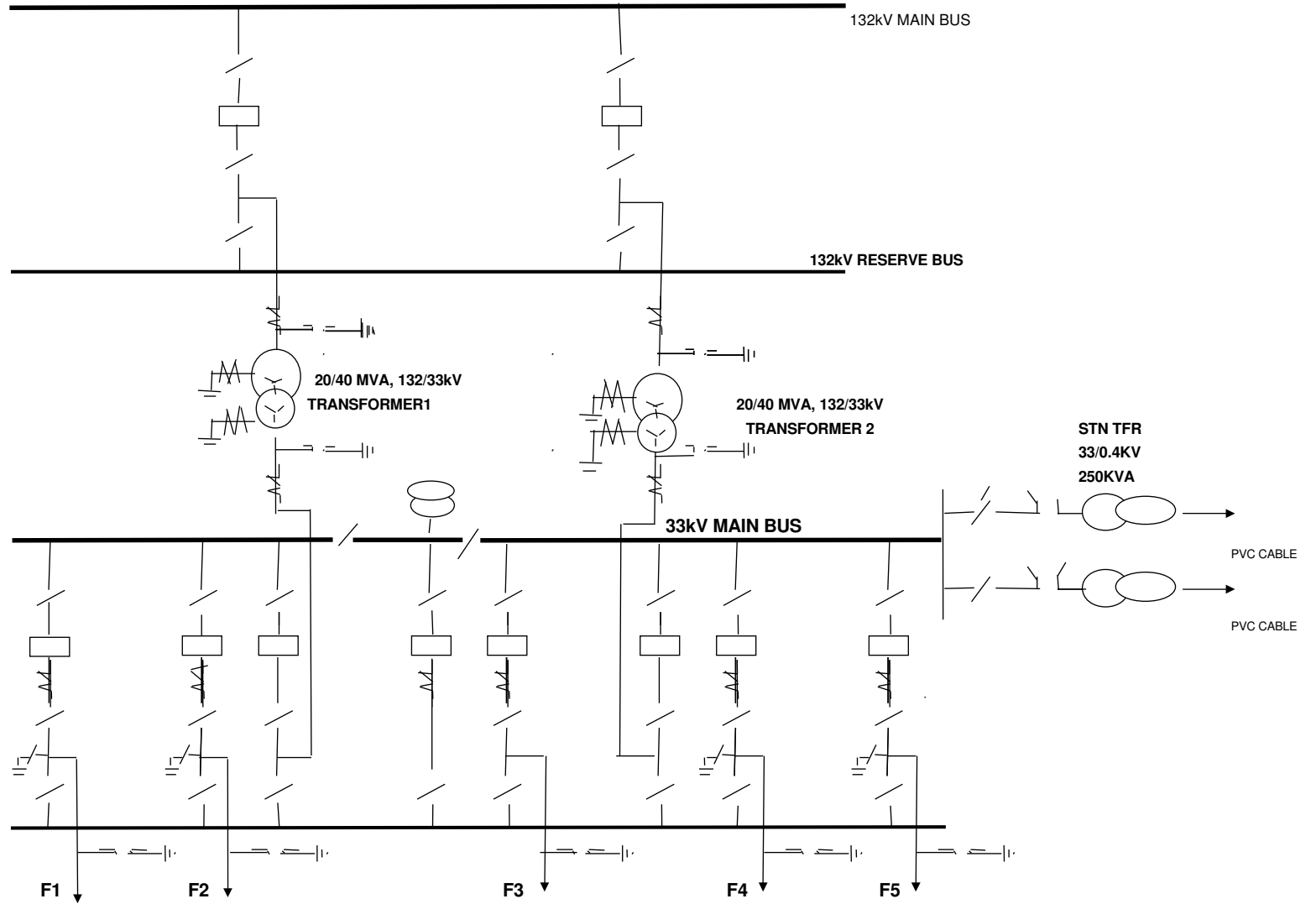


SLD FOR 132/33 KV DUB-STATION, SOMANATHPUR



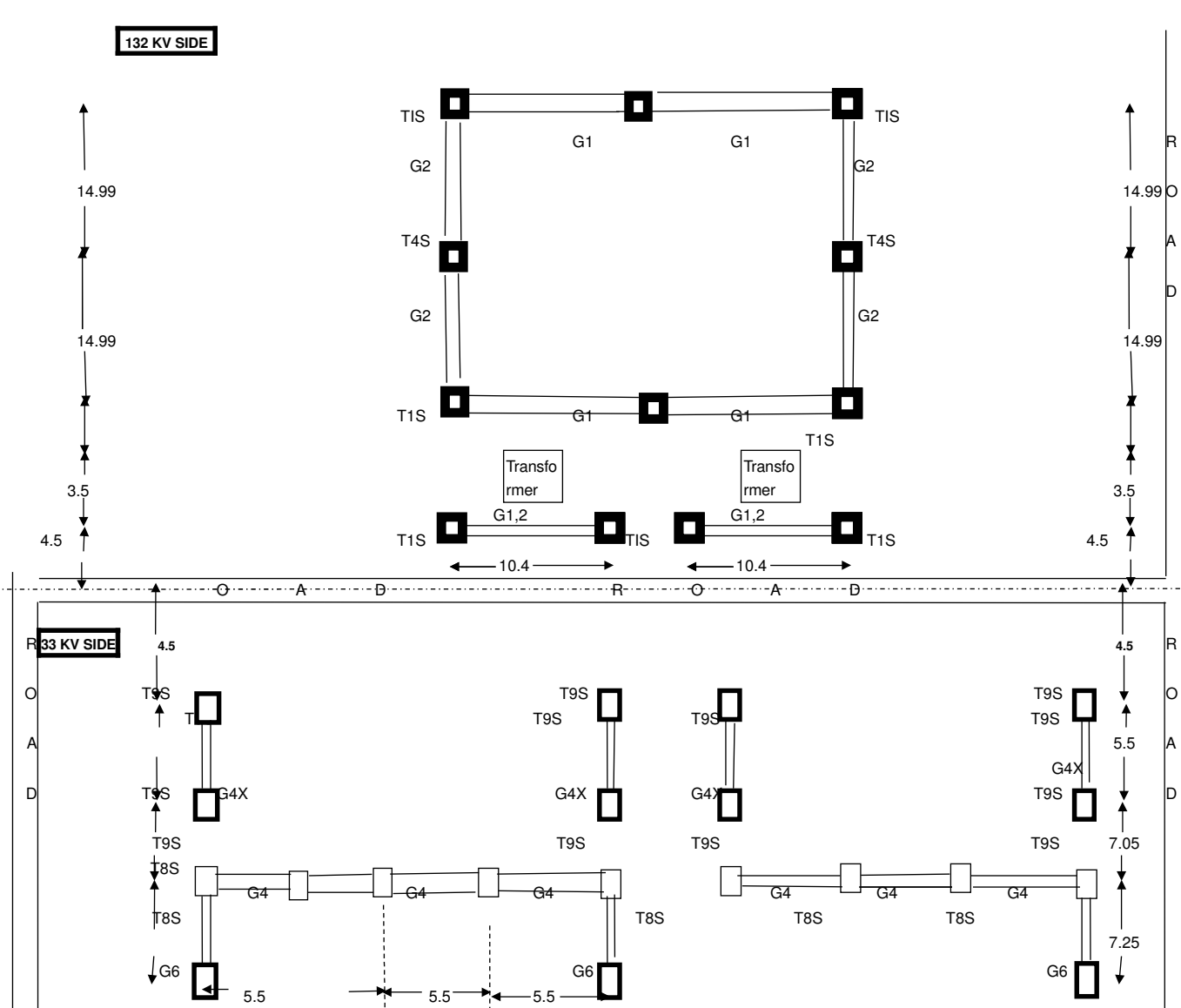
132 KV BAYS
TRANSF 02 NOS.

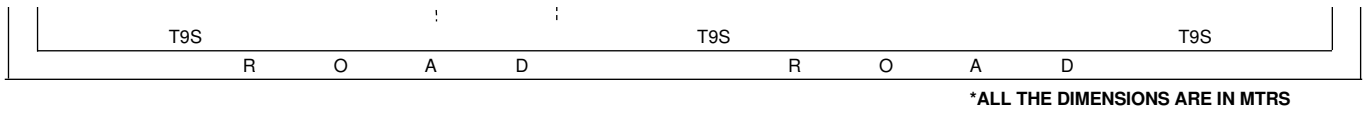
33KV BAY
FEEDER 04 NOS.
TRANSF 02 NOS.
BUS COU 01 NO.





STRUCTURAL NETWORK OF 132/33 KV SUB STATION FOR 132/33 KV SUB -STATION AT SOMNATHPUR





132/33kV SUB-STATION AT SOMNATHPUR

SYMBOLS USED

	SURGE ARRESTOR		AUTO TRANSFORMER
	WAVE TRAP		POWER TRANSFORMER
	CURRENT TRANSFORMER		STATION AUXILIARY SYSTEM
	IND VOLTAGE TRANSFORMER		
	CAP VOLTAGE TRANSFORMER		
	ISOLATOR		
	EARTH SWITCH		
	CKT BKR		



132/33kV SUB-STATION AT SOMNATHPUR

SCOPE OF WORK

- ▶ 132kV Feeder bay -2Nos.
- ▶ 132kV Transfopmmer Bay- 2 Nos.
- ▶ 132/33kV, 12.5MVA-2 No
- ▶ 33kV Feeder bay -4Nos.
- ▶ 33kV Transfopmmer Bay- 2 Nos.
- ▶ 33kV Bus Couplpar Bay-1 No.

OTHER IMPORTANT INFORMATIONS

- ▶ 132kV BUS CONDUCTOR- MAIN-- TWIN ACSR MOOSE
 - ▶ 132kV BUS CONDUCTOR- MAIN BUS-- TWIN ACSR MOOSE
 - ▶ 132kV BUS CONDUCTOR- RESERVE-- SINNGLE ACSR MOOSE
 - ▶ 33kV BUS CONDUCTOR- MAIN-- TWIN ACSR MOOSE
 - ▶ 33kV BUS CONDUCTOR- RESERVE-- SINNGLE ACSR MOOSE
- BUS CONFIGURATION: MAIN & TRANSFER BUS SYSTEM.

132kV EQUIPMENTS / MATERIALS

SI No.	Items	Qty
1	SF6 Circuit Breaker	2
2	Current Transformer	6
3	Surge Arrester	6
4	BPI	21
5	SI w/o ES	2
6	DI w/o ES	2
7	D Ten Insulator string	
8	S.Ten Insulator string	
9	Sus Insulator string	
10	BMK	1
11	Lighting Board	1
12	Receptical Board	1
13	Receptical Tfr oil filter	1
14	T1S	
15	T4S	
16	G1	
17	G2	
18	G1,2	
19	G1X	

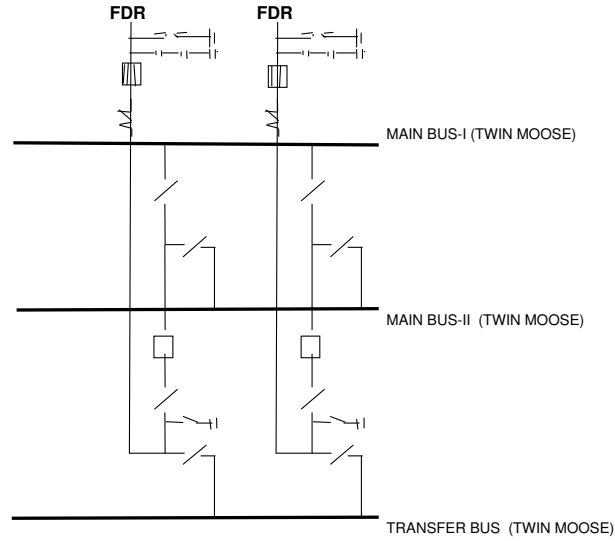
33kV EQUIPMENTS / MATERIALS

SI No.	Items	Qty
1	Vaccum C Breaker	8
2	Current Transforme	24
3	IVT	3
4	Surge Arrester	21
5	BPI	
6	SI w/o ES	9
7	DI w/o ES	2
8	DI with ES	5
9	SI with BM	2
10	NCT	4 For Tfr
11	D Ten Insulator string	
12	S.Ten Insulator string	
13	Sus Insulator string	
14	BMK	3
15	Lighting Board	1
16	Receptical Board	1
17	T9S	
18	T8S	
19	G4	
20	G4X	
21	G6	
22	250 KVA STN TFR	2 For Stn Tfr
23	HG FUSE SET	2 For Stn Tfr
24	AB Switch	2 set For Stn Tfr
25	Surge Arrester	6 For Stn Tfr

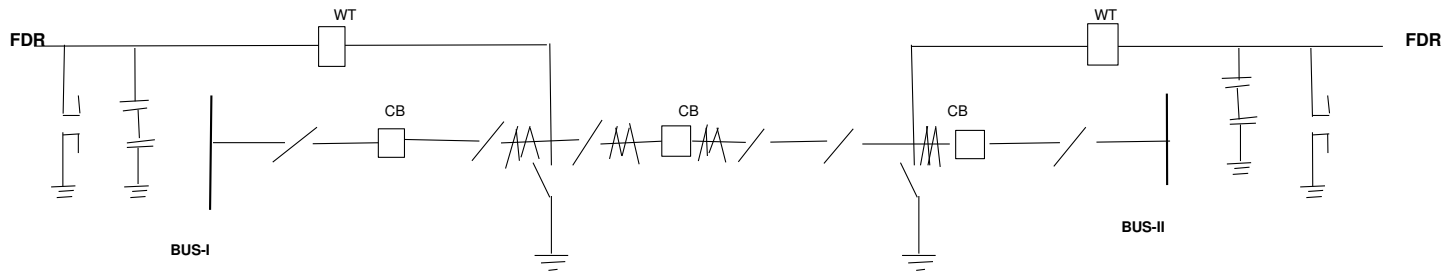


SLD FOR 220 KV BAY EXTENSION(3 BUS SYSTEM) AT 400/220 SUB-STATION AT JAYAPUR(PGCIL)

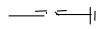
220 KV BAYS
FDR 2 NOS



SLD FOR 220 KV BAY EXTENSION(1&1/2 CB BUS SYSTEM) AT 220/132/33kV SUB-STATION AT JAYANAGAR(OPTCL)



SYMBOLS USED



SURGE ARRESTOR



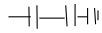
WAVE TRAP



CURRENT TRANSFORMER



IND VOLTAGE TRANSFORMER



CAP VOLTAGE TRANSFORMER



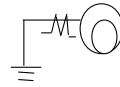
ISOLATOR



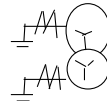
CKT BKR



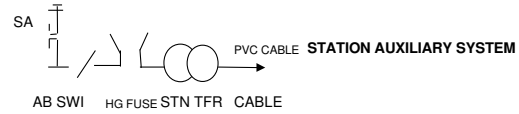
EARTH SWITCH



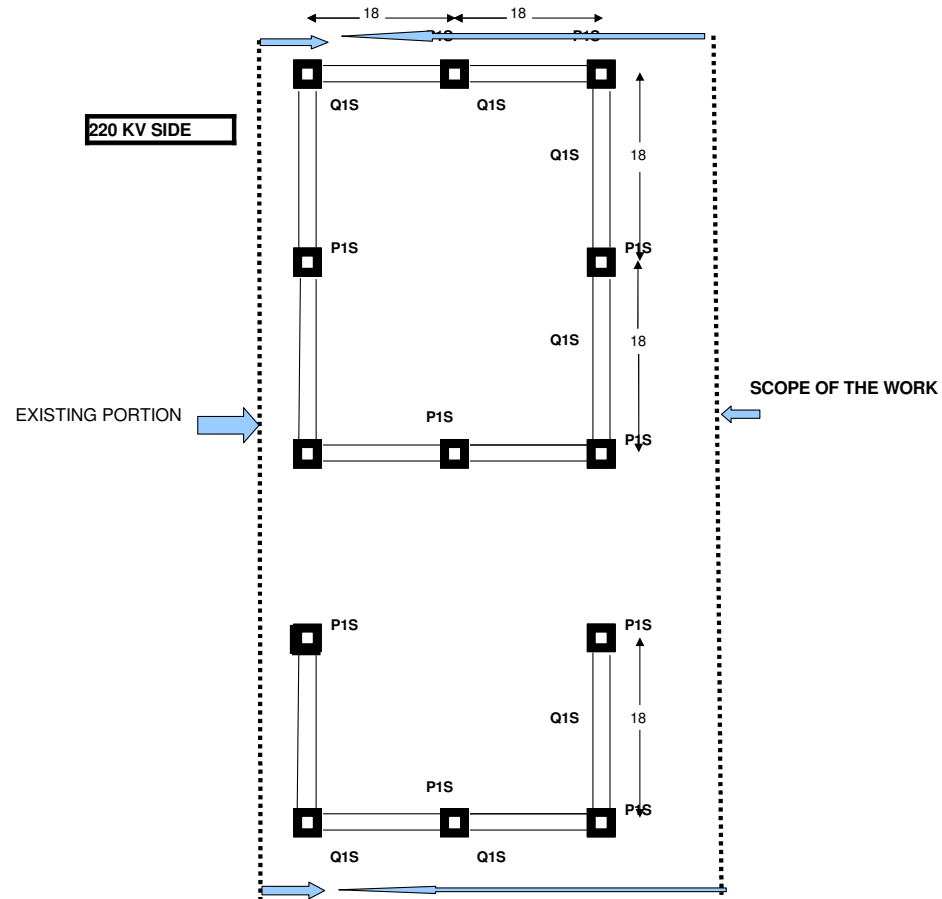
AUTO TRANSFORMER



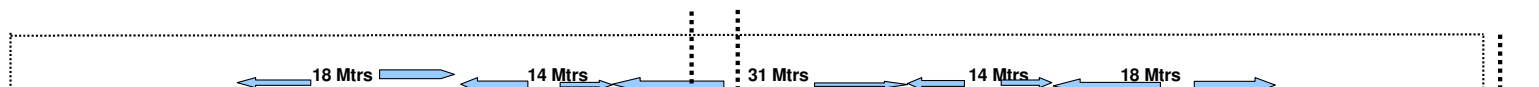
POWER TRANSFORMER

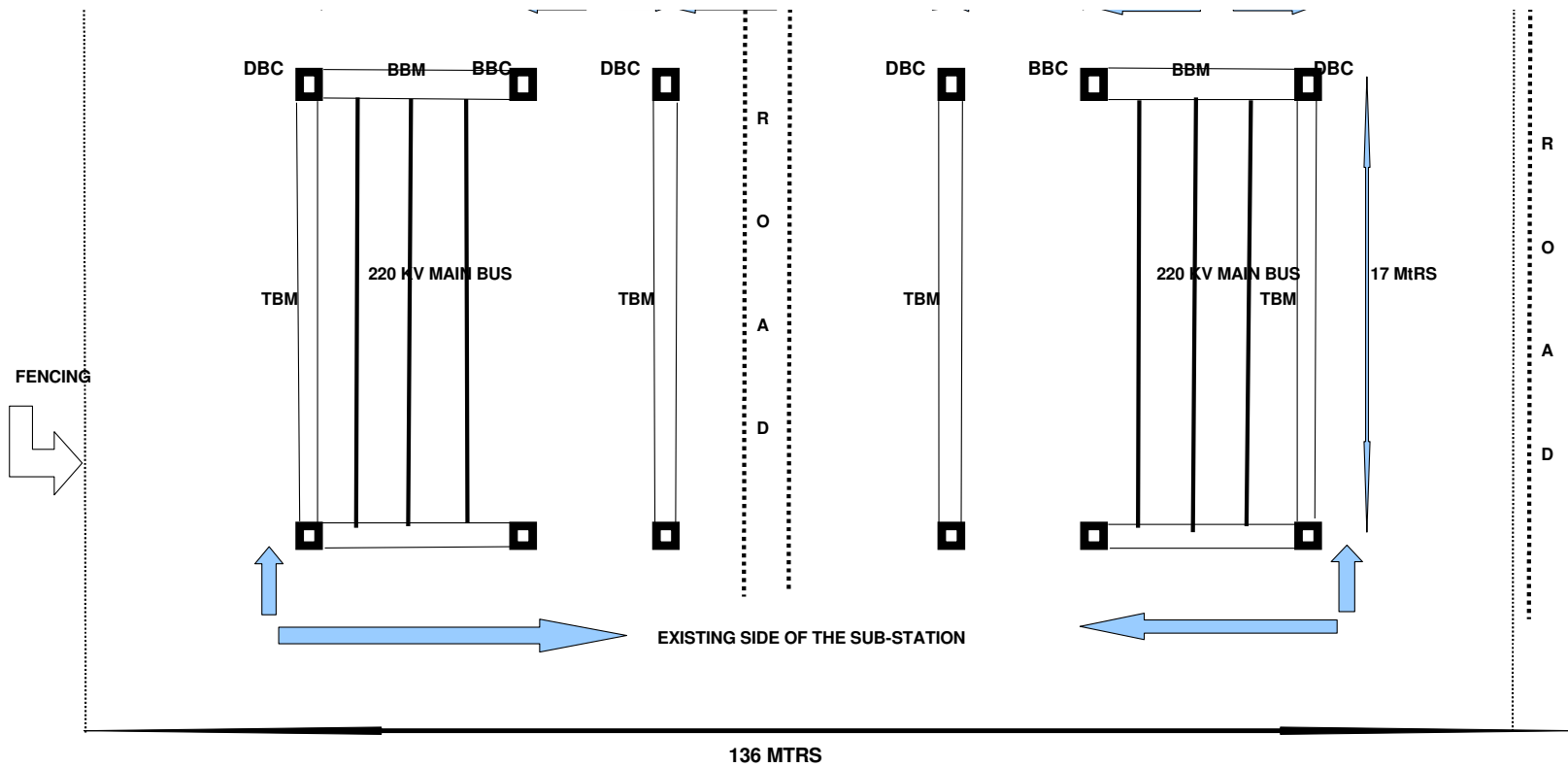


STRUCTURAL LAYOUT FOR 220 KV BAY EXTENSION AT JAYAPUR(PGCIL)



STRUCTURAL LAYOUT FOR 220 KV BAY EXTENSION AT JAYANAGAR(OPTCL)





SCOPE OF THE WORK

1. DBC = 04 Nos.
2. BBC = 02 Nos.
3. TBM = 04 Nos
4. BBM = 02 Nos.

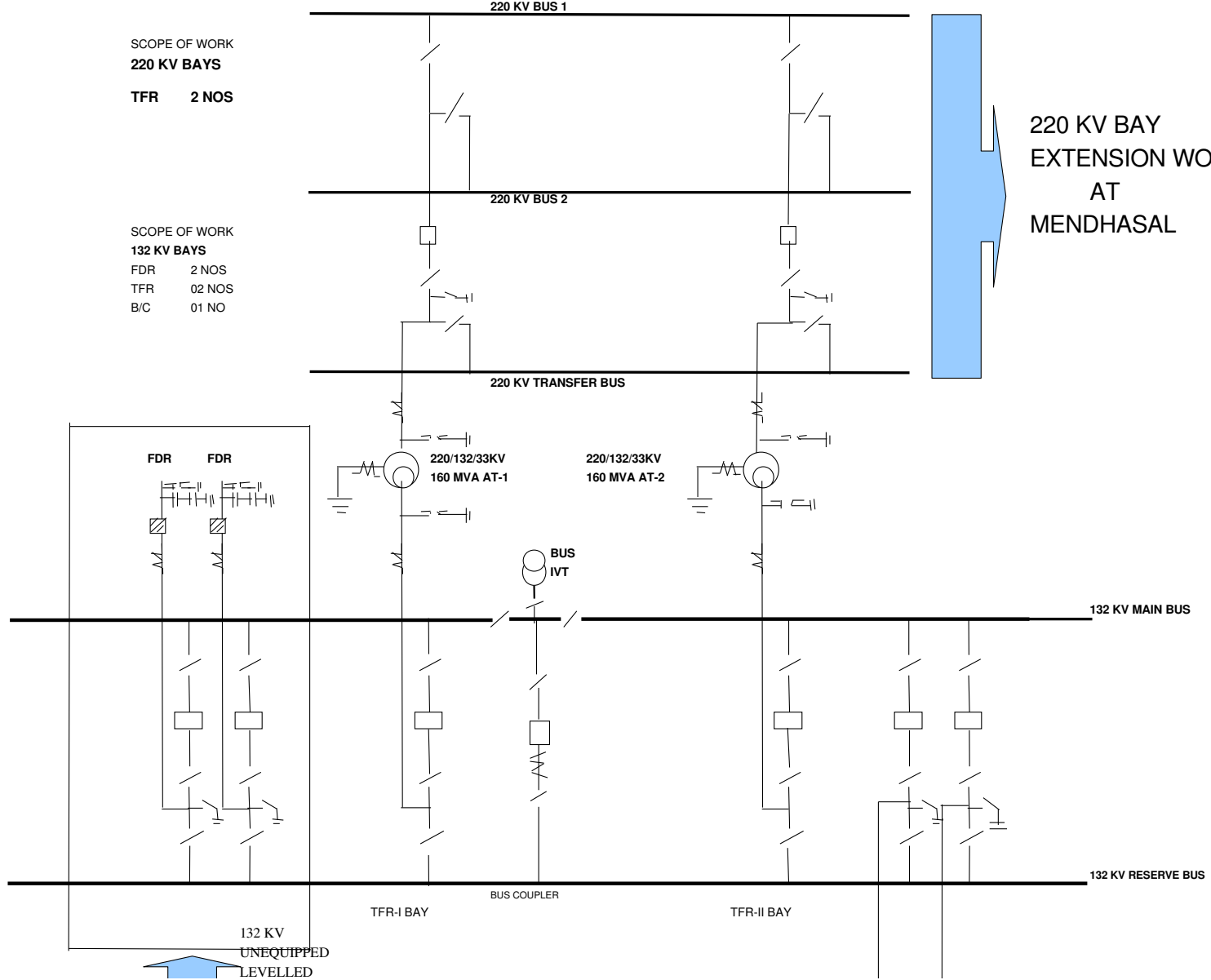


INDICATIVE SLD & STRUCTURAL LAYOUT (ANNEXURE-VII) OF THE SUBSTATION
SLD FOR 220/132 SUB-STATION ATMENDHASAL

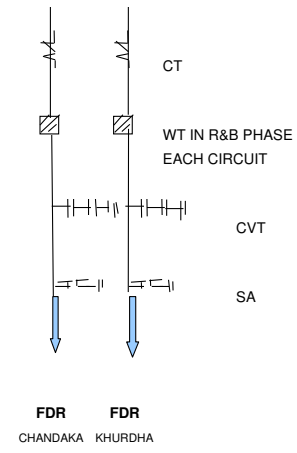
SCOPE OF WORK
220 KV BAYS
 TFR 2 NOS

SCOPE OF WORK
132 KV BAYS
 FDR 2 NOS
 TFR 02 NOS
 B/C 01 NO

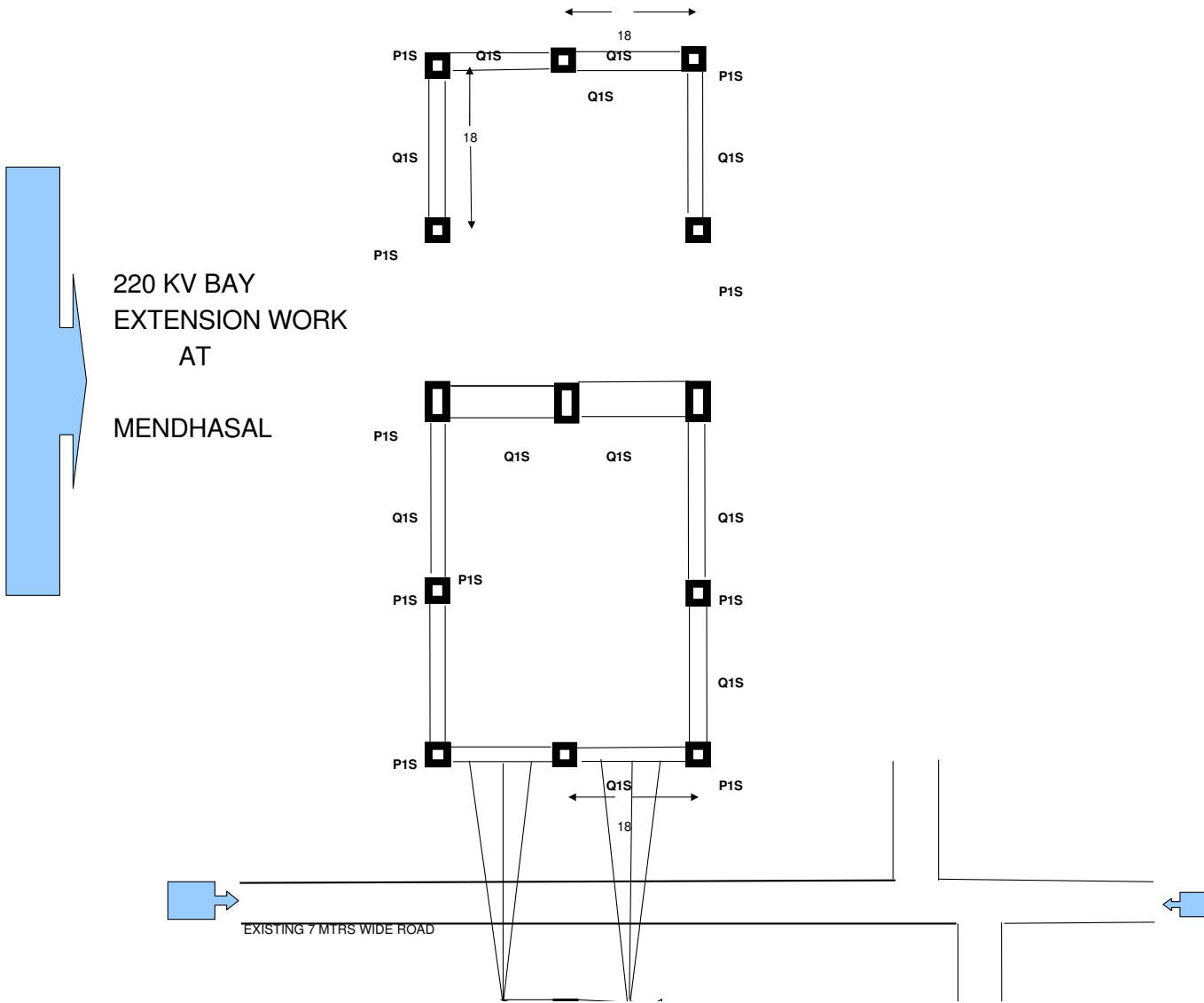
220 KV BAY
 EXTENSION WORK
 AT
 MENDHASAL

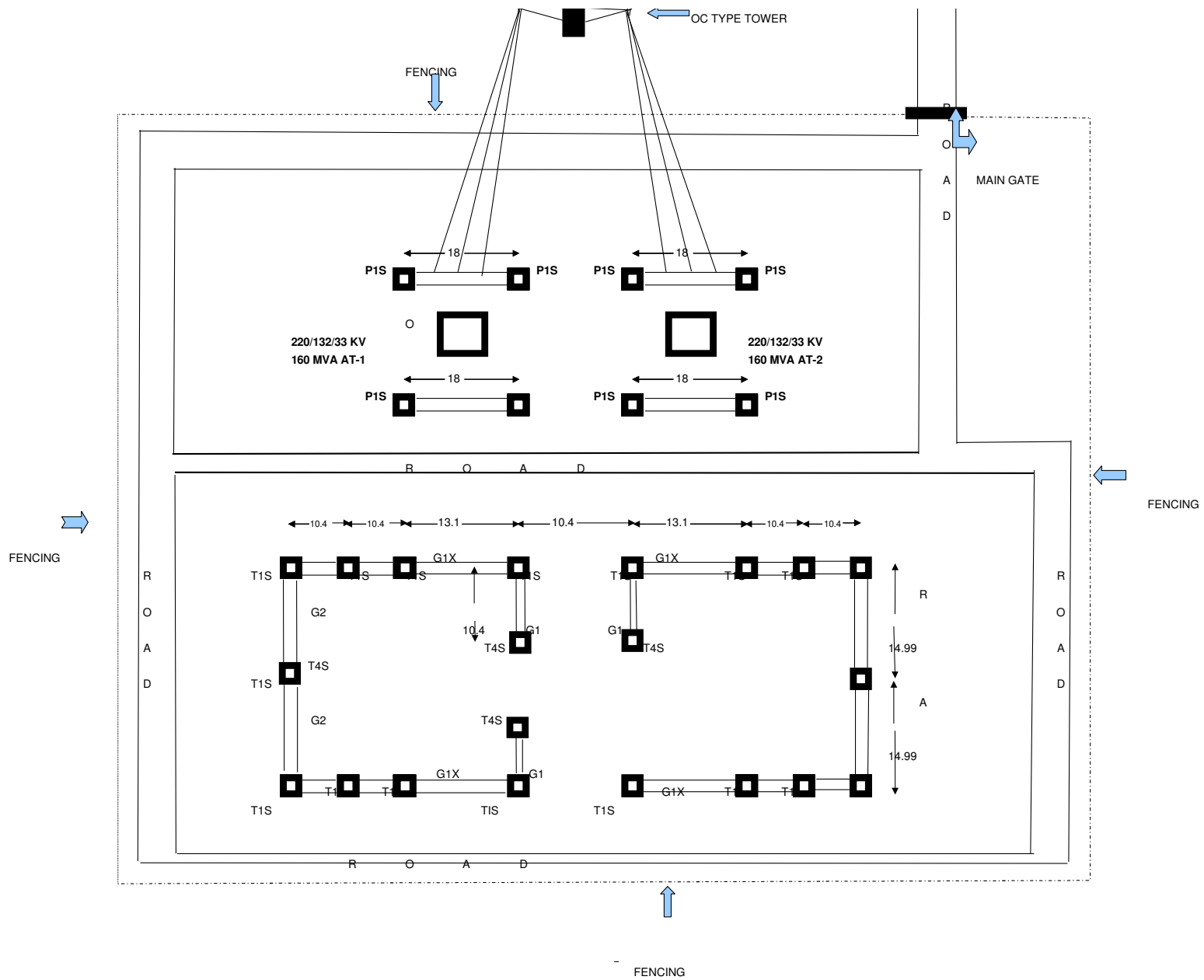


 SPARE BAY



STRUCTURAL LAYOUT FOR 220/132 SUB-STATION AT MENDHASAL







220/132/33kV SUB-STATION AT KARADAGADIA

SYMBOLS USED



SURGE ARRESTOR



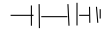
WAVE TRAP



CURRENT TRANSFORMER



IND VOLTAGE TRANSFORMER



CAP VOLTAGE TRANSFORMER



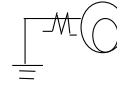
ISOLATOR



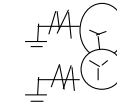
EARTH SWITCH



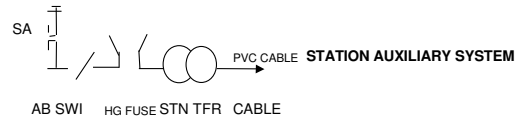
CKT BKR



AUTO TRANSFORMER



POWER TRANSFORMER



220/132 kV SUB-STATION ATMENDHASAL

SCOPE OF WORK

- ▶ 220kV Transformer Bay- 2 Nos.
- ▶ 220/132/33 KV ,160 MVA TFR:02 Nos
- ▶ 132kV Feeder bay -4 Nos
(.2 Nos equipped & 2 Nos not equipped)
- ▶ 132kV Transformer Bay- 2 Nos.
- ▶ 132kV Bus Couplrar Bay-1 No.

- ▶ 220kV BUS CONDUCTOR- BUS1,BUS 2-- TWIN ACSR MOOSE
- ▶ 220kV BUS CONDUCTOR- TRANSFER-- SINNGLE ACSR MOOSE
- ▶ BUS CONFIGURATION: TWO MAIN & ONE TRANSFER BUS SYSTEM.
- ▶ 132kV BUS CONDUCTOR- MAIN-- TWIN ACSR MOOSE
- ▶ 132kV BUS CONDUCTOR- RESERVE-- SINNGLE ACSR MOOSE
- ▶ BUS CONFIGURATION: MAIN & TRANSFER BUS SYSTEM.



REQUIREMENT OF EQUIPMENT/MATERIALS

220 KV EQUIPMENTS / MATERIALS

Sl No.	Items	Qty
1	SF6 Circuit Breake	2 NOS
2	Current Transform	6
3	CVT	01 NO
4	IVT	01 NO
5	Surge Arrester	6
6	Wave Trap	01 NO
7	BPI	
8	SI w/o ES	2 NOS
9	SI with ES	2 NOS
10	Tandem Isolator	4
11	D Ten Insulator string	
12	S.Ten Insulator string	
13	Sus Insulator string	
14	BMK	2 NOS
15	Lighting Board	1
16	Receptical Board	1
17	Receptical Tfr oil fi	1
18	P1S	
19	Q1S	

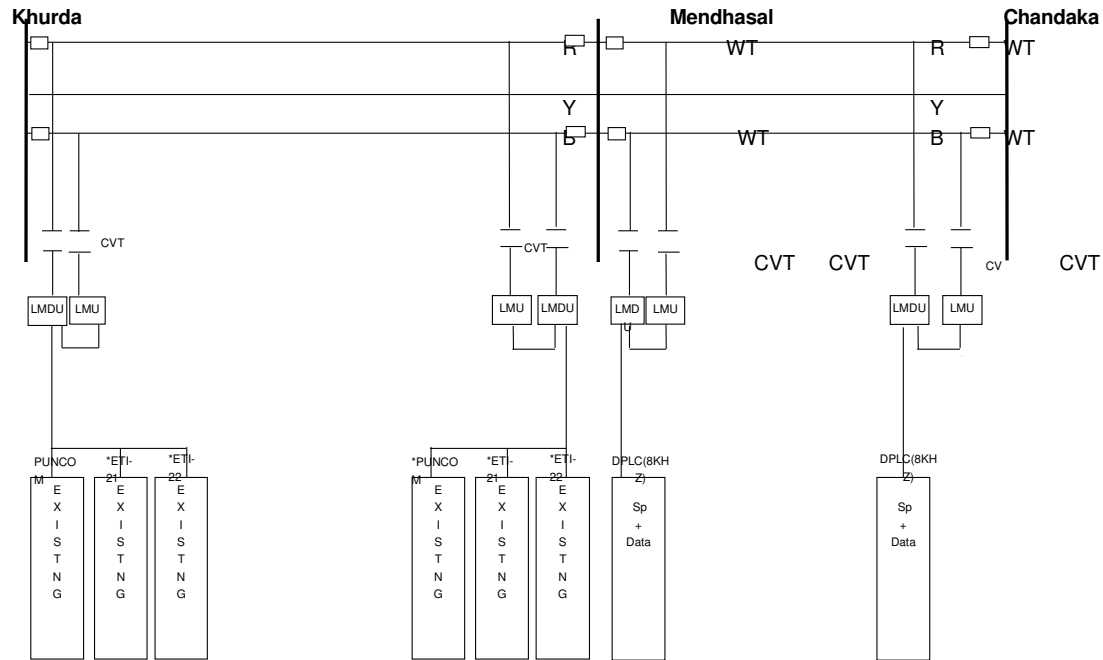
132kV EQUIPMENTS / MATERIALS

Sl No.	Items	Qty
1	SF6 Circuit Breake	5
2	Current Transform	15
3	CVT	6
4	IVT	3
5	Surge Arrester	12
6	Wave Trap	4
7	BPI	
8	SI w/o ES	8
9	DI w/o ES	2
10	DI with ES	2
11	D Ten Insulator string	
12	S.Ten Insulator string	
13	Sus Insulator string	
14	BMK	3
15	Lighting Board	1
16	Receptical Board	2
17	Receptical Tfr oil fi	0
18	T1S	
19	T4S	
20	G1	
21	G2	
22	G1,2	
23	G1X	



**SINGLE LINE DIAGRAM SHOWING INSTALLATIONS, REMOVING AND ERECTION OF PLCC EQUIPMENT
ANNEXURE-VI**

SCHEMATIC LAYOUT FOR SPEECH & DATA FOR 132KV KHURDA-CHANDAKA LILO AT MENDHASAL



* Marked ETI/PUNCOM carrier sets working at Chandaka for Khurda direction are to be shifted to Mendhasal and used in between Khurda-Mendhasal for speech and data.