


INVENTORY NO. SIGN & DATE

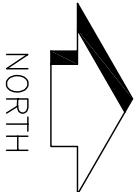
NOTES:-

01. DIMENSIONS INDICATED IN THE DRAWING ARE IN MM.
02. POSITIONS OF LINE THICKS INDICATED IS TOLERANCE.
03. PARAMETERS FOR THE THICKS SHOULD BE DESIGNED ARE :
 - (a) SYSTEM VOLTAGE 245KV
 - (b) LIFTING WEIGHT 10500KN
 - (c) POWER FREQUENCY 50 HZ
 - (d) WITHSTAND VOLTAGE 460W R/S
 - (e) CREWING : 400W FOR 1 SEC.
04. (a) DESIGN MAX SPEED 50M/SEC.
- (b) MAX. TEMP. RISE FOR ALL CURRENT CARRYING CONO. 30 DEG. C ABOVE 50 DEG. C AMBIENT ABOVE AMBIENT TEMP.

05. (a) NAME BUS-I
NAME BUS-II
(b) EQUIPMENT INTER CONNECTION
(c) EQUIPMENT NAME BUS/DRIVERS
(d) SHIELD WIRE 7/8 SWG DIA 12MM

PE-CO-281-100-0001.


GUJARAT STATE ELECTRICITY CORPORATION LTD.
પરિવહનના સ્તંભ સંગ્રહ
NAME OF PROJECT 2x250MW SIKKA THERMAL POWER PROJECT EXTENSION
UNITS 3 & 4, DIST JAMNAGAR
TCE CONSULTING ENGINEERS LTD.
DRAWING TCE REF. NO. : TCE 5064A-EP-C-BH-UNINT-0001

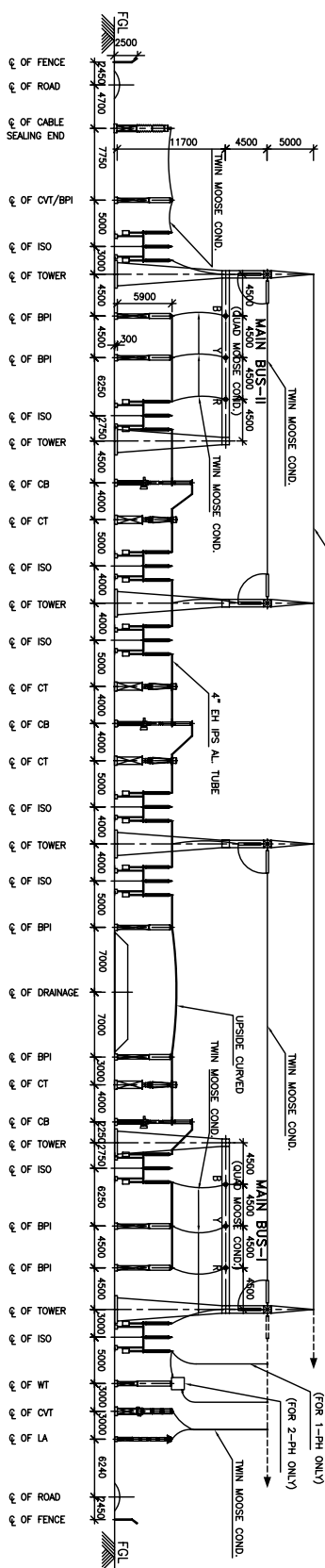
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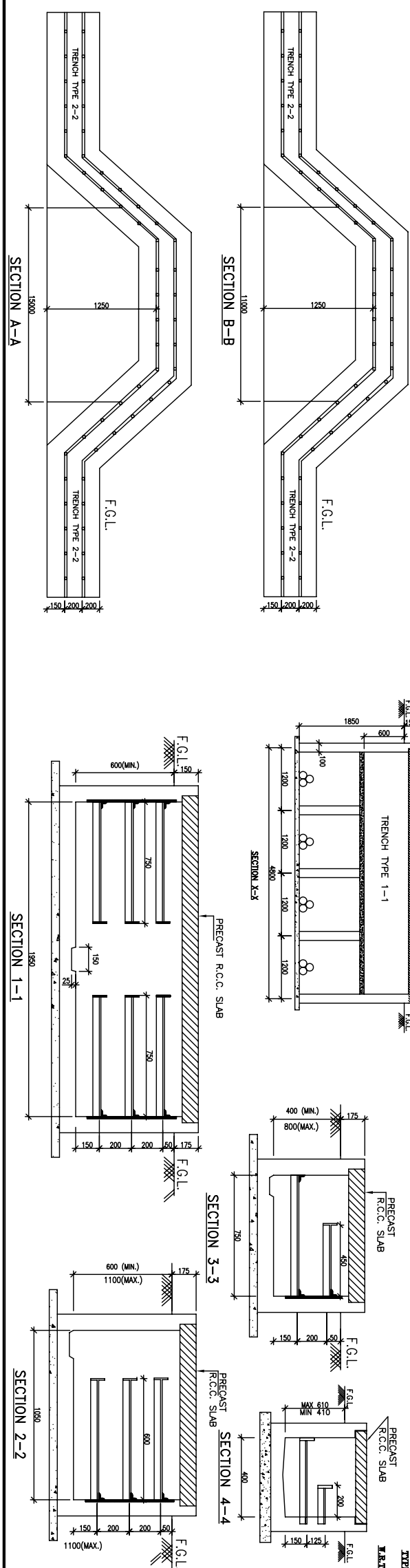
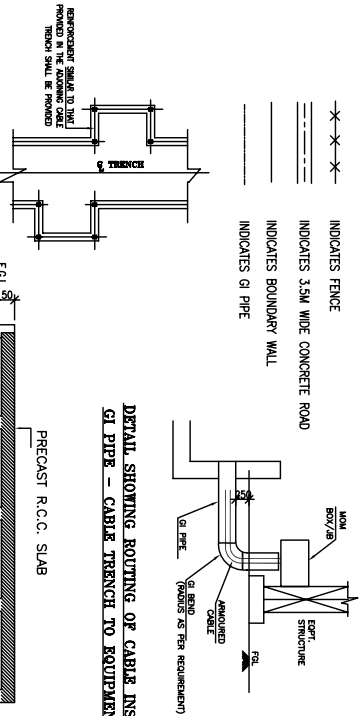
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COMPUTER DRG. PATH NAME :

INVENTORY NO. SIGN & DATE



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FOR 220 KV EQUIPMENTS			
S.NO	FROM	TO	CONTROL CABLE 50MM OD/100MM DI
1.	TRENCH	JB (CT/CT)	1
2.	JB (CT/CT)	CT/ CT	1
3.	TRENCH	ISO/ES MOUNT	1
4.	TRENCH	MB (CIRCUIT BREAKER)	1
5.	MB (CIRCUIT BREAKER)	CIRCUIT BREAKER	1

3. MARKED THIS (a) INDICATES CABLE ENTRY/EXIT FROM TRENCH TO GI PIPE.
4. INSERTS SHALL BE EMBEDDED AT EVERY 0.75m INTERVAL FOR CABLE SUPPORTS IN OUTDOOR CABLE TRENCH.
5. ALL OTHER DETAILS PERTAINING TO CIVIL WORKS SHALL BE REFLECTED IN THE RESPECTIVE CIVIL DRAWINGS.
6. AUXILIARY POWER CABLES SHALL BE LAID IN TOP TRENCH AND CONTROL CABLES IN BOTTOM TRENCH.
7. GI PIPES SHALL BE SECURELY FIXED AT BOTH ENDS, EITHER EMBEDDED IN CONCRETE OR PROPERLY CLAMPED.
8. AFTER LAYING THE CABLES THE ENDS OF PIPES SHALL BE FULLY SEALED TO PREVENT INGRESS OF WATER INSIDE THE PIPE.
9. CONTROL CABLES & POWER CABLES MUST BE LAID IN SEPARATE GI PIPES.
10. EARNING CONDUCTOR SHALL BE WELDED ON THE CABLE SUPPORTING STRUCTURE BEFORE INSTALLATION OF CABLE.
11. HORIZONTAL BENDS IN CONDUITS TO BE AVOIDED. CONDUITS TO BE RUN STRAIGHT FROM EQUIPMENT TO TRENCH/ANKLE. CONDUITS SHALL BE BENT AT SITE BY FILLING SAND AND MODERATELY HEATING THE SAME. NO BENDS SHALL BE USED.
12. HORIZONTAL BENDS IN CONDUITS TO BE AVOIDED. CONDUITS TO BE RUN STRAIGHT FROM EQUIPMENT TO TRENCH/ANKLE. CONDUITS SHALL BE BENT AT SITE BY FILLING SAND AND MODERATELY HEATING THE SAME. NO BENDS SHALL BE USED.
13. CABLE TRENCH SHALL BE PROVIDED ON MARSHALLING BOX SIDE OF EQUIPMENT.
14. THE PURPOSE OF TRENCH LAID FOR CABLES ARE FOR USE AS FOLLOWS:
 - TO BE USED AS CIVIL INPUT FOR CABLE TRENCHES;
 - FOR ERECTION OF CABLE RACKS AT SITE;
 - FOR CABLE LAYING AND ROUTING AT SITE.
15. CABLE DEMALS OF TRENCH WITH LOCATION OF EQUIPMENT FOUNDATIONS WILL BE SHOWN IN A SEPARATE CIVIL DRAWING.
16. THE CABLE RACKS SHALL BE EARTHED BY A 50x10MM FLAT RUNNING ON THE CABLE TRENCH WHICH SHALL BE CONNECTED TO EARTH AT EVERY 30 mts. INTERVAL AND AT THE ENDS. THIS FLAT SHALL BE CONNECTED TO EACH OF THE RACKS
17. CABLE SHALL BE LAID AS PER IS : 1255.
18. CABLE TRENCH LAID FOR CONTROL ROOM SHALL BE SUBMITTED SEPARATELY.
19. SIZE OF PIPES/CONDUITS SHALL BE SELECTED ON 40% FLAT CRITERIA.
20. ALL 220KV HT CABLES SHALL BE IN SEPARATE TRENCHES.
21. ALL 220KV HT CABLES SHALL BE IN SEPARATE TRENCHES.

LEGEND:

INDICATES FENCE
INDICATES 3.5M WIDE CONCRETE ROAD
INDICATES BOUNDARY WALL
INDICATES GI PIPE

**DETAIL SHOWING ROUTING OF CABLE INSIDE
GI PIPE - CABLE TRENCH TO EQUIPMENT**

TYPICAL DETAIL OF
MR PDN
W.R.T. CABLE TRENCH


SECTION FOR 220KV HT CABLE

REV.	STATUS	TYPE	REASONS FOR REVISION	PREPARED BY	CHECKED BY	SIG./YES	SN	APPROVED BY	DATE
0			FIRST ISSUE	MANU.					20.10.09

GS ECL

GUJARAT STATE ELECTRICITY CORPORATION LTD.

2x250MW SIKKA THERMAL POWER PROJECT EXTENSION
UNITS 3 & 4, DIST JAMNAGAR

 **TCE CONSULTING ENGINEERS LTD.**
DRAWING TCE REF. No. : TCE 5064A-EPC-BH-(UNIT)-0001

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BHARAT HEAVY ELECTRICALS LTD.
TRANSMISSION PROJECTS DIVISION

CODE	422	DRWG. NO : TB-1-301-316-008
SCALE	1:380	
W/O. No.	87004	

DRAWING TITLE : **CABLE TRENCH LAYOUT FOR 220KV S/S AT SIKKA**