




COVER

1

LEGEND

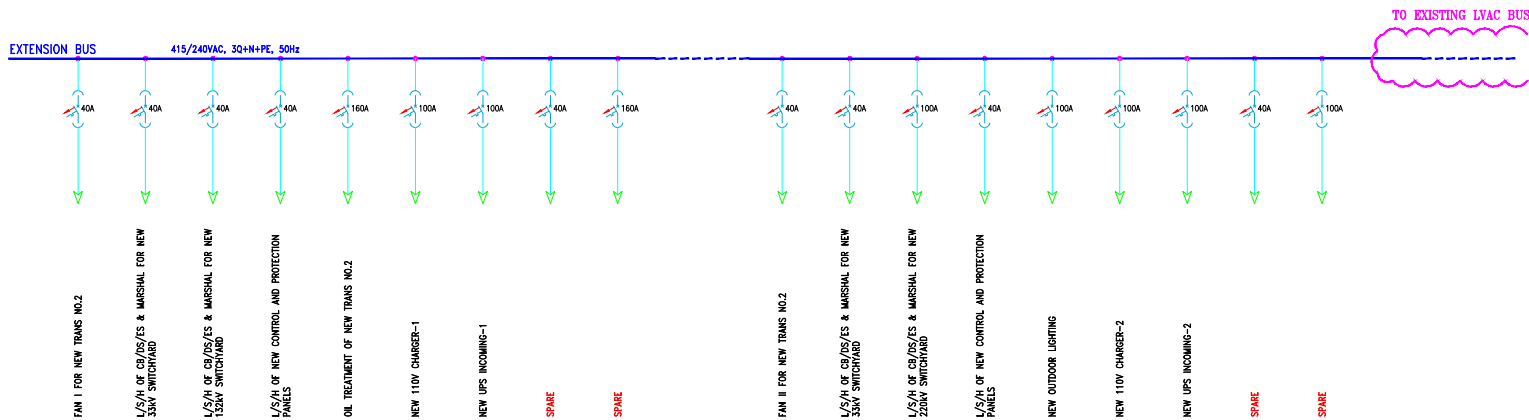
	AUXILIARY TRANSFORMER		VOLTMETER		ENERGY METER		AS	AMMETER SELECTOR SWITCH
	MCCB 4P WITH DEDICATED O/C PROTECTION		AMMETER		VOLTAGE SELECTOR SWITCH		48	PHASE SEQUENCE RELAY
	MCCB PLUG-IN TYPE		CURRENT TRANSFORMER		UNDER(ZERO) VOLTAGE RELAY			MINIATURE CIRCUIT BREAKER
	DROP FUSE		SIGNAL LAMP		INSTANTANEOUS AND INVERSE TIME OVER CURRENT RELAY			
			EARTH		INSTANTANEOUS AND INVERSE EARTH FAULT RELAY			
			L/S/H		OVER VOLTAGE RELAY			

NOTE:

- 1- THE QUANTITIES, SIZES AND RATINGS ARE PRELIMINARY AND SHALL BE FINALIZED AT DETAIL DESIGN STAGE BY EPC CONTRACTOR SUBJECT TO CLIENT/CONSULTANT APPROVAL.
- 2- AT LEAST 20% SPARE OF EACH FEEDER TYPE SHALL BE CONSIDERED IN ADDITION TO FUTURE FEEDERS.
- 3- ALL MCCBs/MCBs FOR FUTURE EXTENSION WITH CORRESPONDENT SPACE SHALL BE CONSIDERED/SUPPLIED IN MAIN/DISTRIBUTION LVAC PANELS.
- 4- ALL CIRCUIT BREAKERS SHALL BE EQUIPPED WITH AUXILIARY CONTACT(S).
- 5- LVAC SINGLE LINE DIAGRAM SHALL BE SHOWN IN OPERATOR WORKSTATION WITH DYNAMIC COLORS AND ALL MEASURING VALUES(VOLTAGE, CURRENT, REACTIVE POWER, ACTIVE POWER, FREQUENCY, POWER FACTOR, ENERGY, TEMPERATURE AND ETC) SHALL BE MONITORED THROUGH HMI AND ALL NECESSARY EQUIPMENT SUCH AS TRANSDUCERS SHALL BE CONSIDERED.
- 6- ALL REQUIRED MODIFICATION OF EXISTING LVAC SYSTEM INCLUDING WIRING AND ETC SHALL BE CONSIDERED.
- 7- THE CONTRACTOR SHALL PROVIDE SUB-DISTRIBUTION BOARDS AS REQUIRED SUBJECT TO CLIENT/CONSULTANT APPROVAL.
- 8- SIZE OFF ALL CABLES SHALL BE DETERMINED AFTER CALCULATION AT DESIGN STAGE.
- 9- THE EXISTING PHILOSOPHY SHOULD BE FOLLOWED ON WIRING AND DISTRIBUTION.
- 10- ALL SIGNALS REQUIRED TO CONTROL THE AC/DC SYSTEM SHOULD BE CONSIDERED BY SAS.
- 11- THE SINGLE LINE DIAGRAM SHALL BE IN BLUE (NO. 166) COLOR FOR 0.415KV VOLTAGE LEVEL.
- 12- THE CUBICLES SHALL BE COMPLETELY SELF-SUPPORTING, MADE OF A REQUIRED NUMBER OF STANDARDIZED, PREFABRICATED, VERTICAL SECTIONS BOLTED TOGETHER TO FORM INDOOR METAL CLAD, DUST-PROOF RIGID UNIT, DEGREE OF PROTECTION IP51. THE CUBICLES SHALL BE FREE STANDING, EQUIPPED WITH BOTTOM FRAMES SUITABLE FOR BOLTING TO THE FLOOR. SHEET STEEL THICKNESS SHALL NOT BE LESS THAN 2 mm.
- 13- THE INTERLOCK SYSTEM SHALL BE COMPLETED/MODIFIED AND RETESTED TO MAKE THE ENTIRE SYSTEM WORK PROPERLY.



LEGEND & NOTE

REFERENCE DRAWINGS			
DRAWING NO.	TITLE		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
APPROVED	APPROVED WITH COMMENTS	NOT APPROVED	FOR INFORMATION
DATE:		SIGNATURE/STAMP..... PROJECT CONSULTANT	
		KENYA ELECTRICITY TRANSMISSION COMPANY LTD.	
		COLENCO CONSULTING LIMITED	
PROJECT:			
KENYA TRANSMISSION NETWORK IMPROVEMENT PROJECT (KTRNIP).			
PROJECT DRAWING NO.	NAME:	DATE:	PROJECT NO.
PREPARED:	HL		KABARNET132/33KV SUBSTATION
DRAWN:	FJ	30/05/2023	
CHECKED:	V.JOSH	30/05/2023	
APPROVED:	S.DESHMUKH	30/05/2023	
LEGEND & NOTE			
REVISIONS			
NO.	NAME	DATE	
SCALE:	1:600	DWG NO.	REV.:



- * ONE NEW AUXILIARY TRANSFORMER WITH ITS CABLING IS IN SCOPE OF WORK.
- * ALL OTHER MODIFICATION REGARDING ABOVE NOTE ARE INCLUDED IN SCOPE OF WORK.

LVAC SINGLE LINE DIAGRAM EXTENSION

REFERENCE DRAWINGS			
DRAWING NO.	REV.		
<input type="checkbox"/>	APPROVED	<input type="checkbox"/>	APPROVED WITH COMMENTS
<input type="checkbox"/>	NOT APPROVED	<input type="checkbox"/>	FOR INFORMATION
DATE: _____		SIGNATURE/STAMP: _____ PROJECT CONSULTANT	
		KENYA ELECTRICITY TRANSMISSION COMPANY LTD	
		COLOENCO CONSULTING LIMITED	
PROJECT: KENYA TRANSMISSION NETWORK IMPROVEMENT PROJECT (KTRNIP).			
PROJECT DRAWING NO. _____ PROJECT NO. _____			
PREPARED: _____	NAME: _____	DATE: _____	KABARNET 132/33KV SUBSTATION
DRAWN: _____	DATE: _____	DATE: _____	DATE: _____
CHECKED: _____	DATE: _____	DATE: _____	DATE: _____
APPROVED: _____	DATE: _____	DATE: _____	DATE: _____
LVAC SINGLE LINE DIAGRAM EXTENSION			
NO. NAME DATE			
SCALE: 1:400	DWG NO.	KABARNET-LVAC-SLE-001	REV: _____