






R2	09.11.2024	REVISED AS PER T.O NOTE Dtd-07.11.2024		
REVISION	DATE			
 KARNATAKA POWER TRANSMISSION CORPORATION LIMITED				
LAY OUT DIAGRAM FOR THE PROPOSED 110/11KV SUB STATION AT BOMMANAHALLI IN HANAGAL TALUK, HAVERI DISTRICT.				
DRGNO. KPTCL/TECH/SS-110/874-A/R2		DATE 09.11.2024	SCALE- NTS	SHEET 1 OF 4
				
A.E	A.E.E	E.E	REC(TECH)	CEE (P&C)
DRN	CHD	SUB	REC	APPROVED

NOTES:-


- ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED.
- RIGID BUS IS PROPOSED FOR 110KV MAIN BUS.
- a) 110KV SWITCHYARD WITH BOUNDARY 'ABCDEFGHA' SHALL BE FIXED WITH RESPECT TO THE EXISTING ROAD LEVEL. THE CUTTING & FILLING QUANTITIES SHALL BE FINALISED BASED ON RL FIXED.
 - SWITCH YARD FENCING SHALL BE PROVIDED ALONG THE BOUNDARY LINE.
 - SECURITY COMPOUND WALL SHALL BE PROVIDED ALONG THE BOUNDARY LINE "ABCD CBP5 F G H A"
 - RETAINING WALL SHALL BE PROVIDED WHERE EVER NECESSARY ALONG THE BOUNDARY LINE.
 - 5M WIDE APPROACH ROAD SHALL BE PROVIDED IN THE STATION SITE INCLUDING THAT IN THE SWITCH YARD AS INDICATED IN THE SITE PLAN & DETAILED LAYOUT PLAN.
- FOR DETAILS OF BOUNDARY DIMENSIONS & CO ORDINATES, REFER DRG. TOPOGRAPHICAL SURVEY WITH BLOCK LEVELS.
- CONTROL ROOM OF SIZE 20.5X10.7M OF STANDARD CONTROL ROOM BUILDING IS PROPOSED FOR THIS STATION.
- TO FIX EXACT LOCATION OF STATION YARD, FIRST FIX THE 110KV STRUCTURE LINE A1-A2 WITH CO ORDINATES OF POINTS GIVEN BELOW.

POINTS	S-N	W-E
A1	200.48	33.31
A2	200.48	41.51

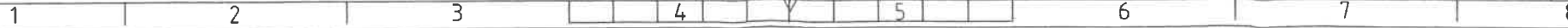
- FOR BILL OF MATERIALS/EQUIPMENTS/STATION STRUCTURES & MOUNTING STRUCTURES REFER ANNEXURE- SCHEDULE OF REQUIREMENTS.
- ROUTE OF PROPOSED CABLE DUCT FOR SSY -1 & SSY-2 TYPES ARE INDICATED IN THE LAYOUT PLAN. FROM MAIN CABLE DUCTS ie. SSY-1 & SSY-2 TYPE TO THE RESPECTIVE EQUIPMENTS 'SSY-3' TYPE HUME PIPE SHALL BE PROVIDED FOR THE COMBINATION OF CONTROL & POWER CABLE 'SSY-4' TYPE SHALL BE PROVIDED & FOR ONLY CONTROL CABLE/ POWER CABLE. REFER TYPES OF CABLE DUCT DRAWING FOR OTHER DETAILS.
- SPACE IS EARMARKED ON EITHER SIDE OF 110KV BAYS FOR FUTURE PROVISION, DEPENDING UPON THE ORIENTATION OF 110KV LINES. THE BAYS CAN BE EXTENDED ON ANY SIDE.
- CABLE DUCT WHICH CROSSES 5M WIDE ROAD SHALL BE SUITABLY DESIGNED TO TAKE CARE OF THE LOAD OF THE VEHICLE WITH TRANSFORMER.
- a) APPROVED IN 91ST TCC MEETING DATED-09.02.2024.
b) REVISED AS PER T.O. NOTE DTD:-07.11.2024
- OTHER REFERENCE DRAWINGS--
 - SITE PLAN WITH BLOCK LEVEL.
 - CROSS SECTION DRAWING
 - SINGLE LINE DIAGRAM.


TECHNICAL PARTICULARS

SL.NO.	PARTICULARS	110KV RIGID BUS
1.	BASIC INSULATION LEVEL (KV)	550
2.	MINIMUM CLEARANCES	
	a) BETWEEN PHASES	2.0 M
	b) BETWEEN PHASE TO EARTH (CENTRE LINE OF TOWER)	2.1 M
	c) SECTIONAL CLEARANCE	3.5 M
3.	a) HEIGHT OF CROSS BUS CONDUCTOR	6.35 M
	b) BAY WIDTH	8.2 M
	c) HEIGHT OF MAIN BUS	4.6 M
4.	HEIGHT OF CENTRE OF TERMINAL PAD PERTAINING TO VARIOUS EQUIPMENTS	
	a) ISOLATORS ADJACENT TO MAIN BUS	6.35 M
	b) OTHER ISOLATORS AND EQUIPMENTS	4.6 M
5.	MATERIALS OF THE BUS	
	a) MAIN ALUMINIUM TUBE BS 1600 SCH.40	75 MM DIA
	b) MAIN STRUNG BUS	-
	c) CROSS BUS	
	i) ALUMINIUM TUBE BS.1600 SCH.40	63 MM DIA
	ii) ACSR CONDUCTOR	MOOSE
6.	POST INSULATORS USED FOR BUS SUPPORTS AS PER IS 5350 PART II & III	
	a) NO.OF UNITS/STACK	1
	b) VOLTAGE CLASS	110KV
	c) HEIGHT OF INSULATOR STACK (MM)	1220
	d) PITCH DIA HOLES AT TOP (MM)	127
	e) NO. OF FIXING BOLTS	4
7.	a) 11KV, 90KN DISC INSULATORS	
	i) TENSION STRING	8
	b) 11KV, 90KN DISC INSULATORS	
	i) SUSPENSION STRING	8

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 KARNATAKA POWER TRANSMISSION CORPORATION LIMITED				
TECHNICAL PARTICULARS OF LAYOUT PLAN FOR THE PROPOSED 110/11KV SUB STATION AT BOMMANAHALLI IN HANAGAL TALUK, HAVERI DISTRICT.				
DRG.NO. KPTCL/TECH/SS-110/874/R#		DATE: 09.11.2024	SCALE:- NTS	SHEET 2 OF 4
	<i>S.H.</i>	<i>P. S. S.</i>	<i>J. S.</i>	<i>all</i>
A.E	A.E.E	E.E	S.E(TECH)	CEE (P&C)
DRN	CHD	SUB	REC	APPROVED

A	•
B	
C	
D	
E	•
F	



R2	09.11.2024	REVISED AS PER T.O LETTER Dtd:-				
REVISION	DATE					
	KARNATAKA POWER TRANSMISSION CORPORATION LIMITED					
SINGLE LINE DIAGRAM OF PROPOSED 110/11kV SUB STATION BOMMANAHALLI IN HANAGAL TALUK AND HAVERI DISTRICT.						
DRG.NO.	KPTCL/TECH/SS-110/874/R#	DATE	09.11.2024	SCALE:-	NTS	SHEET 3 OF 4
	S.S.-	P.S.S.	huk			ch
A.E	A.E.E	E.E	S.E.(TECH)	CEE (P&C)		
DRN	CHD	SUB	REC	APPROVED		

