

Seals:



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ELECTRICAL SYMBOL LEGEND

LIGHTING

	LINEAR FLUORESCENT LUMINAIRE, TYPE 'A' AS SPECIFIED. HATCHING DENOTES CONNECTED TO EMERGENCY/NIGHT LIGHTING CIRCUIT
	CEILING MOUNTED LUMINAIRE, TYPE 'A' AS SPECIFIED
	WALL MOUNTED LUMINAIRE, TYPE 'A' AS SPECIFIED
	POLE MOUNTED LUMINAIRE, TYPE 'H1' AS SPECIFIED
	DOUBLE SURFACE MOUNTED EMERGENCY LIGHTING REMOTE HEADS, TYPE 'BU-1' INDICATES BATTERY BANK FED FROM
	CEILING MOUNTED EMERGENCY LIGHTING REMOTE HEAD
	EMERGENCY LIGHTING BATTERY UNIT C/W DUPLEX RECEPTACLE AND DOUBLE REMOTE HEADS, TYPE 'BU-1' AS SPECIFIED.
	WALL MOUNTED DOUBLE FACED EXIT LIGHT AND DIRECTIONAL ARROWS AS INDICATED. SHADED AREAS DENOTE DIRECTION OF FACE OF EXIT SIGN. 'BU-1' INDICATES BATTERY UNIT FED FROM.
	WALL MOUNTED SINGLE FACED EXIT LIGHT AND DIRECTIONAL ARROWS AS INDICATED. SHADED AREAS DENOTE DIRECTION OF FACE OF EXIT SIGN.
	CEILING MOUNTED DOUBLE FACED EXIT LIGHT AND DIRECTIONAL ARROWS AS INDICATED. SHADED AREAS DENOTE DIRECTION OF FACE OF EXIT SIGN.
	CEILING MOUNTED SINGLE FACED EXIT LIGHT AND DIRECTIONAL ARROWS AS INDICATED. SHADED AREAS DENOTE DIRECTION OF FACE OF EXIT SIGN.

SECURITY AND ACCESS SYSTEMS

	SECURITY SYSTEM CONTROL PANEL
	KEY PAD
	CARD READER
	INFRA RED READER
	REQUEST TO EXIT BUTTON
	EGRESS MOTION DETECTOR
	DOOR CONTACT
	ELECTRIC STRIKE
	AUDIBLE ALARM
	MOTION DETECTOR
	MOTION SENSOR RELEASE
	AUTOMATIC DOOR OPENER

	CLOSED CIRCUIT CAMERA
	DENOTES BOX ENCLOSURE
	DENOTES ELEVATOR CORNER MOUNT
	DENOTES PEDESTAL MOUNT
	DENOTES PAN TILT ZOOM
	WEDGE ENCLOSURE

	SECURITY SYSTEM MONITOR
	MAGLOCK DEVICE
	MAGLOCK RESET SWITCH

	KEY SWITCH
	CODE BLUE SPEAKER PHONE

	CODE BLUE INTEGRATED UNIT C/W ACCESSORIES, POLE OR PEDESTAL MOUNTED
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	ALARM SOUNDER
	PANIC ALARM

	15A, U-GROUND SINGLE RECEPTACLE - FLUSH CEILING MOUNTED UNLESS NOTED OTHERWISE
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	15A, U-GROUND DUPLEX RECEPTACLE - FLUSH CEILING MOUNTED UNLESS NOTED OTHERWISE
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	(5-20RA) T-SLOT U-GROUND DUPLEX RECEPTACLE - FLUSH CEILING MOUNTED UNLESS NOTED OTHERWISE
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EQUIPMENT CONNECTIONS AND CONTROLS

	DIRECT CONNECTION - 120 OR 208V AS SPECIFIED
	DIRECT CONNECTION - 374 OR 600V AS SPECIFIED
	DIRECT CONNECTION - 120 OR 208V C/W UNFUSED DISCONNECT SWITCH AS SPECIFIED
	DIRECT CONNECTION - 347 OR 600V C/W UNFUSED DISCONNECT SWITCH AS SPECIFIED
	DIRECT CONNECTION - 120 OR 208V C/W FUSED DISCONNECT SWITCH AS SPECIFIED
	DIRECT CONNECTION - 347 OR 600V C/W FUSED DISCONNECT SWITCH AS SPECIFIED
	MODULAR FURNITURE WHIP CONNECTION. PROVIDE HARD-WIRE CONNECTION AND CONDUIT SIZE AS PER COMMUNICATION DRAWINGS
	C - DENOTES FOR COMMUNICATION
	P - DENOTES FOR POWER
	AS ABOVE FOR POLE MOUNTED. POLE IS PART OF SYSTEM FURNITURE
	POWER AND COMMUNICATION HARDWARE CONNECTIONS ON FLOOR, CORE DRILL OR TRENCHING CONCRETE FLOOR AS REQUIRED
	MOTOR CONNECTION C/W UNFUSED DISCONNECT SWITCH
	MOTOR CONNECTION C/W FUSED DISCONNECT SWITCH
	MOTOR CONNECTION C/W LOOSE STARTER
	MOTOR STARTER AS SPECIFIED
	UNFUSED DISCONNECT SWITCH
	FUSED DISCONNECT SWITCH
	HAND DRYER
	THERMOSTAT PROVIDED BY DIV. 15 AND WIRED BY DIV. 16

GENERAL POWER

	15A, U-GROUND SINGLE RECEPTACLE
	15A, U-GROUND DUPLEX RECEPTACLE
	USB CHARGER/15A, U-GROUND DUPLEX RECEPTACLE, HUBBELL CAT# USB15A5W
	15A, U-GROUND QUAD RECEPTACLE
	(5-20RA) T-SLOT U-GROUND DUPLEX RECEPTACLE
	15A, U-GROUND SINGLE OR DUPLEX RECEPTACLE - MOUNTED ABOVE COUNTER
	15A, U-GROUND SINGLE INSULATED/ISOLATED GROUND RECEPTACLE - STANDARD MOUNTING HEIGHT OR MOUNTED ABOVE COUNTER
	15A, U-GROUND DUPLEX INSULATED/ISOLATED GROUND RECEPTACLE - STANDARD MOUNTING HEIGHT OR MOUNTED ABOVE COUNTER
	(5-20RA) T-SLOT U-GROUND DUPLEX INSULATED/ISOLATED GROUND RECEPTACLE - STANDARD MOUNTING HEIGHT OR MOUNTED ABOVE COUNTER
	120/208V/110/30 AMP DRYER OUTLET
	120/208V/110/40 AMP RANGE OUTLET
	SINGLE SPECIAL RECEPTACLE - AMPACITY AS INDICATED, TYPE 'A' AS SPECIFIED
	15A, U-GROUND SPLIT WIRED DUPLEX RECEPTACLE - STANDARD MOUNTING HEIGHT OR MOUNTED ABOVE COUNTER
	15A, U-GROUND HALF SWITCHED DUPLEX RECEPTACLE - STANDARD MOUNTING HEIGHT OR MOUNTED ABOVE COUNTER (CONTROLLED BY SWITCH)
	(5-20RA) T-SLOT U-GROUND DUPLEX RECEPTACLE C/W GROUND FAULT CIRCUIT INTERRUPTER - STANDARD MOUNTING HEIGHT OR MOUNTED ABOVE COUNTER
	15A, U-GROUND SINGLE RECEPTACLE - FLUSH FLOOR MOUNTED UNLESS NOTED OTHERWISE
	15A, U-GROUND DUPLEX RECEPTACLE - FLUSH FLOOR MOUNTED UNLESS NOTED OTHERWISE
	USB CHARGER/15A, U-GROUND DUPLEX RECEPTACLE - FLUSH FLOOR MOUNTED UNLESS NOTED OTHERWISE

FIRE ALARM SYSTEM

	PULL STATION
	CEILING FLUSH VERTICAL MOUNTED BELL C/W FLUSH MTD. BOX
	FLUSH MOUNTED HORN
	DOUBLE HORN - CEILING OR WALL MOUNTED
	SUITE ISOLATOR MODULE
	STROBE - WALL OR CEILING MOUNTED
	FLUSH MOUNTED SPEAKER - WALL OR CEILING MOUNTED
	SURFACE MOUNTED SPEAKER - WALL OR CEILING MOUNTED
	FIREMEN HANDSET
	FIRE ALARM SYSTEM SPEAKER
	AUTOMATIC COMBINATION FIXED TEMPERATURE/RATE OF RISE HEAT DETECTOR - WALL OR CEILING MOUNTED
	AUTOMATIC FIXED TEMPERATURE HEAT DETECTOR - WALL OR CEILING MOUNTED
	SMOKE DETECTOR - WALL OR CEILING MOUNTED
	DUCT TYPE SMOKE DETECTOR WITH REMOTE ANNUNCIATION
	SINGLE STATION TYPE SMOKE DETECTOR C/W RED INDICATION LIGHT - WALL OR CEILING MOUNTED
	SINGLE STATION TYPE SMOKE/CARBON MONOXIDE DETECTOR C/W RED INDICATION LIGHT - WALL OR CEILING MOUNTED
	CARBON MONOXIDE DETECTOR - WALL OR CEILING MOUNTED
	DOOR HOLDER

LIGHTING CONTROL

	ONE, TWO, THREE AND FOUR GANG SINGLE POLE TOGGLE SWITCHES
	3-WAY SWITCH
	4-WAY SWITCH
	KEY OPERATED LIGHT SWITCH
	TOGGLE SWITCH C/W RED PILOT LIGHT
	DOOR LIGHT SWITCH
	HUBBELL DUAL TECHNOLOGY WALL SWITCH OCCUPANCY SENSOR, CAT# LHMTS1-6347-WH
	FAN CONTROL SWITCH
	LUTRON VARIABLE SPEED FAN CONTROL SWITCH NTF SERIES
	MANUAL TIMER SWITCH
	HUBBELL DUAL CX PROGRAMMABLE WALL DIMMING SWITCH, CAT# CXSW-4-WH
	PROGRAMMABLE TIME CLOCK, TYPE 'A' AS SPECIFIED
	HUBBELL LOW VOLTAGE DUAL TECHNOLOGY ULTRASONIC AND PIR CEILING OCCUPANCY SENSOR, CAT# OMN-DT-2000-WH C/W POWER PACK.
	PHOTO ELECTRIC CONTROL

MISCELLANEOUS

	INDICATES EXISTING DEVICE TO REMAIN
	INDICATES EXISTING DEVICE TO BE MOVED
	INDICATES EXISTING DEVICE IN RELOCATED POSITION
	INDICATES EXISTING DEVICE TO BE DEMOLISHED
	INDICATES CONDUIT
	ELECTRICAL DRAWING NOTES

NOTE:

NOT ALL SYMBOLS SHOWN ON THIS LEGEND ARE NECESSARILY USED ON THIS PROJECT.

COMMUNICATIONS

	WALL MOUNTED COMBINATION MULTI-FUNCTION HDMI AND VGA OUTLETS. 1 1/2" C TO CEILING SPACE BY DIV. 16.
	2 GANG MUDRING
	WALL MOUNTED TELEVISION OUTLET PVR FOR SATELLITE (RG6 PLENUM RATED CABLE), TO TERMINATE TO THE SERVER ROOM. 3/4" C TO CEILING SPACE BY DIV. 16.
	FLUSH CEILING MOUNTED TELEVISION OUTLET PVR FOR SATELLITE (RG6 PLENUM RATED CABLE), TO TERMINATE TO THE SERVER ROOM.
	VOIP TELEPHONE OUTLET - WALL MOUNTED OR MOUNTED ABOVE COUNTER. PROVIDE 3/4" CONDUIT FROM OUTLET TO CEILING SPACE
	VOIP TELEPHONE OUTLET - FLUSH CEILING MOUNTED UNLESS NOTED OTHERWISE. PROVIDE 3/4" TO CEILING SPACE
	TELEPHONE OUTLET - FLUSH FLOOR MOUNTED PROVIDE 3/4" TO CEILING SPACE
	VOIP DATA OUTLET - WALL MOUNTED OR MOUNTED ABOVE COUNTER. PROVIDE 3/4" CONDUIT TO CEILING SPACE
	VOIP DATA OUTLET - FLUSH CEILING MOUNTED UNLESS NOTED OTHERWISE. PROVIDE 3/4" CONDUIT TO CEILING SPACE
	VOIP DATA OUTLET - FLUSH FLOOR MOUNTED. PROVIDE 3/4" CONDUIT TO CEILING SPACE
	VOIP DATA OUTLET - WALL MOUNTED OR MOUNTED ABOVE COUNTER. PROVIDE 3/4" CONDUIT TO CEILING SPACE
	VOIP DATA OUTLET - FLUSH CEILING MOUNTED UNLESS NOTED OTHERWISE. PROVIDE 3/4" CONDUITS TO CEILING SPACE
	VOIP DATA OUTLET - FLUSH FLOOR MOUNTED TYPE TO MATCH EXISTING. PROVIDE 3/4" CONDUIT TO CEILING SPACE
	SIGNAL PUSHBUTTON
	SIGNAL BELL C/W TRANSFORMER
	INTERCOM MASTER STATION
	INTERCOM STATION
	FLUSH MOUNTED AUXILIARY SOUND SYTEM SPEAKER - WALL MOUNTED OR CEILING MOUNTED
	SURFACE MOUNTED AUXILIARY SOUND SYTEM SPEAKER - WALL MOUNTED OR CEILING MOUNTED
	MICROPHONE JACK
	PUBLIC ADDRESS SPEAKER, TYPE '1' AS SPECIFIED
	VOLUME CONTROL SWITCH
	PROJECTION SOUND JACK
	SOUND BRIDGING JACK
	AMPLIFIER
	CONSOLE OR RACK C/W TERMINAL BOX

POWER DISTRIBUTION

	POWER TRANSFORMER
	POWER TRANSFORMER C/W ELECTROSTATIC SHIELD
	CURRENT CONTROL TRANSFORMER
	INCOMING POWER INTERRUPTER SWITCH
	DISCONNECT SWITCH
	MOLDED CASE CIRCUIT BREAKER
	DRAW OUT AIR CIRCUIT BREAKER
	FIXED AIR CIRCUIT BREAKER

ELECTRIC HEATING

	SURFACE WALL MOUNTED ELECTRIC BASEBOARD HEATER
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BRANCH CIRCUITING LEGEND

	2EP1-3
	T - DENOTES CIRCUIT NUMBER
	P1 - DENOTES LOCATION OF PANEL (P1 LEVEL)
	E - DENOTES EMERGENCY PANEL
	Z - DENOTES 120/208V OR
	V - DENOTES 347/600V

ELECTRICAL DRAWING LIST

E0	ELECTRICAL LEGEND AND DRAWING LIST	N.T.S.
E1-01	LEVEL 01 - ELECTRICAL PLAN - WASHROOM	1:75
E1-02	LEVEL 01 - LIGHTING PLAN - OFFICE	1:75
E1-03	LEVEL 02 - LIGHTING PLAN - OFFICE	1:75
E1-04	LEVEL 01 - POWER & SYSTEM PLAN - OFFICE	1:75
E1-05	LEVEL 02 - POWER & SYSTEMS PLAN - OFFICE	1:75
E1-06	LEVEL 01 - LIGHTING DEMOLITION PLAN - OFFICE	1:75
E1-07	LEVEL 01 & P1 LEVEL POWER & SYSTEMS DEMOLITION PLAN - OFFICE	1:75
E3	ELECTRICAL & DETAILS	N.T.S.
E-5	ELECTRICAL SINGLE LINE DIAGRAM & PANEL SCHEDULES	N.T.S.

GENERAL NOTES:

- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH MECHANICAL AND ARCHITECTURAL DRAWINGS.
- ALL RELOCATED AND EXISTING LIGHTING FIXTURES WITHIN THE RENOVATED AREAS TO BE RE-LAMPED WITH 4100K AND C/W NEW K12 LENSES.
- ALL NIGHT LIGHTS/ EMERGENCY LIGHTING ARE TO BE ON A 24 HOURS OPERATION.
- ALL NEW/ EXISTING / RELOCATED LIGHTING FIXTURES IN SCOPE OF WORK SHALL BE SUPPORTED INDEPENDENT OF THE CEILING SYSTEM TO APPROVAL OF THE CANADIAN ELECTRICAL CODE.
- ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF ALL REDUNDANT LIGHTING FIXTURES AND THEIR ASSOCIATED WIRING AND CONDUIT.
- CONTRACTOR SHALL UTILIZE EXISTING LIGHTING & POWER CIRCUITS IN REMOVED AREA AND SPARE CIRCUIT IN EXISTING PANEL BOARDS. LIGHTING AND POWER CIRCUIT SHALL NOT BE LOADED MORE THAN 80% OF ITS RATED LOAD.
- PROVIDE CIRCUITRY NAMEPLATES FOR ALL ELECTRICAL OUTLETS.
- REFER TO ARCHITECTURE DRAWINGS FOR EXACT DEVICE MOUNTING HEIGHT AND LOCATIONS.
- REFER TO MECHANICAL DRAWINGS FOR EXACT LOCATIONS OF ALL MECHANICAL EQUIPMENT.
- PRIOR TO ANY WORK FOR UNDERFLOOR OR INFLOOR/INSLAB CONDUIT, ALLOW TO X-RAY THE FLOOR AND COORDINATE THE LOCATION WITH LANDLORD. OBTAIN WRITTEN APPROVAL AS REQUIRED.
- SUPPLY AND INSTALL OUTLET BOX AND 3/4" EMT CONDUIT UP TO CEILING SPACE FOR ALL WALL MOUNTED TELEPHONE, DATA & TELEVISION OUTLET.
- CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR ALL LIGHTING AND ELECTRICAL ITEMS UPON AWARD OF PROJECT FOR DESIGNER/ENGINEERING REVIEW AND APPROVAL.
- IN AREAS WITH DRYWALL CEILING, CONTRACTOR SHALL LOCATE/RELOCATE ALL NEW/EXISTING JUNCTION BOXES, PULL BOXES, DISCONNECTS, ETC TO ACCESSIBLE AREAS. WHERE IT IS NO POSSIBLE TO RELOCATE/INSTALL EXISTING/NEW SERVICES IN ACCESSIBLE AREAS, CONTRACTOR SHALL PROVIDE ACCESS PANELS C/W FIRE RATINGS AS REQUIRED. EXACT LOCATION OF ACCESS PANELS SHALL BE CO-ORDINATED WITH THE ARCHITECT.
- DURING THE CONSTRUCTION PERIOD, A SET OF DRAWINGS APPROVED BY THE LANDLORD MUST BE KEPT ON SITE AND AVAILABLE FOR CONSULTATION AT ALL TIMES.
- ALL CONDUIT LOCATIONS UNDERFLOOR OR INFLOOR/ INSLAB TO BE CONSIDERED WET LOCATIONS AND ALL POWER, DATA CONDUCTOR TO BE LISTED FOR WET LOCATIONS USE.
- MAINTAIN EXISTING LIGHTING. EMERGENCY LIGHTING, EXIT SIGNS C/W ASSOCIATED BATTERY PACKS AND NORMAL POWER SUPPLY IN AREA NOT IN SCOPE OF WORK. ENSURE PROPER OPERATION DURING AND AFTER CONSTRUCTION.

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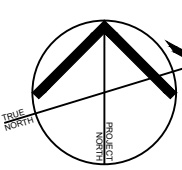
Drawing Title:

ELECTRICAL LEGEND AND DRAWING LIST

Issue Date: 2023.06.23

Drawn By: TL Checked By: GL

Project No.: 21424 Drawing Scale: N.T.S



Drawing No.:

E0



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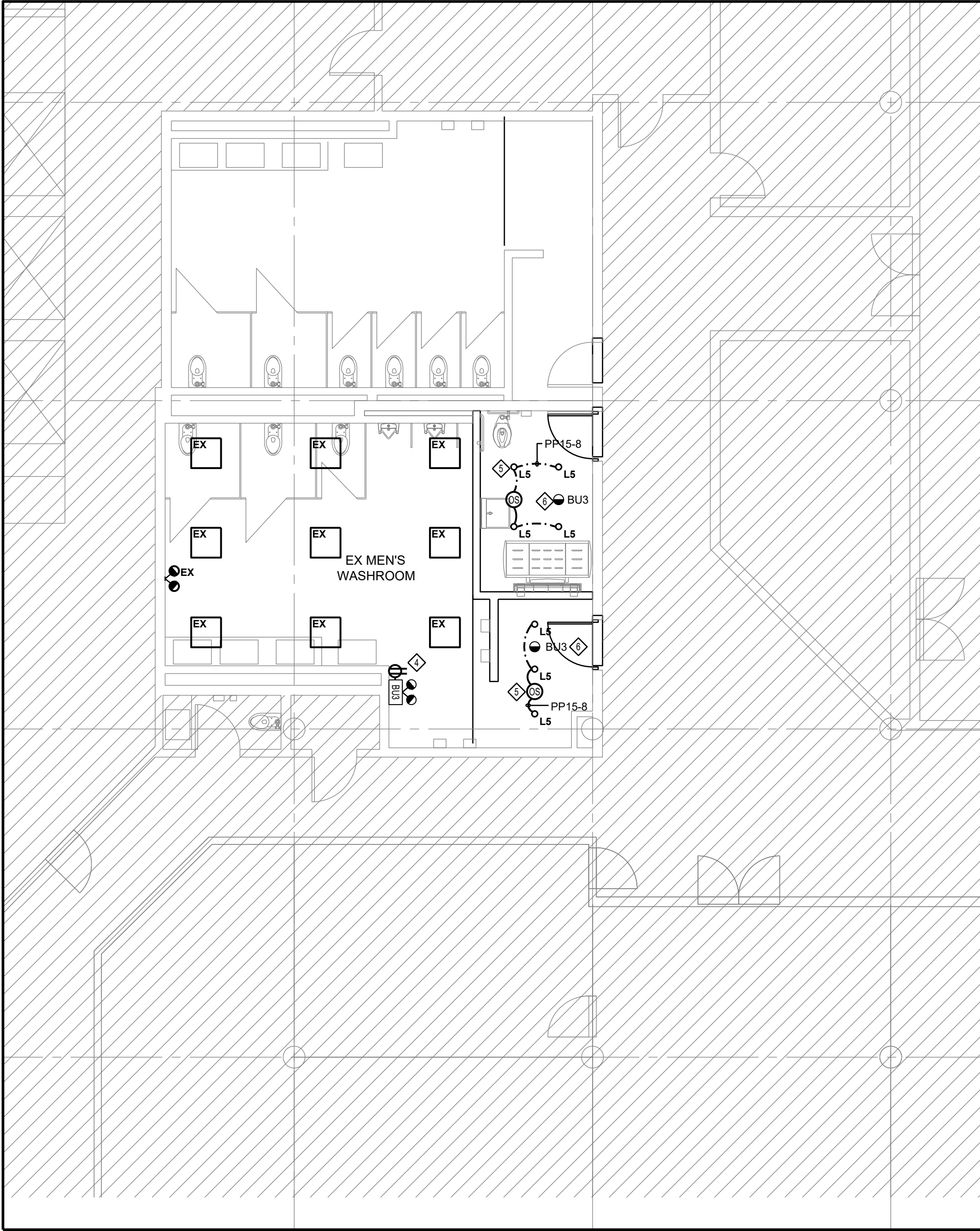


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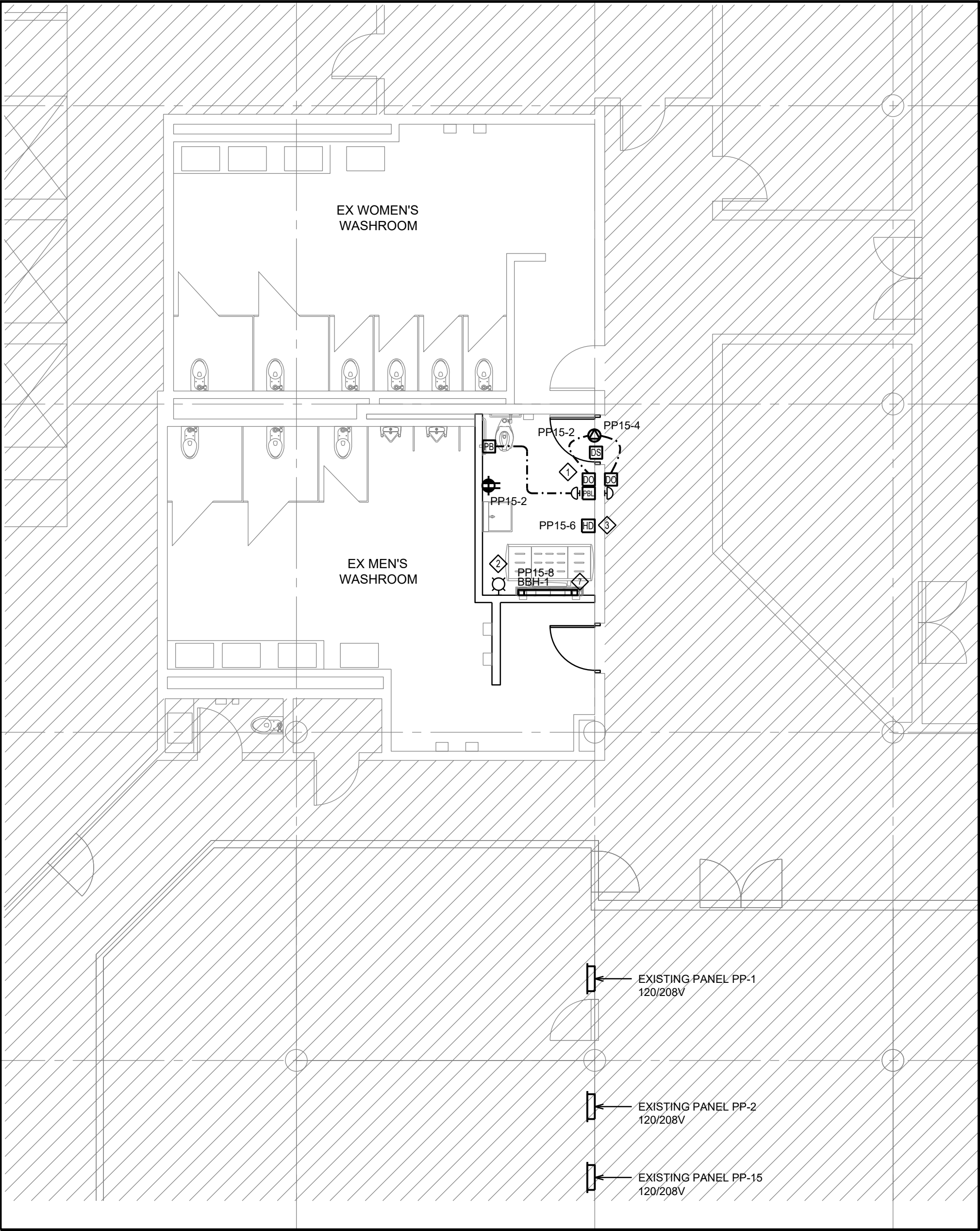
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1 LEVEL 1 WASHROOM LIGHTING PLAN
1:75



2 LEVEL 1 WASHROOM POWER & SYSTEMS PLAN
1:75

KEY NOTES:

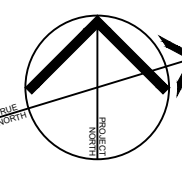
- NEW UNIVERSAL WASHROOM EMERGENCY CALL SYSTEM. SEE WIRING DIAGRAM ON DRAWING E-10.
- CONNECT NEW FIRE ALARM STROBE LIGHT TO EXISTING NOTIFIER CONTROL PANEL. COMPLE WITH NEW STROBE LIGHT CONTROL MODULE.
- PROVIDE POWER OUTLET FOR HAND DRYER. HAND DRYER TO BE SUPPLIED BY GC AND INSTALLED & WIRED BY THIS CONTRACTOR.
- RELOCATE & REPLACE EXISTING WITH NEW BATTERY UNIT. TYPE TO MATCH EXISTING UNIT & EXTEND AC & DC WIRING TO SUIT.
- CONNECT NEW LIGHTING FIXTURE TO NEW LIGHTING CIRCUIT FROM EXISTING PANEL PP-15.
- NEW RECESSED MTD. EMERGENCY REMOTE HEAD. TYPE TO MATCH EXISTING BATTERY UNIT VOLTAGE. CONNECT NEW HEADS TO NEW BATTERY UNIT BU3.
- NEW STELPRO ELECTRIC BASEBOARD HEATER CAT # SPR1001 WHITE C/W BUILT-IN THERMOSTAT.

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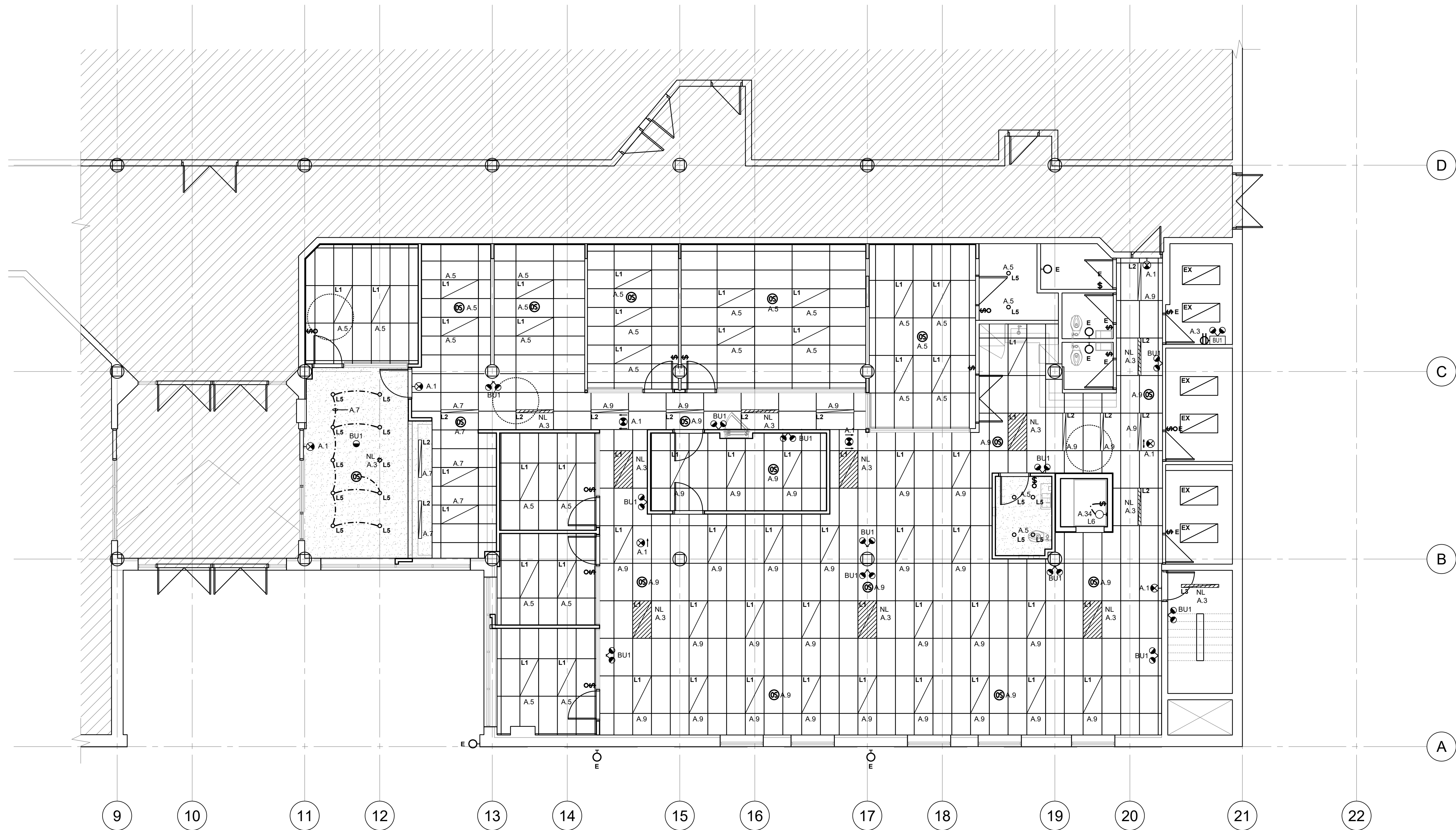
Drawing Title:

LEVEL 01
ELECTRICAL PLANS
WASHROOM

Issue Date:	2023.06.23
Drawn By: TL	Checked By: CL
Project No.: 21424	Drawing Scale: 1:75



E1.01



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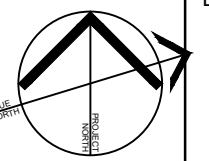
LEVEL 01
LIGHTING PLAN
OFFICE

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E1-02

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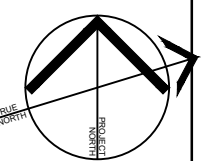
LEVEL 02
LIGHTING PLAN
OFFICE

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Project No.: 21424 Drawing Scale: 1 : 75

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E1-03

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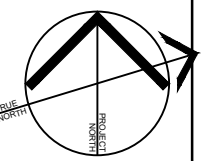
LEVEL 01
POWER & SYSTEMS PLAN
OFFICE

Issue Date: 2023.06.23

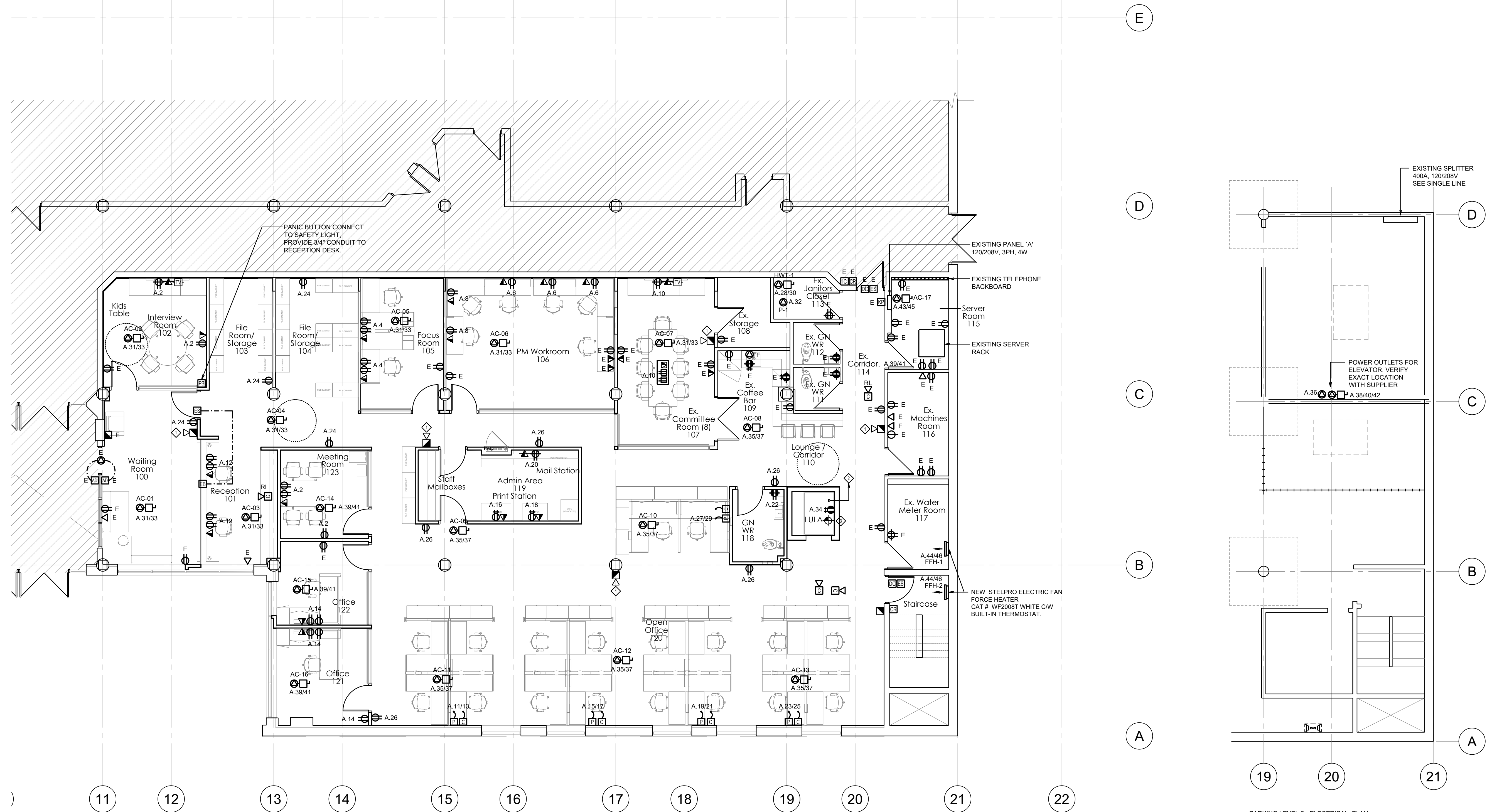
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Project No.: 21424 Drawing Scale: 1 : 75

Drawing No.:



E1-04



LEVEL 01 - ELECTRICAL & SYSTEMS PLAN

1:75

KEY NOTES:

- ① CONNECT NEW FIRE ALARM HORN TO BASE BUILDING FIRE ALARM HORN CIRCUIT, TYPICAL.
- ② PROVIDE 1" CONDUIT TO TELEPHONE ROOM FOR COMMUNICATIONS SERVICE.
- ③ CONNECT NEW FIRE ALARM DEVICE IN ELEVATOR SHAFT TO NEW INITIATING ZONE AS INDICATED ON FIRE ALARM RISER ON DRAWING E5.

PARKING LEVEL 2 - ELECTRICAL PLAN

1:75



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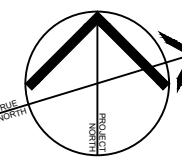
LEVEL 02
POWER & SYSTEMS PLAN
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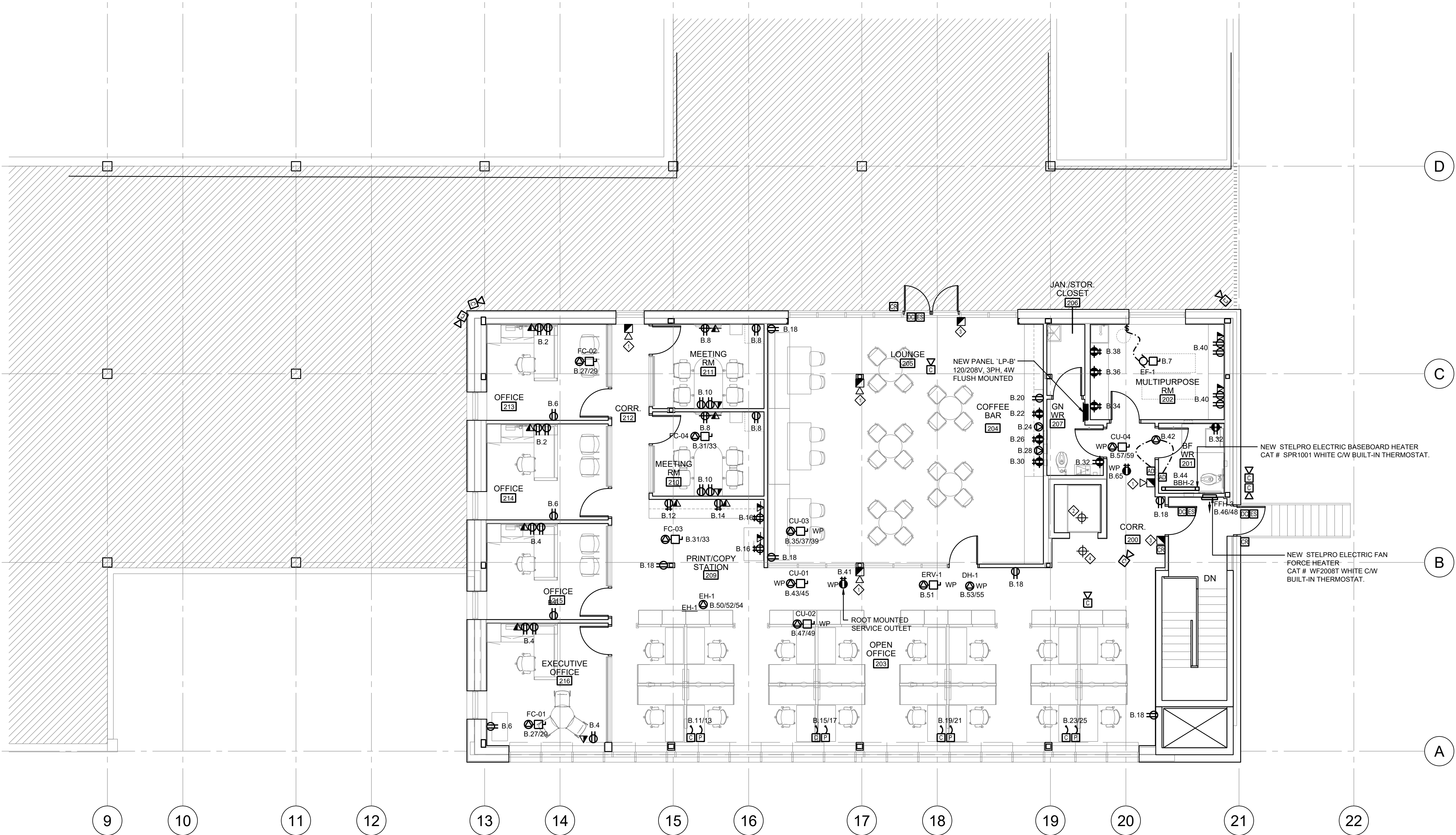
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Project No.: 21424 Drawing Scale: 1: 75

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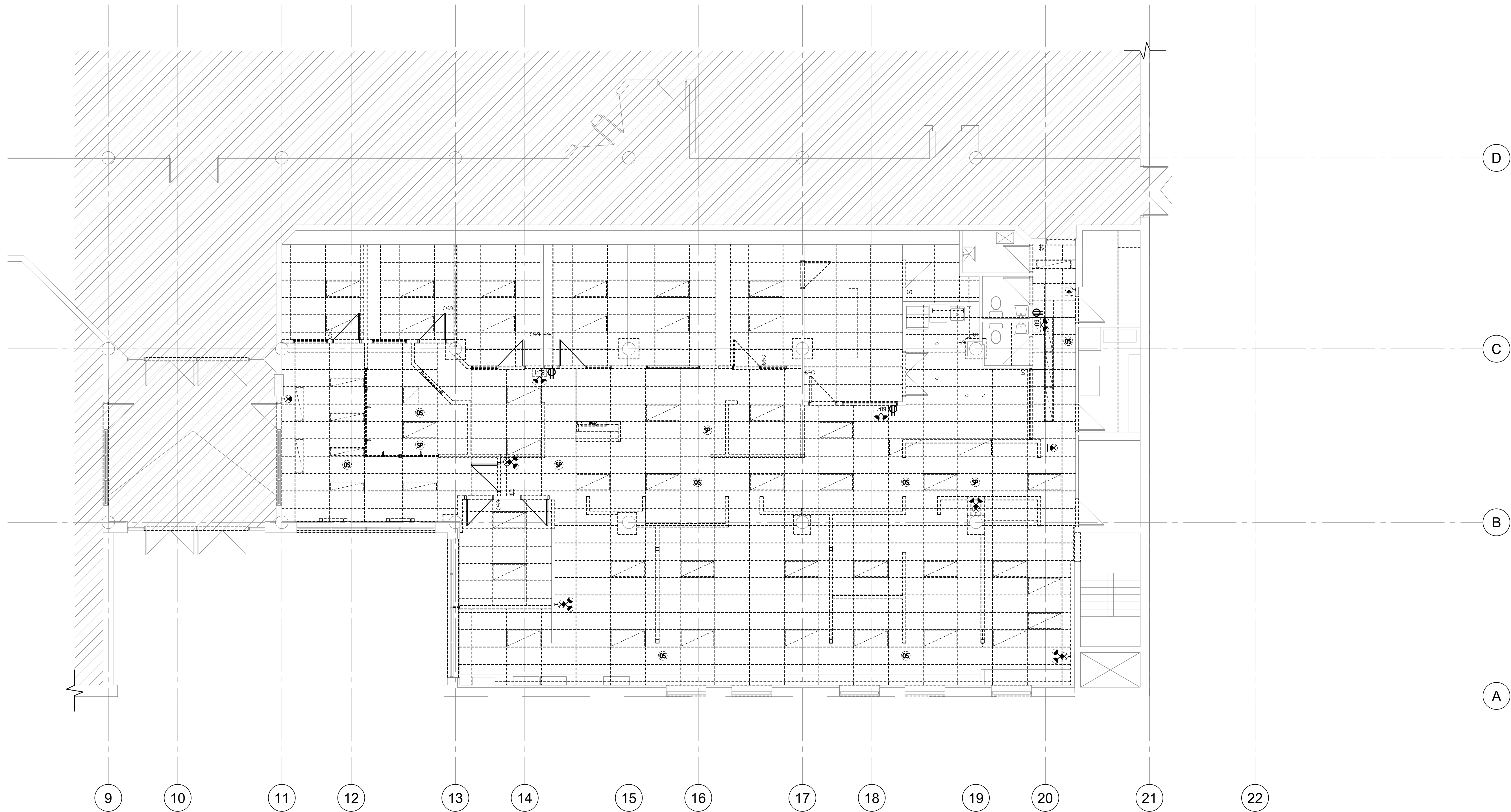


E1-05



KEY NOTES:

- CONNECT NEW FIRE ALARM HORNS TO NEW FIRE ALARM HORN CIRCUITS, TYPICAL.
- CONNECT NEW FIRE ALARM DEVICES IN ELEVATOR SHAFT TO NEW INITIATING ZONE AS INDICATED ON FIRE ALARM RISER ON DRAWING E5.
- CONNECT NEW FIRE ALARM DEVICES TO NEW INITIATING ZONE AS INDICATED ON FIRE ALARM RISER ON DRAWING E5.
- CONNECT NEW FIRE ALARM SMOKE DETECTOR TO SECOND FLOOR ADDITION ZONE AND INTERCONNECT WITH ELEVATOR FOR ELEVATOR RECALL.



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02	Issued for Review	2023.03.03
01	Issued for Review	2022.11.23
No.:	Issues / Revisions	YYYY.MM.DD

Drawing Title:

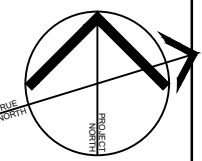
LEVEL 01
LIGHTING DEMOLITION
PLAN
OFFICE

Issue Date: 2023.06.23

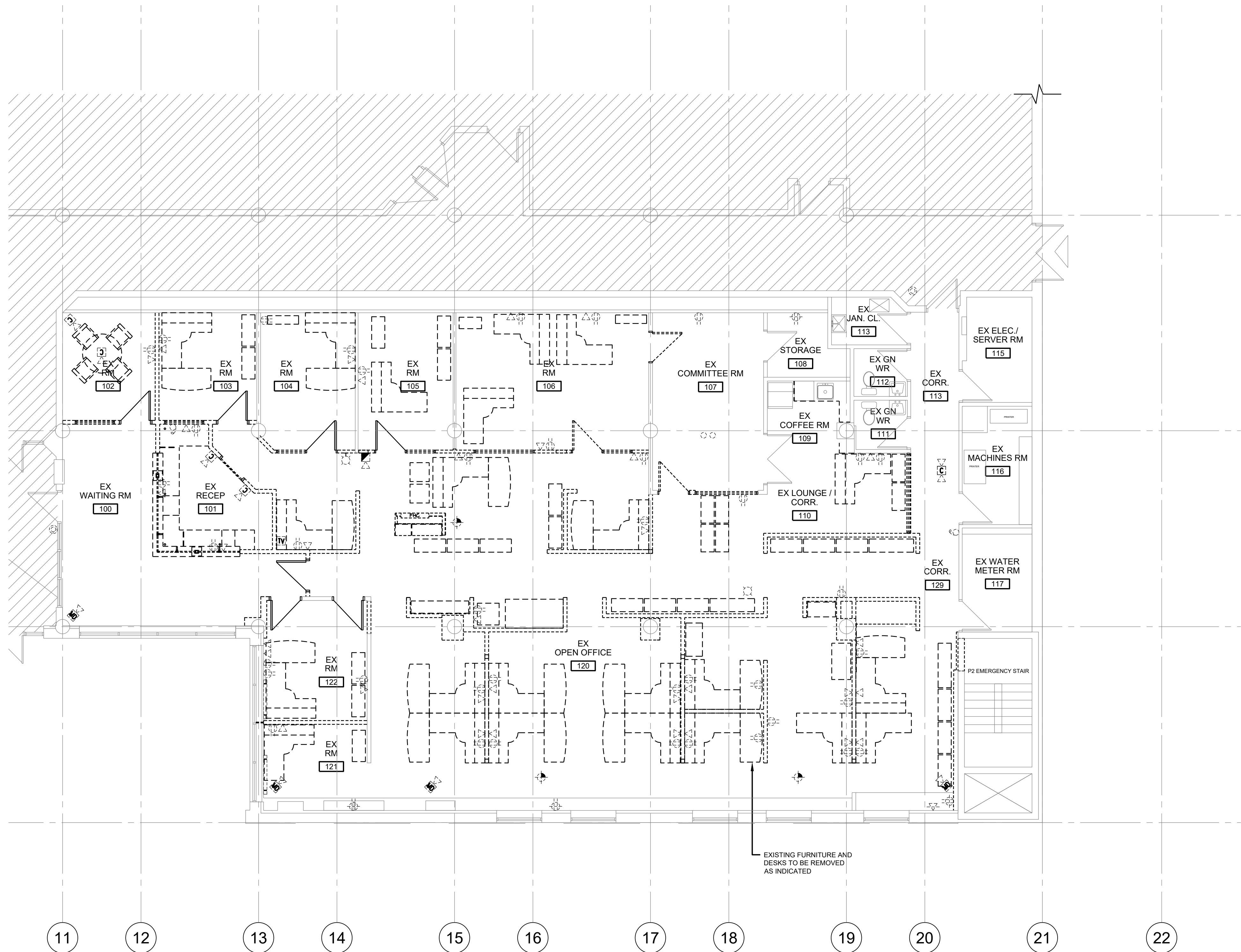
Drawn By: TL Checked By: CL

Project No.: 21424 Drawing Scale: 1:75

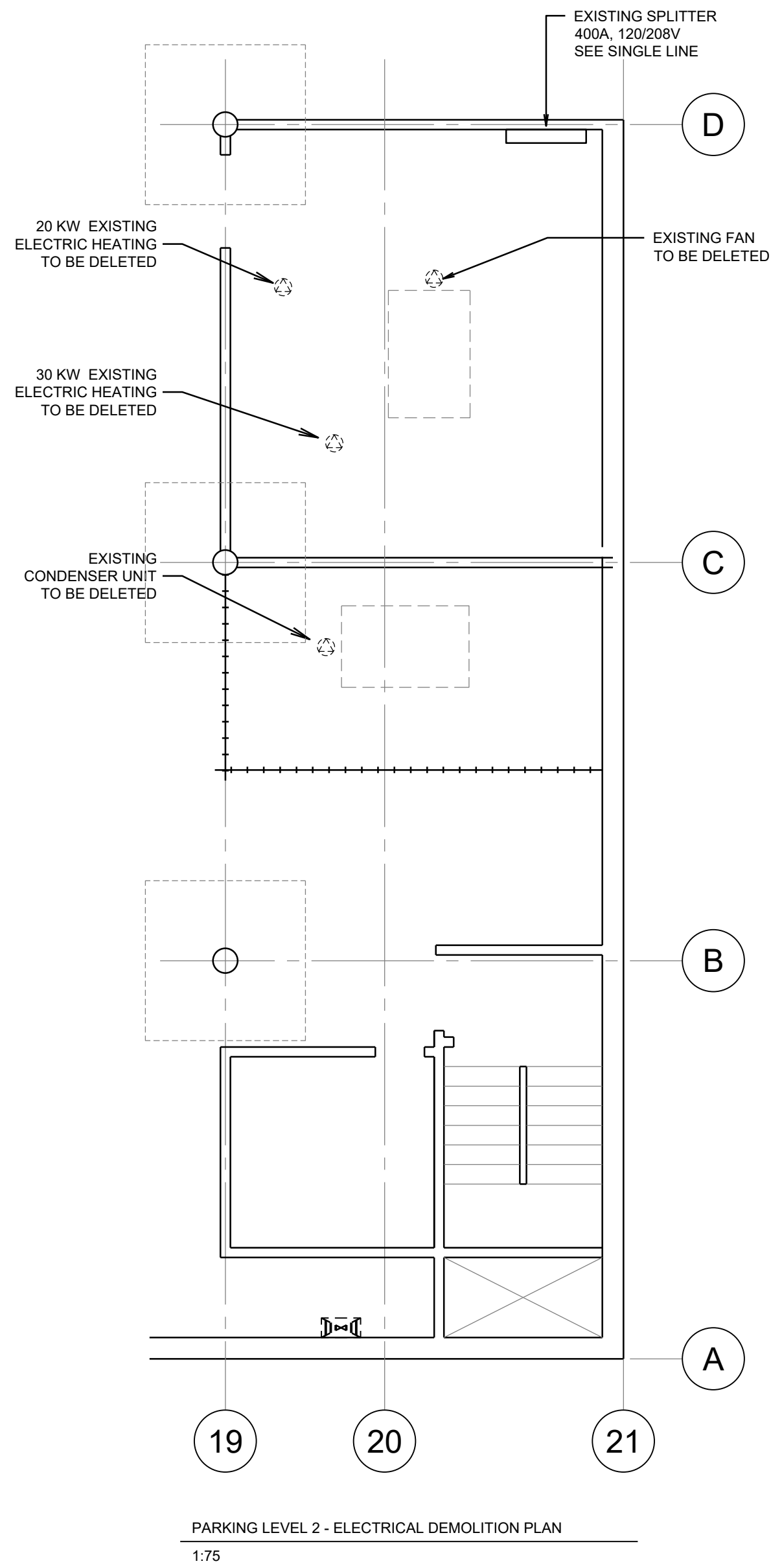
Drawing No.:



E1-06



LEVEL 01 - ELECTRICAL DEMOLITION PLAN
1:75



VPCH OFFICE EXPANSION

155 QUEEN ST NORTH
HAMILTON, ONTARIO



25 Main Street West
Hamilton, Ontario
L8P 1H1 Canada
T: 905-522-0220

Seals:



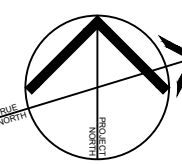
MCW Consultants Ltd.
207 Queen's Quay West, Suite 615, Toronto, ON, M5J 1A7
E-Mail: mcw_tor@mcw.com www.mcw.com
Tel: 416-598-2920 Fax: 416-598-5394
Toronto Vancouver Winnipeg Moncton Ottawa Halifax
Dauphin Kelowna Trail Saint John

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No.:	Issues / Revisions	YYYY.MM.DD

Drawing Title:

LEVEL 01 & P1 LEVEL
POWER & SYSTEMS
DEMOLITION PLAN
OFFICE

Issue Date: 2023.06.23
Drawn By: TL Checked By: CL
Project No.: 21424 Drawing Scale: 1:75



E1-07



VPCH OFFICE EXPANSION

155 QUEEN ST NORTH
HAMILTON, ONTARIO

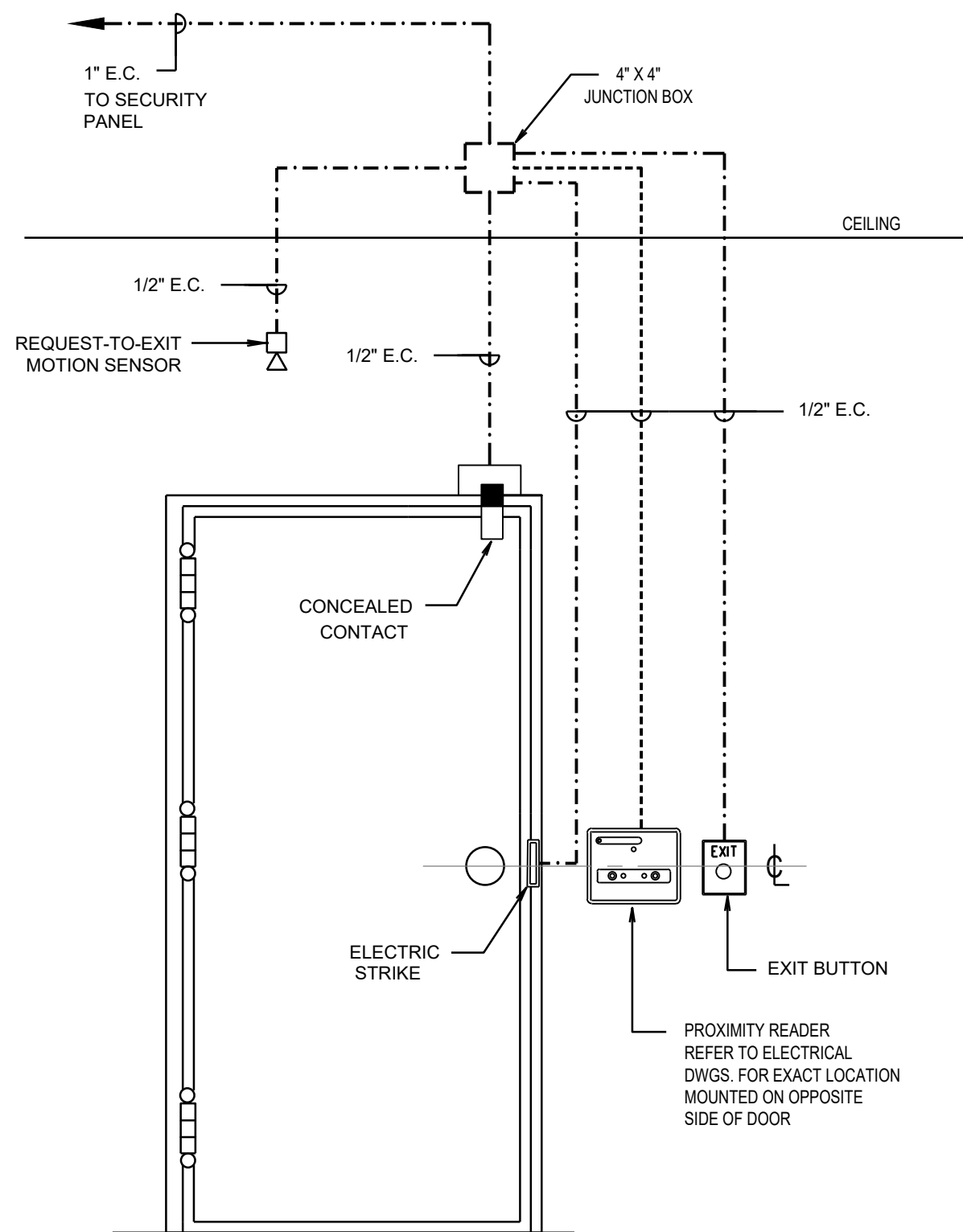


25 Main Street West
Hamilton, Ontario
L8P 1H1 Canada
T: 905-522-0220

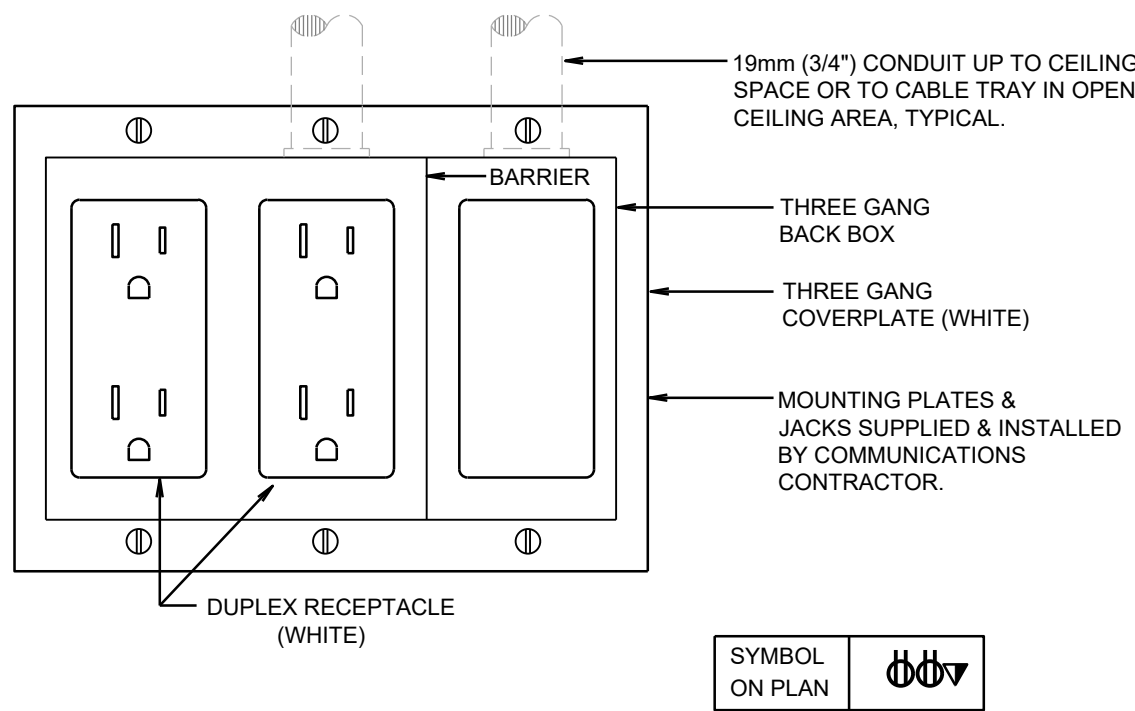
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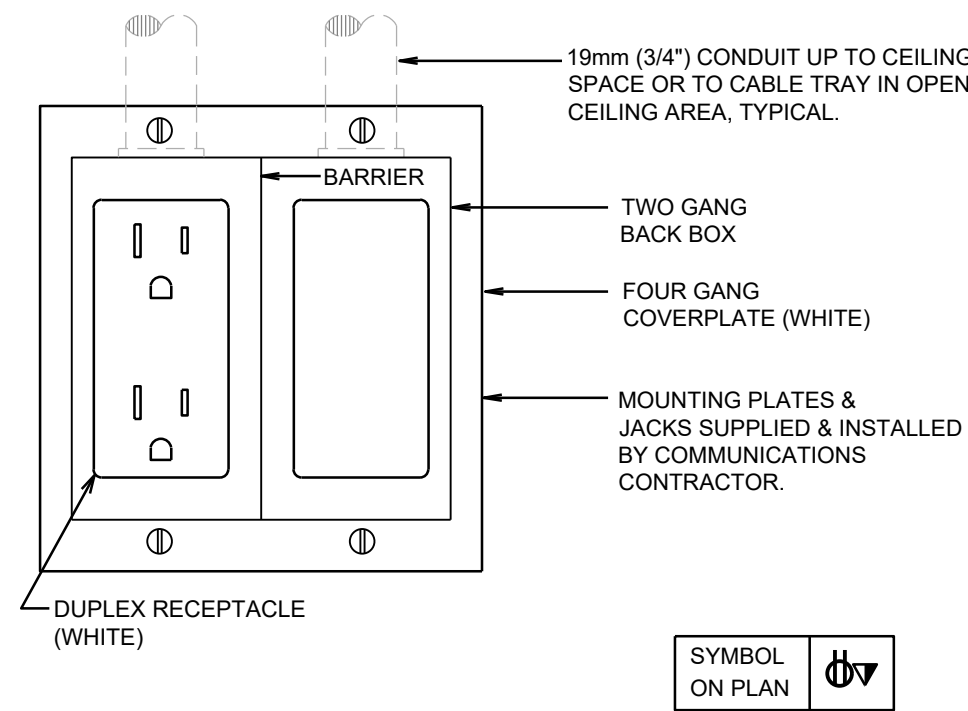
MCW Consultants Ltd.
207 Queen's Quay West, Suite 615, Toronto, ON, M5J 1A7
E-Mail: mcw_tor@mcw.com www.mcw.com
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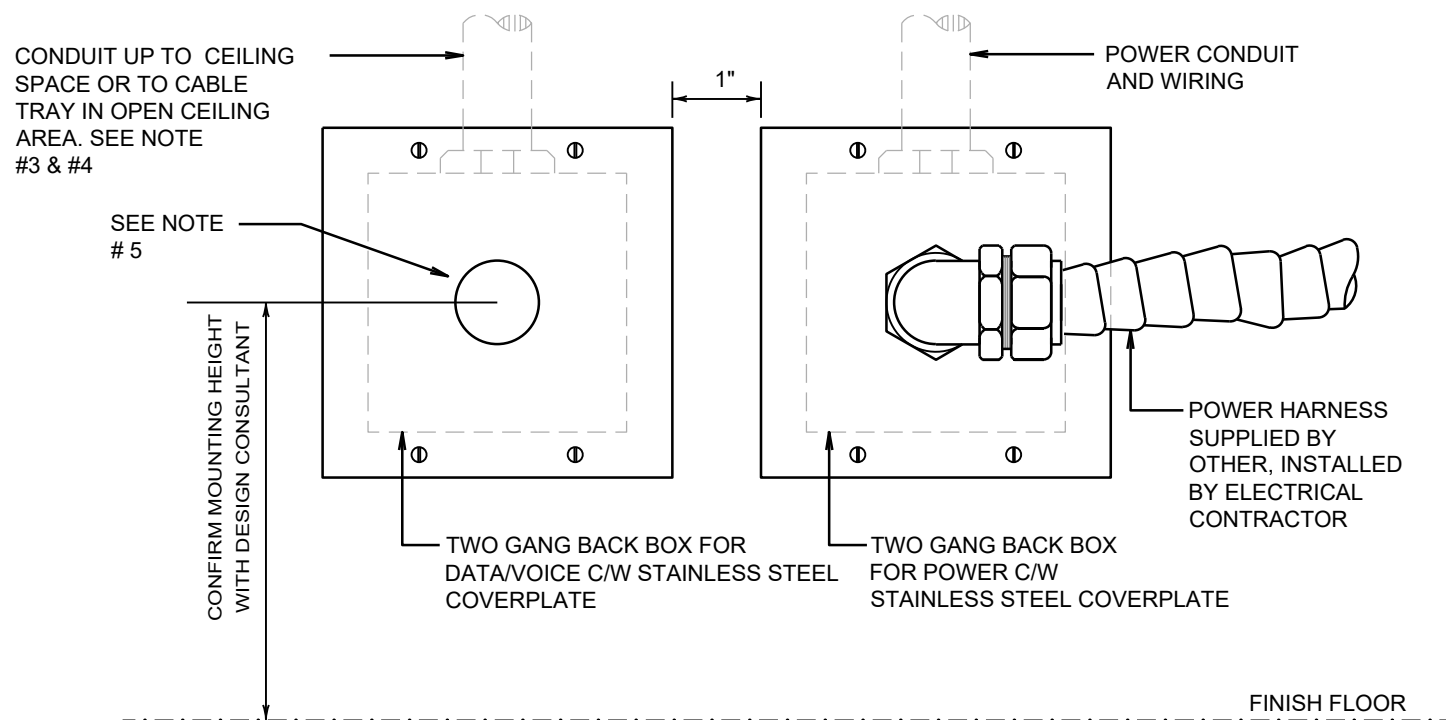
CARD ACCESS CONTROL SYSTEM ROUGH-IN DETAILS
SCALE: N.T.S.



POWER AND COMMUNICATIONS WALL GANG OUTLET DETAIL
SCALE: N.T.S.



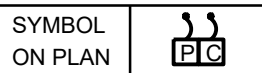
POWER AND COMMUNICATIONS WALL GANG OUTLET DETAIL
SCALE: N.T.S.



WALL OUTLET BOX DETAIL FOR DIRECT CONNECTION TO SYSTEM FURNITURE
SCALE: N.T.S.

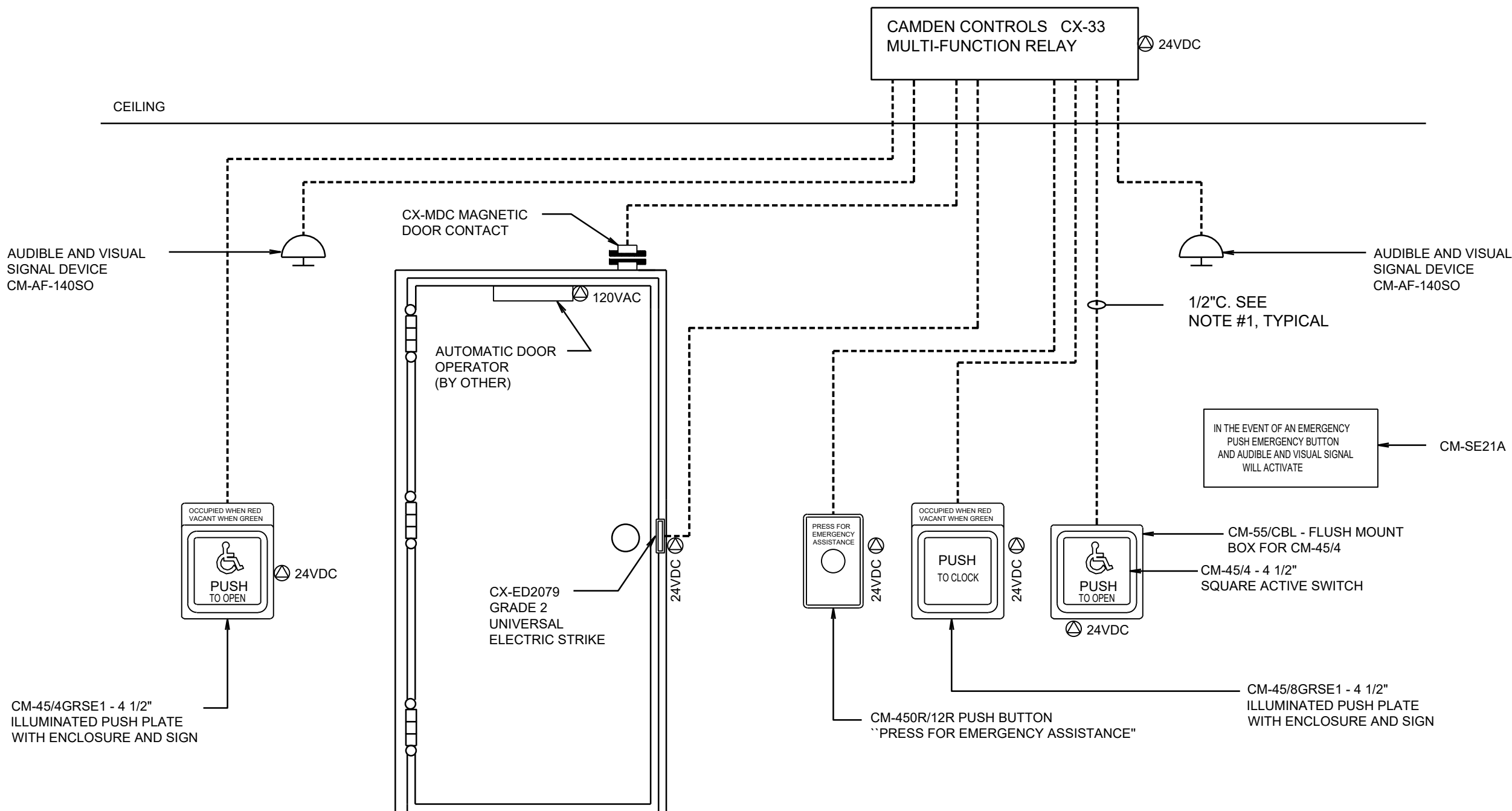
NOTES:

1. REFER TO FLOOR PLANS FOR CIRCUITING.
2. FINAL POWER CONNECTION TO FURNITURE SYSTEM BY DIVISION 16. FLEX HARNESS FOR DATA/VOICE LINES TO BE PROVIDED BY THE COMMUNICATIONS CONTRACTOR.
3. ALLOW 1"E.C. FOR TWO (2) STATIONS, 1 1/2" E.C. FOR UP TO FOUR (4) STATIONS, 2" E.C. FOR UP TO SIX (6) STATIONS.
4. COORDINATE SIZE OF HOLE WITH COMMUNICATION CONTRACTOR FOR DATA/VOICE.
5. GROMMETTED OPENING TO BE ADEQUATE FOR COMMUNICATION CABLES. COORDINATE SIZE WITH CABLE CONTRACTOR.



OUTSIDE WASHROOM

INSIDE WASHROOM



UNIVERSAL WASHROOM EMERGENCY CALL SYSTEM
SCALE: N.T.S.

NOTES:

1. THIS ELECTRICAL CONTRACTOR TO PROVIDE ALL WIRING, CONDUIT AND BACKBOXES AS REQUIRED FOR A COMPLETE AND FUNCTION SYSTEM. WIRING SHALL BE RUN IN CONDUIT AS PER DOOR HARDWARE MANUFACTURER'S WIRING REQUIREMENTS.
2. COORDINATE WITH DOOR HARDWARE SUPPLIER FOR INSTALLATION OF ALL DEVICES.
3. COORDINATE EXACT LOCATIONS AND MOUNTING HEIGHTS OF ALL DEVICES AND PLATES WITH ARCHITECTURAL DRAWINGS AND LOCAL INSPECTOR PRIOR TO ROUGH-IN.
4. LETTERS FOR SIGNAGE SHALL BE AT LEAST 25mm HIGH WITH A 5mm STROKE WITH SIGN POSTED ABOVE THE EMERGENCY BUTTON.

THE DOOR TO THE UNIVERSAL WASHROOM SHALL OPERATE AS FOLLOWS:

1. THE DOOR IS NORMALLY CLOSED AND UNLOCKED.
2. PRESSING THE EXTERIOR "PUSH TO OPEN" AURA PUSH PLATE TO OPEN THE DOOR.
3. ONCE INSIDE AND DOOR IS CLOSED. PRESSING THE ILLUMINATED "PUSH TO LOCK" AURA PUSH PLATE, CHANGES THE COLOUR TO RED AND LOCK THE DOOR.
4. PRESS THE INTERIOR "PUSH TO UNLOCK" AURA PUSH PLATE TO UNLOCK THE DOOR TO EXIT.
5. THE "PUSH TO LOCK" AURA PUSH PLATE SWITCH ILLUMINATED RING TURNS GREEN AND THE EXTERIOR "PUSH TO OPEN" AURA PUSH PLATE OUTER RING TURNS GREEN.
6. IF THE DOOR IS OPENED MANUALLY TO EXIT THE UNIVERSAL WASHROOM, THE OVERHEAD MAGNETIC CONTACT SWITCH RESETS THE SYSTEM.
7. UPON ACTIVATION OF THE EMERGENCY CALL BUTTON, THE LED ANNUNCIATOR AND SOUNDER WITHIN THE WASHROOM AND THE AUDIBLE AND VISUAL ALARMS ARE ACTIVATED AND THE DOOR IS DE-ENERGIZED AND UNLOCKED.
8. EMERGENCY ACCESS, THE DOOR CAN ALSO BE OPENED FROM OUTSIDE BY A MASTER KEY.

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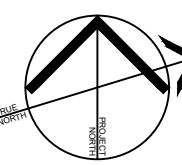
Drawing Title:

ELECTRICAL DETAILS

Issue Date: 2023.06.23

Drawn By: TL Checked By: CL

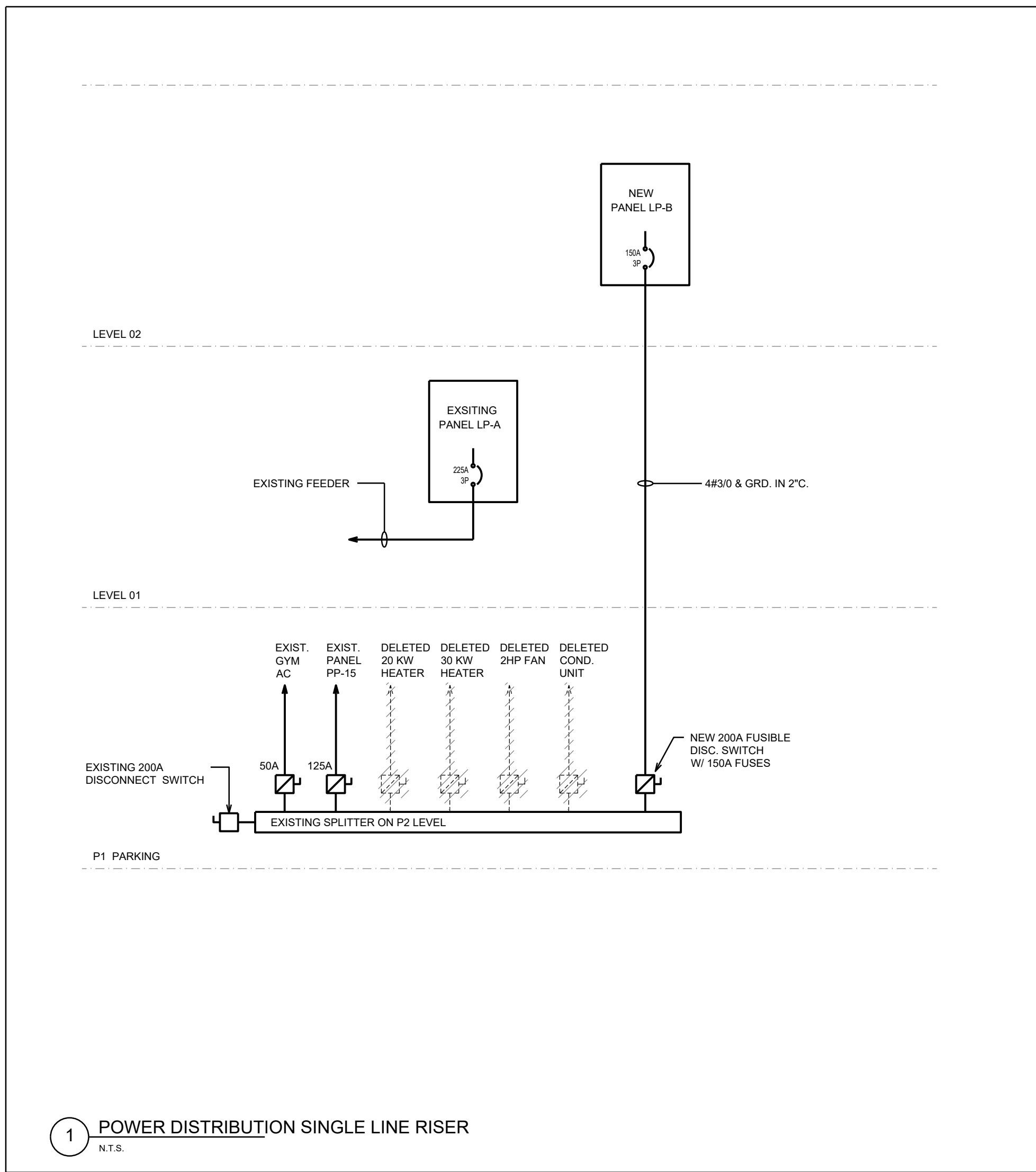
Project No.: 21424 Drawing Scale: N.T.S



Drawing No.:

E3

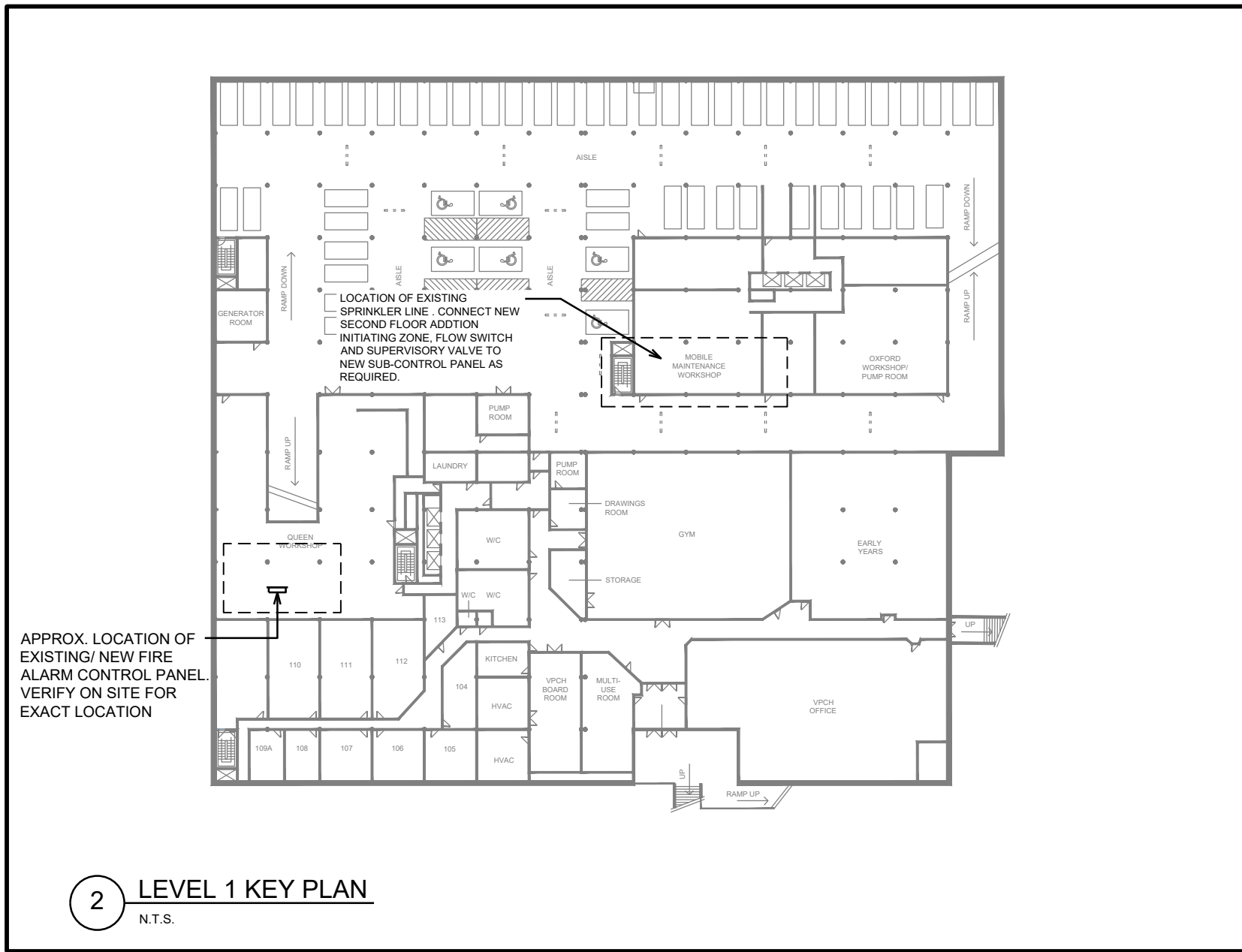
SYMBOLS	BASE MANUFACTURER (AS SPECIFIED)	MODEL NO.	SURFACE	RECESSED	SUSPENDED	SURFACE	RECESSED	BRACKET	No. OF LAMPS	WATTAGE	120 V.	347 V.	24 VDC.	REMARKS
		EXISTING BASE BUILDING 2' X 2' LIGHTING FIXTURE		•						LED	•			
		EXISTING BASE BUILDING 2' X 4' LIGHTING FIXTURE		•						LED	•			
	DAY-BRITE CFI BY SIGNIFY	2' X 4' RECESSED FLUX PANEL LED CAT.# 2FP24BL835-4-DS-UNV-DIM		•						37W LED	•			
				•						LED	•			
				•						LED	•			
				•						LED	•			
		EXISTING BASE BUILDING DOWN LIGHT		•						LED	•			
	LIGHTOLIER BY SIGNIFY	6" ROUND LED DOWN LIGHT CAT.# P8RSL15835CLZ10U		•						15W LED	•			
	HUBBELL	LAMP HOLDER MODEL# RL8504 C/W WIREGUARD					•			15W LED	•			
	LUMACELL	FULLY RECESSED GREEN RUNNING MAN EDGE-LIT EXIT SIGN, SUPPLIED AND INSTALLED BY DIV. 16 LUMACELL. CAT.# LDE-X-W-F-SP (SELF-POWER). (X) DENOTES FOR FACES/ARROWS AS INDICATED ON DRAWING)		•	•					LED	•			
	LUMACELL	LUMACELL, RECESSED EMERGENCY LIGHTING HEAD RSTH19-LD14-24VDC, 6W LED MR16 (590 LUMENS)		•						LED	•			
	LUMACELL	LUMACELL, SUSPENDED/WALL EMERGENCY LIGHTING DOUBLE HEAD MQM2-LD14-24VDC, 6W LED MR16 (590 LUMENS)					•			LED	•			
	LUMACELL	EMERGENCY BATTERY UNIT 24V VOLT, 720 WATT RG24S720MT18WTD WITH 10MIN TURN OFF DELAY							•		•			



1 POWER DISTRIBUTION SINGLE LINE RISER
N.T.S.

Branch Panel:			EXISTING PP-15			Volts: 120/208			A.I.C. Rating: 22kA			
Location:			HVAC ROOM			Phase: 3			Mains Type: MLO			
Supply From:			112.5kVA			Wires: 4			Mains Rating: 200A			
Mounting:			SURFACE						MCB Rating:			
Enclosure:												
Note * Lockable breaker												
Shaded Breakers denote existing												
CKT	Load Name	# REC	Trip (A)	Poles	A (VA)	B (VA)	C (VA)	Poles	Trip (A)	# REC	Load Name	CKT
1		15	1	0	240			1	15	1	GFI OUTLET	2
3		15	1			0	240		1	15	DOOR/EMERGENCY CALL	4
5		15	1				0	1000	1	15	HAND DRYER	6
7		15	1	0	1000				1	15	BASEBOARD HEATER	8
9		15	1			0	0		1	15		10
11		15	1				0	0	1	15		12
13		15	1	0	0				1	15	EXISTING SERVICE	14
15		15	1			0	0		1	15	EXISTING SERVICE	16
17	EXISTING SERVICE	15	1				0	0	1	15	EXISTING SERVICE	18
19	EXISTING SERVICE	15	1	0	0				1	15	EXISTING SERVICE	20
21	EXISTING SERVICE	15	1			0	0		1	15	EXISTING SERVICE	22
23	EXISTING SERVICE	15	1				0	0	1	15	EXISTING SERVICE	24
Total Load:					1240	240		1000				
Total Amps					10	2		8				
Load Classification			Connected Load		Demand Factor		Estimated Demand		Panel Totals			
Lighting			0		0%		0		TTL Conn. Load (VA)		2480	
Receptacle			240		70%		168		TTL Est. Load (VA)		1736	
Equipment (largest motor VA)			2240		70%		1568		TTL Conn. Amp (A)		7	
Appliances			0		0%		0		TTL Est. Demand (A)		5	
Others			0		0%		0					
Notes:												

Branch Panel:		EXISTING "LP-A"				Volts: 120/208			A.I.C. Rating: 22kA				
Location:		ROOM 115				Phase: 3			Mains Type: MLO				
Supply From:		SURFACE				Wires: 4			Mains Rating: 225A				
Mounting:		SURFACE							MCB Rating:				
Enclosure:													
Note * Lockable breaker													
Shaded Breakers denote existing													
CKT	Load Name	# REC	Trip (A)	Poles	A (VA)	B (VA)	C (VA)	Poles	Trip (A)	# REC	Load Name	CKT	
1	EXIT LIGHTS	20	1	50	1440			1	15	6	GROUND FLOOR OUTLETS	2	
3	NIGHT LIGHTS & BATTERY UNIT	20	1		0	600	960		1	15	4	GROUND FLOOR OUTLETS	4
5	GROUND FLOOR LIGHTING	20	1				600	960	1	15	4	GROUND FLOOR OUTLETS	6
7	GROUND FLOOR LIGHTING	20	1	600	720			1	15	3	GROUND FLOOR OUTLETS	8	
9	GROUND FLOOR LIGHTING	20	1			600	480	1	15	2	GROUND FLOOR OUTLETS	10	
11	GROUND FLOOR WORK STATION	15	2				480	960	1	15	4	GROUND FLOOR OUTLETS	12
13		15	1		480	1440		1	15	6	GROUND FLOOR OUTLETS	14	
15	GROUND FLOOR WORK STATION	15	2			480	500	1	20	1	GROUND FLOOR COPIER OUTLET	16	
17		15	2				480	500	1	20	1	GROUND FLOOR COPIER OUTLET	18
19	GROUND FLOOR WORK STATION	15	2		480	240		1	15	1	GROUND FLOOR OUTLET	20	
21		15	2			480	480	1	15	2	GROUND FLOOR OUTLETS	22	
23	GROUND FLOOR WORK STATION	15	2				480	960	1	15	4	GROUND FLOOR OUTLETS	24
25		15	2		480	1200		1	15	5	GROUND FLOOR OUTLETS	26	
27	GROUND FLOOR WORK STATION	15	2			240	2250	2	30		HWT-1	28	
29		15	2				240	2250	2	30			30
31		15	1			325	240	1	15	1	P-1		32
33	AC-1 to AC-7	15	2			325	240	150	100	1	15	ELEVATOR SERVICE OUTLET	34
35	AC-8 TO AC 13	15	2							1	15	ELEVATOR CONTROL	36
37	AC-9 TO AC 13	15	2		150	1500							38
39	AC-14 TO AC 16	15	2			125	1500		3	30	LULA ELEVATOR	40	
41		15	2					125	1500				42
43	AC-17	15	2	200	2000	200	2000		2	30	FFH1 / FFH2	44	
45		15	1					0	0	1	15		46
47		15	1	0	0					1	15		48
49		15	1			0	0			1	15		50
51		15	1				0	0		1	15		52
53		15	1					0	0	1	15		54
55		15	1	0	0				1	15			56
57		15	1			0	0		1	15			58
59		15	1				0	0	1	15			60
61		15	1	0	0				1	15			62
63		15	1				0	0	1	15			64
65		15	1					0	0	1	15		66
67		15	1	0	0				1	15			68
69		15	1				0	0	1	15			70
71		15	1				0	0	1	15			72
Total Load:					11545	11460	9785						
Total Amps:					96	96	82						
Load Classification		Connected Load	Demand Factor		Estimated Demand		Panel Totals						
Lighting		2650	100%		2650		TTL Conn. Load (VA)		33390				
Receptacle		15000	70%		10500		TTL Est. Load (VA)		24138				
Equipment (largest motor VA)		15840	70%		11088		TTL Conn. Amp. (A)		93				
Appliances		0	0%		0		TTL Est. Demand (A)		67				
Others		-600	70%		-420								
Notes:													



2 LEVEL 1 KEY PLAN
N.T.S.

Branch Panel:		NEW "LP-B"				Volts: 120/208		A.I.C. Rating: 22KA						
Location:		ROOM 115				Phase: 3		Mains Type: MLO						
Supply From:		SURFACE				Wires: 4		Mains Rating: 225A						
Mounting:								MCB Rating:						
Enclosure:														
Note * Lockable breaker														
Shaded Breakers denote existing														
CKT	Load Name	# REC	Trip (A)	Poles	A (VA)	B (VA)	C (VA)	Poles	Trip (A)	# REC	Load Name	CKT		
1	EXIT LIGHTS	20	1	50	960			1	15	4	SECOND FLOOR OUTLETS	2		
3	NIGHT LIGHTS & BATTERY UNIT	20	1			600	1200		1	15	5	SECOND FLOOR OUTLETS	4	
5	SECOND FLOOR LIGHTING	20	1				600	960	1	15	4	SECOND FLOOR OUTLETS	6	
7	SECOND FLOOR LIGHTING + EF-1	20	1	600	480				1	15	2	SECOND FLOOR OUTLETS	8	
9	SECOND FLOOR LIGHTING	20	1			600	960		1	15	4	SECOND FLOOR OUTLETS	10	
11	SECOND FLOOR WORK STATION	15	2		480	240		480	240	1	20	1	SECOND FLOOR COPIER OUTLET	12
13		15	2						1	20	1	SECOND FLOOR COPIER OUTLET	14	
15	SECOND FLOOR WORK STATION	15	2					480		1	20	2	SECOND FLOOR OUTLETS	16
17		15	2						1	15	5	SECOND FLOOR OUTLETS	18	
19	SECOND FLOOR WORK STATION	15	2		480	240			1	15	1	SECOND FLOOR KITCHEN OUTLET	20	
21		15	2			480	240		1	20	1	SECOND FLOOR KITCHEN OUTLET	22	
23	SECOND FLOOR WORK STATION	15	2		480	240		480	240	1	20	1	SECOND FLOOR KITCHEN OUTLET	24
25		15	2						1	20	1	SECOND FLOOR KITCHEN OUTLET	26	
27	FC-01, FC-02	15	2			740	240		1	20	1	SECOND FLOOR KITCHEN OUTLET	28	
29		15	2				740	240	1	20	1	SECOND FLOOR KITCHEN OUTLET	30	
31	FC-03, FC-04	15	2		600	480			1	15	2	SECOND FLOOR OUTLETS	32	
33		15	2			600	240		1	15	1	SECOND FLOOR OUTLET	34	
35		15	2				5280	240	1	15	1	SECOND FLOOR OUTLET	36	
37	CU-3	70	3		5280	240			1	15	1	SECOND FLOOR OUTLET	38	
39		1	20	1		5280	960		1	15	4	SECOND FLOOR OUTLETS	40	
41	ROOF SERVICE OUTLET	1	20	1			240	240	1	15	1	ROOF OPERATOR	42	
43		50	2		3750	1000			1	15		BASEBOARD HEATER -BBH-2	44	
45	CU-1	50	2			3750	1000		2	20		FAN FORCE HEATER -FFH-3	46	
47		50	2				3750	1000					48	
49	CU-2	50	3		3750	1666			3	20		EH-1	50	
51	ERW-1	20	1			1752	1666						52	
53	PH-1	30	2		2500	0		2500	1666	1	15		54	
55		30	2				1144	0	1	15			56	
57	CU-4	30	2					1144	0	1	15		58	
59			1		1144	0			1	15			60	
61			1			1144	0		1	15			62	
63		20	1				240	0	1	15			64	
65	ROOF SERVICE OUTLET	1	20	1					1	15			66	
67		15	1	0	0				1	15			68	
69		15	1			0	0		1	15			70	
71		15	1				0	0	1	15			72	
Total Load:					24680	23078	20760							
Total Amps:					206	192	173							
Load Classification		Connected Load		Demand Factor		Estimated Demand		Panel Totals						
Lighting		2450		100%		2450		TTL Conn. Load (VA)		68656				
Receptacle		11160		70%		7812		TTL Est. Load (VA)		49304				
Equipment (largest motor VA)		55246		70%		38672		TTL Conn. Amp (A)		191				
Appliances		0		0%		0		TTL Est. Demand (A)		136				
Others		-360		70%		-252								
Notes:														