

ADDENDUM

DATE: 24-12-2021

Supply and E&C of Side Beam for WT-4&5

Tender Ref: 77/21/6072/DSP

"Extension of due date for submission of offer"

Due date for submission of Offer has been extended to 31.12.2021

Submission of offer by 1.00 PM on 31.12.2021

Opening of Techno commercial bid at 4.00 PM on 31.12.2021

"Replies/Corrigendum to bidder queries"

Attached Corrigendum of replies/changes to be read in conjunction with GCC & SCC & Addendum dtd.26.11.2021 and Addendum dtd.10.12.2021

Any further addendum such issued carry part of the bidding documents and this will be available at the web site from where the original documents have been received / downloaded by the bidder. Hence, bidders are requested to visit the web site on regular basis.

For Further Queries if any, Contact:

For Commercial :

Sh. D S Pradeep Kumar Sarma
Manager / MM
BHEL-ISG,
Prof.C.N.R.Rao Circle,
Bangalore-560 012
Off: 080 2218 4520,
e-mail: dsp@bhel.in

For Technical :

Sh. Indrajit Dey
Sr Manager / PE / Mech
BHEL-ISG,
Prof.C.N.R.Rao Circle,
Bangalore-560 012
Off: 080 2218 4219,
e-mail : idey@bhel.in

1 x 700MW BTPS-3, WT-4 & WT- 5 NEW BEAM SUPPLY AND ERECTION

Enquiry No: 77/21/6072/DSP

Sl. No.	Bidder Queries	BHEL Replies
1	Kindly confirm whether EOT crane is available there or we have to arrange for the Mobile crane for dismantling of Side beam and reassembly of side beams.	GA Drg of Wagon Tippler Complex (WTC) is attached for bidders reference. 15T Electric Hoist has been provided for Handling of all equipments under WTC Shed. Bidder's may also go through Tech. Enq. Spec. Point No. 3 (page 5 of 7) - Bidder shall visit the site to familiarize and make detail assessment of the physical condition of the WT machine & site conditions.
2	You have asked for Hydraulic Experts from M/s Rexroth. Can we engage Hydraulic experts who have worked with M/s Rexroth and now separated.	Bidder to adhere to NIT (Hydraulic Experts from M/s Rexroth)
3	You have asked for PLC Experts from M/s Honeywell. Generally M/s Honeywell supports through their System houses. We shall engage experts from Honeywell System House.	Agreed.
4	Design Vetting and FEM will be done by a reputed Design house who had worked with TRF for similar application. Hope it is acceptable to BHEL.	Accepted.
5	Any item, other than Side beam, which is found defective, shall be charged at actuals.	Bidder to ref./follow NIT as scope of work is clearly mentioned.

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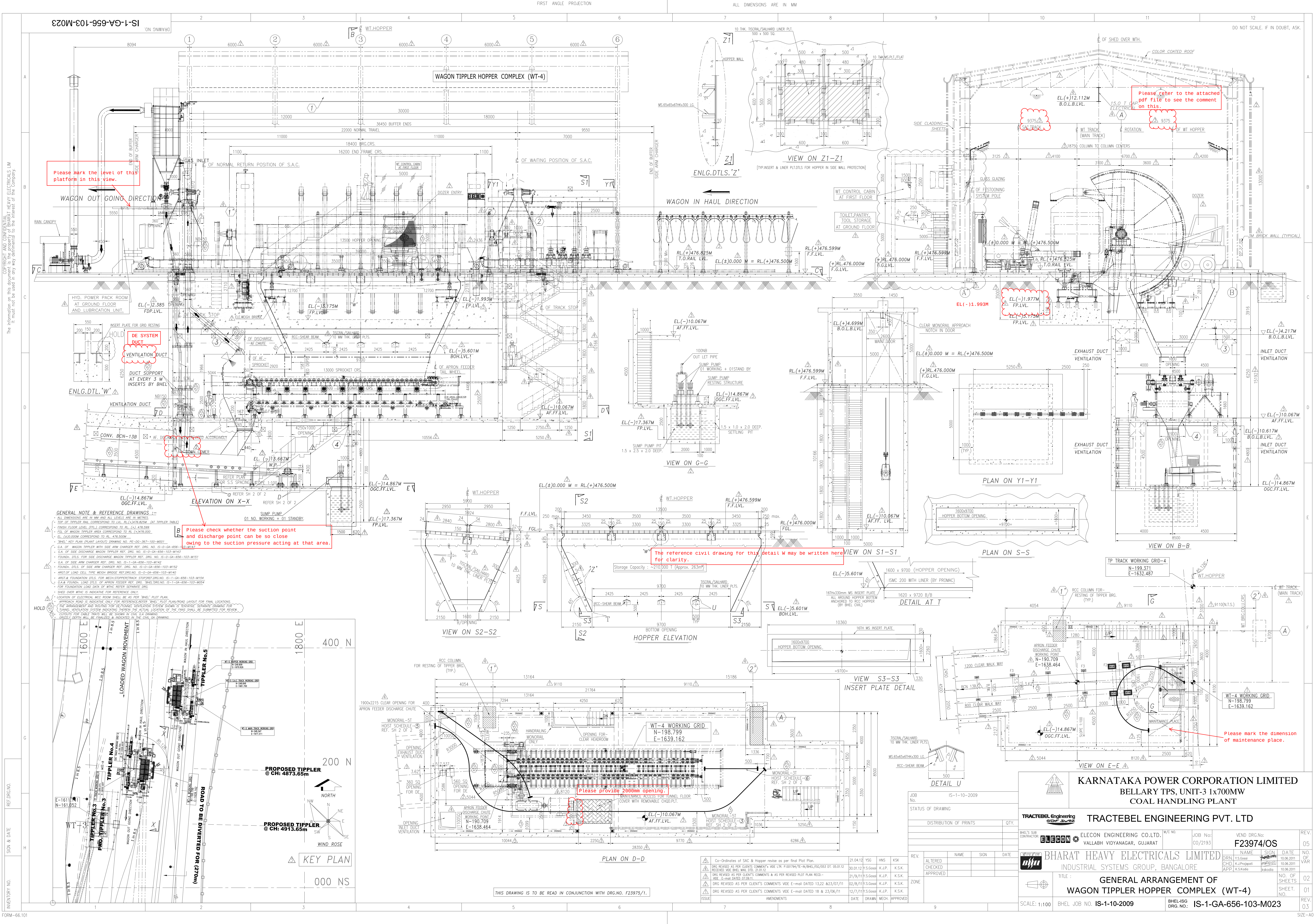
PRODUCED BY AN AUTODESK EDUCATIONAL PRODUCT

INVENTORY NO.

FORM-66.101

PRODUCED BY AN AUTODESK EDUCATIONAL PRODUCT

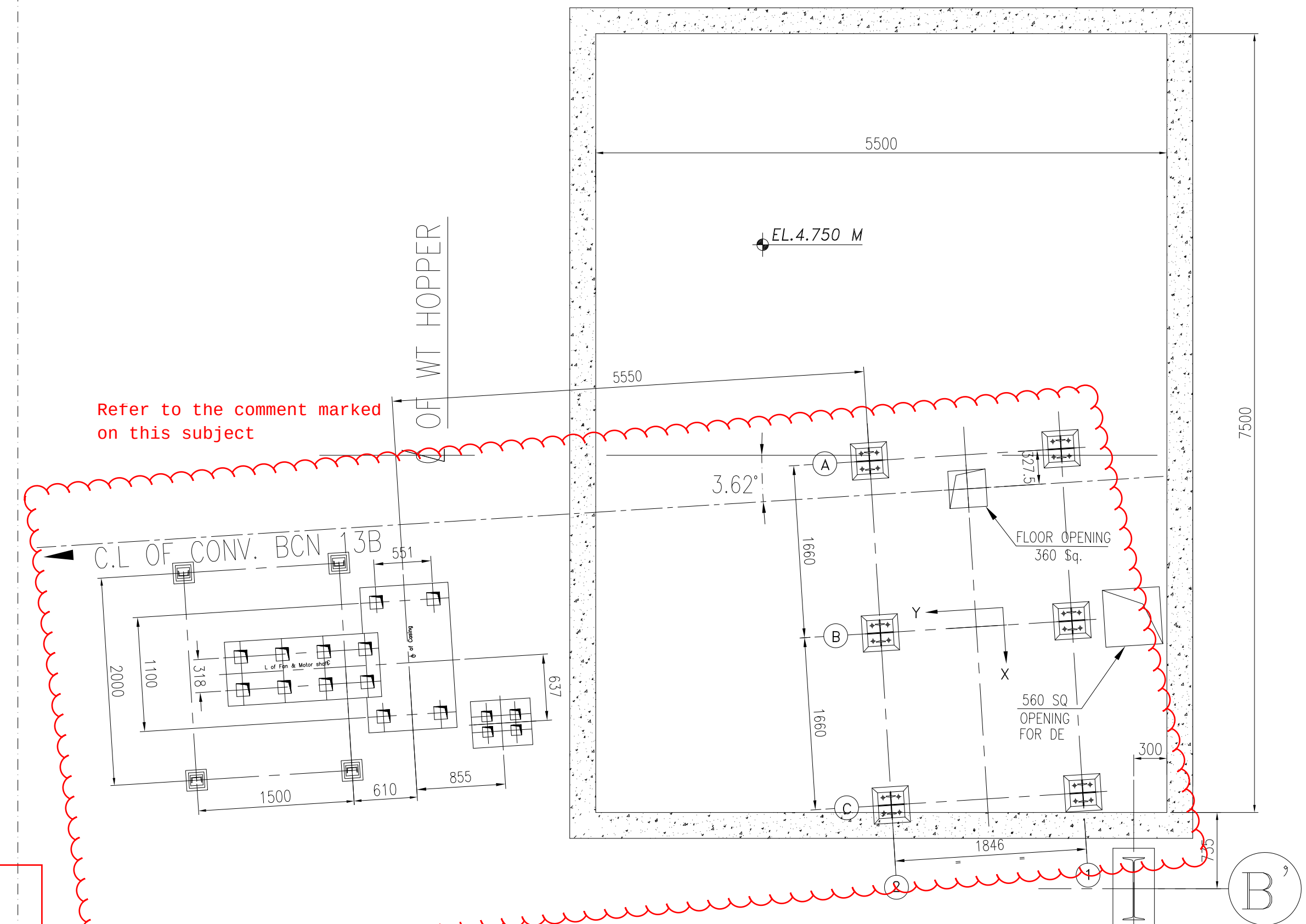
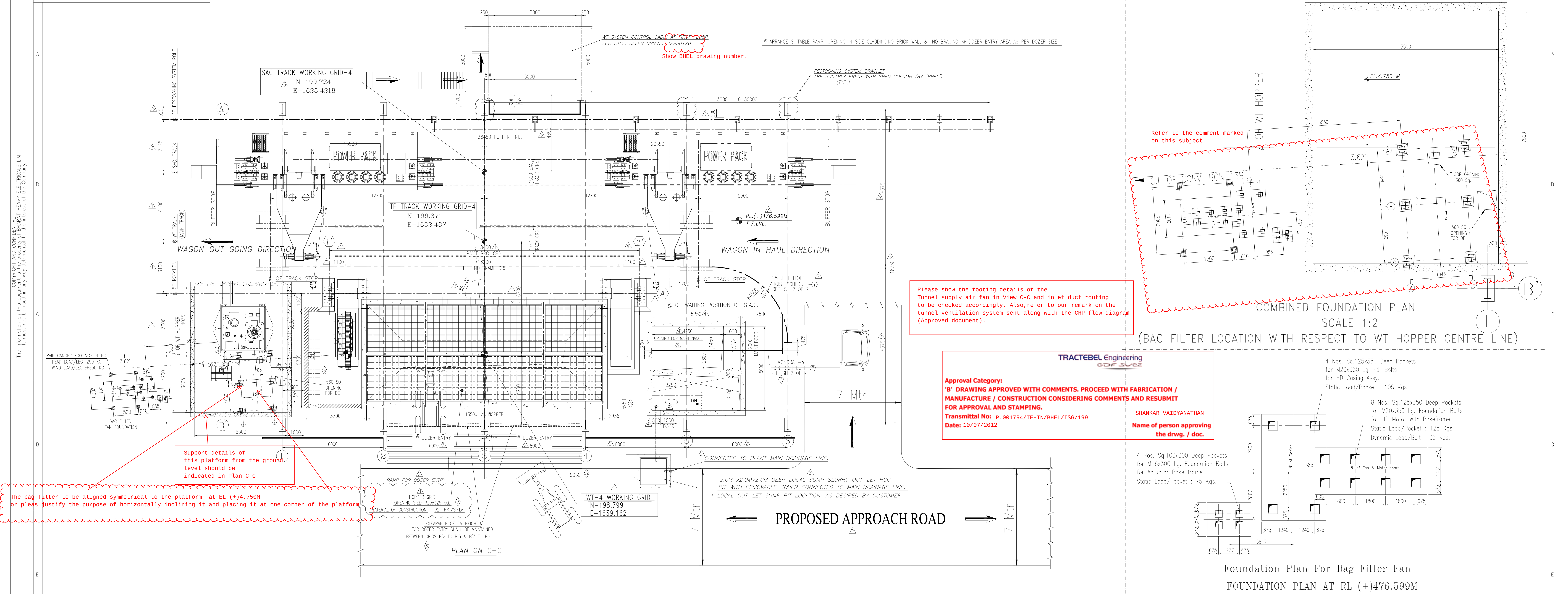
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IS-0-GA-656-103-M023

ON CHAINWAY

DO NOT SCALE. IF IN DOUBT, ASK.

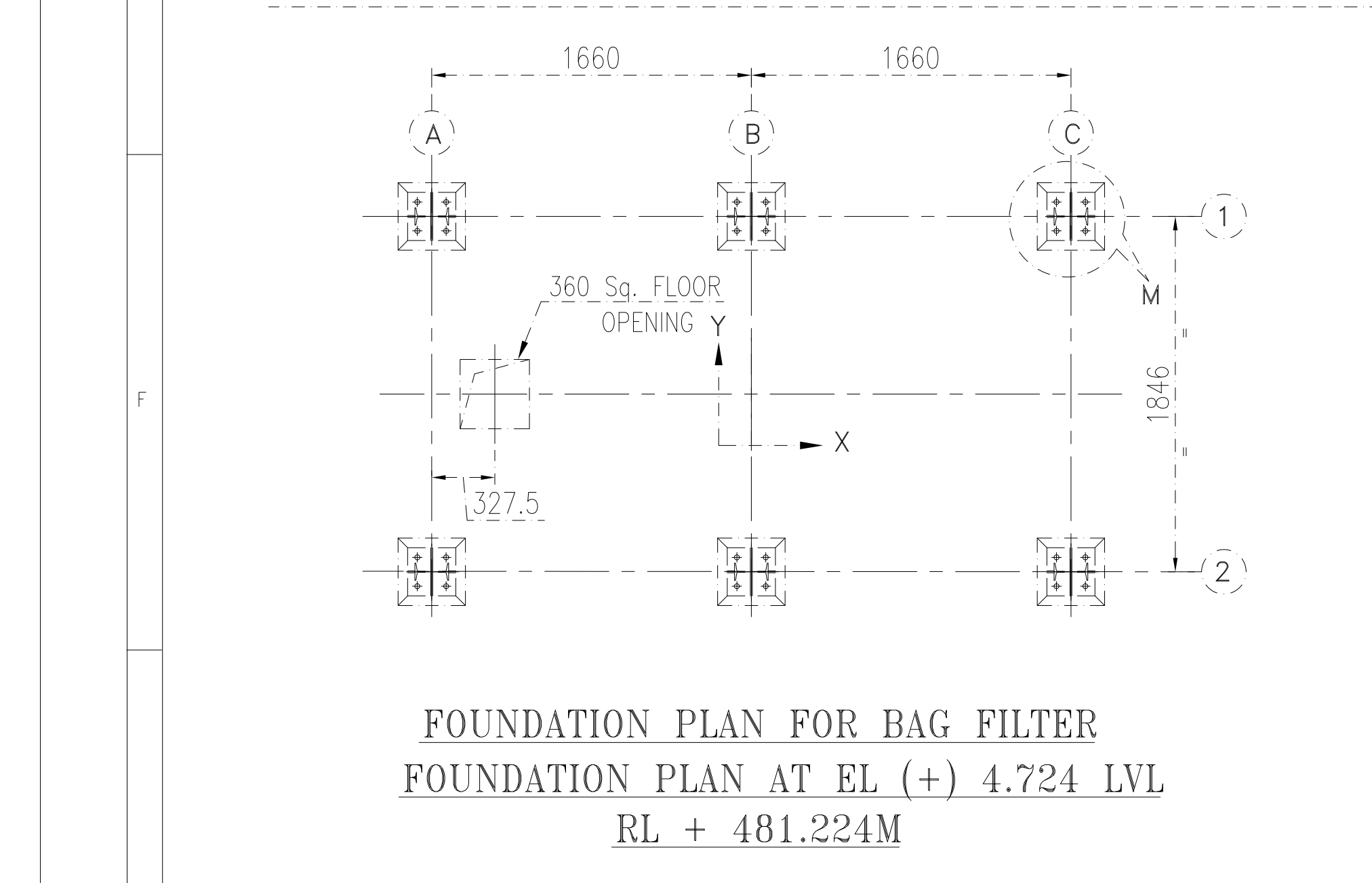
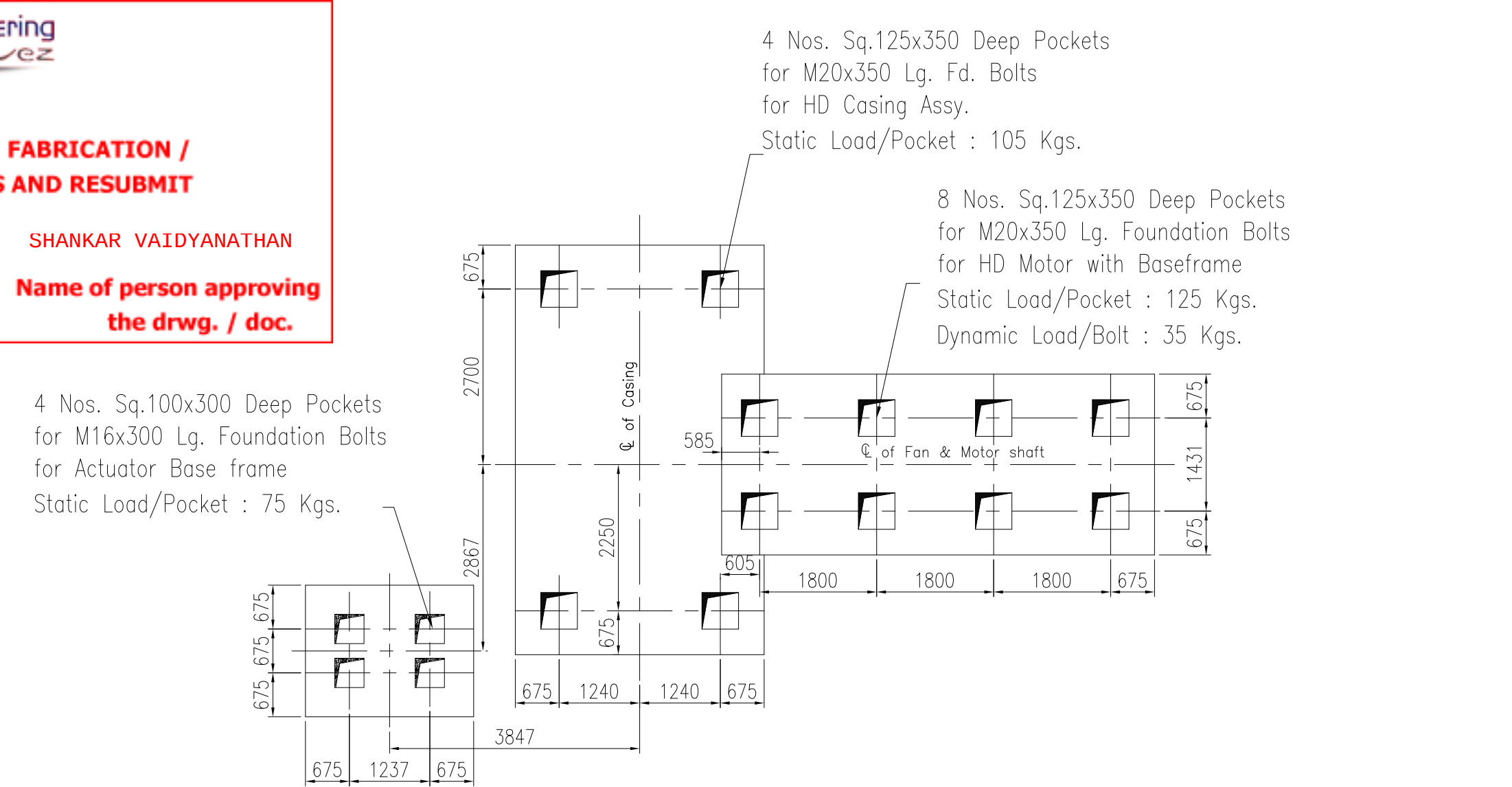


Please show the footing details of the Tunnel supply air fan in View C-C and inlet duct routing to be checked accordingly. Also, refer to our remark on the tunnel ventilation system sent along with the CHP flow diagram (Approved document).

Approval Category:
'B' DRAWING APPROVED WITH COMMENTS. PROCEED WITH FABRICATION / MANUFACTURE / CONSTRUCTION CONSIDERING COMMENTS AND RESUBMIT FOR APPROVAL AND STAMPING.
Transmittal No: P-001794/TE-IN/BHEL/ISG/199
Date: 10/07/2012

SHANKAR VAIDYANATHAN
Name of person approving the drwg. / doc.

(BAG FILTER LOCATION WITH RESPECT TO WT HOPPER CENTRE LINE)



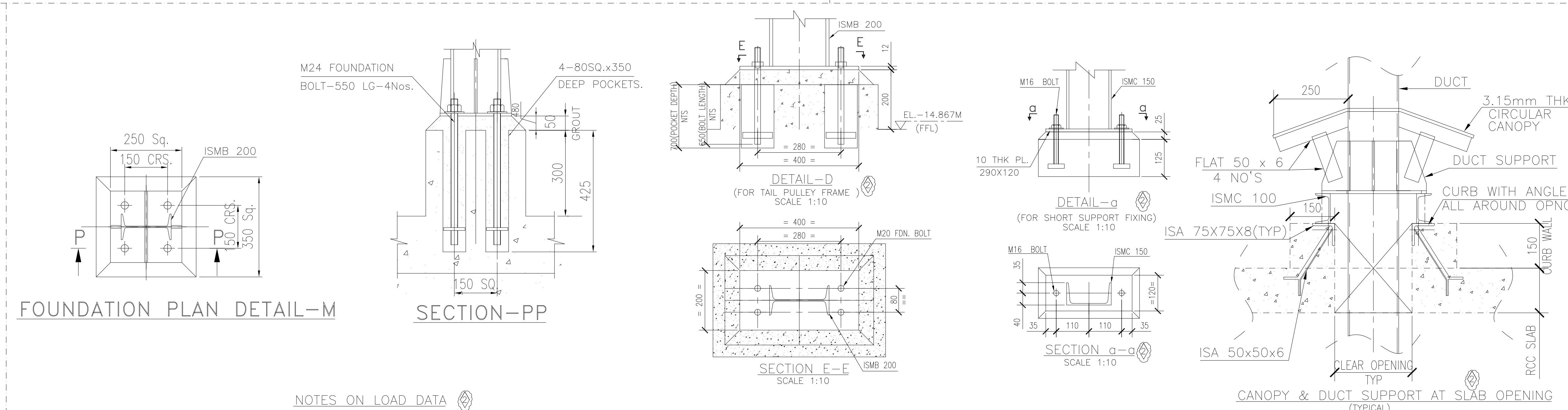
BAG FILTER LOAD DATA - TENTATIVE

COLUMN	* LOAD ON EACH COLUMN			
	DEAD LOAD	VERTICAL LOAD DUE TO WIND	HORIZONTAL LOAD DUE TO WIND	HORIZONTAL LOAD DUE TO WIND
A1 & A2	2.00 T	2.25 T	±2.50 T	±3.20 T
C1 & C2	2.00 T	2.25 T	±2.50 T	±3.20 T
B1 & B2	3.50 T	4.00 T	±2.50 T	±3.20 T

* LOADS GIVEN ARE STATIC LOAD ONLY. A DYNAMIC FACTOR OF 1.5 OR AS PER IS PROVISIONS OR CONTRACT SPECIFICATIONS OR STANDARD PRACTICE SHALL BE CONSIDERED

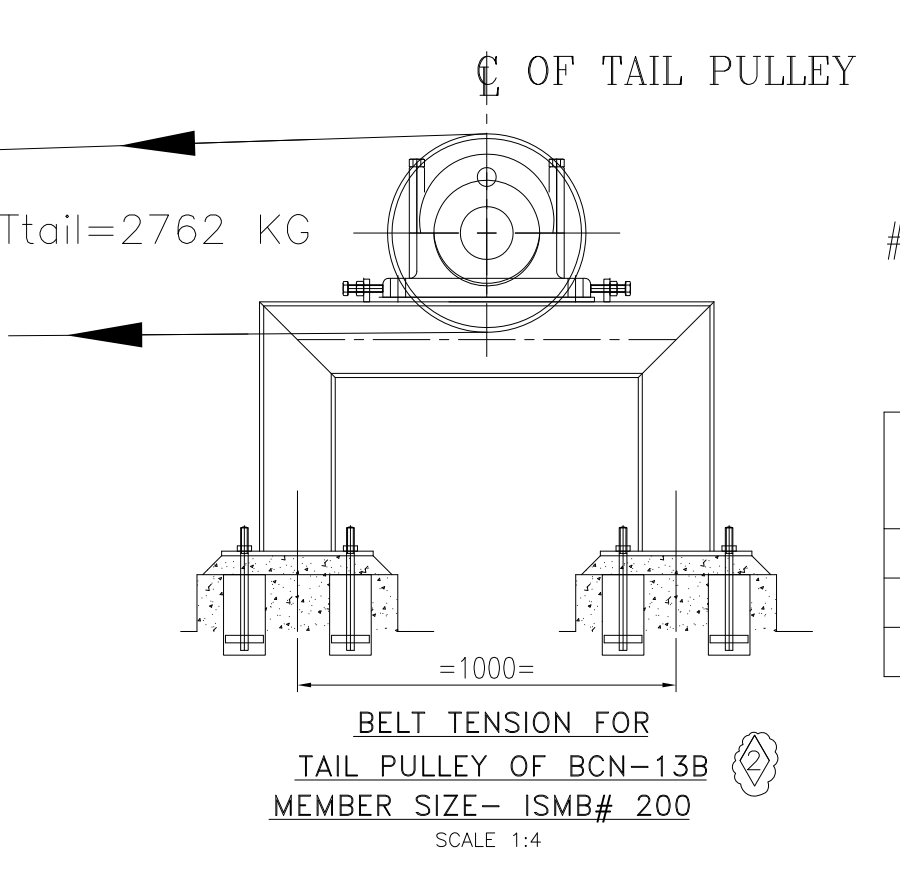
* THE DIRECTION OF HORIZONTAL LOADS INDICATED IN THE TABLE SHOULD BE READ IN CONJUNCTION WITH THE RESPECTIVE PLAN VIEWS.

* THE LOAD DATA FOR DE SYSTEM SHALL BE SUBJECT TO CHANGES AFTER APPROVAL OF THE DE SYSTEM DRAWING.



HOIST SCHEDULE

ITEM NO.	MONO RAIL SECTION	HOIST CRAN TYPE	CAPACITY	LIFTING HT.	OPERATING HT.	L/B.RADIUS	QTY.	LOCATION LVL. @ ELEVATION	HANDLING EQPT. & LOCATION	HEAVIEST EQUIPMENT-AND WEIGHT DTLS.
1	FABRICATED BEAM 500 FLANGE WTH 220mm WEB THK 16mm	ELECTRICAL	15.0 T	12.0 MTRS.	12.0 MTRS.	N/A	01 NO.	EL(+12.112M (B.O.L.B))	* UNDER WITHC SHED. ALL EQUIPMENTS UNDER THE WITHC & ACCESS SHAFT	* WT/M.C. DRIVE UNIT ~ 11T
2	ISMB 400	ELECTRICAL	5.0 T	16.5 MTRS.	4.5 MTRS.	N/A	01 NO.	EL(+4.699M (B.O.L.B.LVL))	* AT ACCESS SHAFT ALL EQUIPMENTS UNDER THE WITHC	* AF. DRIVE SHAFT ASSLY ~4 T (MAX)
3	ISMB 400	ELECTRICAL	5.0 T	10.5 MTRS.	6.5 MTRS.	3 MTR.	01 NO.	EL(-14.217M (B.O.L.B.LVL))	* AT A.F.FLOOR AF,DF DRIVES,PULLEY,SUMP PUMP ETC.	* WT/M.C. DRIVE UNIT ~4 T (MAX)
4	ISMB 250	MANUAL	1.0 T	3.5 MTRS.	3.5 MTRS.	2.25 MTR.	01 NO.	EL(-10.617M (B.O.L.B.LVL))	* AT TUNNEL FFL Bcn-13B PULLEY & WITHC SUMP PUMP,ETC.	* TAIL UNIT ~0.8 T (MAX)
5	ISMB 400	MONORAIL BEAM ONLY	5.0 T	6.00 MTRS.	6.5 MTRS.	5 MTR.	01 NO.	EL(-14.217M (B.O.L.B.LVL))	* AT A.F.FLOOR AF,DF HEAD SPROCKET ASSEMBLY ETC.	* HEAD UNIT ~4 T (MAX)
6	ISMB 250	MONORAIL BEAM ONLY	3.0 T	6.0 MTRS.	6.5 MTRS.	N/A	01 NO.	EL(-14.217M (B.O.L.B.LVL))	* AT A.F.FLOOR AF,DF TAIL SPROCKET ASSEMBLY ETC.	* TAIL UNIT ~2.0 T (MAX)



NOTES ON LOAD DATA

- SYMBOL -VE IMPLIES VERTICAL UPWARD FORCE AND +VE IMPLIES VERTICAL DOWNWARD FORCE
- DIRECTION OF HORIZONTAL LOADS AS INDICATED IN THE TABLE SHALL BE READ IN CONJUNCTION WITH THE RESPECTIVE PLAN VIEWS.
- THE EQUIPMENT LOADS GIVEN ARE STATIC LOAD ONLY. A DYNAMIC FACTOR OF 1.5 OR AS PER IS PROVISIONS /CONTRACT SPECIFICATIONS /STD. PRACTICE WILL BE CONSIDERED.
- CHOKED CHUTE MATERIAL HAS BEEN CONSIDERED WHILE GIVING LOAD FOR F3. MEMBER SIZES SHOWN FOR TAIL PULLEY FRAME SHALL BE SUBJECT TO CHANGES AFTER APPROVAL OF CONV. PULLEY C.A. DRAWINGS.

CONV. BCN-13B LOAD DATA (Kgs.)

SI NO	FOOTING MARK	NO. OF FOOTINGS	DEAD LOAD	LIVE LOAD	BELT PULL	REMARKS
1	F1	2	300	0	0	13B TAIL FRAME
2	F2	2	650	1250	0	S.S
3	F3	6	1300	0	3500	S.S

Co-Ordinates of SAC & Hopper revise as per final Plot Plan.

DATE	BY	CHKD	APPD
21.04.12	YSG	HNS	KSK
30.01.12	YSG	K.J.P.	K.S.K.
27/9/11	YSG	K.J.P.	K.S.K.
02/8/11	YSG	K.J.P.	K.S.K.
12/7/11	YSG	K.J.P.	K.S.K.

KARNATAKA POWER CORPORATION LIMITED
BELLARY TPS, UNIT-3 1x700MW
COAL HANDLING PLANT

TRACTEBEL ENGINEERING PVT. LTD

BARHAT HEAVY ELECTRICALS LIMITED
INDUSTRIAL SYSTEMS GROUP, BANGALORE

GENERAL ARRANGEMENT OF WAGON TIpPLER HOPPER COMPLEX (WT-4)

SCALE: 1:100

BHEL JOB NO. IS-1-10-2009

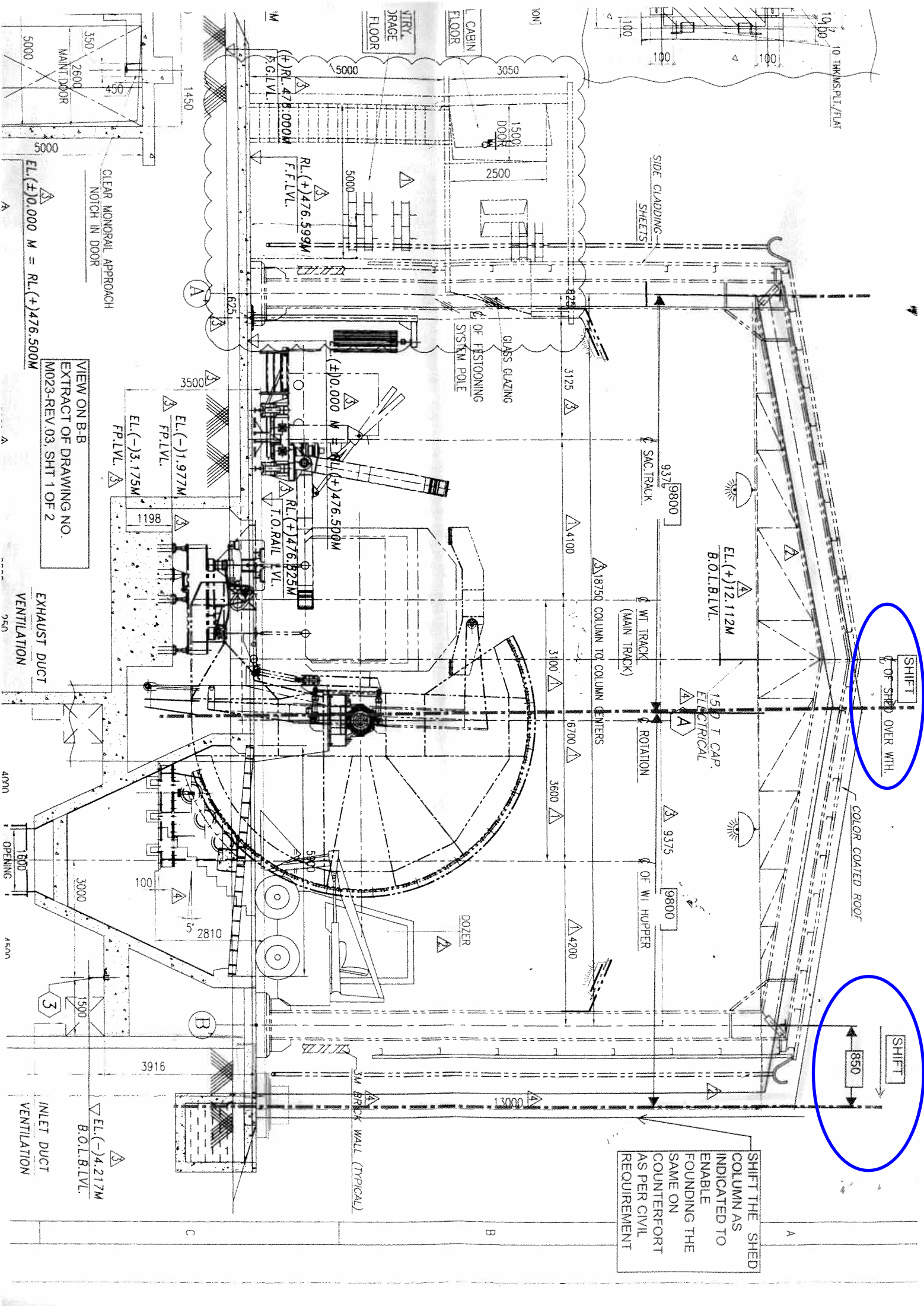
BHEL-ISG DRG. NO.: IS-0-GA-656-103-M023

REV. 05

NO. OF SHEETS 02

SHEET NO. 02

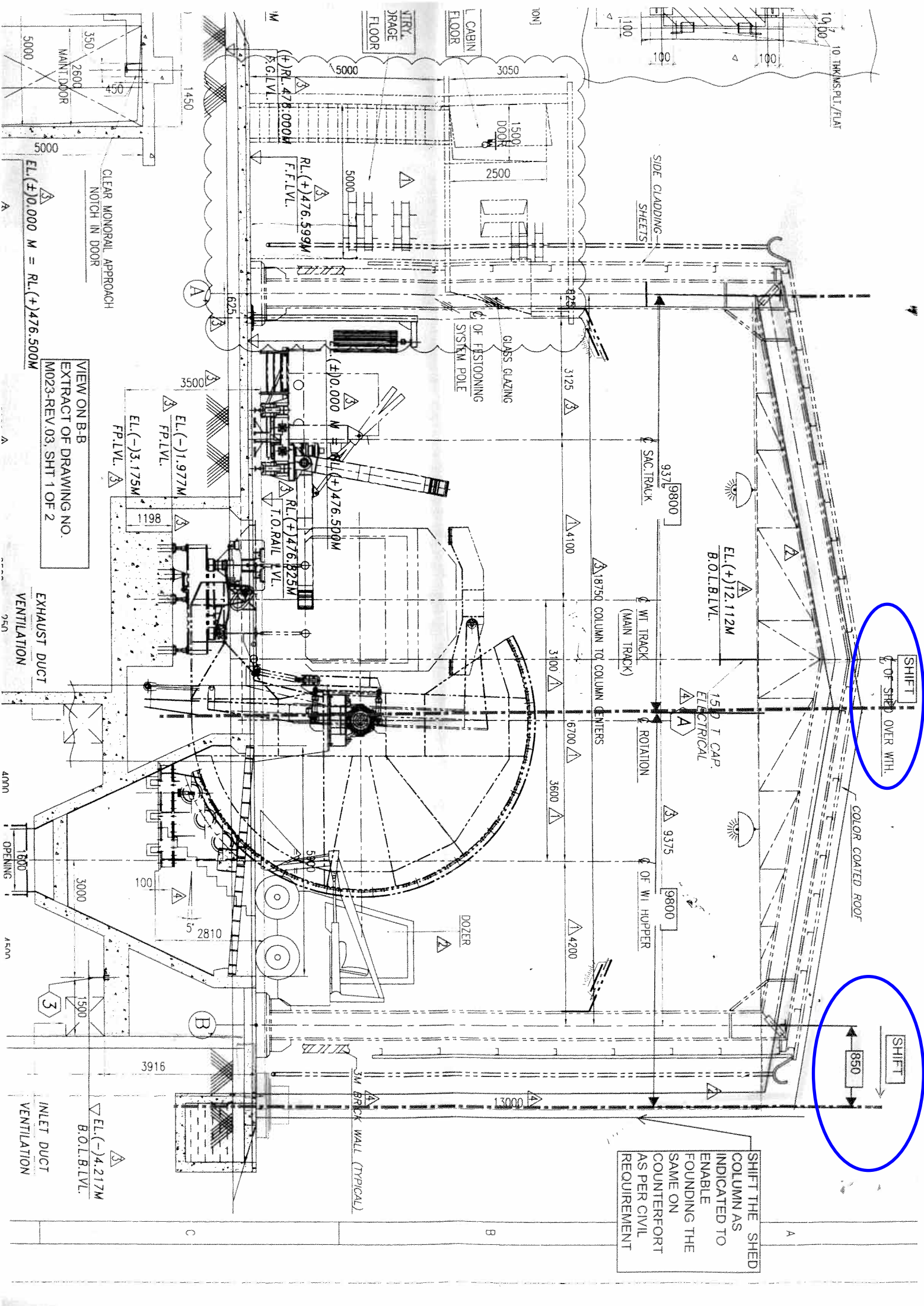
REV. 03



SHIFT
OF SHED OVER WITH.

SHIFT
850

SHIFT THE SHED
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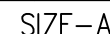


18	Spacing of short supports to be 2500 instead of 3000 for outgoing conv. gallery 13 B.	Pls. Note the spacing of 3m shown for outgoing gallery is in order as per approved Civil drawings for gallery span.	View on E-E
19	Opening for ducts for Electrical system shall be indicated in plans & elevations.	As the location of MCC-8 is not frozen, the location of ducts for electrical system cannot be finalized. However, the exact position shall be as per the civil GA. The same has been indicated in the Notes.	-
B	Drawing No: IS-0-GA-656-103-M023, Rev, 2 GA of WTC-4 - Sheet No. 2 of 2		
20	Increase the dimension from 500 to 625mm.	Noted & revised.	Plan on C-C
21	Possibility of shifting power pack and relocating this shall be explored.	Noted & as discussed with KPCL, the powerpack has been shifted by 1m.	Plan on C-C
22	Coordinate of MCC-8 shall be furnished.	Noted & Indicated. (Pls. mark N - 221.557 & E - 1630.372)	Plan on C-C
23	Relocate this as commented in Drg M066 sheet 4	Noted & revised.	Plan on C-C
24	Correct the dimensions as marked.	Noted & revised. (Scale to be corrected).	Combined Foundation Plan
25	Rename grid numbers	Noted & indicated.	Combined Foundation Plan
26	Indicate boundaries of floor slab	Noted & indicated.	Combined Foundation Plan
27	Elevation of TOC	Noted & indicated.	Combined Foundation Plan
28	Indicate face of the tunnel	Noted & indicated.	Combined Foundation Plan
29	Indicate main gridlines	Noted & indicated.	Combined Foundation Plan
30	Indicate Outlet/inlet openings.	Noted & indicated.	Foundation for Bag filter at El +4.724
31	Indicate Size of the member	Noted & indicated.	Foundation Plan Detail M
32	Shall be made of Steel (0.6mm)	As discussed & mutually agreed during the meeting, a separate arrangement with stiffeners is provided.	Canopy & Duct support
33	Shall be ISA 50x50x6 (radially)		Canopy & Duct support
34	Indicate the dimensions & details as marked.	Noted & indicated.	Canopy & Duct support
35	Specify beam with flange width & thickness.	Noted & indicated.	Hoist Schedule.
	TEPL COMMENTS		
C	Drawing No: IS-0-GA-656-103-M023, Rev, 2 GA of WTC-4 - Sheet No. 1 of 2		
1	Dimension to be corrected as 18400	Noted & revised.	Elevation on X-X
2	Pls. mark levels.	Noted & indicated.	Elevation on X-X
3	14000 hopper opening	The dimension 13500 mm is the hopper inside opening. Same has been corrected in this drg.	Elevation on X-X

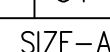
COMPLIANCE TO COMMENTS OF KPCL/TRACTEBEL			
Ref:	Comments on GA Drawing of WTC-4 R2 jointly discussed at KPCL on 21/06/2012		
SL NO	KPCL/TRACTEBEL comments	COMPLIANCE / CLARIFICATIONS BY BHEL / PROMAC	REMARKS
	KPCL COMMENTS		
A	Drawing No: IS-0-GA-656-103-M023, Rev, 2 GA of WTC-4 - Sheet No. 1 of 2		
1	Shift this as commented in M066	Noted & revised.	Elevation on X-X
2	Staircase arrangement shall be modified as indicated in the enclosed Sketch - 1	Noted & revised.	Elevation on X-X
3	Modify the elevation -16.867 to -17.367m	Noted & revised.	Elevation on X-X
4	Indicate landing levels on each of the flight	Noted & indicated.	View on S1-S1
5	Shift this as commented in M066	Noted & revised.	View on B-B
6	Opening for Apron feeder discharge chute to be increased from 1800 to 1900.	Noted & Revised.	Plan on D-D
7	Modify wall & drain arrangement as commented in Drg. M066 sheet 3	Noted & revised.	Plan on D-D
8	Modify staircase arrangement as commented in Drg. M066 sheet 3	Noted & revised.	Plan on D-D
9	Modify wall pedestal & drain arrangement as commented in Drg. M066 sheet 2	Noted & revised.	Plan on D-D
10	Pls. indicate here also, level & capacity of monorail.	Noted & indicated	Plan on D-D
11	Indicate this on Elevation X-X	Noted & indicated	Plan on D-D
12	Modify wall & drain arrangement as commented in Drg. M066 sheet 3	Noted & revised.	View on E-E
13	Modify staircase arrangement as commented in Drg. M066 sheet 3	Noted & revised.	View on E-E
14	Indicate in dotted line.	Noted & indicated.	View on E-E
15	Radius is not matching. As per M066, it is 1500.	The monorail profile given in M066 shall be corrected as per M023 Rev.02	View on E-E
16	Indicate angles θ and β	Noted & indicated.	View on E-E
17	Modify the direction of indicated slope.	Noted & revised.	View on E-E

4	This dimension may be indicated & matched with Drg. M143 R2	The dimension 2710 mm shown is in order and the same shall be indicated in other WT drgs.	Elevation on X-X
5	Liner material & thickness	Noted & as discussed with KPCL, 10thk Tiscral/Sailhard is being provided.	Elevation on X-X
6	Side Plate angle of hopper	Due to layout constraints the side plate angle of the hopper is reduced to 65 degrees on both sides. This has already been discussed with KPCL and complied in Rev.02	Elevation on X-X
7	The dimension is shown as 2318mm in M140. The level may be EL -1.993mm.	Noted & corrected to 2318mm.	Elevation on X-X
8	Landing Levels.	Noted & indicated.	Elevation on X-X
9	Pls. mark levels.	Noted & indicated.	View on B-B
10	Pls. check & correct EL -1.977m	Noted & revised.	View on B-B
11	Dimension shown as 1700mm in Plan D-D	Noted & revised.	View on B-B
12	Pls. indicate the conveyor cross section properly.	Noted & indicated.	View on B-B
13	This opening is indicated as 13500mm in Drg M147.	The dimension 13500 mm is the hopper inside opening. Same has been corrected in this drg.	Hopper Elevation
14	Detail W to be furnished.	This detail shall be as per the Civil GA for WTC	Hopper Elevation
15	Kindly clarify that apron feeder discharge chute opening is fine w.r.t comments furnished on Drg M054 R1	Noted & revised.	Plan on D-D
16	Pls. check this clearance for material movement.	The clearance is checked & found in order for the apron feeder floor.	Plan on D-D
17	Pls. mark the clearances	Noted & indicated.	Plan on D-D
18	Pls. mark the dimensions as shown.	Noted & indicated.	Plan on D-D
19	Pls. mark the angle with horizontal	Noted & indicated.	View on E-E
D	Drawing No: IS-0-GA-656-103-M023, Rev, 2 GA of WTC-4 - Sheet No. 2 of 2		
20	Pls. check the adequacy of this dimension.	Checked & found in order. As per our civil design, the columns for control room are being modified by taking the first floor cantilever to avoid any kind of fouling in this area.	Plan on C-C
21	Pls. furnish the BHEL drg no. for reference.	Already indicated in the Notes in Sheet 1 of 2	Plan on C-C
22	Comments on dimension as indicated.	Noted & revised.	Plan on C-C
23	Coordinate of MCC-8 shall be furnished.	Noted & Indicated. (Pls. mark N - 221.557 & E - 1630.372)	Plan on C-C

INVENTORY NO.



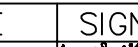
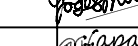
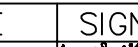
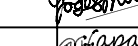
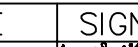
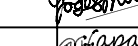
INVENTORY NO.	SIGN & DATE	REF.DRG.NO.
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FORM-66.101



JOB	IS-1-10-200
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		KARNATAKA POWER CORPORATION LIMITED BELLARY TPS, UNIT-3 1x700MW COAL HANDLING PLANT																
		TRACTEBEL ENGINEERING PVT. LTD																
BHEL'S SUB CONTRACTOR		ELECON ENGINEERING CO.LTD. VALLABH VIDYANAGAR, GUJARAT		W/C NO.	JOB No: CO/2193	VEND DRG.No: F24561/OS												
		BHARAT HEAVY ELECTRICALS LIMITED INDUSTRIAL SYSTEMS GROUP, BANGALORE																
TITLE :		GENERAL ARRANGEMENT OF WAGON TIPLER HOPPER COMPLEX (WT-5)		<table><tr><td>DRN.</td><td>NAME</td><td>SIGN</td><td>DATE</td></tr><tr><td>CHD</td><td>K.J.Prajapati</td><td></td><td>07.10.2011</td></tr><tr><td>APP</td><td>K.S.Rao</td><td></td><td>07.10.2011</td></tr></table>		DRN.	NAME	SIGN	DATE	CHD	K.J.Prajapati		07.10.2011	APP	K.S.Rao		07.10.2011	NO. OF SHEETS
DRN.	NAME	SIGN	DATE															
CHD	K.J.Prajapati		07.10.2011															
APP	K.S.Rao		07.10.2011															
				SHEET. NO.														
SCALE: 1:100	BHEL JOB NO.	IS-1-10-2009	BHEL-ISSG	IS-0-GA-656-103-M024														

COMPLIANCE TO COMMENTS OF KPCL/TRACTEBEL			
Ref:	Comments made on Drawing Number: IS-0-GA-656-103-M024, Rev-0 GA OF WAGON TIPPLER HOPPER COMPLEX (WT-5)		
SL NO	KPCL/TRACTEBEL comments	COMPLIANCE / CLARIFICATIONS BY	REMARKS
A	Drawing No:IS-0-GA-656-103-M024, Rev-00 GA OF WAGON TIPPLER HOPPER COMPLEX (WT-5)		
1	Pls. note that this drg. has been revised in-line with the GA of WTC-4 approved in Cat-B by KPCL/TEPL which covers all the previous comments. Any further comments may pls. be given on this revision.		
2	Further to the Cat-B approved WTC-4 Drg, the thickness of liner plate ONLY for Shear beams has been increased from 10mm to 16mm as discussed & agreed by BHEL in the meeting as a special case. The same shall be revised in WTC-4 drg when submitted for final Cat-A approval.		
3	In Rev.01 of M024-GA of WTC (WT-5) drg submitted earlier vide transmittal M/CHP/128 dated 7/9/12, the monorail with Chain pulley block at Head end of Apron Feeder is now being removed due to redundancy as the same can be maintained with the 5T Electric hoist with the revised monroail routing shown in the drg. The same shall be revised in WTC-4 drg when submitted for final Cat-A approval.		