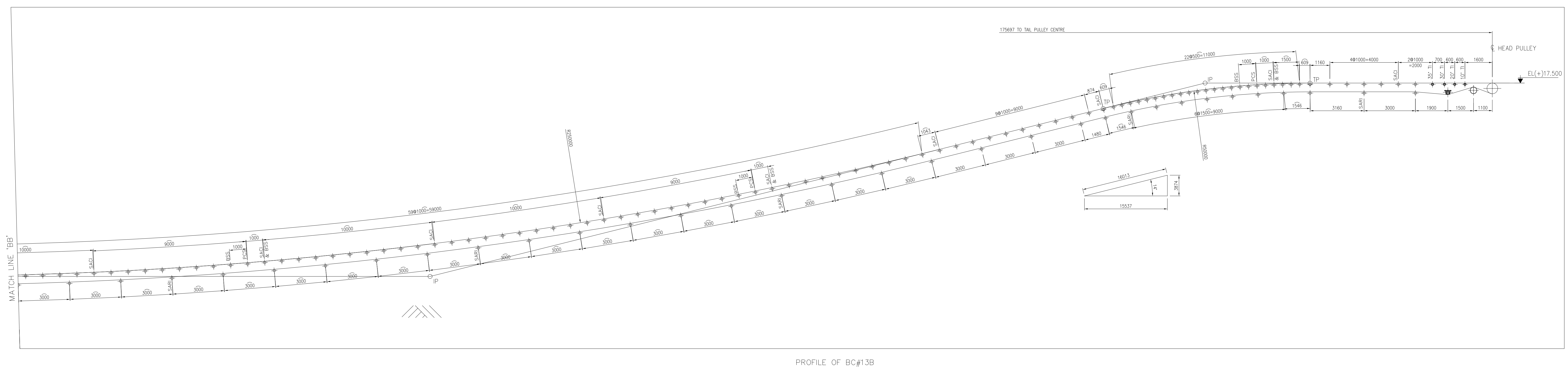
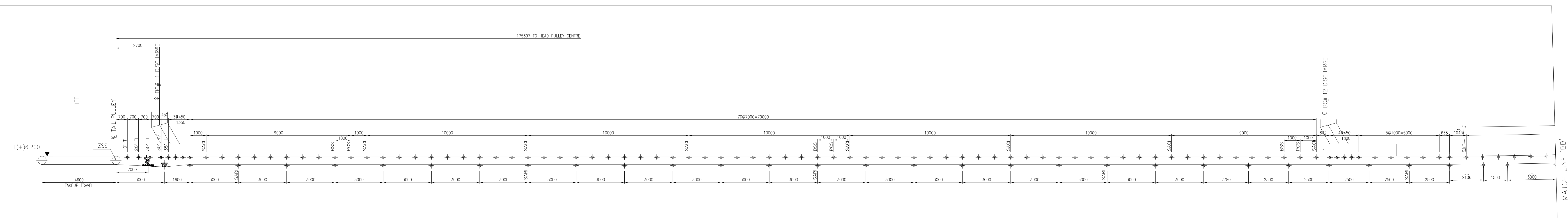
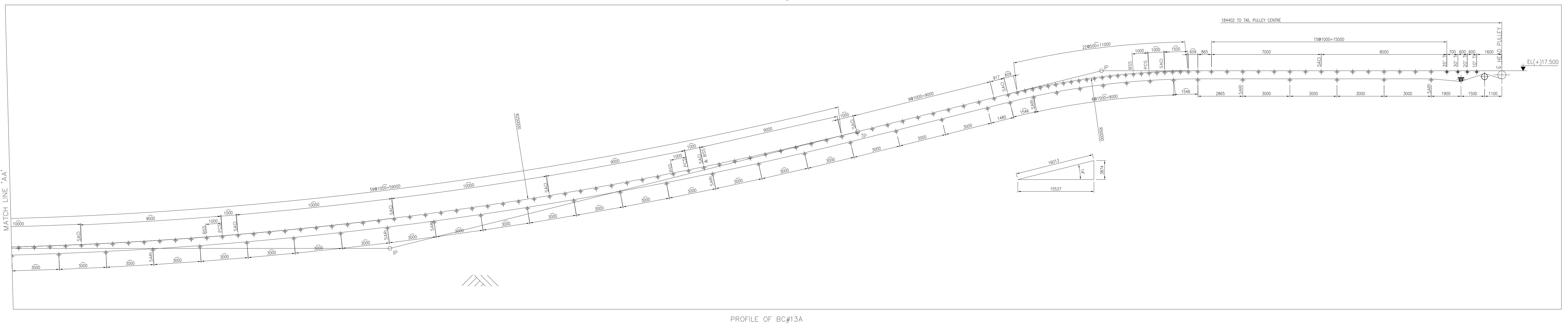
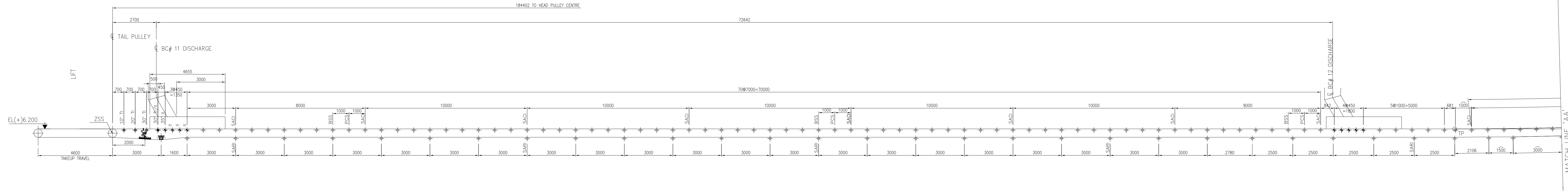
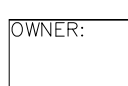
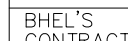


LEGENDS:

CARRYING IDLER	CI
RETURN IDLER	RI
IMPACT IDLER	II
SELF ALIGNING CARRYING IDLER	SACI
SELF ALIGNING RETURN IDLER	SARI
TRANSITION IDLER	TI
PULL CHORD SWITCH	PCS
BELT SWAY SWITCH	BSS
ZERO SPEED SWITCH	ZSS

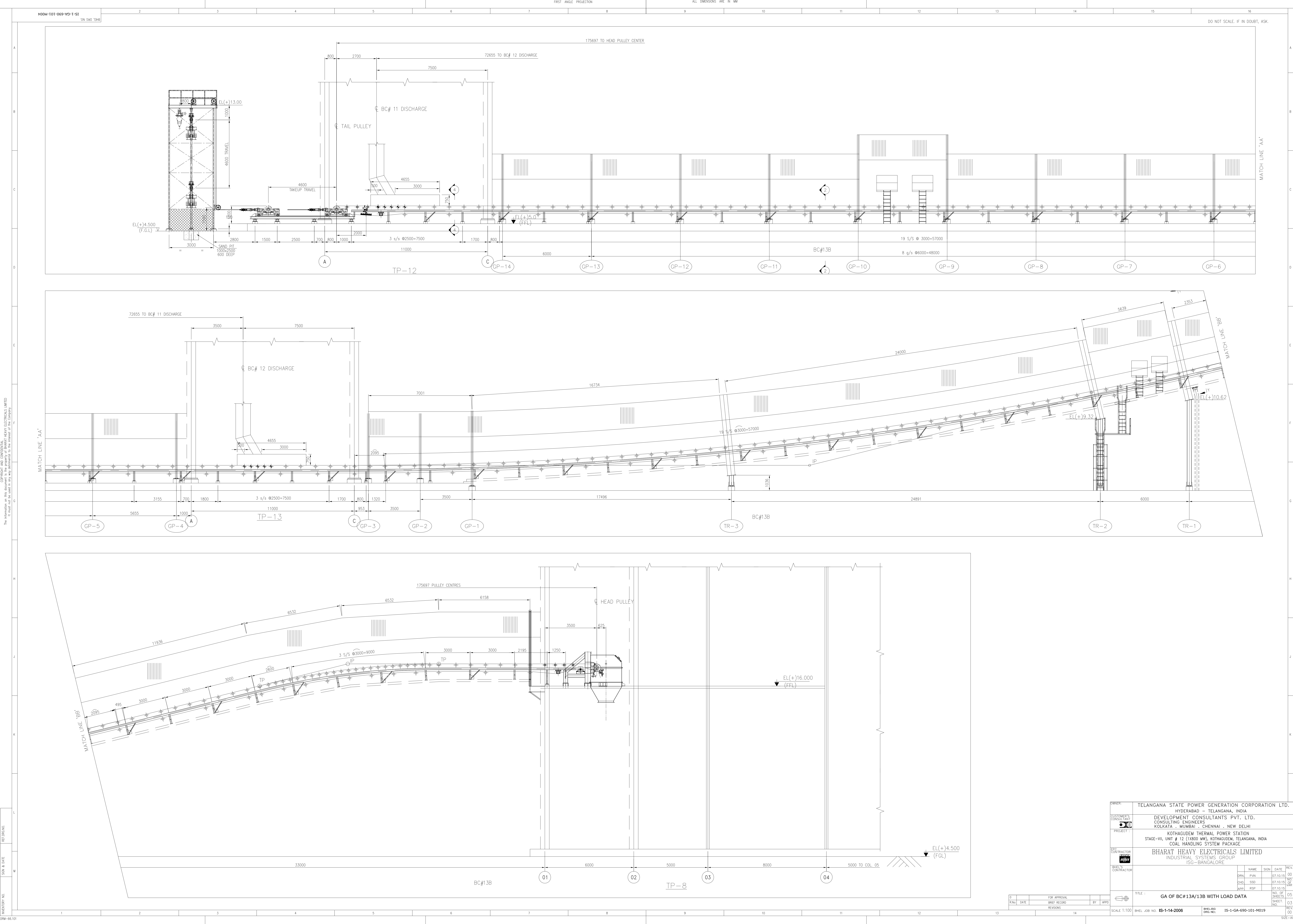
HEAD PULLEY	HP
TAIL PULLEY	TP
SNUB PULLEY	SP
BEND PULLEY	BP
TAKEUP PULLEY	TU
WORKING POINT	WP
SHORT SUPPORT	SS
TOP OF CONCRETE	TOC
DEFLECTOR ROLLER	DR
INTERNAL SCRAPER	IS

O		FOR APPROVAL		
R.No:	DATE	BRIEF RECORD	BY	APPO
REVISIONS				

	TELANGANA STATE POWER GENERATION CORPORATION LTD. HYDERABAD – TELANGANA, INDIA																													
	DEVELOPMENT CONSULTANTS PVT. LTD. CONSULTING ENGINEERS KOLKATA - MUMBAI - CHENNAI - NEW DELHI																													
PROJECT :	KOTHAGUDEM THERMAL POWER STATION STAGE-VII, UNIT # 12 (19800 MW), KOTHAGUDEM, TELANGANA, INDIA COAL HANDLING SYSTEM PACKAGE																													
EPC CONTRACTOR 	BHARAT HEAVY ELECTRICALS LIMITED INDUSTRIAL SYSTEMS GROUP ISO – BANGALORE																													
BIDDING CONTRACTOR 	<table><tr><th></th><th>NAME</th><th>SIGN.</th><th>DATE</th><th>RE.</th></tr><tr><td>DIN.</td><td>PUN</td><td></td><td>07-10-16</td><td>NO</td></tr><tr><td>SD</td><td>SDD</td><td></td><td>07-10-16</td><td>NO</td></tr><tr><td>APP</td><td>RSP</td><td></td><td>07-10-16</td><td>NO OF SHEETS</td></tr><tr><td></td><td></td><td></td><td></td><td>NO OF</td></tr></table>						NAME	SIGN.	DATE	RE.	DIN.	PUN		07-10-16	NO	SD	SDD		07-10-16	NO	APP	RSP		07-10-16	NO OF SHEETS					NO OF
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TITLE :	GA OF BCF#13A/13B WITH LOAD DATA																													
SCALE : 1/100	BHEL JOB NO : IS-14-2006	BHEL DDO NO : IS-14-GA-690-101-M019	REVISION NO :																											



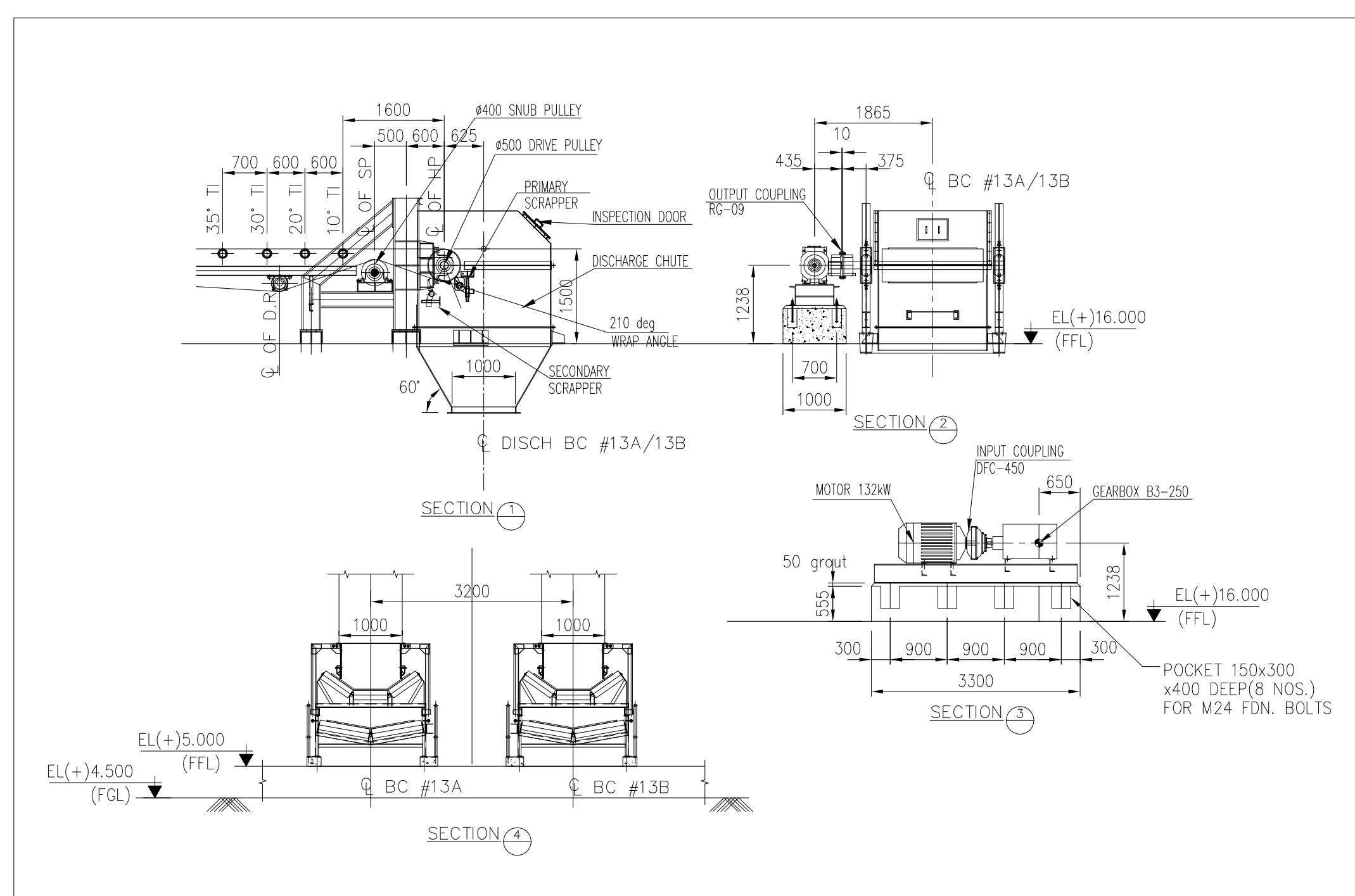
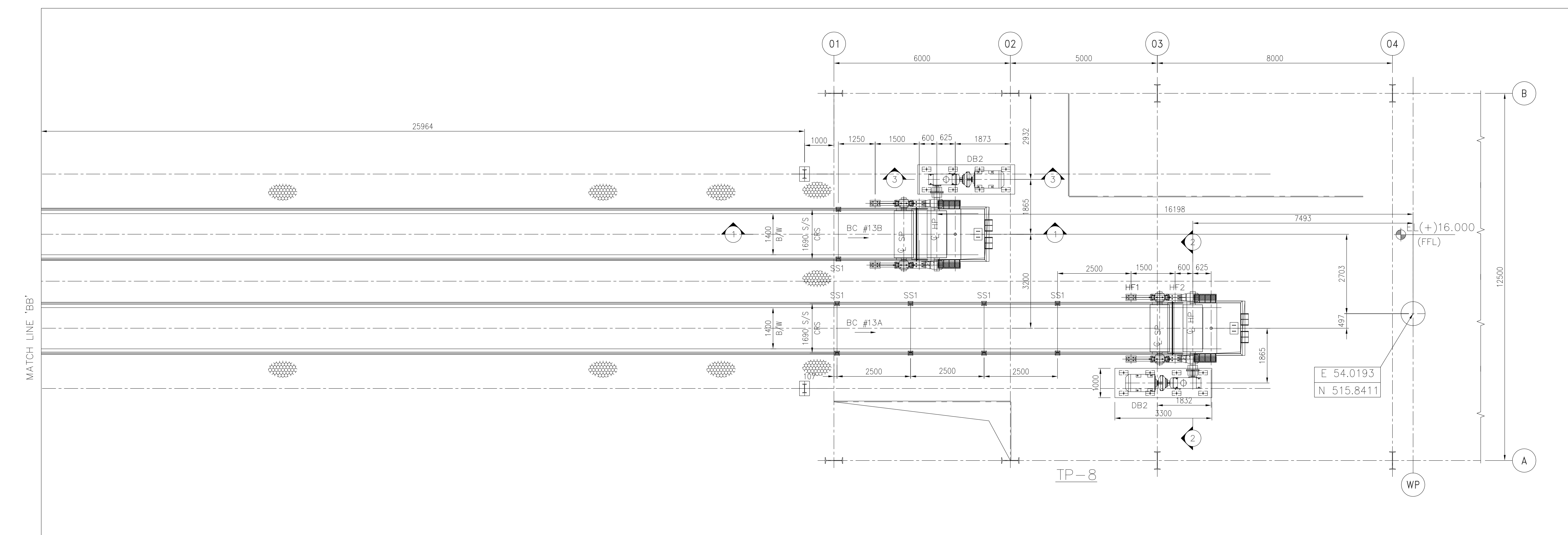
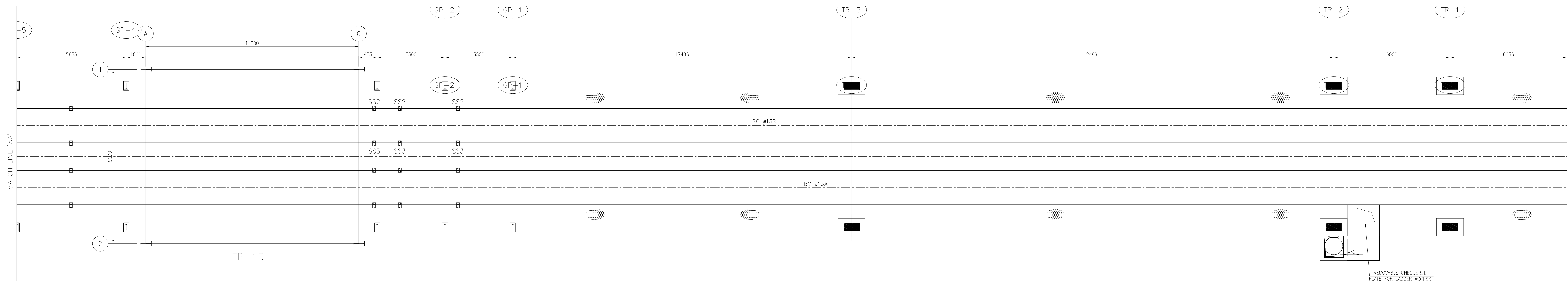
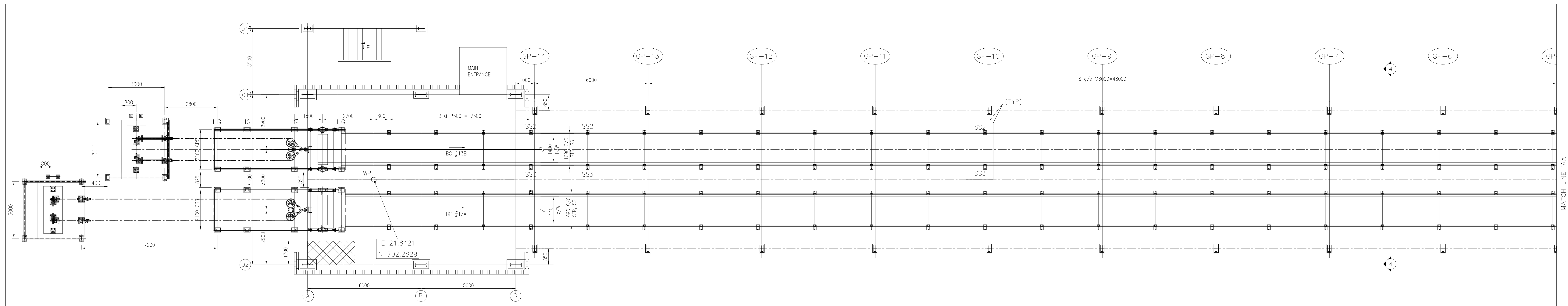
 CUSTOMER'S LOGO/NAME		TELANGANA STATE POWER GENERATION CORPORATION LTD. HYDERABAD – TELANGANA, INDIA																									
PROJECT		DEVELOPMENT CONSULTANTS PVT. LTD. CONSULTING ENGINEERS KOLAKATA - MUMBAI - CHENNAI - NEW DELHI																									
		KOTHAUDETH THERMAL POWER STATION STAGE-VII, UNIT # 12 (13800 MW), KOTHAUDETH, TELANGANA, INDIA COAL HANDLING SYSTEM PACKAGE																									
ISS CONTRACTOR  BH&E'S CONTRACTOR		BHARAT HEAVY ELECTRICALS LIMITED INDUSTRIAL SYSTEMS GROUP ISG – GANAGALORE																									
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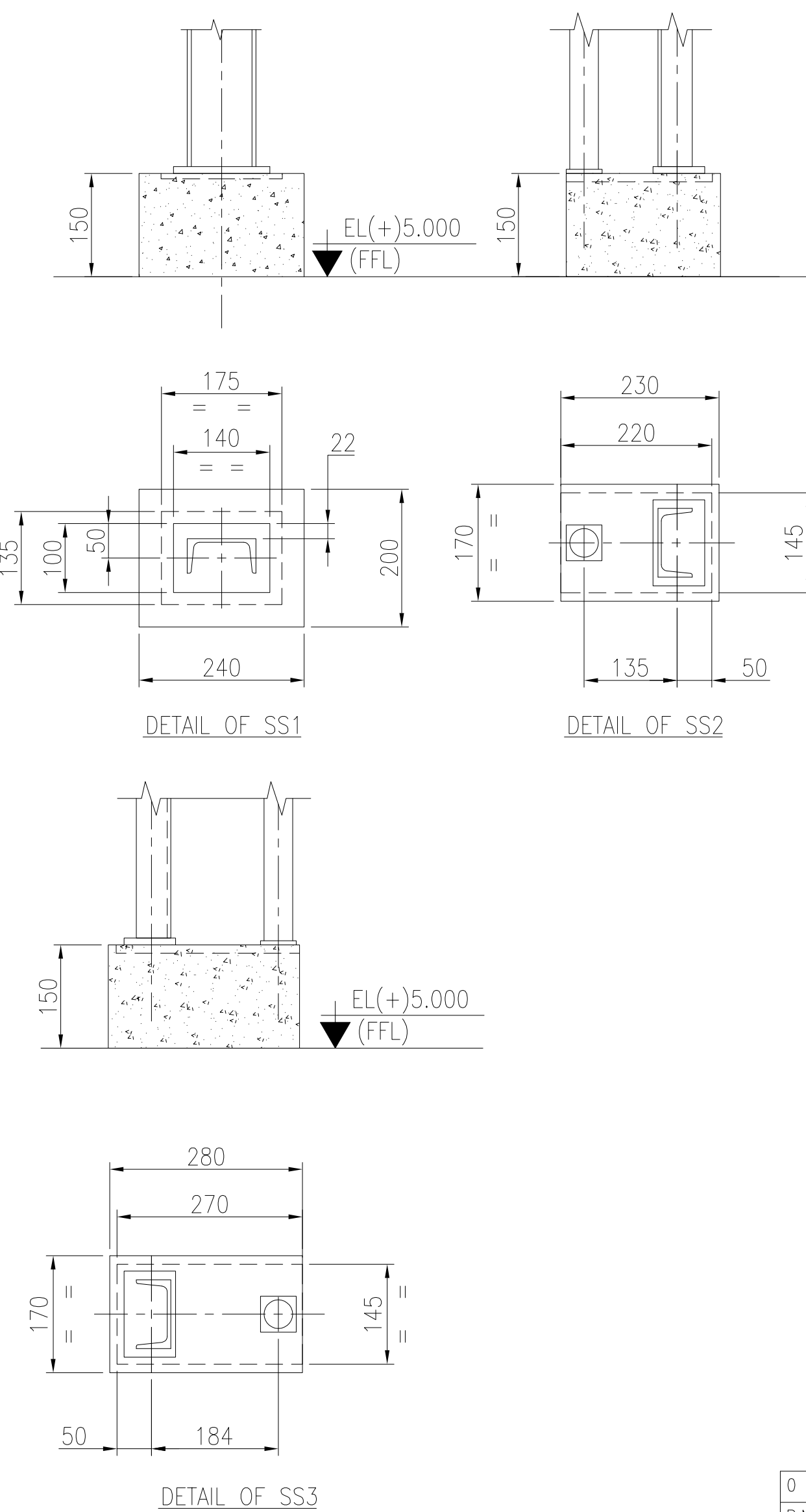
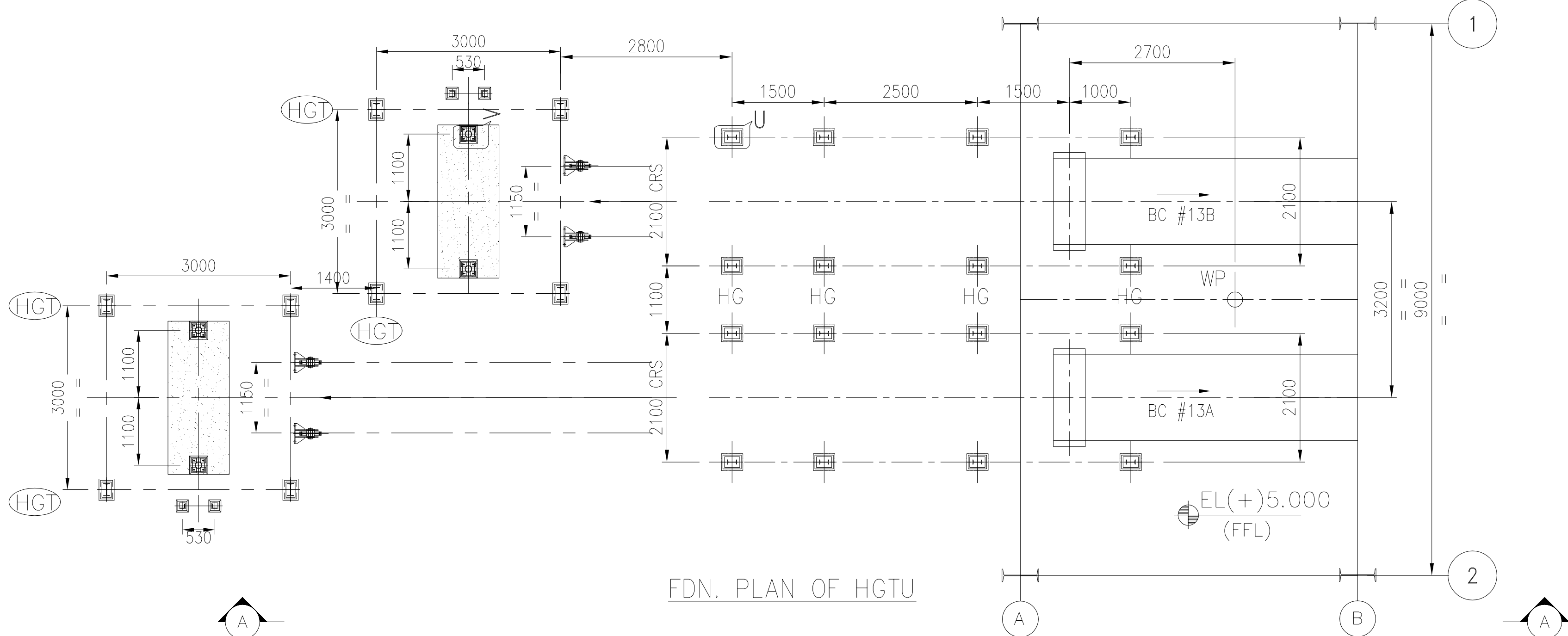
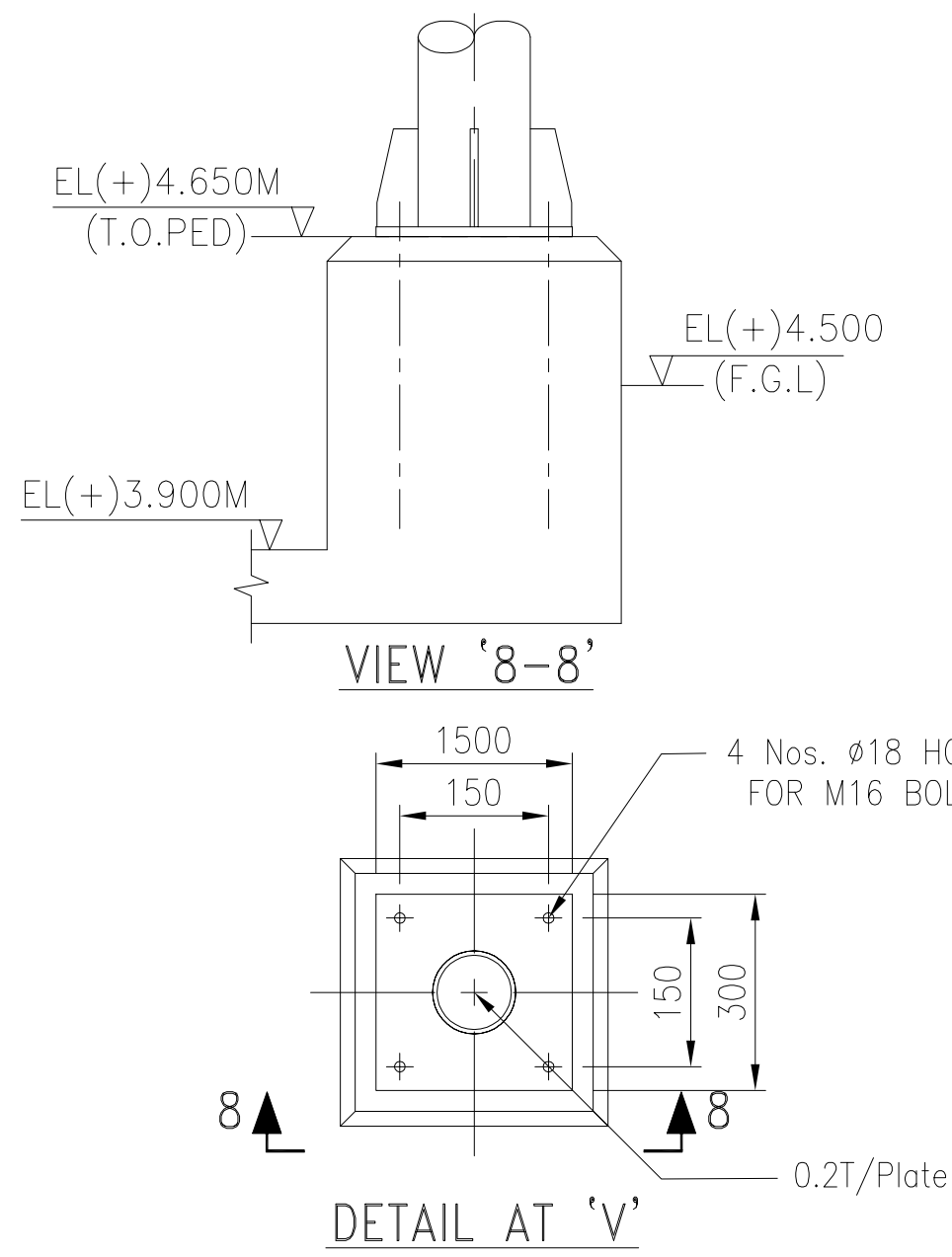
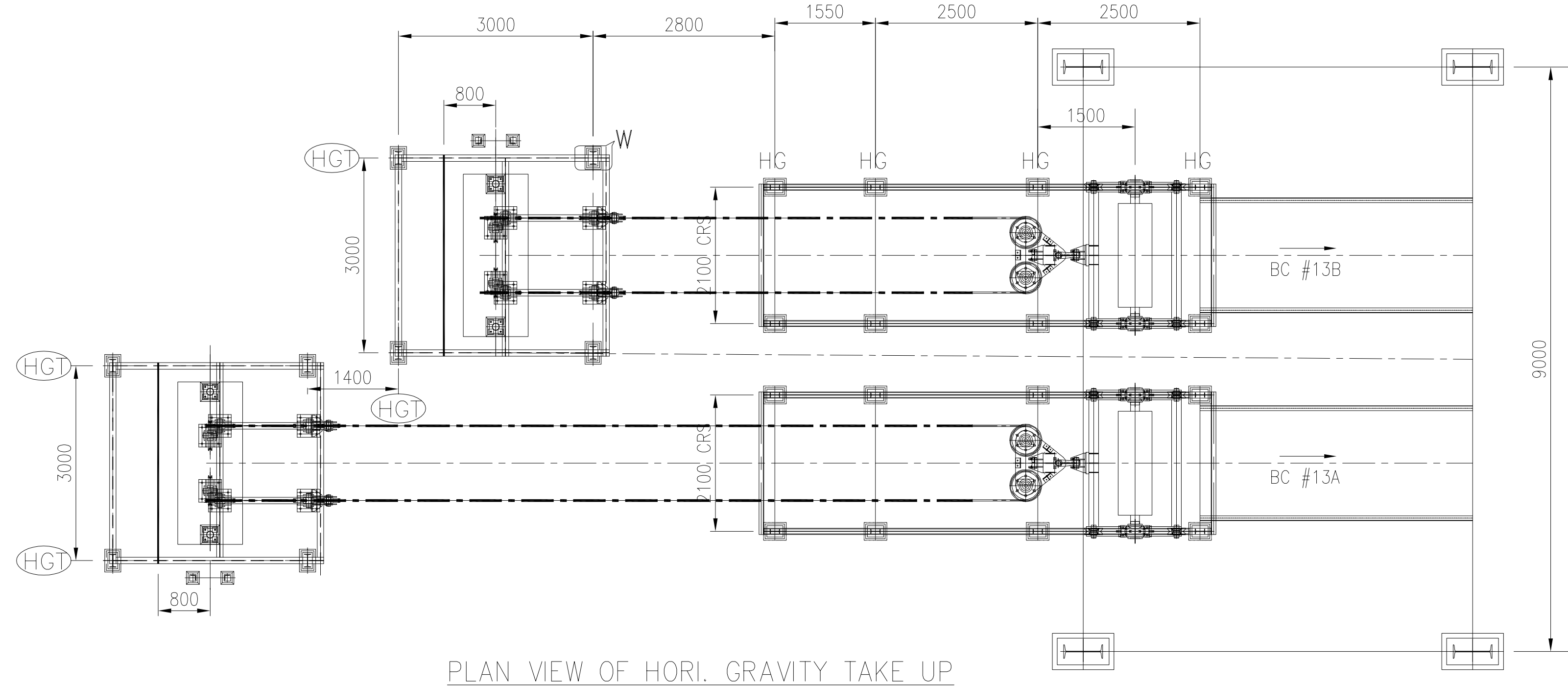
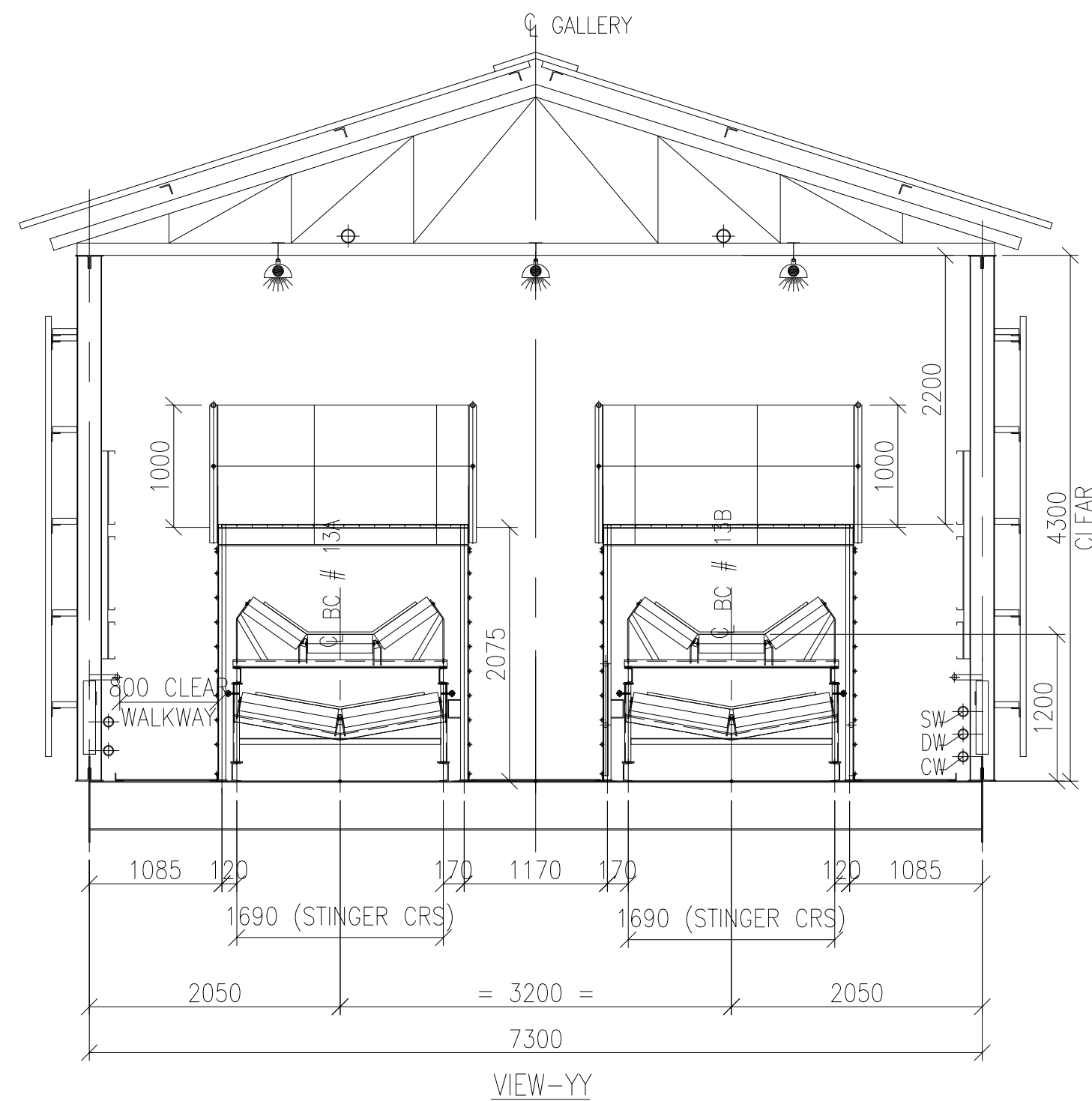
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REVISION NO.
DATE
BY
APPROVED
DATE
BY
APPROVED

WORK:		TELANGANA STATE POWER GENERATION CORPORATION LTD. HYDERABAD - TELANGANA, INDIA	
CUSTOMER'S CONSULTANT:	DEVELOPMENT CONSULTANTS PVT. LTD. CONSULTING ENGINEERS KOLKATA - MUMBAI - CHENNAI - NEW DELHI		
PROJECT:	KOTHAGUDEM THERMAL POWER STATION STAGE-VII, UNIT # 12 (1800 MW), KOTHAGUDEM, TELANGANA, INDIA COAL HANDLING SYSTEM PACKAGE		
DESIGN CONTRACTOR:	BHARAT HEAVY ELECTRICALS LIMITED INDUSTRIAL SYSTEMS GROUP ISG-BANGALORE		
BRIEF CONTRACTOR:			
NAME	SIGN	DATE	REV.
DRN	FIN	07.10.15	00
CHD	SSD	07.10.15	01
APP	RSP	07.10.15	02
TITLE :		GA OF BC#13A/13B WITH LOAD DATA	
SCALE 1:100		BHEL JOB NO. IS-1-14-2006	
BHEL JOB NO.		IS-1-GA-690-101-M019	
SHEET NO.		REV. NO.	
03		00	



OWNER:	TELANGANA STATE POWER GENERATION CORPORATION LTD.				
	HYDERABAD - TELANGANA, INDIA				
CUSTOMER'S SPECIFICATION	DEVELOPMENT CONSULTANTS PVT. LTD.				
	CONSULTING ENGINEERS				
	KOLKATA, MUMBAI, CHENNAI , NEW DELHI.				
PROJECT :	KOTHAGUDEM THERMAL POWER STATION				
	STAGE-VII, UNIT # 12 (19800 MW), KOTHAGUDEM, TELANGANA, INDIA				
	COAL HANDLING SYSTEM PACKAGE				
ERC CONTRACTOR	BHARAT HEAVY ELECTRICALS LIMITED				
	INDUSTRIAL SYSTEMS GROUP				
	ISG-BANGALORE				
BHEL CONTRACTOR		NAME	SIGN	DATE	REVISION
	DIN	PVN		07-10-11	1
	CHD	SSD		07-10-11	2
	APP	RSP		07-10-11	3
	SHEET NO.				NO. OF SHEETS
	SHEET NO.				NO. OF SHEETS
TITLE :	GA OF BC#13A/13B WITH LOAD DATA				
SCALE 1:100	BHEL JOB NO.	IS-1-14-2006	BHEL/SG DWG. NO.	IS-1-4-GA-690-101-M019	REVISION



TECHNICAL SPECIFICATION										QTY	QTY
CONVEYOR IS-1592	CONVEYOR NO/EQUIPMENT NO.				BC #13A		BC #13B			BC# 13A	BC# 13B
	RATED CAPACITY/DESIGN CAPACITY (T/P:H)				1200/1320				--	--	
	BELT WIDTH (MM)/TROUGHING ANGLE				1400 / 35 DEG				--	--	
	VERTICAL LIFT (MM)				11300				--	--	
	HORIZONTAL CRS. (MM)				184402		175697		--	--	
	PROFILE LENGTH (MM)				185119		176414		--	--	
	ENDLESS BELT LENGTH(CONSIDERING SAG) (MM)				379438		362028		--	--	
MATERIAL HANDLED	SPEED (M/SEC.)				2.55				--	--	
	MATERIAL				COAL (UNCRUSHED)				--	--	
	BULK DENSITY FOR CONVEYOR SIZING (TON/CUM)				0.8				--	--	
	FOR STRUCTURAL DESIGN (TON/CUM)				1.2				--	--	
	LUMP SIZE (MM)				(-)300				--	--	
BELT IS-1891	MOISTURE CONTENT				20%				--	--	
	WATERAL TEMP.				AMBIENT (MAX. 50°)				--	--	
	TYPE MAKE				N/DN 500/4 GRADE-FR (AS PER CANADIAN BUREAU OF MINES)				--	--	
	TOP COVER THICKNESS (MM)				STD.No. CAN/CSA-M422-M87.				--	--	
	BOTTOM COVER THICKNESS (MM)				3				--	--	
BELT TENSION (N)				T1=50401.2, T2=18472.4 T3=43834, Te=31928.8		T1=49720.5, T2=18222.9 T3=43267, Te=31497.6		--	--		
PULLEYS (IS8833)	LAGGING THK.MM	TYPE OF JOINT				VULCANIZED				--	--
		DRIVE				ø500X1600LG				1 No.	1 No.
		TAIL				ø400X1600LG				1 No.	1 No.
		TAKE-UP				ø400X1600LG				1 No.	1 No.
		BEND				ø323X1600LG				1 No.	1 No.
		SNUB				ø323X1600LG				1 No.	1 No.
	CARRYING	SHELL THICKNESS				MIN 16MM FOR DRIVE & 12MM FOR NON DRIVE PULLEYS				--	--
		DRIVE PULLEY				12 MM HERRINGBONE GROOVE,SHORE HARDNESS 55-65 A				--	--
		ALL OTHER PULLEYS				10 MM PLAIN NEOPRENE RUBBER SHORE HARDNESS 55-65 A				--	--
		3 ROLL 10' TRANSITION IDLERS				ø152.4 ERW 4.85THK MS PIPE, DEEP GROOVE BALL BRG. (ø30)				2 Nos.	2 Nos.
		3 ROLL 20' TRANSITION IDLERS				ø152.4 ERW 4.85THK MS PIPE, DEEP GROOVE BALL BRG. (ø30)				2 Nos.	2 Nos.
		3 ROLL 30' TRANSITION IDLERS				ø152.4 ERW 4.85THK MS PIPE, DEEP GROOVE BALL BRG. (ø30)				2 Nos.	2 Nos.
RETURN	3 ROLL 35' CARRYING IDLERS				ø152.4 ERW 4.85THK MS PIPE, DEEP GROOVE BALL BRG. (ø30)				168 Nos.	159 Nos.	
	3 ROLL 30' IMPACT IDLERS				ø139.7 ERW 4.85THK MS PIPE, OD ø 190, DEEP GROOVE BALL BRG. (ø35)				1 Nos.	1 Nos.	
	3 ROLL 35' IMPACT IDLERS				ø139.7 ERW 4.85THK MS PIPE, OD ø 190, DEEP GROOVE BALL BRG. (ø35)				9 Nos.	9 Nos.	
	3 ROLL 35' SELF ALIGNING CARRYING IDLERS				ø152.4 ERW 4.85THK MS PIPE, DEEP GROOVE BALL BRG.(ø35), 5000MM FROM HEAD & TAIL END THEREAFTER 10000 MM SPACING				18 Nos.	18 Nos.	
	SINGLE ROLL RETURN IDLER				ø152.4 ERW 4.85THK MS PIPE, DEEP GROOVE BALL BRG. (ø30), AT 3000MM SPACING				56 Nos.	62 Nos.	
	SINGLE ROLL SELF ALIGNING RETURN IDLER				ø152.4 ERW 4.85THK MS PIPE, DEEP GROOVE BALL BRG. (ø30), 10000MM FROM HEAD & TAIL END THEREAFTER 18000 MM SPACING				9 Nos.	9 Nos.	
DRIVE DETAILS	REDUCER	DEFLECTOR ROLLER				ø219 ERW 6 THK MS PIPE,				2 Nos.	2 Nos.
		TYPE				TEFC S/DRREL CAGE , S1 DUTY, IP55				1 No.	1 No.
		MAKE				ABB/BHEL/APPROVED VENDOR				--	--
		POWER RATING(KW)/RPM/FRAME SIZE				132/1500/3155MM				--	--
		SUPPLY VOLTAGE / DUTY				415V,3PHASE,3 WIRE AC SUPPLY				--	--
		TYPE				BEVEL HELICAL				1 No.	1 No.
COUPLING LOW HIGH	TAKE UP	MODEL NO/MAKE				B3-250/PREMIUM/APPROVED VENDOR				--	--
		HOLD BACK				YES INTEGRAL				--	--
		RATIO				15:4				--	--
		MECHANICAL RATING KW				191				--	--
		TYPE/SIZE/MAKE				DELAY FILLED CHAMBER TYPE/DFC-450/PETL/APPROVED VENDOR				1 No.	1 No.
		RATING KW				134				--	--
MISCELLANEOUS INFORMATIONS	SCRAAPER	TYPE/SIZE/MAKE				GEARED TYPE/RG-09/GBM/APPROVED VENDOR				1 No.	1 No.
		RATING HP/100 rpm				786				--	--
		TYPE				HGTU				--	--
		TRAVEL (MM)				4600				--	--
		CAST IRON COUNTER WEIGHT (IN KG)				4500				--	--
		INTERNAL SCRAPPER TYPE/MAKE				V-PLUGH TYPE, MAKE : HOSCH/APPROVED VENDOR				1 No.	1 No.
SAFETY SWITCHES	DISCHARGE	EXTERNAL SCRAPER TYPE/MAKE				PRIMARY WITH TORSON ARM MAKE, APPROVED VENDOR				1 No.	1 No.
		TYPE/MAKE				SECONDARY WITH SPRUNG BLADE MAKE, APPROVED VENDOR				1 No.	1 No.
		SKIRT BOARD				10 THK. MS PLATES WITH 06 THK SS409M LINING 9.3M LG. 20 THK RUBBER LINING				LOT	LOT
		DECK PLATE				3MM THK. MS CONTINUOUS PLATE				1 LOT.	1 LOT.
		HEAD FRAME, TAIL FRAME & DRIVE BASE FRAME				MB 400 FOR HEAD, MB 300 FOR TAIL & MC250 FOR DRIVE				1 EACH	1 EACH
		BEND FRAME				MB 300				1 EACH	1 EACH
SEAL PLATE				12 G STEEL				1 LOT.	1 LOT.		
STRINGER				MC 125				1 LOT.	1 LOT.		
SHORT SUPPORT				MC 100				LOT	LOT		
DISCHARGE & FEED CHUTE				MOTHER PLATE - M.S 10MM THICK LINER - 10MM THICK SS-409M ON SLIDING SURFACE & ADJACENT SURFACE				LOT	LOT		
DISCHARGE HOOD				4MM THK MS PLATE WITH RUBBER CURTAIN				1 No.	1 No.		
LEGEND (FOR BELT TENSIONS) :-	PULL CHORD ROPE				PVC COATED Ø5 WIPE,LENGTH 1062M						
	PULL CORD SWITCH /LOCATION/MAKE				15M FROM ENDS AND 30 M THROUGHOUT (BOTH THE SIDE OF CONVEYOR) JAYSHREE/KANA				06 PAIR	06 PAIR	
	BELT SWAY SWITCH/LOCATION/MAKE				15M FROM ENDS AND 30 M THROUGHOUT (BOTH THE SIDE OF CONVEYOR) JAYSHREE/KANA				06 PAIR	06 PAIR	
	ZERO SPEED SWITCH/LOCATION/MAKE				MOUNTED AT TAIL PULLEY JAYSHREE/KANA				1 No.	1 No.	

OWNER:	TELANGANA STATE POWER GENERATION CORPORATION LTD.					
	HYDERABAD – TELANGANA, INDIA					
CUSTOMER'S CONSULTANT	DEVELOPMENT CONSULTANTS PVT. LTD. CONSULTING ENGINEERS KOLKATA . MUMBAI . CHENNAI . NEW DELHI					
PROJECT :	KOTHAGUDEM THERMAL POWER STATION STAGE-VII, UNIT # 12 (1X800 MW), KOTHAGUDEM, TELANGANA, INDIA COAL HANDLING SYSTEM PACKAGE					
EPC CONTRACTOR	BHARAT HEAVY ELECTRICALS LIMITED INDUSTRIAL SYSTEMS GROUP ISG-BANGALORE					
BHEL'S CONTRACTOR		NAME	SIGN	DATE	REVISION	
	DRN	PVN		08.10.15	01	
	CHD	PSD		08.10.15	02	
	APP	RSP		08.10.15	03	
	TITLE : GA OF BC#13A/13B WITH LOAD DATA				NO OF SHEETS	
					SHEET. NO.	
SCALE	BHEL JOB NO. IS-1-14-2006	BHEL ISG DRG. NO.:	IS-1-GA-690-101-M019			REVISION

NOTES:

1. ALL DIMENSIONS ARE IN MM & LEVELS ARE IN METERS.
2. EL 0.0M CORRESPONDS TO RL (+) 99.5M, FINISHED FLOOR LEVEL OF TG BUILDING.
3. CIVIL DETAILS INDICATED ARE TENTATIVE, FINAL DIMENSIONS SHALL BE AS INDICATED IN CIVIL DRAWINGS.
4. ALL OPENINGS SHALL BE PROVIDED WITH HAND RAILS.

"NOTES(FOR LOAD DATA DIRECTION):

1: IN VERTICAL DIRECTION SYMBOL -VE IMPLIES UPWARD FORCE AND +VE IMPLIES DOWNWARD FORCE

2: IN HORIZONTAL DIRECTION SYMBOL -VE IMPLIES FORCE TOWARDS CONVEYOR HEAD END AND +VE IMPLIES

FORCE TOWARDS CONVEYOR TAIL END

HOIST SCHEDULE						
ITEM NO.	HOIST TYPE	CAPACITY	LIFTING HT.	OPERATING FLOOR	RADIUS	QTY.
(A)	MANUAL(@HGTU)	2T	9.6 MTRS.	EL (+)4.5M	-	2 NO

REFERENCE DRAWINGS/DOCUMENTS	
DWG NO.	DESCRIPTION
IS-0-PL-690-100-M001	GENERAL PLANT LAYOUT OF COAL HANDLING SYSTEM
IS-1-FL-690-100-M002	FLOW DIAGRAM CHP
IS-1-GA-690-100-M003	TYPICAL CROSS SECTION OF CONVEYOR GALLERY & TUNNELS
IS-1-GA-690-104-M033	GA OF TP-12 WITH LOAD DATA
IS-1-GA-690-104-M034	GA OF TP-13 WITH LOAD DATA
IS-1-GA-690-104-M024	GA OF TP-8 WITH LOAD DATA

Equipment Load Data per footing (in Tonnes)					
BC #13A/13B					
		SHORT	POST	HGTU	
	Footing Marking	SS2	SS3	HG	HGT
	No of Footing	50	50	16	8
	Dead Load	DL	0.6	0.6	0.2
	Live Load	LL	0.2	0.2	0.8
Belt Pull	Hx(Starting)	0.35	0.35	–	–
	Hx(Running)	0.3	0.3	–	–
	Vy (Starting)	–	–	–	–
	Vy(Running)	–	–	–	6.5

0		FOR APPROVAL	
R.No:	DATE	BRIEF RECORD	BY
REVISIONS			