

REFERENCE DRAWINGS

1. SYMBOL & LEGEND FOR LIGHTING LAYOUT
SEE DWG. NO. ZP00700-B1CE-EEG-DRG-0900
2. LIGHTING FIXTURE SCHEDULE
SEE DWG. NO. ZP00700-B1CE-EEG-DRG-0901
3. INSTALLATION DETAIL FOR LIGHTING LAYOUT (1/2)
SEE DWG. NO. ZP00700-B1CE-EEG-DRG-0902
4. INSTALLATION DETAIL FOR LIGHTING LAYOUT (2/2)
SEE DWG. NO. ZP00700-B1CE-EEG-DRG-0903
5. LIGHTING LAYOUT FOR ELECTRICAL ANNEX GROUND FL. (1/2)
SEE DWG. NO. ZP00700-B1CE-EEG-DRG-0904
6. LIGHTING LAYOUT FOR ELECTRICAL ANNEX OPERATING FL. (1/2)
SEE DWG. NO. ZP00700-B1CE-EEG-DRG-0906
7. LIGHTING PANEL BOARD SCHEDULE-1
SEE DWG. NO. ZP00700-B1CE-EEG-DRG-0919
8. LIGHTING PANEL BOARD SCHEDULE-2
SEE DWG. NO. ZP00700-B1CE-EEG-DRG-0920

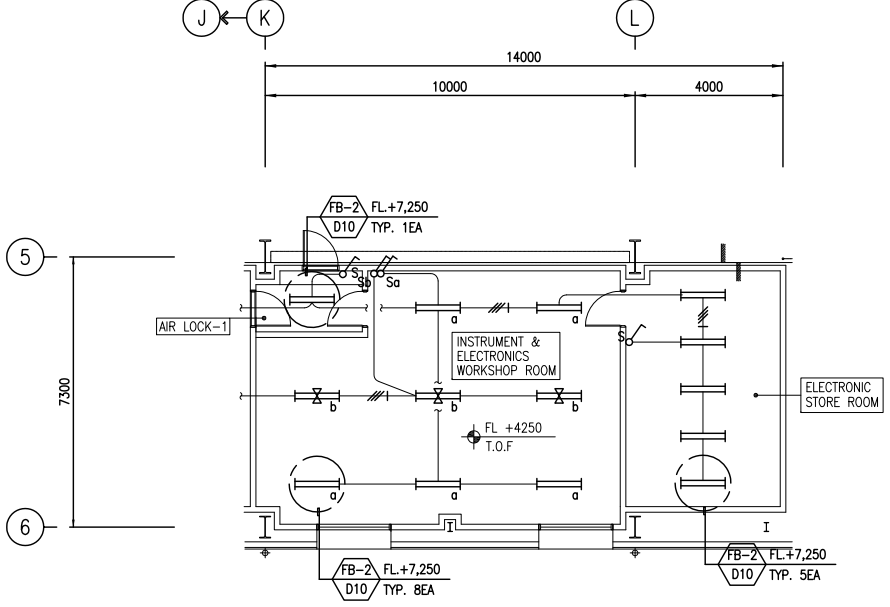
NOTE

1. WIRE & CONDUIT FOR LIGHTING BRANCH CIRCUITS SHALL BE AS FOLLOWS EXCEPT AS NOTED ON THE DRAWINGS ;

- A) LIGHTING
- HFIX 2-4mm² GROUND WIRE HFIX 4mm² (22C)
 - HFIX 4-4mm² GROUND WIRE HFIX 4mm² (22C)
 - HFIX 6-4mm² GROUND WIRE HFIX 4mm² (28C)
 - HFIX 8-4mm² GROUND WIRE HFIX 4mm² (28C)
- B) RECEPTACLE
- HFIX 2-6mm² GROUND WIRE HFIX 4mm² (22C)
 - HFIX 4-6mm² GROUND WIRE HFIX 4mm² (28C)

2. — : CONDUIT (EXPOSED)
- : CONDUIT (EMBEDDED IN CEILING OR WALL)
- - - : CONDUIT (EMBEDDED IN CONCRETE SLAB OR UNDERGROUND)

MEZZANINE FLOOR LIGHTING PLAN (FL.+4250)
SCALE=1/100



- A) DN TO GROUND FL. (NLS01-N05,N06)
HFIX 4-4mm²
GROUND WIRE HFIX 4mm² (22C)
- B) UP TO OPERATING FL. (ELS02-E05)
HFIX 2-4mm²
GROUND WIRE HFIX 4mm² (22C)
- C) UP TO OPERATING FL. (ELS02-E03)
HFIX 2-4mm²
GROUND WIRE HFIX 4mm² (22C)
- D) DN TO GROUND FL. (ELS02-E03)
HFIX 2-4mm²
GROUND WIRE HFIX 4mm² (22C)
- E) UP TO OPERATING FL. (ELS02-E04)
HFIX 2-4mm²
GROUND WIRE HFIX 4mm² (22C)
- F) DN TO GROUND FL. (ELS02-E04)
HFIX 2-4mm²
GROUND WIRE HFIX 4mm² (22C)
- G) UP TO OPERATING FL. (NLS02-N05)
HFIX 2-4mm²
GROUND WIRE HFIX 4mm² (22C)

MEZZANINE FLOOR LIGHTING PLAN (FL.+4250)
SCALE=1/100

CERTIFIED AS-BUILT

REV.	DATE	REASON FOR REVISION	DRAWN	CHECKED	APPROVED
1	31/AUG/2014	CERTIFIED AS-BUILT	H.W.JANG	K.C.KIM	S.H.SONG
0	22/OCT/2012	FOR CONSTRUCTION	H.W.JANG	K.C.KIM	S.H.SONG

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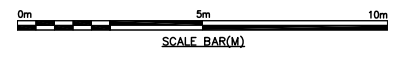
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PRODUCT : OLKARIA IAU GEOTHERMAL POWER PLANT

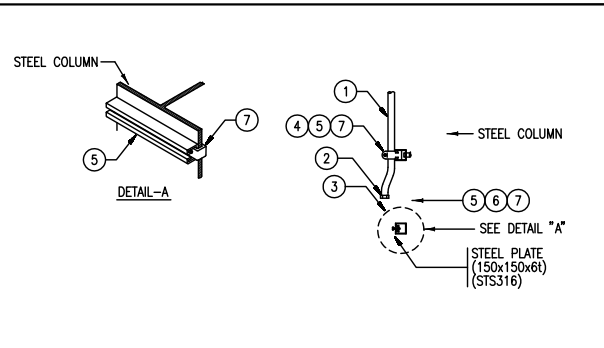
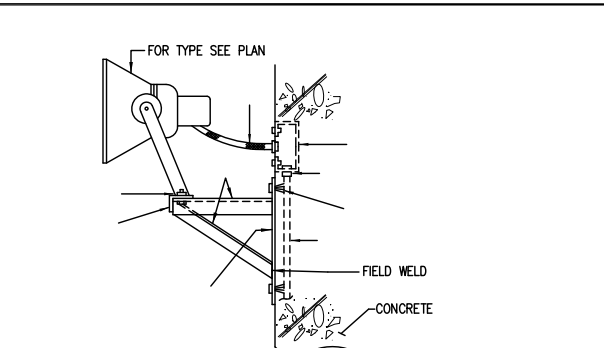
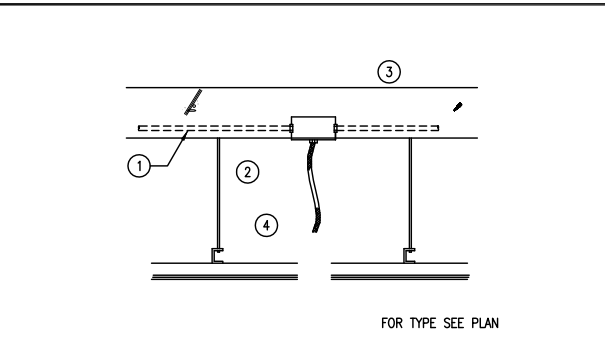
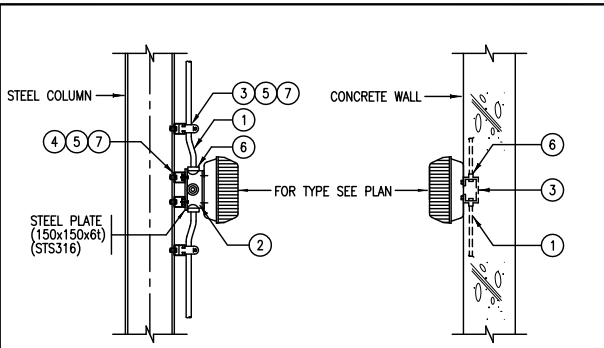
DESIGNED BY	DATE	TIME
H.W.JANG	27/08/2014	
DESIGNED BY	DATE	TIME
H.W.JANG	25/08/2014	
CHECKED BY	DATE	TIME
K.C.KIM	27/08/2014	
APPROVED BY	DATE	TIME
S.H.SONG	29/08/2014	
DRAWING SCALE	DRAWING NUMBER	REV.
1/100	ZP00700-B1CE-EEG-DRG-0905	1

LIGHTING FIXTURE

NO.	DESCRIPTION	TYPE	QTY	REMARKS
1	HVAC ROOM	FA-2	35	
2	STAIR	SB-2	1	
3	GCB ROOM-1	FA-2	9	
4	GCB ROOM-2	FA-2	8	
5	WORKSHOP ROOM	FB-2	8	
6	ELECTRONIC STORE ROOM	FB-2	5	
7	AIR LOCK-1	FB-2	1	
8	AIR LOCK-2	FB-2	1	
9	AIR LOCK-3	FB-2	1	



SCALE BAR(M)



DETAIL - 12
STEEL COLUMN OR WALL MOUNTED TYPE

DETAIL - 13
FLOOR SURFACE PENDANT

DETAIL - 14
WALL INSERT BRACKET MOUNTED TYPE

DETAIL - 15
STEEL COLUMN BRACKET MOUNTING TYPE

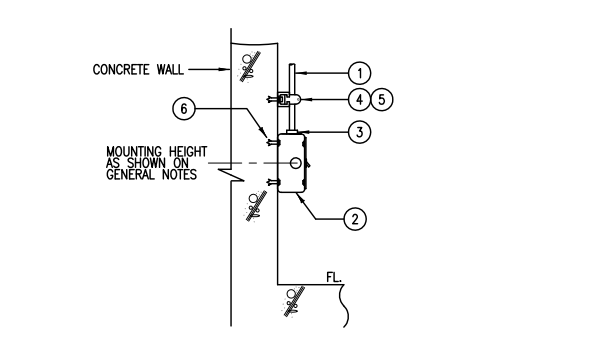
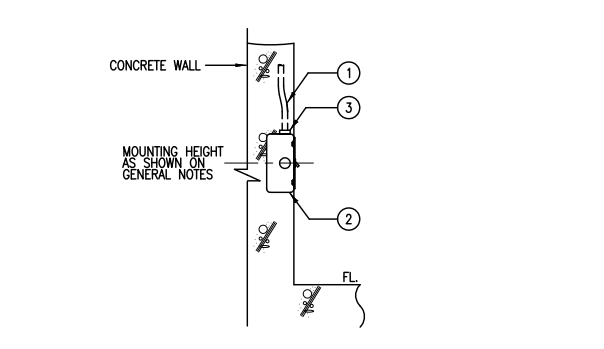
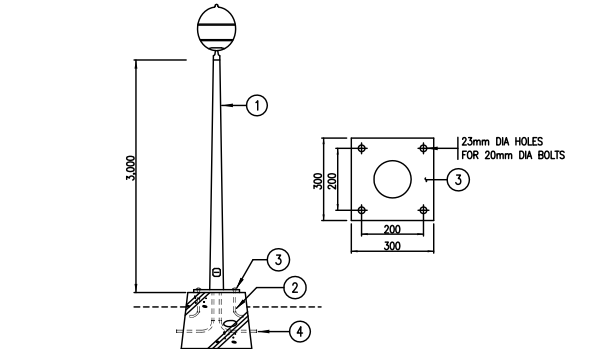
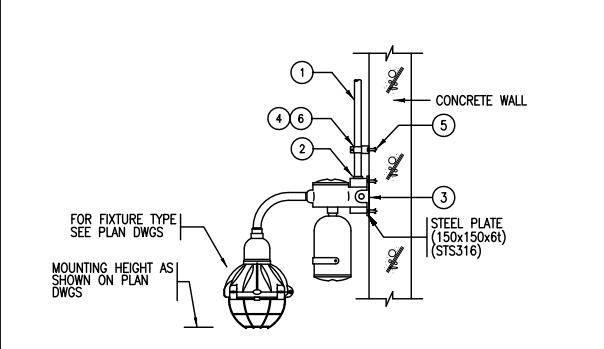
NO.	DESCRIPTION	SIZE	Q'TY	REMARKS
1	HI-IMPACT PVC CONDUIT	22C	AS REQ'D	-
2	SQUARE BOX	-	1	-
3	CONDUIT CLAMP	22C	AS REQ'D	SEE NOTE 2
4	HEX HEAD BOLT W/SPRING NUT	M10 x 30L	2	SEE NOTE 2
5	UNISTRUT CHANNEL	41.4x41.4x2.6t	AS REQ'D	H.D.G
6	BOX CONNECTOR	22C	2	-
7	BEAM CLAMP	-	AS REQ'D	SEE NOTE 3

NO.	DESCRIPTION	SIZE	Q'TY	REMARKS
1	HI-IMPACT PVC CONDUIT	22C	AS REQ'D	-
2	BOX CONNECTOR	22C	2	-
3	ROUND BOX W/COVER	22C	1	-
4	FLEXIBLE CONDUIT W/TWO CONNECTOR	22C	2	-

NO.	DESCRIPTION	SIZE	Q'TY	REMARKS
1	HI-IMPACT PVC CONDUIT	22C	AS REQ'D	-
2	BOX CONNECTOR	22C	2	-
3	SQUARE BOX W/COVER	-	1	-
4	FLEXIBLE CONDUIT W/TWO CONNECTOR	22C	AS REQ'D	-
5	ANCHOR BOLT & NUT W/WASHER	M8x100L/M8	6	SEE NOTE 2
6	BOLT & NUT W/WASHER	M6x30L	2	SEE NOTE 2
7	ANGLE	60x60x4t	4	SUS (STS316)
8	PLATE	500x500x6t	1	SUS (STS316)

NO.	DESCRIPTION	SIZE	Q'TY	REMARKS
1	HI-IMPACT PVC CONDUIT	22C	AS REQ'D	-
2	BOX CONNECTOR	22C	1	-
3	SQUARE BOX W/COVER	-	1	-
4	CONDUIT CLAMP	22C	1	SEE NOTE 2
5	HEX HEAD BOLT, CHANNEL NUT W/SPRING	M10x30mm	4	SEE NOTE 2
6	UNISTRUT CHANNEL	41x41x2.6t	AS REQ'D	SEE NOTE 2
7	BEAM CLAMP	-	AS REQ'D	SEE NOTE 3

- NOTES**
- NO WELDING TO STRUCTURAL STEEL IS ALLOWED.
 - FIXING MATERIALS SUCH AS BOLTS, NUTS, UNISTRUTS & CLAMPS SHALL BE OF STAINLESS STEEL(STS316).
 - FIXING MATERIALS SUCH AS BEAM CLAMPS SHALL BE OF GALVANIZED STEEL.
 - UNISTRUTS AND OTHER FIXING MATERIALS SHALL BE FIXED TO COLUMNS OR STEEL STRUCTURES BY BOLTING.



DETAIL - 16
STEEL COLUMN BRACKET MOUNTING TYPE

DETAIL - 17
SWITCH YARD LIGHTING

DETAIL - 18
CONCRETE WALL FLUSH MOUNTING RECEPTACLE OR SWITCH

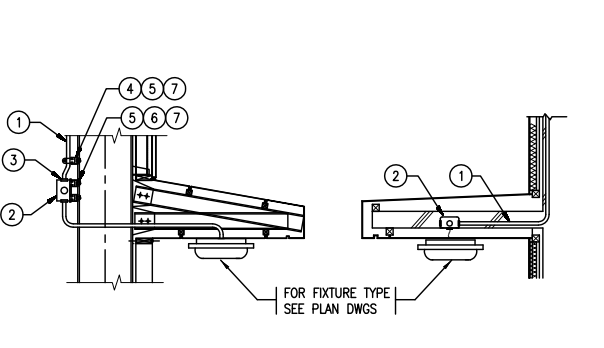
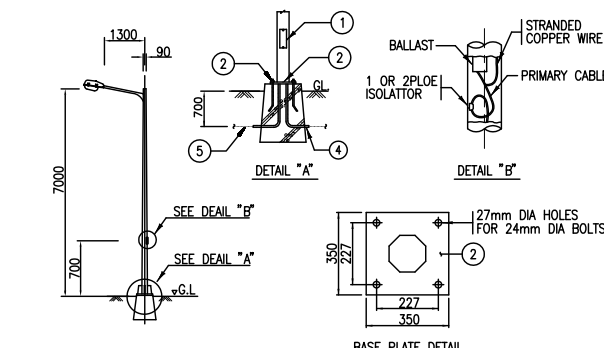
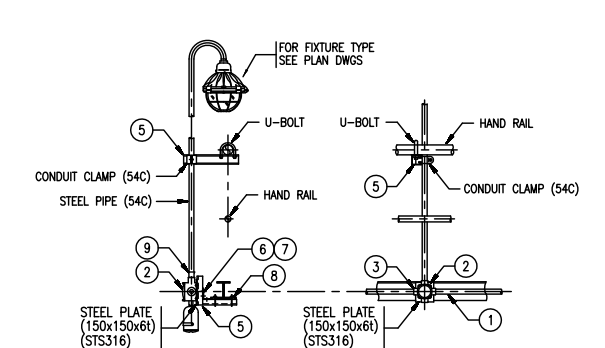
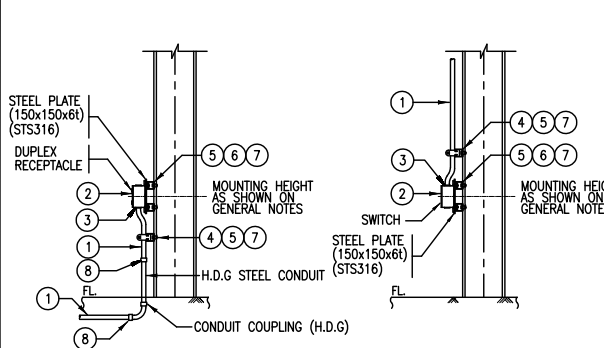
DETAIL - 19
CONCRETE WALL MOUNTING RECEPTACLE OR SWITCH

NO.	DESCRIPTION	SIZE	Q'TY	REMARKS
1	HI-IMPACT PVC CONDUIT	22C	AS REQ'D	-
2	BOX CONNECTOR	22C	1	-
3	SQUARE BOX W/COVER	-	1	-
4	CONDUIT CLAMP	22C	1	SEE NOTE 2
5	ANCHOR BOLT W/NUT	HILTI OR EQUAL	3	SEE NOTE 2
6	UNISTRUT CHANNEL	41x41x2.6t	AS REQ'D	SEE NOTE 2

NO.	DESCRIPTION	SIZE	Q'TY	REMARKS
1	ROUND TAPERED STEEL POLE	NOM. HEIGHT 3M	1	STS316
2	ANCHOR BOLT & NUT W/ WASHER	M20x350L	4	SEE NOTE 2
3	BASE PLATE	300x300x6t	1	SUS (STS316)
4	HI IMPACT PVC CONDUIT	AS REQ'D	AS REQ'D	-

NO.	DESCRIPTION	SIZE	Q'TY	REMARKS
1	HI-IMPACT PVC CONDUIT	22C	AS REQ'D	-
2	SWITCH BOX OR RECEPTACLE BOX	-	1	-
3	BOX CONNECTOR	22C	2	-

NO.	DESCRIPTION	SIZE	Q'TY	REMARKS
1	HI-IMPACT PVC CONDUIT	22C	AS REQ'D	-
2	SWITCH BOX OR RECEPTACLE BOX	-	1	-
3	BOX CONNECTOR	22C	1	-
4	CONDUIT CLAMP	22C	1	SEE NOTE 2
5	UNISTRUT CHANNEL	41.4x41.4x2.6t	AS REQ'D	SEE NOTE 2
6	ANCHOR BOLT W/NUT	HILTI OR EQUAL	3	SEE NOTE 2



DETAIL - 20
STEEL STRUCTURE WALL SURFACE MOUNTING (SWITCH & RECEPTACLE)

DETAIL - 21
HANDRAIL MOUNTED TYPE

DETAIL - 22
ROAD LIGHTING POLE

DETAIL - 23
CANOPY MOUNTING TYPE

NO.	DESCRIPTION	SIZE	Q'TY	REMARKS
1	HI-IMPACT PVC CONDUIT	22C	AS REQ'D	-
2	SWITCH BOX OR RECEPTACLE BOX	-	1	-
3	BOX CONNECTOR	22C	1	-
4	CONDUIT CLAMP	22C	1	SEE NOTE 2
5	UNISTRUT CHANNEL	41.4x41.4x2.6t	AS REQ'D	SEE NOTE 2
6	HEX HEAD BOLT W/SPRING NUT	M10 x 30L	4	SEE NOTE 2
7	BEAM CLAMP	-	AS REQ'D	SEE NOTE 3
8	PVC/STEEL CONDUIT ADAPTER	22C	1	H.D.G

NO.	DESCRIPTION	SIZE	Q'TY	REMARKS
1	HI-IMPACT PVC CONDUIT	22C	AS REQ'D	-
2	ROUND BOX W/COVER	-	1	-
3	BOX CONNECTOR	22C	1	-
4	CONDUIT CLAMP	22C	1	SEE NOTE 2
5	UNISTRUT CHANNEL	41.4x41.4x2.6t	AS REQ'D	SEE NOTE 2
6	HEX HEAD BOLT W/SPRING NUT	M10 x 30L	4	SEE NOTE 2
7	3-HOLE ANGLE FITTING	-	AS REQ'D	SUS (STS316)
8	"U" TYPE BEAM CLAMP	-	AS REQ'D	SEE NOTE 3
9	REDUCING COUPLING	54C-22C	AS REQ'D	SUS (STS316)

NO.	DESCRIPTION	SIZE	Q'TY	REMARKS
1	HDC STEEL POLE, OCTAGONAL TAPERED (SINGLE OR DOUBLE ARM AS SHOWN ON THE PLAN DWG.)	NOM. 7M HIGH	1	SUS (STS316)
2	BASE PLATE	350x350x12t	1	SUS (STS316)
3	ANCHOR BOLT & NUT W/ WASHER	M24x350L	1	SEE NOTE 2
4	HI-IMPACT PVC CONDUIT	AS REQ'D	4	-
5	CABLE	AS PER PLAN DWG	-	-

NO.	DESCRIPTION	SIZE	Q'TY	REMARKS
1	HI-IMPACT PVC CONDUIT	22C	AS REQ'D	-
2	SQUARE BOX W/COVER	-	1	-
3	BOX CONNECTOR	22C	2	-
4	CONDUIT CLAMP	22C	1	SEE NOTE 2
5	UNISTRUT CHANNEL	41.4x41.4x2.6t	AS REQ'D	SEE NOTE 2
6	HEX HEAD BOLT W/SPRING NUT	M10 x 30L	4	SEE NOTE 2
7	BEAM CLAMP	-	AS REQ'D	SEE NOTE 3

CERTIFIED AS-BUILT

REV.	DATE	REASON FOR REVISION	DRAWN	CHECKED	APPROVED
2	31/AUG/2014	CERTIFIED AS-BUILT	H.W.JANG	K.C.KIM	S.H.SONG
1	11/MAR/2014	REVISED AS MARKED	H.W.JANG	K.C.KIM	S.H.SONG
0	23/AUG/2012	FOR CONSTRUCTION	H.W.JANG	K.C.KIM	S.H.SONG

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PROJECT :
OLKARIA IAU GEOTHERMAL POWER PLANT

DRAWN BY	DATE	TITLE
H.W.JANG	23/AUG/2014	INSTALLATION DETAIL FOR LIGHTING LAYOUT (2/2)
DESIGNED BY	DATE	
CHECKED BY	DATE	
APPROVED BY	DATE	
S.H.SONG	23/AUG/2014	