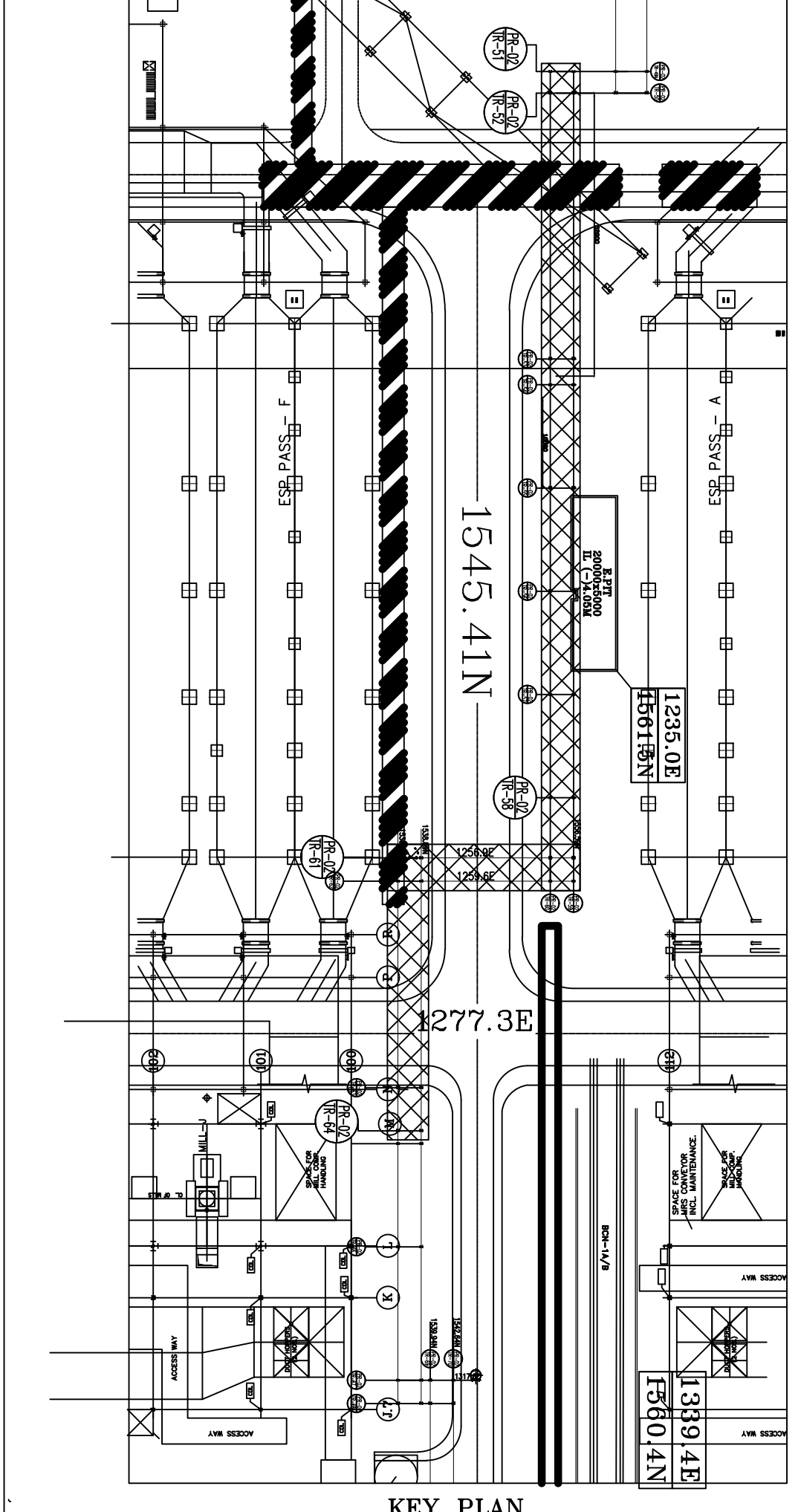


NORTH



KEY PLAN

NOTES:-

- 1. ALL DIMENSIONS ARE IN MILLIMETERS, CO-ORDINATES & LEVELS IN METERS.
- 2. ALL ELEVATIONS ARE REFERRED TO FINISHED FLOOR LEVEL OF POWER HOUSE BUILDING AT EL(+0.00) WHICH CORRESPONDS TO RL (+375.50M) ABOVE MSL.
- 3. UNLESS NOTED OTHERWISE, END CONNECTION OF BEAMS SHALL BE DESIGNED FOR A MIN OF 60% OF BEAM SHEAR CAPACITY OR FORCES INDICATED ON THE DWG. IN CASE OF BEAM WITH ADDITIONAL FLANGE PLATES THIS PERCENTAGE SHALL BE 80%.
- 4. ALL MC (MOMENT CONNECTION) TO BE DESIGNED FOR FULL CAPACITY.
- 5. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH CONTRACT TERMS AND CONDITIONS, TECHNICAL SPECIFICATIONS AND SCHEDULE OF ITEMS.
- 6. FOR OTHER NOTES AND STD. DETAILS REF. DRG. PE-DG-434-600-C002 (NTPC DRG NO. 9585-001-315-PVC-C-0089A).
- 7. CONNECTION DETAILS SHOWN ARE INDICATIVE ONLY. SIZE & THICKNESS OF GUSSETS, NO. & DIA. OF CONNECTION BOLTS ETC. SHALL BE DESIGNED & DETAILED BY FABRICATOR AND SHALL BE SHOWN IN CORRESPONDING FABRICATION DRG.
- 8. COLUMN BASE SURFACE & BOTTOM FACE OF VERTICAL STIFFENERS SHALL BE PROPERLY MACHINED BEFORE WELDING TO BASE PLATE.
- 9. LOCATION OF COLUMN SPLICES TO BE DECIDED BY MANUFACTURING UNIT BASED ON AVAILABILITY OF PLATE SIZES AND TRANSPORTATION PLAN TO SITE. SPLICE DETAILS MAY BE REFERRED FROM GENERAL NOTES DRG. NO. - PE-DG-434-600-C002 (NTPC DRG NO. 9585-001-315-PVC-C-0089A).

ENGINEERING REFERENCE DRAWING:

- 1. PE-DG-434-100-M001 - PLOT PLAN (9585-001-999-PVC-F-001)
- 2. PE-DG-434-100-M002 - MAIN EQUIPMENT LAYOUT PLAN AT 0.00M (9585-001-999-PVC-F-001)
- 3. PE-DG-434-100-M0543 - YARD PIPING & TRESTLE LAYOUT 2 (PR-02 AREA NEAR BOILER) (9585-001-999-PVC-F-0108) ESP UNIT-2, GYPSUM AND LIMESTONE BUILDING

CONSTRUCTION REFERENCE DRAWING:

- 1. PE-DG-434-675-C013 - PIPE RACK PR-2/ BOP AREA - GA & RC DETAILS (9585-001-315-PVC-C-1462)

LEGEND:

- 1. TOS = TOP OF STEEL
- 2. BOS = BOTTOM OF STEEL
- 3. F/S = FAR SIDE (WHEN VIEWED FROM ROW A TO B)
- 4. N/S = NEAR SIDE (WHEN VIEWED FROM ROW A TO B)
- 5. UNO = UNLESS NOTED OTHERWISE
- 6. TYP. = TYPICAL
- 7. B/S = BOTH SIDE
- 8. THK. = THICK
- 9. PLT. = PLATE
- 10. MC = MOMENT CONNECTION

SPECIAL NOTE
DRAWINGS / DOCUMENTS ARE BEING SUBMITTED FOR INFORMATION. BHEL HEREBY CONFIRMS COMPLIANCE TO ALL THE SPECIFIED REQUIREMENTS OF THE CONTRACT SPECIFICATION WITHIN THE SCOPE OF THE CONTRACT. IN CASE OF ANY DISCREPANCY BETWEEN THE DRAWING AND THE CONTRACT SPECIFICATION, THE CONTRACT SPECIFICATION SHALL PREVAIL. THE TENURE OF THE CONTRACT, IT IS OBSERVED, PROVIDED THAT THE DATA / INFORMATION IN THE RELEASED DRAWING / DOCUMENT IS NOT ADVERSE TO THE CONTRACT SPECIFICATION. BHEL/ITS VENDORS WILL MODIFY / RECTIFY / REPLACE THE SAME TO MEET THE SPECIFICATION WITHIN THE COMMERCIAL IMPLICATION OR ANY TIME EXTENSION TO FURNISH NTPC IN THIS REGARD.

BILL OF MATERIAL	
(Grade of Steel E250)	
S. NO.	ITEMS
1.	ISMC 75 BOX 3.9
2.	ISMC 100 BOX 10.9
3.	ISMC 150 BOX 7.5
4.	ISMC 200 BOX 5.5
5.	ISMC 250 BOX 5.4
6.	ISMC 300 BOX 11.7
7.	ISMC 400 BOX 21.3
8.	ISMB 200 3.4
9.	ISMB 250 26.1
10.	ISMC 150 4.8
11.	ISMC 200 0.44
12.	ISMC 250 0.6
13.	2 ISA 60X6X6 5.7
14.	2 ISA 60X6X6 4.3
15.	2 ISA 75X75X8 2.0
16.	2 ISA 90X90X10 11.8
17.	11 ISA 90X90X8 9.9
18.	1 ISA 100X100X10 2.5
19.	2 ISA 110X110X10 0.3
20.	2 ISA 110X110X12 0.6
21.	16 THK. PLT. 0.45
22.	25 THK. PLT. 0.20
23.	25 THK. PLT. 0.30
TOTAL 146.51	

BHEL-PROJECT ENGINEERING MANAGEMENT(COVL)	
THIS DRAWING MARKED (✓) IS RELEASED FOR	
<input checked="" type="checkbox"/> COMMENTS/REVISION	<input type="checkbox"/> FABRICATION
<input type="checkbox"/> PLANNING	<input type="checkbox"/> INFORMATION
STAMP ALL PREVIOUS REVISION AS SUPERSEDED	
ISSUED BY	
NAME	ABHAY KUMAR
SIGNATURE	
DATE	15/07/2020

BHEL-PROJECT ENGINEERING MANAGEMENT(COVL)	
THIS DRAWING MARKED (✓) IS RELEASED FOR	
<input checked="" type="checkbox"/> COMMENTS/REVISION	<input type="checkbox"/> FABRICATION
<input type="checkbox"/> PLANNING/INFORMATION	<input type="checkbox"/> CONSTRUCTION
STAMP ALL PREVIOUS REVISION AS SUPERSEDED	
ISSUED BY	
NAME	ABHAY KUMAR
SIGNATURE	
DATE	27/07/2020

NTPC LIMITED	
3x800MW PATRATU SUPER THERMAL POWER PROJECT	
JOB NO. 434	STATUS
DISTRIBUTION	APPROVED
Bharat Heavy Electricals Ltd POWER SECTOR PROJECT ENGINEERING MANAGEMENT Noida	
DEPT. NAME SIGN DATE	
CODE	27/07/2020
CHD	27/07/2020
APPROV	27/07/2020
TITLE	
PIPE RACK PR-2/BOP AREA STRUCTURAL ELEVATION & DETAILS	
DEPT. SCALE 1:100	DRAWING NO.
SYMBOL	PE-DG-434-675-C015
SHEET 1 OF 2	REV. 10
SIZE-A1	

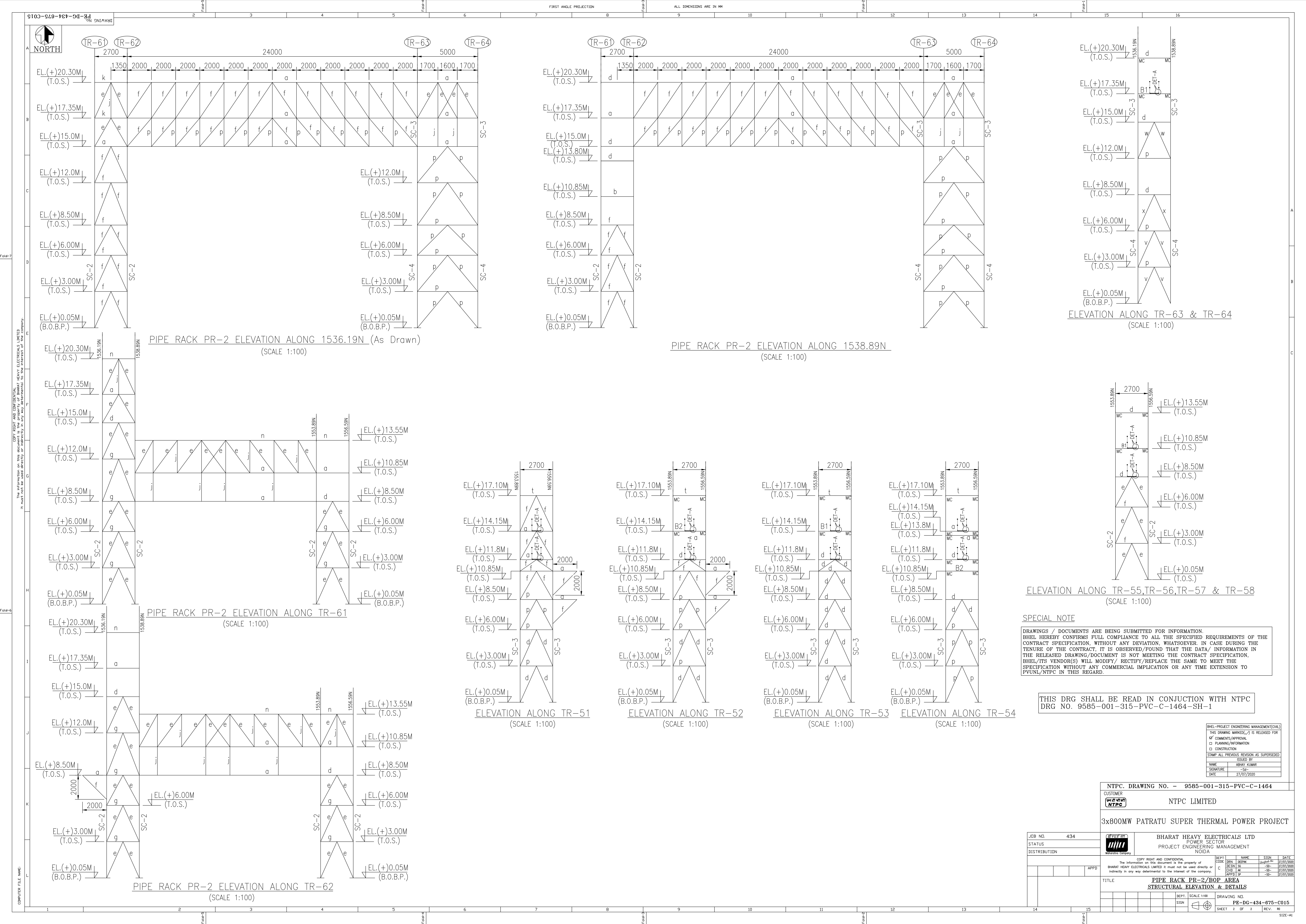
COLUMN SCHEDULE	
(Grade of Steel E250)	
S. NO.	ITEMS
SC1	ISMC 250 BOX
SC2	ISMC 300 BOX
SC3	ISMC 400 BOX
SC4	ISMC 400 BOX

MEMBER SCHEDULE			
(Grade of Steel E250)			
S NO.	MARK	MEMBERS SIZE	
1.	a	ISMB 250	I
2.	b	ISMC 250 BOX	□
3.	c	ISMC 150	[
4.	d	ISMC 150 BOX	□
5.	e	2 ISA 90X90X10	T

THIS DRG SHALL BE READ IN CONJUNCTION WITH NTPC DRG NO. 9585-001-315-PVC-C-1464-SH-2

SL. NO.	MEMBER	DEPTH (D)	FLG. WIDTH X THK (W X T)	BEAM SECTION
1	B1	250	180 X 25	16
2	B2	250	250 X 25	20

SL. NO.	MEMBER	DEPTH (D)	FLG. WIDTH X THK (W X T)	BEAM SECTION
1	B1	250	180 X 25	16
2	B2	250	250 X 25	20



ELEVATION ALONG TR-63 & TR-64
(SCALE 1:100)

PIPE RACK PR-2 ELEVATION ALONG 1538.89N
(SCALE 1:100)

PIPE RACK PR-2 ELEVATION ALONG 1536.19N (As Drawn)
(SCALE 1:100)

ELEVATION ALONG TR-55,TR-56,TR-57 & TR-58
(SCALE 1:100)

SPECIAL NOTE

DRAWINGS / DOCUMENTS ARE BEING SUBMITTED FOR INFORMATION. BHEL HEREBY CONFIRMS FULL COMPLIANCE TO ALL THE SPECIFIED REQUIREMENTS OF THE CONTRACT SPECIFICATION, WITHOUT ANY DEVIATION, WHATSOEVER, IN CASE DURING THE TENURE OF THE CONTRACT, IT IS OBSERVED/FOUND THAT THE DATA/ INFORMATION IN THE RELEASED DRAWING/DOCUMENT IS NOT MEETING THE CONTRACT SPECIFICATION, BHEL/ITS VENDOR(S) WILL MODIFY/ RECTIFY/REPLACE THE SAME TO MEET THE SPECIFICATION WITHOUT ANY COMMERCIAL IMPLICATION OR ANY TIME EXTENSION TO PVUNL/NTPC IN THIS REGARD.

THIS DRG SHALL BE READ IN CONJUNCTION WITH NTPC DRG NO. 9585-001-315-PVC-C-1464-SH-1

BHEL-PROJECT ENGINEERING MANAGEMENT(OVL)			
THIS DRAWING MARKED(✓) IS RELEASED FOR			
OF COMMENTS/APPROVAL			
C) PLANNING/INFORMATION			
D) CONSTRUCTION			
STAMP ALL PREVIOUS REVISION AS SUPERSEDED			
ISSUED BY			
NAME			
SIGNATURE			
DATE			

NTPC. DRAWING NO. - 9585-001-315-PVC-C-1464

CUSTOMER
NTPC LIMITED

3x800MW PATRATU SUPER THERMAL POWER PROJECT

JOB NO. 434
STATUS
DISTRIBUTION



BHARAT HEAVY ELECTRICALS LTD
POWER SECTOR
PROJECT ENGINEERING MANAGEMENT
NOIDA

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indirectly in any way detrimental to the interest of the company.			
DEPT	NAME	SIGN	DATE
CODE	DEPT	NAME	DATE
CHD	AK	-SS-	27/07/2020
APPT	SP	-SS-	27/07/2020

TITLE
PIPE RACK PR-2/BOP AREA
STRUCTURAL ELEVATION & DETAILS

DEPT.	SCALE 1:100	DRAWING NO.
SYON		PE-DG-434-875-C015
SHEET	2 OF 2	REV. NO.

SIZE-A1