ELECTRICAL SYMBOL LIST

LIGHTING SYMBOLS

- LIGHT FIXTURE, RECESSED
- LIGHT FIXTURE, RECESSED – EMERGENCY
- LIGHT FIXTURE, SURFACE MOUNT
- LIGHT FIXTURE, SURFACE MOUNT – EMERGENCY
- LIGHT FIXTURE, STRIP
- LIGHT FIXTURE, STRIP – EMERGENCY
- DOWNLIGHT FIXTURE, RECESSED
- DOWNLIGHT FIXTURE, RECESSED, WALLWASH
- DOWNLIGHT FIXTURE, RECESSED – EMERGENCY
- LIGHT FIXTURE, WALL MOUNT
- LIGHT FIXTURE, CEILING MOUNT
- RECESSED LIGHT FIXTURE, WALL MOUNT
- LIGHT FIXTURE, WALL MOUNT
- LIGHT FIXTURE, WALL SCONCE
- LIGHT FIXTURE, TRACK W/ HEADS AS SHOWN ON PLAN
- EXIT SIGN, UNIVERSAL MOUNT, W/ DIRECTIONAL ARROW
- EXIT SIGN, WALL MOUNT, +8'-0" A.F.F.
- EMERGENCY LIGHT W/ BATTERY PACK, +8'-0" A.F.F.
- FLOOD LIGHT
- AREA LUMINAIRE
- AREA LUMINAIRE W/STANDBY LAMP
- AREA LUMINAIRE, WALL MOUNT
- AREA LUMINAIRE, POLE MOUNT
- AREA LUMINAIRE, POST TOP

SWITCH SYMBOLS

- $ SWITCH, SPST +48" A.F.F.
- $_2$ SWITCH, DPST +48" A.F.F.
- $_3$ SWITCH, 3-WAY +48" A.F.F.
- $_4$ SWITCH, 4-WAY +48" A.F.F.
- $_D$ SWITCH, DIMMER +48" A.F.F.
- $_P$ SWITCH, SPST, W/PILOT LIGHT +48" A.F.F.
- $_K$ SWITCH, KEY-OPERATED +48" A.F.F.
- $_T$ SWITCH, TIMED +48" A.F.F.
- PC PHOTOCELL CONTROL
- OS OCCUPANCY SENSOR CONTROL

SIGNAL SYMBOLS

- TELEPHONE OUTLET +18" A.F.F.
- DATA OUTLET +18" A.F.F.
- DATA/TELEPHONE OUTLET +18" A.F.F.
- CLOCK
- SIGNAL BELL
- VISUAL ALARM SIGNAL (COLOR AS INDICATED ON PLAN)
- P.A. SPEAKER
- CATV OUTLET (LOCATE AS SHOWN ON PLANS)

NOTATIONS

- 1 DRAWING NOTE
- 2 / E3 DETAIL REFERENCE: TOP=DETAIL NO., BOTTOM=SHEET NO.
- EF 2 MECHANICAL EQUIPMENT MARK NO. (SEE EQUIPMENT SCHEDULE)
- A EQUIPMENT NO. (SEE EQUIPMENT SCHEDULE)

WIRING SYMBOLS

- 2A-9 PANEL & CIRCUIT NUMBER
- #10 HOMERUN TO PANEL
- CONDUCTOR SIZE (IF OTHER THAN #12)
- PHASE CONDUCTOR
- NEUTRAL CONDUCTOR
- GROUND CONDUCTOR
- CONCEALED CONDUIT
- 1-1/4"C CONDUIT SIZE
- CONDUIT (UNDER SLAB OR FLOOR)
- FLEXIBLE CONNECTION
- CONDUIT, STUBBED & CAPPED

POWER SYMBOLS

- RECEPTACLE, DUPLEX +18" A.F.F.
- RECEPTACLE, QUAD +18" A.F.F.
- RECEPTACLE, DUPLEX +6" ABV COUNTER
- RECEPTACLE, DUPLEX +18" A.F.F. (ONE OUTLET SWITCHED)
- RECEPTACLE, DUPLEX +18" A.F.F. (BOTH OUTLETS SWITCHED)
- RECEPTACLE, DUPLEX, PEDESTAL MOUNT
- RECEPTACLE, DUPLEX, FLUSH FLOOR MOUNT
- RECEPTACLE, SPECIAL (COORDINATE WITH EQUIPMENT SERVED)
- RELAY
- TIME CLOCK CONTROL
- PUSHBUTTON STATION
- JUNCTION BOX
- THERMOSTAT
- TRANSFORMER
- DISCONNECT, NON-FUSED
- DISCONNECT, FUSED
- ELECTRICAL CONNECTION
- ELECTRICAL CONNECTION, SINGLE MOTOR
- ELECTRICAL CONNECTION, MULTI-MOTOR
- ELECTRICAL DISTRIBUTION PANEL, RECESSED
- ELECTRICAL DISTRIBUTION PANEL, SURFACE

ONE-LINE DIAGRAM SYMBOLS

- PANEL 'A' — ELECTRICAL DISTRIBUTION PANELBOARD (MLO)
- PANEL 'A' MB — ELECTRICAL DISTRIBUTION PANELBOARD (MCB); SUB-FEED CIRCUIT BREAKER
- 200/3 — CIRCUIT BREAKER (TRIP RATING & POLES AS INDICATED ON PLAN)
- NORM / EMERG 200/3 — TRANSFER SWITCH (MANUAL OR AUTOMATIC)
- GEN — GENERATOR (RATING AS INDICATED ON PLAN)
- TRANSFORMER (RATING AS INDICATED ON PLAN)
- GROUND — GROUND SYSTEM (SIZE AS INDICATED ON PLAN)
- WATER PIPE GROUND ELECTRODE
- TRANSIENT VOLTAGE SURGE SUPPRESSOR
- M — UTILITY METER & METER BASE
- C.T. — UTILITY METER CURRENT TRANSFORMER
- 1 — FEEDER NO. (SEE FEEDER SCHEDULE)

ABBREVIATIONS

'A'	LIGHT FIXTURE TYPE (SEE FIXTURE LIST)	I.G.	ISOLATED GROUND
A.F.F.	ABOVE FINISHED FLOOR	LCP	LIGHTING CONTROL PANEL
A.F.G.	ABOVE FINAL GRADE	MCB	MAIN CIRCUIT BREAKER
A.F.I.	ARC FAULT INTERRUPTER	MLO	MAIN LUGS ONLY
A.T.S.	TRANSFER SWITCH, AUTOMATIC	N.I.C.	NOT IN CONTRACT
C	CONDUIT	N.L.	NIGHT LIGHT
C.O.	CONDUIT ONLY	P	POLE
CATV	CABLE TELEVISION	PC	PARTIAL CIRCUIT
CB	CIRCUIT BREAKER	PH	PHASE
CCTV	CLOSED CIRCUIT TELEVISION	R.T.U.	REMOTE TELEMETRY UNIT
C.T.	CURRENT TRANSFORMER	U.G.	UNDERGROUND
(E)	EXISTING	U.O.N.	UNLESS OTHERWISE NOTED
FACP	FIRE ALARM CONTROL PANEL	VFD	VARIABLE FREQUENCY DRIVE
G.F.I.	GROUND FAULT INTERRUPTER	W	WIRE
GND	GROUND	W.G.	WIRE GUARD
HP	HORSEPOWER	W.P.	WEATHERPROOF

NOTE: SOME OF THE SYMBOLS AND ABBREVIATIONS ON THIS LIST MAY NOT APPLY TO THIS PROJECT.

LIGHTING FIXTURE LIST

TYPE	LAMP	MANUFACTURER	CATALOG NUMBER	DESCRIPTION	OPTIONS
A1	LED 3000K 2300LM 20W	NEO RAY LIGHTING (OR APROVED OTHER)	S124DWC575D SERIES	TYPE :4FT GENERAL PURPOSE STRIP MOUNTING :SURFACE HOUSING :STEEL LENS/REFL :ACRYLIC VOLTAGE :MVOLT BALLAST :LED DRIVER	FINISH PER ARCHITECT A1E SHALL HAVE BATTERY BACKUP EQUIP. & STORAGE ROOMS
A2	LED 3000K 3000LM 31W	LITHONIA LIGHTING (OR APROVED OTHER)	ZL1N-L46 SERIES	TYPE :4FT WALL BRACKET MOUNTING :SURFACE (+7'-0" MIN) HOUSING :STEEL LENS/REFL :ACRYLIC VOLTAGE :MVOLT BALLAST :LED DRIVER	 STAIRWELLS
A3	LED 3000K 2850LM 24W	NEO RAY LIGHTING (OR APROVED OTHER)	S124RD1P SERIES	TYPE :4FT DIRECT/INDIRECT MOUNTING :SUSPENDED HOUSING :STEEL LENS/REFL :ACRYLIC VOLTAGE :MVOLT BALLAST :LED DRIVER	FINISH PER ARCHITECT MOUNTING HEIGHT PER ARCHITECT AMENITY SPACES
A4	LED 4000K 3000LM 18W	LITHONIA LIGHTING (OR APROVED OTHER)	FEML48 SERIES	TYPE :4FT ENCLOSED STRIP MOUNTING :SURFACE HOUSING :FIBERGLASS LENS/REFL :ACRYLIC VOLTAGE :MVOLT BALLAST :LED DRIVER	 ELEVATOR PIT, TOP OF SHAFT
B1	LED 3000K 12W	HYDREL LIGHTING (OR APROVED OTHER)	LOWELL SERIES	TYPE :EXTERIOR SCONCE (UP/DWN) MOUNTING :SURFACE HOUSING :ALUMINUM LENS/REFL :CLEAR TEMPERED GLASS VOLTAGE :MVOLT BALLAST :LED DRIVER	FINISH PER ARCHITECT MOUNT AT+7'-0" ABOVE GRADE TO CENTER OF FIXTURE UL LISTED WET LOCATION BUILDING FACADE, ROOF
B2	LED 3000K 2900LM 24W	LITHONIA LIGHTING (OR APROVED OTHER)	WXP1LED SERIES	TYPE :EXTERIOR WALL PACK MOUNTING :SURFACE (+7'-0") HOUSING :ALUMINUM LENS/REFL :ACRYLIC VOLTAGE :MVOLT BALLAST :LED DRIVER	TYPE III DISTRIBUTION ROOF
B3	LED 3000K 750LM 10W	LITHONIA LIGHTING (OR APROVED OTHER)	LDN6CYL SERIES	TYPE :6" DIA EXTERIOR CYLINDER MOUNTING :SURFACE HOUSING :ALUMINUM LENS/REFL :MATTE DIFFUSER VOLTAGE :MVOLT BALLAST :LED DRIVER	FINISH PER ARCHITECT WIDE FLOOD UL LISTED WET LOCATION ENTRY CANOPY
B4	LED 3000K 2420LM 31W	GLOWBACK LED (OR APROVED OTHER)	LVLBP1.5 SERIES	TYPE :4FT LINEAR CEILING LIGHT MOUNTING :SURFACE HOUSING :ALUMINUM LENS/REFL :MATTE DIFFUSER VOLTAGE :MVOLT BALLAST :LED DRIVER	FINISH PER ARCHITECT UL LISTED WET LOCATION ENTRY CANOPY
B5	LED 3000K 20W	FOCUS INDUSTRIES (OR APROVED OTHER)	DL-22 SERIES	TYPE :LANDSCAPE LIGHT MOUNTING :AT GRADE HOUSING :BRASS LENS/REFL : VOLTAGE :12V BALLAST :LED DRIVER	FINISH PER ARCHITECT PROVIDE ALL COMPONENTS FOR COMPLETE INSTALLATION. FIELD ADJUST UL LISTED WET LOCATION COURTYARD
B6	LED 3000K 2250LM 20W	HYDREL LIGHTING (OR APROVED OTHER)	M9410C SERIES	TYPE :ADJUSTABLE IN-GROUND LIGHT MOUNTING :AT GRADE HOUSING :BRASS LENS/REFL : VOLTAGE :MVOLT BALLAST :LED DRIVER	FINISH PER ARCHITECT FIELD ADJUST UL LISTED WET LOCATION LANDSCAPE BED
C1	LED 3000K 1075LM 9W	USAI LIGHTING (OR APROVED OTHER)	P4RDF SERIES	TYPE :4.5" DIA DOWNLIGHT MOUNTING :RECESSED HOUSING :STEEL LENS/REFL :NA VOLTAGE :MVOLT BALLAST :LED DRIVER	FINISH PER ARCHITECT C1E SHALL HAVE BATTERY BACKUP LOBBY, CORRIDORS
C2 C2E	LED 3000K 1175LM 9W	USAI LIGHTING (OR APROVED OTHER)	P3RD SERIES	TYPE :3" DIA DOWNLIGHT MOUNTING :RECESSED HOUSING :STEEL LENS/REFL :NA VOLTAGE :MVOLT BALLAST :LED DRIVER	FINISH PER ARCHITECT C2E SHALL HAVE BATTERY BACKUP LOBBIES
C3	LED 3000K 935LM 11W	SUNPARK LIGHTING (OR APROVED OTHER)	FL03240-VT SERIES	TYPE :2FT VANITY LIGHT MOUNTING :SURFACE (+6" ABOVE MIRROR) HOUSING :STEEL LENS/REFL :ACRYLIC VOLTAGE :MVOLT BALLAST :LED DRIVER	 RESTROOM
U1	LED 2700K 1000LM 15W	DESIGN CLASSICS (OR APPROVED OTHER)	DFR615-H-927-WH	TYPE :6" DIA CEILING LIGHT MOUNTING :SURFACE HOUSING :ALUMINUM LENS/REFL :ACRYLIC VOLTAGE :120V BALLAST :LED DRIVER (0-10 DIMMING)	 UL LISTED WET LOCATION UNIT KITCHEN, BATH, HALL
U2	LED 3000K 1600LM 20W	KUZCO LIGHTING (OR APPROVED OTHER)	FM3511 SERIES	TYPE :11" DIA CEILING LIGHT MOUNTING :SURFACE HOUSING :STEEL LENS/REFL :FROSTED GLASS VOLTAGE :120V BALLAST :LED DRIVER (0-10 DIMMING)	FINISH PER ARCHITECT UNIT BEDROOM
U3	LED 3000K 1600LM 20W	KUZCO LIGHTING (OR APPROVED OTHER)	VL62220 SERIES	TYPE :20" VANITY BAR MOUNTING :SURFACE (+6" ABOVE MIRROR) HOUSING :STEEL LENS/REFL :ACRYLIC VOLTAGE :120V BALLAST :LED DRIVER (0-10 DIMMING)	FINISH PER ARCHITECT UNIT BATHROOM
X1 X2	LED (GREEN LETTERS) (1.5W)	LITHONIA DMF LIGHTING (OR APROVED OTHER)	LE EL N SERIES DLED500EM-G	TYPE :EXIT SIGN MOUNTING :UNIVERSAL HOUSING :DIE-CAST ALUMINUM LENS/REFL :SINGLE FACE/DUAL FACE VOLTAGE :MVOLT BALLAST :NICKLE CADMIUM BATTERY	X1=SINGLE SIDE X2=DOUBLE SIDE

GENERAL LIGHTING NOTES:

A. WHEREVER POSSIBLE, SELECTED LIGHT FIXTURES SHALL HAVE ENERGY EFFICIENT LAMPS, BALLASTS & DRIVERS AND/OR HAVE ENERGY COMPLIANT RATINGS SUCH AS DLC, ENERGY STAR, ETC.

B. VERIFY ALL FIXTURE FINISHES WITH ARCHITECT PRIOR TO BID.

C. VERIFY ALL FIXTURE LOCATIONS AND MOUNTING HEIGHTS WITH ARCHITECT PRIOR TO ROUGH IN.

D. ALL LIGHTING SHALL BE 3000 KELVIN UNLESS OTHERWISE NOTED.

E. ALL PRODUCT SUBSTITUTIONS AND VALUE ENGINEERING SHALL BE SUBMITTED DURING BID PHASE, SHALL MEET DESIGN INTENT AND ARE SUBJECT TO OWNER APPROVAL.

F. EGRESS LIGHTING SHALL BE PROVIDED TO MEET MINIMUM LIGHT LEVELS AS DESCRIBED PER OREGON STRUCTURAL SPECIALTY CODE 1006.3.

G. BUILDING EXTERIOR & SITE LIGHTING SHALL BE CONTROLLED VIA PHOTOCELL, EITHER INTEGRAL OR REMOTE, OR BY TIME CLOCK FOR DUSK-TILL-DAWN OPERATION.

H. LIGHTING FIXTURES DESIGNATED AS NIGHT LIGHTS (N.L.) AND STAIRWELL LIGHTS SHALL BE ON 24/7.

I. STAIRWELL LIGHTS SHALL BE PROVIDED WITH OCCUPANCY SENSOR(S), EITHER INTEGRAL OR REMOTE, TO PROVIDE 50% LIGHT REDUCTION DURING PERIODS OF INACTIVITY. ONCE ACTIVATED, LIGHTS ARE TO REMAIN AT 100% OUTPUT FOR A MINIMUM OF 20 MINUTES.

J. DESIGN INTENT FOR CORRIDOR LIGHT FIXTURES TO BE CONTROLLED SUCH THAT THE FIXTURES DIM BY 50% DURING PERIODS OF LOW ACTIVITY. UPON DETECTION, LIGHTS SHALL RETURN TO 100% AND REMAIN AT FULL OUTPUT FOR A MINIMUM OF 30 MINUTES BEFORE RETURNING TO THE DIMMED STATE. FIXTURES ON EMERGENCY POWER CIRCUITS SHALL REMAIN 'ON' 24/7.

REGISTERED PROFESSIONAL ENGINEER
16,597
OREGON
JULY 20, 1993
ROBERT L. CONNELL
EXPIRES 12-31-2023

1	04.14.2022 PERMIT RESUBMITTAL
Date:	04.08.2022
Proj No:	10105
Drawn By:	DMT
Chkd By:	RLC
DSGN By:	DMT
Acad File:	

SW PARK APARTMENTS
RYSTADT
2057 SW PARK AVE.
PORTLAND OREGON

ELECTRICAL SYMBOL LIST

MFIA INC.

Consulting Engineers
2007 S.E. Ash St.
Portland, OR 97214
PHN: (503) 234-0548
FAX: (503) 234-0677
WWW.MFIA-ENG.COM

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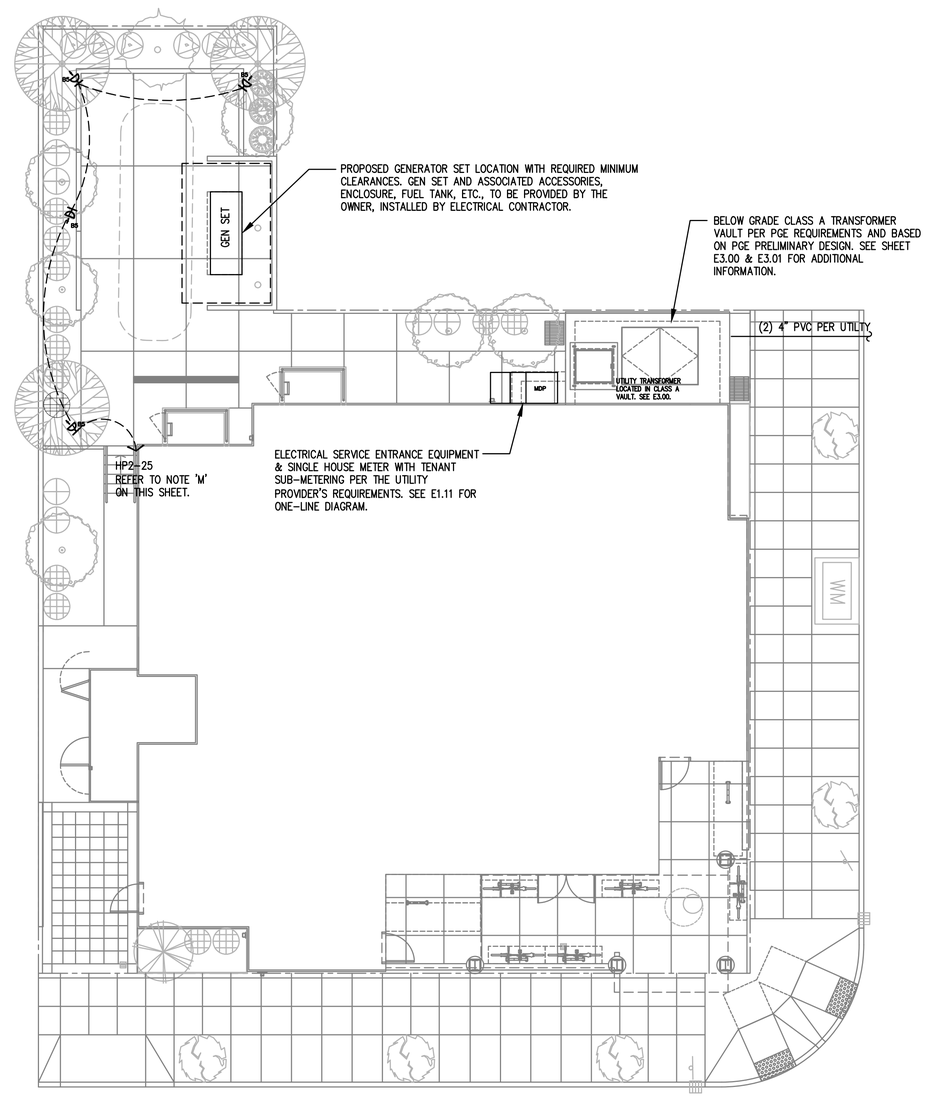

1 / E1.01 ELECTRICAL SITE PLAN
SCALE: 1/8" = 1'-0"

GENERAL NOTES:

A. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND NATIONAL CODES.

B. ELECTRICAL PLANS ARE DIAGRAMMATIC AND MAY OR MAY NOT REFLECT ACTUAL FIELD CONDITIONS.

C. REFER TO LIGHTING PLANS FOR BUILDING MOUNTED LIGHT FIXTURE LOCATIONS.

D. COORDINATE WITH LOCAL UTILITY PROVIDER FOR EXACT SERVICE CONDUIT AND CONDUCTORS REQUIREMENTS.

E. ALL UTILITY WORK SHALL BE DONE IN ACCORDANCE WITH CLARK PUBLIC UTILITIES ELECTRICAL SERVICE REQUIREMENTS.

F. U.G. PRIMARY FEEDER SHALL HAVE A MINIMUM 48 INCH BURY.

G. U.G. SECONDARY FEEDER SHALL HAVE A MINIMUM 36 INCH BURY.

H. REFER TO SHEET E1.11 FOR ONE-LINE DIAGRAM, LOAD SUMMARY INFORMATION AND TYPICAL FEEDER SCHEDULE.

I. SECONDARY CONDUIT SWEEPS SHALL BE MINIMUM 60 INCH RADIUS WITH A MINIMUM OF 7'-0" STRAIGHT CONDUIT RUN BETWEEN SWEEPS.

J. CONTRACTOR SHALL REVIEW THE UTILITY PROVIDER'S ELECTRICAL SERVICE REQUIREMENTS PRIOR TO THE START OF ANY WORK.

K. LOCATION AND INSTALLATION OF THE PRIMARY AND SECONDARY CONDUITS, TRANSFORMER, ETC. SHALL BE PROVIDED PER UTILITY PROVIDER'S ELECTRICAL SERVICE REQUIREMENTS.

L. CONTRACTOR SHALL REVIEW ALL PROJECT DOCUMENTS AND SPECIFICATIONS IN DETAIL AND REFER TO THE DOCUMENTS THROUGHOUT THE CONSTRUCTION.

M. VERIFY LOW VOLTAGE LANDSCAPE LIGHTING FIXTURES & LOCATIONS AND PROVIDE POWER CONNECTIONS AS REQUIRED PER THE LANDSCAPE PLAN SET.

UTILITY REQUIREMENTS

1. CUSTOMER TO PROVIDE ALL TRENCHING AND BACKFILLING. TRENCH TO BE 36 INCHES DEEP AND 30 INCHES WIDE, MEASURED FROM FINAL GRADE.

2. ALL UTILITY CONDUCTORS TO BE INSTALLED IN GRAY SCHEDULE 40, ELECTRICAL GRADE, PVC CONDUIT WITH NYLON PULL STRINGS (MIN 500 LBS. TEST). CLARK PUBLIC UTILITIES TO DETERMINE THE SIZE AND NUMBER OF CONDUITS REQUIRED. ALL ELBOWS TO BE 36 INCH (MIN) RADIUS. ALL BENDS MAY BE FACTORY MADE. IF MORE THAN 270 DEGREES OF BENDS OR IF RUN IS LONGER THAN 150 FEET, BENDS MUST BE RIGID STEEL.

3. CONSULT WITH UTILITY REPRESENTATIVE 2 WEEKS BEFORE STARTING MAIN POWER TRENCHING FOR A PRE-CONSTRUCTION CONFERENCE. INCLUDED IN THIS CONFERENCE WILL BE EXCAVATOR, CPU, TELCO, CATV, AND GAS.

4. CONTRACTOR TO LOCATE ALL UNDERGROUND UTILITIES BEFORE TRENCHING.

CLASS A TRANSFORMER VAULT ROOM GENERAL NOTES:

1. ALL MATERIALS AND PRODUCTS USED WITHIN THE CLASS A VAULT IS SUBJECT TO THE UTILITY PROVIDER'S APPROVAL.

2. PRIMARY SERVICE CONDUCTORS FROM THE PROPERTY LINE TO THE VAULT SHALL BE IN SCHEDULE 40 PVC PER THE UTILITY PROVIDER'S DIRECTION. ALL CONDUIT PENETRATIONS MUST BE SEALED WITH A FLEXIBLE NON-SHRINK HYDROPHOBIC GROUT TO PREVENT WATER INTRUSION.

3. NON-METALIC SEISMIC-APPROVED CABLE TRAY WITH GALVANIZED HARDWARE SHALL BE INSTALLED IN VAULT ROOMS WITH CEILING GREATER THAN 10 FEET HIGH.

4. VAULT ROOM DOORS SHALL BE BLAST-RATED METAL DOORS. DOORS AND VENT SHUTTERS MUST HAVE A THREE HOUR BLAST & FIRE RATING PER NFPA 450.43.

5. ALL OPENING, GAPS & CRACKS MUST BE SEALED WITH THREE-HOUR RATED FIRE CAULKING. CONSULT UTILITY PROVIDER FOR APPROVED PRODUCTS.

6. PROVIDE TWO "RATE TO RISE" HEAT DETECTORS PER THE UTILITY PROVIDER'S REQUIREMENTS. LOCATE ONE ABOVE THE TRANSFORMER AND ONE OTHER WITHIN THE ROOM.

7. VAULT VENTS MUST HAVE SHUTTERS THAT ARE AUTOMATICALLY CLOSED BY THE HEAT DETECTOR IN THE FIRE SUPPRESSION SYSTEM HEAT DETECTORS SHALL MEET NFPA 72 REQUIREMENTS.

8. REFER TO SHEETS E3.00 & E3.01 FOR MORE INFORMATION REGARDING THE CLASS 'A' TRANSFORMER VAULT ROOM.

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ELECTRICAL SITE PLAN

MFA INC.
Consulting Engineers
2007 S.E. Ash St.
Portland, OR 97214
PHN: (503) 234-0548
FAX: (503) 234-0677
WWW.MFA-ENG.COM

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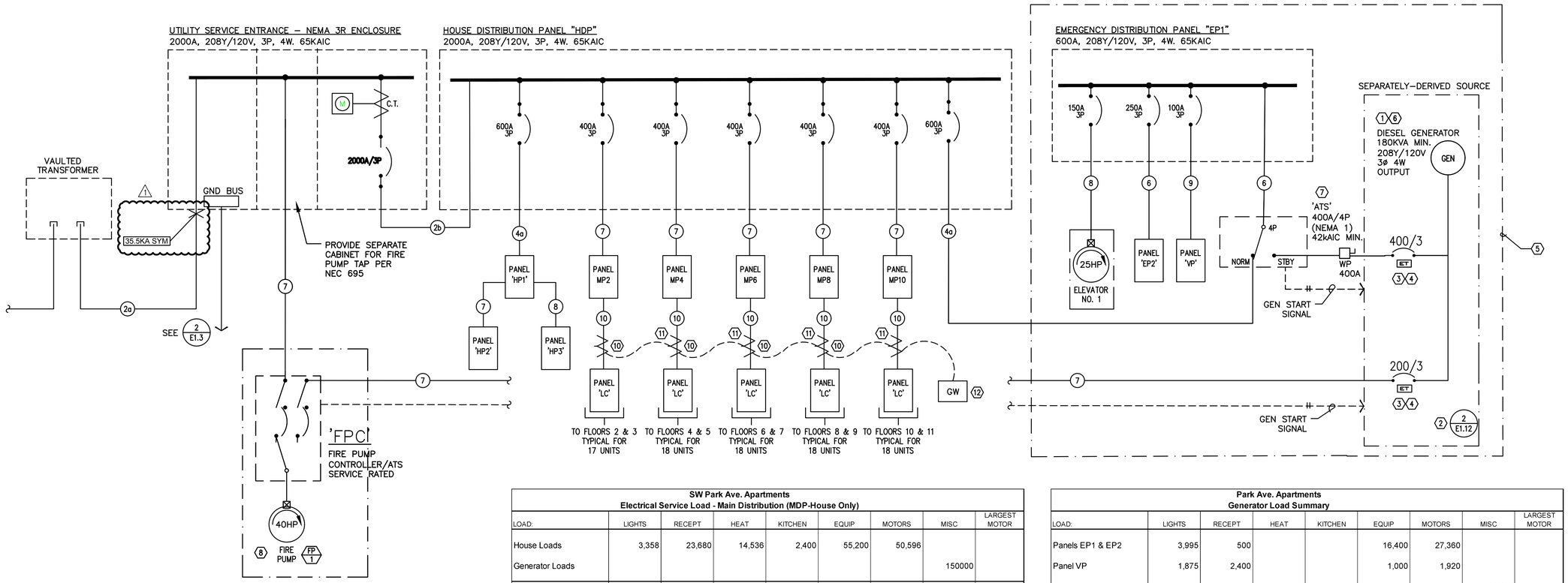

1/E1.11 ELECTRICAL ONE–LINE DIAGRAM
208/120v, 3ph, 4w

SW Park Ave. Apartments
Electrical Service Load - Main Distribution (MDP-House Only)

LOAD:	LIGHTS	RECEPT	HEAT	KITCHEN	EQUIP	MOTORS	MISC	LARGEST MOTOR
House Loads	3,358	23,680	14,536	2,400	55,200	50,596		
Generator Loads							150000	
SUBTOTAL	3,358	23,680	14,536	2,400	55,200	50,596	150,000	0
X-FACTOR	1	1 + .5	1	1	1	1	1	0
CODE LOAD:	4,198	16,840	14,536	1,560	55,200	50,596	150,000	0

CONN LOAD:	300	KVA
VOLTS:	208	3ph
TOTAL CALC:	293	KVA
CALC AMPS:	813	AMPS

4/15/2022

Park Ave. Apartments
Generator Load Summary

LOAD:	LIGHTS	RECEPT	HEAT	KITCHEN	EQUIP	MOTORS	MISC	LARGEST MOTOR
Panels EP1 & EP2	3,995	500			16,400	27,360		
Panel VP	1,875	2,400			1,000	1,920		
Elevator (25hp)							38952	
Fire Pump (40hp)							43200	43,200
SUBTOTAL	5,870	2,900	0	0	17,400	29,280	82,152	43,200
X-FACTOR	1	1 + .5	1	1	1	1	1	0
CODE LOAD:	7,338	2,900	0	0	17,400	29,280	82,152	10,800

CONN LOAD:	138	KVA
VOLTS:	208	3ph
TOTAL CALC:	150	KVA
CALC AMPS:	416	AMPS

4/15/2022

FEEDER SCHEDULE (COPPER)

NO.	AMPS	CONDUIT	CONDUCTOR			
1		PRIMARY	BY UTILITY CO.	&		GND
2a		*(12) 5"	BY UTILITY CO.	&		GND
2b	2500A	*(6) 4"	ea w/ (4) #600Kcm	&	(1) #350K	GND
3	1200A	*(3) 4"	ea w/ (4) #600Kcm	&	(1) #3/0	GND
4	800A	*(2) 4"	ea w/ (4) #600Kcm	&	(1) #1/0	GND
4a	600A	*(2) 3"	ea w/ (4) #350Kcm	&	(1) #1	GND
5	400A	3 1/2"	(4) #500Kcm	&	(1) #3	GND
6	250A	2 1/2"	(4) #250Kcm	&	(1) #4	GND
7	200A	2"	(4) #3/0	&	(1) #6	GND
8	150A	2"	(4) #1/0	&	(1) #6	GND
9	100A	1 1/2"	(4) #1	&	(1) #8	GND
10	100A	1 1/2"	(3) #1	&	(1) #8	GND

* PARALLEL FEEDER

ONE–LINE GENERAL NOTES:

A. COORDINATE ALL WORK ASSOCIATED WITH ELECTRIC SERVICE WITH LOCAL UTILITY PROVIDER. PROVIDE ALL CONDUIT, GROUNDING, TRANSFORMER VAULT/PAD, ETC., IN ACCORDANCE WITH SERVING UTILITY REQUIREMENTS.

B. COORDINATE METERING REQUIREMENTS WITH UTILITY.

C. FOR LOAD CENTER FEEDER LENGTHS GREATER THAN 145'–0" FROM METER CENTER, INCREASE WIRE SIZE ONE SIZE UP FOR VOLTAGE DROP.

D. PER NEC 240.87, THE ELECTRICAL CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR ARC ENERGY REDUCTION DEVICE(S) FOR CIRCUIT BREAKERS 1200A OR GREATER. CONTRACTOR SHALL PROVIDE AN ENERGY–REDUCING ACTIVE FLASH MITIGATION SYSTEM OR OTHER METHOD APPROVED BY THE NEC.

E. USE OF ALUMINUM CONDUCTORS, AS ALLOWED BY CODE, MAY BE SUBSTITUTED FOR COPPER. CONTRACTOR SHALL PROVIDE WRITTEN SUBSTITUTION REQUEST DEMONSTRATING THE THAT THE PROPOSED PRODUCT IS EQUIVALENT TO COPPER IN ALL ASPECTS.

F. ACCEPTABLE POWER MONITORING SYSTEM MANUFACTURERS ARE:
SIEMENS SEM3
E–MON D–MON
SQUARE D POWERLOGIC
OR AS APPROVED BY SUBMITTAL PROCESS.

ONE–LINE NOTES:

1. ESTIMATED GENERATOR STARTING LOAD IS BASED ON THE ELEVATOR & FIRE PUMP MOTORS BEING PROVIDED WITH REDUCED STARTING.

2. PROVIDE GROUND FOR SEPARATELY DERIVED SYSTEM PER NEC.

3. PROVIDE ELECTRONIC TRIP CIRCUIT BREAKER. EXACT BREAKER TYPE, SETTINGS, ETC. TO BE VERIFIED AND AS DETERMINED BY SELECTIVE COORDINATION STUDY AS PERFORMED BY THE ELECTRICAL DISTRIBUTION EQUIPMENT MANUFACTURER.

4. COORDINATE INSTALLATION OF OUTPUT BREAKERS WITH GENERATOR MANUFACTURER TO SELECTIVELY COORDINATE WITH POWER STUDY RECOMMENDATIONS.

5. 'LIFE SAFETY' BRANCH TO MEET ALL REQUIREMENTS OF NEC 700. CONTRACTOR SHALL BE AWARE THAT MFIA HAS ATTEMPTED TO INDICATE EQUIPMENT AND SIZES THAT WILL SELECTIVELY COORDINATE, BUT WILL NOT BE KNOWN UNTIL ELECTRICAL EQUIPMENT MANUFACTURER PERFORMS THE REQUIRED POWER STUDIES AS SPECIFIED IN 26 05 73. CHANGES MAY BE NECESSARY AFTER THE BID.

6. GENERATOR IS SIZED TO OPERATE ONLY ONE ELEVATOR AT A TIME. COORDINATE WITH ELEVATOR & GENERATOR PROVIDERS FOR AUTOMATIC SEQUENTIAL OPERATION AS REQUIRED UNDER ASME A17.1, SECTION 2.27.2.1 THROUGH 2.27.2.5.

7. THE AUTOMATIC TRANSFER SWITCH FOR THE EMERGENCY PANEL "EDP" SHALL OPERATE SUCH THAT THE EGRESS LOADS ARE SWITCHED TO GENERATOR POWER WITHIN 10 SECONDS AND THE ELEVATOR(S) SWITCHED WITHIN 60 SECONDS OF A POWER FAILURE.

8. CONSULT MECHANICAL, PLUMBING AND/OR FIRE ALARM PLANS AND VERIFY EXACT POWER REQUIREMENTS FOR THE FIRE PUMP.

9. CONSULT ELEVATOR PROVIDER FOR INSTALLATION AND POWER REQUIREMENTS PRIOR TO ROUGH IN.

10. PROVIDE CIRCUIT BREAKER WITH INTEGRAL LOAD MONITORING MODULE COMPATIBLE WITH POWER MONITORING SYSTEM. SEE MANUFACTURER SPECIFICATIONS FOR WEB BASED POWER MONITORING SYSTEM REQUIREMENTS.

11. SERIAL COMMUNICATIONS CABLE, 18 AWG MINIMUM. BELDEN 9463 OR APPROVED.

12. PROVIDE LOAD MONITORING NETWORK GATEWAY COMPATIBLE WITH POWER MONITORING SYSTEM.

13. GENERATOR SET AND ALL ASSOCIATED COMPONENTS AND ACCESSORIES TO BE PROVIDED BY OWNER. THE ELECTRICAL CONTRACTOR SHALL PROVIDE INSTALLATION, POWER CONNECTIONS, COORDINATION AND TESTING AS REQUIRED FOR A COMPLETE INSTALLATION. CONSULT MANUFACTURER'S DOCUMENTATION AND DIVISION 26 SPECIFICATIONS FOR ADDITIONAL INFORMATION.

REGISTERED PROFESSIONAL ENGINEER
16,597
OREGON
JULY 20, 1993
ROBERT L. CONNELL
EXPIRES 12-31-2023

Date: 11-06-2020
Proj No: 10105
Drawn By: DMT
Chkd By: RLC
DSGN By: DMT
Acad File:

1 04.14.2022 PERMIT RESUBMITTAL

SW PARK APARTMENTS
RYSTADT
2057 SW PARK AVE.
PORTLAND OREGON

ELECTRICAL ONE–LINE DIAGRAM

MFIA INC.
Consulting Engineers
2007 S.E. Ash St.
Portland, OR 97214
PHN: (503) 234-0548
FAX: (503) 234-0677
WWW.MFIA-ENG.COM

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MFIA PANEL SCHEDULE

panel	mounting	location	connected load amps
EP1	SURFACE	ELECT. ROOM	232

voltage	phase	bus & main			calculated load amps
120/208V (SCCR: 42KAIC)	3	400A		MLO	262

C	service	va	a/p	no.	a b c	no.	a/p	va	service	C
6	ELEVATOR	9384	150/3	1	*	2	250/3	16844	PANEL EP2	7
6	*	9384	*	3	*	4	*	16868	*	7
6	*	9384	*	5	*	6	*	14920	*	7
	SPARE		20/1	7	*	8	100/3	2700	PANEL VP	7
	SPARE		20/1	9	*	10	*	3620	*	7
	SPARE		20/1	11	*	12	*	500	*	7
	BLANK			13	*	14			BLANK	
	BLANK			15	*	16			BLANK	
	BLANK			17	*	18			BLANK	
	BLANK			19	*	20			BLANK	
	BLANK			21	*	22			BLANK	
	BLANK			23	*	24			BLANK	
	BLANK			25	*	26			BLANK	
	BLANK			27	*	28			BLANK	
	BLANK			29	*	30			BLANK	
	BLANK			31	*	32			BLANK	
	BLANK			33	*	34			BLANK	
	BLANK			35	*	36			BLANK	
	BLANK			37	*	38			BLANK	
	BLANK			39	*	40			BLANK	
	BLANK			41	*	42			BLANK	

		NOTES:	line-line voltage
Phase A	28928 VA		208
Phase B	29872 VA		
Phase C	24804 VA		largest motor (va)
Total Connected	83604 VA		43200

load code:	ph. A	ph. B	ph. C		total	factor	calculated load (va)
1. LIGHTS=	0	0	0	VA	0	1.25	0
2. RECEPT.=	0	0	0	VA	0	1 + 0.5	0
3. HEATING=	0	0	0	VA	0	1.00	0
4. KITCHEN=	0	0	0	VA	0	1.00	0
5. EQUIP.=	0	0	0	VA	0	1.00	0
6. MOTORS=	9384	9384	9384	VA	28152	*	38952
7. MISC=	19544	20488	15420	VA	55452	1.00	55452
(* 125% of the largest motor + 100% of the balance)					TOTAL =		94404

MFIA PANEL SCHEDULE

panel	mounting	location	connected load amps
EP2	SURFACE	ELECT. ROOM	135

voltage	phase	bus & main			calculated load amps
120/208V (SCCR: 42KAIC)	3	250A		MLO	137

C	service	va	a/p	no.	a b c	no.	a/p	va	service	C
1	LIGHTS - BLDG EXTERIOR	206	20/1	1	*	2	20/1	1200	ELEV. CONTROL PANEL	5
1	LIGHTS - STAIR #2	744	20/1	3	*	4	20/1	1200	ELEV. CAB LIGHTS	5
1	LIGHTS - STAIR #1	806	20/1	5	*	6	20/1	1500	GENERATOR BLOCK HEATER	5
1	ELEV PITS & LTS (PIT & SHAFT)	500	20/1	7	*	8	20/1	1500	GENERATOR BATTERY CHARGER	5
1	LIGHTS - BSMNT, FLR 1 & 2	220	20/1	9	*	10	20/1	500	FACP/VOICE EVAC	5
1	LIGHTS - FLRS 3,4,5	210	20/1	11	*	12	20/1	1176	SP-1 (ELEV PIT)	6
1	LIGHTS - FLRS 6,7,8	210	20/1	13	*	14	20/1	500	RECEPT - ELEV MACH RM	2
1	LIGHTS - FLRS 9,10,11,12,ROOF	300	20/1	15	*	16	20/1	500	GENERATOR REMOTE ANNUNC.	5
5	DOOR OPENERS	1500	20/1	17	*	18	20/1	500	STAIR #1 DAMPERS	5
5	SMOKE CURTAINS	1500	20/1	19	*	20	20/1	500	STAIR #2 DAMPERS	5
5	SMOKE CURTAINS	1500	20/1	21	*	22	20/1	1176	SF-5	6
5	SMOKE CURTAINS	1500	20/1	23	*	24	20/1		SPARE	
5	SMOKE DAMPERS	1500	20/1	25	*	26	50/3	3864	SF-3 STAIR PRESSURIZATION FAN	6
5	SMOKE DAMPERS	1500	20/1	27	*	28	*	3864	*	6
	SPARE	0	20/1	29	*	30	*	3864	*	6
6	IAC/OAC-3	1500	30/2	31	*	32	50/3	3864	SF-4 STAIR PRESSURIZATION FAN	6
6	*	1500	*	33	*	34	*	3864	*	6
	BLANK			35	*	36	*	3864	*	6
	BLANK			37	*	38			BLANK	
	BLANK			39	*	40			BLANK	
	BLANK			41	*	42			BLANK	

		NOTES:	line-line voltage
Phase A	16844 VA		208
Phase B	16868 VA		
Phase C	14920 VA		largest motor (va)
Total Connected	48632 VA		0

load code:	ph. A	ph. B	ph. C		total	factor	calculated load (va)
1. LIGHTS=	916	1264	1016	VA	3196	1.25	3995
2. RECEPT.=	500	0	0	VA	500	1 + 0.5	500
3. HEATING=	0	0	0	VA	0	1.00	0
4. KITCHEN=	0	0	0	VA	0	1.00	0
5. EQUIP.=	6200	5200	5000	VA	16400	1.00	16400
6. MOTORS=	9228	10404	8904	VA	28536	*	28536
7. MISC=	0	0	0	VA	0	1.00	0
(* 125% of the largest motor + 100% of the balance)					TOTAL =		49431

MFIA PANEL SCHEDULE

panel	mounting	location	connected load amps
VP	SURFACE	CLASS A VAULT	19

voltage	phase	bus & main			calculated load amps
120/208V (SCCR: 42 KAIC)	3	100A		MLO	20

C	service	va	a/p	no.	a b c	no.	a/p	va	service	C
1	LIGHTS	1000	20/1	1	*	2	20/1	1200	RECEPTACLES	2
1	LIGHTS - EGRESS	500	20/1	3	*	4	20/1	1200	RECEPT - SUMP PUMP SP-X	2
5	SMOKE DAMPERS	500	20/1	5	*	6	30/2		IAC/OAC-X	3
5	SMOKE DAMPERS	500	20/1	7	*	8	*		*	3
6	EF-5	1920	30/1	9	*	10	20/1	0	SPARE	
	SPARE	0	20/1	11	*	12	20/1	0	SPARE	
	BLANK			13	*	14			BLANK	
	BLANK			15	*	16			BLANK	
	BLANK			17	*	18			BLANK	
	BLANK			19	*	20			BLANK	
	BLANK			21	*	22			BLANK	
	BLANK			23	*	24			BLANK	
				25	*	26				
				27	*	28				
				29	*	30				
				31	*	32				
				33	*	34				
				35	*	36				
				37	*	38				
				39	*	40				
				41	*	42				

		NOTES:	line-line voltage
Phase A	2700 VA		208
Phase B	3620 VA		
Phase C	500 VA		largest motor (va)
Total Connected	6820 VA		0

load code:	ph. A	ph. B	ph. C		total	factor	calculated load (va)
1. LIGHTS=	1000	500	0	VA	1500	1.25	1875
2. RECEPT.=	1200	1200	0	VA	2400	1 + 0.5	2400
3. HEATING=	0	0	0	VA	0	1.00	0
4. KITCHEN=	0	0	0	VA	0	1.00	0
5. EQUIP.=	500	0	500	VA	1000	1.00	1000
6. MOTORS=	0	1920	0	VA	1920	*	1920
7. MISC=	0	0	0	VA	0	1.00	0
(* 125% of the largest motor + 100% of the balance)					TOTAL =		7195

MFIA PANEL SCHEDULE

panel	mounting	location	connected load amps
HP1	SURFACE	ELECT. ROOM	395

voltage	phase	bus & main			calculated load amps
120/208V (SCCR: 42KAIC)	3	600A		MLO	419

C	service	va	a/p	no.	a b c	no.	a/p	va	service	C
1	LIGHTS - BLDG EXTERIOR	116	20/1	1	*	2	20/1	1500	RECEPT - 1ST FLR	2
1	LIGHTS - BSMNT, FLR 1 & 2	640	20/1	3	*	4	20/1	1500	RECEPT - 1ST FLR & SF-2	2
1	LIGHTS - FLR 1	485	20/1	5	*	6	20/1	1080	RECEPT - 1ST FLR	2
1	LIGHTS - FLRS 3,4,5	240	20/1	7	*	8	20/1	1500	REFRIGERATOR	4
1	LIGHTS - FLRS 6,7,8	240	20/1	9	*	10	20/1	500	RECEPT - KITCHEN	2
1	LIGHTS - FLRS 9,10,11,12,ROOF	320	20/1	11	*	12	20/1	900	DISPOSAL	4
1	LIGHTS - LANDSCAPING	0	20/1	13	*	14	20/1	900	RECEPT - DISHWSH	4
1	LIGHTS - ROOF (EXTERIOR)	145	20/1	15	*	16	20/1	1500	RECPT - BIKE CHARGING	2
5	TELECOM PANEL	500	20/1	17	*	18	20/1	500	RECEPT - 1ST FLR	2
5	TELECOM PANEL	500	20/1	19	*	20	20/1	500	SF-1 (x10)	6
5	TLELCOM PANEL	500	20/1	21	*	22	20/1	500	RECEPT - ELEV MACHINE RM	2
5	LANDSCAPE	500	20/1	23	*	24	20/1	1440	RECEPT - FLRS 2,3	2
5	IRRIGATION	500	20/1	25	*	26	20/1	1440	RECEPT - FLRS 4,5	2
1	LIGHTS - FLOOR 12	500	20/1	27	*	28	20/1	1440	RECEPT - FLRS 6,7	2
6	IA/OAC-1	1500	30/2	29	*	30	20/1	1440	RECEPT - FLRS 8,9	2
6	*	1500	*	31	*	32	20/1	1440	RECEPT - FLRS 10,11	2
6	IAC/OAC-2	1500	30/2	33	*	34	20/1	0	SPARE	
6	*	1500	*	35	*	36	20/1	0	SPARE	
7	PANEL HP2	20916	200/3	37	*	38	200/3	8000	PANEL HP3	7
7	*	20412	*	39	*	40	*	21600	*	7
7	*	20004	*	41	*	42	*	21600	*	7

		NOTES:	line-line voltage
Phase A	38652 VA		208
Phase B	50977 VA		
Phase C	52349 VA		largest motor (va)
Total Connected	141978 VA		43200

load code:	ph. A	ph. B	ph. C		total	factor	calculated load (va)
1. LIGHTS=	358	1525	805	VA	2686	1.25	3358
2. RECEPT.=	4880	5440	5040	VA	15360	1 + 0.5	12680
3. HEATING=	0	0	0	VA	0	1.00	0
4. KITCHEN=	1500	0	900	VA	2400	1.00	2400
5. EQUIP.=	1000	500	1000	VA	2500	1.00	2500
6. MOTORS=	2000	1500	3000	VA	6500	*	17300
7. MISC=	28916	42012	41604	VA	112532	1.00	112532
(* 125% of the largest motor + 100% of the balance)					TOTAL =		150770

MFIA PANEL SCHEDULE

panel	mounting	location	connected load amps
HP2	SURFACE	ELECT. ROOM	170

voltage	phase	bus & main			calculated load amps
120/208V (SCCR: 42KAIC)	3	200A		MLO	170

C	service	va	a/p	no.	a b c	no.	a/p	va	service	C
3	EH-1 STAIRWELL	1500	20/1	1	*	2	20/1	1500	RECEPT - BASEMENT, EF-4	2
3	EH-1 STAIRWELL	1500	20/1	3	*	4	20/1	1500	RECEPT- BASEMENT	2
6	TRASH COMPACTOR	2100	30/3	5	*	6	20/1	1500	B-1, B-2, B-3 GAS BOILERS	5
6	*	2100	*	7	*	8	20/1	1500	WH-1, WH-2 GAS WATER HTRS	5
6	*	2100	*	9	*	10	20/1	1176	RP-1	6
3	IHP/OHP & EF-6 (FIT. RM)	1768	30/2	11	*	12	30/3	828	SP-2 (BIKE STORGE)	6
3	*	1768	*	13	*	14	*	828	*	6
6	P-1 (5HP)	2912	50/2	15	*	16	*	828	*	6
6	*	2912	*	17	*	18	20/1	2088	P-3, P-4, P-5	6
6	P-2 (5HP)	2912	50/2	19	*	20	20/1	1500	EH-1 (LAUNDRY)	3
6	*	2912	*	21	*	22	20/1	500	EH-2 (RISER RM)	3
2	RECEPT - FITNESS ROOM	1500	20/1	23	*	24	20/1	1500	EH-1 (BIKE RM)	3
2	RECEPT - FITNESS ROOM	1500	20/1	25	*	26	20/1	1500	EH-1 (BIKE RM)	3
2	RECEPT - FITNESS ROOM	1500	20/1	27	*	28	30/3	2808	BOOSTER PUMP	6
2	RECEPT - FITNESS ROOM	1500	20/1	29	*	30	*	2808	*	6
2	RECEPT - FITNESS ROOM	1500	20/1	31	*	32	*	2808	*	6
6	RP-2	1176	20/1	33	*	34	20/2	1500	WH-3	3
	SPARE	0	20/1	35	*	36	*	1500	*	3
	SPARE	0	20/1	37	*	38	20/1	0	SPARE	
	SPARE	0	20/1	39	*	40	20/1	0	SPARE	
	SPARE	0	20/1	41	*	42	20/1	0	SPARE	

		NOTES:	line-line voltage
Phase A	20916 VA		208
Phase B	20412 VA		
Phase C	20004 VA		largest motor (va)
Total Connected	61332 VA		

load code:	ph. A	ph. B	ph. C		total	factor	calculated load (va)
1. LIGHTS=	0	0	0	VA	0	1.25	0
2. RECEPT.=	4500	3000	3000	VA	10500	1 + 0.5	10250
3. HEATING=	6268	3500	4768	VA	14536	1.00	14536
4. KITCHEN=	0	0	0	VA	0	1.00	0
5. EQUIP.=	1500	0	1500	VA	3000	1.00	3000
6. MOTORS=	8648	13912	10736	VA	33296	*	33296
7. MISC=	0	0	0	VA	0	1.00	0
(* 125% of the largest motor + 100% of the balance)					TOTAL =		61082

MFIA PANEL SCHEDULE

panel	mounting	location	connected load amps
HP3	SURFACE	ELECT. ROOM	142

voltage	phase	bus & main			calculated load amps
120/208V (SCCR: 42KAIC)	3	200A		MLO	142

C	service	va	a/p	no.	a b c	no.	a/p	va	service	C
2	WASHER	1500	20/1	1	*	2	20/1	1500	WASHER	5
5	DRYER	4320	30/2	3	*	4	30/2	4320	DRYER	5
5	*	4320	*	5	*	6	*	4320	*	5
5	WASHER	1500	20/1	7	*	8	20/1	1500	WASHER	5
5	DRYER	4320	30/2	9	*	10	30/2	4320	DRYER	5
5	*	4320	*	11	*	12	*	4320	*	5
5	WASHER	1500	20/1	13	*	14	20/1	500	DRYER BOOSTER FANS	5
5	DRYER	4320	30/2	15	*	16	20/1	0	SPARE	
5	*	4320	*	17	*	18	20/1	0	SPARE	
				19	*	20			BLANK	
	BLANK			21	*	22			BLANK	
	BLANK			23	*	24			BLANK	
	BLANK			25	*	26			BLANK	
	BLANK			27	*	28			BLANK	
	BLANK			29	*	30			BLANK	
	BLANK			31	*	32			BLANK	
	BLANK			33	*	34			BLANK	
	BLANK			35	*	36			BLANK	
	BLANK			37	*	38			BLANK	
	BLANK			39	*	40			BLANK	
	BLANK			41	*	42			BLANK	

		NOTES:	line-line voltage
Phase A	8000 VA		208
Phase B	21600 VA		
Phase C	21600 VA		largest motor (va)
Total Connected	51200 VA		

load code:	ph. A	ph. B	ph. C		total	factor	calculated load (va)
1. LIGHTS=	0	0	0	VA	0	1.25	0
2. RECEPT.=	1500	0	0	VA	1500	1 + 0.5	1500
3. HEATING=	0	0	0	VA	0	1.00	0
4. KITCHEN=	0	0	0	VA	0	1.00	0
5. EQUIP.=	6500	21600	21600	VA	49700	1.00	49700
6. MOTORS=	0	0	0	VA	0	*	0
7. MISC=	0	0	0	VA	0	1.00	0
(* 125% of the largest motor + 100% of the balance)					TOTAL =		51200

REGISTERED PROFESSIONAL ENGINEER
16,597
OREGON
JULY 20, 1993
ROBERT L. CONNELL
EXPIRES 12-31-2023

Date: 11-06-2020
Proj No: 10105
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1 04.14.2022 PERMIT RESUBMITTAL

Acad File:

SW PARK APARTMENTS
RYSTADT
2057 SW PARK AVE.
PORTLAND OREGON

ELECTRICAL LOAD SUMMARY & SCHEDULES

MFIA INC.

Consulting Engineers
2007 S.E. Ash St.
Portland, OR 97214
PHN: (503) 234-0548
FAX: (503) 234-0677
WWW.MFIA-ENG.COM

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MECHANICAL EQUIPMENT SCHEDULE

NO.	EQUIPMENT NAME	HP/KW	VOLTS	PH	AMPS	CONDUIT	WIRE	GND	CIRCUIT
EF-1	EXHAUST FAN NO.1	11.0W	120	1		1/2"	#12	#12	SEE TYP. UNIT PLANS
EF-2	EXHAUST FAN NO.2	11.0W	120	1		1/2"	#12	#12	
EF-3	EXHAUST FAN NO.3	11.0W	120	1		1/2"	#12	#12	HP2-27
EF-4	EXHAUST FAN NO.4	11.0W	120	1		1/2"	#12	#12	HP2-33
EF-5	EXHAUST FAN NO.5	1HP	120	1		1/2"	#12	#12	VP-9
EF-6	EXHAUST FAN NO.6	16W	120	1		1/2"	#12	#12	SEE NOTE "E" BELOW
EH-1	WALL HEATER NO.1	1.5KW	208	1		1/2"	#12	#12	SEE POWER PLANS
EH-2	WALL HEATER NO.2	500W	120	1		1/2"	#12	#12	SEE POWER PLANS
EH-3	WALL HEATER NO.3	4.0KW	208	1		1/2"	#12	#12	SEE POWER PLANS
IAC-1	SPLIT SYST NO.1 (BOILER RM)								INTERCONNECT W/ OAC
OAC-1	SPLIT SYST NO.1 (OUTDOOR)		208	1	18.0 MCA	1/2"	#10	#10	HP1-29,31
IAC-2	SPLIT SYST NO.2 (IT RM)								INTERCONNECT W/ OAC
OAC-2	SPLIT SYST NO.2 (OUTDOOR)		208	1	18.0 MCA	1/2'	#10	#10	HP1-33,35
IAC-3	SPLIT SYST NO.3 (RISER RM)								INTERCONNECT W/ OAC
OAC-3	SPLIT SYST NO.3 (OUTDOOR)		208	1	18.0 MCA	1/2'	#10	#10	EP2-31,33
IAC-X	SPLIT SYST NO.3 (CLASS A VAULT)								INTERCONNECT W/ OAC
OAC-X	SPLIT SYST NO.X (OUTDOOR)		208	1	12.0 MCA	1/2'	#12	#12	VP-6,8
IHP-1	SPLIT SYST NO.1 (FITNESS RM)								INTERCONNECT W/ OHP
OHP-1	SPLIT SYST NO.1 (OUTDOOR)		208	1	17.0 MCA	1/2'	#10	#10	HP2-11,13
B-1	BOILER NO.1 (GAS)		120	1		1/2"	#12	#12	HP2-6 (PC)
B-2	BOILER NO.2 (GAS)		120	1		1/2"	#12	#12	HP2-6 (PC)
B-3	BOILER NO.3 (GAS)		120	1		1/2"	#12	#12	HP2-6 (PC)
BP-1	BOOSTER PUMP NO.1	(3) 2HP	208	3		1/2"	#10	#10	HP2-28,30,32
P-1	PUMP NO. 1	5HP	208	1		3/4"	#6	#10	HP2-35,37
P-2	PUMP NO. 2	5HP	208	1		3/4"	#6	#10	HP2-36,38
P-3	PUMP NO. 3	1/4HP	120	1		1/2"	#12	#12	HP2-18 (PC)
P-4	PUMP NO. 4	1/4HP	120	1		1/2"	#12	#12	HP2-18 (PC)
P-5	PUMP NO. 5	1/4HP	120	1		1/2"	#12	#12	HP2-18 (PC)
RP-1	RECIRC PUMP NO.1	1/2HP	120	1		1/2"	#12	#12	HP2-10
RP-2	RECIRC PUMP NO.2	1/2HP	120	1		1/2"	#12	#12	HP2-33
SF-2	SUPPLY FAN NO.2	13W	120	1		1/2"	#12	#12	SEE E3.01
SF-3	SUPPLY FAN NO.3	10HP	208	3		1"	#6	#10	EP2-26,28,30
SF-4	SUPPLY FAN NO.4	10HP	208	3		1"	#6	#10	EP2-32,34,36
SF-5	SUPPLY FAN NO.5	1/4HP	120	1		1/2"	12	#12	EP2-22
SP-1	SUMP PUMP NO.1	1/2HP	120	1		1/2"	#12	#12	EP2-12
SP-2	SUMP PUMP NO.2	2x 3/4HP	208	3		1/2"	#10	#10	HP2-12,14,16
WH-1	WATER HEATER NO.1 (GAS)		120	1		1/2"	#12	#12	HP2-20 (PC)
WH-2	WATER HEATER NO.2 (GAS)		120	1		1/2"	#12	#12	HP2-20 (PC)
WH-3	WATER HEATER NO.3		208	1		1/2"	#12	#12	HP2-34,36

GENERAL EQUIPMENT NOTES:

A. CONTRACTOR/DESIGNER SHALL VERIFY ALL MECHANICAL EQUIPMENT CONNECTION LOAD REQUIREMENTS WITH THE MECHANICAL EQUIPMENT PROVIDER PRIOR TO ROUGH IN.

B. MECHANICAL EQUIPMENT SIZES SHOWN IN THE MECHANICAL SCHEDULE ABOVE ARE FOR REFERENCE ONLY AND MAY NOT REFLECT THE ACTUAL EQUIPMENT TO BE INSTALLED.

C. INDOOR & OUTDOOR COMPONENTS OF THE MINI-SPLIT SYSTEMS ARE INTERCONNECTED. CONSULT WITH AND COORDINATE THE ELECTRICAL REQUIREMENTS AND EXACT LOCATIONS WITH THE HVAC EQUIPMENT INSTALLER PRIOR TO ROUGH IN.

D. REFER TO TYPICAL UNIT PLAN LOAD CENTER SCHEDULES ON THIS SHEET FOR CIRCUITING INFORMATION.

E. EXHAUST FAN EF-6 TO BE INTERCONNECTED WITH IHP/OHP-1 SPLIT SYSTEM. CONSULT MECHANICAL EQUIPMENT INSTALLER FOR ADDITIONAL INFORMATION.

SW Park Ave. Apartments

Total Building Loads — **Electrical Service Load - Main Distribution (MDP)**

LOAD:	LIGHTS	RECEPT	HEAT	KITCHEN	EQUIP	MOTORS	MISC	LARGEST MOTOR
House Loads	3,358	23,680	14,536	2,400	55,200	50,596		
Residential Loads							407,000	
Generator Loads							156000	
SUBTOTAL	3,358	23,680	14,536	2,400	55,200	50,596	563,000	0
X-FACTOR	1	1 + .5	1	1	1	1	1	0
CODE LOAD:	4,198	16,840	14,536	1,560	55,200	50,596	563,000	0

CONN LOAD:	713	KVA

VOLTS:	208	3ph
TOTAL CALC:	706	KVA
CALC AMPS:	1,960	AMPS

4/15/2022

Park Ave. Apartments
RESIDENTIAL LOAD SUMMARY

UNIT TYPE:	QTY PER FLOOR	TOTAL	AREA (SF)	LTG RECEPT (3VA / SF)	SM APPL (1500VA X 2)	COOK TOP (NO OVEN) (CONNECTED)	MICRO/HOOD (CONNECTED)	MOTORS (CONNECTED)	LARGEST OF AC/HEATING (CONNECTED)
	Studio								
Level 1	2	2	325	975	3000	8000	1700	0	3000
Level 2	8	8	325	975	3000	8000	1700	0	3000
Level 3	9	9	325	975	3000	8000	1700	0	3000
Level 4	9	9	325	975	3000	8000	1700	0	3000
Level 5	9	9	325	975	3000	8000	1700	0	3000
Level 6	9	9	325	975	3000	8000	1700	0	3000
Level 7	9	9	325	975	3000	8000	1700	0	3000
Level 8	9	9	325	975	3000	8000	1700	0	3000
Level 9	9	9	325	975	3000	8000	1700	0	3000
Level 10	9	9	325	975	3000	8000	1700	0	3000
Level 11	9	9	325	975	3000	8000	1700	0	3000
Level 12	9	9	325	975	3000	8000	1700	0	3000
TOTALS:	100	100	32500	97500	300000	800000	170000	0	300000

VOLTS: 208 3ph
TOTAL CONNECTED: 1770 KVA
DEMAND FACTOR: 0.23 Based on Total Number of Residential Units = 63 & Over (See N.E.C. Article: 220.84)
TOTAL CALCULATED: 407 KVA
CALCULATED AMPS: 1131 AMPS

NOTE: Actual cooktop load is 3000w.
Connected amount of 8000w is the minimum connected load per NEC 220.55 for full diversity.

DWELLING UNIT LOAD CALCULATION

Project: Park Ave Apartments

Unit Type Studio

Area: 325 **square feet(average)**

Minimum Size Feeder (NEC 220.40):

General lighting load at 3 VA / SF	975	VA
Small Appliance load (2 ckts at 1500VA each)	3,000	VA
Laundry Load (1 ckt at 1500VA)	0	VA
Elect Cook Top (No Range)	8,000	VA
Other Cooking Appliance Load (Microwave Oven)	1,700	VA
Dishwasher Load	0	VA
Electric Dryer Load	0	VA
Electric Water Heater Load	0	VA
Disposal load	900	VA
Other motor loads	0	VA
Total "General Loads"	14,575	VA
First 10 kVA of "general loads" at 100%	10,000	VA
Remainder of "general loads" at 40%	1,830	VA
Net "general load"	11,830	VA
Largest of 3,000 VA of electric space heating (less than 4) at 65%	1,950	VA
-or- VA of electric space heating (4 or more) at 40%	0	VA
-or- VA of air conditioning/cooling/heat pumps at 100%	0	VA
TOTAL LOAD	13,780	VA

For 120/208-volt, 3-wire, single-phase service or feeder,
13,780 VA / 208 volts = 57 Amps

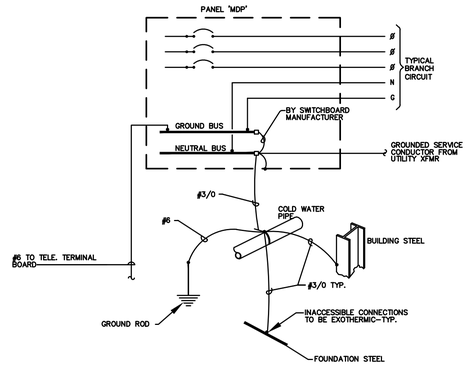
Therefore, this dwelling unit shall be permitted to be served by a 100 amp service.

MFIA CIRCUIT DIRECTORY 25-Apr-22

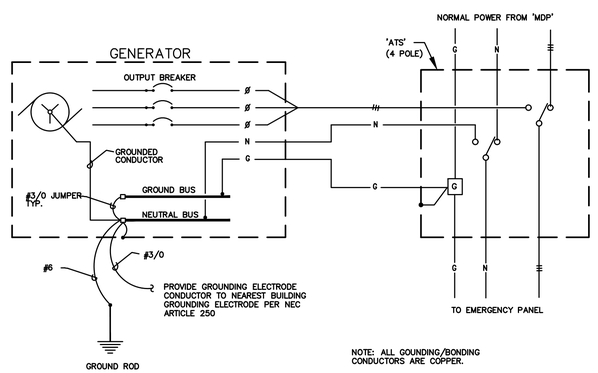
Loadcenter Name: LC-STUDIO (TYPICAL) — mounting: RECESSED — location:
voltage: 120/208 — phase: 1 — bus & main: 100A MLO (SCCR: 22K)

service	a/p	no.	L1	L2	no.	a/p	service
LIGHTS-KITCHEN/LIVING	20/1(A)	1	*		2	20/1(A)	APPLIANCE CIRCUIT
LTS & RECEPT - BATH	20/1	3		*	4	20/1(A)	APPLIANCE CIRCUIT
LTS & RECEPT - BEDROOM	20/1(A)	5	*		6	20/1	REFRIGERATOR
RECEPT - LIVING (OPTIONAL)	20/1(A)	7		*	8	20/1	MICRO/HOOD
SMART PANEL	20/1	9	*		10	30/2	2-BURNER COOKTOP
AC PORT (OPTIONAL)	20/1	11		*	12	*	*
HEAT	20/2	13	*		14	20/1	DISPOSAL (OPTIONAL)
*	*	15		*	16	20/1	SPARE
SPARE	20/1	17	*		18	20/1	SPARE
BLANK	----	19		*	20	----	BLANK
BLANK	----	21	*		22	----	BLANK
BLANK	----	23		*	24	----	BLANK
BLANK	----	25	*		26	----	BLANK
BLANK	----	27		*	28	----	BLANK
BLANK	----	29	*		30	----	BLANK

NOTES:
1. (A) DENOTES: ARC-FAULT INTERRUPTER CIRCUIT BREAKER. INSTALL PER NEC 210.12
2. LOADS FOR THIS PANEL ARE INDICATED ON THE "DWELLING UNIT LOAD CALCULATION".
3. BREAKER & WIRE SHALL BE SIZED FOR EQUIPMENT INSTALLED.
4. (G) DENOTES GFCI RATED BREAKER.



1 / E1.12 GROUNDING/BONDING DIAGRAM
208Y/120V, 3ø, 4 WIRE



3 / E1.12 GENERATOR – ELECTRICAL GROUNDING/BONDING DETAIL
NO SCALE

REGISTERED PROFESSIONAL ENGINEER
16,597
OREGON
JULY 20, 1993
ROBERT L. CONNELL
EXPIRES 12-31-2023

Date: 11-06-2020
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Drawn By: DMT
Chkd By: RLC
DSGN By: DMT
Acad File:

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SW PARK APARTMENTS
RYSTADT
2057 SW PARK AVE.
PORTLAND OREGON

ELECTRICAL DETAILS

MFIA INC.
Consulting Engineers
2007 S.E. Ash St.
Portland, OR 97214
PHN: (503) 234-0548
FAX: (503) 234-0677
WWW.MFIA-ENG.COM

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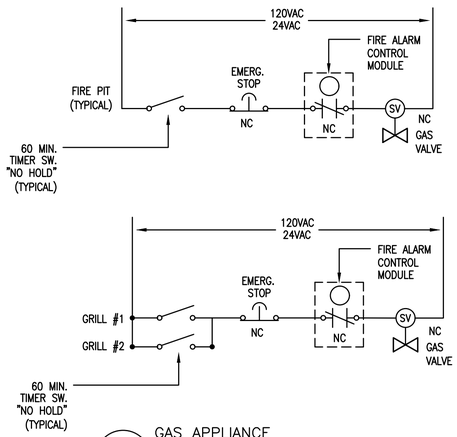
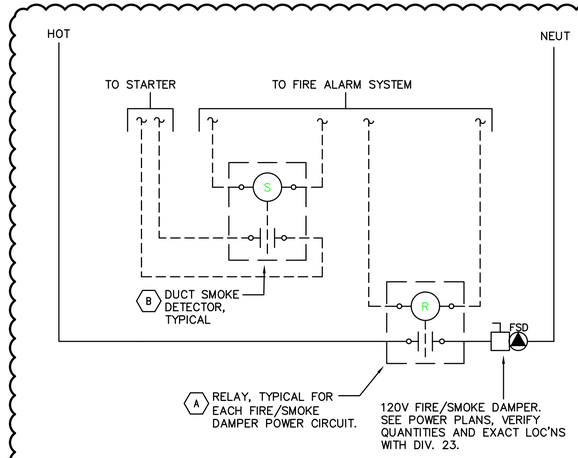


1 / E1.14 GAS APPLIANCE EMERGENCY SHUT-OFF DIAGRAM

SCALE: NONE

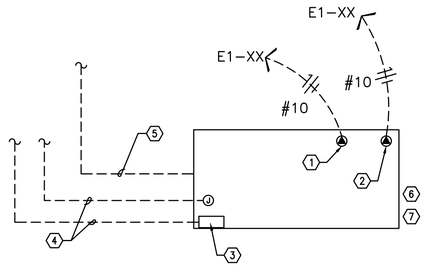


3 / E1.14 SMOKE/FIRE DAMPER CONTROL DIAGRAM

NO SCALE

(A) RELAY TO BE "NORMALLY ENERGIZED". RELAY TO BE DE-ENERGIZED UPON SIGNAL FROM FIRE ALARM SYSTEM (ALLOWS DAMPERS TO CLOSE). PROGRAM FIRE ALARM SYSTEM FOR 15 SECOND DELAY BETWEEN DUCT DETECTOR ACTIVATION AND FIRE/SMOKE DAMPER SHUTDOWN. PROVIDE WITH 20A CONTACTS AND COIL VOLTAGE AS REQUIRED BY THE FIRE ALARM SYSTEM. MOUNT RELAY IN NEMA 1 ENCLOSURE ADJACENT TO PANEL.

(B) DUCT DETECTOR WITH AUXILIARY CONTACTS MOUNTED IN AIR HANDLER CONTACT CLOSURE TO DISABLE HVAC FAN STARTER.

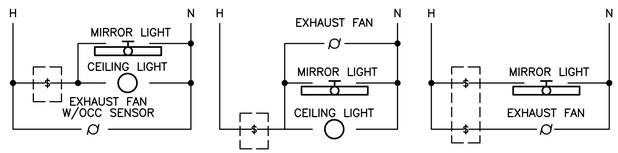


2 / E1.14 GENERATOR CIRCUITING DETAIL

NO SCALE

NOTES:

1. 120V GENERATOR BLOCK HEATER. SEE PANEL E1.
2. 120V GENERATOR BATTERY CHARGER. SEE PANEL E1.
3. GENERATOR OUTPUT BREAKER AND CONTROL SECTION. SEE PANEL E1.
4. POWER AND CONTROL TO TRANSFER SWITCH AND REMOTE ANNUNCIATOR. SEE ONE-LINE DIAGRAM ON SHEET E1.10.
5. TO AUTOMATIC TRANSFER SWITCH. SEE E1.10.
6. DIESEL GENERATOR TO BE PROVIDED WITH DOUBLE-WALL FUEL TANK AND SPILL CONTAINMENT PER CITY OF PORTLAND REQUIREMENTS.
7. DIESEL GENERATOR TANK SHALL DOUBLE WALLED AND BE EQUIPPED WITH OVERFILL PROTECTION (AUTO SHUTOFF), 5 GALLON INFILL SPILL BUCKET WITH DRAIN BACK, 12FT ABOVE GRADE TANK FUME VENTING AND ONSITE PRESSURE TESTING PER CITY REQUIREMENTS.



BATHROOM SWITCHING WITH EXHAUST FAN

BATHROOM SWITCHING WITH EXHAUST FAN

BATHROOM SWITCHING WITH EXHAUST FAN

4 / E1.14 BATHROOM SWITCHING DIAGRAM – TYPICAL

NO SCALE

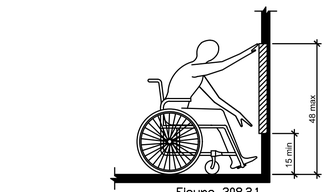


Figure 308.2.1
Unobstructed Forward Reach

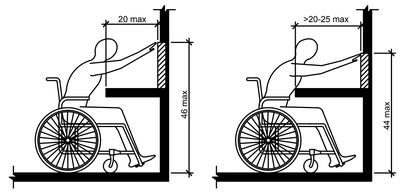


Figure 308.2.2
Obstructed High Forward Reach

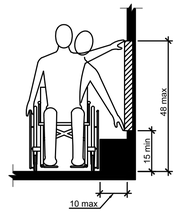


Figure 308.3.1
Unobstructed Side Reach

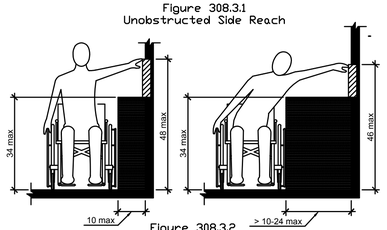


Figure 308.3.2
Obstructed High Side Reach

5 / E1.14 ADA REACH REQUIREMENTS

N.T.S.

308.2 Forward Reach.

308.2.1 Unobstructed. Where a forward reach is unobstructed, the high forward reac be 48" maximum and the low forward reach shall be 15" minimum above the f ground.

308.2.2 Obstructed High Reach. Where a high forward reach is over an obstruction, t clear floor or ground space shall extend beneath the element for a distance not thank the required reach depth over the obstruction. The high forward reach sh 48" maximum where the reach depth is 20" maximum. Where the reach depth e 20", the high forward reach shall be 44" maximum and the reach depth shall b maximum.

308.3 Side Reach.

308.3.1 Unobstructed. Where a clear floor or ground space allows a parallel approa an element and the side reach is unobstructed, the high side reach shall be 48 maximum and the low side reach shall be 15" minimum above the floor or grou

Exception: Existing elements shall be permitted at 54" maximum above the floor or ground.

308.3.2 Obstructed High Reach. Where a clear floor or ground space allows a parall approach to an object and the high side reach is over an obstruction, the heig the obstruction shall be 34" maximum and the depth of the obstruction shall 2 maximum. The high side reach shall be 48" maximum for a reach depth of 10" maximum. Where the reach depth exceeds 10", the high side reach shall be 4 maximum for a reach depth of 24" maximum.

REGISTERED PROFESSIONAL ENGINEER
16,597
OREGON
JULY 20, 1995
ROBERT L. CONNELL
EXPIRES 12-31-2023

Date:	11-06-2020
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Drawn By:	DMT
Chkd By:	RLC
DSGN By:	DMT
Acad File:	

1	04.14.2022	PERMIT RESUBMITTAL

SW PARK APARTMENTS
RYSTADT
2057 SW PARK AVE.
PORTLAND OREGON

FIXTURE SCHEDULE & DETAILS

MFIA INC.
Consulting Engineers
2007 S.E. Ash St.
Portland, OR 97214
PHN: (503) 234-0548
FAX: (503) 234-0677
WWW.MFIA-ENG.COM

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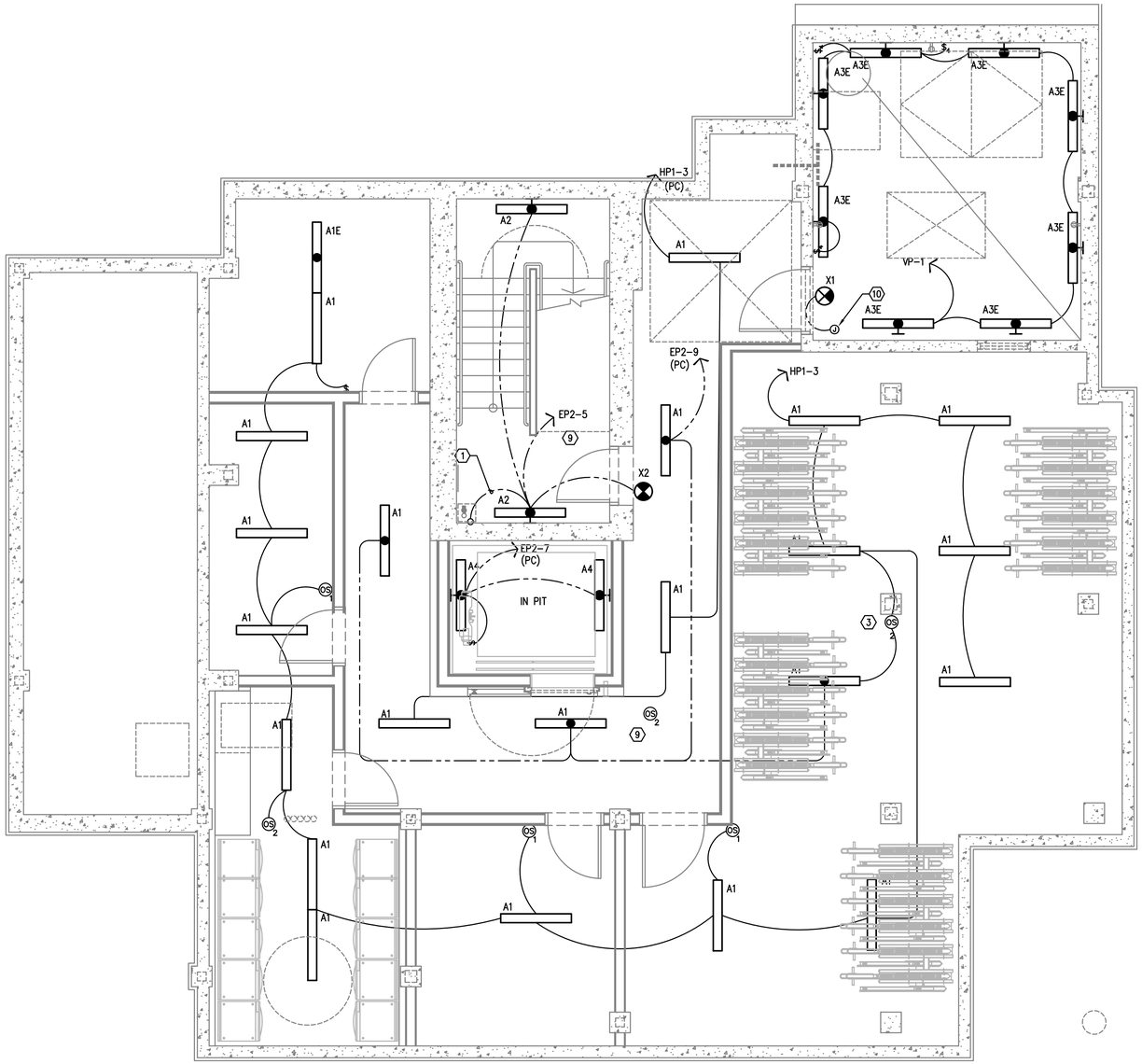

1 E2.00 LIGHTING PLAN – BASEMENT LEVEL
SCALE: 1/4" = 1'-0"

GENERAL LIGHTING NOTES:

A. ELECTRICAL DRAWINGS ARE DIAGRAMMATICAL AND MAY NOT ACCURATELY REFLECT ACTUAL CONSTRUCTION CONDITIONS. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE INSTALLATION OF ALL ELECTRICAL EQUIPMENT, WITH ALL TRADES PRIOR TO AND DURING CONSTRUCTION.

B. THE ELECTRICAL CONTRACTOR SHALL REFER TO THE ARCHITECTURAL & INTERIOR DESIGN DRAWINGS FOR EXACT LOCATIONS, MOUNTING HEIGHTS AND FINISHES OF DEVICES AND FIXTURES.

C. REFER TO ARCHITECTURAL INTERIOR ELEVATION PLANS FOR EXACT LOCATIONS OF FIXTURES AND DEVICES.

D. REFER TO SHEET E1.21 FOR LIGHT FIXTURE SCHEDULE.

E. REFER TO AVAILABLE ARCHITECTURAL AND/OR INTERIOR DESIGN DOCUMENTS & DRAWINGS FOR ADDITIONAL INFORMATION.

F. OCCUPANCY SENSORS SHALL BE FIELD ADJUSTED TO ENSURE PROPER COVERAGE AND CONTROL.

G. PROVIDE DIGITAL LIGHTING CONTROLS FOR EACH ROOM/SPACE, CONSISTING OF MULTI-BUTTON SWITCH(ES), OCC SENSORS, POWER PACKS, DAYLIGHT SENSORS, DIMMERS, INTERCONNECTING WIRING, ETC.

H. CORRIDOR LIGHTING TO BE CONSTANT "ON" AND PROVIDED WITH LOCAL MANUAL OVERRIDE SWITCHES FOR MAINTENANCE. REFER TO SHEET E1.22 FOR SWITCH WIRING DIAGRAMS.

I. ALL EGRESS FIXTURES SHALL BE WIRED SUCH THAT IN THE EVENT OF A POWER FAILURE, ALL LIGHTS WILL AUTOMATICALLY RETURN TO FULL POWER. REFER TO SWITCHING DETAILS ON SHEET E1.22.

J. REFER TO SHEET E1.23 FOR LIGHTING CONTROL DIAGRAMS AND DESIGN INTENT. VERIFY LIGHTING CONTROLLABILITY WITH ARCHITECT AND/OR OWNER'S REPRESENTATIVE TO DETERMINE EXACT NEEDS FOR ALL PUBLIC/COMMON AREAS SUCH AS LOBBIES, OFFICES, LOUNGE AREAS, ETC., PRIOR TO THE START OF ANY WORK.

K. THERE SHALL BE NO SURFACE MOUNTED FIXTURES OR PATHWAYS (CONDUIT, ETC.) IN ANY PUBLICLY ACCESSIBLE SPACES, INCLUDING STAIRWELLS AND EXIT PASSAGEWAYS WITHOUT PRIOR APPROVAL BY OWNER AND ARCHITECT. ROUTE ALL PATHWAYS WITHIN STUD CAVITIES OR ABOVE FINISHED CEILINGS.

⬡ KEYED NOTES:

1. CONTINUE CIRCUIT UP THROUGH THE STAIRWELL.
2. EXTERIOR BUILDING LIGHTS TO BE CONTROLLED VIA INTEGRAL AND/OR REMOTE PHOTOCELL FOR DUSK-TILL-DAWN OPERATION. REFER TO LIGHT FIXTURE SCHEDULE ON SHEET E1.21 FOR ADDITIONAL INFORMATION.
3. LIGHT FIXTURES IN THIS SPACE CONTROLLED BY CEILING MOUNT OCCUPANCY SENSOR.
4. PROVIDE PHOTOCELL FOR DAY-LIGHT REDUCTION OF LIGHT LEVELS.
5. CONTRACTOR TO COORDINATE WITH LANDSCAPE LIGHTING INSTALLER AND PROVIDE ROUGH-IN AND POWER CONNECTION(S) AS REQUIRED.
6. REFER TO SHEET E1.12 FOR TYPICAL DWELLING UNIT LOAD CENTER SCHEDULE FOR CIRCUITING INFORMATION.
7. REFER TO THE E3 SERIES SHEETS FOR TYPICAL DWELLING UNIT POWER DEVICE LAYOUT.
8. CORRIDOR LIGHTING CIRCUITS FOR THE UPPER FLOORS ARE AS FOLLOWS:

NORMAL POWER	EGRESS POWER
FLOORS 3, 4, 5 = HP1-7	FLOORS 3, 4, 5 = EP2-11
FLOORS 6, 7, 8 = HP1-9	FLOORS 6, 7, 8 = EP2-13
FLOORS 9, 10, 11, 12 & ROOF = HP1-11	FLOORS 9, 10, 11, 12 & ROOF = EP2-15

9. CORRIDOR AND STAIRWELL LIGHT FIXTURES TO BE CONTROLLED SUCH THAT THE FIXTURES DIM BY 50% DURING PERIODS OF LOW ACTIVITY. UPON DETECTION, LIGHTS SHALL RETURN TO 100% AND REMAIN AT FULL OUTPUT FOR A MINIMUM OF 30 MINUTES BEFORE RETURNING TO THE DIMMED STATE. FIXTURES ON EMERGENCY POWER CIRCUITS SHALL REMAIN 'ON' 24/7.
10. STROBE LIGHTS @ 24" AFF (BELOW SMOKE LING), AROUND PERIMETER FOR EGRESS. REFER TO 'T' SERIES SHEETS FOR MORE INFO. CIRCUIT TO PANEL 'VP'. SEE PANEL SCHEDULE ON SHEET E1.12.

REGISTERED PROFESSIONAL ENGINEER
16,597
OREGON
JULY 20, 1993
ROBERT L. CONNELL
EXPIRES 12-31-2023

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DSGN By: DMT
Acad File:

△ 04.14.2022 PERMIT RESUBMITTAL

SW PARK APARTMENTS
RYSTADT
2057 SW PARK AVE.
PORTLAND OREGON

LIGHTING PLAN – BASEMENT LEVEL

MFIA INC.
Consulting Engineers
2007 S.E. Ash St.
Portland, OR 97214
PHN: (503) 234-0548
FAX: (503) 234-0677
WWW.MFIA-ENG.COM

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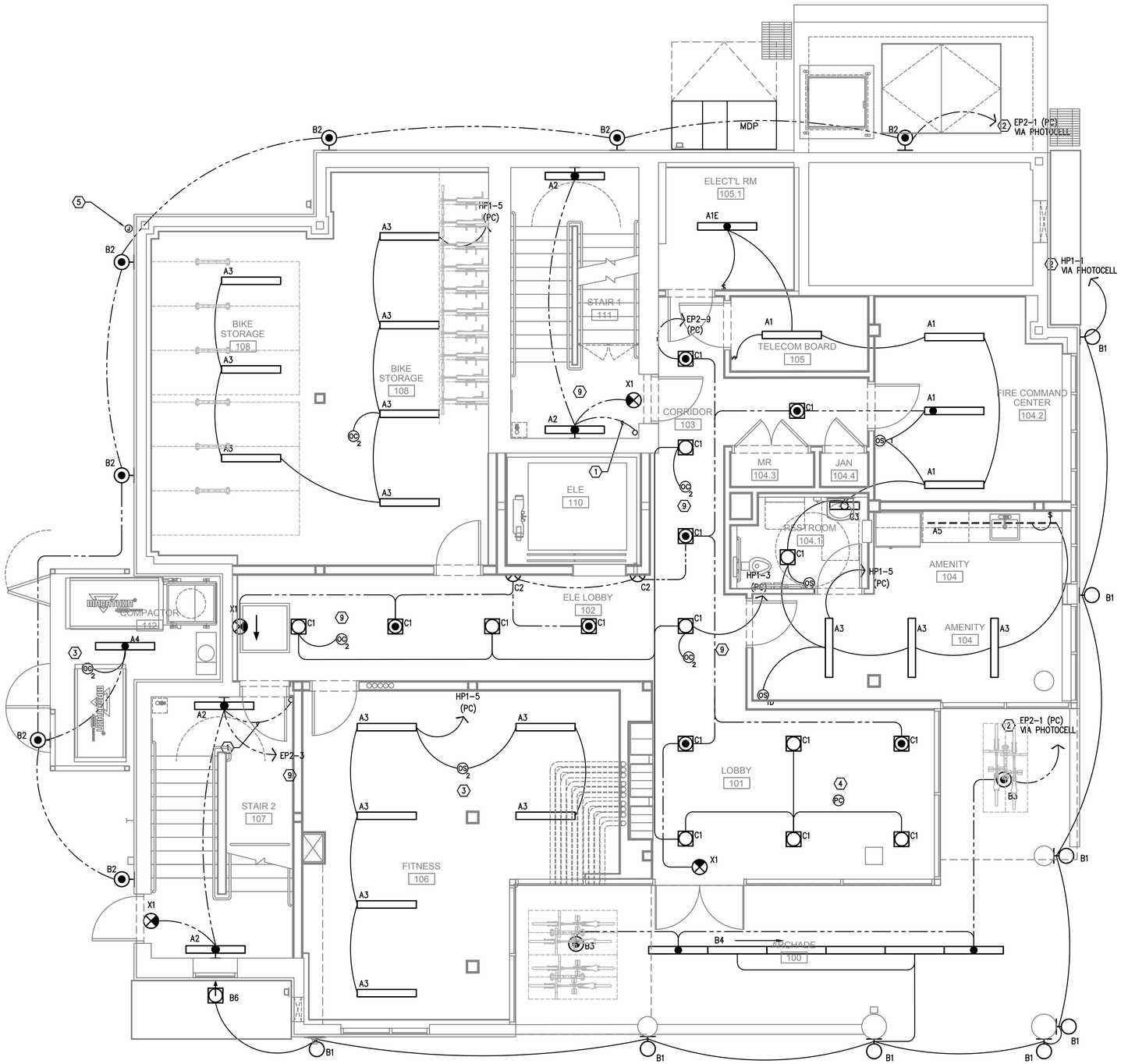

1 E2.01 LIGHTING PLAN – LEVEL 1
SCALE: 1/4" = 1'-0"

GENERAL LIGHTING NOTES:

A. ELECTRICAL DRAWINGS ARE DIAGRAMMATICAL AND MAY NOT ACCURATELY REFLECT ACTUAL CONSTRUCTION CONDITIONS. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE INSTALLATION OF ALL ELECTRICAL EQUIPMENT, WITH ALL TRADES PRIOR TO AND DURING CONSTRUCTION.

B. THE ELECTRICAL CONTRACTOR SHALL REFER TO THE ARCHITECTURAL & INTERIOR DESIGN DRAWINGS FOR EXACT LOCATIONS, MOUNTING HEIGHTS AND FINISHES OF DEVICES AND FIXTURES.

C. REFER TO ARCHITECTURAL INTERIOR ELEVATION PLANS FOR EXACT LOCATIONS OF FIXTURES AND DEVICES.

D. REFER TO SHEET E1.21 FOR LIGHT FIXTURE SCHEDULE.

E. REFER TO AVAILABLE ARCHITECTURAL AND/OR INTERIOR DESIGN DOCUMENTS & DRAWINGS FOR ADDITIONAL INFORMATION.

F. OCCUPANCY SENSORS SHALL BE FIELD ADJUSTED TO ENSURE PROPER COVERAGE AND CONTROL.

G. PROVIDE DIGITAL LIGHTING CONTROLS FOR EACH ROOM/SPACE, CONSISTING OF MULTI-BUTTON SWITCH(ES), OCC SENSORS, POWER PACKS, DAYLIGHT SENSORS, DIMMERS, INTERCONNECTING WIRING, ETC.

H. CORRIDOR LIGHTING TO BE CONSTANT "ON" AND PROVIDED WITH LOCAL MANUAL OVERRIDE SWITCHES FOR MAINTENANCE. REFER TO SHEET E1.22 FOR SWITCH WIRING DIAGRAMS.

I. ALL EGRESS FIXTURES SHALL BE WIRED SUCH THAT IN THE EVENT OF A POWER FAILURE, ALL LIGHTS WILL AUTOMATICALLY RETURN TO FULL POWER. REFER TO SWITCHING DETAILS ON SHEET E1.22.

J. REFER TO SHEET E1.23 FOR LIGHTING CONTROL DIAGRAMS AND DESIGN INTENT. VERIFY LIGHTING CONTROLLABILITY WITH ARCHITECT AND/OR OWNER'S REPRESENTATIVE TO DETERMINE EXACT NEEDS FOR ALL PUBLIC/COMMON AREAS SUCH AS LOBBIES, OFFICES, LOUNGE AREAS, ETC., PRIOR TO THE START OF ANY WORK.

K. THERE SHALL BE NO SURFACE MOUNTED FIXTURES OR PATHWAYS (CONDUIT, ETC.) IN ANY PUBLICLY ACCESSIBLE SPACES, INCLUDING STAIRWELLS AND EXIT PASSAGEWAYS WITHOUT PRIOR APPROVAL BY OWNER AND ARCHITECT. ROUTE ALL PATHWAYS WITHIN STUD CAVITIES OR ABOVE FINISHED CEILINGS.

KEYED NOTES:

1. CONTINUE CIRCUIT UP THROUGH THE STAIRWELL.
2. EXTERIOR BUILDING LIGHTS TO BE CONTROLLED VIA INTEGRAL AND/OR REMOTE PHOTOCELL FOR DUSK-TILL-DAWN OPERATION. REFER TO LIGHT FIXTURE SCHEDULE ON SHEET E1.21 FOR ADDITIONAL INFORMATION.
3. LIGHT FIXTURES IN THIS SPACE CONTROLLED BY CEILING MOUNT OCCUPANCY SENSOR.
4. PROVIDE PHOTOCELL FOR DAY-LIGHT REDUCTION OF LIGHT LEVELS.
5. CONTRACTOR TO COORDINATE WITH LANDSCAPE LIGHTING INSTALLER AND PROVIDE ROUGH-IN AND POWER CONNECTION(S) AS REQUIRED.
6. REFER TO SHEET E1.12 FOR TYPICAL DWELLING UNIT LOAD CENTER SCHEDULE FOR CIRCUITING INFORMATION.
7. REFER TO THE E3 SERIES SHEETS FOR TYPICAL DWELLING UNIT POWER DEVICE LAYOUT.
8. CORRIDOR LIGHTING CIRCUITS FOR THE UPPER FLOORS ARE AS FOLLOWS:

NORMAL POWER	EGRESS POWER
FLOORS 3, 4, 5 = HP1-7	FLOORS 3, 4, 5 = EP2-11
FLOORS 6, 7, 8 = HP1-9	FLOORS 6, 7, 8 = EP2-13
FLOORS 9, 10, 11, 12 & ROOF = HP1-11	FLOORS 9, 10, 11, 12 & ROOF = EP2-15

9. CORRIDOR AND STAIRWELL LIGHT FIXTURES TO BE CONTROLLED SUCH THAT THE FIXTURES DIM BY 50% DURING PERIODS OF LOW ACTIVITY. UPON DETECTION, LIGHTS SHALL RETURN TO 100% AND REMAIN AT FULL OUTPUT FOR A MINIMUM OF 30 MINUTES BEFORE RETURNING TO THE DIMMED STATE. FIXTURES ON EMERGENCY POWER CIRCUITS SHALL REMAIN 'ON' 24/7.
10. STROBE LIGHTS @ 24" AFF (BELOW SMOKE LING), AROUND PERIMETER FOR EGRESS. REFER TO 'T' SERIES SHEETS FOR MORE INFO. CIRCUIT TO PANEL 'VP'. SEE PANEL SCHEDULE ON SHEET E1.12.

REGISTERED PROFESSIONAL ENGINEER
16,597
OREGON
JULY 20, 1993
ROBERT L. CONNELL
EXPIRES 12-31-2023

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Drawn By:	DMT		
Chkd By:	RLC		
DSGN By:	DMT		
Acad File:			

SW PARK APARTMENTS
RYSTADT
2057 SW PARK AVE.
PORTLAND OREGON

LIGHTING PLAN – FIRST FLOOR

MFIA INC.

Consulting Engineers
2007 S.E. Ash St.
Portland, OR 97214
PHN: (503) 234-0548
FAX: (503) 234-0677
WWW.MFIA-ENG.COM

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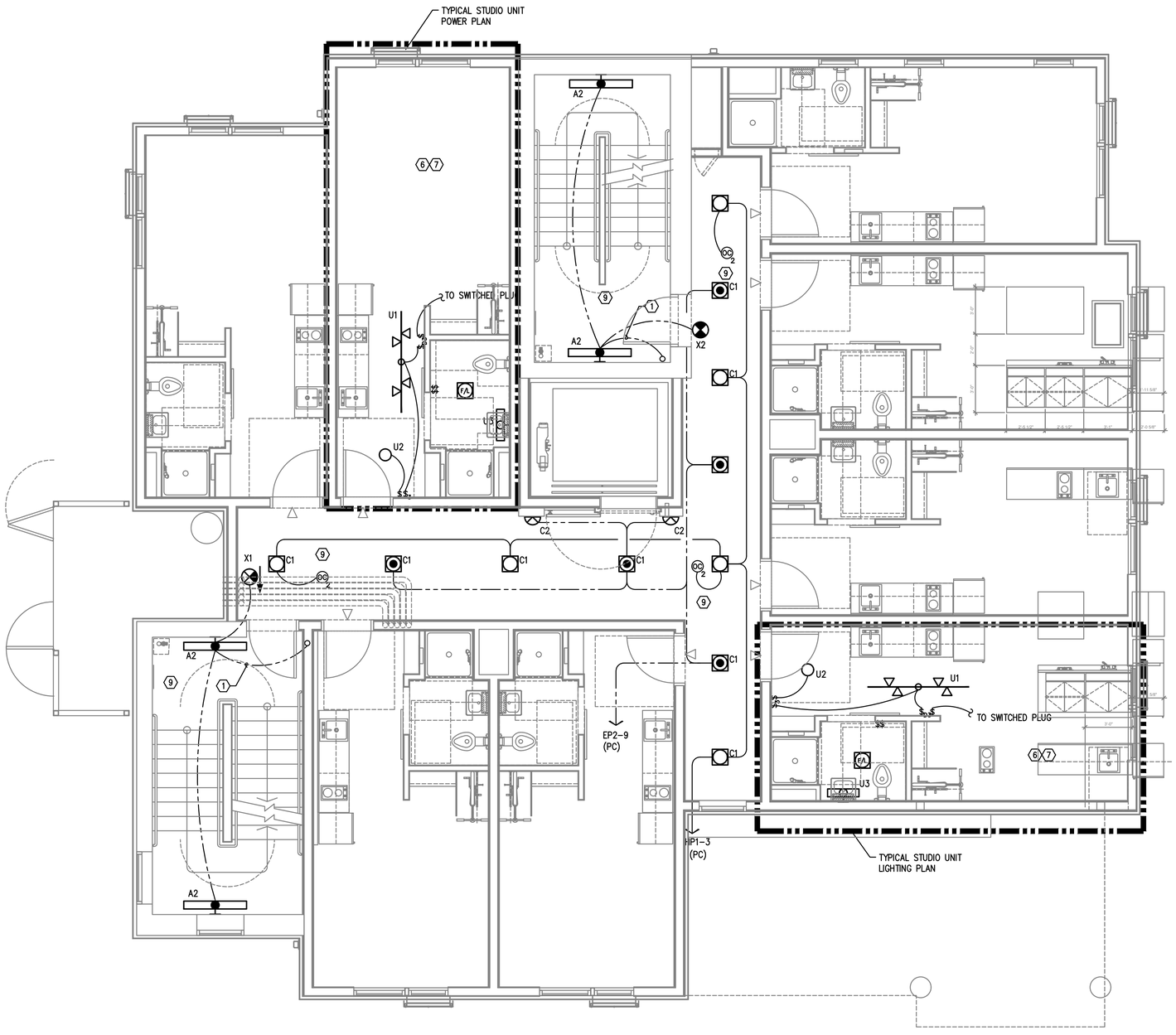

1 E2.02 LIGHTING PLAN – LEVEL 2

SCALE: 1/4" = 1'-0"

GENERAL LIGHTING NOTES:

A. ELECTRICAL DRAWINGS ARE DIAGRAMMATICAL AND MAY NOT ACCURATELY REFLECT ACTUAL CONSTRUCTION CONDITIONS. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE INSTALLATION OF ALL ELECTRICAL EQUIPMENT, WITH ALL TRADES PRIOR TO AND DURING CONSTRUCTION.

B. THE ELECTRICAL CONTRACTOR SHALL REFER TO THE ARCHITECTURAL & INTERIOR DESIGN DRAWINGS FOR EXACT LOCATIONS, MOUNTING HEIGHTS AND FINISHES OF DEVICES AND FIXTURES.

C. REFER TO ARCHITECTURAL INTERIOR ELEVATION PLANS FOR EXACT LOCATIONS OF FIXTURES AND DEVICES.

D. REFER TO SHEET E1.21 FOR LIGHT FIXTURE SCHEDULE.

E. REFER TO AVAILABLE ARCHITECTURAL AND/OR INTERIOR DESIGN DOCUMENTS & DRAWINGS FOR ADDITIONAL INFORMATION.

F. OCCUPANCY SENSORS SHALL BE FIELD ADJUSTED TO ENSURE PROPER COVERAGE AND CONTROL.

G. PROVIDE DIGITAL LIGHTING CONTROLS FOR EACH ROOM/SPACE, CONSISTING OF MULTI-BUTTON SWITCH(ES), OCC SENSORS, POWER PACKS, DAYLIGHT SENSORS, DIMMERS, INTERCONNECTING WIRING, ETC.

H. CORRIDOR LIGHTING TO BE CONSTANT "ON" AND PROVIDED WITH LOCAL MANUAL OVERRIDE SWITCHES FOR MAINTENANCE. REFER TO SHEET E1.22 FOR SWITCH WIRING DIAGRAMS.

I. ALL EGRESS FIXTURES SHALL BE WIRED SUCH THAT IN THE EVENT OF A POWER FAILURE, ALL LIGHTS WILL AUTOMATICALLY RETURN TO FULL POWER. REFER TO SWITCHING DETAILS ON SHEET E1.22.

J. REFER TO SHEET E1.23 FOR LIGHTING CONTROL DIAGRAMS AND DESIGN INTENT. VERIFY LIGHTING CONTROLLABILITY WITH ARCHITECT AND/OR OWNER'S REPRESENTATIVE TO DETERMINE EXACT NEEDS FOR ALL PUBLIC/COMMON AREAS SUCH AS LOBBIES, OFFICES, LOUNGE AREAS, ETC., PRIOR TO THE START OF ANY WORK.

K. THERE SHALL BE NO SURFACE MOUNTED FIXTURES OR PATHWAYS (CONDUIT, ETC.) IN ANY PUBLICLY ACCESSIBLE SPACES, INCLUDING STAIRWELLS AND EXIT PASSAGEWAYS WITHOUT PRIOR APPROVAL BY OWNER AND ARCHITECT. ROUTE ALL PATHWAYS WITHIN STUD CAVITIES OR ABOVE FINISHED CEILINGS.

KEYED NOTES:

1. CONTINUE CIRCUIT UP THROUGH THE STAIRWELL.
2. EXTERIOR BUILDING LIGHTS TO BE CONTROLLED VIA INTEGRAL AND/OR REMOTE PHOTOCELL FOR DUSK-TILL-DAWN OPERATION. REFER TO LIGHT FIXTURE SCHEDULE ON SHEET E1.21 FOR ADDITIONAL INFORMATION.
3. LIGHT FIXTURES IN THIS SPACE CONTROLLED BY CEILING MOUNT OCCUPANCY SENSOR.
4. PROVIDE PHOTOCELL FOR DAY-LIGHT REDUCTION OF LIGHT LEVELS.
5. CONTRACTOR TO COORDINATE WITH LANDSCAPE LIGHTING INSTALLER AND PROVIDE ROUGH-IN AND POWER CONNECTION(S) AS REQUIRED.
6. REFER TO SHEET E1.12 FOR TYPICAL DWELLING UNIT LOAD CENTER SCHEDULE FOR CIRCUITING INFORMATION.
7. REFER TO THE E3 SERIES SHEETS FOR TYPICAL DWELLING UNIT POWER DEVICE LAYOUT.
8. CORRIDOR LIGHTING CIRCUITS FOR THE UPPER FLOORS ARE AS FOLLOWS:

NORMAL POWER	EGRESS POWER
FLOORS 3, 4, 5 = HP1-7	FLOORS 3, 4, 5 = EP2-11
FLOORS 6, 7, 8 = HP1-9	FLOORS 6, 7, 8 = EP2-13
FLOORS 9, 10, 11, 12 & ROOF = HP1-11	FLOORS 9, 10, 11, 12 & ROOF = EP2-15

9. CORRIDOR AND STAIRWELL LIGHT FIXTURES TO BE CONTROLLED SUCH THAT THE FIXTURES DIM BY 50% DURING PERIODS OF LOW ACTIVITY. UPON DETECTION, LIGHTS SHALL RETURN TO 100% AND REMAIN AT FULL OUTPUT FOR A MINIMUM OF 30 MINUTES BEFORE RETURNING TO THE DIMMED STATE. FIXTURES ON EMERGENCY POWER CIRCUITS SHALL REMAIN 'ON' 24/7.
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SW PARK APARTMENTS
RYSTADT
2057 SW PARK AVE.
PORTLAND OREGON

LIGHTING PLAN – SECOND FLOOR

MFIA INC.
Consulting Engineers
2007 S.E. Ash St.
Portland, OR 97214
PHN: (503) 234-0548
FAX: (503) 234-0677
WWW.MFIA-ENG.COM

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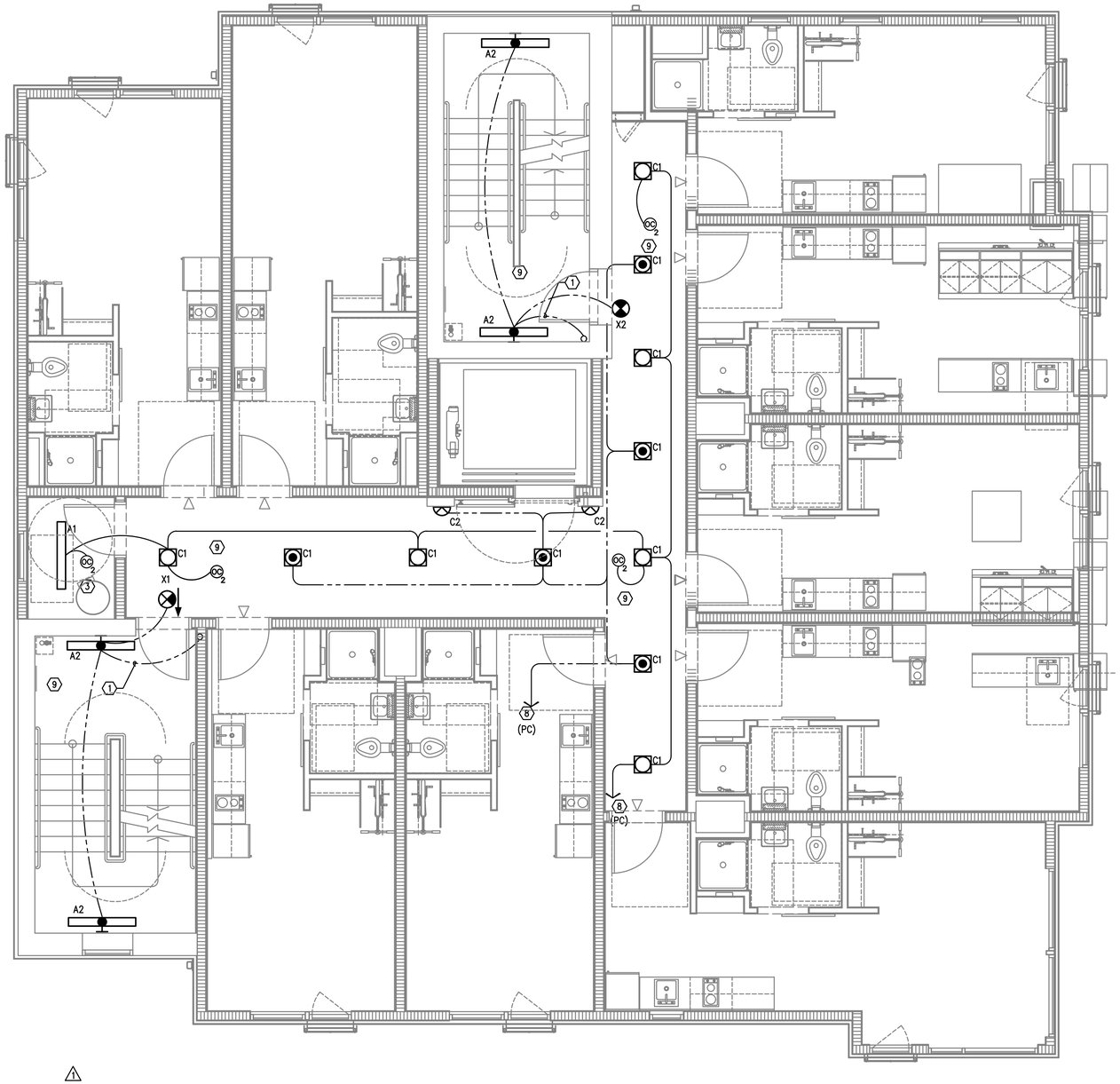

1 E2.03 LIGHTING PLAN – LEVELS 3–6
SCALE: 1/4" = 1'-0"

GENERAL LIGHTING NOTES:

A. ELECTRICAL DRAWINGS ARE DIAGRAMMATICAL AND MAY NOT ACCURATELY REFLECT ACTUAL CONSTRUCTION CONDITIONS. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE INSTALLATION OF ALL ELECTRICAL EQUIPMENT, WITH ALL TRADES PRIOR TO AND DURING CONSTRUCTION.

B. THE ELECTRICAL CONTRACTOR SHALL REFER TO THE ARCHITECTURAL & INTERIOR DESIGN DRAWINGS FOR EXACT LOCATIONS, MOUNTING HEIGHTS AND FINISHES OF DEVICES AND FIXTURES.

C. REFER TO ARCHITECTURAL INTERIOR ELEVATION PLANS FOR EXACT LOCATIONS OF FIXTURES AND DEVICES.

D. REFER TO SHEET E1.21 FOR LIGHT FIXTURE SCHEDULE.

E. REFER TO AVAILABLE ARCHITECTURAL AND/OR INTERIOR DESIGN DOCUMENTS & DRAWINGS FOR ADDITIONAL INFORMATION.

F. OCCUPANCY SENSORS SHALL BE FIELD ADJUSTED TO ENSURE PROPER COVERAGE AND CONTROL.

G. PROVIDE DIGITAL LIGHTING CONTROLS FOR EACH ROOM/SPACE, CONSISTING OF MULTI-BUTTON SWITCH(ES), OCC SENSORS, POWER PACKS, DAYLIGHT SENSORS, DIMMERS, INTERCONNECTING WIRING, ETC.

H. CORRIDOR LIGHTING TO BE CONSTANT "ON" AND PROVIDED WITH LOCAL MANUAL OVERRIDE SWITCHES FOR MAINTENANCE. REFER TO SHEET E1.22 FOR SWITCH WIRING DIAGRAMS.

I. ALL EGRESS FIXTURES SHALL BE WIRED SUCH THAT IN THE EVENT OF A POWER FAILURE, ALL LIGHTS WILL AUTOMATICALLY RETURN TO FULL POWER. REFER TO SWITCHING DETAILS ON SHEET E1.22.

J. REFER TO SHEET E1.23 FOR LIGHTING CONTROL DIAGRAMS AND DESIGN INTENT. VERIFY LIGHTING CONTROLLABILITY WITH ARCHITECT AND/OR OWNER'S REPRESENTATIVE TO DETERMINE EXACT NEEDS FOR ALL PUBLIC/COMMON AREAS SUCH AS LOBBIES, OFFICES, LOUNGE AREAS, ETC., PRIOR TO THE START OF ANY WORK.

K. THERE SHALL BE NO SURFACE MOUNTED FIXTURES OR PATHWAYS (CONDUIT, ETC.) IN ANY PUBLICLY ACCESSIBLE SPACES, INCLUDING STAIRWELLS AND EXIT PASSAGEWAYS WITHOUT PRIOR APPROVAL BY OWNER AND ARCHITECT. ROUTE ALL PATHWAYS WITHIN STUD CAVITIES OR ABOVE FINISHED CEILINGS.

⬡ KEYED NOTES:

1. CONTINUE CIRCUIT UP THROUGH THE STAIRWELL.
2. EXTERIOR BUILDING LIGHTS TO BE CONTROLLED VIA INTEGRAL AND/OR REMOTE PHOTOCELL FOR DUSK-TILL-DAWN OPERATION. REFER TO LIGHT FIXTURE SCHEDULE ON SHEET E1.21 FOR ADDITIONAL INFORMATION.
3. LIGHT FIXTURES IN THIS SPACE CONTROLLED BY CEILING MOUNT OCCUPANCY SENSOR.
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5. CONTRACTOR TO COORDINATE WITH LANDSCAPE LIGHTING INSTALLER AND PROVIDE ROUGH-IN AND POWER CONNECTION(S) AS REQUIRED.
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7. REFER TO THE E3 SERIES SHEETS FOR TYPICAL DWELLING UNIT POWER DEVICE LAYOUT.
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SW PARK APARTMENTS
RYSTADT
2057 SW PARK AVE.
PORTLAND OREGON

LIGHTING PLAN – FLOORS 3–6

MFIA INC.
Consulting Engineers
2007 S.E. Ash St.
Portland, OR 97214
PHN: (503) 234-0548
FAX: (503) 234-0677
WWW.MFIA-ENG.COM

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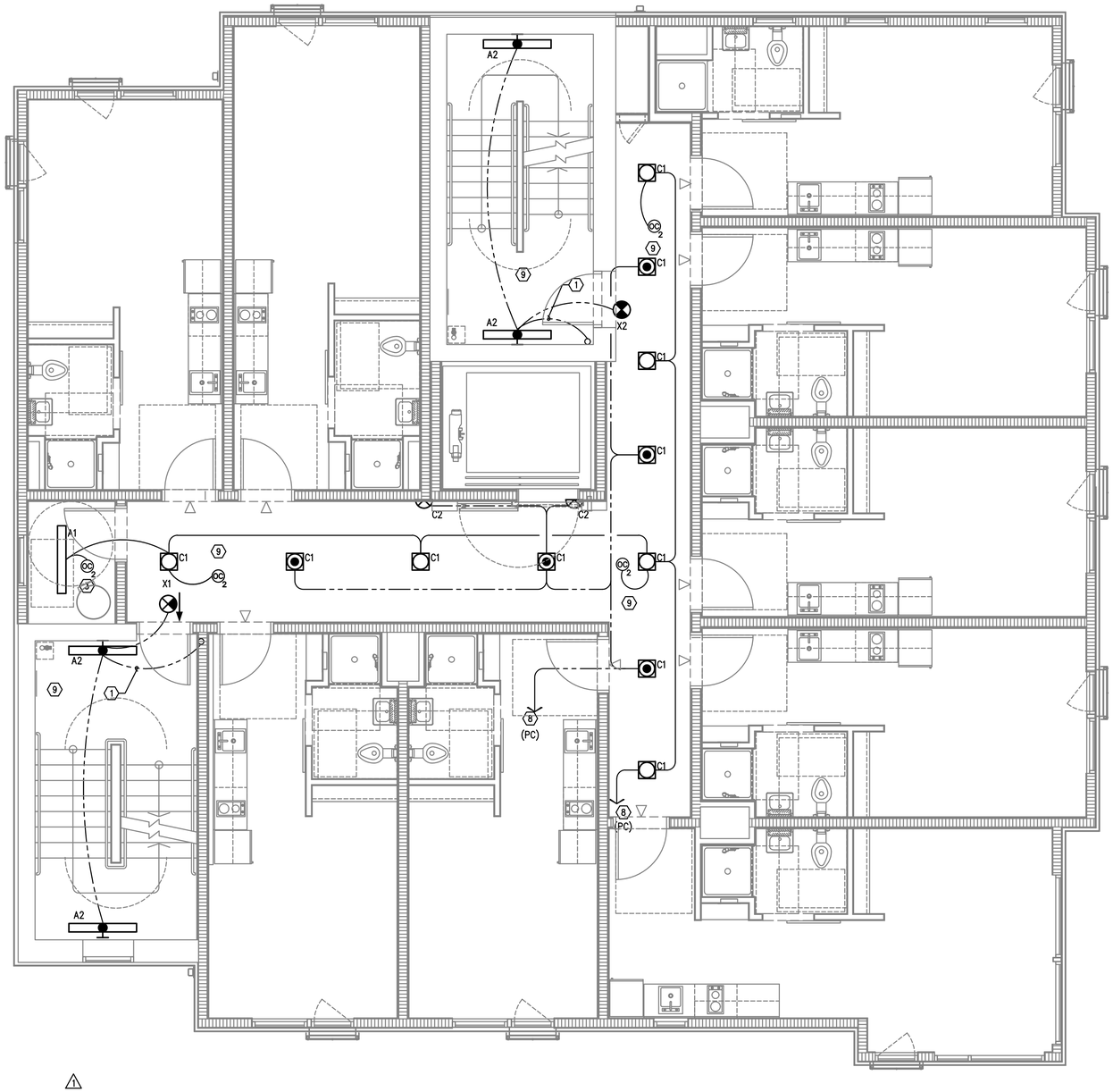

1 LIGHTING PLAN – LEVELS 7–11
E2.04 SCALE: 1/4" = 1'-0"

GENERAL LIGHTING NOTES:

A. ELECTRICAL DRAWINGS ARE DIAGRAMMATICAL AND MAY NOT ACCURATELY REFLECT ACTUAL CONSTRUCTION CONDITIONS. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE INSTALLATION OF ALL ELECTRICAL EQUIPMENT, WITH ALL TRADES PRIOR TO AND DURING CONSTRUCTION.

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C. REFER TO ARCHITECTURAL INTERIOR ELEVATION PLANS FOR EXACT LOCATIONS OF FIXTURES AND DEVICES.

D. REFER TO SHEET E1.21 FOR LIGHT FIXTURE SCHEDULE.

E. REFER TO AVAILABLE ARCHITECTURAL AND/OR INTERIOR DESIGN DOCUMENTS & DRAWINGS FOR ADDITIONAL INFORMATION.

F. OCCUPANCY SENSORS SHALL BE FIELD ADJUSTED TO ENSURE PROPER COVERAGE AND CONTROL.

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J. REFER TO SHEET E1.23 FOR LIGHTING CONTROL DIAGRAMS AND DESIGN INTENT. VERIFY LIGHTING CONTROLLABILITY WITH ARCHITECT AND/OR OWNER'S REPRESENTATIVE TO DETERMINE EXACT NEEDS FOR ALL PUBLIC/COMMON AREAS SUCH AS LOBBIES, OFFICES, LOUNGE AREAS, ETC., PRIOR TO THE START OF ANY WORK.

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KEYED NOTES:

1. CONTINUE CIRCUIT UP THROUGH THE STAIRWELL.
2. EXTERIOR BUILDING LIGHTS TO BE CONTROLLED VIA INTEGRAL AND/OR REMOTE PHOTOCELL FOR DUSK-TILL-DAWN OPERATION. REFER TO LIGHT FIXTURE SCHEDULE ON SHEET E1.21 FOR ADDITIONAL INFORMATION.
3. LIGHT FIXTURES IN THIS SPACE CONTROLLED BY CEILING MOUNT OCCUPANCY SENSOR.
4. PROVIDE PHOTOCELL FOR DAY-LIGHT REDUCTION OF LIGHT LEVELS.
5. CONTRACTOR TO COORDINATE WITH LANDSCAPE LIGHTING INSTALLER AND PROVIDE ROUGH-IN AND POWER CONNECTION(S) AS REQUIRED.
6. REFER TO SHEET E1.12 FOR TYPICAL DWELLING UNIT LOAD CENTER SCHEDULE FOR CIRCUITING INFORMATION.
7. REFER TO THE E3 SERIES SHEETS FOR TYPICAL DWELLING UNIT POWER DEVICE LAYOUT.
8. CORRIDOR LIGHTING CIRCUITS FOR THE UPPER FLOORS ARE AS FOLLOWS:

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SW PARK APARTMENTS
RYSTADT
2057 SW PARK AVE.
PORTLAND OREGON

LIGHTING PLAN – FLOORS 7–11

MFIA INC.
Consulting Engineers
2007 S.E. Ash St.
Portland, OR 97214
PHN: (503) 234-0548
FAX: (503) 234-0677
WWW.MFIA-ENG.COM

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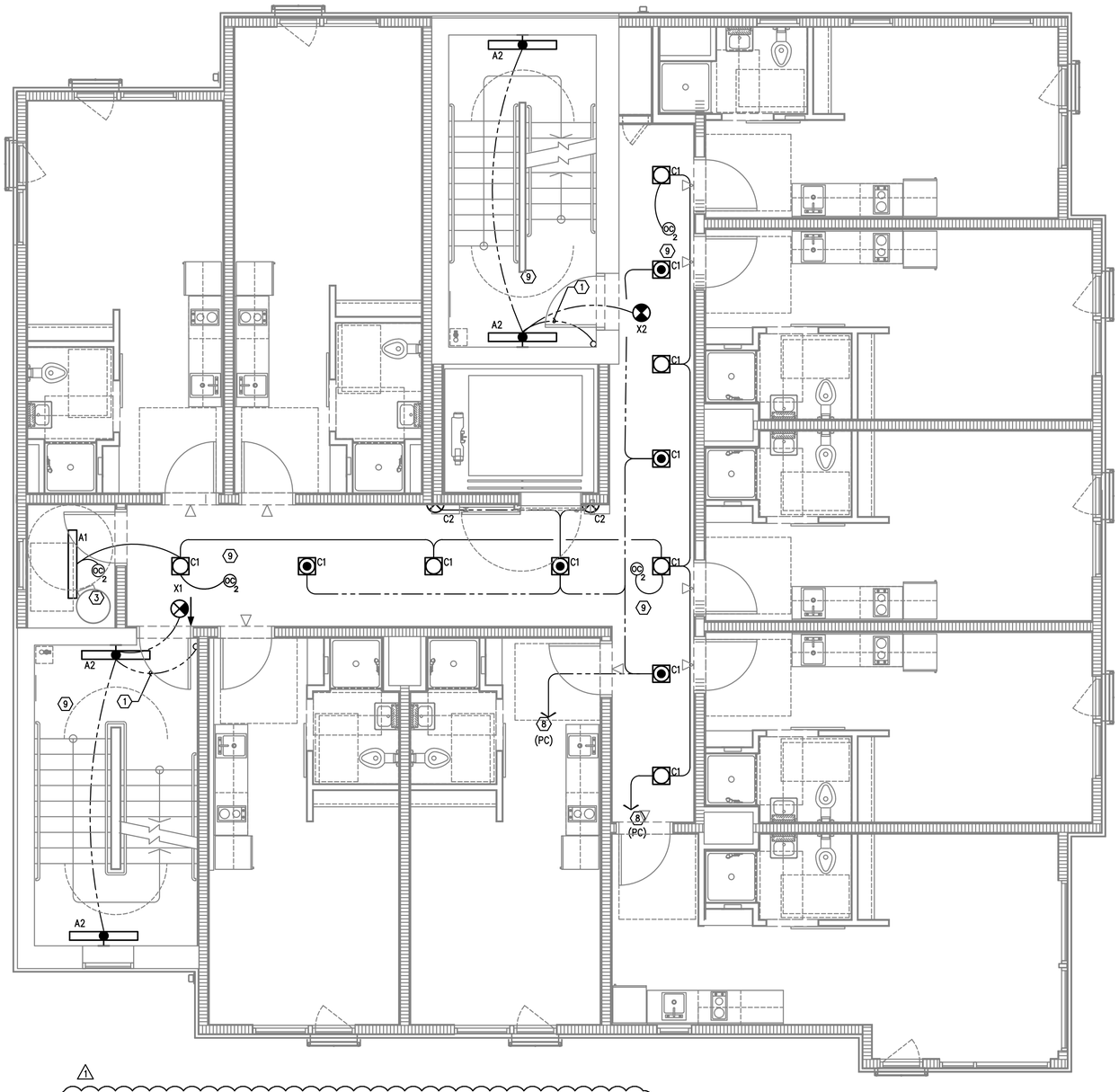

1 E2.05 LIGHTING PLAN – LEVEL 12
SCALE: 1/4" = 1'-0"

GENERAL LIGHTING NOTES:

A. ELECTRICAL DRAWINGS ARE DIAGRAMMATICAL AND MAY NOT ACCURATELY REFLECT ACTUAL CONSTRUCTION CONDITIONS. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE INSTALLATION OF ALL ELECTRICAL EQUIPMENT, WITH ALL TRADES PRIOR TO AND DURING CONSTRUCTION.

B. THE ELECTRICAL CONTRACTOR SHALL REFER TO THE ARCHITECTURAL & INTERIOR DESIGN DRAWINGS FOR EXACT LOCATIONS, MOUNTING HEIGHTS AND FINISHES OF DEVICES AND FIXTURES.

C. REFER TO ARCHITECTURAL INTERIOR ELEVATION PLANS FOR EXACT LOCATIONS OF FIXTURES AND DEVICES.

D. REFER TO SHEET E1.21 FOR LIGHT FIXTURE SCHEDULE.

E. REFER TO AVAILABLE ARCHITECTURAL AND/OR INTERIOR DESIGN DOCUMENTS & DRAWINGS FOR ADDITIONAL INFORMATION.

F. OCCUPANCY SENSORS SHALL BE FIELD ADJUSTED TO ENSURE PROPER COVERAGE AND CONTROL.

G. PROVIDE DIGITAL LIGHTING CONTROLS FOR EACH ROOM/SPACE, CONSISTING OF MULTI-BUTTON SWITCH(ES), OCC SENSORS, POWER PACKS, DAYLIGHT SENSORS, DIMMERS, INTERCONNECTING WIRING, ETC.

H. CORRIDOR LIGHTING TO BE CONSTANT "ON" AND PROVIDED WITH LOCAL MANUAL OVERRIDE SWITCHES FOR MAINTENANCE. REFER TO SHEET E1.22 FOR SWITCH WIRING DIAGRAMS.

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KEYED NOTES:

1. CONTINUE CIRCUIT UP THROUGH THE STAIRWELL.
2. EXTERIOR BUILDING LIGHTS TO BE CONTROLLED VIA INTEGRAL AND/OR REMOTE PHOTOCELL FOR DUSK-TILL-DAWN OPERATION. REFER TO LIGHT FIXTURE SCHEDULE ON SHEET E1.21 FOR ADDITIONAL INFORMATION.
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5. CONTRACTOR TO COORDINATE WITH LANDSCAPE LIGHTING INSTALLER AND PROVIDE ROUGH-IN AND POWER CONNECTION(S) AS REQUIRED.
6. REFER TO SHEET E1.12 FOR TYPICAL DWELLING UNIT LOAD CENTER SCHEDULE FOR CIRCUITING INFORMATION.
7. REFER TO THE E3 SERIES SHEETS FOR TYPICAL DWELLING UNIT POWER DEVICE LAYOUT.
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FLOORS 9, 10, 11,	FLOORS 9, 10, 11,
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SW PARK APARTMENTS
RYSTADT
2057 SW PARK AVE.
PORTLAND OREGON

LIGHTING PLAN – 12TH FLOOR

MFIA INC.
Consulting Engineers
2007 S.E. Ash St.
Portland, OR 97214
PHN: (503) 234-0548
FAX: (503) 234-0677
WWW.MFIA-ENG.COM

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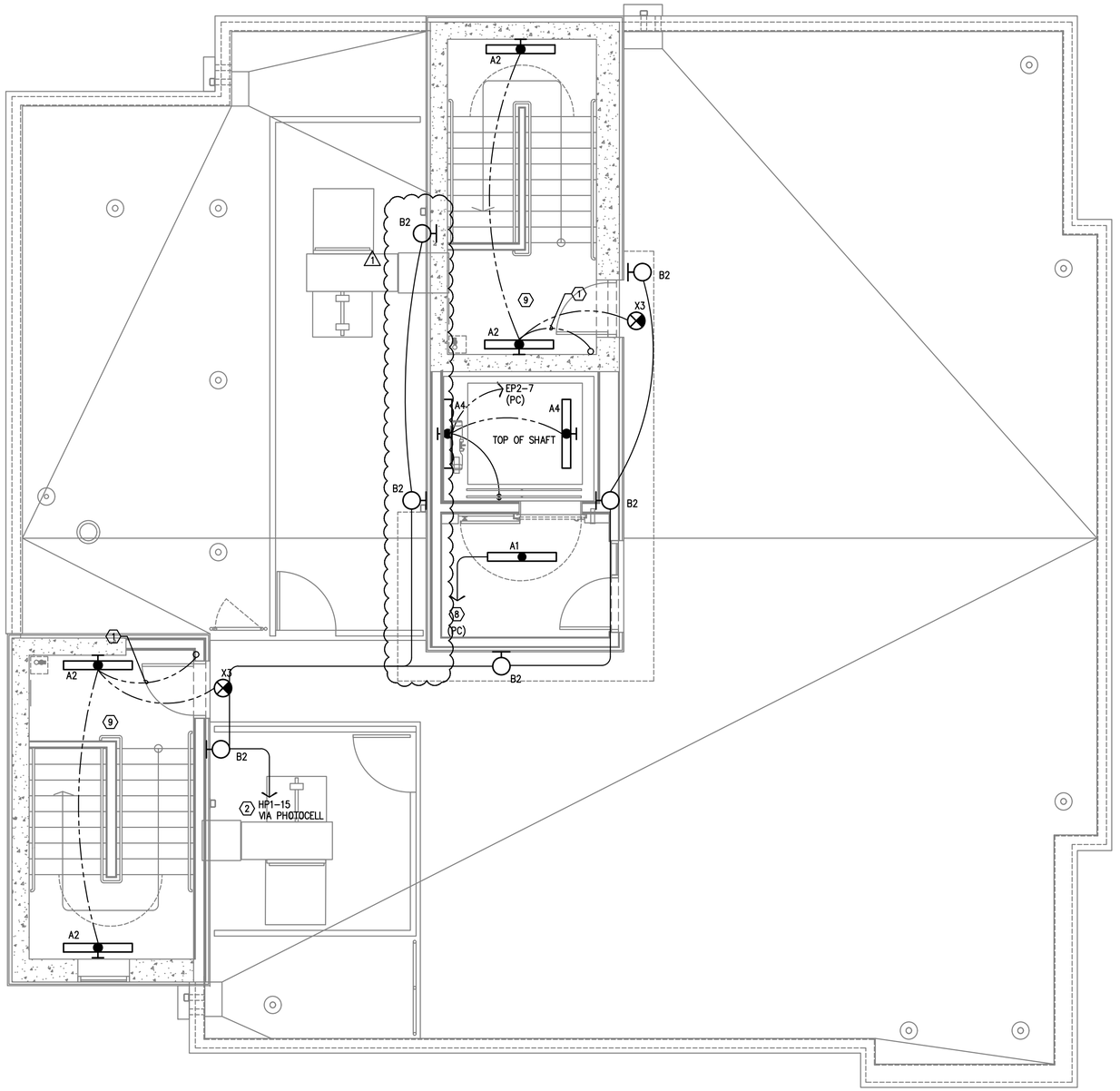

1 LIGHTING PLAN – ROOF LEVEL
E2.06 SCALE: 1/4" = 1'-0"

GENERAL LIGHTING NOTES:

A. ELECTRICAL DRAWINGS ARE DIAGRAMMATICAL AND MAY NOT ACCURATELY REFLECT ACTUAL CONSTRUCTION CONDITIONS. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE INSTALLATION OF ALL ELECTRICAL EQUIPMENT, WITH ALL TRADES PRIOR TO AND DURING CONSTRUCTION.

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⬡ KEYED NOTES:

1. CONTINUE CIRCUIT UP THROUGH THE STAIRWELL.
2. EXTERIOR BUILDING LIGHTS TO BE CONTROLLED VIA INTEGRAL AND/OR REMOTE PHOTOCELL FOR DUSK-TILL-DAWN OPERATION. REFER TO LIGHT FIXTURE SCHEDULE ON SHEET E1.21 FOR ADDITIONAL INFORMATION.
3. LIGHT FIXTURES IN THIS SPACE CONTROLLED BY CEILING MOUNT OCCUPANCY SENSOR.
4. PROVIDE PHOTOCELL FOR DAY-LIGHT REDUCTION OF LIGHT LEVELS.
5. CONTRACTOR TO COORDINATE WITH LANDSCAPE LIGHTING INSTALLER AND PROVIDE ROUGH-IN AND POWER CONNECTION(S) AS REQUIRED.
6. REFER TO SHEET E1.12 FOR TYPICAL DWELLING UNIT LOAD CENTER SCHEDULE FOR CIRCUITING INFORMATION.
7. REFER TO THE E3 SERIES SHEETS FOR TYPICAL DWELLING UNIT POWER DEVICE LAYOUT.
8. CORRIDOR LIGHTING CIRCUITS FOR THE UPPER FLOORS ARE AS FOLLOWS:

NORMAL POWER	EGRESS POWER
FLOORS 3, 4, 5 = HP1-7	FLOORS 3, 4, 5 = EP2-11
FLOORS 6, 7, 8 = HP1-9	FLOORS 6, 7, 8 = EP2-13
FLOORS 9, 10, 11, 12 & ROOF = HP1-11	FLOORS 9, 10, 11, 12 & ROOF = EP2-15

9. CORRIDOR AND STAIRWELL LIGHT FIXTURES TO BE CONTROLLED SUCH THAT THE FIXTURES DIM BY 50% DURING PERIODS OF LOW ACTIVITY. UPON DETECTION, LIGHTS SHALL RETURN TO 100% AND REMAIN AT FULL OUTPUT FOR A MINIMUM OF 30 MINUTES BEFORE RETURNING TO THE DIMMED STATE. FIXTURES ON EMERGENCY POWER CIRCUITS SHALL REMAIN 'ON' 24/7.
10. STROBE LIGHTS @ 24" AFF (BELOW SMOKE LING), AROUND PERIMETER FOR EGRESS. REFER TO 'T' SERIES SHEETS FOR MORE INFO. CIRCUIT TO PANEL 'VP'. SEE PANEL SCHEDULE ON SHEET E1.12.

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SW PARK APARTMENTS
RYSTADT
2057 SW PARK AVE.
PORTLAND OREGON

LIGHTING PLAN – ROOF LEVEL

MFIA INC.
Consulting Engineers
2007 S.E. Ash St.
Portland, OR 97214
PHN: (503) 234-0548
FAX: (503) 234-0677
WWW.MFIA-ENG.COM

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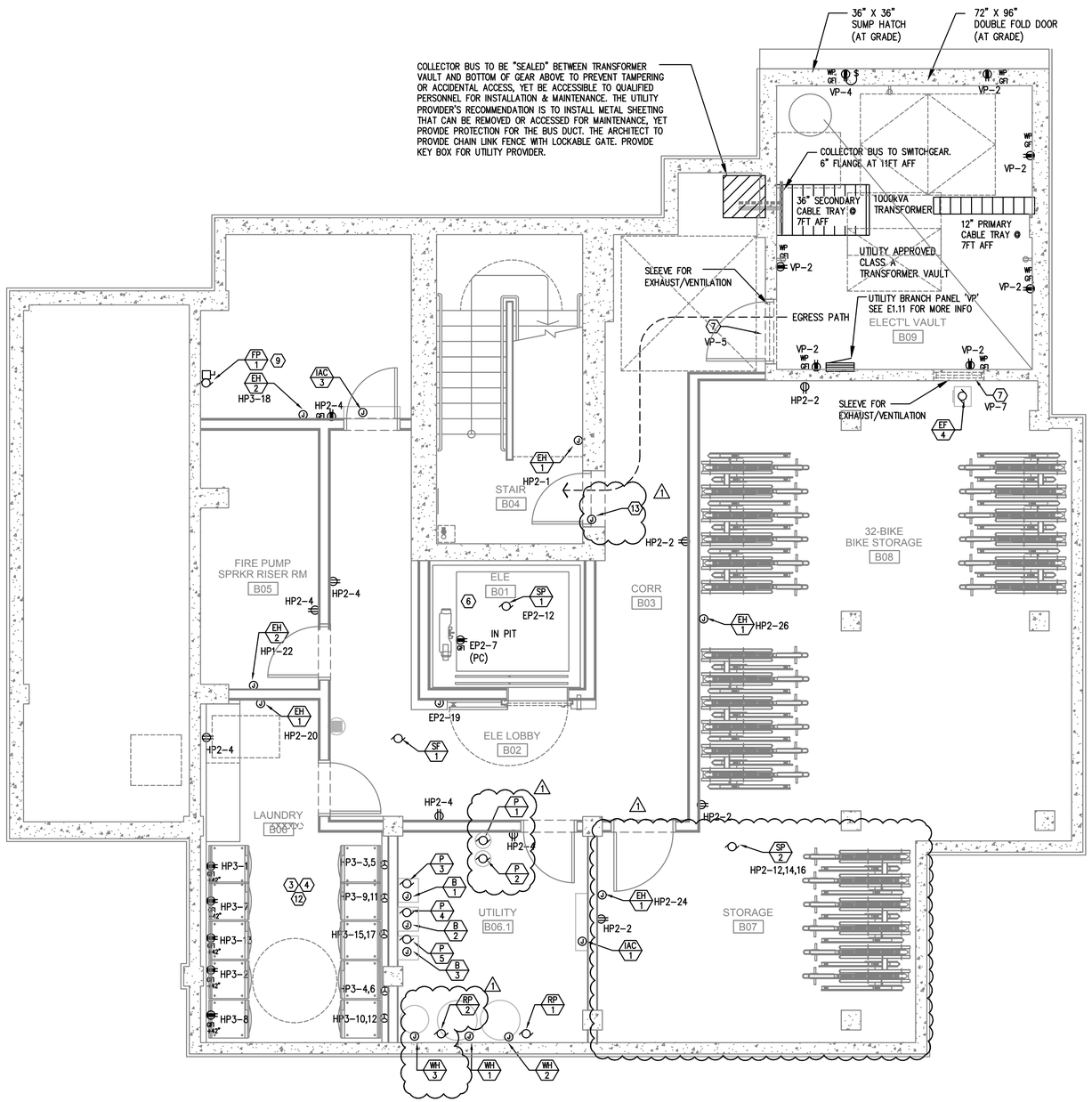

1 E3.00 POWER PLAN – BASEMENT LEVEL

SCALE: 1/4" = 1'-0"

GENERAL POWER NOTES:

A. ELECTRICAL DRAWINGS ARE DIAGRAMMATICAL AND MAY NOT ACCURATELY REFLECT ACTUAL CONSTRUCTION CONDITIONS. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE INSTALLATION OF ALL ELECTRICAL EQUIPMENT, WITH ALL TRADES PRIOR TO AND DURING CONSTRUCTION.

B. WORK SHALL BE IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND NATIONAL CODES.

C. ELECTRICAL CONTRACTOR TO PROVIDE THERMOSTATS NOT SUPPLIED BY MECHANICAL CONTRACTOR, AS REQUIRED. CONSULT MECHANICAL PLANS FOR ADDITIONAL INFORMATION.

D. ELECTRICAL CONTRACTOR SHALL PROVIDE INSTALLATION AND FINAL CONNECTION OF THERMOSTATS AS REQUIRED. CONSULT MECHANICAL CONTRACTOR FOR EXACT REQUIREMENTS PRIOR TO ROUGH IN.

E. COORDINATE WITH DIVISION 23 FOR EXACT LOCATION AND POWER REQUIREMENTS OF ALL MECHANICAL EQUIPMENT PRIOR TO ROUGH IN. REFER TO SHEET E1.13 FOR MECHANICAL EQUIPMENT SCHEDULE.

F. THE ELECTRICAL CONTRACTOR SHALL REFER TO THE ARCHITECTURAL DRAWINGS FOR ALL MOUNTING HEIGHTS AND FINISHES OF DEVICES AND FIXTURES.

G. ELECTRICAL CONTRACTOR SHALL REFER TO THE 'T' SERIES SHEETS AND PROVIDE ROUGH IN FOR THE LOW VOLTAGE SYSTEMS/FIRE ALARM INSTALLER.

H. SERVICE ENTRANCE AND METERING EQUIPMENT SHOWN TO APPROXIMATE SCALE, BASED ON SIEMENS PRODUCTS. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT INSTALLED EQUIPMENT FITS THE SPACE PROVIDED AND THAT ALL REQUIRED WORKING CLEARANCES ARE PROVIDED.

I. THE CLASS 'A' TRANSFORMER VAULT SHALL BE IN ACCORDANCE WITH NEC REQUIREMENTS AS WELL AS THOSE OF THE UTILITY PROVIDER. MAN-DOOR SHALL BE EQUIPPED WITH PANIC HARDWARE AND AN OUTWARD SWING.

J. PROVIDE A KEY BOX AT THE TRANSFORMER ROOM DOOR PER THE UTILITY PROVIDER'S REQUIREMENTS, FOR 24/7 ACCESS.

K. TENANT ELECTRICAL METERING SHALL BE SUB-METERED BY THE OWNER PER THE UTILITY PROVIDER'S REQUIREMENTS. SUB-METERING EQUIPMENT IS BASED ON SIEMENS SEM3 PRODUCTS. REFER TO SHEET E1.11 FOR ADDITIONAL INFORMATION.

L. REFER TO 'E4' SERIES SHEETS FOR TYPICAL DWELLING UNIT POWER PLANS.

M. PROVIDE ROUGH IN AND WIRING FOR ACCESS CONTROL. REFER TO 'T' SERIES SHEETS FOR ADDITIONAL INFORMATION.

N. LOW VOLTAGE/COMMUNICATIONS SYSTEM DEMARCATION BOARD(S). COORDINATE LOCATIONS AND ELECTRICAL POWER REQUIREMENTS WITH THE TELECOM PLANS ('T' SERIES SHEETS) AND LOW VOLTAGE SYSTEMS INSTALLERS. PROVIDE ROUGH IN AND/OR FINAL ELECTRICAL POWER CONNECTIONS & DEVICES. REFER PANEL 'HP2' SCHEDULE ON E1.12 FOR CIRCUITS.

O. REFER TO SHEET E1.12 FOR TYPICAL DWELLING UNIT LOAD CENTER SCHEDULE FOR CIRCUITING INFORMATION.

P. EACH UNIT LOAD CENTER TO BE FED VIA SUB-METERING SYSTEM. REFER TO ONE-LINE DIAGRAM ON SHEET E1.11 FOR CONDUCTOR SIZE AND CABLING.

⬡ KEYED POWER NOTES:

1. PROVIDE KEY BOX FOR PGE AT METER ROOM FOR 24/7 ACCESS.
2. GENERATOR EMERGENCY DISCONNECT.
3. LAUNDRY ROOM GFCI RECEPTACLES FOR WASHING MACHINES TO BE MOUNTED AT 42" A.F.F., OR UNLESS OTHERWISE DIRECTED BY THE ARCHITECT. LAUNDRY ROOM APPLIANCES CIRCUITED TO PANEL 'HP3'. REFER TO PANEL SCHEDULE ON SHEET E1.12.
4. 40A, DEDICATED 14-40R DRYER RECEPTACLE (TYPICAL). VERIFY EXACT POWER RATING REQUIRED FOR THE COMMERCIAL DRYERS PRIOR TO ORDERING. LAUNDRY ROOM APPLIANCES CIRCUITED TO PANEL 'HP3'. REFER TO PANEL SCHEDULE ON SHEET E1.12.
5. EXHAUST FAN IN THIS AREA TO BE TIED INTO THE LIGHTING CIRCUIT.
6. CONSULT ELEVATOR PROVIDER FOR EXACT POWER REQUIREMENTS AND PROVIDE ALL ELECTRICAL WORK AS DIRECTED. VERIFY EXACT LOCATION FOR ELEVATOR EQUIPMENT WITH ARCHITECT AND COORDINATE WITH ELEVATOR INSTALLER.
7. SMOKE DAMPER FOR VENTILATION LOUVER. COORDINATE WITH MECHANICAL EQUIPMENT INSTALLER AND CIRCUIT AS INDICATED
8. PROVIDE POWER CONNECTION FOR IRRIGATION CONTROLS. COORDINATE WITH THE LANDSCAPER FOR EXACT REQUIREMENTS AND LOCATION PRIOR TO ROUGH IN.
9. CONSULT FIRE SPRINKLER SYSTEM PLAN SET AND COORDINATE EXACT LOCATION AND ELECTRICAL REQUIREMENTS FOR THE BUILDING FIRE PUMP.
10. REFER TO THE HOUSE PANEL 'HP1' PANEL SCHEDULE FOR CORRIDOR RECEPTACLE CIRCUITS ON FLOOR 2 THROUGH 11.
11. REFER TO PLUMBING PLAN SHEETS FOR ADDITIONAL INFORMATION ON THE PUMP SYSTEMS IN THIS SPACE. COORDINATE WITH INSTALLER AND PROVIDE ELECTRICAL CONNECTIONS AS REQUIRED. PROVIDE CIRCUITS FROM PANEL HP2, SEE PANEL SCHEDULES.
12. PROVIDE ONE 20A, 120V, 1P CIRCUIT FROM PANEL HP3 FOR DRYER BOOSTER FANS. COORDINATE WITH MECHANICAL EQUIPMENT INSTALLER FOR WIRING REQUIREMENTS PRIOR TO ROUGH IN.

⚠1
13. PROVIDE ONE 20A, 120V, 1P CIRCUIT FROM PANEL EP2 FOR AUTOMATIC DOOR CLOSER(S), TIED TO FIRE ALARM SYSTEM. COORDINATE WITH FIRE ALARM EQUIPMENT INSTALLER FOR WIRING REQUIREMENTS PRIOR TO ROUGH IN.
14. STAIRWELL PRESSURIZATION FANS ARE INTERLOCKED WITH MOTORIZED SMOKE DAMPERS AND BAROMETRIC RELIEF DAMPERS. REFER TO MECHANICAL PLANS SHEETS AND COORDINATE WITH THE MECHANICAL EQUIPMENT INSTALLER FOR ADDITIONAL INFORMATION. BOTH THE PRESSURIZATION FANS AND DAMPERS ARE TO BE CIRCUITED TO THE EMERGENCY POWER SYSTEM AND VIA THE FACP. SEE PANEL EP2 FOR PROPOSED CIRCUITING.
    - *POWER SHALL BE MONITORED DOWN STREAM OF THE DISCONNECTS.
    - *PROVIDE CURRENT TRANSDUCER TO MONITOR FAN AIRFLOW (HAWKEYE 608 OR EQUAL).

CLASS A TRANSFORMER VAULT GENERAL NOTES

A1. VAULT ROOM DOORS SHALL BE BLAST-RATED METAL DOORS. DOORS AND VENT SHUTTERS MUST HAVE A THREE HOUR BLAST & FIRE RATING PER NFPA 450.43.

A2. VAULT VENTS MUST HAVE SHUTTERS THAT ARE AUTOMATICALLY CLOSED BY THE HEAT DETECTOR IN THE FIRE SUPPRESSION SYSTEM HEAT DETECTORS SHALL MEET NFPA 72 REQUIREMENTS.

A3. PROVIDE TWO "RATE TO RISE" HEAT DETECTORS PER THE UTILITY PROVIDER'S REQUIREMENTS. LOCATE ONE ABOVE THE TRANSFORMER AND ONE OTHER WITHIN THE ROOM.

A4. ALL OPENING, GAPS & CRACKS MUST BE SEALED WITH THREE-HOUR RATED FIRE CAULKING. CONSULT UTILITY PROVIDER FOR APPROVED PRODUCTS.

A5. NON-METALIC SEISMIC-APPROVED CABLE TRAY WITH GALVANIZED HARDWARE SHALL BE INSTALLED IN VAULT ROOMS WITH CEILING GREATER THAN 10 FEET HIGH.

A6. ALL MATERIALS AND PRODUCTS USED WITHIN THE CLASS A VAULT IS SUBJECT TO THE UTILITY PROVIDER'S APPROVAL.

A7. PRIMARY SERVICE CONDUCTORS FROM THE PROPERTY LINE TO THE VAULT SHALL BE IN SCHEDULE 40 PVC PER THE UTILITY PROVIDER'S DIRECTION. ALL CONDUIT PENETRATIONS MUST BE SEALED WITH A FLEXIBLE NON-SHRINK HYDROPHOBIC GROUT TO PREVENT WATER INTRUSION.

A8. THE CLASS A VAULT SHALL BE PROVIDED WITH BOTH EQUIPMENT AND UFER GROUNDING PER THE UTILITY PROVIDER'S REQUIREMENTS.

A9. PROVIDE TWO DIRECT UFER GROUND CONNECTIONS TO THE BUILDING FOOTER OR SOLDIER PILING. CONNECTIONS TO BE LOCATED AT OPPOSITE CORNERS OF THE VAULT FLOOR IN ACCORDANCE WITH NEC 250.

A10. PROVIDE A CONTINUOUS LOOP OF 250MCM BARE COPPER AROUND THE ROOM AT 24 INCHES ABOVE THE FLOOR, WITH HUBS AT 5-FOOT INTERVALS.

A11. REFER TO E2 SERIES SHEETS FOR LIGHTING WITHIN THE VAULT ROOM.

A12. THE ELECTRICAL CONTRACTOR SHALL CONSULT WITH THE UTILITY PROVIDER AND THE PROVIDER'S REQUIREMENTS FOR CLASS A TRANSFORMER VAULTS PRIOR TO THE START OF ANY WORK. THE UTILITY PROVIDER IS THE AUTHORITY REGARDING ALL ASPECS OF THE VAULT ROOM

REGISTERED PROFESSIONAL ENGINEER 16,597 OREGON JULY 20, 1993 ROBERT L. CONNELL
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RYSTADT
2057 SW PARK AVE.
PORTLAND OREGON

POWER PLAN – BASEMENT LEVEL

MFA INC.
Consulting Engineers
2007 S.E. Ash St.
Portland, OR 97214
PHN: (503) 234-0548
FAX: (503) 234-0677
WWW.MFA-ENG.COM

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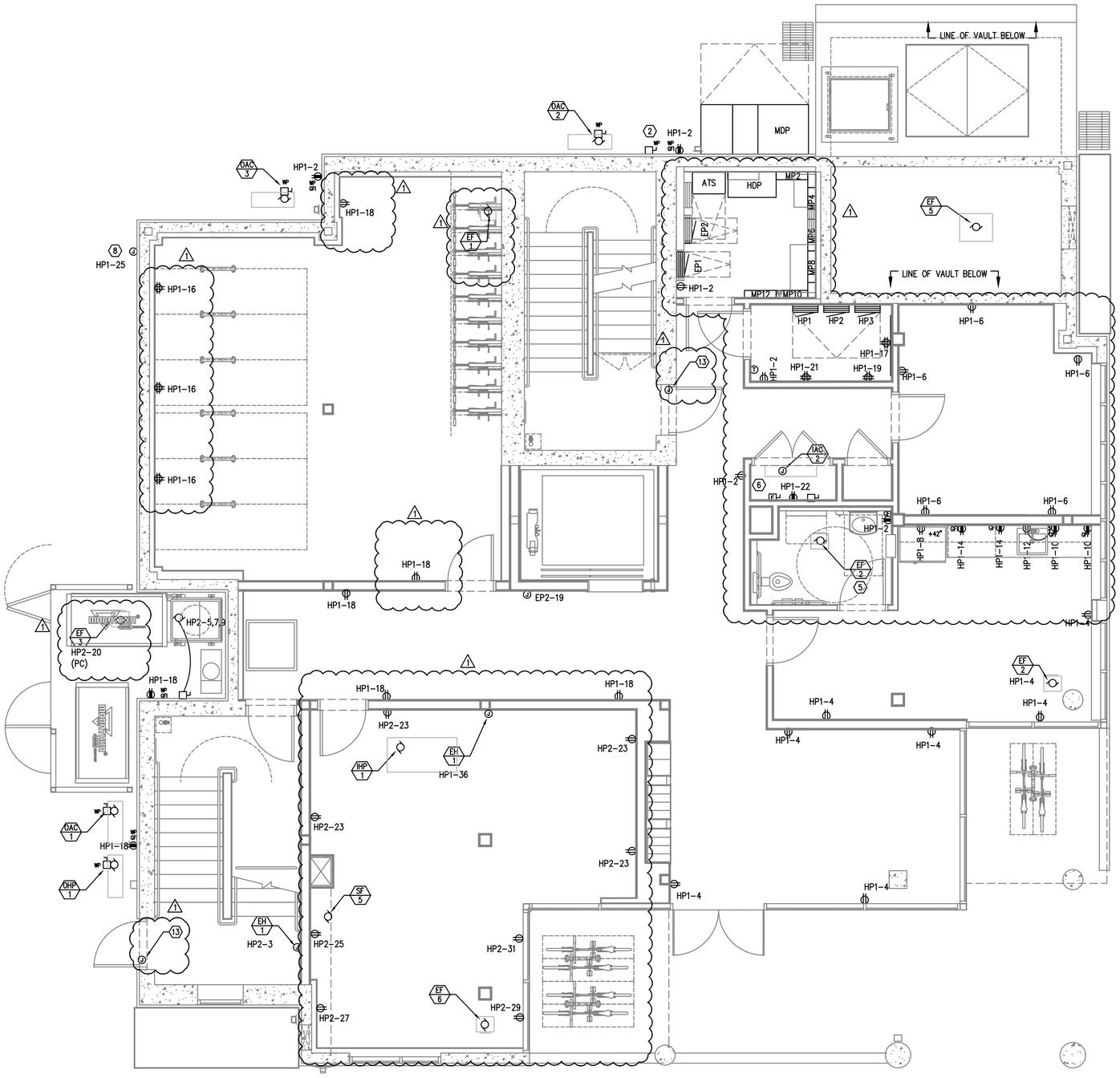

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D. ELECTRICAL CONTRACTOR SHALL PROVIDE INSTALLATION AND FINAL CONNECTION OF THERMOSTATS AS REQUIRED. CONSULT MECHANICAL CONTRACTOR FOR EXACT REQUIREMENTS PRIOR TO ROUGH IN.

E. COORDINATE WITH DIVISION 23 FOR EXACT LOCATION AND POWER REQUIREMENTS OF ALL MECHANICAL EQUIPMENT PRIOR TO ROUGH IN. REFER TO SHEET E1.13 FOR MECHANICAL EQUIPMENT SCHEDULE.

F. THE ELECTRICAL CONTRACTOR SHALL REFER TO THE ARCHITECTURAL DRAWINGS FOR ALL MOUNTING HEIGHTS AND FINISHES OF DEVICES AND FIXTURES.

G. ELECTRICAL CONTRACTOR SHALL REFER TO THE 'T' SERIES SHEETS AND PROVIDE ROUGH IN FOR THE LOW VOLTAGE SYSTEMS/FIRE ALARM INSTALLER.

H. SERVICE ENTRANCE AND METERING EQUIPMENT SHOWN TO APPROXIMATE SCALE, BASED ON SIEMENS PRODUCTS. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT INSTALLED EQUIPMENT FITS THE SPACE PROVIDED AND THAT ALL REQUIRED WORKING CLEARANCES ARE PROVIDED.

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J. PROVIDE A KEY BOX AT THE TRANSFORMER ROOM DOOR PER THE UTILITY PROVIDER'S REQUIREMENTS, FOR 24/7 ACCESS.

K. TENANT ELECTRICAL METERING SHALL BE SUB-METERED BY THE OWNER PER THE UTILITY PROVIDER'S REQUIREMENTS. SUB-METERING EQUIPMENT IS BASED ON SIEMENS SEM3 PRODUCTS. REFER TO SHEET E1.11 FOR ADDITIONAL INFORMATION.

L. REFER TO 'E4' SERIES SHEETS FOR TYPICAL DWELLING UNIT POWER PLANS.

M. PROVIDE ROUGH IN AND WIRING FOR ACCESS CONTROL. REFER TO 'T' SERIES SHEETS FOR ADDITIONAL INFORMATION.

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O. REFER TO SHEET E1.12 FOR TYPICAL DWELLING UNIT LOAD CENTER SCHEDULE FOR CIRCUITING INFORMATION.

P. EACH UNIT LOAD CENTER TO BE FED VIA SUB-METERING SYSTEM. REFER TO ONE-LINE DIAGRAM ON SHEET E1.11 FOR CONDUCTOR SIZE AND CABLING.

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4. 40A, DEDICATED 14-40R DRYER RECEPTACLE (TYPICAL). VERIFY EXACT POWER RATING REQUIRED FOR THE COMMERCIAL DRYERS PRIOR TO ORDERING. LAUNDRY ROOM APPLIANCES CIRCUITED TO PANEL 'HP3'. REFER TO PANEL SCHEDULE ON SHEET E1.12.
5. EXHAUST FAN IN THIS AREA TO BE TIED INTO THE LIGHTING CIRCUIT.
6. CONSULT ELEVATOR PROVIDER FOR EXACT POWER REQUIREMENTS AND PROVIDE ALL ELECTRICAL WORK AS DIRECTED. VERIFY EXACT LOCATION FOR ELEVATOR EQUIPMENT WITH ARCHITECT AND COORDINATE WITH ELEVATOR INSTALLER.
7. SMOKE DAMPER FOR VENTILATION LOUVER. COORDINATE WITH MECHANICAL EQUIPMENT INSTALLER AND CIRCUIT AS INDICATED
8. PROVIDE POWER CONNECTION FOR IRRIGATION CONTROLS. COORDINATE WITH THE LANDSCAPER FOR EXACT REQUIREMENTS AND LOCATION PRIOR TO ROUGH IN.
9. CONSULT FIRE SPRINKLER SYSTEM PLAN SET AND COORDINATE EXACT LOCATION AND ELECTRICAL REQUIREMENTS FOR THE BUILDING FIRE PUMP.
10. REFER TO THE HOUSE PANEL 'HP1' PANEL SCHEDULE FOR CORRIDOR RECEPTACLE CIRCUITS ON FLOOR 2 THROUGH 11.
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13. PROVIDE ONE 20A, 120V, 1P CIRCUIT FROM PANEL EP2 FOR AUTOMATIC DOOR CLOSER(S), TIED TO FIRE ALARM SYSTEM. COORDINATE WITH FIRE ALARM EQUIPMENT INSTALLER FOR WIRING REQUIREMENTS PRIOR TO ROUGH IN.
14. STAIRWELL PRESSURIZATION FANS ARE INTERLOCKED WITH MOTORIZED SMOKE DAMPERS AND BAROMETRIC RELIEF DAMPERS. REFER TO MECHANICAL PLANS SHEETS AND COORDINATE WITH THE MECHANICAL EQUIPMENT INSTALLER FOR ADDITIONAL INFORMATION. BOTH THE PRESSURIZATION FANS AND DAMPERS ARE TO BE CIRCUITED TO THE EMERGENCY POWER SYSTEM AND VIA THE FACP. SEE PANEL EP2 FOR PROPOSED CIRCUITING.
    - *POWER SHALL BE MONITORED DOWN STREAM OF THE DISCONNECTS.
    - *PROVIDE CURRENT TRANSDUCER TO MONITOR FAN AIRFLOW (HAWKEYE 608 OR EQUAL).

1 / E3.01 POWER PLAN – LEVEL 1
SCALE: 1/4" = 1'-0"

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SW PARK APARTMENTS
RYSTADT
2057 SW PARK AVE.
PORTLAND OREGON

POWER PLAN – FIRST FLOOR

MFIA INC.

Consulting Engineers
2007 S.E. Ash St.
Portland, OR 97214
PHN: (503) 234-0548
FAX: (503) 234-0677
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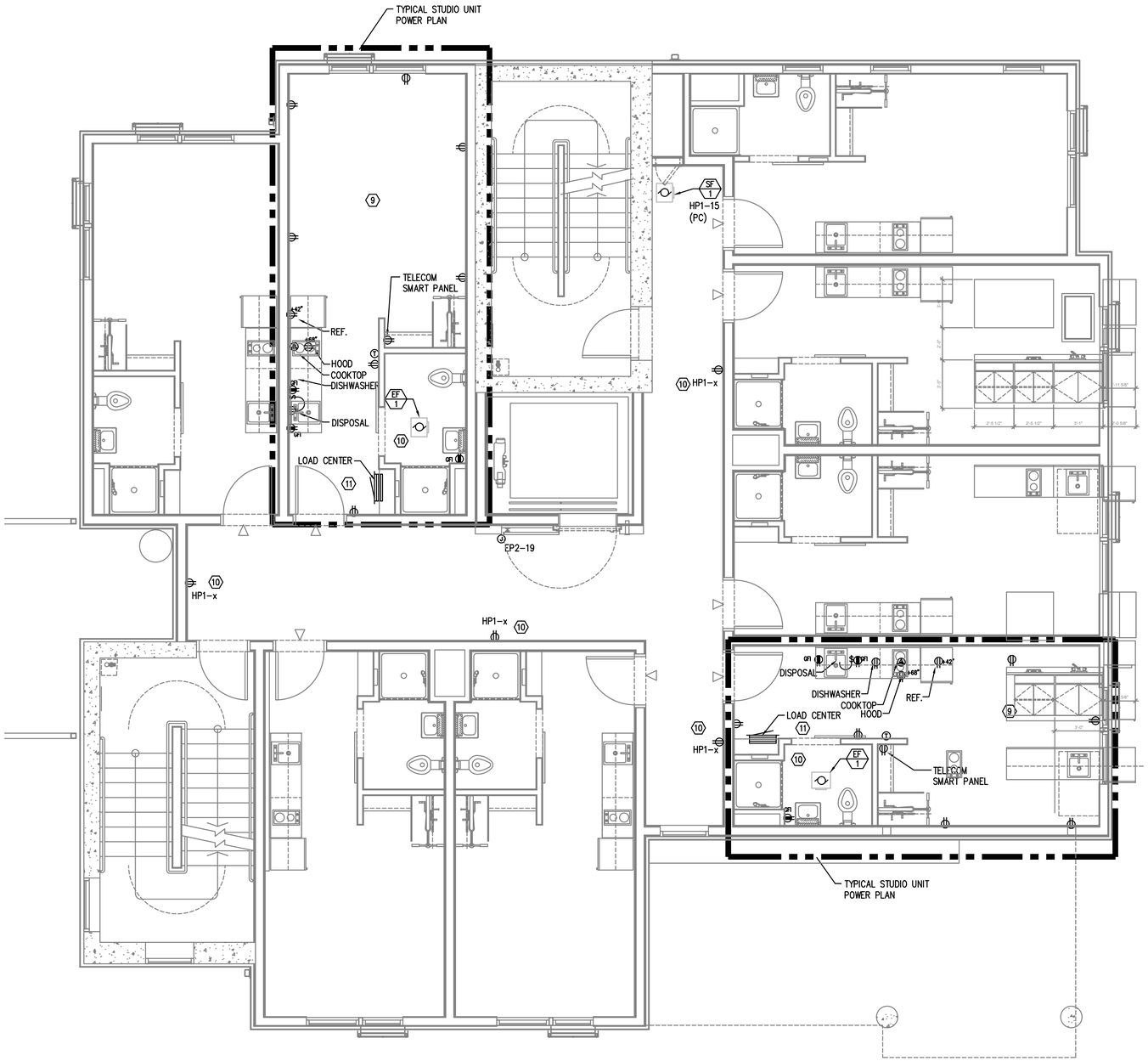

1 E3.02 POWER PLAN – LEVEL 2

SCALE: 1/4" = 1'-0"

GENERAL POWER NOTES:

A. ELECTRICAL DRAWINGS ARE DIAGRAMMATICAL AND MAY NOT ACCURATELY REFLECT ACTUAL CONSTRUCTION CONDITIONS. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE INSTALLATION OF ALL ELECTRICAL EQUIPMENT, WITH ALL TRADES PRIOR TO AND DURING CONSTRUCTION.

B. WORK SHALL BE IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND NATIONAL CODES.

C. ELECTRICAL CONTRACTOR TO PROVIDE THERMOSTATS NOT SUPPLIED BY MECHANICAL CONTRACTOR, AS REQUIRED. CONSULT MECHANICAL PLANS FOR ADDITIONAL INFORMATION.

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E. COORDINATE WITH DIVISION 23 FOR EXACT LOCATION AND POWER REQUIREMENTS OF ALL MECHANICAL EQUIPMENT PRIOR TO ROUGH IN. REFER TO SHEET E1.13 FOR MECHANICAL EQUIPMENT SCHEDULE.

F. THE ELECTRICAL CONTRACTOR SHALL REFER TO THE ARCHITECTURAL DRAWINGS FOR ALL MOUNTING HEIGHTS AND FINISHES OF DEVICES AND FIXTURES.

G. ELECTRICAL CONTRACTOR SHALL REFER TO THE 'T' SERIES SHEETS AND PROVIDE ROUGH IN FOR THE LOW VOLTAGE SYSTEMS/FIRE ALARM INSTALLER.

H. SERVICE ENTRANCE AND METERING EQUIPMENT SHOWN TO APPROXIMATE SCALE, BASED ON SIEMENS PRODUCTS. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT INSTALLED EQUIPMENT FITS THE SPACE PROVIDED AND THAT ALL REQUIRED WORKING CLEARANCES ARE PROVIDED.

I. THE CLASS 'A' TRANSFORMER VAULT SHALL BE IN ACCORDANCE WITH NEC REQUIREMENTS AS WELL AS THOSE OF THE UTILITY PROVIDER. MAN-DOOR SHALL BE EQUIPPED WITH PANIC HARDWARE AND AN OUTWARD SWING.

J. PROVIDE A KEY BOX AT THE TRANSFORMER ROOM DOOR PER THE UTILITY PROVIDER'S REQUIREMENTS, FOR 24/7 ACCESS.

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PORTLAND OREGON

POWER PLAN – SECOND FLOOR

MFIA INC.
Consulting Engineers
2007 S.E. Ash St.
Portland, OR 97214
PHN: (503) 234-0548
FAX: (503) 234-0677
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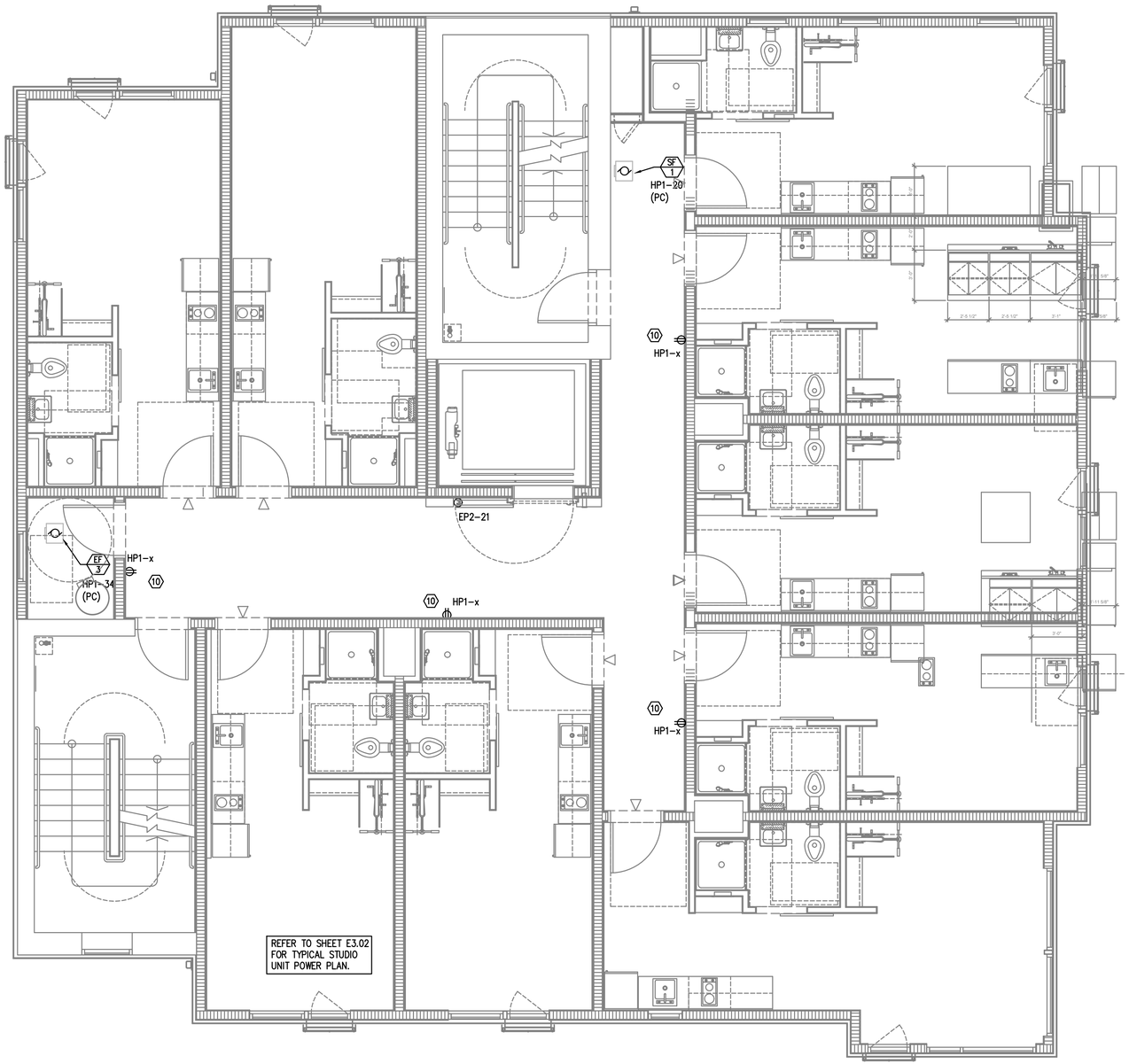

1 E3.03 POWER PLAN – LEVELS 3–6
SCALE: 1/4" = 1'-0"

GENERAL POWER NOTES:

A. ELECTRICAL DRAWINGS ARE DIAGRAMMATICAL AND MAY NOT ACCURATELY REFLECT ACTUAL CONSTRUCTION CONDITIONS. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE INSTALLATION OF ALL ELECTRICAL EQUIPMENT, WITH ALL TRADES PRIOR TO AND DURING CONSTRUCTION.

B. WORK SHALL BE IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND NATIONAL CODES.

C. ELECTRICAL CONTRACTOR TO PROVIDE THERMOSTATS NOT SUPPLIED BY MECHANICAL CONTRACTOR, AS REQUIRED. CONSULT MECHANICAL PLANS FOR ADDITIONAL INFORMATION.

D. ELECTRICAL CONTRACTOR SHALL PROVIDE INSTALLATION AND FINAL CONNECTION OF THERMOSTATS AS REQUIRED. CONSULT MECHANICAL CONTRACTOR FOR EXACT REQUIREMENTS PRIOR TO ROUGH IN.

E. COORDINATE WITH DIVISION 23 FOR EXACT LOCATION AND POWER REQUIREMENTS OF ALL MECHANICAL EQUIPMENT PRIOR TO ROUGH IN. REFER TO SHEET E1.13 FOR MECHANICAL EQUIPMENT SCHEDULE.

F. THE ELECTRICAL CONTRACTOR SHALL REFER TO THE ARCHITECTURAL DRAWINGS FOR ALL MOUNTING HEIGHTS AND FINISHES OF DEVICES AND FIXTURES.

G. ELECTRICAL CONTRACTOR SHALL REFER TO THE 'T' SERIES SHEETS AND PROVIDE ROUGH IN FOR THE LOW VOLTAGE SYSTEMS/FIRE ALARM INSTALLER.

H. SERVICE ENTRANCE AND METERING EQUIPMENT SHOWN TO APPROXIMATE SCALE, BASED ON SIEMENS PRODUCTS. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT INSTALLED EQUIPMENT FITS THE SPACE PROVIDED AND THAT ALL REQUIRED WORKING CLEARANCES ARE PROVIDED.

I. THE CLASS 'A' TRANSFORMER VAULT SHALL BE IN ACCORDANCE WITH NEC REQUIREMENTS AS WELL AS THOSE OF THE UTILITY PROVIDER. MAN-DOOR SHALL BE EQUIPPED WITH PANIC HARDWARE AND AN OUTWARD SWING.

J. PROVIDE A KEY BOX AT THE TRANSFORMER ROOM DOOR PER THE UTILITY PROVIDER'S REQUIREMENTS, FOR 24/7 ACCESS.

K. TENANT ELECTRICAL METERING SHALL BE SUB-METERED BY THE OWNER PER THE UTILITY PROVIDER'S REQUIREMENTS. SUB-METERING EQUIPMENT IS BASED ON SIEMENS SEM3 PRODUCTS. REFER TO SHEET E1.11 FOR ADDITIONAL INFORMATION.

L. REFER TO 'E4' SERIES SHEETS FOR TYPICAL DWELLING UNIT POWER PLANS.

M. PROVIDE ROUGH IN AND WIRING FOR ACCESS CONTROL. REFER TO 'T' SERIES SHEETS FOR ADDITIONAL INFORMATION.

N. LOW VOLTAGE/COMMUNICATIONS SYSTEM DEMARCATION BOARD(S). COORDINATE LOCATIONS AND ELECTRICAL POWER REQUIREMENTS WITH THE TELECOM PLANS ('T' SERIES SHEETS) AND LOW VOLTAGE SYSTEMS INSTALLERS. PROVIDE ROUGH IN AND/OR FINAL ELECTRICAL POWER CONNECTIONS & DEVICES. REFER PANEL 'HP2' SCHEDULE ON E1.12 FOR CIRCUITS.

O. REFER TO SHEET E1.12 FOR TYPICAL DWELLING UNIT LOAD CENTER SCHEDULE FOR CIRCUITING INFORMATION.

P. EACH UNIT LOAD CENTER TO BE FED VIA SUB-METERING SYSTEM. REFER TO ONE-LINE DIAGRAM ON SHEET E1.11 FOR CONDUCTOR SIZE AND CABLING.

⬡ KEYED POWER NOTES:

1. PROVIDE KEY BOX FOR PGE AT METER ROOM FOR 24/7 ACCESS.
2. GENERATOR EMERGENCY DISCONNECT.
3. LAUNDRY ROOM GFCI RECEPTACLES FOR WASHING MACHINES TO BE MOUNTED AT 42" A.F.F., OR UNLESS OTHERWISE DIRECTED BY THE ARCHITECT. LAUNDRY ROOM APPLIANCES CIRCUITED TO PANEL 'HP3'. REFER TO PANEL SCHEDULE ON SHEET E1.12.
4. 40A, DEDICATED 14-40R DRYER RECEPTACLE (TYPICAL). VERIFY EXACT POWER RATING REQUIRED FOR THE COMMERCIAL DRYERS PRIOR TO ORDERING. LAUNDRY ROOM APPLIANCES CIRCUITED TO PANEL 'HP3'. REFER TO PANEL SCHEDULE ON SHEET E1.12.
5. EXHAUST FAN IN THIS AREA TO BE TIED INTO THE LIGHTING CIRCUIT.
6. CONSULT ELEVATOR PROVIDER FOR EXACT POWER REQUIREMENTS AND PROVIDE ALL ELECTRICAL WORK AS DIRECTED. VERIFY EXACT LOCATION FOR ELEVATOR EQUIPMENT WITH ARCHITECT AND COORDINATE WITH ELEVATOR INSTALLER.
7. SMOKE DAMPER FOR VENTILATION LOUVER. COORDINATE WITH MECHANICAL EQUIPMENT INSTALLER AND CIRCUIT AS INDICATED
8. PROVIDE POWER CONNECTION FOR IRRIGATION CONTROLS. COORDINATE WITH THE LANDSCAPER FOR EXACT REQUIREMENTS AND LOCATION PRIOR TO ROUGH IN.
9. CONSULT FIRE SPRINKLER SYSTEM PLAN SET AND COORDINATE EXACT LOCATION AND ELECTRICAL REQUIREMENTS FOR THE BUILDING FIRE PUMP.
10. REFER TO THE HOUSE PANEL 'HP1' PANEL SCHEDULE FOR CORRIDOR RECEPTACLE CIRCUITS ON FLOOR 2 THROUGH 11.
11. REFER TO PLUMBING PLAN SHEETS FOR ADDITIONAL INFORMATION ON THE PUMP SYSTEMS IN THIS SPACE. COORDINATE WITH INSTALLER AND PROVIDE ELECTRICAL CONNECTIONS AS REQUIRED. PROVIDE CIRCUITS FROM PANEL HP2, SEE PANEL SCHEDULES.
12. PROVIDE ONE 20A, 120V, 1P CIRCUIT FROM PANEL HP3 FOR DRYER BOOSTER FANS. COORDINATE WITH MECHANICAL EQUIPMENT INSTALLER FOR WIRING REQUIREMENTS PRIOR TO ROUGH IN.

⚠1
13. PROVIDE ONE 20A, 120V, 1P CIRCUIT FROM PANEL EP2 FOR AUTOMATIC DOOR CLOSER(S), TIED TO FIRE ALARM SYSTEM. COORDINATE WITH FIRE ALARM EQUIPMENT INSTALLER FOR WIRING REQUIREMENTS PRIOR TO ROUGH IN.
14. STAIRWELL PRESSURIZATION FANS ARE INTERLOCKED WITH MOTORIZED SMOKE DAMPERS AND BAROMETRIC RELIEF DAMPERS. REFER TO MECHANICAL PLANS SHEETS AND COORDINATE WITH THE MECHANICAL EQUIPMENT INSTALLER FOR ADDITIONAL INFORMATION. BOTH THE PRESSURIZATION FANS AND DAMPERS ARE TO BE CIRCUITED TO THE EMERGENCY POWER SYSTEM AND VIA THE FACP. SEE PANEL EP2 FOR PROPOSED CIRCUITING.
    *POWER SHALL BE MONITORED DOWN STREAM OF THE DISCONNECTS.
    *PROVIDE CURRENT TRANSDUCER TO MONITOR FAN AIRFLOW (HAWKEYE 608 OR EQUAL).

REGISTERED PROFESSIONAL ENGINEER
16,597
OREGON
JULY 20, 1993
ROBERT L. CONNELL
EXPIRES 12-31-2023

⚠1	04.14.2022 PERMIT RESUBMITTAL
Date:	04-08-2022
Proj No:	10105
Drawn By:	DMT
Chkd By:	RLC
DSGN By:	DMT
Acad File:	

SW PARK APARTMENTS
RYSTADT
2057 SW PARK AVE.
PORTLAND OREGON

POWER PLAN – FLOORS 3-7

MFIA INC.

Consulting Engineers
2007 S.E. Ash St.
Portland, OR 97214
PHN: (503) 234-0548
FAX: (503) 234-0677
WWW.MFIA-ENG.COM

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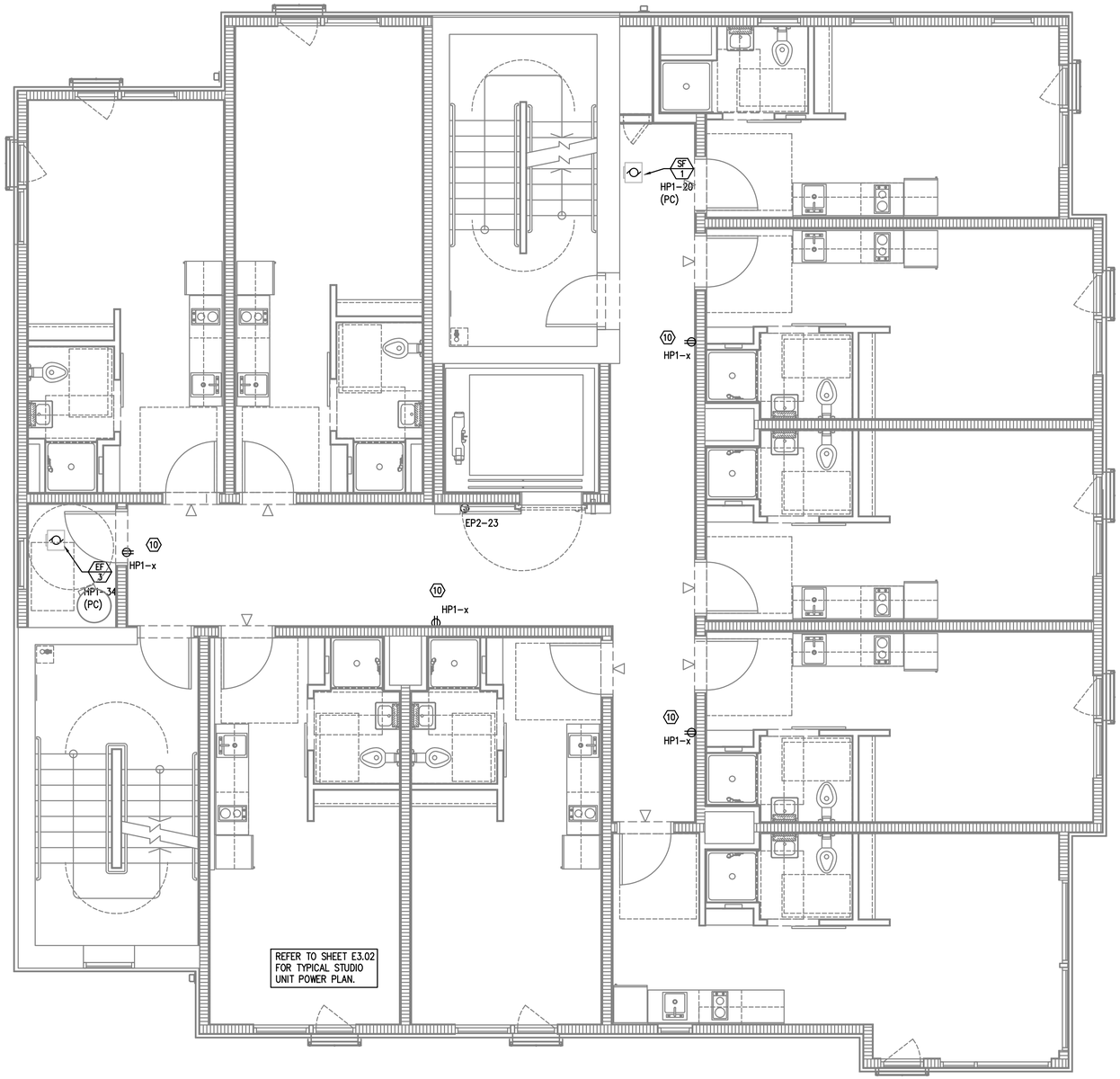

1 POWER PLAN – LEVELS 7–11
E3.04 SCALE: 1/4" = 1'-0"

GENERAL POWER NOTES:

A. ELECTRICAL DRAWINGS ARE DIAGRAMMATICAL AND MAY NOT ACCURATELY REFLECT ACTUAL CONSTRUCTION CONDITIONS. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE INSTALLATION OF ALL ELECTRICAL EQUIPMENT, WITH ALL TRADES PRIOR TO AND DURING CONSTRUCTION.

B. WORK SHALL BE IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND NATIONAL CODES.

C. ELECTRICAL CONTRACTOR TO PROVIDE THERMOSTATS NOT SUPPLIED BY MECHANICAL CONTRACTOR, AS REQUIRED. CONSULT MECHANICAL PLANS FOR ADDITIONAL INFORMATION.

D. ELECTRICAL CONTRACTOR SHALL PROVIDE INSTALLATION AND FINAL CONNECTION OF THERMOSTATS AS REQUIRED. CONSULT MECHANICAL CONTRACTOR FOR EXACT REQUIREMENTS PRIOR TO ROUGH IN.

E. COORDINATE WITH DIVISION 23 FOR EXACT LOCATION AND POWER REQUIREMENTS OF ALL MECHANICAL EQUIPMENT PRIOR TO ROUGH IN. REFER TO SHEET E1.13 FOR MECHANICAL EQUIPMENT SCHEDULE.

F. THE ELECTRICAL CONTRACTOR SHALL REFER TO THE ARCHITECTURAL DRAWINGS FOR ALL MOUNTING HEIGHTS AND FINISHES OF DEVICES AND FIXTURES.

G. ELECTRICAL CONTRACTOR SHALL REFER TO THE 'T' SERIES SHEETS AND PROVIDE ROUGH IN FOR THE LOW VOLTAGE SYSTEMS/FIRE ALARM INSTALLER.

H. SERVICE ENTRANCE AND METERING EQUIPMENT SHOWN TO APPROXIMATE SCALE, BASED ON SIEMENS PRODUCTS. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT INSTALLED EQUIPMENT FITS THE SPACE PROVIDED AND THAT ALL REQUIRED WORKING CLEARANCES ARE PROVIDED.

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J. PROVIDE A KEY BOX AT THE TRANSFORMER ROOM DOOR PER THE UTILITY PROVIDER'S REQUIREMENTS, FOR 24/7 ACCESS.

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L. REFER TO 'E4' SERIES SHEETS FOR TYPICAL DWELLING UNIT POWER PLANS.

M. PROVIDE ROUGH IN AND WIRING FOR ACCESS CONTROL. REFER TO 'T' SERIES SHEETS FOR ADDITIONAL INFORMATION.

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O. REFER TO SHEET E1.12 FOR TYPICAL DWELLING UNIT LOAD CENTER SCHEDULE FOR CIRCUITING INFORMATION.

P. EACH UNIT LOAD CENTER TO BE FED VIA SUB-METERING SYSTEM. REFER TO ONE-LINE DIAGRAM ON SHEET E1.11 FOR CONDUCTOR SIZE AND CABLING.

⬡ KEYED POWER NOTES:

1. PROVIDE KEY BOX FOR PGE AT METER ROOM FOR 24/7 ACCESS.
2. GENERATOR EMERGENCY DISCONNECT.
3. LAUNDRY ROOM GFCI RECEPTACLES FOR WASHING MACHINES TO BE MOUNTED AT 42" A.F.F., OR UNLESS OTHERWISE DIRECTED BY THE ARCHITECT. LAUNDRY ROOM APPLIANCES CIRCUITED TO PANEL 'HP3'. REFER TO PANEL SCHEDULE ON SHEET E1.12.
4. 40A, DEDICATED 14-40R DRYER RECEPTACLE (TYPICAL). VERIFY EXACT POWER RATING REQUIRED FOR THE COMMERCIAL DRYERS PRIOR TO ORDERING. LAUNDRY ROOM APPLIANCES CIRCUITED TO PANEL 'HP3'. REFER TO PANEL SCHEDULE ON SHEET E1.12.
5. EXHAUST FAN IN THIS AREA TO BE TIED INTO THE LIGHTING CIRCUIT.
6. CONSULT ELEVATOR PROVIDER FOR EXACT POWER REQUIREMENTS AND PROVIDE ALL ELECTRICAL WORK AS DIRECTED. VERIFY EXACT LOCATION FOR ELEVATOR EQUIPMENT WITH ARCHITECT AND COORDINATE WITH ELEVATOR INSTALLER.
7. SMOKE DAMPER FOR VENTILATION LOUVER. COORDINATE WITH MECHANICAL EQUIPMENT INSTALLER AND CIRCUIT AS INDICATED
8. PROVIDE POWER CONNECTION FOR IRRIGATION CONTROLS. COORDINATE WITH THE LANDSCAPER FOR EXACT REQUIREMENTS AND LOCATION PRIOR TO ROUGH IN.
9. CONSULT FIRE SPRINKLER SYSTEM PLAN SET AND COORDINATE EXACT LOCATION AND ELECTRICAL REQUIREMENTS FOR THE BUILDING FIRE PUMP.
10. REFER TO THE HOUSE PANEL 'HP1' PANEL SCHEDULE FOR CORRIDOR RECEPTACLE CIRCUITS ON FLOOR 2 THROUGH 11.
11. REFER TO PLUMBING PLAN SHEETS FOR ADDITIONAL INFORMATION ON THE PUMP SYSTEMS IN THIS SPACE. COORDINATE WITH INSTALLER AND PROVIDE ELECTRICAL CONNECTIONS AS REQUIRED. PROVIDE CIRCUITS FROM PANEL HP2, SEE PANEL SCHEDULES.
12. PROVIDE ONE 20A, 120V, 1P CIRCUIT FROM PANEL HP3 FOR DRYER BOOSTER FANS. COORDINATE WITH MECHANICAL EQUIPMENT INSTALLER FOR WIRING REQUIREMENTS PRIOR TO ROUGH IN.

⚠1
13. PROVIDE ONE 20A, 120V, 1P CIRCUIT FROM PANEL EP2 FOR AUTOMATIC DOOR CLOSER(S), TIED TO FIRE ALARM SYSTEM. COORDINATE WITH FIRE ALARM EQUIPMENT INSTALLER FOR WIRING REQUIREMENTS PRIOR TO ROUGH IN.
14. STAIRWELL PRESSURIZATION FANS ARE INTERLOCKED WITH MOTORIZED SMOKE DAMPERS AND BAROMETRIC RELIEF DAMPERS. REFER TO MECHANICAL PLANS SHEETS AND COORDINATE WITH THE MECHANICAL EQUIPMENT INSTALLER FOR ADDITIONAL INFORMATION. BOTH THE PRESSURIZATION FANS AND DAMPERS ARE TO BE CIRCUITED TO THE EMERGENCY POWER SYSTEM AND VIA THE FACP. SEE PANEL EP2 FOR PROPOSED CIRCUITING.
    *POWER SHALL BE MONITORED DOWN STREAM OF THE DISCONNECTS.
    *PROVIDE CURRENT TRANSDUCER TO MONITOR FAN AIRFLOW (HAWKEYE 608 OR EQUAL).

REGISTERED PROFESSIONAL ENGINEER
16,597
OREGON
JULY 20, 1993
ROBERT L. CONNELL
EXPIRES 12-31-2023

⚠1 04.14.2022 PERMIT RESUBMITTAL

Date: 04-08-2022
Proj No: 10105
Drawn By: DMT
Chkd By: RLC
DSGN By: DMT
Acad File:

SW PARK APARTMENTS
RYSTADT
2057 SW PARK AVE.
PORTLAND OREGON

POWER PLAN – FLOORS 8–10

MFIA INC.
Consulting Engineers
2007 S.E. Ash St.
Portland, OR 97214
PHN: (503) 234-0548
FAX: (503) 234-0677
WWW.MFIA-ENG.COM

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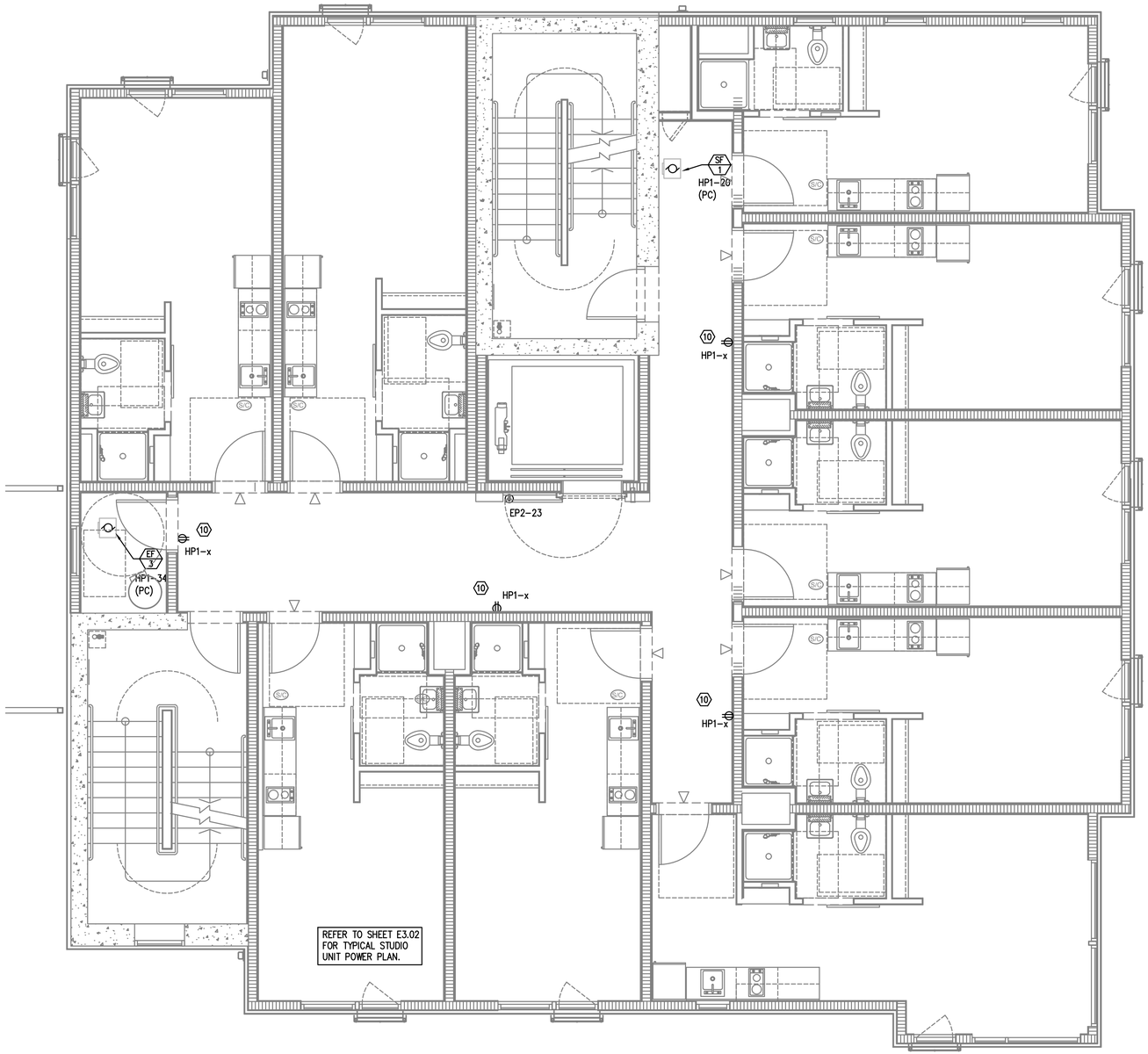

1 E3.05 POWER PLAN – LEVEL 12
SCALE: 1/4" = 1'-0"

GENERAL POWER NOTES:

A. ELECTRICAL DRAWINGS ARE DIAGRAMMATICAL AND MAY NOT ACCURATELY REFLECT ACTUAL CONSTRUCTION CONDITIONS. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE INSTALLATION OF ALL ELECTRICAL EQUIPMENT, WITH ALL TRADES PRIOR TO AND DURING CONSTRUCTION.

B. WORK SHALL BE IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND NATIONAL CODES.

C. ELECTRICAL CONTRACTOR TO PROVIDE THERMOSTATS NOT SUPPLIED BY MECHANICAL CONTRACTOR, AS REQUIRED. CONSULT MECHANICAL PLANS FOR ADDITIONAL INFORMATION.

D. ELECTRICAL CONTRACTOR SHALL PROVIDE INSTALLATION AND FINAL CONNECTION OF THERMOSTATS AS REQUIRED. CONSULT MECHANICAL CONTRACTOR FOR EXACT REQUIREMENTS PRIOR TO ROUGH IN.

E. COORDINATE WITH DIVISION 23 FOR EXACT LOCATION AND POWER REQUIREMENTS OF ALL MECHANICAL EQUIPMENT PRIOR TO ROUGH IN. REFER TO SHEET E1.13 FOR MECHANICAL EQUIPMENT SCHEDULE.

F. THE ELECTRICAL CONTRACTOR SHALL REFER TO THE ARCHITECTURAL DRAWINGS FOR ALL MOUNTING HEIGHTS AND FINISHES OF DEVICES AND FIXTURES.

G. ELECTRICAL CONTRACTOR SHALL REFER TO THE 'T' SERIES SHEETS AND PROVIDE ROUGH IN FOR THE LOW VOLTAGE SYSTEMS/FIRE ALARM INSTALLER.

H. SERVICE ENTRANCE AND METERING EQUIPMENT SHOWN TO APPROXIMATE SCALE, BASED ON SIEMENS PRODUCTS. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT INSTALLED EQUIPMENT FITS THE SPACE PROVIDED AND THAT ALL REQUIRED WORKING CLEARANCES ARE PROVIDED.

I. THE CLASS 'A' TRANSFORMER VAULT SHALL BE IN ACCORDANCE WITH NEC REQUIREMENTS AS WELL AS THOSE OF THE UTILITY PROVIDER. MAN-DOOR SHALL BE EQUIPPED WITH PANIC HARDWARE AND AN OUTWARD SWING.

J. PROVIDE A KEY BOX AT THE TRANSFORMER ROOM DOOR PER THE UTILITY PROVIDER'S REQUIREMENTS, FOR 24/7 ACCESS.

K. TENANT ELECTRICAL METERING SHALL BE SUB-METERED BY THE OWNER PER THE UTILITY PROVIDER'S REQUIREMENTS. SUB-METERING EQUIPMENT IS BASED ON SIEMENS SEM3 PRODUCTS. REFER TO SHEET E1.11 FOR ADDITIONAL INFORMATION.

L. REFER TO 'E4' SERIES SHEETS FOR TYPICAL DWELLING UNIT POWER PLANS.

M. PROVIDE ROUGH IN AND WIRING FOR ACCESS CONTROL. REFER TO 'T' SERIES SHEETS FOR ADDITIONAL INFORMATION.

N. LOW VOLTAGE/COMMUNICATIONS SYSTEM DEMARCATION BOARD(S). COORDINATE LOCATIONS AND ELECTRICAL POWER REQUIREMENTS WITH THE TELECOM PLANS ('T' SERIES SHEETS) AND LOW VOLTAGE SYSTEMS INSTALLERS. PROVIDE ROUGH IN AND/OR FINAL ELECTRICAL POWER CONNECTIONS & DEVICES. REFER PANEL 'HP2' SCHEDULE ON E1.12 FOR CIRCUITS.

O. REFER TO SHEET E1.12 FOR TYPICAL DWELLING UNIT LOAD CENTER SCHEDULE FOR CIRCUITING INFORMATION.

P. EACH UNIT LOAD CENTER TO BE FED VIA SUB-METERING SYSTEM. REFER TO ONE-LINE DIAGRAM ON SHEET E1.11 FOR CONDUCTOR SIZE AND CABLING.

⬡ KEYED POWER NOTES:

1. PROVIDE KEY BOX FOR PGE AT METER ROOM FOR 24/7 ACCESS.
2. GENERATOR EMERGENCY DISCONNECT.
3. LAUNDRY ROOM GFCI RECEPTACLES FOR WASHING MACHINES TO BE MOUNTED AT 42" A.F.F., OR UNLESS OTHERWISE DIRECTED BY THE ARCHITECT. LAUNDRY ROOM APPLIANCES CIRCUITED TO PANEL 'HP3'. REFER TO PANEL SCHEDULE ON SHEET E1.12.
4. 40A, DEDICATED 14-40R DRYER RECEPTACLE (TYPICAL). VERIFY EXACT POWER RATING REQUIRED FOR THE COMMERCIAL DRYERS PRIOR TO ORDERING. LAUNDRY ROOM APPLIANCES CIRCUITED TO PANEL 'HP3'. REFER TO PANEL SCHEDULE ON SHEET E1.12.
5. EXHAUST FAN IN THIS AREA TO BE TIED INTO THE LIGHTING CIRCUIT.
6. CONSULT ELEVATOR PROVIDER FOR EXACT POWER REQUIREMENTS AND PROVIDE ALL ELECTRICAL WORK AS DIRECTED. VERIFY EXACT LOCATION FOR ELEVATOR EQUIPMENT WITH ARCHITECT AND COORDINATE WITH ELEVATOR INSTALLER.
7. SMOKE DAMPER FOR VENTILATION LOUVER. COORDINATE WITH MECHANICAL EQUIPMENT INSTALLER AND CIRCUIT AS INDICATED
8. PROVIDE POWER CONNECTION FOR IRRIGATION CONTROLS. COORDINATE WITH THE LANDSCAPER FOR EXACT REQUIREMENTS AND LOCATION PRIOR TO ROUGH IN.
9. CONSULT FIRE SPRINKLER SYSTEM PLAN SET AND COORDINATE EXACT LOCATION AND ELECTRICAL REQUIREMENTS FOR THE BUILDING FIRE PUMP.
10. REFER TO THE HOUSE PANEL 'HP1' PANEL SCHEDULE FOR CORRIDOR RECEPTACLE CIRCUITS ON FLOOR 2 THROUGH 11.
11. REFER TO PLUMBING PLAN SHEETS FOR ADDITIONAL INFORMATION ON THE PUMP SYSTEMS IN THIS SPACE. COORDINATE WITH INSTALLER AND PROVIDE ELECTRICAL CONNECTIONS AS REQUIRED. PROVIDE CIRCUITS FROM PANEL HP2, SEE PANEL SCHEDULES.
12. PROVIDE ONE 20A, 120V, 1P CIRCUIT FROM PANEL HP3 FOR DRYER BOOSTER FANS. COORDINATE WITH MECHANICAL EQUIPMENT INSTALLER FOR WIRING REQUIREMENTS PRIOR TO ROUGH IN.

⚠1
13. PROVIDE ONE 20A, 120V, 1P CIRCUIT FROM PANEL EP2 FOR AUTOMATIC DOOR CLOSER(S), TIED TO FIRE ALARM SYSTEM. COORDINATE WITH FIRE ALARM EQUIPMENT INSTALLER FOR WIRING REQUIREMENTS PRIOR TO ROUGH IN.
14. STAIRWELL PRESSURIZATION FANS ARE INTERLOCKED WITH MOTORIZED SMOKE DAMPERS AND BAROMETRIC RELIEF DAMPERS. REFER TO MECHANICAL PLANS SHEETS AND COORDINATE WITH THE MECHANICAL EQUIPMENT INSTALLER FOR ADDITIONAL INFORMATION. BOTH THE PRESSURIZATION FANS AND DAMPERS ARE TO BE CIRCUITED TO THE EMERGENCY POWER SYSTEM AND VIA THE FACP. SEE PANEL EP2 FOR PROPOSED CIRCUITING.
    *POWER SHALL BE MONITORED DOWN STREAM OF THE DISCONNECTS.
    *PROVIDE CURRENT TRANSDUCER TO MONITOR FAN AIRFLOW (HAWKEYE 608 OR EQUAL).

CLASS 'A' TRANSFORMER VAULT GENERAL NOTES

REGISTERED PROFESSIONAL ENGINEER
16,597
OREGON
JULY 20, 1993
ROBERT L. CONNELL
EXPIRES 12-31-2023

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SW PARK APARTMENTS
RYSTADT
2057 SW PARK AVE.
PORTLAND OREGON

POWER PLAN – 11TH FLOOR

MFIA INC.

Consulting Engineers
2007 S.E. Ash St.
Portland, OR 97214
PHN: (503) 234-0548
FAX: (503) 234-0677
WWW.MFIA-ENG.COM

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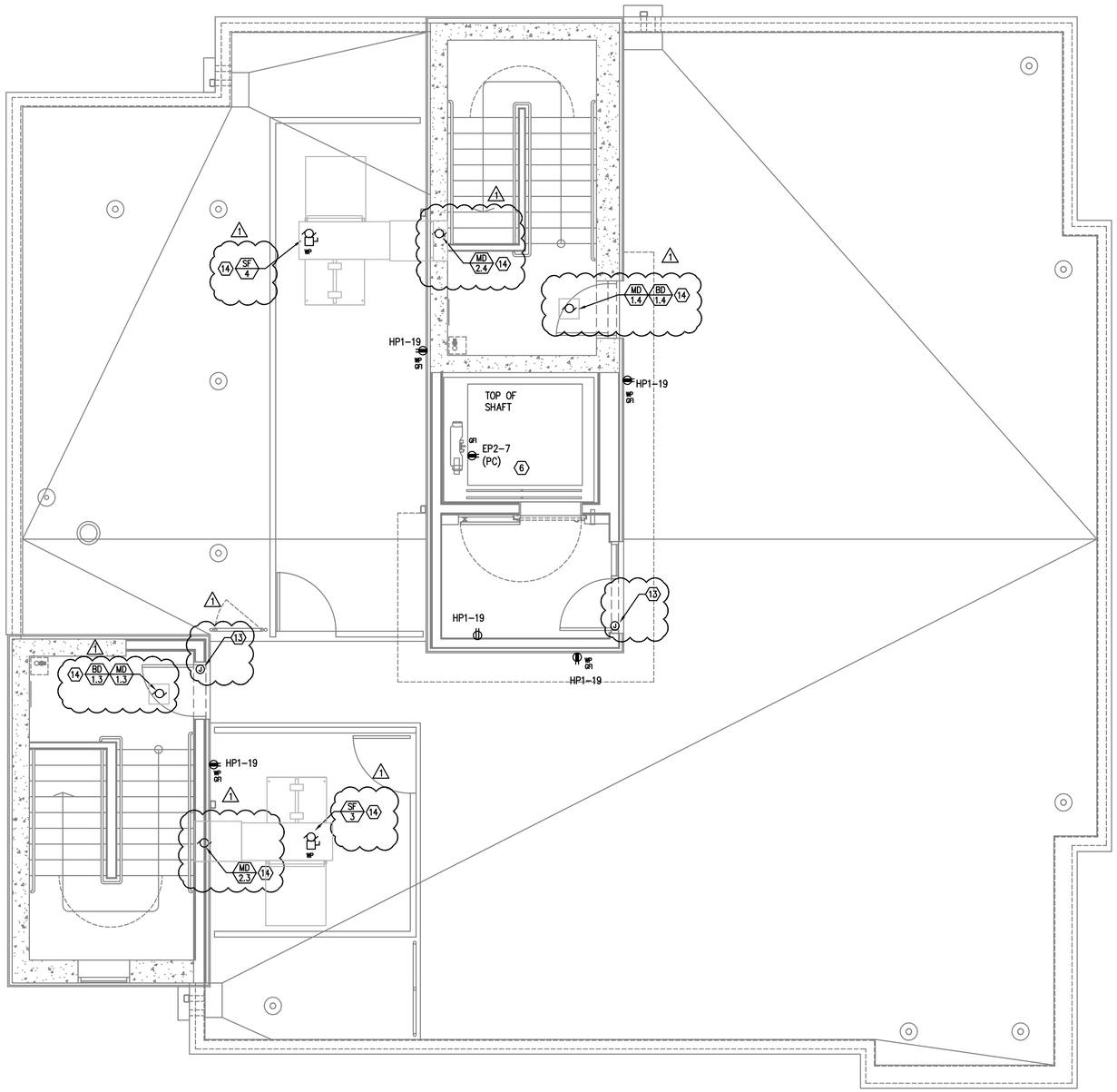

1 E3.06 POWER PLAN – ROOF LEVEL
SCALE: 1/8" = 1'-0"

GENERAL POWER NOTES:

A. ELECTRICAL DRAWINGS ARE DIAGRAMMATICAL AND MAY NOT ACCURATELY REFLECT ACTUAL CONSTRUCTION CONDITIONS. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE INSTALLATION OF ALL ELECTRICAL EQUIPMENT, WITH ALL TRADES PRIOR TO AND DURING CONSTRUCTION.

B. WORK SHALL BE IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND NATIONAL CODES.

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F. THE ELECTRICAL CONTRACTOR SHALL REFER TO THE ARCHITECTURAL DRAWINGS FOR ALL MOUNTING HEIGHTS AND FINISHES OF DEVICES AND FIXTURES.

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J. PROVIDE A KEY BOX AT THE TRANSFORMER ROOM DOOR PER THE UTILITY PROVIDER'S REQUIREMENTS, FOR 24/7 ACCESS.

K. TENANT ELECTRICAL METERING SHALL BE SUB-METERED BY THE OWNER PER THE UTILITY PROVIDER'S REQUIREMENTS. SUB-METERING EQUIPMENT IS BASED ON SIEMENS SEM3 PRODUCTS. REFER TO SHEET E1.11 FOR ADDITIONAL INFORMATION.

L. REFER TO 'E4' SERIES SHEETS FOR TYPICAL DWELLING UNIT POWER PLANS.

M. PROVIDE ROUGH IN AND WIRING FOR ACCESS CONTROL. REFER TO 'T' SERIES SHEETS FOR ADDITIONAL INFORMATION.

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⬡ KEYED POWER NOTES:

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5. EXHAUST FAN IN THIS AREA TO BE TIED INTO THE LIGHTING CIRCUIT.
6. CONSULT ELEVATOR PROVIDER FOR EXACT POWER REQUIREMENTS AND PROVIDE ALL ELECTRICAL WORK AS DIRECTED. VERIFY EXACT LOCATION FOR ELEVATOR EQUIPMENT WITH ARCHITECT AND COORDINATE WITH ELEVATOR INSTALLER.
7. SMOKE DAMPER FOR VENTILATION LOUVER. COORDINATE WITH MECHANICAL EQUIPMENT INSTALLER AND CIRCUIT AS INDICATED
8. PROVIDE POWER CONNECTION FOR IRRIGATION CONTROLS. COORDINATE WITH THE LANDSCAPER FOR EXACT REQUIREMENTS AND LOCATION PRIOR TO ROUGH IN.
9. CONSULT FIRE SPRINKLER SYSTEM PLAN SET AND COORDINATE EXACT LOCATION AND ELECTRICAL REQUIREMENTS FOR THE BUILDING FIRE PUMP.
10. REFER TO THE HOUSE PANEL 'HP1' PANEL SCHEDULE FOR CORRIDOR RECEPTACLE CIRCUITS ON FLOOR 2 THROUGH 11.
11. REFER TO PLUMBING PLAN SHEETS FOR ADDITIONAL INFORMATION ON THE PUMP SYSTEMS IN THIS SPACE. COORDINATE WITH INSTALLER AND PROVIDE ELECTRICAL CONNECTIONS AS REQUIRED. PROVIDE CIRCUITS FROM PANEL HP2, SEE PANEL SCHEDULES.
12. PROVIDE ONE 20A, 120V, 1P CIRCUIT FROM PANEL HP3 FOR DRYER BOOSTER FANS. COORDINATE WITH MECHANICAL EQUIPMENT INSTALLER FOR WIRING REQUIREMENTS PRIOR TO ROUGH IN.

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13. PROVIDE ONE 20A, 120V, 1P CIRCUIT FROM PANEL EP2 FOR AUTOMATIC DOOR CLOSER(S), TIED TO FIRE ALARM SYSTEM. COORDINATE WITH FIRE ALARM EQUIPMENT INSTALLER FOR WIRING REQUIREMENTS PRIOR TO ROUGH IN.
14. STAIRWELL PRESSURIZATION FANS ARE INTERLOCKED WITH MOTORIZED SMOKE DAMPERS AND BAROMETRIC RELIEF DAMPERS. REFER TO MECHANICAL PLANS SHEETS AND COORDINATE WITH THE MECHANICAL EQUIPMENT INSTALLER FOR ADDITIONAL INFORMATION. BOTH THE PRESSURIZATION FANS AND DAMPERS ARE TO BE CIRCUITED TO THE EMERGENCY POWER SYSTEM AND VIA THE FACP. SEE PANEL EP2 FOR PROPOSED CIRCUITING.
    *POWER SHALL BE MONITORED DOWN STREAM OF THE DISCONNECTS.
    *PROVIDE CURRENT TRANSDUCER TO MONITOR FAN AIRFLOW (HAWKEYE 608 OR EQUAL).

REGISTERED PROFESSIONAL ENGINEER
16,597
OREGON
JULY 20, 1993
ROBERT L. CONNELL
EXPIRES 12-31-2023

⚠1	04.14.2022 PERMIT RESUBMITTAL
Date:	04-08-2022
Proj No:	10105
Drawn By:	DMT
Chkd By:	RLC
DSGN By:	DMT
Acad File:	

SW PARK APARTMENTS
RYSTADT
2057 SW PARK AVE.
PORTLAND OREGON

POWER PLAN – ROOF LEVEL

MFIA INC.
Consulting Engineers
2007 S.E. Ash St.
Portland, OR 97214
PHN: (503) 234-0548
FAX: (503) 234-0677
WWW.MFIA-ENG.COM

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