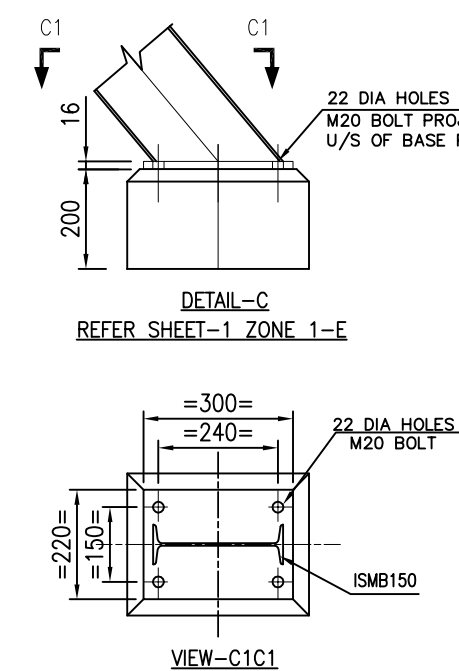
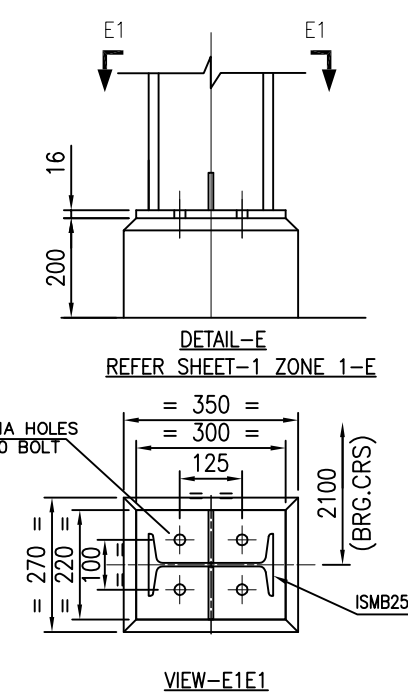
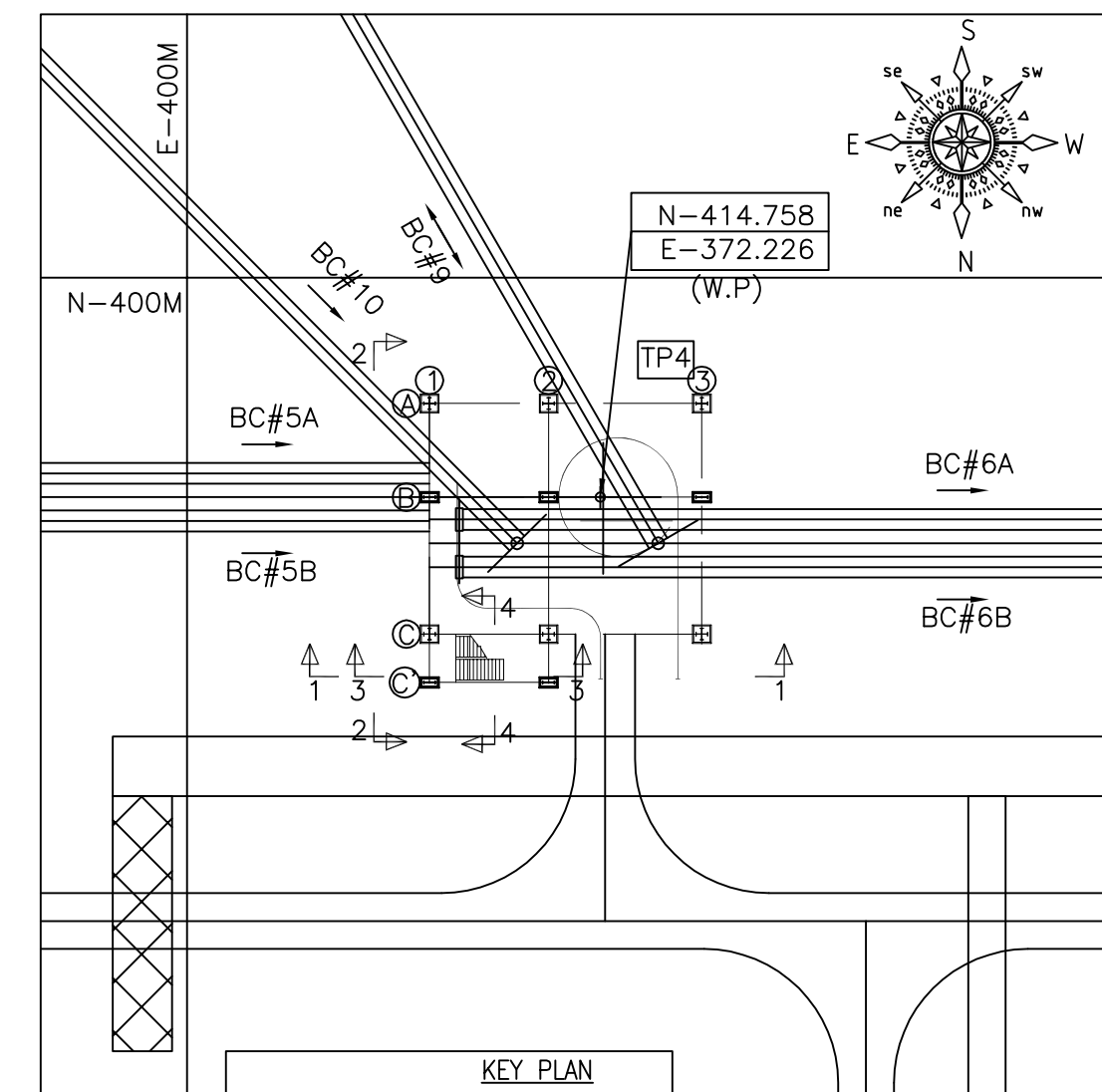
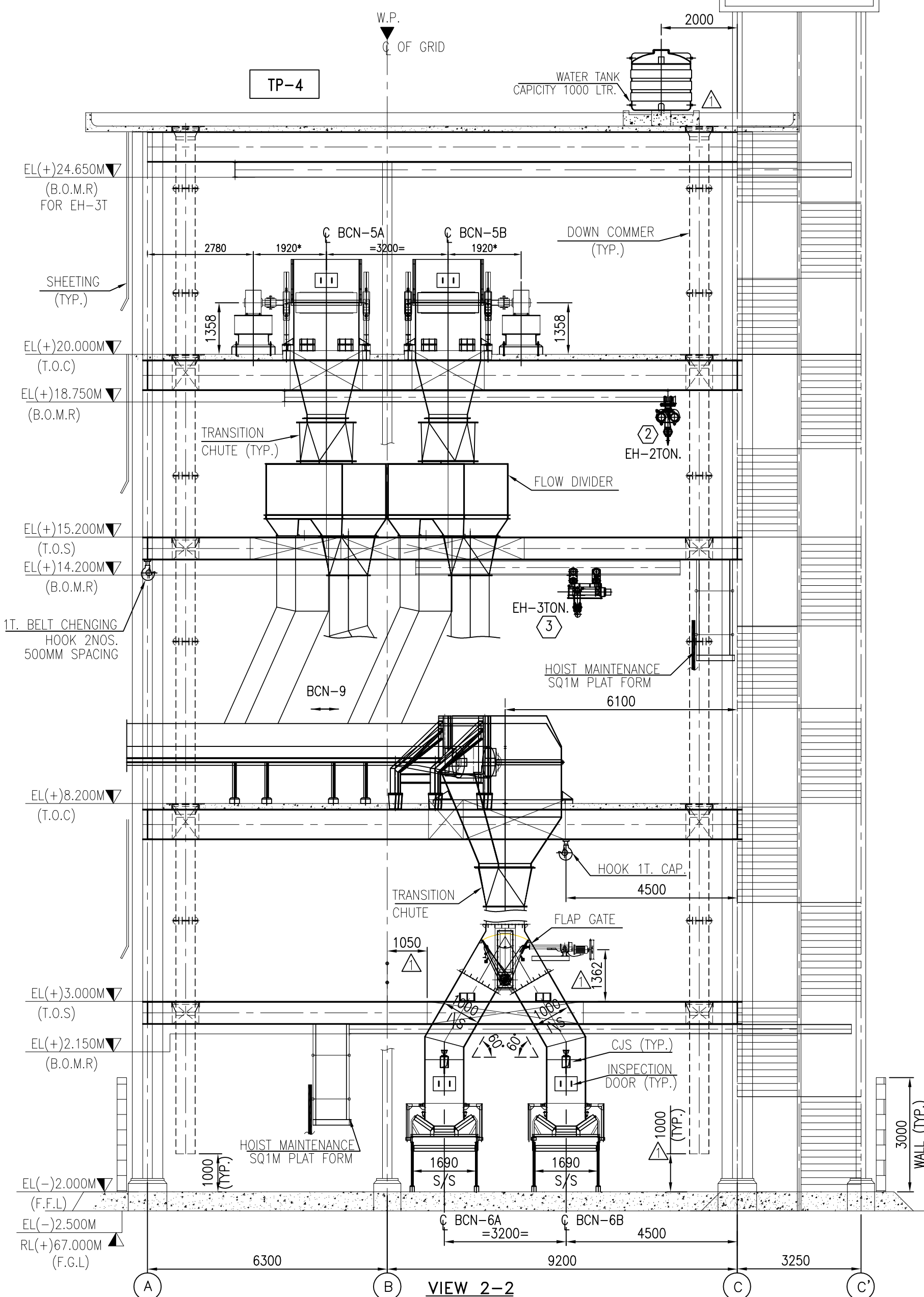
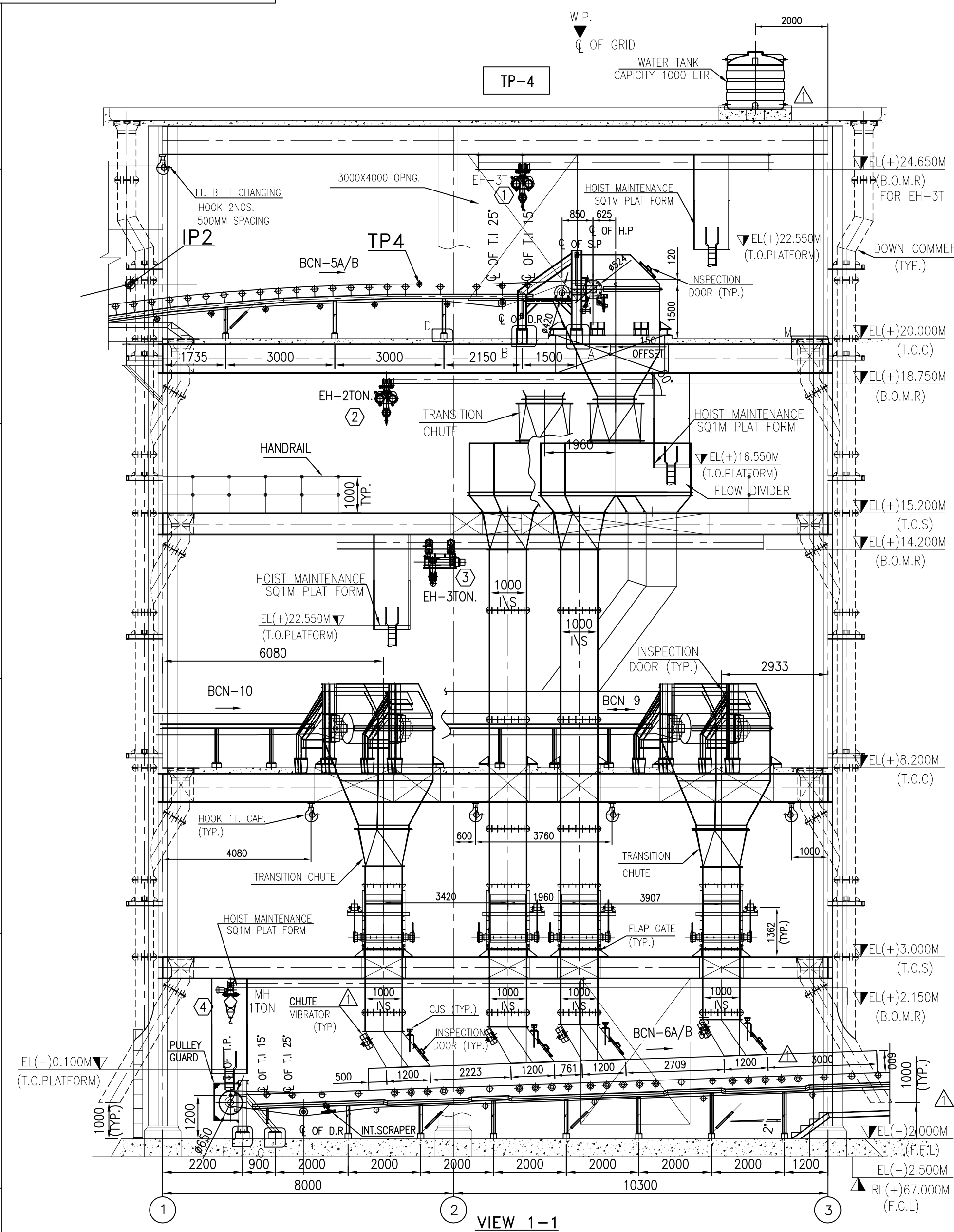


IS-1-GA-691-101-M022

DO NOT SCALE. IF IN DOUBT, ASK.



REFERENCE DRAWINGS/DOCUMENTS	
BHEL-DRG. NO.	DESCRIPTION
IS-1-GA-691-101-M012	MECHANICAL GA & LOAD DATA OF BCN-5AB
IS-1-GA-691-101-M013	MECHANICAL GA & LOAD DATA OF BCN-6AB
IS-1-GA-691-101-M016	MECHANICAL GA & LOAD DATA OF BCN-9
IS-1-GA-691-101-M017	MECHANICAL GA & LOAD DATA OF BCN-10
IS-1-GA-691-100-M003	TYPICAL CROSS SECTION OF CONVEYOR GALLERY & TUNNELS
IS-1-FL-691-100-M002	FLOW DIAGRAM CHP
IS-0-PL-691-100-M001	GENERAL PLANT LAYOUT OF COAL HANDLING SYSTEM

LEGEND :-	
F.F.L	= FINISHED FLOOR LEVEL
F.G.L	= FINISHED GROUND LEVEL
T.O.C	= TOP OF CONCRETE
T.O.S	= TOP OF STEEL
B.O.M.R	= BOTTOM OF MONORAIL
M.H	= MANUAL HOIST
E.H	= ELECTRIC HOIST
T.P	= TRANSFER POINT
B.C.N	= BELT CONVEYOR

HOIST SCHEDULE

ITEM NO.	MONO RAIL SECTION	HOIST TYPE	CAPACITY	LIFTING HT.	OPERATING HT.	L/B.RADIUS	QTY.	LOCATION LVL. @ ELEVATION	HANDLING EQPT. & LOCATION
1	ISMB 400	ELECTRICAL	3 T	26.650 MTRS.	26.650 MTRS.	3,4 MTRS	01 No.	EL(+24.650M) (B.O.M.R)	BELOW ROOF FOR DRIVE COMPONATE OF CONV 5A/B
2	ISMB 300	ELECTRICAL	2 T	3.550 MTRS.	20.750 MTRS.	2 MTRS	01 No.	EL(+18.750M) (B.O.M.R)	FLOW DIVIDER
3	ISMB 400	ELECTRICAL	3 T	6.000 MTRS.	16.200 MTRS.	3 MTRS	02 Nos.	EL(+14.200M) (B.O.M.R)	DRIVE COMPONATE OF CONV 9 AND CONV 10
4	ISMB 250	MANUAL	1.0 T	4.150 MTRS.	4.150 MTRS.	2 MTRS	01 No.	EL(+2.150M) (B.O.M.R)	TAIL PULLEY OF CONV 6A/B

NOTES:-

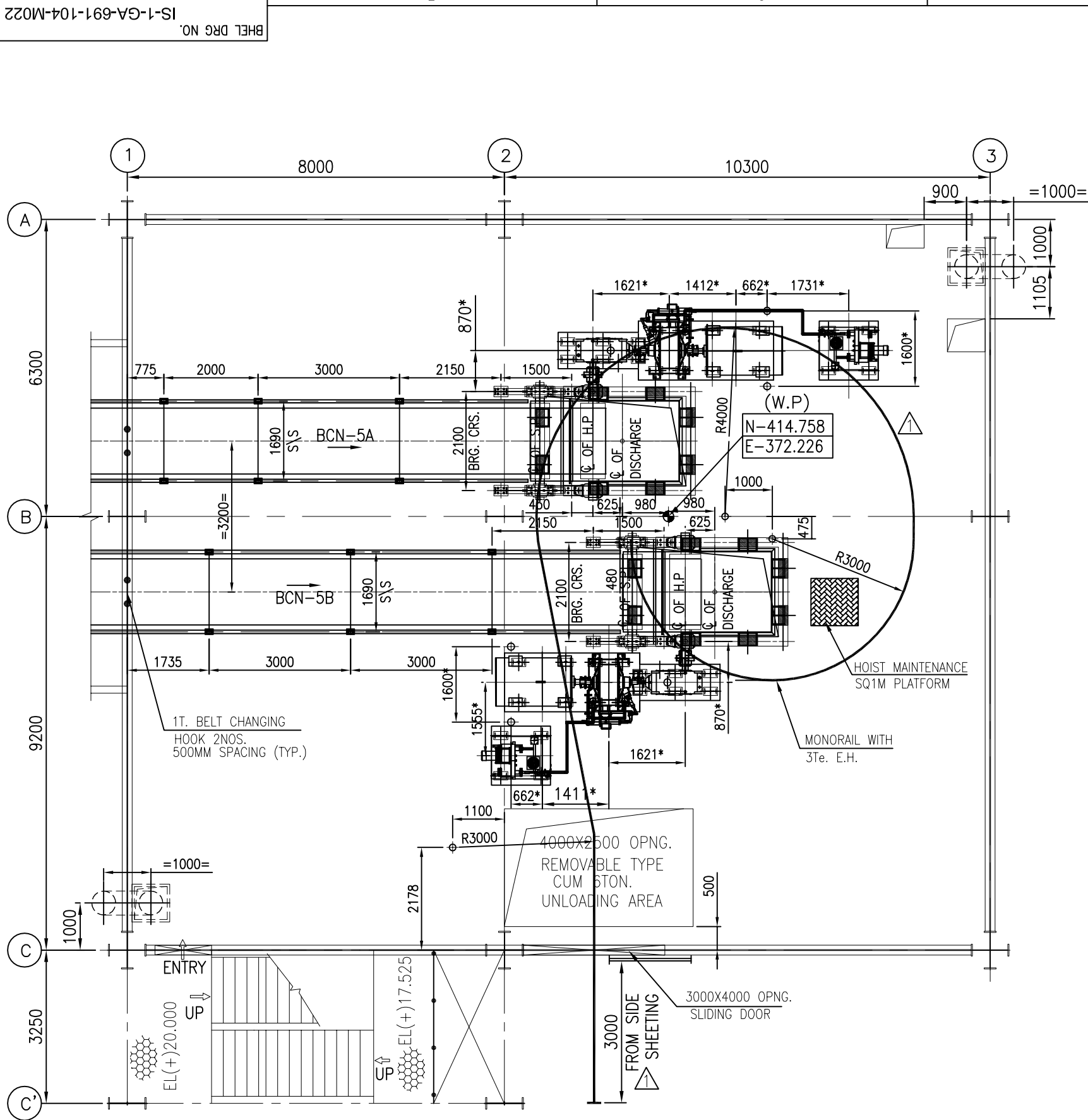
- ALL DIMENSIONS ARE IN MM & LEVELS ARE IN METERS.
- THE FINISHED FLOOR LEVEL (FFL) OF POWER HOUSE BUILDING GROUND FLOOR IS EL. 0.00M WHICH CORRESPONDS TO RL 69.5M i.e. 0.5M ABOVE FGL.
- BOILER AREA FINISHED GRADED LEVEL IS 200MM BELOW 0.0M i.e. RL 69.3M.
- TRANSFORMER YARD FINISHED GRADED LEVEL IS 100MM BELOW 0.0M i.e. RL 69.4M.
- STEPPED WALKWAY, IF CONVEYOR INCLINATION IS MORE THAN 10°.
- THE DRIVE DIMENSIONS ARE INDICATIVE ONLY AS MARKED * & SHALL BE FINALIZED AFTER GETTING THE DRIVE COMPONENT DRGS.
- GALLERY SUPPORTING TRESTLE TYPES AND TRESTLE LOCATIONS INDICATED IN THIS DRG. ARE TENTATIVE AND FINALLY THEY SHALL BE AS PER STRUCTURAL DRGS.
- FOR DS/SW/DW SYSTEM, SEPARATE DETAILED DRGS. WILL BE FURNISHED AT LATER STAGE.
- CIVIL REQUIREMENT INDICATED TENTATIVE.
- CURB WALL BE PROVIDED AROUND ALL OPENINGS.
- INSPECTION DOOR SHALL BE LEAK PROOF.
- THE FINISHED GROUND LEVEL OF TP-4 IN CHP AREA IS EL(-) 2.5M WHICH

1	20-10-19	REVISED AS PER DESEIN COMMENTS DATED 18-7-19	J.S.	M.K.N
R.No:	DATE	BRIEF RECORD	BY	APPD
REVISIONS				

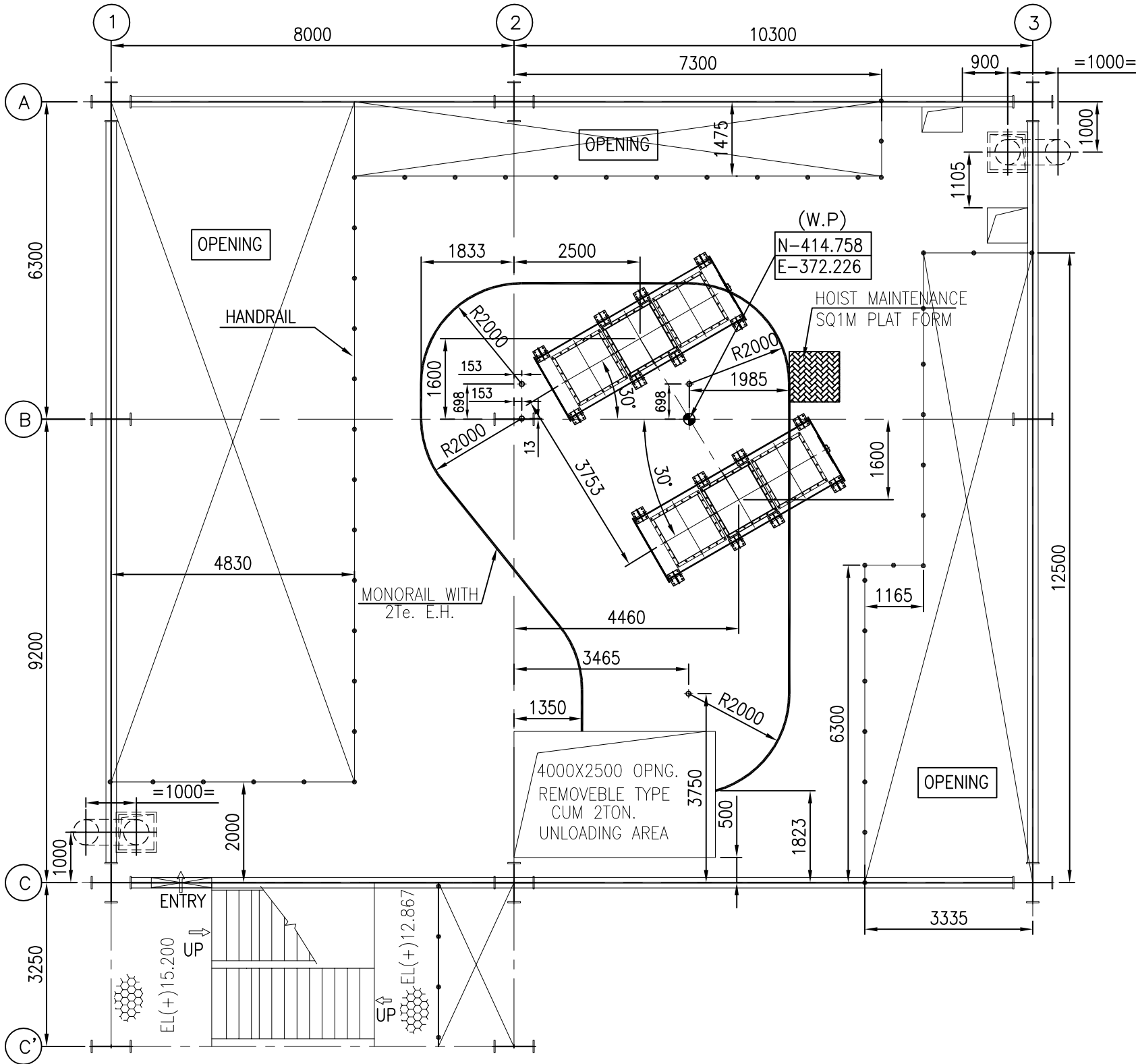
		EQUIPMENT LOAD DATA PER FOOTINGS (TONNES)																					
		EL(+20.000M					EL(+15.200M		EL(+8.200M							EL(+3.000M					EL(-2.000M		
		BCN-5AB DRIVE END FOUNDATION	BCN-5AB HOOD	SWEEPING CHUTE	SHORT SUPPORT BCN-5A/B	FLOW DIVIDER	SWEEPING CHUTE	BCN-9 DRIVE END FOUNDATION	BCN-10 DRIVE END FOUNDATION	BCN 9/10 HOOD	SHORT SUPPORT BCN-9	SHORT SUPPORT BCN-10	BCN-5A/B CHUTE	SWEEPING CHUTE	BCN-9/10 CHUTE	BCN-5A/B CHUTE	SWEEPING CHUTE	BCN-6AB TAIL END FOUNDATION	SHORT SUPPORT BCN-6A/B				
		HF1	HF2	F1	F2	SS-2	F1	F2	HF1	HF2	HF3	HF4	F1	SS-2	SS-1	F3	F4	F1	F2	F3	TF1	TF2	SS-1
NO OF FOOTING		4	4	16	4	12	16	4	2	2	2	2	16	9	4	8	2	8	8	2	4	4	28
DEAD LOAD	DL	2.3	2.1	0.8	0.3	1.3	1.1	0.3	2.53	1.8	2.26	1.8	4.0	2.5	1.3	3.0	0.3	2.8	2.8	0.3	0.74	2.55	2.5
LIVE LOAD	LL	0.3	0.2	1.0	-	0.3	0.4	-	0.2	0.2	0.2	0.2	1.0	0.5	0.3	1.95	-	1.8	1.8	-	0.00	0.11	0.5
BELT PULL	Hx(Starting)	5.6	6.2	-	-	-	-	-	5.53	4.1	5.10	3.75	-	-	-	-	-	-	-	-	-	-	-
	Hx(Running)	4.7	5.2	-	-	-	-	-	4.61	3.41	4.23	3.13	-	-	-	-	-	-	-	-	-1.86	-2.25	-
	Vy ±(Starting)	-6.3	6.5	-	-	-	-	-	-7.74	8.82	-7.56	8.22	-	-	-	-	-	-	-	-	-	-	-
	Vy ±(Running)	-5.2	5.4	-	-	-	-	-	-6.45	7.35	-6.30	6.84	-	-	-	-	-	-	-	-	-	-4.19	4.05
NOTES FOR LOAD DATA DIRECTION: 1. (-) SYMBOL -VE IMPLIES VERTICAL UPWARD FORCE AND +VE IMPLIES VERTICAL DOWN WARD FORCE 2. DIRECTION OF HORIZONTAL LOADS AS INDICATED IN THE TABLE SHALL READ IN CONJUNCTION WITH THE RESPECTIVE PLAN VIEW ALONG THE CONVEYOR..																							

NOTES FOR LOAD DATA DIRECTION:

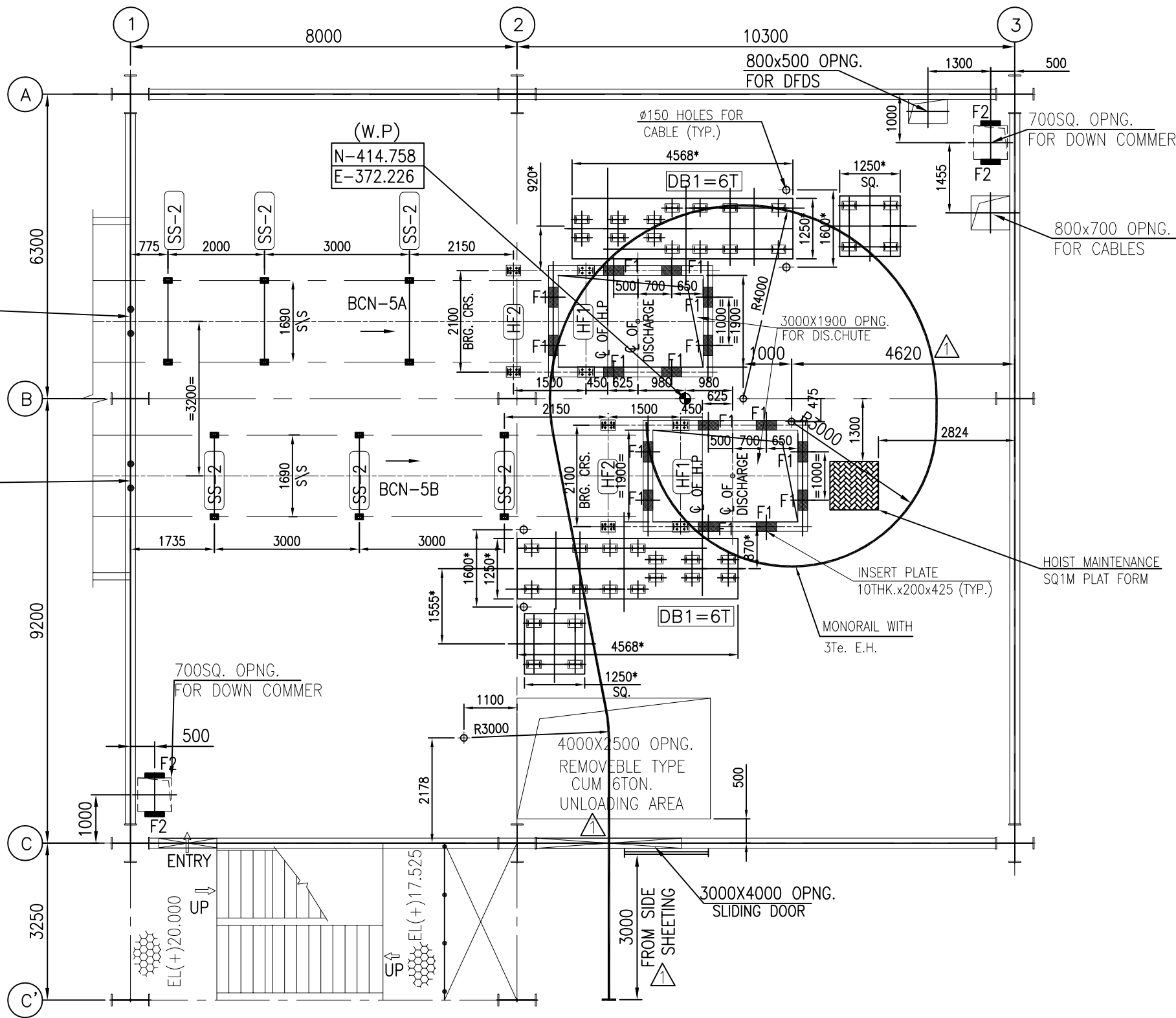
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- DIRECTION OF HORIZONTAL LOADS AS INDICATED IN THE TABLE SHALL READ IN CONJUNCTION WITH THE RESPECTIVE PLAN VIEW ALONG THE CONVEYOR..



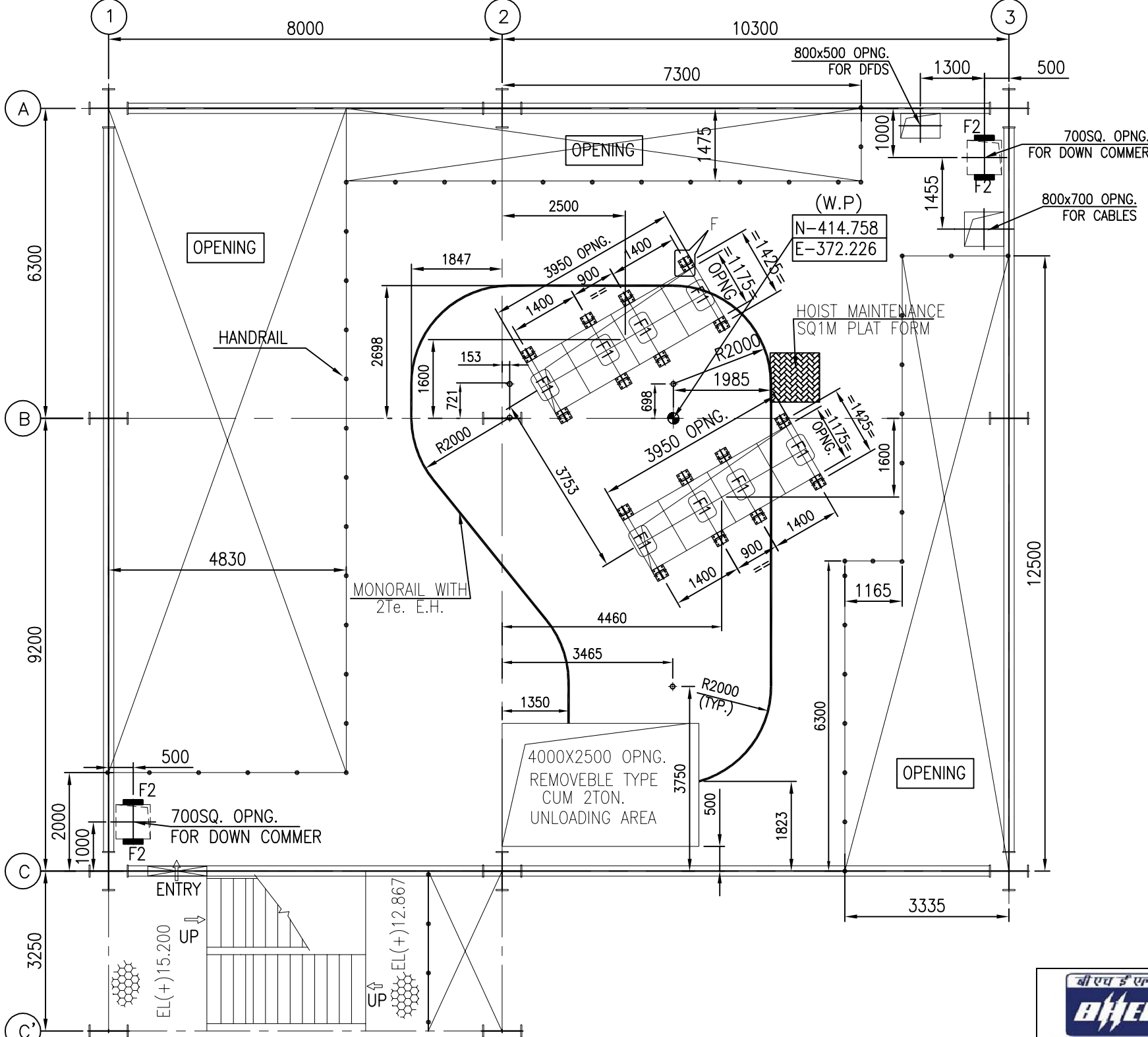
PLAN AT EL(+20.000M (T.O.C)
MACHINERY PLAN



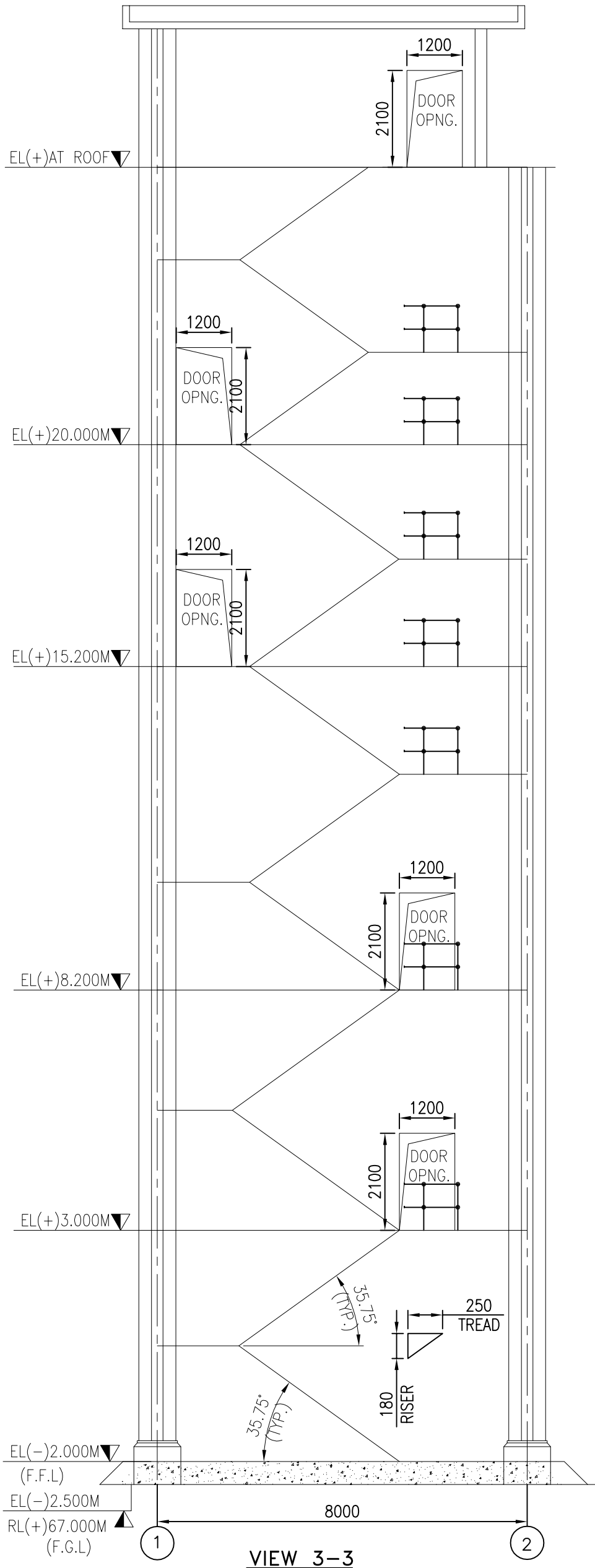
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MACHINERY PLAN



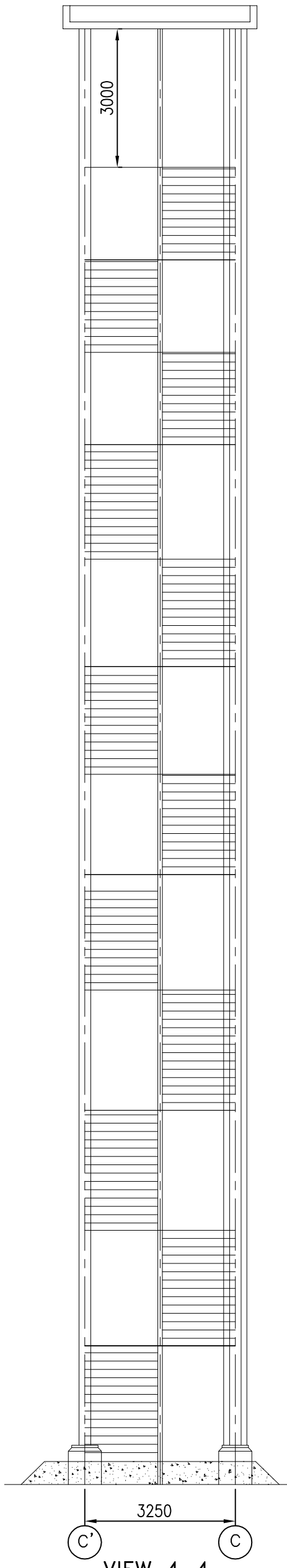
PLAN AT EL(+20.000M (T.O.C)
FOUNDATION PLAN



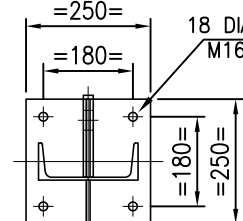
PLAN AT EL(+15.200M (T.O.S)
FOUNDATION PLAN



VIEW 3-3



VIEW 4-4



ENLG. DTLS. AT-'I'
AT FLOW DIVIDER
REFER SHEET-2 ZONE 6-E



BHARAT HEAVY ELECTRICALS LTD
INDUSTRIAL SYSTEMS GROUP
(COAL HANDLING PLANT)

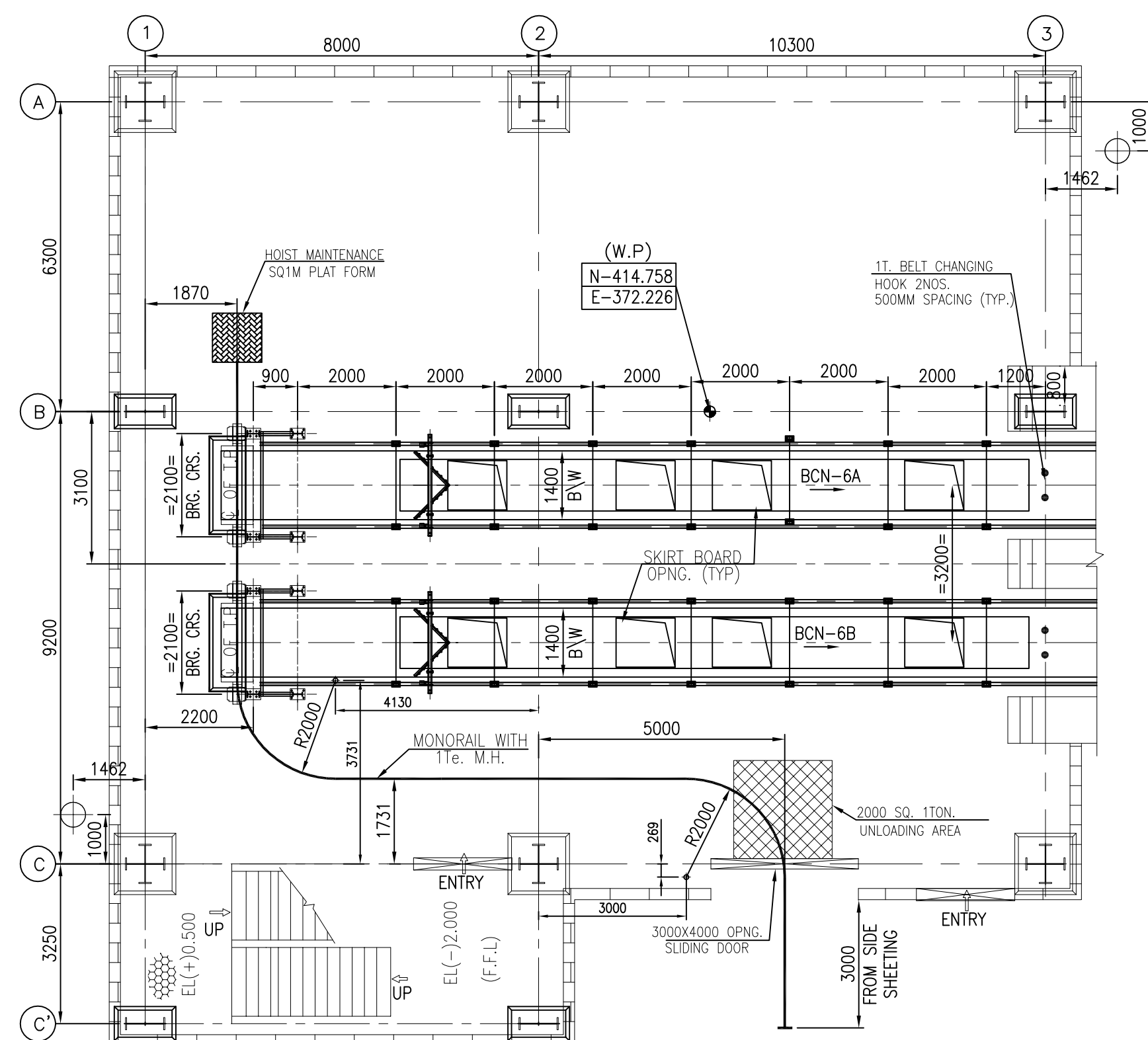
This approval status shall be interpreted as laid down in the contract and it shall not relieve the contractor from the contractual obligation. Reviewed & Submitted for

CAT-I - Approval
CAT-II - Information
CAT-III - Reference

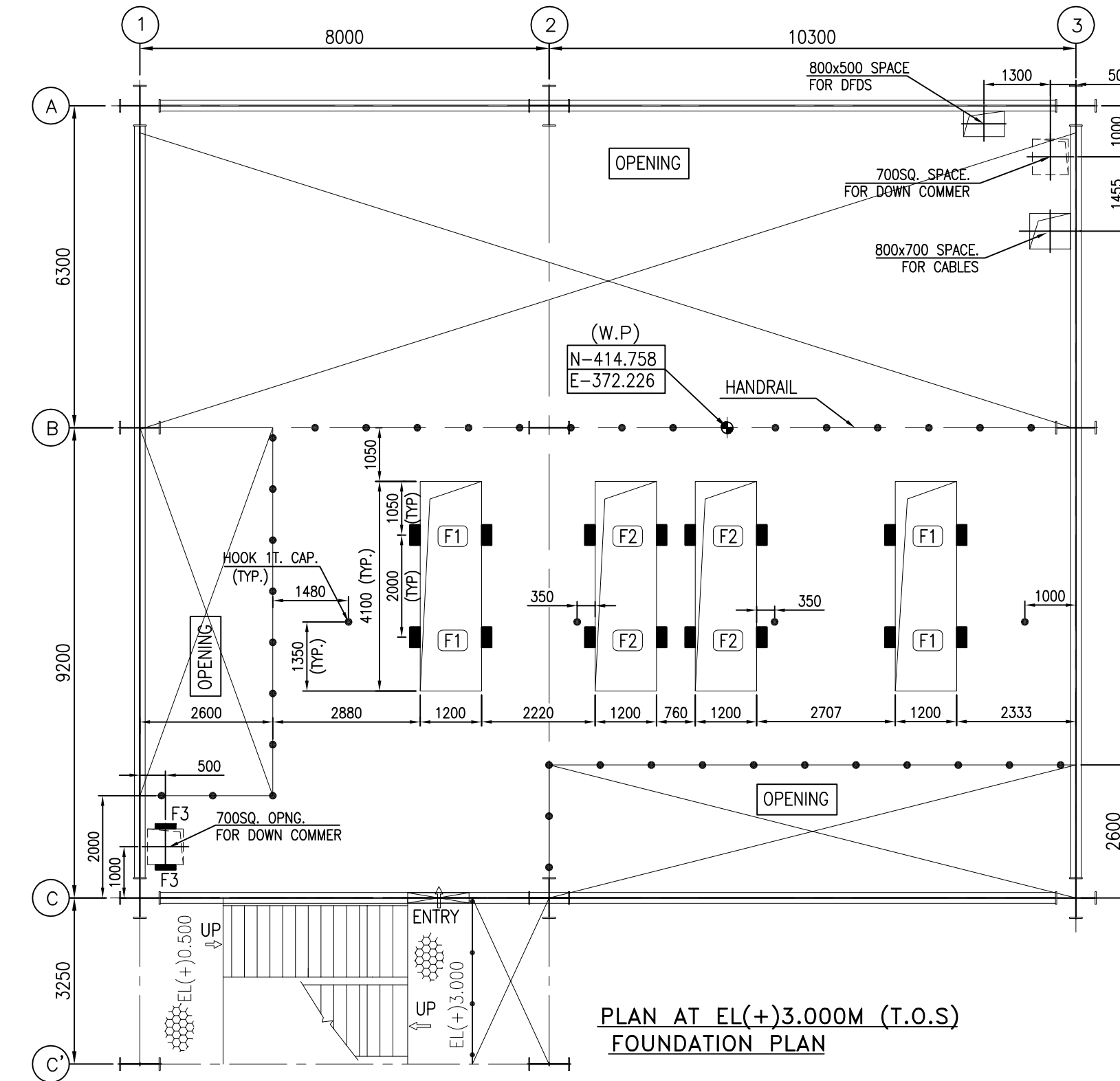
Name
Mallikarjun Nayak
Sr Engineer
Bharat Heavy Electricals
Limited
155/95 1A CHP
Bangalore - 560012

1	20-10-15	REVISED AS PER DESEIN COMMENTS DATED 18-7-15	J.S.	M.K.N.
RNG.	DATE	BRIEF RECORD	BY	APPD
		REVISIONS		

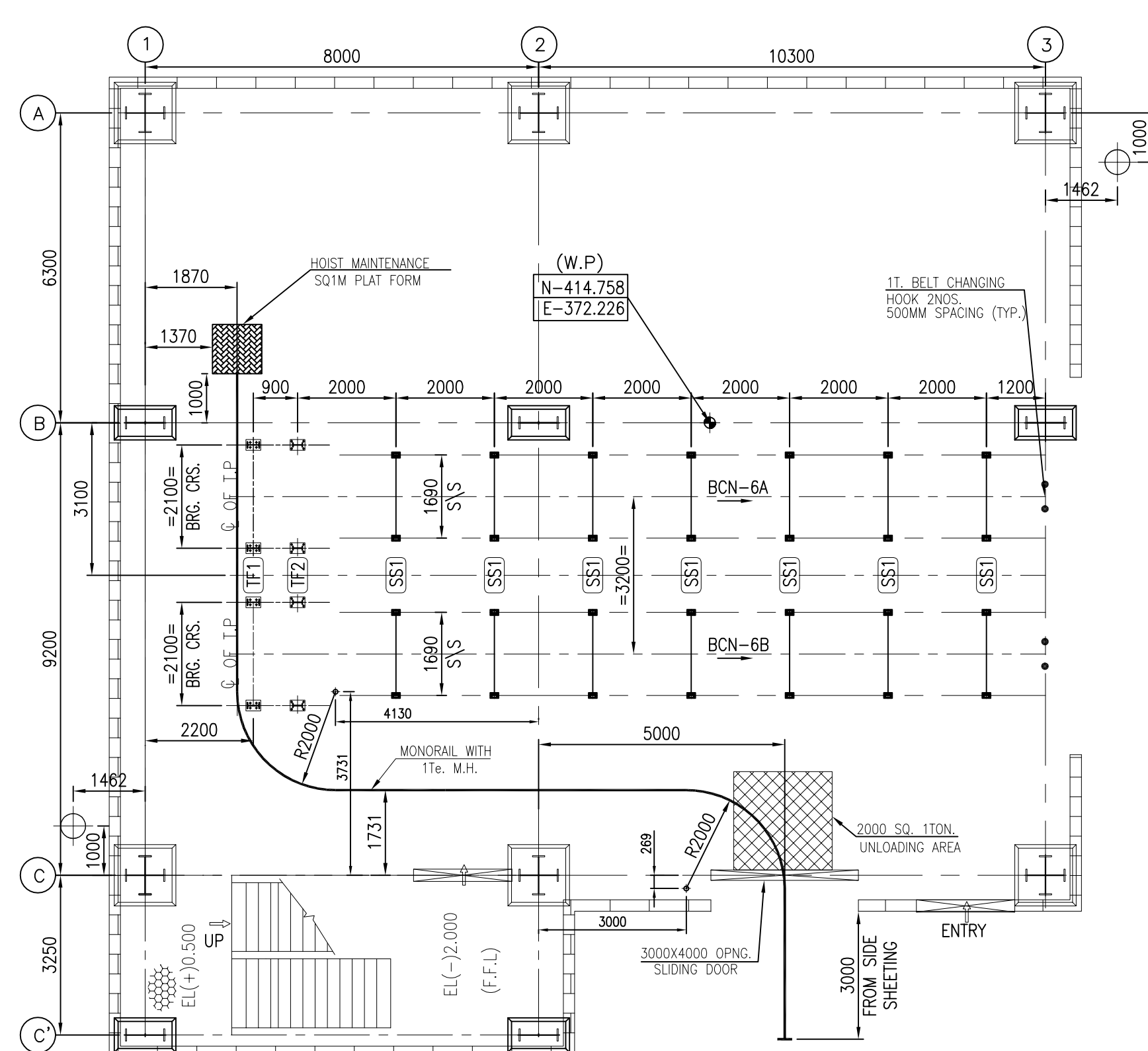
OWNER:	TELANGANA STATE POWER GENERATION CORPORATION LTD. HYDERABAD - TELANGANA, INDIA			
CONSULTANT	DESEIN PRIVATE LIMITED			
PROJECT :	BHADRADRI THERMAL POWER STATION 4 X 270 MW, UNITS-1 TO 4, MANUGURU, TELANGANA, INDIA			
EPC CONTRACTOR	BHARAT HEAVY ELECTRICALS LIMITED INDUSTRIAL SYSTEMS GROUP ISG-BANGALORE			
TITLE :	G.A OF TP-4 WITH LOAD DATA	NAME	SIGN	DATE
		DRN.	DUT	10.06.15
		CHD.	MNK	10.06.15
SCALE	BHEL JOB NO. IS-1-14-2007	BHEL-ISG	IS-1-GA-691-104-M022	REV. 01



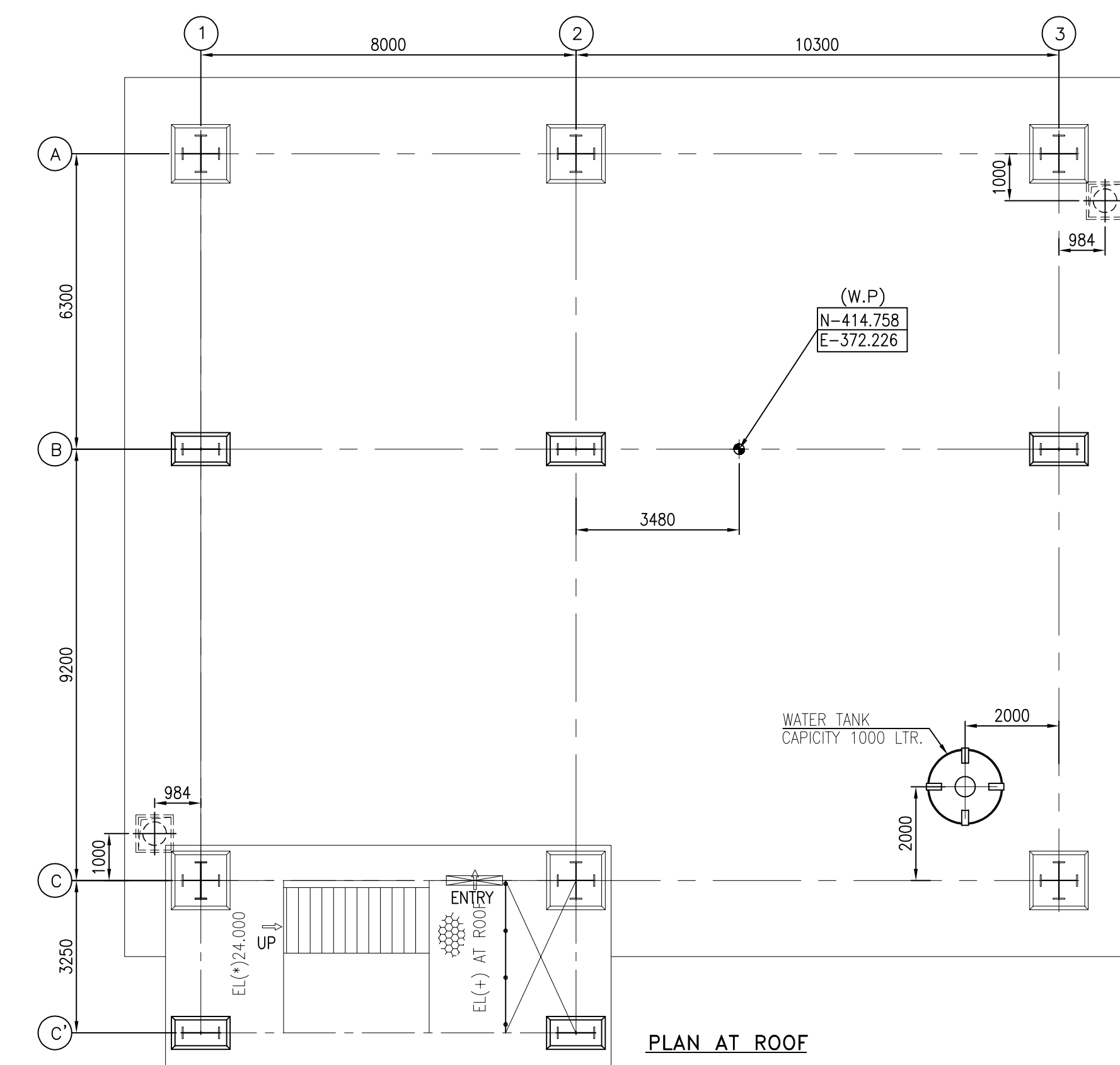
PLAN AT EL(-)2.000M (F.F.L)
MACHINERY PLAN



PLAN AT EL(+)^{3.000}M (T.O.S)
FOUNDATION PLAN



PLAN AT EL(-)2.000M (F.F.L)
FOUNDATION PLAN



PLAN AT ROOF

OWNER:		TELANGANA STATE POWER GENERATION CORPORATION LTD.																													
		HYDERABAD – TELANGANA, INDIA																													
CONSULTANT		DESEIN PRIVATE LIMITED																													
 PROJECT :		BHADRADRI THERMAL POWER STATION 4 X 270 MW, UNITS-1 TO 4, MANUGURU, TELANGANA, INDIA																													
EPC CONTRACTOR 		BHARAT HEAVY ELECTRICALS LIMITED INDUSTRIAL SYSTEMS GROUP ISG-BANGALORE					<table><tr><td></td><td>NAME</td><td>SIGN</td><td>DATE</td><td>REV</td></tr><tr><td>DRN.</td><td>DNK</td><td></td><td>10.06.15</td><td>A</td></tr><tr><td>CHD.</td><td>MUK</td><td></td><td>10.06.15</td><td>NO. OF</td></tr><tr><td>APP.</td><td>RSP</td><td></td><td>10.06.15</td><td>VARS</td></tr></table>						NAME	SIGN	DATE	REV	DRN.	DNK		10.06.15	A	CHD.	MUK		10.06.15	NO. OF	APP.	RSP		10.06.15	VARS
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APP.	RSP		10.06.15	VARS																											
M.K.N APPO				TITLE : G.A OF TP-4 WITH LOAD DATA					TOTAL SHEETS SHEET NO.			03 03																			
SCALE		BHEL JOB NO. IS-1-14-2007					BHEL-ISG DRG.NO.: IS-1-GA-691-104-M022					REV 01																			

1	20-10-15	REVISED AS PER DESEIN COMMENTS DATED 18-7-15	J.S.	M.K.M
R.No:	DATE	BRIEF RECORD	BY	APPD
REVISIONS				

Project : BHADRADRI POWER 4x270MW TELANGANA
Client : TELANGANA STATE POWER GENERATION CORPORATION LTD.
Consultant : DESEIN PRIVATE LTD.
Contractor : BHARAT HEAVY ELECTRICALS LTD.

COMPLIANCE TO COMMENTS OF DESEIN

ON GA DRAWINGS OF TP-4 R0 SUBMITTED BY BHEL FOR APPROVAL

Ref:	Comments made on GA Drawing prints of TP-4, IS-1-GA-691-104-M022, R0 by DESEIN		
SL NO	DESEIN COMMENTS.	COMPLIANCE / CLARIFICATIONS BY BHEL	REMARKS
	COMMENTS MARKED MEMO		
1	Monorail shall be projected 3 m from the out side sheeting of the transfer tower. Please correct.	Noted & revised.	
2	Please indicate the down comer and tramp iron chute clearance from the ground level.	Indicated	
3	Please include details of 1 ton hook provided at various places in the hoist schedule.	In hoist schedule, only details of hoist will be indicated. However, capacity & location is indicated in resp plan & elevation view & same shall be taken care by our civil in drgs.	
4	DE please check and correct the note 8 in this drawing. Also include the details of service water and drinking water	Noted & revised.	
5	Please confirm the *marked data and delete note 6	Whenever possible revised at this stage. However, it shall be taken care before release of drgs to site for civil work.	
6	Please submit power tension calculations of BCNs coming in the transfer tower along with the GA's.	Already submitted.	
7	Please provide a note that curb wall will be provided around all openings	Noted & revised.	
8	Please provide side cladding details, equipment list along with their loads.	Shall be furnished in respective drgs. of civil / structural drgs.	
9	Please indicate chute vibrators and provide its details.	Indicated	
10	Inspection doors shall be leak proof. Please add	Noted.	
11	Anchor bolt plan may be corrected as foundation plan as not anchor bolt details are shown.	Corrected	
12	Refer machinery and anchor bolt plans: Please indicated the type of floor.	Indicated	
13	Please indicate height of skirt board and projection of skirt board in forward & reverse direction & give dimension.	Indicated	
14	Please confirm monorail routed is passing over CG of equipments to be handled.	Whereever possible to maximum extent, monorail routing has been done.	
15	Openings for debris chute, DS/SW/DW pipes etc to be shown in all floors.	Indicated	
16	Please indicate north orientation in all the drawings.	Indicated	
17	Please indicate all the distances from the working point	Indicated	
18	Water tank shall be provided on a pedestal. Please indicate the same.	Indicated	
19	Please check and correct the angle of T.I in conveyors.	Indicated inline with already conveyor drgs. submitted.	
20	Refer GA of TP-4: At elevations 3, 15.2 openings are provided in the grids 1 7 2 along A/B/C row. Please clarify why these openings are envisaged.	Since it skew in arrangement, for better clarify, pls. refer respective plan view also.	
21	Refer GA of TP-4 : please indicate feeding points on BCN-9 from flow divider in plan at EI (+) 8.20M	Indicated	