

# 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 – 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                       |

## SWITCH SYMBOLS

|  |                                         |
|--|-----------------------------------------|
|  | SWITCH, SPST +48" A.F.F.                |
|  | SWITCH, DPST +48" A.F.F.                |
|  | SWITCH, 3-WAY +48" A.F.F.               |
|  | SWITCH, 4-WAY +48" A.F.F.               |
|  | SWITCH, DIMMER +48" A.F.F.              |
|  | SWITCH, SPST, W/PILOT LIGHT +48" A.F.F. |
|  | SWITCH, KEY-OPERATED +48" A.F.F.        |
|  | SWITCH, TIMED +48" A.F.F.               |
|  | PHOTOCELL CONTROL                       |
|  | 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)           |

## FIRE ALARM SYMBOLS

|  |                                                       |
|--|-------------------------------------------------------|
|  | FIRE ALARM MANUAL PULL STATION, +48" A.F.F.           |
|  | MAGNETIC DOOR HOLDER                                  |
|  | SMOKE DETECTOR, W/AUX. CONTACTS                       |
|  | SMOKE/FIRE DAMPER                                     |
|  | SMOKE DETECTOR, DUCT, IONIZATION TYPE W/SAMPLING TUBE |
|  | SMOKE DETECTOR, IONIZATION TYPE                       |
|  | SMOKE DETECTOR, PHOTO TYPE                            |
|  | HEAT DETECTOR, RATE-OF-RISE OR FIXED TEMP.            |
|  | FIRE MAIN FLOW DETECTION SWITCH                       |
|  | FIRE MAIN TAMPER DETECTION SWITCH                     |
|  | FIRE ALARM BELL, +80" A.F.F.                          |
|  | FIRE ALARM HORN, +80" A.F.F.                          |
|  | FIRE ALARM HORN/STROBE, +80" A.F.F.                   |
|  | FIRE ALARM STROBE, +80" A.F.F.                        |

## 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                 |
|  | MISCELLANEOUS PANEL, RECESSED                          |
|  | MISCELLANEOUS PANEL, SURFACE                           |
|  | FLUSH FLOOR BOX (W/ DEVICES AS SHOWN ON PLAN)          |

## WIRING SYMBOLS

|  |                                    |
|--|------------------------------------|
|  | PANEL & CIRCUIT NUMBER             |
|  | HOMERUN TO PANEL                   |
|  | CONDUCTOR SIZE (IF OTHER THAN #12) |
|  | PHASE CONDUCTOR                    |
|  | NEUTRAL CONDUCTOR                  |
|  | GROUND CONDUCTOR                   |
|  | CONCEALED CONDUIT                  |
|  | CONDUIT SIZE                       |
|  | CONDUIT (UNDER SLAB OR FLOOR)      |

|  |                           |
|--|---------------------------|
|  | FLEXIBLE CONNECTION       |
|  | CONDUIT, STUBBED & CAPPED |

## NOTATIONS

|  |                                                        |
|--|--------------------------------------------------------|
|  | DRAWING NOTE                                           |
|  | DETAIL REFERENCE: TOP=DETAIL NO., BOTTOM=SHEET NO.     |
|  | MECHANICAL EQUIPMENT MARK NO. (SEE EQUIPMENT SCHEDULE) |
|  | EQUIPMENT NO. (SEE EQUIPMENT SCHEDULE)                 |

|  |                                  |
|--|----------------------------------|
|  | NORMAL POWER CIRCUIT LINETYPE    |
|  | EMERGENCY POWER CIRCUIT LINETYPE |
|  | EXISTING POWER CIRCUIT LINETYPE  |

## ONE-LINE DIAGRAM SYMBOLS

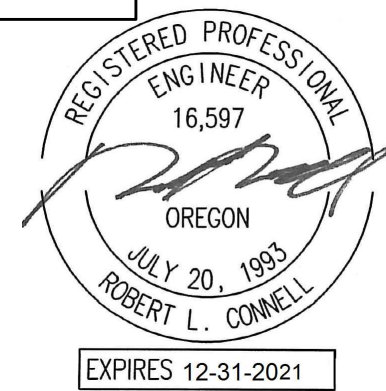
|  |                                                            |
|--|------------------------------------------------------------|
|  | ELECTRICAL DISTRIBUTION PANELBOARD (MLO)                   |
|  | ELECTRICAL DISTRIBUTION PANELBOARD (MCB)                   |
|  | SUB-FEED CIRCUIT BREAKER                                   |
|  | CIRCUIT BREAKER (TRIP RATING & POLES AS INDICATED ON PLAN) |
|  | MAIN SWITCH (RATING & POLES AS INDICATED ON PLAN)          |
|  | FUSE (RATING & CLASS AS INDICATED ON PLAN)                 |
|  | TRANSFER SWITCH (MANUAL OR AUTOMATIC)                      |
|  | GENERATOR (RATING AS INDICATED ON PLAN)                    |
|  | TRANSFORMER (RATING AS INDICATED ON PLAN)                  |
|  | GROUND SYSTEM (SIZE AS INDICATED ON PLAN)                  |
|  | WATER PIPE GROUND ELECTRODE                                |
|  | TRANSIENT VOLTAGE SURGE SUPPRESSOR                         |
|  | UTILITY METER & METER BASE                                 |
|  | UTILITY METER CURRENT TRANSFORMER                          |
|  | 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                   | T.V.S.S. | TRANSIENT VOLTAGE SURGE SUPPRESSOR |
| (E)    | EXISTING                              | U.G.     | UNDERGROUND                        |
| FACP   | FIRE ALARM CONTROL PANEL              | U.O.N.   | UNLESS OTHERWISE NOTED             |
| G.F.I. | GROUND FAULT INTERRUPTER              | VFD      | VARIABLE FREQUENCY DRIVE           |
| GND    | GROUND                                | W        | WIRE                               |
| HP     | HORSEPOWER                            | W.G.     | WIRE GUARD                         |
|        |                                       | W.P.     | WEATHERPROOF                       |

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

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**NORTHWEST HOUSING ALTERNATIVES**

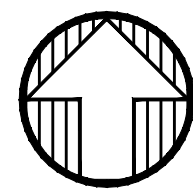
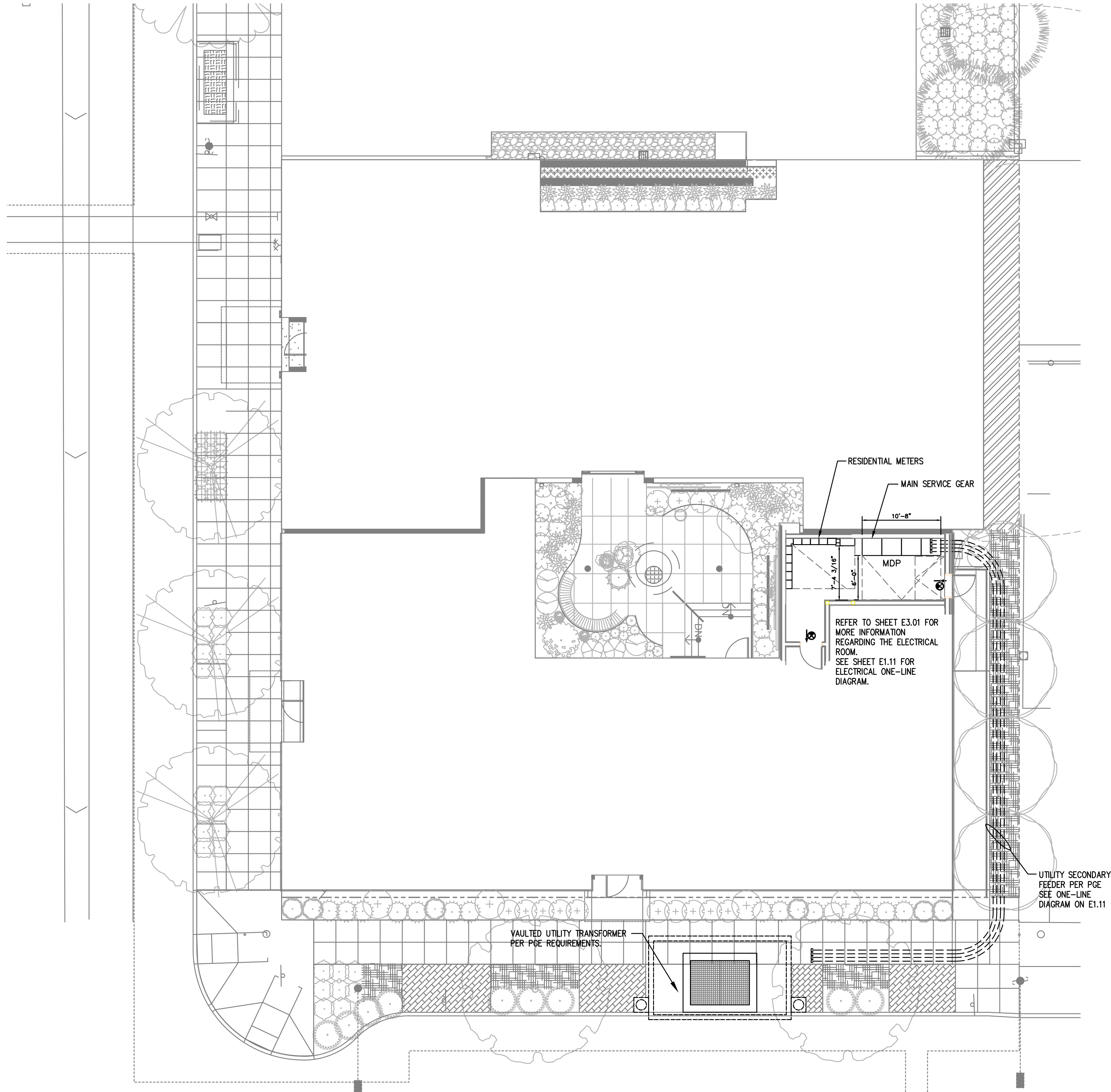
CONFORMANCE SET

ELECTRICAL  
LEGEND

PROJECT NO.  
17004  
05/28/2021

REVISIONS:

E1.00



1 SITE PLAN — SOUTH BUILDING  
E1.01 SCALE: 3/32" = 1'-0"

#### GENERAL POWER NOTES:

- ALL PLANS ARE CONSIDERED DIAGRAMMATICAL. THEREFORE ALL EQUIPMENT SIZES AND DEVICE LOCATIONS ARE APPROXIMATE AND SUBJECT TO FIELD CONDITIONS AND PRODUCT APPROVAL.
- ELECTRICAL SERVICE ENTRANCE EQUIPMENT DESIGN IS BASED ON SIEMENS PRODUCTS. ACTUAL PRODUCTS USED MAY DIFFER IN SIZE AND CONFIGURATION AND SHALL BE NOTED IN FINAL PROJECT DOCUMENTS.
- COORDINATE WITH LOCAL UTILITY PROVIDER FOR EXACT SERVICE CONDUIT AND CONDUCTORS REQUIREMENTS.
- ALL UTILITY WORK SHALL BE DONE IN ACCORDANCE WITH PGE ELECTRICAL SERVICE REQUIREMENTS.
- U.G. PRIMARY FEEDER SHALL HAVE A MINIMUM 48 INCH BURY.
- U.G. SECONDARY FEEDER SHALL HAVE A MINIMUM 36 INCH BURY.
- REFER TO SHEET E1.11 FOR TYPICAL FEEDER SCHEDULE.
- SECONDARY CONDUIT SWEEPS SHALL BE MINIMUM 60 INCH RADIUS WITH A MINIMUM OR 7'-0" STRAIGHT CONDUIT RUN BETWEEN SWEEPS.
- LOCATION AND INSTALLATION OF THE PRIMARY AND SECONDARY CONDUITS, TRANSFORMER, ETC. SHALL BE PROVIDED PER PGE ELECTRICAL SERVICE REQUIREMENTS.
- REFER TO SHEET E3.01 FOR ELECTRICAL ROOM EQUIPMENT LAYOUT.

#### PGE REQUIREMENTS

- CUSTOMER TO PROVIDE ALL TRENCHING AND BACKFILLING. TRENCH TO BE 36 INCHES DEEP AND 30 INCHES WIDE, MEASURED FROM FINAL GRADE.
- ALL PGE CONDUCTORS TO BE INSTALLED IN GREY SCHEDULE 40, ELECTRICAL GRADE, PVC CONDUIT WITH NYLON PULL STRINGS (MIN 500 LBS. TEST). PGE 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.
- CONSULT WITH PGE REPRESENTATIVE 2 WEEKS BEFORE STARTING MAIN POWER TRENCHING FOR A PRECONSTRUCTION CONFERENCE. INCLUDED IN THIS CONFERENCE WILL BE EXCAVATOR, PGE, TELCO, CATV, AND GAS.
- CONTRACTOR TO LOCATE ALL UNDERGROUND UTILITIES BEFORE TRENCHING. COORDINATE WITH CIVIL.

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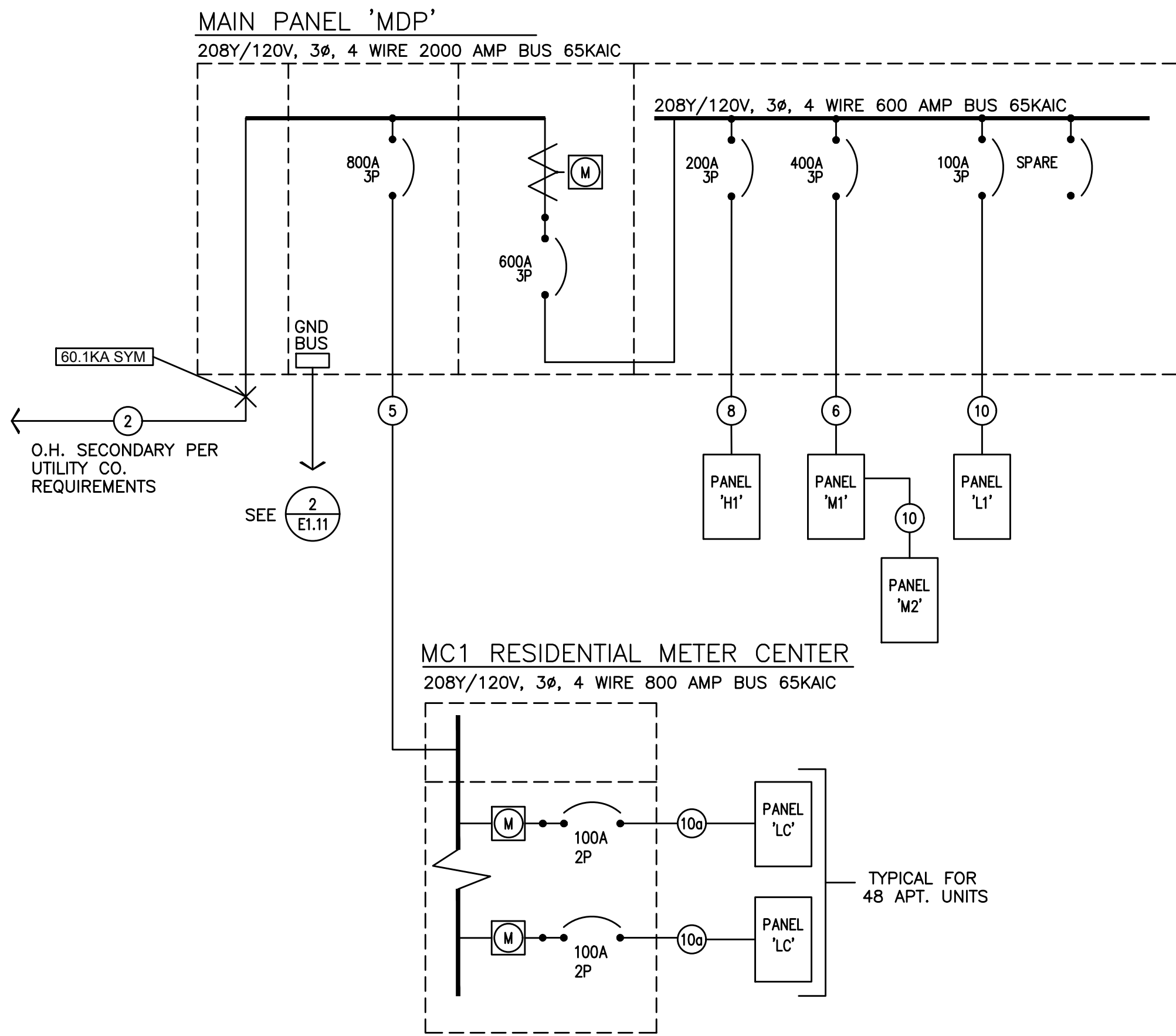
**NORTHWEST HOUSING ALTERNATIVES**

CONFORMANCE SET

ELECTRICAL  
SITE PLAN  
PROJECT NO.  
17004  
05/28/2021

REVISIONS:

E1.01



1 ELECTRICAL ONE-LINE DIAGRAM

E1.11 208Y/120V, 3PH, 4W

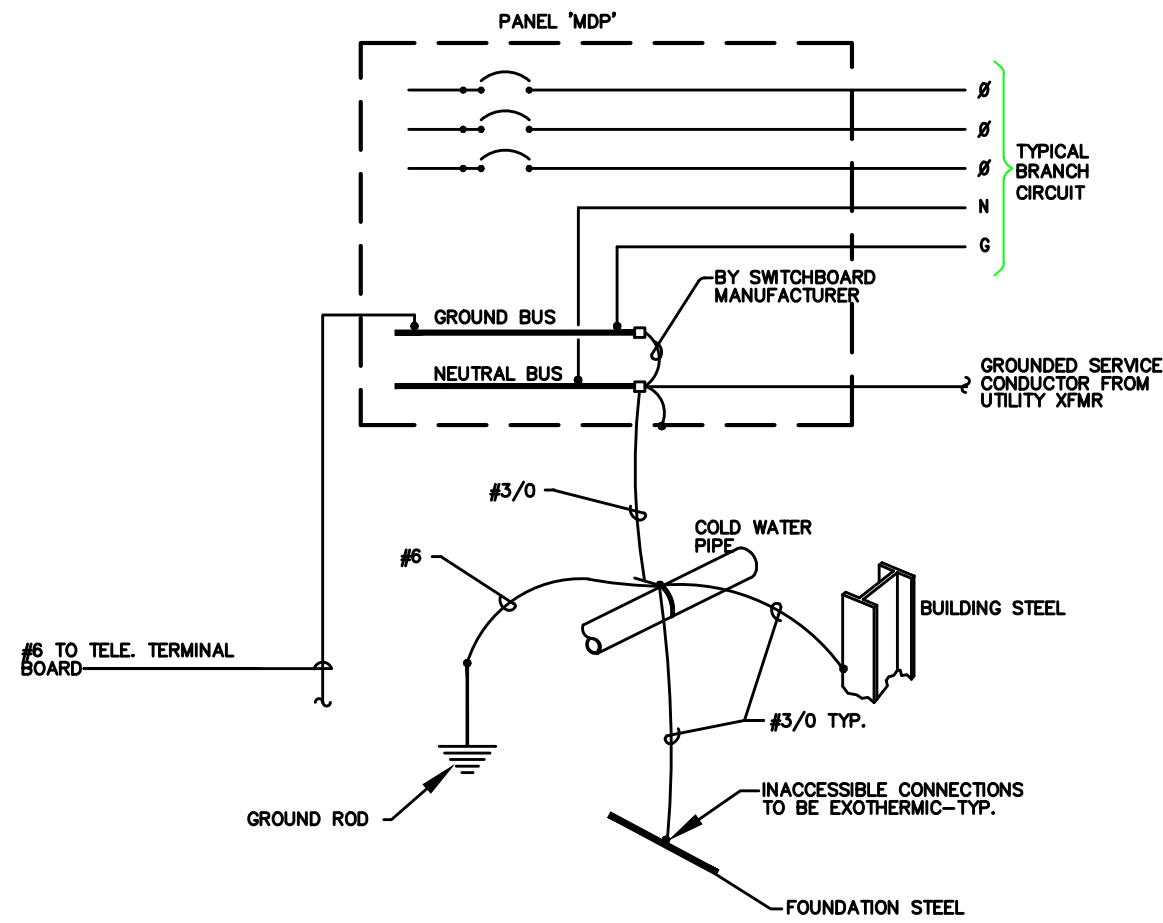
| FEEDER SCHEDULE (COPPER) |       |         |                     |            |     |
|--------------------------|-------|---------|---------------------|------------|-----|
| NO.                      | AMPS  | CONDUIT | CONDUCTOR           |            |     |
| 1                        |       | *(5) 4" | BY UTILITY CO.      | & (1)      | GND |
| 2                        |       | *(8) 6" | BY UTILITY CO.      | & (1)      | GND |
| 3                        | 1600A | *(4) 4" | ea w/ (4) #600Kcmil | & (1) #4/0 | GND |
| 4                        | 1200A | *(3) 4" | ea w/ (4) #600Kcmil | & (1) #3/0 | GND |
| 5                        | 800A  | *(2) 4" | ea w/ (4) #600Kcmil | & (1) #1/0 | GND |
| 6                        | 400A  | 3 1/2"  | (4) #500Kcmil       | & (1) #3   | GND |
| 7                        | 250A  | 2 1/2"  | (4) #250Kcmil       | & (1) #4   | GND |
| 8                        | 200A  | 2"      | (4) #3/0            | & (1) #6   | GND |
| 9                        | 150A  | 2"      | (4) #1/0            | & (1) #6   | GND |
| 10                       | 100A  | 1 1/2"  | (4) #1              | & (1) #8   | GND |
| 10a                      | 100A  | 1 1/2"  | (3) #1              | & (1) #8   | GND |
| 11                       | 125A  | 1 1/2"  | (3) #1              | & (1) #6   | GND |
| 12                       | 60A   | 1 1/4"  | (4) #4              | & (1) #10  | GND |

\* PARALLEL FEEDER

| Susan Emmons - South Building   |        |        |       |         |        |         |         |               |
|---------------------------------|--------|--------|-------|---------|--------|---------|---------|---------------|
| LOAD SUMMARY - MAIN PANEL 'MDP' |        |        |       |         |        |         |         |               |
| LOAD:                           | LIGHTS | RECEPT | HEAT  | KITCHEN | EQUIP  | MOTORS  | MISC    | LARGEST MOTOR |
| Panel H1                        | 5,971  | 16,400 | 0     | 13,500  | 6,000  | 1,000   | 0       |               |
| Panel M1                        | 0      | 500    | 6,000 | 0       | 12,000 | 71,395  | 32,580  |               |
| Panel L1                        | 0      | 4,500  | 0     | 0       | 500    | 17,125  | 0       |               |
| Elevator                        | 0      | 0      | 0     | 0       | 0      | 42,500  | 0       | 42,500        |
| Elevator                        | 0      | 0      | 0     | 0       | 0      | 42,500  | 0       |               |
| Residential Loads               | 0      | 0      | 0     | 0       | 0      | 0       | 267,000 | 0             |
| SUBTOTAL                        | 5,971  | 21,400 | 6,000 | 13,500  | 18,500 | 174,520 | 299,580 | 42,500        |
| X-FACTOR                        | 1.25   | 1 + .5 | 1     | 0.65    | 1      | 1       | 1       | 0.25          |
| CODE LOAD:                      | 7,464  | 15,700 | 6,000 | 8,775   | 18,500 | 174,520 | 299,580 | 10,625        |
| CONN LOAD:                      | 539    |        | KVA   |         |        |         |         |               |
| VOLTS:                          | 208    |        | 3ph   |         |        |         |         |               |
| TOTAL CALC:                     | 541    |        | KVA   |         |        |         |         |               |
| CALC AMPS:                      | 1502   |        | AMPS  |         |        |         |         |               |

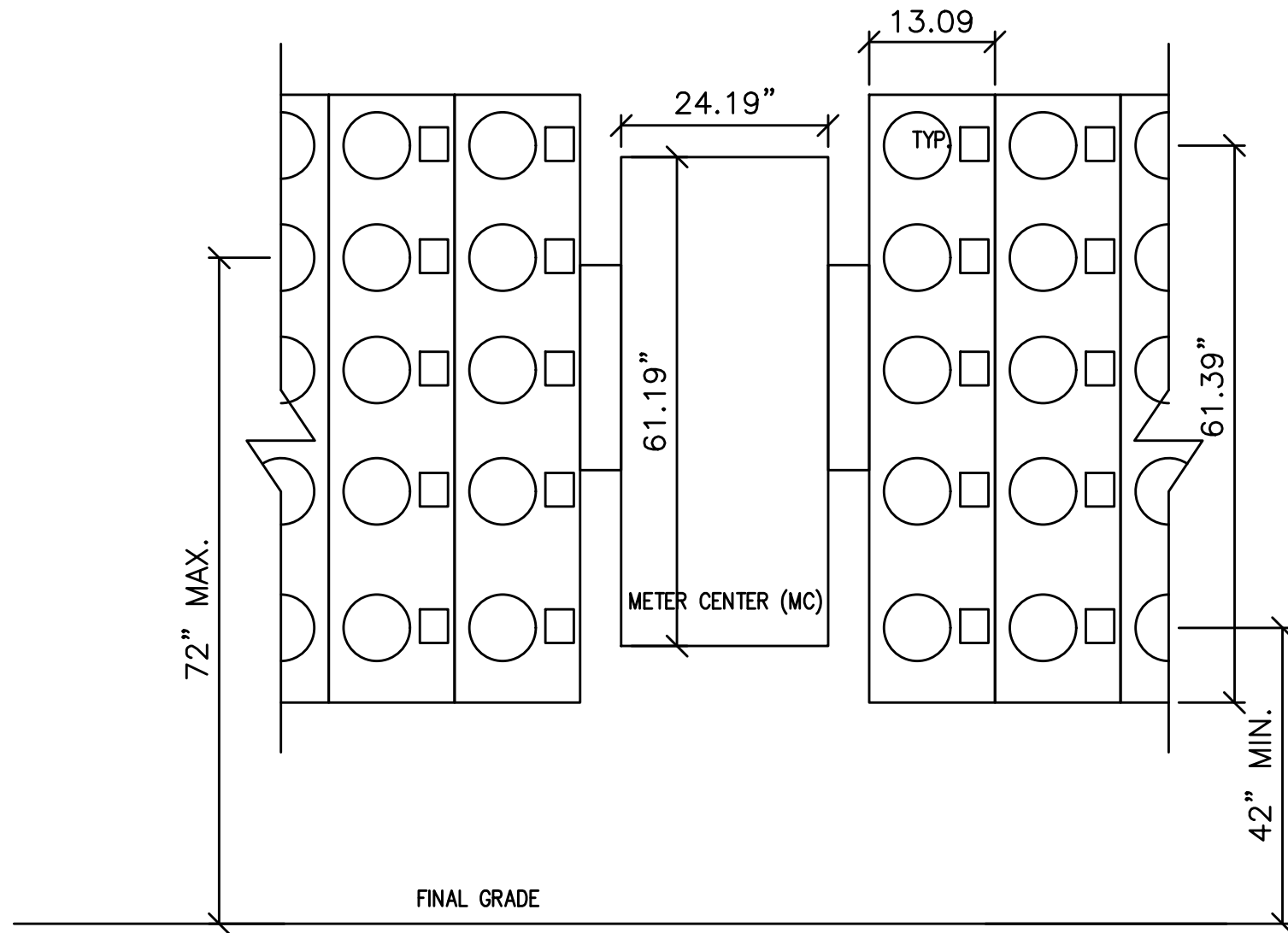
### ONE-LINE GENERAL NOTES:

- A. COORDINATE ALL WORK ASSOCIATED WITH ELECTRIC SERVICE WITH LOCAL UTILITY. 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.



2 GROUNDING/BONDING DIAGRAM

E1.11 208Y/120V, 3Ø, 4 WIRE

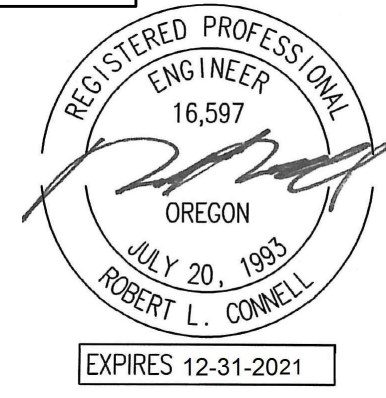


3 TYPICAL METER ELEVATION

E1.11 NOT TO SCALE

TYPICAL METER ARRANGEMENT PER PGE REQUIREMENTS. COMPONENTS SHOWN ARE APPROXIMATE BASED ON VENDOR INFORMATION. ACTUAL EQUIPMENT TO BE INSTALLED MAY VARY. ELECTRICAL CONTRACTOR TO PROVIDE CUTSHEETS OF THE PRODUCTS INSTALLED UPON SUBMITTAL REVIEW & APPROVAL.

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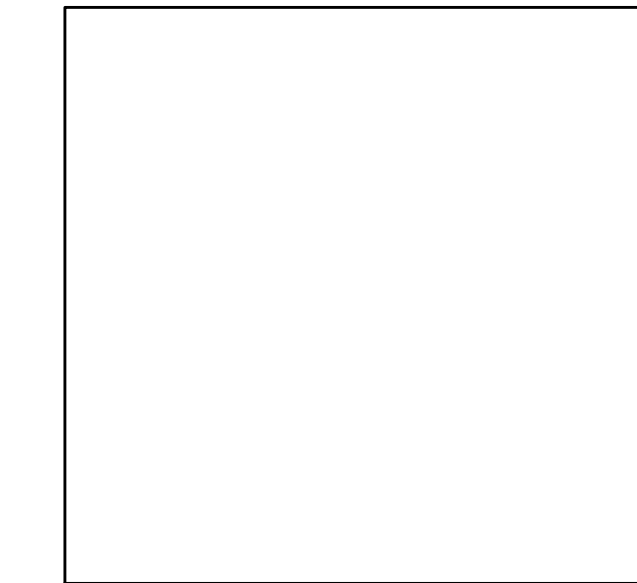
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17004

05/28/2021

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NORTHWEST HOUSING ALTERNATIVES

CONFORMANCE SET

ELECTRICAL PANEL  
SCHEDULES & LOAD  
SUMMARIES

PROJECT NO.  
17004

05/28/2021

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E1.12

| MFIA PANEL SCHEDULE                                 |                             |          |       |            |       |                     |        |                      |                       |                    |       |
|-----------------------------------------------------|-----------------------------|----------|-------|------------|-------|---------------------|--------|----------------------|-----------------------|--------------------|-------|
| panel                                               |                             | mounting |       | location   |       | connected load amps |        |                      |                       |                    |       |
| H1 (House Loads)                                    |                             | SURFACE  |       | ELECT RM   |       |                     |        | 119                  |                       |                    |       |
| voltage                                             |                             | phase    |       | bus & main |       | MLO                 |        | calculated load amps |                       |                    |       |
| 120/208V (SCCR: 42KAIC)                             |                             |          |       | 200A       |       |                     |        |                      |                       |                    |       |
| C                                                   | service                     | va       | a/p   | no.        | a b c | no.                 | a/p    | va                   | service               |                    | C     |
| 1                                                   | LIGHTS - EXTERIOR           | 200      | 20/1  | 1          | *     | 2                   | 20/1   | 1080                 | RECEPT - 1ST FLOOR    | 2                  | 2     |
| 1                                                   | LIGHTS - STAIR #1           | 152      | 20/1  | 3          | *     | 4                   | 20/1   | 900                  | RECEPT - 1ST FLOOR    | 2                  | 2     |
| 1                                                   | LIGHTS - STAIR #2           | 152      | 20/1  | 5          | *     | 6                   | 20/1   | 1260                 | RECEPT - 1ST FLOOR    | 2                  | 2     |
| 1                                                   | ELEVATOR PIT LTS & RECEPT   | 1500     | 20/1  | 7          | *     | 8                   | 20/1   | 1260                 | RECEPT - 1ST FLOOR    | 2                  | 2     |
| 1                                                   | LIGHTS - 1ST FLOOR (EGRESS) | 260      | 20/1  | 9          | *     | 10                  | 20/1   | 500                  | EDEPT - 1ST FLOOR     | 2                  | 2     |
| 1                                                   | LIGHTS - 1ST FLOOR (CORRID) | 308      | 20/1  | 11         | *     | 12                  | 20/1   | 1500                 | RECEPT - 1ST FLOOR    | 2                  | 2     |
| 1                                                   | LIGHTS - 1ST FLOOR          | 437      | 20/1  | 13         | *     | 14                  | 50/2   | 6000                 | RANGE                 | 4                  | 4     |
| 1                                                   | LIGHTS - 2ND FLOOR (EGRESS) | 256      | 20/1  | 15         | *     | 16                  | *      | 6000                 | *                     | 4                  | 4     |
| 1                                                   | LIGHTS - 2ND FLOOR (CORRID) | 224      | 20/1  | 17         | *     | 18                  | 20/1   | 1500                 | HOOD/MICROWAVE        | 4                  | 4     |
| 1                                                   | LIGHTS - 3RD FLOOR (EGRESS) | 256      | 20/1  | 19         | *     | 20                  | 20/1   | 1080                 | RECEPT - 1ST FLOOR    | 2                  | 2     |
| 1                                                   | LIGHTS - 3RD FLOOR (CORRID) | 224      | 20/1  | 21         | *     | 22                  | 20/1   | 1260                 | RECEPT - 2ND FLOOR    | 2                  | 2     |
| 1                                                   | LIGHTS - 4TH FLOOR (EGRESS) | 160      | 20/1  | 23         | *     | 24                  | 20/1   | 1260                 | RECEPT - 2ND FLOOR    | 2                  | 2     |
| 1                                                   | LIGHTS - 4TH FLOOR (CORRID) | 160      | 20/1  | 25         | *     | 26                  | 20/1   | 1080                 | RECEPT - 3RD FLOOR    | 2                  | 2     |
| 1                                                   | LTS - FLR 2,3,4 (EQUIP RMS) | 182      | 20/1  | 27         | *     | 28                  | 20/1   | 900                  | RECEPT - 3RD FLOOR    | 2                  | 2     |
| 5                                                   | PALLET JACK CHARGER         | 1500     | 20/1  | 29         | *     | 30                  | 20/1   | 900                  | RECEPT - 4TH FLOOR    | 2                  | 2     |
| 5                                                   | SMOKE DAMPERS               | 1000     | 20/1  | 31         | *     | 32                  | 20/1   | 1080                 | RECEPT - ROOF         | 2                  | 2     |
| 5                                                   | SMOKE DAMPERS               | 1000     | 20/1  | 33         | *     | 34                  | 20/1   | 1000                 | EF-4                  | 6                  | 6     |
| 5                                                   | SMOKE DAMPERS               | 1000     | 20/1  | 35         | *     | 36                  | 20/1   | 1500                 | COURTYARD LIGHTS      | 1                  | 1     |
| 5                                                   | SMOKE DAMPERS               | 1000     | 20/1  | 37         | *     | 38                  | 20/1   | 500                  | MAGNETIC DOOR HOLDERS | 5                  | 5     |
| 2                                                   | RECEPT - AMENITY            | 900      | 20/1  | 39         | *     | 40                  | 20/1   | 1440                 | RECEPT - OFFICE 329   | 2                  | 2     |
|                                                     | SPARE                       | 0        | 20/1  | 41         | *     | 42                  | 20/1   | 0                    | SPARE                 |                    |       |
| Phase A                                             |                             | 16633 VA |       |            |       |                     |        | NOTES:               |                       | line-line voltage  |       |
| Phase B                                             |                             | 14974 VA |       |            |       |                     |        |                      |                       | 208                |       |
| Phase C                                             |                             | 11264 VA |       |            |       |                     |        |                      |                       | largest motor (va) |       |
| Total Connected                                     |                             | 42671 VA |       |            |       |                     |        |                      |                       | 0                  |       |
| load code:                                          |                             | ph. A    | ph. B | ph. C      |       | total               | factor | calculated load (va) |                       |                    |       |
| 1. LIGHTS=                                          |                             | 2553     | 1074  | 2344       |       | VA                  | 5971   | 1.25                 |                       |                    | 7464  |
| 2. RECEPT=                                          |                             | 5580     | 5900  | 4920       |       | VA                  | 16400  | + 0.5                |                       |                    | 13200 |
| 3. HEATING=                                         |                             | 0        | 0     | 0          |       | VA                  | 0      | 1.00                 |                       |                    | 0     |
| 4. KITCHEN=                                         |                             | 6000     | 6000  | 1500       |       | VA                  | 13500  | 1.00                 |                       |                    | 13500 |
| 5. EQUIP=                                           |                             | 2500     | 1000  | 2500       |       | VA                  | 6000   | 1.00                 |                       |                    | 6000  |
| 6. MOTORS=                                          |                             | 0        | 1000  | 0          |       | VA                  | 1000   | *                    |                       |                    | 1000  |
| 7. MISC=                                            |                             | 0        | 0     | 0          |       | VA                  | 0      | 1.00                 |                       |                    | 0     |
| (* 125% of the largest motor + 100% of the balance) |                             |          |       |            |       |                     |        | TOTAL =              |                       |                    | 41164 |

| MFIA PANEL SCHEDULE                                 |  |          |       |            |       |                     |        |                      |                        |  |  |
|-----------------------------------------------------|--|----------|-------|------------|-------|---------------------|--------|----------------------|------------------------|--|--|
| panel                                               |  | mounting |       | location   |       | connected load amps |        |                      |                        |  |  |
| M1 (Mechanical Loads)                               |  | SURFACE  |       | ELECT RM   |       |                     |        | 340                  |                        |  |  |
| voltage                                             |  | phase 3  |       | bus & main |       | MLO                 |        | calculated load amps |                        |  |  |
| 120/208V (SCCR: 42KAIC)                             |  |          |       |            |       |                     |        | 340                  |                        |  |  |
| service                                             |  | va       | a/p   | no.        | a b c | no.                 | a/p    | va                   | service                |  |  |
| 3 EH-3                                              |  | 1500     | 20/2  | 1          | *     | 2                   | 20/1   | 500                  | PHONE BOARD            |  |  |
| 3 *                                                 |  | 1500     | *     | 3          | *     | 4                   | 20/1   | 500                  | COMMUNICATIONS BOARD   |  |  |
| 3 EH-2                                              |  | 500      | 20/1  | 5          | *     | 6                   | 20/1   | 500                  | RECEPT - ELEV MACH RM  |  |  |
| 5 AUTO DOORS                                        |  | 1500     | 20/1  | 7          | *     | 8                   | 20/1   | 1176                 | SP-1                   |  |  |
| 5 BUILDING SIGN                                     |  | 1500     | 20/1  | 9          | *     | 10                  | 20/1   | 1176                 | SP-2                   |  |  |
| 5 FIRE ALARM REMOTE ANNUNC                          |  | 500      | 20/1  | 11         | *     | 12                  | 20/1   | 500                  | WH-1 & WH-2 (GAS)      |  |  |
| 5 FACP                                              |  | 500      | 20/1  | 13         | *     | 14                  | 20/1   | 1176                 | RP-1                   |  |  |
| 5 ENTRY SYSTEM                                      |  | 1000     | 20/1  | 15         | *     | 16                  | 50/3   | 3865                 | BP-1                   |  |  |
| 5 SECURITY SYSTEM                                   |  | 1000     | 20/1  | 17         | *     | 18                  | *      | 3865                 | *                      |  |  |
| 5 IRRIGATION                                        |  | 500      | 20/1  | 19         | *     | 20                  | *      | 36865                | *                      |  |  |
| 6 IHP/OHP-2                                         |  | 4368     | 50/2  | 21         | *     | 22                  | 50/2   | 2900                 | TRASH COMPACTOR        |  |  |
| 6 *                                                 |  | 4368     | *     | 23         | *     | 24                  | 20/1   | 2900                 | *                      |  |  |
| 6 IHP/OHP-3                                         |  | 4368     | 50/2  | 25         | *     | 26                  | 20/1   | 1500                 | EH-4                   |  |  |
| 6 *                                                 |  | 4368     | *     | 27         | *     | 28                  | 20/1   | 0                    | SPARE                  |  |  |
| SPARE                                               |  | 20/1     | 29    | *          | 30    | 20/1                | 500    | EH-2                 |                        |  |  |
| 7 PANEL M2                                          |  | 10860    | 100/3 | 31         | *     | 32                  | 20/1   | 1500                 | ELEVATOR SMOKE CURTAIN |  |  |
| 7 *                                                 |  | 10860    | *     | 33         | *     | 34                  | 20/1   | 1500                 | ELEVATOR SMOKE CURTAIN |  |  |
| 7 *                                                 |  | 10860    | *     | 35         | *     | 36                  | 20/1   | 1500                 | SNOW MELT SYSTEM       |  |  |
| BLANK                                               |  | 20/1     | 37    | *          | 38    |                     |        | BLANK                |                        |  |  |
| BLANK                                               |  | 20/1     | 39    | *          | 40    |                     |        | BLANK                |                        |  |  |
| BLANK                                               |  | 20/1     | 41    | *          | 42    |                     |        | BLANK                |                        |  |  |
| Phase A                                             |  | 61945    | VA    | NOTES:     |       |                     |        | line-line voltage    |                        |  |  |
| Phase B                                             |  | 33537    | VA    |            |       |                     |        | 208                  |                        |  |  |
| Phase C                                             |  | 26993    | VA    |            |       |                     |        | largest motor (va)   |                        |  |  |
| Total Connected                                     |  | 122475   | VA    |            |       |                     |        | 0                    |                        |  |  |
| load code:                                          |  | ph. A    | ph. B | ph. C      |       | total               | factor | calculated load (va) |                        |  |  |
| 1. LIGHTS=                                          |  | 0        | 0     | 0          | 0     | VA                  | 0      | 1.25                 |                        |  |  |
| 2. RECEPT=                                          |  | 0        | 0     | 0          | 500   | VA                  | 500    | 0.1 + 0.5            |                        |  |  |
| 3. HEATING=                                         |  | 3000     | 1500  | 1500       | VA    | 6000                | 1000   | 8000                 |                        |  |  |
| 4. KITCHEN=                                         |  | 0        | 0     | 0          | 0     | VA                  | 0      | 1.00                 |                        |  |  |
| 5. EQUIP=                                           |  | 4500     | 4500  | 3000       | VA    | 12000               | 1000   | 12000                |                        |  |  |
| 6. MOTORS=                                          |  | 43585    | 16677 | 11133      | VA    | 71395               | *      | 71395                |                        |  |  |
| 7. MISC=                                            |  | 10860    | 10860 | 10860      | VA    | 32580               | 1000   | 32580                |                        |  |  |
| (* 125% of the largest motor + 100% of the balance) |  |          |       |            |       | TOTAL =             | 122475 |                      |                        |  |  |

| MFIA PANEL SCHEDULE                                 |                          |          |       |            |       |                     |         |                      |                     |  |  |
|-----------------------------------------------------|--------------------------|----------|-------|------------|-------|---------------------|---------|----------------------|---------------------|--|--|
| panel                                               |                          | mounting |       | location   |       | connected load amps |         |                      |                     |  |  |
| L1 (Laundry)                                        |                          | FLUSH    |       | ELECT RM   |       |                     |         | 63                   |                     |  |  |
| voltage                                             |                          | phase    |       | bus & main |       | MLO                 |         | calculated load amps |                     |  |  |
| 120/208V (SCCR: 42KAIC)                             |                          | 3        |       | 100A       |       |                     |         | 63                   |                     |  |  |
| C                                                   | service                  | va       | a/p   | no.        | a b c | no.                 | a/p     | va                   | service             |  |  |
| 2                                                   | WASHER                   | 1500     | 20/1  | 1          | *     | 2                   | 40/2    | 2800                 | DRYER               |  |  |
| 2                                                   | WASHER                   | 1500     | 20/1  | 3          | *     | 4                   | *       | 2800                 | *                   |  |  |
| 2                                                   | ELECT BIKE CHARGER       | 1500     | 20/1  | 5          | *     | 6                   | 40/2    | 2800                 | DRYER               |  |  |
| 6                                                   | RF-1 (4TH FLR RADON FAN) | 215      | 20/1  | 7          | *     | 8                   | *       | 2800                 | *                   |  |  |
| 6                                                   | RF-1 (5TH FLR RADON FAN) | 110      | 20/1  | 9          | *     | 10                  | 40/2    | 2800                 | DRYER               |  |  |
| 5                                                   | LAUNDRY CARD MACHINE     | 500      | 20/1  | 11         | *     | 12                  | *       | 2800                 | *                   |  |  |
| 6                                                   | IHP/OHP-4 - OFFICE 329   | 0        | 40/2  | 13         | *     | 14                  | 20/1    | 500                  | DRYER BOOSTERS (x3) |  |  |
| 6                                                   | *                        | 0        | *     | 15         | *     | 16                  | 20/1    | SPARE                |                     |  |  |
|                                                     | BLANK                    |          |       | 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                |                     |  |  |
|                                                     | BLANK                    |          |       | 31         | *     | 32                  |         | BLANK                |                     |  |  |
|                                                     | BLANK                    |          |       | 33         | *     | 34                  |         | BLANK                |                     |  |  |
|                                                     | BLANK                    |          |       | 35         | *     | 36                  |         | BLANK                |                     |  |  |
|                                                     | BLANK                    |          |       | 37         | *     | 38                  |         | BLANK                |                     |  |  |
|                                                     | BLANK                    |          |       | 39         | *     | 40                  |         | BLANK                |                     |  |  |
|                                                     | BLANK                    |          |       | 41         | *     | 42                  |         | BLANK                |                     |  |  |
| Phase A                                             |                          | 7815 VA  |       | NOTES:     |       |                     |         | line-line voltage    |                     |  |  |
| Phase B                                             |                          | 7210 VA  |       |            |       |                     |         | 208                  |                     |  |  |
| Phase C                                             |                          | 7600 VA  |       |            |       |                     |         | largest motor (va)   |                     |  |  |
| Total Connected                                     |                          | 22625 VA |       |            |       |                     |         | 0                    |                     |  |  |
| 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     | 1500  | 1500 VA    |       | 4500                | 1 + 0.5 | 4500                 |                     |  |  |
| 3. HEATING=                                         |                          | 0        | 0     | 0 VA       |       | 0                   | 1.00    | 0                    |                     |  |  |
| 4. KITCHEN=                                         |                          | 0        | 0     | 0 VA       |       | 0                   | 1.00    | 0                    |                     |  |  |
| 5. EQUIP.=                                          |                          | 0        | 0     | 500 VA     |       | 500                 | 1.00    | 500                  |                     |  |  |
| 6. MOTORS=                                          |                          | 6315     | 5710  | 5600 VA    |       | 17625               | *       | 17625                |                     |  |  |
| 7. MISC=                                            |                          | 0        | 0     | 0 VA       |       | 0                   | 1.00    | 0                    |                     |  |  |
| (* 125% of the largest motor + 100% of the balance) |                          |          |       |            |       | TOTAL =             |         | 22625                |                     |  |  |

| LIGHTING FIXTURE LIST |                                            |                                          |                                       |                                                                                                                                                                   |                                                                                                                                                                          |
|-----------------------|--------------------------------------------|------------------------------------------|---------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TYPE                  | LAMP                                       | MANUFACTURER                             | CATALOG NUMBER                        | DESCRIPTION                                                                                                                                                       | OPTIONS                                                                                                                                                                  |
| A1<br>A1E             | LED<br>3000K<br>2000LM/80CRI<br><br>25W    | LITHONIA<br>(OR APPROVED OTHER)          | ZLIN SERIES                           | TYPE :4' GEN. PURPOSE STRIP<br>MOUNTING :SURFACE<br>HOUSING :STEEL<br>LENS/REFL :DIFFUSED ACRYLIC<br>VOLTAGE :MVOLT<br>BALLAST :LED DRIVER                        | TYPE 'AE' SIMILAR TO TYPE 'A' EXCEPT<br>WITH EMERGENCY BATTERY BACK-UP<br><br>EQUIP. RMS, TRASH RM                                                                       |
| A2                    | LED<br>3500K<br>3000LM/80CRI<br><br>23W    | LITHONIA<br>(OR APPROVED OTHER)          | FEML48 SERIES                         | TYPE :4' ENCLOSED INDUSTRIAL<br>MOUNTING :SURFACE<br>HOUSING :POLYCARBONATE<br>LENS/REFL :CLEAR POLYCARBONATE<br>VOLTAGE :MVOLT<br>BALLAST :LED DRIVER            | ELEVATOR PIT & TOP OF SHAFT                                                                                                                                              |
| B1<br>B1E             | LED<br>3000K<br>3600LM/80CRI<br><br>34W    | FAIL SAFE<br>(OR APPROVED OTHER)         | HVSL8 SERIES                          | TYPE :4' WRAP AROUND<br>MOUNTING :SURFACE<br>HOUSING :STEEL<br>LENS/REFL :ACRYLIC<br>VOLTAGE :MVOLT<br>BALLAST :LED DRIVER                                        | B1E TO BE PROVIDED WITH EMERGENCY<br>BATTERY BALLAST.<br><br>PROVIDE WITH INTEGRAL OCCUPANCY.<br>SENSOR, DIM50 STANDBY MODE.<br>STAIRWELLS                               |
| B3<br>B3E             | LED<br>3000K<br>575LM/FT 80CRI<br><br>20W  | NEO RAY LIGHTING<br>(OR APPROVED OTHER)  | S124DS-C SERIES                       | TYPE :4FT LINEAR FIXTURE<br>MOUNTING :SURFACE<br>HOUSING :STEEL<br>LENS/REFL :STRAIGHT BLADE DIFFUSER<br>VOLTAGE :MVOLT<br>BALLAST :LED DRIVER (0-10 DIMMING)     | B3E PROVIDED WITH EMERGENCY<br>BATTERY BACKUP.<br>MATTE WHITE FINISH<br>VERIFY MOUNTING TYPE W/ ARCHITECT<br><br>OFFICE,LAUNDRY,BIKE RMS, TRASH RMS                      |
| C1<br>C1E             | LED<br>1300LM/80CRI<br>3000K<br><br>16W    | USAI LIGHTING<br>(OR APPROVED OTHER)     | B4RD 16G1 SERIES                      | TYPE :4.5" DIA. DOWNLIGHT<br>MOUNTING :RECESSED<br>HOUSING :STEEL<br>LENS/REFL :ACRYLIC<br>VOLTAGE :MVOLT<br>BALLAST :LED DRIVER (0-10 DIMMING)                   | C1E PROVIDED WITH EMERGENCY<br>BATTERY BACK UP.<br>90 DEGREE BEAM<br>TRIMLESS/BLACK FINISH<br>IC RATED<br>CORRIDORS, LOBBY                                               |
| C2<br>C2E             | LED<br>3000K<br>975LM<br><br>14W           | USAI LIGHTING<br>(OR APPROVED OTHER)     | BEVELED 1020 SERIES                   | TYPE :4.5" DIA. DOWNLIGHT<br>MOUNTING :RECESSED<br>HOUSING :ALUMINUM<br>LENS/REFL :SOLITE<br>VOLTAGE :MVOLT<br>BALLAST :LED DRIVER                                | C2E TO BE PROVIDED WITH EMERGENCY<br>BATTERY BACK UP.<br>FLANGE TRIM/BRONZE FINISH<br><br>UL LISTED WET LOCATION<br>MAIN BUILDING ENTRANCES                              |
| C3<br>C3E             | LED<br>3000K<br>2000LM<br><br>10W          | LITHONIA LIGHTING<br>(OR APPROVED OTHER) | WDGE1 P2 SERIES                       | TYPE :EXTERIOR WALL PACK<br>MOUNTING :SURFACE (+8"-0")<br>HOUSING :ALUMINUM<br>LENS/REFL :ACRYLIC<br>VOLTAGE :MVOLT<br>BALLAST :LED DRIVER                        | C3E TO BE PROVIDED WITH EMERGENCY<br>BATTERY BACK UP.<br>FLANGE TRIM/BRONZE FINISH<br>TYPE VW DISTRIBUTION<br>WET LOCATION LISTED<br>BUILDING MAINTENANCE COURTYARD      |
| C4S                   | (2) LED A19<br>3000K<br><br>10W            | SEA GULL LIGHTING<br>(NO SUBSTITUTE)     | 8313802-12                            | TYPE :EXTERIOR WALL SCONCE<br>MOUNTING :SURFACE (+8"-0")<br>HOUSING :ALUMINUM<br>LENS/REFL :NA<br>VOLTAGE :120V<br>BALLAST :INTEGRAL LED DRIVER                   | C4E TO BE PROVIDED WITH REMOTE<br>EMERGENCY BATTERY BACK UP.<br>BLACK FINISH<br><br>WET LOCATION LISTED<br>BUILDING SERVICE ENTRANCES                                    |
| F2                    | LED<br>3000K<br>550LM<br><br>20W           | KICHLER<br>(NO SUBSTITUTE)               | 49298BKLED                            | TYPE :EXTERIOR WALL SCONCE<br>MOUNTING :SURFACE (+8"-0")<br>HOUSING :ALUMINUM<br>LENS/REFL :ACRYLIC<br>VOLTAGE :120V<br>BALLAST :LED DRIVER                       | ADA COMPLIANT.<br>VERIFY MOUNTING HEIGHT.<br>BLACK FINISH<br><br>WET LOCATION LISTED<br>MAIN BUILDING ENTRANCE                                                           |
| D1                    | LED<br>1020LM/FT<br>3000K<br><br>(6.7W/FT) | KELVIX LIGHTING<br>(OR APPROVED EQUAL)   | VT35K-WR-24V SERIES<br>CH-011 CHANNEL | TYPE :LINEAR LED TAPE (16"-6")<br>MOUNTING :SURFACE (IN CHANNEL)<br>HOUSING :ALUMINUM<br>LENS/REFL :ACRYLIC/FROSTED<br>VOLTAGE :24 VOLT DC<br>BALLAST :LED DRIVER | VERIFY EXACT LENGTHS W/ARCHITECT<br>CHANNEL TYPE PER ARCHITECT<br>PROVIDE APPROPRIATE TRANSFORMER(S)<br>AND ACCESSORIES FOR EACH LOCATION.<br><br>UL LISTED WET LOCATION |
| L1<br><div>Ⓢ</div>    | LED<br>3000K<br>1620LM<br><br>18W          | LIGHTOLOGY<br>(OR APPROVED OTHER)        | RLM801450                             | TYPE :18" DECORATIVE PENDANT<br>MOUNTING :SUSPENDED<br>HOUSING :<br>LENS/REFL :GLASS GLOBE<br>VOLTAGE :120V<br>BALLAST :INTEGRAL LED DRIVER                       | MATTE BLACK FINISH<br>PROVIDE WITH ADJUSTABLE<br>SUSPENSION CORD.<br><br>COMMUNITY ROOM                                                                                  |
| L2                    | LED<br>3000K<br>35710LM<br><br>42W         | LIGHTOLOGY<br>(OR APPROVED OTHER)        | HAMPTON SERIES                        | TYPE :20.9" DIA CEILING LIGHT<br>MOUNTING :SURFACE<br>HOUSING :METAL<br>LENS/REFL :ACRYLIC<br>VOLTAGE :120V<br>BALLAST :INTEGRAL LED DRIVER                       | MATTE BLACK FINISH<br><br>AMMENITY, AMENITY KITCHEN                                                                                                                      |
| L3<br>L3E             | LED<br>3000K<br>2000LM<br><br>22W          | ALCON LIGHTING<br>(OR APPROVED OTHER)    | 11170-12 SERIES                       | TYPE :12" DIA CEILING LIGHT<br>MOUNTING :SURFACE<br>HOUSING :METAL<br>LENS/REFL :ACRYLIC<br>VOLTAGE :120V<br>BALLAST :INTEGRAL LED DRIVER                         | FINISH PER ARCHITECT<br>L3E PROVIDE WITH REMOTE<br>EMERGENCY BATTERY BACK UP<br><br>CORRIDORS, RESTRM                                                                    |
| L4                    | LED<br>3000K<br>2621LM<br><br>28W          | LANDSCAPE FORMS<br>(OR APPROVED OTHER)   | TUMBLER SERIES                        | TYPE :CANTERNARY (STRING) LIGHTS<br>MOUNTING :SUSPENDED (12FT)<br>HOUSING :METAL<br>LENS/REFL :ACRYLIC<br>VOLTAGE :120V<br>BALLAST :INTEGRAL LED DRIVER           | MATTE BLACK FINISH<br>QUANTITY OF FIXTURES AS SHOWN<br>ON LIGHTING PLANS<br><br>COURTYARD                                                                                |

| LIGHTING FIXTURE LIST |                                          |                                                 |                                     |                                                                                                                                                                |                                                  |
|-----------------------|------------------------------------------|-------------------------------------------------|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|
| TYPE                  | LAMP                                     | MANUFACTURER                                    | CATALOG NUMBER                      | DESCRIPTION                                                                                                                                                    | OPTIONS                                          |
| U1                    | LED<br>700LM/90CRI<br>3000K<br><br>(10W) | UGHTQUIER<br>(OR APPROVED EQUAL)                | SD5R SERIES                         | TYPE :5" DIA. DOWNLIGHT<br>MOUNTING :SURFACE (J-BOX)<br>HOUSING :ALUMINUM<br>LENS/REFL :MOLDED POLYMER<br>VOLTAGE :MVOLT<br>BALLAST :LED DRIVER (0-10 DIMMING) | WHITE FINISH<br><br>UNIT KITCHEN, HALL, BATHROOM |
| U3                    | LED<br>1300LM/90CRI<br>3000K<br><br>16W  | DESIGN CLASSICS<br>(OR APPROVED EQUAL)          | PRODUCT #646438<br>MODEL 1330-30-90 | TYPE :24" VANITY LIGHT<br>MOUNTING :SURFACE (+6" ABOVE MIRROR)<br>HOUSING :STEEL<br>LENS/REFL :ACRYLIC<br>VOLTAGE :120V<br>BALLAST :INTEGRAL DRIVER            | CHROME FINISH<br><br>UNIT BATHROOM               |
| U4                    | LED<br>2500lm<br>3000K<br><br>(36W)      | MAXIM LIGHTING<br>(OR APPROVED OTHER)           | WAFER SERIES<br>57746WTWT           | TYPE :4FT FLAT PANEL<br>MOUNTING :SURFACE<br>HOUSING :ALUMINUM<br>LENS/REFL :ACRYLIC<br>VOLTAGE :120V<br>BALLAST :LED DRIVER (0-10 DIMMING)                    | UNIT KITCHEN                                     |
| U5                    | LED<br>1200LM<br>3000K<br><br>(17W)      | PROGRESS LIGHTING<br>(OR APPROVED EQUAL)        | P3911 SERIES                        | TYPE :14" DIA. CEILING LIGHT<br>MOUNTING :SURFACE<br>HOUSING :STEEL<br>LENS/REFL :WHITE ACRYLIC<br>VOLTAGE :120V<br>BALLAST :LED DRIVER (0-10 DIMMING)         | WHITE FINISH<br><br>UNIT BEDROOM, LIVING ROOM    |
| X1<br>X2              | LED<br>(GREEN LETTERS)<br><br>(1.5W)     | LITHONIA<br>DMF LIGHTING<br>(OR APPROVED OTHER) | LE EL N SERIES<br>DLED500EM-G       | TYPE :EXIT SIGN<br>MOUNTING :UNIVERSAL<br>HOUSING :DIE-CAST ALUMINUM<br>LENS/REFL :SINGLE FACE/DUAL FACE<br>VOLTAGE :MVOLT<br>BALLAST :NICKLE CADMIUM BATTERY  | X1=SINGLE SIDE<br>X2=DOUBLE SIDE                 |
| X3                    | LED<br>(GREEN LETTERS)<br><br>(1.5W)     | LITHONIA<br>(OR APPROVED OTHER)                 | WLTE EL SERIES                      | TYPE :EXIT SIGN<br>MOUNTING :UNIVERSAL<br>HOUSING :DIE-CAST ALUMINUM<br>LENS/REFL :SINGLE FACE<br>VOLTAGE :MVOLT<br>BALLAST :NICKLE CADMIUM BATTERY            | FINISH PER ARCHITECT<br>LISTED WET LOCATION      |

| MECHANICAL EQUIPMENT SCHEDULE |                                |         |       |    |          |         |      |     |                   |
|-------------------------------|--------------------------------|---------|-------|----|----------|---------|------|-----|-------------------|
| NO.                           | EQUIPMENT NAME                 | HP/KW   | VOLTS | PH | AMPS     | CONDUIT | WIRE | GND | CIRCUIT           |
| EF-1                          | EXHAUST FAN NO.1               | 38W     | 120   | 1  |          | 1/2"    | #12  | #12 | SEE UNIT PLANS    |
| EF-2                          | EXHAUST FAN NO.2               | 8.2A    | 120   | 1  |          | 1/2"    | #12  | #12 | SEE E3.01         |
| EF-3                          | EXHAUST FAN NO.3               | 7.7A    | 120   | 1  |          | 1/2"    | #12  | #12 | SEE E3.02         |
| EF-4                          | EXHAUST FAN NO.4               | 1/4HP   | 120   | 1  |          | 1/2"    | #12  | #12 | H1-34             |
| EF-5                          | EXHAUST FAN NO.5               | 1/10 HP | 120   | 1  |          | 1/2"    | #12  | #12 | SEE E3.01/NOTE 16 |
| EF-6                          | EXHAUST FAN NO.6               | 8.2A    | 120   | 1  |          | 1/2"    | #12  | #12 |                   |
| EH-1                          | ELECT HEATER NO.1              | 1.5KW   | 120V  | 1  |          | 1/2"    | #12  | #12 | SEE UNIT PLANS    |
| EH-2                          | ELECT HEATER NO.2              | 500W    | 120   | 1  |          | 1/2"    | #12  | #12 | M1-5              |
| EH-3                          | ELECT HEATER NO.3              | 3.0KW   | 208   | 1  |          | 1/2"    | #12  | #12 | M1-1,3            |
| EH-4                          | ELECT HEATER NO.4              | 1.5KW   | 120V  | 1  |          | 1/2"    | #12  | #12 | M1-26             |
| IHP-1                         | MINI SPLIT SYST NO.1 (INDOOR)  | (A & B) |       |    |          |         |      |     |                   |
| OHP-1                         | MINI SPLIT SYST NO.1 (OUTDOOR) |         | 208   | 1  | 42.0 MCA | 3/4"    | #6   | #10 | SEE UNIT PLANS    |
| IHP-2                         | MINI SPLIT SYST NO.2 (INDOOR)  |         |       |    |          |         |      |     |                   |
| OHP-2                         | MINI SPLIT SYST NO.2 (OUTDOOR) |         | 208   | 1  | 42.0 MCA | 3/4"    | #6   | #10 | M1-21,23          |
| IHP-3                         | MINI SPLIT SYST NO.3 (INDOOR)  | (A & B) |       |    |          |         |      |     |                   |
| OHP-3                         | MINI SPLIT SYST NO.3 (OUTDOOR) |         | 208   | 1  | 42.0 MCA | 3/4"    | #6   | #10 | M1-25,27          |
| IHP-4                         | MINI SPLIT SYST NO.4 (INDOOR)  |         |       |    |          |         |      |     |                   |
| OHP-4                         | MINI SPLIT SYST NO.4 (OUTDOOR) |         | 208   | 1  | 42.0 MCA | 3/4"    | #6   | #10 | L1-13,15          |
| RTU-1                         | AIR HANDLING UNIT NO.1         |         | 208   | 3  | 30.0 MCA | 3/4'    | #6   | #10 | M2-1,3,5          |
| RTU-2                         | AIR HANDLING UNIT NO.2         |         | 208   | 3  | 24.0 MCA | 1/2'    | #10  | #10 | M2-7,9,11         |
| RTU-3                         | AIR HANDLING UNIT NO.3         |         | 208   | 3  | 24.0 MCA | 1/2'    | #10  | #10 | M2-13,15,17       |
| SP-1                          | SUMP PUMP NO.1                 | 1/2HP   | 120   | 1  |          | 1/2"    | #12  | #12 | M1-8              |
| SP-2                          | SUMP PUMP NO.2                 | 1/2HP   | 120   | 1  |          | 1/2"    | #12  | #12 | M1-10             |
| RF-1                          | RADON FAN NO.1                 | 53W     | 120   | 1  |          | 1/2"    | #12  | #12 | L1- 7 & 8         |
| RP-1                          | RECIRC PUMP NO.1               | 1/2HP   | 120   | 1  |          | 1/2"    | #12  | #12 | M1-14             |
| BP-1                          | BOOSTER PUMP NO.1              | (2) 5HP | 208   | 3  | 28.8 EA. | 1"      | #4   | #10 | M1-16,18,20       |
| WH-1                          | WATER HEATER NO.1 (GAS)        |         | 120   | 1  |          | 1/2"    | #12  | #12 | M1-12 (PC)        |
| WH-2                          | WATER HEATER NO.2 (GAS)        |         | 120   | 1  |          | 1/2"    | #12  | #12 | M1-12 (PC)        |

GENERAL LIGHTING NOTES:

- A. ALL LIGHT FIXTURES SHALL HAVE ENERGY EFFICIENT LAMPING AND BALLASTS.
- B. LIGHT FIXTURES FOR LIVING UNITS SHALL BE "ENERGY STAR" RATED.
- C. VERIFY ALL FIXTURE FINISHES WITH ARCHITECT PRIOR TO BID.
- D. VERIFY ALL FIXTURE MOUNTING HEIGHTS WITH ARCHITECT PRIOR TO BID.
- E. VERIFY ALL FIXTURE LOCATIONS WITH ARCHITECT PRIOR TO ROUGH IN.
- F. ALL INTERIOR LIGHTING SHALL BE 3000 KELVIN UNLESS OTHERWISE NOTED.
- G. ALL PRODUCT SUBSTITUTIONS AND VALUE ENGINEERING SHALL BE SUBMITTED DURING BID PHASE, SHALL MEET DESIGN INTENT AND IS SUBJECT TO OWNER APPROVAL.
- H. EGRESS LIGHTING SHALL BE PROVIDED WITH EMERGENCY BATTERY BACKUP, EITHER INTEGRAL OR REMOTE, AS REQUIRED. EGRESS LIGHTING SHALL BE PROVIDED TO MEET MINIMUM LIGHT LEVELS AS DESCRIBED PER OREGON STRUCTURAL SPECIALTY CODE 1006.3.
- I. BUILDING MOUNTED LIGHT FIXTURES SHALL BE CONTROLLED VIA PHOTOCELL AND SHALL ACT AS EGRESS LIGHTING IN THE EVENT OF POWER FAILURE.

KEYED LIGHTING NOTES:

1. PROVIDE REMOTE EMERGENCY BATTERY PACK FOR THE FIXTURES IN THE MAIN LOBBY.

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.

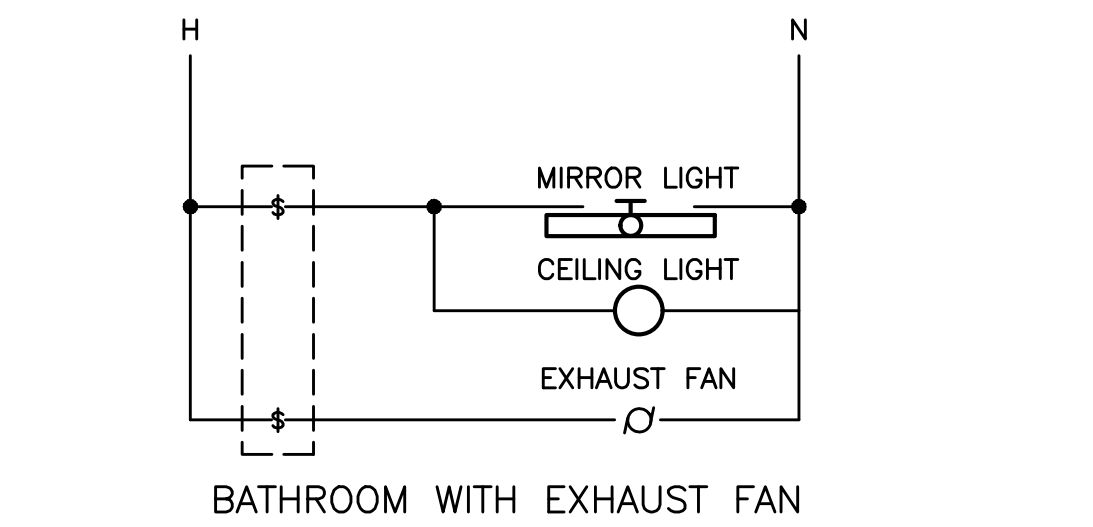
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NORTHWEST HOUSING ALTERNATIVES  
CONFORMANCE SET

ELECTRICAL  
SCHEDULES & DETAILS

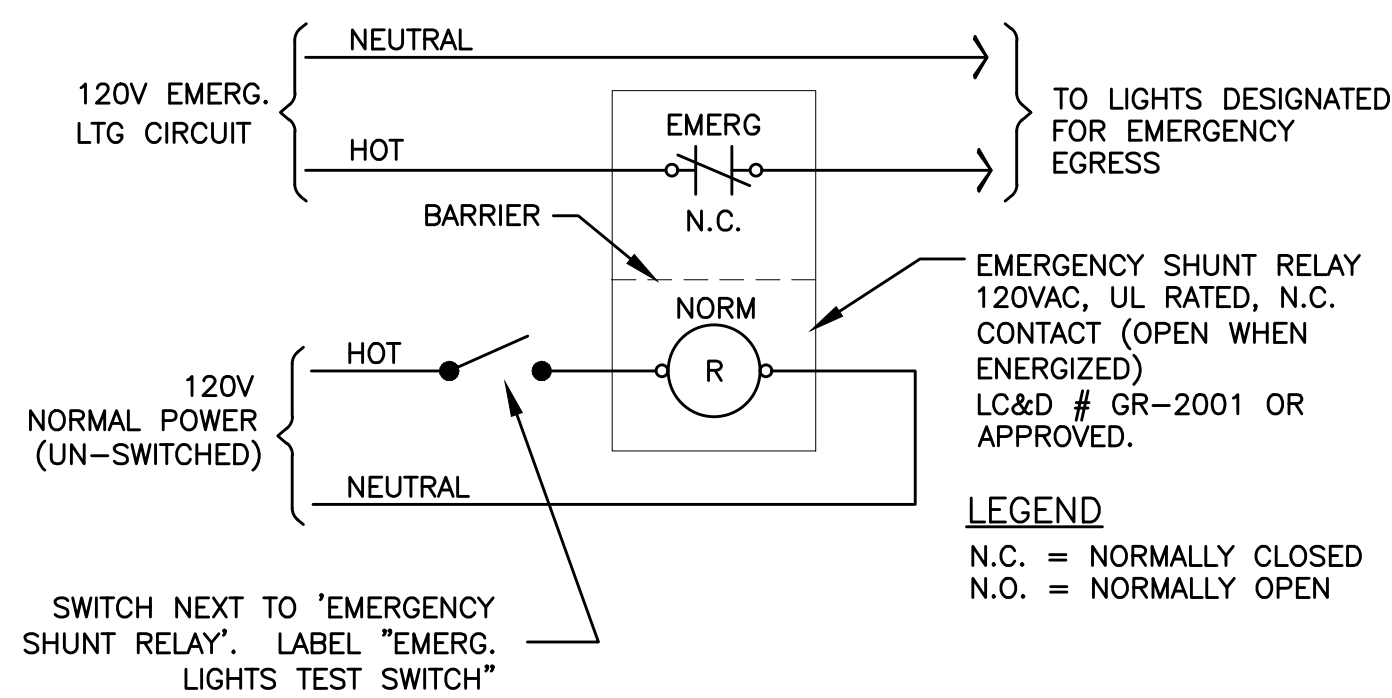
PROJECT NO.  
17004

05/28/2021

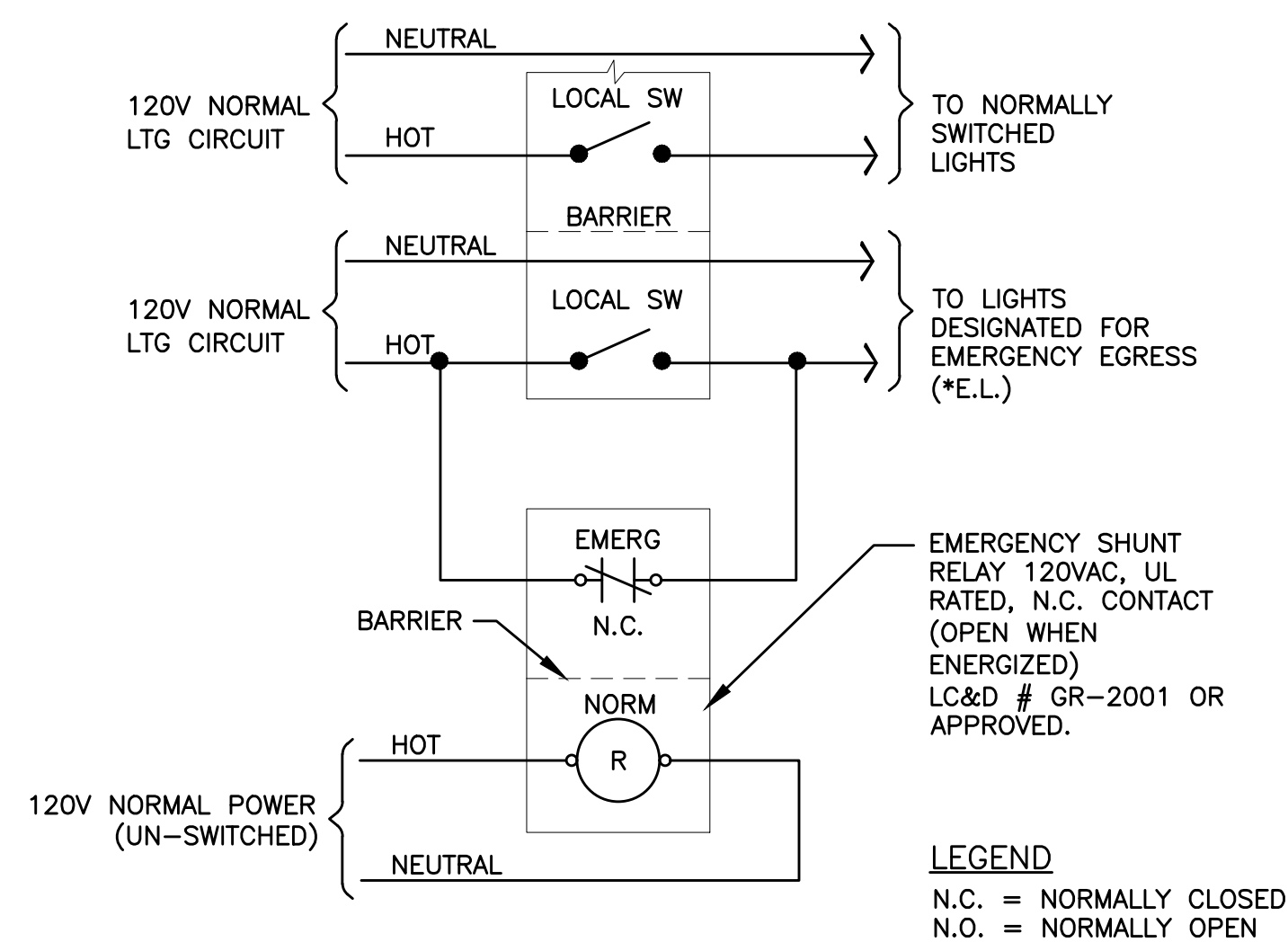
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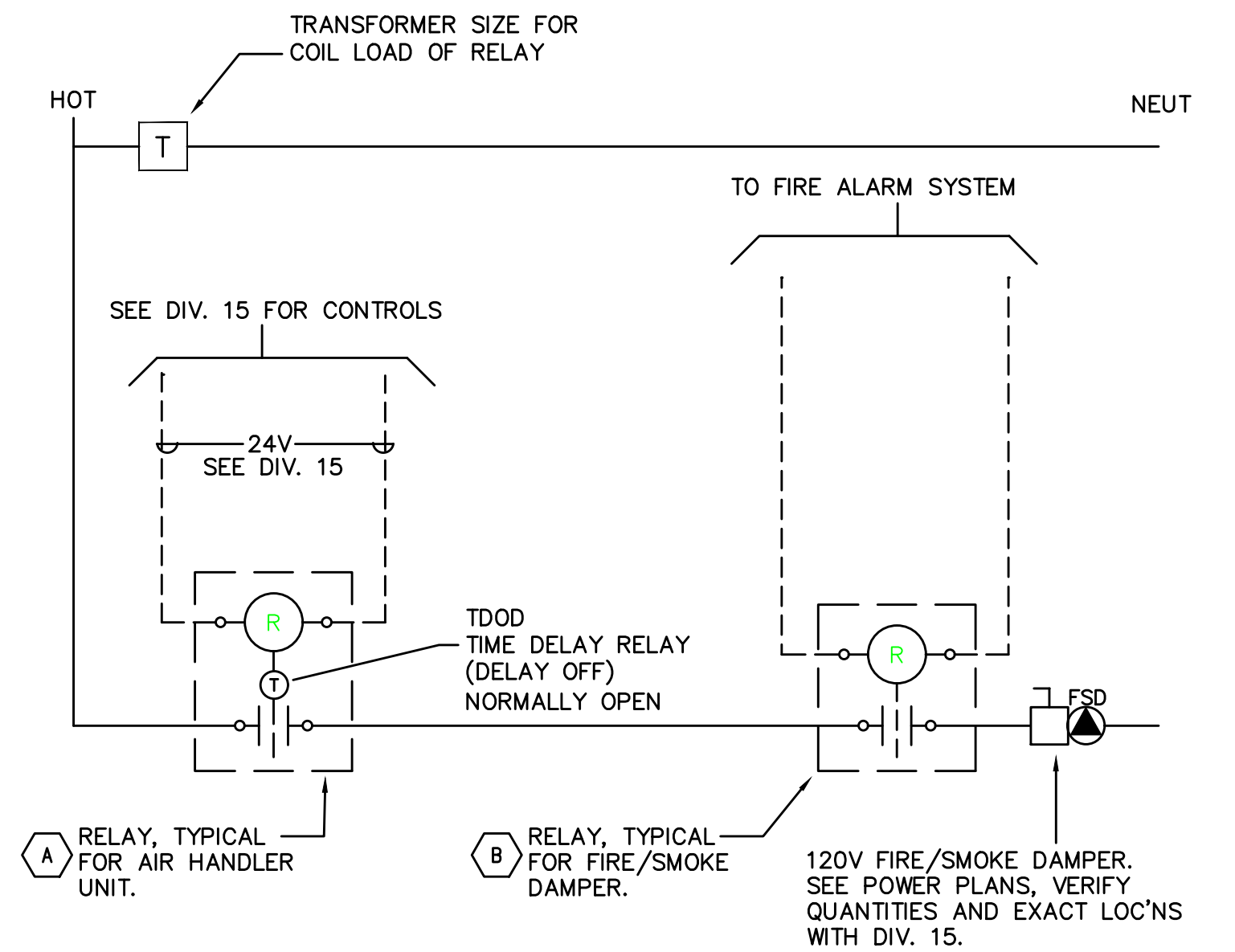
1 BATHROOM SWITCHING DIAGRAM – TYPICAL  
E1.14 NO SCALE



2 EMERGENCY EGRESS LIGHTING – UNSWITCHED  
E1.14 NO SCALE



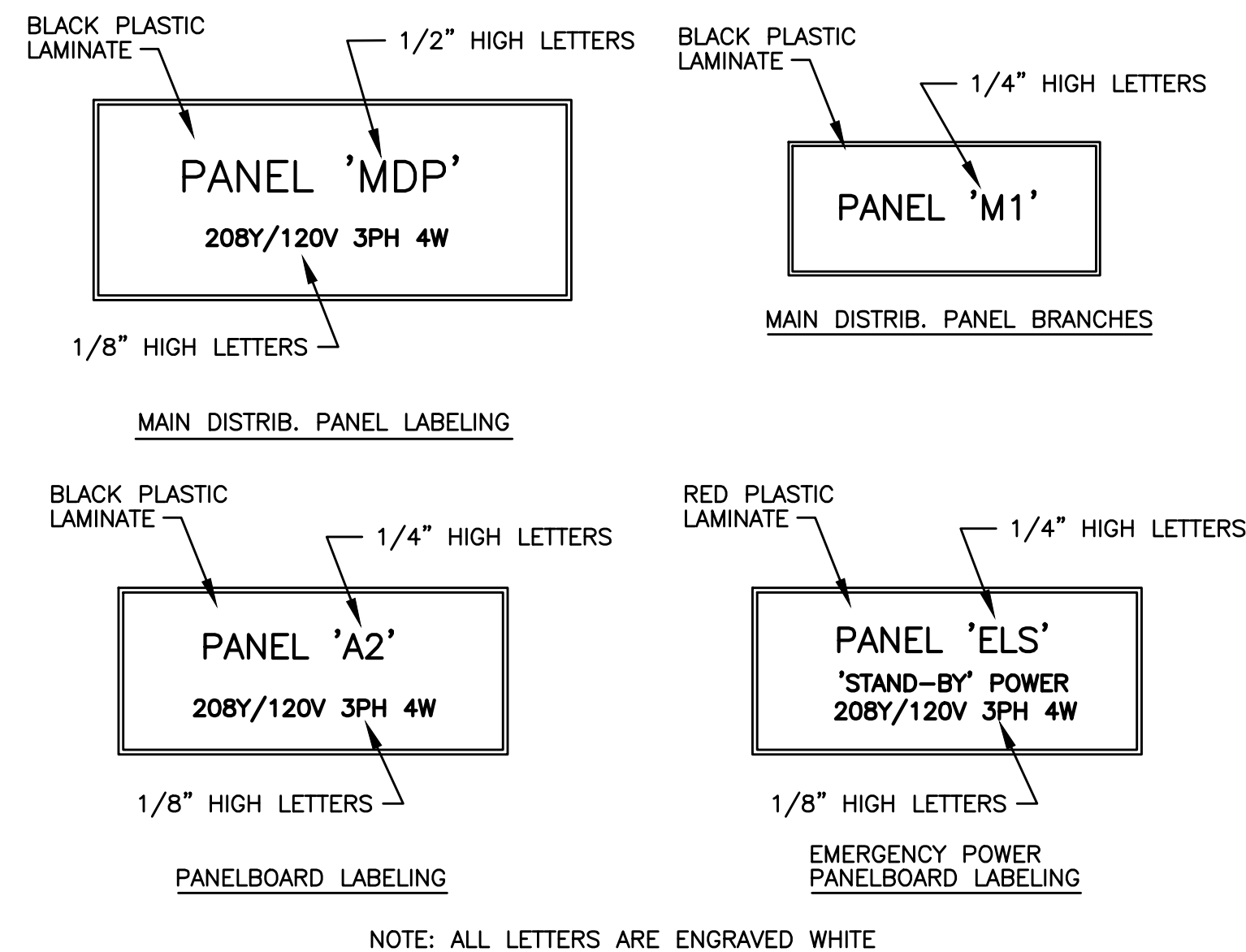
3 EMERGENCY EGRESS LIGHTING – SWITCHED  
E1.14 NO SCALE



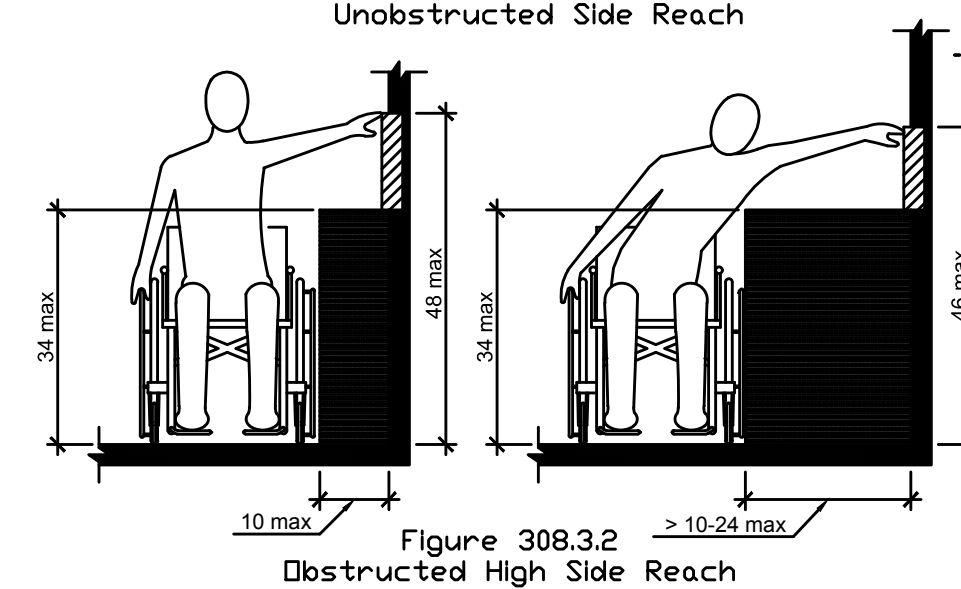
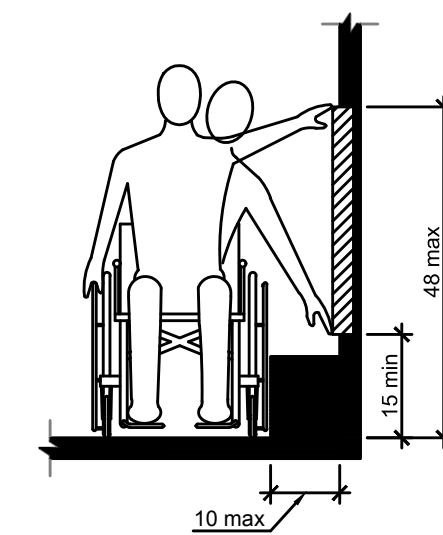
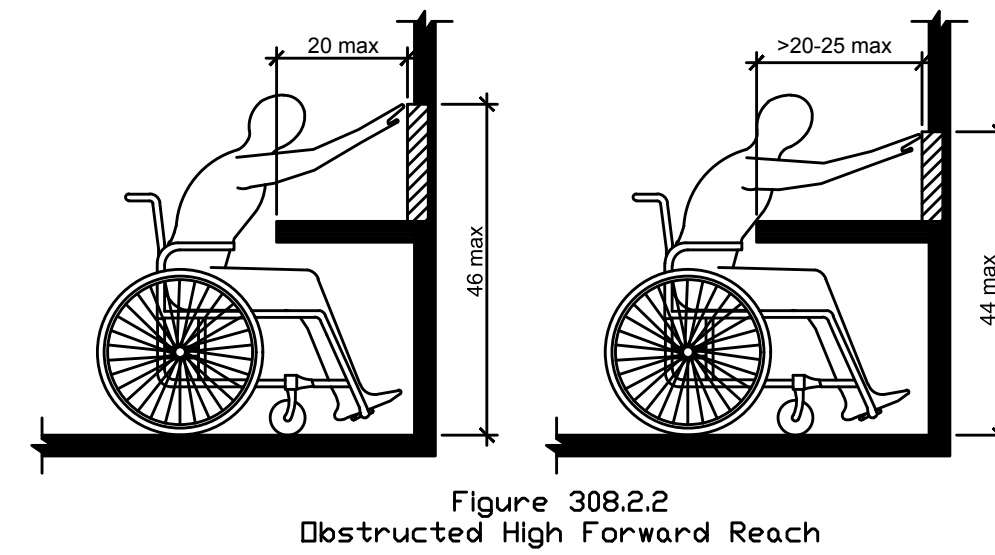
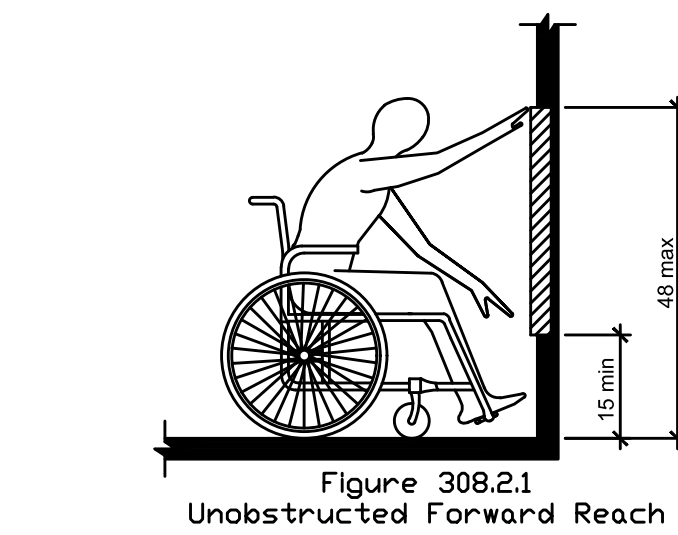
5 SMOKE/FIRE DAMPER CONTROL DIAGRAM  
E1.14 NO SCALE

#### ADDRESSABLE DETECTOR CONTROL

- A RELAY TO BE "NORMALLY OPEN". TDOD (TIME DELAY ON DE-ENERGIZE) SET FOR 15 SECONDS. RELAY TO CLOSE UPON SIGNAL FROM HVAC CONTROL SYSTEM (ALLOWS DAMPER TO OPEN); PROVIDE WITH 20A CONTACTS AND COIL VOLTAGE AS REQ'D BY HVAC CONTROL SYSTEM. MOUNT RELAY IN NEMA 1 ENCLOSURE ADJACENT TO HVAC CONTROL PANEL.
- B 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 SMOKE DETECTOR ACTIVATION AND FIRE/SMOKE DAMPER SHUTDOWN. PROVIDE WITH 20A CONTACTS AND COIL VOLTAGE AS REQ'D BY FIRE ALARM SYSTEM. MOUNT RELAY IN NEMA 1 ENCLOSURE ADJACENT TO FIRE/SMOKE DAMPER.



6 SWITCHBOARD/PANEL LABELING DETAIL  
E1.14 NO SCALE



7 ADA REACH REQUIREMENTS  
E1.14 N.T.S.

#### 308.2 Forward Reach.

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

**308.2.2 Obstructed High Reach.** Where a high forward reach is over an obstruction, the clear floor or ground space shall extend beneath the element for a distance not less than the required reach depth over the obstruction. The high forward reach shall be 48" maximum where the reach depth is 20" maximum. Where the reach depth exceeds 20", the high forward reach shall be 44" maximum and the reach depth shall be 25" maximum.

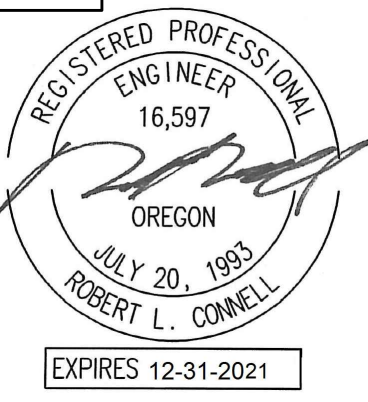
#### 308.3 Side Reach.

**308.3.1 Unobstructed.** Where a clear floor or ground space allows a parallel approach to 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 ground.

**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 parallel approach to an object and the high side reach is over an obstruction, the height of the obstruction shall be 34" maximum and the depth of the obstruction shall 24" 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 46" maximum for a reach depth of 24" maximum.

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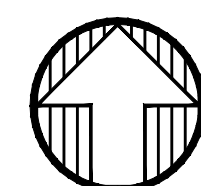
CONFORMANCE SET

#### ELECTRICAL DETAILS

PROJECT NO.  
17004  
05/28/2021

#### REVISIONS:

REVISIONS: A



1. CONTINUE CIRCUIT UP THROUGH THE STAIRWELL.
2. CORRIDOR EGRESS LIGHTS SHALL BE ON 24/7. ALL OTHER CORRIDOR FIXTURES TO BE CIRCUITED VIA MECHANICAL TIME CLOCK AND SET TO REDUCE THE LIGHT LEVELS DURING PERIODS OF LOW ACTIVITY (EG. 12AM TO 4AM). CONSULT OWNER FOR PREFERRED TIME CLOCK SETTINGS. LOCATE TIME CLOCK IN ELECTRICAL ROOM.
3. LOBBY PENDANT LIGHTS SHALL BE ON 24/7 AND CIRCUITED VIA MECHANICAL TIME CLOCK, SET TO DIM THE LIGHT LEVELS BY 50% DURING PERIODS OF LOW ACTIVITY (EG. 12AM TO 4AM). CONSULT OWNER FOR PREFERRED TIME CLOCK SETTINGS. LOCATE TIME CLOCK IN ELECTRICAL ROOM.
4. EXTEND CIRCUIT TO POWER CONNECTION POINT FOR LOW VOLTAGE LIGHTING, IF REQUIRED. CONSULT LANDSCAPE AND/OR ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION.
5. PROVIDE ONE WEATHER PROOF 20A POWER CONNECTION MOUNTED AT 12FT AFF. FOR CANTERINARY LIGHTS. CIRCUIT AS INDICATED VIA PHOTOCELL OR MECHANICAL TIME CLOCK. CONSULT ARCHITECT FOR PREFERRED CONTROL TYPE AND EXACT MOUNTING HEIGHT.
6. CIRCUIT AS INDICATED VIA PHOTOCELL OR MECHANICAL TIME CLOCK. CONSULT ARCHITECT FOR PREFERRED CONTROL TYPE.
7. PROVIDE FIXTURE WITH A REMOTE BATTERY BACKUP FOR EMERGENCY EGRESS ILLUMINATION. LOCATE REMOTE DEVICE ABOVE CEILING, SO AS NOT TO BE IN CONFLICT WITH OTHER DEVICES AND/OR TRADES.
8. LIGHT FIXTURE TO BE CENTERED ABOVE WINDOW.

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## NORTHWEST HOUSING ALTERNATIVES

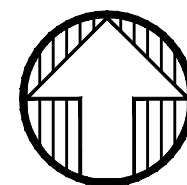
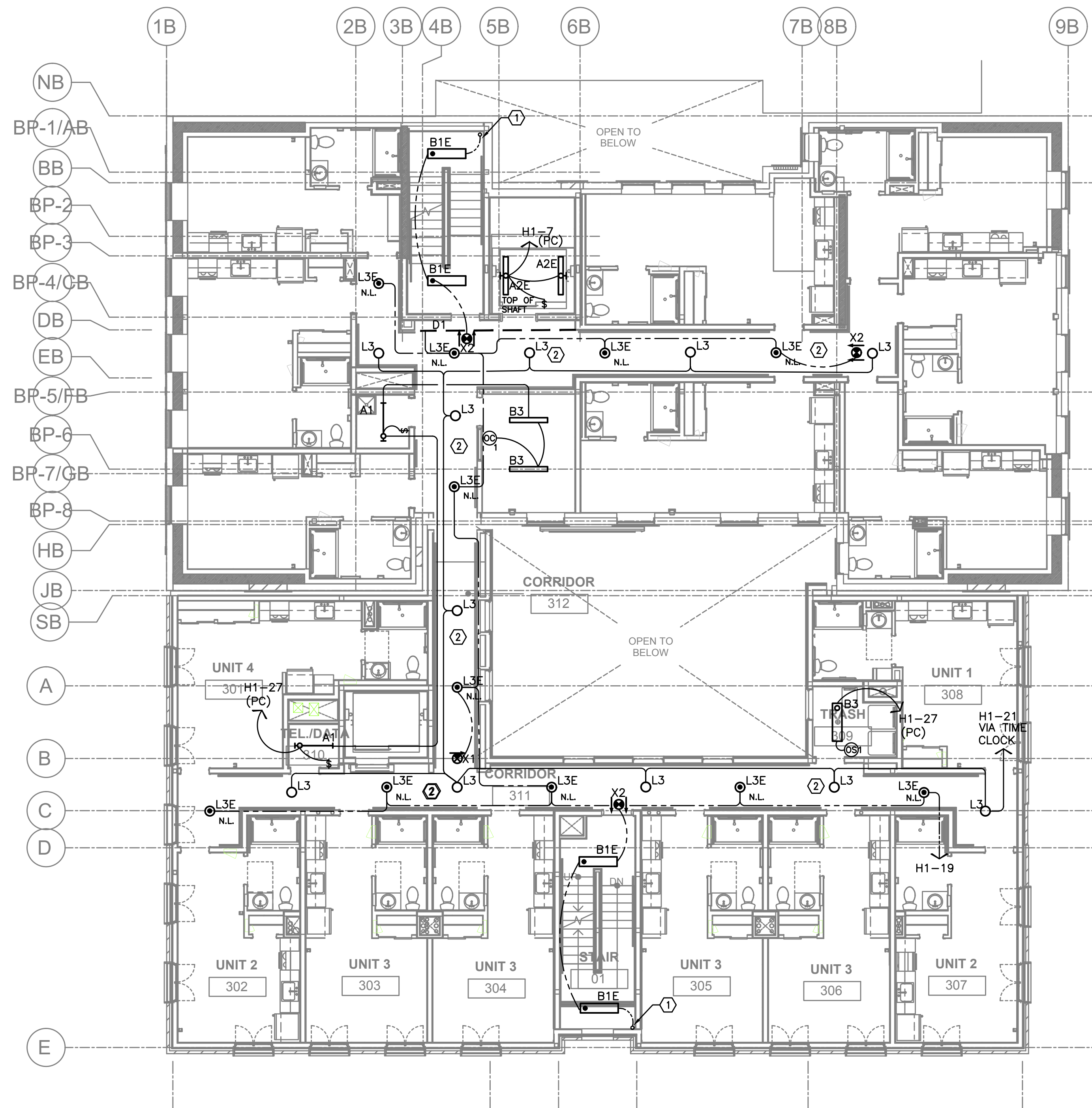
## CONFORMANCE SET

FIRST FLOOR  
LIGHTING PLAN

PROJECT NO.  
17004  
05/28/2021

REVISIONS:  $\triangle$  #





1 THIRD FLOOR LIGHTING PLAN  
E2.03 SCALE: 1/8" = 1'-0"

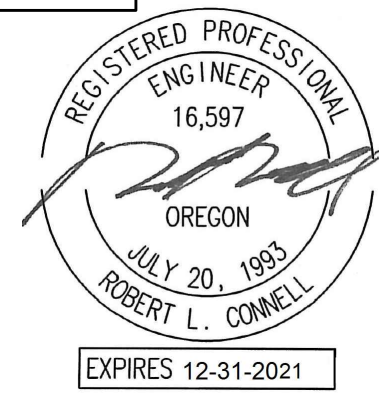
## GENERAL LIGHTING NOTES:

- 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.
- THE ELECTRICAL CONTRACTOR SHALL REFER TO THE ARCHITECTURAL DRAWINGS FOR ALL MOUNTING HEIGHTS AND FINISHES OF DEVICES AND FIXTURES.
- REFER TO ENLARGED TYPICAL UNIT PLANS (E4 SERIES SHEETS) FOR TYPICAL POWER & LIGHTING LAYOUTS FOR THE RESIDENTIAL UNITS.
- REFER TO SHEET E1.14 FOR LIGHT FIXTURE SCHEDULE.
- THE CONTRACTOR SHALL CONSULT THE ARCHITECT AND/OR INTERIOR DESIGNER FOR THE EXACT LOCATION OF ALL LIGHT FIXTURES PRIOR TO THE START OF ANY ROUGH IN WORK.
- OCCUPANCY SENSORS SHALL BE FIELD ADJUSTED TO ENSURE COVERAGE AND PROPER CONTROL.
- CORRIDOR LIGHTING TO BE CONSTANT "ON" AND PROVIDED WITH LOCAL MANUAL OVERRIDE SWITCHES FOR MAINTENANCE. ROUTE CORRIDOR LIGHTING VIA TIME CLOCK TO REDUCE LIGHT LEVELS BY 50% DURING PERIODS OF LOW ACTIVITY (EG. MIDNIGHT TO 4AM). REFER TO SHEET E1.15 FOR SWITCH WIRING DIAGRAMS.
- ALL EGRESS FIXTURES SHALL BE WIRED SUCH THAT IN THE EVENT OF A POWER FAILURE, ALL LIGHTS WILL AUTOMATICALLY RETURN TO FULL POWER REGARDLESS OF SWITCH POSITION. REFER TO SWITCHING DETAILS ON SHEET E1.15.

## KEYED NOTES:

- CONTINUE CIRCUIT UP THROUGH THE STAIRWELL.
- CORRIDOR EGRESS LIGHTS SHALL BE ON 24/7. ALL OTHER CORRIDOR FIXTURES TO BE CIRCUITED VIA MECHANICAL TIME CLOCK AND SET TO REDUCE THE LIGHT LEVELS DURING PERIODS OF LOW ACTIVITY (EG. 12AM TO 4AM). CONSULT OWNER FOR PREFERRED TIME CLOCK SETTINGS. LOCATE TIME CLOCK IN ELECTRICAL ROOM.
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- EXTEND CIRCUIT TO POWER CONNECTION POINT FOR LOW VOLTAGE LIGHTING, IF REQUIRED. CONSULT LANDSCAPE AND/OR ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION.
- PROVIDE ONE WEATHER PROOF 20A POWER CONNECTION MOUNTED AT 12FT AFF, FOR CANTERNARY LIGHTS. CIRCUIT AS INDICATED VIA PHOTOCELL OR MECHANICAL TIME CLOCK. CONSULT ARCHITECT FOR PREFERRED CONTROL TYPE AND EXACT MOUNTING HEIGHT.
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- LIGHT FIXTURE TO BE CENTERED ABOVE WINDOW.

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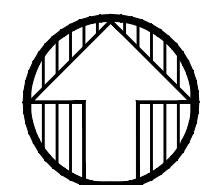
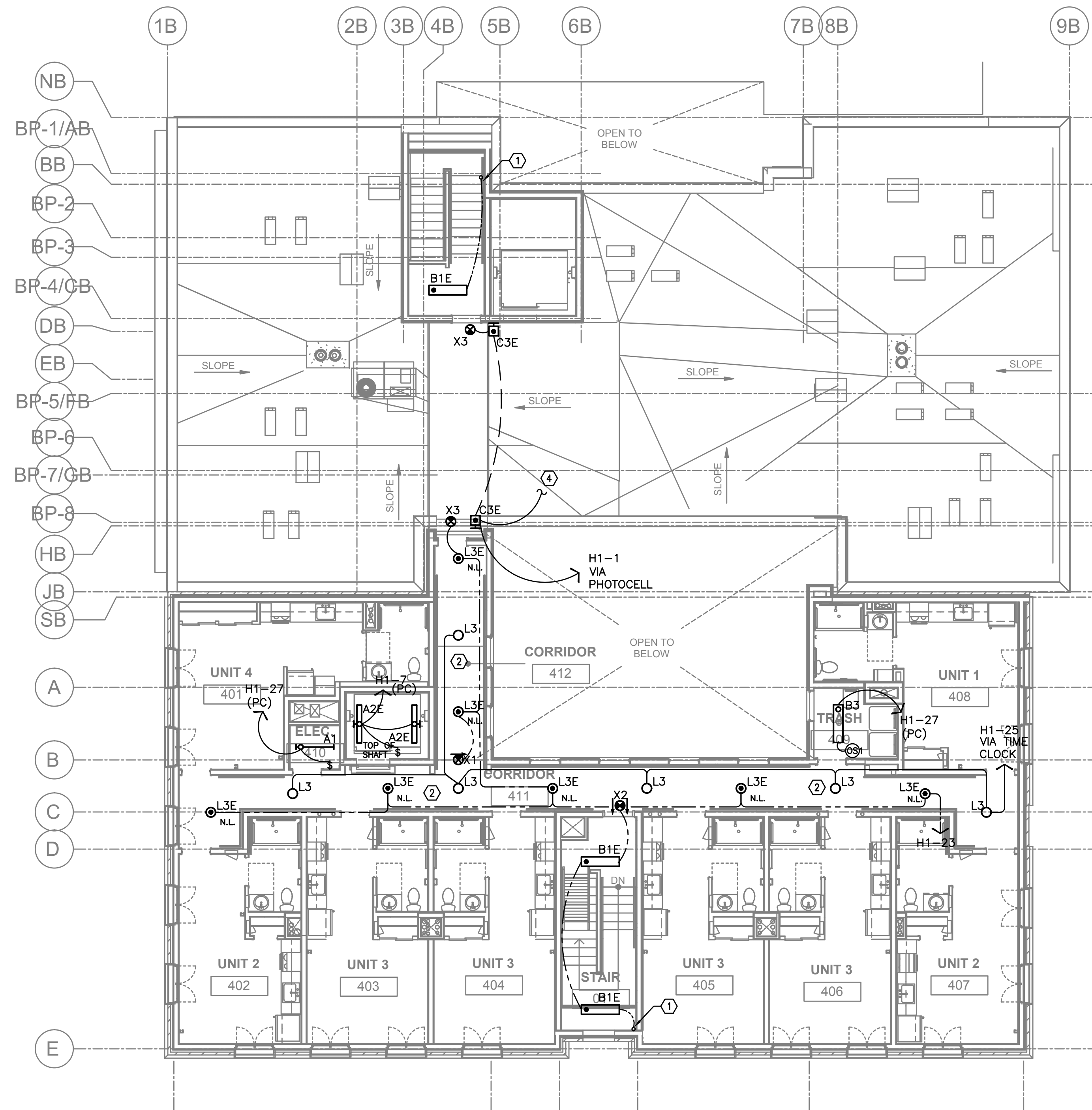
CONFORMANCE SET

THIRD FLOOR  
LIGHTING PLAN

PROJECT NO.  
17004  
05/28/2021

REVISIONS:

E2.03



1 FOURTH FLOOR LIGHTING PLAN  
E2.04 SCALE: 1/8" = 1'-0"

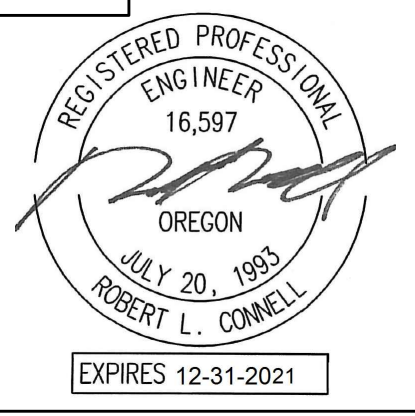
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### KEYED NOTES:

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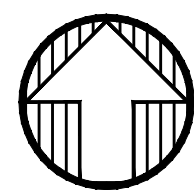
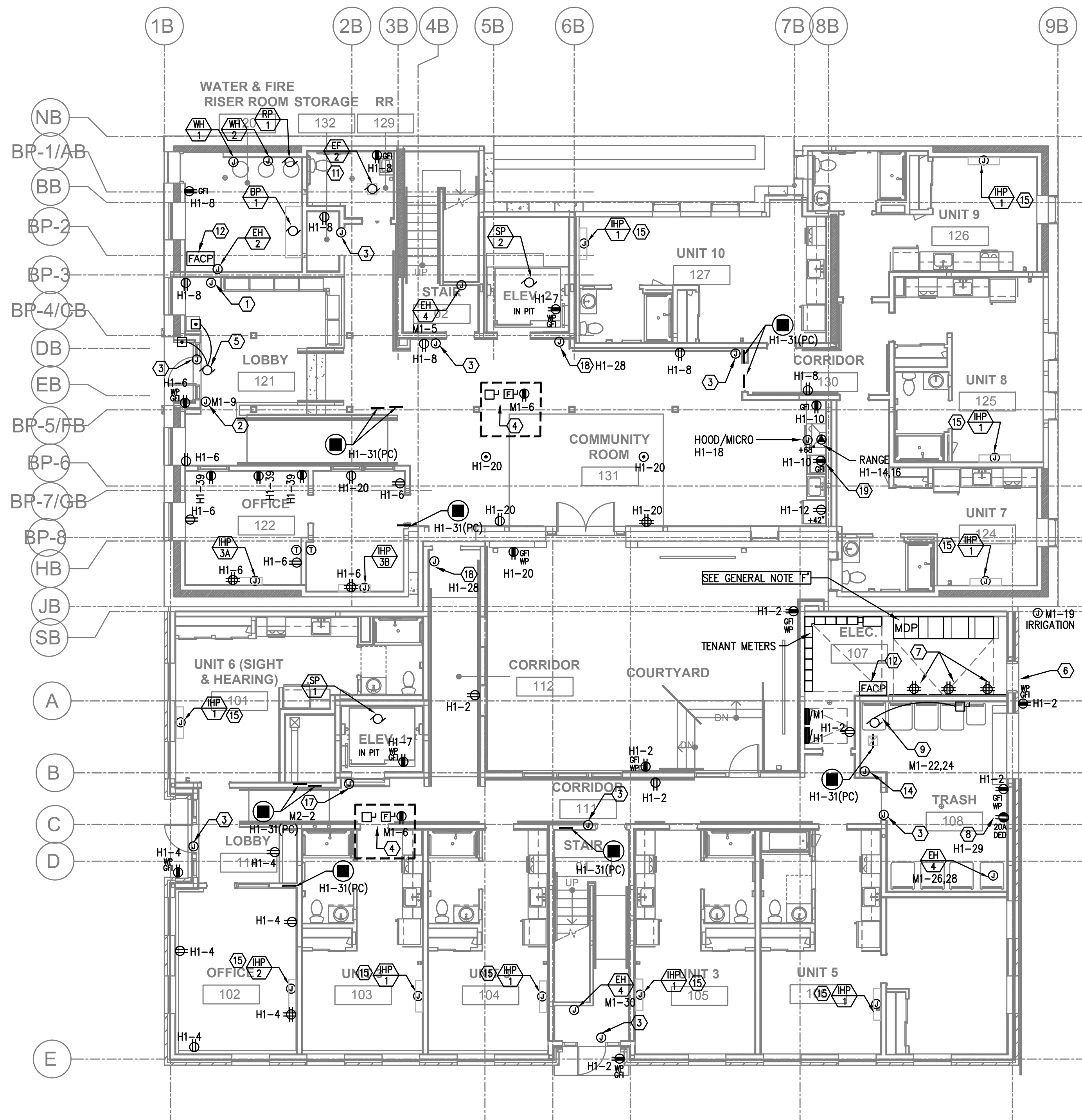
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FOURTH FLOOR  
LIGHTING PLAN  
PROJECT NO.  
17004  
05/28/2021  
REVISIONS: A



1 FIRST FLOOR POWER PLAN  
SCALE: 1/8" = 1'-0"

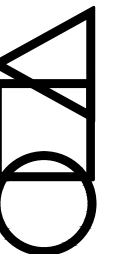
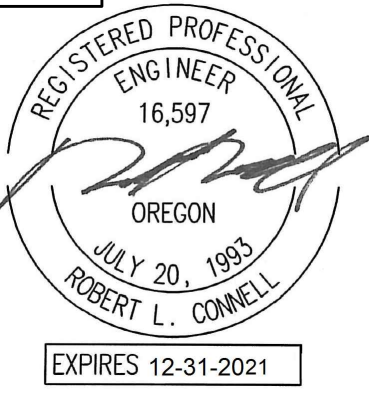
#### GENERAL POWER NOTES:

- ALL PLANS ARE CONSIDERED DIAGRAMMATICAL, THEREFORE ALL EQUIPMENT SIZES AND DEVICE LOCATIONS ARE APPROXIMATE AND SUBJECT TO FIELD CONDITIONS AND PRODUCT APPROVAL.
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**NORTHWEST HOUSING ALTERNATIVES**

**CONFORMANCE SET**

FIRST FLOOR  
POWER PLAN

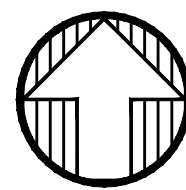
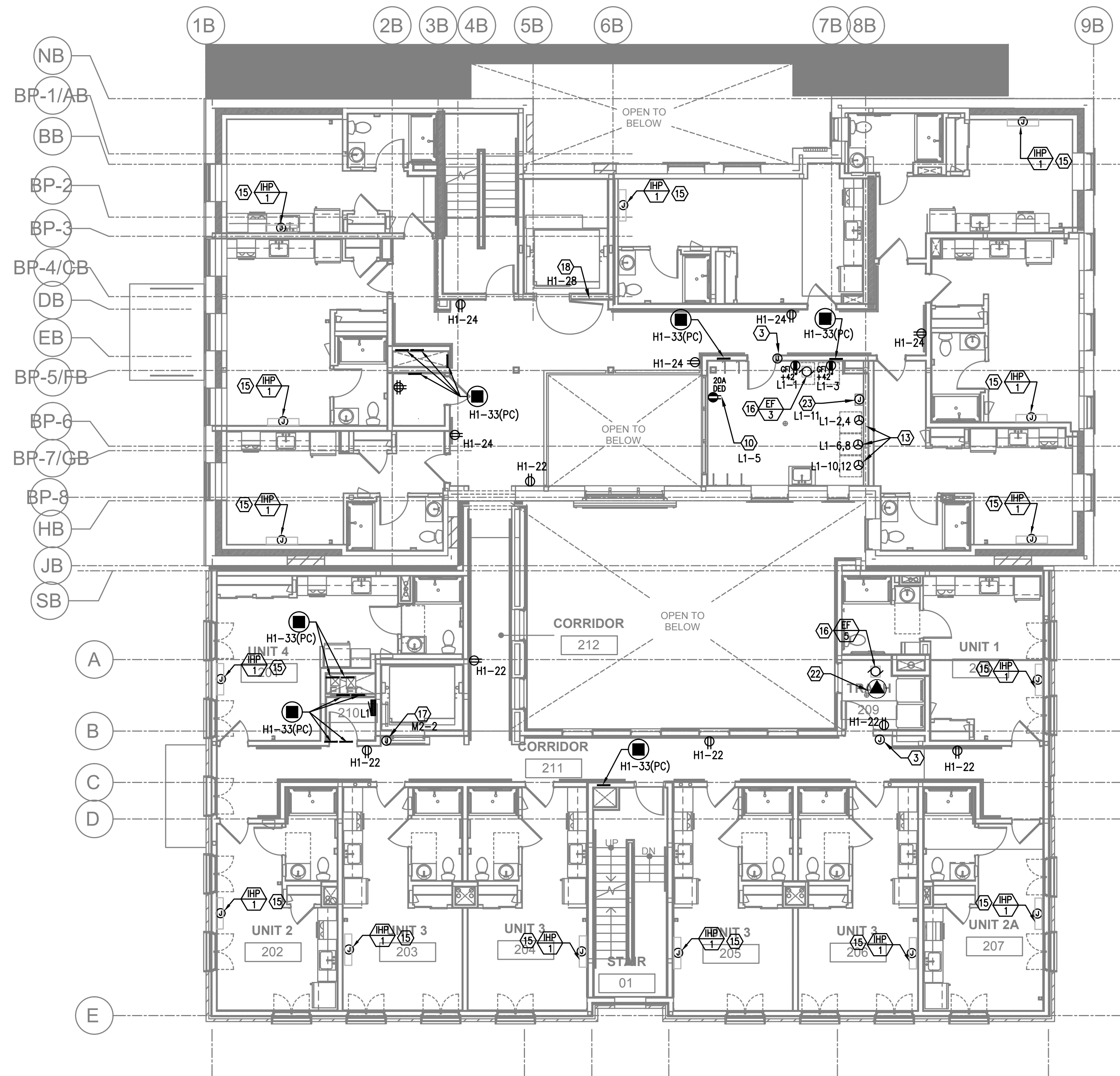
PROJECT NO.  
17004

05/28/2021

REVISIONS:

**E3.01**

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1 SECOND FLOOR POWER PLAN  
E3.02 SCALE: 1/8" = 1'-0"

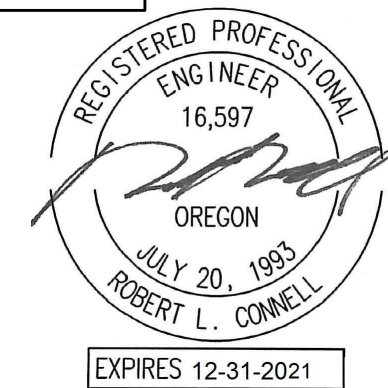
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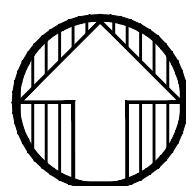
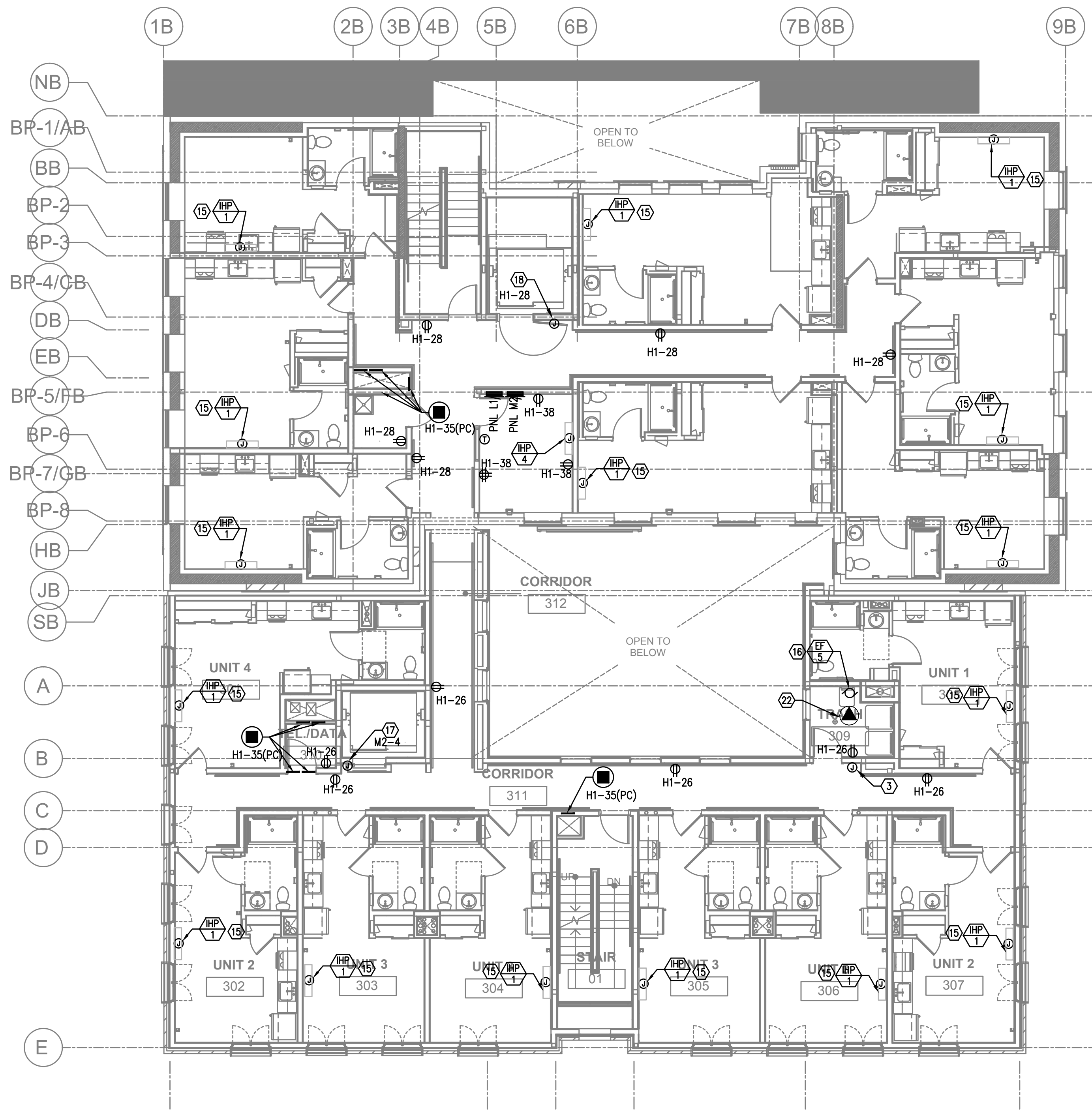
CONFORMANCE SET

SECOND FLOOR  
POWER PLAN

PROJECT NO.  
17004  
05/28/2021

REVISIONS: A

E3.02



1 THIRD FLOOR POWER PLAN  
E3.03 SCALE: 1/8" = 1'-0"

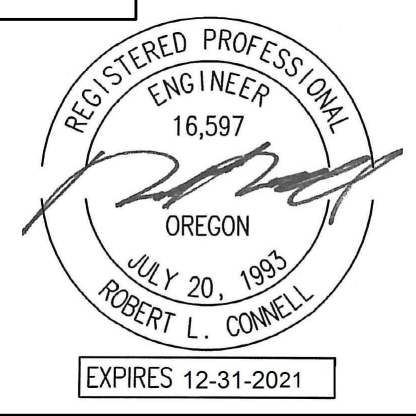
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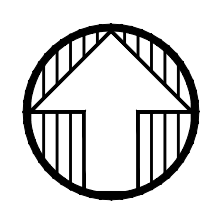
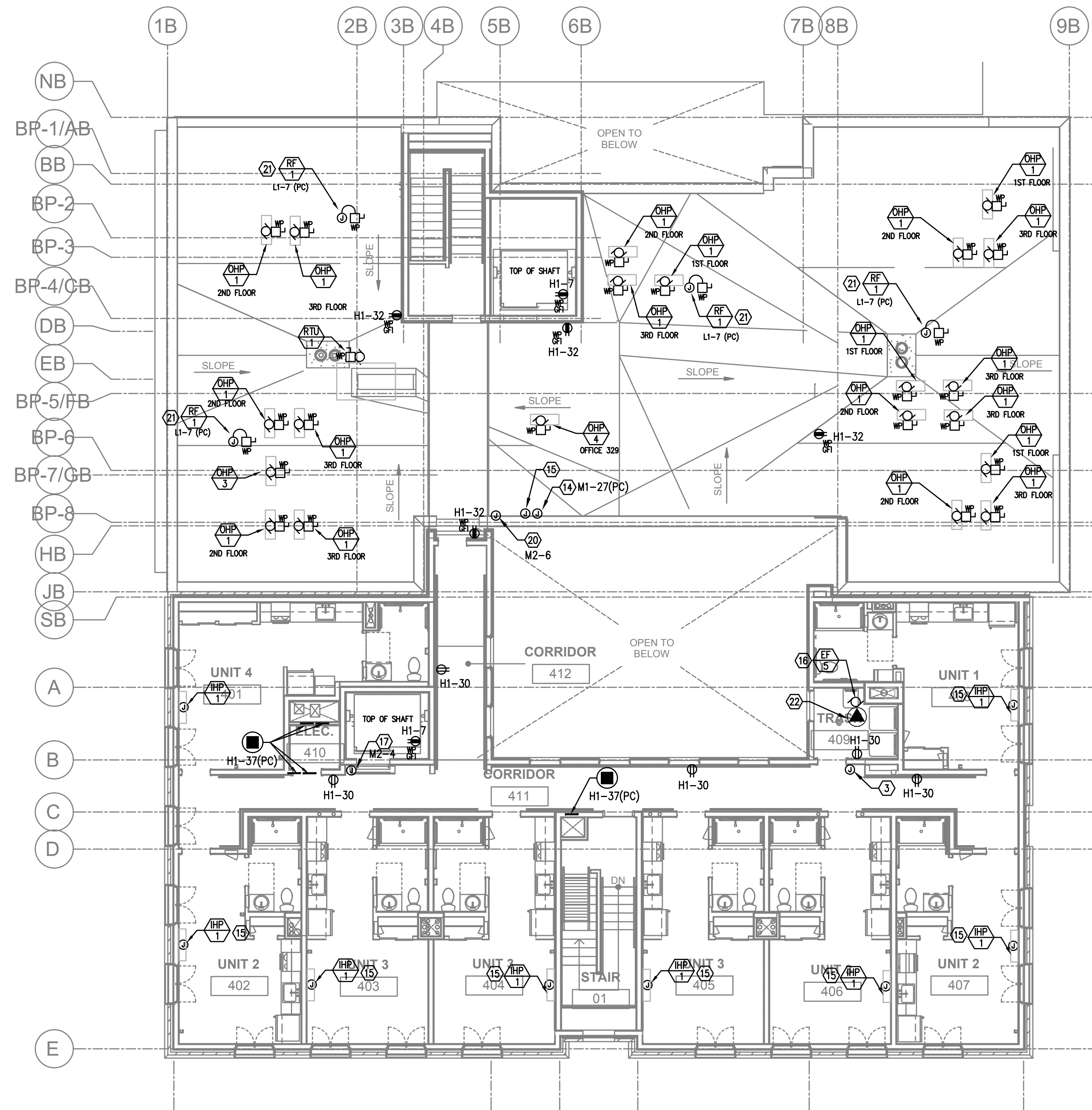


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CONFORMANCE SET

THIRD FLOOR  
POWER PLAN  
PROJECT NO.  
17004  
05/28/2021

REVISIONS: A



1 FOURTH FLOOR POWER PLAN  
SCALE: 1/8" = 1'-0"

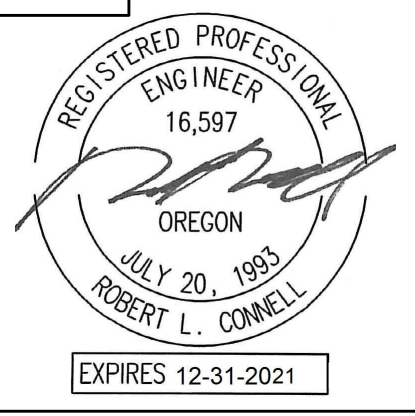
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- 14. COORDINATE WITH LANDSCAPE DESIGNER/INSTALLER FOR EXACT LOCATION AND POWER REQUIREMENTS OF ANY IRRIGATION CONTROLLER. PROVIDE POWER CONNECTION FROM PANEL 'M1' AND SLEEVE PER LANDSCAPE'S DIRECTION.
- 15. REFER TO TYPICAL UNIT PLANS ON THE E4 SERIES SHEETS FOR ADDITIONAL INFORMATION REGARDING THE HVAC EQUIPMENT LOCATIONS AND CIRCUITING. COORDINATE WITH MECHANICAL INSTALLER.
- 16. CONTINUOUS OPERATION EXHAUST FAN TO BE TIED INTO NEAREST "NORMAL" POWER LIGHTING CIRCUIT, AHEAD OF ANY SWITCHING.
- 17. PROVIDE ONE 20A, 120V, 1P CIRCUIT AS INDICATED FOR ELEVATOR SMOKE CURTAIN.
- 18. PROVIDE ONE 20A, 120V, 1P CIRCUIT FROM PANEL 'H1' FOR MAGNETIC DOOR HOLDER.
- 19. PER ARCHITECTS DIRECTION, ABOVE COUNTER RECEPTACLES SHALL BE 1-INCH OFFSET FROM THE WALL FOR EASE OF ACCESSIBILITY.
- 20. PROVIDE CIRCUIT AS INDICATED FOR SNOW MELT SYSTEM. VERIFY EXACT POWER REQUIREMENTS WITH SYSTEM INSTALLER PRIOR TO ROUGH IN AND COORDINATE CONNECTION LOCATION.
- 21. CONSULT 'R' SERIES PLAN SHEETS FOR ADDITIONAL INFORMATION REGARDING THE POWER REQUIREMENTS FOR THE RADON MITIGATION SYSTEM. COORDINATE WITH SYSTEM INSTALLER FOR EXACT LOCATION(S) PRIOR TO ROUGH IN.
- 22. ELECTRICAL CONTRACTOR TO CONSULT THE MECHANICAL PLANS AND COORDINATE WITH THE MECHANICAL INSTALLER FOR ANY POWER CONNECTIONS NEEDED FOR DAMPERS. PROVIDE ANY ROUGH IN AND/OR FINAL ELECTRICAL CONNECTIONS.
- 23. PROVIDE ONE 20A, 120V, 1P CIRCUIT FOR "GREENWALD" ATM SYSTEM PER OWNER'S DIRECTION. CONSULT ARCHITECT FOR EXACT LOCATION.

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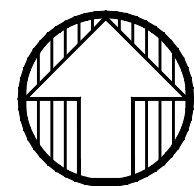
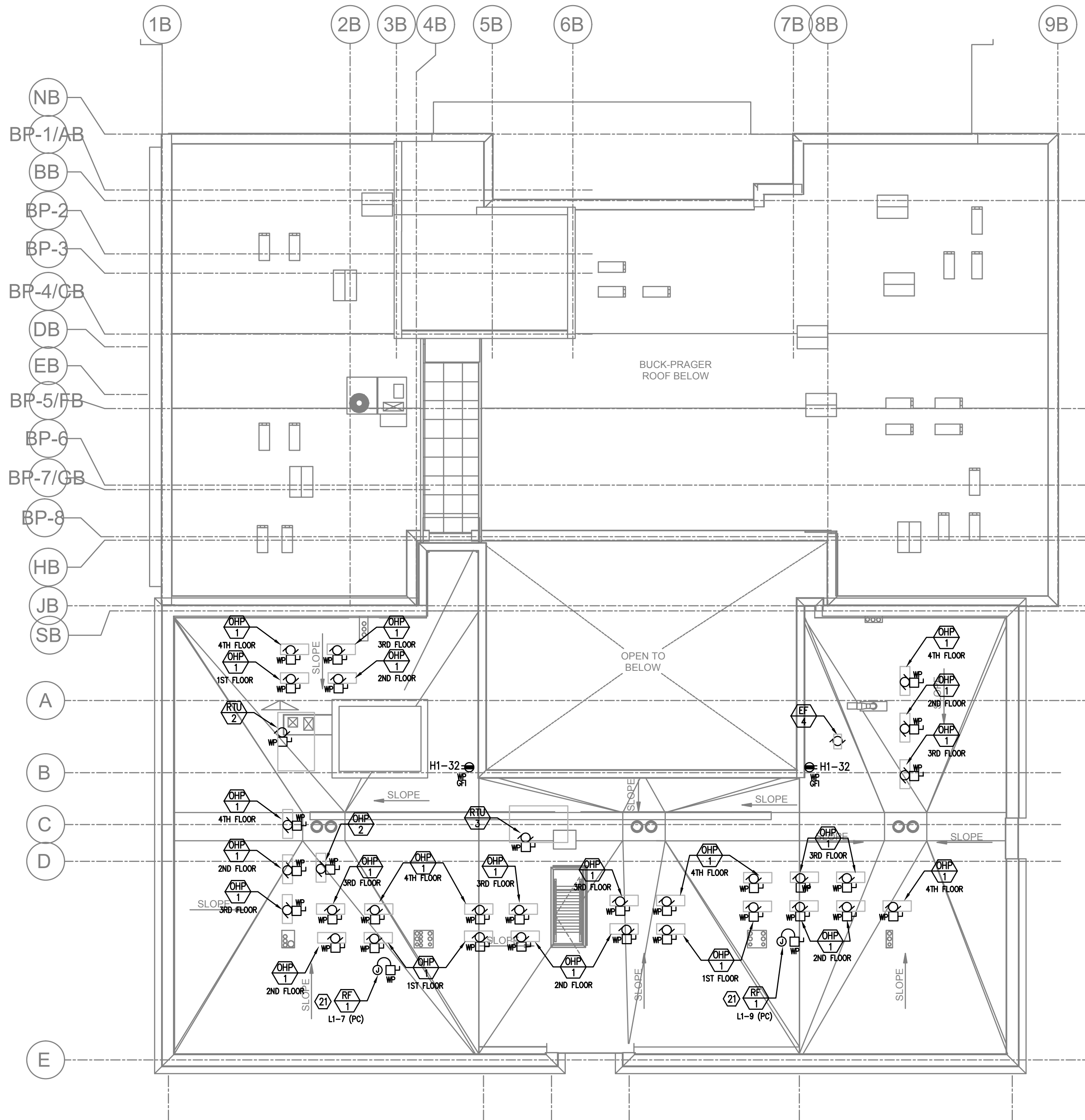
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1 ROOF LEVEL POWER PLAN  
E3.05 SCALE: 1/8" = 1'-0"

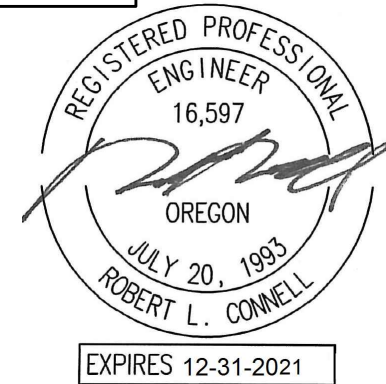
#### GENERAL POWER NOTES:

- ALL PLANS ARE CONSIDERED DIAGRAMMATICAL. THEREFORE ALL EQUIPMENT SIZES AND DEVICE LOCATIONS ARE APPROXIMATE AND SUBJECT TO FIELD CONDITIONS AND PRODUCT APPROVAL.
- ELECTRICAL CONTRACTOR TO PROVIDE THERMOSTATS NOT SUPPLIED BY MECHANICAL CONTRACTOR. CONSULT MECHANICAL PLANS FOR ADDITIONAL INFORMATION.
- ELECTRICAL CONTRACTOR SHALL PROVIDE INSTALLATION AND FINAL CONNECTION OF THERMOSTATS. CONSULT MECHANICAL CONTRACTOR FOR EXACT REQUIREMENTS PRIOR TO ROUGH IN.
- REFER TO INTERIOR DECORATOR AND/OR ARCHITECTURAL DRAWINGS FOR DIMENSIONED LOCATION(S) AND ELEVATIONS OF FIXTURES & DEVICES. OTHER DEVICES SHOWN ON THE ELECTRICAL PLANS AND NOT INDICATED ON THE DECORATOR'S OR ARCHITECT'S DRAWINGS, SHALL BE INSTALLED AT STANDARD MOUNTING HEIGHT AS INDICATED THE SYMBOL LIST.
- REFER TO ENLARGED TYPICAL UNIT PLANS (E4 SERIES SHEETS) FOR TYPICAL POWER & LIGHTING LAYOUTS FOR THE APARTMENT UNITS.
- ELECTRICAL EQUIPMENT SHOWN IN THE ELECTRICAL ROOMS IS BASED ON SIEMENS PRODUCTS. CONTRACTOR SHALL VERIFY ANY SUBMITTED EQUIPMENT WILL FIT WITHIN THE SPACE PROVIDED AND MAINTAIN REQUIRED CLEARANCES, PRIOR TO PRODUCT SUBMITTAL REVIEW.
- ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE LOW VOLTAGE ('T' SERIES) PLANS, INCLUDING FIRE ALARM AND SYSTEMS INSTALLER, AND PROVIDE ROUGH IN AS NEEDED.
- GENERAL PURPOSE CONVENIENCE RECEPTACLES LOCATED ON THE BUILDING EXTERIOR, OTHER THAN INTERIOR COURT YARD, SHALL BE EQUIPPED WITH A LOCKING, WEATHER PROOF COVER.
- CONSULT SWITCHGEAR SUPPLIER FOR HOUSEKEEPING PAD REQUIREMENTS PRIOR TO PURCHASE. HOUSEKEEPING PAD SHOULD 4" THICK, MINIMUM.

#### KEYED NOTES:

- FIRE ALARM REMOTE ANNUNCIATOR. FED FROM PANEL M1. REFER TO THE 'T' SERIES SHEETS FOR EXACT LOCATION. PROVIDE ROUGH IN AS REQUIRED.
- PROVIDE ONE 20A, 120V, 1P POWER CONNECTION FOR BUILDING SIGNS. CIRCUIT AS INDICATED VIA TIME CLOCK. MOUNT JUNCTION BOX TIGHT TO CEILING (AT BUILDING INTERIOR), COORDINATING EXACT LOCATION WITH SIGN INSTALLER'S SLEEVE AND PER ARCHITECT'S DIRECTION.
- PROVIDE ONE 20A, 120V, 1P CIRCUIT FROM PANEL M1 FOR BUILDING ENTRY ACCESS CONTROL SYSTEM AND PROVIDE ROUGH IN AND WIRING TO ACCESS POINTS LOCATED ON PLANS. CONSULT WITH LOW VOLTAGE SYSTEMS INSTALLER AND THE 'T' SERIES SHEETS FOR ADDITIONAL INFORMATION.
- VERIFY ELEVATOR EQUIPMENT LOCATION AND ELECTRICAL REQUIREMENTS WITH ARCHITECT AND/OR ELEVATOR PROVIDER.
- PROVIDE ONE 20A, 120V, 1P CIRCUIT FROM PANEL M1 FOR AUTOMATIC DOOR OPENERS.
- ELECTRICAL SERVICE METER ROOMS SHALL HAVE OUTWARD SWING DOORS EQUIPPED WITH PANIC HARDWARE. PROVIDE A KEY BOX AT THE EXTERIOR FOR ELECTRICAL UTILITIES' 24/7 ACCESS.
- 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, AND PROVIDE ROUGH IN AND/OR FINAL ELECTRICAL POWER CONNECTIONS & DEVICES. REFER PANEL 'M1' SCHEDULE ON E1.12 FOR CIRCUITS.
- DEDICATED 20A, 120V RECEPTACLE FOR PALLET JACK CHARGING.
- PROVIDE ONE 30A, 208V, 1PH ELECTRICAL CIRCUIT FOR TRASH COMPACTOR. FEED FROM PANEL M1.
- DEDICATED 20A, 120V RECEPTACLE FOR ELECTRIC BIKE CHARGING.
- TIE RESTROOM EXHAUST FAN INTO LIGHTING CIRCUIT FOR THIS SPACE. SWITCHING CONTROLLED VIA INTEGRAL OCCUPANCY SENSOR.
- FIRE ALARM CONTROL PANEL. FED FROM PANEL M1. REFER TO THE 'T' SERIES SHEETS FOR EXACT LOCATION. PROVIDE ROUGH IN AS REQUIRED.
- PROVIDE ONE 20A, 120V, 1P CIRCUIT FROM PANEL 'L1' FOR DRYER BOOSTER FANS. REFER TO MECHANICAL SHEET M6.01, DETAIL 6 FOR ADDITIONAL INFORMATION AND COORDINATE WITH THE EQUIPMENT INSTALLER TO PROVIDE THE APPROPRIATE POWER CONNECTION(S).
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- PROVIDE CIRCUIT AS INDICATED FOR SNOW MELT SYSTEM. VERIFY EXACT POWER REQUIREMENTS WITH SYSTEM INSTALLER PRIOR TO ROUGH IN AND COORDINATE CONNECTION LOCATION.
- CONSULT 'R' SERIES PLAN SHEETS FOR ADDITIONAL INFORMATION REGARDING THE POWER REQUIREMENTS FOR THE RADON MITIGATION SYSTEM. COORDINATE WITH SYSTEM INSTALLER FOR EXACT LOCATION(S) PRIOR TO ROUGH IN.
- ELECTRICAL CONTRACTOR TO CONSULT THE MECHANICAL PLANS AND COORDINATE WITH THE MECHANICAL INSTALLER FOR ANY POWER CONNECTIONS NEEDED FOR DAMPERS. PROVIDE ANY ROUGH IN AND/OR FINAL ELECTRICAL CONNECTIONS.
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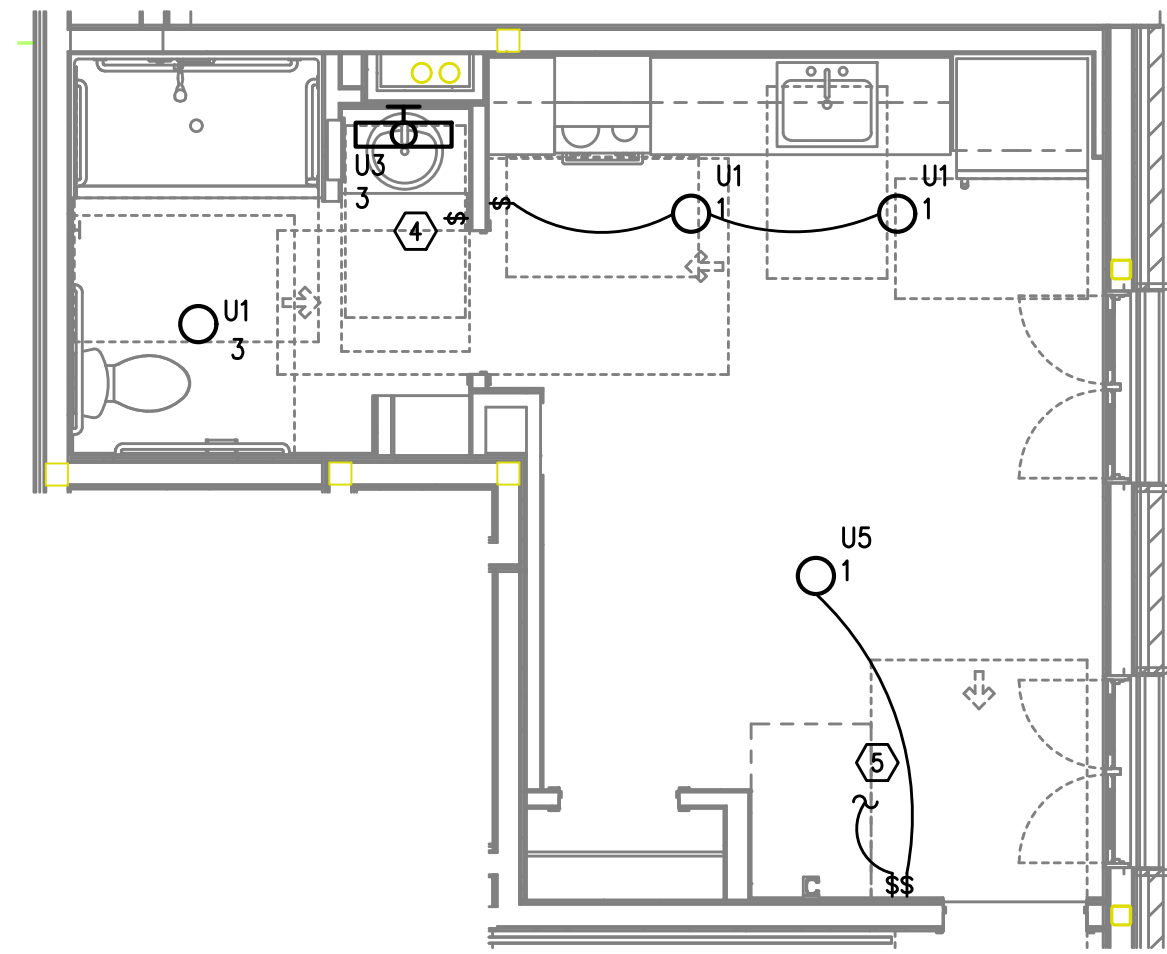


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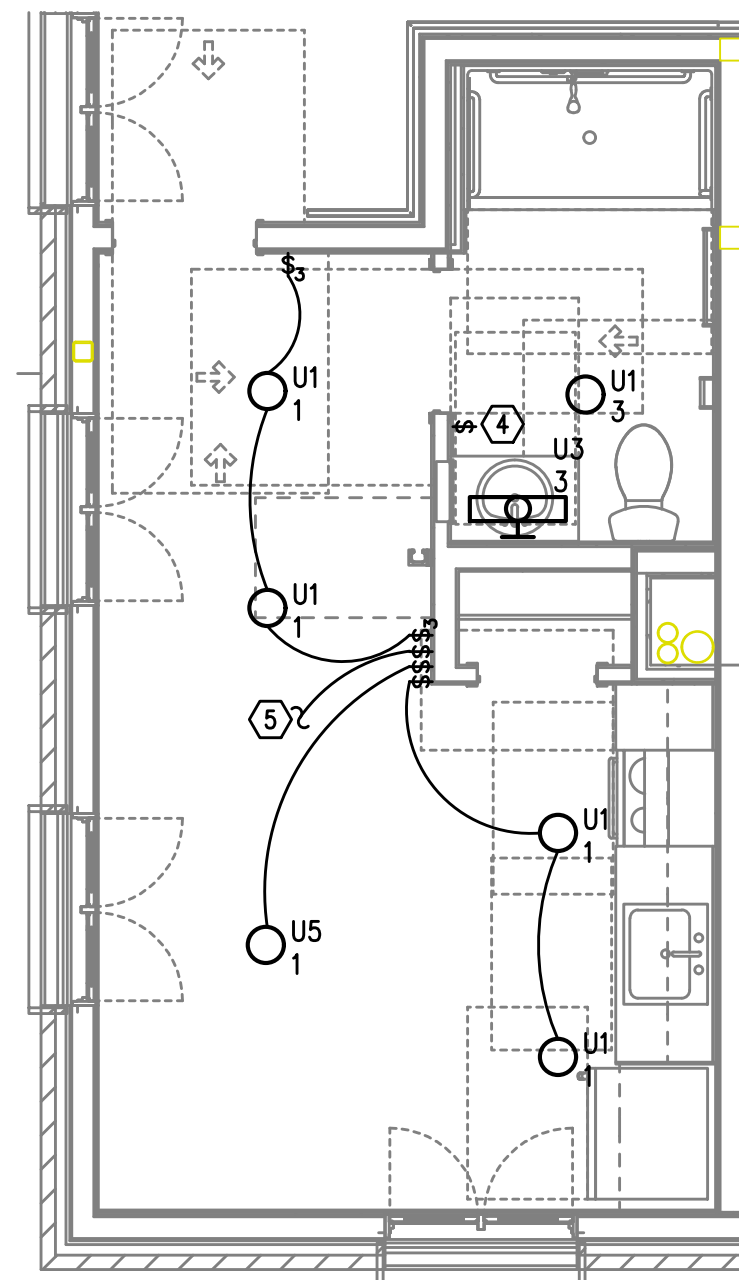
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CONFORMANCE SET

ROOF LEVEL  
POWER PLAN  
PROJECT NO.  
17004  
05/28/2021  
REVISIONS: A

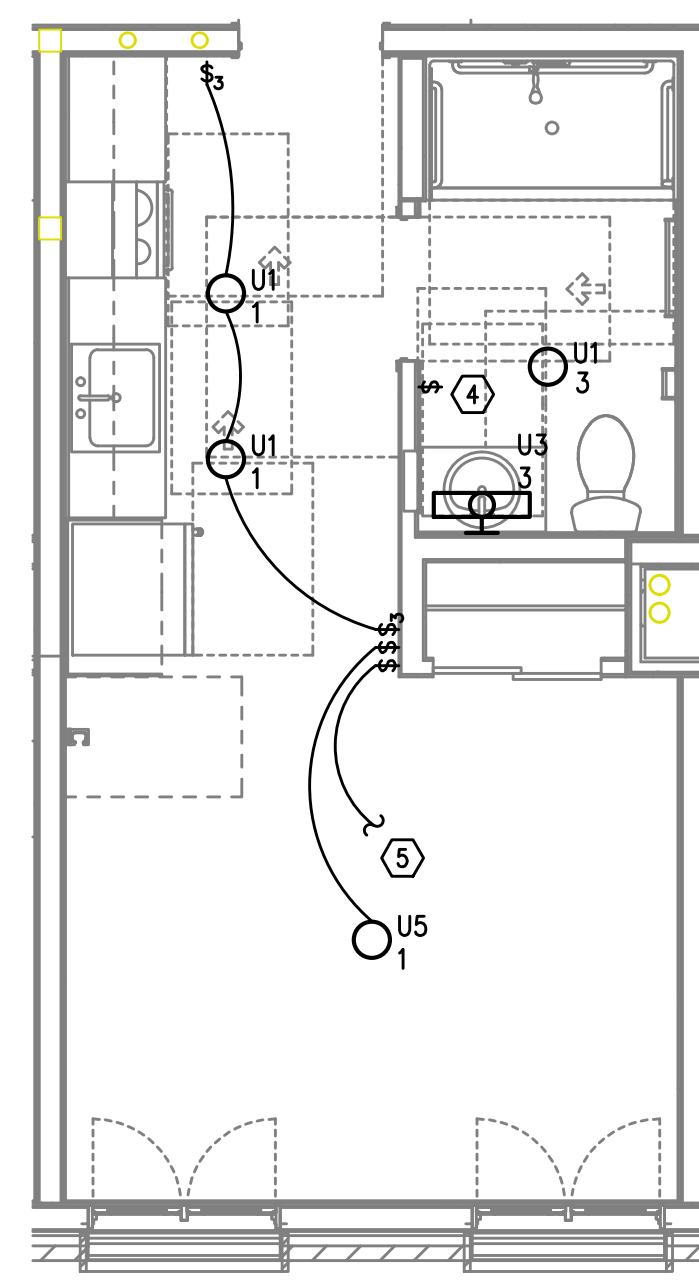
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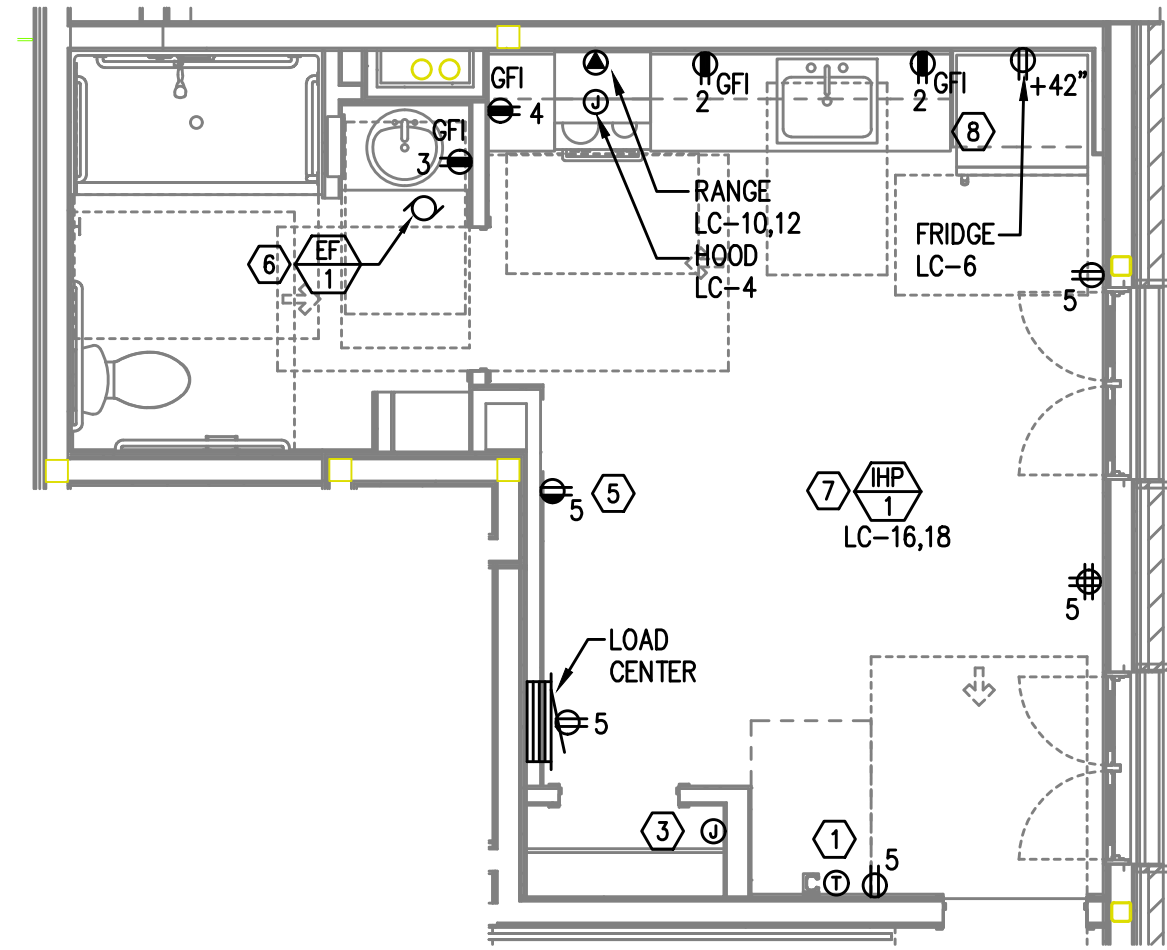
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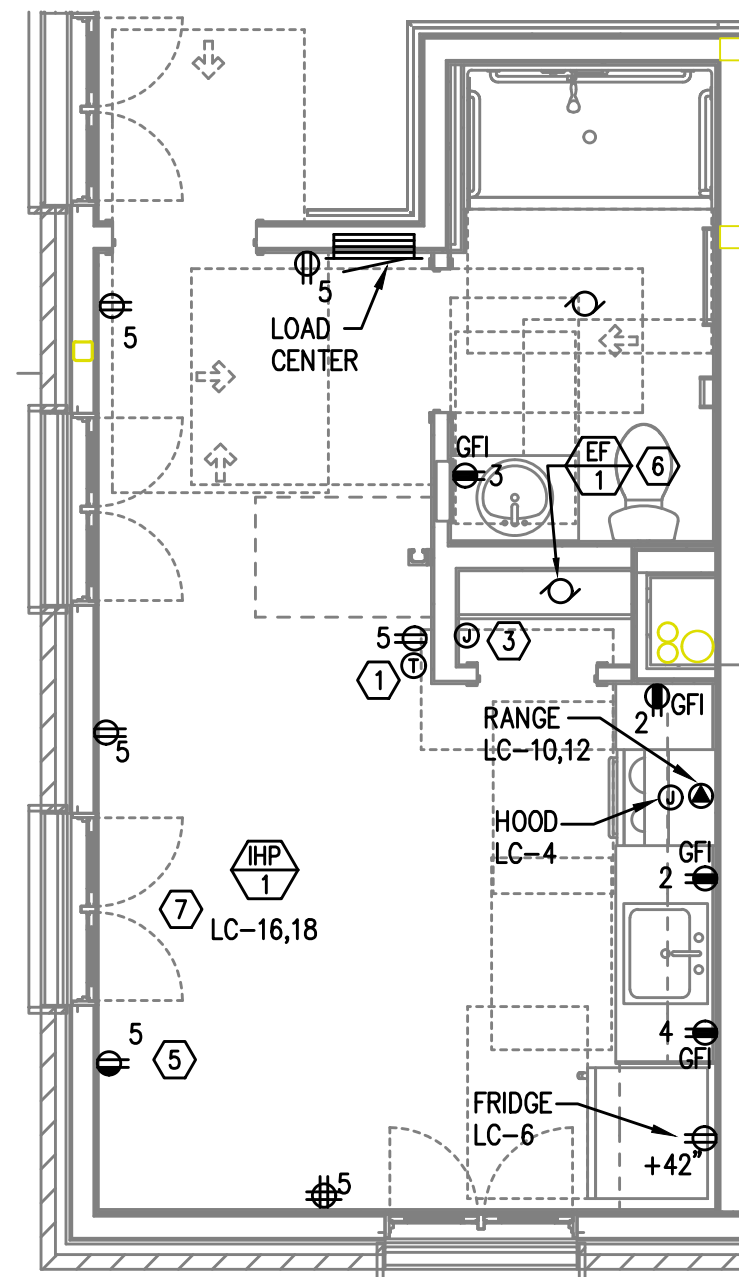
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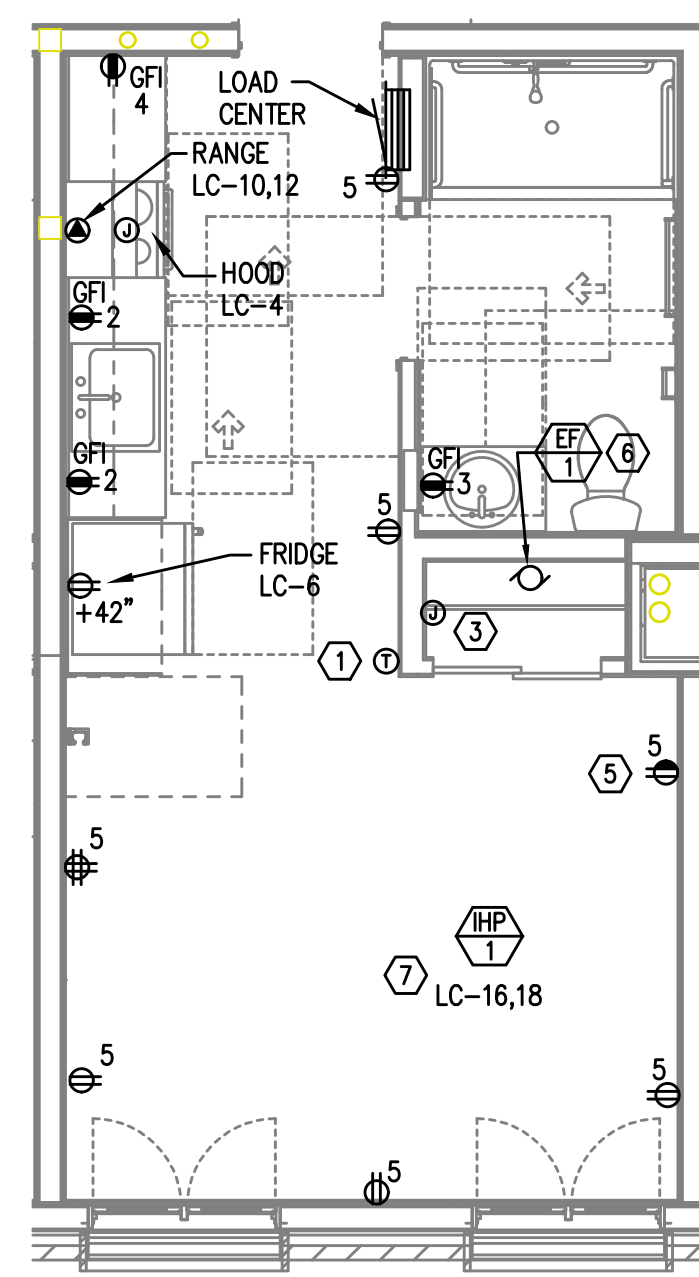
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E4.01 UNIT TYPE 3  
TYPICAL LIGHTING PLAN  
SCALE: 1/4" = 1'-0"



2  
E4.01 UNIT TYPE 1 ADA  
TYPICAL POWER PLAN  
SCALE: 1/4" = 1'-0"



4  
E4.01 UNIT TYPE 2  
TYPICAL POWER PLAN  
SCALE: 1/4" = 1'-0"



6  
E4.01 UNIT TYPE 3  
TYPICAL POWER PLAN  
SCALE: 1/4" = 1'-0"

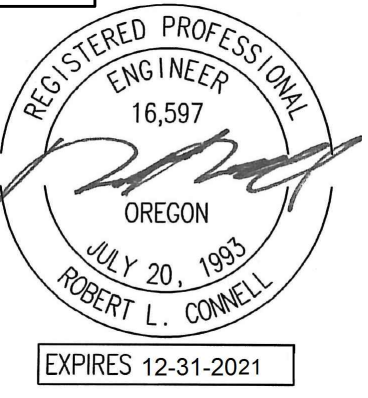
#### GENERAL NOTES:

- ALL PLANS ARE DIAGRAMMATICAL. CONSULT ARCHITECTURAL PLANS FOR EXACT LOCATION OF ALL DEVICES AND FIXTURES.
- REFER TO SHEET E1.12 FOR TYPICAL UNIT LOAD CENTER DIRECTORIES.
- ALL LIGHT SWITCHES SHALL BE ROCKER STYLE, SUCH AS LEVITON DECORA, OR APPROVED EQUAL.
- REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT FIXTURE LOCATIONS. CONSULT INTERIOR DESIGNER FOR MOUNTING HEIGHTS NOT SPECIFIED.
- KITCHEN RECEPTACLES LOCATED IN ISLANDS OR PENINSULAS WHERE THE BACK SPLASH WILL NOT ACCOMMODATE VERTICAL PLACEMENT OR THE DUPLEX RECEPTACLE, THE CONTRACTOR SHALL ROTATE THE DEVICE 90 DEGREES SO THAT THE RECEPTACLE IS INSTALLED HORIZONTALLY.
- REFER TO DETAILS ON SHEET E1.15 FOR ADDITIONAL INFORMATION REGARDING ADA REACH REQUIREMENTS FOR RECEPTACLE AND SWITCH MOUNTING HEIGHT.
- STANDARD RECEPTACLE MOUNTING HEIGHT IS 18" A.F.F. UNLESS OTHERWISE SPECIFIED. RECEPTACLES LOCATED BELOW WINDOW SILLS SHALL NOT BE LESS THAN 15" A.F.F.
- ALL PLANS ARE DIAGRAMMATICAL. CONSULT ARCHITECTURAL PLANS AND ELEVATIONS FOR EXACT LOCATION AND MOUNTING HEIGHT OF ALL DEVICES AND FIXTURES.
- RECEPTACLE FOR PTHP UNIT SHALL BE LOCATED BELOW THE UNIT, NEAR THE BASE OF THE WALL SUCH THAT THE CORD SET IS CONCEALED AS MUCH AS POSSIBLE. COORDINATE INSTALLATION WITH THE MECHANICAL INSTALLER.
- COORDINATE WITH THE 'T' SERIES SHEETS AND PROVIDE ROUGH IN FOR LOW VOLTAGE SYSTEMS.

#### KEYED NOTES:

- PROVIDE WIRE CONNECTION FOR THERMOSTAT(S). COORDINATE WITH MECHANICAL INSTALLER FOR EXACT LOCATION AND POWER REQUIREMENTS PRIOR TO ROUGH IN.
- NOT USED.
- PROVIDE ONE 15A, RECEPTACLE CIRCUIT FROM TENANT LOAD CENTER FOR TELECOM SMART PANEL. COORDINATE WORK WITH SERVICE PROVIDER FOR EXACT LOCATION AND FINAL CONNECTION.
- REFER TO TYPICAL BATHROOM SWITCHING DETAILS ON SHEET E1.15.
- SWITCHED RECEPTACLE. SEE TYPICAL LIGHTING PLAN FOR SWITCH LOCATION.
- CONTINUOUS OPERATION EXHAUST FAN SHALL BE TIED INTO THE BATHROOM LIGHTING CIRCUIT. VERIFY EXACT LOCATION W/MECHANICAL INSTALLER PRIOR TO ROUGH IN.
- REFER TO E3 SHEETS FOR HVAC EQUIPMENT LOCATION(S) & TYPE IN EACH UNIT. REVIEW & COORDINATE WITH THE MECHANICAL PLANS AND THE MECHANICAL INSTALLER FOR EXACT LOCATIONS AND ELECTRICAL REQUIREMENTS PRIOR TO ROUGH IN. PROVIDE CIRCUITING AS INDICATED. INDOOR HEAT PUMP UNITS ARE INTERCONNECTED WITH OUTDOOR UNIT LOCATED ON THE ROOF. POWER CONNECTION FOR PTHP UNIT SHALL BE LOCATED BELOW THE UNIT, NEAR THE BASE OF THE WALL SUCH THAT THE CORD SET IS CONCEALED AS MUCH AS POSSIBLE. CONSULT MECHANICAL PLANS TO DETERMINE WHETHER PTHP UNITS ARE CORD & PLUG OR HARDWIRED AND PROVIDE THE APPROPRIATE CONNECTION TYPE.
- PER ARCHITECT'S DIRECTION, ABOVE COUNTER RECEPTACLES IN ACCESSIBLE UNIT KITCHENS TO BE PROVIDED WITH A 1-INCH OFFSET, EXCEPT FOR THOSE LOCATED ON AN END WALL.

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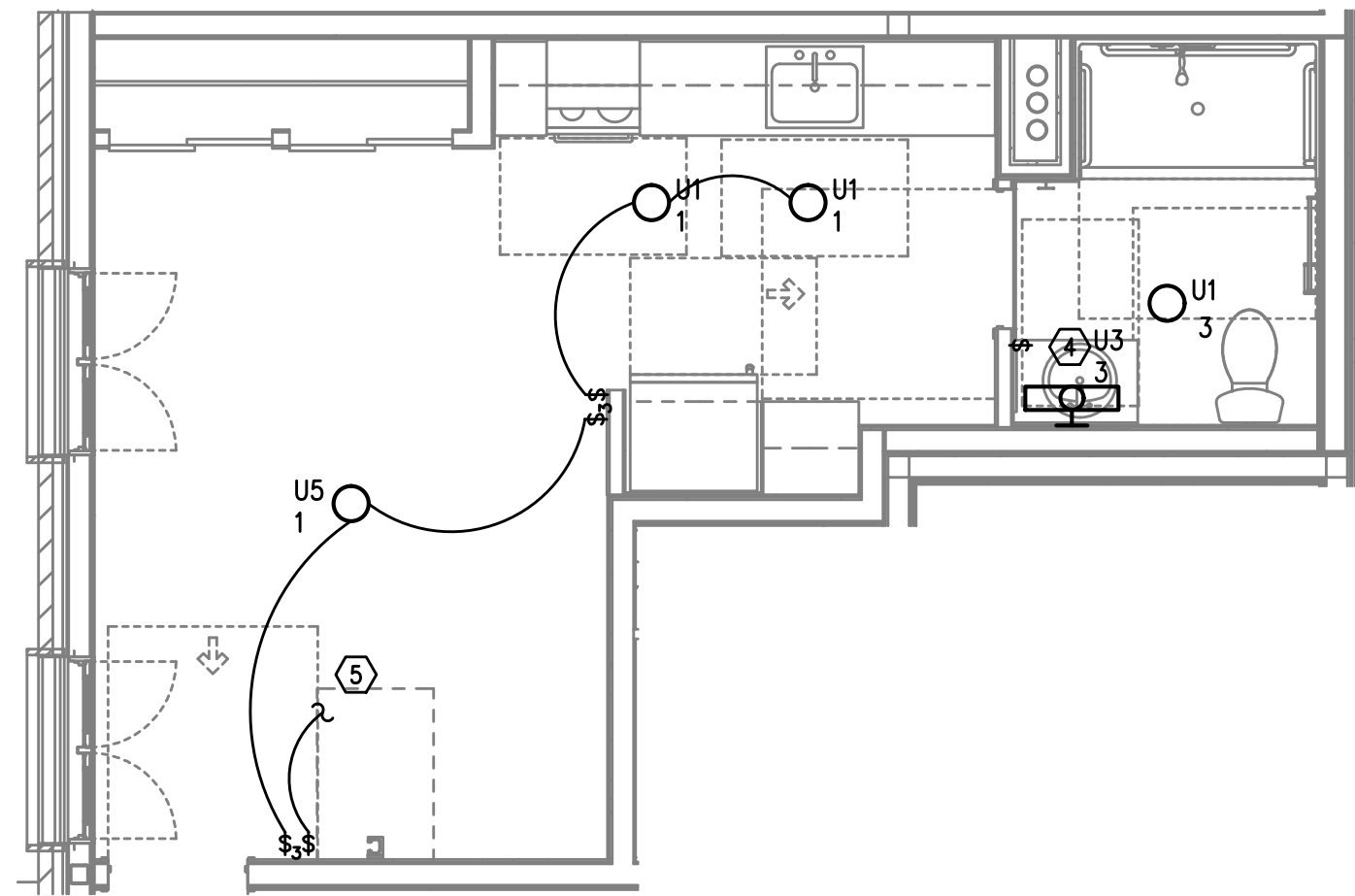
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TYPICAL ENLARGED  
UNIT PLANS

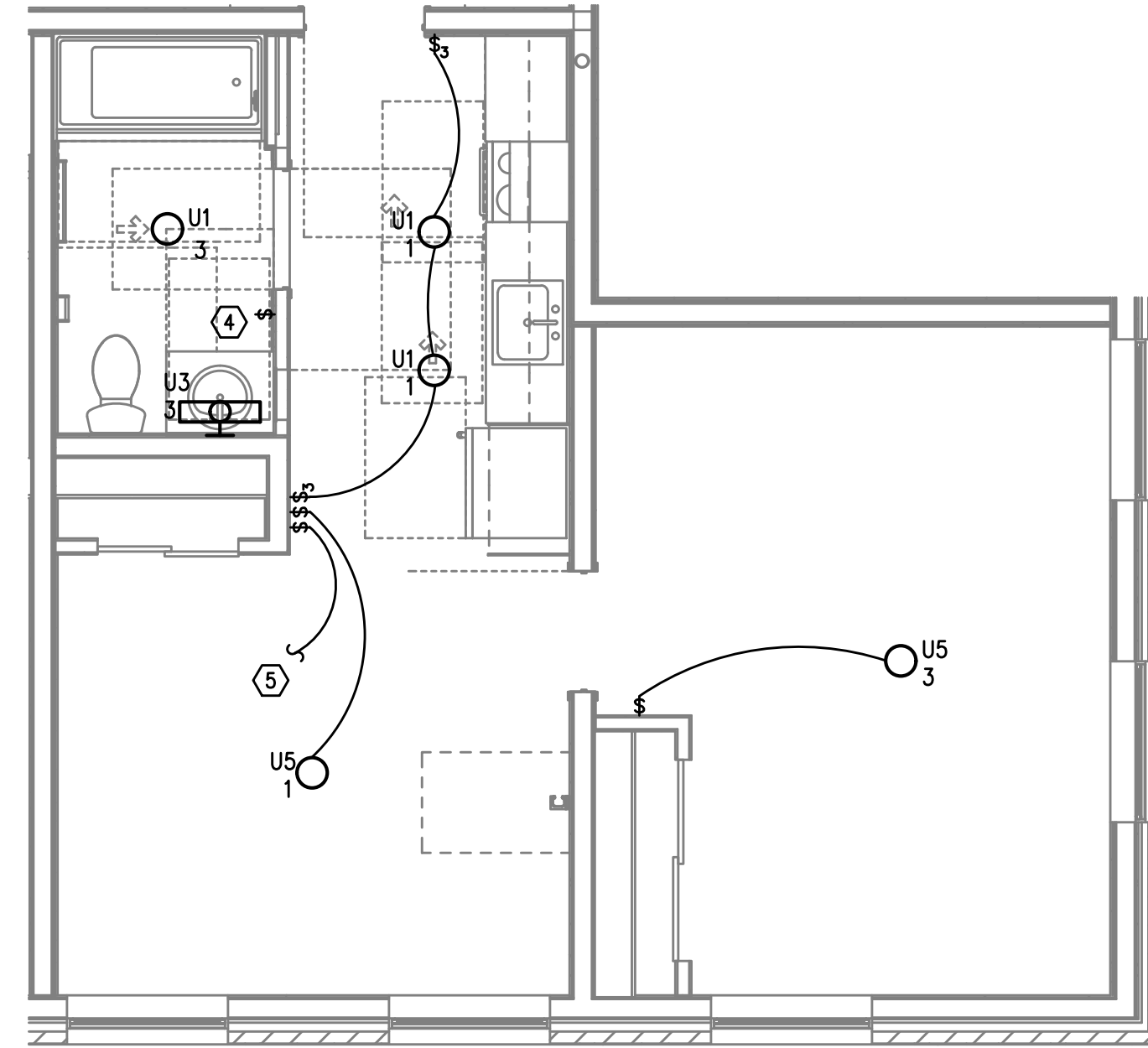
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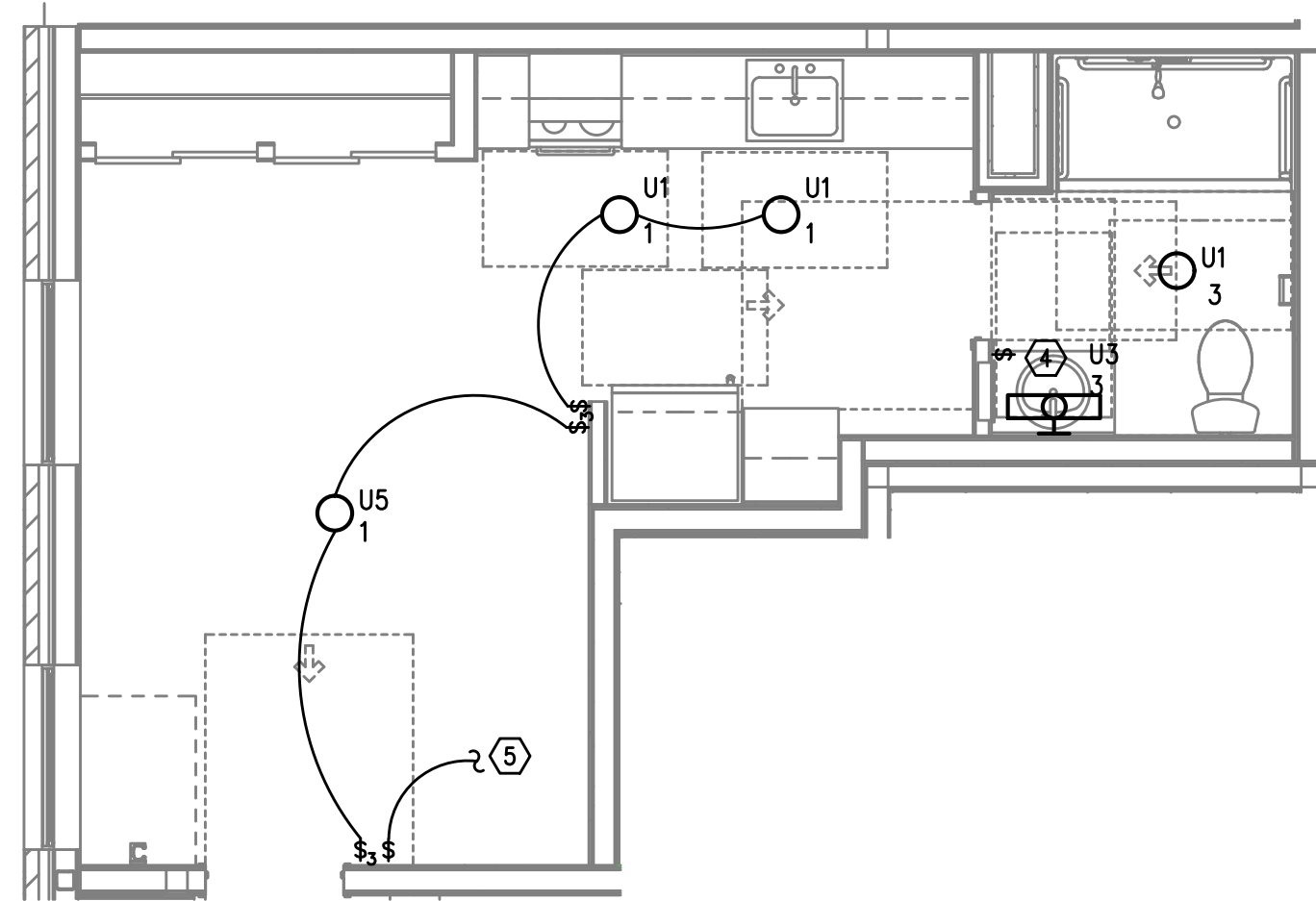
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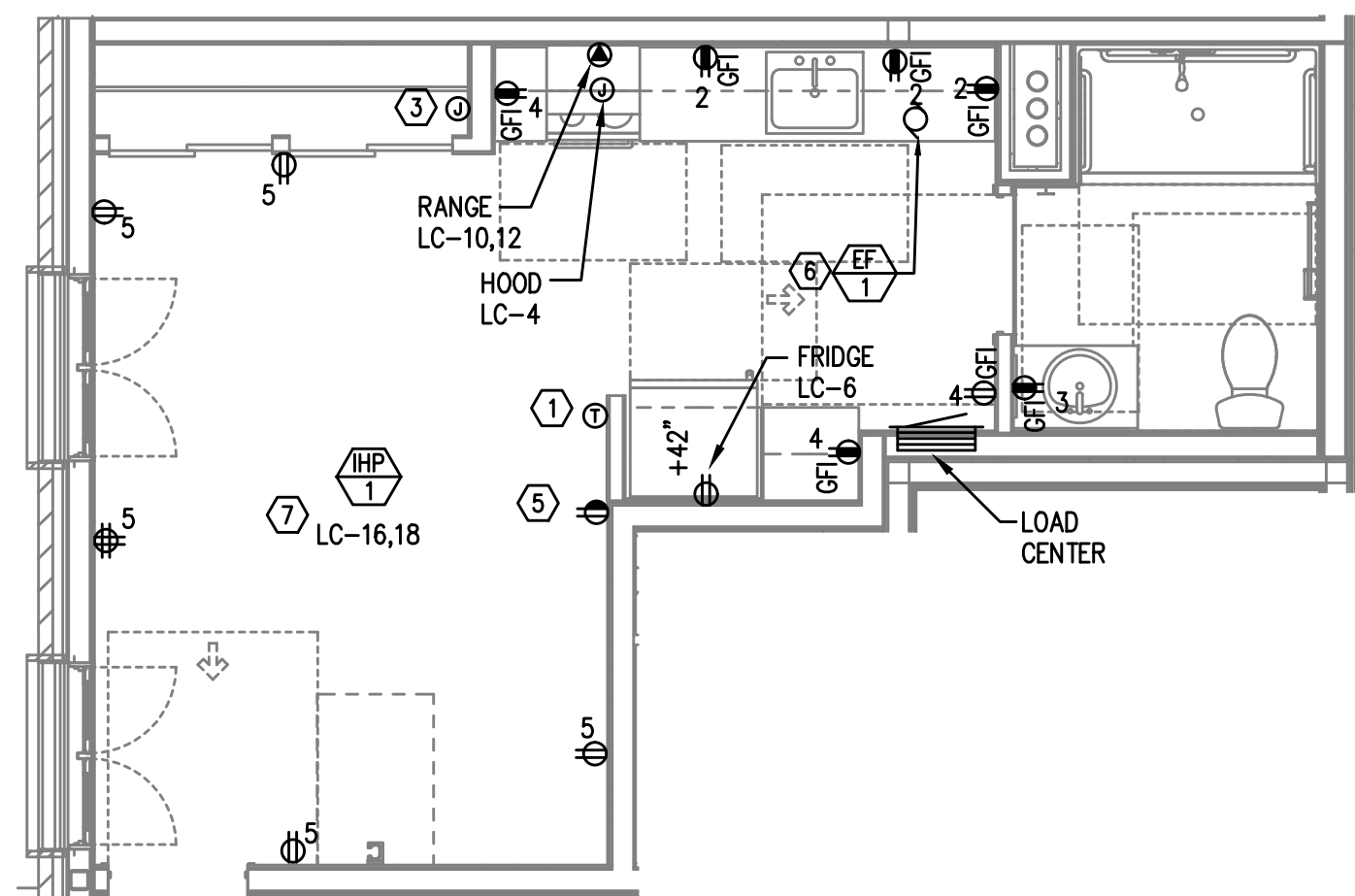
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E4.02 SCALE: 1/4" = 1'-0"



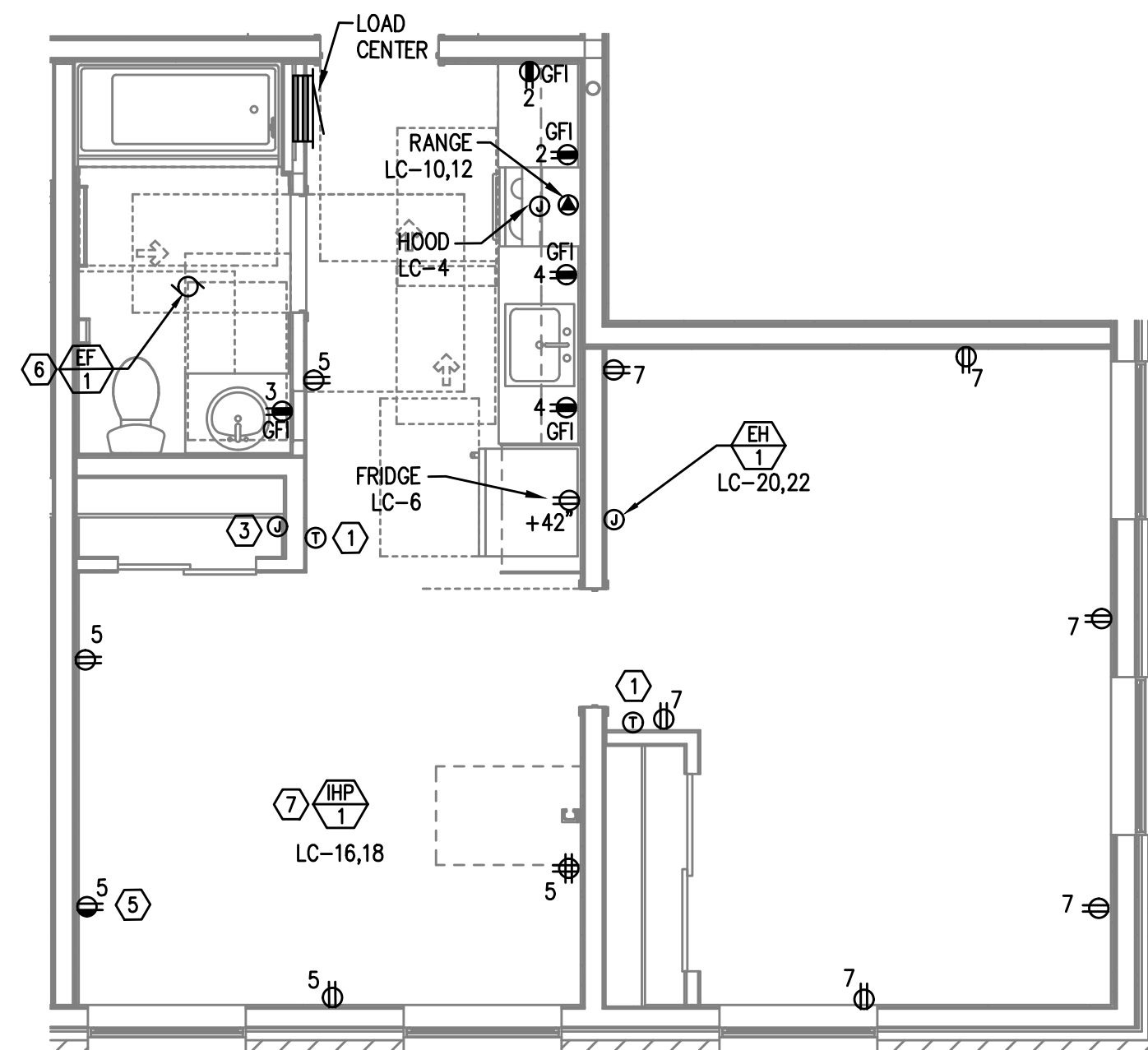
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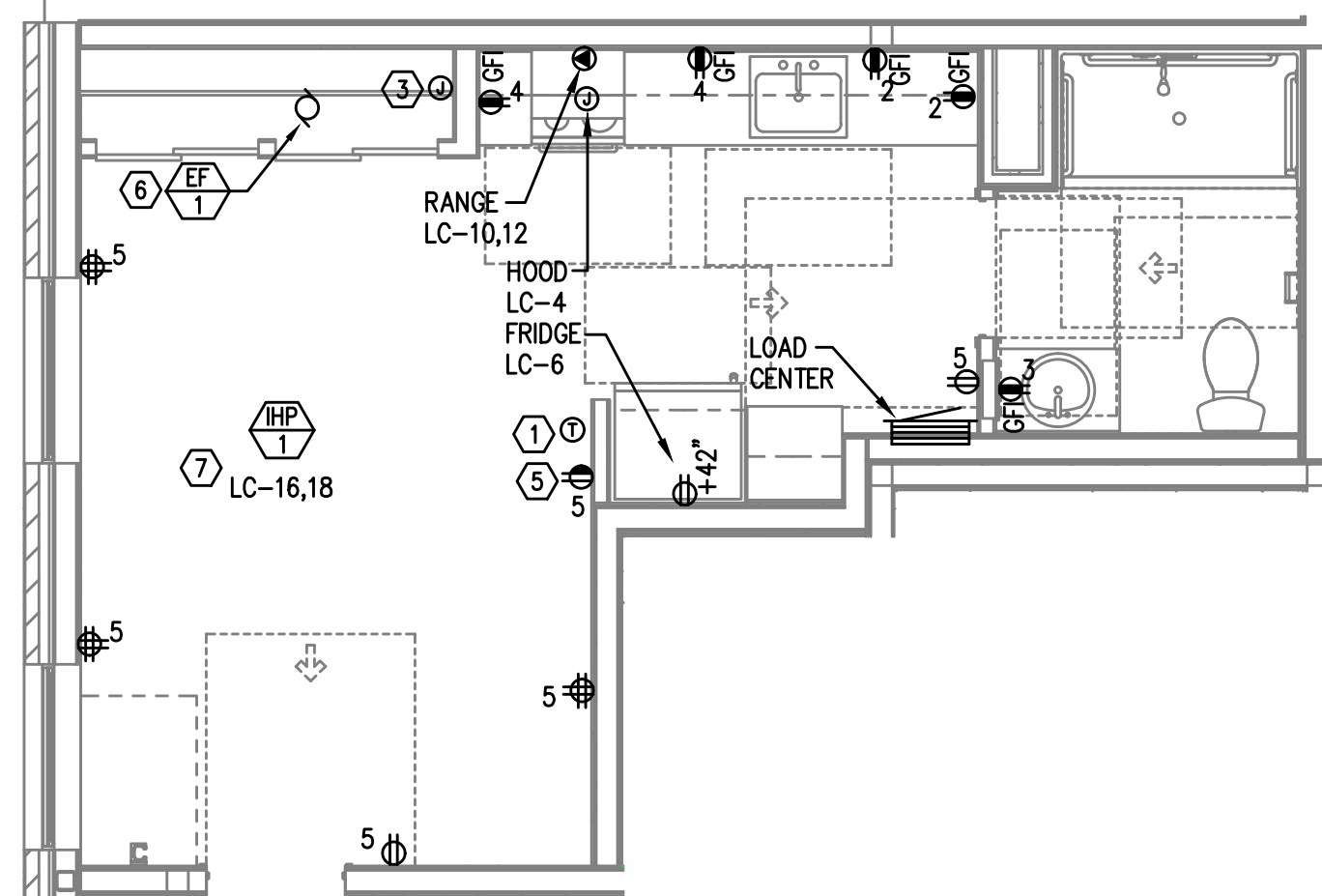
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5  
E4.02 SCALE: 1/4" = 1'-0"



UNIT TYPE 4  
TYPICAL POWER PLAN  
2  
E4.02 SCALE: 1/4" = 1'-0"



UNIT TYPE 5  
TYPICAL POWER PLAN  
4  
E4.02 SCALE: 1/4" = 1'-0"



UNIT TYPE 6  
TYPICAL POWER PLAN  
6  
E4.02 SCALE: 1/4" = 1'-0"

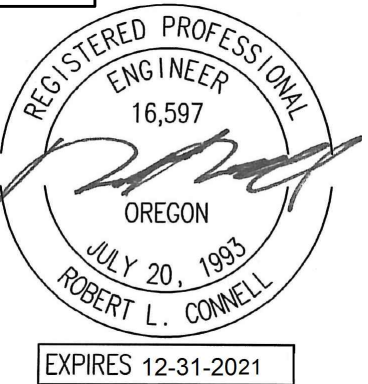
## GENERAL NOTES:

- ALL PLANS ARE DIAGRAMMATICAL. CONSULT ARCHITECTURAL PLANS FOR EXACT LOCATION OF ALL DEVICES AND FIXTURES.
- REFER TO SHEET E1.12 FOR TYPICAL UNIT LOAD CENTER DIRECTORIES.
- ALL LIGHT SWITCHES SHALL BE ROCKER STYLE, SUCH AS LEVITON DECORA, OR APPROVED EQUAL.
- REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT FIXTURE LOCATIONS. CONSULT INTERIOR DESIGNER FOR MOUNTING HEIGHTS NOT SPECIFIED.
- KITCHEN RECEPTACLES LOCATED IN ISLANDS OR PENINSULAS WHERE THE BACK SPLASH WILL NOT ACCOMMODATE VERTICAL PLACEMENT OR THE DUPLEX RECEPTACLE, THE CONTRACTOR SHALL ROTATE THE DEVICE 90 DEGREES SO THAT THE RECEPTACLE IS INSTALLED HORIZONTALLY.
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## KEYED NOTES:

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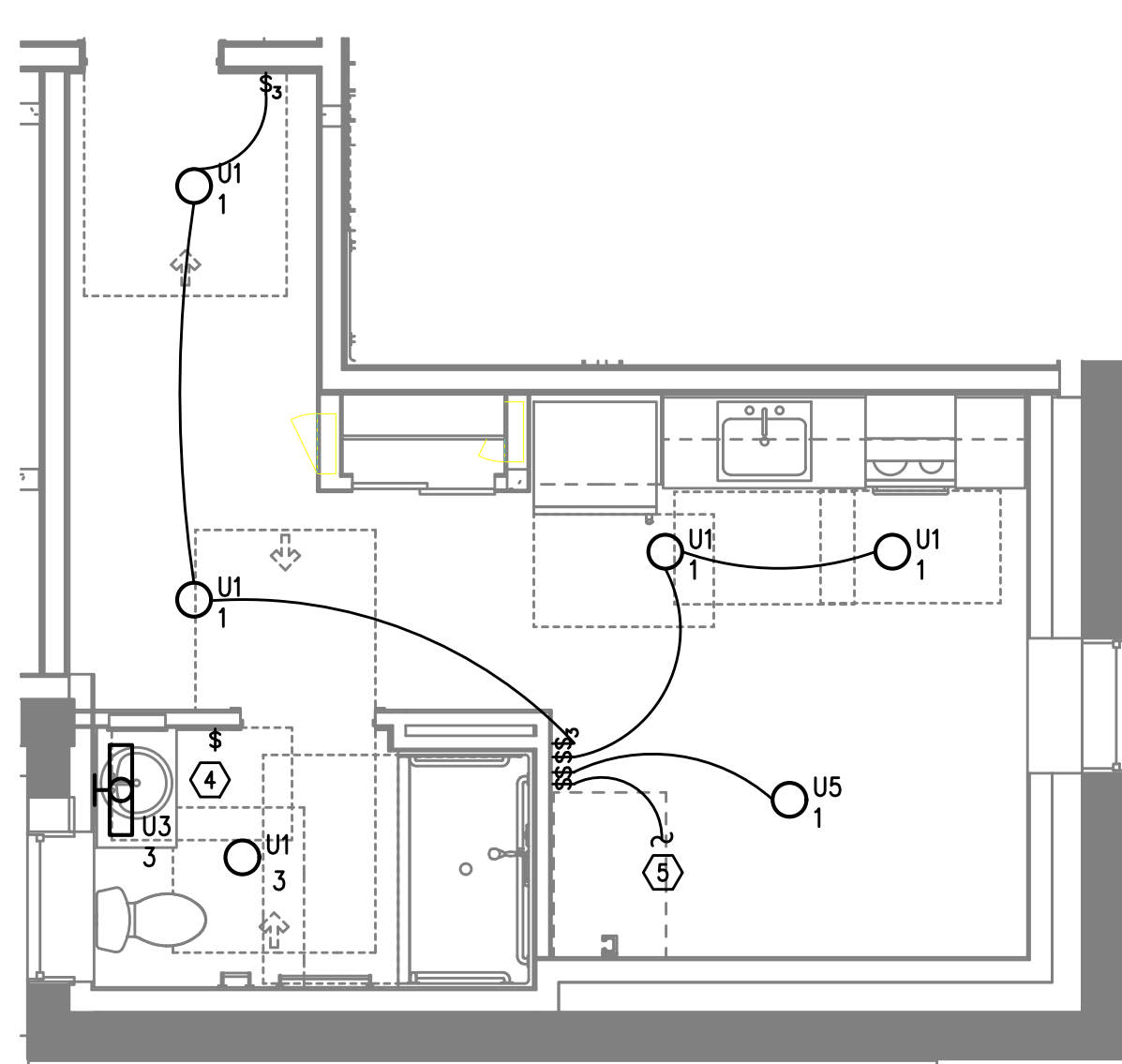
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TYPICAL ENLARGED  
UNIT PLANS

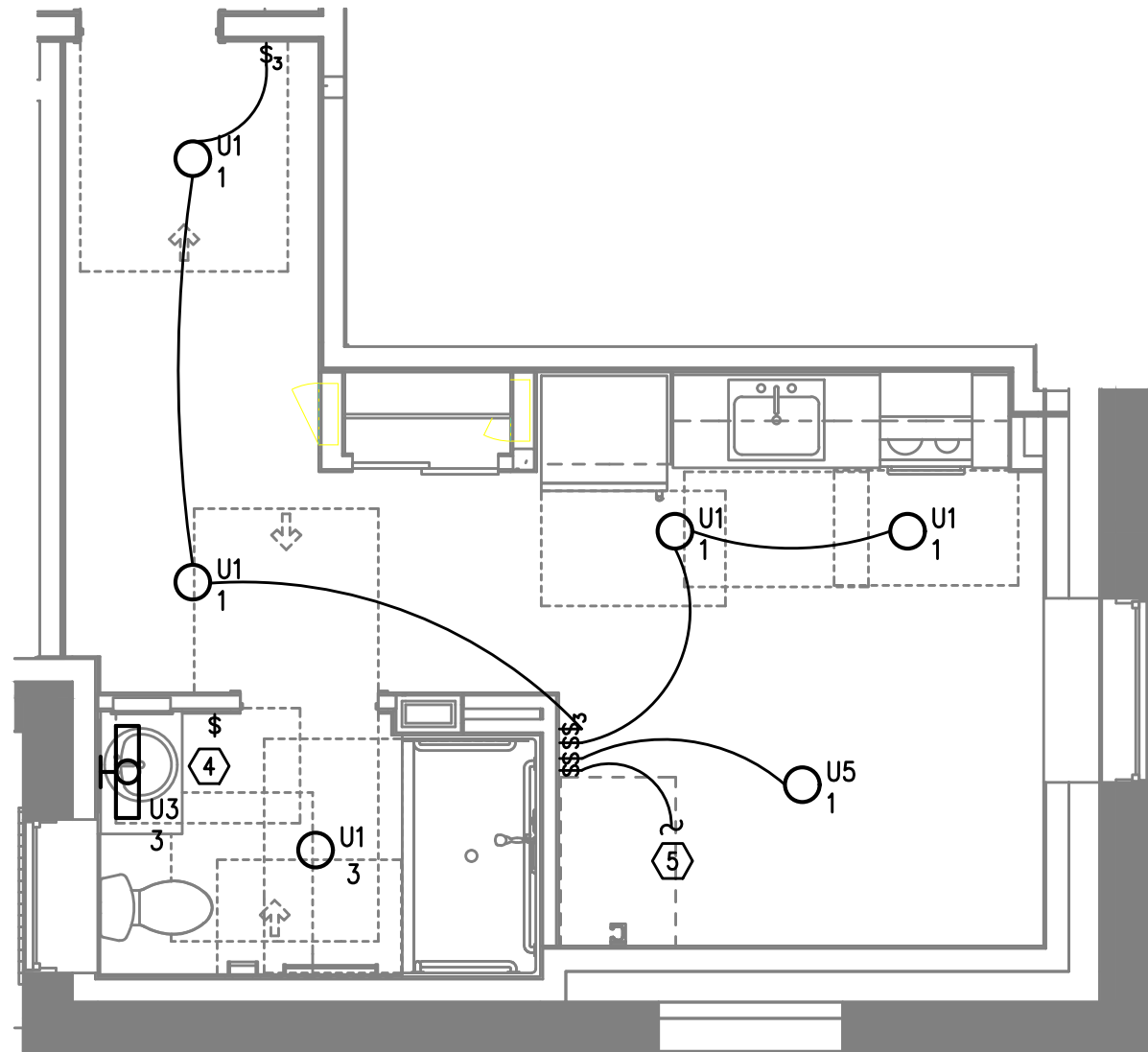
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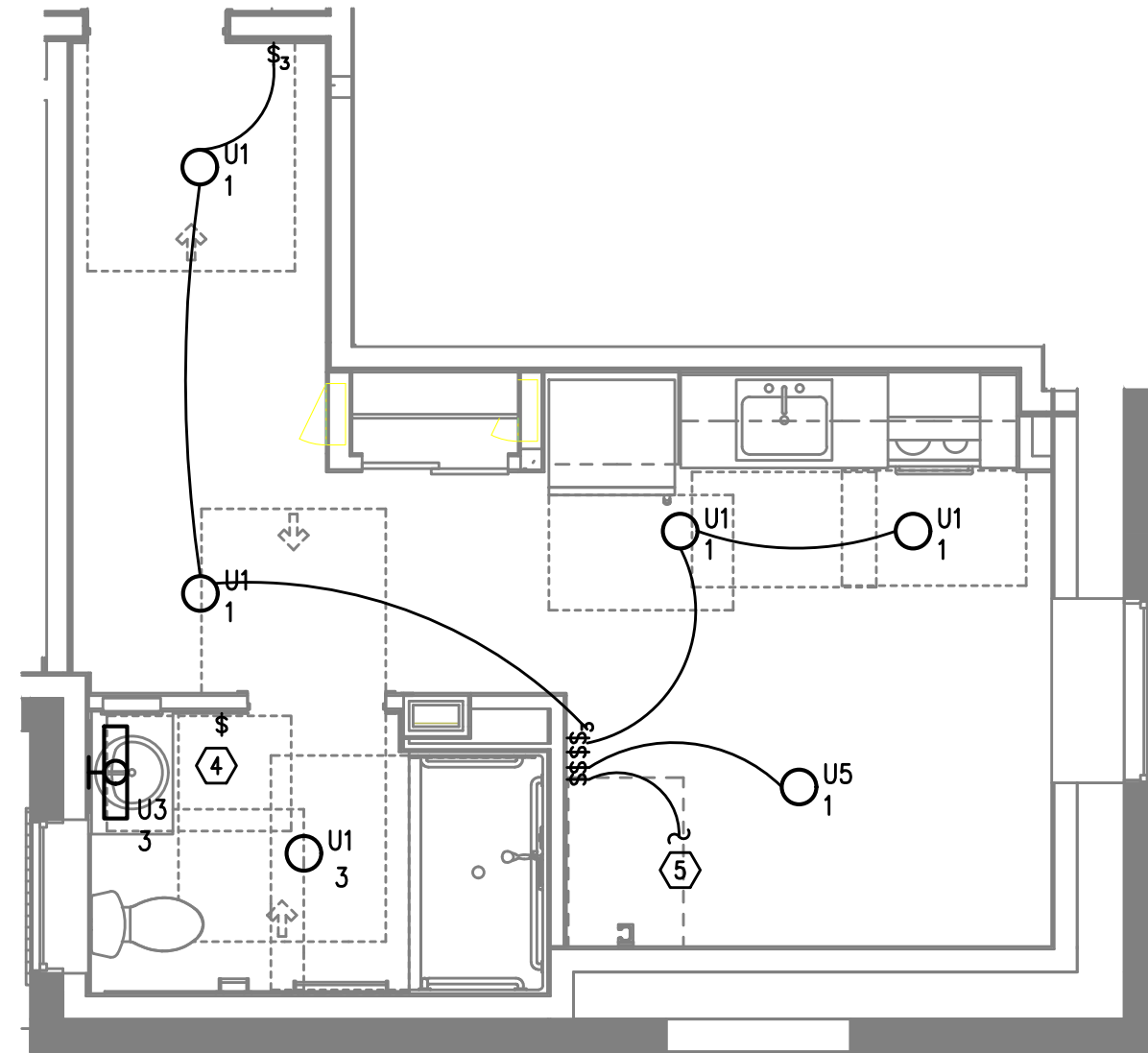
E4.02



UNIT TYPE 7 ADA  
TYPICAL LIGHTING PLAN  
1  
E4.03 SCALE: 1/4" = 1'-0"



UNIT TYPE 7A ADA  
TYPICAL LIGHTING PLAN  
3  
E4.03 SCALE: 1/4" = 1'-0"



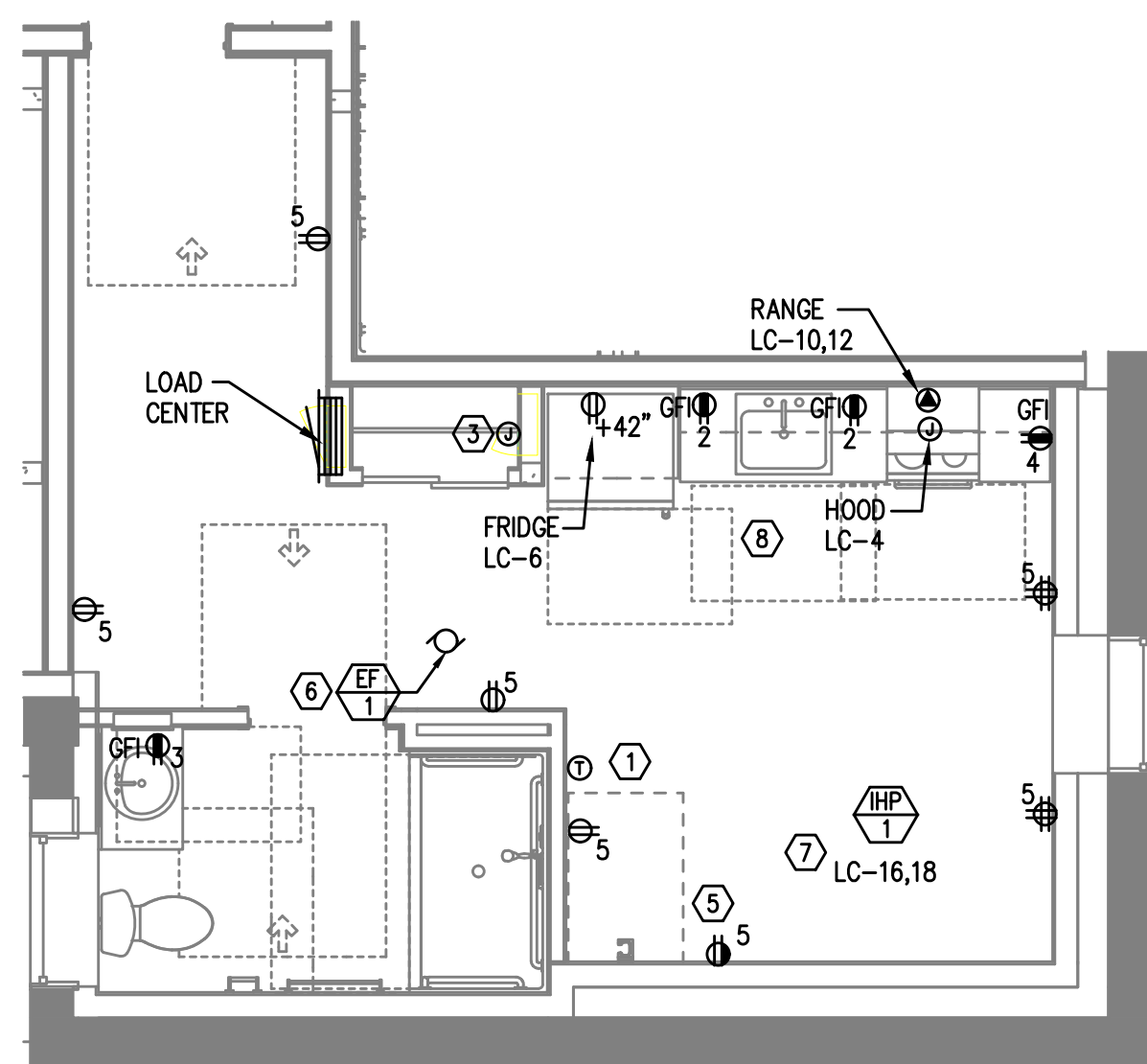
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E4.03 SCALE: 1/4" = 1'-0"

#### GENERAL NOTES:

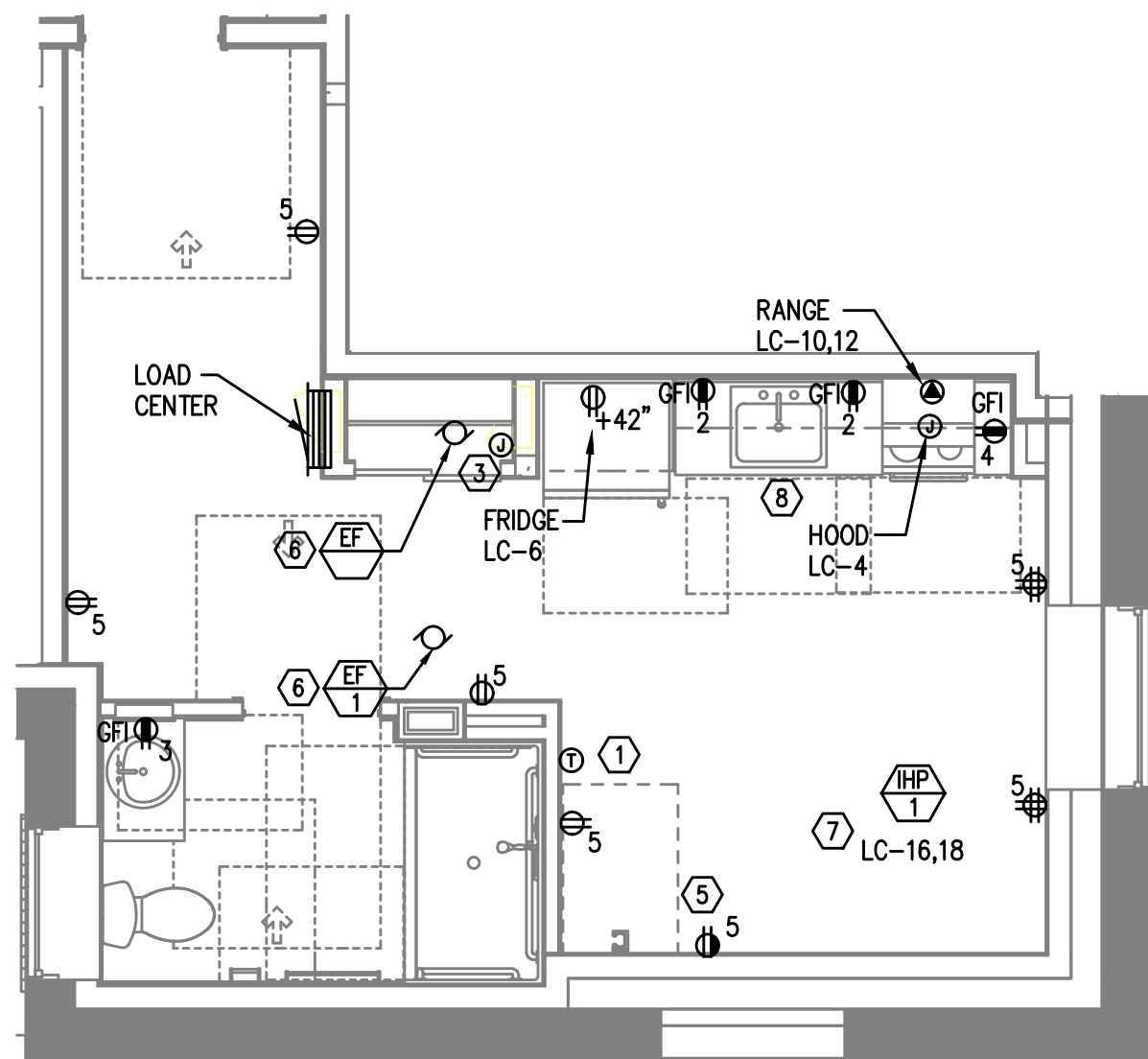
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- REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT FIXTURE LOCATIONS. CONSULT INTERIOR DESIGNER FOR MOUNTING HEIGHTS NOT SPECIFIED.
- KITCHEN RECEPTACLES LOCATED IN ISLANDS OR PENINSULAS WHERE THE BACK SPLASH WILL NOT ACCOMMODATE VERTICAL PLACEMENT OR THE DUPLEX RECEPTACLE, THE CONTRACTOR SHALL ROTATE THE DEVICE 90 DEGREES SO THAT THE RECEPTACLE IS INSTALLED HORIZONTALLY.
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- RECEPTACLE FOR PTHP UNIT SHALL BE LOCATED BELOW THE UNIT, NEAR THE BASE OF THE WALL SUCH THAT THE CORD SET IS CONCEALED AS MUCH AS POSSIBLE. COORDINATE INSTALLATION WITH THE MECHANICAL INSTALLER.
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#### KEYED NOTES:

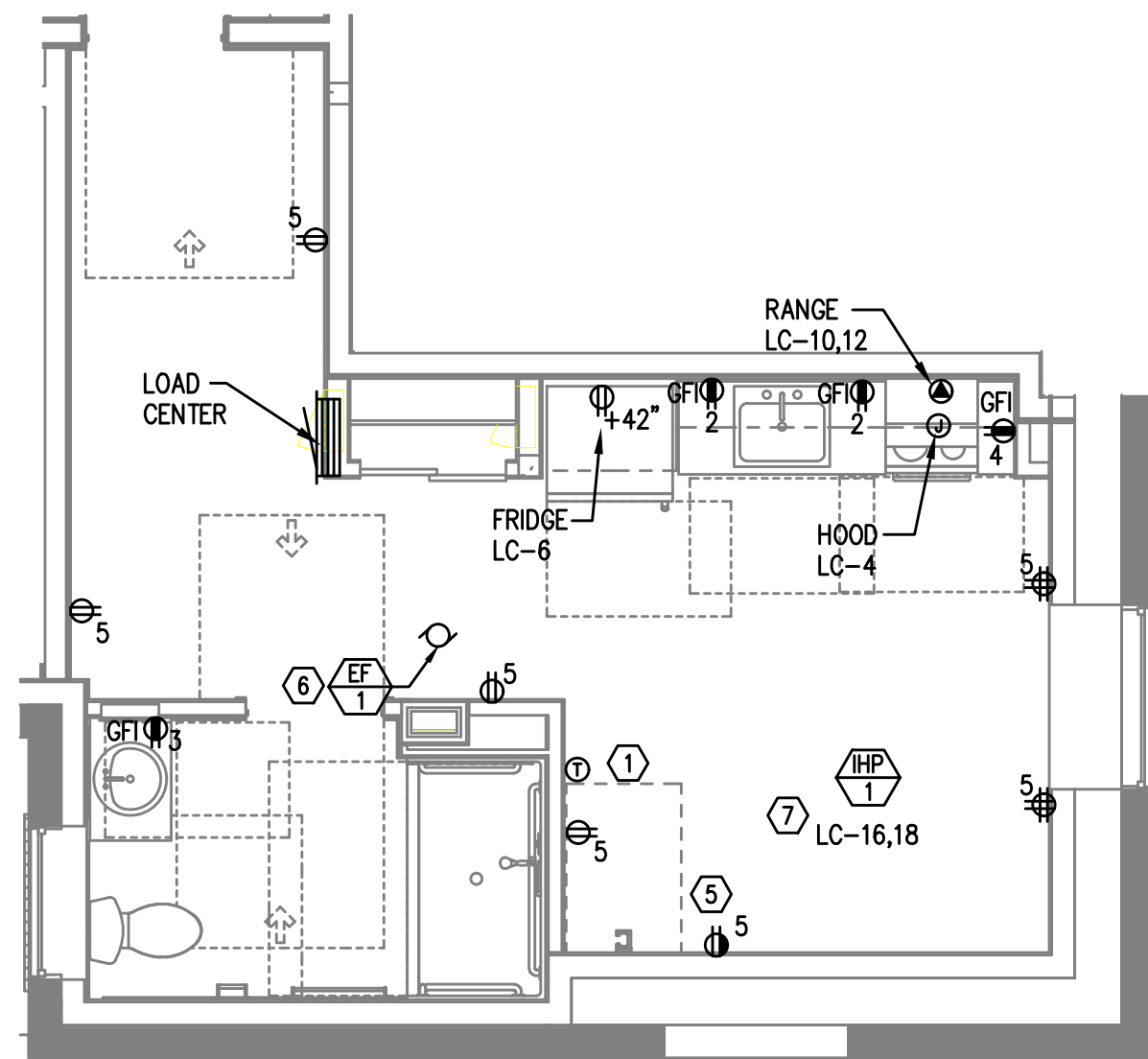
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UNIT TYPE 7 ADA  
TYPICAL POWER PLAN  
2  
E4.03 SCALE: 1/4" = 1'-0"

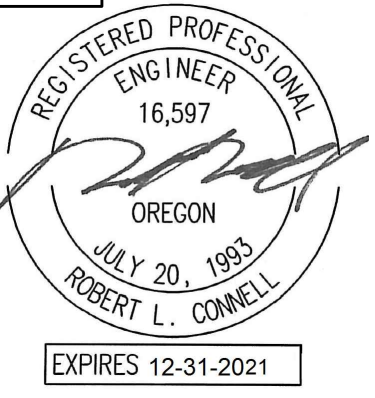


UNIT TYPE 7A ADA  
TYPICAL POWER PLAN  
4  
E4.03 SCALE: 1/4" = 1'-0"



UNIT TYPE 7B ADA  
TYPICAL POWER PLAN  
6  
E4.03 SCALE: 1/4" = 1'-0"

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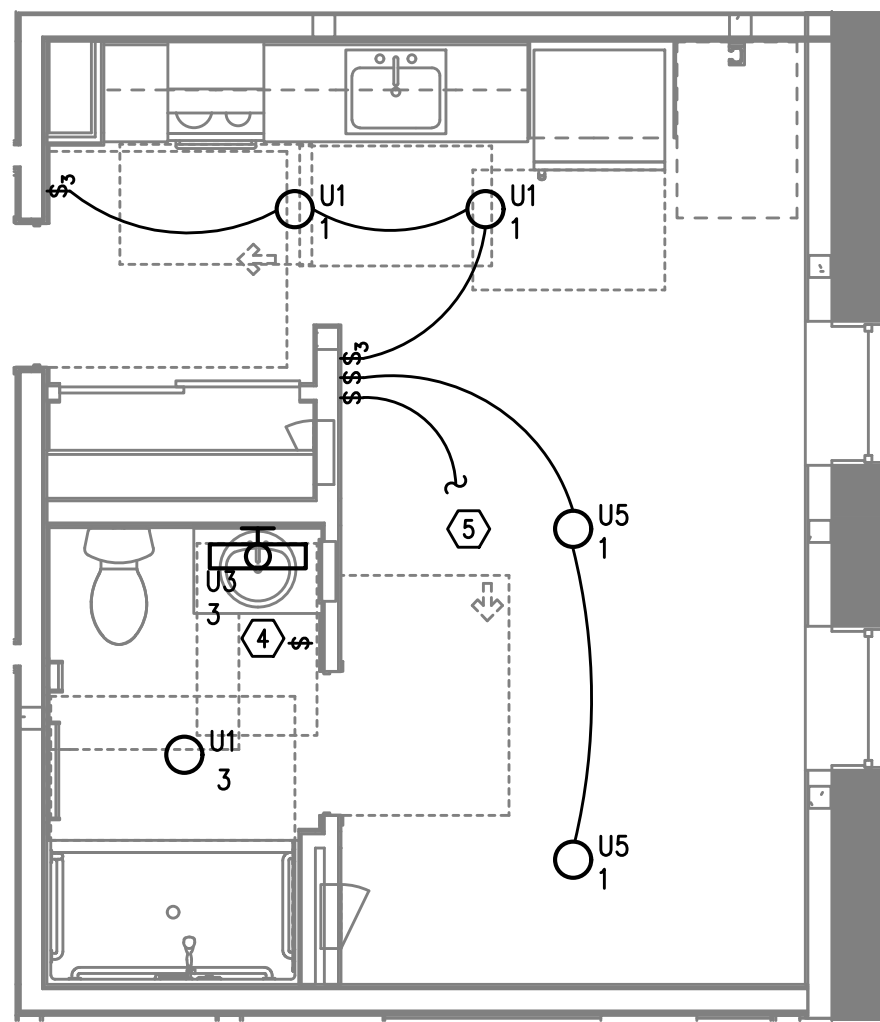
CONFORMANCE SET

TYPICAL ENLARGED  
UNIT PLANS

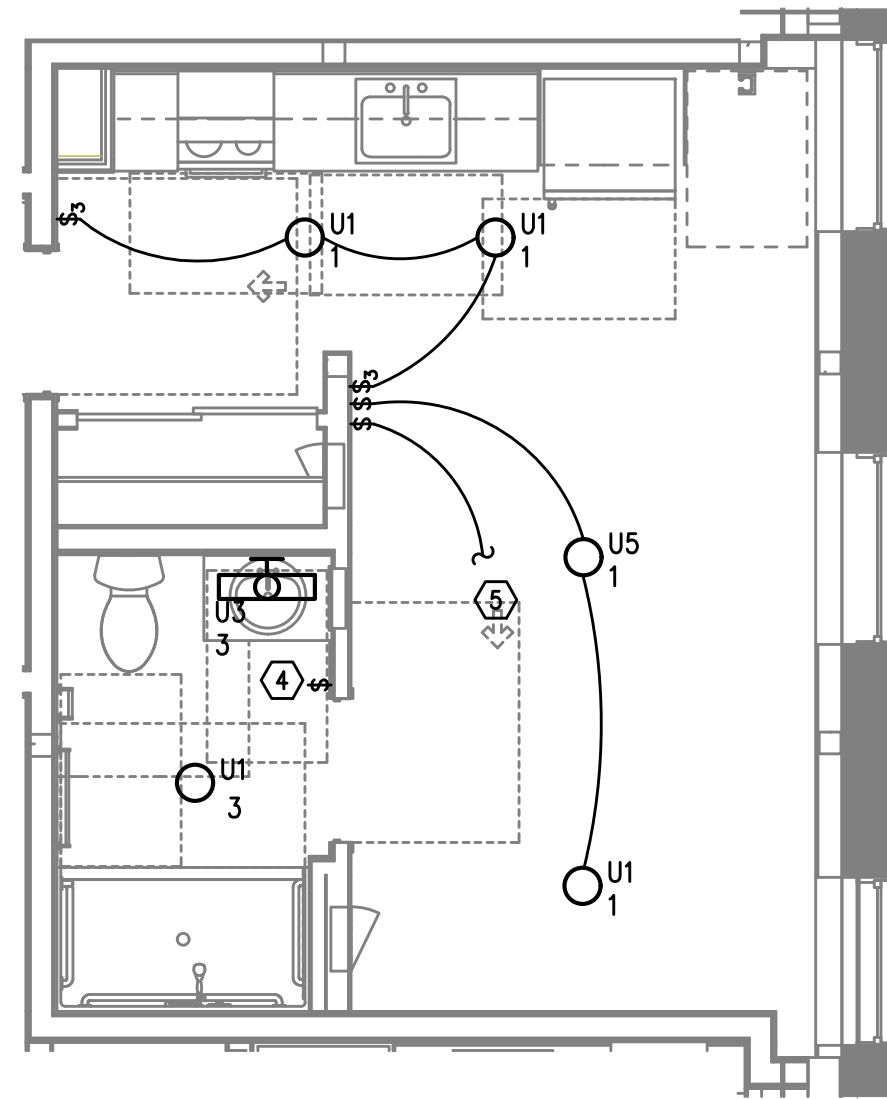
PROJECT NO.  
17004  
05/28/2021

REVISIONS: A

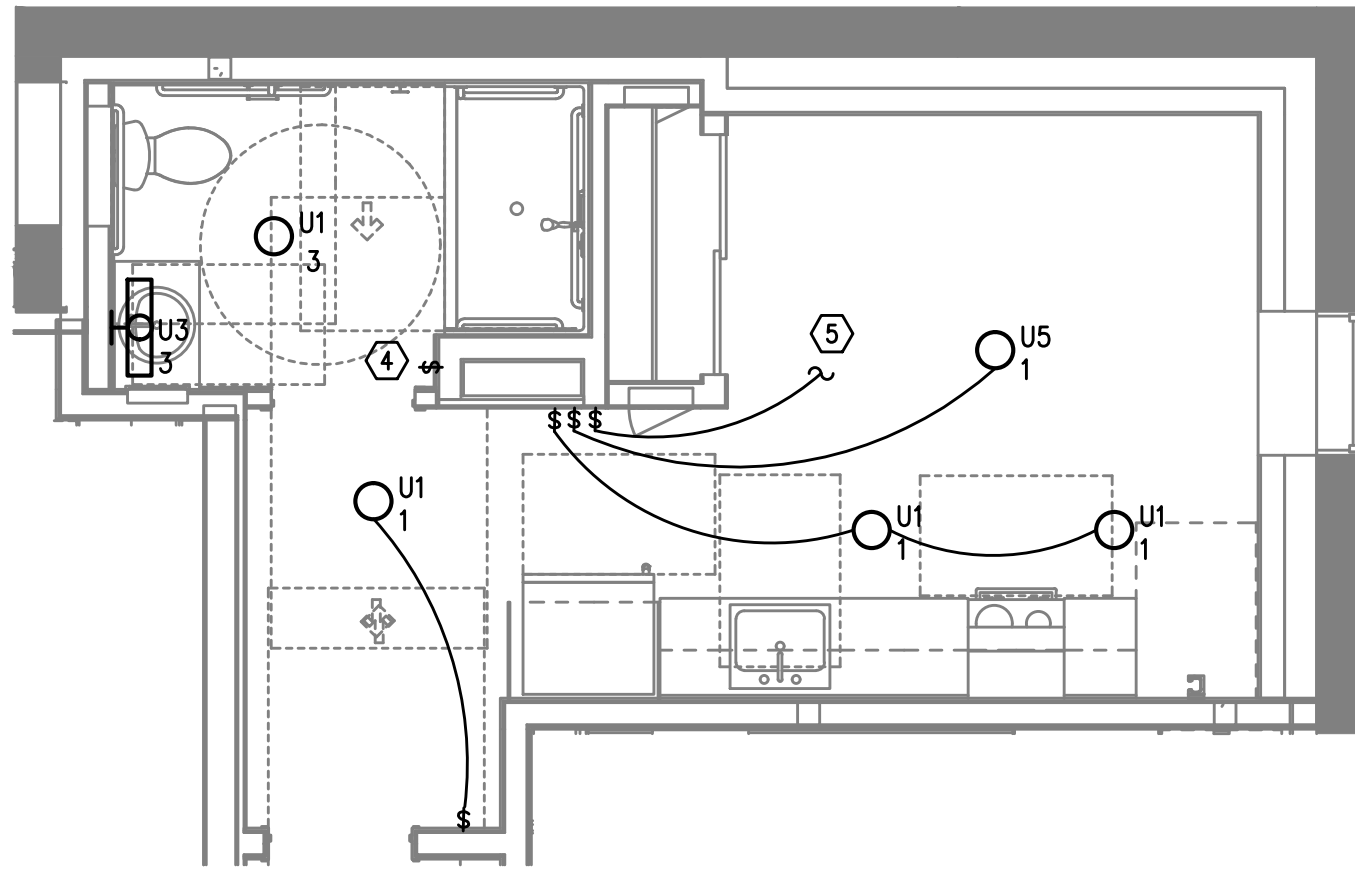
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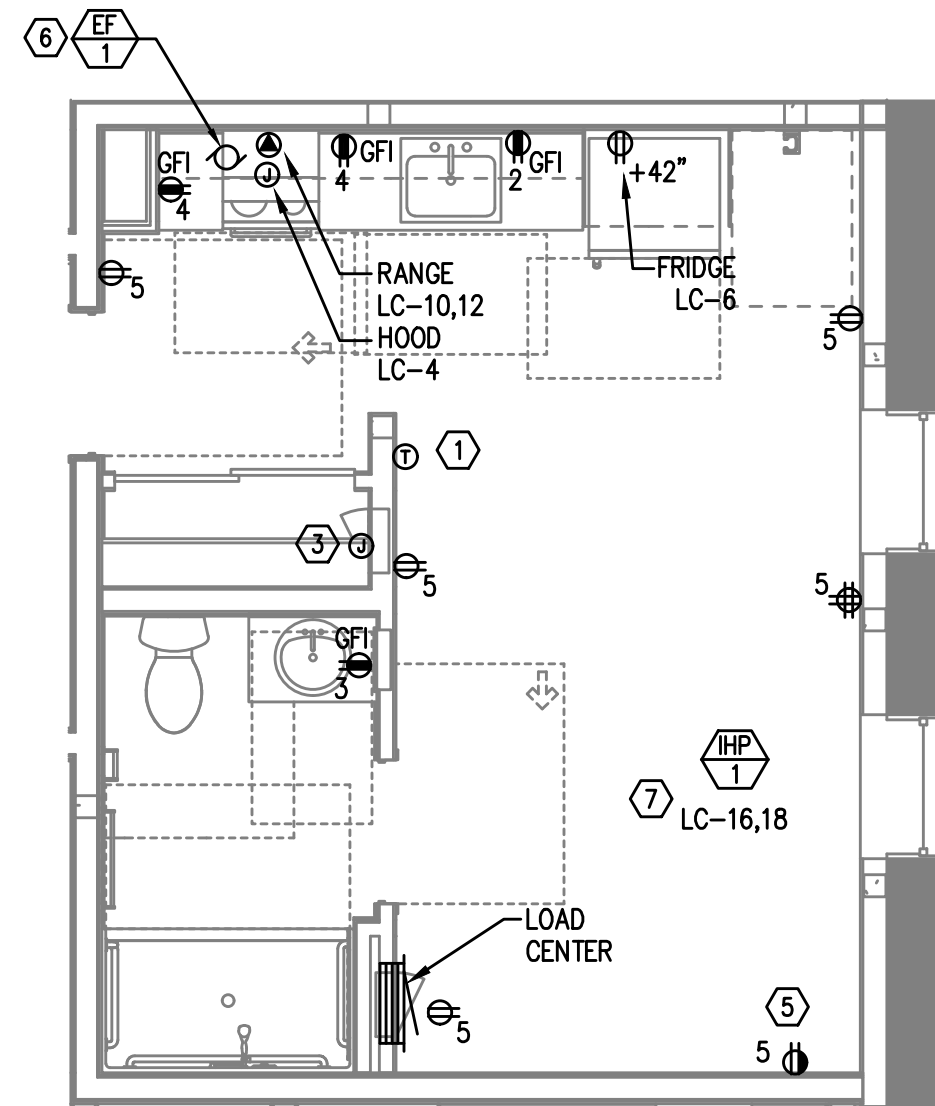
UNIT TYPE 8  
1 TYPICAL LIGHTING PLAN  
E4.04 SCALE: 1/4" = 1'-0"



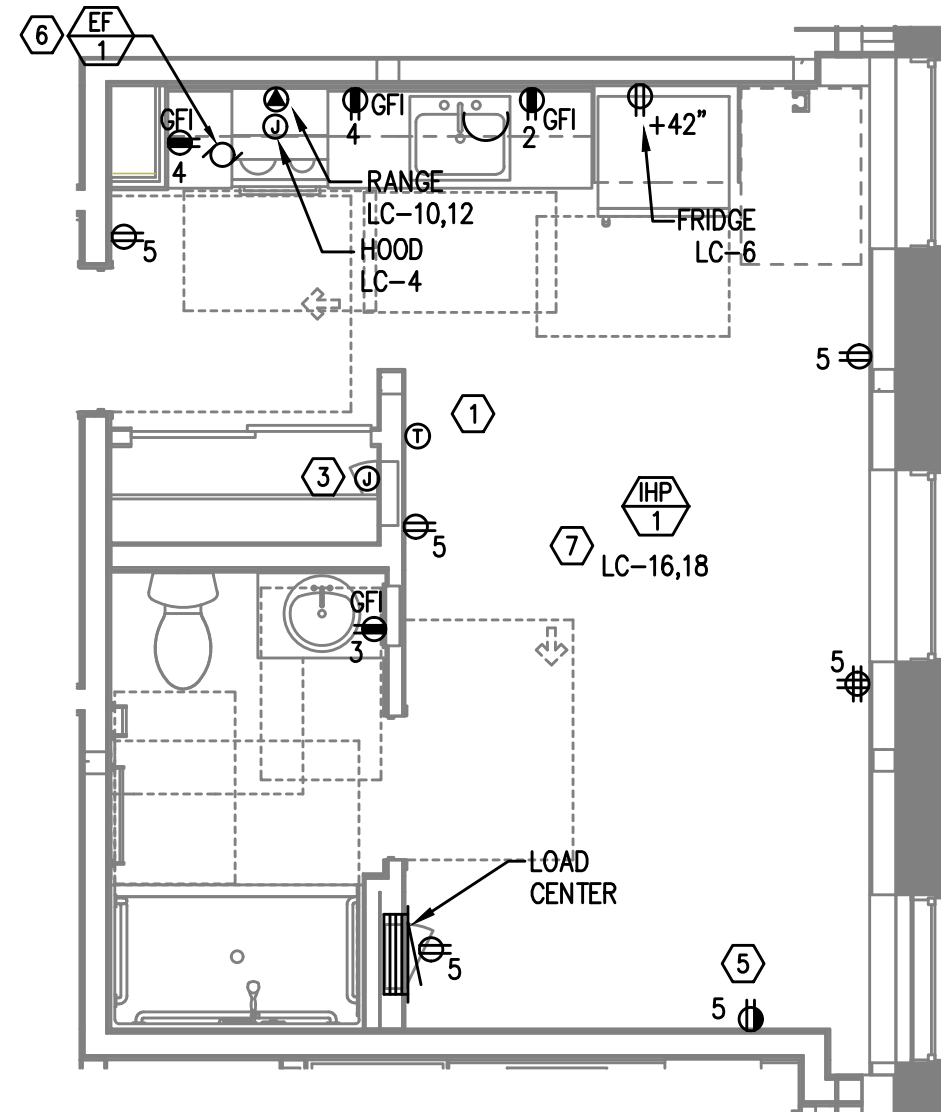
UNIT TYPE 8A  
3 TYPICAL LIGHTING PLAN  
E4.04 SCALE: 1/4" = 1'-0"



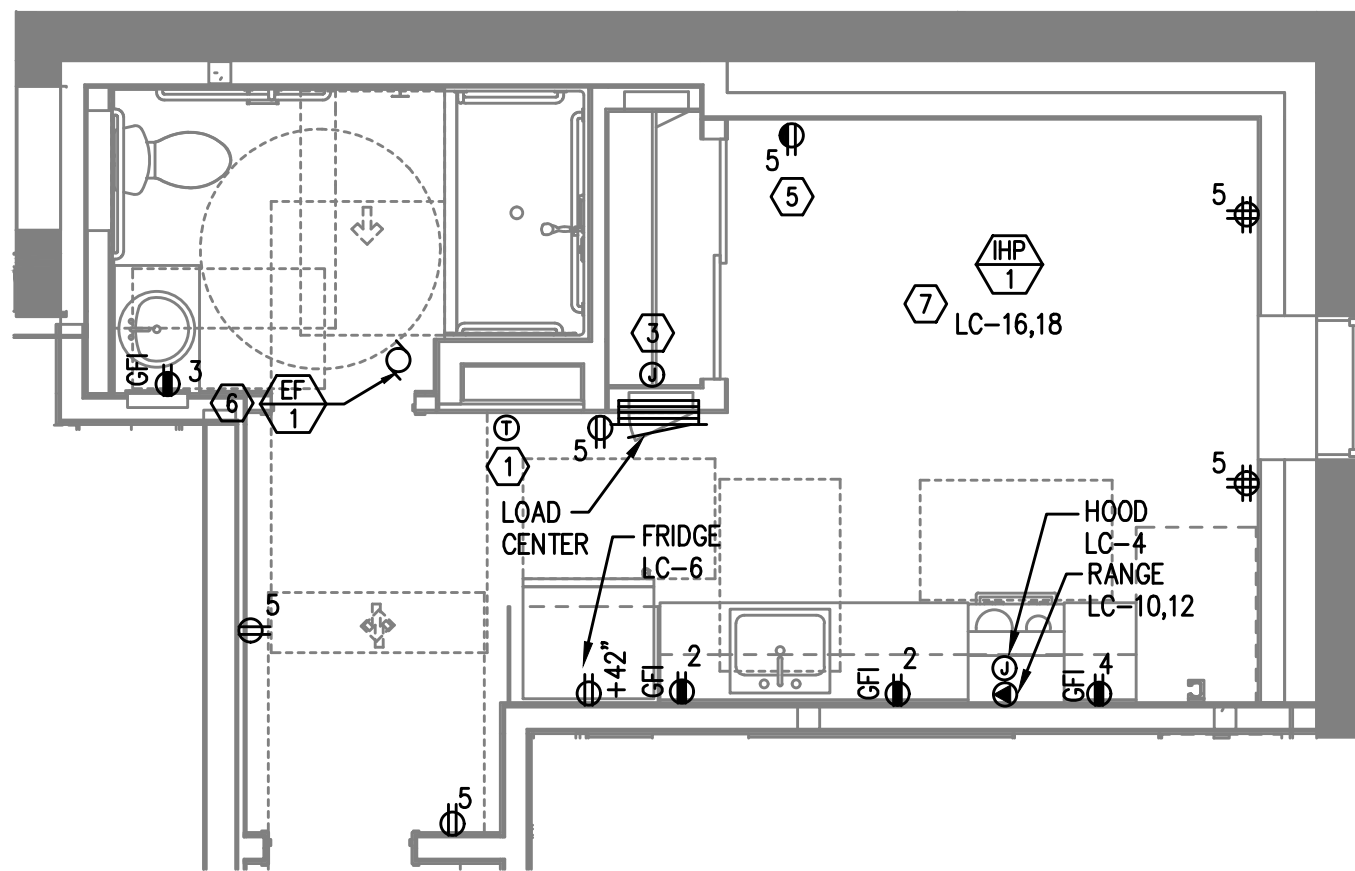
UNIT TYPE 9  
5 TYPICAL LIGHTING PLAN  
E4.04 SCALE: 1/4" = 1'-0"



UNIT TYPE 8  
2 TYPICAL POWER PLAN  
E4.04 SCALE: 1/4" = 1'-0"



UNIT TYPE 8A  
4 TYPICAL POWER PLAN  
E4.04 SCALE: 1/4" = 1'-0"



UNIT TYPE 9  
6 TYPICAL POWER PLAN  
E4.04 SCALE: 1/4" = 1'-0"

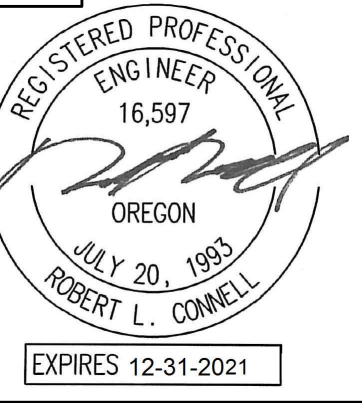
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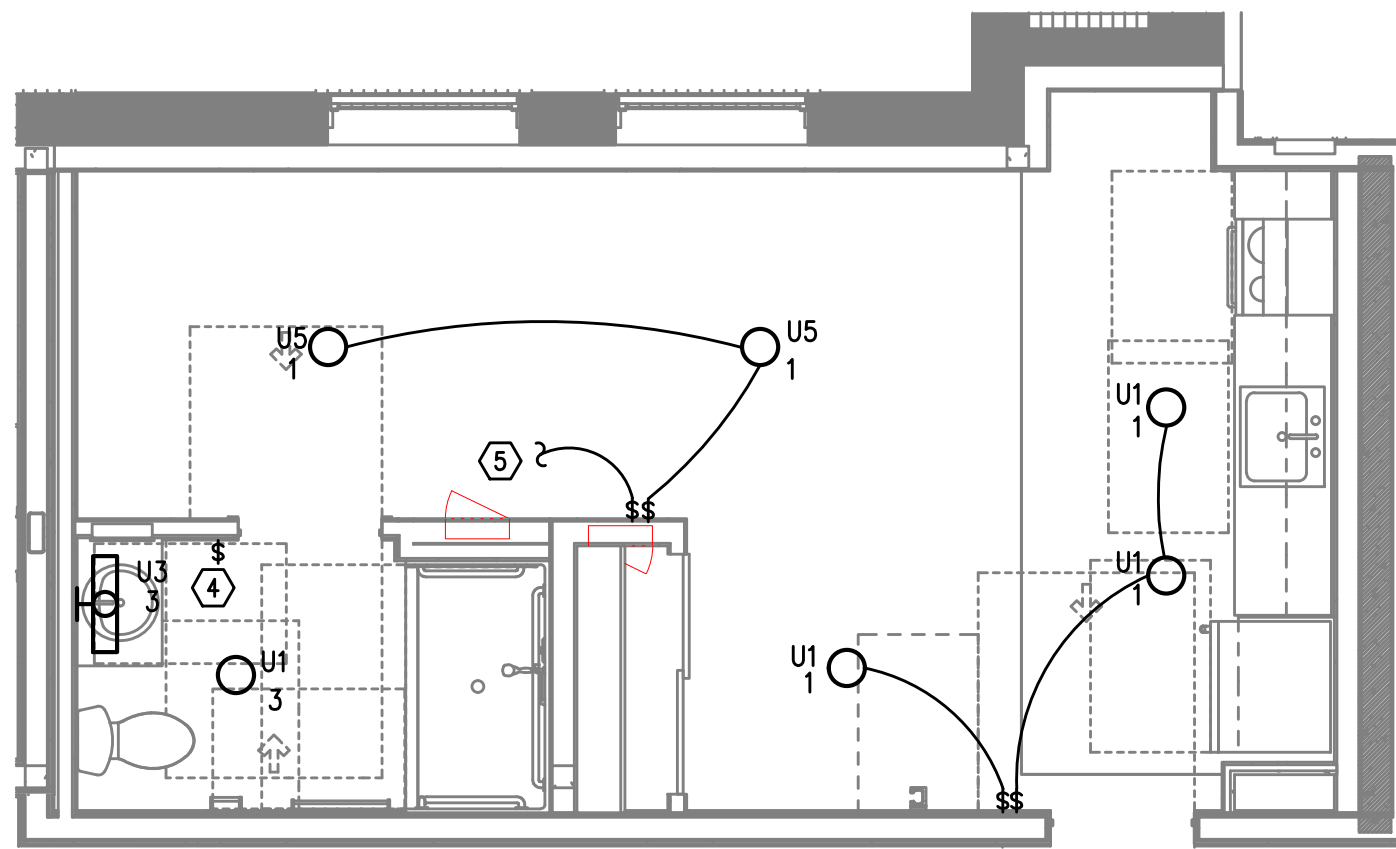
**CONFORMANCE SET**

TYPICAL ENLARGED  
UNIT PLANS

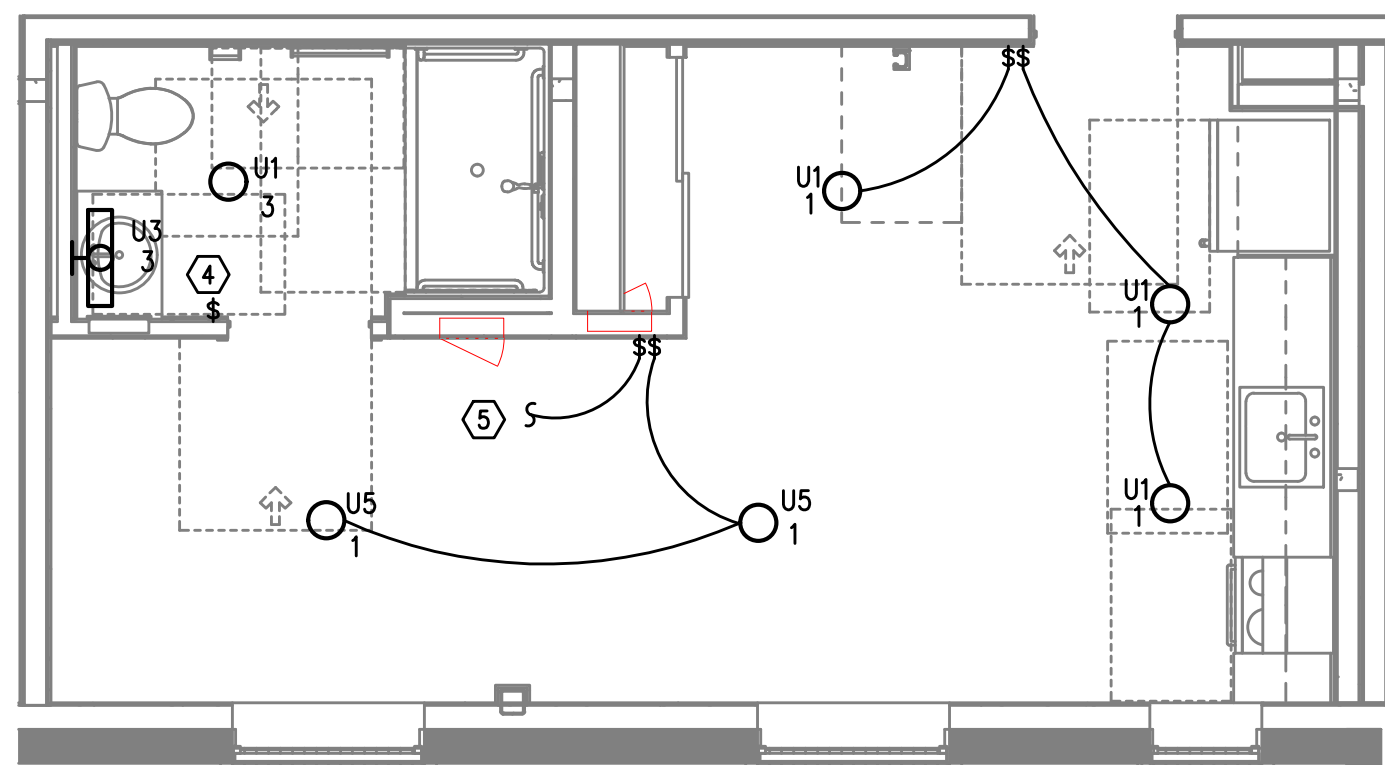
PROJECT NO.  
17004  
05/28/2021

REVISIONS:

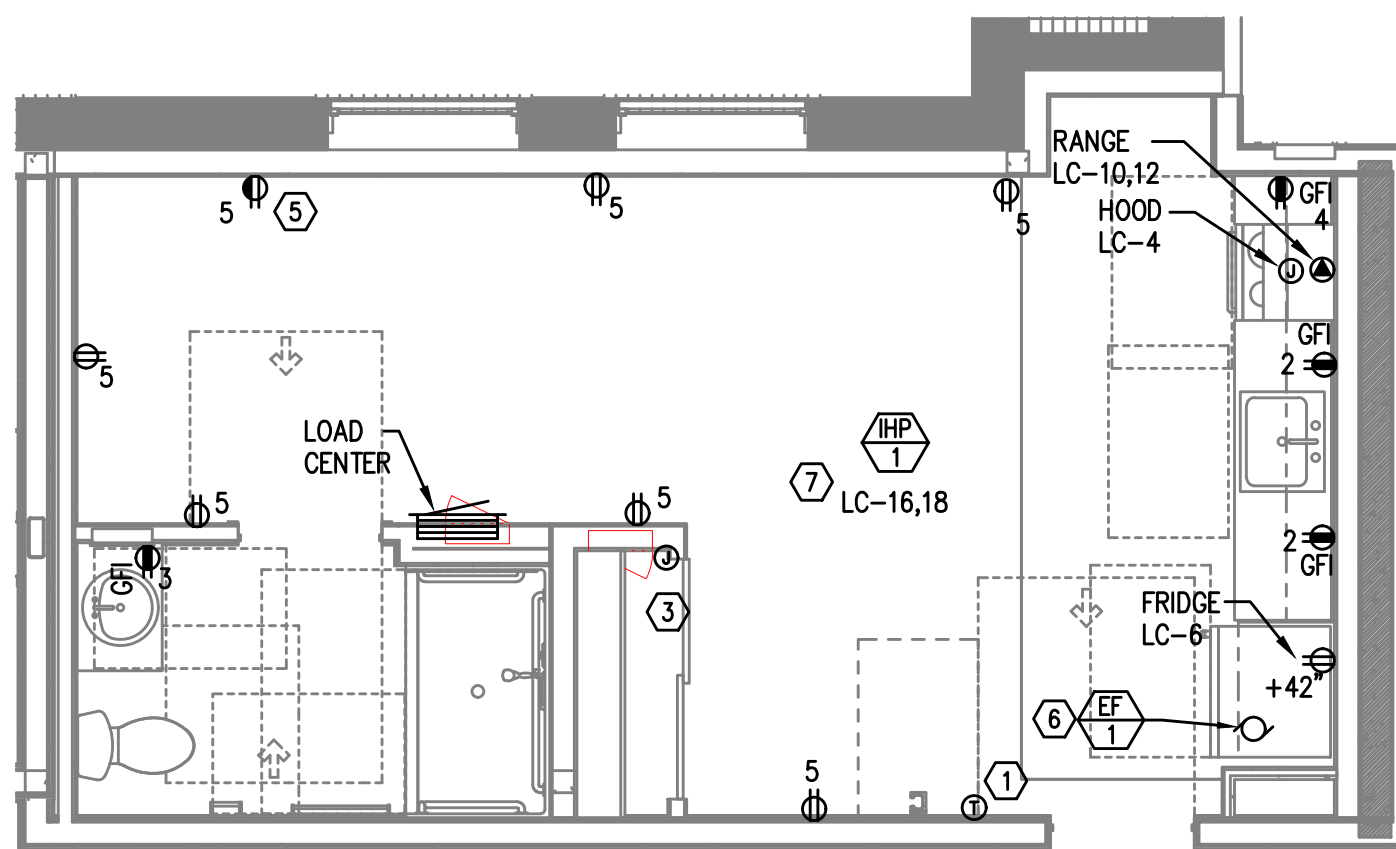
**E4.04**



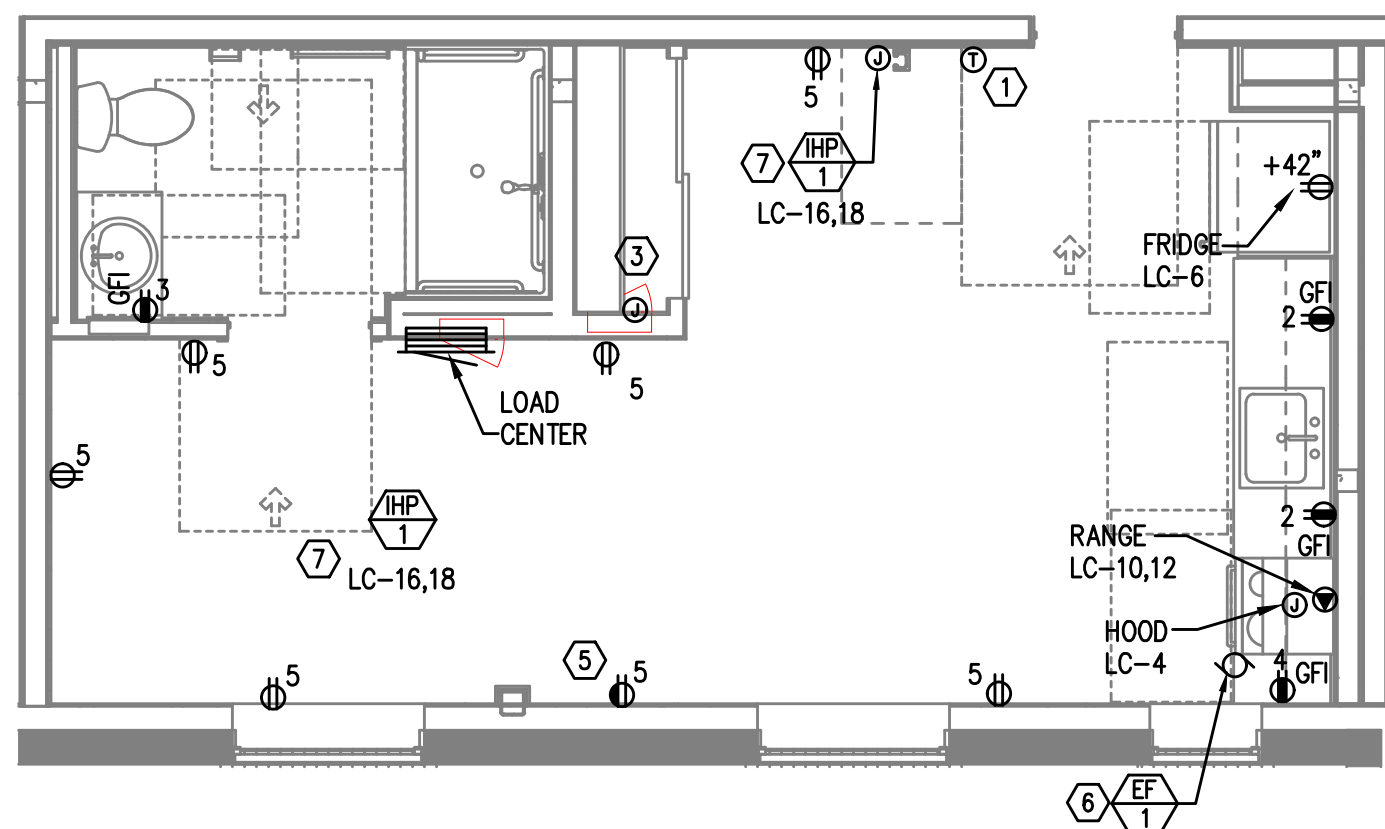
UNIT TYPE 10  
1  
TYPICAL LIGHTING PLAN  
E4.05 SCALE: 1/4" = 1'-0"



UNIT TYPE 10A  
3  
TYPICAL LIGHTING PLAN  
E4.05 SCALE: 1/4" = 1'-0"



UNIT TYPE 10  
2  
TYPICAL POWER PLAN  
E4.05 SCALE: 1/4" = 1'-0"



UNIT TYPE 10A  
4  
TYPICAL POWER PLAN  
E4.05 SCALE: 1/4" = 1'-0"

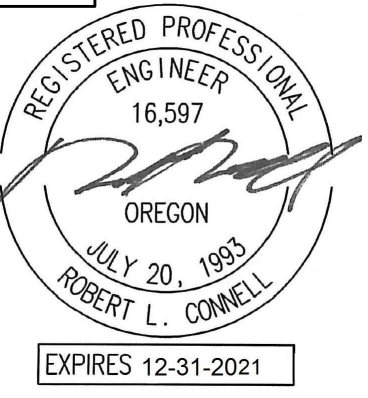
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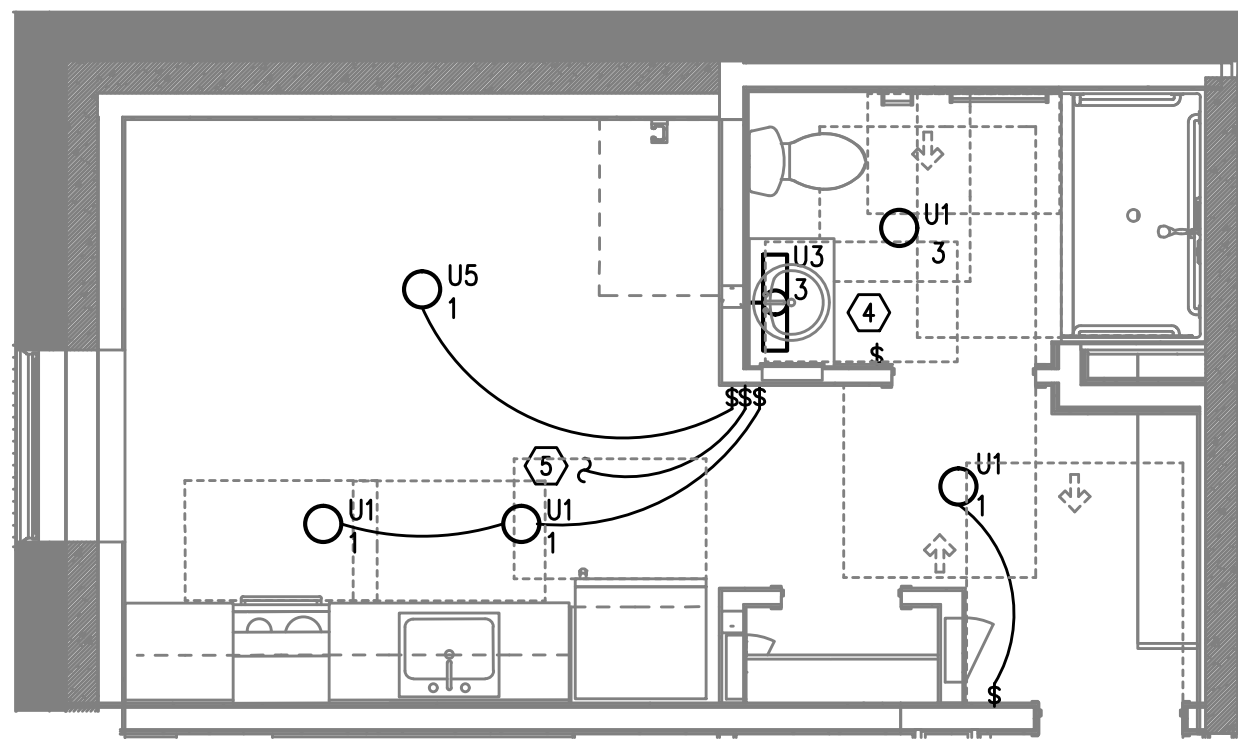
**CONFORMANCE SET**

TYPICAL ENLARGED  
UNIT PLANS

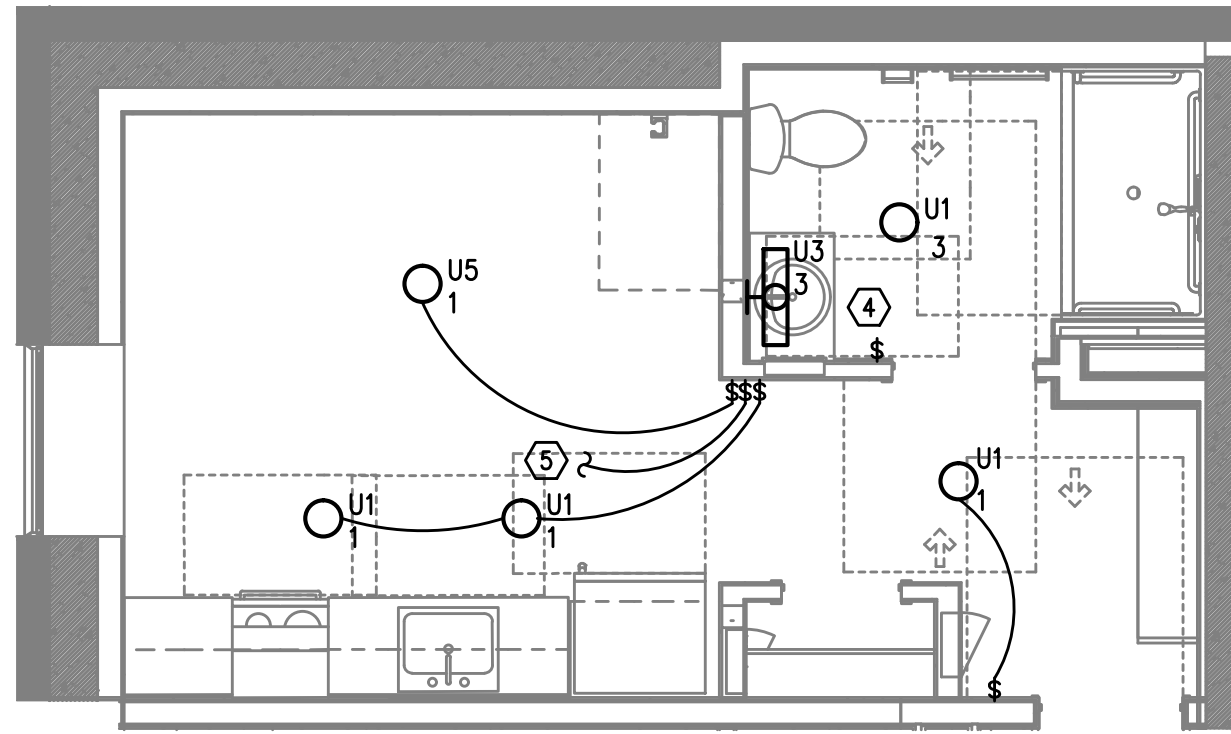
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17004  
05/28/2021

REVISIONS:

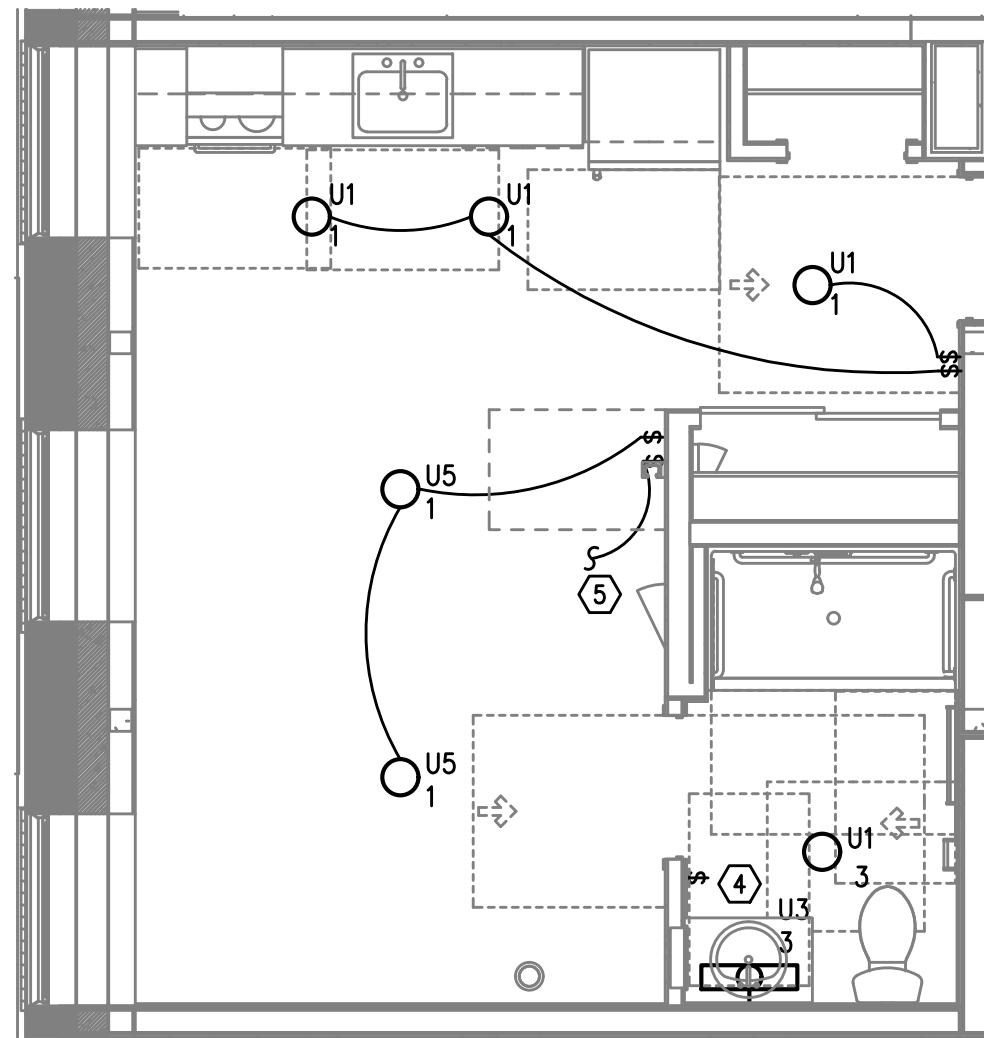
**E4.05**



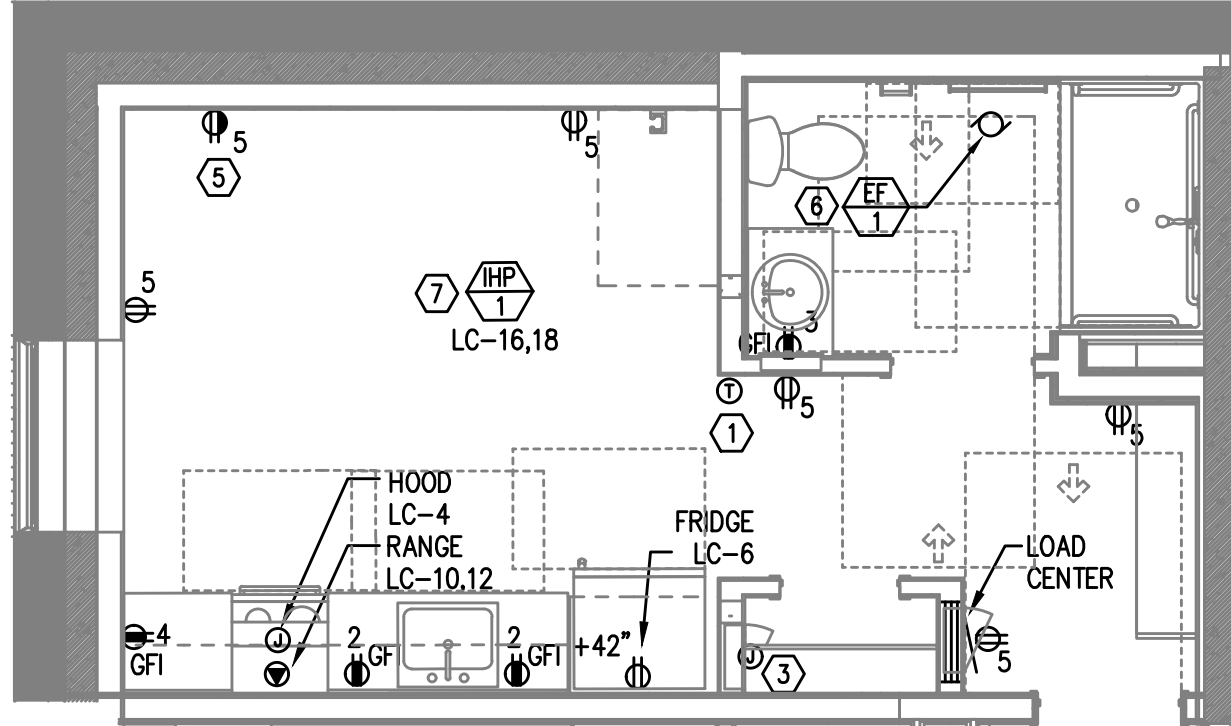
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E4.06  
TYPICAL LIGHTING PLAN  
SCALE: 1/4" = 1'-0"



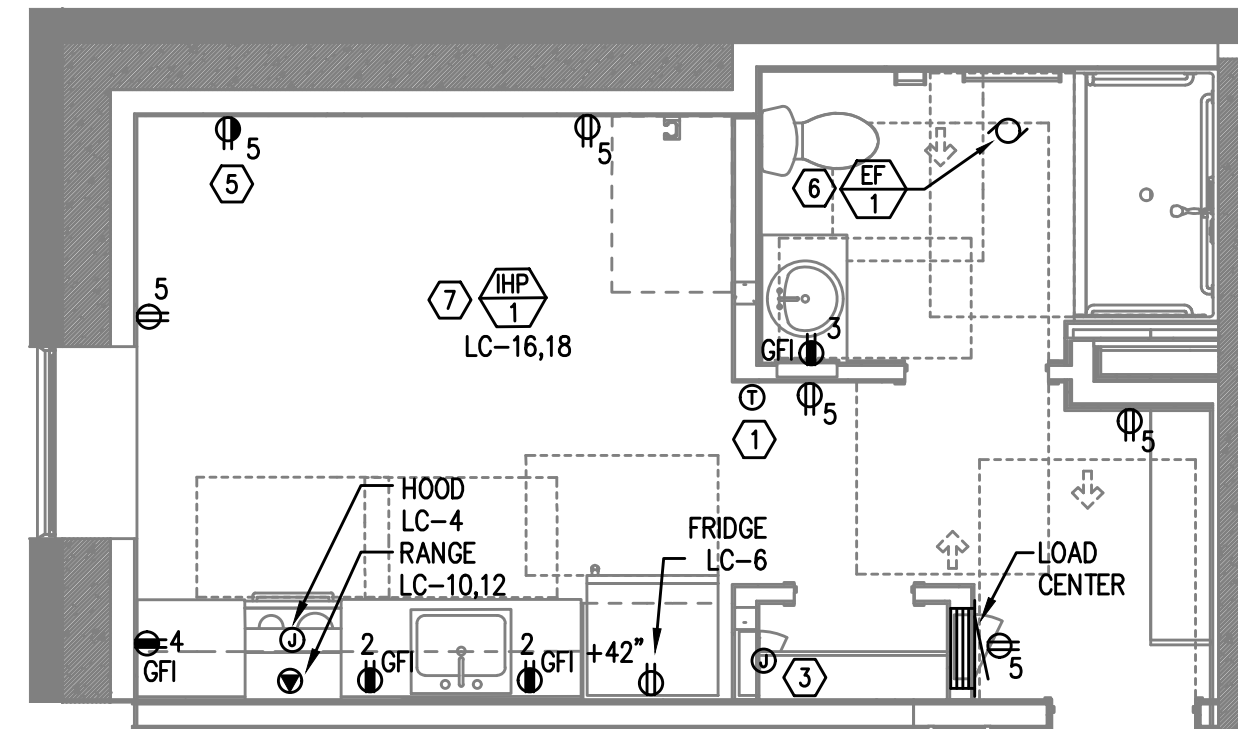
UNIT TYPE 11A  
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E4.06  
TYPICAL LIGHTING PLAN  
SCALE: 1/4" = 1'-0"



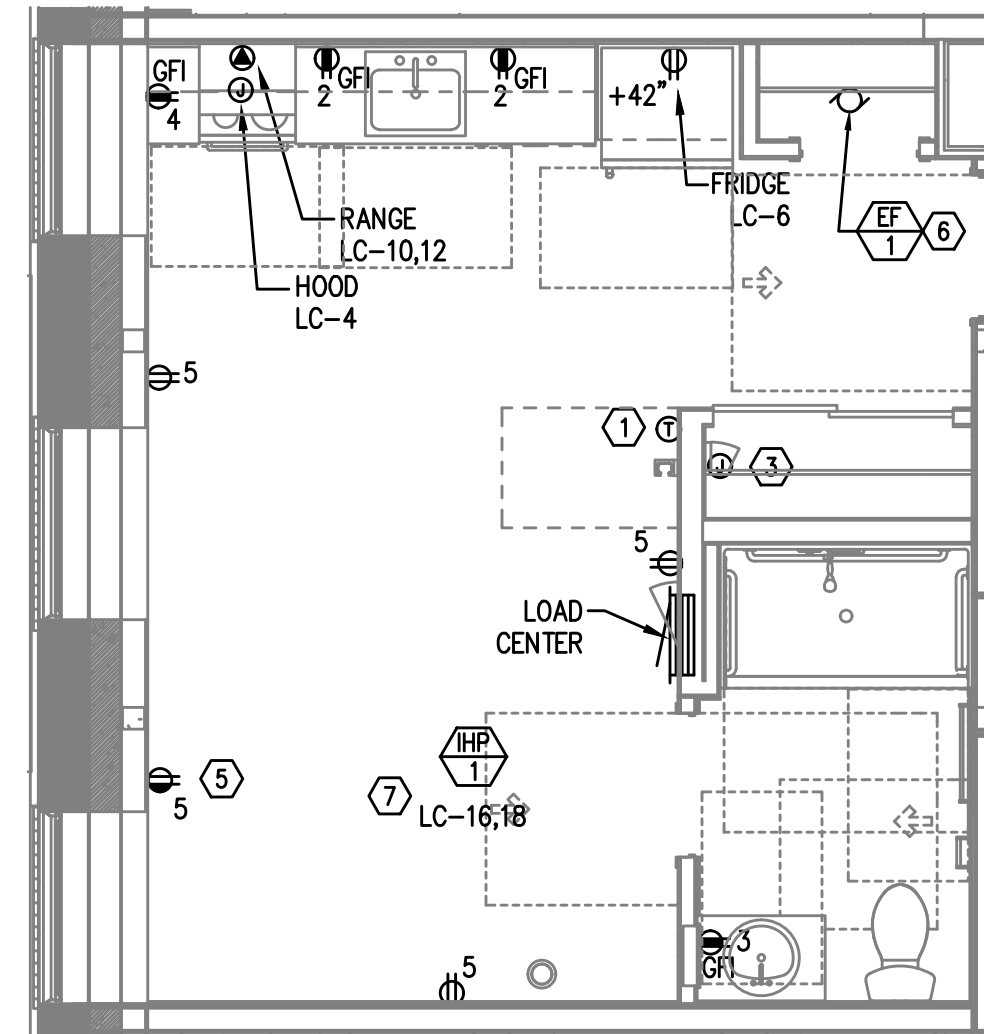
UNIT TYPE 12  
5  
E4.06  
TYPICAL LIGHTING PLAN  
SCALE: 1/4" = 1'-0"



UNIT TYPE 11  
2  
E4.06  
TYPICAL POWER PLAN  
SCALE: 1/4" = 1'-0"



UNIT TYPE 11A  
4  
E4.06  
TYPICAL POWER PLAN  
SCALE: 1/4" = 1'-0"



UNIT TYPE 12  
6  
E4.06  
TYPICAL POWER PLAN  
SCALE: 1/4" = 1'-0"

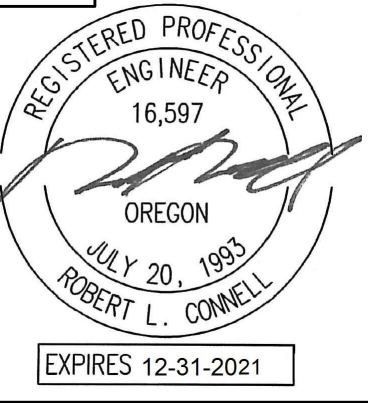
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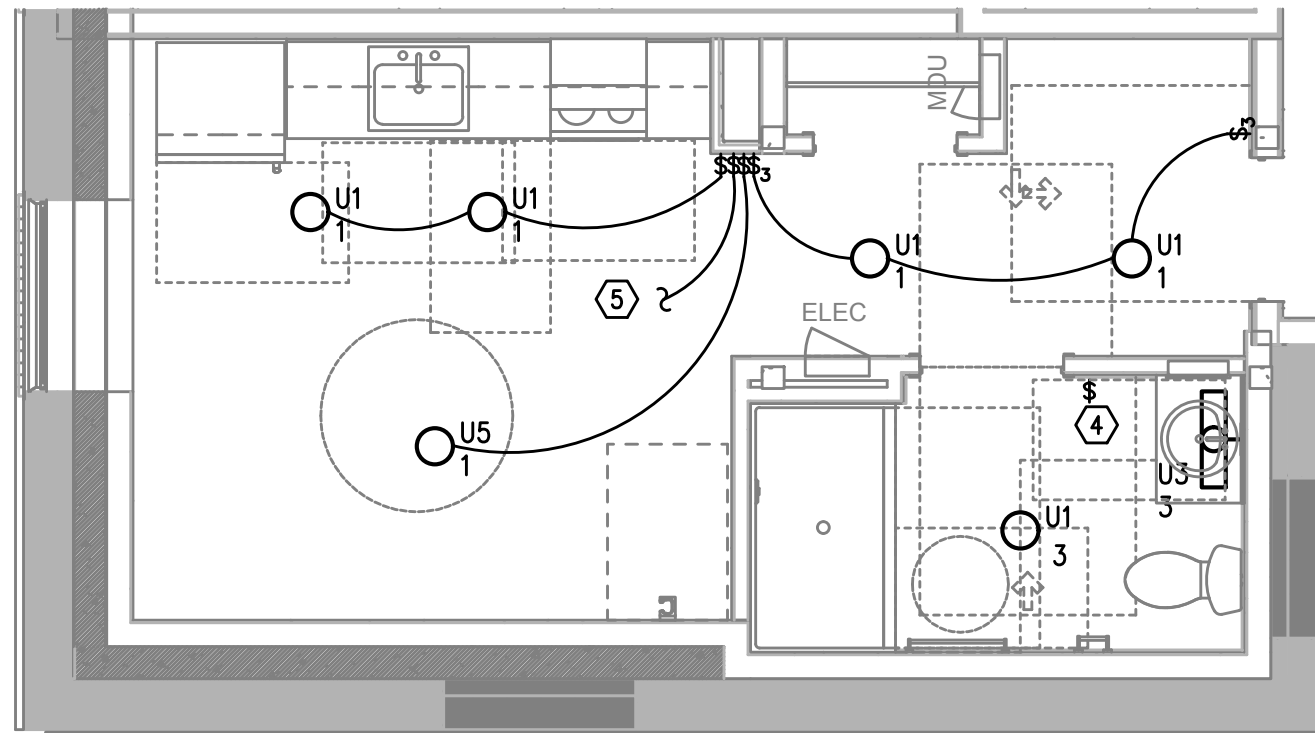
**NORTHWEST HOUSING ALTERNATIVES**

**CONFORMANCE SET**

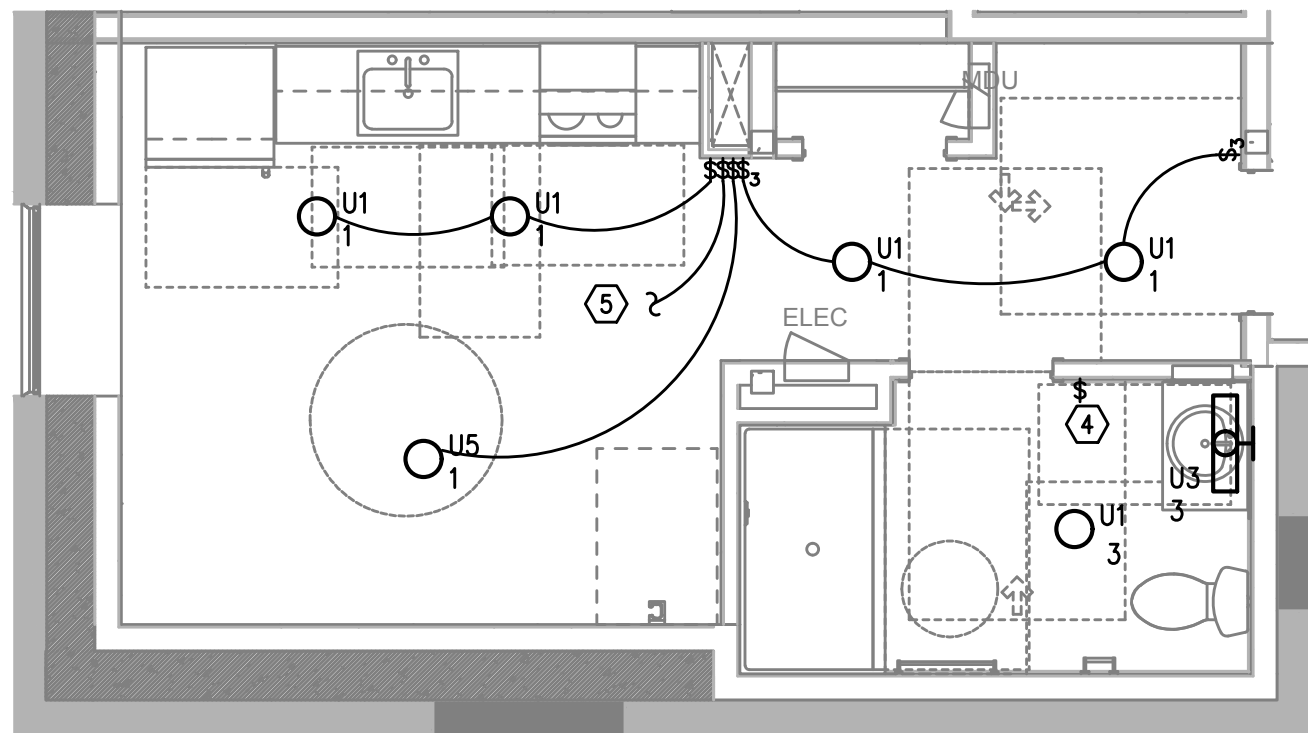
TYPICAL ENLARGED  
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PROJECT NO.  
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05/28/2021

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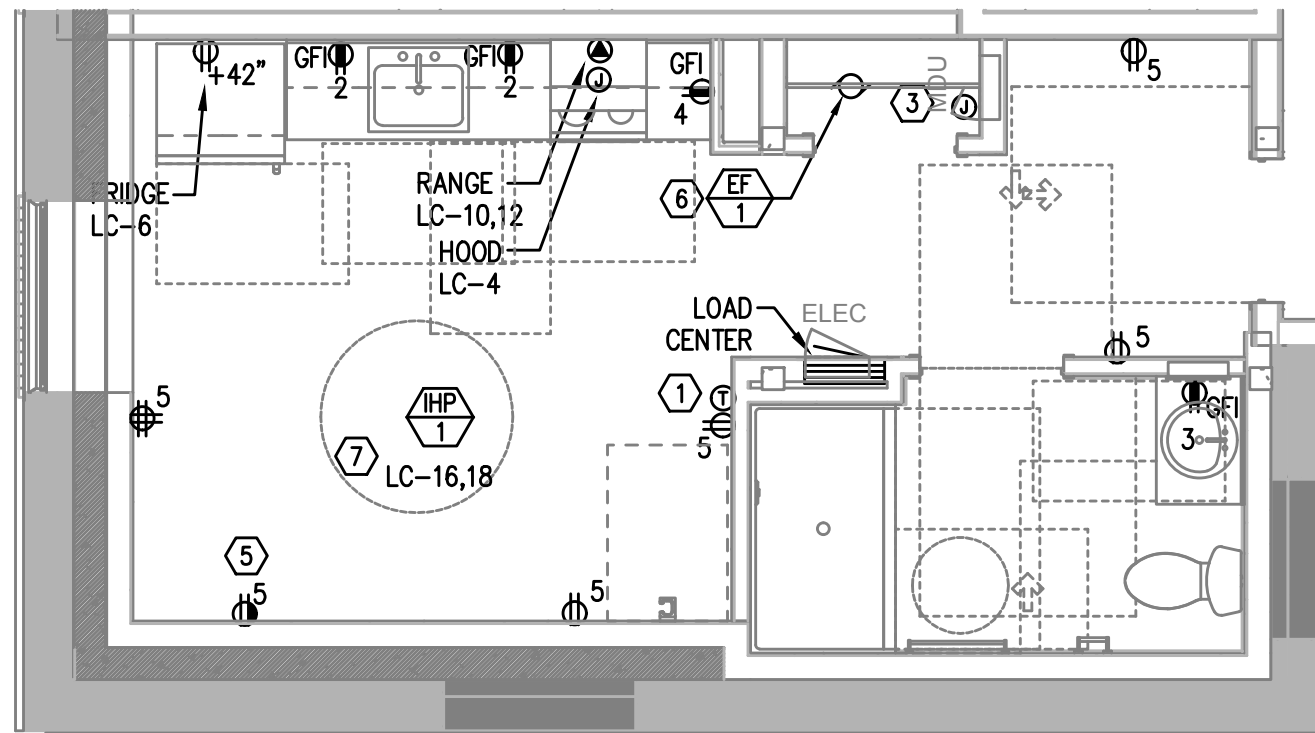
**E4.06**



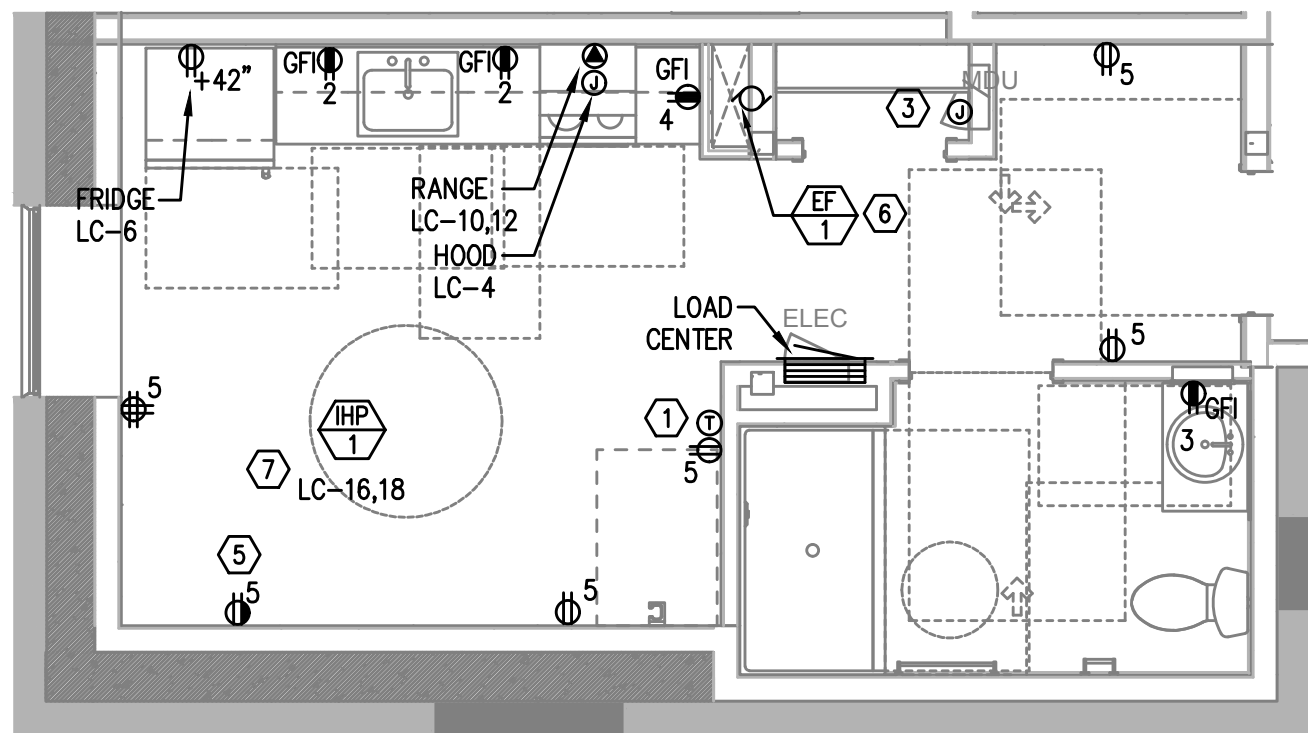
UNIT TYPE 13  
TYPICAL LIGHTING PLAN  
1  
E4.07 SCALE: 1/4" = 1'-0"



UNIT TYPE 13A  
TYPICAL LIGHTING PLAN  
3  
E4.07 SCALE: 1/4" = 1'-0"



UNIT TYPE 13  
TYPICAL POWER PLAN  
2  
E4.07 SCALE: 1/4" = 1'-0"



UNIT TYPE 13A  
TYPICAL POWER PLAN  
4  
E4.07 SCALE: 1/4" = 1'-0"

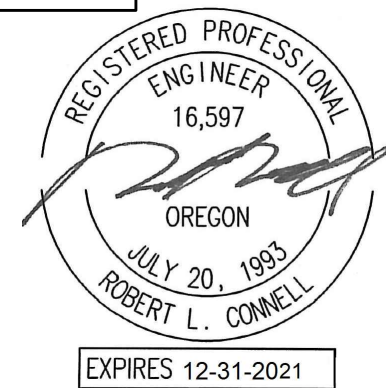
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- STANDARD RECEPTACLE MOUNTING HEIGHT IS 18" A.F.F. UNLESS OTHERWISE SPECIFIED. RECEPTACLES LOCATED BELOW WINDOW SILLS SHALL NOT BE LESS THE 15" A.F.F.
- ALL PLANS ARE DIAGRAMMATICAL. CONSULT ARCHITECTURAL PLANS AND ELEVATIONS FOR EXACT LOCATION AND MOUNTING HEIGHT OF ALL DEVICES AND FIXTURES.
- RECEPTACLE FOR PTHP UNIT SHALL BE LOCATED BELOW THE UNIT, NEAR THE BASE OF THE WALL SUCH THAT THE CORD SET IS CONCEALED AS MUCH AS POSSIBLE. COORDINATE INSTALLATION WITH THE MECHANICAL INSTALLER.
- COORDINATE WITH THE 'T' SERIES SHEETS AND PROVIDE ROUGH IN FOR LOW VOLTAGE SYSTEMS.

KEYED NOTES:

- PROVIDE WIRE CONNECTION FOR THERMOSTAT(S). COORDINATE WITH MECHANICAL INSTALLER FOR EXACT LOCATION AND POWER REQUIREMENTS PRIOR TO ROUGH IN.
- NOT USED.
- PROVIDE ONE 15A, RECEPTACLE CIRCUIT FROM TENANT LOAD CENTER FOR TELECOM SMART PANEL. COORDINATE WORK WITH SERVICE PROVIDER FOR EXACT LOCATION AND FINAL CONNECTION.
- REFER TO TYPICAL BATHROOM SWITCHING DETAILS ON SHEET E1.15.
- SWITCHED RECEPTACLE. SEE TYPICAL LIGHTING PLAN FOR SWITCH LOCATION.
- CONTINUOUS OPERATION EXHAUST FAN SHALL BE TIED INTO THE BATHROOM LIGHTING CIRCUIT. VERIFY EXACT LOCATION W/MECHANICAL INSTALLER PRIOR TO ROUGH IN.
- REFER TO E3 SHEETS FOR HVAC EQUIPMENT LOCATION(S) & TYPE IN EACH UNIT. REVIEW & COORDINATE WITH THE MECHANICAL PLANS AND THE MECHANICAL INSTALLER FOR EXACT LOCATIONS AND ELECTRICAL REQUIREMENTS PRIOR TO ROUGH IN. PROVIDE CIRCUITING AS INDICATED. INDOOR HEAT PUMP UNITS ARE INTERCONNECTED WITH OUTDOOR UNIT LOCATED ON THE ROOF. POWER CONNECTION FOR PTHP UNIT SHALL BE LOCATED BELOW THE UNIT, NEAR THE BASE OF THE WALL SUCH THAT THE CORD SET IS CONCEALED AS MUCH AS POSSIBLE. CONSULT MECHANICAL PLANS TO DETERMINE WHETHER PTHP UNITS ARE CORD & PLUG OR HARDWIRED AND PROVIDE THE APPROPRIATE CONNECTION TYPE.
- PER ARCHITECT'S DIRECTION, ABOVE COUNTER RECEPTACLES IN ACCESSIBLE UNIT KITCHENS TO BE PROVIDED WITH A 1-INCH OFFSET, EXCEPT FOR THOSE LOCATED ON AN END WALL.

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CONFORMANCE SET

TYPICAL ENLARGED  
UNIT PLANS  
PROJECT NO.  
17004  
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REVISIONS: A