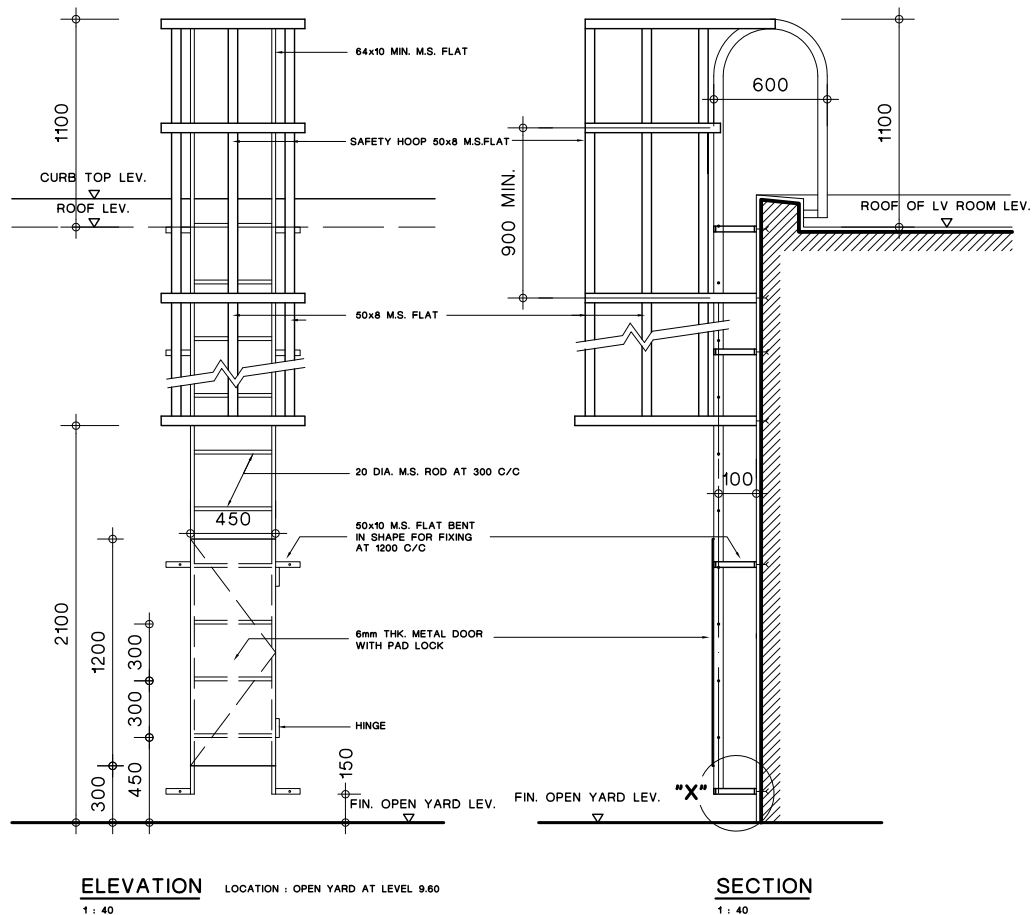
TITLE :

TYPICAL DETAILS OF NUMBER MARKED ON
THE CABLE TRENCH COVER

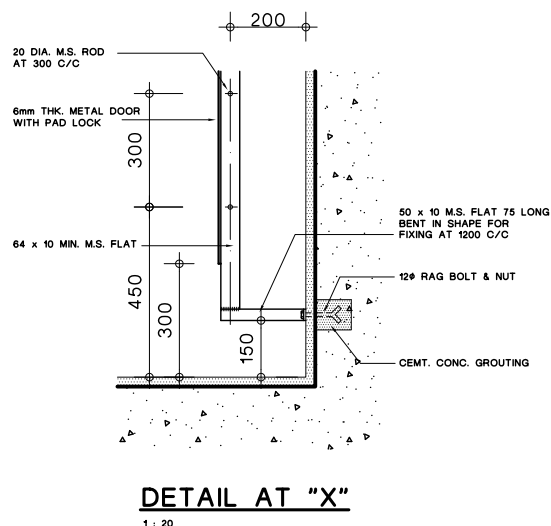
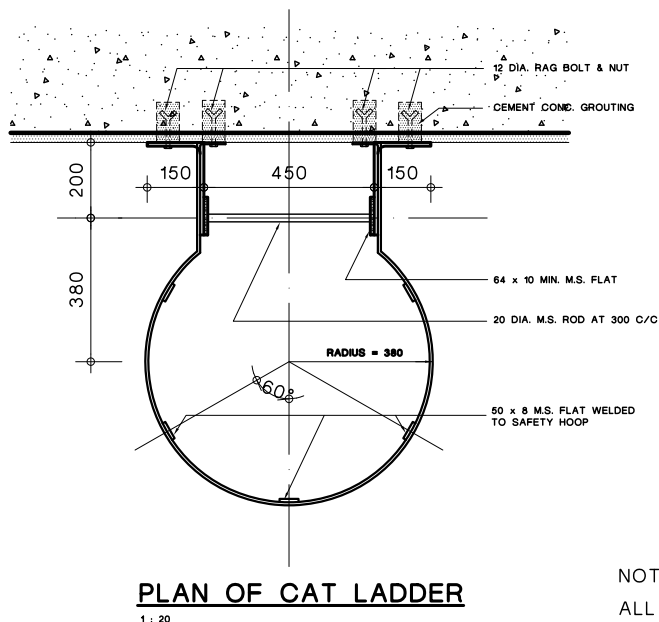
DRAWN: C. W. WONG	DATE: 16 Sep., 2002
CHECKED: K. C. CHENG	APPROVED: K. W. WONG
SCALE: N. T. S.	SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO.	T	C	O	P	1	0	2	5	0	D	E	3	3	0	1	0	3	0	8	B	A
----------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---



CAT LADDER WITH SAFETY HOOP AT OPEN YARD (TYPE '1')



NOTE:

ALL METAL WORKS MUST BE BONDED TO THE EARTHING TERMINAL AT THE DISTRIBUTION BOARD WITH COPPER CONDUCTOR NOT LESS THAN 6mm².

C GENERAL NOTES ADDED.

B BRACE HOOP INTERNAL

A DIMENSION UPDATED

CLP 中電

REVS.	13.09.04	13.08.07	18.03.14										
INITIAL	A K.C.C.	B K.C.C.	C H.T.YU	D	E	F	G	H	J	K	L		

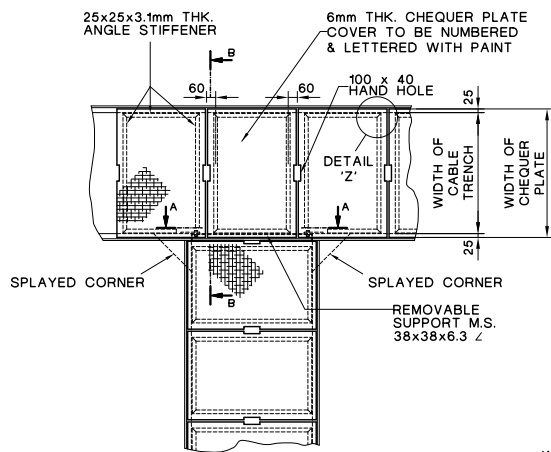
TITLE :

TYPICAL DETAILS OF CAT LADDER

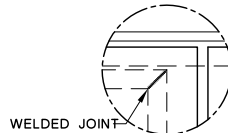
DRAWN: T. Y. IP DATE: 17-09-2002
 CHECKED: K. C. CHENG APPROVED: W. C. HO
 SCALE: 1 : 20 (mm) SHEET(S) IN SET:

ASSET MANAGEMENT

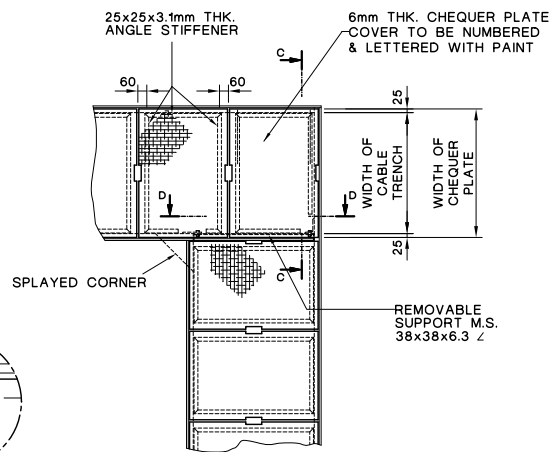
DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 3 0 9 C A



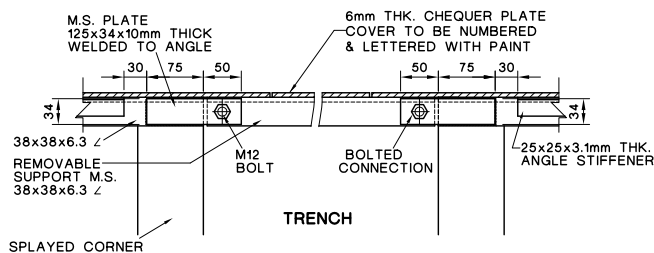
**DETAILS OF CHEQUER PLATE SUPPORT AT
TEE POINT OF THE TRENCH**



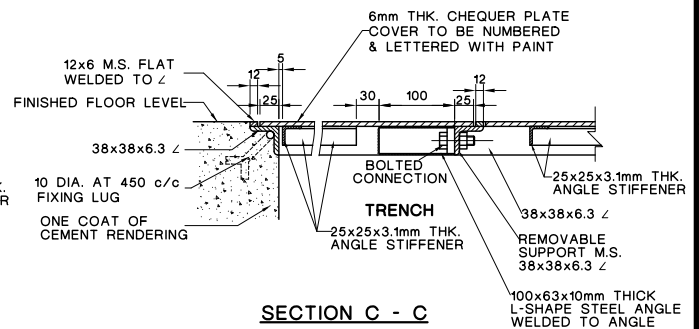
DETAIL 'Z'



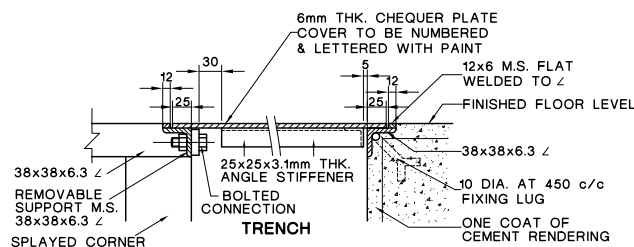
**CHEQUER PLATE ARRANGEMENT
AT 90° BEND OF THE TRENCH**



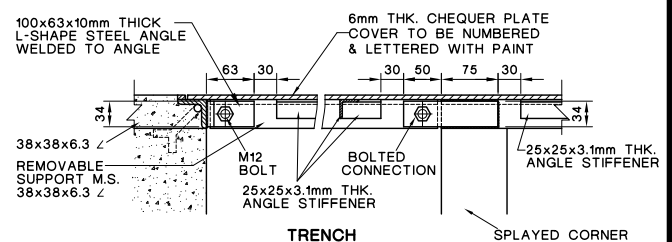
**SECTION A - A
(SCALE 1 : 10)**



**SECTION C - C
(SCALE 1 : 10)**



**SECTION B - B
(SCALE 1 : 10)**



**SECTION D - D
(SCALE 1 : 10)**

NOTES:

- CHEQUER PLATE TO BE CUT TO SIZE AND FITTED IN POSITION UNDER THE DIRECTION OF CLP POWER ON SITE.
- ALL CHEQUER PLATES SHALL BE NUMBERED IN SEQUENCE.
- ALL STEELWORK SHALL BE HOT DIP GALVANISED AND FINISHED WITH ONE COAT OF CALCIUM PLUMBATE OR ZINC PHOSPHATE PRIMER AND TWO FINISHING COATS OF SYNTHETIC PAINT.
- CONCRETE STRENGTH MINIMUM 30N/mm² IN 28 DAYS.
- HOT DIP GALVANIZED STEP IRONS FOR ACCESS TO THE CABLE TRENCH SHALL BE INSTALLED

A ZINC PRIMER ADDED



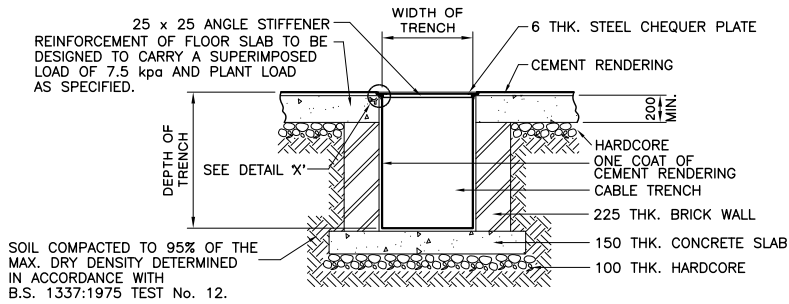
REVS.	15.1107													
INITIAL	A	B	C	D	E	F	G	H	J	K	L			

TITLE :

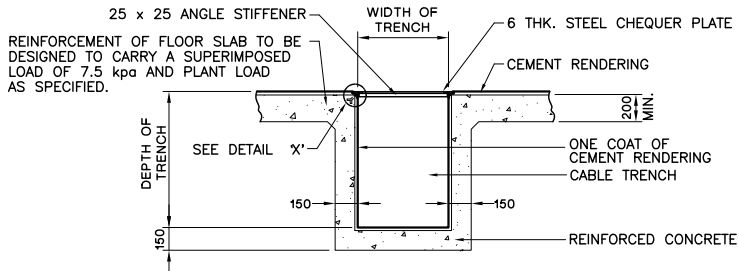
**TYPICAL DETAILS OF CABLE TRENCH
(SHEET 1 OF 3)**

DRAWN: S. C. TO DATE: 12-8-2002
CHECKED: K. C. CHENG APPROVED: W. C. HO
SCALE: 1 : 50 (mm) SHEET(S) IN SET:

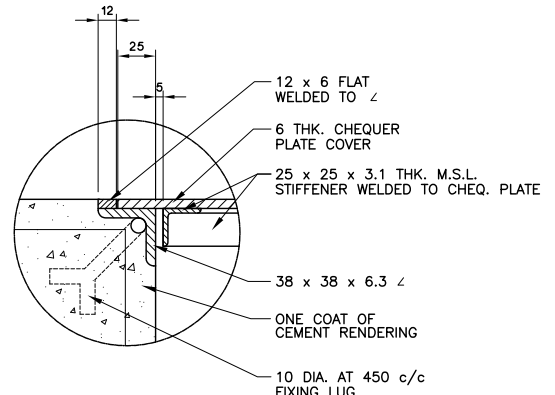
ASSET MANAGEMENT DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 3 1 0 A A



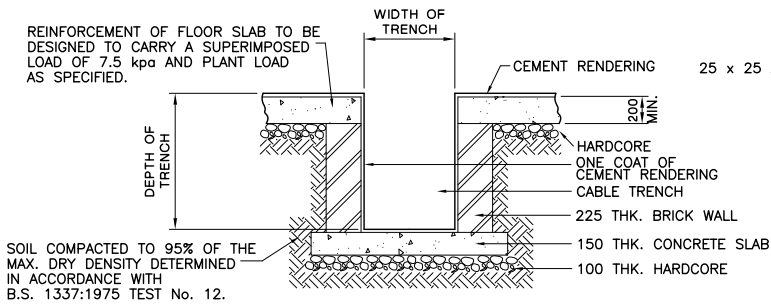
TYPICAL CROSS SECTION OF TRENCH ON SOLID GROUND



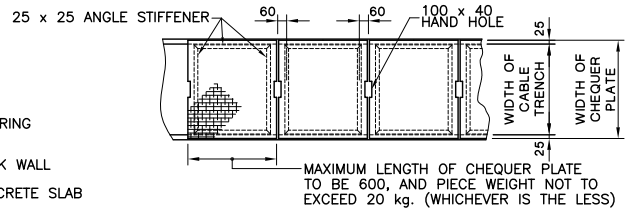
**TYPICAL CROSS SECTION OF SUSPENDED TRENCH
CABLE TRENCH FOR INDOOR SUBSTATION**



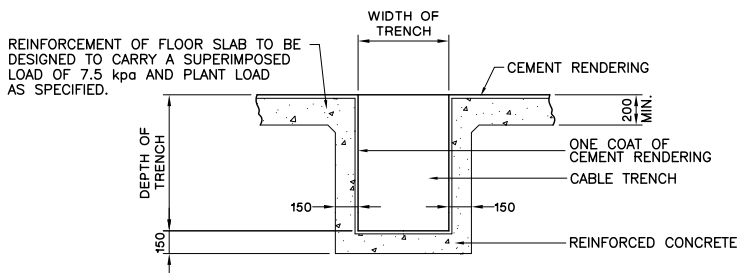
DETAIL AT 'X'
(SCALE 1 : 5)



TYPICAL CROSS SECTION OF TRENCH ON SOLID GROUND



DETAIL OF CHEQUER PLATE



TYPICAL CROSS SECTION OF R.C. TRENCH

CABLE TRENCH FOR OUTDOOR SUBSTATION

NOTES:

- CHEQUER PLATE TO BE CUT TO SIZE AND FITTED IN POSITION UNDER THE DIRECTION OF CLP POWER ON SITE.
- ALL CHEQUER PLATES SHALL BE NUMBERED IN SEQUENCE.
- ALL STEELWORK SHALL BE HOT DIP GALVANISED AND FINISHED WITH ONE COAT OF CALCIUM PLUMBATE OR ZINC PHOSPHATE PRIMER AND TWO FINISHING COATS OF SYNTHETIC PAINT.
- CONCRETE STRENGTH MINIMUM 30N/mm² IN 28 DAYS.
- HOT DIP GALVANIZED STEP IRONS FOR ACCESS TO THE CABLE TRENCH SHALL BE INSTALLED

B	ZINC PRIMER ADDED
A	NOTE 5 ADDED, TRENCH COVER REVISED

CLP 中電

REVS.	13-9-04	15.11.07												
INITIAL	A	B	C	D	E	F	G	H	J	K	L			
	K.C.C	K.C.C												

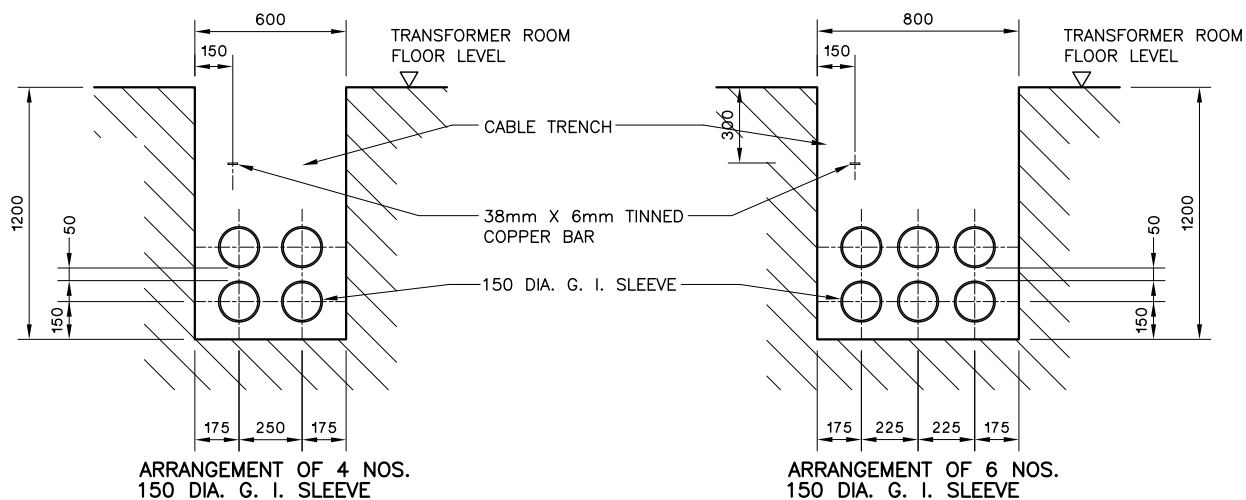
TITLE :

**TYPICAL DETAILS OF CABLE TRENCH
(SHEET 2 OF 3)**

DRAWN: S. C. TO DATE: 12-8-2002
CHECKED: K. C. CHENG APPROVED: W. C. HO
SCALE: 1 : 50 (mm) SHEET(S) IN SET:

ASSET MANAGEMENT

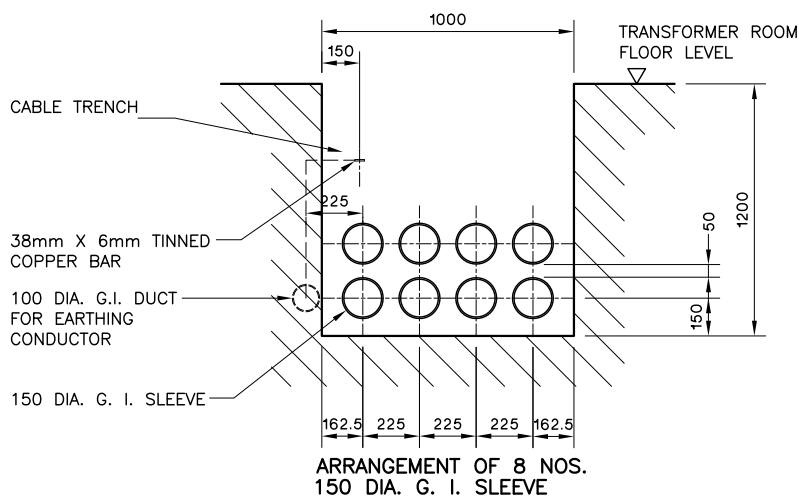
DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 3 1 1 B A

**ELEVATION**

(LOOKING FROM INSIDE OF TRANSFORMER ROOM)

ELEVATION

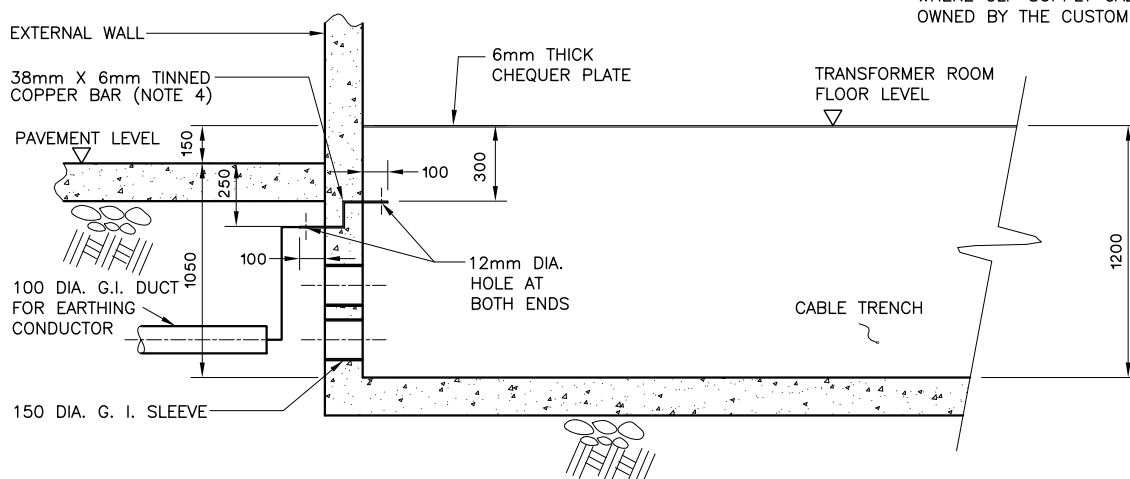
(LOOKING FROM INSIDE OF TRANSFORMER ROOM)

**ELEVATION**

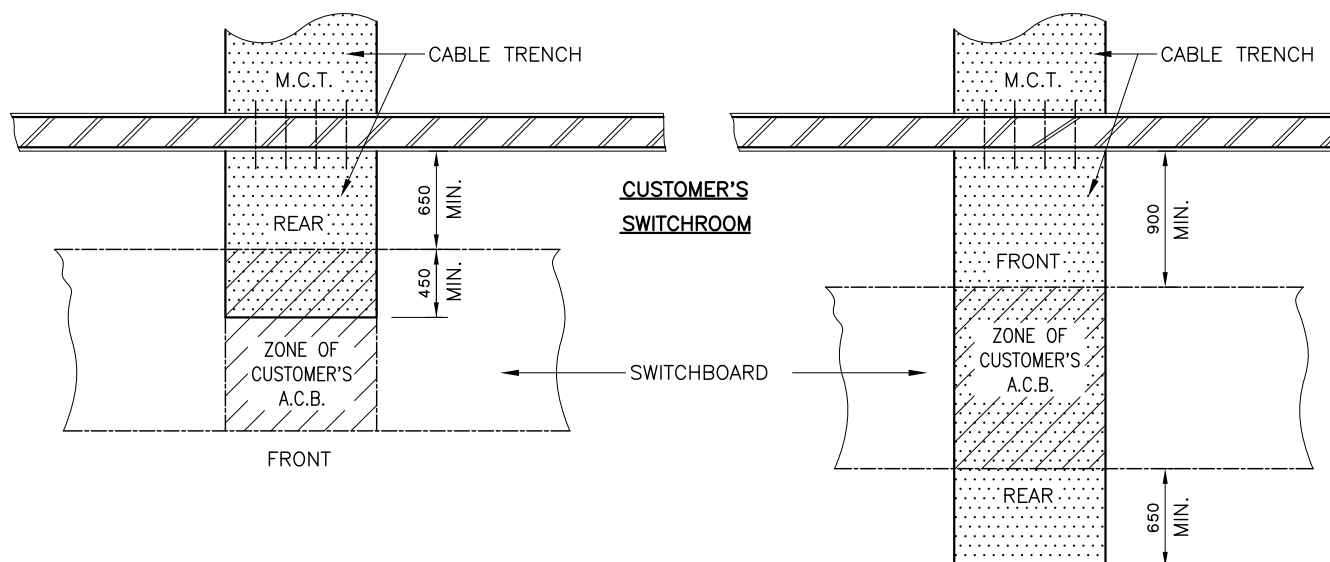
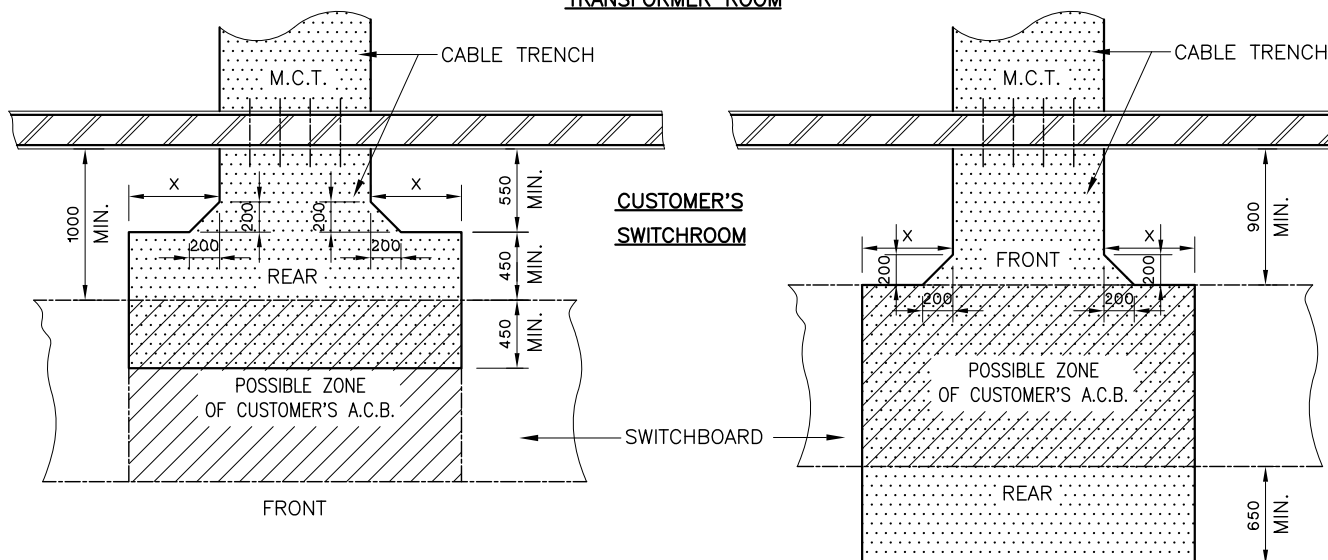
(LOOKING FROM INSIDE OF TRANSFORMER ROOM)

NOTES:

1. THE BARRIER AROUND THE G. I. SLEEVES SHALL BE WATERPROOF.
2. 38mm X 6mm TINNED COPPER EARTHING BAR TO BE PROVIDED AND INSTALLED BY CUSTOMER.
3. DEPTH OF CABLE TRENCH IS 1200mm ACCORDING TO THE TRANSFORMER ROOM LAYOUT PLAN.
4. AN EARTHING CONDUCTOR NOT LESS THAN 38mm X 6mm IN SIZE SHALL BE EXTENDED VIA DUCTS AND DRAW-PITS TO THE LOCATION(S) WHERE CLP SUPPLY CABLES ENTER THE SITE OWNED BY THE CUSTOMER.

**SECTION ALONG TRENCH OUTLET**

C STEP IRON REPLACED BY LADDER		E G. I. SLEEVE SIZE AND DEPTH OF CABLE TRENCH UPDATED, EARTHING DETAIL ADDED.		D G. I. SLEEVE SIZE UPDATED							
		REVS.	14-9-04	28-01-05	05-11-07	26-03-12	18.03.14				
		INITIAL	A K.C.C	B K.C.C	C K.C.C	D K.C.C	E H.T.YU	F	G	H	L
		TITLE :									
		TYPICAL DETAILS OF CABLE TRENCH (SHEET 3 OF 3)									
DRAWN: S. C. TO		DATE: 23-07-2002									
CHECKED: K. C. CHENG		APPROVED: W. C. HO									
SCALE: 1 : 30 (mm)		SHEET(S) IN SET:									
ASSET MANAGEMENT		DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 3 1 2 E A									

TRANSFORMER ROOM**CUSTOMER'S A.C.B. IN LINE WITH M.C.T.****TRANSFORMER ROOM****CUSTOMER'S A.C.B. NOT IN LINE WITH M.C.T.****NOTES:**

1. X TO BE EXTENDED TO THE POSSIBLE ZONE OF CUSTOMER'S MAIN A.C.B..
2. WIDTH AND DEPTH OF CABLE TRENCH, IF NOT SPECIFIED, SHOULD CORRESPOND TO THAT IN THE TRANSFORMER ROOM.



REVS.	A	B	C	D	E	F	G	H	J	K	L
INITIAL											

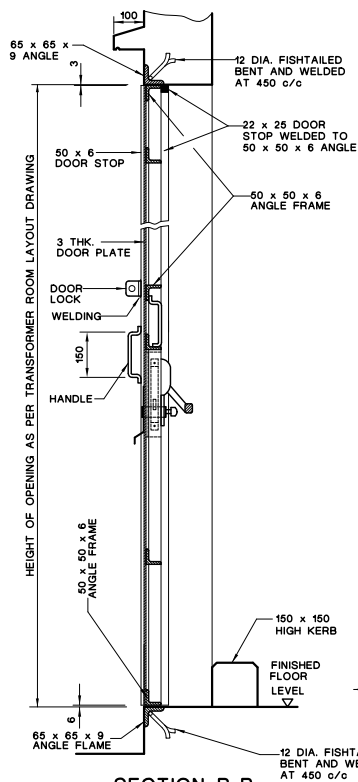
TITLE :

CABLE TRENCH FOR ACCOMMODATING CLP
POWER SINGLE-CORE CABLES IN CUSTOMER
MAIN SWITCHROOM

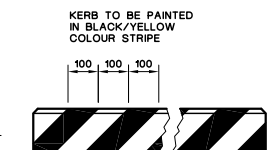
DRAWN: S. C. TO DATE: 26-07-2002
CHECKED: K. C. CHENG APPROVED: K. W. WONG
SCALE: 1 : 50 (mm) SHEET(S) IN SET:

ASSET MANAGEMENT

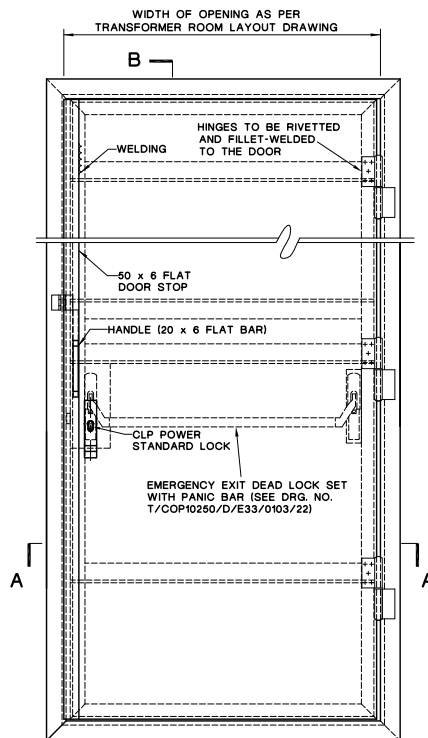
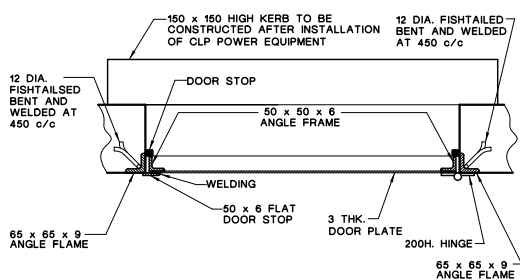
DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 3 1 3 - A



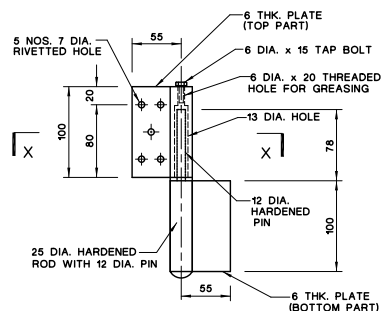
SECTION B-B



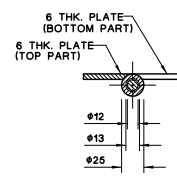
VIEW C

B
ELEVATION
SCALE 1:25 (mm)

SECTION A-A

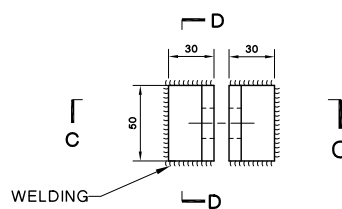
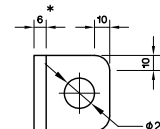


ELEVATION

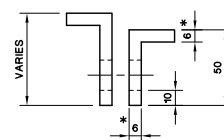
SECTION X-X
DETAIL OF HINGE

NOTES:

1. ALL CONNECTIONS OF STAINLESS STEEL WORKS TO BE WELDED.
2. ALL STEEL WORKS TO BE GRADE 316L STAINLESS STEEL.
3. ALL STEEL WORKS MUST BE BONDED TO THE EARTHING TERMINAL AT THE DISTRIBUTION BOARD WITH COPPER CONDUCTOR NOT LESS THAN 6mm².
4. * - STAINLESS STEEL
5. ALL DIMENSIONS ARE IN mm.

DETAIL OF DOOR LOCK
SCALE 1:5 (mm)

SECTION D-D



SECTION C-C

C	AMENDMENT OF DESCRIPTION TO VIEW 'C'				B	S.S. ANGLE BRACKETS ON DOOR ADDED				A	PAINTING ON THE DOOR KERB AND DOOR LOCK DETAIL ADDED															
CLP 中電					REVS.	13.9.04	13.10.09	18.03.14																		
						A	B	C	D	E	F	G	H	J	K	L										
					INITIAL	K.C.C	K.C.C	H.T.YU																		
DRAWN: K. F. CHEUNG CHECKED: K. C. CHENG SCALE: AS SHOWN					TITLE : TYPICAL DETAILS OF SINGLE STAINLESS STEEL DOOR																					
															DATE: 26-07-2002											
															APPROVED: W. C. HO											
															SHEET(S) IN SET:											
ASSET MANAGEMENT					DRG. NO.	T	C	O	P	1	0	2	5	0	D	E	3	3	0	1	0	3	1	4	C	A

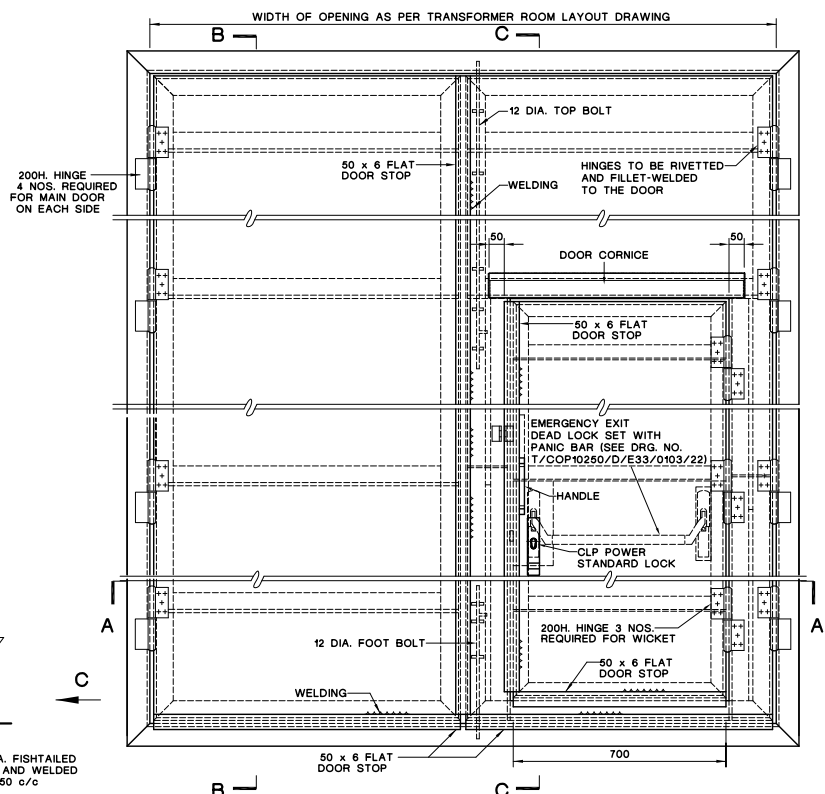


DETAIL OF HINGE



1. ALL CONNECTIONS OF STAINLESS STEEL WORKS TO BE WELDED.
2. ALL STEEL WORKS TO BE GRADE 316L STAINLESS STEEL.
3. ALL STEEL WORKS MUST BE BONDED TO THE EARTHING TERMINAL AT THE DISTRIBUTION BOARD WITH COPPER CONDUCTOR NOT LESS THAN 6mm².
4. ALL DIMENSIONS ARE IN mm.

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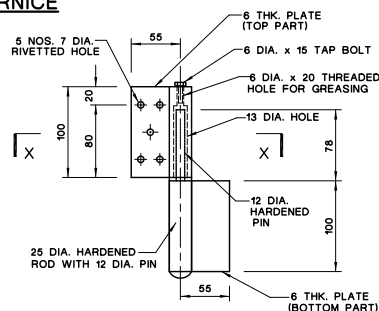


SECTION C-C

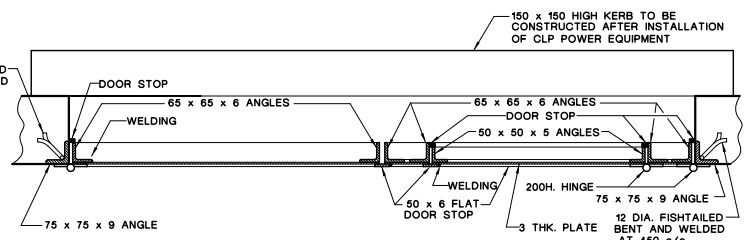
ELEVATION
SCALE 1 :25 (mm)



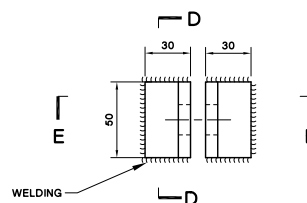
DETAIL OF DOOR CORNICE
(NOT TO SCALE)



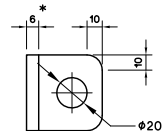
SECTION X-X

ELEVATION

SECTION A-A



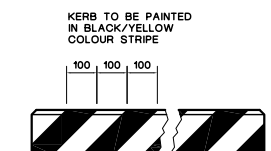
DETAIL OF DOOR LOCK
SCALE 1 : 5 (mm)



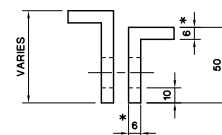
SECTION D-D

- DETAIL OF HINGE
(NOT TO SCALE)

1. ALL CONNECTIONS OF STAINLESS STEEL WORKS TO BE WELDED.
2. ALL STEEL WORKS TO BE GRADE 316L STAINLESS STEEL.
3. ALL STEEL WORKS MUST BE BONDED TO THE EARTHING TERMINAL AT THE DISTRIBUTION BOARD WITH COPPER CONDUCTOR NOT LESS THAN 6mm².
4. ALL DIMENSIONS ARE IN mm.



VIEW C



SECTION E-E

C	AMENDMENT OF DESCRIPTION TO VIEW 'C'
B	DOOR CORNICE AND S.S. ANGLE BRACKETS ON DOOR ADDED



REVS.	14.9.04	10.8.09	18.03.14								
	A	B	C	D	E	F	G	H	J	K	L
INITIAL	K.C.C.	K.C.C.	H.T.YU								

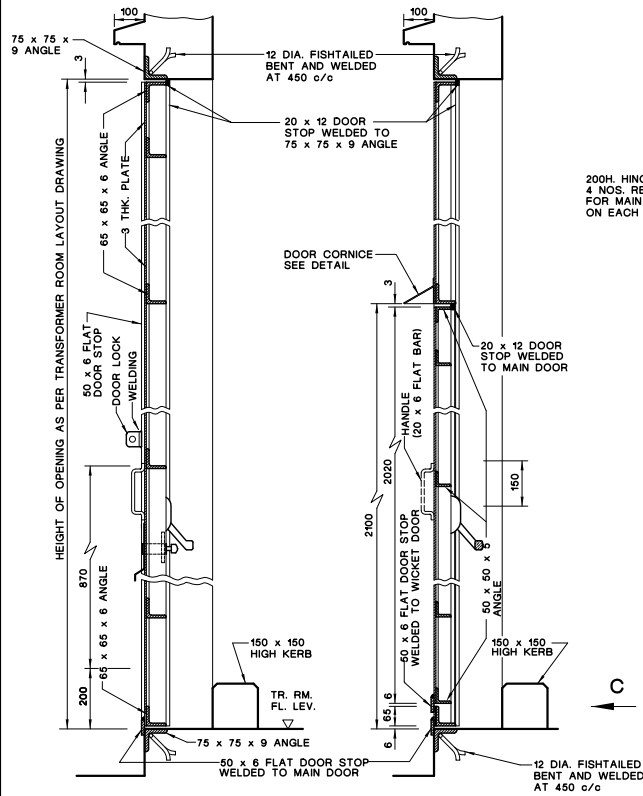
TITLE :

TYPICAL DETAILS OF DOUBLE LEAF STAINLESS
STEEL DOOR WITH WICKET ON THE RIGHT

DRAWN:	K. F. CHEUNG	DATE:	26-07-2002
CHECKED:	K. C. CHENG	APPROVED:	W. C. HO
SCALE:	AS SHOWN	SHEET(S) IN SET:	

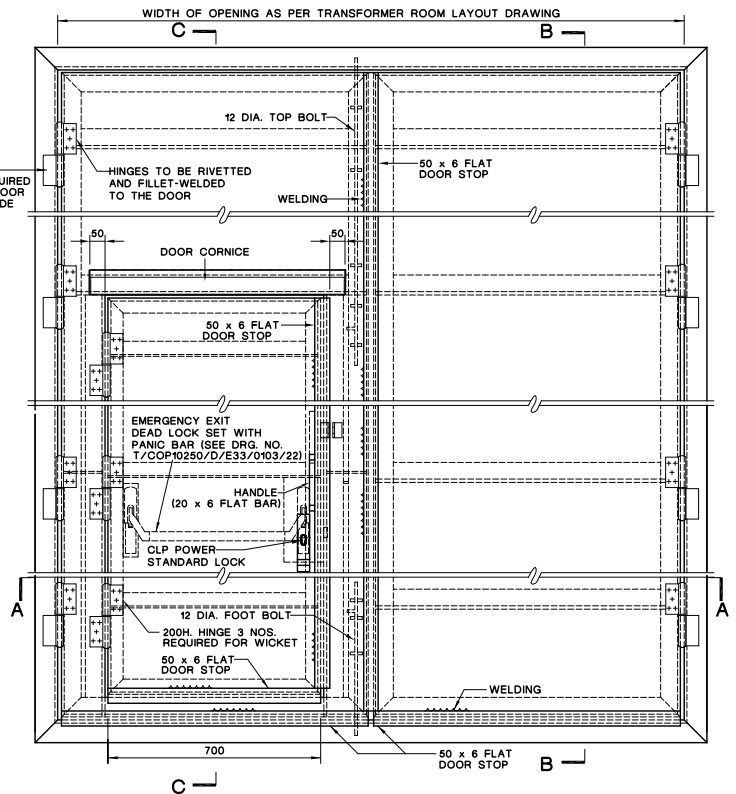
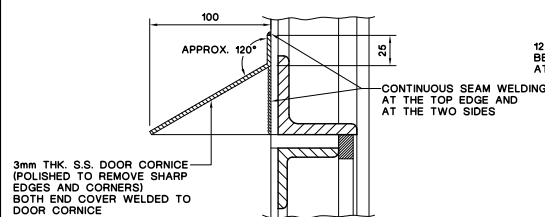
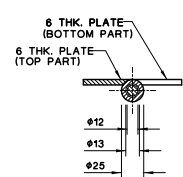
ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 3 1 6 C A

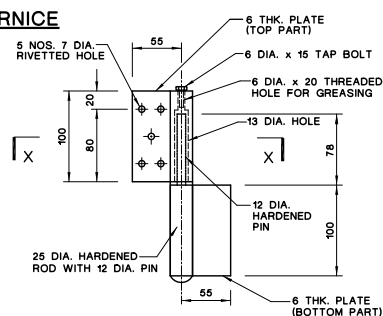


SECTION B-B

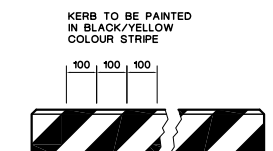
SECTION C-C

ELEVATION
SCALE 1:25 (mm)DETAIL OF DOOR CORNICE
(NOT TO SCALE)

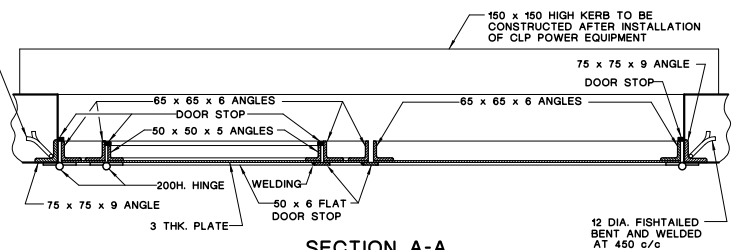
SECTION X-X



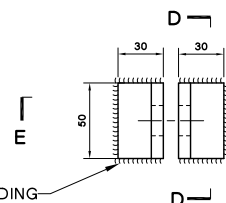
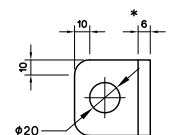
ELEVATION

DETAIL OF HINGE
(NOT TO SCALE)

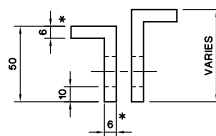
VIEW C



SECTION A-A

DETAIL OF DOOR LOCK
SCALE 1:5 (mm)

SECTION D-D



SECTION E-E

NOTES:

- ALL CONNECTIONS OF STAINLESS STEEL WORKS TO BE WELDED.
- ALL STEEL WORKS TO BE GRADE 316L STAINLESS STEEL.
- ALL STEEL WORKS MUST BE BONDED TO THE EARTHING TERMINAL AT THE DISTRIBUTION BOARD WITH COPPER CONDUCTOR NOT LESS THAN 6mm².
- ALL DIMENSIONS ARE IN mm.

CLP 中電

DRAWN: K. F. CHEUNG DATE: 26-07-2002
 CHECKED: K. C. CHENG APPROVED: W. C. HO
 SCALE: AS SHOWN SHEET(S) IN SET:

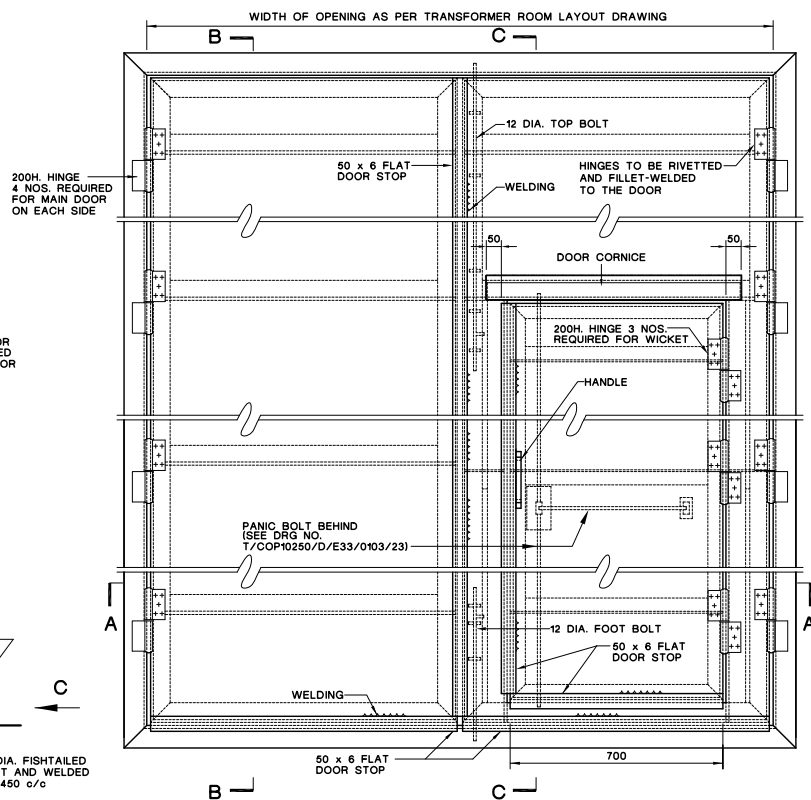
ASSET MANAGEMENT

REVS.	21-9-04	10-8-09	18-03-14											
INITIAL	A	B	C	D	E	F	G	H	J	K	L			
	K.C.C.	K.C.C.	H.T.YU											

TITLE :

TYPICAL DETAILS OF DOUBLE LEAF STAINLESS
STEEL DOOR WITH WICKET ON THE LEFT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 3 1 7 C A

ELEVATION

DETAIL OF HINGE



VIEW C

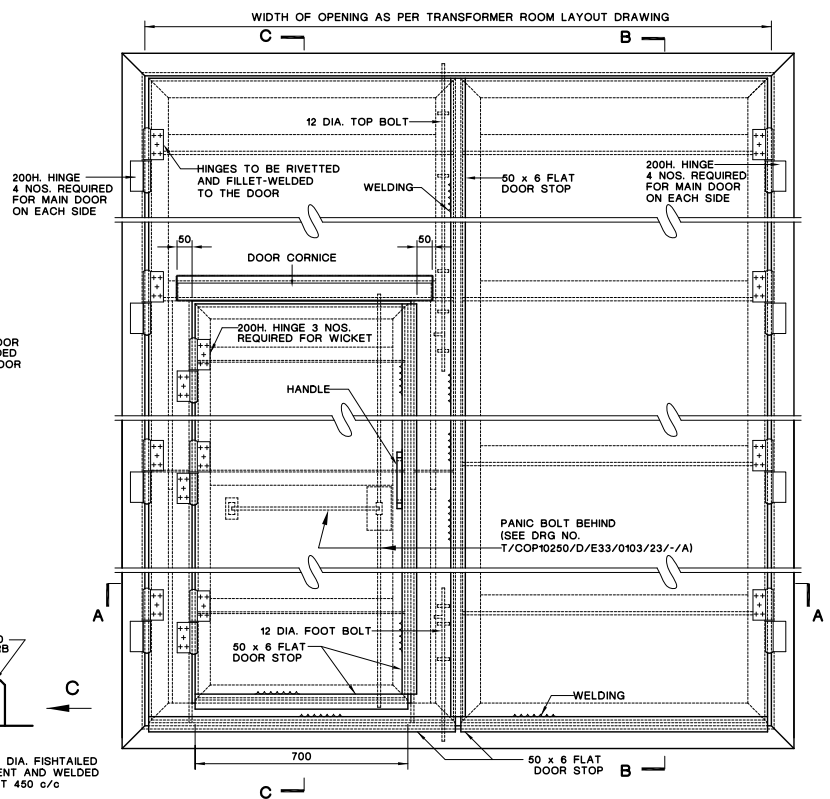
1. ALL CONNECTIONS OF STAINLESS STEEL WORKS TO BE WELDED.
2. ALL STEEL WORKS TO BE GRADE 316L STAINLESS STEEL.
3. ALL STEEL WORKS MUST BE BONDED TO THE EARTHING TERMINAL AT THE DISTRIBUTION BOARD WITH COPPER CONDUCTOR NOT LESS THAN 6mm².
4. ALL DIMENSIONS ARE IN mm.

CLP 中電

TITLE :

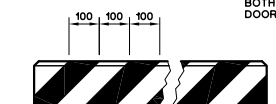
ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 3 1 8 C A

ELEVATION

- DETAIL OF DOOR CORNICE
(NOT TO SCALE)

DETAIL OF DOOR CORNICE
(NOT TO SCALE)



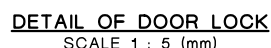
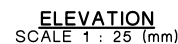
VIEW C

CLP 中電

TITLE :

DRAWN:	S. C. TO	DATE:	12-8-2002
CHECKED:	K. C. CHENG	APPROVED:	W. C. HO
SCALE:	N.T.S.	SHEET(S) IN SET:	

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 3 1 9 C A



1. ALL CONNECTIONS OF STAINLESS STEEL WORKS TO BE WELDED.
2. ALL STEEL WORKS TO BE GRADE 316L STAINLESS STEEL.
3. ALL STEEL WORKS MUST BE BONDED TO THE EARTHING TERMINAL AT THE DISTRIBUTION BOARD WITH COPPER CONDUCTOR NOT LESS THAN 6mm².
4. ALL DIMENSIONS ARE IN mm.

CLP 中電

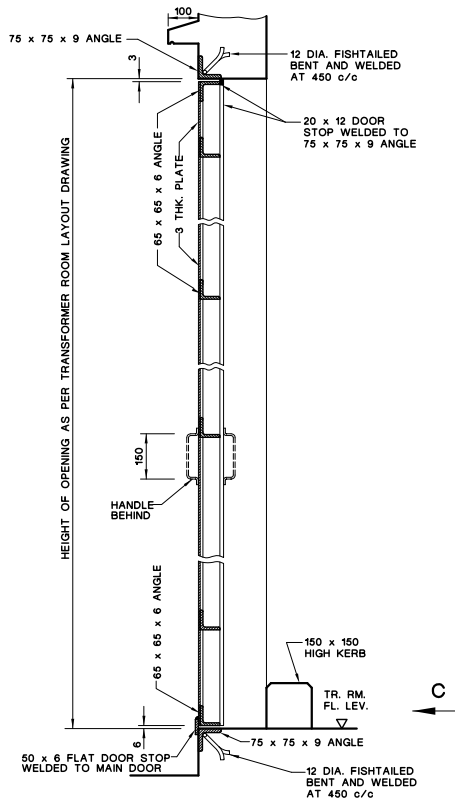
TITLE :

TYPICAL DETAILS OF DOUBLE LEAF STAINLESS
STEEL DOOR (1500W x 2500H) FOR H. V.
SWITCHGEAR ROOM

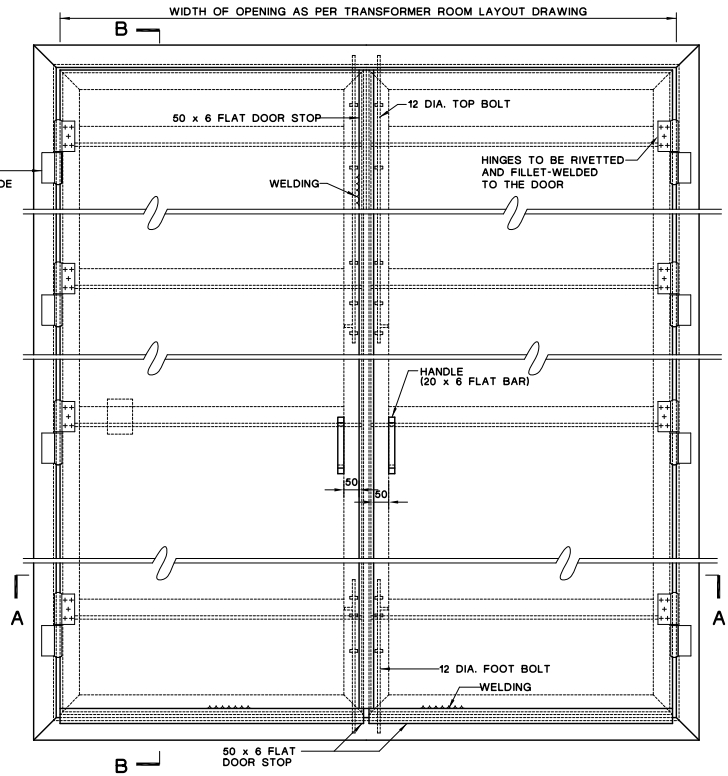
DRAWN: K. F. CHEUNG	DATE: 26-07-2002
CHECKED: K. C. CHENG	APPROVED: W. C. HO
SCALE: AS SHOWN	SHEET(S) IN SET:

ASSET MANAGEMENT

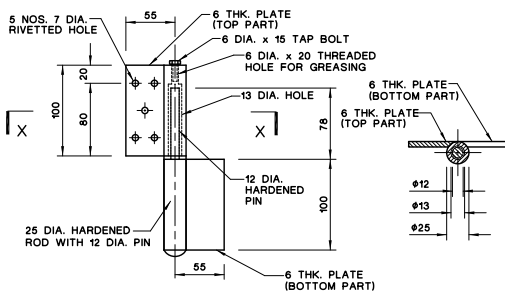
DRG. NO.	T	C	O	P	1	0	2	5	0	D	E	3	3	0	1	0	3	2	0	D	A
----------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---



SECTION B-B

200H. HINGE 4 NOS.
REQUIRED ON EACH SIDE

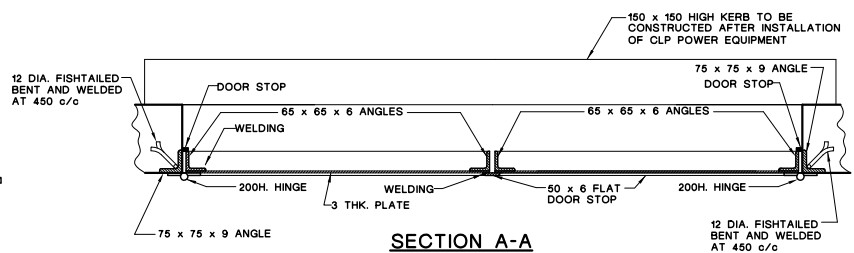
ELEVATION



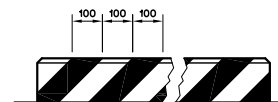
ELEVATION

SECTION X-X

DETAIL OF HINGE



SECTION A-A

KERB TO BE PAINTED
IN BLACK/YELLOW
COLOUR STRIPE

VIEW C

NOTES:

1. ALL CONNECTIONS OF STAINLESS STEEL WORKS TO BE WELDED.
2. ALL STEEL WORKS TO BE GRADE 316L STAINLESS STEEL.
3. ALL STEEL WORKS MUST BE BONDED TO THE EARTHING TERMINAL AT THE DISTRIBUTION BOARD WITH COPPER CONDUCTOR NOT LESS THAN 6mm².
4. ALL DIMENSIONS ARE IN mm.

D	AMENDMENT OF DESCRIPTION TO VIEW 'C'
C	DISTANCE BETWEEN HANDLE ADJUSTED

CLP 中電

REVS.	13-9-04	13.10.09	26.03.12	18.03.14									
INITIAL	A	B	C	D	E	F	G	H	J	K	L		
	K.C.C	K.C.C	K.C.C	H.T.YU									

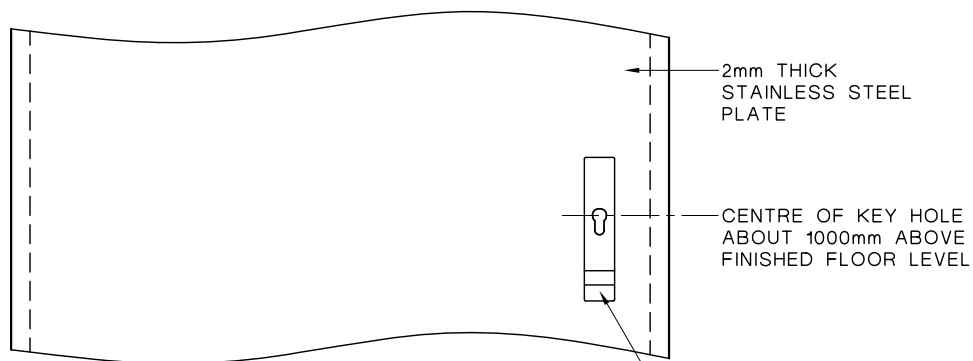
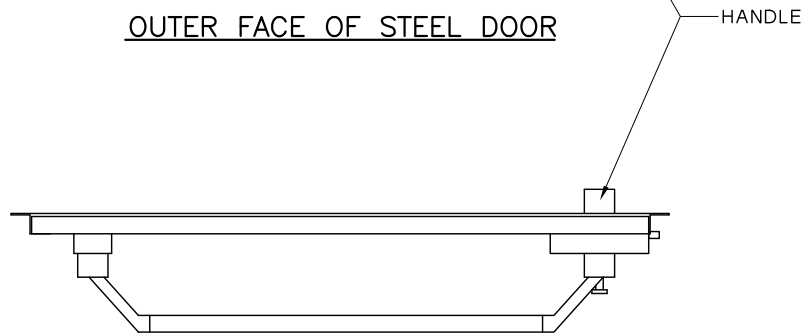
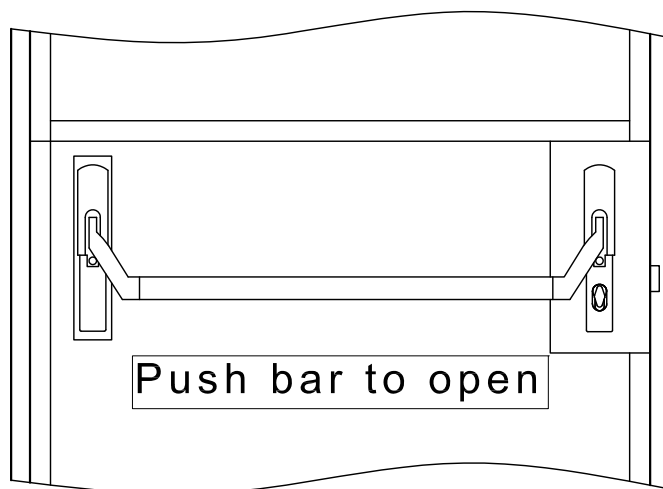
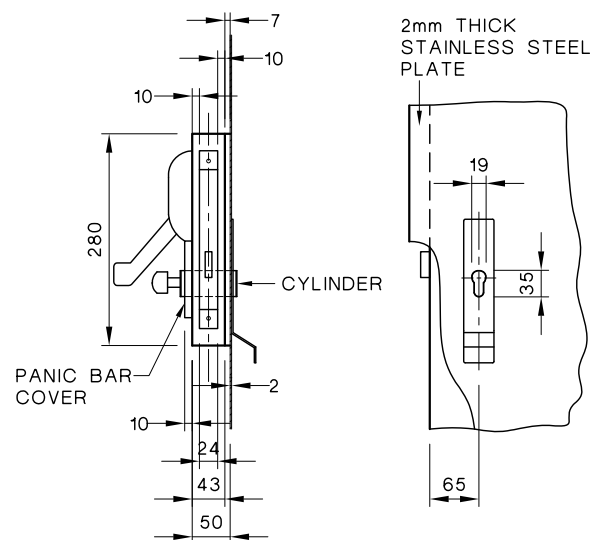
TITLE :

TYPICAL DETAILS OF DOUBLE LEAF STAINLESS
STEEL DOOR WITHOUT LOCK (1500W x 2500H)

DRAWN:	S. C. TO	DATE:	26-07-2002
CHECKED:	K. C. CHENG	APPROVED:	W. C. HO
SCALE:	N.T.S.	SHEET(S) IN SET:	

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 3 2 1 D A

OUTER FACE OF STEEL DOORPLANINNER FACE OF STEEL DOORSIDE VIEW

CLP 中電

REVS.	A	B	C	D	E	F	G	H	J	K	L
INITIAL											

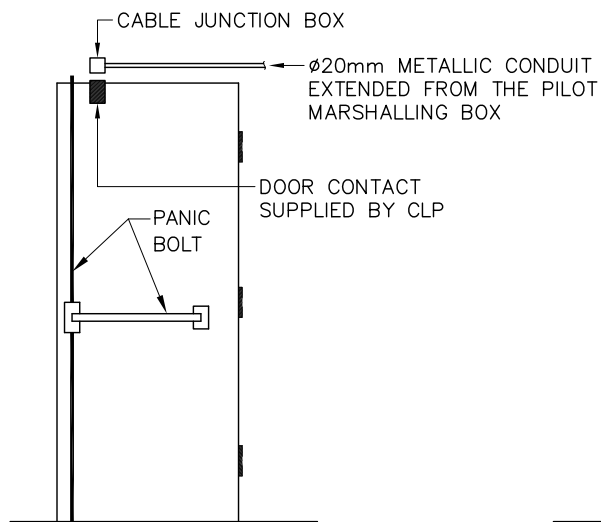
TITLE :

DETAILS OF EMERGENCY EXIT DEADLOCK
SET WITH PANIC BAR

DRAWN: C W WONG	DATE: 28 OCT., 2009
CHECKED: K C CHENG	APPROVED: W C HO
SCALE: 1 : 10 (mm)	SHEET(S) IN SET: 1

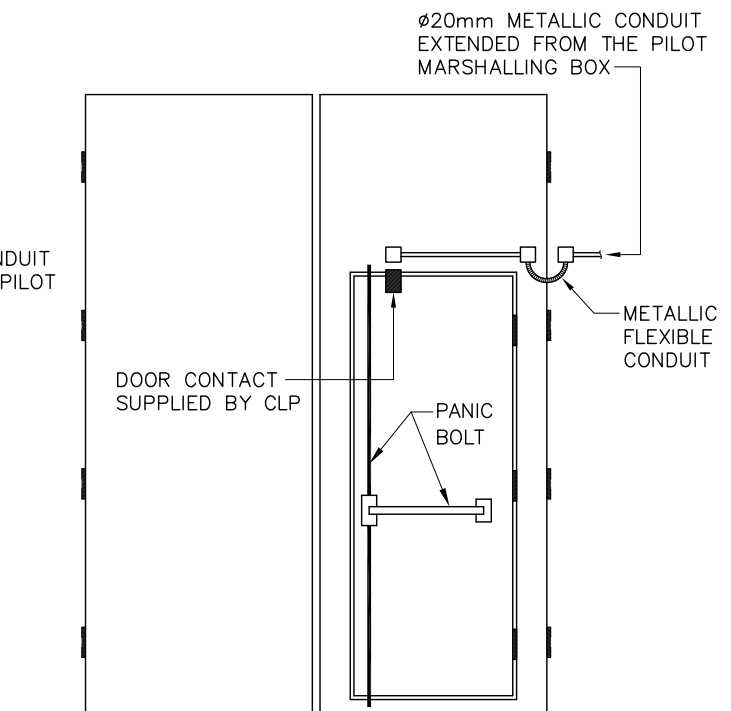
ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 3 2 2 - A



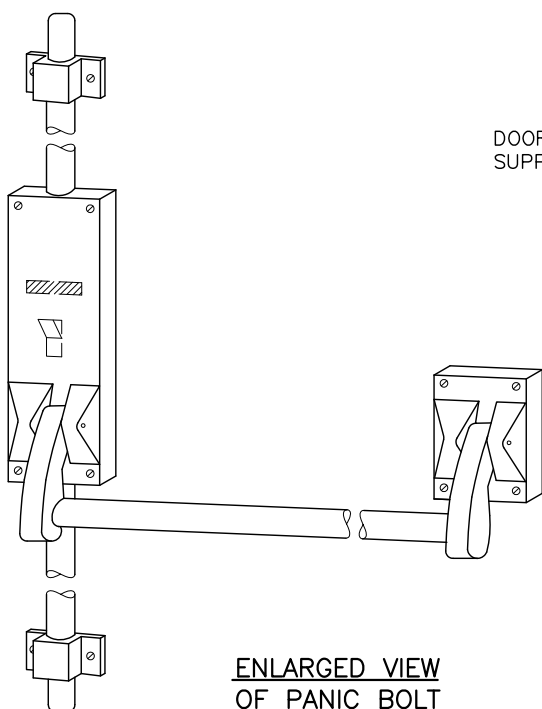
**PANIC BOLT FOR
SINGLE STEEL DOOR**

(LOOKING FROM INSIDE
OF TRANSFORMER RM.)

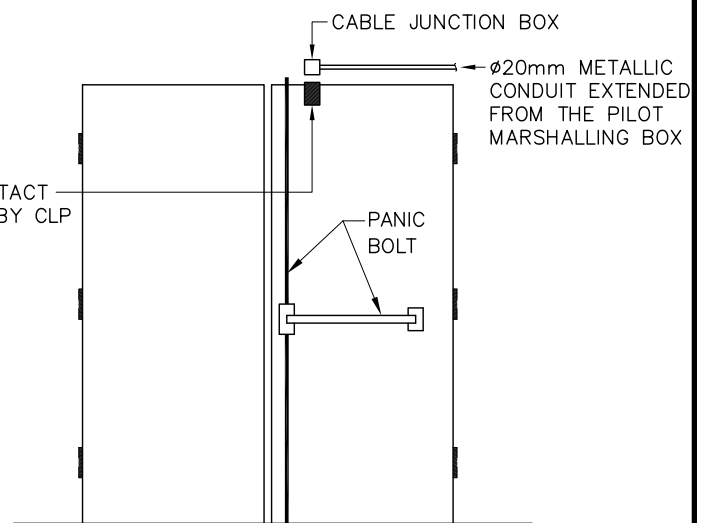


**PANIC BOLT FOR
WICKET OF DOUBLE
LEAF DOOR**

(LOOKING FROM INSIDE
OF TRANSFORMER RM.)



**ENLARGED VIEW
OF PANIC BOLT**



**PANIC BOLT FOR
DOUBLE LEAF
STAINLESS STEEL DOOR**

(LOOKING FROM INSIDE
OF TRANSFORMER RM.)

A GENERAL REVISION

CLP 中電

REVS.	08.05.12												
INITIAL	A	B	C	D	E	F	G	H	J	K	L		
	E. YU												

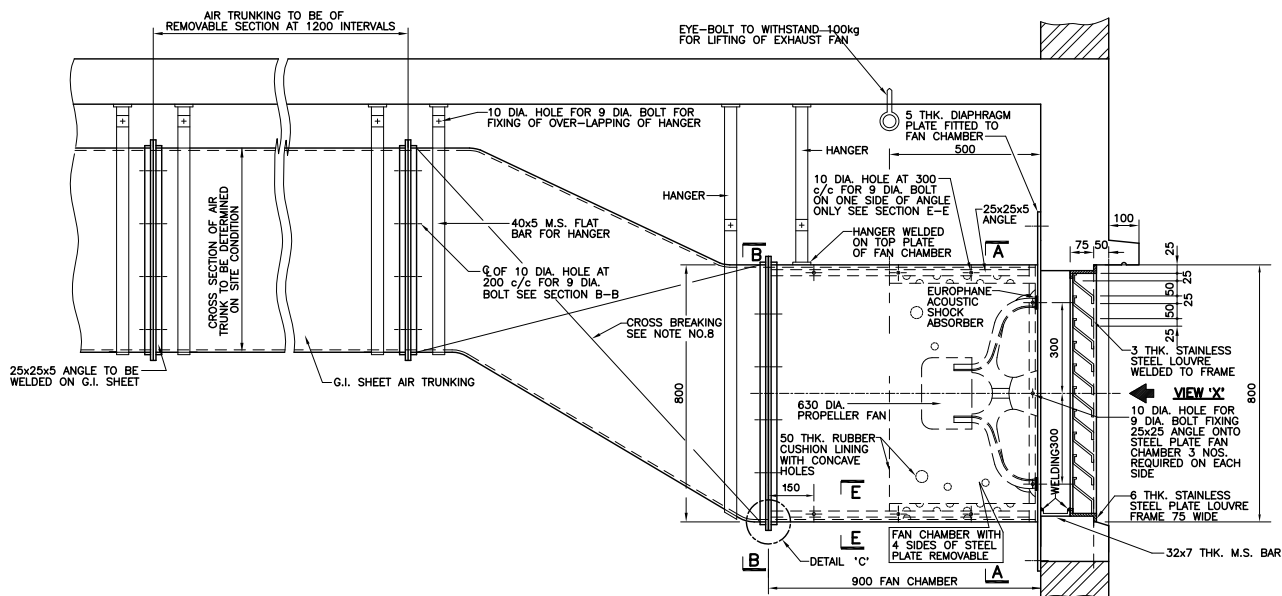
TITLE :

**TYPICAL ARRANGEMENT OF PANIC BOLT
AND DOOR CONTACT INSTALLATION FOR
TRANSFORMER ROOM DOORS**

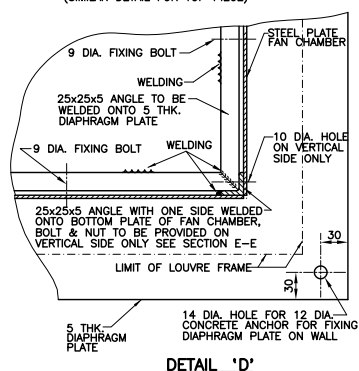
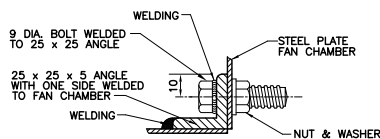
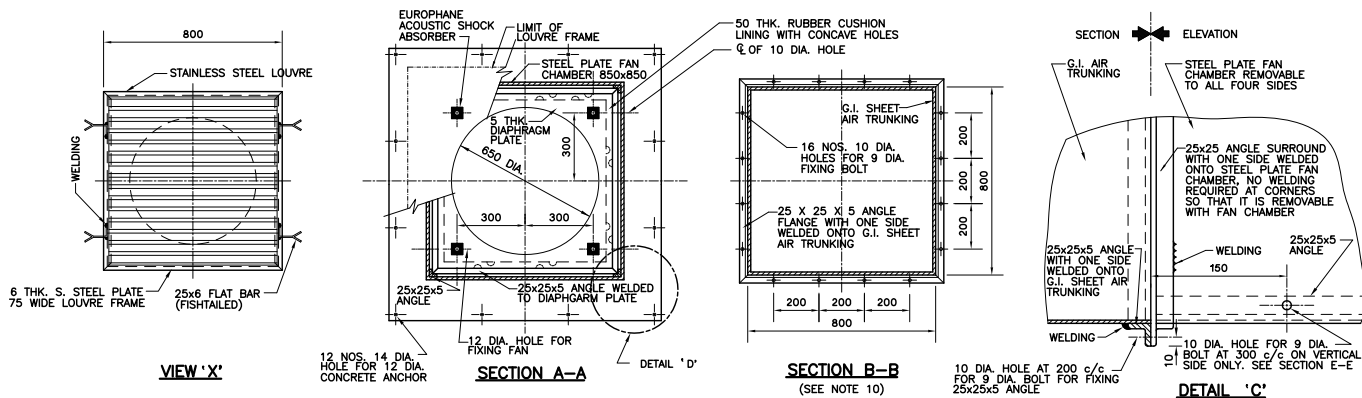
DRAWN: S. C. TO	DATE: 26-07-2002
CHECKED: K. C. CHENG	APPROVED: K. W. WONG
SCALE: N. T. S.	SHEET(S) IN SET: 1

ASSET MANAGEMENT

DRG. NO. T C O P 7 2 0 0 0 D E 3 3 0 1 0 3 2 3 A A



SIDE ELEVATION WITH SECTION AT LOUVRE



NOTES:

1. G.I. SHEET FOR ALL TRUNKING TO BE 1mm THICK AND TO BE CONSTRUCTED BY PITTSBURGH LOCK FOR LONGITUDINAL SEAM.
2. ALL WELDING TO BE SPOT WELDED.
3. ALL BOLTS AND NUTS ARE NOT SHOWN.
4. INTERNAL STEEL WORKS SHALL BE HOT DIP GALVANISED TO BS EN ISO 1461 AND FINISHED WITH ONE COAT OF CALCIUM PLUMBATE OR ZINC PHOSPHATE PRIMER AND TWO FINISHING COATS OF SYNTHETIC PAINT.
5. ALL STEEL WORKS FOR LOUVRE TO BE GRADE 316L STAINLESS STEEL.
6. CROSS BREAKING REQUIRED FOR EACH FACE OF AIR TRUNKING.
7. DETACHABLE WIRE MESH OF 50 SQ. GALVANISED BRC WELDMESH NO. 28 TO BE PROVIDED AT INLET OF AIR TRUNKING.
8. ALL METAL WORKS MUST BE BONDED TO THE EARTHING TERMINAL AT THE DISTRIBUTION BOARD WITH COPPER CONDUCTOR NOT LESS THAN 6mm.
9. ALTERNATIVE AIR DUCT CONNECTION METHOD - USING FASTENING CLAMPS INSTEAD OF FIXING BOLTS AT 200mm INTERVAL. THE FLANGE CONSTRUCTION OF THE AIR DUCT JOINT SHALL COMPLY TO HVCA DW/144, 1998 SPECIFICATION FOR STEEL METAL STEEL METAL DUCTWORK.
10. ALL DIMENSIONS ARE IN mm.

B	ZINC PRIMER AND NOTE 10 ADDED.	A	LOUVRE BLADES REVISED
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CLP 中電

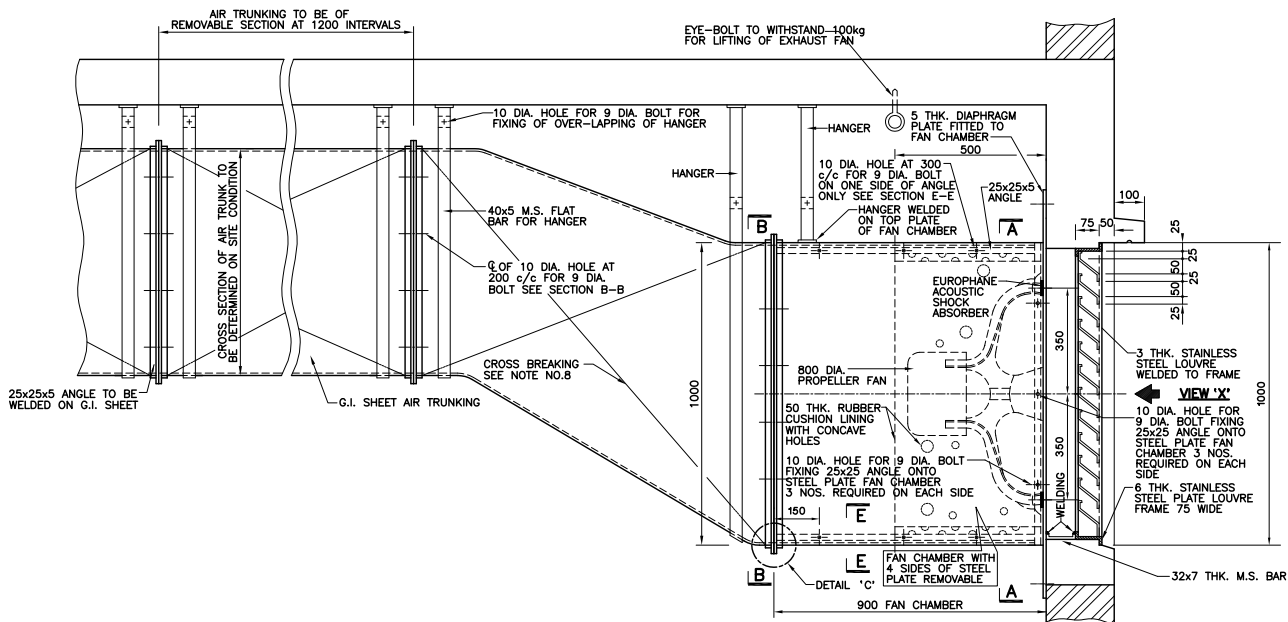
REVS.	21.12.05													
INITIAL	A	B	C	D	E	F	G	H	J	K	L			

TITLE :

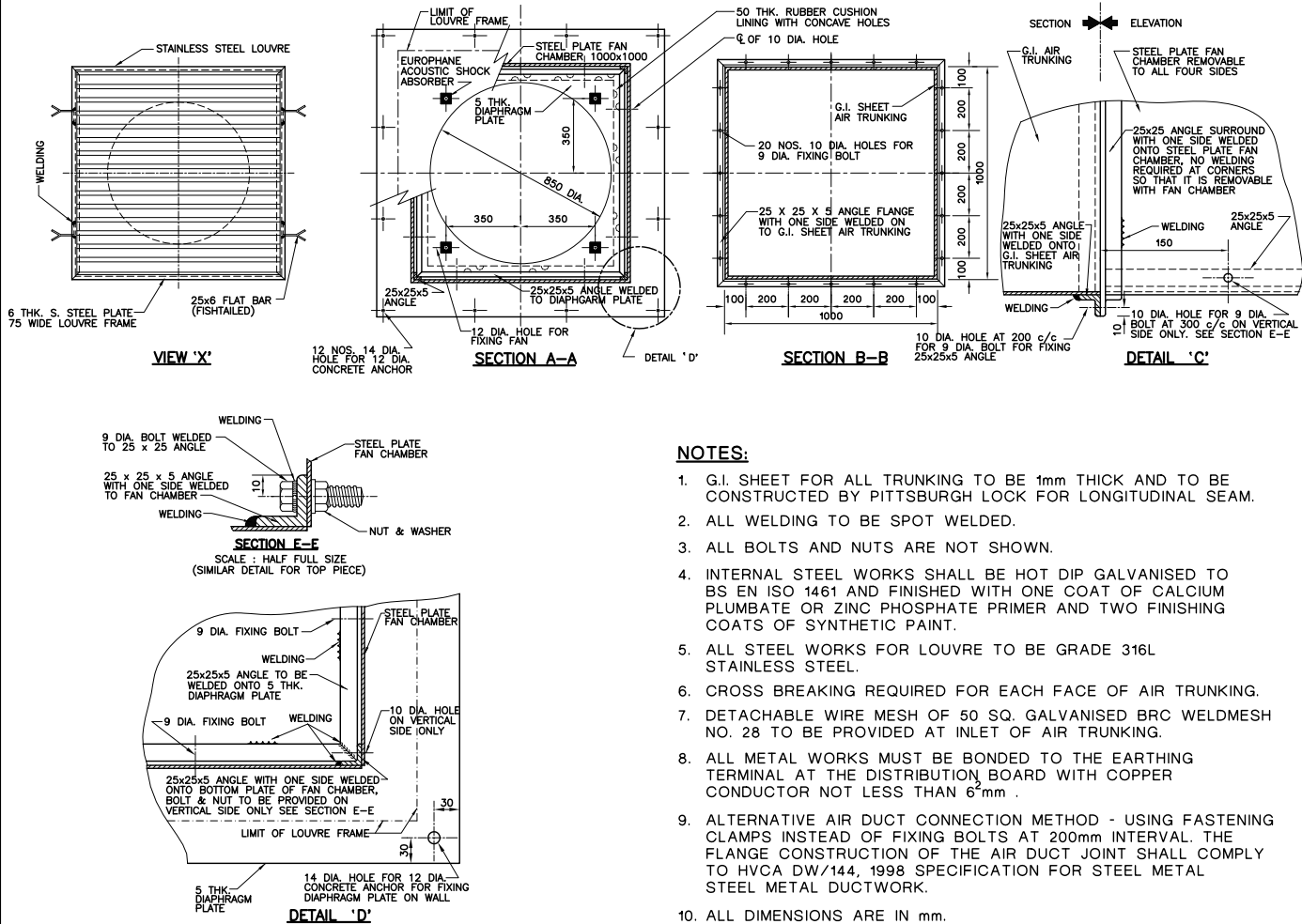
TYPICAL DETAILS OF METAL TRUNKING &
STAINLESS STEEL LOUVRE FOR 630mm DIA.
WALL MOUNTED EXHAUST FAN

DRAWN:	S. C. TO	DATE:	21 Dec., 2005
CHECKED:	K. C. CHENG	APPROVED:	W. C. HO
SCALE:	AS SHOWN	SHEET(S) IN SET:	

ASSET MANAGEMENT	DRG. NO.	T	C	O	P	1	0	2	5	0	D	E	3	3	0	1	0	3	2	4	B	A
------------------	----------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---



SIDE ELEVATION WITH SECTION AT LOUVRE



NOTES:

1. G.I. SHEET FOR ALL TRUNKING TO BE 1mm THICK AND TO BE CONSTRUCTED BY PITTSBURGH LOCK FOR LONGITUDINAL SEAM.
2. ALL WELDING TO BE SPOT WELDED.
3. ALL BOLTS AND NUTS ARE NOT SHOWN.
4. INTERNAL STEEL WORKS SHALL BE HOT DIP GALVANISED TO BS EN ISO 1461 AND FINISHED WITH ONE COAT OF CALCIUM PLUMBATE OR ZINC PHOSPHATE PRIMER AND TWO FINISHING COATS OF SYNTHETIC PAINT.
5. ALL STEEL WORKS FOR LOUVRE TO BE GRADE 316L STAINLESS STEEL.
6. CROSS BREAKING REQUIRED FOR EACH FACE OF AIR TRUNKING.
7. DETACHABLE WIRE MESH OF 50 SQ. GALVANISED BRC WELDMESH NO. 28 TO BE PROVIDED AT INLET OF AIR TRUNKING.
8. ALL METAL WORKS MUST BE BONDED TO THE EARTHING TERMINAL AT THE DISTRIBUTION BOARD WITH COPPER CONDUCTOR NOT LESS THAN 6^{mm} .
9. ALTERNATIVE AIR DUCT CONNECTION METHOD - USING FASTENING CLAMPS INSTEAD OF FIXING BOLTS AT 200mm INTERVAL. THE FLANGE CONSTRUCTION OF THE AIR DUCT JOINT SHALL COMPLY TO HVCA DW/144, 1998 SPECIFICATION FOR STEEL METAL STEEL METAL DUCTWORK.
10. ALL DIMENSIONS ARE IN mm.

B	ZINC PRIMER AND NOTE 10 ADDED	A	LOUVRE BLADES REVISED
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REVS.	21.12.05	15.11.07								
	A	B	C	D	E	F	G	H	J	K
INITIAL	K.C.C.	K.C.C.								

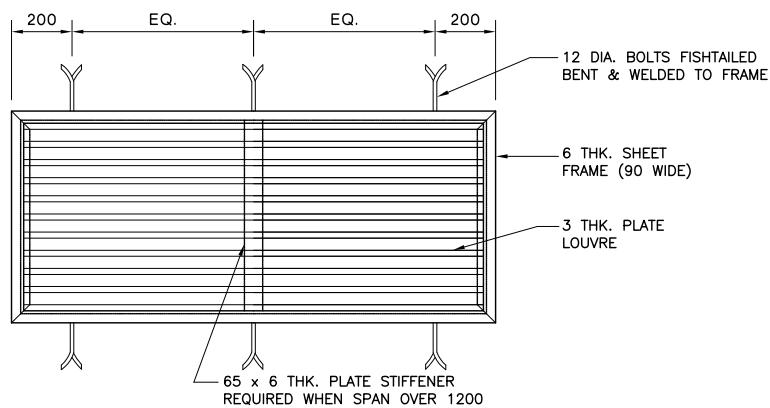
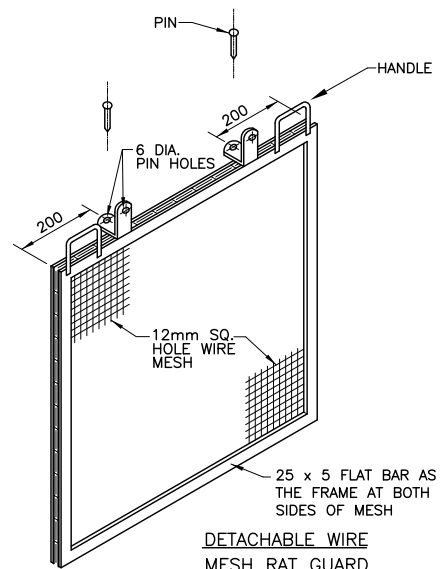
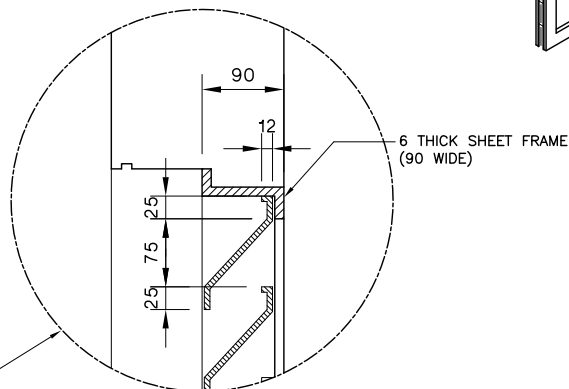
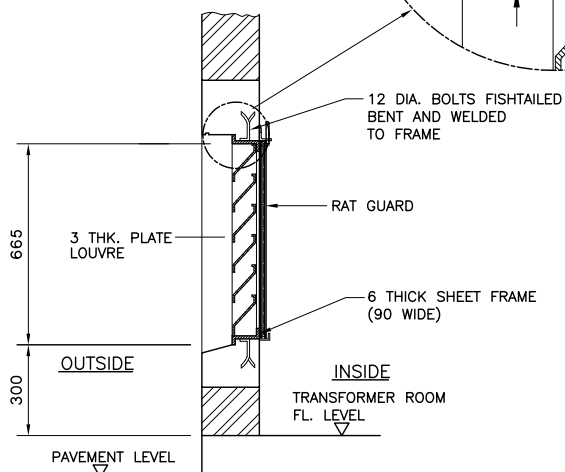
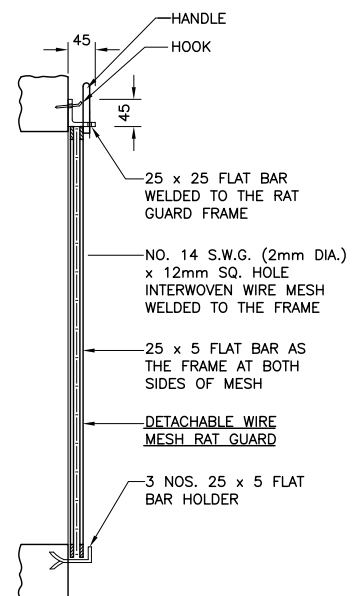
TITLE :

TYPICAL DETAILS OF METAL TRUNKING &
STAINLESS STEEL LOUVRE FOR 800mm DIA.
WALL MOUNTED EXHAUST FAN

DRAWN:	S. C. TO	DATE:	21 Dec., 2005
CHECKED:	K. C. CHENG	APPROVED:	W. C. HO
SCALE:	AS SHOWN	SHEET(S) IN SET:	

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 3 2 5 B A

**ELEVATION****DETACHABLE WIRE MESH RAT GUARD****MESH RAT GUARD****CROSS SECTION OF WALL SHOWING STAINLESS STEEL LOUVRE****DETAIL 'A'**

SECTION FOR FIXING WIRE MESH RAT GUARD ONLY

NOTES:

- 1, ALL CONNECTION OF STAINLESS STEEL WORKS TO BE WELDED.
- 2, ALL STEEL WORKS TO BE GRADE 316L STAINLESS STEEL.
- 3, ALL STEEL WORKS MUST BE BONDED TO THE EARTHING TERMINAL AT THE DISTRIBUTION BOARD WITH COPPER CONDUCTOR NOT LESS THAN 6 mm².

A LOUVRE BLADES REVISED

CLP 中電

REVS.	21.12.05													
INITIAL	A	B	C	D	E	F	G	H	J	K	L			
	K.C.C.													

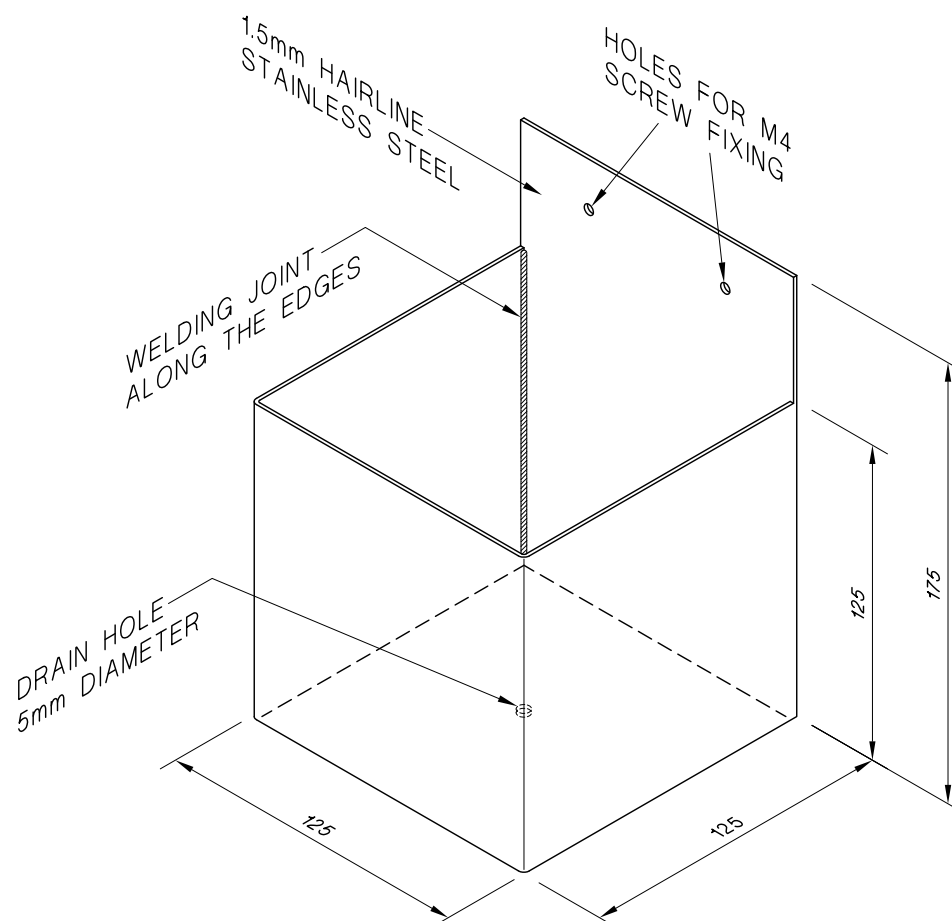
TITLE :

TYPICAL DETAILS OF STAINLESS STEEL LOUVRE

DRAWN: S. C. TO	DATE: 21 Dec., 2005
CHECKED: K. C. CHENG	APPROVED: W. C. HO
SCALE: 1 : 25 (mm)	SHEET(S) IN SET: 1

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 3 2 6 A A



CLP 中電

REVS.

INITIAL

TITLE :

REVS.	A	B	C	D	E	F	G	H	J	K	L
INITIAL											

PLASTIC CHAIN STORAGE BOX

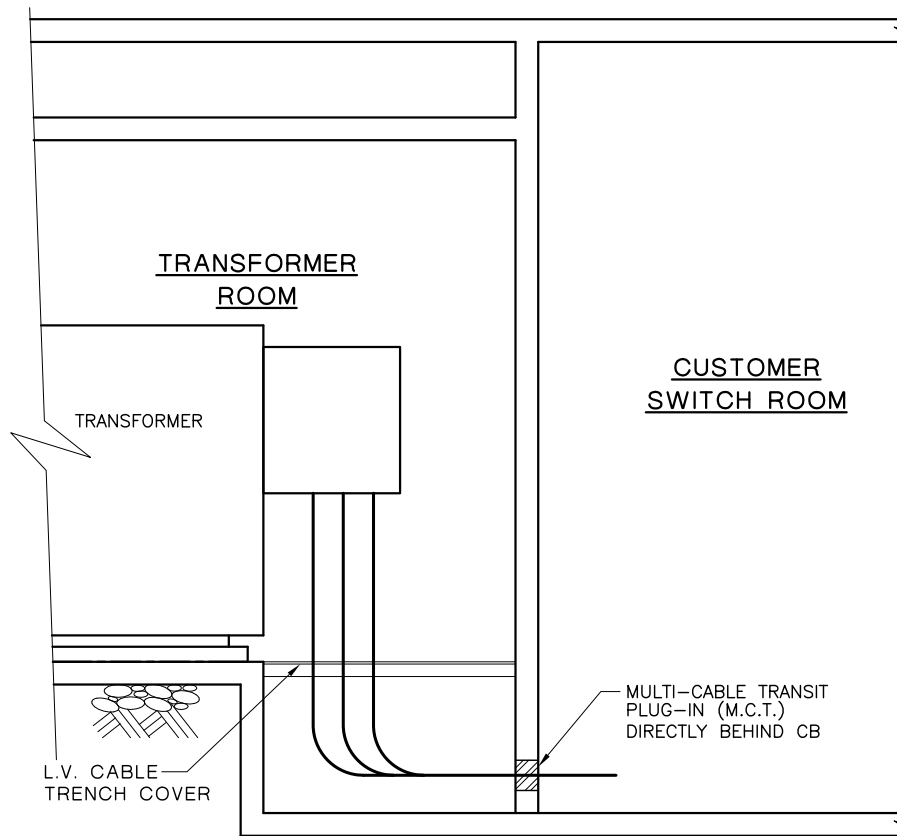
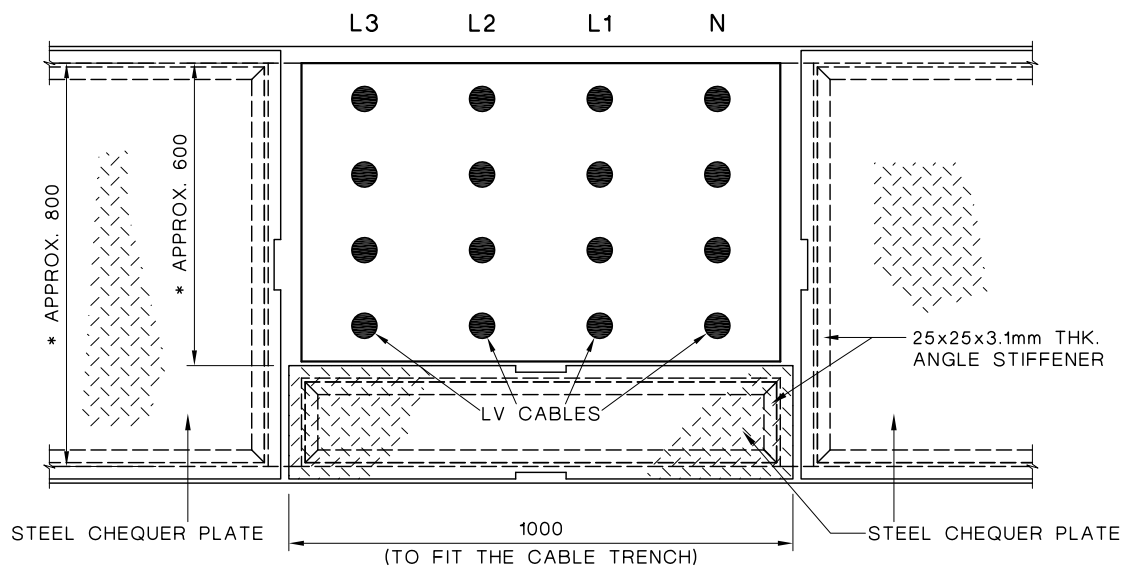
DRAWN: C W WONG DATE: 9 Jul., 2007

CHECKED: K C CHENG APPROVED: W C HO

SCALE: 1 : 3 SHEET(S) IN SET: 1

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 3 2 7 - A



NOTES:

- * EXACT DIMENSION TO BE DETERMINED ACCORDING TO SITE CONDITIONS.
- ALL DIMENSIONS ARE IN mm

B CONFIGURATION OF CHEQUER PLATE
UPDATED

CLP 中電

REVS.	26.03.12	18.03.14												
INITIAL	A	B	C	D	E	F	G	H	J	K	L			
	K.C.C.	H.T.YU												

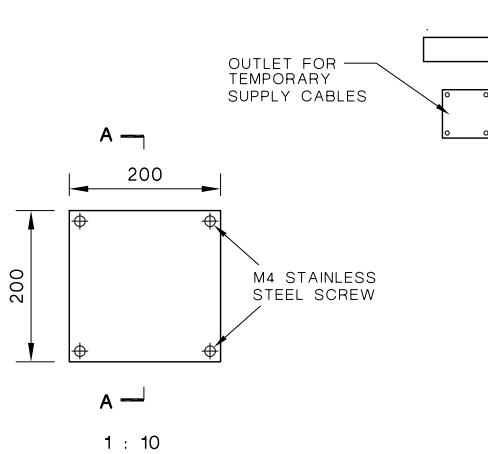
TITLE :

CABLE TRENCH COVER FOR
L.V. CABLES DROPPING FROM TRANSFORMER
L.V. TERMINALS INTO THE CABLE TRENCH

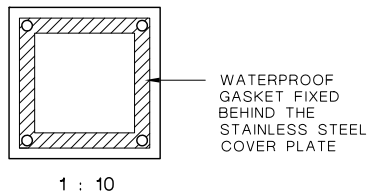
DRAWN: C W WONG	DATE: 21 Aug., 2007
CHECKED: K C CHENG	APPROVED: W C HO
SCALE: N. T. S.	SHEET(S) IN SET:

ASSET MANAGEMENT

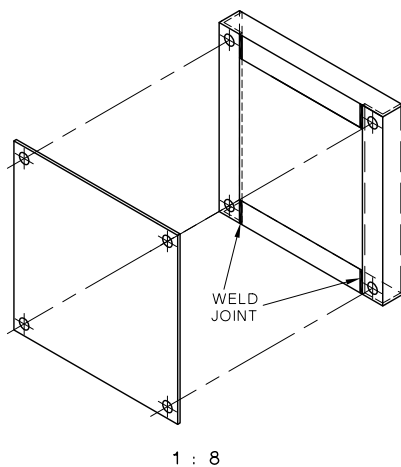
DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 3 2 8 B A



**FRONT VIEW OF
STAINLESS STEEL COVER**



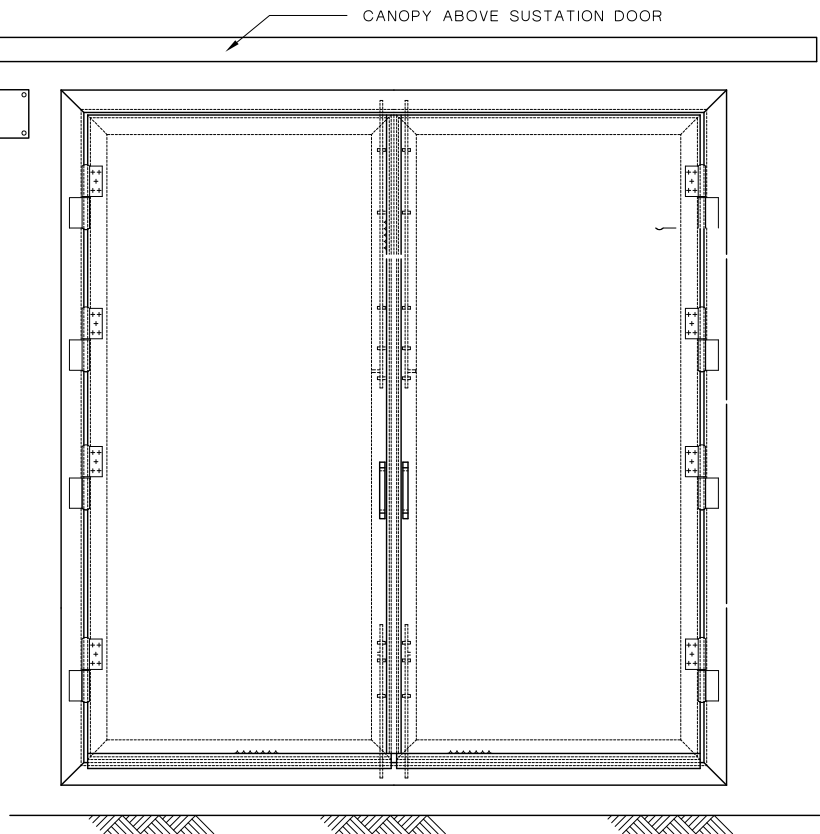
**BACK VIEW OF
STAINLESS STEEL COVER**



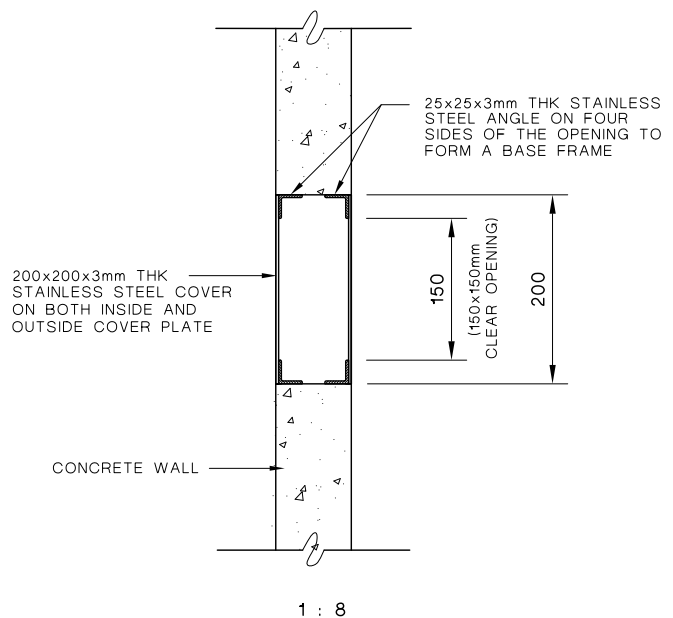
BASE FRAME ISOMATIC VIEW

NOTES:

1. HAIRLINE STAINLESS STEEL SHALL BE USED FOR THE COVER AND FRAME
2. STAINLESS STEEL FIXING SCREW SHALL BE USED
3. ALL DIMENSIONS ARE IN mm



ELEVATION



SECTION A - A



REVS.	A	B	C	D	E	F	G	H	J	K	L
INITIAL											

TITLE :

DETAILS OF OUTLET FOR TEMPORARY
SUPPLY CABLES

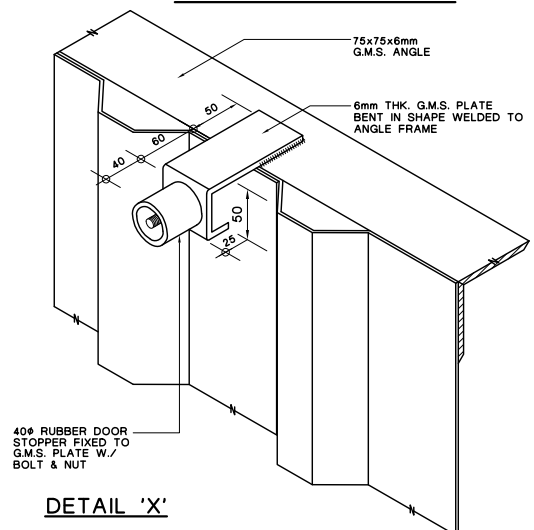
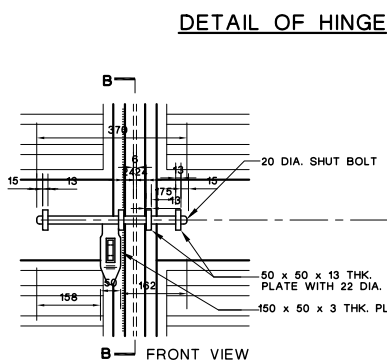
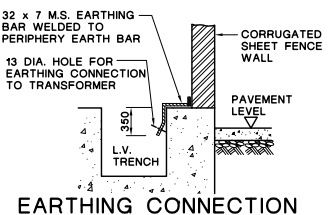
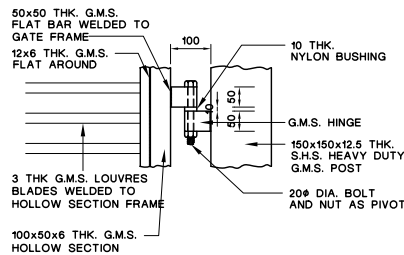
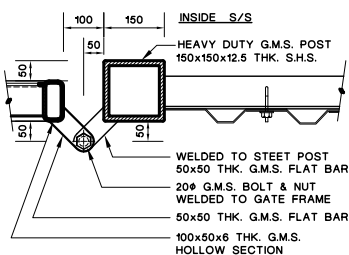
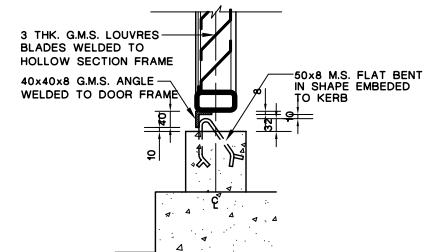
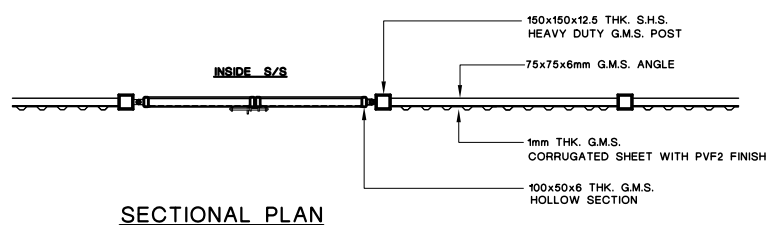
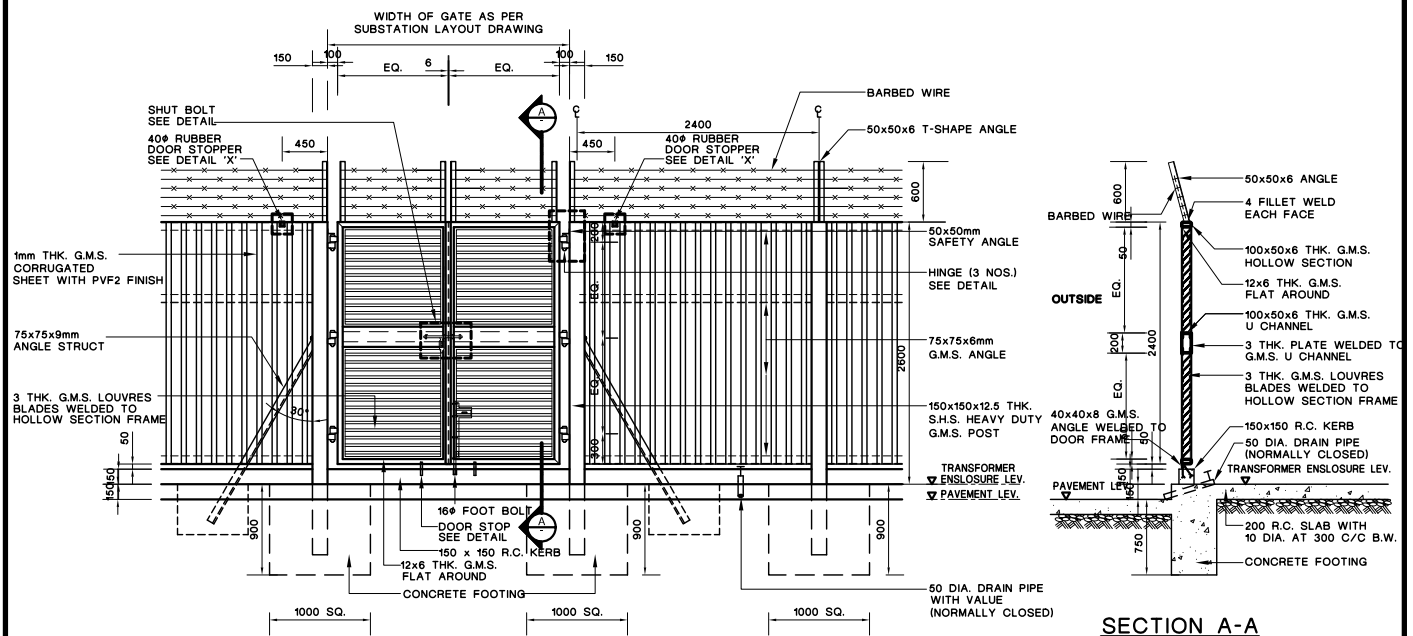
DRAWN: T. W. LAU DATE: 14-09-2007

CHECKED: K. C. CHENG APPROVED: W. C. HO

SCALE: N.T.S. SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 3 2 9 - A



NOTES:

- ALL STEELWORKS SHALL BE HOT DIP GALVANISED TO B.S. EN ISO 1461 AND FINISHED WITH ONE COAT OF CALCIUM PLUMBATE OR ZINC PHOSPHATE PRIMER AND TWO FINISHING COATS OF SYNTHETIC PAINT.
- ALL DIMENSIONS ARE IN mm.

C ZINC PRIMER ADDED

CLP 中電

REVS.	21.12.05	9.11.06	20.08.07											
INITIAL	A	B	C	D	E	F	G	H	J	K	L			
	K.C.C.	C.H.F.	K.C.C.											

TITLE :

DETAILS OF METAL GATE AND FENCE WITH STEEL POST FOR OUTDOOR SUBSTATION

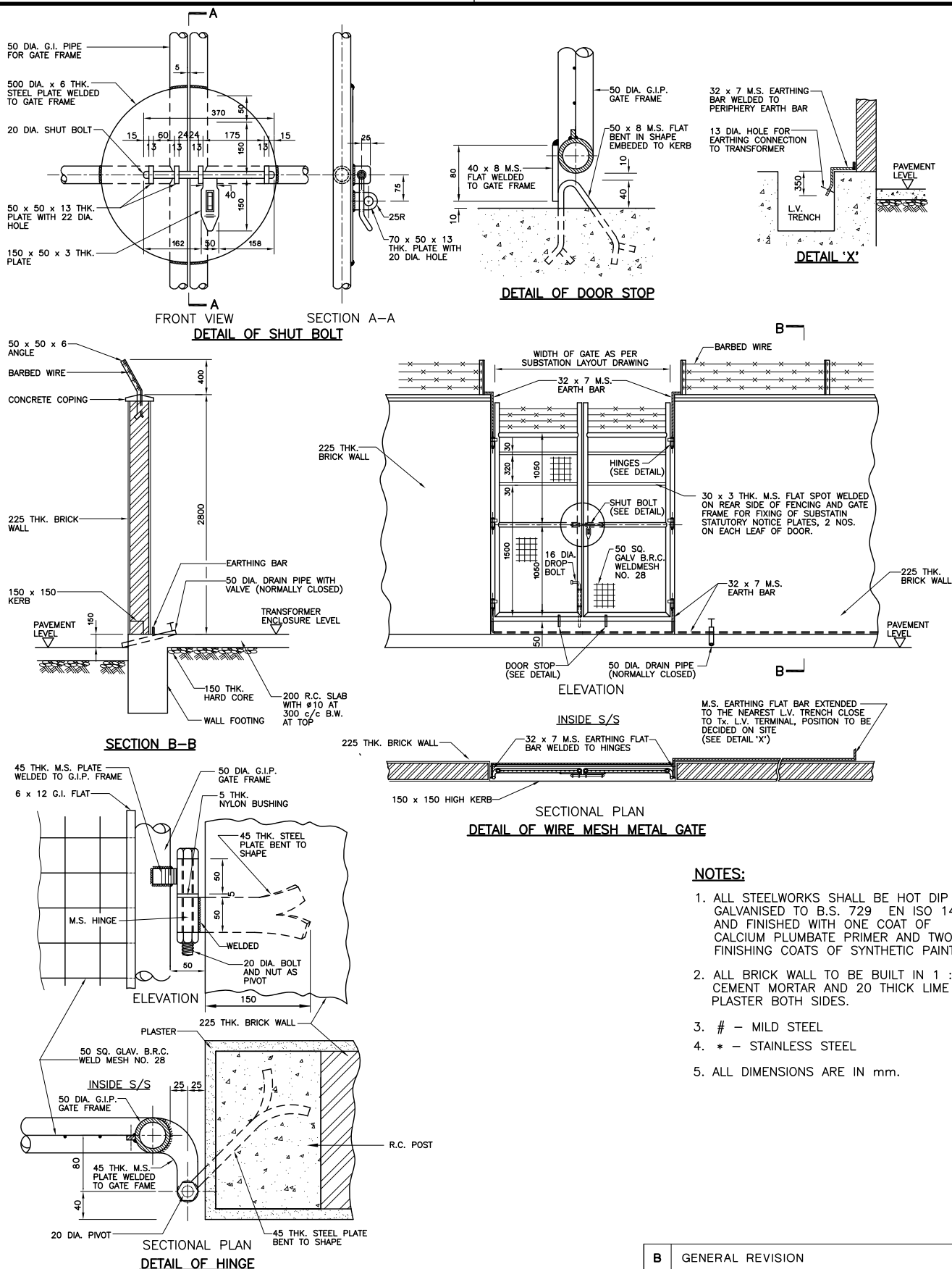
DRAWN: O. S. YIP DATE: 21 Dec., 2005

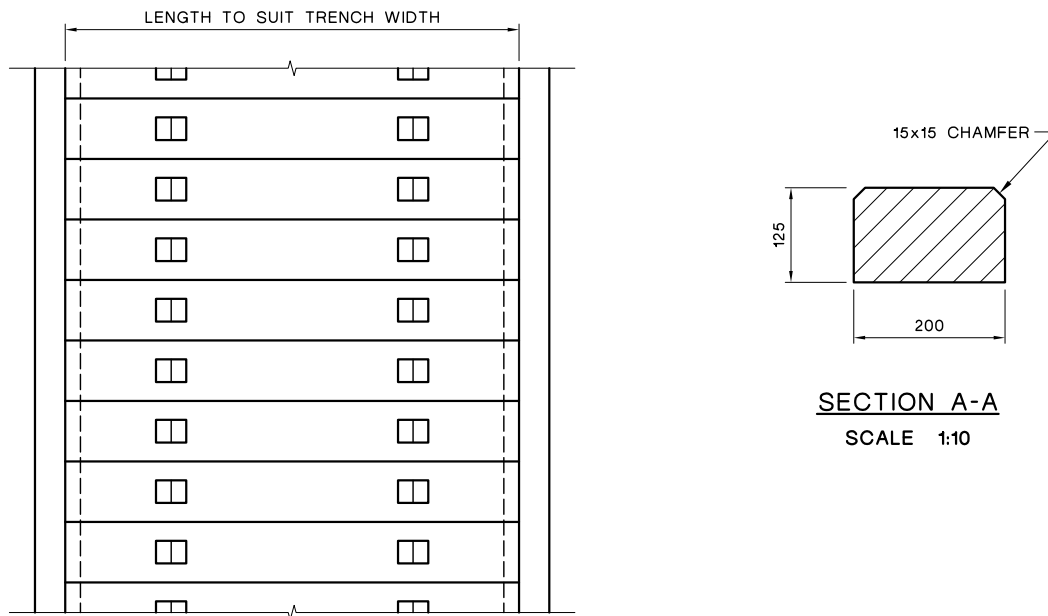
CHECKED: C. H. FUNG APPROVED: W. C. HO

SCALE: N. T. S. SHEET(S) IN SET: 1

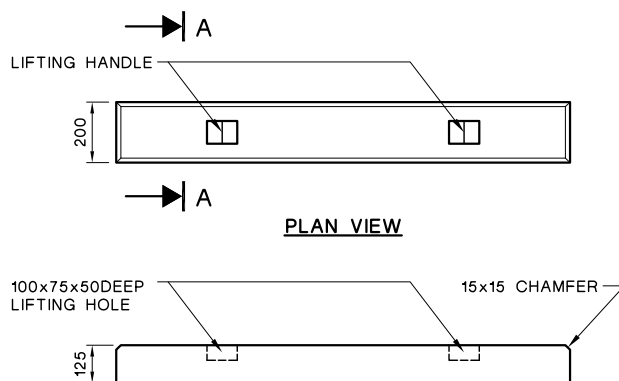
ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 4 0 1 C A





TYPICAL ARRANGEMENT OF
REINFORCED CONCRETE COVER



TYPICAL DETAILS OF
REINFORCED CONCRETE COVER

NOTES:

1. THE MAX. WEIGHT OF THE CONCRETE COVER SHALL NOT EXCEED 75kg FOR EASY HANDLING.
2. THE COVERS SHALL BE DESIGNED BY THE BUILDING OWNER TO WITHSTAND THE REQUIRED LOADING OF THE SITE. (MIN. LOADING SHALL BE NOT LESS THAN 7.5kPa)

A NOTES ADDED



REVS.	20.08.07													
INITIAL	A	B	C	D	E	F	G	H	J	K	L			

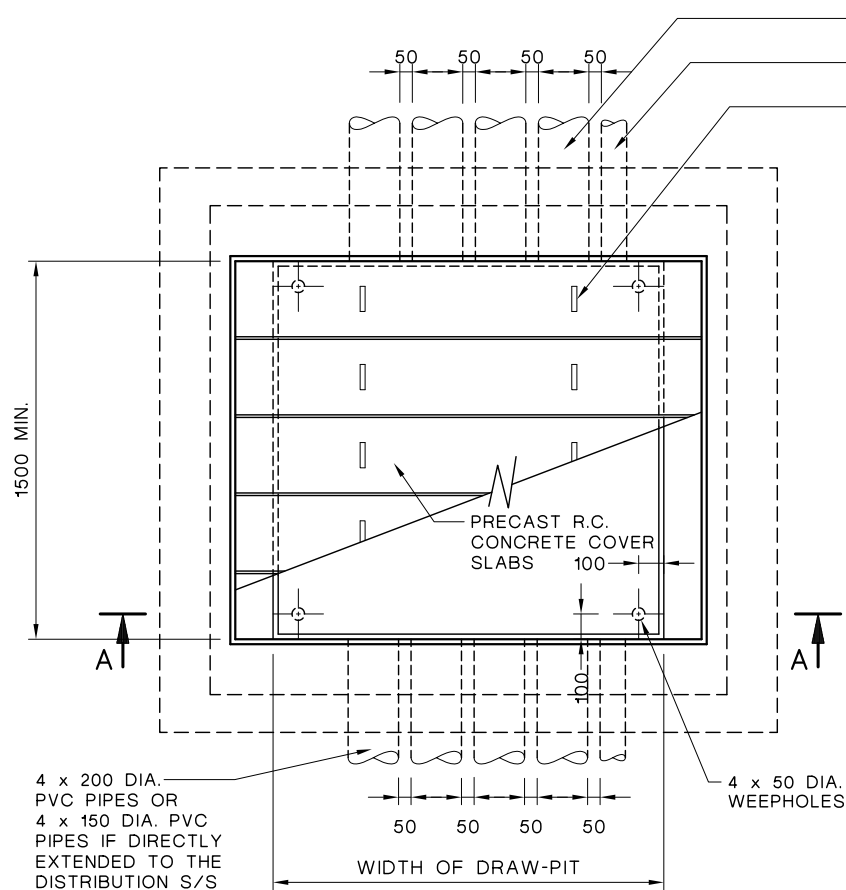
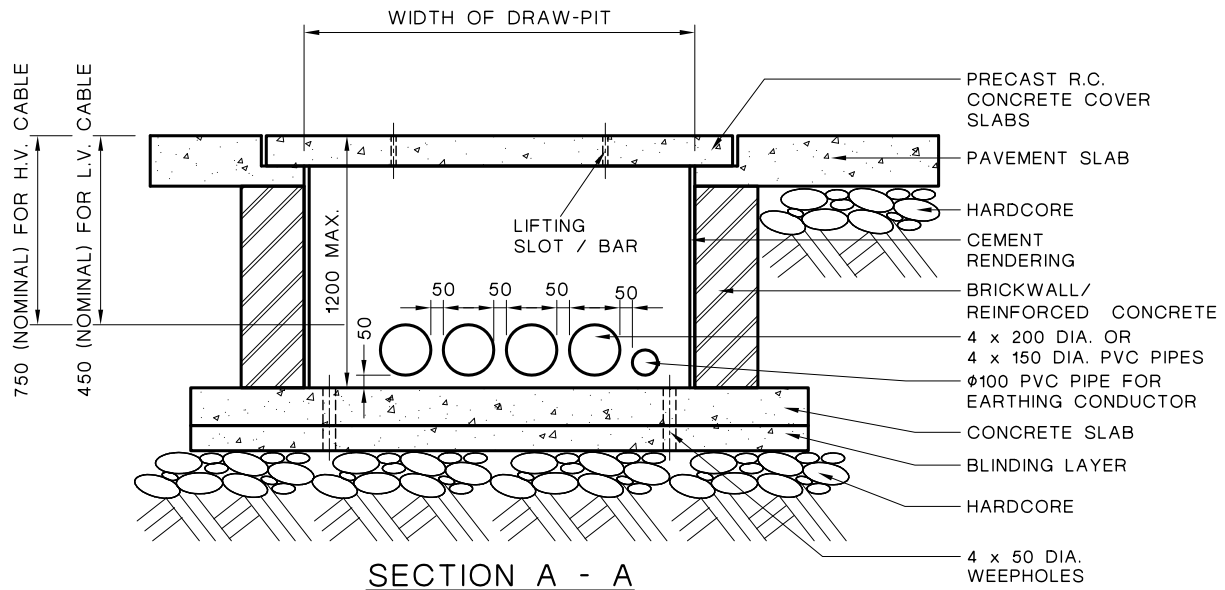
TITLE :

TYPICAL DETAILS OF CABLE TRENCH
R. C. COVER

DRAWN: T. Y. IP DATE: 8-8-2002
CHECKED: K. C. CHENG APPROVED: K. W. WONG
SCALE: 1 : 25 (mm) SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 4 0 4 A A

**NOTES :**

1. CIVIL ENGINEERING AND STRUCTURE OF DRAW-PIT AND COVERS TO BE DESIGNED TO WITHSTAND THE REQUIRED LOADING ON SITE BY CUSTOMER'S/DEVELOPER'S ARCHITECT OR CONSULTANT. (MIN. LOADING SHALL BE NOT LESS THAN 7.5kPa)
2. WIDTH AND LENGTH OF DRAW-PIT AND NO. OF CABLE DUCTS TO BE VARIED AS REQUIRED.
3. PVC PIPES WITH CONCRETE SURROUND.
4. THE PVC PIPE SHALL BE SEALED BY WATERTIGHT DUCT PLUG.
5. DRAW WIRE/ROPE SHALL BE LAID IN THE PVC PIPE.
6. DRAW PIT SHALL BE BACKFILLED WITH SOIL/SAND AFTER CABLE LAYING.
7. THE EARTHING BARS WHICH ARE PROVIDED AND INSTALLED BY THE CUSTOMER FOR THE DISTRIBUTION SUBSTATION SHALL BE EXTENDED VIA DUCTS AND DRAW-PITS TO THE LOCATION(S) WHERE CLP SUPPLY CABLES ENTER THE SITE OWNED BY THE CUSTOMER.
8. ALL DIMENSIONS ARE IN mm.

D	PVC PIPE SIZE UPDATED, G.I. PIPE DELETED.
C	PVC/G.I. PIPE SIZE CHANGED

CLP 中電

REVS.	20.08.07	21.10.08	26.03.12	18.03.14										
INITIAL	A K.C.C.	B K.C.C.	C K.C.C.	D H.T.YU	E	F	G	H	J	K	L			

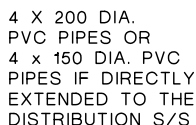
TITLE :

TYPICAL DETAILS OF CABLE DRAW-PIT (STRAIGHT APPLICATION)

DRAWN: C. W. WONG	DATE: 17 Sep., 2002
CHECKED: K. C. CHENG	APPROVED: K. W. WONG
SCALE: N. T. S.	SHEET(S) IN SET: 1

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 4 0 5 D A



SECTION A - A



1. CIVIL ENGINEERING AND STRUCTURE OF DRAW-PIT AND COVERS TO BE DESIGNED TO WITHSTAND THE REQUIRED LOADING ON SITE BY CUSTOMER'S/DEVELOPER'S ARCHITECT OR CONSULTANT. (MIN. LOADING SHALL BE NOT LESS THAN 7.5kPa)
2. WIDTH AND LENGTH OF DRAW-PIT AND NO. OF CABLE DUCTS TO BE VARIED AS REQUIRED.
3. PVC PIPES WITH CONCRETE SURROUND.
4. THE PVC PIPE SHALL BE SEALED BY WATERTIGHT DUCT PLUG.
5. DRAW WIRE/ROPE SHALL BE LAID IN THE PVC PIPE.
6. DRAW PIT SHALL BE BACKFILLED WITH SOIL/SAND AFTER CABLE LAYING.
7. THE EARTHING BARS WHICH ARE PROVIDED AND INSTALLED BY THE CUSTOMER FOR THE DISTRIBUTION SUBSTATION SHALL BE EXTENDED VIA DUCTS AND DRAW-PITS TO THE LOCATION(S) WHERE CLP SUPPLY CABLES ENTER THE SITE OWNED BY THE CUSTOMER.
8. ALL DIMENSIONS ARE IN mm.

PLAN

D	PVC PIPE SIZE UPDATED, G.I. PIPE DELETED.
---	---



REVS.	20.08.07	21.10.08	26.03.12	18.03.14							
	A	B	C	D	E	F	G	H	J	K	L
INITIAL	K.C.C.	K.C.C.	K.C.C.	H.T.Y.U							

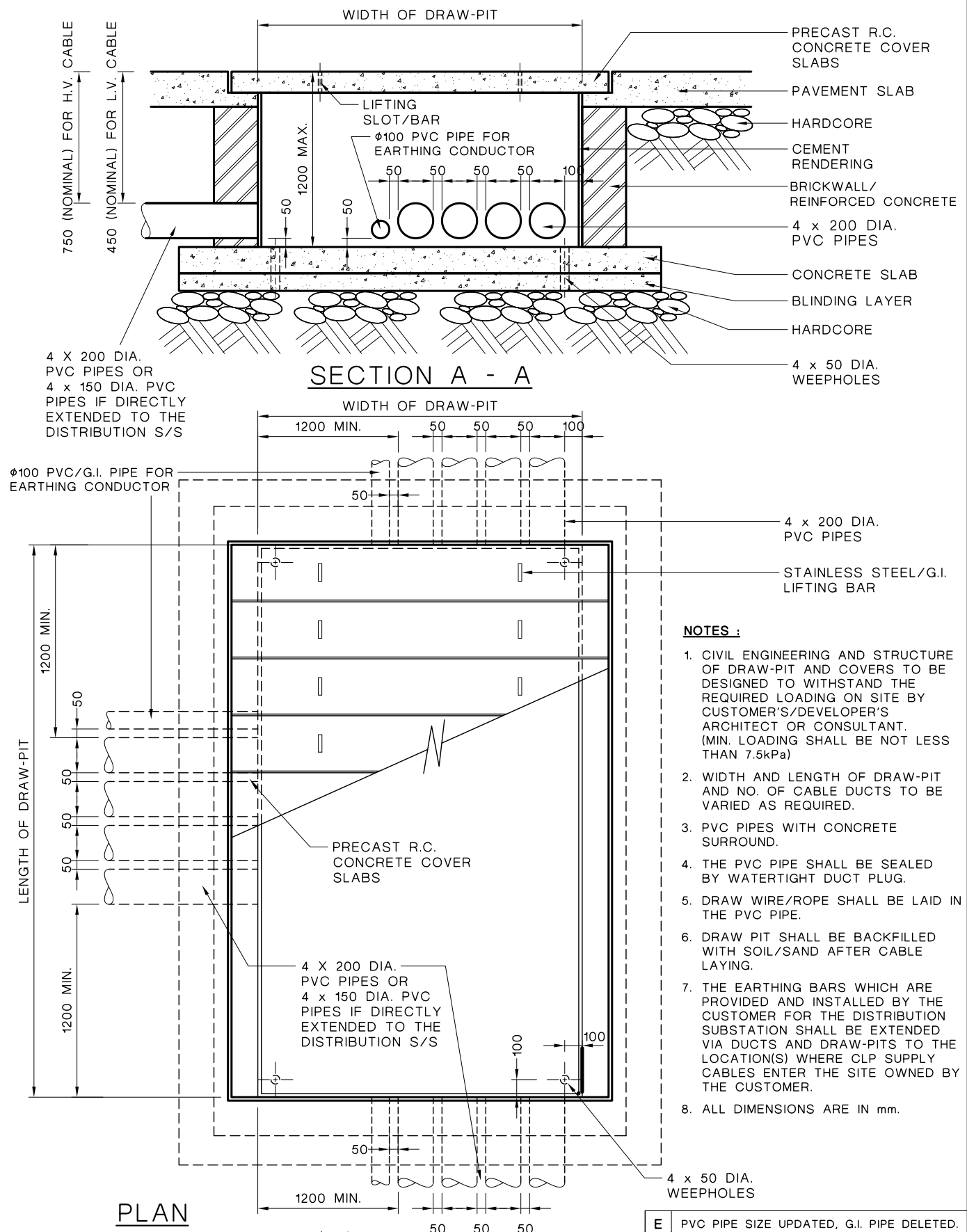
TITLE :

TYPICAL DETAILS OF CABLE DRAW-PIT (ANGLE APPLICATION)

DRAWN: C. W. WONG	DATE: 16 Sep., 2002
CHECKED: K. C. CHENG	APPROVED: K. W. WONG
SCALE: N. T. S.	SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 4 0 6 D A



CLP 中電

DRAWN: C. W. WONG DATE: 17 Sep., 2002
 CHECKED: K. C. CHENG APPROVED: K. W. WONG
 SCALE: N. T. S. SHEET(S) IN SET:

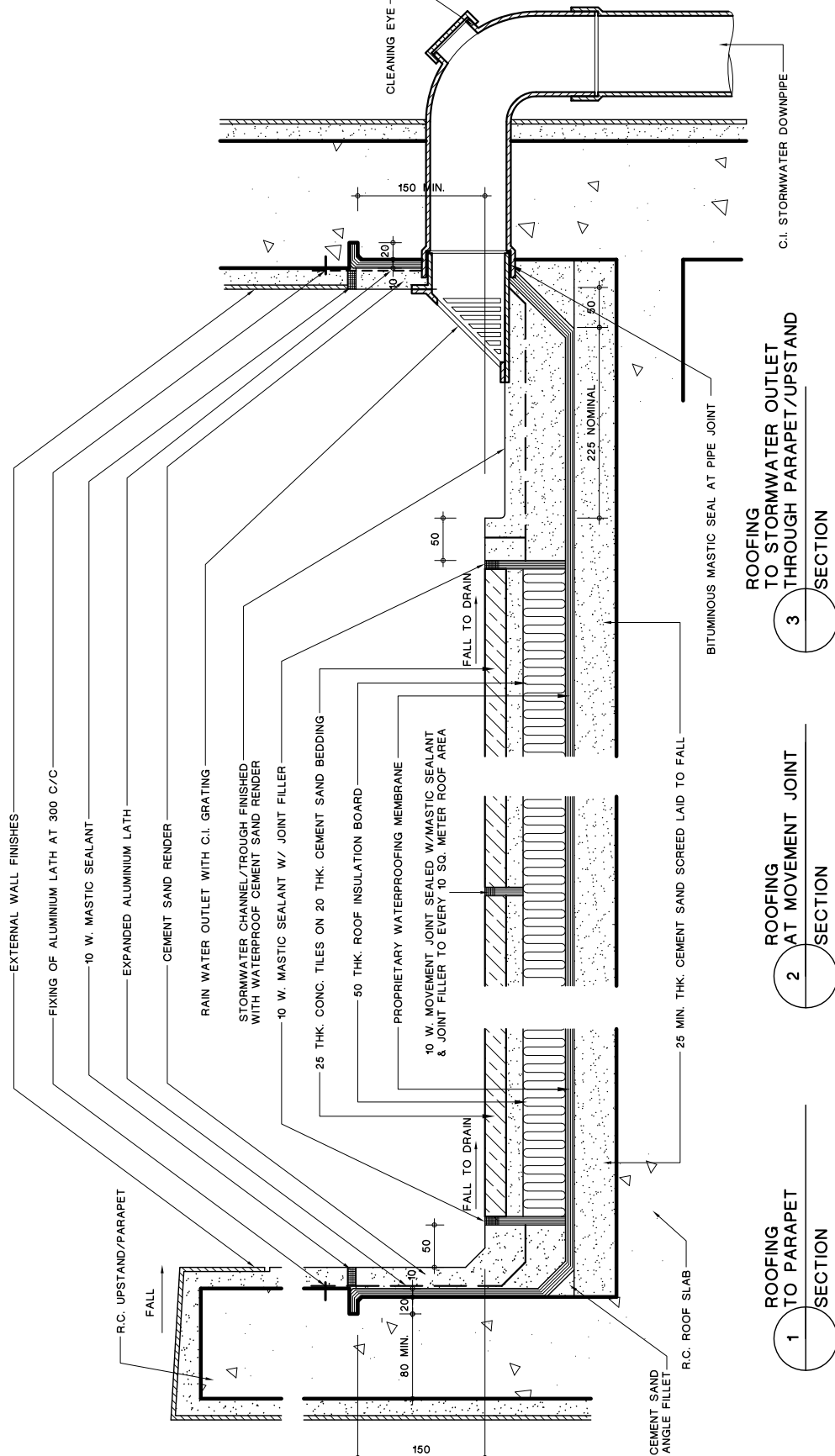
REVS. 10.3.03 20.08.07 21.10.08 26.03.12 18.03.14
 INITIAL K.C.C. K.C.C. K.C.C. K.C.C. H.T.YU

TITLE :

**TYPICAL DETAILS OF CABLE DRAW-PIT
(TEE APPLICATION)**

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 4 0 7 E A



ALL DIMENSIONS ARE IN mm

CLP 中電

REVS.

INITIAL

TITLE :

ROOFING WITH INSULATION
PARAPET & WALL DETAILS

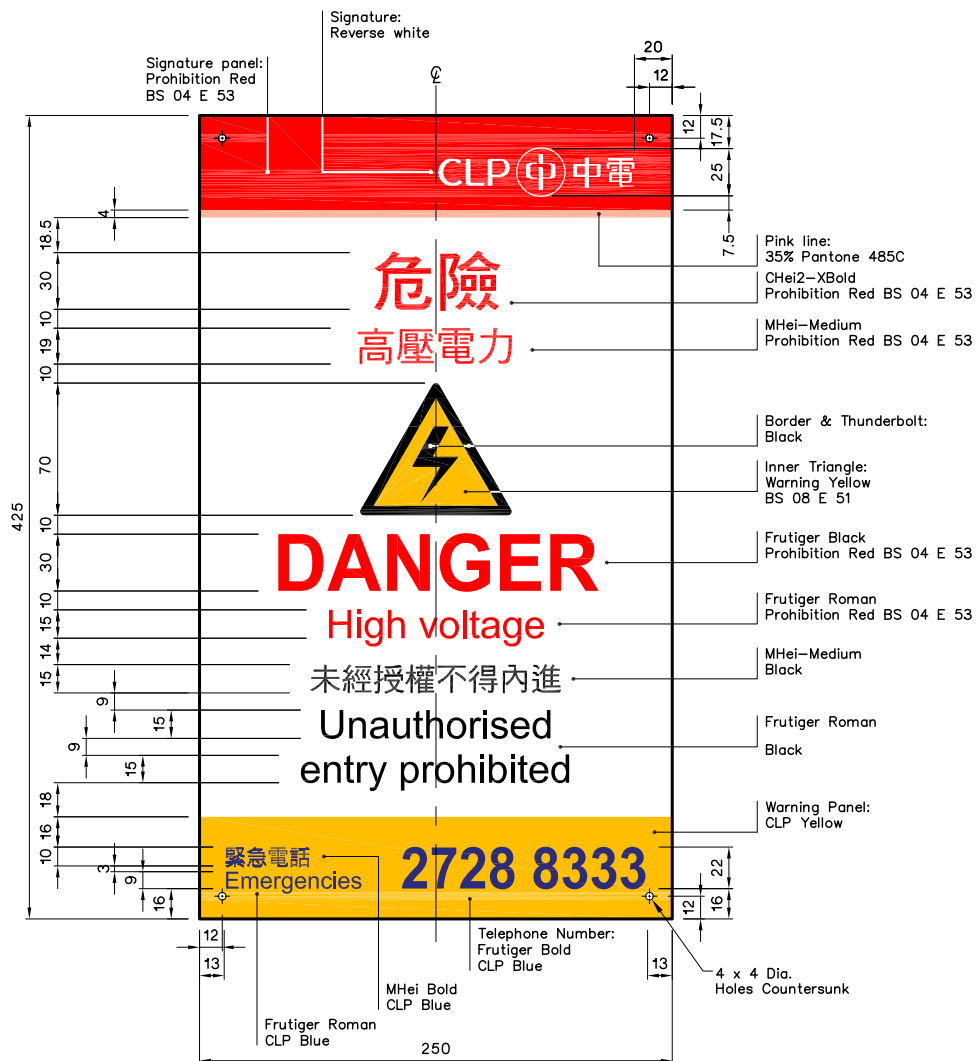
DRAWN: C W WONG DATE: 22 Aug., 2007

CHECKED: K C CHENG APPROVED: W C HO

SCALE: N. T. S. SHEET(S) IN SET: 1

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 4 0 8 - A



C TEXT SIZE UPDATED

B GENERAL LAYOUT REVISION

A GENERAL LAYOUT REVISION



REVS.	01-12-04	20-12-06	26-03-12										
INITIAL	A	B	C	D	E	F	G	H	J	K	L		
	K.C.C.	K.C.C.	K.C.C.										

TITLE :

DETAILS OF SUBSTATION STATUTORY NOTICE
PLATE - DANGER WARNING

DRAWN: S. C. TO DATE: 13-8-2002

CHECKED: K. C. CHENG APPROVED: W. C. HO

SCALE: 1 : 4 (mm) SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 5 0 1 C A



C TEXT SIZE UPDATED

B GENERAL LAYOUT REVISION

A GENERAL LAYOUT REVISION

CLP 中電

REVS.	01.12.04	20.12.06	26.03.12										
INITIAL	A	B	C	D	E	F	G	H	J	K	L		
	K.C.C.	K.C.C.	K.C.C.										

TITLE :

DETAILS OF SUBSTATION STATUTORY NOTICE
PLATE - DANGER & SF6 GAS-FILLED EQUIPMENT
WARNING

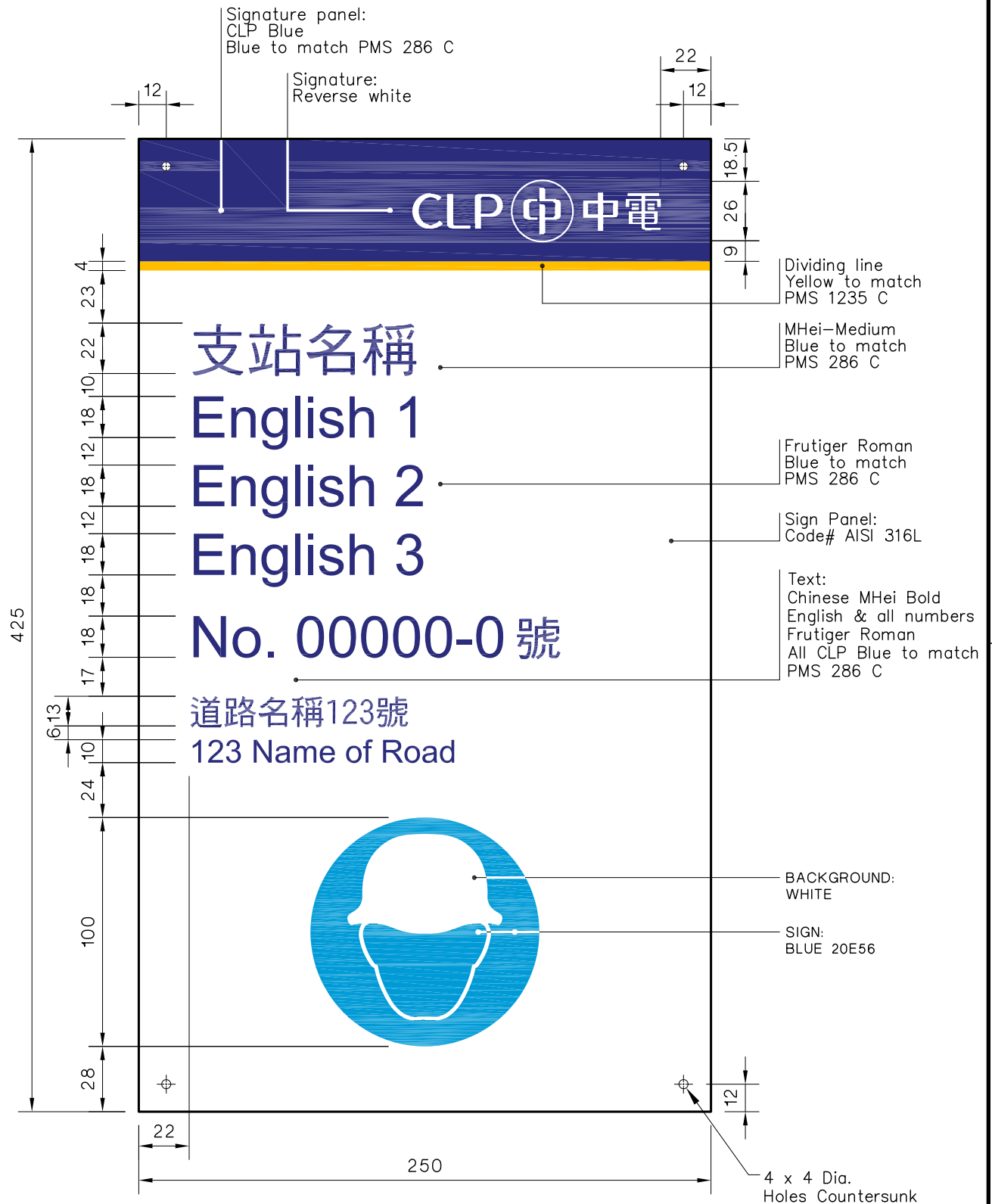
DRAWN: T. Y. IP DATE: 15-8-2002

CHECKED: K. C. CHENG APPROVED: W. C. HO

SCALE: 1 : 4 (mm) SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 5 0 2 C A



B GENERAL LAYOUT REVISION

A GENERAL LAYOUT REVISION

CLP 中電

REVS.	01-12-04	27-12-06												
INITIAL	A	B	C	D	E	F	G	H	J	K	L			
	K.C.C.	K.C.C.												

TITLE :

DETAILS OF SUBSTATION STATUTORY NOTICE
PLATE - SUBSTATION NAME

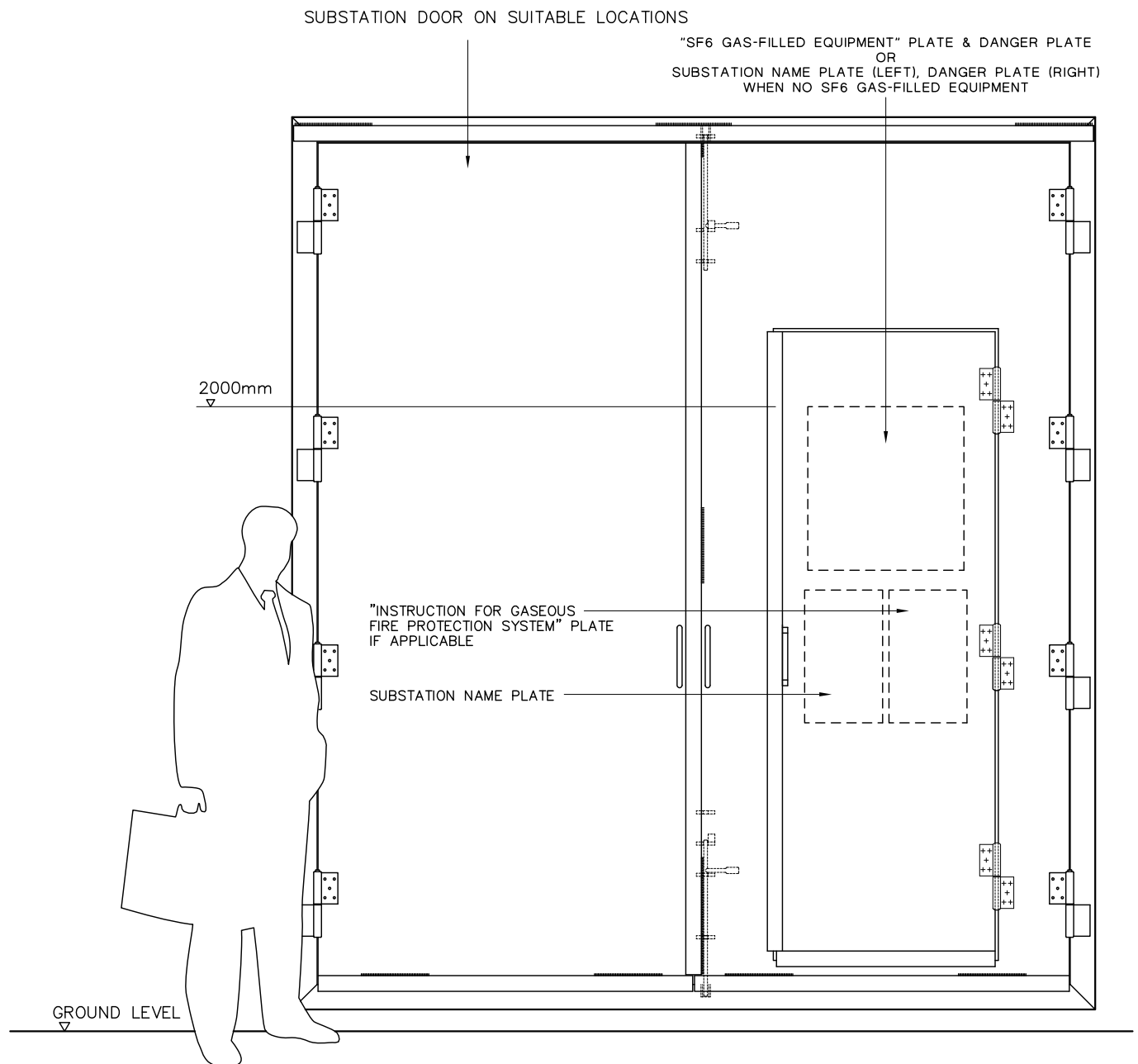
DRAWN: T. Y. IP DATE: 04-09-2002

CHECKED: K. C. CHENG APPROVED: W. C. HO

SCALE: 1 : 2.5 (mm) SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 5 0 3 B A



NOTES

1. NOTICE PLATES SHALL BE ON THE WICKET DOOR WHEN IT IS USED AS THE NORMAL ENTRANCE.
2. THE DANGER PLATE AND SUBSTATION NAME PLATE SHALL BE ARRANGED AND DISPLAYED CONSISTENTLY AT ALL SUBSTATIONS.

A NOTICE PLATE REVISION



REVS.	13.09.04												
INITIAL	A	B	C	D	E	F	G	H	J	K	L		

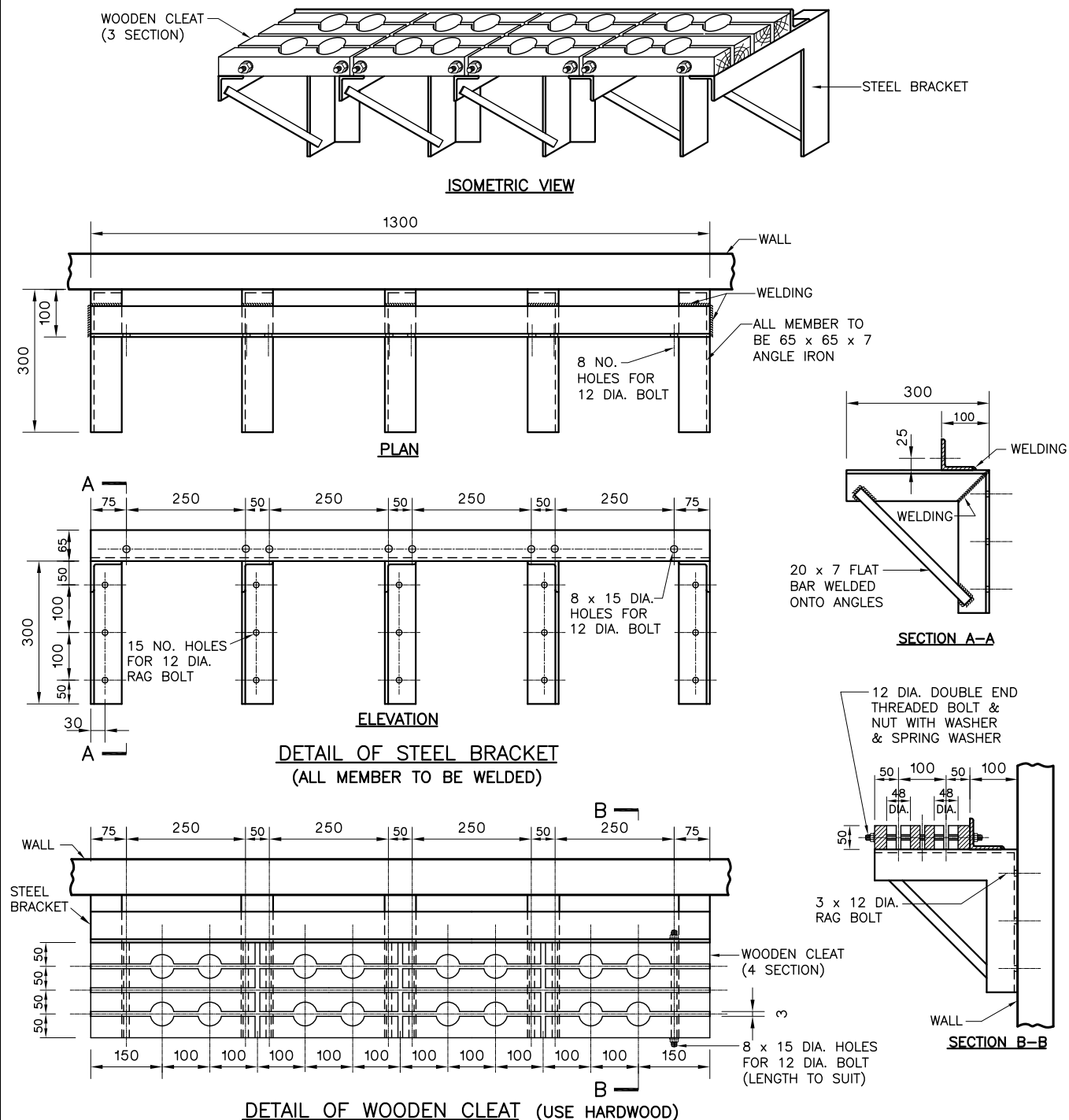
TITLE :

DISPOSITION OF THE DANGER PLATE AND
SUBSTATION NAME PLATE

DRAWN: S. C. TO	DATE: 13-8-2002
CHECKED: K. C. CHENG	APPROVED: W. C. HO
SCALE: N.T.S.	SHEET(S) IN SET:

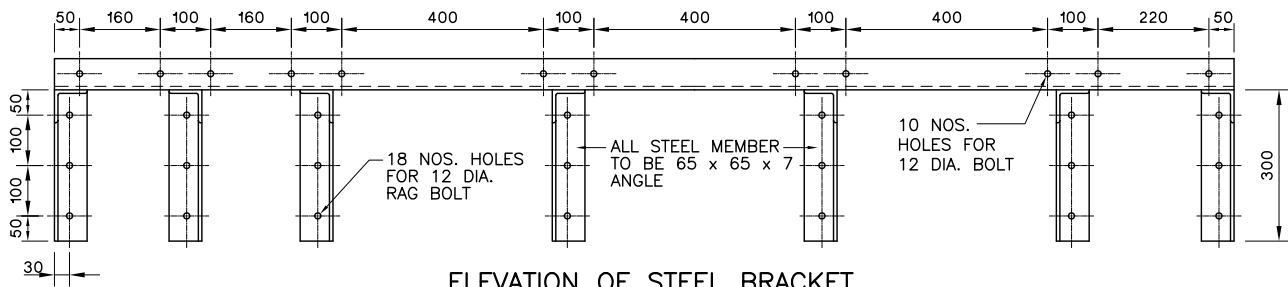
ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 5 0 4 A A

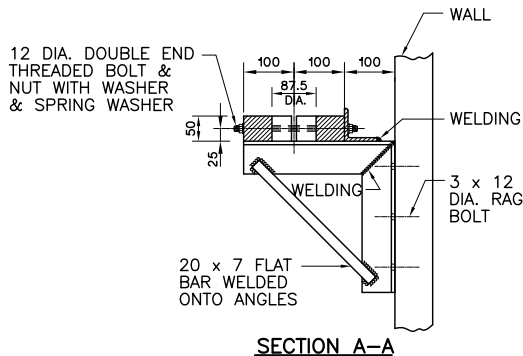
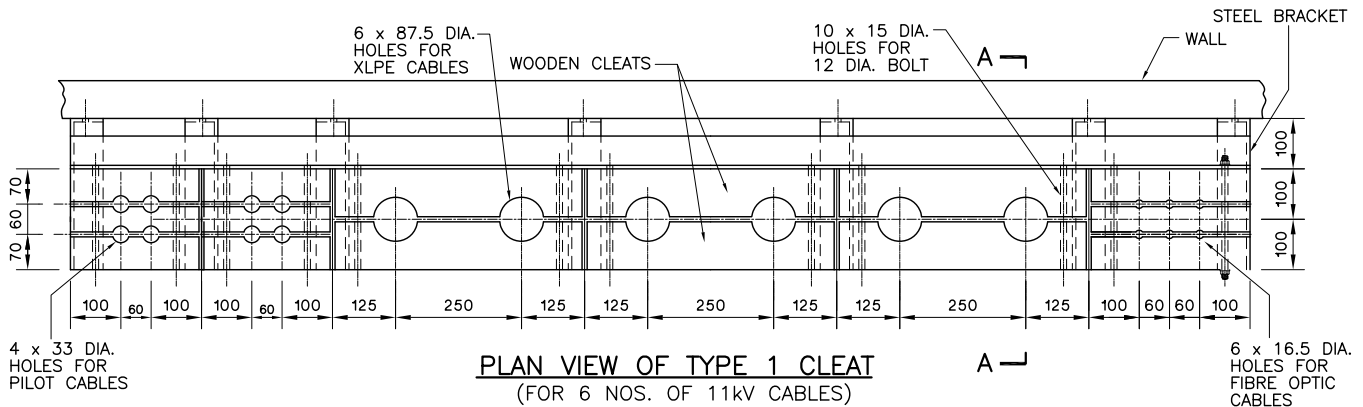
**NOTES:**

1. ALL STEELWORKS SHALL BE HOT DIP GALVANISED TO BS EN ISO 1461 AND FINISHED WITH ONE COAT OF CALCIUM PLUMBATE OR ZINC PHOSPHATE PRIMER AND TWO FINISHING COATS OF SYNTHETIC PAINT.
2. ALL MATERIALS TO BE PROVIDED AND INSTALLED BY DEVELOPER/CUSTOMER.
3. ALL METAL WORKS MUST BE BONDED TO THE EARTHING TERMINAL AT THE DISTRIBUTION BOARD WITH COPPER CONDUCTOR NOT LESS THAN 6mm².
4. THE NO. OF CABLE CLEATS SHALL BE ADEQUATE FOR THE ACTUAL NO. OF CABLES USED AND SPARES.

C	SIZE OF HOLES FOR CABLE UPDATED.										B	ZINC PRIMER ADDED										A	NOTE 4, 5 ADDED										
CLP 中電												REVS.	15.09.04	15.11.07	18.03.14																		
													A	B	C	D	E	F	G	H	J	K	L										
												INITIAL	K.C.C.	K.C.C.	H.T.YU																		
												TITLE :																					
												DETAILS OF STEEL WALL BRACKET AND WOODEN CLEAT FOR HOLDING SINGLE CORE CABLES																					
DRAWN: S. C. TO				DATE: 26-07-2002																													
CHECKED: K. C. CHENG				APPROVED: W. C. HO																													
SCALE: 1 : 12.5 (mm)				SHEET(S) IN SET: 1																													
ASSET MANAGEMENT												DRG. NO.	T	C	O	P	1	0	2	5	0	D	E	3	3	0	1	0	5	0	5	C	A

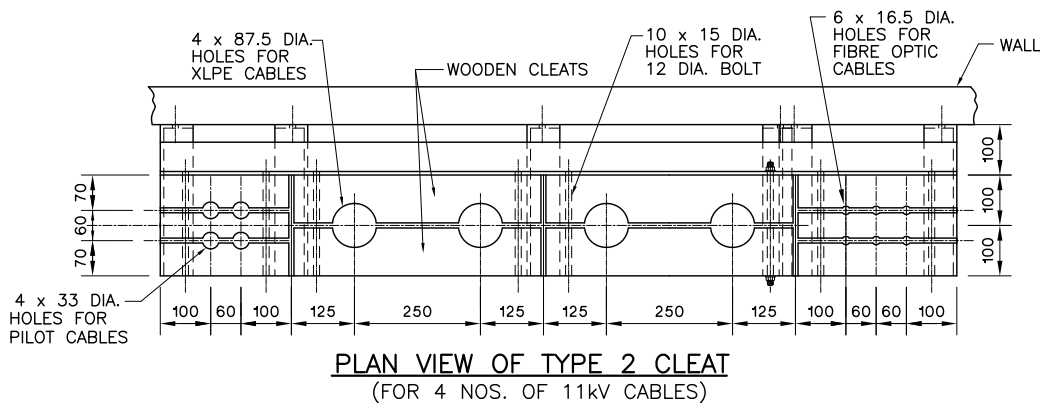


ELEVATION OF STEEL BRACKET
(ALL MEMBER TO BE WELDED)



NOTES:

1. ALL STEELWORKS SHALL BE HOT DIP GALVANISED TO BS EN ISO 1461 AND FINISHED WITH ONE COAT OF CALCIUM PLUMBATE OR ZINC PHOSPHATE PRIMER AND TWO FINISHING COATS OF SYNTHETIC PAINT.
2. ALL MATERIALS TO BE PROVIDED AND INSTALLED BY DEVELOPER/CUSTOMER.
3. ALL METAL WORKS MUST BE BONDED TO THE EARTHING TERMINAL AT THE DISTRIBUTION BOARD WITH COPPER CONDUCTOR NOT LESS THAN 6mm².
4. THE NO. OF CABLE CLEATS SHALL BE ADEQUATE FOR THE ACTUAL NO. OF CABLES USED AND SPARES.



B ZINC PRIMER ADDED.

A NOTE 4, 5 ADDED

CLP 中電

REVS.	15.09.04	15.11.07											
INITIAL	A	B	C	D	E	F	G	H	J	K	L		
	K.C.C.	K.C.C.											

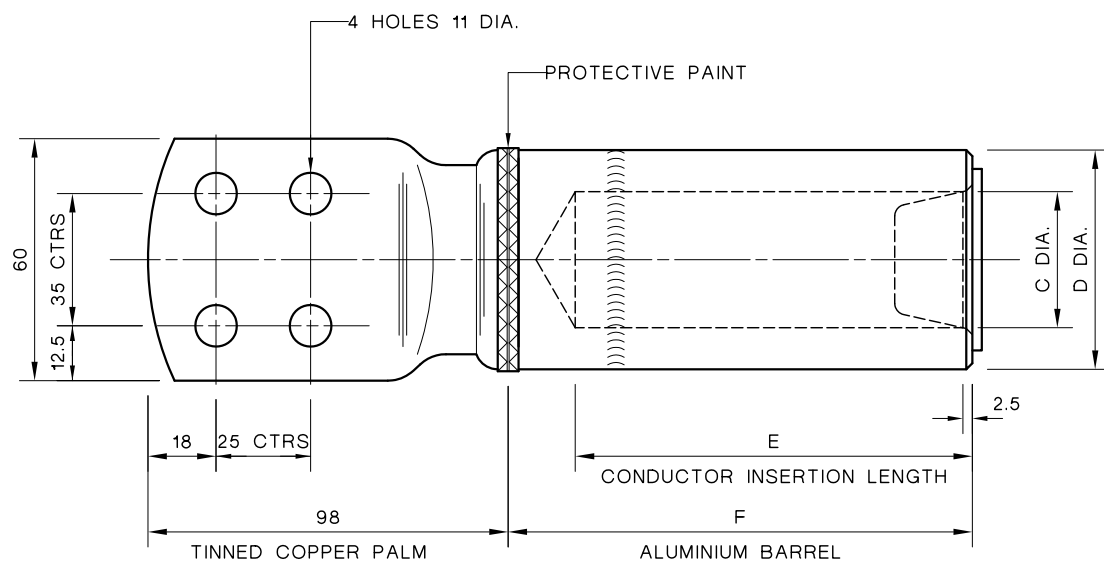
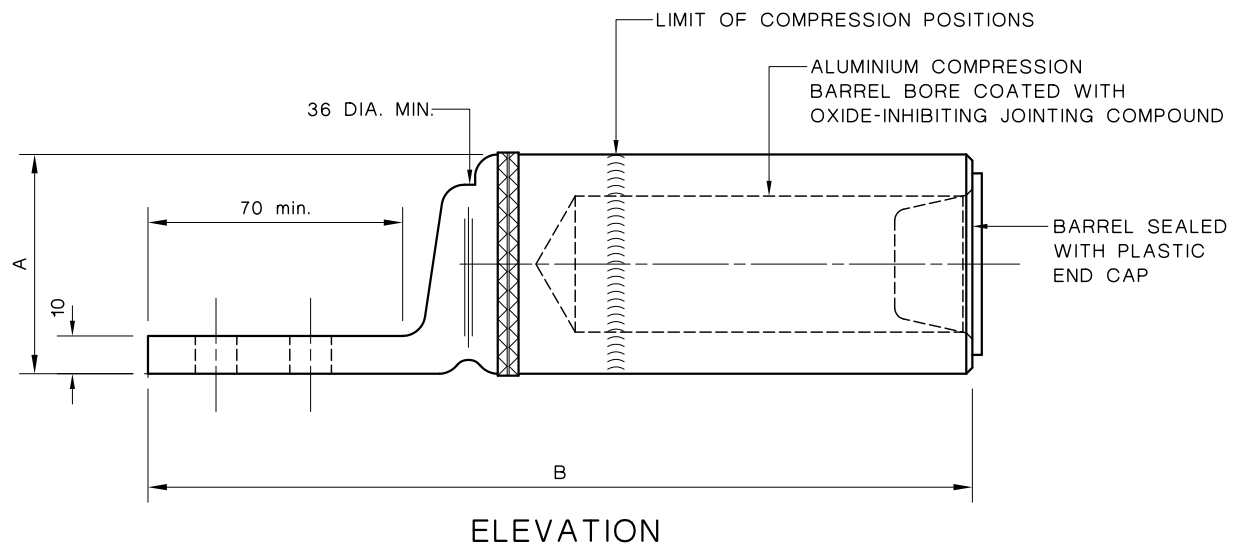
TITLE :

DETAILS OF STEEL WALL BRACKET AND WOODEN CLEAT FOR HOLDING 11kV CABLES
(240 mm² XLPE CABLE, PILOT CABLE AND FIBRE OPTIC CABLE)

DRAWN: S. C. TO DATE: 29-07-2002
CHECKED: K. C. CHENG APPROVED: W. C. HO
SCALE: 1 : 15 (mm) SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 5 0 6 B A

**NOTES:**

TOLERANCES: INSIDE AND OUTSIDE DIAMETERS OF BARREL $\pm 0.15\text{mm}$
ALL OTHER DIMENSION $\pm 2\%$

MATERIAL: ALUMINIUM AND TINNED COPPER

MARKING: '960mm² BICC DIE ED819' AT ALUMINIUM BARREL

NO. OF SINGLE CORE CABLE:

500kVA - 1 CABLE PER PHASE.
1000kVA - 2 CABLE PER PHASE.
1500kVA - 3 CABLE PER PHASE.
2000kVA - 4 CABLE PER PHASE.

DIMENSION TABLE

ITEM	STRANDED CABLE	SOLID CABLE
A	58	58
B	218	218
C	39	36
D	54	54
E	105	105
F	120	120

B	GENERAL NOTES REVISED
A	GENERAL REVISED

CLP 中電

REVS. 15.01.07/16.04.14
INITIAL K.C.C. H.T.YU

TITLE :

CABLE LUG FOR 960mm² SINGLE CORE
STRANDED ALUMINIUM CONDUCTOR L.V. CABLE

DRAWN: S. C. TO DATE: 12-8-2002
CHECKED: K. C. CHENG APPROVED: K. W. WONG
SCALE: 1 : 2 (mm) SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 5 0 8 B A

LEGEND:

TO BE INSTALLED BY CLP POWER

TO BE INSTALLED BY CUSTOMER IN GALVANISED IRON (G.I.) CONDUIT SYSTEM



LIGHTING SWITCH WITH PILOT WIRED TO LIGHT THE LAMP WHEN SUPPLY IS AVAILABLE



FUSED SPUR CONNECTION UNIT



16A FIXED CONNECTION UNIT FOR TEMPERATURE CONTROL PANEL



i) WALL MOUNTED PANEL FOR TEMPERATURE CONTROL OF VENTILATION FAN (PROVIDED BY CLP POWER)



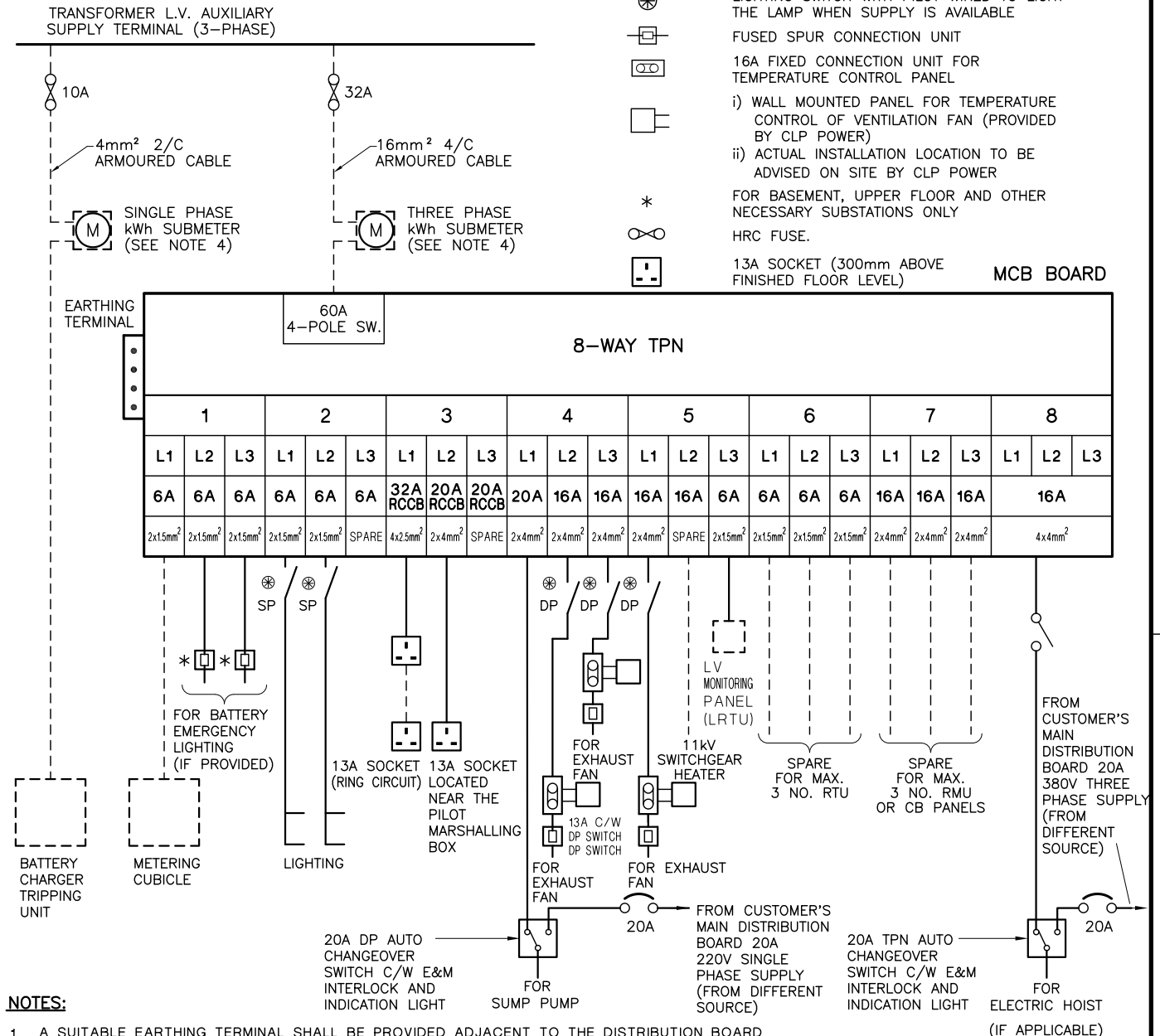
ii) ACTUAL INSTALLATION LOCATION TO BE ADVISED ON SITE BY CLP POWER



FOR BASEMENT, UPPER FLOOR AND OTHER NECESSARY SUBSTATIONS ONLY



13A SOCKET (300mm ABOVE FINISHED FLOOR LEVEL)

MCB BOARD

CLP 中電

REVS.	13.09.04	21.12.05	09.08.07	12.10.09	18.03.14									
INITIAL	A	B	C	D	E	F	G	H	J	K	L			
	K.C.C.	K.C.C.	K.C.C.	K.C.C.	H.T.YU									

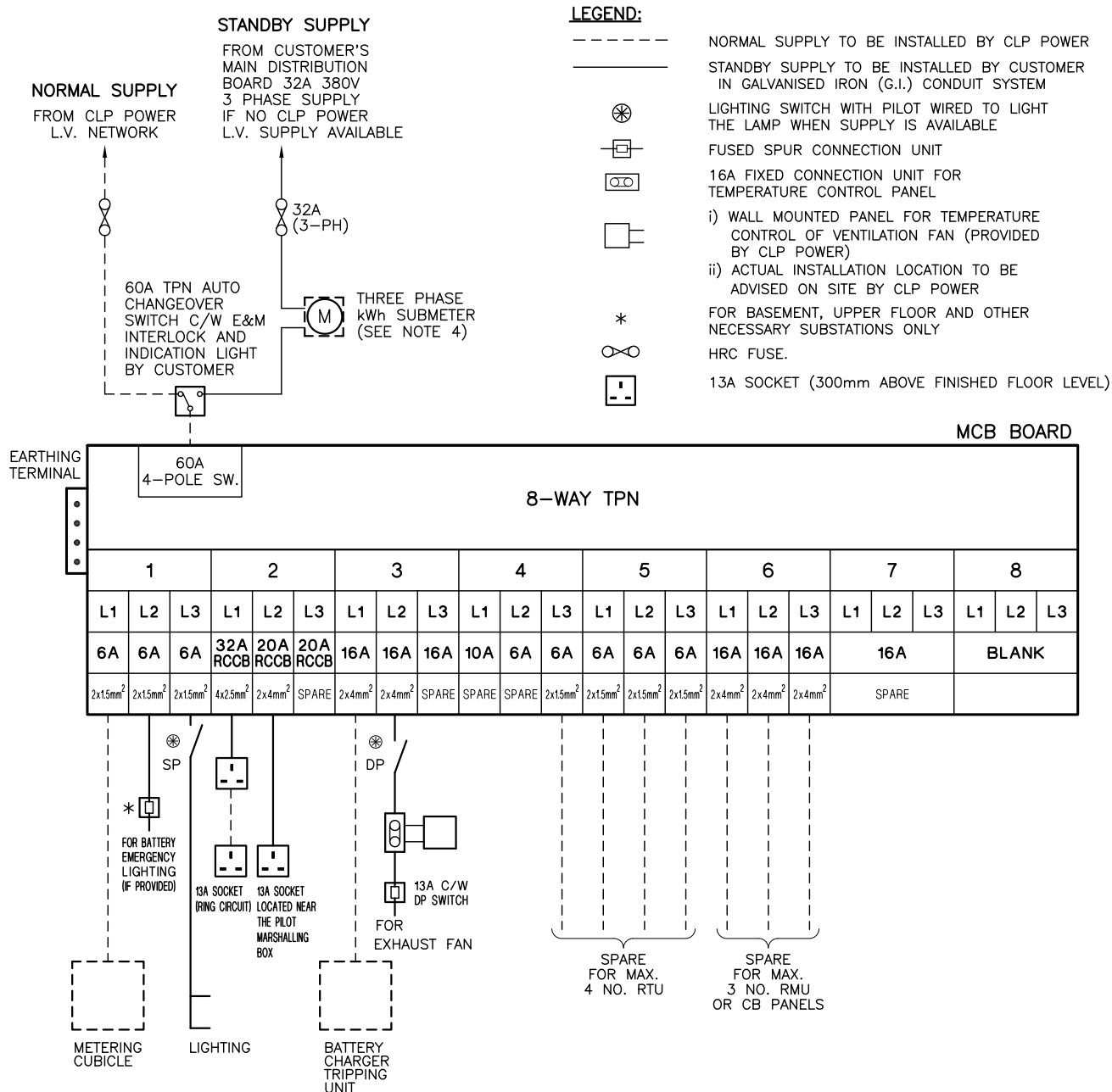
TITLE :

LV SCHEMATIC DIAGRAM FOR DISTRIBUTION SUBSTATION (WITH TRANSFORMER AND 11kV SWITCHGEAR)

DRAWN: S. C. TO DATE: 23-07-2002
 CHECKED: K. C. CHENG APPROVED: W. C. HO
 SCALE: N. T. S. SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 6 0 1 E A

**NOTES:**

- A SUITABLE EARTHING TERMINAL SHALL BE PROVIDED ADJACENT TO THE DISTRIBUTION BOARD FOR CONNECTING ALL EXPOSED CONDUCTIVE PARTS VIA APPROPRIATE PROTECTIVE CONDUCTORS.
- ALL EXTRANEOUS CONDUCTIVE PARTS SUCH AS STEEL DOOR FRAME, EXHAUST DUCT, LOUVRE AND PIPEWORK OF FIRE SERVICES INSTALLATION ETC., SHALL ALSO BE CONNECTED TO THE EARTHING TERMINAL WITH A COPPER CONDUCTOR NOT LESS THAN 6mm².
- LIGHTING SWITCH AND 13A SOCKET TO BE POSITIONED AT 1350mm AND 300mm FROM FLOOR LEVEL RESPECTIVELY.
- kWh SUBMETERS WILL BE INSTALLED ADJACENT TO MCB BOARD.
- MCB UNIT SHALL COMPLY TO BS EN60898 TYPE C AND BREAKING CAPACITY NOT LESS THAN 10kA.
- MCB BOARD WITH DUSTPROOF DOOR COMPLIES TO IEC60439/BS5486.
- RCCB SENSITIVITY 30mA
- PHASE IDENTIFICATION & COLOUR CODE OF WIRING CABLES SHALL COMPLY TO THE COLOUR CODE REQUIREMENTS OF EMSD WITH EFFECTIVE FROM 1 JULY 2007.

E	DETAIL OF CHANGEOVER FACILITY UPDATED.
D	CHANGEOVER FACILITY ADDED
C	MAIN SW. RATING & 13A SOCKET RING CIRCUIT REVISED
B	PHASE IDENTIFICATION UPDATED
A	LEGEND DESCRIPTION CHANGE

CLP 中電

REVS.	13.09.04	09.08.07	12.10.09	26.03.12	18.03.14								
INITIAL	A	B	C	D	E	F	G	H	J	K	L		
	K.C.C.	K.C.C.	K.C.C.	K.C.C.	H.T.YU								

TITLE :

DRAWN: S. C. TO DATE: 23-07-2002

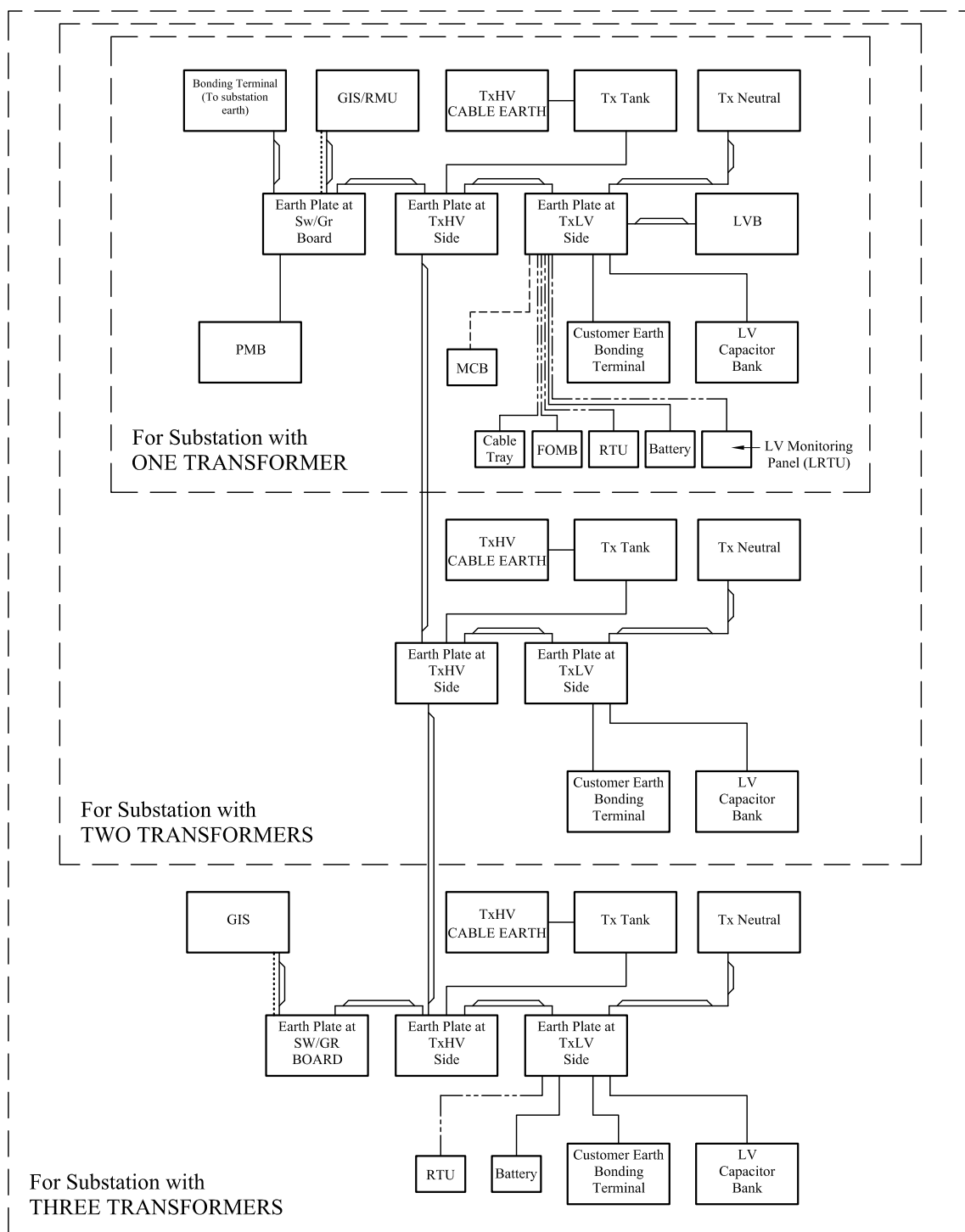
CHECKED: K. C. CHENG APPROVED: W. C. HO

SCALE: N. T. S. SHEET(S) IN SET:

LV SCHEMATIC DIAGRAM FOR 11kV SWITCHROOM

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 6 0 2 E A

**NOTES :****LEGEND :**

- Additional 2 x 100 mm² BARE COPPER is required for CB numbers at 5, 9, 13
- 100 mm² BARE COPPER
- 2 x 100 mm² BARE COPPER
- 6 mm² COPPER PVC COVERED
- 16 mm² COPPER PVC COVERED

C	LRTU ADDED
B	GIS BOARD ADDED FOR 3 Tx. S/S



REVS.	16.05.03	15.09.04	21.12.05										
INITIAL	A	B	C	D	E	F	G	H	J	K	L		
	D. HUNG	K. C. C.	K. C. C.										

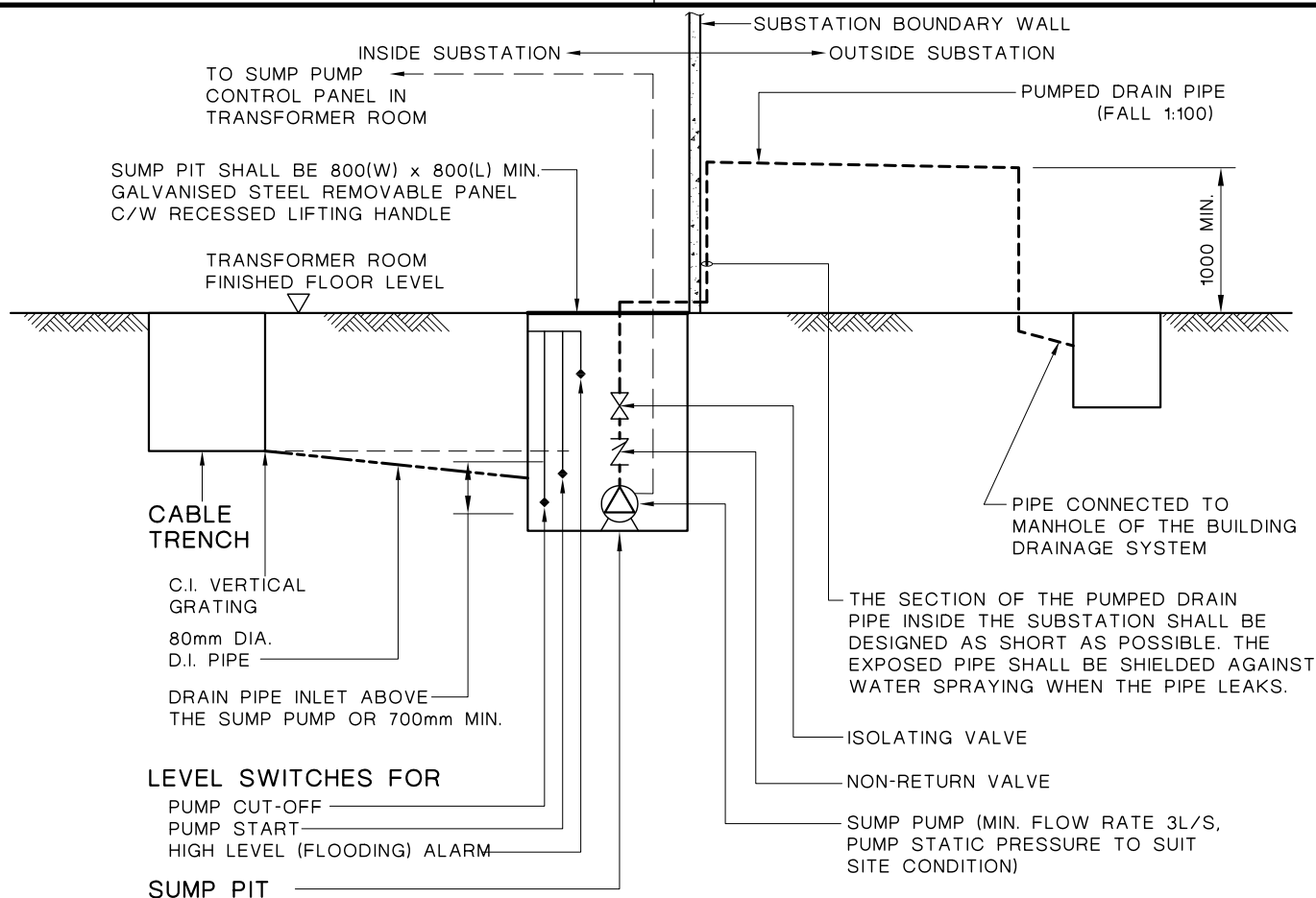
TITLE :

EARTHING SCHEMATIC DIAGRAM

DRAWN:	T. Y. IP	DATE:	15-09-2002
CHECKED:	K. C. CHENG	APPROVED:	W. C. HO
SCALE:	N.T.S.	SHEET(S) IN SET:	

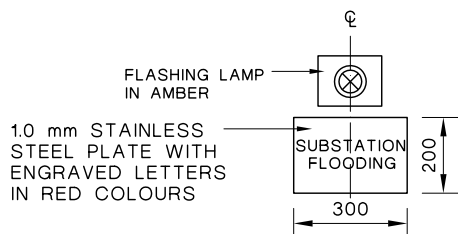
ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 6 0 3 C A

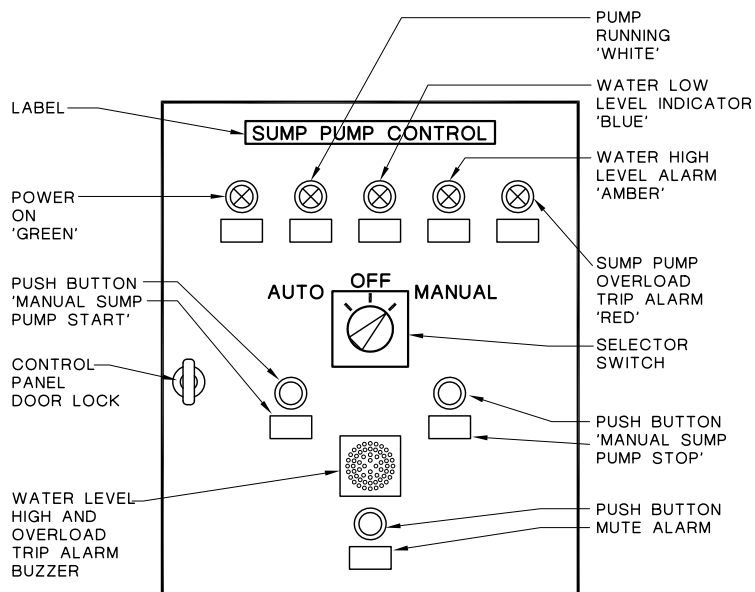


NOTES:

1. THE SUMP PUMP SHALL BE AUTOMATIC START AND STOP WHEN WATER LEVEL REACHES THE PUMP START LEVEL AND THE PUMP CUT-OFF LEVEL
2. START/STOP CONTROL OF THE SUMP PUMP SHALL BE PROVIDED ON THE CONTROL PANEL.
3. CHANGEOVER SWITCH FOR SWITCHING THE POWER SUPPLY TO THE SUMP PUMP SHALL BE PROVIDED. CHANGEOVER SCHEMATIC IS SHOWN IN CLP DRG. NO. T-COP-10250-D-E33-0106-01
4. SUMP PUMP CONTROL CIRCUIT DIAGRAM SHALL BE FRAMED AND DISPLAYED NEXT TO THE SUMP PUMP CONTROL PANEL.
5. SUMP PIT SIZE MIN. 600mm x 600mm.



FLOODING ALARM LIGHT AT EACH ENTRANCE



PROPOSED SUMP PUMP CONTROL PANEL

A BOUNDARY WALL ADDED

CLP 中電

REVS.	20.08.07												
INITIAL	A	B	C	D	E	F	G	H	J	K	L		

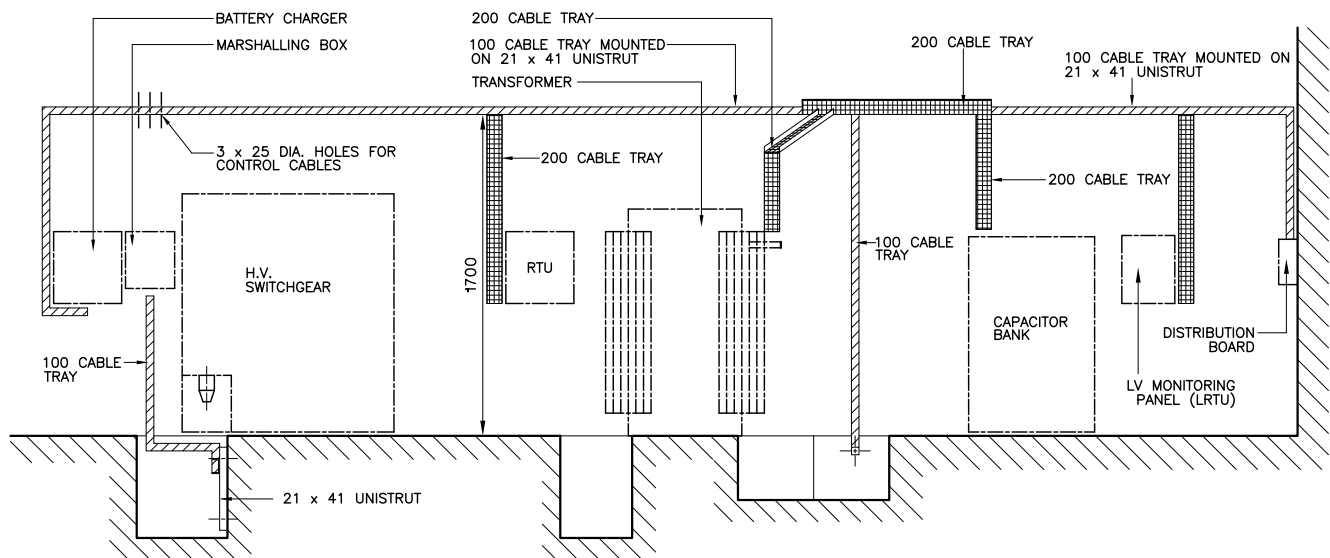
TITLE :

GENERAL SCHEMATIC DIAGRAM OF SUMP PUMP AND PIPE CONNECTIONS FOR BASEMENT SUBSTATION

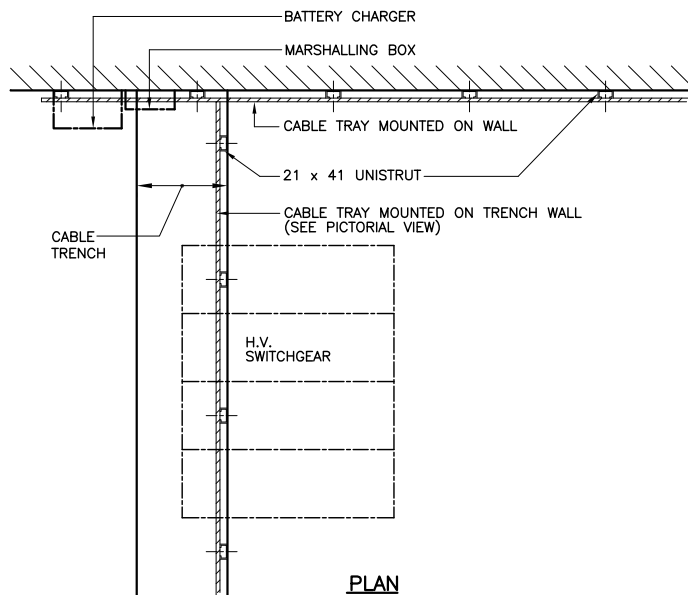
DRAWN: S. C. TO	DATE: 22-07-2002
CHECKED: K. C. CHENG	APPROVED: K. W. WONG
SCALE: N. T. S.	SHEET(S) IN SET:

ASSET MANAGEMENT

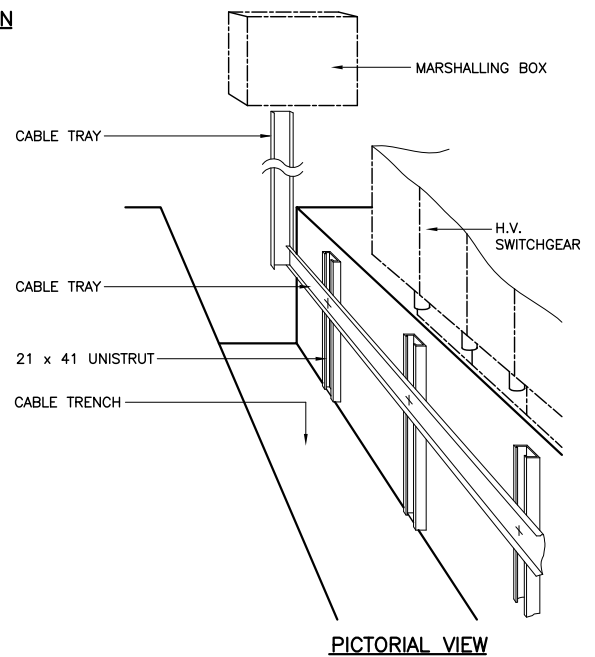
DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 6 0 4 A A



ELEVATION



PLAN



PICTORIAL VIEW

NOTES:

1. ALL METAL WORKS MUST BE BONDED TO THE EARTHING TERMINAL AT THE EARTHING PLATE WITH COPPER CONNECTOR NOT LESS THAN 6mm².
2. ALL METAL WORKS TO BE HOT DIP GALVANISED.
3. ACTUAL INSTALLATION LOCATION TO BE ADVISED ON SITE BY CLP POWER.
4. ALL DIMENSIONS ARE IN MILLIMETRE.

B	LV MONITORING PANEL ADDED
A	RTU ADDED

CLP 中電

REVS.	13.09.04	21.12.05											
INITIAL	A	B	C	D	E	F	G	H	J	K	L		
	K.C.C.	K.C.C.											

TITLE :

TYPICAL ARRANGEMENT OF CABLE TRAY

DRAWN:	S. C. TO	DATE:	12-8-2002
CHECKED:	K. C. CHENG	APPROVED:	W. C. HO
SCALE:	N.T.S.	SHEET(S) IN SET:	

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 6 0 5 B A

COLOUR CODE SYSTEM

COLOUR CODE

PIPE/CONDUIT



RED

FIRE FIGHTING PIPE
(WATER)

YELLOW/BLACK

FIRE FIGHTING PIPE
(CO₂ GAS)

ORANGE

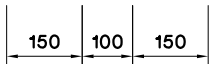
ELECTRICAL CONDUIT



ORANGE/RED

FIRE PROTECTION SYSTEM
CONTROL WIRING

ORANGE/GREEN

COMPUTER
DATA SIGNALING

REFERENCE: BS1710 SPECIFICATION FOR IDENTIFICATION OF PIPELINES AND SERVICES.
BS4800 SCHEDULE OF PAINT COLOURS FOR BUILDING PURPOSE.

A COLOUR CODE FOR COMPUTER DATA
SIGNALING ADDED



REVS.	16.5.12												
INITIAL	A	B	C	D	E	F	G	H	J	K	L		
	E. YU												

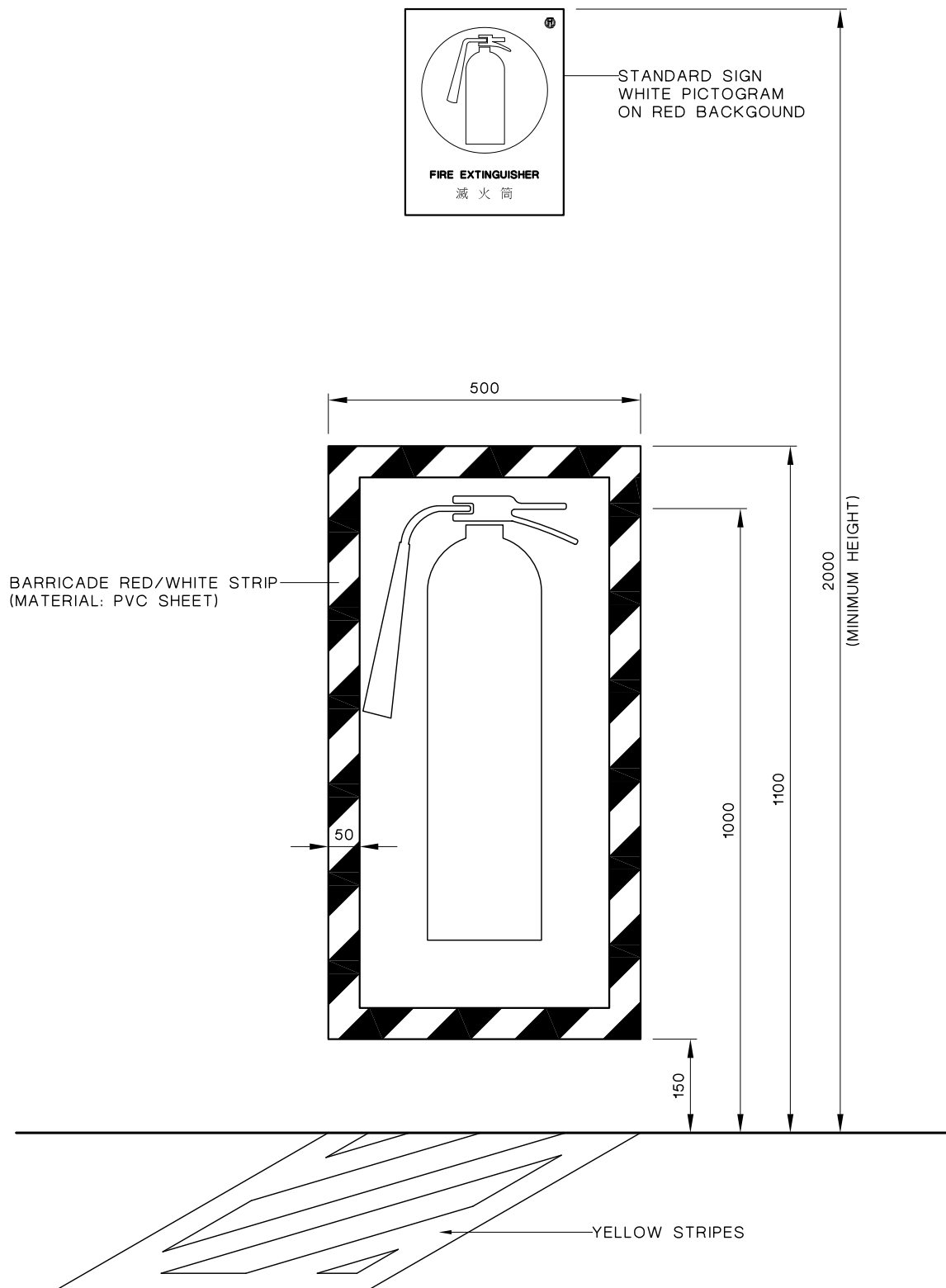
TITLE :

COLOUR CODES FOR PIPES AND CONDUITS
IN DISTRIBUTION SUBSTATION

DRAWN: C. W. WONG DATE: 15 Sep., 2004
CHECKED: K. C. CHENG APPROVED: W. C. HO
SCALE: 1 : 15 SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 6 0 6 A A



ALL DIMENSIONS ARE IN mm



REVS.	A	B	C	D	E	F	G	H	J	K	L
INITIAL											

TITLE :

FIRE EXTINGUISHER DEMARCATION

DRAWN: C W WONG DATE: 9 Aug., 2007
 CHECKED: K C CHENG APPROVED: W C HO
 SCALE: N. T. S. SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 6 0 8 - A