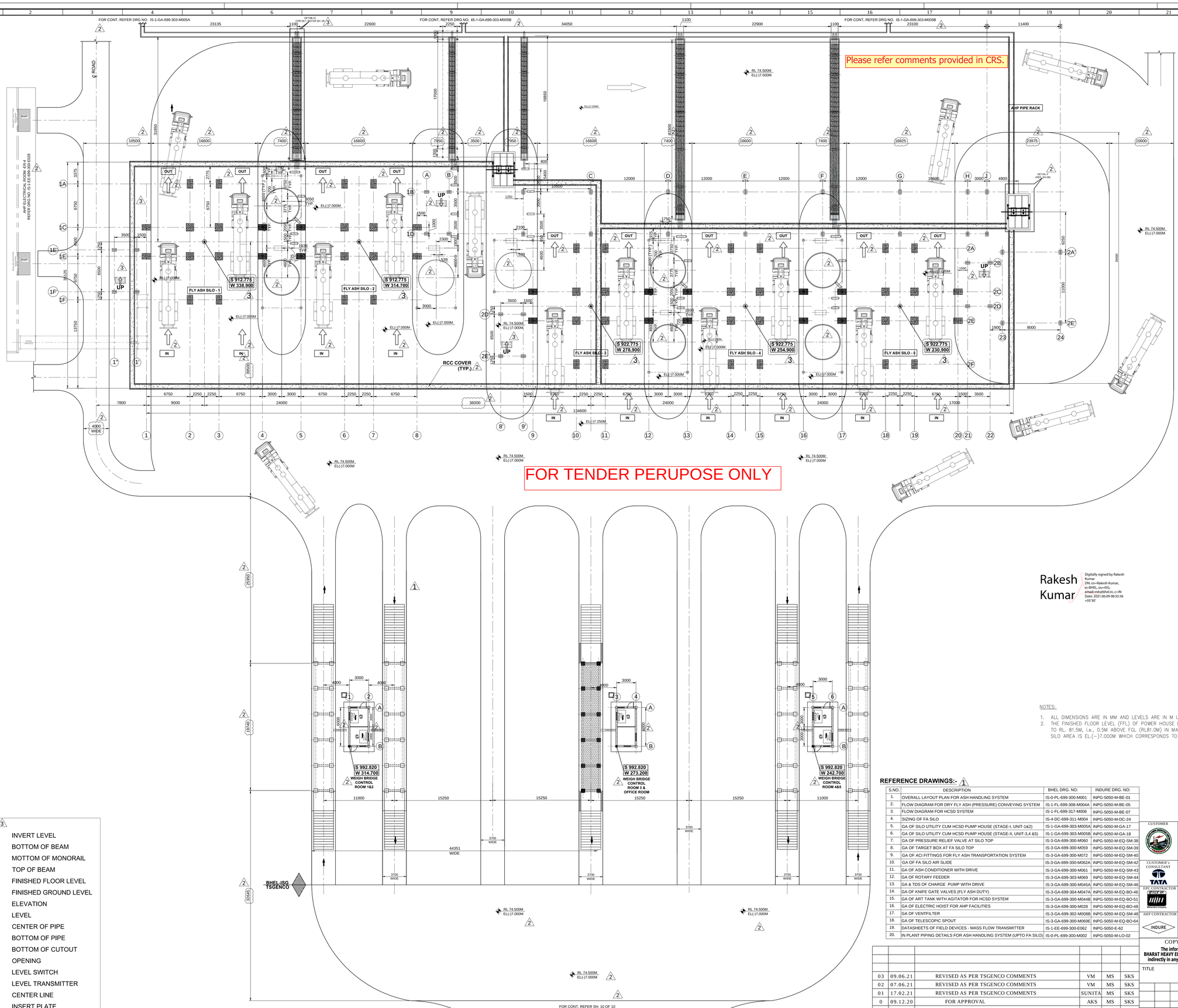


LEGENDS:-		
IL	-	INVERT LEVEL
B.O.B	-	BOTTOM OF BEAM
B.O.M.R	-	MOTTOM OF MONORAIL
T.O.B	-	TOP OF BEAM
FFL	-	FINISHED FLOOR LEVEL
FGL	-	FINISHED GROUND LEVEL
EL	-	ELEVATION
LVL	-	LEVEL
C.O.P	-	CENTER OF PIPE
B.O.P	-	BOTTOM OF PIPE
B.O.C	-	BOTTOM OF CUTOUT
OP	-	OPENING
LS	-	LEVEL SWITCH
LT	-	LEVEL TRANSMITTER
CL	-	CENTER LINE
IP	-	INSERT PLATE
OPNG	-	OPENING

Rakesh Kumar

Digitally signed by Rakesh Kumar
DN: cn=Rakesh Kumar, o=BHEL, ou=ISG, email=rrsh@bhel.in, c=IN
Date: 2021.06.09 08:35:36 +05'30'

NOTES:

1. ALL DIMENSIONS ARE IN MM AND LEVELS ARE IN M UNLESS OTHERWISE SPECIFIED.
2. THE FINISHED FLOOR LEVEL (FFL) OF POWER HOUSE BUILDING GROUND FLOOR IS EL.(+)0.00M WHICH CORRESPONDS TO RL. 81.5M, i.e., 0.5M ABOVE FGL (RL81.0M) IN MAIN PLANT AREA.THE FINISHED FLOOR LEVEL (FFL) OF FLYASH SILO AREA IS EL.(–)7.000M WHICH CORRESPONDS TO RL. 74.0M. 1

REFERENCE DRAWINGS:- 1

S.NO.	DESCRIPTION	BHEL DRG. NO:	INDURE DRG. NO:
1.	OVERALL LAYOUT PLAN FOR ASH HANDLING SYSTEM	IS-0-PL-699-300-M001	INPG-5050-M-BE-01
2.	FLOW DIAGRAM FOR DRY FLY ASH (PRESSURE) CONVEYING SYSTEM	IS-1-FL-699-308-M004A	INPG-5050-M-BE-05
3.	FLOW DIAGRAM FOR HCSD SYSTEM	IS-1-FL-699-317-M006	INPG-5050-M-BE-07
4.	SIZING OF FA SILO	IS-4-DC-699-311-M004	INPG-5050-M-DC-24
5.	GA OF SILO UTILITY CUM HCSD PUMP HOUSE (STAGE-I, UNIT-1&2)	IS-1-GA-699-303-M005A	INPG-5050-M-GA-17
6.	GA OF SILO UTILITY CUM HCSD PUMP HOUSE (STAGE-II, UNIT-3,4 &5)	IS-1-GA-699-303-M005B	INPG-5050-M-GA-18
7.	GA OF PRESSURE RELIEF VALVE AT SILO TOP	IS-3-GA-699-300-M060	INPG-5050-M-EQ-SM-38
8.	GA OF TARGET BOX AT FA SILO TOP	IS-3-GA-699-300-M059	INPG-5050-M-EQ-SM-39
9.	GA OF ACI FITTINGS FOR FLY ASH TRANSPORTATION SYSTEM	IS-3-GA-699-300-M072	INPG-5050-M-EQ-SM-40
10.	GA OF FA SILO AIR SLIDE	IS-3-GA-699-300-M062A	INPG-5050-M-EQ-SM-42
11.	GA OF ASH CONDITIONER WITH DRIVE	IS-3-GA-699-300-M061	INPG-5050-M-EQ-SM-43
12.	GA OF ROTARY FEEDER	IS-3-GA-699-303-M069	INPG-5050-M-EQ-SM-44
13.	GA & TDS OF CHARGE PUMP WITH DRIVE	IS-3-GA-699-300-M045A	INPG-5050-M-EQ-SM-46
14.	GA OF KNIFE GATE VALVES (FLY ASH DUTY)	IS-3-GA-699-304-M047A	INPG-5050-M-EQ-BO-46
15.	GA OF ART TANK WITH AGITATOR FOR HCSD SYSTEM	IS-3-GA-699-300-M044B	INPG-5050-M-EQ-BO-51
16.	GA OF ELECTRIC HOIST FOR AHP FACILITIES	IS-3-GA-699-300-M028	INPG-5050-M-EQ-BO-48
17.	GA OF VENTFILTER	IS-3-GA-699-302-M008B	INPG-5050-M-EQ-SM-48
18.	GA OF TELESCOPIC SPOUT	IS-3-GA-699-300-M069E	INPG-5050-M-EQ-BO-64
19.	DATASHEETS OF FIELD DEVICES - MASS FLOW TRANSMITTER	IS-1-EE-699-300-E062	INPG-5050-E-62
20.	IN PLANT PIPING DETAILS FOR ASH HANDLING SYSTEM (UPTO FA SILO)	IS-0-PL-699-300-M002	INPG-5050-M-LO-02

R.No.	DATE	DESCRIPTION	BY	CHKD.	APPD.
03	09.06.21	REVISED AS PER TSGENCO COMMENTS	VM	MS	SKS
02	07.06.21	REVISED AS PER TSGENCO COMMENTS	VM	MS	SKS
01	17.02.21	REVISED AS PER TSGENCO COMMENTS	SUNITA	MS	SKS
0	09.12.20	FOR APPROVAL	AKS	MS	SKS

REVISIONS

CUSTOMER	TELANGANA STATE POWER GENERATION CORPORATION LTD TELANGANA STATE, INDIA 5x800 MW YADADRI THERMAL POWER STATION NALGONDA
CUSTOMER'S CONSULTANT	TATA CONSULTING ENGINEERS LIMITED BANGALORE
EPC CONTRACTOR	BHARAT HEAVY ELECTRICALS LTD INDUSTRIAL SYSTEMS GROUP BANGALORE
AHP CONTRACTOR	THE INDURE PVT. LTD. NEWDELHI - INDIA

INDURE JOB NO. INPG-5050
INDURE DRAWING NO. INPG-5050-M-GA-14

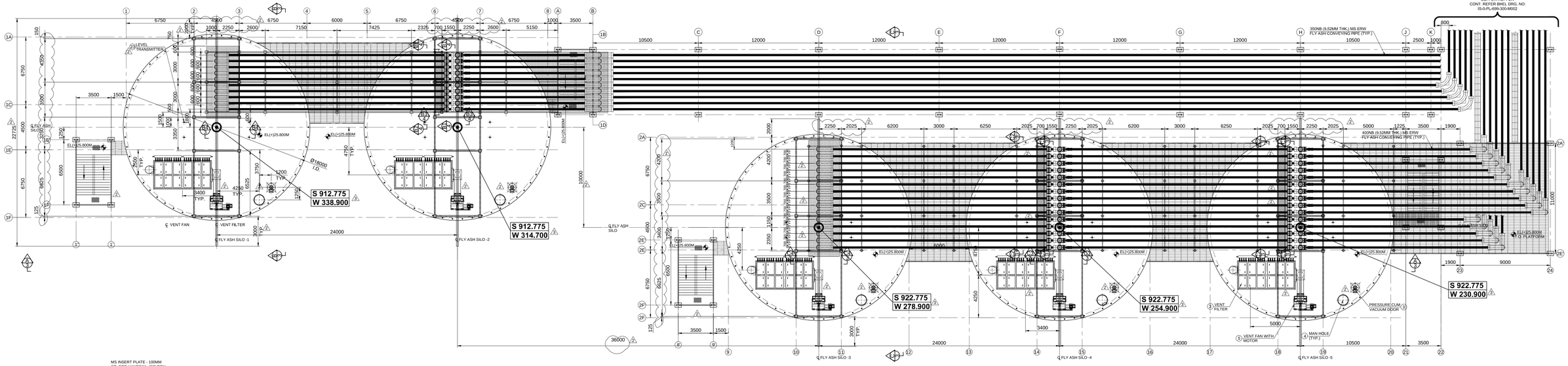
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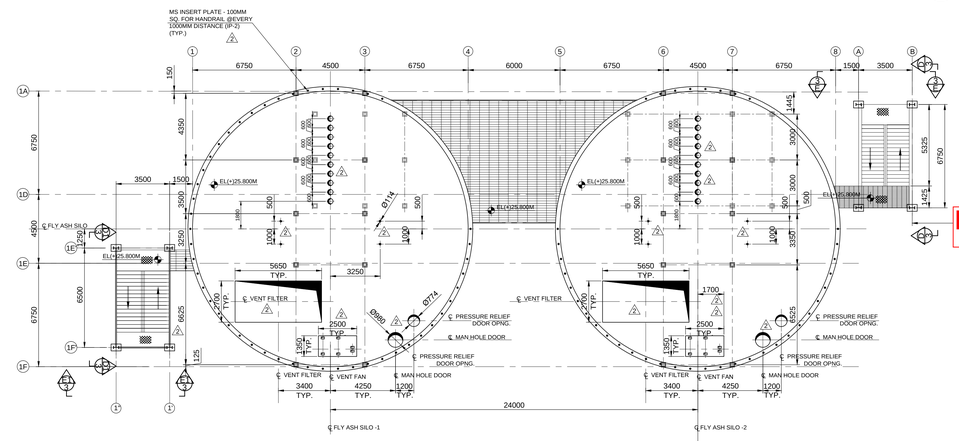
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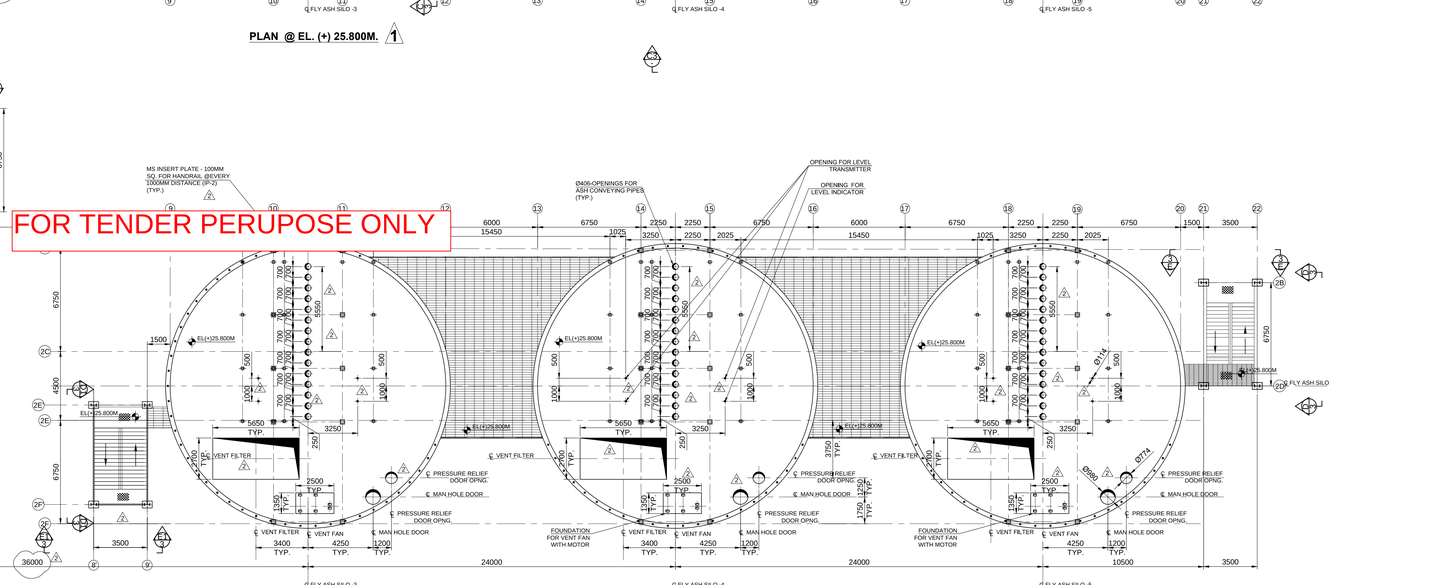
DEPT. | SCALE | SIGN

DRAWING NO. IS-1-GA-699-303-M004A
SHEET 01 OF 10 REV. 03
JOB NO.IS-1-15-2001



PLAN @ EL. (+) 25.800M. 1





CUTOUT DETAILS
PLAN @ EL. (+) 25.800M. 1

FOR TENDER PERUPOSE ONLY

NOTES:-
1. ALL DIMENSIONS ARE IN MILLIMETER AND LEVELS IN METER UNLESS NOTED OTHERWISE.
2. FOR GENERAL NOTES PLEASE REFER SH.-01 OF 05.

LEGENDS:- 3

IL	-	INVERT LEVEL
B.O.B	-	BOTTOM OF BEAM
B.O.M.R	-	MOTTOM OF MONORAIL
T.O.B	-	TOP OF BEAM
FFL	-	FINISHED FLOOR LEVEL
FGL	-	FINISHED GROUND LEVEL
EL	-	ELEVATION
LVL	-	LEVEL
C.O.P	-	CENTER OF PIPE
B.O.P	-	BOTTOM OF PIPE
B.O.C	-	BOTTOM OF CUTOUT
OP	-	OPENING
LS	-	LEVEL SWITCH
LT	-	LEVEL TRANSMITTER
CL	-	CENTER LINE
IP	-	INSERT PLATE
OPNG	-	OPENING

R.No.	DATE	DESCRIPTION	BY	CHKD.	APPD.
		REVISIONS			
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01	17.02.21	REVISED AS PER TSGENCO COMMENTS	SUNITA	MS	SKS
0	09.12.20	FOR APPROVAL	AKS	MS	SKS

CUSTOMER: TELANGANA STATE POWER GENERATION CORPORATION LTD
TELANGANA STATE, INDIA
5x800 MW YADADRI THERMAL POWER STATION
NALGONDA

CUSTOMER'S CONSULTANT: TATA CONSULTING ENGINEERS LIMITED
BANGALORE

EPC CONTRACTOR: BHARAT HEAVY ELECTRICALS LTD
INDUSTRIAL SYSTEMS GROUP
BANGALORE

AHP CONTRACTOR: THE INDURE PVT. LTD.
NEWDELHI - INDIA

INDURE JOB NO. INPG-5050
INDURE DRAWING NO. INPG-5050-M-GA-14

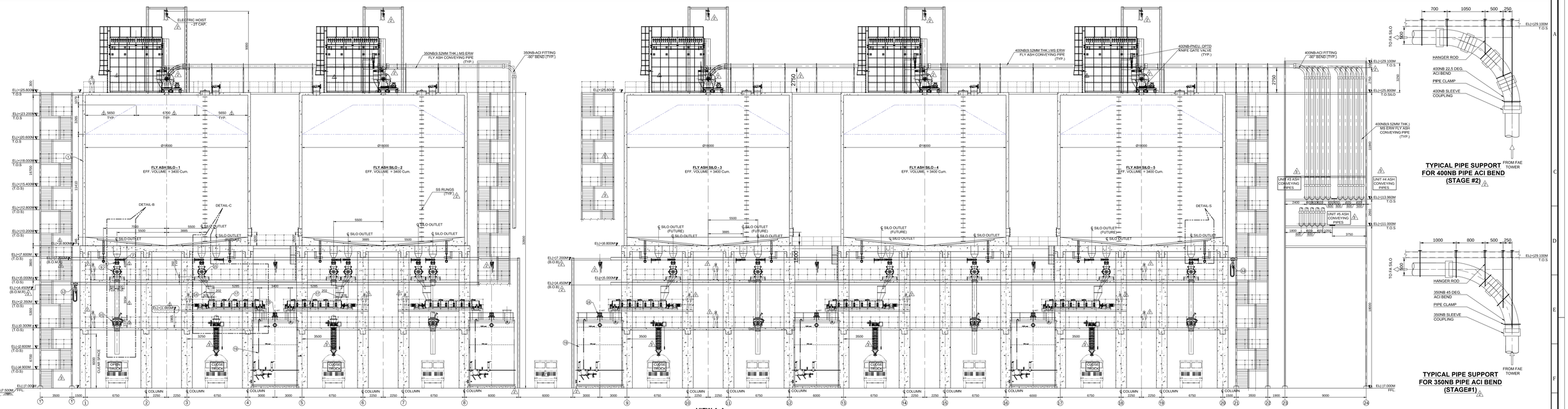
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M	DRN	AKS		06.10.20
	DESN	HB		06.10.20
	CHD	MS		06.10.20
	APPD	SKS		06.10.20

TITLE: GA OF FA SILO (STAGE-I & II)

DEPT. M | SCALE | SIGN

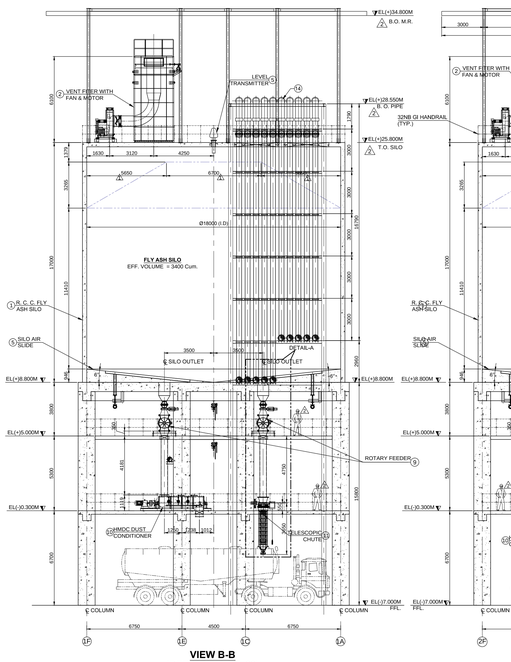
DRAWING NO. IS-1-GA-699-303-M004A
SHEET 02 OF 10 | REV. 03
JOB NO.IS-1-15-2001



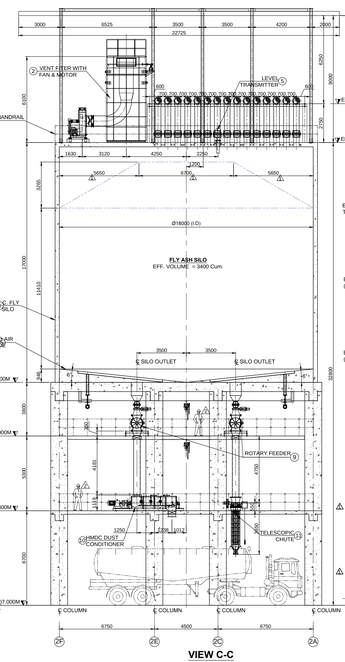
VIEW A-A
(REF. FROM SH. 02)

TYPICAL PIPE SUPPORT FOR 400NB PIPE ACI BEND (STAGE #2)

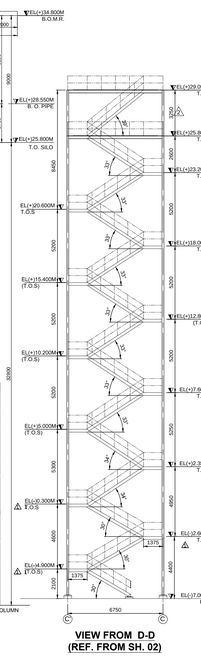
TYPICAL PIPE SUPPORT FOR 350NB PIPE ACI BEND (STAGE#1)



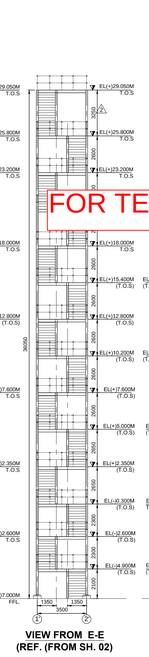
VIEW B-B
(REF. FROM SH. 02)



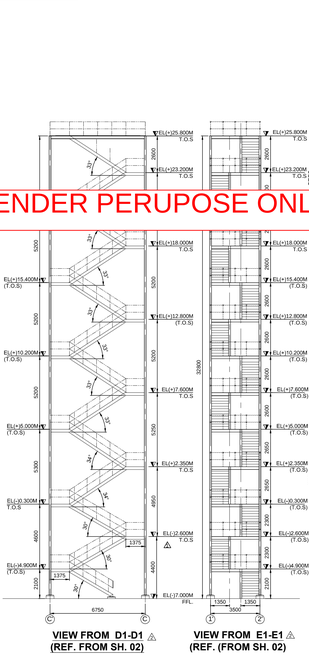
VIEW C-C
(REF. FROM SH. 02)



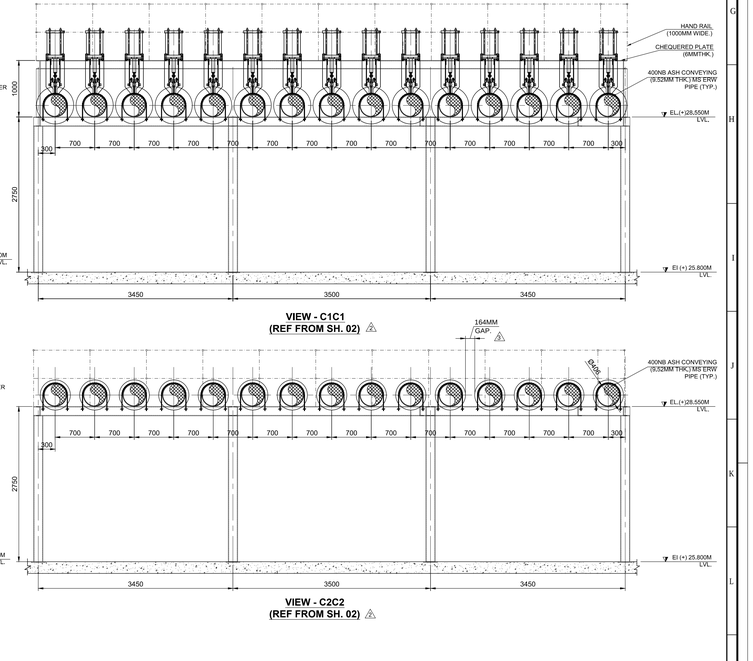
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(REF. FROM SH. 02)



VIEW FROM E-E
(REF. (FROM SH. 02)



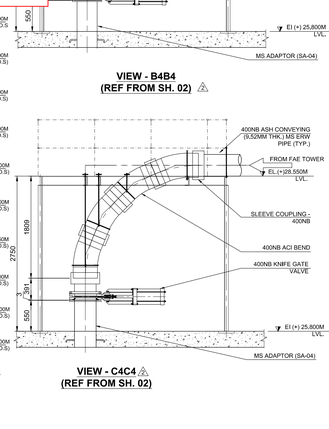
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(REF FROM SH. 02)



VIEW - C1C1
(REF FROM SH. 02)

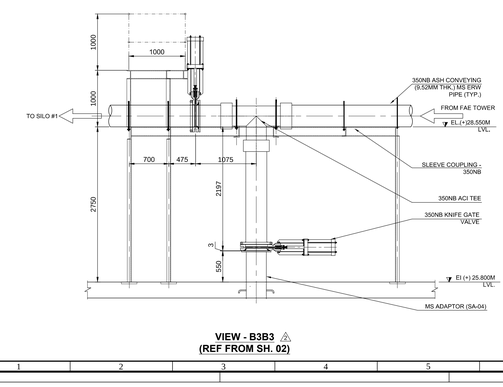
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(REF. FROM SH. 02)

VIEW FROM E1-E1
(REF. (FROM SH. 02)

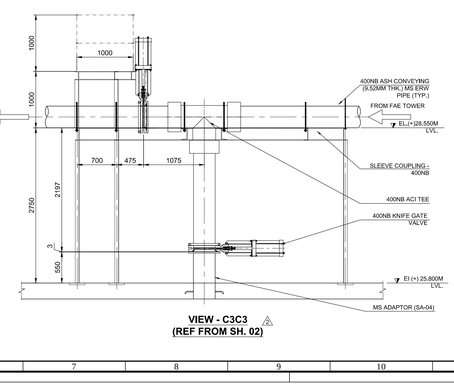


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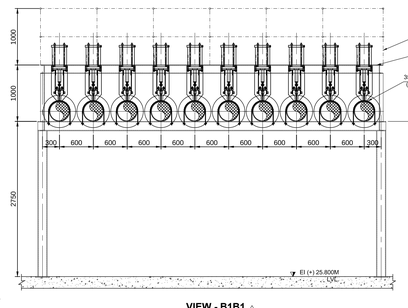
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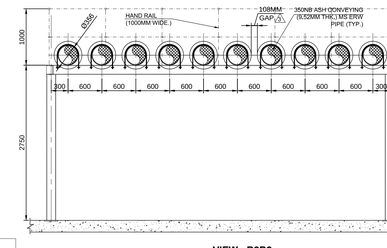
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(REF FROM SH. 02)



VIEW - C3C3
(REF FROM SH. 02)



VIEW - B1B1
(REF FROM SH. 02)



VIEW - B2B2
(REF FROM SH. 02)

FOR TENDER PERUPOSE ONLY

LEGENDS:-

IL	-	INVERT LEVEL
B.O.B	-	BOTTOM OF BEAM
B.O.M.R	-	BOTTOM OF MONORAIL
T.O.B	-	TOP OF BEAM
FFL	-	FINISHED FLOOR LEVEL
FGL	-	FINISHED GROUND LEVEL
EL	-	ELEVATION
LVL	-	LEVEL
C.O.P	-	CENTER OF PIPE
B.O.P	-	BOTTOM OF PIPE
B.O.C	-	BOTTOM OF CUTOUT
OP	-	OPENING
LS	-	LEVEL SWITCH
LT	-	LEVEL TRANSMITTER
CL	-	CENTER LINE
IP	-	INSERT PLATE
OPNG	-	OPENING

NOTES:-
1. ALL DIMENSIONS ARE IN MILLIMETER AND LEVELS IN METER UNLESS NOTED OTHERWISE.
2. FOR GENERAL NOTES PLEASE REFER SH.-01 OF 05.

R.No.	DATE	DESCRIPTION	BY	CHKD.	APPD.
		REVISIONS			
03	09.06.21	REVISED AS PER TSGENCO COMMENTS.	VM	MS	SKS
02	07.06.21	REVISED AS PER TSGENCO COMMENTS.	VM	MS	SKS
01	17.02.21	REVISED AS PER TSGENCO COMMENTS.	SUNITA	MS	SKS
0	09.12.20	FOR APPROVAL	AKS	MS	SKS

CUSTOMER	TELANGANA STATE POWER GENERATION CORPORATION LTD TELANGANA STATE, INDIA 5x800 MW YADADRI THERMAL POWER STATION NALGONDA
CUSTOMER'S CONSULTANT	TATA CONSULTING ENGINEERS LIMITED BANGALORE
EPC CONTRACTOR	BHARAT HEAVY ELECTRICALS LTD INDUSTRIAL SYSTEMS GROUP BANGALORE
AHP CONTRACTOR	THE INDURE PVT. LTD. NEWDELHI - INDIA
INDURE JOB NO.	INPG-5050
INDURE DRAWING NO.	INPG-5050-M-GA-14

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DEPT.		NAME	SIGN	DATE
CODE	DRN	AKS		06.10.20
M	DESN	HB		06.10.20
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	APPD	SKS		06.10.20

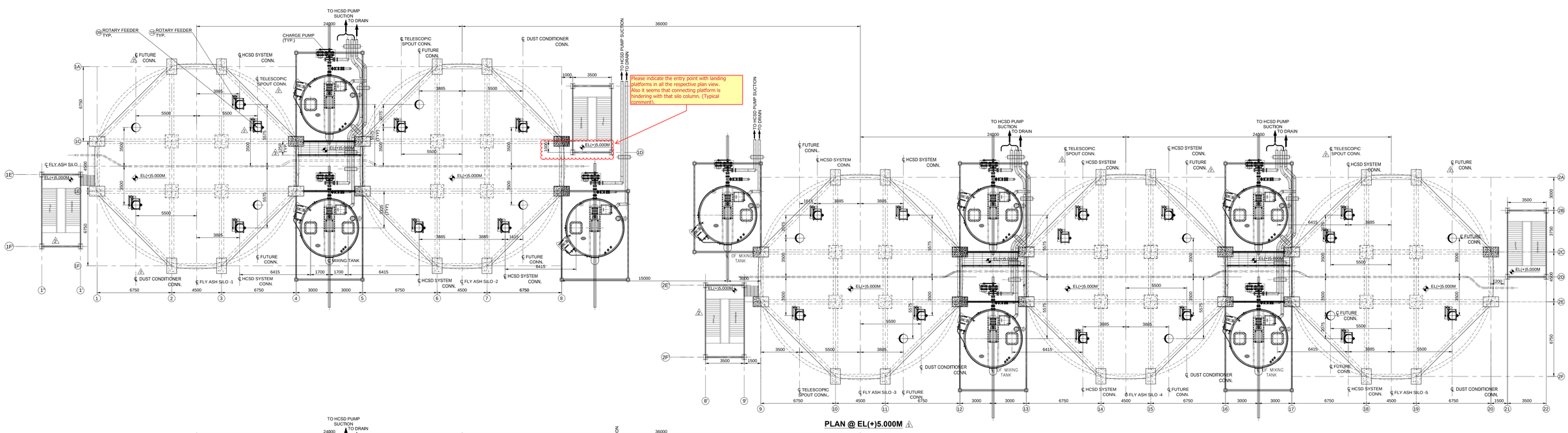
TITLE: GA OF FA SILO (STAGE-I & II)

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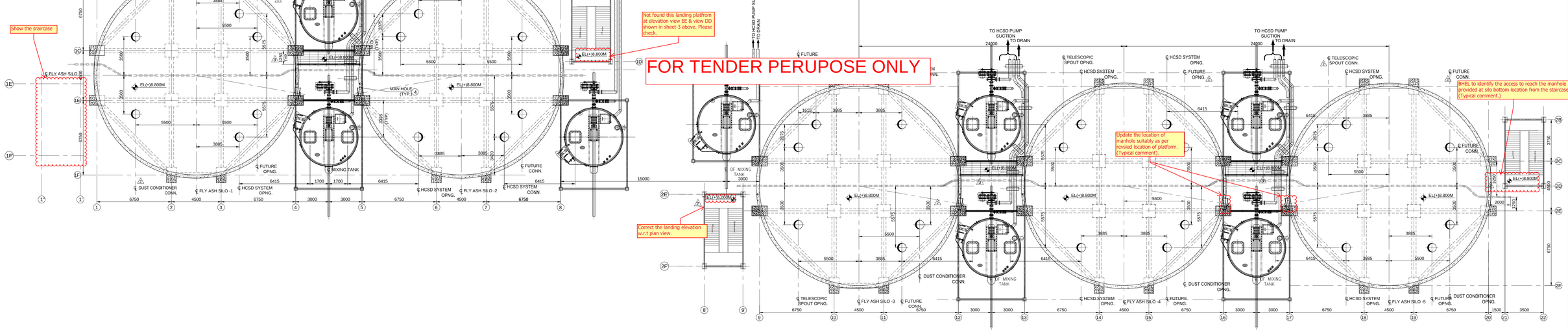
DRAWING NO. IS-1-GA-699-303-M004A

SHEET 03 OF 10 REV. 03

JOB NO.IS-1-15-2001



PLAN @ EL(+)5.000M ⚠3



PLAN @ EL(+)8.800M ⚠1

FOR TENDER PERUPOSE ONLY

NOTES:-
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2. FOR GENERAL NOTES PLEASE REFER SH.-01 OF 05.

LEGENDS:- ⚠3

IL	-	INVERT LEVEL
B.O.B	-	BOTTOM OF BEAM
B.O.M.R	-	MOTTOM OF MONORAIL
T.O.B	-	TOP OF BEAM
FFL	-	FINISHED FLOOR LEVEL
FGL	-	FINISHED GROUND LEVEL
EL	-	ELEVATION
LVL	-	LEVEL
C.O.P	-	CENTER OF PIPE
B.O.P	-	BOTTOM OF PIPE
B.O.C	-	BOTTOM OF CUTOUT
OP	-	OPENING
LS	-	LEVEL SWITCH
LT	-	LEVEL TRANSMITTER
CL	-	CENTER LINE
IP	-	INSERT PLATE
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R.No.	DATE	DESCRIPTION	BY	CHKD.	APPD.
		REVISIONS			
03	09.06.21	REVISED AS PER TSGENCO COMMENTS	VM	MS	SKS
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01	17.02.21	REVISED AS PER TSGENCO COMMENTS	SUNITA	MS	SKS
0	09.12.20	FOR APPROVAL	AKS	MS	SKS

CUSTOMER: TELANGANA STATE POWER GENERATION CORPORATION LTD
TELANGANA STATE, INDIA
5x800 MW YADADRI THERMAL POWER STATION
NALGONDA

CUSTOMER'S CONSULTANT: TATA CONSULTING ENGINEERS LIMITED
BANGALORE

EPC CONTRACTOR: BHARAT HEAVY ELECTRICALS LTD
INDUSTRIAL SYSTEMS GROUP
BANGALORE

AMP CONTRACTOR: THE INDURE PVT. LTD.
NEWDELHI - INDIA

INDURE JOB NO. INPG-5050
INDURE DRAWING NO. INPG-5050-M-GA-14

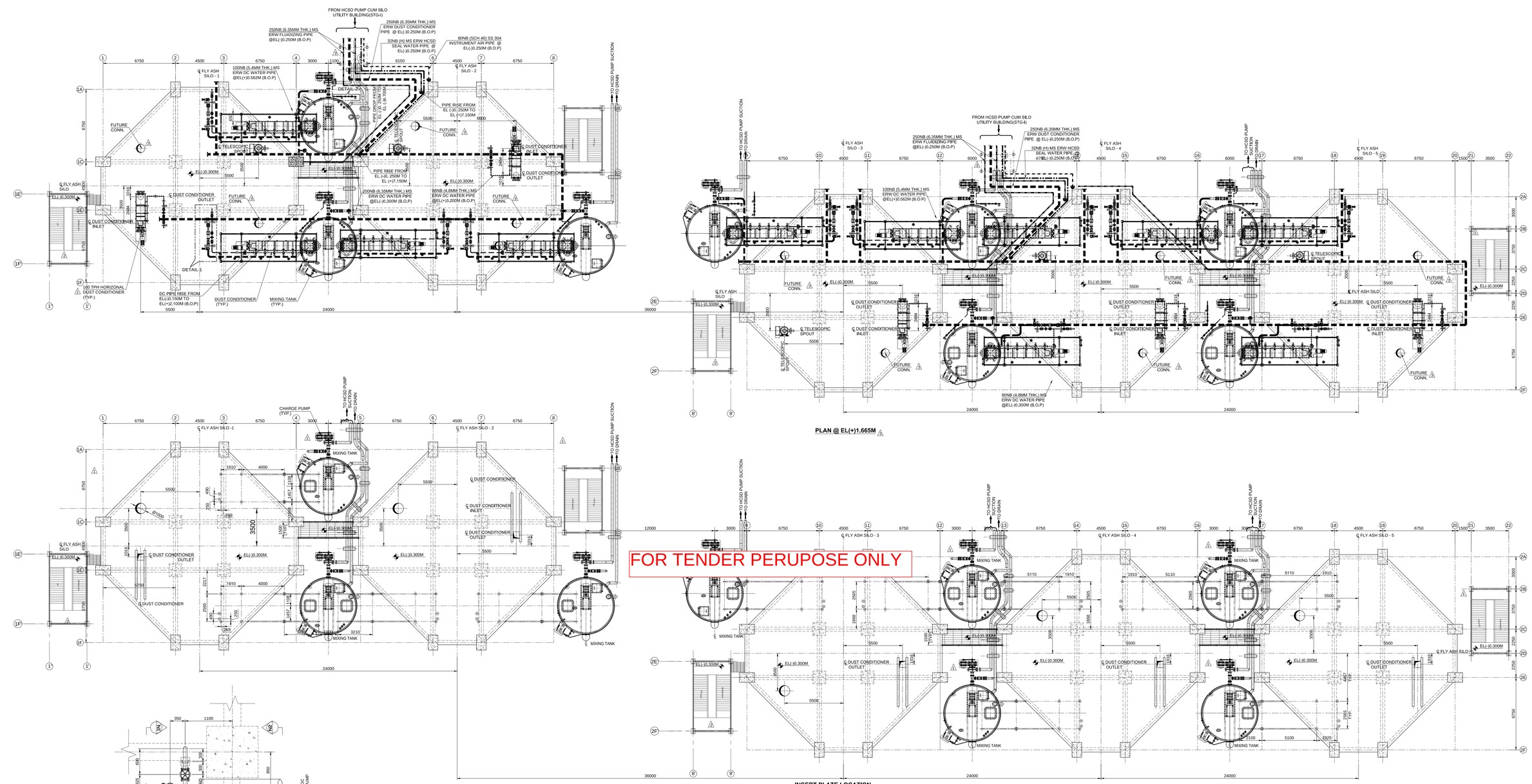
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	APPD	SKS		06.10.20

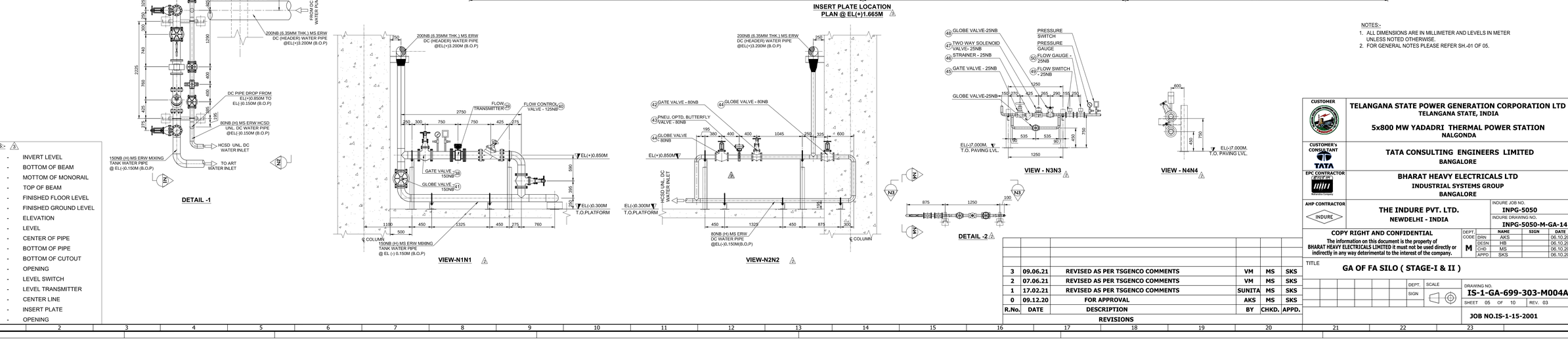
TITLE: GA OF FA SILO (STAGE-I & II)

DEPT. | SCALE | SIGN

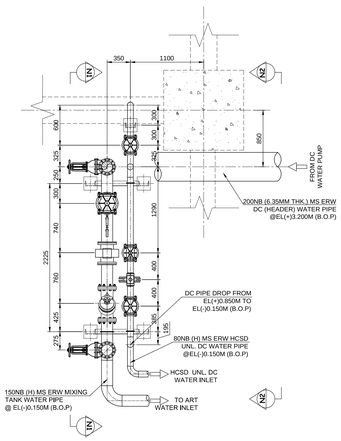
DRAWING NO. IS-1-GA-699-303-M004A
SHEET 04 OF 10 REV. 03
JOB NO.IS-1-15-2001



PLAN @ EL(+)1.665M ⚠



INSERT PLATE LOCATION PLAN @ EL(+)1.665M ⚠



DETAIL -1

VIEW-N1N1 ⚠

VIEW-N2N2 ⚠

VIEW - N3N3 ⚠

VIEW - N4N4 ⚠

DETAIL -2 ⚠

NOTES:-

1. ALL DIMENSIONS ARE IN MILLIMETER AND LEVELS IN METER UNLESS NOTED OTHERWISE
2. FOR GENERAL NOTES PLEASE REFER SH.-01 OF 05.

LEGENDS:- ⚠

IL	-	INVERT LEVEL
B.O.B	-	BOTTOM OF BEAM
B.O.M.R	-	MOTTOM OF MONORAIL
T.O.B	-	TOP OF BEAM
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LVL	-	LEVEL
C.O.P	-	CENTER OF PIPE
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B.O.C	-	BOTTOM OF CUTOUT
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FOR TENDER PERUPOSE ONLY

R.No.	DATE	DESCRIPTION	BY	CHKD.	APPD.
		REVISIONS			
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1	17.02.21	REVISED AS PER TSGENCO COMMENTS	SUNITA	MS	SKS
0	09.12.20	FOR APPROVAL	AKS	MS	SKS

CUSTOMER: TELANGANA STATE POWER GENERATION CORPORATION LTD
TELANGANA STATE, INDIA

5x800 MW YADADRI THERMAL POWER STATION
NALGONDA

CUSTOMER'S CONSULTANT: TATA CONSULTING ENGINEERS LIMITED
BANGALORE

EPC CONTRACTOR: BHARAT HEAVY ELECTRICALS LTD
INDUSTRIAL SYSTEMS GROUP
BANGALORE

AHP CONTRACTOR: THE INDURE PVT. LTD.
NEWDELHI - INDIA

INDURE JOB NO. INPG-5050
INDURE DRAWING NO. INPG-5050-M-GA-14

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DEPT. CODE	NAME	SIGN	DATE
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DESN	HB		06.10.20
M CHD	MS		06.10.20
APPD	SKS		06.10.20

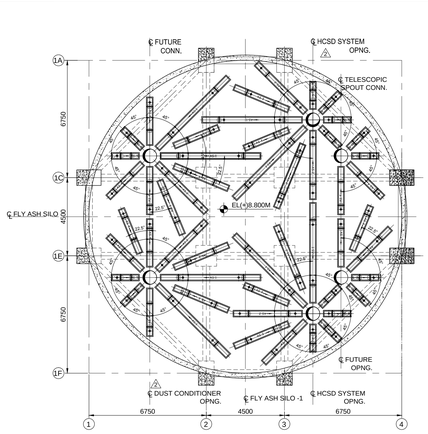
TITLE: GA OF FA SILO (STAGE-I & II)

DEPT. SCALE SIGN

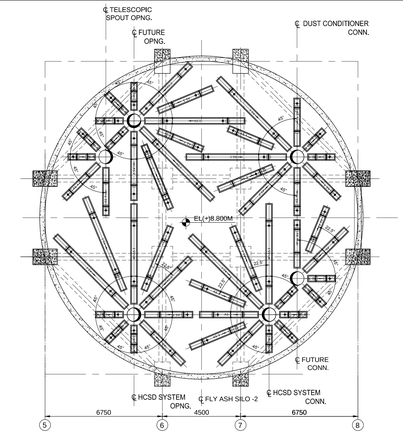
DRAWING NO. IS-1-GA-699-303-M004A

SHEET 05 OF 10 REV. 03

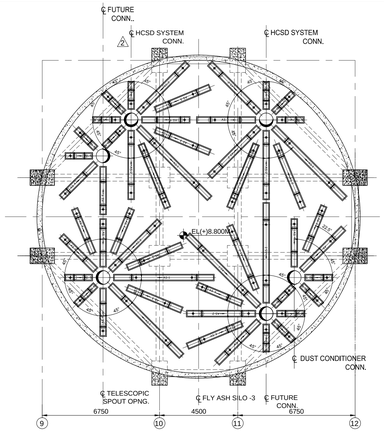
JOB NO.IS-1-15-2001



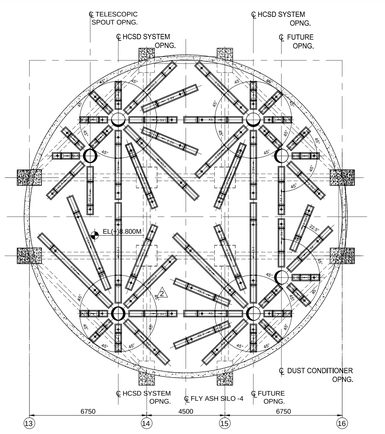
SILO #1 OPENING AND FLUIDIZING AIR SLIDE ARRANGEMENT PLAN @ EL(+)8.800M △1



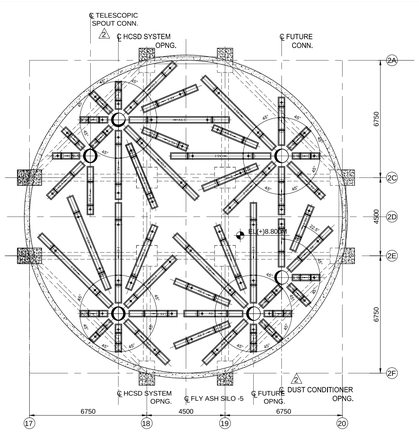
SILO #2 OPENING AND FLUIDIZING AIR SLIDE ARRANGEMENT PLAN @ EL(+)8.800M △1



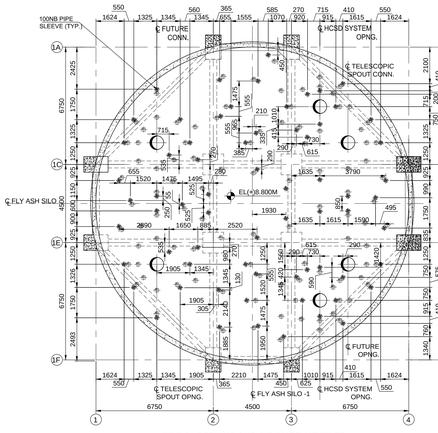
SILO #3 OPENING AND FLUIDIZING AIR SLIDE ARRANGEMENT PLAN @ EL(+)8.800M △1



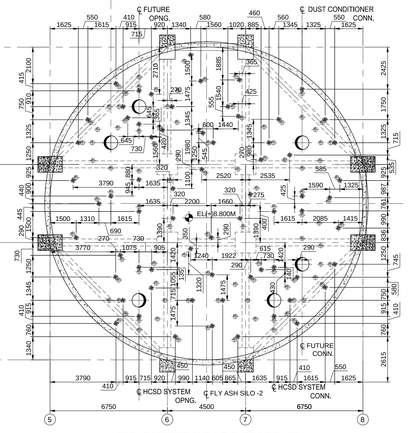
SILO #4 OPENING AND FLUIDIZING AIR SLIDE ARRANGEMENT PLAN @ EL(+)8.800M △1



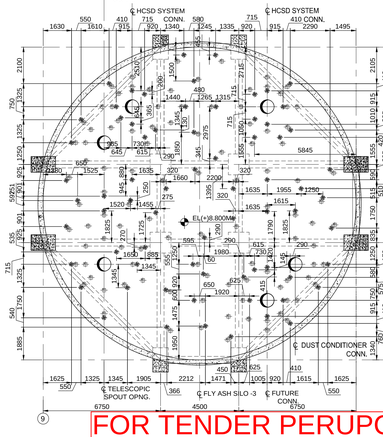
SILO #5 OPENING AND FLUIDIZING AIR SLIDE ARRANGEMENT PLAN @ EL(+)8.800M △1



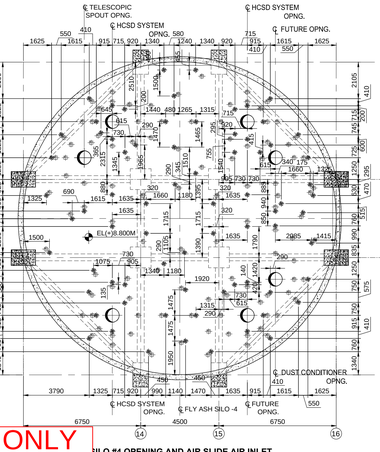
SILO #1 OPENING AND AIR SLIDE AIR INLET PIPE LOCATION DETAILS @ EL(+)8.800M △1



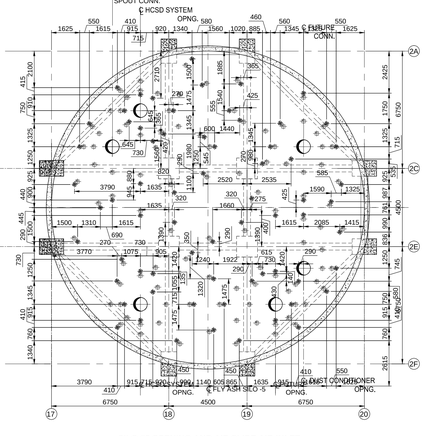
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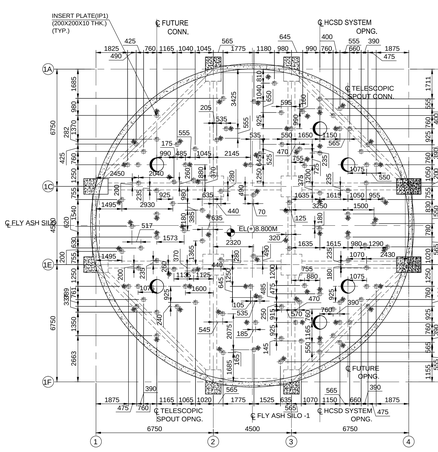
SILO #3 OPENING AND AIR SLIDE AIR INLET PIPE LOCATION DETAILS @ EL(+)8.800M △1



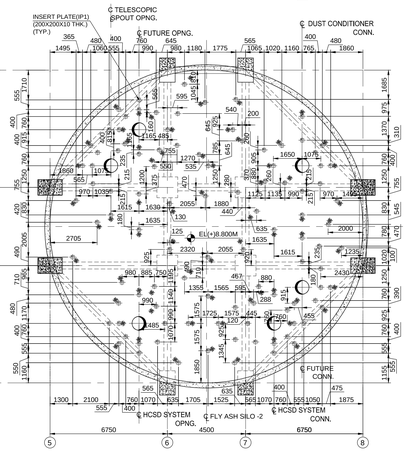
SILO #4 OPENING AND AIR SLIDE AIR INLET PIPE LOCATION DETAILS @ EL(+)8.800M △1



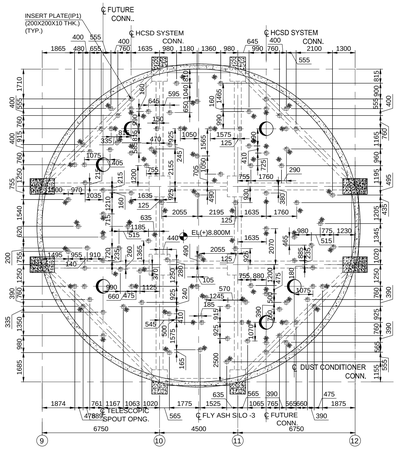
SILO #5 OPENING AND AIR SLIDE AIR INLET PIPE LOCATION DETAILS @ EL(+)8.800M △1



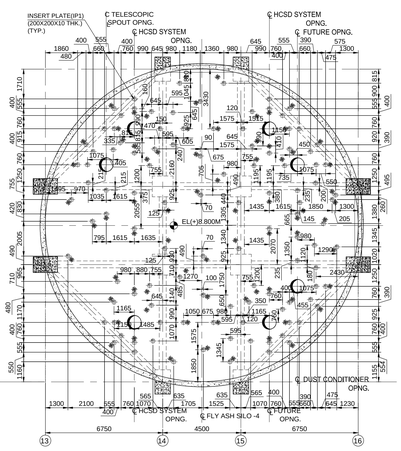
SILO #1 OPENING AND INSERT PLATE LOCATION DETAILS @ EL(+)8.800M △1



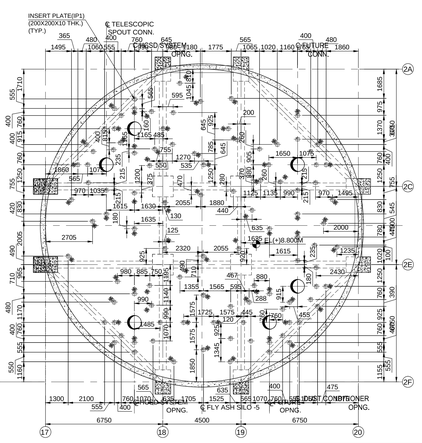
SILO #2 OPENING AND INSERT PLATE LOCATION DETAILS @ EL(+)8.800M △1



SILO #3 OPENING AND INSERT PLATE LOCATION DETAILS @ EL(+)8.800M △1



SILO #4 OPENING AND INSERT PLATE LOCATION DETAILS @ EL(+)8.800M △1



SILO #5 OPENING AND INSERT PLATE LOCATION DETAILS @ EL(+)8.800M △1

FOR TENDER PERUPOSE ONLY

LEGENDS:- △3

IL	-	INVERT LEVEL
B.O.B	-	BOTTOM OF BEAM
B.O.M.R	-	MOTTOM OF MONORAIL
T.O.B	-	TOP OF BEAM
FFL	-	FINISHED FLOOR LEVEL
FGL	-	FINISHED GROUND LEVEL
EL	-	ELEVATION
LVL	-	LEVEL
C.O.P	-	CENTER OF PIPE
B.O.P	-	BOTTOM OF PIPE
B.O.C	-	BOTTOM OF CUTOUT
OP	-	OPENING
LS	-	LEVEL SWITCH
LT	-	LEVEL TRANSMITTER
CL	-	CENTER LINE
IP	-	INSERT PLATE
OPNG	-	OPENING

PIPE SLEEVES DETAILS:- △1

S.No.	DESCRIPTION	QUANTITY (NOS.)				
		STAGE-I (U #1&#2)		STAGE-II (U #3, #4 & #5)		
		FA SILO-1	FA SILO-2	FA SILO-3	FA SILO-4	FA SILO-5
1.	100 NB PIPE SLEEVE	68 Nos.	68 Nos.	68 Nos.	70 Nos.	68 Nos.

INSERT PLATE DETAILS:- △1

S.No.	DESCRIPTION	QUANTITY (NOS.)				
		STAGE-I (U #1&#2)		STAGE-II (U #3, #4 & #5)		
		FA SILO-1	FA SILO-2	FA SILO-3	FA SILO-4	FA SILO-5
1.	INSERT PLATE(IP1) (200X200X10MM THK.)	94 Nos.	94 Nos.	94 Nos.	96 Nos.	94 Nos.
2.	INSERT PLATE(IP2) (100X100X10MM THK.)	150 Nos.	150 Nos.	150 Nos.	150 Nos.	150 Nos.

R.No.	DATE	DESCRIPTION	BY	CHKD.	APPD.
		REVISIONS			
3	09.06.21	REVISED AS PER TSGENCO COMMENTS	AKS	MS	SKS
2	07.06.21	REVISED AS PER TSGENCO COMMENTS	AKS	MS	SKS
1	17.02.21	REVISED AS PER TSGENCO COMMENTS	AKS	MS	SKS
0	09.12.20	FOR APPROVAL	AKS	MS	SKS

CUSTOMER: TELANGANA STATE POWER GENERATION CORPORATION LTD
TELANGANA STATE, INDIA

5x800 MW YADADRI THERMAL POWER STATION
NALGONDA

CUSTOMER'S CONSULTANT: TATA CONSULTING ENGINEERS LIMITED
BANGALORE

EPC CONTRACTOR: BHARAT HEAVY ELECTRICALS LTD
INDUSTRIAL SYSTEMS GROUP
BANGALORE

AHP CONTRACTOR: THE INDURE PVT. LTD.
NEWDELHI - INDIA

INDURE JOB NO. INPG-5050
INDURE DRAWING NO. INPG-5050-M-GA-14

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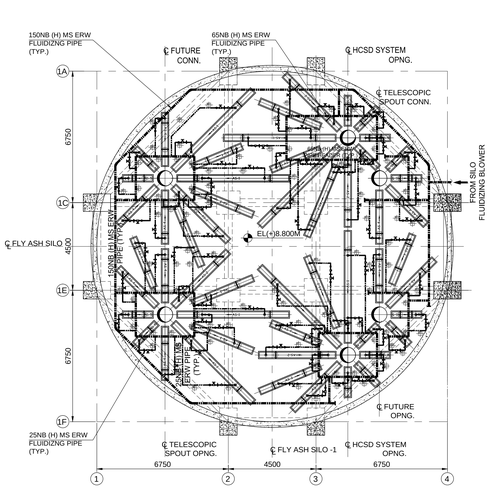
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M	DRN.	AKS		06.10.20
	DESN	HB		06.10.20
	CHD	MS		06.10.20
	APPD	SKS		06.10.20

TITLE: GA OF FA SILO (STAGE-I & II)

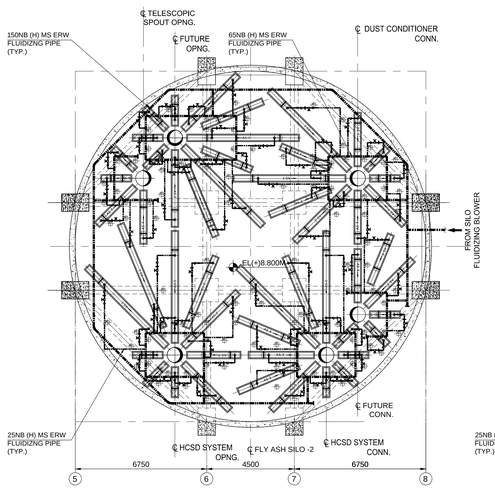
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DRAWING NO. IS-1-GA-699-303-M004A
SHEET 06 OF 10 REV. 03

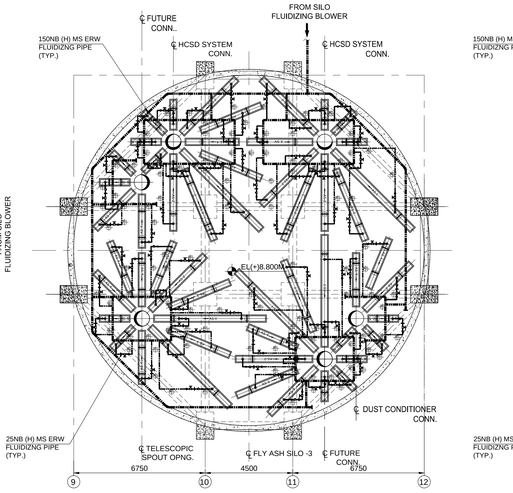
JOB NO.IS-1-15-2001



FLY ASH SILO #1
(SILO BOTTOM FLUIDIZING PIPING ARRANGEMENT)

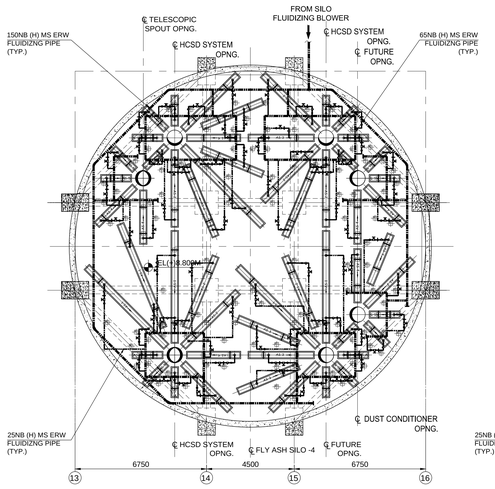


FLY ASH SILO #2
(SILO BOTTOM FLUIDIZING PIPING ARRANGEMENT)

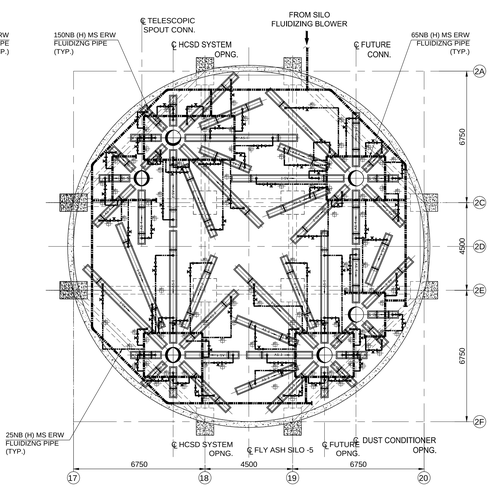


FLY ASH SILO #3 ⚠2

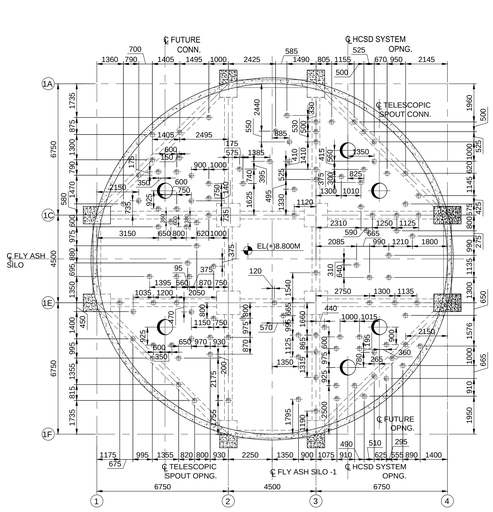
(SILO BOTTOM FLUIDIZING PIPING ARRANGEMENT)



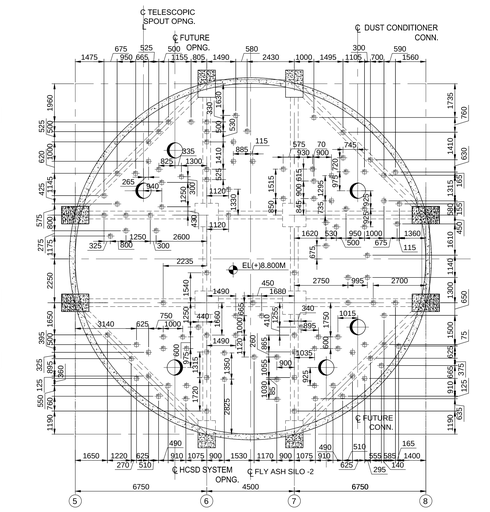
FLY ASH SILO #4
(SILO BOTTOM FLUIDIZING PIPING ARRANGEMENT)



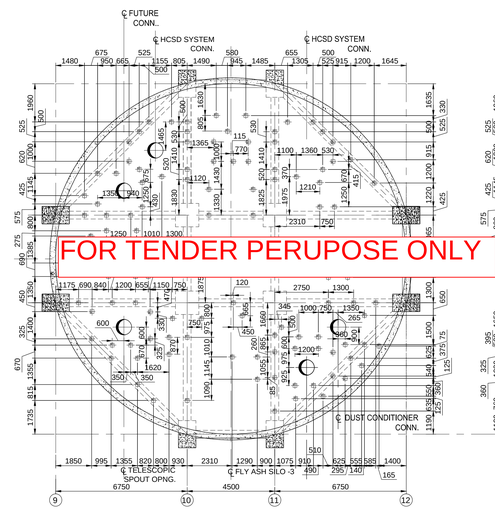
FLY ASH SILO #5
(SILO BOTTOM FLUIDIZING PIPING ARRANGEMENT)



FLY ASH SILO #1
(SILO BOTTOM FLUIDIZING PIPE SUPPORT INSERT PLATE LOCATION DETAILS)

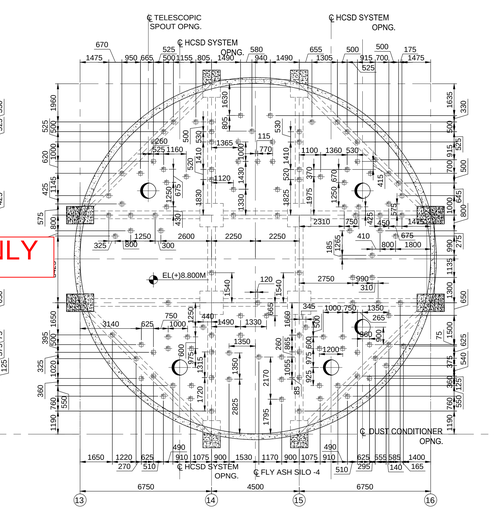


FLY ASH SILO #1
(SILO BOTTOM FLUIDIZING PIPE SUPPORT INSERT PLATE LOCATION DETAILS)

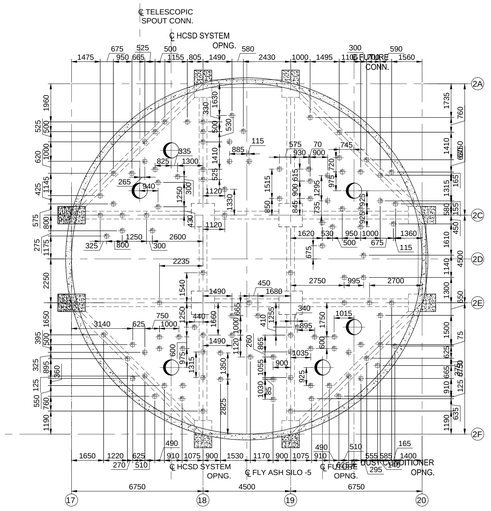


FLY ASH SILO #3 ⚠2

(SILO BOTTOM FLUIDIZING PIPE SUPPORT INSERT PLATE LOCATION DETAILS)



FLY ASH SILO #4
(SILO BOTTOM FLUIDIZING PIPE SUPPORT INSERT PLATE LOCATION DETAILS)



FLY ASH SILO #5
(SILO BOTTOM FLUIDIZING PIPE SUPPORT INSERT PLATE LOCATION DETAILS)

LEGENDS:- ⚠3

IL	-	INVERT LEVEL
B.O.B	-	BOTTOM OF BEAM
B.O.M.R	-	MOTTOM OF MONORAIL
T.O.B	-	TOP OF BEAM
FFL	-	FINISHED FLOOR LEVEL
FGL	-	FINISHED GROUND LEVEL
EL	-	ELEVATION
LVL	-	LEVEL
C.O.P	-	CENTER OF PIPE
B.O.P	-	BOTTOM OF PIPE
B.O.C	-	BOTTOM OF CUTOUT
OP	-	OPENING
LS	-	LEVEL SWITCH
LT	-	LEVEL TRANSMITTER
CL	-	CENTER LINE
IP	-	INSERT PLATE
OPNG	-	OPENING

FOR TENDER PERUPOSE ONLY

R.No.	DATE	DESCRIPTION	BY	CHKD.	APPD.
3	09.06.21	REVISED AS PER TSGENCO COMMENTS	AKS	MS	SKS
2	07.06.21	REVISED AS PER TSGENCO COMMENTS	AKS	MS	SKS
1	17.02.21	REVISED AS PER TSGENCO COMMENTS	AKS	MS	SKS
0	09.12.20	FOR APPROVAL	AKS	MS	SKS

REVISIONS

CUSTOMER: TELANGANA STATE POWER GENERATION CORPORATION LTD
TELANGANA STATE, INDIA
5x800 MW YADADRI THERMAL POWER STATION
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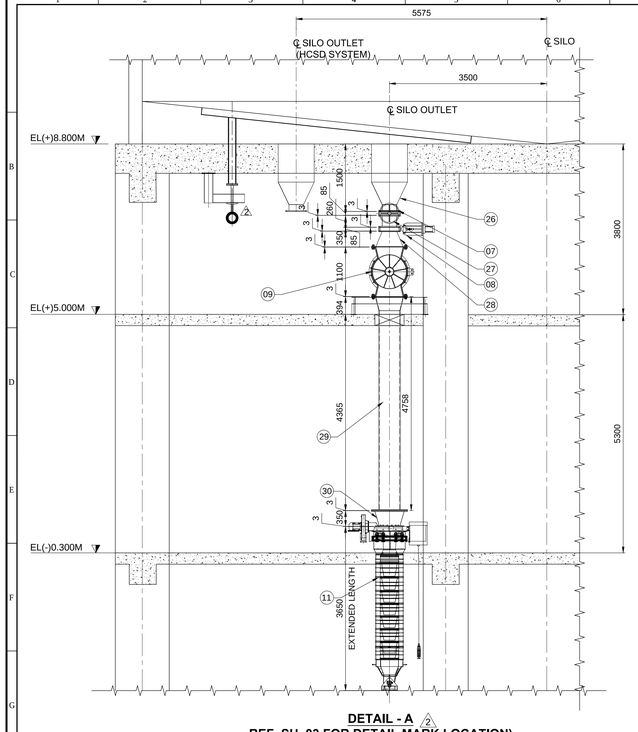
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TITLE: GA OF FA SILO (STAGE-I & II)

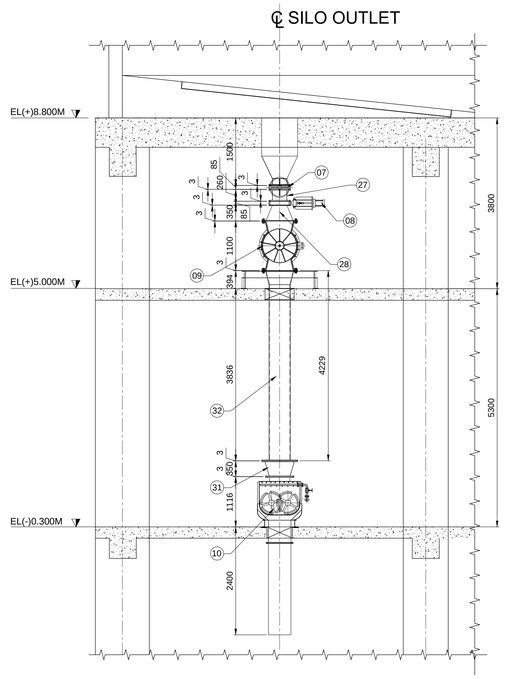
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DRAWING NO. IS-1-GA-699-303-M004A
SHEET 07 OF 10 REV. 03

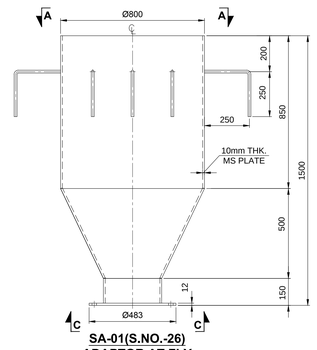
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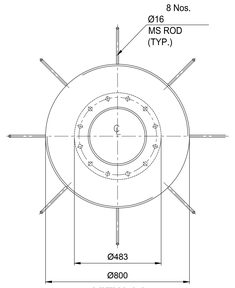
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REF. SH. 03 FOR DETAIL MARK LOCATION)



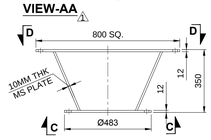
DETAIL - B ⚠2
REF. SH. 03 FOR DETAIL MARK LOCATION)



SA-01(S.NO.-26)
ADAPTOR AT FLY ASH SILO OUTLET ⚠1



VIEW-AA ⚠1

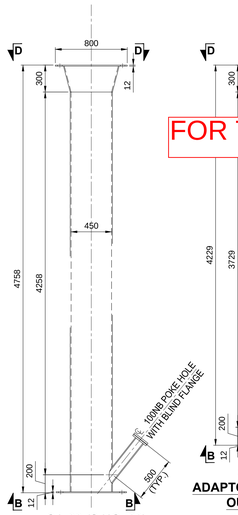


SA-04 (S.NO.-29)
ADAPTOR BETWEEN PNEU. OPTD. KNIFE GATE VALVE & ROTARY FEEDER ⚠1

BILL OF MATERIAL:-

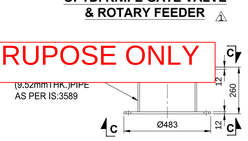
S.NO.	DESCRIPTION	UOM	QUANTITY UNIT #1	UNIT #2	UNIT #3	UNIT #4	UNIT #5	TOTAL QTY.	WEIGHT IN KGS / UNIT	REF. DRG. NO.
1.	R.C.C. FLY ASH SILO	NOS.	01	01	01	01	01	05	-	N.A.
2.	VENT FILTER WITH FAN AND MOTOR	NOS.	01	01	01	01	01	05	5000 KG.	IS-3-GA-699-302-M008B
3.	PRESSURE RELIEF DOOR	NOS.	01	01	01	01	01	05	500 KG.	IS-3-GA-699-300-M060
4.	MAN HOLE	NOS.	01	01	01	01	01	05	400 KG.	N.A.
5.	LEVEL TRANSMITTER	NOS.	03	03	03	03	03	15	50 KG.	IS-1-EE-699-300-E047D
6.	SILO FLUIDIZATION AIR SLIDES ⚠3	NOS.	47	47	47	48	47	236	200 KG.	IS-3-GA-699-300-M063
7.	300NB - MANUAL OPERATED KNIFE GATE VALVE	NOS.	06	06	06	07	06	31	125 KG.	IS-3-GA-699-300-M058A
8.	300NB - PNEUMATIC OPERATED KNIFE GATE VALVE	NOS.	04	04	04	05	04	21	150 KG.	IS-3-GA-699-300-M058A
9.	ROTARY FEEDER (CAP. 160 TPH.)	NOS.	⚠3, 02	02	02	02	02	10	1000 KG.	IS-3-GA-699-303-M069
10.	DUST CONDITIONER WITH MOTOR (CAP. 160 TPH.)	NOS.	01	01	01	01	01	05	3500 KG.	IS-3-GA-699-300-M061
11.	TELESCOPIC CHUTE (CAP.- 160 TPH.)	NOS.	01	01	01	01	01	05	350 KG.	IS-3-GA-699-303-M069A
12.	MANUAL HOIST (CAPACITY - 1T)	NOS.	REFER HOIST SCHEDULE TABLE ⚠2						350 KG.	IS-3-GA-699-300-M029
13.	ELECTRIC HOIST (CAPACITY - 2T)	NOS.							750 KG.	IS-3-GA-699-300-M028
14.	400NB - MS ERW ASH CONVEYING PIPE WITH FITTINGS	LOT.	01	01	01	01	01	05	-	IS-4-DS-699-302-M002
15.	ROTARY FEEDER - VFD DRIVEN (CAP. 234 TPH.) ⚠3	NOS.	02	02	02	03	02	11	1000 KG.	IS-3-GA-699-303-M069
16.	SOLID FLOW METER (CAP. 234 TPH) ⚠2	NOS.	02	02	02	03	02	11	50 KG.	IS-1-EE-699-300-E047M
17.	HYDROMIX DUST CONDITIONER (CAP. 234 TPH.) ⚠2	NOS.	02	02	02	03	02	11	500 KG.	IS-3-GA-699-300-M061
18.	AGITATOR WITH MOTOR GEAR BOX	NOS.	03	-	05	-	-	08	6500 KG.	IS-3-GA-699-300-M044B
19.	MIXING TANK	NOS.	03	-	05	-	-	08	13000 KG.	IS-1-GA-699-303-M004C
⚠1 20.	MS ADAPTOR	NOS.	20	-	45	-	-	65	90 KG.	N.A.
21.	400 NB PNEUMATIC OPERATED KNIFE GATE VALVE	NOS.	10	10	30	30	-	80	150 KG.	IS-3-GA-699-304-M047A
22.	WEIGH BRIDGE	NOS.	01	01	01	01	01	05	-	IS-3-GA-699-300-M074
23.	LEVEL INDICATOR	NOS.	01	01	01	01	01	05	15 KG.	IS-1-EE-699-300-E047D
24.	MS ADAPTOR FOR PRESSURE RELIEF DOOR	NOS.	01	01	01	01	01	05	50 KG.	N.A.
25.	MS ADAPTOR FOR LEVEL TRANSMITTER	NOS.	03	03	03	03	03	15	10 KG.	N.A.
26.	MS ADAPTOR (SA-01)	NOS.	06	06	06	07	06	31	150 KG.	N.A.
27.	MS ADAPTOR (SA-02)	NOS.	04	04	04	05	04	21	25 KG.	N.A.
28.	MS ADAPTOR (SA-03)	NOS.	04	04	04	05	04	21	350 KG.	N.A.
29.	MS ADAPTOR (SA-04)	NOS.	01	01	01	01	01	05	30 KG.	N.A.
30.	MS ADAPTER (SA-05)	NOS.	01	01	01	01	01	05	100 KG.	N.A.
31.	MS ADAPTOR (SA-06)	NOS.	01	01	01	01	01	05	110 KG.	N.A.
32.	MS ADAPTOR (SA-07)	NOS.	01	01	01	01	01	05	100 KG.	N.A.
33.	FA SILO AREA DRAIN PUMP (CAP: 40CUM/H)	NOS.	02	-	02	-	-	04	650 KG.	IS-3-GA-699-300-M031
34.	MOTOR FOR FA SILO AREA DRAIN PUMP - 9 KW	NOS.	02	-	02	-	-	04	150 KG.	IS-1-EE-699-300-E012E
35.	NON RETURN VALVE - 80NB	NOS.	02	-	02	-	-	04	20 KG.	IS-3-GA-699-300-M049
⚠1 36.	KNIFE GATE VALVE - 80NB PNEU. OPTD.	NOS.	02	-	02	-	-	04	20 KG.	IS-3-GA-699-300-M049
37.	MS ERW (H) FA SILO AREA DRAIN PIPE	LOT.	01	-	01	-	-	01	10 KG/M.	IS-4-DS-699-302-M003
⚠1 38.	GATE VALVE -150NB	NOS.	04	-	07	-	-	11	35 KG.	-
⚠1 39.	FLOW TRANSMITTER -150NB	NOS.	04	-	07	-	-	11	20 KG.	-
⚠1 40.	FLOW CONTROL VALVE -125NB	NOS.	04	-	07	-	-	11	22 KG.	-
⚠1 41.	GLOBE VALVE -150NB	NOS.	08	-	14	-	-	22	38 KG.	-
⚠1 42.	GATE VALVE -80NB	NOS.	04	-	07	-	-	11	16 KG.	-
⚠1 43.	PNEU. OPTD BUTTERFLY VALVE -80NB	NOS.	04	-	07	-	-	11	15 KG.	-
⚠1 44.	GLOBE VALVE -80NB	NOS.	08	-	14	-	-	22	18 KG.	-
⚠1 45.	GATE VALVE -25NB	NOS.	03	-	05	-	-	08	05 KG.	-
⚠1 46.	STRAINER -25NB	NOS.	03	-	05	-	-	08	05 KG.	-
⚠1 47.	TWO WAY SOLENOID VALVE -25NB	NOS.	03	-	05	-	-	08	06 KG.	-
⚠1 48.	GLOBE VALVE -25NB	NOS.	06	-	10	-	-	16	06 KG.	-
⚠1 49.	FLOW SWITCH -25NB	NOS.	03	-	05	-	-	08	04 KG.	-
⚠1 50.	FLOW GAUGE -25NB	NOS.	03	-	05	-	-	08	04 KG.	-

FOR TENDER PERUPOSE ONLY

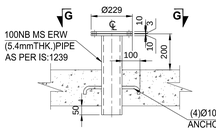


SA-03 (S.NO.-28)
ADAPTOR AT ROTARY FEEDER OUTLET (FOR TELESCOPIC CHUTE ARRANGEMENT) ⚠1

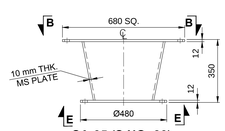
SA-03 (S.NO.-32)
ADAPTOR AT ROTARY FEEDER OUTLET (FOR HMDC ARRANGEMENT) ⚠1



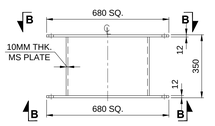
SA-02 (S.NO.-27)
ADAPTOR BETWEEN MANUAL OPTD. KNIFE GATE VALVE & PNEU. OPTD. KNIFE GATE VALVE ⚠1



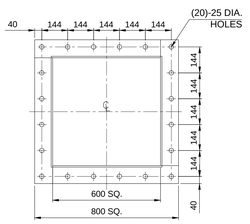
DETAIL-F (S.No.-21)
MS ADAPTOR FOR LEVEL TRANSMITTER ⚠1



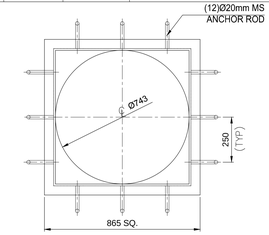
SA-05 (S.NO.-30)
ADAPTOR BETWEEN ROTARY FEEDER & TELESCOPIC CHUTE ⚠1



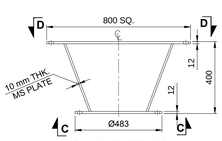
SA-06 (S.NO.-31)
ADAPTOR BETWEEN ROTARY FEEDER & HMDC DUST CONDITIONER ⚠1



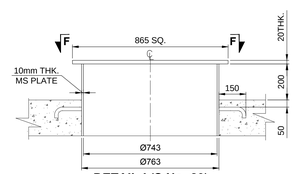
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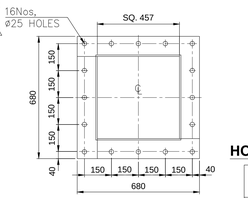
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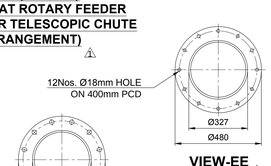
SA-06 (S.NO.-32)
ADAPTOR BETWEEN PNEU. OPTD. KNIFE GATE VALVE & ROTARY FEEDER ⚠1



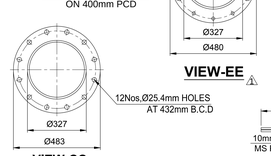
DETAIL-I (S.No.-20)
ADAPTOR FOR PRESSURE RELIEF DOOR ⚠1



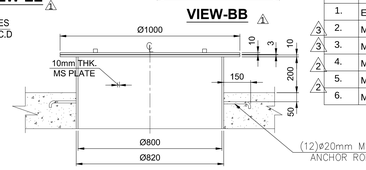
VIEW-BB ⚠1



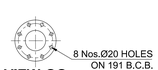
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VIEW-CC ⚠1

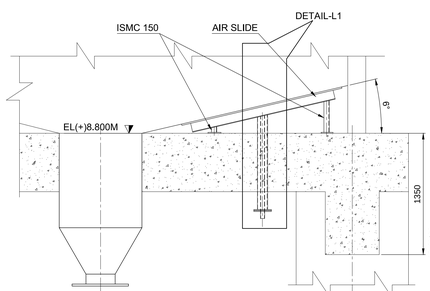


DETAIL-J (S.No.-04)
(MAN HOLE) ⚠1

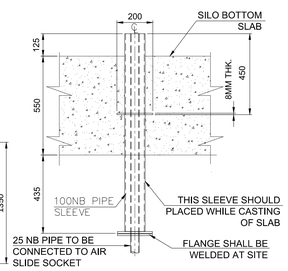


VIEW-GG ⚠1

DETAIL - C ⚠2
REF. SH. 03 FOR DETAIL MARK LOCATION)



DETAIL - S ⚠1



DETAIL-L1
PIPE SLEEVE FOR SILO FLUIDIZING PADS (100NB) ⚠1

LEGENDS:- ⚠1

IL	-	INVERT LEVEL
B.O.B	-	BOTTOM OF BEAM
B.O.M.R	-	BOTTOM OF MONORAIL
T.O.B	-	TOP OF BEAM
FFL	-	FINISHED FLOOR LEVEL
FGL	-	FINISHED GROUND LEVEL
EL	-	ELEVATION
LVL	-	LEVEL
C.O.P	-	CENTER OF PIPE
B.O.P	-	BOTTOM OF PIPE
B.O.C	-	BOTTOM OF CUTOUT
OP	-	OPENING
LS	-	LEVEL SWITCH
LT	-	LEVEL TRANSMITTER
CL	-	CENTER LINE
IP	-	INSERT PLATE
OPNG	-	OPENING

HOIST SCHEDULE:- ⚠1

S.NO.	DESCRIPTION	LOCATION	LONG TRAVEL STAGE-I	LONG TRAVEL STAGE-II	B.O. ⚠2 MONORAIL	LIFT ⚠1,2	QUANTITY ⚠2
1.	ELECTRIC HOIST - 2T	SILO TOP	23 M	23 M	EL(+)34.80M	41.80 M	5 NOS.
⚠3 2.	MANUAL HOIST - 2T	AT FLOOR EL (+) 5.000M	45 M	69 M	EL(+)7.200M	14.20 M	2 NOS.
⚠3 3.	MANUAL HOIST - 2T	AT FLOOR EL (+) 0.300M	45 M	69 M	EL(+)4.450M	11.45 M	2 NOS.
⚠2 4.	MANUAL HOIST - 1T	MIXING #1&2, 5&6, 7&8	25.5 M	12.75 M	EL(+)7.200M	14.20 M	6 NOS.
⚠2 5.	MANUAL HOIST - 1T	MIXING TANK #4&5	13 M	12.75 M	EL(+)7.200M	14.20 M	2 NOS.
⚠2 6.	MANUAL HOIST - 1T	DRAIN SUMP	6M	6M	EL(-)2.900M	3.5M	2 NOS.

NOTES:-
⚠1. ALL DIMENSIONS ARE IN MILLIMETER AND LEVELS IN METER UNLESS NOTED OTHERWISE.
2. FOR GENERAL NOTES PLEASE REFER SH.-01 OF 05.

R.No.	DATE	DESCRIPTION	BY	CHKD.	APPD.
		REVISIONS			
3	09.06.21	REVISED AS PER TSGENCO COMMENTS	VM	MS	SKS
2	07.06.21	REVISED AS PER TSGENCO COMMENTS	VM	MS	SKS
1	17.02.21	REVISED AS PER TSGENCO COMMENTS	SUNITA	MS	SKS
0	09.12.20	FOR APPROVAL	AKS	MS	SKS

CUSTOMER: TELANGANA STATE POWER GENERATION CORPORATION LTD, TELANGANA STATE, INDIA

5x800 MW YADADRI THERMAL POWER STATION, NALGONDA

CUSTOMER'S CONSULTANT: TATA CONSULTING ENGINEERS LIMITED, BANGALORE

EPC CONTRACTOR: BHARAT HEAVY ELECTRICALS LTD, INDUSTRIAL SYSTEMS GROUP, BANGALORE

AHP CONTRACTOR: THE INDURE PVT. LTD., NEWDELHI - INDIA

INDURE JOB NO. INPG-5050
INDURE DRAWING NO. INPG-5050-M-GA-14

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DEPT		NAME	SIGN	DATE
CODE	DRN.	AKS		06.10.20
	DESN.	HB		06.10.20
M	CHD	MS		06.10.20
	APPD	SKS		06.10.20

TITLE: GA OF FA SILO (STAGE-I & II)

DEPT. | SCALE | SIGN

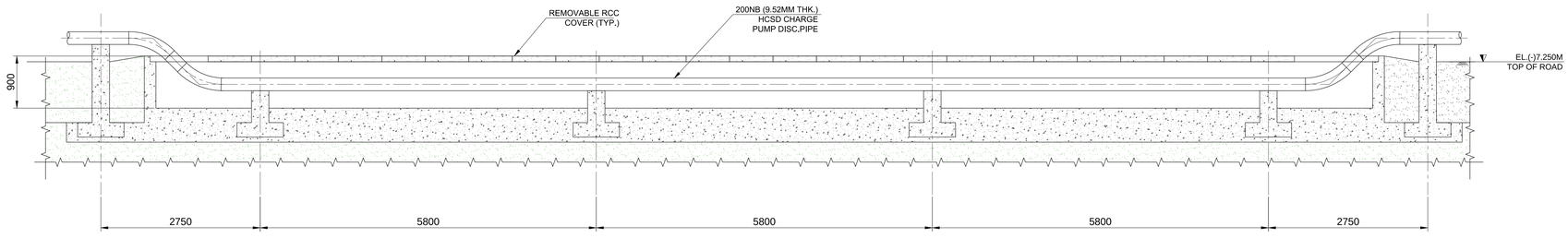
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SHEET 08 OF 10 REV. 03

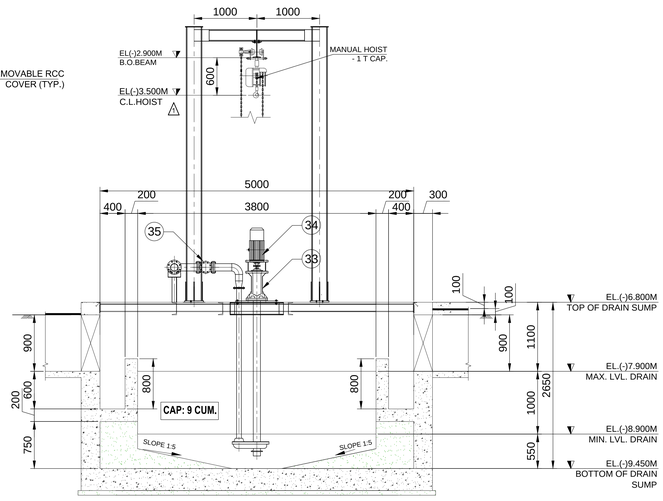
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TO HCSD PUMP SUCTION
CONT TO. DRG. NO.
IS-1-GA-699-303-M005A & B

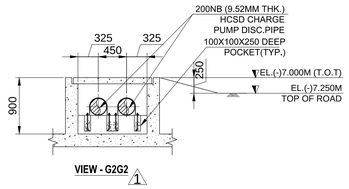
DETAIL-G 3
(FOR LOCATION REFER SH. 01)



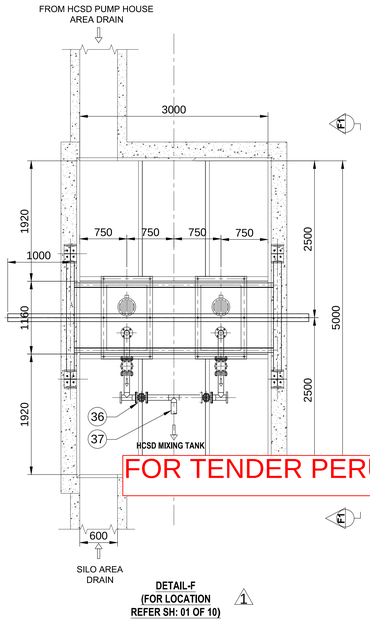
VIEW - G1G1



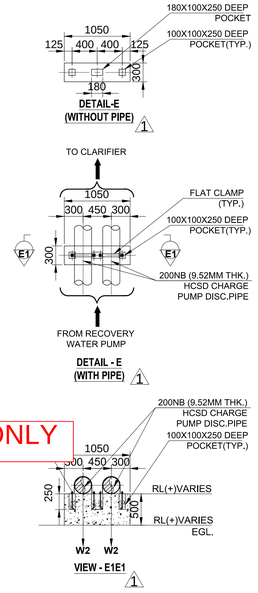
VIEW - F1F1 1



VIEW - G2G2 1



DETAIL-F
(FOR LOCATION
REFER SH: 01 OF 10) 1



VIEW - E1E1 1

FOR TENDER PERUPOSE ONLY

LEGENDS:- 3

IL	-	INVERT LEVEL
B.O.B	-	BOTTOM OF BEAM
B.O.M.R	-	MOTTOM OF MONORAIL
T.O.B	-	TOP OF BEAM
FFL	-	FINISHED FLOOR LEVEL
FGL	-	FINISHED GROUND LEVEL
EL	-	ELEVATION
LVL	-	LEVEL
C.O.P	-	CENTER OF PIPE
B.O.P	-	BOTTOM OF PIPE
B.O.C	-	BOTTOM OF CUTOUT
OP	-	OPENING
LS	-	LEVEL SWITCH
LT	-	LEVEL TRANSMITTER
CL	-	CENTER LINE
IP	-	INSERT PLATE
OPNG	-	OPENING

1. ALL DIMENSIONS ARE IN MILLIMETER AND LEVELS IN METER UNLESS NOTED OTHERWISE
2. FOR GENERAL NOTES PLEASE REFER SH-01 OF 05.

R.No.	DATE	DESCRIPTION	BY	CHKD.	APPD.
3	09.06.21	REVISED AS PER TSGENCO COMMENTS	VM	MS	SKS
2	07.06.21	REVISED AS PER TSGENCO COMMENTS	VM	MS	SKS
1	17.02.21	REVISED AS PER TSGENCO COMMENTS	SUNITA	MS	SKS
0	09.12.20	FOR APPROVAL	AKS	MS	SKS

REVISIONS

CUSTOMER: TELANGANA STATE POWER GENERATION CORPORATION LTD
TELANGANA STATE, INDIA
5x800 MW YADADRI THERMAL POWER STATION
NALGONDA

CUSTOMER'S CONSULTANT: TATA CONSULTING ENGINEERS LIMITED
BANGALORE

EPC CONTRACTOR: BHARAT HEAVY ELECTRICALS LTD
INDUSTRIAL SYSTEMS GROUP
BANGALORE

AHP CONTRACTOR: THE INDURE PVT. LTD.
NEWDELHI - INDIA

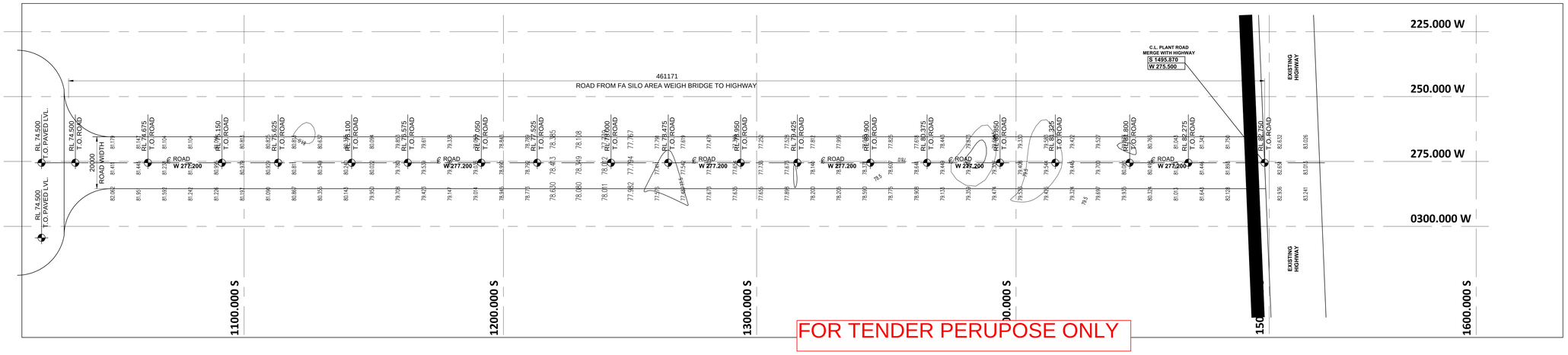
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INDURE DRAWING NO. INPG-5050-M-GA-14

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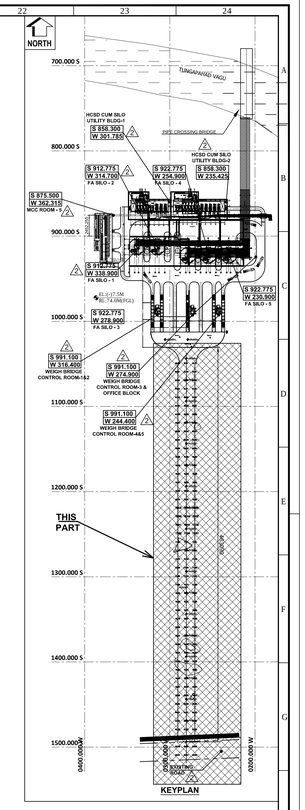
TITLE: GA OF FA SILO (STAGE-I & II)

DRAWING NO. IS-1-GA-699-303-M004A
SHEET 09 OF 10 REV. 03
JOB NO.IS-1-15-2001



FOR TENDER PERUPOSE ONLY

ROAD FROM FA SILO AREA WEIGH BRIDGE TO HIGHWAY △3



LEGENDS:- △3

IL	-	INVERT LEVEL
B.O.B	-	BOTTOM OF BEAM
B.O.M.R	-	MOTTOM OF MONORAIL
T.O.B	-	TOP OF BEAM
FFL	-	FINISHED FLOOR LEVEL
FGL	-	FINISHED GROUND LEVEL
EL	-	ELEVATION
LVL	-	LEVEL
C.O.P	-	CENTER OF PIPE
B.O.P	-	BOTTOM OF PIPE
B.O.C	-	BOTTOM OF CUTOUT
OP	-	OPENING
LS	-	LEVEL SWITCH
LT	-	LEVEL TRANSMITTER
CL	-	CENTER LINE
IP	-	INSERT PLATE
OPNG	-	OPENING
RL	-	REFERENCE LEVEL

R.No.	DATE	DESCRIPTION	BY	CHKD.	APPD.
03	09.06.21	REVISED AS PER TSGENCO COMMENTS	SUNITA	MS	SKS
02	07.06.21	REVISED AS PER TSGENCO COMMENTS	SUNITA	MS	SKS
01	17.02.21	REVISED AS PER TSGENCO COMMENTS	SUNITA	MS	SKS
0	09.12.20	FOR APPROVAL	AKS	MS	SKS

REVISIONS

CUSTOMER: TELANGANA STATE POWER GENERATION CORPORATION LTD
TELANGANA STATE, INDIA
5x800 MW YADADRI THERMAL POWER STATION
NALGONDA

CUSTOMER'S CONSULTANT: TATA CONSULTING ENGINEERS LIMITED
BANGALORE

EPC CONTRACTOR: BHARAT HEAVY ELECTRICALS LTD
INDUSTRIAL SYSTEMS GROUP
BANGALORE

AMP CONTRACTOR: THE INDURE PVT. LTD.
NEWDELHI - INDIA

INDURE JOB NO. INPG-5050
INDURE DRAWING NO. INPG-5050-M-GA-14

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	DESN	HB		06.10.20
	CHD	MS		06.10.20
	APPD	SKS		06.10.20

TITLE: GA OF FA SILO (STAGE-I & II)

DEPT. | SCALE | SIGN

DRAWING NO. IS-1-GA-699-303-M004A
SHEET 10 OF 10 REV. 03
JOB NO.IS-1-15-2001