

Date :17.07.2025
 Project :sky533 KARNATAKA GRAMEENA BANK @ BENGALORE
 Architects : N.G.SHESHAGIRI RAO & ASSOCIATES
 Electrical Consultants : Skyline electro

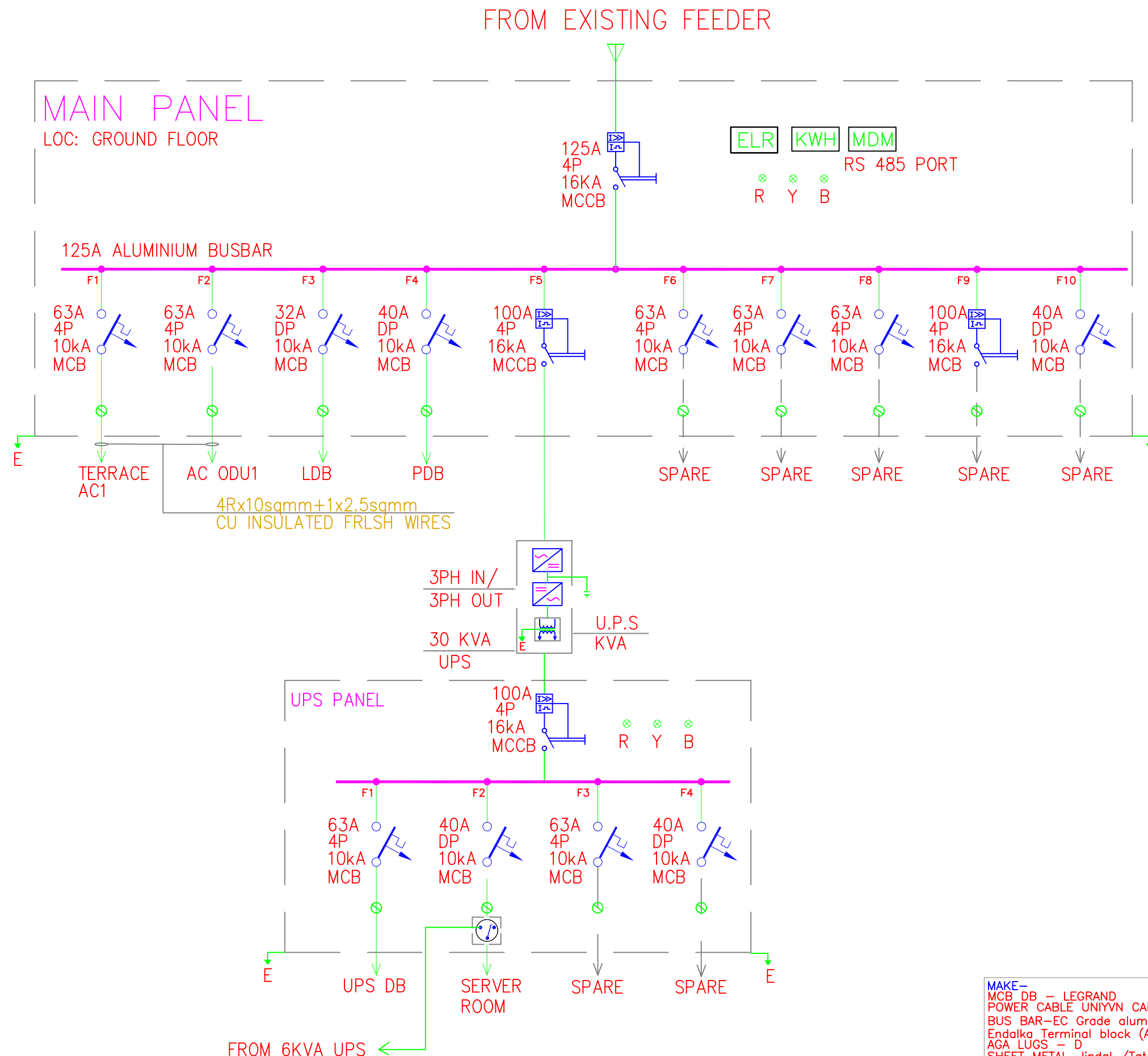
Subject : Electrical load Calculation

A. TOTAL LOAD REQUIREMENT

S/I#	Load Description	Total	Load in KW	C.L in KW	DF	Max Demand
1	1X3w led light	11	0.02	0.22	0.7	0.14
2	2x36w light	70	0.03	2.10	0.7	1.37
3	mirror light	2	0.01	0.02	0.6	0.01
4	Exhaust fan	5	0.04	0.20	0.7	0.13
5	15A socket WITH SWITCH	28	0.30	8.40	0.4	2.94
6	5a socket	15	0.15	2.25	0.7	1.58
7	3X15A(UPS)	53	0.15	7.95	0.7	5.57
8	Computer	2	0.02	0.03	0.7	0.02
9	tv	1	0.01	0.01	0.7	0.01
10	Server data ,cctv	1	5.00	5.00	1.0	5.00
11	Miscellaneous	1	1.00	1.00	0.4	0.40
TOTAL				27.18		17.16 KW

Sizing of UPS

2. Total load in kVA at	0.8	PF	21	KVA
3.Considering continuous loading upto	85%	MD is	25	KVA
4.Contingency	5%	Reqrd	26	KVA
Hence we recommend -	1	X	30	KVA



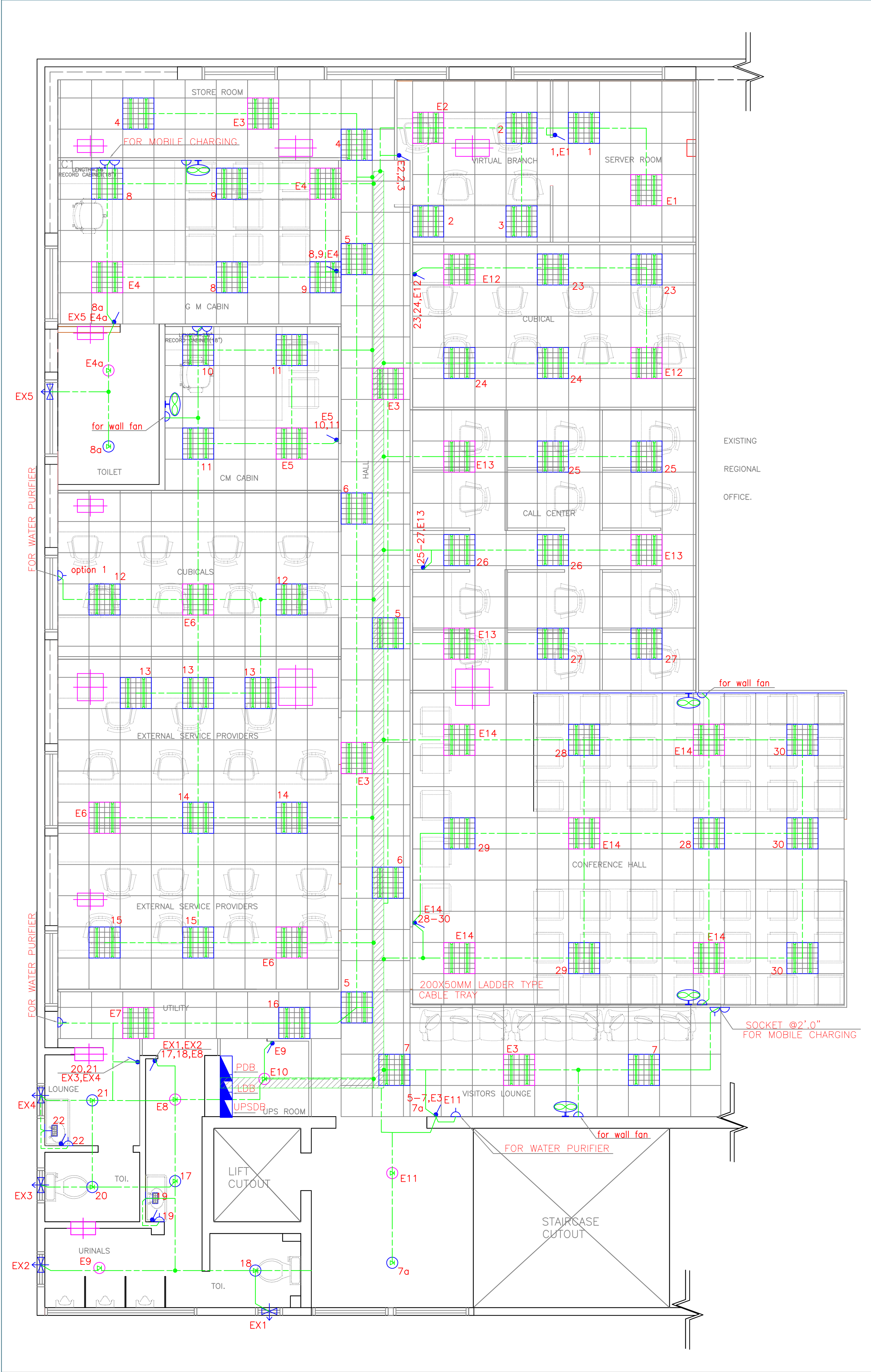
LEGEND: -	
SYMBOL	DESCRIPTION
ELR	EARTH LEAKAGE RELAY
KWH	KILOWATT-HOUR METER
MDM	MULTIPARAMETER DISPALY OF VL, KWH, KVAR, KVA, KW, FZ, PF WITH RS 485 PORT MAKE: RS 485 PORT ELMEASURE
SPD	SURGE PROTECTIVE DEVICES
⊗	INDICATING LAMP (LED TYPE)
	MINIATURE CIRCUIT BREAKER
	MOULDED CASE CIRCUIT BREAKER,TPN, WITH ADJUSTABLE OVERLOAD, FIXED SHORT CIRCUIT PROTECTION
—	BUSBAR
	MANUAL CHANGE-OVER SWITCH

- CONSTRUCTION FEATURES**
- CABLE ENTRY : INCOMING : TO SUIT SITE CONDITION
OUTGOING : TOP/BOTTOM
 - DEGREE OF PRO. : IP43
 - SHEET METAL : 16SWG CRCA MS FOR FRAME/BO
14SWG CRCA MS FOR DOOR
 - POWDER COATING : SIEMENS GREY(RAL 7032)
 - BASE FRAME : 75x40x6mm 'C' CHANNEL
 - PANEL HEIGHT : SHALL NOT BE MORE THAN 7 FE
 - FRONT : SINGLE FRONT
 - 25X6MM COPPER STRIP ENTER LENGTH OF PANEL
- NOTE:-**
- OPERATING COMPONENTS SHALL NOT BE LESS THAN 450mm & MORE THAN 1800mm AFFL.
 - FABRICATION SHALL BE STARTED ONLY AFTER TAKING APPROVAL OF GA DRAWINGS FROM CONSULTANTS.
 - PANEL SHALL BE DISPATCHED ONLY AFTER INSPECTION FROM CONSULTANTS.
 - CURRENT DENSITY OF ALLUMINIUM BUS BAR 1AMP/Sqmm TO BE CONSIDERED.
 - CURRENT DENSITY OF COPPER BUS BAR 2AMP/Sqmm TO BE CONSIDERED.
 - ALL MCCB's TO BE MOTOR RATED ('C' CURVE)
 - PANEL SHOULD BE HAVE DRAWING PACKET

ISSUES PURPOSE FOR TENDER

REV	DATE	AMENDMENTS	DRAWN	APPD
ARCHITECT				
N.G.SHESHAGIRI RAO & ASSOCIATES ARCHITECTS, STRUCTURAL & CIVIL ENGINEERS NO 12, KRUMBIGAL ROAD, LALBAGH WEST GATE,MAVALLI, BANGALORE-560004				
MEP CONSULTANT				
 #17 Annapurneshwari layout, Dasampura, Nelamangala, Bangalore - 562162 Tel : +91 7019934428 Web : www.skylineelectro.com				
PROJECT TITLE				
KARNATAKA GRAMEENA BANK,BANGALORE.				
DRAWING TITLE				
SINGLE LINE DIAGRAM				
DRAWN	PR	DATE	15.07.2025	
DESIGNED	MAHENDRA	SCALE	NTS	
JOB No	SHEET: A3		REV RO	
DRAWING No : SE533-E-SLD-01				
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MAKE-
MCB DB - LEGRAND
POWER CABLE UNIVYN CABLE
BUS BAR-EC Grade aluminium (Jindal /
Endalka Terminal block (AC DC CONNECTOR)
AGA LUGS - D
SHEET METAL-Jindal /Tata
Powder coated / 7Tanj prosww



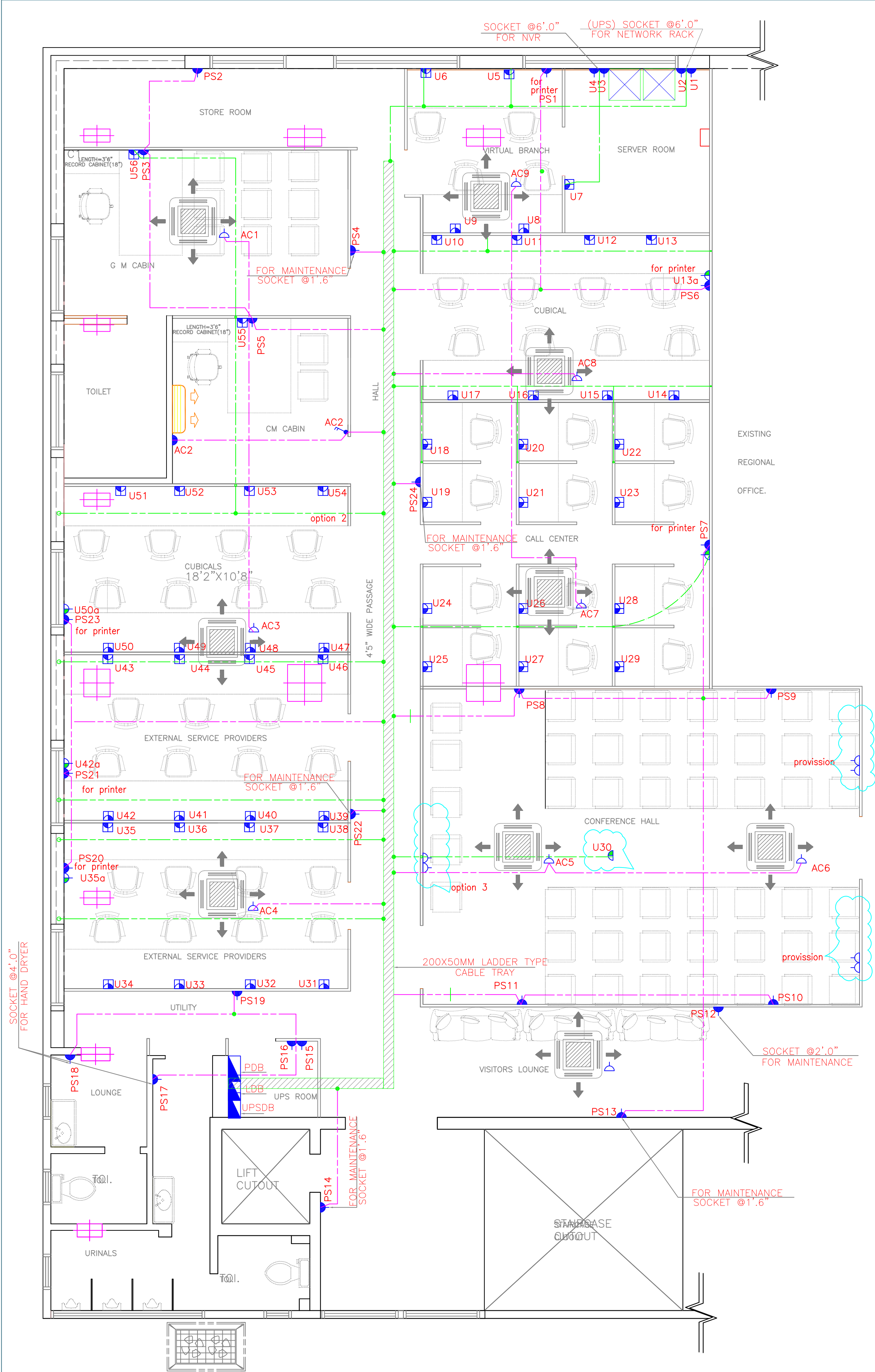
LEGEND:		
SYMBOL	DESCRIPTION	MOUNTING HL. AFFL.
	2'x2'x36W LED RECESS MOUNTED LIGHT FIXTURE WITH MIRROR OPTIC REFLECTOR	ØCEILING
	2'x2'x36U LED RECESS MOUNTED LIGHT FIXTURE WITH MIRROR OPTIC REFLECTOR FOR EMERGENCY	ØCEILING
	LED SPOT LIGHT FIXTURE	ØCEILING
	LED SPOT LIGHT FIXTURE FOR EMERGENCY	ØCEILING
	MIRROR LIGHT FIXTURE	Ø6'.6"
	EXHAUST FAN	Ø7'.9"
	6A SINGLE POLE SWITCH	Ø4'.0"
	TWO WAY SWITCH	Ø4'.0"
	MCB DISTRIBUTION BOARD	Ø6'.0"
	WALL FAN	Ø6'.6"
	19mm DIA, 2mm THICK PVC CONDUIT LAID ABOVE FALSE CEILING	
	25mm DIA, 2mm THICK PVC CONDUIT LAID ABOVE FALSE CEILING	
	19mm DIA, 2mm THICK PVC CONDUIT CHASED IN WALL	
	19mm DIA, 2mm THICK PVC CONDUIT LAID IN FLOOR	
	25mm DIA, 2mm THICK PVC CONDUIT LAID IN FLOOR	
	200X50MM LADDER TYPE CABLE TRAY	

- GENERAL NOTE :-
- DRAWING SHALL NOT BE MEASURED, FOR MEASUREMENT REFER ARCHITECTURAL DRAWINGS.
 - ALL PVC CONDUIT SHALL BE 2mm THICK ONLY.
 - LIGHTING & POWER CIRCUITS TO BE TAKEN IN SEPARATE CONDUIT.
 - FOR POINT WIRING MINIMUM 1.5sqmm WIRE TO BE USED FOR BOTH PHASE & NEUTRAL.
 - COLOR CODING OF WIRES SHALL BE AS BELOW :
PHASE(RED) - RED
PHASE(BLUE) - BLUE
PHASE(YELLOW)- YELLOW
NEUTRAL - BLACK
GROUND - GREEN
 - COLOR CODING OF CONDUIT SHALL BE AS BELOW :
WHITE - ELECTRICAL
BLUE - NETWORK & CCTV
YELLOW - ACCESS CONTROL
GREY - PUBLIC ADDRESS
RED - FIRE(METAL)
 - WHEREVER SWITCH BOXES ARE LOCATED NEXT TO THE EDGE OF THE WALL/DOOR 5" HORIZONTAL DISTANCE TO BE MAINTAINED FROM THE EDGE OF THE WALL.
 - A DISTANCE OF MINIMUM 300mm TO BE MAINTAINED BETWEEN POWER CABLE AND COMMUNICATION CABLE.
 - PHASE SHALL BE LOOPED ONLY FROM SWITCH BOX TO SWITCH BOX.
 - MOUNTING BOX FROM TV & TELE TO BE SEPARATE.(SHALL NOT BE PART OF ELECTRICAL SWITCH BOX).
 - MOUNTING HEIGHT MENTIONED ARE FROM BOTTOM OF THE BOX.
 - HORIZONTAL DIMENTION MENTIONED ARE FROM CENTRE OF BOX.
 - LOCATION OF SWITCHES & SOCKETS MOUNTING BOXES TO BE CHECKED BY ARCHITECTS/CONSULTANTS BEFORE PLASTERING OF WALLS.
 - ALL WIRE SHOULD BE FRILSH

REV	DATE	AMENDMENTS	DRAWN	APPD
ARCHITECT				
N.G.SHESHAGIRI RAO & ASSOCIATES ARCHITECTS, STRUCTURAL & CIVIL ENGINEERS NO 12, KRUMBICAL ROAD, LALBAGH WEST GATE,MAVALLI, BANGALORE-560004				
MEP CONSULTANT				
 #17 Annapurneshwari layout, Dasampura, Nelamangala Bangalore - 562162 Tel : +91 7019934428 Web : www.skylineelectro.com				
PROJECT TITLE				
KARNATAKA GRAMEENA BANK,BANGALORE.				
DRAWING TITLE				
ELECTRICAL LIGHTING CONDUIT LAYOUT				
DRAWN	PR	DATE	15.07.2025	
DESIGNED	MAHENDRA	SCALE	NTS	
JOB No		SHEET:	A2	
SKY/2025/SE533		DRAWING No :	SE533-E-L-01	
		REV	RO	

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ISSUE PURPOSE
FOR TENDER



LEGEND:		
SYMBOL	DESCRIPTION	MOUNTING HL. AFFL
	6A MULTIPIN SOCKET CONTROLLED BY SP SWITCH	Ø4'.0"
	6/16A MULTIPIN SOCKET CONTROLLED BY 20A SP SWITCH	Ø1'.6"
	1 NO. OF 6/13A FLAT/ROUND PIN SOCKET + 2 NOS OF 6A SOCKET CONTROLLED BY 10A SP SWITCH(UPS SUPPLY)	Ø1'.6"
	20A SOCKET FOR AC / GEYSER	Ø7'.9"
	20A SP SWITCH FOR AC / GEYSER	Ø4'.0"
	MCB DISTRIBUTION BOARD	Ø6'.0"
	2 NO'S OF 6/16A MULTIPIN SOCKET CONTROLLED BY 1 NO'S OF 20A SP SWITCH(UPS SUPPLY)	Ø4'.0"
	6A MULTIPIN SOCKET WITHOUT SWITCH (UPS SUPPLY)	ØCEILING
	19mm DIA, 2mm THICK PVC CONDUIT LAID ABOVE FALSE CEILING	
	25mm DIA, 2mm THICK PVC CONDUIT LAID ABOVE FALSE CEILING	
	19mm DIA, 2mm THICK PVC CONDUIT CHASED IN WALL	
	19mm DIA, 2mm THICK PVC CONDUIT LAID IN FLOOR	
	25mm DIA, 2mm THICK PVC CONDUIT LAID IN FLOOR	
	THIS CONDUIT'S INDICATES RAW POWER SUPPLY	
	200X50MM LADDER TYPE CABLE TRAY	

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 - LIGHTING & POWER CIRCUITS TO BE TAKEN IN SEPARATE CONDUIT.
 - FOR POINT WIRING MINIMUM 1.5sqmm WIRE TO BE USED FOR BOTH PHASE & NEUTRAL.
 - COLOR CODING OF WIRES SHALL BE AS BELOW:
PHASE(RED) - RED
PHASE(BLUE) - BLUE
PHASE(YELLOW)- YELLOW
NEUTRAL - BLACK
GROUND - GREEN
 - COLOR CODING OF CONDUIT SHALL BE AS BELOW :
WHITE - ELECTRICAL
BLUE - NETWORK & CCTV
YELLOW - ACCESS CONTROL
GREAY - PUBLIC ADDRESS
RED - FIRE(METAL)
 - WHEREVER SWITCH BOXES ARE LOCATED NEXT TO THE EDGE OF THE WALL/DOOR 5" HORIZONTAL DISTANCE TO BE MAINTAINED FROM THE EDGE OF THE WALL.
 - A DISTANCE OF MINIMUM 300mm TO BE MAINTAINED BETWEEN POWER CABLE AND COMMUNICATION CABLE.
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ARCHITECT				
N.G.SHESHAGIRI RAO & ASSOCIATES ARCHITECTS, STRUCTURAL & CIVIL ENGINEERS NO 12, KRUMBICAL ROAD, LALBAGH WEST GATE,MAVALLI, BANGALORE-560004				
MEP CONSULTANT				
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PROJECT TITLE				
KARNATAKA GRAMEENA BANK,BANGALORE.				
DRAWING TITLE				
POWER & UPS CONDUIT LAYOUT				
DRAWN	PR	DATE	15.07.2025	
DESIGNED	MAHENDRA	SCALE	NTS	
JOB No		SHEET:	A2	
SKY/2025/SE533		DRAWING No :	SE533-E-P&UPS-01	
		REV	RO	

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ISSUE PURPOSE
FOR TENDER



LEGEND:		
SYMBOL	DESCRIPTION	MOUNTING Ht. AFFL
	RJ-11 TELEPHONE OUTLET	SEE NOTE
	CAT6 DATA OUTLET	SEE NOTE
	RG-6 TV OUTLET	Ø4'.0"
	CAT6 DATA OUTLET FOR WIFI	Ø7'.9"
	CCTV CAMERA	ØCEILING
	PROJECTOR	ØCEILING
	HDMI OUTLET	
	BIOMETRIC	Ø4'.0"
	IP BULLET CAMERA FIXED LENSE (INDOOR TYPE)	ØCEILING/WALL MOUNT
	19mm DIA, 2mm THICK PVC CONDUIT LAID ABOVE FALSE CEILING	
	25mm DIA, 2mm THICK PVC CONDUIT LAID ABOVE FALSE CEILING	
	32mm DIA, 2mm THICK PVC CONDUIT LAID ABOVE FALSE CEILING	
	19mm DIA, 2mm THICK PVC CONDUIT LAID IN FLOOR	
	150X50MM RACEWAY	

GENERAL NOTE :-

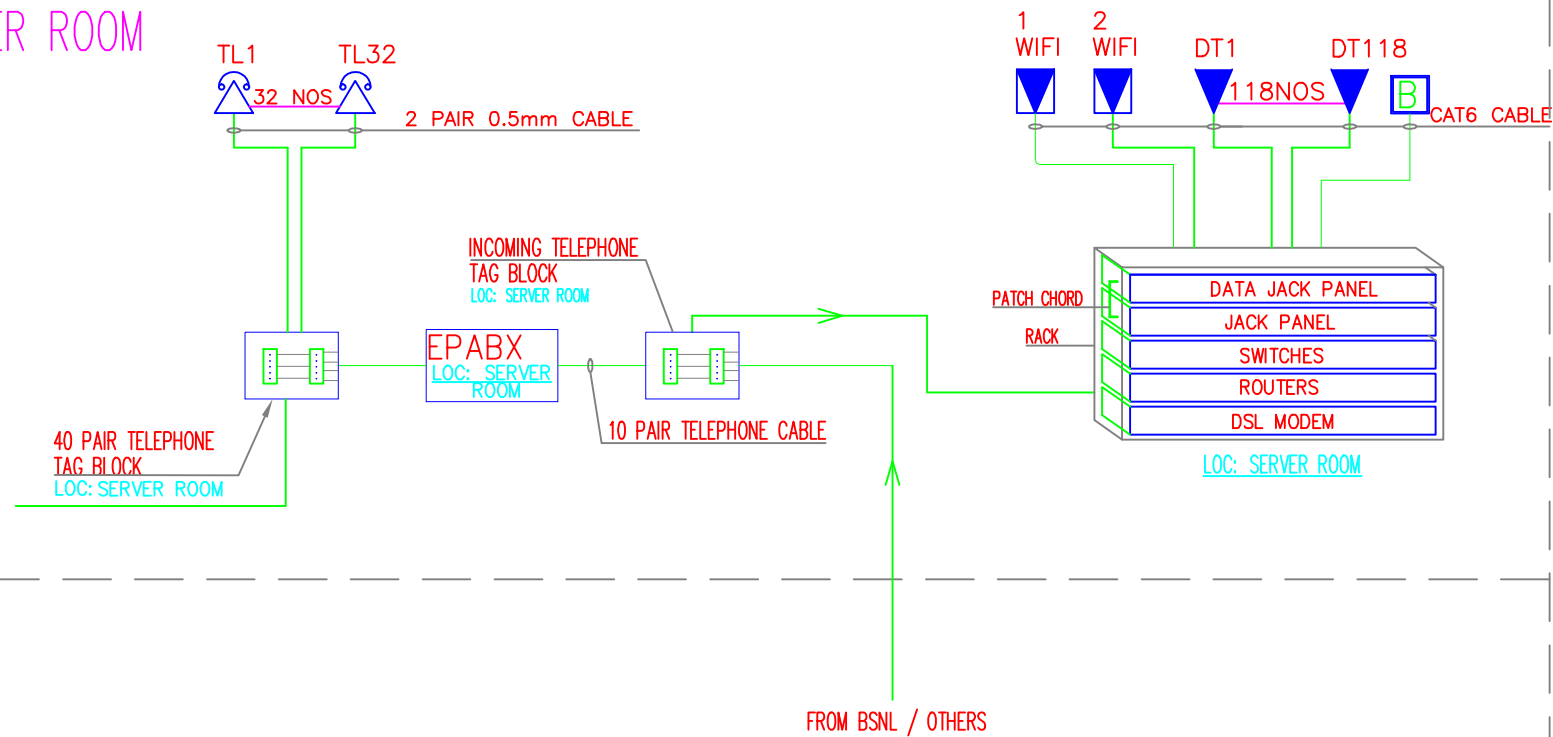
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- ALL WIRE SHOULD BE FRILSH

REV	DATE	AMENDMENTS	DRAWN	APPD
ARCHITECT				
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MEP CONSULTANT				
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PROJECT TITLE				
KARNATAKA GRAMEENA BANK,BANGALORE.				
DRAWING TITLE				
LOW VOLTAGE CONDUIT LAYOUT				
DRAWN	PR	DATE	15.07.2025	
DESIGNED	MAHENDRA	SCALE	NTS	
JOB No		SHEET:	A2	
SKY/2025/SE533		DRAWING No :	SE533-E-LV-01	
		REV	RO	

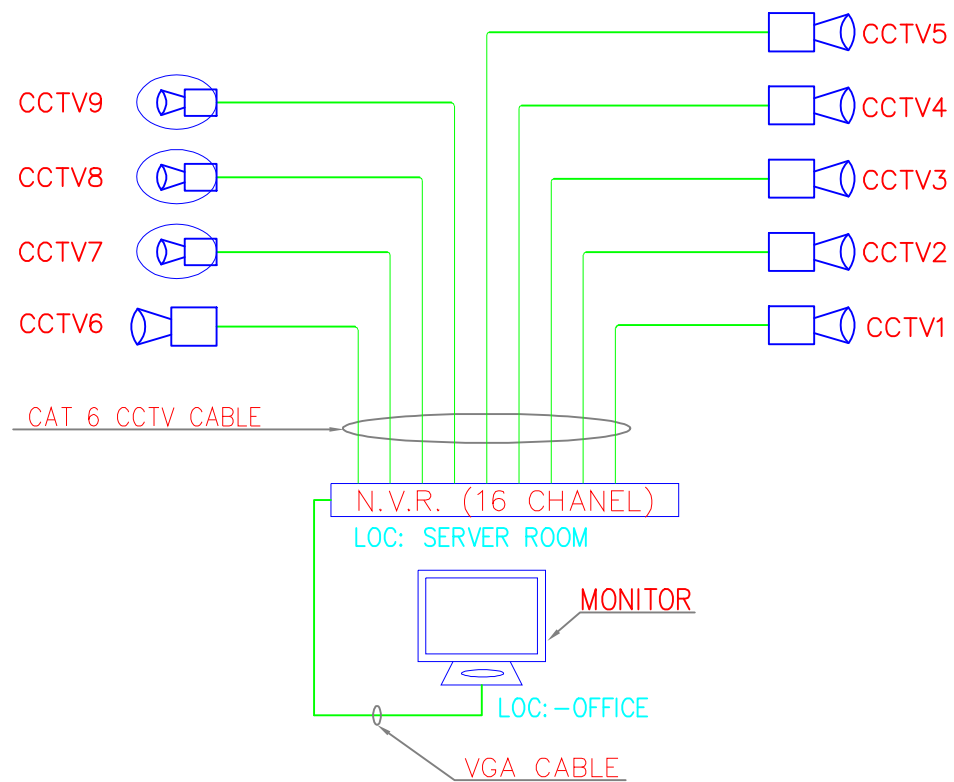
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ISSUE PURPOSE
FOR TENDER

OFFICE
LOC : SERVER ROOM



TELEPHONE AND DATA DISTRIBUTION



CCTV DISTRIBUTION

LEGEND:

SYMBOL	DESCRIPTION
	RJ-11 TELEPHONE OUTLET
	CAT6 DATA OUTLET
	CAT6 DATA OUTLET FOR WIFI
	IP BULLET CAMERA FIXED LENSE (INDOOR TYPE)
	CCTV CAMERA
	BIOMETRIC

ISSUE PURPOSE: -
FOR TENDER

REV	DATE	AMENDMENTS	DRAWN	APPD
ARCHITECT				
N.G.SHESHAGIRI RAO & ASSOCIATES ARCHITECTS, STRUCTURAL & CIVIL ENGINEERS NO 12, KRUMBIGAL ROAD, LALBAGH WEST GATE,MAVALLI, BANGALORE-560004				
MEP CONSULTANT				
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PROJECT TITLE				
KARNATAKA GRAMEENA BANK,BANGALORE.				
DRAWING TITLE				
LOW VOLTAGE SCHEMATIC LAYOUT				
DRAWN	TEJAS	DATE	15.07.2025	
DESIGNED	Mahendra	SCALE	NTS	
CHECKED	Mahendra	SHEET	A4	
JOB No	SKY/2025/SE533	DRAWING No	SE533-E-LV-01	REV RO
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