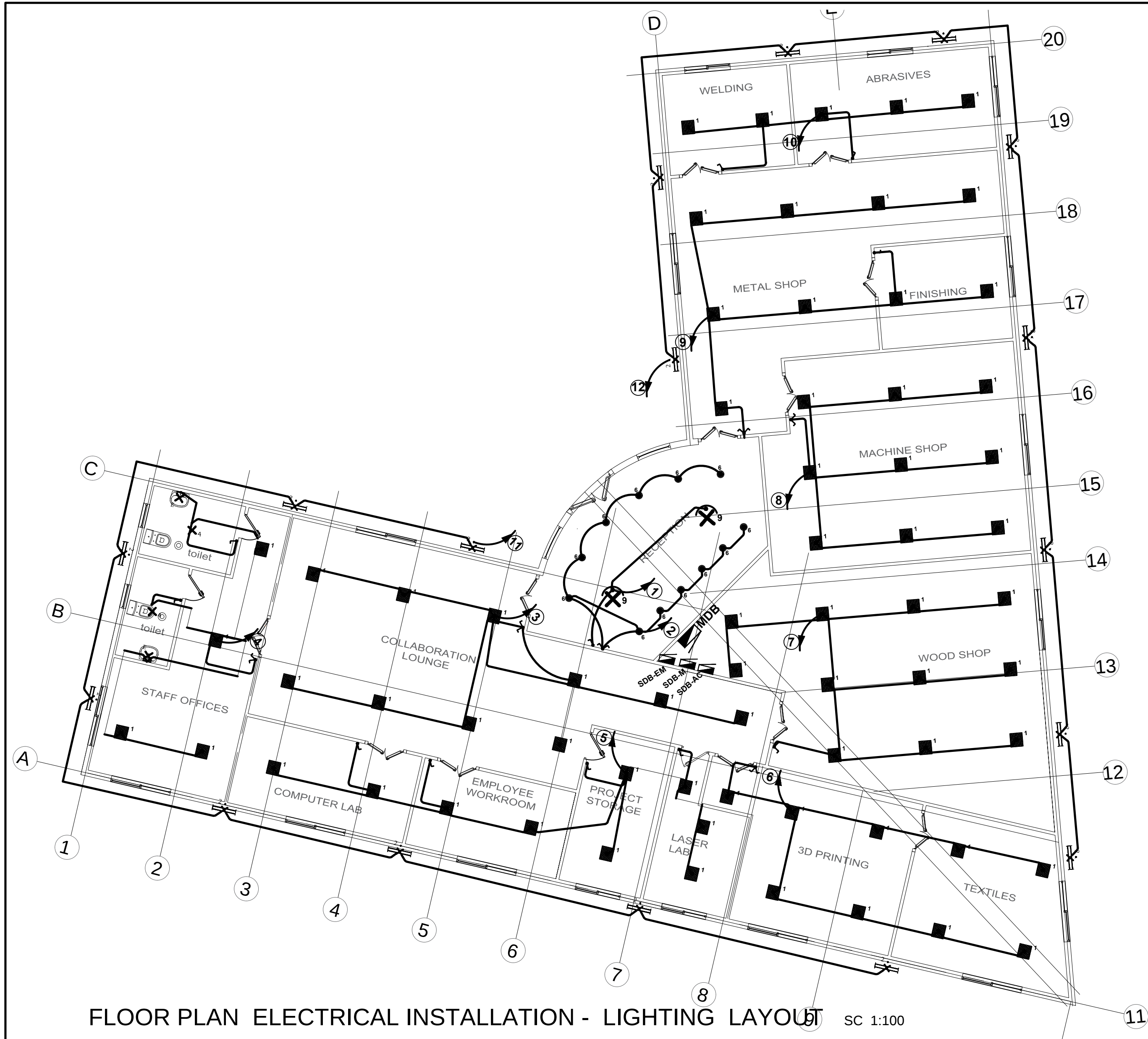
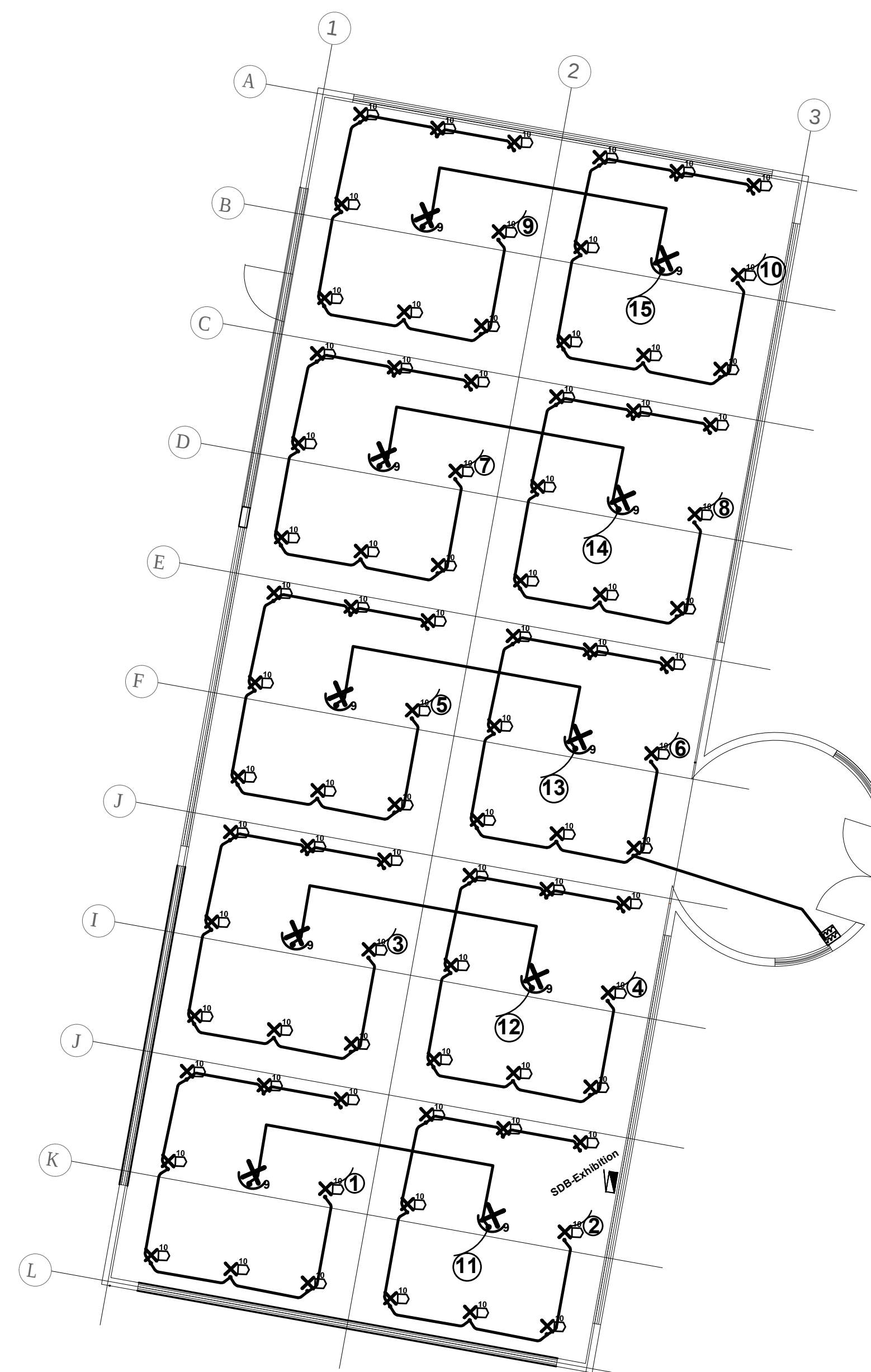




FLOOR PLAN ELECTRICAL INSTALLATION - LIGHTING LAYOUT SC 1:100



EXHIBITION FLOOR PLAN ELECTRICAL INSTALLATION - LIGHTING LAYOUT SC 1:100

LIGHTING LAYERS 1:50 Sc	
1	60x60cm Square LED Panel, 56w
2	Tube Light, 120cm, 28w
3	Ceiling Light
4	Water proof Light for Bath room
5	Wall mounted light for Bath room
6	Ceiling Mounted Spot light
7	Wall mount Light
8	Decorative Pendant Light
9	Industrial Pendant Light
10	Spot/ Projector Light
11	Emergency Lighting, 10w with Built-in Battery, 30watt-hr.

SWITCH LAYERS 1:50 Sc	
1	Double switch
2	Single switch
3	Dimmer switch
4	Two way switch
5	Intermediate switch
6	Card Switch
7	Switch box

SOCKET LAYERS 1:50 Sc	
1	Socket
2	Double Socket
3	Water Heater
4	Jaccuzine
5	Stove
6	Heavy duty

WIRE LAYERS 1:50 Sc	
1	Lighting wire with sercuit
2	Socket wire with sercuit
3	Tele Line
4	Tv Line
5	Intercom Line
6	Data Line
7	Fire Alarm Line
8	Camera Line
9	Cable Tray for Data 20x10cm
10	Cable Tray for Power 20x10cm

Fire Alarm & SIGNALS FITTING LAYERS 1:50 Sc	
1	Tele Fitting
2	TV Fitting
3	Intercom Fitting
4	Data Fitting
5	Tele Duct
6	Tv Duct
7	Intercom Duct
8	Fire button Fitting
9	Fire Alarm Fitting
10	Fire Detector Fitting
11	Camera Fitting
12	Number display
13	Keypad
14	Distribution board
15	Manholes
16	Raisers
17	Ventilations

MDB: MAIN DISTRIBUTION BOARD on FLOOR

	DESCRIPTION	I(A)	A(mm2)	R	S	T	P(kw)
1	Lighting	10	2x2.5	●	●		0.3
2	Lighting	10	2x2.5		●		0.5
3	Lighting	10	2x2.5			●	0.4
4	Lighting	10	2x2.5	●			0.4
5	Lighting	10	2x2.5		●		0.4
6	Lighting	10	2x2.5			●	0.4
7	Lighting	10	2x2.5	●			0.4
8	Lighting	10	2x2.5		●		0.4
9	Lighting	10	2x2.5			●	0.4
10	Lighting	10	2x2.5	●			0.4
11	Lighting	10	2x2.5		●		0.4
12	Lighting	10	2x2.5			●	0.5
13	Lighting	10	2x2.5		●		0.5
14	Socket Outlet	16	3x2.5	●			1.2
15	Socket Outlet	16	3x2.5		●		1.2
16	Socket Outlet	16	3x2.5			●	1.2
17	Socket Outlet	16	3x2.5	●			1.2
18	Socket Outlet	16	3x2.5		●		1.2
19	Socket Outlet	16	3x2.5			●	1.2
20	Socket Outlet	16	3x2.5	●			1.2
21	Socket Outlet	16	3x2.5		●		1.2
F1	Feeder to SDB-Emergency	3x25	5x6.0	1.8	1.0	1.6	4.4
				6.9	6.4	6.9	20.2
22	Socket Outlet	16	3x2.5	●			1.2
23	Socket Outlet	16	3x2.5		●		1.2
24	Socket Outlet	16	3x2.5			●	1.2
25	Socket Outlet	16	3x2.5		●		1.2
26	Socket Outlet	16	3x2.5			●	1.2
F1	Feeder to SDB-Exhibition	3x25	5x6.0	2.4	2.4	2.5	7.3
F1	Feeder to SDB-Machines	3x50	5x10	8.0	8.0	7.5	23.5
F1	Feeder to SDB-AC	3x63	5x16	13.5	13.5	13.5	40.5
	Reserve						
	P(KW)			35.3	35.7	35.9	109.8

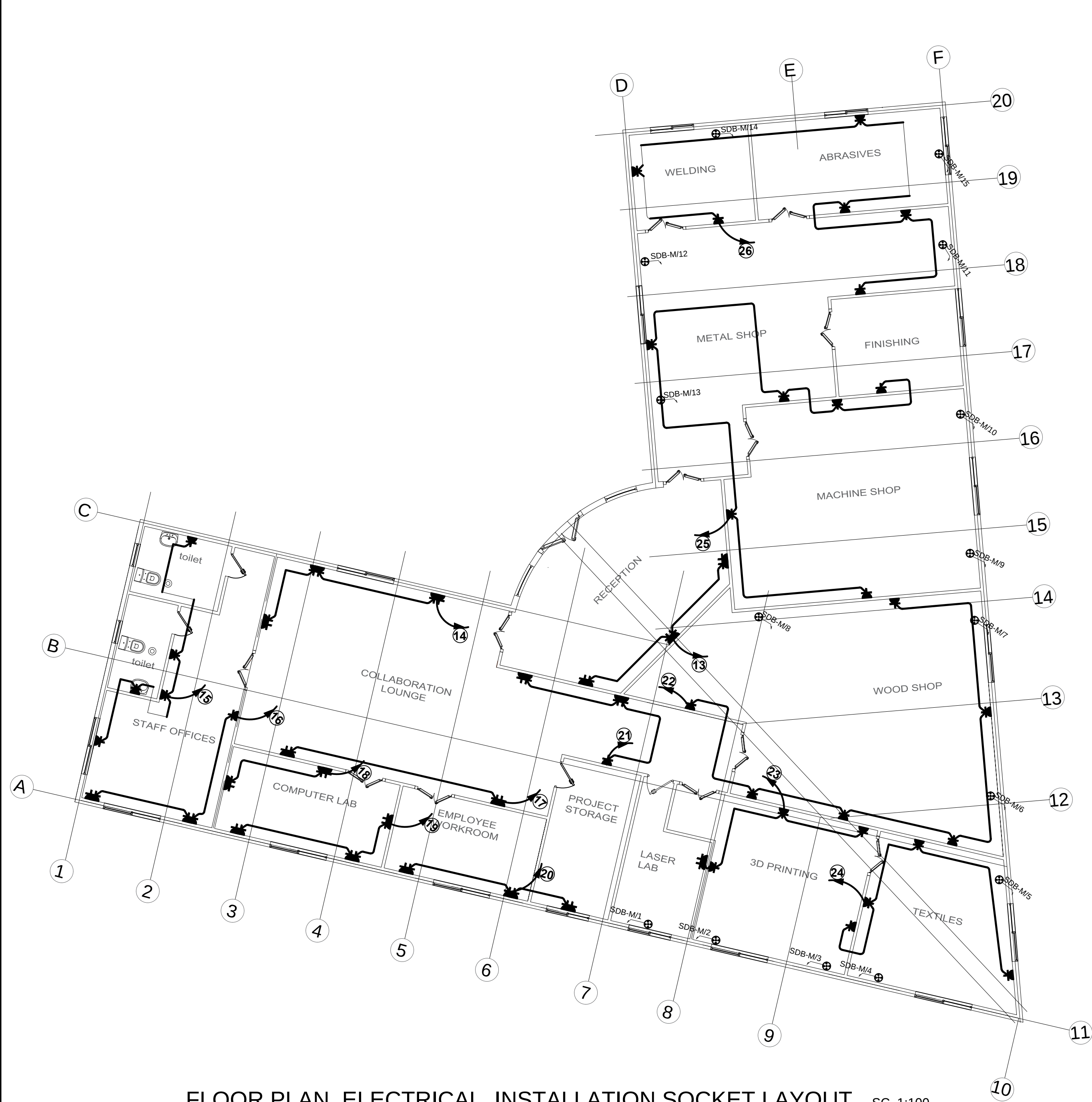
Ptot = 109.8 KW df = 0.6 Pmax = 65.9 KW

SDB-Exhibition: Sub Distribution Board for Exhibition

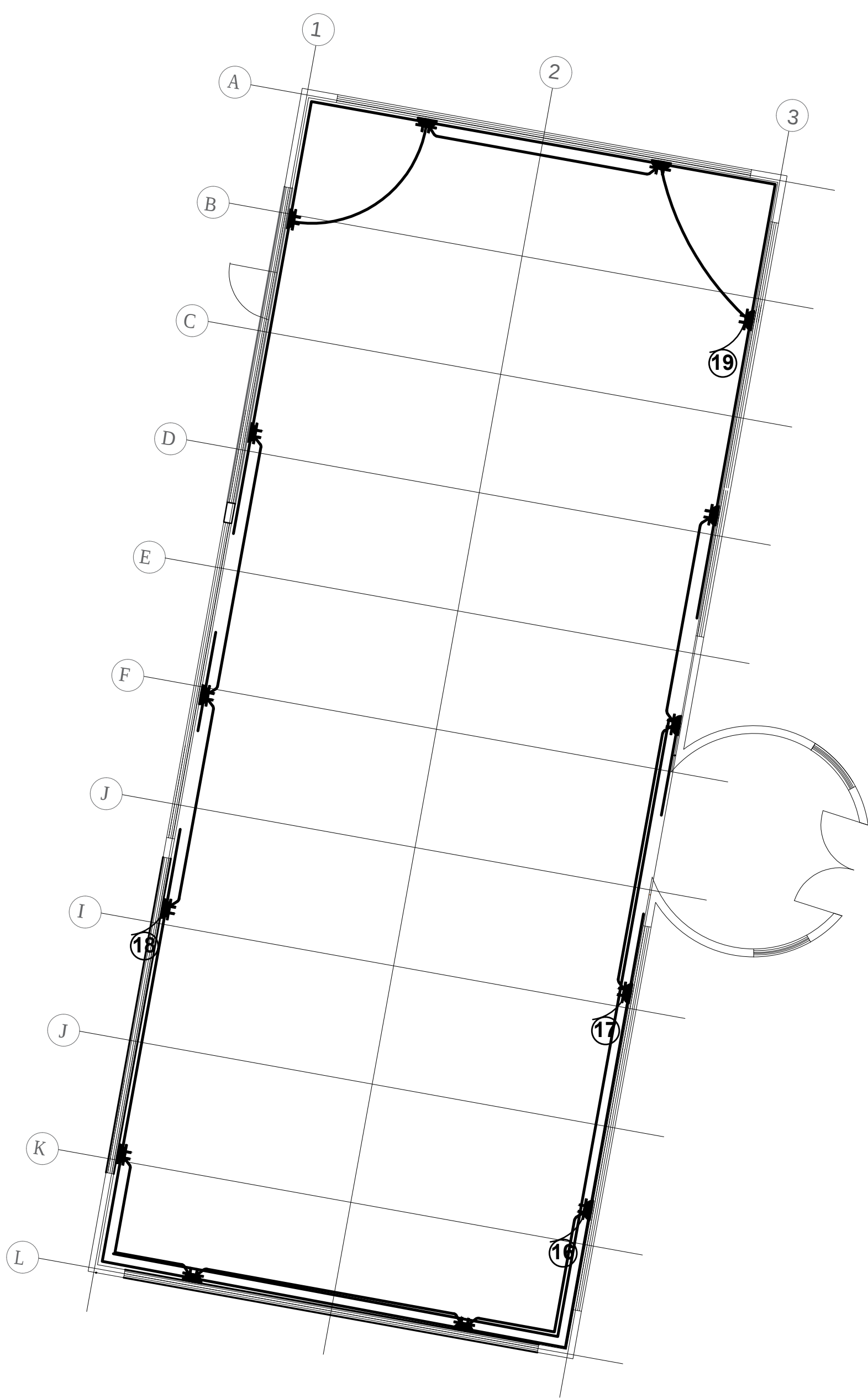
	DESCRIPTION	I(A)	A(mm2)	R	S	T	P(kw)
1	Lighting	10	3x2.5				0.3
2	Lighting	10	3x2.5				0.3
3	Lighting	10	3x2.5				0.3
4	Lighting	10	3x2.5				0.3
5	Lighting	10	3x2.5				0.3
6	Lighting	10	3x2.5				0.3
7	Lighting	10	3x2.5				0.3
8	Lighting	10	3x2.5				0.3
9	Lighting	10	3x2.5				0.3
10	Lighting	10	3x2.5				0.3
11	Lighting	10	3x2.5				0.3
12	Lighting	10	3x2.5				0.3
13	Lighting	10	3x2.5				0.3
14	Lighting	10	3x2.5				0.3
15	Lighting	10	3x2.5				0.3
16	Socket Outlet	16	3x2.5				0.8
17	Socket Outlet	16	3x2.5				0.6
18	Socket Outlet	16	3x2.5				0.6
19	Socket Outlet	16	3x2.5				0.8
	Reserve						
	Reserve						
	P(KW)			2.4	2.4	2.5	7.3

Ptot = 7.3 KW df = 0.7 Pmax = 5.1 KW

No	Revisions	Date	Signature
Project name: PLAN EXHIBITIONS			
Client: RISING DJIBOUTI			
			
Title: ELECTRICAL INSTALLATION - Lighting Plan			
Location, Title deed no		Scale: 1:100 1:30	
Designed by:		Date: Nov.2021	
Drawn by:		EL-01	
		/6	



FLOOR PLAN ELECTRICAL INSTALLATION SOCKET LAYOUT SC 1:100



EXHIBITION FLOOR PLAN ELECTRICAL
INSTALLATION SOCKET LAYOUT SC 1:100

LIGHTING LAYERS 1:50 Sc	
	60x60cm Square LED Panel, 56w
	Tube Light, 120cm, 28w
	Ceiling Light
	Water proof Light for Bath room
	Wall mounted light for Bath room
	Ceiling Mounted Spot light
	Wall mount Light
	Decorative Pendant Light
	Industrial Pendant Light
	Spot/ Projector Light
	Emergency Lighting, 10w with Built-in Battery, 30watt-hr.

SWITCH LAYERS 1:50 Sc	
	Double switch
	Single switch
	Dimmer switch
	Two way switch
	Intermediate switch
	Card Switch
	Switch box

SOCKET LAYERS 1:50 Sc	
	Socket
	Double Socket
	Water Heater
	Jaccuzine
	Stove
	Heavy duty

WIRE LAYERS 1:50 Sc	
	Lighting wire with sercuit
	Socket wire with sercuit
	Tele Line
	Tv Line
	Intercom Line
	Data Line
	Fire Alarm Line
	Camera Line
	Cable Tray for Data 20x10cm
	Cable Tray for Power 20x10cm

Fire Alarm & SIGNALS FITTING LAYERS 1:50 Sc	
	Tele Fitting
	TV Fitting
	Intercom Fitting
	Data Fitting
	Tele Duct
	Data Duct
	Intercom Duct
	Fire button Fitting
	Fire Alarm Fitting
	Fire Detector Fitting
	Camera Fitting
	Number display
	Keypad
	Distribution board
	Manholes
	Raisers
	Ventilations

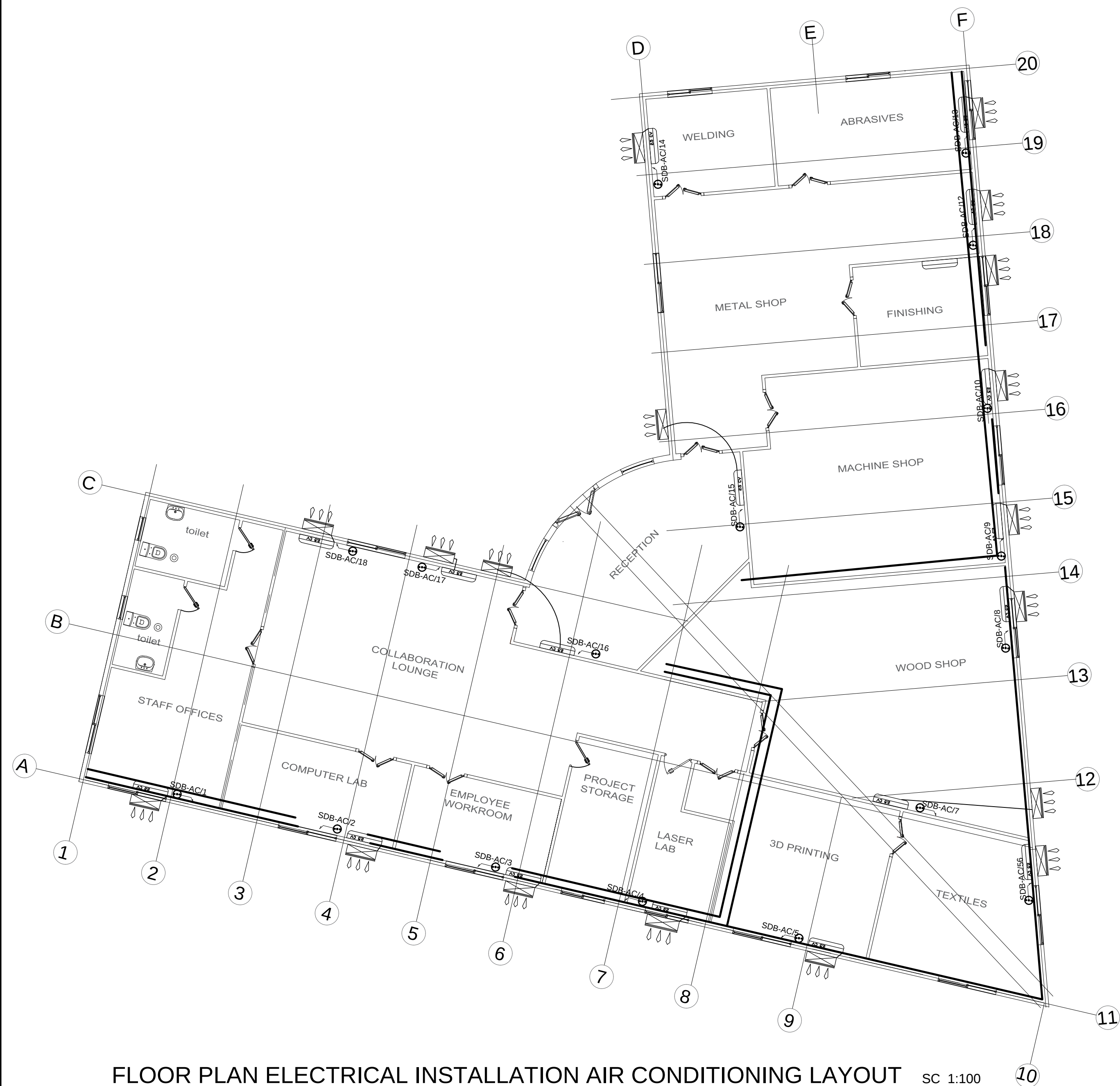
SDB-M: SUB DISTRIBUTION BOARD for Machines

DESCRIPTION	I(A)	A(mm2)	R	S	T	P(kw)
1 Laser Machine	3x16	5x4.0	●	●	●	5.0
2 3D Printer 1	16	3x4.0		●		1.0
3 3D Printer 2	16	3x4.0			●	1.0
4 Textile 1	16	3x4.0	●			1.0
5 Textile 2	16	3x4.0		●		1.0
6 Woodwork Machine 1	16	3x4.0			●	1.0
7 Woodwork Machine 2	16	3x4.0	●			1.0
8 Woodwork Machine 3	16	3x4.0		●		1.0
9 Machine Shop 1	16	3x4.0	●			0.6
10 Machine Shop 2	16	3x4.0		●		0.6
11 Metalwork Machine 1	25	3x4.0			●	2.0
12 Metalwork Machine 2	25	3x4.0	●			2.0
13 Metalwork Machine 3	16	3x4.0		●		1.0
14 Welding Machine	32	3x6.0			●	6.0
15 Abrasives	16	3x4.0	●			0.5
Reserve						
P(KW)			8.0	8.0	7.5	23.5
Ptot = 23.5 KW			df = 0.6			Pmax = 14.1 KW

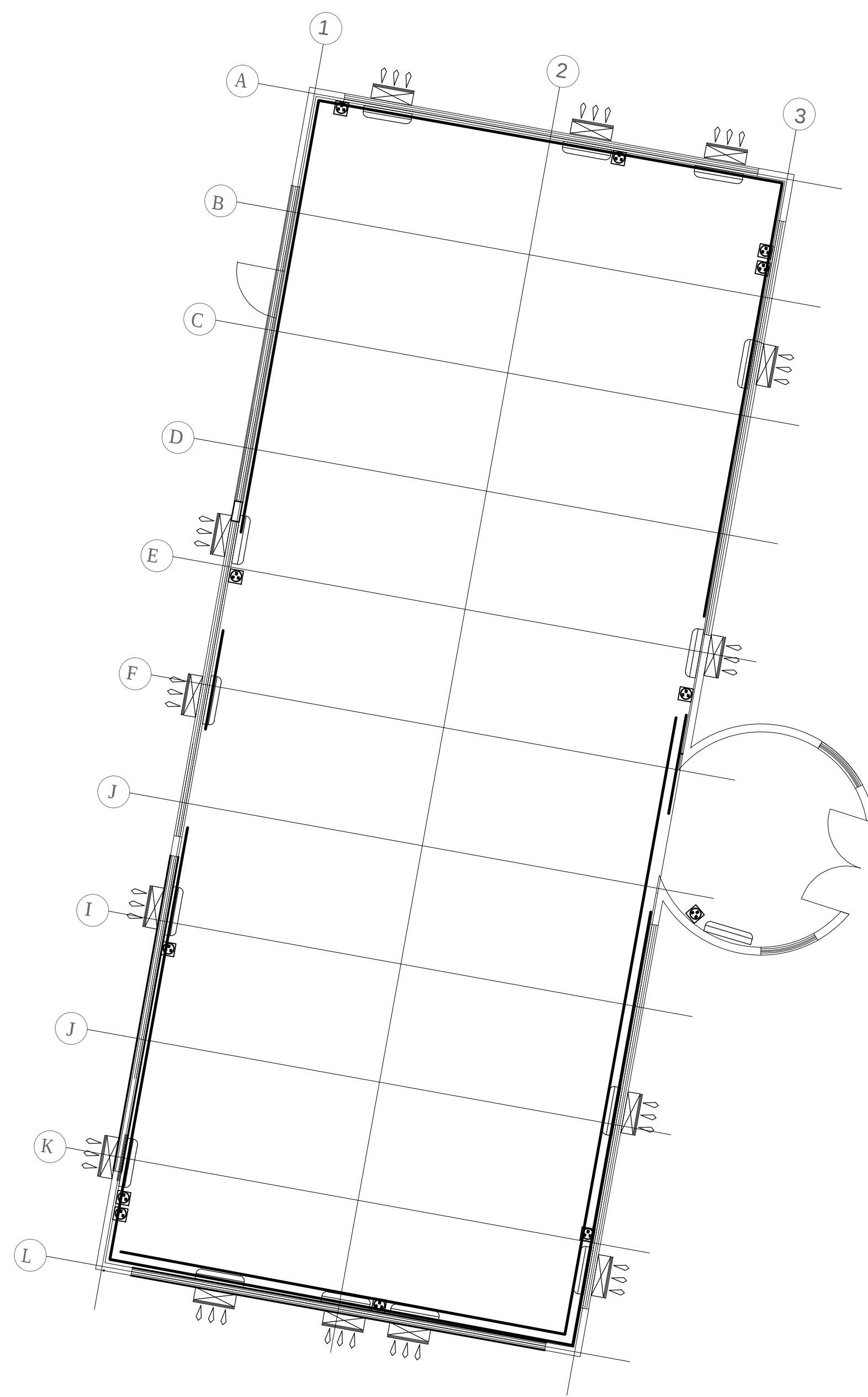
SDB-Exhibition: Sub Distribution Board for Exhibition

DESCRIPTION	I(A)	A(mm2)	R	S	T	P(kw)
1 Lighting	10	3x2.5				0.3
2 Lighting	10	3x2.5				0.3
3 Lighting	10	3x2.5				0.3
4 Lighting	10	3x2.5				0.3
5 Lighting	10	3x2.5				0.3
6 Lighting	10	3x2.5				0.3
7 Lighting	10	3x2.5				0.3
8 Lighting	10	3x2.5				0.3
9 Lighting	10	3x2.5				0.3
10 Lighting	10	3x2.5				0.3
11 Lighting	10	3x2.5				0.3
12 Lighting	10	3x2.5				0.3
13 Lighting	10	3x2.5				0.3
14 Lighting	10	3x2.5				0.3
15 Lighting	10	3x2.5				0.3
16 Socket Outlet	16	3x2.5				0.8
17 Socket Outlet	16	3x2.5				0.6
18 Socket Outlet	16	3x2.5				0.6
19 Socket Outlet	16	3x2.5				0.8
Reserve						
Reserve						
P(KW)			2.4	2.4	2.5	7.3
Ptot = 7.3 KW			df = 0.7			Pmax = 5.1 KW

No	Revisions	Date	Signature
Project name: PLAN EXHIBITIONS			
Client: RISING DJIBOUTI			
			
Title: ELECTRICAL INSTALLATION - Power Outlet Plan			
Location, Title deed no		Scale: 1:100 1:30	
Designed by:		Date: Nov.2021	
Drawn by:		EL-02 /6	



FLOOR PLAN ELECTRICAL INSTALLATION AIR CONDITIONING LAYOUT SC 1:100



EXHIBITION FLOOR PLAN ELECTRICAL INSTALLATION AIR CONDITIONING LAYOUT SC 1:100

LIGHTING LAYERS 1:50 Sc	
	1 60x60cm Square LED Panel, 56w
	2 Tube Light, 120cm, 28w
	3 Ceiling Light
	4 Water proof Light for Bath room
	5 Wall mounted light for Bath room
	6 Ceiling Mounted Spot light
	7 Wall mount Light
	8 Decorative Pendant Light
	9 Industrial Pendant Light
	10 Spot/ Projector Light
	11 Emergency Lighting, 10w with Built-in Battery, 30watt-hr.

SWITCH LAYERS 1:50 Sc	
	1 Double switch
	2 Single switch
	3 Dimmer switch
	4 Two way switch
	5 Intermidate switch
	6 Card Switch
	7 Switch box

SOCKET LAYERS 1:50 Sc	
	1 Socket
	2 Double Socket
	3 Water Heater
	4 Jaccuzine
	5 Stove
	6 Heavy duty

WIRE LAYERS 1:50 Sc	
	1 Lighting wire with sercuit
	2 Socket wire with sercuit
	3 Tele Line
	4 Tv Line
	5 Intercom Line
	6 Data Line
	7 Fire Alarm Line
	8 Camera Line
	9 Cable Tray for Data 20x10cm
	10 Cable Tray for Power 20x10cm

Fire Alarm & SIGNALS FITTING LAYERS 1:50 Sc	
	1 Tele Fitting
	2 TV Fitting
	3 Intercom Fitting
	4 Data Fitting
	5 Tele Duct
	6 Tv Duct
	7 Intercom Duct
	8 Fire button Fitting
	9 Fire Alarm Fitting
	10 Fire Detector Fitting
	11 Camera Fitting
	12 Number display
	13 Keypad
	14 Distribution board
	15 Manholes
	16 Raisers
	17 Ventilations

- Smoke detector
- Manual break glass
- Control module
- Sounder/strobe light
- FIRE ALARM CONTROL PANAL
- 1003-MAN GOING RIGHT
- 1004-MAN GOING LEFT
- 1005-MAN GOING DOWN

SDB-AC: SUB DISTRIBUTION BOARD for Air Conditioning (AC)

	DESCRIPTION	I(A)	A(mm2)	R	S	T	P(kw)
1	AC Reception 24,000BTU	16	3x4.0	●			3.0
2	AC Welding 18,000BTU	16	3x4.0		●		2.5
3	AC Abrasives 18,000BTU	16	3x4.0			●	2.5
4	AC Metal Shop 24,000BTU	16	3x4.0	●			3.0
5	AC Finishing 18,000BTU	16	3x4.0		●		2.5
6	AC Machine Shop 24,000BTU	16	3x4.0			●	3.0
7	AC Wood Shop 24,000BTU	16	3x4.0	●			3.0
8	AC Textile 18,000BTU	16	3x4.0		●		2.5
9	AC 3D Printing 18,000BTU	16	3x4.0			●	2.5
10	AC Laser Lab 24,000BTU	16	3x4.0	●			3.0
11	AC Employee Workroom 18,000BTU	16	3x4.0		●		2.5
12	AC Staff Offices 18,000BTU	16	3x4.0			●	2.5
13	AC Collaboration Lounge 24,000BTU	16	3x4.0	●			3.0
14	AC Exhibition Hall - Provision	3x16	5x4.0	●	●	●	6.0
	Reserve						
Ptot = 40.5 KW				P(KW)	13.5	13.5	13.5
df = 0.6				Pmax = 24.3 KW			

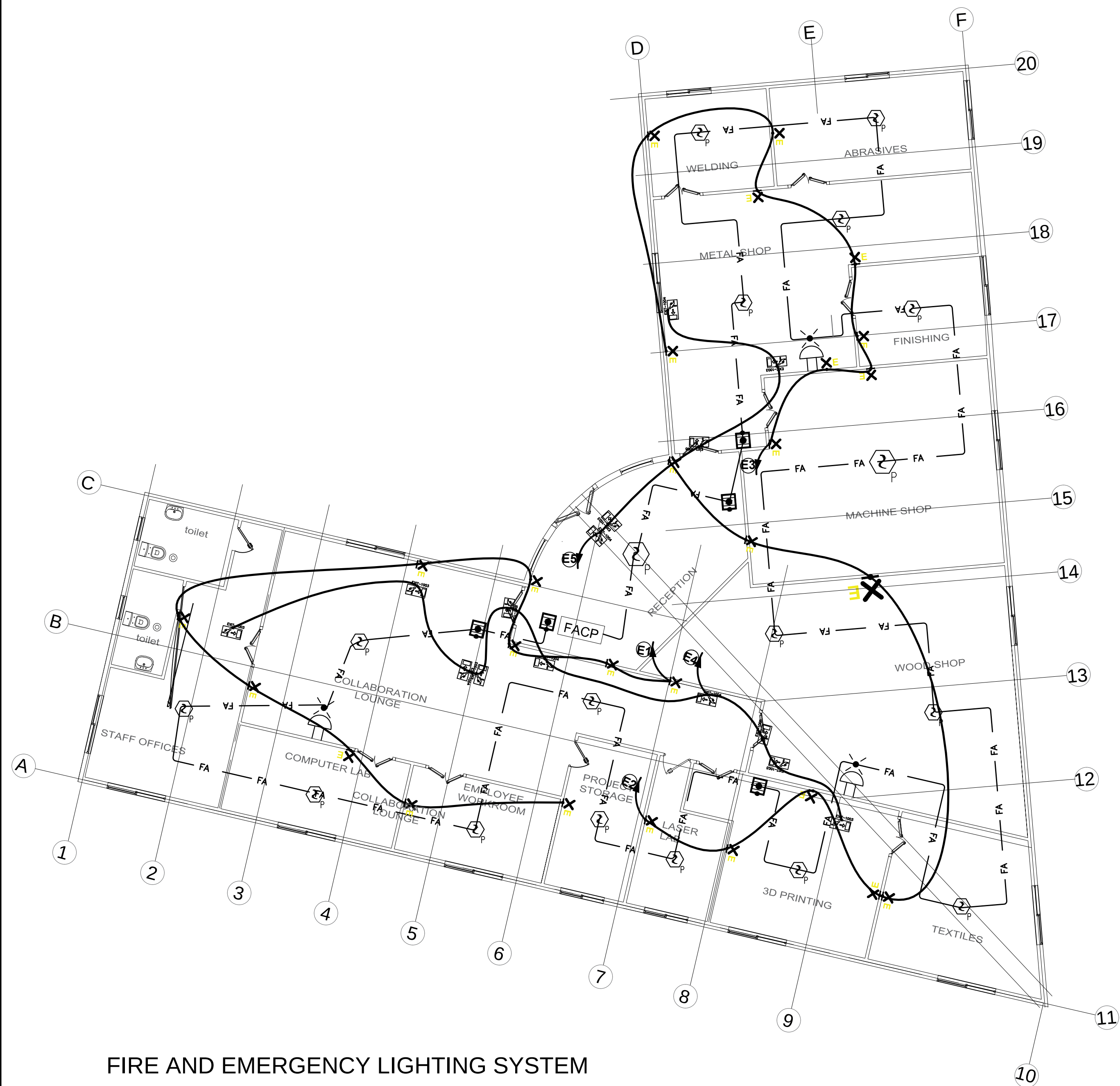
LEGEND

AIR CONDITIONING

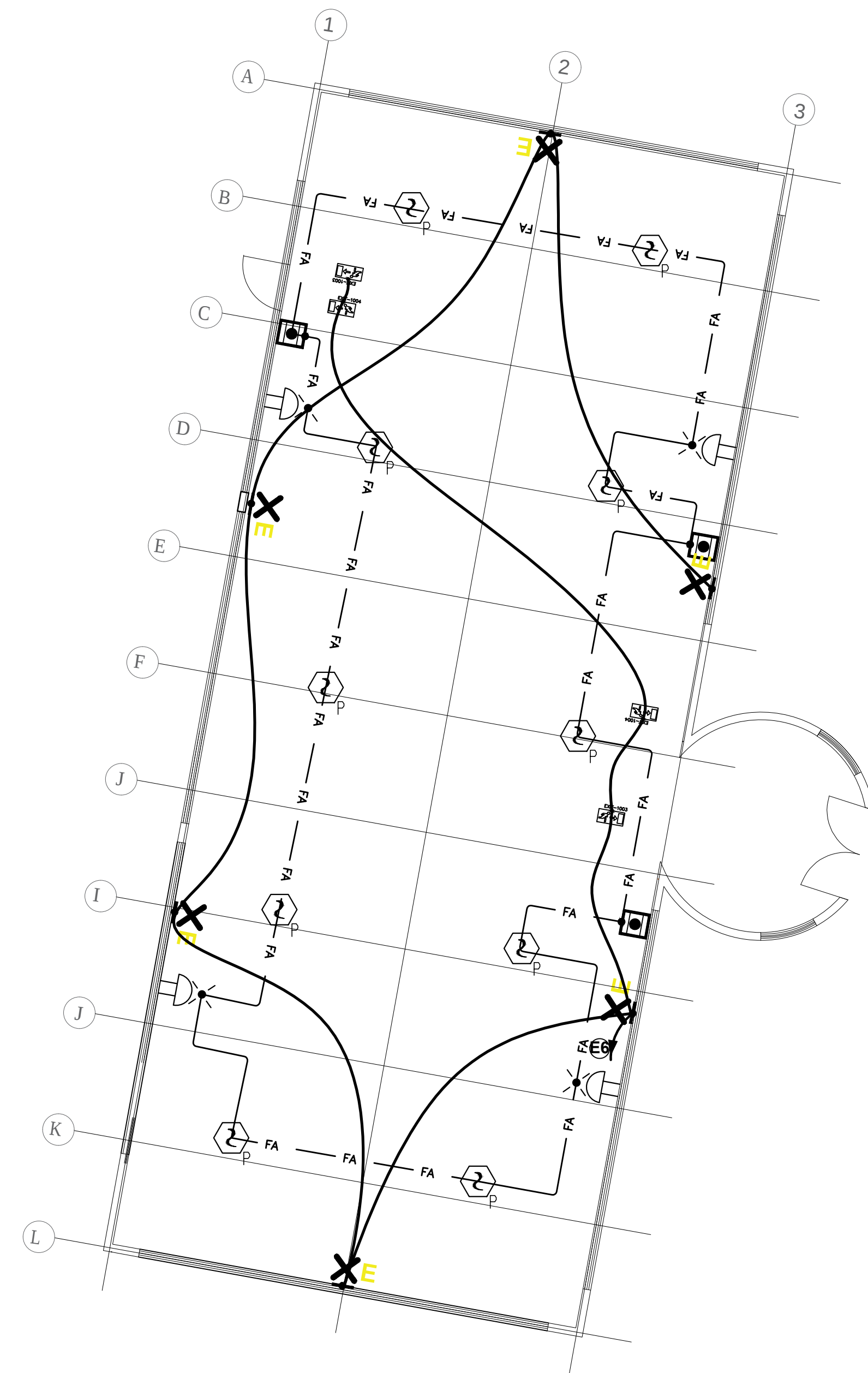
- Indoor Unit
- Outdoor Unit
- Refrigeration connection
- POWER OUTLET 2P+E 32A-250V

RECEPTION	Air conditioner split unit 24 000 btu
WELDING	Air conditioner split unit 18 000 btu
ABRASIVES	Air conditioner split unit 18 000 btu
METAL SHOP	Air conditioner split unit 24 000 btu
FINISHING	Air conditioner split unit 18 000 btu
MACHINE SHOP	Air conditioner split unit 24 000 btu
WOODSHOP	Air conditioner split unit 24 000 btu
TEXTILES	Air conditioner split unit 18 000 btu
3D PRINTING	Air conditioner split unit 18 000 btu
LASER LAB	Air conditioner split unit 24 000 btu
EMPLOYEE WORKROOM	Air conditioner split unit 18 000 btu
STAFF OFFICES	Air conditioner split unit 18 000 btu
COLLABORATION LOUNGE	Air conditioner split unit 24 000 btu

No	Revisions	Date	Signature
Project name: PLAN EXHIBITIONS			
Client: RISING DJIBOUTI			
Title: ELECTRICAL INSTALLATION - Power Outlet Plan for Air Conditioning			
Location, Title deed no		Scale: 1:100 1:30	
Designed by:		Date: Nov.2021	
Drawn by:		EL-03 /6	



FIRE AND EMERGENCY LIGHTING SYSTEM



EXHIBITION FLOOR PLAN ELECTRICAL
INSTALLATION FIRE FITTING LAYOUT SC 1:100

LIGHTING LAYERS 1:50 Sc

- 1 60x60cm Square LED Panel, 56w
- 2 Tube Light, 120cm, 28w
- 3 Ceiling Light
- 4 Water proof Light for Bath room
- 5 Wall mounted light for Bath room
- 6 Ceiling Mounted Spot light
- 7 Wall mount Light
- 8 Decorative Pendant Light
- 9 Industrial Pendant Light
- 10 Spot/ Projector Light
- 11 Emergency Lighting, 10w with Built-in Battery, 30watt-hr.

SWITCH LAYERS 1:50 Sc

- 1 Double switch
- 2 Single switch
- 3 Dimmer switch
- 4 Two way switch
- 5 Intermediate switch
- 6 Card Switch
- 7 Switch box

SOCKET LAYERS 1:50 Sc

- 1 Socket
- 2 Double Socket
- 3 Water Heater
- 4 Jacuzzi
- 5 Stove
- 6 Heavy duty

WIRE LAYERS 1:50 Sc

- 1 Lighting wire with sercuit
- 2 Socket wire with sercuit
- 3 Tele Line
- 4 Tv Line
- 5 Intercom Line
- 6 Data Line
- 7 Fire Alarm Line
- 8 Camera Line
- 9 Cable Tray for Data 20x10cm
- 10 Cable Tray for Power 20x10cm

Fire Alarm & SIGNALS FITTING LAYERS 1:50 Sc

- 1 Tele Fitting
- 2 TV Fitting
- 3 Intercom Fitting
- 4 Data Fitting
- 5 Tele Duct
- 6 Tv Duct
- 7 Intercom Duct
- 8 Fire button Fitting
- 9 Fire Alarm Fitting
- 10 Fire Detector Fitting
- 11 Camera Fitting
- 12 Number display
- 13 Keypad
- 14 Distribution board
- 15 Manholes
- 16 Raisers
- 17 Ventilations

SDB-E: SUB DISTRIBUTION BOARD for FIRE & EMERGENCY SYSTEM

(5x6.0)sq mm

Power from MDB

3x25A

	DESCRIPTION	I(A)	A(mm2)	R	S	T	P(kw)
E1	Lighting	10	3x1.5			●	0.4
E2	Lighting	10	3x1.5			●	0.3
E3	Lighting	10	3x1.5			●	0.3
E4	Lighting	10	3x1.5	●			0.3
E5	Lighting	10	3x1.5			●	0.3
E6	Lighting - Exhibition	10	3x2.5			●	0.3
E7	Provision for ICT Equip	16	3x4.0	●			1.5
E8	Fire Alarm System	16	3x2.5		●		1.0
	Reserve						
	Reserve						
	P(KW)			1.8	1.0	1.6	4.4

Ptot = 4.4 KW

df = 1.0

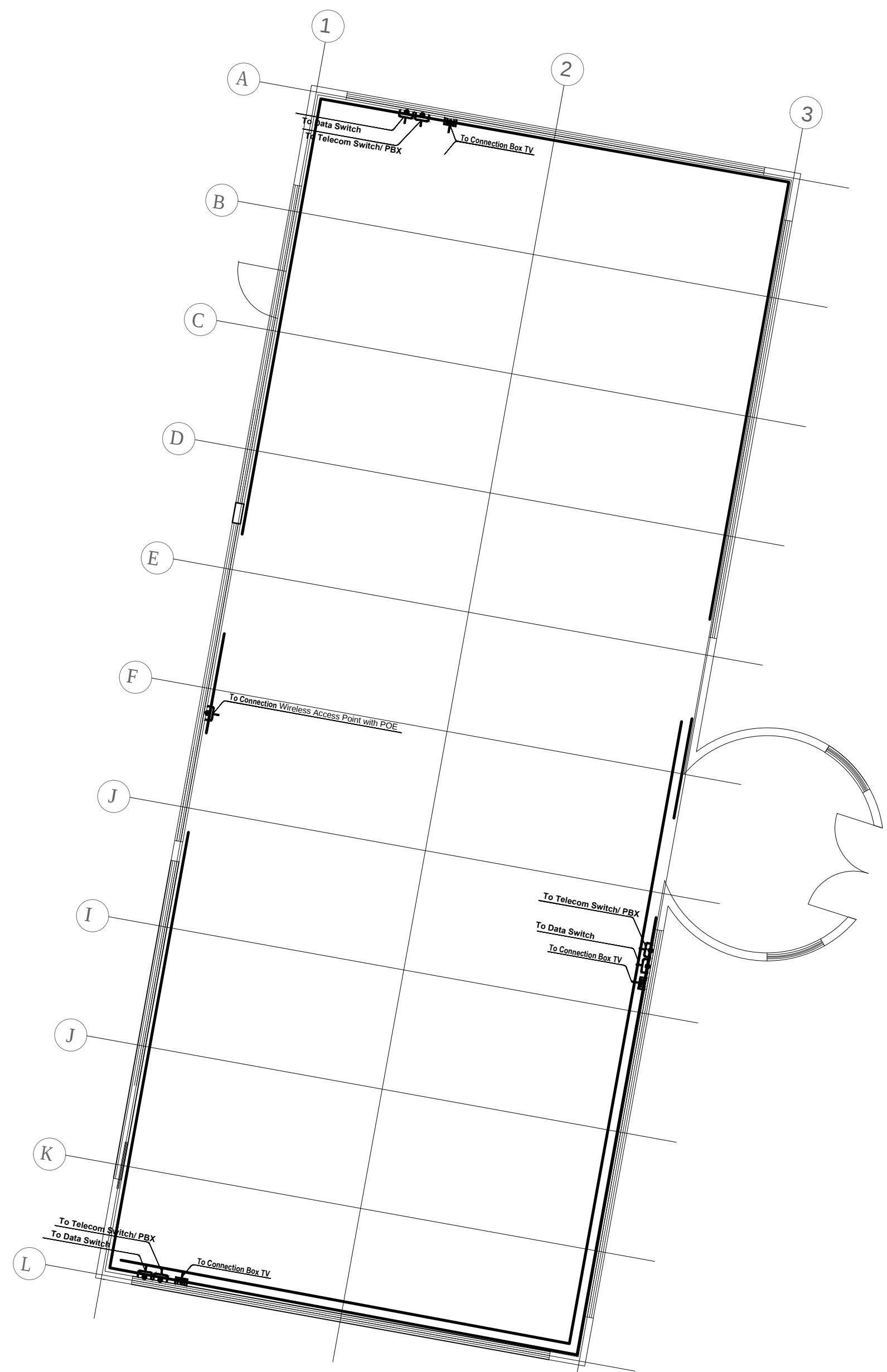
Pmax = 4.4 KW

- 2 Smoke detector
- Manual break glass
- CM Control module
- Sounder/strobe light
- FACP FIRE ALARM CONTROL PANAL
- 1003-MAN GOING RIGHT
- 1004-MAN GOING LEFT
- 1005-MAN GOING DOWN

No	Revisions	Date	Signature
Project name: PLAN EXHIBITIONS			
Client: RISING DJIBOUTI			
Title: ELECTRICAL INSTALLATION- Fire Alarm & Emergency Lighting			
Location, Title deed no		Scale: 1:100 1:30	
Designed by:		Date: Nov.2021	
Drawn by:		EL-04 /6	



FLOOR PLAN ELECTRICAL INSTALLATION TEL/DATA LAYOUT SC 1:50



EXHIBITION FLOOR PLAN ELECTRICAL INSTALLATION TEL/DATA LAYOUT SC 1:50

LIGHTING LAYERS 1:50 Sc	
1	60x60cm Square LED Panel, 56w
2	Tube Light, 120cm, 28w
3	Ceiling Light
4	Water proof Light for Bath room
5	Wall mounted light for Bath room
6	Ceiling Mounted Spot light
7	Wall mount Light
8	Decorative Pendant Light
9	Industrial Pendant Light
10	Spot/ Projector Light
11	Emergency Lighting, 10w with Built-in Battery, 30watt-hr.

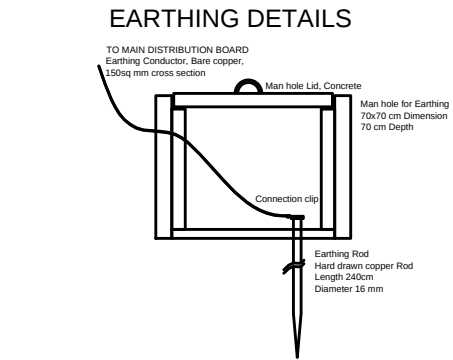
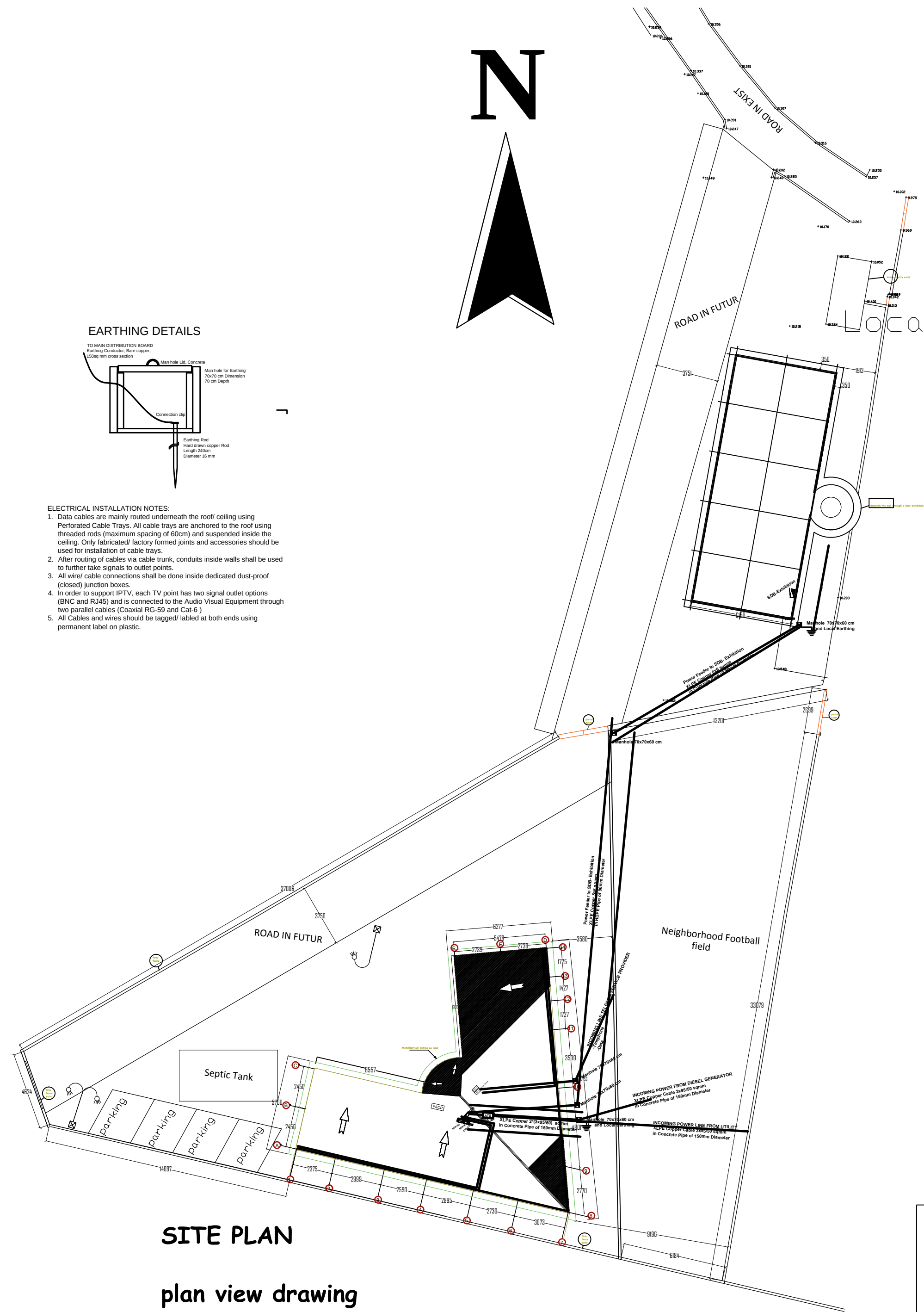
SWITCH LAYERS 1:50 Sc	
1	Double switch
2	Single switch
3	Dimmer switch
4	Two way switch
5	Intermidate switch
6	Card Switch
7	Switch box

SOCKET LAYERS 1:50 Sc	
1	Socket
2	Double Socket
3	Water Heater
4	Jaccuzine
5	Stove
6	Heavy duty

WIRE LAYERS 1:50 Sc	
1	Lighting wire with sercuit
2	Socket wire with sercuit
3	Tele Line
4	Tv Line
5	Intercom Line
6	Data Line
7	Fire Alarm Line
8	Camera Line
9	Cable Tray for Data 20x10cm
10	Cable Tray for Power 20x10cm

Fire Alarm & SIGNALS FITTING LAYERS 1:50 Sc	
1	Tele Fitting
2	TV Fitting
3	Intercom Fitting
4	Data Fitting
5	Tele Duct
6	Tv Duct
7	Intercom Duct
8	Fire button Fitting
9	Fire Alarm Fitting
10	Fire Detector Fitting
11	Camera Fitting
12	Number display
13	Keypad
14	Distribution board
15	Manholes
16	Raisers
17	Ventilations

No	Revisions	Date	Signature
Project name: PLAN EXHIBITIONS			
Client: RISING DJIBOUTI			
			
Title: ELECTRICAL INSTALLATION - ICT Plan for Telephone, Data & CCTV			
Location, Title deed no		Scale: 1:100 1:30	
Designed by:		Date: Nov.2021	
Drawn by:		EL-05	
		/6	



- ELECTRICAL INSTALLATION NOTES:**
1. Data cables are mainly routed underneath the roof ceiling using Perforated Cable Trays. All cable trays are anchored to the roof using threaded rods (maximum spacing of 600mm) and suspended inside the ceiling. Only fabricated factory formed joints and accessories should be used for installation of cable trays.
 2. After routing of cables via cable trunk, conduits inside walls shall be used to further take signals to outlet points.
 3. All wire/cable connections shall be done inside dedicated dust-proof (closed) junction boxes.
 4. In order to support IPTV, each TV point has two signal outlet options (BNC and RJ45) and is connected to the Audio Visual Equipment through two parallel cables (Coaxial RG-59 and Cat-6).
 5. All Cables and wires should be tagged/labelled at both ends using permanent label on plastic.

MDB: MAIN DISTRIBUTION BOARD on FLOOR

If Solar PV System is implemented for this section of installation, Remove this Busbar Tie

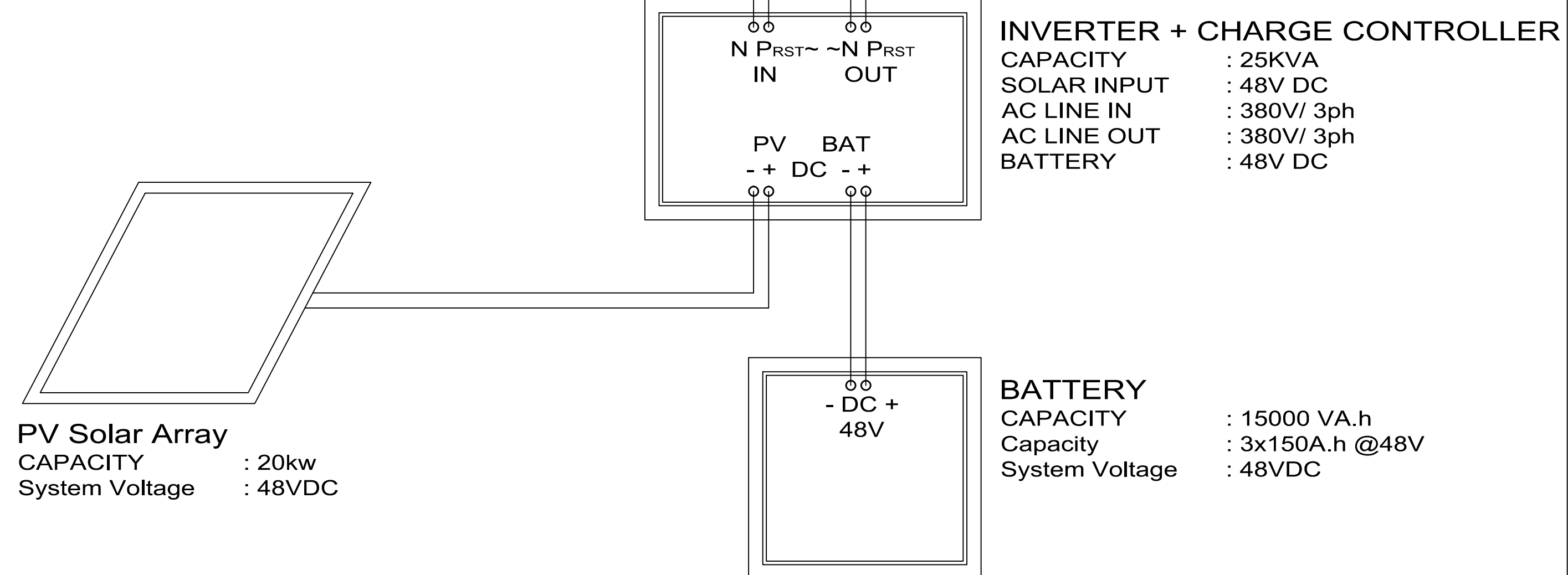
(3x95/50)sq mm
Power from Electric Utility 3x160A

(1x50)sq mm
Earthing Cable

	DESCRIPTION	I(A)	A(mm2)	R	S	T	P(kw)
1	Lighting	10	2x2.5	●			0.3
2	Lighting	10	2x2.5		●		0.5
3	Lighting	10	2x2.5			●	0.4
4	Lighting	10	2x2.5	●			0.4
5	Lighting	10	2x2.5		●		0.4
6	Lighting	10	2x2.5			●	0.4
7	Lighting	10	2x2.5	●			0.4
8	Lighting	10	2x2.5		●		0.4
9	Lighting	10	2x2.5			●	0.4
10	Lighting	10	2x2.5	●			0.4
11	Lighting	10	2x2.5		●		0.5
12	Lighting	10	2x2.5			●	0.5
13	Socket Outlet	16	3x2.5	●			1.2
14	Socket Outlet	16	3x2.5		●		1.2
15	Socket Outlet	16	3x2.5			●	1.2
16	Socket Outlet	16	3x2.5	●			1.2
17	Socket Outlet	16	3x2.5		●		1.2
18	Socket Outlet	16	3x2.5			●	1.2
19	Socket Outlet	16	3x2.5	●			1.2
20	Socket Outlet	16	3x2.5		●		1.2
21	Socket Outlet	16	3x2.5			●	1.2
F1	Feeder to SDB-Emergency	3x25	5x6.0	1.8	1.0	1.6	4.4
				6.9	6.4	6.9	20.2

22	Socket Outlet	16	3x2.5	●			1.2
23	Socket Outlet	16	3x2.5		●		1.2
24	Socket Outlet	16	3x2.5			●	1.2
25	Socket Outlet	16	3x2.5			●	1.2
26	Socket Outlet	16	3x2.5		●		1.2
F1	Feeder to SDB-Exhibition	3x25	5x6.0	2.4	2.4	2.5	7.3
F1	Feeder to SDB-Machines	3x50	5x10	8.0	8.0	7.5	23.5
F1	Feeder to SDB-AC	3x63	5x16	13.5	13.5	13.5	40.5
Reserve							
P(KW)				35.3	35.7	35.9	109.8

Ptot = 109.8 KW df = 0.6 Pmax = 65.9 KW



PROVISION FOR SOLAR PV SYSTEM ATTACHMENT

No	Revisions	Date	Signature
Project name: PLAN EXHIBITIONS			
Client: RISING DJIBOUTI			
Title: ELECTRICAL SITE PLAN			
Location, Title deed no		Scale: 1:100 1:30	Date: Nov.2021
Designed by:		EL-06	
Drawn by:		/6	