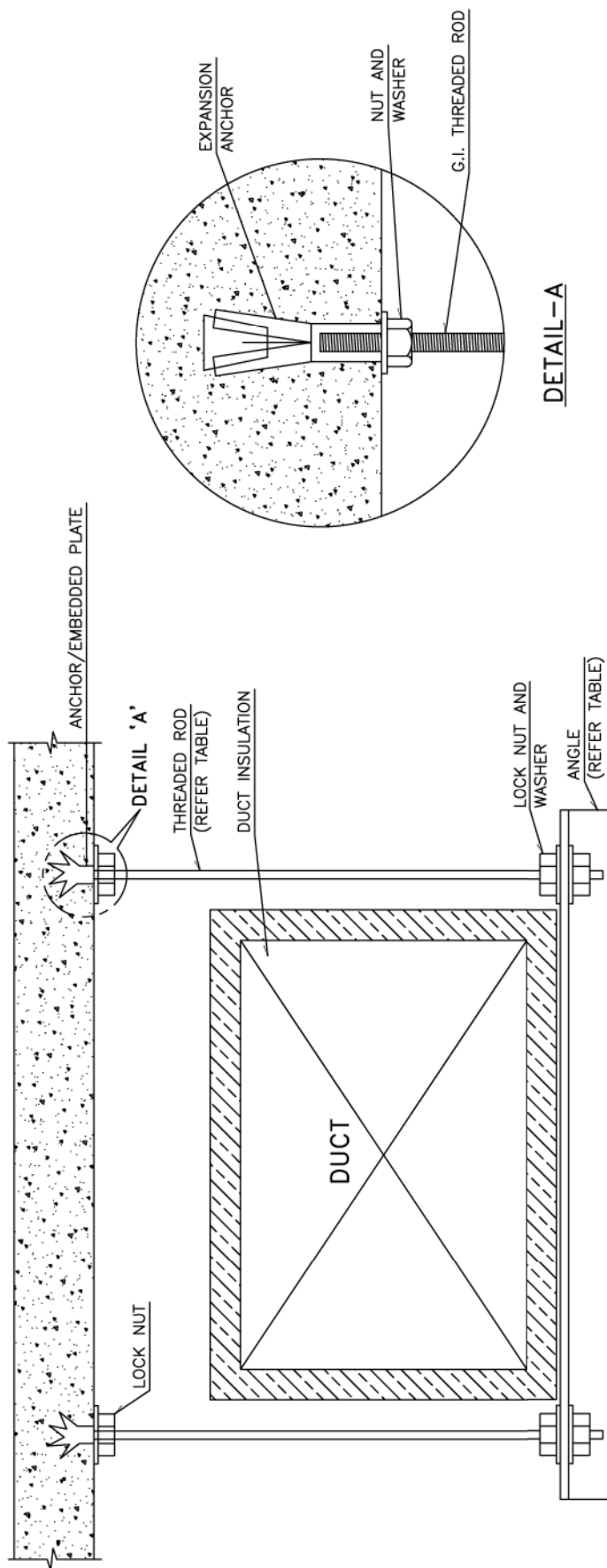




APPLICABLE FOR INSULATED & NON-INSULATED DUCT:

DUCT SIZE (mm)	ANGLE SIZE (mm)	ROD Ø (mm)
UPTO 1350	25x25x5	8 mm
1375 TO 2100	35x35x5	10 mm
ABOVE 2100	40x40x6	10 mm

FOR BID PURPOSE ONLY

DO NOT SCALE

[illegible]

TYPE	PLAN	ELEV.	a HORIZONTAL LOUVER b VERTICAL LOUVER c OPPOSED BLADE DAMPER
'A'			SUPPLY RECTANGLE SIDE DISCHARGE GRILLE
'B'			RETURN RECTANGLE SIDE DISCHARGE GRILLE
'C'			SUPPLY SQUARE/RECTANGLE FLUSH WITH FALSE CEILING
'D'			RETURN SQUARE/RECTANGLE FLUSH WITH FALSE CEILING
'E'			SUPPLY CIRCULAR GRILLE FLUSH WITH FALSE CEILING
'F'			RETURN CIRCULAR GRILLE FLUSH WITH FALSE CEILING

FOR BID PURPOSE ONLY

DO NOT SCALE

DATE : 05-09-2011

ISSUE BY CH DATE

DESCRIPTION OF GRILLE TYPE

SCALE ~

DIV. MECH.

DR. P.N.Z.

CH. S.N.S.

APPROVED

A.K.S.

DWG.NO.

PE-189-ME-SK-1028

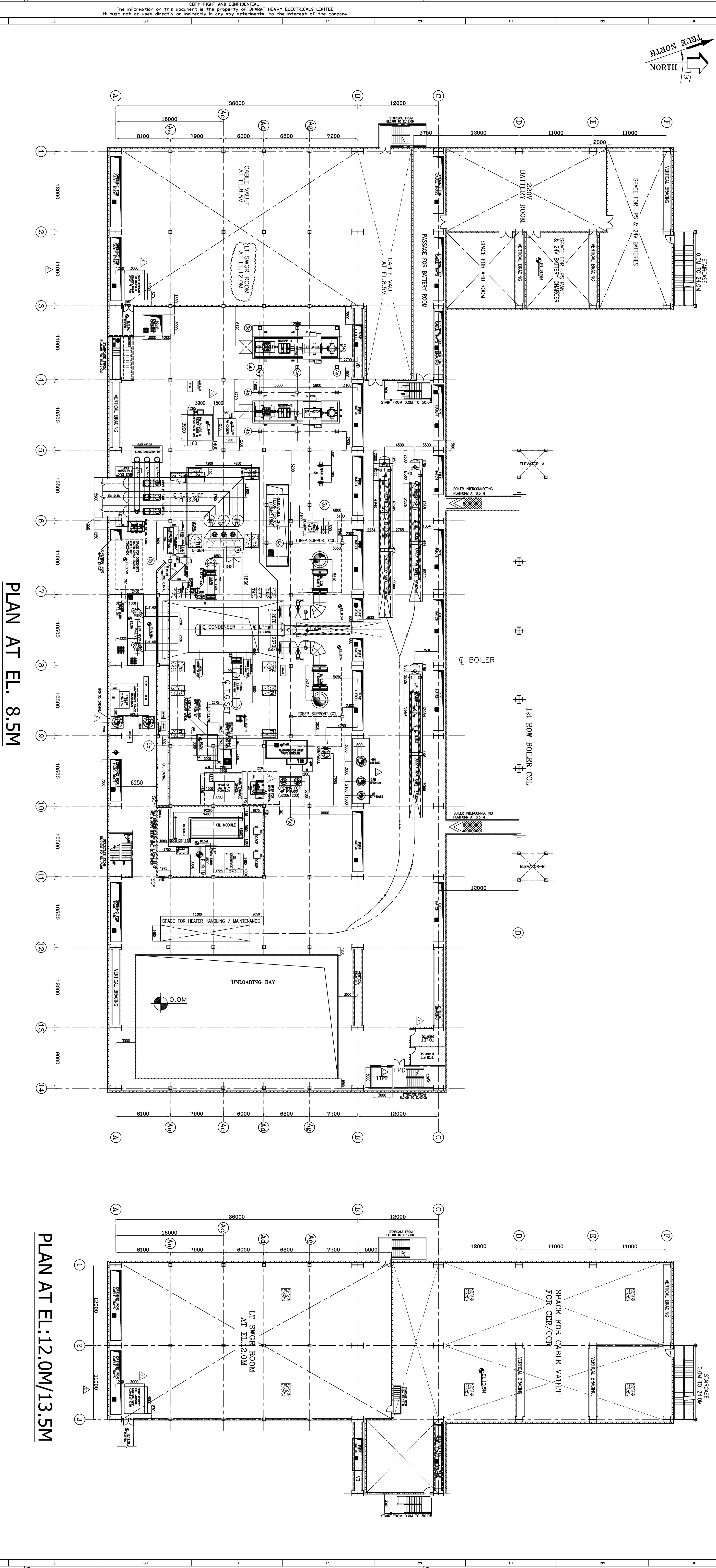
S.N.S.

ISSUE

PO

CLIENT : MAHARASHTRA STATE POWER GENERATION CO.LTD.

PROJECT : BHUSAWAL T.P.S. UNIT-6 : 1 X 660 MW PROJECT



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COMPUTER FILE NAME: 415 100 M004 R2

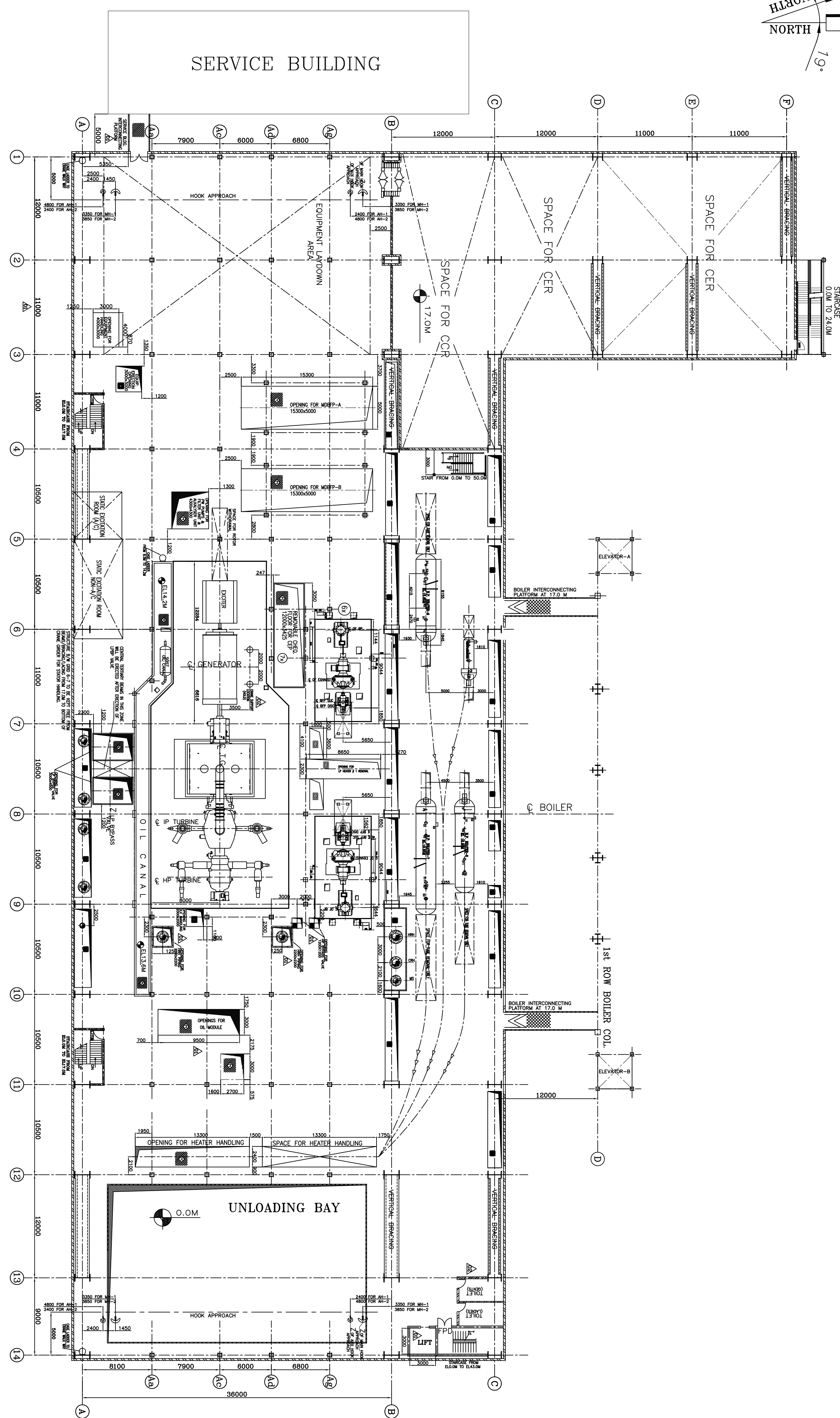
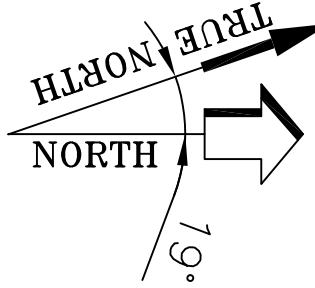
	LEGEND:	
	CHEQUERED PLATE FLOORING	FE-002-415-103-M003
	REMOVABLE CHEQUERED PLATE	PE-002-415-103-M005
	GRADED FLOORING	FE-002-415-103-M005
	REMOVABLE GRATING	06100170027 0222 (HW)
	CONCRETE BLOCK	01-180-01-180-00-2938
	HAND PAINTING	0-139-00-0222 (HW)
	PARQUET WALL	11818107002 0340 (HW)
	GLASS PARTITION	0-3100-01-180-00-2938
	OUT DOORS	2-162-22-00-00-0140
	BRICK WALL	2-62-26-00-00-0140
		2-62-26-00-00-0140
		18-004 OF TUBING-GENERATOR AUX. CONTROL CABINET
		1180-00-03-00-0000
		(HOLD)

NOTES:

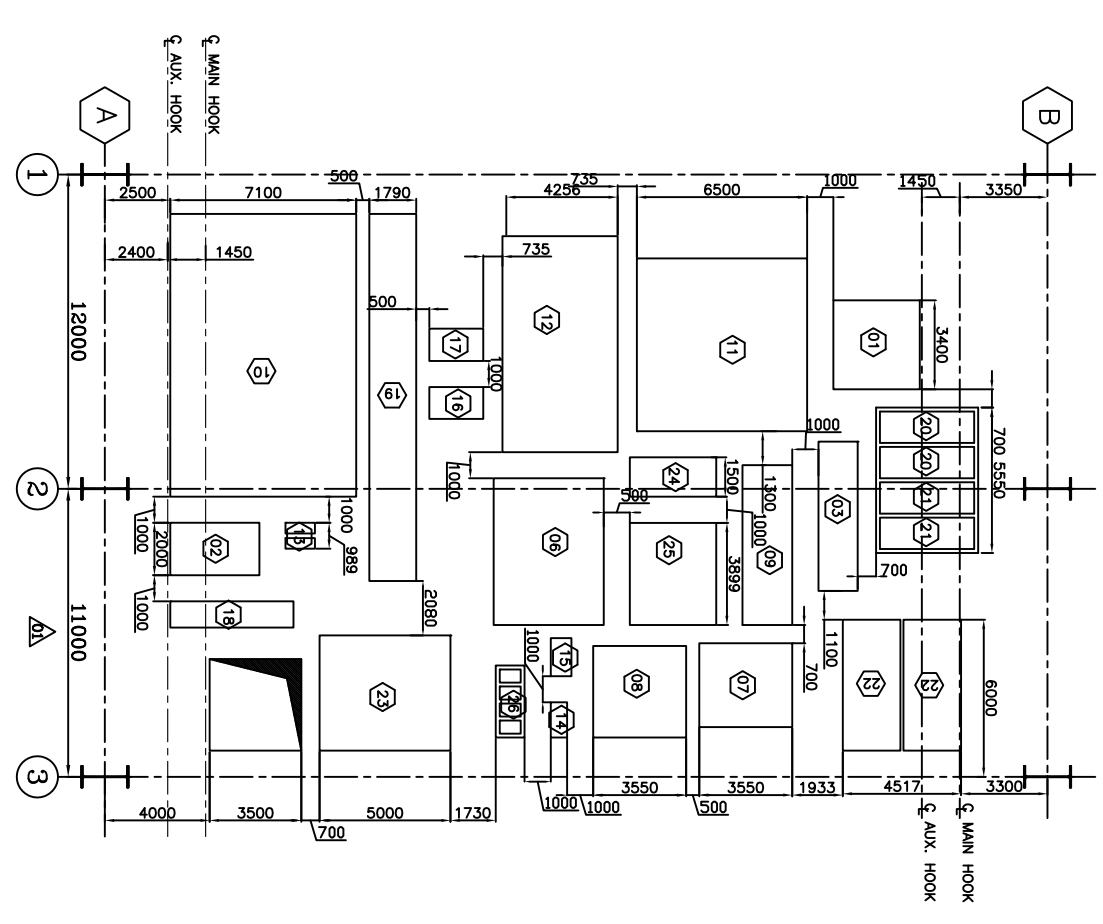
1. ALL DIMENSIONS ARE IN MM'S AND LEVELS ARE IN METRES.
2. ALL ELEVATIONS INDICATED IN THE DRG. ARE W.R.T. POWER HOUSE GROUND FLOOR
3. GROUND FLOOR ELEVATION AS 0.00M. EL 0.00M CORRESPONDS TO RL(+209.0M).

OWNER		MAHARASHTRA STATE POWER GENERATION CO. LTD.
WATER-NO.	W-1-0800	
CONSULTANT		DEVELOPMENT CONSULTANTS PVT. LTD. CONSULTING ENGINEERS VASHI, NAVI MUMBAI

PROJECT										1x660 MW BHUSAWAL TPS UNIT-6									
JOB No. 415										STATUS CONTRACT									
DISTRIBUTION										CONTRACTOR									
REV	DATE	BY	CHK	APPD	REV	DATE	BY	CHK	APPD	BIRMAT HEAVY ELECTRICALS LTD									
01	22.01.19	AK			01	22.01.19	AK			PROJECT ENGINEERING MANAGEMENT									
1. COMMENTS FOR 15.02.2018 & 20.02.2018										NODIA									
2. DRAWING REVISIONS ARE MARKED										TITLE									
TG EQUIPMENT LAYOUT AT MEZZANINE FLOOR (8.5M)										CUSTOMER MARKS CODE									
DISCIPLINE										SCALE: 1:200									
DRAWING No. FE-05-415-100-MC										DATE									



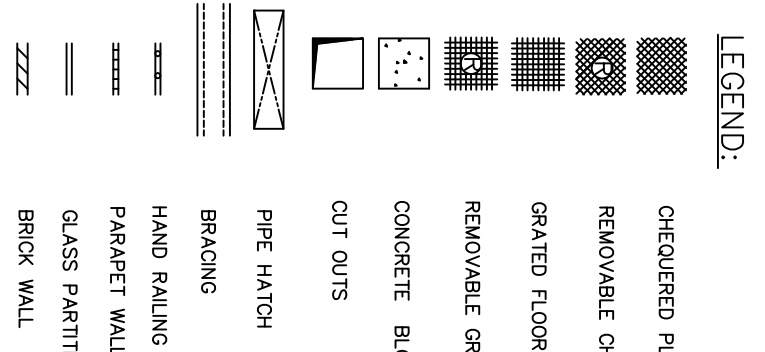
PLAN AT EL. 17.0M



EQUIPMENT LAYDOWN DETAIL

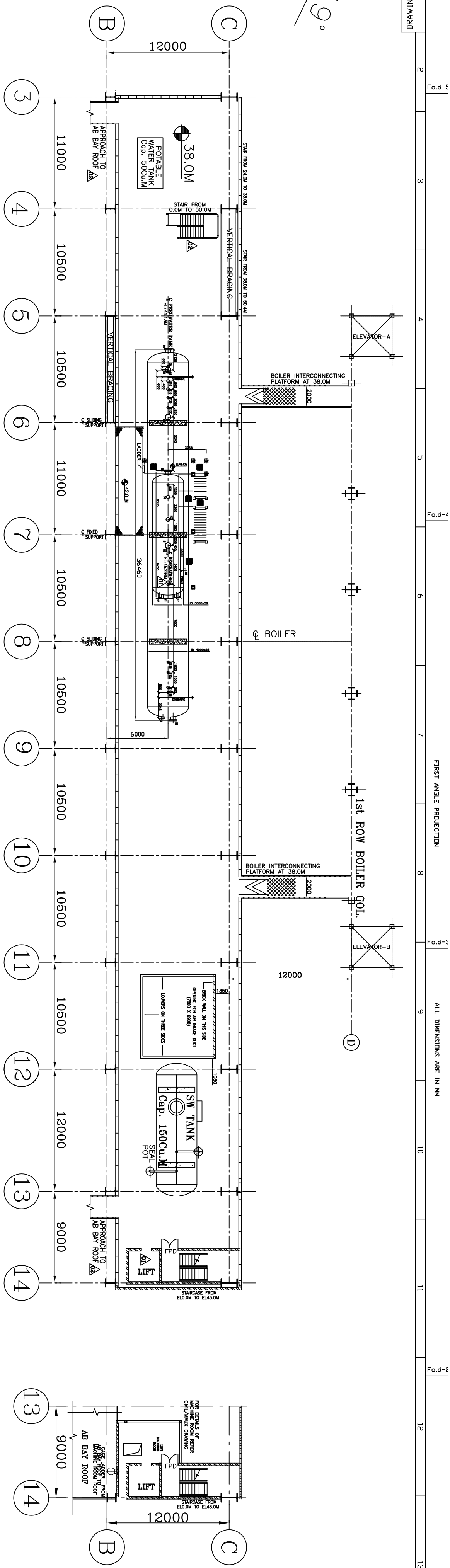
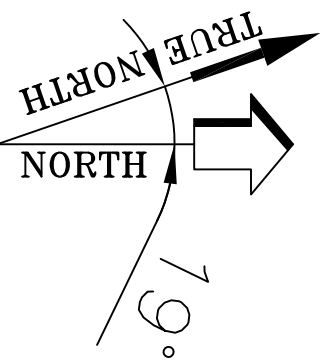
DETAIL OF LAYDOWN SPACE FOR THE COMPONENTS (MM)			
NO.	COMPONENT	W	D
1	16" DIESEL ENGINE (GENERATOR)	1700	1100
2	16" DIESEL ENGINE (PUMP)	1700	1100
3	16" DIESEL ENGINE (PUMP)	1700	1100
4	16" DIESEL ENGINE (PUMP)	1700	1100
5	16" DIESEL ENGINE (PUMP)	1700	1100
6	16" DIESEL ENGINE (PUMP)	1700	1100
7	16" DIESEL ENGINE (PUMP)	1700	1100
8	16" DIESEL ENGINE (PUMP)	1700	1100
9	16" DIESEL ENGINE (PUMP)	1700	1100
10	16" DIESEL ENGINE (PUMP)	1700	1100
11	16" DIESEL ENGINE (PUMP)	1700	1100
12	16" DIESEL ENGINE (PUMP)	1700	1100
13	16" DIESEL ENGINE (PUMP)	1700	1100
14	16" DIESEL ENGINE (PUMP)	1700	1100
15	16" DIESEL ENGINE (PUMP)	1700	1100
16	16" DIESEL ENGINE (PUMP)	1700	1100
17	16" DIESEL ENGINE (PUMP)	1700	1100
18	16" DIESEL ENGINE (PUMP)	1700	1100
19	16" DIESEL ENGINE (PUMP)	1700	1100
20	16" DIESEL ENGINE (PUMP)	1700	1100
21	16" DIESEL ENGINE (PUMP)	1700	1100
22	16" DIESEL ENGINE (PUMP)	1700	1100
23	16" DIESEL ENGINE (PUMP)	1700	1100
24	16" DIESEL ENGINE (PUMP)	1700	1100
25	16" DIESEL ENGINE (PUMP)	1700	1100
26	16" DIESEL ENGINE (PUMP)	1700	1100
27	16" DIESEL ENGINE (PUMP)	1700	1100
28	16" DIESEL ENGINE (PUMP)	1700	1100
29	16" DIESEL ENGINE (PUMP)	1700	1100
30	16" DIESEL ENGINE (PUMP)	1700	1100
31	16" DIESEL ENGINE (PUMP)	1700	1100
32	16" DIESEL ENGINE (PUMP)	1700	1100
33	16" DIESEL ENGINE (PUMP)	1700	1100
34	16" DIESEL ENGINE (PUMP)	1700	1100
35	16" DIESEL ENGINE (PUMP)	1700	1100
36	16" DIESEL ENGINE (PUMP)	1700	1100
37	16" DIESEL ENGINE (PUMP)	1700	1100
38	16" DIESEL ENGINE (PUMP)	1700	1100
39	16" DIESEL ENGINE (PUMP)	1700	1100
40	16" DIESEL ENGINE (PUMP)	1700	1100
41	16" DIESEL ENGINE (PUMP)	1700	1100
42	16" DIESEL ENGINE (PUMP)	1700	1100
43	16" DIESEL ENGINE (PUMP)	1700	1100
44	16" DIESEL ENGINE (PUMP)	1700	1100
45	16" DIESEL ENGINE (PUMP)	1700	1100
46	16" DIESEL ENGINE (PUMP)	1700	1100
47	16" DIESEL ENGINE (PUMP)	1700	1100
48	16" DIESEL ENGINE (PUMP)	1700	1100
49	16" DIESEL ENGINE (PUMP)	1700	1100
50	16" DIESEL ENGINE (PUMP)	1700	1100
51	16" DIESEL ENGINE (PUMP)	1700	1100
52	16" DIESEL ENGINE (PUMP)	1700	1100
53	16" DIESEL ENGINE (PUMP)	1700	1100
54	16" DIESEL ENGINE (PUMP)	1700	1100
55	16" DIESEL ENGINE (PUMP)	1700	1100
56	16" DIESEL ENGINE (PUMP)	1700	1100
57	16" DIESEL ENGINE (PUMP)	1700	1100
58	16" DIESEL ENGINE (PUMP)	1700	1100
59	16" DIESEL ENGINE (PUMP)	1700	1100
60	16" DIESEL ENGINE (PUMP)	1700	1100
61	16" DIESEL ENGINE (PUMP)	1700	1100
62	16" DIESEL ENGINE (PUMP)	1700	1100
63	16" DIESEL ENGINE (PUMP)	1700	1100
64	16" DIESEL ENGINE (PUMP)	1700	1100
65	16" DIESEL ENGINE (PUMP)	1700	1100
66	16" DIESEL ENGINE (PUMP)	1700	1100
67	16" DIESEL ENGINE (PUMP)	1700	1100
68	16" DIESEL ENGINE (PUMP)	1700	1100
69	16" DIESEL ENGINE (PUMP)	1700	1100
70	16" DIESEL ENGINE (PUMP)	1700	1100
71	16" DIESEL ENGINE (PUMP)	1700	1100
72	16" DIESEL ENGINE (PUMP)	1700	1100
73	16" DIESEL ENGINE (PUMP)	1700	1100
74	16" DIESEL ENGINE (PUMP)	1700	1100
75	16" DIESEL ENGINE (PUMP)	1700	1100
76	16" DIESEL ENGINE (PUMP)	1700	1100
77	16" DIESEL ENGINE (PUMP)	1700	1100
78	16" DIESEL ENGINE (PUMP)	1700	1100
79	16" DIESEL ENGINE (PUMP)	1700	1100
80	16" DIESEL ENGINE (PUMP)	1700	1100
81	16" DIESEL ENGINE (PUMP)	1700	1100
82	16" DIESEL ENGINE (PUMP)	1700	1100
83	16" DIESEL ENGINE (PUMP)	1700	1100
84	16" DIESEL ENGINE (PUMP)	1700	1100
85	16" DIESEL ENGINE (PUMP)	1700	1100
86	16" DIESEL ENGINE (PUMP)	1700	1100
87	16" DIESEL ENGINE (PUMP)	1700	1100
88	16" DIESEL ENGINE (PUMP)	1700	1100
89	16" DIESEL ENGINE (PUMP)	1700	1100
90	16" DIESEL ENGINE (PUMP)	1700	1100
91	16" DIESEL ENGINE (PUMP)	1700	1100
92	16" DIESEL ENGINE (PUMP)	1700	1100
93	16" DIESEL ENGINE (PUMP)	1700	1100
94	16" DIESEL ENGINE (PUMP)	1700	1100
95	16" DIESEL ENGINE (PUMP)	1700	1100
96	16" DIESEL ENGINE (PUMP)	1700	1100
97	16" DIESEL ENGINE (PUMP)	1700	1100
98	16" DIESEL ENGINE (PUMP)	1700	1100
99	16" DIESEL ENGINE (PUMP)	1700	1100
100	16" DIESEL ENGINE (PUMP)	1700	1100

- NOTES:
- ALL DIMENSIONS ARE IN MM AND LEVELS ARE IN METERS.
 - ALL ELEVATIONS INDICATED IN THE DRG. ARE W.R.T. POWER HOUSE GROUND FLOOR ELEVATION AS 0.00M. EL. 0.00M CORRESPONDS TO RL (+209.0M).
- REFERENCE DRAWING:
- | | |
|--|----------------------------|
| 1. TG EQUIPMENT LAYOUT AT GROUND FLOOR (0.0M) | PE-06-415-100-M003 |
| 2. TG EQUIPMENT LAYOUT AT WEZANINE FLOOR (8.5M) | PE-06-415-100-M004 |
| 3. TG EQUIPMENT LAYOUT AT MISC. FLOORS ABOVE OPERATING | PE-06-415-100-M005 |
| 4. GROSS SECTION OF MAIN PLANT | PE-06-415-100-M007 |
| 5. FOUNDATION ARR. OF MD BFP SET | HY-06-1-180-00-57865 (HYD) |
| 6. GENERAL ARRANGEMENT OF MD BFP SET | HY-06-1-180-00-57865 (HYD) |
| 7. GENERAL ARRANGEMENT OF HP HEATER No. 6 | 2-175-05-00--- (HYD) |
| 8. GENERAL ARRANGEMENT OF HP HEATER No. 7 | 2-175-05-00--- (HYD) |
| 9. GENERAL ARRANGEMENT OF HP HEATER No. 8 | 2-175-05-00--- (HYD) |
| 10. GENERAL ARRANGEMENT OF DESUPER HEATER | 1-16053-40--- (HYD) |
| 11. GA OF SV DISCHARGE F/1 | 1-1300-01--- (HYD) |
| 12. GA OF SV DISCHARGE F/1 | 1-1300-01--- (HYD) |
| 13. GA OF SV DISCHARGE F/1 | 1-1300-01--- (HYD) |
| 14. LAYDOWN SPACE FOR GENERATOR COMPONENTS | 1-1300-01--- (HYD) |
| 15. LAYDOWN SPACE FOR STEAM TURBINE COMPONENTS | 1-1300-01--- (HYD) |
| 16. OIL ROOM ARRANGEMENT | 0-1300-01--- (HYD) |
- (HOLD)



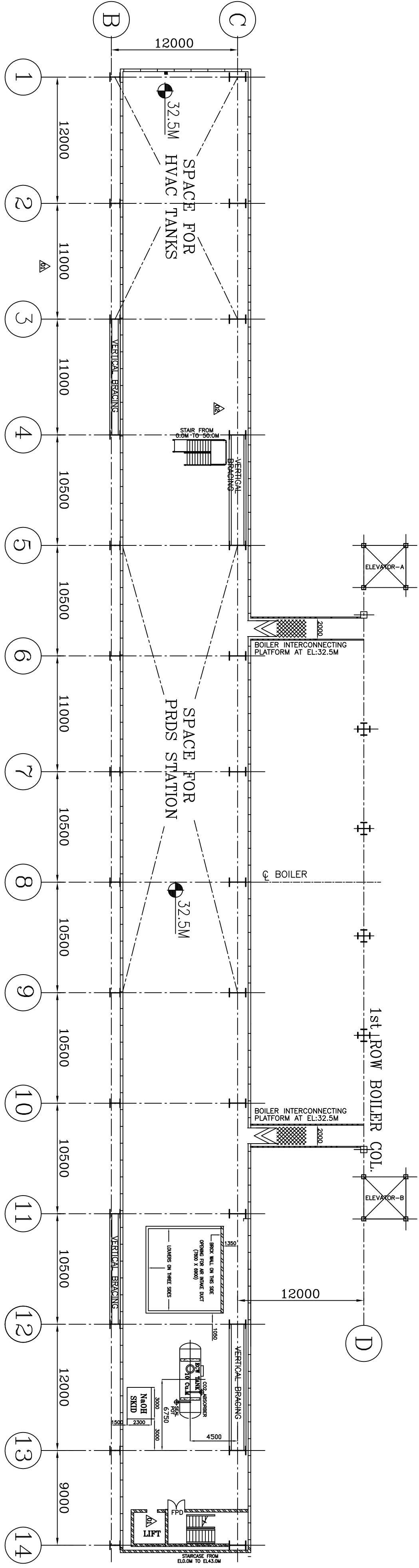
MAHARASHTRA STATE POWER GENERATION CO. LTD.
DEVELOPMENT CONSULTANTS PVT. LTD.
CONSULTING ENGINEERS
VASHI, NAVI MUMBAI

JOB No. 415	
STATUS CONTRACT	
DISTRIBUTION	
CONTRACTOR BHARAT HEAVY ELECTRICALS LTD	
PROJECT 1x660 MW BHUSAWAL TPS UNIT-6	
TITLE TG EQUIPMENT LAYOUT AT OPERATING FLOOR (17.0M)	
CUSTOMER PROJECT CODE	
SCALE 1:100	
DRAWING No. PE-DG-415-100-M005	
SHEET 1 OF 1	

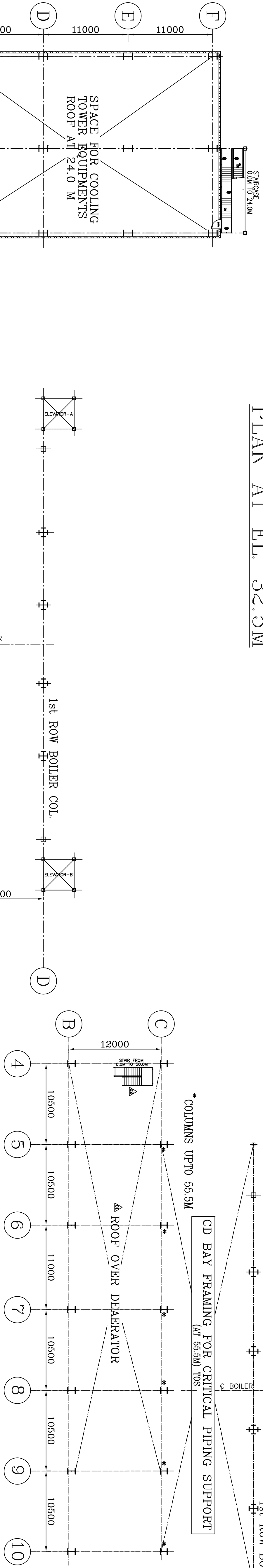


▲ MACHINE ROOM PLAN AT EL.(+)43.0M (HOLD)

- NOTES:-**
1. ALL DIMENSIONS ARE IN MM'S AND LEVELS ARE IN METRES.
 2. ALL ELEVATIONS INDICATED IN THE DRG. ARE W.R.T. POWER HOUSE GROUND FLOOR ELEVATION AS 0.00M. EL. 0.00M CORRESPONDS TO RL. (+)209.0M
- REFERENCE DRAWING:-**
- 1. MAIN EQUIPMENT PLAN
 - 2. TG EQUIPMENT LAYOUT AT GROUND FLOOR (0.0M)
 - 3. TG EQUIPMENT LAYOUT AT MEZZANINE FLOOR (8.5M)
 - 4. TG EQUIPMENT LAYOUT AT OPERATING FLOOR (17.0M)
 - 5. MAIN PLANT CROSS SECTION
 - 6. CA OF DEGRATOR
 - 7. DEGRATOR PLATFORM ASSEMBLY
 - 8. CA OF DNOV TANK
 - 9. CA OF NOD DNOV TANK
 - 10. CA OF POTABLE WATER TANK
- LEGEND:-**
- CHEQUERED PLATE FLOORING
 - REMOVABLE CHEQUERED PLATE
 - GRADED FLOORING
 - REMOVABLE GRATING
 - CONCRETE BLOCK
 - HAND RAILING
 - PARAPET WALL
 - GLASS PARTITION
 - CUT OUTS
 - BRICK WALL
 - CABLE RISERS
- HOLD**
- PE-DG-415-100-M002 PEM
PE-DG-415-100-M003 PEM
PE-DG-415-100-M004 PEM
PE-DG-415-100-M005 PEM
PE-DG-415-100-M007 PEM
PE-DG-415-16310-85301 (HND)
HY-DG-2-16310-85304 (HND)
1-17052-40581 (BPJ)
-- (PEM)
-- (PEM)



PLAN AT EL. 32.5M



PLAN AT EL. 50.4M (TOS)

1st ROW BOILER COL. D

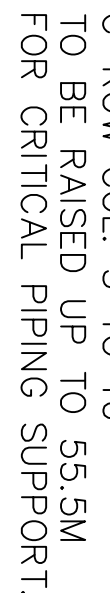
CD BAY FRAMING FOR CRITICAL PIPING SUPPORT (At 55.5M) TOS

▲ ROOF OVER DEGRATOR

* COLUMNS UPTO 55.5M

PLAN AT EL. 24.0M.

OWNER MAHARASHTRA STATE POWER GENERATION CO. LTD.		PROJECT 1x660 MW BHUSAWAL TPS UNIT-6	
CONSULTANT DEVELOPMENT CONSULTANTS PVT. LTD. CONSULTING ENGINEERS YASHEL, NAVI KUMBAI		CONTRACTOR BHARAT HEAVY ELECTRICALS LTD. POWER SECTOR PROJECT ENGINEERING MANAGEMENT	
REVISIONS		REVISIONS	
REV	DATE	BY	CHKD
1	10.10.2018	YASHEL	YASHEL
2	24.04.2018	YASHEL	YASHEL
TITLE TG EQUIPMENT LAYOUT AT MISC. FLOORS ABOVE OPERATING FLOOR IN BC BAY		CUSTOMER PACKAGE CODE PE-DG-415-100-M006	
SCALE SCALE 1:200		SHEET SHEET 1 OF 1	



REFERENCE DRAWING:

- | | |
|--|------------------------|
| 1. MAIN EQUIPMENT PLAN | PE-DC-415-100-M002 PEN |
| 2. EQUIPMENT LAYOUT AT 0.0M | PE-DC-415-100-M003 PEN |
| 3. EQUIPMENT LAYOUT AT 8.5M | PE-DC-415-100-M004 PEN |
| 4. EQUIPMENT LAYOUT AT 17.0M | PE-DC-415-100-M005 PEN |
| 5. EQUIPMENT LAYOUT PLAN AT EL. 17.0/24.0/
32.5 & 38.0M | PE-DC-415-100-M006 PEN |

- LEGEND:-**
- | | |
|---|---------------------------|
|  | CHECKERED PLATE FLOORING |
|  | REMOVABLE CHECKERED PLATE |
|  | GRATED FLOORING |
|  | REMOVABLE GRATING |
|  | CONCRETE BLOCK |
|  | HAND RAILING |
|  | PARQUET WALL |
|  | GLASS PARTITION |
|  | CUT OUTS |
|  | BRICK WALL |

REV	DATE	ALTD	CHD	PK
02	22.01.19	AK	AMT	

1. DRAWING REVISED AS PER CUS COMMENTS DTD: 15.09.2018 & DCA COMMENTS 19.11.2018

