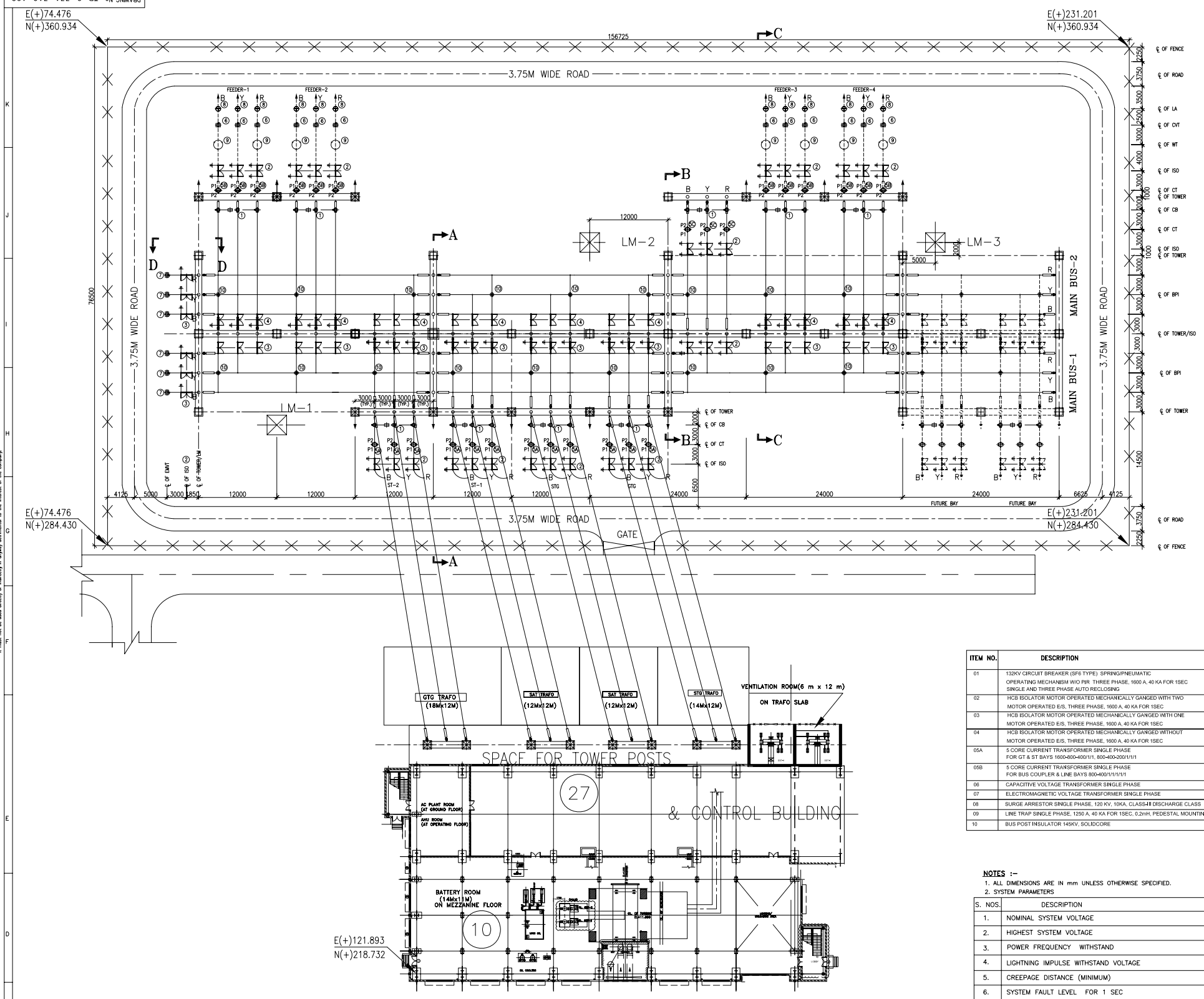
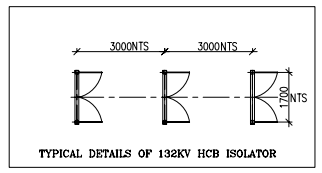
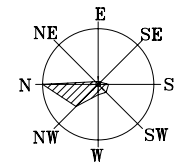
FIRST ANGLE PROJECTION (ALL DIMENSIONS ARE IN MM.)

DRAWING No. TB-0-331-316-102



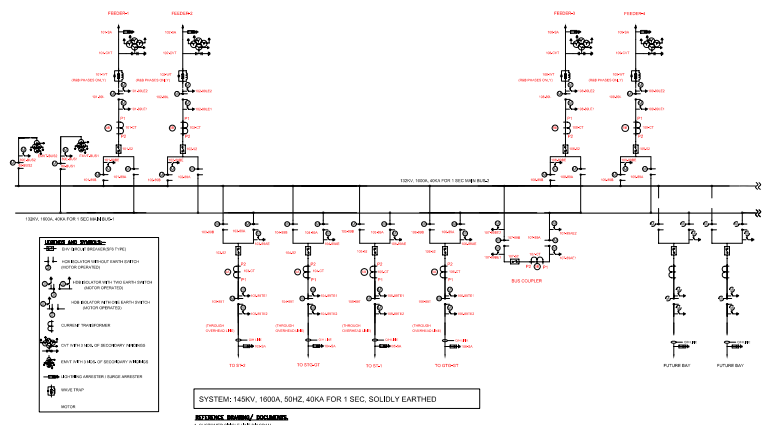




CLEARANCE TABLE

THE FOLLOWING MINIMUM ELECTRICAL CLERANCES ARE ADOPTED AS PER SPECIFICATION

	132kV
a. PHASE TO PHASE CLEARANCE (PP)	1600mm
b. PHASE TO EARTH CLEARANCE (PE)	1400mm
c. SECTION CLEARANCE (SC)	4000mm
d. GROUND CLEARANCE	4600mm
d. LOWEST PART OF SUPPORT INSULATOR OF EQUIPMENT FROM PLINTH LEVEL (INSULATOR SAFETY CLEARANCE)	2550mm



ITEM NO.	DESCRIPTION	CODE	HIGHEST SYSTEM VOLTAGE	MAIN QTY. (IN NOS.)	SPARE QTY. (IN NOS.)
01	132KV CIRCUIT BREAKER (SF6 TYPE) SPRING/PNEUMATIC OPERATING MECHANISM W/O PIR THREE PHASE, 1600 A, 40 KA FOR 1SEC SINGLE AND THREE PHASE AUTO RECLOSING	52	145	9	0
02	HCB ISOLATOR MOTOR OPERATED MECHANICALLY GANGED WITH TWO MOTOR OPERATED E/S, THREE PHASE, 1600 A, 40 KA FOR 1SEC	89	145	10	0
03	HCB ISOLATOR MOTOR OPERATED MECHANICALLY GANGED WITH ONE MOTOR OPERATED E/S, THREE PHASE, 1600 A, 40 KA FOR 1SEC	89	145	10	0
04	HCB ISOLATOR MOTOR OPERATED MECHANICALLY GANGED WITHOUT MOTOR OPERATED E/S, THREE PHASE, 1600 A, 40 KA FOR 1SEC	89	145	8	0
05A	5 CORE CURRENT TRANSFORMER SINGLE PHASE FOR GT & ST BAYS 1600-800-400/1/1, 800-400-200/1/1/1	CT	145	12	2
05B	5 CORE CURRENT TRANSFORMER SINGLE PHASE FOR BUS COUPLER & LINE BAYS 800-400/1/1/1/1/1	CT	145	15	4
06	CAPACITIVE VOLTAGE TRANSFORMER SINGLE PHASE	CVT	145	12	3
07	ELECTROMAGNETIC VOLTAGE TRANSFORMER SINGLE PHASE	EMVT	145	6	1
08	SURGE ARRESTOR SINGLE PHASE, 120 KV, 10KA, CLASS-II DISCHARGE CLASS	SA	145	24	0
09	LINE TRAP SINGLE PHASE, 1250 A, 40 KA FOR 1SEC, 0.2mH, PEDESTAL MOUNTING	WT	145	8	0
10	BUS POST INSULATOR 145KV, SOLIDCORE	BPI	145	18	0

LEGEND TABLE

———	PRESENT SCOPE
- - - - - - - -	FUTURE
——→	SHIELD WIRE
——×——×——	FENCE
⟸	TENSION STRING INSULATOR
⟸	TENSION STRING INSULATOR WITH TURN BUCKLE
⊙	CONNECTION TO TWIN ACSR MOOSE CONDUCTOR

NOTES :-

1. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED.
2. SYSTEM PARAMETERS

S. NOS.	DESCRIPTION	UNIT	132
1.	NOMINAL SYSTEM VOLTAGE	kV	132
2.	HIGHEST SYSTEM VOLTAGE	kV	145
3.	POWER FREQUENCY WITHSTAND	kVrms	275
4.	LIGHTNING IMPULSE WITHSTAND VOLTAGE	kVP	650
5.	CREEPAGE DISTANCE (MINIMUM)	mm/kV	25
6.	SYSTEM FAULT LEVEL FOR 1 SEC	kA	40

3. CONDUCTOR DETAIL

S. NOS.	DESCRIPTION	132KV
1.	MAIN BUS	TWIN ACSR MOOSE CONDUCTOR
3.	EQUIPMENT INTERCONNECTION	SINGLE ACSR MOOSE CONDUCTOR
4.	JUMPER /DROPPERS	SINGLE ACSR MOOSE CONDUCTOR
5.	SHIELD WIRE 7/3.66 GALVANISED STEEL (10.98mm DIA)	

4. ALL STRUCTURE/CONDUCTOR HEIGHTS ARE ABOVE PLINTH LEVEL. PLINTH LEVEL – 300 MM ABOVE G.L. (GROUND LEVEL)
5. FUTURE 132 kV SWITCHYARD IS MARKED IN DOTTED.
6. LOCATION OF WTS ARE INDICATIVE ONLY AND THE EXACT LOCATION WILL BE BASED ON PLCC REQUIREMENT THEREFORE THE FDN. SHALL BE PROVIDED IN ALL THREE PHASE.
7. REFER SHEET-2 FOR ELEVATION DRAWINGS.
8. IN SECTIONAL ELEVATION DRAWING(SHEET 2 OF 2), 'W' & 'E' DENOTES MAIN & EARTHSWITCH OPERATING MECHANISM BOXES, RESPECTIVELY.
9. LA PRESSURE RELIEF VALVE SHALL NOT BE TOWARDS TRANSFORMER SIDE/ANY EQUIPMENT KEPT NEAR LIGHTNING ARRESTER.

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COMPUTER DNG PATH NAME :

INVENTORY No.	SIGN. & DATE	REF. DRG. No.

REV.	DATE	ALTERED / CHECKED / APPROVED	ZONE
01	07.02.11	ALTERED JUGENDRA / CHECKED SK/DKM / APPROVED DS	
		REVISED AS PER M.O.M DATED 03.02.11 &04.02.11	

ADDITIONAL INFORMATION
W.O.No. 80002

STATUS OF DRAWING

DISTRIBUTION OF PRINTS

परियोजना का नाम NAME OF PROJECT: 132 kV SWITCHYARD FOR 100 MW MONARCHAK GAS BASED COMBINED CYCLE POWER PROJECT

ग्राहक का नाम NAME OF CUSTOMER: NORTH EASTERN ELECTRIC POWER CORPORATION LTD. TRIPURA GAS BASED POWER PROJECT

NAME OF CONSULTANT: M/S DESEIN PVT. LTD.

भारत हेवी इलेक्ट्रिकल्स लिमिटेड
ट्रांसमिशन परियोजना विभाग
BHARAT HEAVY ELECTRICALS LTD.
TRANSMISSION PROJECTS DIVISION

	NAME	SIGN	DATE
DRAWN	JUGENDRA	JUGENDRA	30.08.10
CHECKED	SK	sd/–	
APPROVED	DKM/DS	sd/–	

ड्रा.सं./DRAWING NO. TB-0-331-316-102

पृष्ठ सं./SHEET No. 1 अगला पृष्ठ/NEXT SHEET 2

DEPT. CODE

CARD CODE

1:200

शीर्षक/TITLE: LAYOUT PLAN OF 132KV SWITCHYARD

पुनरी./REV. 01