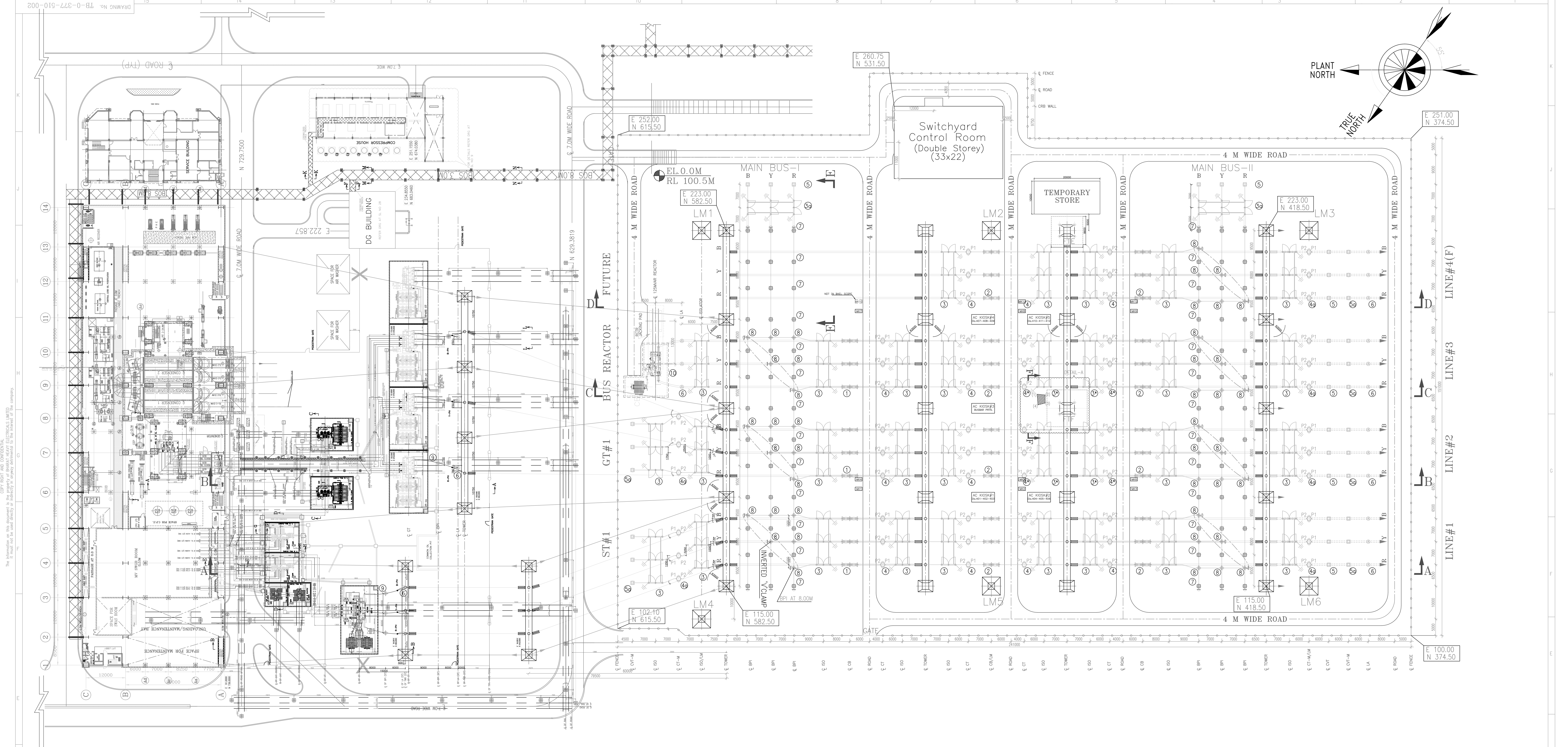




SCHEDULE OF EQUIPMENT

S.NO.	DESCRIPTION	SYMBOL	QTY.
1	400KV, 3150A, 50KA FOR 3 SEC, 3PH, SF6 CIRCUIT BREAKER WITHOUT PIR		03
2	400KV, 3150A, 50KA FOR 3 SEC, 3PH, SF6 CIRCUIT BREAKER WITH PIR		08
3	400KV, 3150A, 50KA FOR 3 SEC, 3PH HCB ISOLATOR WITH ONE EARTH SWITCH		27
3*	400KV, 3150A, 50KA FOR 3 SEC, 3PH HCB ISOLATOR WITH ONE EARTH SWITCH (HIGH LEVEL)		04
3a	400KV, 3150A, 50KA FOR 3 SEC, 3PH HCB ISOLATOR WITH TWO EARTH SWITCH		02
4	400KV 3000A, 5-CORE, 50KA FOR 3 SEC 1PH. CURRENT TRANSFORMER		30
4*	400KV 3000A, 5-CORE, 50KA FOR 3 SEC 1PH. CURRENT TRANSFORMER (HIGH LEVEL)		12
4a	400KV 3000A, 2-CORE, 50KA FOR 3 SEC 1PH. CURRENT TRANSFORMER (METERING)		18
5	400KV, 4400pf, 1PH. CAPACITIVE VOLTAGE TRANSFORMER (3 SECONDARY)		18
5a	400KV, 4400pf, 1PH. CAPACITIVE VOLTAGE TRANSFORMER (2 SECONDARY)		18
6	360KV, 20KA, 1-PH SURGE ARRESTER		21
7	400KV, 8kN BUS POST INSULATOR (HIGH LEVEL - 12.5 m)		78
8	400KV, 8kN BUS POST INSULATOR (LOW LEVEL - 8.00 m)		42
9	400KV, 8kN BUS POST INSULATOR (MED. LEVEL - 10.5 m)		06
10	400KV, 125MVAR BUS REACTOR		01

SYSTEM PARAMETERS

DESCRIPTION	400KV
HIGHEST SYSTEM VOLTAGE (kV)	420
LIGHTNING IMPULSE WITHSTAND VOLTAGE (kVp)	1425
SWITCHING IMPULSE WITHSTAND VOLTAGE (Pn-C)(kVp)	1050
P.f. WITHSTAND VOLTAGE (kV rms)	630
SYSTEM FAULT LEVEL (kA for 1sec)	50
CREEPAGE DISTANCE (25mm/kV) (mm)	10500

CLEARANCE TABLE

PHASE TO PHASE (PP)	4200
PHASE TO EARTH (PE)	3500
SECTION CLEARANCE (SC)	6500
VERTICAL GROUND CLEARANCE TO NEAREST PART NOT AT EARTH POTENTIAL OF AN INSULATOR SUPPORTING LIVE CONDUCTOR/EQUIPMENT	2440
GROUND CLEARANCE (PLINTH TO CENTER OF TUBE)	8000

CONDUCTOR DETAIL

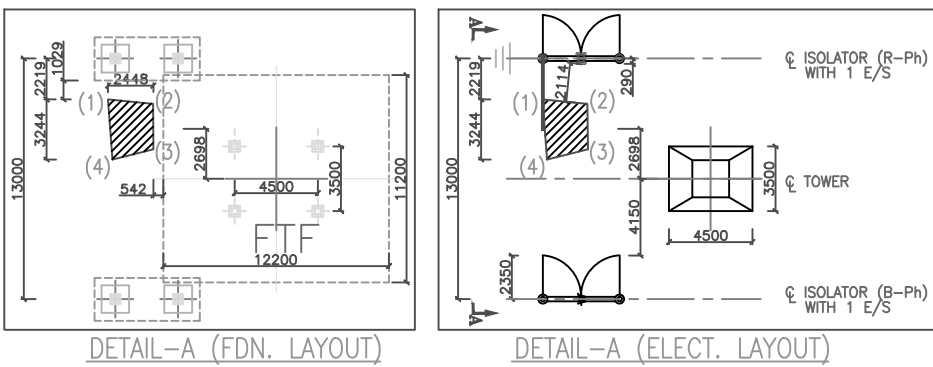
S.NO	DESCRIPTION	DETAIL
1.	MAIN BUS	4.5"IPS (EH) AL TUBE "E-91E GRADE, SCHEDULE 80", OD=120mm ID=96mm
2.	EQUIPMENT INTERCONNECTION	4.5"IPS AL TUBE/QUAD/TWIN MOOSE/BERSIMIS ACSR
3.	JUMPER /DROPPERS	QUAD/TWIN MOOSE/BERSIMIS ACSR
4.	SHIELD WIRE	(7/8 SWG) GALVANISED STEEL (12mm DIA)

LEGEND TABLE

	PRESENT BHEL SCOPE
	CUSTOMER SCOPE
	FENCE
	TENSION STRING INSULATOR (2X25 DISCS)
	SUSPENSION STRING INSULATOR (1X25 DISCS)
	COLUMN WITHOUT PEAK
	COLUMN WITH PEAK
	CORONA END BELL
	INDICATES CONNECTION TO MAIN BUS
	LIGHTNING MAST

NOTES:-

- ALL CONNECTIONS MARKED WITH ACSR CONDUCTOR ARE WITH "MOOSE"/"BERSIMIS". CONNECTIONS MARKED WITH AL TUBE ARE WITH 4.5" IPS.
- SWITCHYARD SHALL BE PROVIDED WITH 20MM & 40MM GRAVEL (75MM EACH LAYER).
- LA PRESSURE RELIEF VALVE SHALL NOT BE TOWARDS TRANSFORMER SIDE/ ANY EQUIPMENT KEPT NEAR LIGHTNING ARRESTERS.
- CS, BPI, ISOLATOR, LA, CVT & CT STRUCTURE SHALL BE LATTICE TYPE.
- TERMINATION OF LINE CONDUCTORS ON THE SWITCHYARD GANTRY INCLUDING INSULATOR STRINGS FOR SAME IS NOT IN SCOPE OF CONTRACT AND THEREFORE SHOWN IN DOTTED CONDUCTOR TO PROVIDE CONDUCTOR DETAILS.
- LM QUANTITY AND LOCATION IS TENTATIVE. IT SHALL BE FINALIZED AFTER DSLP CALCULATION.
- THE TOP OF THE BOLT OF LA/POST INSULATOR (COMING NEAR GENERATOR/STATION TRANSFORMER YARD) FOUNDATION SHALL BE LOWER BY 15MM THAN THE TOP OF RAIL. THIS IS TO FACILITATE THE REMOVAL OF LA STRUCTURE DURING TRANSFORMER TO BE TAKEN OUT FOR REPAIR/REPLACEMENT.
- LOCATION OF AC KIODES & MKs ARE TENTATIVE AND SHALL BE AS PER CABLE TRENCH LAYOUT.
- INPUTS OF EXISTING "MUTIALAMA" TEMPLE RECEIVED FROM TSSGCO VIDE LETTER REF NO. CE/O&M/KTPS(1x800MM)/F-16/D.No 757/16, DT. 06.01.16.
- CO-ORDINATES:-
(1) N=488.090, E=173.286 (2) N=485.660, E=173.054
(3) N=485.642, E=170.590 (4) N=487.853, E=170.042
b. HEIGHT = 4000mm FROM FGL.



COMPUTER DRG. PATH NAME

REF. DRG. No.

SIGN. & DATE

INVENTORY No.

16

15

14

13

12

11

10

9

8

7

6

5

4

3

2

1

COMPUTER DRG. PATH NAME

REF. DRG. No.

SIGN. & DATE

INVENTORY No.

16

15

14

13

12

11

10

9

8

7

6

5

4

3

2

1

29	COOLING TOWER	HYDRANTS- 02	SH-01,21
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