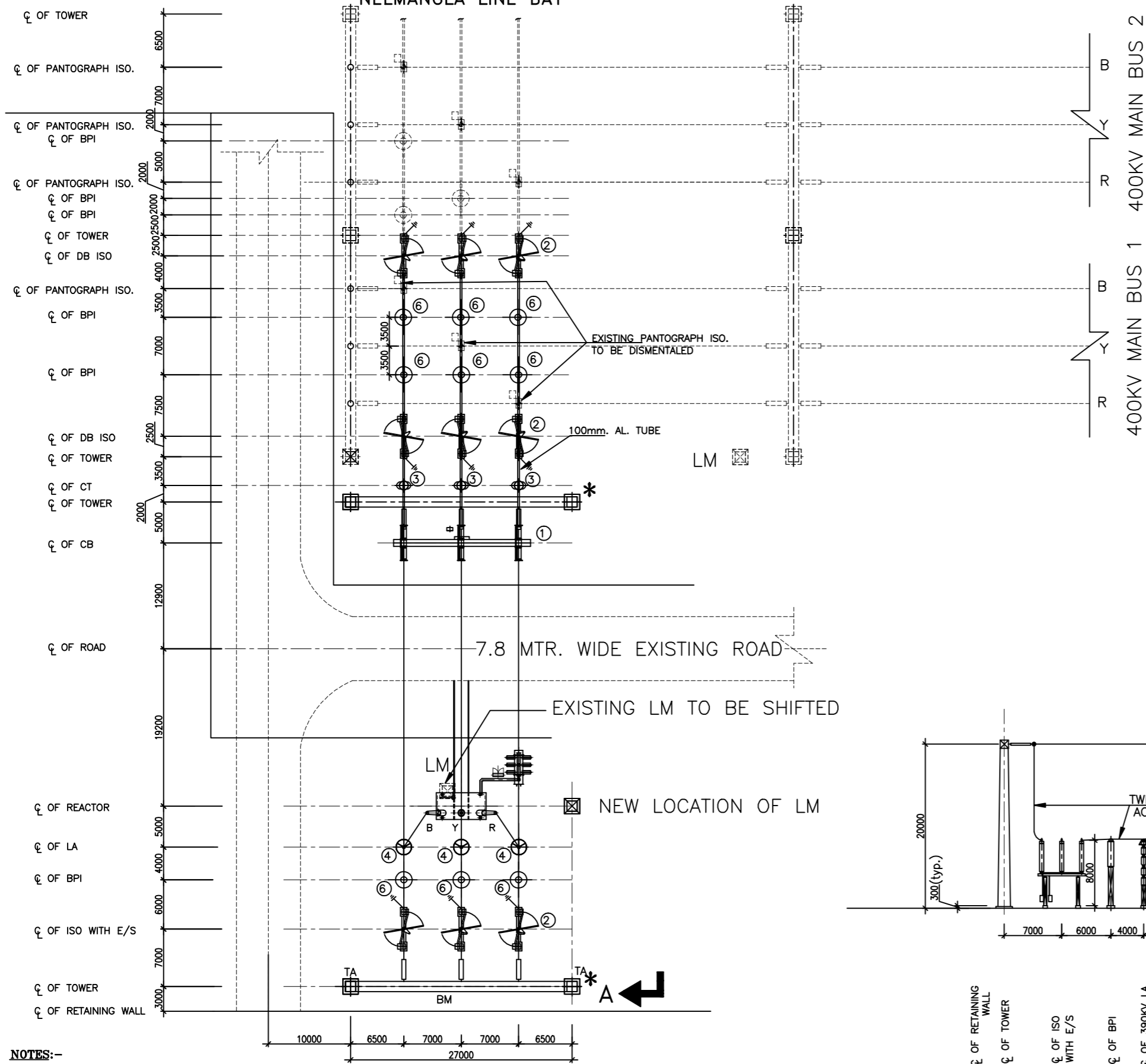




FIRST ANGLE PROJECTION ( ALL DIMENSIONS ARE IN MM. )

DRWING NO. TB-2-316-002A

TO EXISTING NELMANGLA LINE BAY



SCHEDULE OF EQUIPMENT

S.NO.	DESCRIPTION	SYMBOL	QTY.
1	400KV, 2000A, 40KA FOR 1 SEC., 3-PH. SF6 CIRCUIT BREAKER WITHOUT CLOSING RESISTOR		01
2	400KV, 3150A, 40KA FOR 1 SEC., 3-PH. DOUBLE BREAK ISOLATOR WITH ONE EARTH SWITCH		03
3	400KV, 3000A, 40KA FOR 1 SEC., 1-PH. CURRENT TRANSFORMER		03
4	390KV, 10ka Class-3 SURGE ARRESTER		03
5	63MVAR, 400KV REACTOR		01
6	400KV POST INSULATOR		09

PARTICULARS	400KV
1. BASIC INSULATION LEVEL (KV)	1425 KV
2. MINIMUM CLEARANCE (a) B/W PHASES (FOR RIGID BUS) (b) B/W PHASES (FOR STRUNG BUS) (c) B/W PHASES TO EARTH	4000 MM 4000 MM 3500 MM
3. (a) BAY WIDTH (b) HEIGHT OF MAIN BUS(FROM GROUND)	27000 MM 15500 MM
4. HEIGHT OF LIVE POINT OF VARIOUS EQUIPMENTS ISOLATOR, CT, BREAKER ETC.	8000 MM
5. POWER FREQUENCY WITH STAND VOLTAGE	630 KV
6. CREPAGE DISTANCE	10500 MM
7. SECTIONAL CLEARANCE	6500 MM

CONDUCTOR-ALUMINIUM TUBE-100MM	
1. NOMINAL SIZE	100 MM
2. OUTER DIAMETER	114.2 MM
3. INNER DIAMETER	97.18 MM
4. WALL THICKNESS	8.51 MM
5. CROSS SECTION	2825.61SQMM
6. MAX. DC RESIST AT 20° C	-
7. CURRENT RATING AT OUTDOOR	3150
8. WEIGHT PER UNIT LENGTH	7.7 KG/M
9. GRADE OF ALUMINIUM.	63401 WP (RANGE 2) AS PER IS 5082

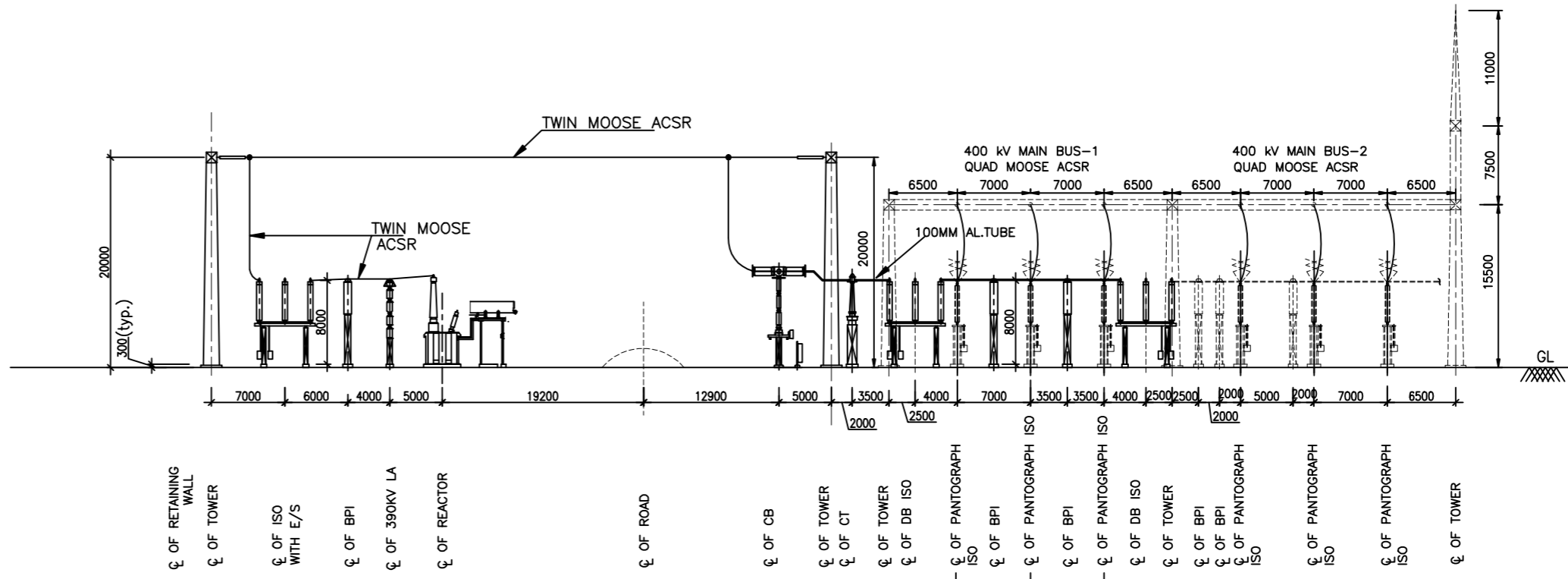
CONDUCTOR - MOOSE	
1. STANDING AND WIRE DIAMETER	54/3.53(AL) +7/3.53(STEEL)
2. SECTIONAL AREA OF ALUMINIUM	528.5 SQ.MM.
3. TOTAL SECTIONAL AREA	597.00 SQ.MM.
4. OVERALL DIA	31.77 MM.
5. WEIGHT (APPROX.)	2004 KG/M
6. DC RESISTANCE AT 20° C	0.05552 OHM/KM
7. MINIMUM U.T.S.	161.2 KN

EQUIPMENTS STRUCTURE QUANTITY	
1. 400KV CT STRUCTURE	03
2. LA STRUCTURE-390KV (1Ph)	03
3. ISOLATOR STRUCTURE (3Ph)	3
4. BPI STRUCTURE	09

BUS POST INSULATOR	TOP PCD	BOTTOM PCD	QTY.
400KV	127 MM	300 MM	09

TOWERS			
SL.NO.	TOWER DESIGNATION	STR. HEIGHT	QTY.
1	TA	20	04

BEAMS			
SL.NO.	BEAM DESIGNATION	SPAN	QTY.
1	BM	27MTR.	02



SECTION A-A

TO BE DISMANTLED AND NEW DOUBLE BREAK ISOLATOR ARE TO BE PROVIDED AT NEW LOCATION (AS SHOWN IN LAYOUT PLAN) FOR CONNECTION OF MAIN BUS-1 TO REACTOR AND NELAMANGALA LINE

REFERENCE DWG.  
DWG.NO.: KPTCL/TECH/SS-400/HDY-1  
DWG.TITLE: LAYOUT PLAN FOR MODIFICATION WORKS AT 400/220 KV S/S (HOODY)

- NOTES:-
- ALL DIMENSIONS ARE MM UNLESS OTHERWISE SPECIFIED.
  - ALL HEIGHT ARE ABOVE PLINTH LEVEL UNLESS OTHERWISE SPECIFIED.
  - PRESENT SCOPE
  - EXISTING
  - EXISTING PANTOGRAPH ISOLATOR BENEATH BUS-1 IS TO BE DISMANTLED, CONNECTION OF MAIN BUS -1 TO THE REACTOR & NELAMANGALA LINE SHALL BE PROVIDED THROUGH NEW DOUBLE BREAK ISOLATOR WHICH ARE TO BE PROVIDED AT NEW LOCATIONS.
  - EXISTING LM TO BE SHIFTED TO NEW LOCATION SHOWN.
  - ALL NON-CURRENT CARRYING METAL PARTS ARE TO BE EARTHED AND CONNECTED TO GROUND MAT.
  - CABLE DUCTS SHALL BE SHOWN SEPERATELY IN CABLE TRENCH DRAWING.
  - GROUND MAT IS TO BE PROVIDED FOR THE NEW REACTOR BAY IN CONSULTATION WITH SEE (R&D).
  - WHILE INSTALLING THE EQUIPMENTS ARE MAY BE ENSURED TO INSTALL THE BREAKER, CTs, ISOLATORS, SURGE ARRESTORS, STRUCTURES IN LINE WITH SIMILAR EQUIPMENTS OF ADJACENT BAYS WHEREVER FEASIBLE.
  - LA PRESSURE RELIEF VALVE SHALL NOT BE TOWARDS REACTOR SIDE/ ANY EQUIPMENT KEPT NEAR SURGE ARRESTER.
- \* THE DESIGN OF BEAM AND COLUMN FOR REACTOR BAY WILL BE DONE BY BHEL AND SHALL BE SUBMITTED FOR APPROVAL.

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it must not be used directly or indirectly in any way detrimental to the interest of the company.

COMPUTER DRG. PATH NAME :

REF. DRG. No.

SIGN. & DATE

INVENTORY No.

ADDITIONAL INFORMATION W.O.No. 80008	आह्वक/परियोजना का नाम KARNATAKA POWER TRANSMISSION CORPORATION LIMITED												
STATUS OF DRAWING	NAME OF CUSTOMER/PROJECT (INSTALLATION OF 1X63MVAR BUS REACTOR)												
DISTRIBUTION OF PRINTS	<table border="1"> <tr> <td>                   भारत हेवी इलेक्ट्रिकल्स लिमिटेड                  दूरस्थान परियोजना विभाग                  BHARAT HEAVY ELECTRICALS LTD.                  TRANSMISSION PROJECTS DIVISION             </td> <td>                 नाम /NAME                  JUGENDRA             </td> <td>                 हस्ता./SIGN.                  JUGENDRA             </td> <td>                 दि./DATE                  31.01.11             </td> </tr> <tr> <td>                 चेक/ DRAWN                  MM/DKM             </td> <td colspan="3"></td> </tr> <tr> <td>                 चेक/ CHECKED                  DS             </td> <td colspan="3"></td> </tr> </table>	 भारत हेवी इलेक्ट्रिकल्स लिमिटेड दूरस्थान परियोजना विभाग BHARAT HEAVY ELECTRICALS LTD. TRANSMISSION PROJECTS DIVISION	नाम /NAME JUGENDRA	हस्ता./SIGN. JUGENDRA	दि./DATE 31.01.11	चेक/ DRAWN MM/DKM				चेक/ CHECKED DS			
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चेक/ DRAWN MM/DKM													
चेक/ CHECKED DS													
विभागा DEPT. कोड CODE	अनुपात / SCALE 1:500	कार्ड कोड CARD CODE	ड्राईंग.क./DRAWING NO. TB-2-341-316-002A										
ड्राईंगक./TITLE LAYOUT PLAN & SECTION FOR MODIFICATION WORKS AT 400/220KV S/S HOODY			पुनः/REV. 02										
ड्राईंगक./SHEET No. 01			अगला पृष्ठ/NEXT SHEET --										

REV.	DATE	ALTERED	REV.	DATE	ALTERED	REV.	DATE	ALTERED	RK	REV.	DATE	ALTERED	RK
		CHECKED			CHECKED			CHECKED	MM/DKM	01	23.06.11	CHECKED	MM
		APPROVED			APPROVED			APPROVED	RS	02	29.09.11	APPROVED	DKM
ZONE			ZONE			ZONE				ZONE	NGR AND 120 KV LA REMOVED		