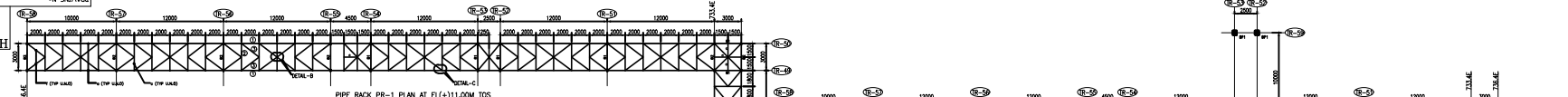
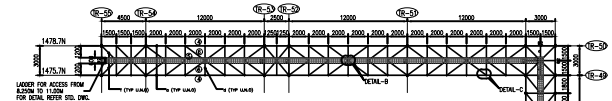
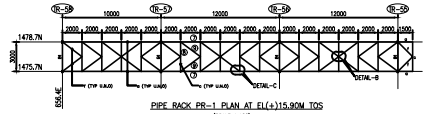
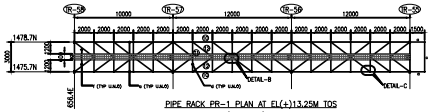
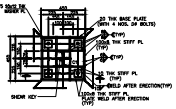
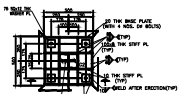


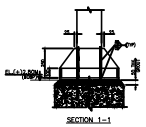


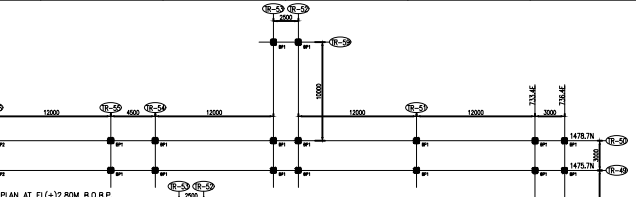


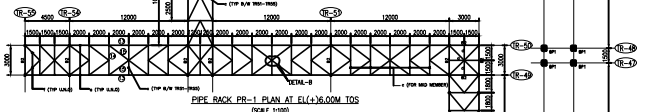


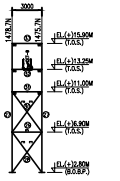


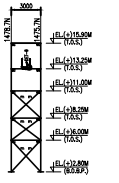


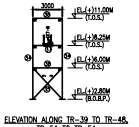


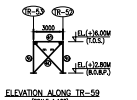


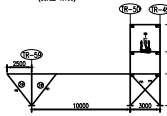


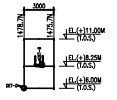


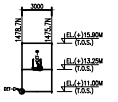


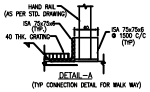


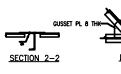


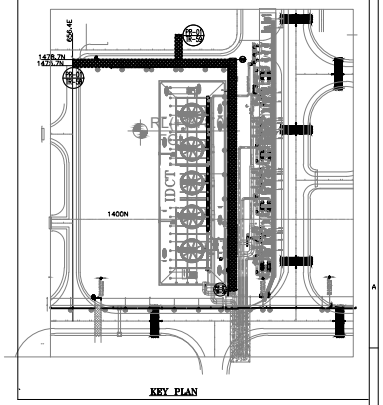












NOTES:–

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 (+)375.500M. 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-PGM-F-001)
2. PE-DG-434-100-M002 – MAIN EQUIPMENT LAYOUT PLAN AT 0.00M (9585-001-999-PGM-F-001)
3. PE-DG-434-100-M0543 – YARD PIPING & TRESTLE LAYOUT 2 (PR-02 AREA NEAR BOILER, ESP UNIT-2 ,DYPSUM AND LIMESTONE BUILDING (9585-001-999-PGM-F-0108

CONSTRUCTION REFERENCE DRAWING:

1. PE-DG-434-675-C010 – PIPE RACK PR-1/ BOP AREA – GA & RC DETAILS (9585-001-315-PVC-C-1459)

LEGEND:

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

ERECTION SEQUENCE:

1. SET-1 : MEMBER MARKED ① TO ⑩ IN RE SHOP WELDED & COMPLETE ASSEMBLY SHALL BE FIELD BOLTED WITH COLUMN ON GRID LOCATION.
2. SET-2 : WALKWAY SUPPORTING MEMBER MARKED IN RESPECTIVE LEVEL PLAN SHALL BE FIELD BOLTED WITH SET-1.
3. SET-3 : WALKWAY MARKED ① TO ⑤ SHALL BE SHOP WELDED & COMPLETE ASSEMBLY SHALL BE FILED BOLTED WITH SET-1 AT SITE.

SPECIAL NOTE

DRAWINGS / DOCUMENTS ARE BEING SUBMITTED FOR INFORMATION. THE BHEL MUNDRA CONSORTIUM FULL COMPLIANCE TO ALL THE SPECIFIED REQUIREMENTS OF THIS CONTRACT SPECIFICATION, WITHOUT ANY DEVIATION, EXCEPTION, OR NOTATION. THE CONSORTIUM, WITHOUT LIMITING THE GENERALITY OF THE FOREGOING, HEREBY REPRESENTS THAT THE DRAWINGS / DOCUMENTS SUBMITTED BY THE CONSORTIUM INCORPORATE ALL DETAILS, DATA AND INFORMATION NECESSARY TO ENABLE THE CONSORTIUM TO PERFORM THE WORKS IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS. IN THE EVENT OF ANY DISCREPANCY / OMISSION / AMBIGUITY, THE CONSORTIUM SHALL, BY NOTICE IN WRITING, SEEK CLARIFICATION FROM THE EMPLOYER / ENGINEER AND THE CONSORTIUM SHALL NOT MAKE ANY ASSUMPTIONS IN THIS REGARD. ANY DEVIATION, EXCEPTION OR NOTATION IN THE DRAWINGS / DOCUMENTS SUBMITTED BY THE CONSORTIUM SHALL NOT RELIEVE THE CONSORTIUM FROM FULL COMPLIANCE TO THE CONTRACT SPECIFICATIONS. IN SUCH EVENT, THE CONSORTIUM SHALL, AT ITS OWN EXPENSE, MODIFY / RECTIFY / REPLACE THE WORKS SO AS TO ENSURE FULL COMPLIANCE TO THE CONTRACT SPECIFICATIONS, WITHOUT ANY ADDITIONAL IMPLICATION OR ANY TIME EXTENSION TO PTUPH/NTPC OR THEIR AGENCIES.

MEMBER SCHEDULE
(Grade of Steel E250)

SL NO.	MARK	MEMBERS SIZE	
1.	a	ISMB 350	
2.	b	ISMB 300	
3.	c	ISMC 150	
4.	d	ISMC 100	
5.	e	ISMC 75 (MOD)	
6.	f	ISA 6060X6	
7.	g	ISA 7575X8	
8.	h	ISA 6565X6	
9.	k	ISA 9090X8	
10.	m	ISMC 75(MOD)	
11.	n	ISMC 150(MOD)	
12.	p	ISMC 100 (MOD)	

COLUMN & BEAM SCHEDULE
(Grade of Steel E250)

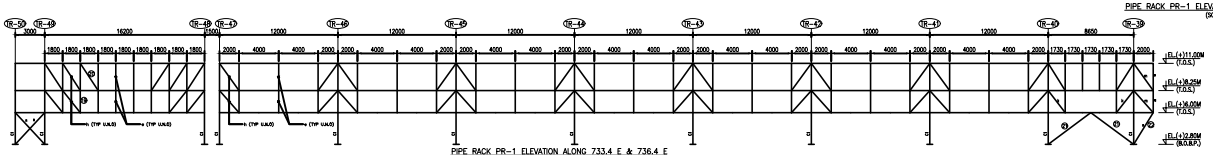
C1	ISMC 150(MOD)
C2	ISMC 300(MOD)
B1	ISMC 100(MOD)
B2	ISMC 150(MOD)

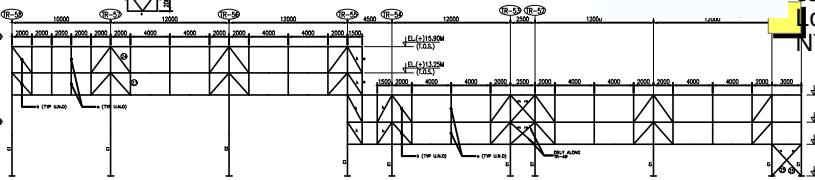
TOTAL TONNAGE– 85(MT) (APPROX.)

BHEL-PROJECT ENGINEERING MANAGEMENT(CIVIL)
THIS DRAWING MARKED (✓) IS RELEASED FOR
☐ COMMENTS/APPROVAL ☐ FABRICATION
☐ PLANNING ☐ INFORMATION
☐ CONSTRUCTION
STAMP ALL PREVIOUS REVISION AS SUPERSEDED
ISSUED BY
NAME: ABHAY KUMAR
SIGNATURE: For
DATE: 29/06/2020

Signature Not Verified
Digitally signed by B. Prasad
Date: 2020.06.07 21:41:18 IST
Reason: CAT catrel
Location: NTPCEOC

(B. Prasad)





NTPC. DRAWING NO. – 9585-001-315-PVC-C-1461

CUSTOMER: NTPC LIMITED

3x800MW PATRATU SUPER THERMAL POWER PROJECT

JOB NO. 434
STATUS
DISTRIBUTION

BHARAT HEAVY ELECTRICALS LTD
POWER SECTOR
PROJECT ENGINEERING MANAGEMENT
NOIDA

REMARKS	ALTD	CHD	APPD

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DEPT.	NAME	SIGN	DATE
DSN	DEEPAK		03/06/2020
DLCN	SRC		03/06/2020
CHD	ABHAY		03/06/2020
APPD	SP		03/06/2020

TITLE: PIPE RACK PR-1/ BOP AREA(TR-39 TO TR-59)
STRUCTURAL LAYOUT & DETAILS

DEPT. | SCALE 1:100 | DRAWING NO. PE-DG-434-675-C012
SIGN | SHEET 1 OF 1 | REV. R0

SIZE-A2