

Electrical Abbreviations & Symbol Legend

Abbreviations

A	AMPERE
AC	ALTERNATING CURRENT, AIR CONDITIONING UNIT
AHJ	AUTHORITY HAVING JURISDICTION
AIC	AVAILABLE INTERRUPTING CAPACITY
AF	AMPERE FRAME / AMPERE FUSED
AFC	ABOVE FINISHED CEILING
AFB	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
ARMS	ARC FLASH REDUCTION MAINTENANCE SYSTEM
AT	AMPERE TRIP
AV	AUDIO / VIDEO
AWG	AMERICAN WIRE GAUGE
BAS	BUILDING AUTOMATION SYSTEM
BFG	BELOW FINISHED GRADE
BLDG	BUILDING
C	CONDUIT
CAT	CATEGORY
CB	CIRCUIT BREAKER
CFCI	CONTRACTOR FURNISHED, CONTRACTOR INSTALLED
CFOI	CONTRACTOR FURNISHED, OWNER INSTALLED
CKT	CIRCUIT
CPT	CONTROL POWER TRANSFORMER
CR	CONTROL RELAY
CU	COPPER
dB	DECIBEL
DC	DIRECT CURRENT
DM	DIMENSION
DIV	DIVISION
DTL	DETAIL
DWG	DRAWING
EL	ELEVATION
EMT	ELECTRICAL METALLIC TUBING
EOLR	END OF LINE RESISTOR
FACP	FIRE ALARM CONTROL PANEL
FF	FINISH FLOOR
FLA	FULL LOAD AMPERES
FT	FOOT, FEET
FBO	FURNISHED BY OTHERS
G, GND	GROUND
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
HH	HAND HOLE
HP	HORSEPOWER
ID	IDENTIFICATION
IDC	INITIATING DEVICE CIRCUIT
IDF	INTERMEDIATE DISTRIBUTION FRAME
IEEE	INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS
IG	ISOLATED GROUND
IT	INFORMATION TECHNOLOGY
JB	JUNCTION BOX
KAIC	THOUSAND AMPS INTERRUPTING CURRENT
KCMIL	THOUSAND CIRCULAR MILS
KVA	KILOVOLT-AMPERE
KW	KILOWATT
LAN	LOCAL AREA NETWORK
LED	LIGHT EMITTING DIODE
LS	LIMIT SWITCH
LSI	ELECTRONIC TRIP UNIT ADJUSTABLE LONG TIME DELAY, SHORT TIME DELAY, INSTANTANEOUS TRIP
LSIG	ELECTRONIC TRIP UNIT WITH ADJUSTABLE LONG TIME DELAY, SHORT TIME DELAY, INSTANTANEOUS TRIP, AND GROUND FAULT LOW VOLTAGE
LV	LOW VOLTAGE
MCA	MINIMUM CIRCUIT AMPACITY
MCC	MOTOR CONTROL CENTER
MCP	MOTOR CIRCUIT PROTECTOR
MDF	MAIN DISTRIBUTION FRAME
MHz	MEGAHERTZ
MISC	MISCELLANEOUS
MLO	MAIN LUGS ONLY
MCCP	MAXIMUM OVERCURRENT PROTECTION
N	NEUTRAL
NAC	NOTIFICATION APPLIANCE CIRCUIT
N/A	NOT APPLICABLE
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NL	NIGHT LIGHT
NO	NORMALLY OPEN
NTS	NOT TO SCALE
OC	ON CENTER
OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED
OFOI	OWNER FRNISHED, OWNER INSTALLED
Ø	PHASE
PB	PULL BOX, PANIC BUTTON, PUSH BUTTON
PE	PHOTO EYE
PNL	PANEL
POE	POWER OVER ETHERNET
PTZ	PAN, TILT, ZOOM
RF	RADIO FREQUENCY
RFI	REQUEST FOR INFORMATION
SPD	SURE PROTECTION DEVICE
STD	STANDARD
SW	SWITCH
T/M	THERMAL MAGNETIC CIRCUIT BREAKER
TBD	TO BE DETERMINED
TV	TELEVISION/MONITOR OUTLET
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
TYP	TYPICAL
UH	UNIT HEATER
UG	UNDERGROUND
UL	UNDERWRITERS LABORATORIES
UPS	UNINTERRPTIBLE POWER SUPPLY
UON	UNLESS OTHERWISE NOTED
USB	UNIVERSAL SERIAL BUS
V	VOLTS, VOLTAGE
VA	VOLT-AMP
VFD	VARIABLE REQUENCY DRIVE
W	WATT, WIRE
WAN	WIDE AREA NETWORK
WAP	WIRELESS ACCESS POINT
Wi-Fi	WIRELESS FIDELITY
W/O	WITHOUT
XFMR	TRANSFORMER
Y	WYE
1P	ONE POLE
2P	TWO POLE
3P	THREE POLE
4P	FOUR POLE

General Electrical Notes

1. ALL LIGHTING BRANCH CIRCUITS SHALL BE 2#10, 1#10G IN 3/4" CONDUIT, UON.
2. ALL 20-AMP RECEPTACLE AND HARDWIRED BRANCH CIRCUITS SHALL BE 2#12, 1#12G IN 3/4" CONDUIT, UON.
3. ALL EXIT SIGNS SHALL BE WIRED TO THE LOCAL LIGHTING BRANCH CIRCUIT AHEAD OF ALL SWITCHINGS, UON.
4. PROVIDE 0-10V DIMMING CONDUCTORS TO ALL LUMINAIRES WHICH ARE CONTROLLED BY 0-10V DIMMERS SHOWN ON THE DRAWINGS.

Drawing Symbol Variables

3	THREE WAY SWITCH.
4	FOUR WAY SWITCH.
#J	QUANTITY OF JACKS AND HORIZONTAL CABLES. J = CAT6, JA = CAT6A, JE = CATSE
+XX	MOUNTING UNITS EXPRESSED IN INCHES TO CENTERLINE ABOVE FINISHED FLOOR OR GRADE.
C	COUNT
CL	CLOCK
CFI	CONTRACTOR FURNISHED, OWNER INSTALLED
DR	DUAL RELAY
E	RED EMERGENCY SWITCH.
EL	ELEVATOR RECALL
ETR	EXISTING DEVICE SHALL REMAIN.
G	GLASS BREAK SENSOR.
K	KEYED SWITCH.
LF	LOW FREQUENCY.
LV	LOW VOLTAGE SWITCH.
M	MOTOR RATED TOGGLE SWITCH.
NEX	REPLACE EXISTING WIRING DEVICE AND FACEPLATE WITH NEW. BACK BOX AND CONDUIT SHALL REMAIN.
O	INTEGRAL OCCUPANCY SENSOR.
P	ADA PHONE. VERIFY HEIGHT WITH ARCHITECT / OWNER.
REX	REMOVE EXISTING DEVICE / EQUIPMENT.
TK	MOUNTED IN TOE KICK OF CASEWORK.
TV	MOUNTED ADJACENT TO TV AT 60" AFF. UON.
V	VANDAL RESISTANT.
WG	WIREGUARD.
WP	WEATHERPROOF.

Annotation

(N)	INDICATES NEW EQUIPMENT.
(E)	INDICATES EXISTING EQUIPMENT TO REMAIN.
(D)	INDICATES EXISTING EQUIPMENT TO BE DEMOLISHED.
(RR)(RD)	INDICATES EXISTING EQUIPMENT OR DEVICE TO BE REMOVED AND REINSTALLED.
ⓧ	CONDUIT & CONDUCTOR CALLOUT. REFER TO CONDUIT & CONDUCTOR SCHEDULE.
ⓧ	KEYED NOTE CALLOUT. REFER TO CORRESPONDING SHEET KEYNOTES.
ⓧ	KEYED NOTE CALLOUT. REFER TO CORRESPONDING SHEET KEYNOTES.
ⓧ	KEYED NOTE CALLOUT. REFER TO CORRESPONDING SHEET KEYNOTES.
ⓧ	MECHANICAL EQUIPMENT CALLOUT. REFER TO MECHANICAL EQUIPMENT CONNECTION SCHEDULE.
ⓧ	DETAIL CALLOUT. REFER TO DETAIL AND SHEET AS INDICATED ON CALLOUT.
ⓧ	FIXTURE MOUNTING CALLOUT. HEIGHT ABOVE FINISHED FLOOR (A.F.F.)
ⓧ	EQUIPMENT CALLOUT. REFER TO NEMA CONNECTION SCHEDULE.
ⓧ	SECTION CALLOUT. REFER TO DETAIL AND SHEET AS INDICATED ON CALLOUT.
ⓧ	ELEVATION CALLOUT. REFER TO DETAIL AND SHEET AS INDICATED ON CALLOUT.

Fire Alarm

ⓧ	15	FIRE ALARM AUDIO/VISUAL - WALL MOUNTED. CANDELA RATING AS SHOWN ON DRAWING.
ⓧ	15	FIRE ALARM VISUAL - WALL MOUNTED. CANDELA RATING AS SHOWN ON DRAWING.
ⓧ	15	FIRE ALARM AUDIO/VISUAL - CEILING MOUNTED. CANDELA RATING AS SHOWN ON DRAWING.
ⓧ	15	FIRE ALARM VISUAL - CEILING MOUNTED. CANDELA RATING AS SHOWN ON DRAWING.
PB	○	FIRE ALARM BELL.
Ⓢ		FIRE ALARM SMOKE DETECTOR - CEILING MOUNTED.
Ⓢ		FIRE ALARM SMOKE DETECTOR - WALL MOUNTED.
Ⓢ		FIRE ALARM HEAT DETECTOR - CEILING MOUNTED.
Ⓢ		FIRE ALARM HEAT DETECTOR - WALL MOUNTED.
Ⓢ		FIRE ALARM DUCT SMOKE DETECTOR.
Ⓢ		FIRE ALARM DUCT SMOKE DETECTOR WITH REMOTE TEST STATION.
Ⓢ	➤	FIRE ALARM BEAM SMOKE DETECTOR - WALL MOUNTED.
F		FIRE ALARM MANUAL PULL STATION - WALL MOUNTED.
TS		FIRE ALARM MANUAL TAMPER SWITCH.
TS		FIRE ALARM MANUAL FLOW SWITCH.
PS		FIRE ALARM MANUAL PRESSURE SWITCH.
MM		FIRE ALARM MONITOR MODULE.
RI		FIRE ALARM RELAY INPUT.
RO		FIRE ALARM RELAY OUTPUT.
PV		FIRE ALARM POST INDICATOR VALVE.
SA		FIRE ALARM SURGE ARRESTOR.
IM		FIRE ALARM ISOLATION MODULE.
FAA		FIRE ALARM ANNUNCIATOR.
△		FIRE ALARM MAGNETIC DOOR HOLD.

Lighting

□ □	TROFFER LUMINAIRE, SURFACE, RECESS, OR PENDANT MOUNTED AS INDICATED ON THE DRAWINGS.
○ ○ ○	DOWNLIGHT LUMINAIRE, SURFACE, RECESS, OR PENDANT MOUNTED AS INDICATED ON THE DRAWINGS.
ⓧ	UNDERCABINET LUMINAIRE.
ⓧ	EMERGENCY BATTERY PACK LUMINAIRE, WALL OR CEILING MOUNTED.
ⓧ	LINEAR PENDANT MOUNTED LUMINAIRE.
ⓧ	LINEAR WALL MOUNTED LUMINAIRE.
ⓧ	BOLLARD LUMINAIRE.
ⓧ	SITE LUMINAIRE POLE MOUNTED. NUMBER OF HEADS AS SHOWN.
ⓧ	TRACK LUMINAIRE.
ⓧ	SPOT LUMINAIRE.
ⓧ	WALL MOUNTED LUMINAIRE.
ⓧ	RING PENDANT LUMINAIRE.
ⓧ	WALL WASH LUMINAIRE POINTED IN DIRECTION AS SHOWN.
ⓧ	EXIT SIGN, WALL OR CEILING MOUNTED, SINGLE FACE WITH DIRECTIONAL CHEVRONS AS INDICATED ON DRAWINGS.
ⓧ	EXIT SIGN, WALL OR CEILING MOUNTED, DOUBLE FACE WITH DIRECTIONAL CHEVRONS AS INDICATED ON DRAWINGS.
ⓧ	HALF HATCHED LUMINAIRE TO BE WIRED TO EMERGENCY CIRCUIT.
ⓧ	FULL HATCHED LUMINAIRE TO BE WIRED TO NIGHTLIGHT CIRCUIT.

Switches

ⓧ	SINGLE POLE SWITCH - MOUNTED AT 42" AFF. UON.
ⓧ	LOW VOLTAGE 0-10 VOLT DIMMING SWITCH - MOUNTED AT 42" AFF. UON.
ⓧ	OCCUPANCY SENSOR - CEILING OR WALL MOUNTED.
ⓧ	OCCUPANCY SENSOR POWER PACK.
ⓧ	PHOTOCELL - CEILING OR WALL MOUNTED.
ⓧ	ADA DOOR PUSHPLATE.
ⓧ	EMERGENCY STOP SWITCH, MUSHROOM HEAD.
ⓧ	PUSHBUTTON, SINGLE OR DOUBLE.

Low Voltage

ⓧ	ETHERNET OUTLET MOUNTED AT 18" AFF. UON.
ⓧ	COAXIAL OUTLET MOUNTED AT 18" AFF. UON.
ⓧ	PHONE OUTLET MOUNTED AT 18" AFF. UON.
ⓧ	LOW VOLTAGE OUTLET CEILING MOUNTED.
ⓧ	WIRELESS ACCESS POINT CEILING MOUNTED.
ⓧ	WIRELESS ACCESS POINT WALL MOUNTED.
ⓧ	DIGITAL CLOCK.
ⓧ	FLOORBOX DATA.
ⓧ	POKETHRU DATA.
ⓧ	IT RACK.
ⓧ	VERTICAL WIRE MANAGEMENT.

Audio/Visual

ⓧ	AV OUTLET - WALL MOUNTED AT 18" AFF. UON. SEE AUDIO VISUAL DETAILS FOR CONFIGURATIONS.
ⓧ	AUDIO VIDEO OUTLET - CEILING MOUNTED.
ⓧ	AUDIO SPEAKER - WALL MOUNTED AT 96" AFF. UON.
ⓧ	AUDIO SPEAKER - CEILING MOUNTED.
ⓧ	PAGING SPEAKER - WALL MOUNTED AT 96" AFF. UON.
ⓧ	PAGING SPEAKER - CEILING MOUNTED.
ⓧ	PAGING HORN - WALL MOUNTED AT 96" AFF. UON.
ⓧ	INTERCOM SPEAKER - WALL MOUNTED AT 96" AFF. UON.
ⓧ	INTERCOM SPEAKER - CEILING MOUNTED.
ⓧ	INTERCOM CALL BUTTON - MOUNTED AT 42", UON.
ⓧ	ADMINISTRATION CONSOLE. PROVIDE ONE (1) CAT6 CABLE.
ⓧ	AV PROJECTOR - CEILING MOUNTED.
ⓧ	AUDIO ENHANCEMENT DEVICE.

Access Control & Security

ⓧ	ACCESS CONTROL - DOOR CONTACT. PROVIDE 3/4" CONDUIT FROM DOOR FRAME TO ACCESSIBLE CEILING OR SECURITY JUNCTION BOX AS SHOWN ON THE DRAWINGS.
ⓧ	ACCESS CONTROL - CARD READER. PROVIDE 3/4" CONDUIT FROM DOOR FRAME TO ACCESSIBLE CEILING OR SECURITY JUNCTION BOX AS SHOWN ON THE DRAWINGS.
ⓧ	ACCESS CONTROL - ELECTRIC STRIKE. PROVIDE 3/4" CONDUIT FROM DOOR FRAME TO ACCESSIBLE CEILING OR SECURITY JUNCTION BOX AS SHOWN ON THE DRAWINGS.
ⓧ	ACCESS CONTROL - KEY PAD. PROVIDE 3/4" CONDUIT FROM DOOR FRAME TO ACCESSIBLE CEILING OR SECURITY JUNCTION BOX AS SHOWN ON THE DRAWINGS.
ⓧ	ACCESS CONTROL - MAGNETIC LOCK. PROVIDE 3/4" CONDUIT FROM DOOR FRAME TO ACCESSIBLE CEILING OR SECURITY JUNCTION BOX AS SHOWN ON THE DRAWINGS.
ⓧ	ACCESS CONTROL - REQUEST TO EXIT. PROVIDE 3/4" CONDUIT FROM DOOR FRAME TO ACCESSIBLE CEILING OR SECURITY JUNCTION BOX AS SHOWN ON THE DRAWINGS.
ⓧ	ACCESS CONTROL - ELECTRIFIED PANIC BAR. PROVIDE 3/4" CONDUIT FROM DOOR FRAME TO ACCESSIBLE CEILING OR SECURITY JUNCTION BOX AS SHOWN ON THE DRAWINGS.
ⓧ	ACCESS CONTROL - SECURITY JUNCTION BOX. SIZED AS RECOMMENDED BY SECURITY SYSTEM MANUFACTURER.
ⓧ	ACCESS CONTROL - CAMERA / INTERCOM.
ⓧ	ACCESS CONTROL - PANIC BUTTON.
ⓧ	SECURITY CAMERA - CEILING MOUNTED.
ⓧ	SECURITY CAMERA - WALL MOUNTED.
ⓧ	INTRUSION SENSOR - CEILING MOUNTED.
ⓧ	INTRUSION SENSOR - WALL MOUNTED.
ⓧ	INTRUSION KEYPAD.

Power Distribution

ⓧ	DUPLEX RECEPTACLE, MOUNTED AT 18" AFF. UON.
ⓧ	SIMPLEX RECEPTACLE, MOUNTED AT 18" AFF. UON.
ⓧ	QUADPLEX RECEPTACLE, MOUNTED AT 18" AFF. UON.
ⓧ	GFCI DUPLEX RECEPTACLE, MOUNTED AT 18" AFF. UON.
ⓧ	GFCI QUADPLEX RECEPTACLE, MOUNTED AT 18" AFF. UON.
ⓧ	TAMPERPROOF DUPLEX RECEPTACLE, MOUNTED AT 18" AFF. UON.
ⓧ	TAMPERPROOF QUADPLEX RECEPTACLE, MOUNTED AT 18" AFF. UON.
ⓧ	NEMA SPECIAL RECEPTACLE, MOUNTED AT 18" AFF. UON. NEMA CONFIGURATION AS INDICATED.
ⓧ	SIDE HATCHED RECEPTACLE, TO BE WIRED TO SWITCHED CIRCUIT.
ⓧ	CENTER HATCHED RECEPTACLE TO BE WIRED TO EMERGENCY CIRCUIT.
ⓧ	RECEPTACLE MOUNTED ON CEILING.
ⓧ	RECEPTACLE MOUNTED IN-COUNTER.
ⓧ	DISCONNECT SWITCH.
ⓧ	FUSED DISCONNECT SWITCH.
ⓧ	ENCLOSED CIRCUIT BREAKER.
ⓧ	COMBINATION STARTER.
ⓧ	FLOORBOX COMBINATION POWER & DATA.
ⓧ	FLOORBOX POWER.
ⓧ	POKETHRU COMBINATION POWER & DATA.
ⓧ	POKETHRU POWER.
ⓧ	POWER POLE.
ⓧ	PANELBOARD SURFACE MOUNT.
ⓧ	PANELBOARD FLUSH MOUNT.
ⓧ	MAIN DISTRIBUTION PANEL.
ⓧ	UTILITY CT METER.
ⓧ	UTILITY TRANSFORMER.

Area Rescue Assistance

ⓧ	COMMAND UNIT.
ⓧ	SPEAKER STROBE.
ⓧ	AREA OF RESCUE STATION.

Raceways

ⓧ	CONDUIT AND/OR CONDUCTORS INSTALLED ABOVE GRADE, CONCEALED IN WALL OR CEILING SPACE.
ⓧ	CONDUIT AND/OR CONDUCTORS INSTALLED ABOVE GRADE, BELOW SLAB.
ⓧ	CONDUIT TURNED DOWN.
ⓧ	CONDUIT TURNED UP.
ⓧ	CONDUIT STUBBED AND CAPPED.
ⓧ	CONDUIT DIRECT CONNECTION TO EQUIPMENT.
ⓧ	FLEXIBLE CONNECTION TO EQUIPMENT.
ⓧ	CONDUIT / WIRING CONTINUATION.
ⓧ	HOMERUN TO PANELBOARD.
ⓧ	CABLE TRAY. SIZE AND TYPE AS INDICATED ON DRAWINGS.

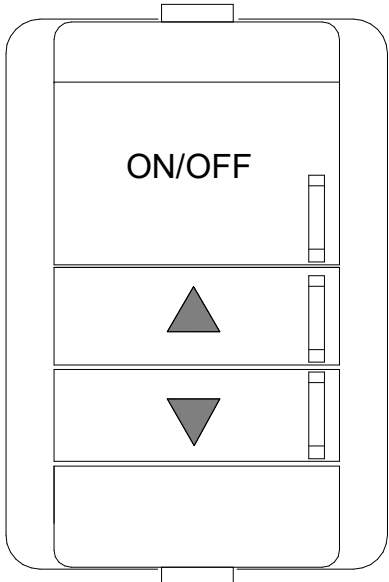
One-Line Diagram

ⓧ	CIRCUIT BREAKER.
ⓧ	DRAWOUT CIRCUIT BREAKER.
ⓧ	ENCLOSED CIRCUIT BREAKER.
ⓧ	MOTOR STARTER CONTACT.
ⓧ	DISCONNECT SWITCH.
ⓧ	ENCLOSED DISCONNECT SWITCH.
ⓧ	FUSED DISCONNECT SWITCH.
ⓧ	ENCLOSED FUSED DISCONNECT SWITCH.
ⓧ	CURRENT TRANSFORMER METER.
ⓧ	FUSE, RATING AS SHOWN ON DRAWINGS.
ⓧ	GENERATOR, CONFIGURATION AS INDICATED ON DRAWING.
ⓧ	GROUND ROD.
ⓧ	EQUIPMENT GROUND.
ⓧ	MOTOR, RATED AS INDICATED ON DRAWINGS.
ⓧ	NEMA CONNECTION.
ⓧ	PANEL.
ⓧ	MINI POWER CENTER.
ⓧ	SHUNT TRIP
ⓧ	HEATER
ⓧ	REMOTE ANNUNCIATOR.
ⓧ	BATTERY CHARGER.
ⓧ	SURGE SUPPRESSION DEVICE
ⓧ	DIGITAL METER
ⓧ	VARIABLE FREQUENCY DRIVE
ⓧ	SOFT STARTER
ⓧ	TRANSFER SWITCH, WITH FUSES OR BREAKERS AS SHOWN ON DRAWINGS.
ⓧ	TRANSFORMER

Miscellaneous

ⓧ	JUNCTION BOX (ROUND, SQUARE).
ⓧ	THERMOSTAT.
ⓧ	RELAY.
ⓧ	CORD REEL.
ⓧ	MOTOR / EXHAUST FAN.
ⓧ	CEILING FAN.
ⓧ	UTILITY POLE.
ⓧ	WEATHERHEAD.
ⓧ	GROUND ROD.
ⓧ	GROUND ROD WITH TEST WELL.
ⓧ	SURFACE RACEWAY / WIREMOLD.
ⓧ	FIRE RATED BACKBOARD.
ⓧ	GROUND BUS BAR.

INTERIOR LUMINAIRE SCHEDULE												
FIXTURE NO.	DESCRIPTION	LAMP TYPE	LUMENS	CRI	COLOR TEMP.	DRIVER	EMERGENCY DRIVER	INTEGRAL MOTION/PHOTO SENSOR	VOLTS	LOAD	MFR.	MODEL NUMBER
D4	RECESSED OPEN 4" DIAMETER, 5.5" HIGH DOWNLIGHT, DIE-CAST ALUMINUM HOUSING, 50 DEGREE MEDIUM DISTRIBUTION , WHITE PAINTED SELF-FLANGED, SEMI-SPECULAR CLEAR FINISH, AND WET LOCATION LISTED.	LED	1,500 LM	80	3500K	STANDARD 0-10V	NO	NO	UNV	16 WATTS	INDY	L4 SERIES
I4	SURFACE MOUNTED STRIP LUMINAIRE, 4FT x 3"W x 4"H. WITH COLD-ROLLED STEEL HOUSING, FULL FROST WIDE DISTRIBUTION DIFFUSER, BAKED WHITE ENAMEL FINISH, AND DAMP LOCATION LISTED.	LED	7,000 LM	85	3500K	STANDARD 0-10V	NO	NO	UNV	35 WATTS	LITHONIA	CLX SERIES
RA2	RECESSED 2' x 2' x 2-3/8"H VOLUMETRIC LUMINAIRE, CURVED SMOOTH ACRYLIC LENS, COLD ROLLED STEEL HOUSING, AND WHITE ENAMEL FINISH.	LED	3,300 LM	80	3500K	STANDARD 0-10V	NO	NO	UNV	26 WATTS	LITHONIA	2AVL4 SERIES
RB2	RECESSED 2' x 2' x 2-3/8"H VOLUMETRIC LUMINAIRE, CURVED SMOOTH ACRYLIC LENS, COLD ROLLED STEEL HOUSING, AND WHITE ENAMEL FINISH.	LED	4,800 LM	80	3500K	STANDARD 0-10V	NO	NO	UNV	42 WATTS	LITHONIA	2AVL4 SERIES
P3P-8	PENDANT MOUNTED 8'LONG x 9"W x 2-5/8"H DIRECT/INDIRECT LUMINAIRE, EXTRUDED ARYLIC FROSTED, FLUSH BOTTOM AND TOP LENS WITH BATWING DISTRIBUTION (UP AND DOWN). EXTRUDED ALUMINUM HOUSING WITH 70D/30U LUMEN DISTRIBUTION RATIO. PROVIDE AIR CRAFT CABLE FOR PENDANT MOUNTING. FIXTURE IS DESIGNED FOR STRAIGHT RUN APPLICATIONS AND SHALL BE MOUNTED CONTINUOUSLY WITH LENGTH IN FEET AS SHOWN ON THE DRAWINGS. PROVIDE FEED-THROUGH WIRING.	LED	625 LM/FT DOWN 250 LM/FT UP	80	3500K	STANDARD 0-10V	NO	NO	UNV	8 WATTS/FT	FOCAL POINT	FSM2BS SERIES



TYPE: ON/OFF+RAISE/LOWER
TAG: LV

1 LIGHTING CONTROL LOW VOLTAGE WALL STATION
NTS

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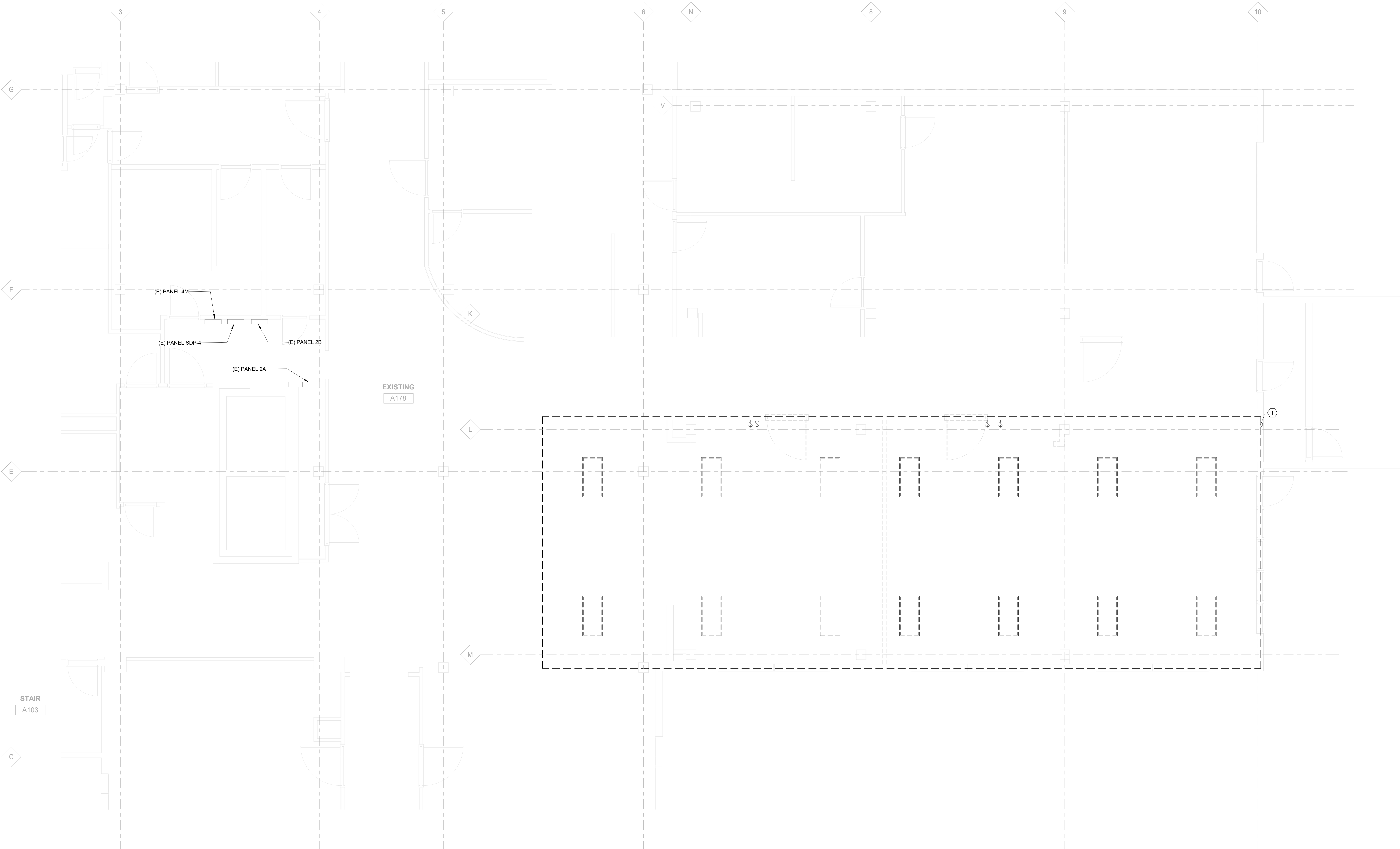
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LUMINAIRE
SCHEDULE &
DETAILS

Sheet No

E0.02



① ELECTRICAL DEMOLITION CEILING PLAN
1/4" = 1'-0"

SHEET KEYNOTES

- DEMOLISH ALL LIGHTING FIXTURES, SWITCHES, CONDUIT CONDUCTORS, AND ACCESSORIES. MAINTAIN CIRCUIT CONTINUITY OF ANY EXISTING BRANCH CIRCUITS THAT FEED LOADS TO REMAIN OUTSIDE OF THE AREA OF WORK SHOWN.

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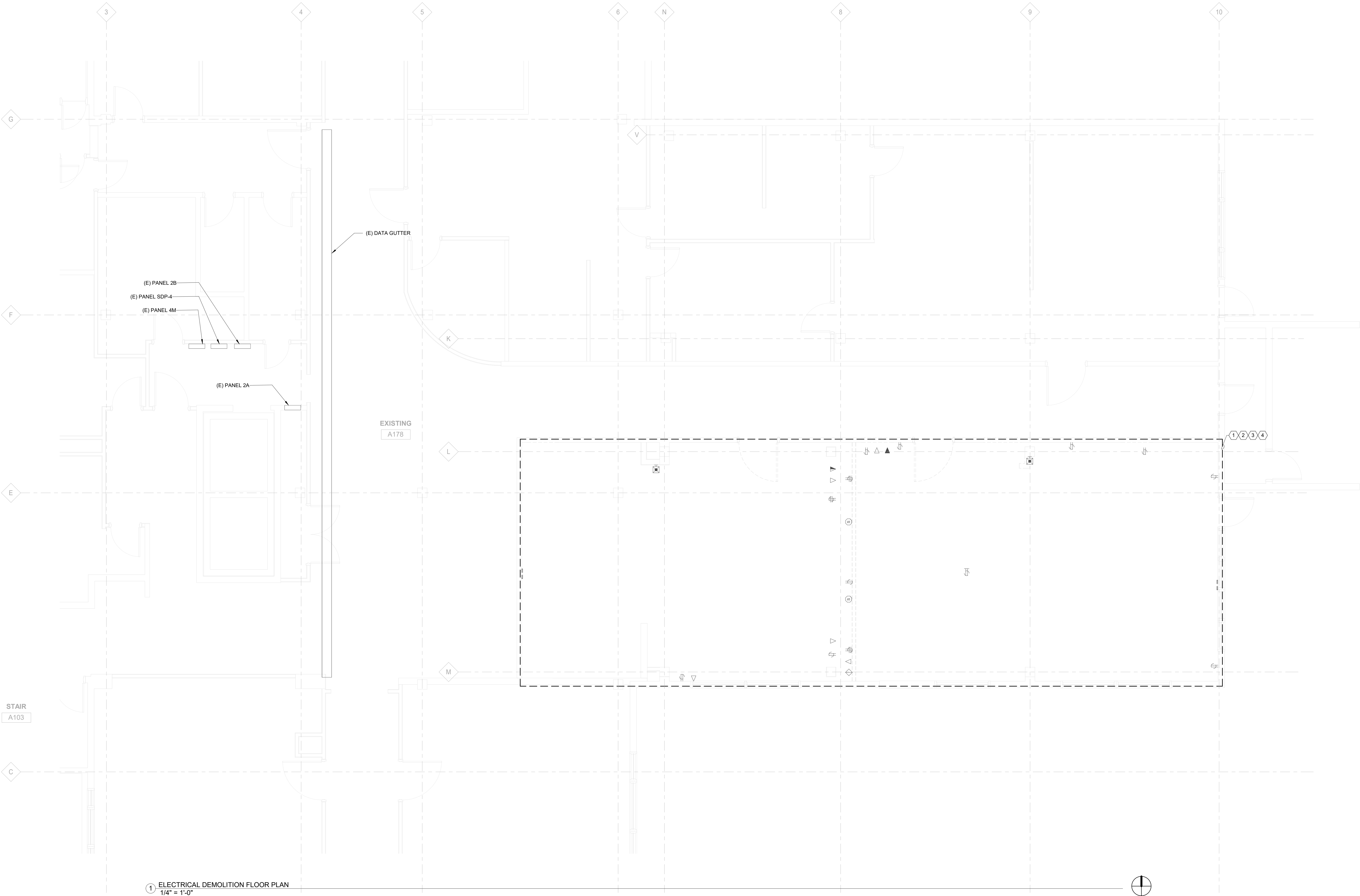
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Drawing Title
**DEMOLITION
ELECTRICAL
CEILING PLAN**

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1 ELECTRICAL DEMOLITION FLOOR PLAN
1/4" = 1'-0"

SHEET KEYNOTES

- DEMOLISH ALL POWER DEVICES, CONDUIT, CONDUCTORS, AND ACCESSORIES. MAINTAIN CIRCUIT CONTINUITY OF ANY EXISTING BRANCH CIRCUITS THAT FEED LOADS TO REMAIN OUTSIDE OF THE AREA OF WORK SHOWN.
- DEMOLISH ALL LOW VOLTAGE DEVICES, CONDUIT, CABLES, AND ACCESSORIES. REMOVE CABLES BACK TO 3RD FLOOR PATCH PANEL. REMOVE ALL CONDUIT AND BOXES IN AREA OF WORK SHOWN.
- DEMOLISH ALL FIRE ALARM DEVICES, CONDUIT, CONDUCTORS, AND ACCESSORIES. MAINTAIN CIRCUIT CONTINUITY OF ANY EXISTING FIRE ALARM CIRCUITS THAT FEED DEVICES TO REMAIN OUTSIDE OF THE AREA OF WORK SHOWN.
- DEMOLISH ALL AV DEVICES, CONDUIT, CONDUCTORS, AND ACCESSORIES IN THE AREA OF WORK SHOWN.

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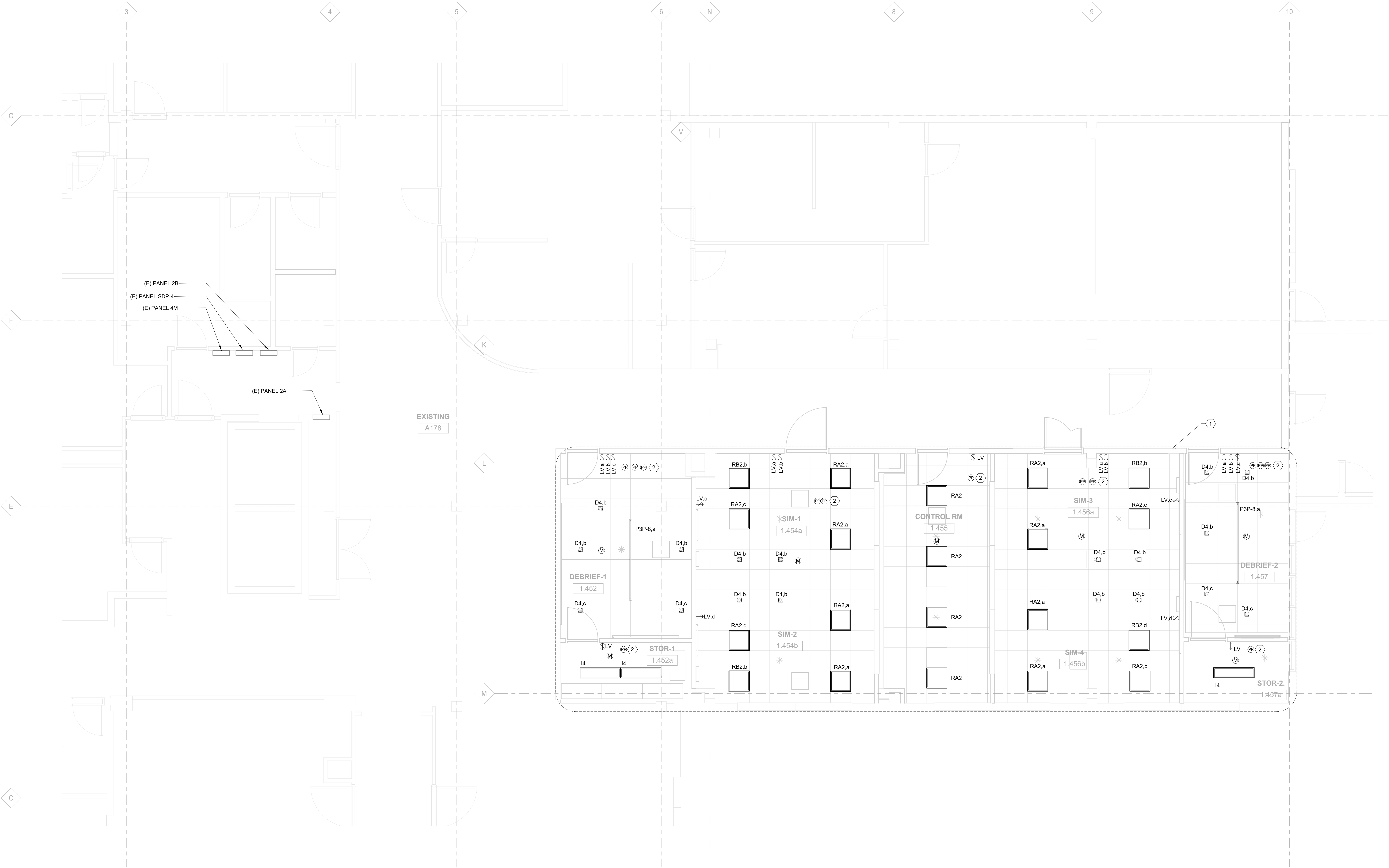
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DEMOLITION
ELECTRICAL FLOOR
PLAN

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1 LIGHTING PLAN
1/4" = 1'-0"

GENERAL NOTES

1. CONNECT ALL NEW LIGHTING FIXTURES SHOWN TO EXISTING BRANCH CIRCUITS.
2. PROVIDE POWER PACK. CONNECT TO LIGHTING BRANCH CIRCUIT IN THIS SPACE.

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Date
07.28.2023

Project Number

22093
EDA Award Number 07-79-07767
URB 116720

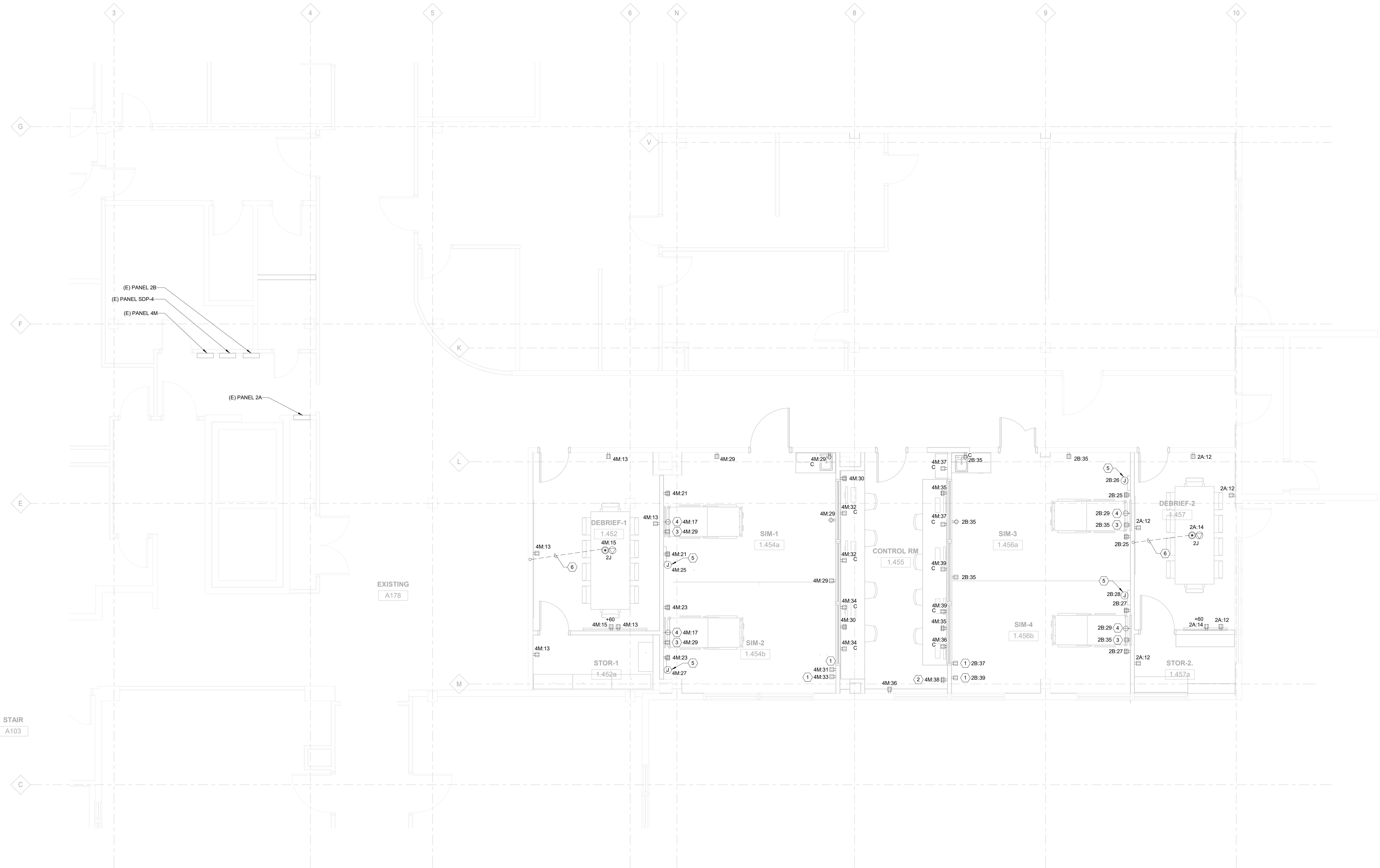
Drawing Title

LIGHTING PLAN

Sheet No.

E2.01

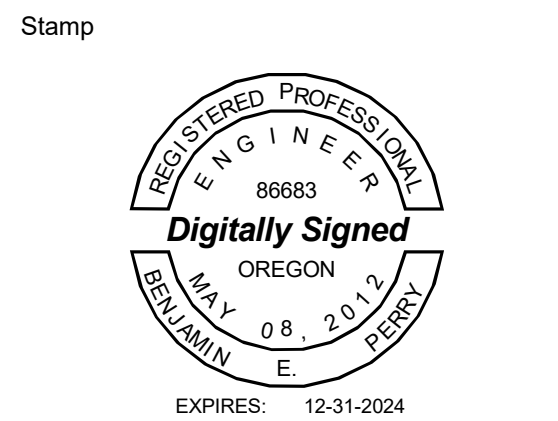
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1 POWER FLOOR PLAN
1/4" = 1'-0"

- SHEET KEYNOTES**
- PYXIS MACHINE CONNECTION.
 - AUDIO AND CAMERA CONTROLLER.
 - MONITOR CONNECTION. MOUNT DUPLEX RECEPTACLE AT 84" AFF. COORDINATE EXACT LOCATION WITH ARCHITECT PRIOR TO ROUGH-IN.
 - BED RECEPTACLE.
 - HEADWALL CONNECTION.
 - PROVIDE (1) 0.75" CONDUIT FOR POWER AND (1) 1" CONDUIT FOR LOW VOLTAGE TO COMBINATION POWER/LOW VOLTAGE POKE THRU.

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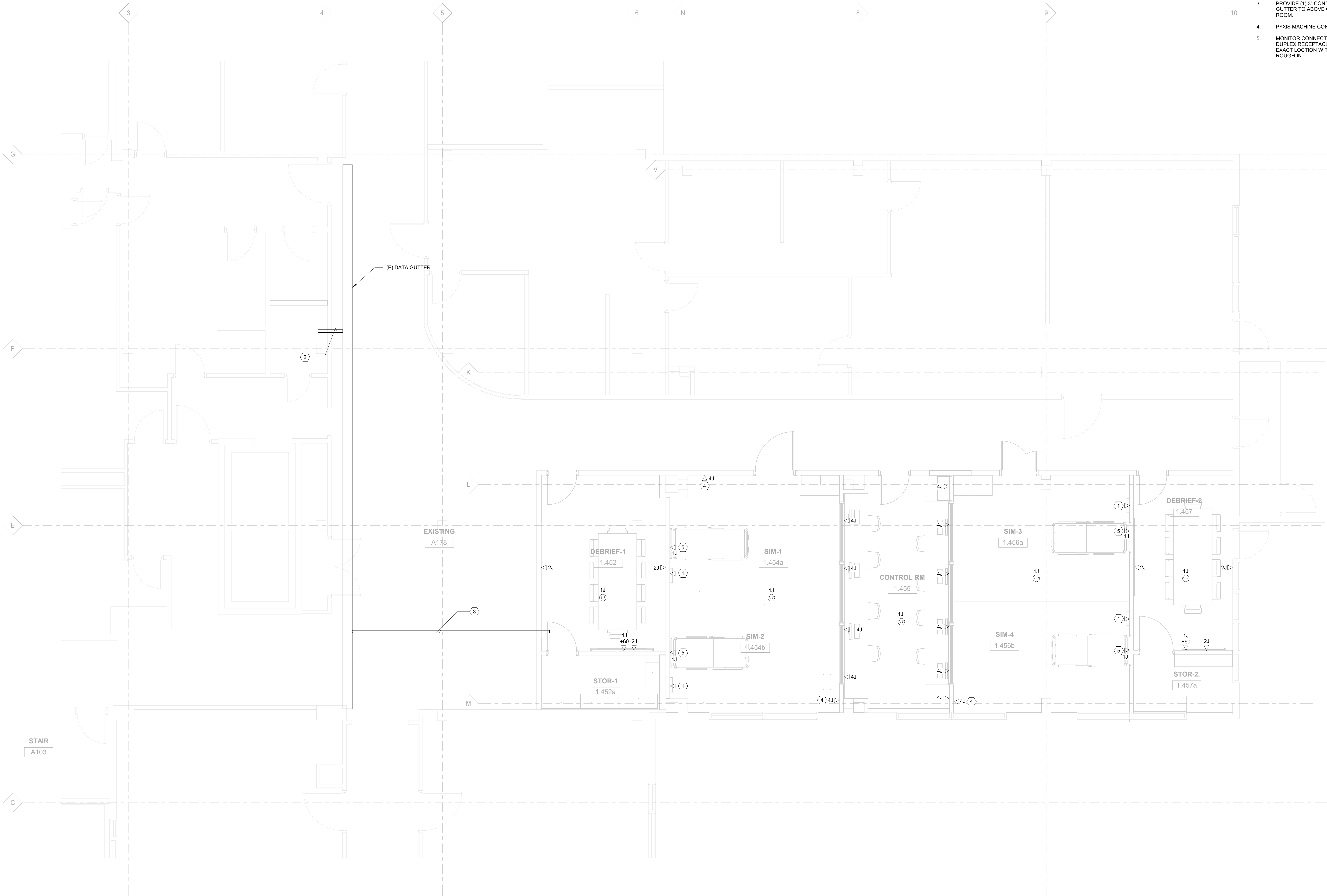
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URI 116720

Drawing Title
POWER FLOOR PLAN

Sheet No.
E2.02

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1 LOW VOLTAGE FLOOR PLAN
1/4" = 1'-0"

GENERAL NOTES

- ALL DATA CONDUITS TO ROUTE TO 3RD FLOOR IDF ROOM. PATCH PANEL, DIRECTLY BELOW THE FOURTH FLOOR IDF ROOM. UTILIZE NEW 3" CONDUITS, EXISTING DATA GUTTER, AND EXISTING 3" CONDUIT SLEEVE THROUGH FLOOR FOR ROUTING.

SHEET KEYNOTES

- PROVIDE COVER WITH HOLE FOR CABLE PASS-THROUGH. PROVIDE 1-1/4" CONDUIT UP TO ACCESSIBLE CEILING.
- PROVIDE (1) 3" CONDUIT FROM EXISTING DATA GUTTER TO EXISTING 4TH FLOOR IDF ROOM. FIRE CAULK AROUND CONDUIT TO MAINTAIN EXISTING FIRE RATING IN CORRIDOR WALL.
- PROVIDE (1) 3" CONDUIT FROM EXISTING DATA GUTTER TO ABOVE CEILING IN CONFERENCE ROOM.
- PYXIS MACHINE CONNECTION.
- MONITOR CONNECTION. MOUNT ADJACENT TO DUPLEX RECEPTACLE AT 84 AFF. COORDINATE EXACT LOCATION WITH ARCHITECT PRIOR TO ROUGH-IN.

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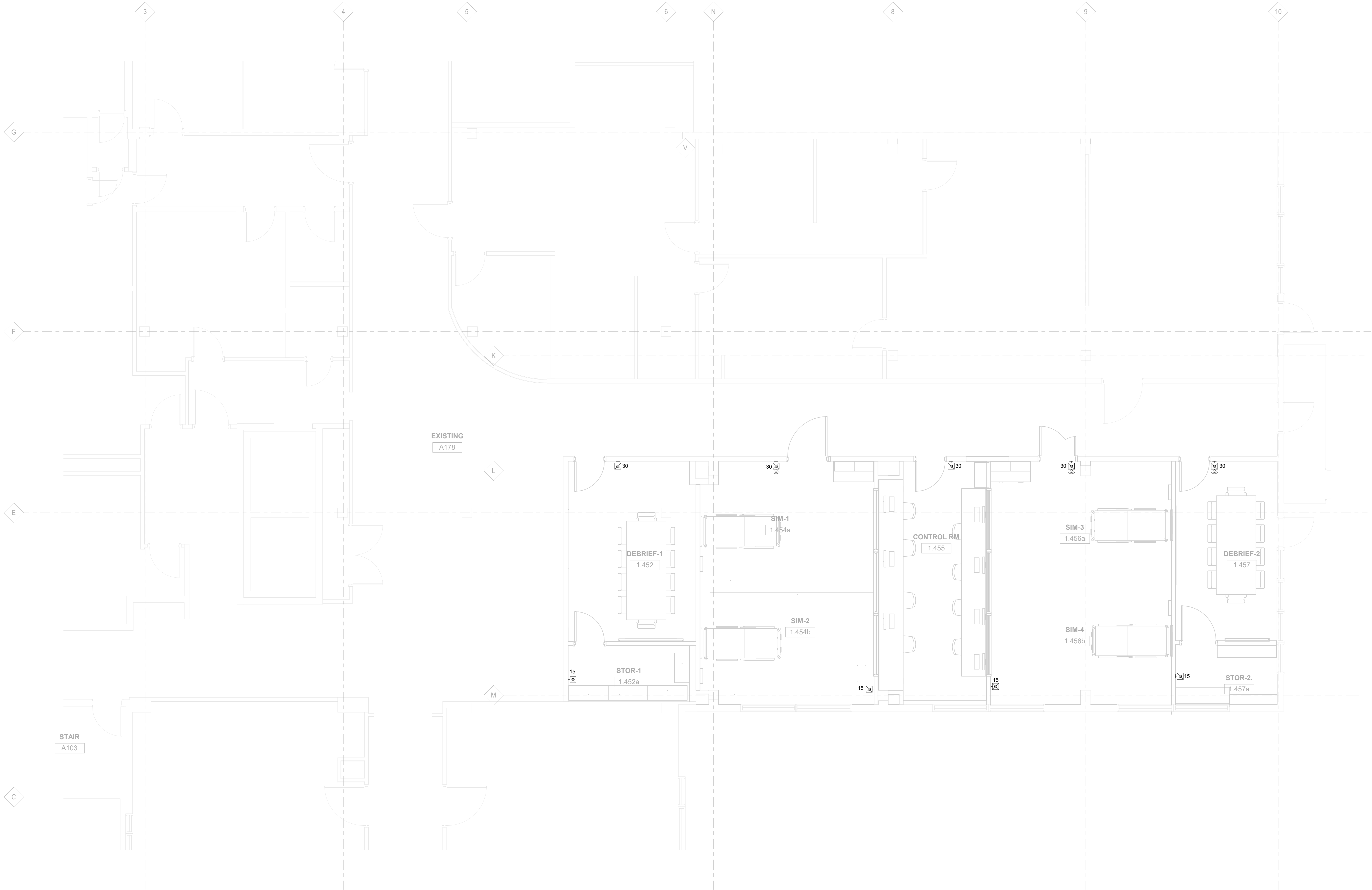
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Drawing Title
**LOW VOLTAGE
FLOOR PLAN**

Sheet No.
E2.03

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① FIRE ALARM FLOOR PLAN
1/4" = 1'-0"

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Drawing Title
**FIRE ALARM FLOOR
PLAN**

Sheet No.

E2.04

PANEL NAME: PANEL 2A										LOCATION: 4TH FLOOR ELEV LOBBY									
VOLT/PHASE: 208/120V, 3Ø										FED FROM: XXX									
NUM. POLES: 3Ø										BREAKER MOUNTING: BOLTED									
A/C RATING: FIELD VERIFY										MAIN LUGS ONLY									
NOTES: EXISTING PANEL										BUS RATING AMPS: 225									
REF. KEY NOTE #:										SED: NO									
NOTES	LOAD DESCRIPTION	LOAD TYPE	VA L1	VA L2	VA L3	TRIP RATING AMPS	CIRCUIT NUMBER	CIRCUIT NUMBER	TRIP RATING AMPS	VA L1	VA L2	VA L3	LOAD TYPE	LOAD DESCRIPTION	NOTES				
	CORRIDOR	R	540			20	1	2	20	900			R	CLASSROOM 402					
	COMPRESSOR	R		1,100		20	3	4	20		900		R	CLASSROOM 464					
	CLASSROOM 432	R			900	20	5	6	20			900	R	CLASSROOM 462					
	CLASSROOM 434 & 451	R	900			20	7	8	20	900			R	CLASSROOM 446					
	CLASSROOM 454	R		900		20	9	10	20		900		R	CLASSROOM 435					
	CLASSROOM 431 - 453	R			900	20	11	12	20			900	R	RECEPT ROOMS 1.457	1				
	CLASSROOM 435 & 436	R	900			20	13	14	20	360			R	RECEPT ROOM 1.457	1				
	CLASSROOM 403	R		900		20	15	16	20		-			SPARE					
	RW MEN AND WOMEN	R		360		20	17	18	20			-		SPARE					
	SPARE	-	-			20	19	20	20		-			SPARE					
	SPARE		-			20	21	22	20			-		SPARE					
	SPARE		-			20	23	24	20			-		SPARE					
	SPARE	-	-			20	25	26	20	540			R	SW HEADBOARD CIRCUIT					
	CONFERENCE ROOM	R		900		20	27	28	20		540		R	SW HEADBOARD CIRCUIT					
	BLANK				-	20	29	30	20			-		BLANK					
TOTAL LOAD:			2,340	3,800	2,160	TOTAL LOAD:			2,700	2,340	1,800								
COMBINED LOAD:			5,040	6,140	3,960	CONNECTED LOAD:			15,140	DEMAND LOAD:			12,070	DEMAND AMPS: 35					
Load Type Key	Demand Factor	Connected Load	Demand Load																
R General Purpose Receptacle	100% First 10kVA, 50% thereafter	15,140	12,070																
L Lighting	125% Load	0	0																
M1 Largest Motor	125% Load	0	0																
M Motor	100% Load	0	0																
A Appliance	100% Load	0	0																
H HVAC	100% Load	0	0																
K Kitchen	100% Load	0	0	[XX] - Units of Equipment - See NEC Table 220.56															
E Equipment	100% Load	0	0																
T Transformer	100% Load	0	0																
W Welder	100% Load	0	0																
RV Recreational Vehicle	100% Load	0	0	[XX] - RV Sites - See NEC Table 551.71 (A)															
NOTES: [1] UTILIZE EXISTING 20A, 1-POLE SPARE CIRCUIT BREAKER AS SHOWN.																			

PANEL NAME: PANEL 2B						LOCATION: 4TH FLOOR ELEV LOBBY										
VOLT/PHASE: 208/120V, 3Ø						FED FROM: XXX										
NUM. POLES: 42						BREAKER MOUNTING: BOLTED										
A/C RATING: 22,000						MAIN LUGS ONLY										
NOTES: EXISTING PANEL						BUS RATING AMPS: 225										
REF. KEY NOTE #:						SED: NO										
NOTES	LOAD DESCRIPTION	LOAD TYPE	VA L1	VA L2	VA L3	TRIP RATING AMPS	CIRCUIT NUMBER	CIRCUIT NUMBER	TRIP RATING AMPS	VA L1	VA L2	VA L3	LOAD TYPE	LOAD DESCRIPTION	NOTES	
	SCIENCE LAB	R	900			20	1	2	20	900			R	GEO SUPPORT		
	SCIENCE LAB	R		900		20	3	4	20		540		R	NE HEADBOARD		
	SCIENCE LAB	R			900	20	5	6	20			540	R	NE HEADBOARD		
	ELECTRIC LAB	R	900			20	7	8	20	540			R	NE HEADBOARD		
	ELECTRIC LAB	R		900		20	9	10	20		540		R	NE HEADBOARD		
	ELECTRIC LAB	R			900	20	11	12	20			540	R	NW HEADBOARD		
	ELECTRIC LAB	R	900			20	13	14	20	900			R	OFFICES AND SKILL LAB RECEPT		
	CLASSROOM HALLWAY RECEPT	R		360		20	15	16	20		540		R	NW HEADBOARD		
	CLASSROOM 1452, 1454	R			900	20	17	18	20		750		E	VACUUM PUMP		
	CHEM PREP	R	900			20	19	20	20	750			E	DRY MACH		
	CHEM PREP	R	900			20	21	22	20	1,200			E	AUTOCLAVE		
	CHEM PREP	R		900		20	23	24	20		900		R	CHEM STOCK		
1	RECEPT ROOM 1.456a	R	1,080			20	25	26	30	720			R	HEADWALL ROOM 1.456a	1	
1	RECEPT ROOM 1.456b	R	720			20	27	28	30		720		R	HEADWALL ROOM 1.456b		
1	BED RECEPT ROOMS 1.456a, 1.456b	R		900		20	29	30	20			900	R	MET FURN		
	SPARE	-	-			20	31	32	20	900			R	PLUG STRIP NORTH ROOM 1463		
	DOOR ACCESS	E		250		20	33	34	20		900		R	PLUG STRIP NORTH ROOM 1463		
1	RECEPT ROOMS 1.456a, 1.456b	R		1,080		20	35	36	20			900	R	PLUG FLOOR SOUTH 1463		
1	MED CABINET ROOM 1.458a	E	500			20	37	38	20	900			R	PLUG FLOOR SOUTH 1463		
1	MED CABINET ROOM 1.458b	E		500		20	39	40	20		900		R	PLUG STRIP SOUTH ROOM 1463		
	SARE				-	20	41	42	20			900	R	PLUG STRIP SOUTH ROOM 1463		
TOTAL LOAD:			5,180	4,530	5,180	TOTAL LOAD:			5,610	5,340	5,430					
COMBINED LOAD:			10,790	9,870	10,610	CONNECTED LOAD:			31,270	DEMAND LOAD:			22,610	DEMAND AMPS:		63

PANEL NAME: PANEL 4M					LOCATION: 4TH FLOOR ELEV LOBBY															
VOLT/PHASE: 208/120V, 3Ø					FED FROM: SGP-4															
NUM. POLES: 42					BREAKER MOUNTING: BOLTED															
A/C RATING: 22,000					MAIN BREAKER AMPS: 200															
NOTES: EXISTING PANEL					BUS RATING AMPS: 225															
REF. KEY NOTE #:					SED: NO															
NOTES	LOAD DESCRIPTION	LOAD TYPE	VA L1	VA L2	VA L3	TRIP RATING AMPS	CIRCUIT NUMBER	CIRCUIT NUMBER	TRIP RATING AMPS	VA L1	VA L2	VA L3	LOAD TYPE	LOAD DESCRIPTION	NOTES					
	SPARE	-	-	-		80	3	4	20	1,200			M	SMART CLASSROOM NORTH AC						
		-	-	-			5	6	20			1,200	M							
		-	-	-			7	8	20	1,200			M	COMPUTER LAB AC						
	SPARE	-	-	-		60	9	10	20		1,200		M	SMART CLASSROOM SOUTH AC						
		-	-	-			11	12	20		1,200		M							
1	RECEPT ROOM 1.452, 1.452a	R	900			20	13	14	20	1,200			M							
2	RECEPT ROOMS 1.452	R	360			-	15	16	20		1,200		M	CONTROL ROOM AC						
2	BED RECEPT ROOMS 1.454a, 1.454b	R		900		20	17	18	20			1,200	M	OFFICE AC						
	SPARE	-	-	-		20	19	20	20	1,200			M	OFFICE AC						
2	RECEPT ROOM 1.454a	R	720			20	21	22	20			1,200	M	SIM LAB AC						
2	RECEPT ROOM 1.454b	R	720		720	20	23	24	20			1,200	M	SIM LAB AC						
2	HEADWALL ROOM 1.454a	R	720			20	25	26	20	1,200			M	DIRECTORS OFFICE AC						
2	HEADWALL ROOM 1.454b	R		720		20	27	28	20		1,200		M	DIRECTORS OFFICE AC						
2	RECEPT ROOMS 1.454a, 1.454b	R		1,080		20	29	30	20			720	R	RECEPT ROOM 1.455	2					
2	MED CABINET ROOM 1.456b	E	900			20	31	32	20	360			R	RECEPT ROOM 1.455	2					
2	MED CABINET ROOM 1.456b	E		900		20	33	34	20	360			R	RECEPT ROOM 1.455	2					
2	RECEPT ROOM 1.455	R	720			20	35	36	20		360		R	RECEPT ROOM 1.455	2					
2	RECEPT ROOM 1.455	R	360			20	37	38	20	360			R	RECEPT ROOM 1.455	2					
2	RECEPT ROOM 1.455	R		360		20	39	40	20		-			SPARE						
	SPACE	-	-	-		41	42	20	20		-			SPARE						
TOTAL LOAD:			2,480	2,660	3,020	TOTAL LOAD:			6,720	6,360	5,880									
COMBINED LOAD:			9,200	9,020	8,900	CONNECTED LOAD:			27,120	DEMAND LOAD:			27,120							
										DEMAND AMPS:			75							
Load Type Key																				
R	General Purpose Receptacle					Demand Factor					Connected Load					Demand Load				
L	Lighting					100% First 10kVA, 50% thereafter					9,320					9,320				
M1	Largest Motor					120% Load					0					0				
A	Motor					100% Load					16,800					16,800				
K	Appliance					100% Load					0					0				
H	HVAC					100% Load					0					0				
K	Kitchen					100% Load					0					0				
E	Equipment					100% Load					1,000					1,000				
T	Transformer					100% Load					0					0				
W	Welder					100% Load					0					0				
RV	Recreational Vehicle					100% Load					0					0				
XX - Units of Equipment - See NEC Table 220.56																				
XX - RV Sites - See NEC Table 61.11 (A)																				
NOTES:																				
[1] UTILIZE EXISTING 20A, 1-POLE SPARE CIRCUIT BREAKER.																				
[2] PROVIDE NEW 25A, 1-POLE CIRCUIT BREAKER IN EXISTING SPACE AS SHOWN.																				