

Ref: BHE/PW/PUR/NTPRT-750MT-CRH/2172/Corg-01

Dt: 03/09/2019

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To,

ALL BIDDERS

**Sub: Corrigendum-01:** Clarification & Drawings w.r.t. Technical Conditions of Contract (TCC) and extension of due date of tender submission.

**Job: Tender Specification No: BHE/PW/PUR/NTPRT-750MT-CRH/2172** for Providing Services of suitable Heavy Lift High Reach (HLHR) Crawler Crane of lifting capacity 750 MT & above for construction work at 3x800 MW PVUNL Patratu, Post –PTPS Ramgarh, Jharkhand.

**Ref:-**

- 1) Tender Specification No: **BHE/PW/PUR/NTPRT-750MT-CRH/2172**

Bidders to kindly take note of the following:

## **AA) Extension of due date of Tender submission**

Bid submission due date has been extended up to **10/09/2019; 1500hrs.**

## **BB) Clarification w.r.t. Technical Conditions of Contract (TCC)**

1. **Query:** Plot plan and Sequence of Equipment erection are required to ensure the space availability and equipment selection. Also, to elaborate with final placing position, particularly for silencer.

**BHEL Reply:** Boiler layout is herewith enclosed. In addition, area available for crane marching in boiler is also highlighted in red and enclosed herewith.

**Erection Sequence:** After the erection of each Ceiling girder, welded beams will be erected in between the erected ceiling girders at an elevation of 107 m. The welded beam will be erected by lifting it over the erected ceiling girder at an elevation of 110 m and its length will be along the crane operating radius. Silencer is planned to be erected after the erection of 4th girder.

**Silencer:** A reference schematic CAD drawing is attached for silencer elevation. The exact drawings for silencer is not available at this moment. 02 nos. reference drawings for Silencer arrangement has been attached for reference purpose only. The actual drawings may vary.

2. **Query:** All work related to ground conditions and soil preparation with proper Ground bearing pressure as per requirement will be in BHEL scope. Ground bearing capacity should be minimum of 30 tons/m<sup>2</sup>.

**BHEL Reply:** For further details and assessment, bidder may visit the site to assess the project site condition.

3. **Query:** As per TCC / Chapter – III: Facilities in the Scope of Contractor/BHEL, Clause no. 3.7 SCOPE FOR MOBILISATION & DEMOBILISATION which states → *“Contractor shall arrange suitable capacity assist cranes and Tools & Tackles ..... manpower and consumables at his own cost.”*

Wrt this clause, rate of charges levied by BHEL is required, in case of using BHEL’s assist crane for unloading, assembly, Dismantling / loading of HLHR crane during mobilization & de-mobilization of HLHR crane. Required cranes/ T&Ps are 250 MT crawler (or) Tyre mounted crane (1 No.), 100 MT Tyre mounted crane (1 No.), 14 MT Hydra/forklift (1 No.) and Man lift (1 No). Duration - Approx. 8 to 10 days during mobilization & Approx. 8 to 10 days during Demobilization.

**BHEL Reply:** Hiring Charges for assist cranes:

1. Kobelco 2500 (250MT) – Rs. 16810 per hour approx.
2. Fushun QUY 80 (80MT) – Rs. 6010 per hour approx.
3. BHEL Operator charges – Approx. Rs. 7200 per day for 8 hours.

**Note:** Charges are excluding Fuel and consumables. Also please note that the above rates indicated here are tentative and may vary. The details are provided just for estimation purpose of bidders and doesn’t form part of contract.

4. **Query:** As per TCC / Chapter – III: Chapter – VI: Time Schedule, Clause no. 6.1 TIME SCHEDULE & MOBILIZATION which states → *“The deployment schedule of the crane indicated ..... within Sixty (60) days from the written intimation for deployment of crane.”*

a) Wrt this clause, Land area with required compaction for unloading, assembly of HLHR crane to be provided immediately by BHEL on start of receipt of crane material at site.

In case of delay in providing the land area by BHEL-

1. The delay days will not be considered as period mentioned in 6.1.1.
2. If the delay is more than 48 hours, the standard rental will commence.

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b) Also, please provide the Land area available for assembly, dismantling of our crane.

**BHEL Reply:**

a) Tender condition shall prevail.

a) Land area will be provided as & when required.

5. **Query:** To provide the length of the slings which will be provided by BHEL to lift the Girders & Silencer.

**BHEL Reply:** Sling of length 16 metre (02 nos.) shall be used for lifting of Girder.

6. **Query:** As per TCC / Chapter – II, Clause 2.1, requirement states → Heavy Lift High Reach (HLHR) Crawler Crane of lifting capacity 750 MT & above.

Wrt this clause, to clarify if less than 750MT crane can be provided which can lift the critical load.

**BHEL Reply:** Tender condition shall prevail.

7. **Query:** As per TCC / Chapter – II, Clause 2.2, requirement states → Suitable jib of required length to meet the erection of Welded beams, Silencer and other top roof structures shall be provided.

a) Wrt this clause, to clarify if configuration with only main boom can be provided which can lift welded beams and silencer.

b) Also, to clarify the maximum percentage lifting allowed.

**BHEL Reply:.**

a) Tender condition shall prevail.

b) Crane load chart shall be used for determining the capacity of crane.

=====  
All other Terms and conditions of the Tender Specification shall remain unaltered unless expressly amended by BHEL in writing.

Bidders are requested to submit as a part of their offer, a copy of this corrigendum duly Digitally countersigned by the authorized signatory as a token of Bidder's unqualified acceptance of this corrigendum.



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**BIDDERS MAY PLEASE NOTE THAT SUBJECT TENDER IS E-TENDER AND THE OFFER IS TO BE SUBMITTED ONLY IN E-PROCUREMENT PORTAL → <https://bhel.abcprocure.com>**

**BIDDERS WHO HAVE ALREADY SUBMITTED THEIR OFFERS PRIOR TO ISSUANCE OF THIS CORRIGENDUM IN E-TENDER PORTAL ARE REQUIRED TO RE-SUBMIT THEIR OFFER AFTER TAKING COGNIZANCE OF THIS CORRIGENDUM.**

Thanking you,  
Yours faithfully,

Sr. Engineer (Purchase)

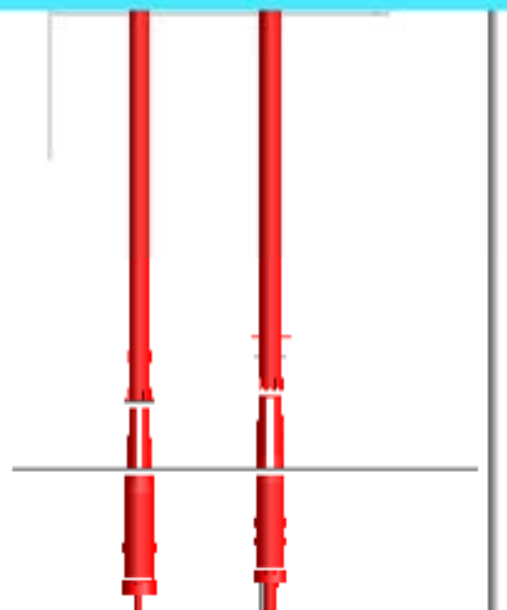
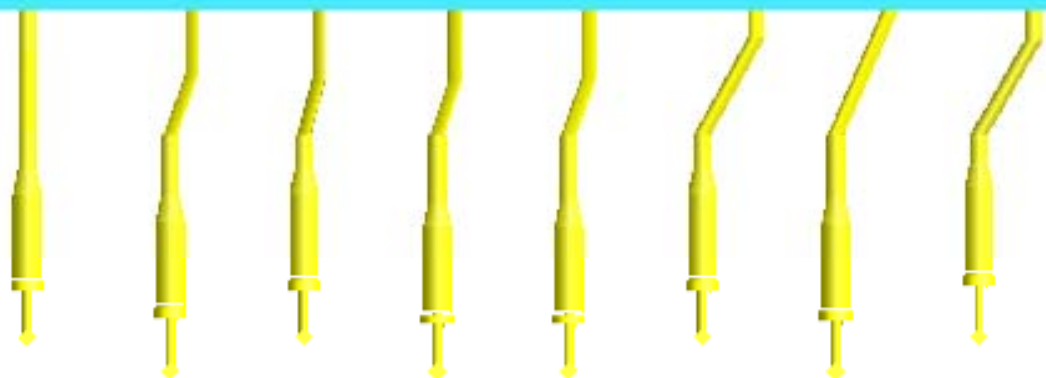
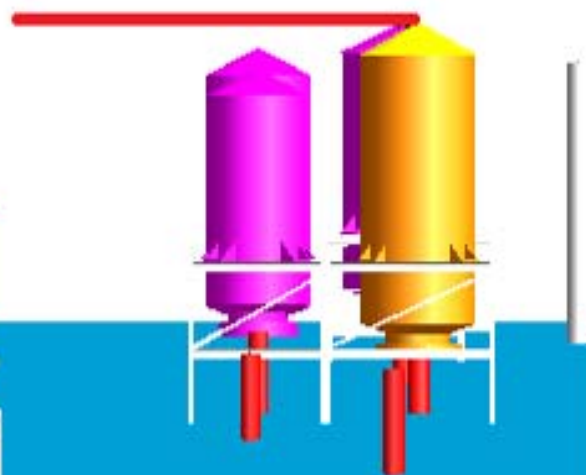
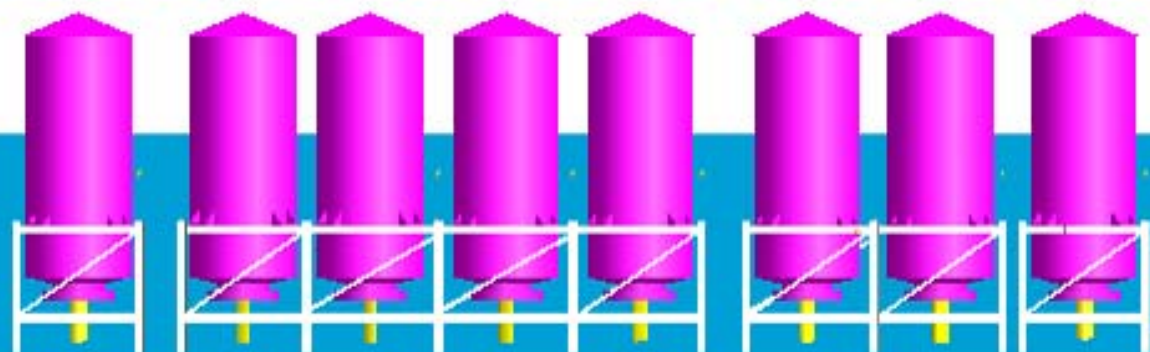
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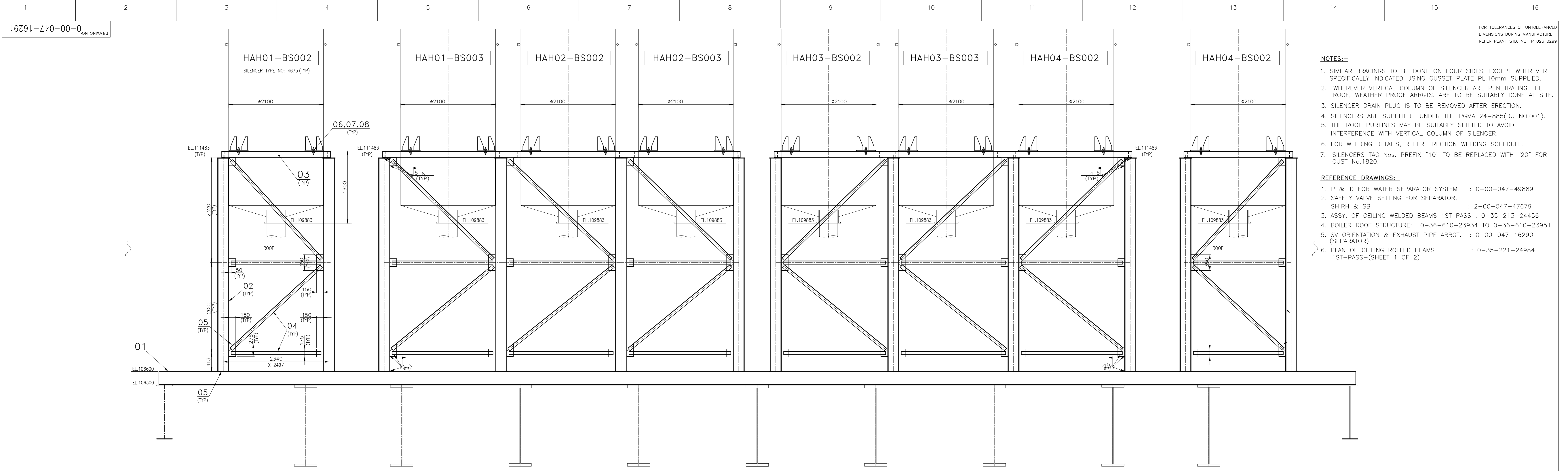
- 1) Detailed Boiler layout.
- 2) Schematic Drawing Boiler layout with area available for crane marching in boiler.
- 3) Schematic CAD drawing for silencer elevation.
- 4) Silencer arrangement for Separator SV
- 5) Silencer arrangement for others





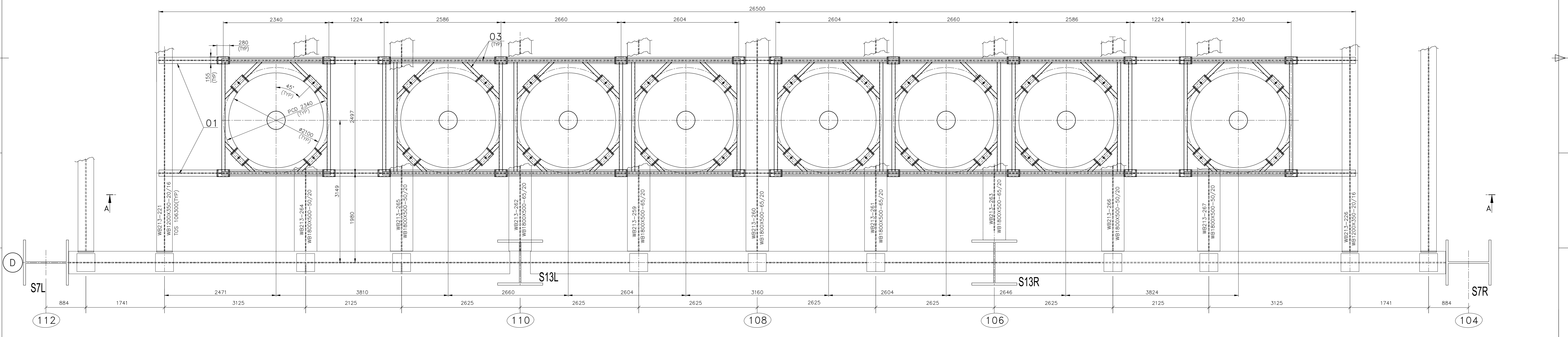
EL. +121500





- NOTES:-**
- SIMILAR BRACINGS TO BE DONE ON FOUR SIDES, EXCEPT WHEREVER SPECIFICALLY INDICATED USING GUSSET PLATE PL.10mm SUPPLIED.
  - WHEREVER VERTICAL COLUMN OF SILENCER ARE PENETRATING THE ROOF, WEATHER PROOF ARRGTs. ARE TO BE SUITABLY DONE AT SITE.
  - SILENCER DRAIN PLUG IS TO BE REMOVED AFTER ERECTION.
  - SILENCERS ARE SUPPLIED UNDER THE PGMA 24-885(DU NO.001).
  - THE ROOF PURLINES MAY BE SUITABLY SHIFTED TO AVOID INTERFERENCE WITH VERTICAL COLUMN OF SILENCER.
  - FOR WELDING DETAILS, REFER ERECTION WELDING SCHEDULE.
  - SILENCERS TAG Nos. PREFIX "10" TO BE REPLACED WITH "20" FOR CUST No.1820.
- REFERENCE DRAWINGS:-**
- P & ID FOR WATER SEPARATOR SYSTEM : 0-00-047-49889
  - SAFETY VALVE SETTING FOR SEPARATOR, SH,RH & SB : 2-00-047-47679
  - ASSY. OF CEILING WELDED BEAMS 1ST PASS : 0-35-213-24456
  - BOILER ROOF STRUCTURE: 0-36-610-23934 TO 0-36-610-23951 (SEPARATOR)
  - SV ORIENTATION & EXHAUST PIPE ARRGT. : 0-00-047-16290
  - PLAN OF CEILING ROLLED BEAMS 1ST-PASS-(SHEET 1 OF 2) : 0-35-221-24984

VIEW-AA



KEY PLAN ARRGT OF SEPARATOR SILENCERS

DU NUMBER	DESCRIPTION	STD	DRAWING NUMBER	ITEM NO	MATERIAL CODE	UNIT WEIGHT	QUANTITY	ZONE
008	TAPER WASHER 33 IS:5372						32	
005	NUT -M27-2H						64	
002	FT STUD-M27X140-B7						32	
008	PLATE 10 x 1250 x 2000				IS2062FE410A		6	
007	ISA 75X75X6				IS2062FE410A		360	
006	ISMC 150X75				IS2062FE410A		100	
002	ISMB 250x125				IS2062FE410A		165	
001	ISMB 300x140				IS2062FE410A		60	

**NTPC TELANGANA STPP**  
2x800 MW. CUST. Nos.:1819 & 1820

Bharat Heavy Electricals Ltd  
UNIT: HIGH PRESSURE BOILER PLANT  
TIRUCHIRAPALLI - 620014

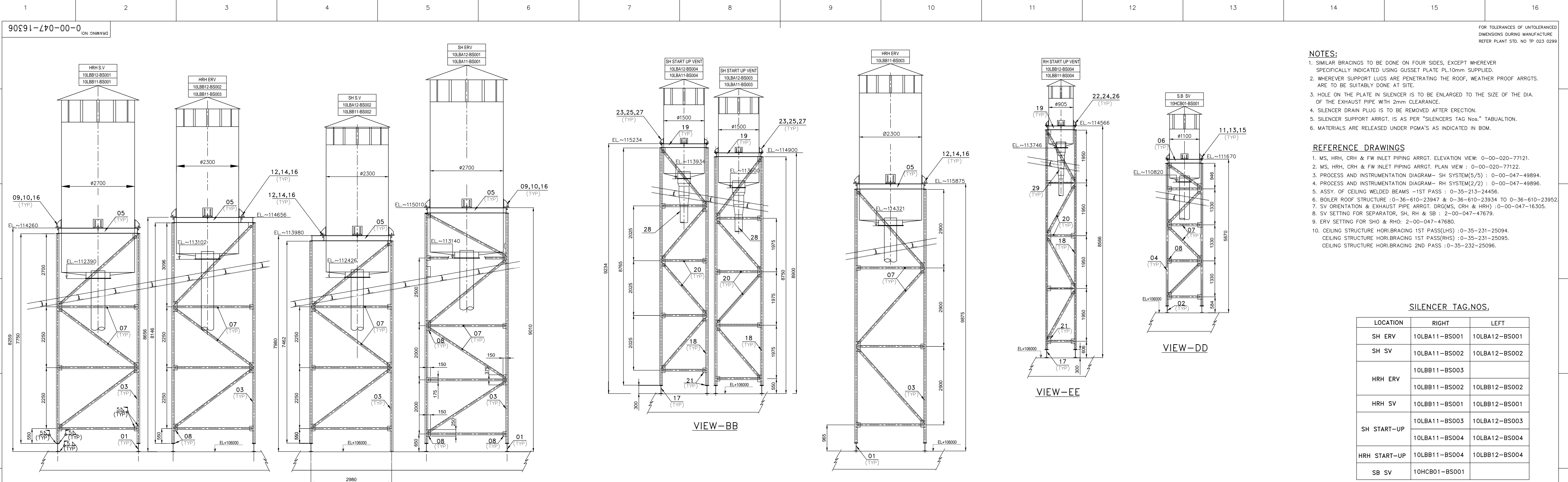
DATE: 01.11.2018  
DATE: 11.11.2018  
DATE: 13.11.2018

PROJECTION: 1ST ANGLE  
SCALE: NTS  
WEIGHT: (kg)

TITLE: SILENCER SUPPORT ARRGT. FOR SEPARATOR SV  
DRAWING NO: 0-00-047-16291  
REV: 00

REV	DATE	ALTERED	BY	CHKD	APPD
01					

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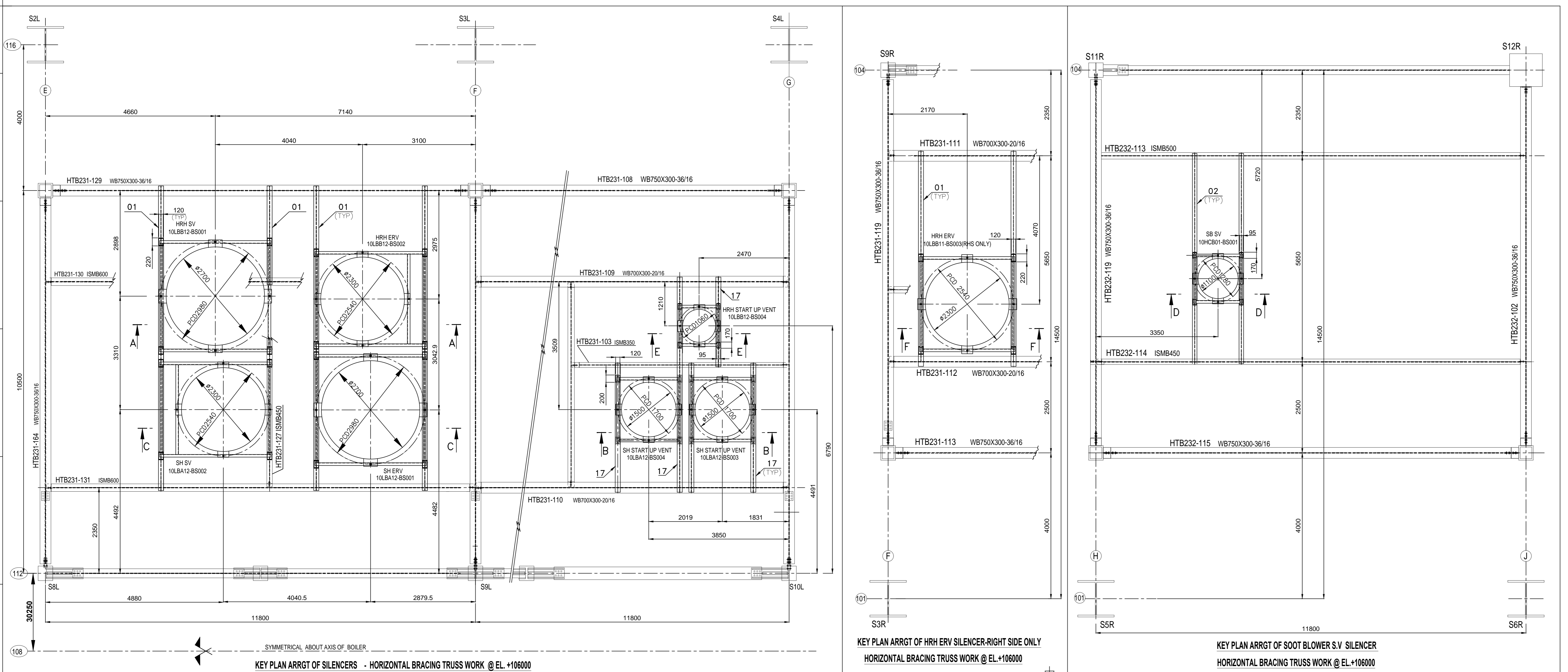


- NOTES:**
- SIMILAR BRACINGS TO BE DONE ON FOUR SIDES, EXCEPT WHEREVER SPECIFICALLY INDICATED USING GUSSET PLATE 10mm SUPPLIED.
  - WHEREVER SUPPORT LUGS ARE PENETRATING THE ROOF, WEATHER PROOF ARRGT. ARE TO BE SUITABLY DONE AT SITE.
  - HOLE ON THE PLATE IN SILENCER IS TO BE ENLARGED TO THE SIZE OF THE DIA. OF THE EXHAUST PIPE WITH 2mm CLEARANCE.
  - SILENCER DRAIN PLUG IS TO BE REMOVED AFTER ERECTION.
  - SILENCER SUPPORT ARRGT. IS AS PER "SILENCERS TAG Nos." TABULATION.
  - MATERIALS ARE RELEASED UNDER PGMA'S AS INDICATED IN BOM.

- REFERENCE DRAWINGS**
- MS, HRH, CRH & FW INLET PIPING ARRGT. ELEVATION VIEW: 0-00-020-77121.
  - MS, HRH, CRH & FW INLET PIPING ARRGT. PLAN VIEW : 0-00-020-77122.
  - PROCESS AND INSTRUMENTATION DIAGRAM- SH SYSTEM(5/5) : 0-00-047-49894.
  - PROCESS AND INSTRUMENTATION DIAGRAM- RH SYSTEM(2/2) : 0-00-047-49896.
  - ASSY. OF CEILING WELDED BEAMS -1ST PASS : 0-35-213-24456.
  - BOILER ROOF STRUCTURE : 0-36-610-23947 & 0-36-610-23934 TO 0-36-610-23952.
  - SV ORIENTATION & EXHAUST PIPE ARRGT. DRG(MS, CRH & HRH) : 0-00-047-16305.
  - SV SETTING FOR SEPARATOR, SH, RH & SB : 2-00-047-47679.
  - ERV SETTING FOR SHO & RHO: 2-00-047-47680.
  - CEILING STRUCTURE HORI.BRACING 1ST PASS(LHS) : 0-35-231-25094.
  - CEILING STRUCTURE HORI.BRACING 1ST PASS(RHS) : 0-35-231-25095.
  - CEILING STRUCTURE HORI.BRACING 2ND PASS : 0-35-232-25096.

**SILENCER TAG.NOS.**

LOCATION	RIGHT	LEFT
SH ERV	10LBA11-BS001	10LBA12-BS001
SH SV	10LBA11-BS002	10LBA12-BS002
HRH ERV	10LBB11-BS003	10LBB12-BS002
HRH SV	10LBB11-BS001	10LBB12-BS001
SH START-UP	10LBA11-BS003	10LBA12-BS003
	10LBA11-BS004	10LBA12-BS004
HRH START-UP	10LBB11-BS004	10LBB12-BS004
SB SV	10HCB01-BS001	



DU NUMBER	DESCRIPTION	STD	DRAWING NUMBER	ITEM NO	MATERIAL CODE	UNIT WEIGHT	QUANTITY	ZONE
VAR NO	MATERIAL SPECN	VAR NO	MATERIAL SPECN	VAR NO	VAR NO	VAR NO	VAR NO	VAR NO
002	29	REDUCING STAGES I-III ASSY.	1-24-835-01169		ASSY.	M	2	
001	28	REDUCING STAGES I-V ASSY.	1-24-835-01200		ASSY.	M	4	
006	27	TAPER WASHER CHN 26	IS: 41409			L	16	
005	26	TAPER WASHER CHN 22	IS: 41409			L	8	
004	25	NUT HEX Gr B T425 M24	BPS 41319			L	32	
003	24	NUT HEX Gr B T425 M20	BPS 41319			L	16	
002	23	STUD BOLT Gr.A T425 M24x120	BPS 41117			L	16	
001	22	STUD BOLT Gr.A T425 M20x90	BPS 41117			L	8	
005	21	PLATE 10 x 1250 x 2000				L	6	
004	20	ISA 65 x 65 x 6				MR	400	
003	19	ISMC 150 x 75				L	43	
002	18	ISMB 150 x 75				MR	205	
001	17	ISMB 300 x 140				MR	40	
008	16	WASHER TAPER CHN 33	IS: 5372			L	36	
007	15	WASHER TAPER CHN 26	IS: 5372			L	4	
006	14	NUT HEX Gr B T425 M30	BPS 41319			L	40	
004	13	NUT HEX Gr B T425 M24	BPS 41319			L	8	
003	12	STUD BOLT Gr.A T425 M30 x 140	BPS 41117			L	20	
001	11	FT STUD M24 x 120	BPS 41117			L	4	
010	10	BLACK HEX NUT M36x4	4-24-346-06436	05		L	32	
009	09	STUD BOLT M36x4: 141 LONG	3-24-346-01701	07		L	16	
008	08	PLATE 10 x 1250 x 2000				L	7	
007	07	ISA 75 x 75 x 6				MR	700	
006	06	ISMC 150 x 75				MR	6	
005	05	ISMC 200 x 75				MR	115	
004	04	ISMB 150 x 75				MR	22	
003	03	ISMB 200 x 100	layer txt			MR	300	
002	02	ISMB 250 x 125				MR	12	
001	01	ISMB 300 x 140				MR	70	

**NTPC TELANGANA STPP**  
2x800 MW. CUST. Nos.:1819 & 1820

**Bharat Heavy Electricals Ltd**  
UNIT: HIGH PRESSURE BOILER PLANT  
TRICHIRAPALLI - 620014

DATE: 29.08.2018  
BY: ARJUNRAM/AMM  
APP: VIGNANSEKARAN  
REV TO ASSY / Q/D Dwg: 27.10.2018

**SILENCER SUPPORT ARRGT. FOR MS, CRH, HRH, SB SV, ERV & START-UP VENT**

DRAWING NO: 0-00-047-16306