



## LEGENDS

	DIESEL GENERATOR
	TRANSFORMER WITH DYN, NEUTRAL BROUGHT OUT
	AIR CIRCUIT BREAKER (ACB), EDO TYPE, MOTORIZED, WITH OC-SC-EE RELEASES (uP)
	AIR CIRCUIT BREAKER (ACB), EDO TYPE, MOTORIZED, WITHOUT RELEASES
	AIR CIRCUIT BREAKER (ACB), MDO TYPE, WITH OC-SC RELEASES (uP)
	AIR CIRCUIT BREAKER (ACB), MDO TYPE, WITHOUT RELEASES
	MOLDED CASE CIRCUIT BREAKER (MCCB) MDO TYPE, WITH OC-SC-EE RELEASES(uP)
	MOLDED CASE CIRCUIT BREAKER (MCCB) EDO TYPE, WITH OC-SC RELEASES(uP)
	MOLDED CASE CIRCUIT BREAKER (MCCB) MDO TYPE, WITHOUT RELEASES
	MOLDED CASE CIRCUIT BREAKER (MCCB) FIXED TYPE, WITH OC-SC RELEASES (uP)
	MOLDED CASE CIRCUIT BREAKER (MCCB) FIXED TYPE, WITHOUT RELEASES
	MINIATURE CIRCUIT BREAKER (MCB)
	ISOLATOR
	MOTOR PROTECTION CIRCUIT BREAKER (MPCB)
	4P AUTO TRANSFER SWITCH WITH OVER LAPPING NEUTRAL (MAKE - ASCO)
	TOTALLY COORDINATED STARTER SIMILAR TO SCHNEIDER TESSY-U
	INDUCTANCE (L)
	DELTA CONNECTED CAPACITORS
	POTENTIAL TRANSFORMER (PT)
	CURRENT TRANSFORMER (CT)
	DUAL CORE CURRENT TRANSFORMER (CT)
	AMMETER WITH SELECTOR SWITCH
	VOLTMETER WITH SELECTOR SWITCH
	3PHASE 3PIN INDUSTRIAL SOCKET WITH PLUG
	1PHASE 3PIN INDUSTRIAL SOCKET WITH PLUG
	POTENTIAL FREE CONTACT FOR ON/OFF/TRIP STATUS FOR BMS INTEGRATION

## LEGENDS

H1	R PHASE ON
H2	Y PHASE ON
H3	B PHASE ON
H4	VCB ON
H5	VCB OFF
H6	VCB TRIP
H7	TRIP CKT HEALTHY
H8	SPRING CHARGED
H9	VCB TEST
H10	VCB SERVICE

## LEGENDS

	KILOWATT HOUR METER WITH RS-485
	DUAL KILOWATT HOUR METER WITH RS-485
	KILOWATT METER WITH RS-485
	POWER FACTOR METER WITH RS-485
	EARTH LEAKAGE RELAY (300mA-3A) WITH CBCT MICROPROCESSOR BASED
	MULTI DATA METER WITH RS-485
	TRANSIENT VOLTAGE SURGE SUPPRESSOR (ASCO)
	TRIVECTOR METER WITH RS-485
	AUTO POWER FACTOR CORRECTION RELAY
	MULTI FUNCTION METER WITH ION6000 / EQUIVALENT
	MULTI FUNCTION METER WITH EM6438 / EQUIVALENT
	ILLUMINATED PUSH BUTTON
	MOTORIZED POTENTIOMETER WITH JOY STICK
	INDICATING LAMPS
	AUTO MANUAL SELECTOR SWITCH
	PUSH BUTTON (OFF)
	PUSH BUTTON (ON)
	SHORT CIRCUIT PROTECTION
	OVER CURRENT PROTECTION
	EARTH FAULT PROTECTION
	AUTO MAINS FAILURE
	CORE BALANCE CURRENT TRANSFORMER
	AUTO TRANSFER SWITCH
	PROGRAMMABLE LOGIC CONTROLLER
	SUB MAIN DISTRIBUTION BOARD
	RISE / LOWER
	EMERGENCY PUSH BUTTON
	INSULATION MONITORING DEVICE
	OVER LAPPING NEUTRAL
	BUS COUPLER
	OVER LOAD RELAY
	LOCAL REMOTE SWITCH
	TRIP CIRCUIT/COIL SUPERVISION RELAY
	DISTRIBUTION BOARD
	LIGHTING DISTRIBUTION BOARD
	POWER DISTRIBUTION BOARD
	EMERGENCY LIGHTING DISTRIBUTION BOARD
	UNINTERRUPTED POWER SUPPLY DB
	EMERGENCY POWER DISTRIBUTION BOARD
	FRONT DISPLAY MODULE
	POWER MONITOR
	SURGE PROTECTION DEVICE

REV. NO.	REVISION DESCRIPTION	DATE
R0	ISSUED FOR TENDER	11.02.2025
R1	ISSUED FOR TENDER	06.03.2025
R2		
R3		
R4		
R5		
R6		

AYFY -	PVC INSULATED PVC SHEATHED FLAT STRIP ARMOURD ALUMINIUM CONDUCTOR CABLE
AYWY -	PVC INSULATED PVC SHEATHED ROUND WIRE ARMOURD ALUMINIUM CONDUCTOR CABLE
YFY -	PVC INSULATED PVC SHEATHED FLAT STRIP ARMOURD COPPER CONDUCTOR CABLE
YWY -	PVC INSULATED PVC SHEATHED ROUND WIRE ARMOURD COPPER CONDUCTOR CABLE
AYY -	PVC INSULATED PVC SHEATHED UNARMOURD ALUMINIUM CONDUCTOR CABLE
YY -	PVC INSULATED PVC SHEATHED UNARMOURD COPPER CONDUCTOR CABLE
AZXFY -	XLPE INSULATED PVC SHEATHED FLAT STRIP ARMOURD ALUMINIUM CONDUCTOR CABLE
AZKWY -	XLPE INSULATED PVC SHEATHED ROUND WIRE ARMOURD ALUMINIUM CONDUCTOR CABLE
AZXY -	XLPE INSULATED PVC SHEATHED UNARMOURD ALUMINIUM CONDUCTOR CABLE
XFY -	XLPE INSULATED PVC SHEATHED FLAT STRIP ARMOURD COPPER CONDUCTOR CABLE

## NOTES

- \* NEUTRAL SIZING IN ALL PANELS SHALL BE RATED FOR 100% OF PHASE UNLESS OTHERWISE SPECIFIED.
- \* ALL GLAND PLATES SHALL BE MADE OUT OF ALUMINIUM SHEET.
- \* ALL ACB'S SHALL HAVE THE FOLLOWING FEATURES AS MUST HP BASED, SAFETY SHUTTER LOCK, DOOR INTERLOCK, READY TO CLOSE CONTACT, ARC CHUTE COVER.
- \* CAPACITOR BANKS OPERATING VOLTAGE 415VOLTS, WITHSTAND VOLTAGE 550VOLTS
- \* NECESSARY CONTROL, WIRING BETWEEN GRID POWER CT AND APFC SHALL BE DONE TO ENSURE CAPACITOR BANKS OPERATE ONLY ON GRID SUPPLY
- \* ALL KWH PM SHALL HAVE COMMUNICATION RS485/RS232/RTU MODBUS COMMUNICATION PORT
- \* WIRING BETWEEN GENERATOR BUS & SUB-METER, COMMUNICATION CABLEING UP TO BMS SYSTEM/SWITCH SHALL BE CARRIED OUT AS PRESCRIBED BY DIGITAL METER SUPPLIER
- \* ALL LT SYSTEM CONTROL SUPPLY SHOULD BE 110V AC BY USING 55-0-55V CENTER TAPPED CONTROL TRANSFORMER WITH SUITABLE PRIMARY/ SECONDARY PROTECTION ARRANGEMENT.
- \* ALL THE SUB PANEL IN COMER SHALL BE SUITABLE FOR BMS COMPATIBILITY.
- \* REQUIRED CONTROL SUPPLY NEEDS TO BE GENERATED INTERNALLY USING POWER PACK, NO EXTERNAL SUPPLY SHALL BE PROVIDED.
- \* ALL MCCB FROM 250A & ABOVE SHALL BE MICROPROCESSOR BASED AND UPTO 200A SHALL BE THERMAL MAGNETIC

## BMS INTEGRATION

- \* SEPARATE CUBICLE TO BE CONSIDERED TO PLACE THE TERMINAL BLOCKS OF ALL BREAKER.
- \* ALL RS-485 PORTS SHALL BE LOOPED AND TERMINATED IN THE ABOVE TERMINAL COMPARTMENT
- \* ALL TRIP RELAY CONTACTS TO BE WIRED AND TERMINATED FOR BMS CONNECTIVITY.
- \* ALL TRIP RELAY CONTACTS TO BE WIRED AND TERMINATED FOR BMS CONNECTIVITY.

## GENERAL NOTES:

- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL AND OTHER SERVICES DRAWINGS.
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- ALL DIMENSIONS ARE IN MILLIMETERS AND ALL LEVELS ARE IN METERS UNLESS OTHERWISE INDICATED.
- FOLLOW WRITTEN DIMENSIONS ONLY, DO NOT SCALE THE DRAWING.

## PROJECT

**JSW ACADEMIC BLOCK - NLSIU**  
NEW ACADEMIC BLOCK Gnaa Bharathi Main Rd, Teachers Colony, Naagarabhaavi, Bengaluru, Karnataka 560072

## CLIENT

**NATIONAL LAW SCHOOL OF INDIA UNIVERSITY**  
Gnaa Bharathi Main Rd, Teachers Colony, Naagarabhaavi, Bengaluru, Karnataka 560072

## ARCHITECT

**HUNDREDHANDS**  
9/2, Madras Bank Road, Shanthala Nagar, Ashok Nagar, Bengaluru, Karnataka 560001

## MEPF AND IBMS CONSULTANTS

**LEAD CONSULTANCY & ENGINEERING SERVICES (INDIA) Pvt.Ltd.**  
Eco Friendly Solutions  
No.2729, 1st FLOOR, 80 FEET ROAD, INDRA NAGAR II STAGE, BANGALURU-560038, KARNATAKA.  
Phone: +91 80 42980111, Web: lcsind.org  
India: Bengaluru | Mumbai | Pune | Gurgaon | Chennai | Hyderabad | Kolkata

## DRAWING TITLE

### SINGLE LINE DIAGRAM

DRAWN BY	AR	DRAWING NUMBER	SCALE	1:150
CHECKED	SSK	LCES-NLS-E-001	SHEET SIZE	A1
APPROVED	PD	REV - R1	DATE	06.03.2025

## DRAWING ISSUED FOR

### TENDER

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