



**4x111MW VISHNUGAD PIPALKOTI HEP
HVAC SYSTEM
LIST OF DOCUMENTS TO BE SUBMITTED
WITH BID**

SPECIFICATION No: PE-TS-413-571-11000A-A001

SECTION : II

SUB-SECTION : 2

REV: 00

DATE: JAN 2020

SHEET 1 OF 1

**BIDDER SHOULD SUBMIT THE SIGNED AND STAMPED COPY OF THE
FOLLOWING DOCUMENTS:**

1. Compliance cum confirmation certificate
2. Un priced format for main package (mentioning quoted against each item),
Un priced format for mandatory spare (mentioning quoted against each
item), Un priced format for Tools and Tackles (mentioning quoted against
each item) and Un priced format for Commissioning spare (mentioning
quoted against each item).
3. Complete set of technical specification.
4. Deviation Schedule in Annexure II (Cost of withdrawal of deviation format)
or No deviation certificate.
5. Pre-bid clarification schedule and signed copy of technical corrigenda, if
any.



**4x111MW VISHNUGAD PIPALKOTI HEP
HVAC SYSTEM
COMPLIANCE CUM CONFIRMATION
CERTIFICATE**

SPECIFICATION No: PE-TS-413-571-11000A-A001

SECTION : II

SUB-SECTION : 3

REV. NO. 00

DATE: JAN 2020

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COMPLIANCE CUM CONFIRMATION CERTIFICATE

The bidder shall confirm compliance with following by signing / stamping this compliance certificate (every sheet) and furnish same with the offer.

- a) The scope of supply, technical details, construction features, design parameters etc. shall be as per technical specification & there are no exclusions, other than those mentioned under "exclusion and those resolved as per 'Schedule of Deviations', with regard to same.
- b) There are no other deviations w.r.t. specifications other than those furnished in the 'Schedule of Deviations'. Any other deviation, stated or implied, taken elsewhere in the offer stands withdrawn unless specifically brought out in the 'Schedule of Deviations'
- c) Bidder shall submit QP in the event of order based on the guidelines given in the specification & QP enclosed therein. QP will be subject to BHEL / CUSTOMER approval & customer hold points for inspection / testing shall be marked in the QP at the contract stage. Inspection / testing shall be witnessed as per same apart from review of various test certificates/ Inspection records etc. This is within the contracted price without any extra implications to BHEL after award of the contract.
- d) All drawings/ data-sheets / calculations etc. submitted along with the offer shall not be taken cognizance off.
- e) The offered materials shall be either equivalent or superior to those specified in the specification & shall meet the specified / intended duty requirements. In case the material specified in the specifications is not compatible for intended duty requirements then same shall be resolved by the bidder with BHEL during the pre-bid discussions, otherwise BHEL / Customer's decision shall be binding on the bidder whenever the deficiency is pointed out.

For components where materials are not specified, same shall be suitable for intended duty, all materials shall be subject to approval in the event of order.

- f) The commissioning spares shall be supplied on 'As Required Basis' & prices for same included in the base price itself.
- g) All sub vendors shall be subject to BHEL / CUSTOMER approval in the event of order.
- h) Guarantee for plant/equipment shall be as per relevant clause of GCC / SCC / Other Commercial Terms & Conditions
- i) In the event of order, all the material required for completing the job at site shall be supplied by the bidder within the ordered price even if the same are additional to approved billing break up, approved drawing or approved Bill of quantities within the scope of work as tender specification. This clause will apply in case during site



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commissioning, additional requirements emerges due to customer and / or consultant's comments. No extra claims shall be put on this account

- j) Schedule of drawings submissions, comment incorporations & approval shall be as stipulated in the specifications. The successful bidder shall depute his design personnel to BHEL's / Customer's / Consultant's office for across the table resolution of issues and to get documents approved in the stipulated time.
- k) As built drawings shall be submitted as and when required during the project execution.
- l) The bidder has not tempered with this compliance cum confirmation certificate and if at any stage any tempering in the signed copy of this document is noticed then same shall be treated as breach of contract and suitable actions shall be taken against the bidder.
- m) Successful bidder shall furnish detailed erection manual for each of the equipment supplied under this contract at least 3 months before the scheduled erection of the concerned equipment / component or along with supply of concerned equipment / component whichever is earlier.
- n) Document approval by customer under Approval category or information category shall not absolve the vendor of their contractual obligations of completing the work as per specification requirement. Any deviation from specified requirement shall be reported by the vendor in writing and require written approval. Unless any change in specified requirement has been brought out by the vendor during detail engineering in writing while submitting the document to customer for approval, approved document (with implicit deviation) will not be cited as a reason for not following the specification requirement.
- o) In case vendor submits revised drawing after approval of the corresponding drawing, any delay in approval of revised drawing shall be to vendor's account and shall not be used as a reason for extension in contract completion.



**4x111MW VISHNUGAD PIPALKOTI HEP
HVAC SYSTEM
GUARANTEED PERFORMANCE**

SPECIFICATION No: PE-TS-413-571-11000A-A001

SECTION : II

SUB-SECTION : 4

REV. NO. 00

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GUARANTEED PERFORMANCE

We hereby declare that:

- a) The Air Conditioning System shall maintain inside conditions as specified in the rooms.
- b) Rating and performance figures of various Air Conditioning equipment mentioned in the tender specification are minimum and are guaranteed.
- c) Any defect/ failure in our system shall be rectified/ replaced by us free of cost up to the period of 12 months from the date of taking over at site.



**4x111MW VISHNUGAD PIPALKOTI HEP
HVAC SYSTEM
PRE-BID CLARIFICATION SCHEDULE**

SPECIFICATION No: PE-TS-413-571-11000A-A001

SECTION : II

SUB-SECTION : 5

REV. NO. 00

DATE: JAN 2020

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PRE-BID CLARIFICATION SCHEDULE

S. NO.	SECTION/CLAUSE/PAGE NO.	STATEMENT OF THE REFERRED CLAUSE	CLARIFICATION REQUIRED

The bidder hereby clarifies that above mentioned are the only clarifications required on the technical specification for the subject package.

Signature: _____

Name: _____

Designation: _____

Company: _____

Date: _____

Company Seal



**4x111MW VISHNUGAD PIPALKOTI HEP
HVAC SYSTEM
NO DEVIATION CERTIFICATE**

SPECIFICATION No: PE-TS-413-571-11000A-A001

SECTION : II

SUB-SECTION : 6

REV: 00

DATE: JAN 2020

SHEET 1 OF 2

NO DEVIATION CERTIFICATE

ANNEXURE-II: DEVIATION SHEET (COST OF WITHDRAWAL)									
PROJECT:-									
PACKAGE:-									
TENDER ENQUIRY REFERENCE:-									
NAME OF VENDOR:-									
SL NO	VOLUME/SECTION	PAGE NO.	CLAUSE NO.	TECHNICAL SPECIFICATION/TENDER DOCUMENT	COMPLETE DESCRIPTION OF DEVIATION	COST OF WITHDRAWAL OF DEVIATION	REFERENCE OF PRICE SCHEDULE ON WHICH COST OF WITHDRAWAL OF DEVIATION IS APPLICABLE	NATURE OF COST OF WITHDRAWAL OF DEVIATION (POSITIVE/NEGATIVE)	REASON FOR QUOTING DEVIATION
TECHNICAL DEVIATIONS									
COMMERCIAL DEVIATIONS									
PARTICULARS OF BIDDERS/AUTHORISED REPRESENTATIVE									
NAME				DESIGNATIONS			SIGN & DATE		
NOTES:									
1. Cost of withdrawal of deviation will be applicable on the basic price (i.e. excluding taxes, duties & freight) only.									
2. All the bidders have to list out all their Technical & Commercial Deviations (if any) in detail in the above format.									
3. Any deviation not mentioned above and shown separately or found hidden in offer, will not be taken cognizance of.									
4. Bidder shall submit duly filled unpriced copy of above format indicating "quoted" in "cost of withdrawal of deviation" column of the schedule above along with their Techno-commercial offer, wherever applicable. In the absence of same, such deviation(s) shall not be considered and offer shall be considered in total compliance to NIT.									
5. Bidder shall furnish price copy of above format along with price bid.									
6. The final decision of acceptance/ rejection of the deviations quoted by the bidder shall be at discretion of the Purchaser.									
7. Bidders to note that any deviation (technical/commercial) not listed in above and asked after Part-I opening shall not be considered.									
8. For deviations w.r.t. Credit Period, Liquidated damages, Firm prices if a bidder chooses not to give any cost of withdrawal of deviation loading as per Annexure-VII, will apply. For any other deviation mentioned in un-priced copy of this format submitted with Part-I bid but not mentioned in priced copy of this format submitted with Priced bid, the cost of withdrawal of deviation shall be taken as NIL.									
9. Any deviation mentioned in priced copy of this format, but not mentioned in the un-priced copy, shall not be considered.									
10. All techno-commercial terms and conditions of NIT shall be deemed to have been accepted by the bidder, other than those listed in unpriced copy of this format.									
11. Cost of withdrawal is to be given separately for each deviation. In no event bidder should club cost of withdrawal of more than one deviation else cost of withdrawal of such deviations which have been clubbed together shall be considered as NIL.									
12. In case nature of cost of withdrawal (positive/negative) is not specified it shall be assumed as positive.									
13. In case of discrepancy in the nature of impact (positive/ negative), positive will be considered for evaluation and negative for ordering.									



**4x111MW VISHNUGAD PIPALKOTI HEP
HVAC SYSTEM
TENDER DRAWINGS**

SPECIFICATION No: PE-TS-413-571-11000A-A001

SECTION : II

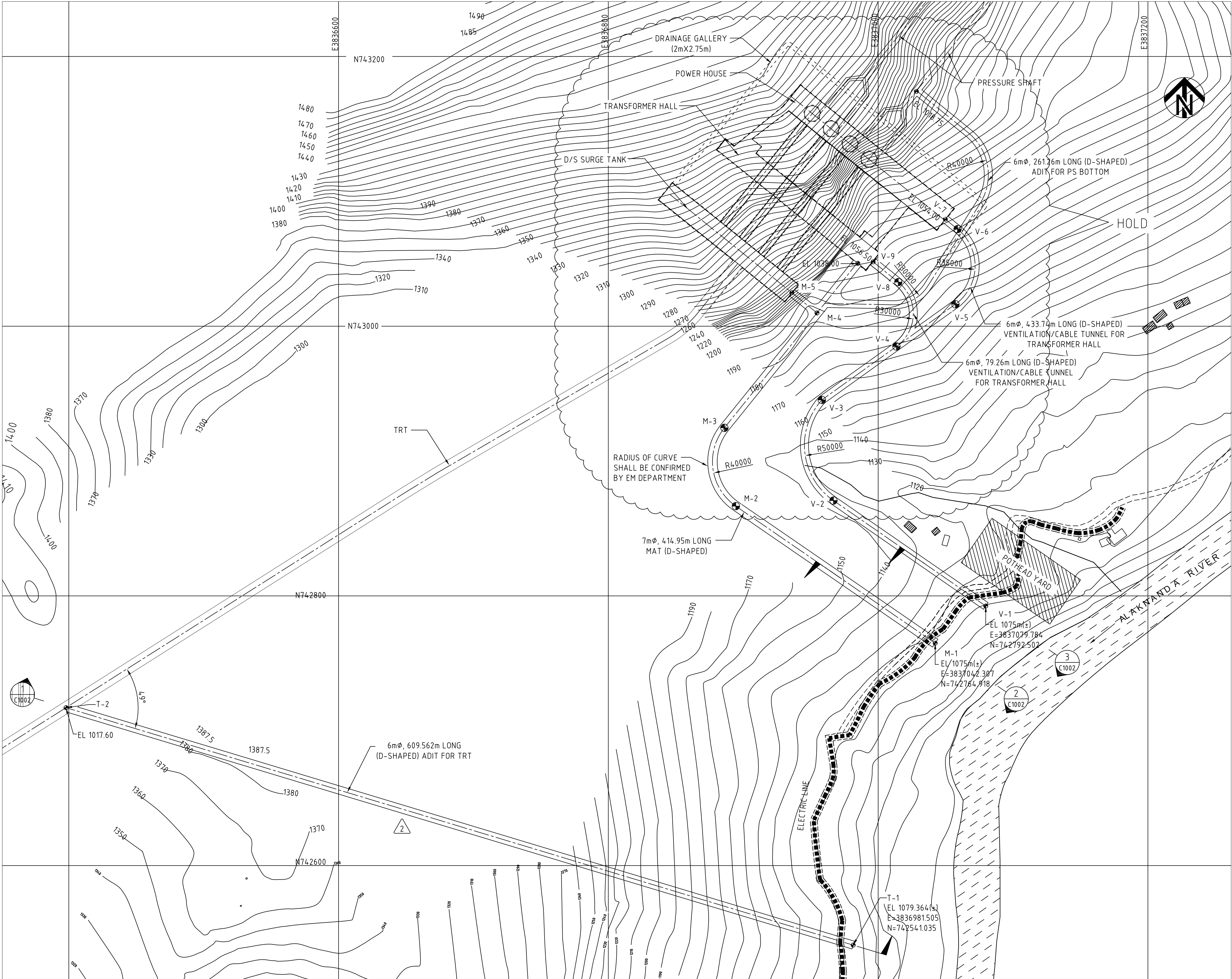
SUB-SECTION : 7

REV: 00

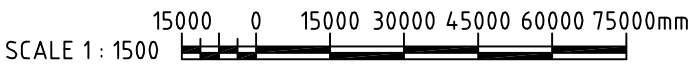
DATE: JAN 2020

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TENDER DRAWINGS



POWER HOUSE LAYOUT PLAN
SCALE (A1) 1:1500



- 2 REVISED AS PER THDC MAIL DATED 04.04.15 TRT ADIT MODIFIED
1 REVISED AS PER THDC MAIL DATE 21.07.14
0 ISSUED FOR CONSTRUCTION

PA 08.04.15
PA 11-08-2014
P. A. 11-07-14

Jul-14
B. S.
Jul-14
M.D.
P.A.
Jul-14
A.P.
Jul-14
M. K.
Jul-14

POWER HOUSE COMPLEX
MAT, VT & TRT ADIT
GENERAL ARRANGEMENT PLAN

CONSTRUCTION 5061149-C1001 2

TRT ADIT COORDINATES

POINT	EASTING	NORTHING
T-1	3836981.505	742541.035
T-2	3836397.926	742717.107

MAT COORDINATES

POINT	EASTING	NORTHING
M-1	3837042.307	742764.918
M-2	3836894.515	742866.564
M-3	3836886.038	742924.623
M-4	3836954.686	743009.796
M-5	3836936.0293	743024.833

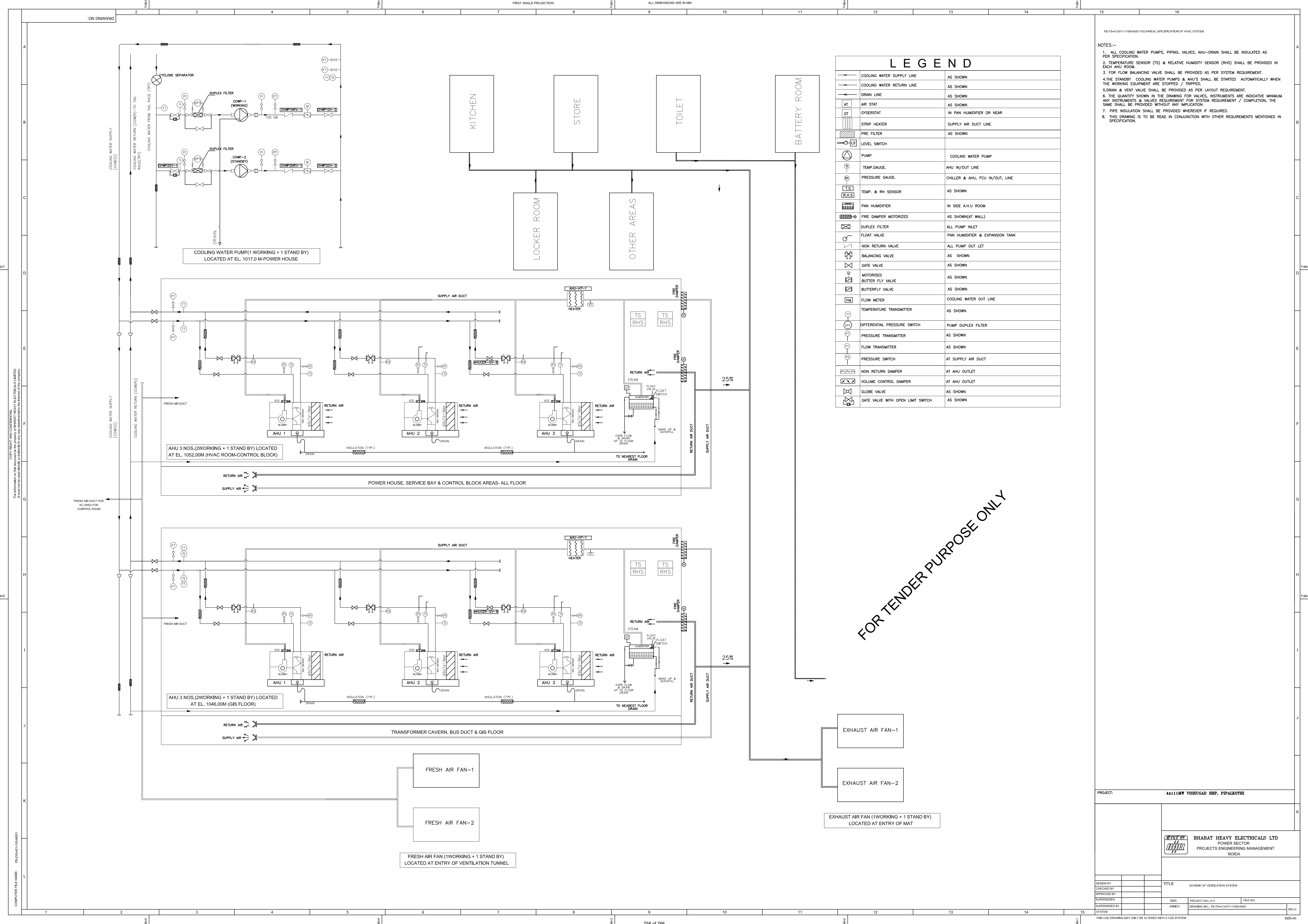
VENTILATION/CABLE TUNNEL COORDINATES

POINT	EASTING	NORTHING
V-1	3837079.790	742792.510
V-2	3836966.888	742870.690
V-3	3836958.249	742945.305
V-4	3837013.585	742984.957
V-5	3837057.316	743016.293
V-6	3837058.888	743071.998
V-7	3837049.0815	743079.307
V-8	3837014.937	743032.701
V-9	3836996.340	743047.690

1. INVERT LEVEL OF MAT, VT PORTAL HAS BEEN FIXED AT EL 1075.00, 1075.00 RESPECTIVELY AS PER INSTRUCTION BY SITE VIDE MAIL DATED 06.06.2014.
2. THE COORDINATES OF PORTALS AND NSL IN SECTION ARE AS COMMUNICATED BY SITE VIDE MAIL DATED 30.06.2014.
3. POWER HOUSE LOCATIONS IS TENTATIVE AND MAY CHANGE AS PER ONGOING SITE INVESTIGATIONS.

NOTES:-

1. ALL DIMENSIONS ARE IN MM, RD'S AND ELEVATIONS IN METER UNLESS OTHERWISE SPECIFIED.
2. DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THE DRAWINGS. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
3. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL RELEVANT DRAWINGS AND SPECIFICATION.
4. THIS DRAWING IS BASED ON THE CONTOURS & PORTAL LOCATION. DETAIL PROVIDED BY THDC. ALTHOUGH THE PORTAL LOCATION CAN BE SHIFTED OUTSIDE, IF LOCAL GEOLOGY IS SUITABLE. THE SAME SHALL BE INTIMATED TO DESIGN DEPARTMENT FOR REVIEW THROUGH SITE GEOLOGIST.

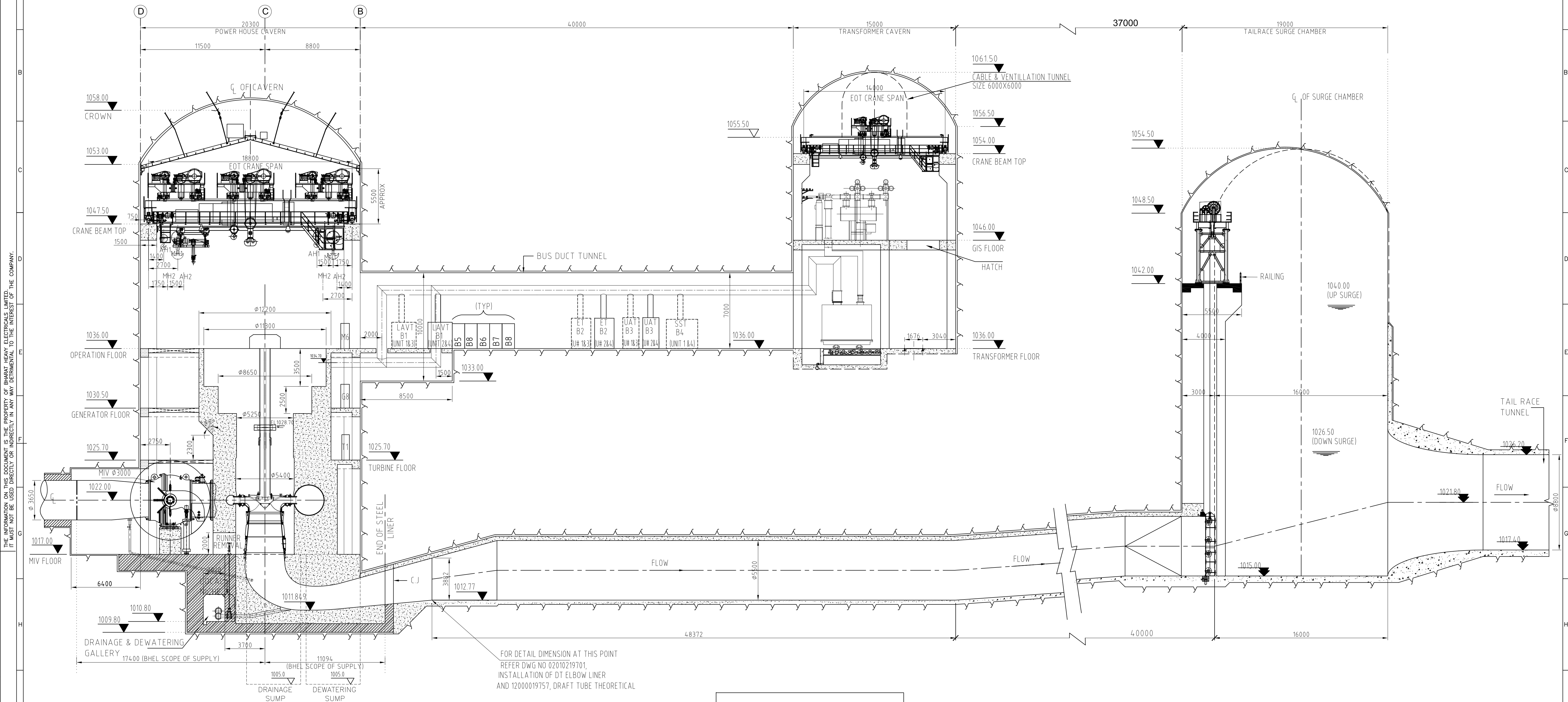


LEGEND		
	COOLING WATER SUPPLY LINE	AS SHOWN
	COOLING WATER RETURN LINE	AS SHOWN
	DRAIN LINE	AS SHOWN
	AIR STAT	AS SHOWN
	OYSESTAT	IN PAN HUMIDIFIER OR NEAR
	STRIP HEATER	SUPPLY AIR DUCT LINE
	PRE FILTER	AS SHOWN
	LEVEL SWITCH	
	PUMP	COOLING WATER PUMP
	TEMP.GAUGE.	AHU IN/OUT LINE
	PRESSURE GAUGE.	CHILLER & AHU, FCU IN/OUT, LINE
	TEMP. & RH SENSOR	AS SHOWN
	PAN HUMIDIFIER	IN SIDE A.H.U ROOM
	FIRE DAMPER MOTORIZED	AS SHOWN(AT WALL)
	DUPLEX FILTER	ALL PUMP INLET
	FLOAT VALVE	PAN HUMIDIFIER & EXPANSION TANK
	NON RETURN VALVE	ALL PUMP OUT LET
	BALANCING VALVE	AS SHOWN
	GATE VALVE	AS SHOWN
	MOTORISED BUTTER FLY VALVE	AS SHOWN
	BUTTERFLY VALVE	AS SHOWN
	FLOW METER	COOLING WATER OUT LINE
	TEMPERATURE TRANSMITTER	AS SHOWN
	DIFFERENTIAL PRESSURE SWITCH	PUMP DUPLEX FILTER
	PRESSURE TRANSMITTER	AS SHOWN
	FLOW TRANSMITTER	AS SHOWN
	PRESSURE SWITCH	AT SUPPLY AIR DUCT
	NON RETURN DAMPER	AT AHU OUTLET
	VOLUME CONTROL DAMPER	AT AHU OUTLET
	GLOBE VALVE	AS SHOWN
	GATE VALVE WITH OPEN LIMIT SWITCH	AS SHOWN

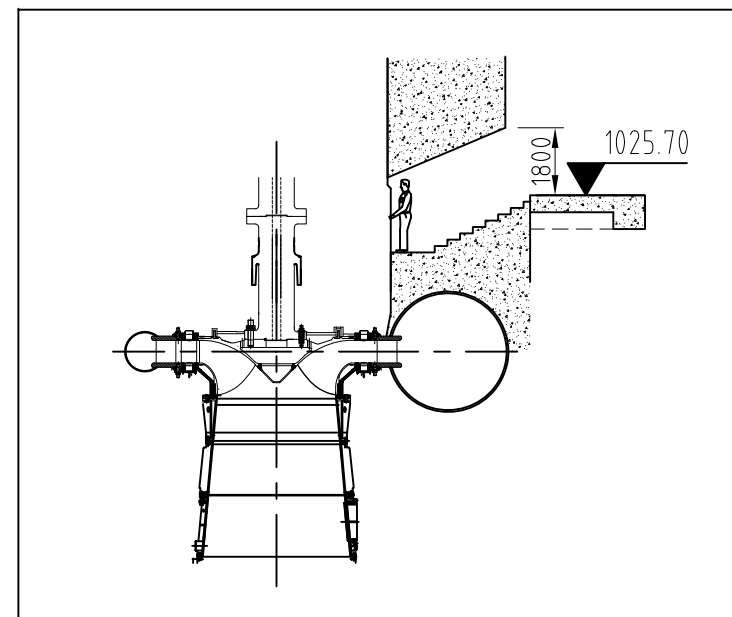
- NOTES:-
1. ALL COOLING WATER PUMPS, PIPING, VALVES, AHU-DRAIN SHALL BE INSULATED AS PER SPECIFICATION.
 2. TEMPERATURE SENSOR (TS) & RELATIVE HUMIDITY SENSOR (RHS) SHALL BE PROVIDED IN EACH AHU ROOM.
 3. FOR FLOW BALANCING VALVE SHALL BE PROVIDED AS PER SYSTEM REQUIREMENT.
 - 4.THE STANDBY COOLING WATER PUMPS & AHU'S SHALL BE STARTED AUTOMATICALLY WHEN THE WORKING EQUIPMENT ARE STOPPED / TRIPPED.
 - 5.DRAIN & VENT VALVE SHALL BE PROVIDED AS PER LAYOUT REQUIREMENT.
 6. THE QUANTITY SHOWN IN THE DRAWING FOR VALVES, INSTRUMENTS ARE INDICATIVE MINIMUM. ANY INSTRUMENTS & VALVES REQUIREMENT FOR SYSTEM REQUIREMENT / COMPLETION, THE SAME SHALL BE PROVIDED WITHOUT ANY IMPLICATION.
 7. PIPE INSULATION SHALL BE PROVIDED WHEREVER IF REQUIRED.
 8. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH OTHER REQUIREMENTS MENTIONED IN SPECIFICATION.

FOR TENDER PURPOSE ONLY

PROJECT:		4x111MW VISHUGAD HEP, PIPALKOTHI	
DESIGN BY			
CHECKED BY			
APPROVED BY			
SUPERSEDED BY			
SYSTEM		TITLE	
SIZE: PROJECT NO.:413		BHARAT HEAVY ELECTRICALS LTD POWER SECTOR PROJECTS ENGINEERING MANAGEMENT NOIDA	
ANNEK: DRAWING NO.: PE-TS413471-1100A001		FILE NO:	
REV:0		THIS CAD DRAWING MAY ONLY BE ALTERED WITH A CAD SYSTEM	



CROSS SECTION



SECTION A-A (REF DWG 120000197153)

CUSTOMER :

टी.एच.डी. सी. इन्डिया लि.
T H D C INDIA Ltd.

CONSULTANT :

PROJECT : VISHNUGAD PIPALKOTI HEP 4x111MW

BHARAT HEAVY ELECTRICALS LTD.
BHOPAL

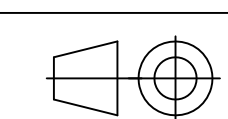
DEPT. CODE	NAME	SIGN	DATE	NO. OF VAR
DRN	B.SINGH		30.04.2015	
HPE	CKD	B.SINGH	30.04.2015	
415	APPD	RS	30.04.2015	

TITLE POWER HOUSE STATION LAYOUT
CROSS SECTION

SUB-VENDOR NAME

WEIGHT
(kg)

SCALE 1:125

THDC DRG. NO.
THDC/VPHEP/C/PH/02BHEL DRG. NO.
12000019751

SHEET NO. 01 NO. OF SHT. 01