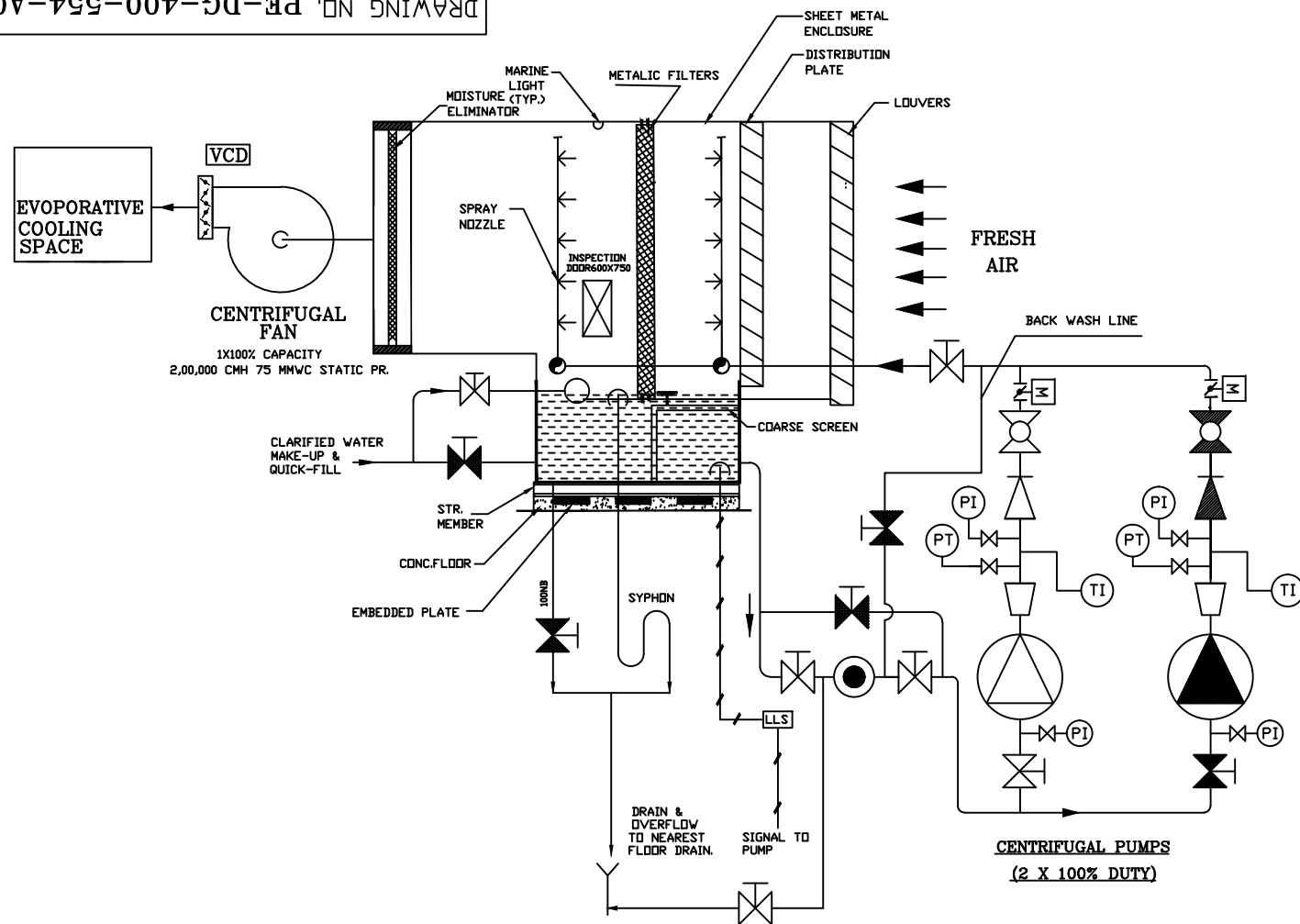


FIRST ANGLE PROJECTION

ALL DIMENSIONS ARE IN MM

DRAWING NO. PE-DG-400-554-A001



LEGEND: -

SYMBOL	DESCRIPTION	MATERIAL
	GATE VALVE	CI
	GATE VALVE (NORMALLY CLOSED)	CI
	GLOBE VALVE	CI
	CHECK VALVE	CI
	P.T. STRAINER	CASING-CI, MESH - BRASS,
	VOLUME CONTROL DAMPER(OPPOS.D.BLD.)	MS
	CENTRIFUGAL PUMP	CASING-CI,EMPELLER - BRONZE,
	PRE FILTER(WASHABLE TYPE)	SS
	PRESSURE INDICATOR WITH COCK	-
	FLOAT VALVE	-
	REDUCER	MS
	LLS	LOW LEVEL SWITCH
	PRESSURE TRANSMITTER WITH MANIFOLD	-
	TEMPERATURE INDICATOR	-
	MOTORISED BUTTERFLY VALVE	-

NOTES:-

- SATURATION EFFICIENCY OF AIR WASHER SHALL BE 90% MINIMUM.
- CENTRIFUGAL FAN SHALL BE BACKWARD CURVED BLADE HEAVY DUTY TYPE.
- GI PIPES HEAVY CLASS FOR AIR WASHER SHALL BE PROVIDED FOR SPRAY SYSTEM.
- METALIC FILTERS SHALL BE PROVIDED.
- GI LOUVERS (FIXED BLADE TYPE) SHALL BE PROVIDED, COMPLETE WITH GI BIRD SCREEN ETC.
- ALL EQUIPMENTS DRAIN SHALL BE TERMINATED TO NEAREST FLOOR DRAIN.
- IN THE AIRWASHER TANK LEVEL INDICATOR / GAUGE & LEVEL SWITCH SHALL BE PROVIDED FOR ALARM / TRIP.

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FILE NAME : 100_M038R0

PRODUCED BY AN AUTODESK EDUCATIONAL PRODUCT

	COSTUMER NEYVELI LIGNITE CORPORATION LTD. (NLC LTD)			
	CONSULTANT LAHMEYER INTERNATIONAL (INDIA) PVT. LTD.			
	BHARAT HEAVY ELECTRICALS LTD POWER GROUP PROJECTS ENGINEERING MANAGEMENT NOIDA , U.P	DEPT CODE MAX.	NAME SIGN DATE	
		DRN	VJ	sd/- 21.08.2014
		DESN	VJ	sd/- 21.08.2014
		CHD	MK	sd/- 21.08.2014
		APPD	SAK	sd/- 21.08.2014
JOB NO.	400			
STATUS	CONTRACT			
DISTRIBUTION				
TO				
No.OFF				
REV	DATE	ALTD	CHD	APPD
TITLE 2X500 MW NEW NEYVELI TPP TYPICAL SCHEME OF AIR WASHER				
		DEPT.	SCALE ~	BHEL DRAWING NO.
		SIGN		PE-DG-400-554-A001
		DATE		SHEET 1 OF 1 REV 00

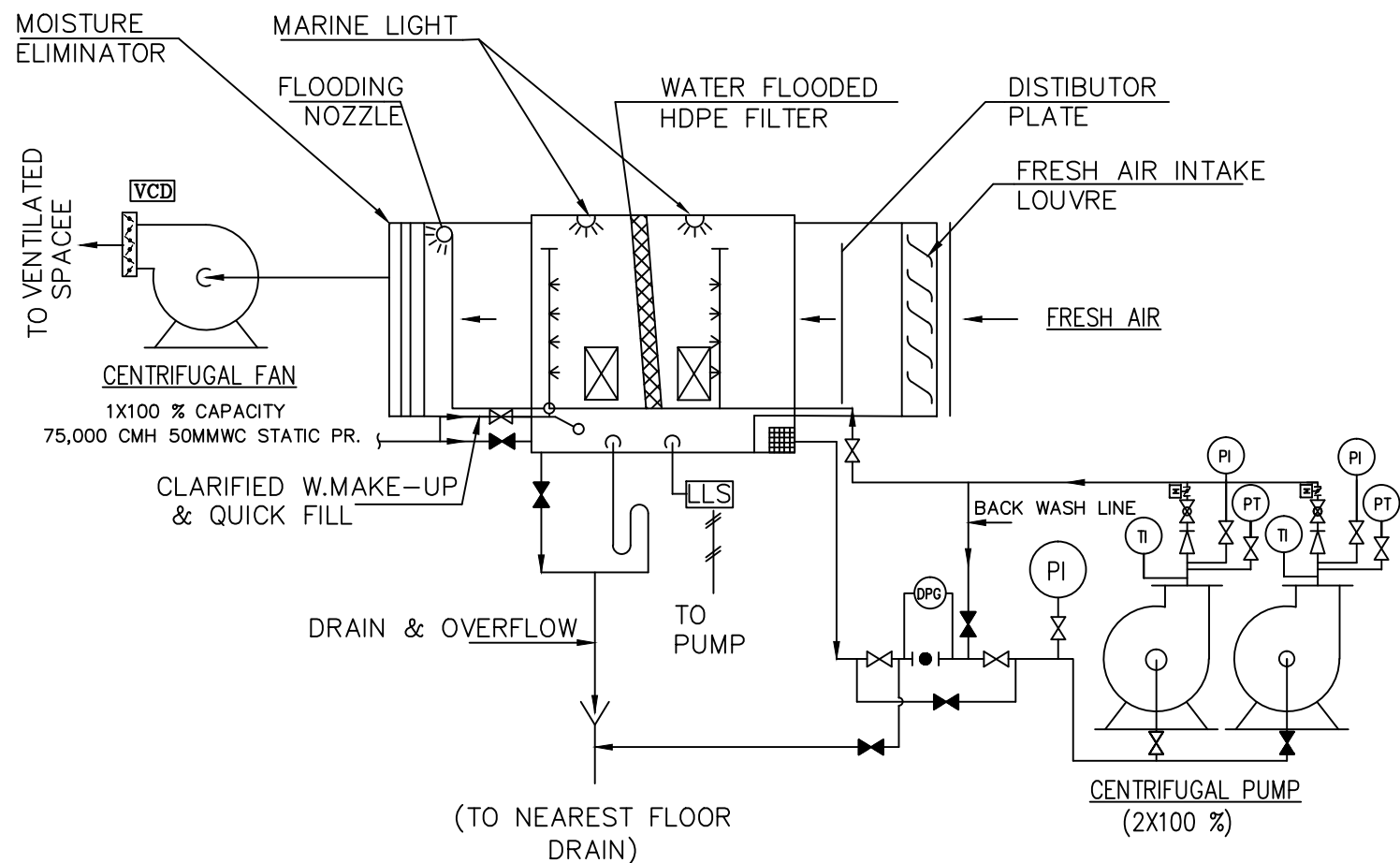
FORMAT SIZE A3

PRODUCED BY AN AUTODESK EDUCATIONAL PRODUCT
Varun Jain, S A Khan, Praveen Kishore

FIRST ANGLE PROJECTION

ALL DIMENSIONS ARE IN MM

DRAWING NO. PE-DG-400-554-A002



LEGEND:

GATE VALVE	
CHECK VALVE	
GLOBE VALVE	
GATE VALVE (NORMALLY CLOSED)	
POT STRAINER	
SYPHON	
DRAIN	
PRESSURE INDICATOR	
PRESSURE TRANSMITTER	
TEMPERATURE INDICATOR	
LOW LEVEL SWITCH	
COARSE STRAINER	
DIFF. PRESURE GAUGE	
Motorised Butterfly Valve	

TYPICAL SCHEME FOR UAF UNIT

COSTUMER NEYVELI LIGNITE CORPORATION LTD. (NLC LTD)																
CONSULTANT LAHMEYER INTERNATIONAL (INDIA) PVT. LTD.																
BHARAT HEAVY ELECTRICALS LTD POWER GROUP PROJECTS ENGINEERING MANAGEMENT NOIDA, U.P.																
DEPT CODE DRN DESN CHD APPD	<table border="1"> <thead> <tr> <th>NAME</th> <th>SIGN</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td>VJ</td> <td>sd/-</td> <td>21.08.2014</td> </tr> <tr> <td>VJ</td> <td>sd/-</td> <td>21.08.2014</td> </tr> <tr> <td>MK</td> <td>sd/-</td> <td>21.08.2014</td> </tr> <tr> <td>SAK</td> <td>sd/-</td> <td>21.08.2014</td> </tr> </tbody> </table>	NAME	SIGN	DATE	VJ	sd/-	21.08.2014	VJ	sd/-	21.08.2014	MK	sd/-	21.08.2014	SAK	sd/-	21.08.2014
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VJ	sd/-	21.08.2014														
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SAK	sd/-	21.08.2014														
2X500 MW NEW NEYVELI TPP																
TITLE TYPICAL SCHEME OF UAF																
DEPT. SCALE ~ SIGN DATE	BHEL DRAWING NO. PE-DG-400-554-A002 SHEET 1 OF 1 REV 00															

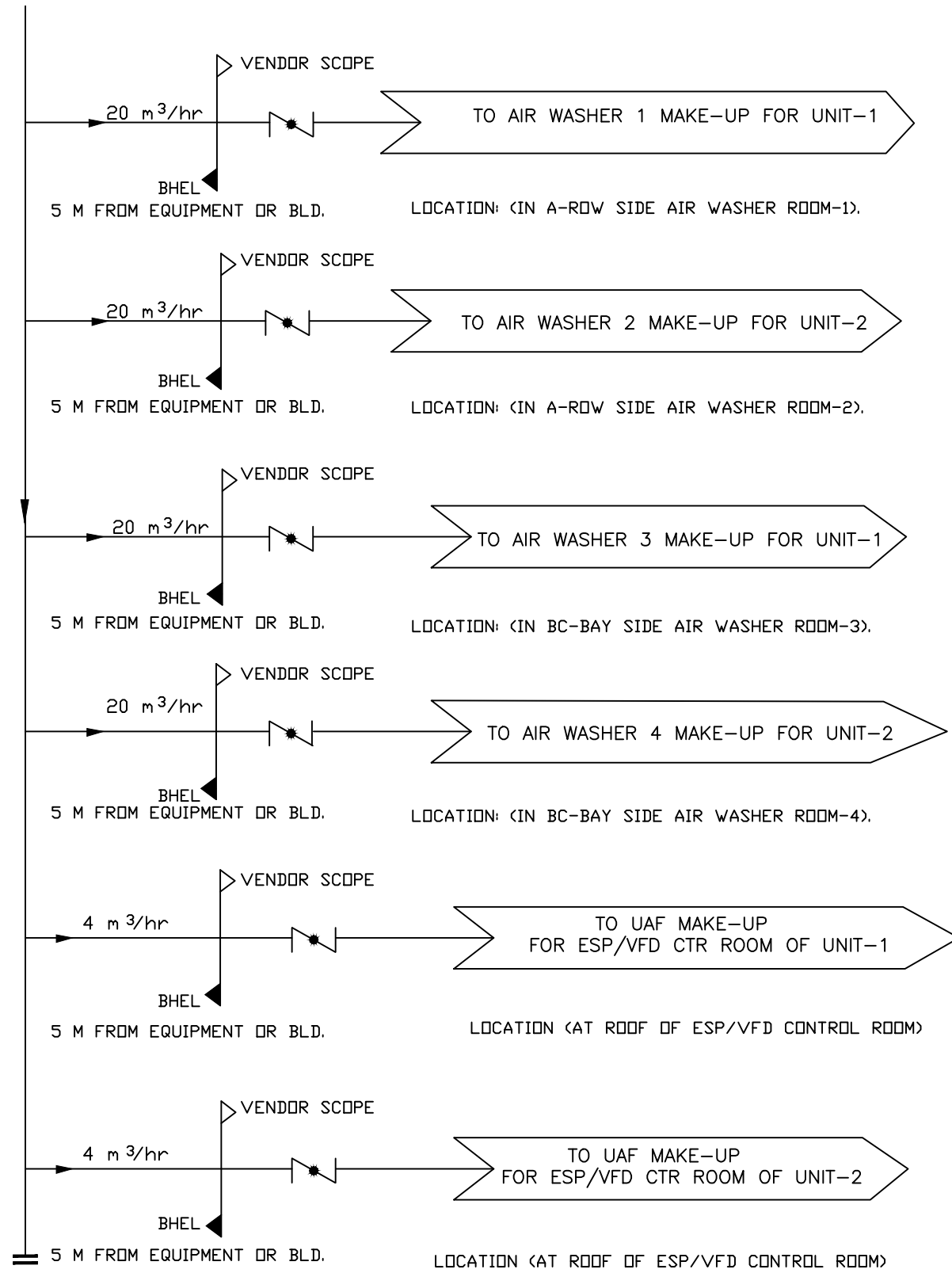
JOB NO.	400				
STATUS	CONTRACT				
DISTRIBUTION					
TD					
No.OFF					
REV	DATE	ALTD	CHD	APPD	

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FILE NAME : 100_M038R0

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 Varun Jain
 S A Khan
 Praveen Kishore

PRODUCED BY AN AUTODESK EDUCATIONAL PRODUCT

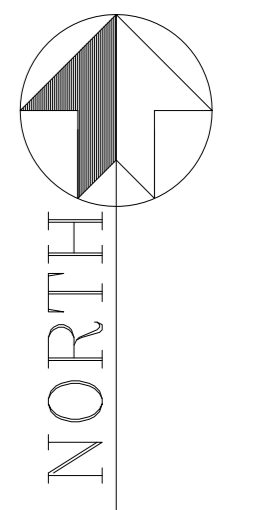
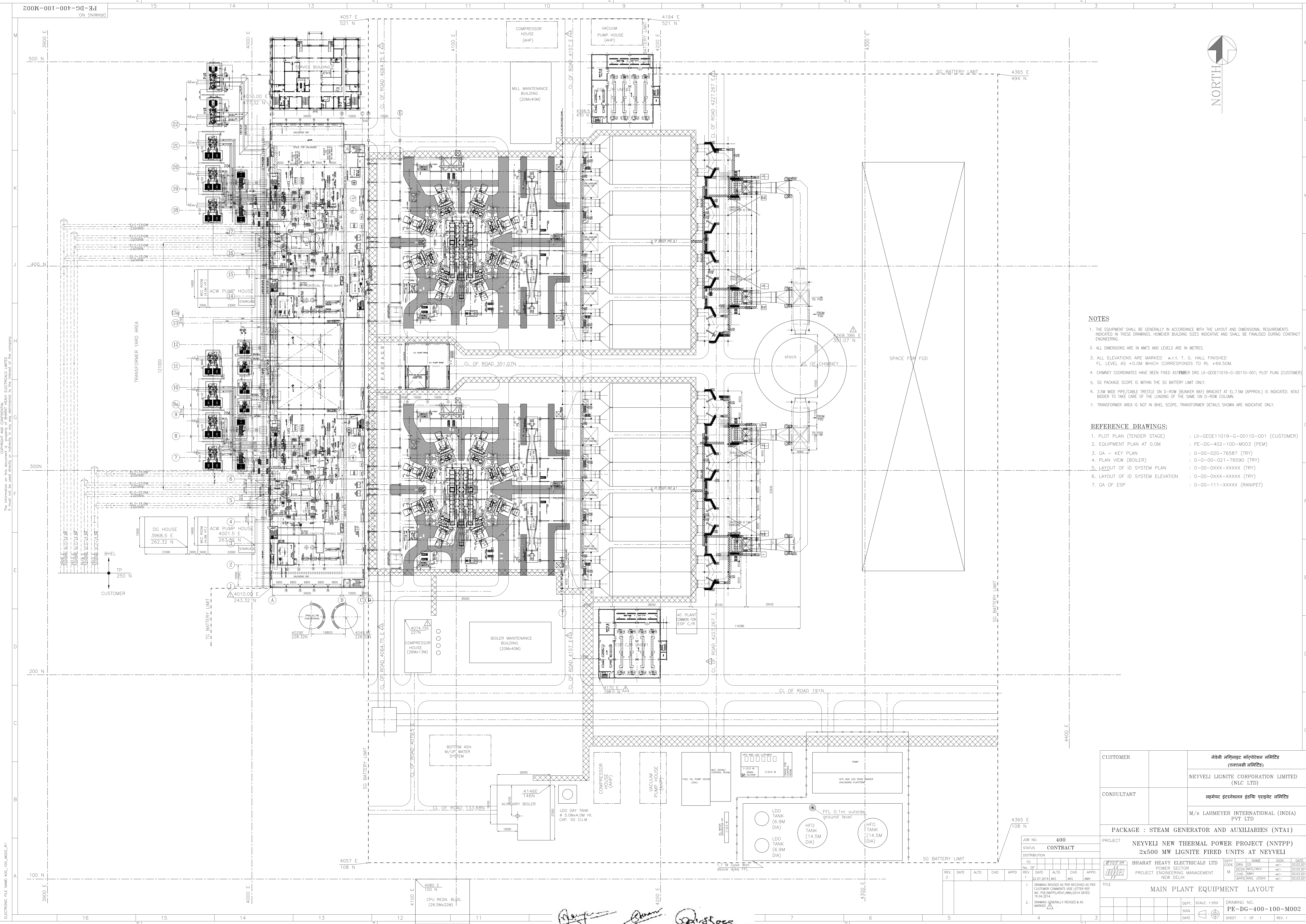


NOTE:-

1. VENTILATION MAKE-UP WATER PIPING INCLUDING FITTINGS SHALL BE TERMINATED WITHIN THE RANGE OF 5 METER DISTANCE FROM THE AIR-WASHER/UAF IF THE EQUIPMENTS ARE IN OPEN AREA OR 5 M FROM THE BLD. IF THE EQUIPMENTS ARE IN HOUSED, BY M/S BHEL FURTHER PIPING SHALL BE DONE BY VENDOR AS MARKED IN THIS DRG.
2. THE HVAC MAKE-UP WATER ISOLATING VALVES SHALL BE ARRANGED BY VENDOR AS PER THE SCHEME.

TITLE

MAKE UP WATER SCHEME
 PE-DG-400-554-A003 R00




- NOTES**
1. THE EQUIPMENT SHALL BE GENERALLY IN ACCORDANCE WITH THE LAYOUT AND DIMENSIONAL REQUIREMENTS INDICATED IN THESE DRAWINGS. HOWEVER BUILDING SIZES INDICATIVE AND SHALL BE FINALISED DURING CONTRACT ENGINEERING.
 2. ALL DIMENSIONS ARE IN MM'S AND LEVELS ARE IN METRES.
 3. ALL ELEVATIONS ARE MARKED w.r.t. T. G. HALL FINISHED FL. LEVEL AS +0.0M WHICH CORRESPONDS TO RL +69.50M.
 4. CHIMNEY COORDINATES HAVE BEEN FIXED AS TENDER DRG LI-GE011019-G-00110-001; PLOT PLAN (CUSTOMER).
 5. SG PACKAGE SCOPE IS WITHIN THE SG BATTERY LIMIT ONLY.
 6. 3.5M WIDE PIPE/CABLE TRESTLE ON D-ROW (BUNKER BAY) BRACKET AT EL.7.5M (APPROX.) IS INDICATED. INTAS BIDDER TO TAKE CARE OF THE LOADING OF THE SAME ON D-ROW COLUMN.
 7. TRANSFORMER AREA IS NOT IN BHEL SCOPE, TRANSFORMER DETAILS SHOWN ARE INDICATIVE ONLY.

- REFERENCE DRAWINGS:**
- | | |
|----------------------------------|--------------------------------------|
| 1. PLOT PLAN (TENDER STAGE) | : LI-GE011019-G-00110-001 (CUSTOMER) |
| 2. EQUIPMENT PLAN AT 0.0M | : PE-DG-402-100-M003 (PEM) |
| 3. GA - KEY PLAN | : O-00-020-76587 (TRY) |
| 4. PLAN VIEW (BOILER) | : O-00-021-76590 (TRY) |
| 5. LAYOUT OF ID SYSTEM PLAN | : O-00-OXXX-XXXXX (TRY) |
| 6. LAYOUT OF ID SYSTEM ELEVATION | : O-00-OXXX-XXXXX (TRY) |
| 7. GA OF ESP | : O-00-111-XXXXX (RANIPET) |

CUSTOMER	नेनेली नवगणित कर्पोरेशन लिमिटेड (नारसली लिमिटेड)																										
	NEYVELI LIGNITE CORPORATION LIMITED (NLC LTD)																										
CONSULTANT	सहमेयर इंटरनेशनल इंडिया प्राइवेट लिमिटेड																										
	M/s LAHMEYER INTERNATIONAL (INDIA) PVT LTD																										
PACKAGE : STEAM GENERATOR AND AUXILIARIES (NTA1)																											
PROJECT	NEYVELI NEW THERMAL POWER PROJECT (NNTPP) 2x500 MW LIGNITE FIRED UNITS AT NEYVELI																										
STATUS	CONTRACT																										
DISTRIBUTION	<table border="1"> <tr> <th>TO</th> <th>DATE</th> <th>BY</th> <th>CHKD</th> <th>APPD</th> </tr> <tr> <td>DRN</td> <td>22.07.2014</td> <td>AKS</td> <td>AKS</td> <td>AKS</td> </tr> <tr> <td>DES</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>CHK</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>APPD</td> <td></td> <td></td> <td></td> <td></td> </tr> </table>		TO	DATE	BY	CHKD	APPD	DRN	22.07.2014	AKS	AKS	AKS	DES					CHK					APPD				
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DEPT	NAME	SIGN	DATE																								
BHARAT HEAVY ELECTRICALS LTD			03.03.2014																								
POWER SECTOR			03.03.2014																								
PROJECT ENGINEERING MANAGEMENT			03.03.2014																								
NEW DELHI			03.03.2014																								
TITLE	MAIN PLANT EQUIPMENT LAYOUT																										
DEPT.	SCALE: 1:550	DRAWING NO.																									
SIGN		PE-DG-400-100-M002																									
DATE		SHEET 1 OF 1																									

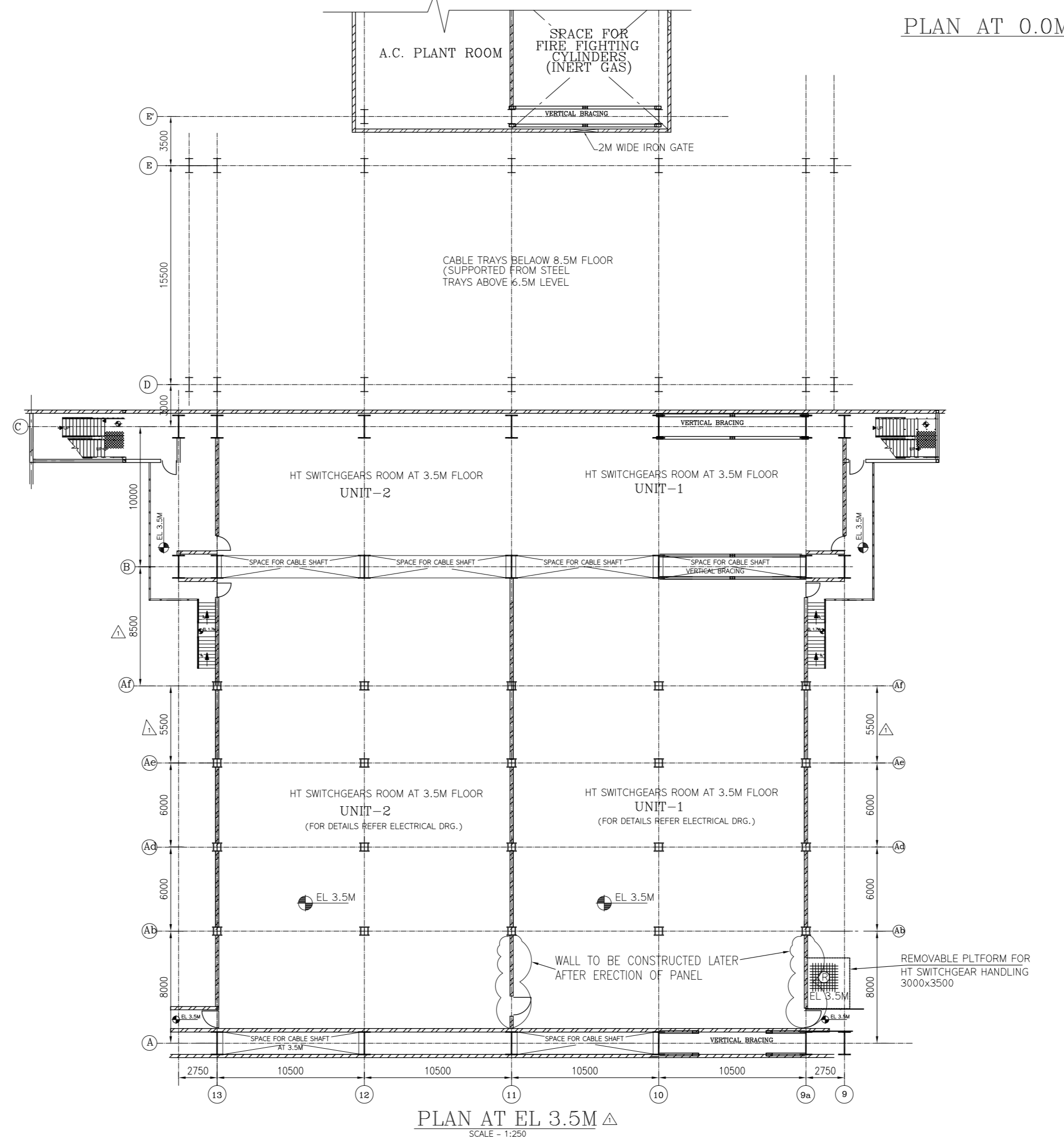
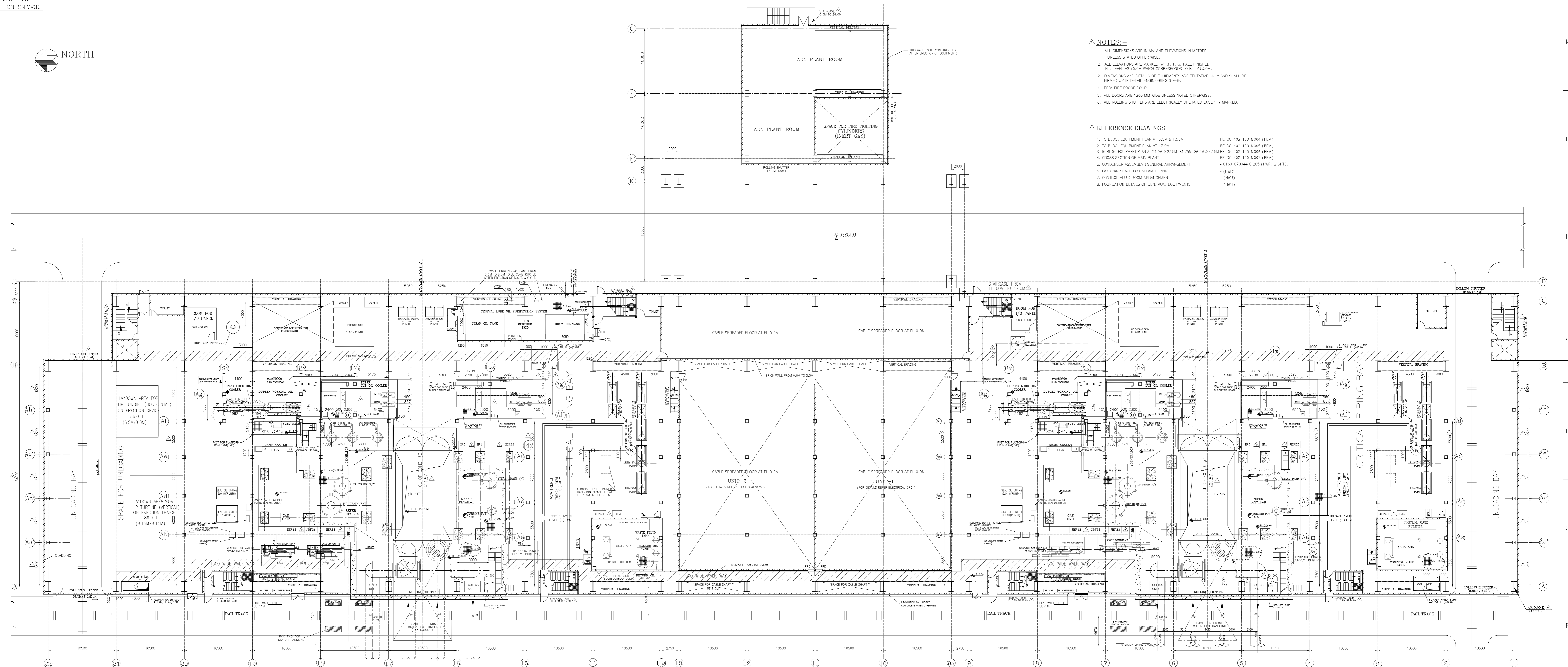
REV.	DATE	ALTD	CHD	APPD
2				

 Praveen Kishore
 S A Khan
 Vanam Jan

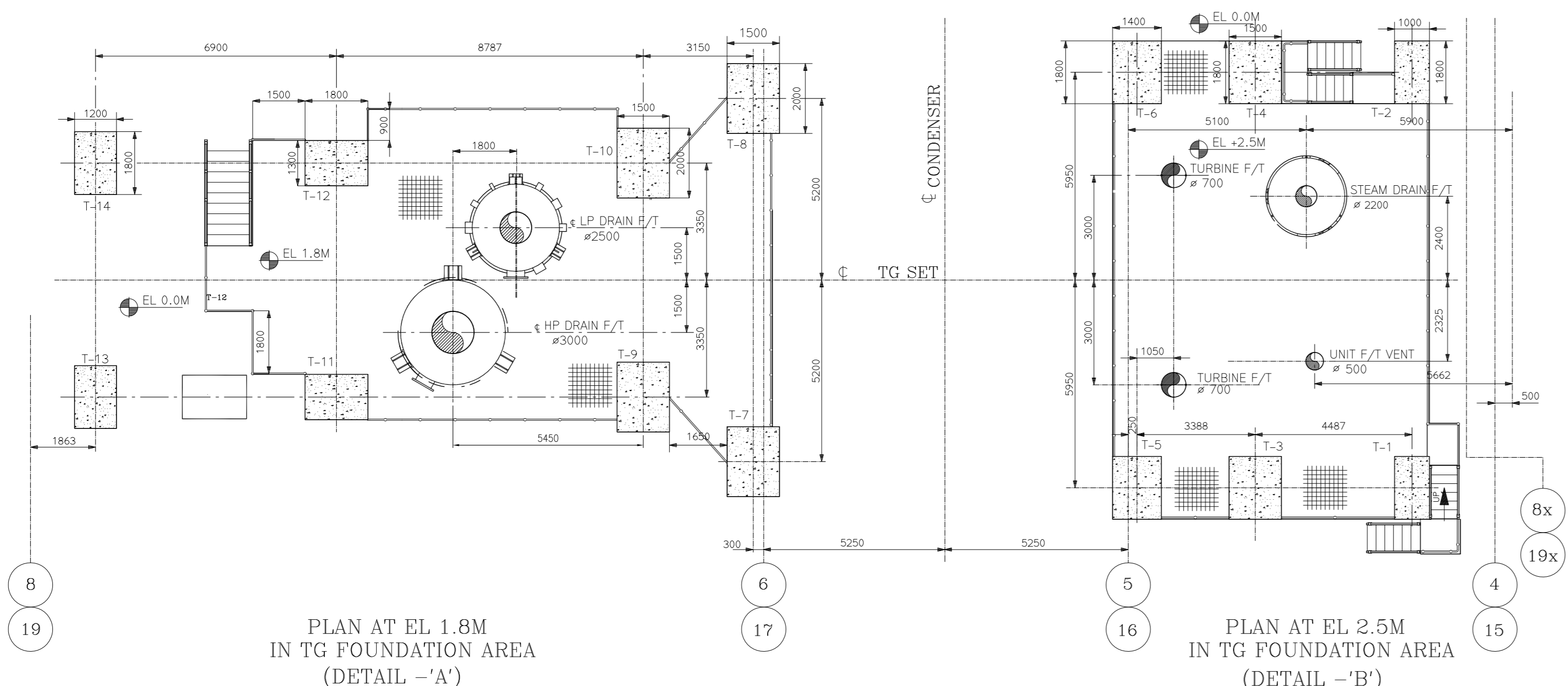


- NOTES:-**
1. ALL DIMENSIONS ARE IN MM AND ELEVATIONS IN METRES UNLESS STATED OTHERWISE.
 2. ALL ELEVATIONS ARE MARKED w.r.t. G. HALL FINISHED F.L. LEVEL AS -0.10M WHICH CORRESPONDS TO RL - 49.20M.
 3. DIMENSIONS AND DETAILS OF EQUIPMENTS ARE TENTATIVE ONLY AND SHALL BE FINISHED UP IN DETAIL ENGINEERING STAGE.
 4. FFD: FIRE PROOF DOOR.
 5. ALL DOORS ARE 1200 MM WIDE UNLESS NOTED OTHERWISE.
 6. ALL ROLLING SHUTTERS ARE ELECTRICALLY OPERATED EXCEPT - MARKED.

- REFERENCE DRAWINGS:**
1. TO BLDG. EQUIPMENT PLAN AT 8.5M & 12.0M PE-DG-402-100-M004 (PEM)
 2. TO BLDG. EQUIPMENT PLAN AT 17.0M PE-DG-402-100-M005 (PEM)
 3. TO BLDG. EQUIPMENT PLAN AT 24.0M & 27.5M, 36.0M & 47.5M PE-DG-402-100-M006 (PEM)
 4. CROSS SECTION OF MAIN PLAN PE-DG-402-100-M007 (PEM)
 5. CONDENSER ASSEMBLY (GENERAL ARRANGEMENT) - (CHS)
 6. LAYDOWN SPACE FOR STEAM TURBINE - (CHS)
 7. CONTROL FLUID ROOM ARRANGEMENT - (CHS)
 8. FOUNDATION DETAILS OF GEN. AUX. EQUIPMENTS - (CHS)



- LEGEND:**
- CHEQUERED PLATE FLOORING
 - REMOVABLE CHEQUERED PLATE
 - GRATED FLOORING
 - REMOVABLE GRATING
 - CONCRETE BLOCK
 - CUT OUTS
 - HAND RAILING
 - PARAPET WALL
 - GLASS PARTITION
 - BRICK WALL
 - RAIL TRACK

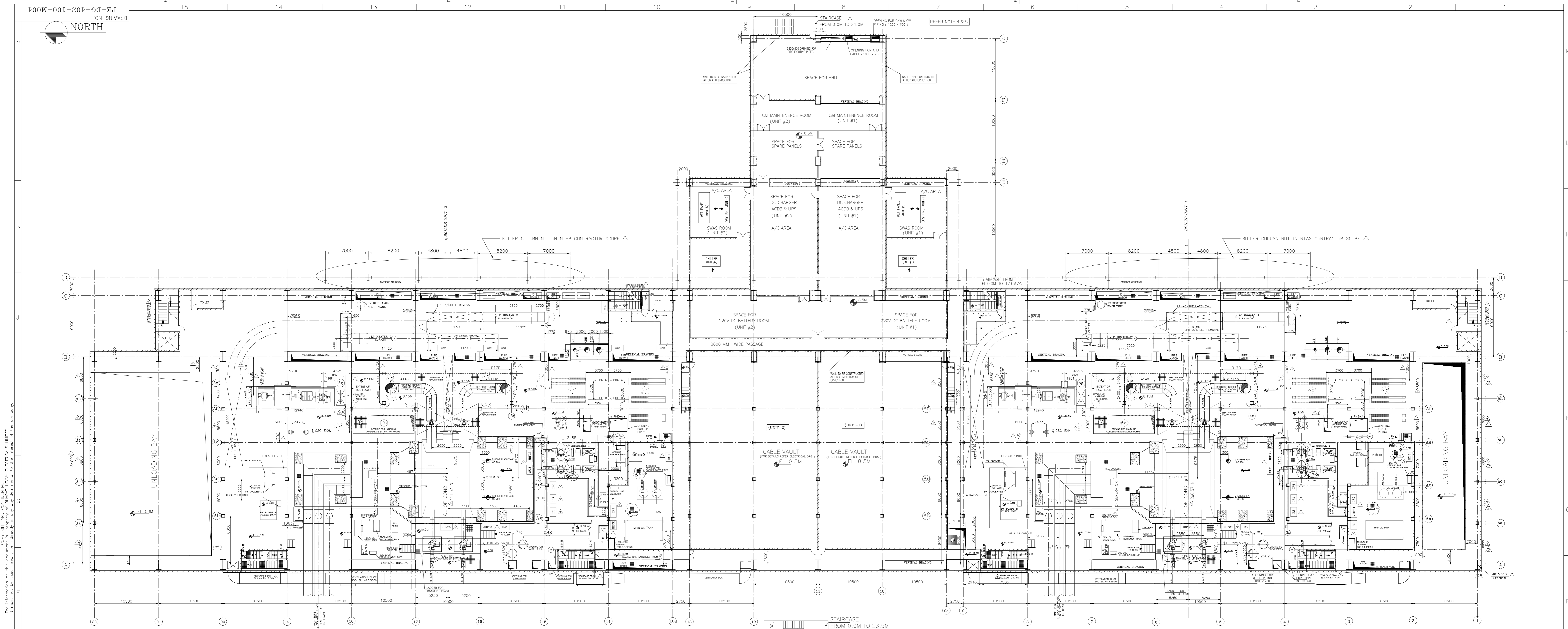


CUSTOMER	नेवेली लिग्नाइट कॉर्पोरेशन लिमिटेड (सार्वजनिक लिमिटेड)	
	NEYVELI LIGNITE CORPORATION LIMITED (NLC LTD)	
CONSULTANT	सहमेयर इंटरनेशनल इंडिया प्राइवेट लिमिटेड	
	M/s LAHMEYER INTERNATIONAL (INDIA) PVT LTD	
PACKAGE : STEAM TURBINE GENERATOR PACKAGE (NTA2)		
PROJECT	NEYVELI NEW THERMAL POWER PROJECT (NNTPP) 2x500 MW LIGNITE FIRED UNITS AT NEYVELI	
JOB NO.	402	
STATUS	CONTRACT	
DISTRIBUTION		
REV.	DATE	ALTD
1	22.07.2014	SS
2		
TITLE: TG BUILDING EQUIPMENT PLAN AT 0.0M		
DEPT.	SCALE: 1/200	DRAWING NO.
SIGN.		PE-DG-402-100-M003
DATE		SHEET 1 OF 1
		REV. 1

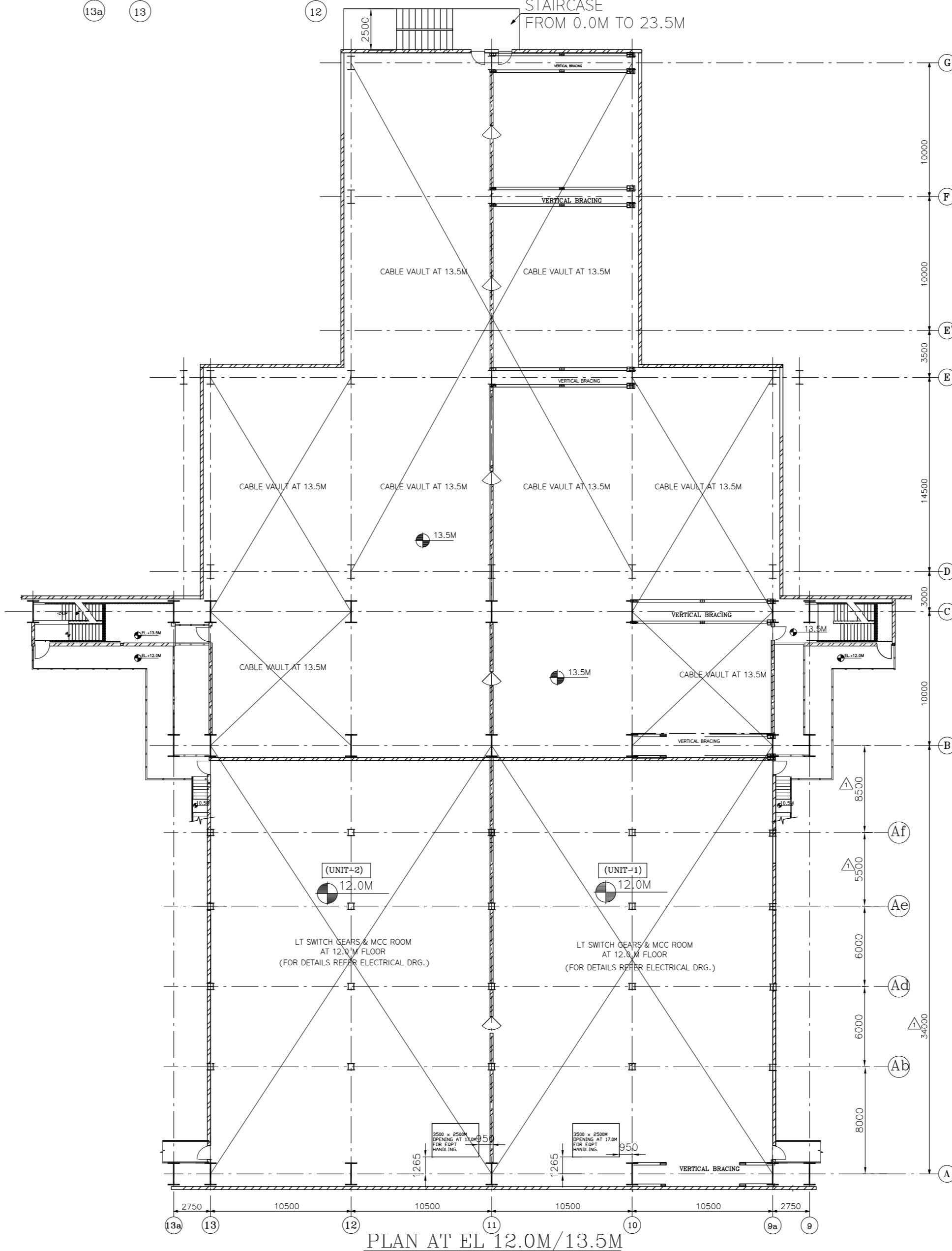
Praveen Kashore
S A Khan
Praveen Kashore

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ELECTRONIC FILE NAME: 402_100_M003_R1



PLAN AT EL 8.5M



PLAN AT EL 12.0M/13.5M

NOTES:-

1. ALL DIMENSIONS ARE IN MM AND ELEVATIONS IN METRES UNLESS STATED OTHERWISE.
2. ALL ELEVATIONS ARE MARKED w.r.t. T.G. HALL FINISHED FL. LEVEL AS +0.0M WHICH CORRESPONDS TO RL +69.50M.
3. DIMENSIONS AND DETAILS OF EQUIPMENTS ARE TENTATIVE ONLY AND SHALL BE FIRMED UP IN DETAIL ENGINEERING STAGE.
4. PFD: FIRE PROOF DOOR.
5. ALL DOORS ARE 1200 MM WIDE UNLESS NOTED OTHERWISE.
6. ALL ROLLING SHUTTERS ARE ELECTRICALLY OPERATED EXCEPT * MARKED.

REFERENCE DRAWING:

- | | |
|--|---------------------------------|
| 1. TG BLDG. EQUIPMENT PLAN AT 0.0M | PE-DG-402-100-M003 (PEM) |
| 2. TG BLDG. EQUIPMENT PLAN AT 17.0M | PE-DG-402-100-M005 (PEM) |
| 3. TG BLDG. EQUIPMENT PLAN AT 24.0M & 27.5M, 31.75M, 36.0M & 47.5M | PE-DG-402-100-M006 (PEM) |
| 4. TG BLDG. & BOILER CROSS SECTION | PE-DG-402-100-M008 (PEM) |
| 5. CONDENSER ASSEMBLY (GENERAL ARRANGEMENT) | 016010700209-C161 (HWR) 2 SHTS. |
| 6. GENERATOR OUTLINE | -(HWR) |
| 7. OIL ROOM ARRANGEMENT | -(HWR) |
| 8. VALVE ROOM ARRANGEMENT | -(HWR) |
| 9. LP BYPASS VALVE ARRANGEMENT | -(HWR) |
| 11. FOUNDATION DETAILS OF GEN. AUXILIARY EQUIPMENTS | -(HWR) |
| 12. GENERAL ARRANGEMENT OF LP HEATER No.1 | -(HWR) |
| 13. GENERAL ARRANGEMENT OF LP HEATER No.2 | -(HYD) |
| 14. GENERAL ARRANGEMENT OF LP HEATER No.3 | -(HYD) |

LEGEND:

- CHISQUERED PLATE FLOORING
- REMOVABLE CHISQUERED PLATE
- GRATED FLOORING
- REMOVABLE GRATING
- CONCRETE BLOCK
- HAND RAILING WITH TOE GUARD
- PARAPET WALL
- CUT OUTS

CUSTOMER	नेवेली लिग्नाइट कॉर्पोरेशन लिमिटेड (एनएलसी लिमिटेड)
CONSULTANT	सहमेयर इंटरनेशनल इंडिया प्राइवेट लिमिटेड M/s LAHMEYER INTERNATIONAL (INDIA) PVT LTD

PACKAGE : STEAM TURBINE GENERATOR PACKAGE (NTA2)
 PROJECT: NEVELI NEW THERMAL POWER PROJECT (NNTPP)
 2x500 MW LIGNITE FIRED UNITS AT NEVELI

JOB NO.	402			
STATUS	CONTRACT			
DISTRIBUTION				
TO				
REV	DATE	ALTD	CHD	APPD
1	22.07.2014	OS	600/605/AMH	AMH

DEPT	POWER SECTOR	NAME	PR	DATE	03.03.2014
DRN	ENGINEERING MANAGEMENT	AKS/ARK	AKS	03.03.2014	
CHK		AMH	AMH	03.03.2014	
APPD		AMH	AMH	03.03.2014	

TITLE	TG BUILDING EQUIPMENT PLAN AT 8.5M & 12.0M
DEPT.	SCALE: 1:200
SIGN	DRAWING NO. PE-DG-402-100-M004
DATE	SHEET 1 OF 1

Praveen Kishore
 S A Khan
 Praveen Kishore