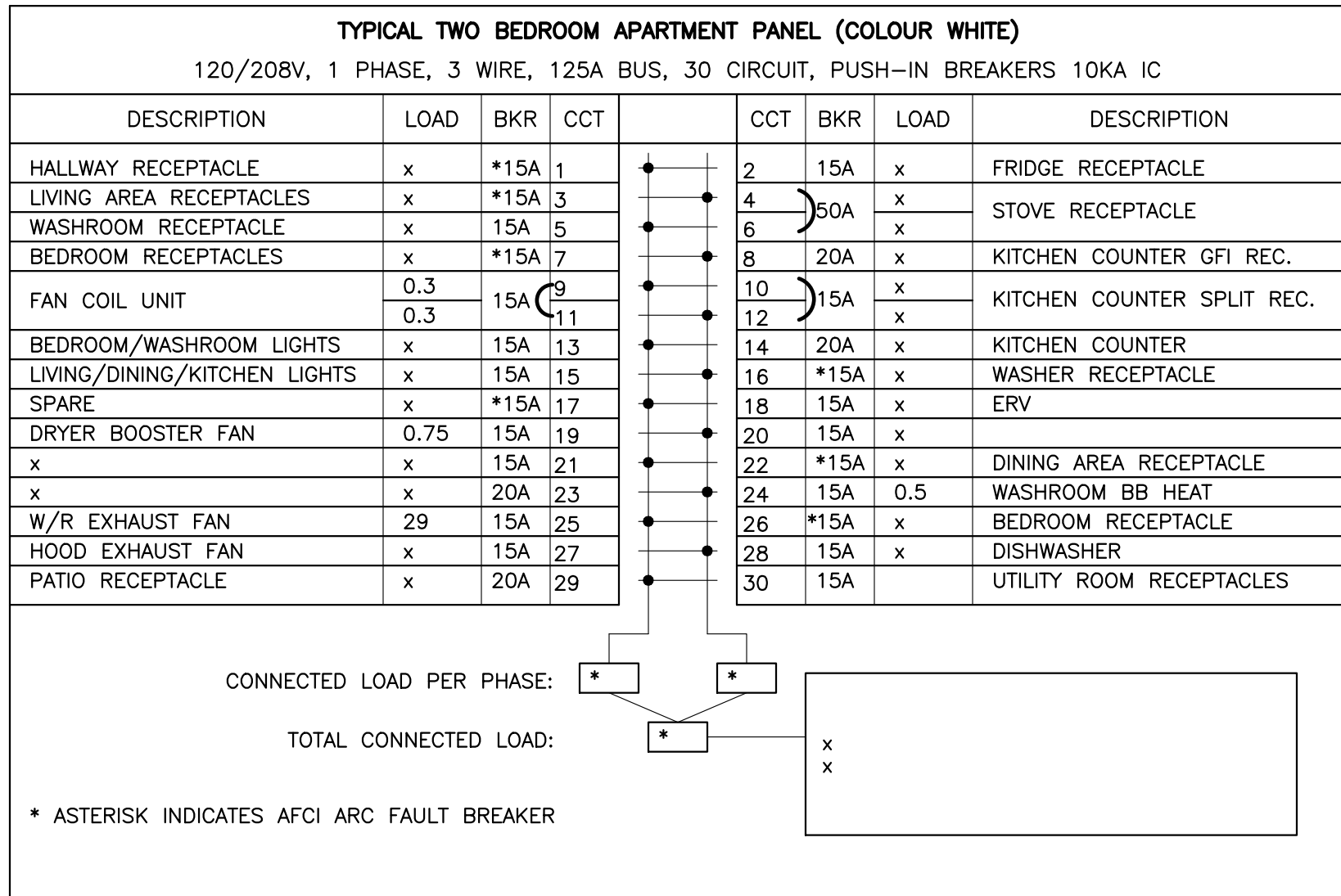
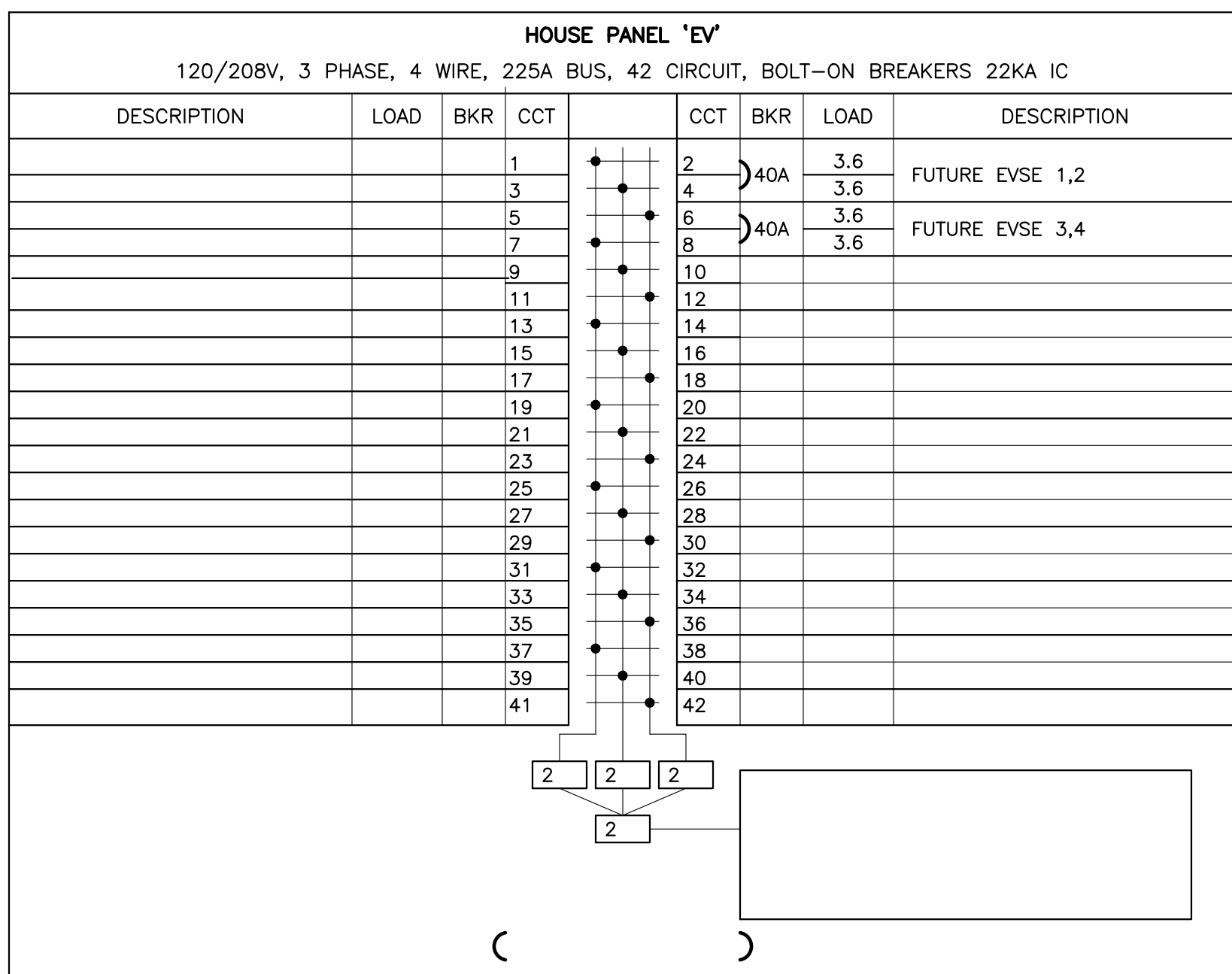
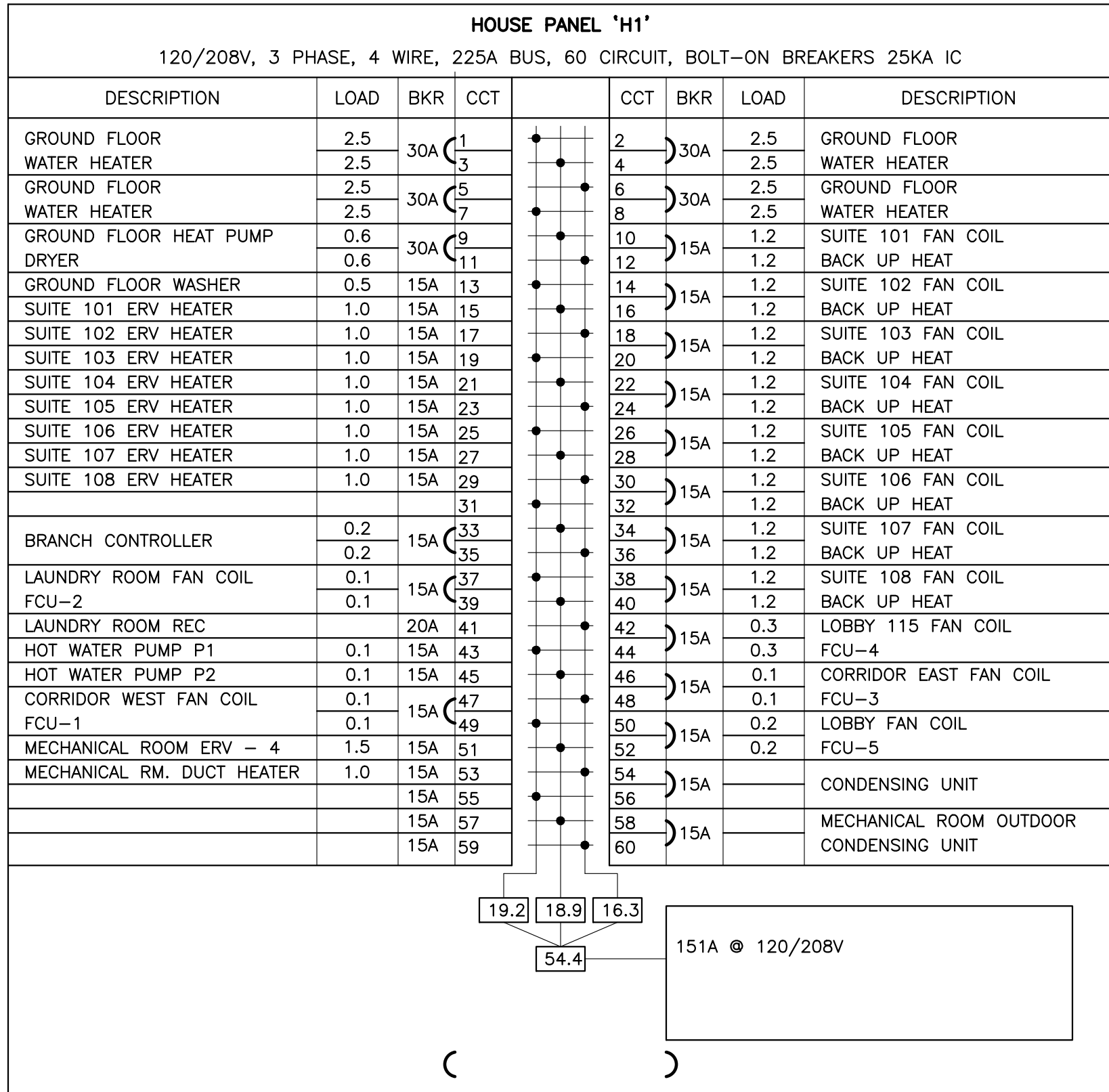
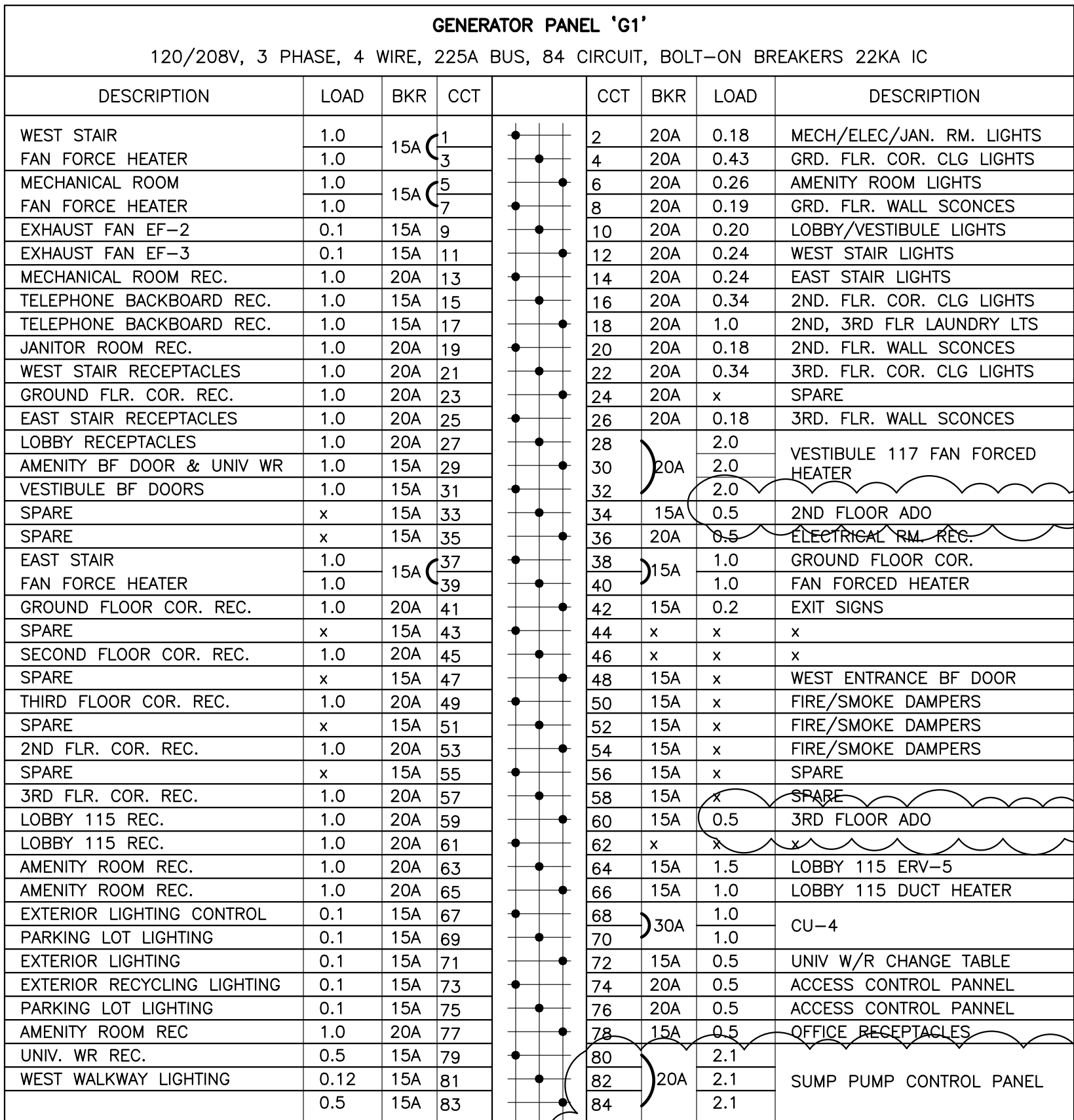
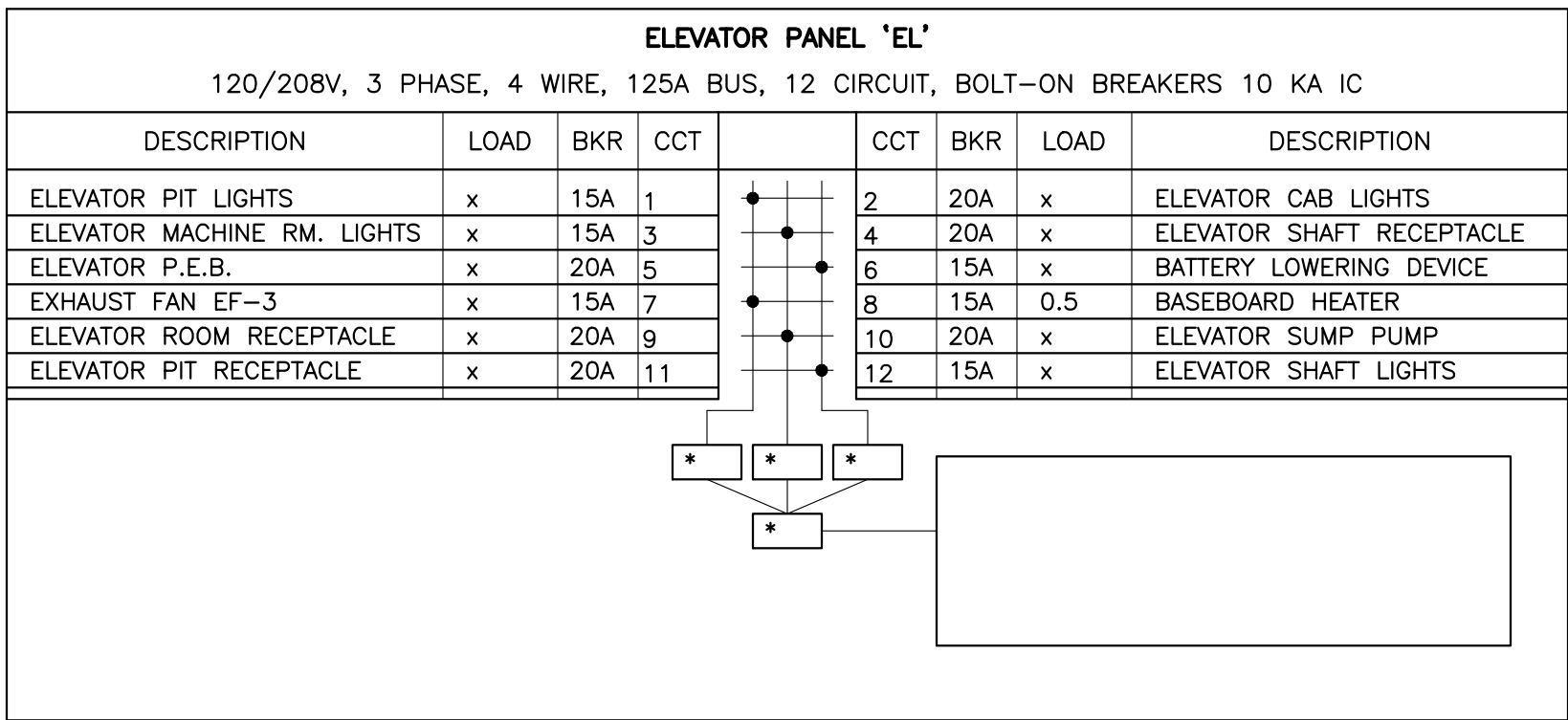
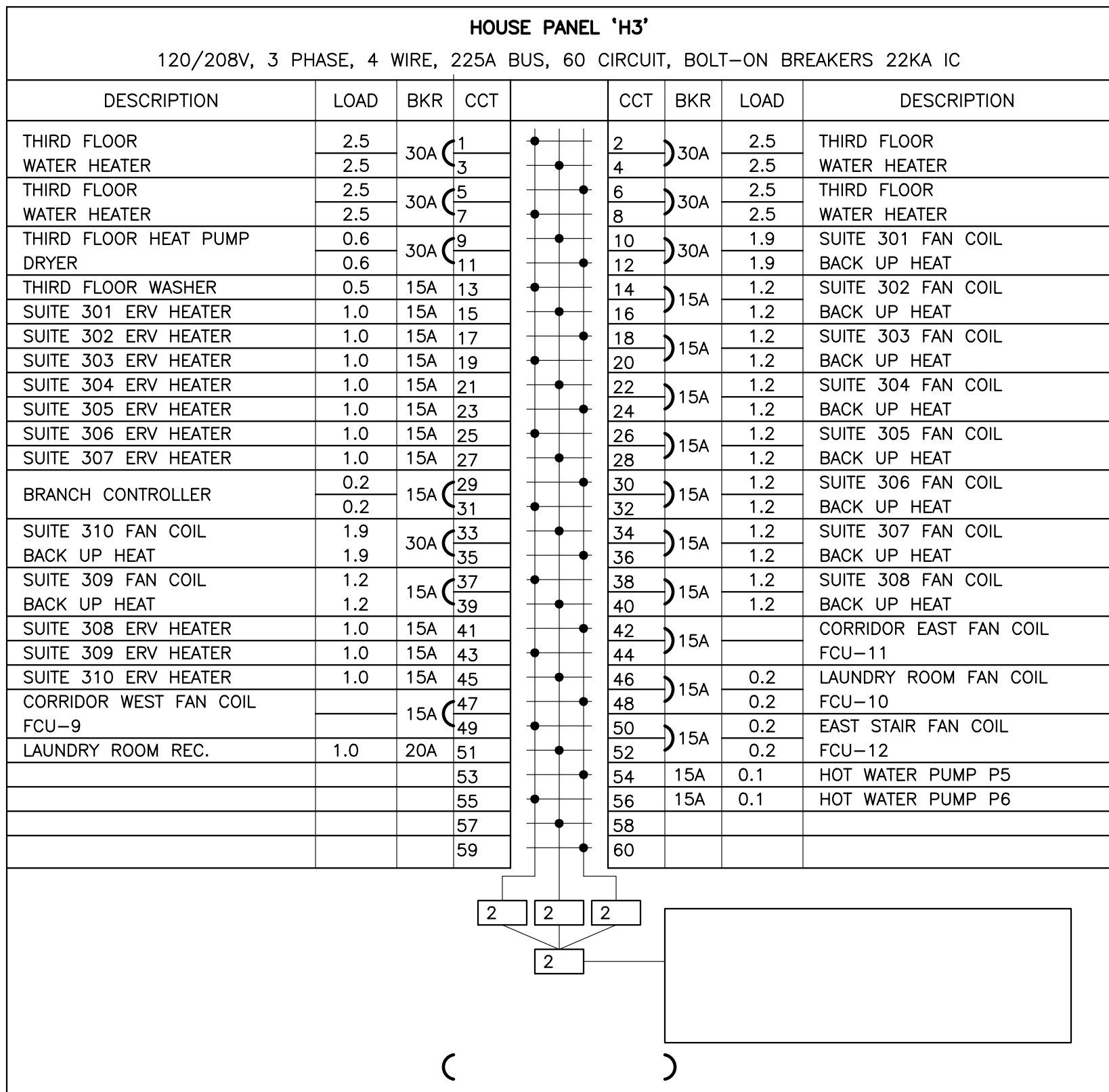
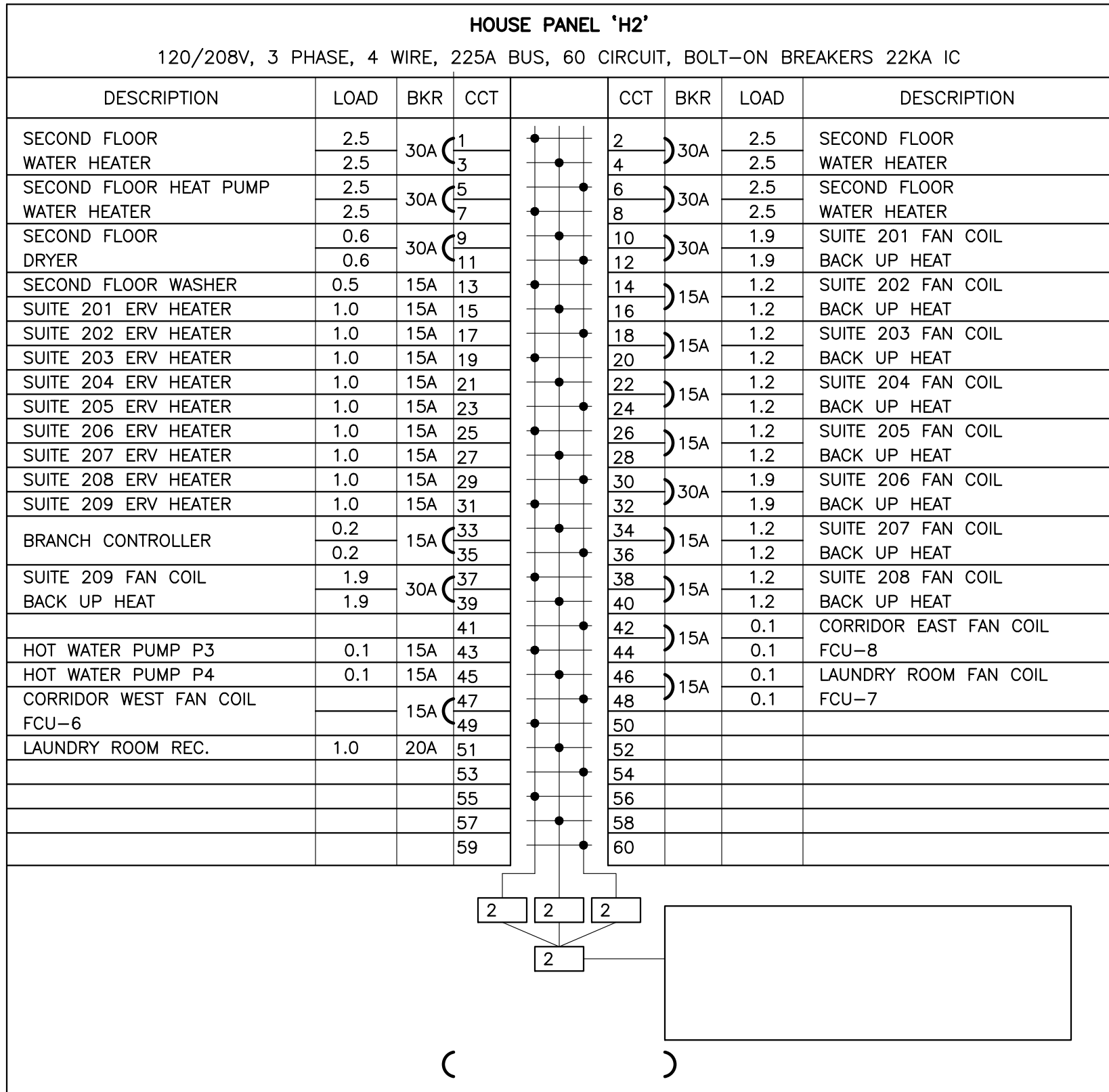
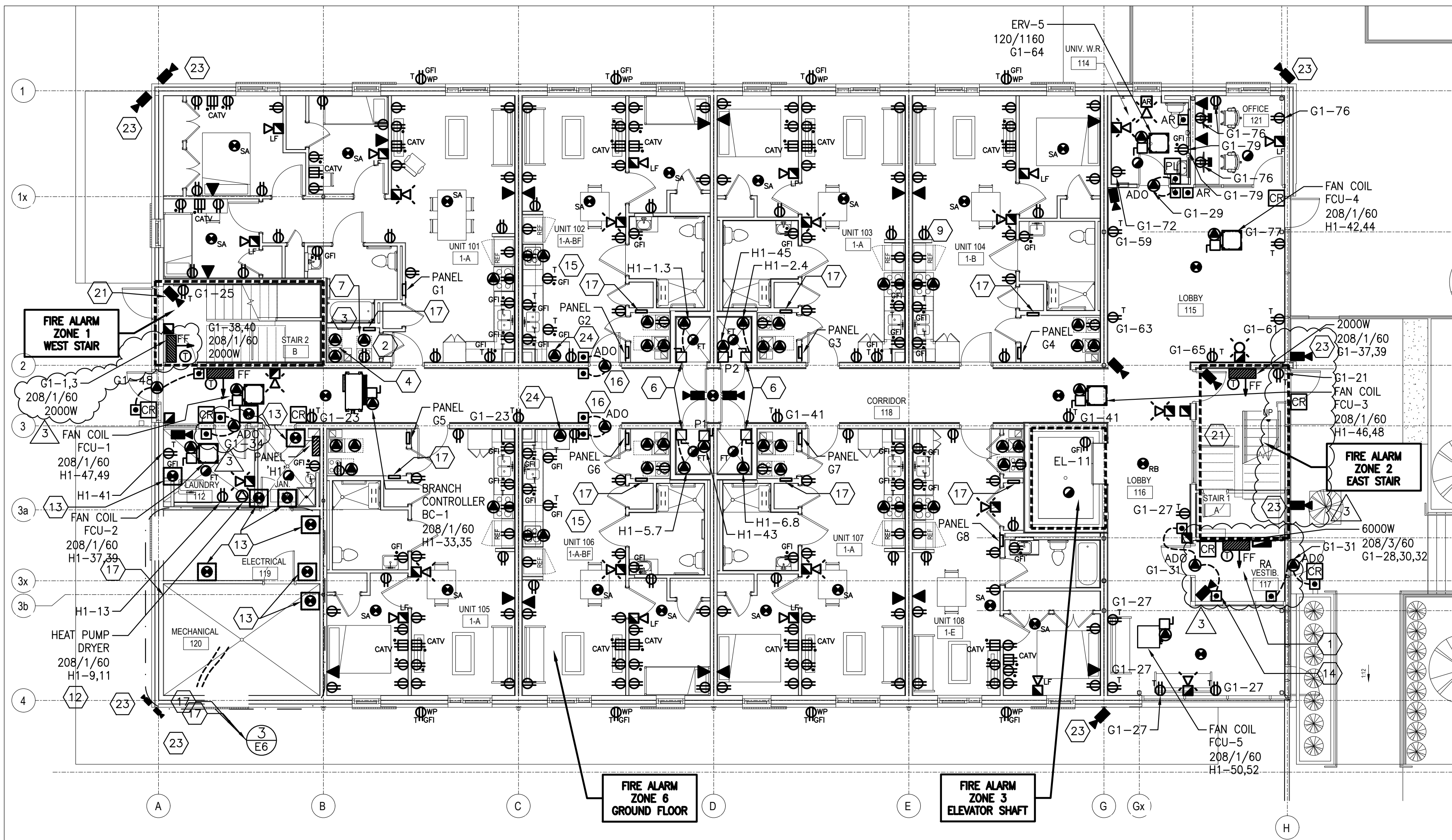


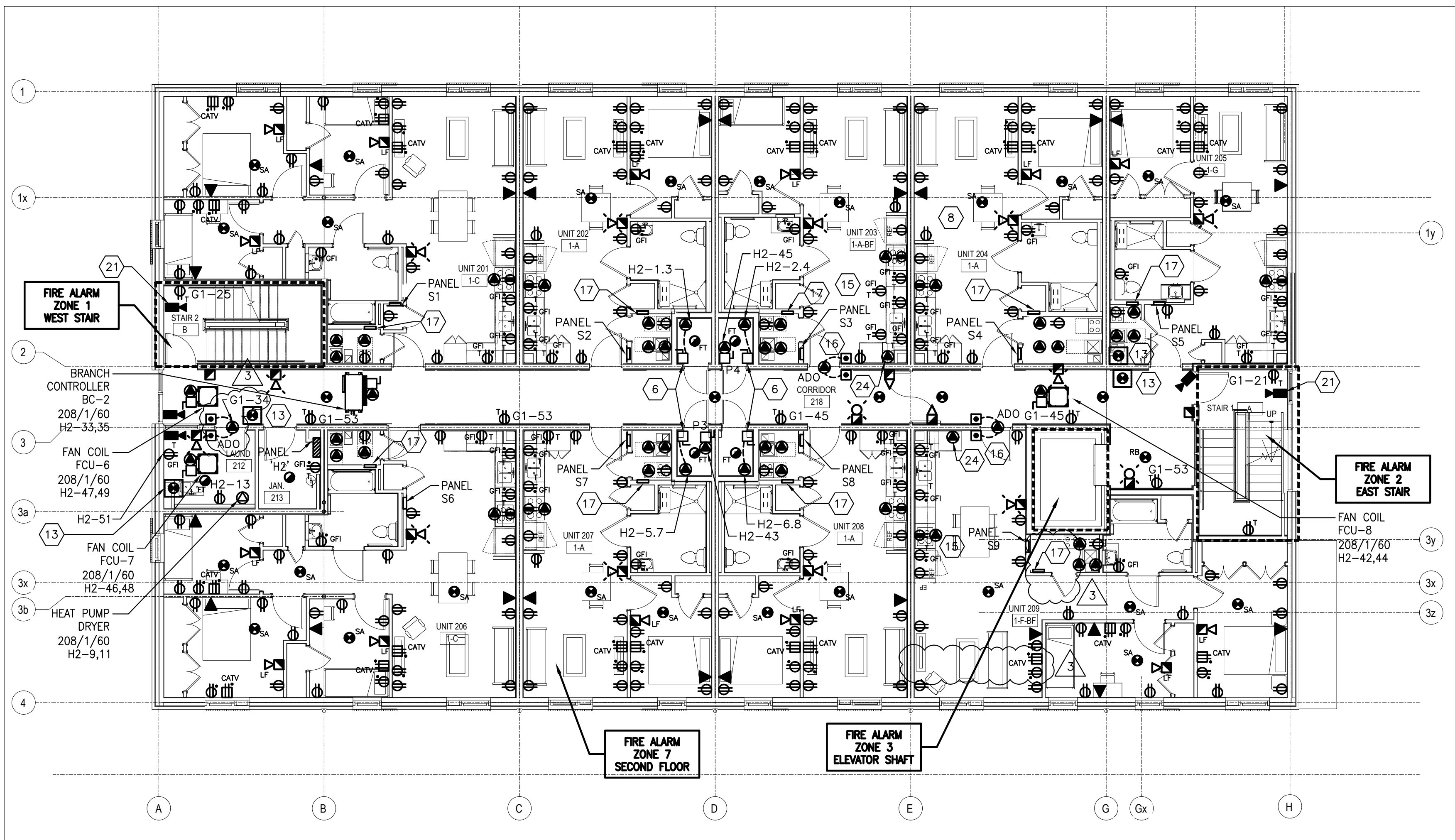






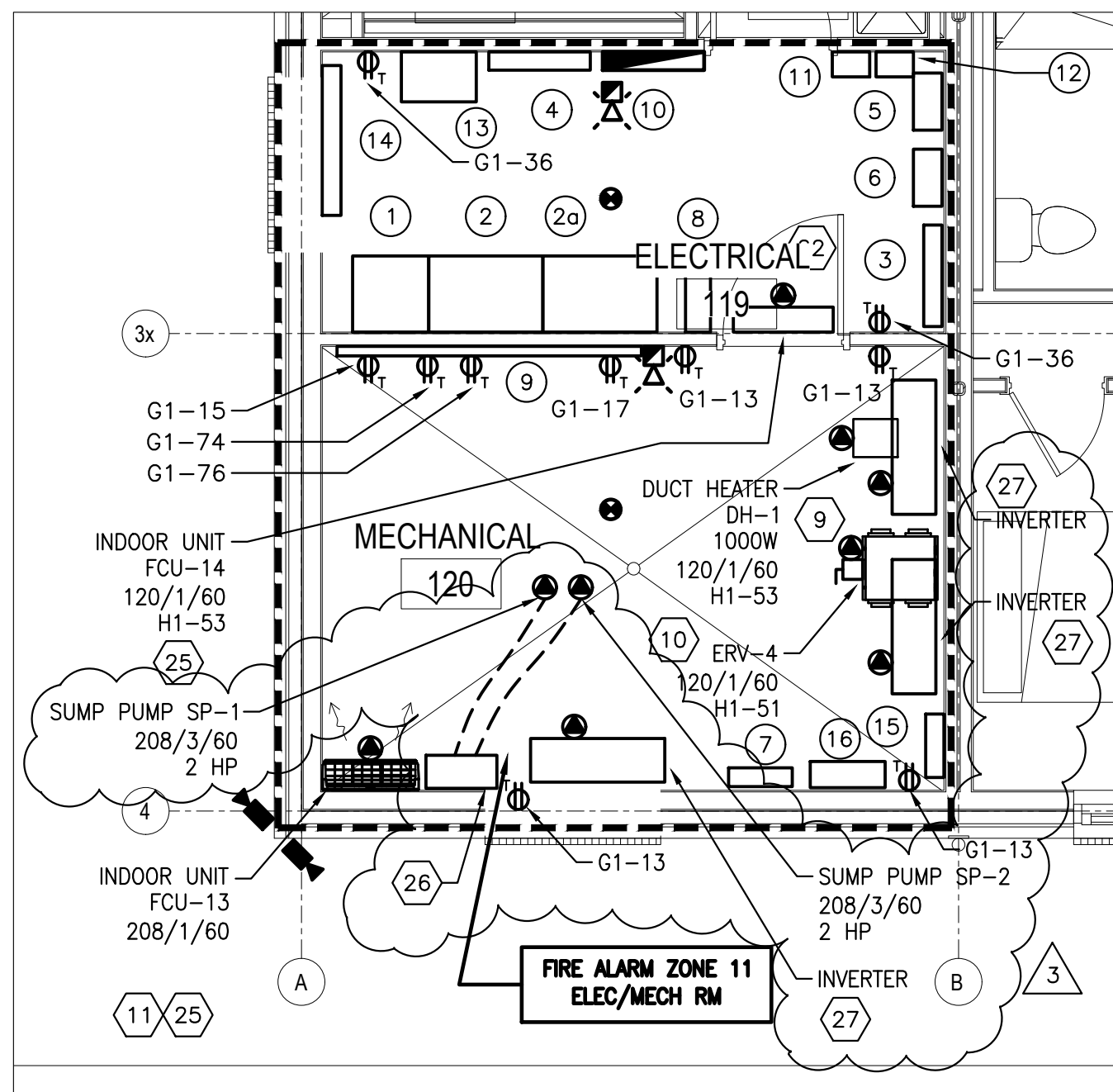
① GROUND FLOOR POWER AND SYSTEMS PLAN  
E6 SCALE:

1:100



② SECOND FLOOR POWER AND SYSTEMS PLAN  
E6 SCALE:

1:100



③ ELECTRICAL AND MECHANICAL ROOM ENLARGEMENT  
E6 SCALE:

1:50

#### NOTES

- LOCATION OF ENTERPHONE PANEL. TO BE MOUNTED ABOVE RECESSED FAN FORCED HEATER. COORDINATE EXACT LOCATION WITH ARCHITECTURAL DRAWINGS.
- PROVIDE RECEPTACLE FOR 120V ERV IN EACH SUITE. COORDINATE WITH MECHANICAL. TYPICAL FOR ALL SUITES UNLESS OTHERWISE NOTED.
- PROVIDE 208V, 1P DIRECT CONNECTION FOR FAN COIL. FEED FROM SUITE PANEL. COORDINATE WITH MECHANICAL. TYPICAL FOR ALL SUITES UNLESS OTHERWISE NOTED.
- PROVIDE 208V, 1P DIRECT CONNECTION FOR FAN COIL BACKUP HEATER. FEED THIS FROM THE HOUSE PANEL ON EACH FLOOR. COORDINATE WITH MECHANICAL. TYPICAL FOR ALL SUITES.
- NOTE NOT USED.
- PROVIDE 208/1/60 POWER TO 5000W ELECTRIC WATER HEATER. COORDINATE WITH MECHANICAL.
- PROVIDE 208V, 1P POWER TO ERV HEATER. COORDINATE WITH MECHANICAL. TYPICAL FOR ALL SUITES UNLESS OTHERWISE NOTED. FEED THIS FROM HOUSE PANEL ON EACH FLOOR.
- IN ALL SUITES CONFIRM WITH ESA THAT THERE IS PROPER CLEARANCES FOR THE ELECTRICAL PANELS. TYPICAL FOR ALL SUITES.
- PROVIDE 120V POWER TO ERV.
- PROVIDE 208V, 1P POWER TO ERV DUCT HEATER.
- INDOOR UNIT IS FED FROM OUTDOOR UNIT.
- PROVIDE L6-30R RECEPTACLE FOR HEAT PUMP DRYER. COORDINATE WITH DRYER SUPPLIER AND INSTALLER.
- PROVIDE DUCT SMOKE DETECTORS TO CLOSE ADJACENT COMBINATION FIRE SMOKE DAMPERS. LOCATE DUCT SMOKE DETECTORS AS PER CAN/ULC S524 "INSTALLATION OF FIRE ALARM SYSTEMS" WITH 1.5m HORIZONTALLY OF THE DUCT OR AIR TRANSFER OPENING IN THE FIRE SEPARATION. PROVIDE 120V AC TO FIRE AND SMOKE DAMPER AND WIRE DAMPER AND ACTUATOR TO CLOSE UPON SIGNAL FROM ADJACENT DUCT SMOKE DETECTOR. USE CIRCUIT G1-50 ON GROUND FLOOR AND G1-52 ON SECOND FLOOR.
- MOUNT ADO PUSH BUTTON ON NORTH WALL ABOVE HEATER. COORDINATION EXACT LOCATION WITH ARCHITECTURAL DRAWINGS.
- IN BARRIER FREE UNITS PROVIDE RECEPTACLES MOUNTED AT FACE OF COUNTER IN ADDITION TO RECEPTACLES SHOWN BEHIND COUNTER. COORDINATE WITH ARCHITECTURAL. SEE ONTARIO ELECTRICAL SAFETY CODE RULES 26-720(d), 26-656(f), AND CSA 651. ALSO PROVIDE SEPARATE POWER FEEDS TO COOKTOP AND OVEN.
- PROVIDE 120V POWER AND CONDUIT ROUGH-IN FOR PUSH BUTTONS FOR ADO IN BARRIER FREE SUITES.
- PROVIDE CENTRAL PANEL BOX FOR BELL AND CABLE AS NOTED IN NOTE 2 ON DETAILS 1 AND 2 ON DRAWING E11. PROVIDE 120V POWER TO THE RECEPTACLE IN THE BOX FROM THE LIVING ROOM RECEPTACLE CIRCUIT. COORDINATE LOCATION OF CENTRAL PANEL BOX WITH MECHANICAL TO ENSURE ADEQUATE WORKING SPACE IS PROVIDED. COORDINATE EXACT LOCATION WITH ARCHITECTURAL DRAWINGS.
- IN SUITE 104, 108, 201, AND 206 INSTALL CENTRAL PANEL BOX FOR BELL AND CABLE UNDER SUITE PANEL. REFER TO NOTE 17.
- NOTE NOT USED.
- PROVIDE 120V POWER FOR GENERATOR ROOM LOUVRES.
- PROVIDE A SINGLE GANG BACK BOX IN CEILING FOR SECURITY CAMERA. RUN 21mm CONDUIT FROM BACK BOX TO ACCESSIBLE CEILING SPACE. COORDINATE WITH CAMERA INSTALLER.
- PROVIDE UNISTRUT FRAME FOR MOUNTING PANEL 'G1'.
- PROVIDE A SINGLE GANG BACK BOX ON EXTERIOR WALL FOR SECURITY CAMERA. RUN 21mm CONDUIT FROM BACK BOX TO ACCESSIBLE CEILING SPACE. COORDINATE WITH CAMERA INSTALLER.
- SEPARATE OVEN CONNECTION IN BARRIER FREE SUITES COORDINATE REQUIREMENTS WITH ARCHITECT.
- INDOOR UNITS ARE FED FROM OUTDOOR UNIT CU-4.
- HIGH LEVEL ALARM PANEL AND SUMP PUMP CONTROL PANEL FOR SUMP PUMP SP-1 AND SP-2. ELECTRICAL CONTRACTOR IS TO PROVIDE WIRING FROM PANEL G1 TO SUMP PUMP CONTROL PANEL. CONTROL PANEL IS SUPPLIED BY MECHANICAL AND PUMP WIRING AND LEVEL CONTROL WIRING FROM SUMP PUMP CONTROL PANEL IS BY MECHANICAL.

#### ELECTRICAL/MECHANICAL ROOM EQUIPMENT LIST

- MAIN SWITCHBOARD WIREWAY
- MAIN SWITCHBOARD MAIN BREAKER AND METERING
- MAIN SWITCHBOARD DISTRIBUTION
- DISTRIBUTION PANEL DP-1
- DISTRIBUTION PANEL DP-GEN
- CARMA EMP PANEL
- CARMA EMP PANEL
- INVERTER PANELBOARD DG-P1
- GENERATOR PANEL 'G1'
- TELEPHONE BACKBOARD: 2400mm x 2400mm x 21mm FIRE ALARM PLYWOOD
- FIRE ALARM CONTROL PANEL
- LIGHTING CONTACTOR
- LIGHTING TIMECLOCK
- AUTOMATIC TRANSFER SWITCH ATS-1
- 1200mm x 1200mm CABINET FOR UTILITY METERING
- PANEL 'EV'
- SCADA PANEL FOR SOLAR

#### GENERAL NOTES

- PROVIDE CIRCUITING IN THE SUITES AS INDICATED ON THE PANEL SCHEDULE FOR TYPICAL APARTMENTS, AND AS PER SECTION 26-656 OF THE ONTARIO ELECTRICAL SAFETY CODE. INCLUDE A SEPARATE CIRCUIT FOR DINING AREA RECEPTACLE.
- PROVIDE TAMPER RESISTANT RECEPTACLES AS PER RULE 26-706(d) OF THE ONTARIO ELECTRICAL SAFETY CODE.
- CONNECT SMOKE/CARBON MONOXIDE ALARMS TO UNSWITCHED PORTION OF BATHROOM LIGHTING CIRCUITS. SMOKE/CARBON MONOXIDE ALARMS IN EACH SUITE TO BE INTERCONNECTED.
- MOUNT POWER RECEPTACLES FOR T.V.'S AND CATV OUTLETS AT 42" ABOVE FINISHED FLOOR.
- PROVIDE AFCI PROTECTION OF BRANCH CIRCUITS AND RECEPTACLES AS PER ONTARIO ELECTRICAL SAFETY CODE RULE 26-658.
- ENSURE THAT BRANCH CIRCUITS ARE SIZED FOR VOLTAGE DROP.
- OAHs WILL ENTER INTO A SEPARATE CONTRACT WITH THE SEPARATE CONTRACT WITH THE SECURITY CONTRACTOR TO PROVIDE SECURITY CAMERAS AND ACCESS CONTROL.

THE SECURITY CONTRACTOR WILL PROVIDE:

CAMERAS (WORK BY SECURITY CONTRACTOR)  
- SUPPLY AND INSTALL ALL REQUIRED CABLING  
- SUPPLY AND INSTALL ALL CAMERAS AND MOUNTS  
- SUPPLY AND INSTALL ALL NETWORK CABINETS, NETWORK SWITCHES AND UPS  
- TERMINATE ALL CAMERA CABLING  
- PROGRAM AND CONFIGURE SYSTEM

ACCESS CONTROL (WORK BY SECURITY CONTRACTOR)  
- SUPPLY AND INSTALL ALL REQUIRED ACCESS CONTROL CABLING FROM DOORS TO PANELS  
- SUPPLY AND INSTALL ALL REQUIRED READERS AND DOOR CONTACTS  
- CONNECT TO EXISTING ELECTRIC STRIKES AND DOOR OPERATORS (SUPPLIED BY OTHERS)  
- TERMINATE ALL CABLING  
- PROGRAM AND CONFIGURE SYSTEM

THE ELECTRICAL CONTRACTOR WILL PROVIDE SECURITY ROUGH IN:

- CONDUIT OR RACEWAY  
- CABLE TRAY OR BASKET TRAY  
- COMMUNICATIONS BACKBOARD  
- ELECTRIC STRIKES OR DOOR OPERATOR INTEGRATION  
- FIRESTOPPING OR FLOOR/FIRE WALL PENETRATIONS

- FOR ALL AUTOMATIC DOOR OPERATORS ADO, ELECTRICAL CONTRACTOR SHALL SUPPLY 120V WIRING AND ALL CONDUITS AND INSTALLATION OF LOW VOLTAGE WIRING TO PUSH BUTTONS. FOR ADO FOR RESIDENT SUITES PROVIDE 120V POWER AND FOR PUSHBUTTONS PROVIDE CONDUIT ROUGH-IN ONLY.

#### NOTES CONTINUED

- FROM EACH OF THE THREE INVERTERS RUN A 53mm EMT CONDUIT UP THROUGH THE SHAFT IN LAUNDRY ROOMS 212 AND 312 CONTINUING UP TO THE ATTIC.

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KEL Project 6429



ELECTRICAL BCIN 23406

#### ISSUE DATE:

| NO. | DATE     | DESCRIPTION                |
|-----|----------|----------------------------|
| 1   | 26/06/11 | ISSUED FOR ADDENDUM E1     |
| 2   | 26/05/29 | ISSUED FOR TENDER DRAFT    |
| 1   | 26/05/29 | ISSUED FOR BUILDING PERMIT |

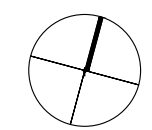
**PROJECT:**  
ONTARIO ABORIGINAL  
HOUSING SERVICES (OAHs), COBOURG

321 John Street, Cobourg, Ontario

**DRAWING TITLE:**  
GROUND & SECOND FLOORS  
POWER AND SYSTEMS PLANS

**PROJECT NO:** 251088  
**SCALE:** AS NOTED  
**DRAWN BY:** KER  
**REVIEWED BY:** RJV

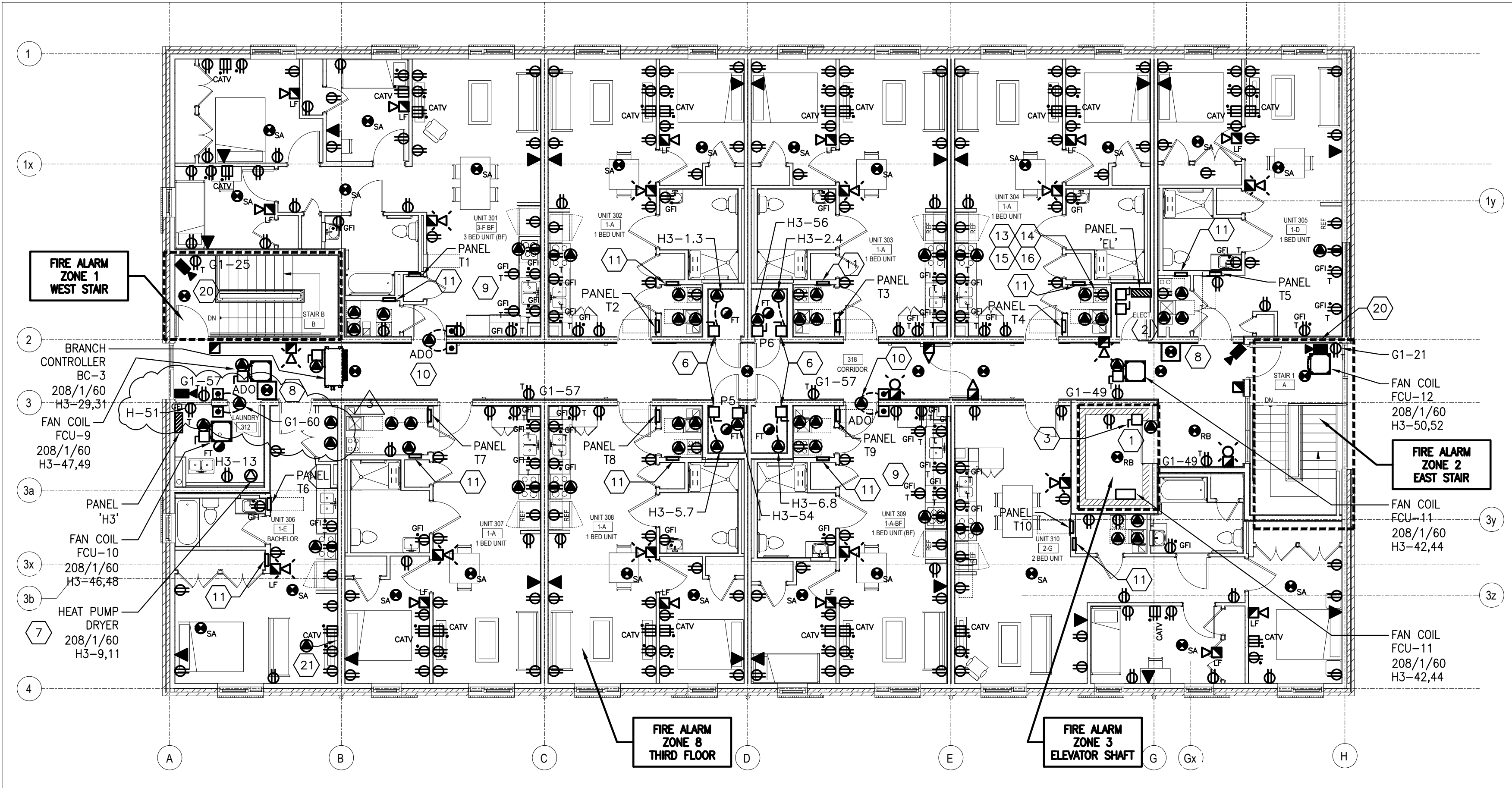
**PROJECT NORTH:**



**DRAWING NO:**

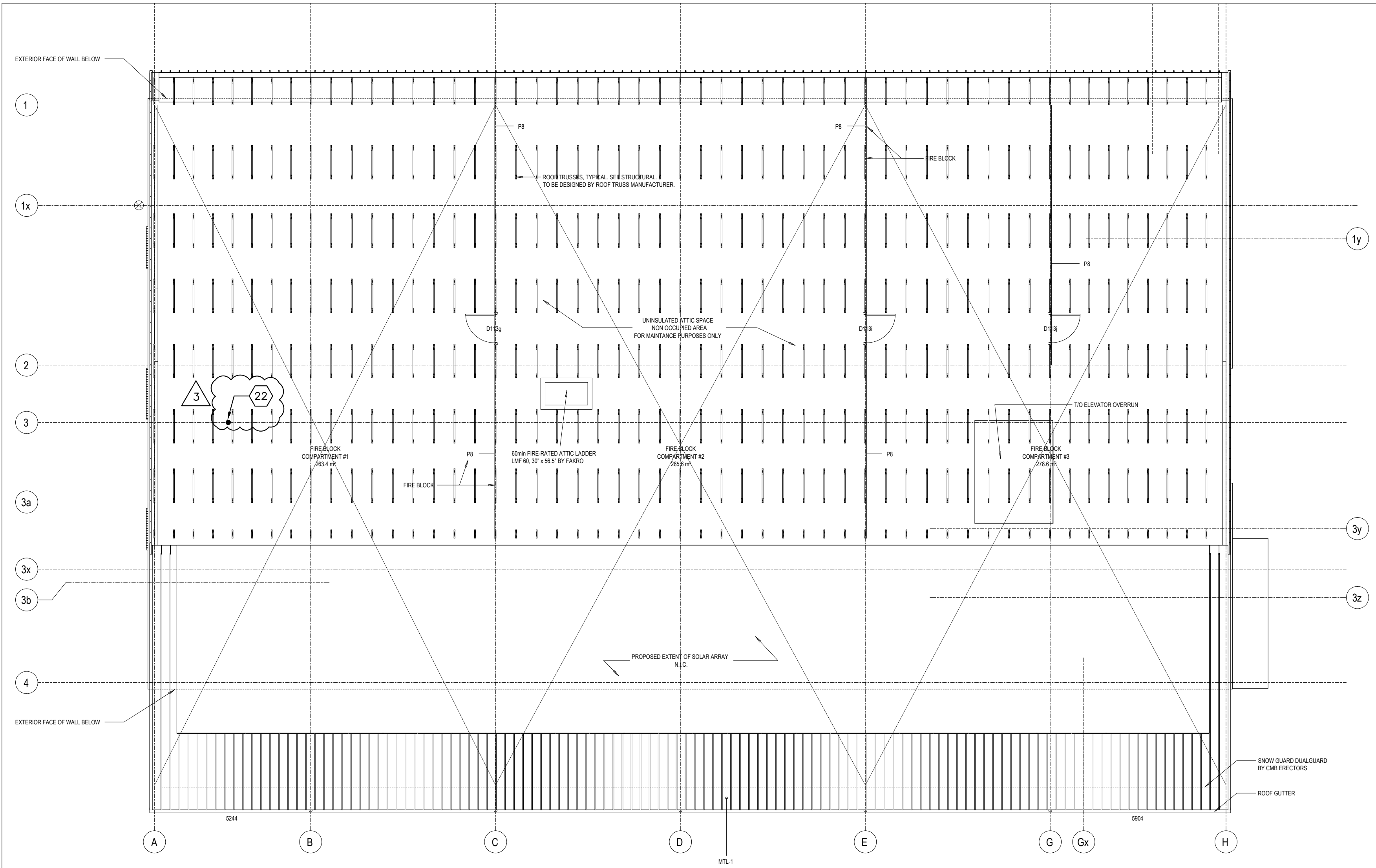
**E6**





1 THIRD FLOOR POWER AND SYSTEMS PLAN

E8 SCALE: 1:100



2 ATTIC POWER AND SYSTEMS PLAN

E8 SCALE: 1:100

NOTES

- ELEVATOR CONTROLLER LOCATED IN DOOR JAMB OF ELEVATOR.
- ELEVATOR FUSED DISCONNECT 'JH' AND ELEVATOR CAB LIGHTING DISCONNECT 'JL'. LOCATED ON NORTH WALL OF ELEVATOR CLOSET AND STACKED ONE OVER THE OTHER.
- NON-FUSED ELEVATOR DISCONNECT 'JH1'. COORDINATE LOCATION WITH ELEVATOR SUPPLIER/INSTALLER.
- NOTE NOT USED.
- NOTE NOT USED.
- PROVIDE 208/1/60 POWER TO 5000W ELECTRIC WATER HEATER. COORDINATE WITH MECHANICAL.
- PROVIDE L6-30R RECEPTACLE FOR HEAT PUMP DRYER. COORDINATE WITH DRYER SUPPLIER AND INSTALLER.
- PROVIDE DUCT SMOKE DETECTORS TO CLOSE ADJACENT COMBINATION FIRE SMOKE DAMPERS. LOCATE DUCT SMOKE DETECTORS AS PER CAN/ULC S524 "INSTALLATION OF FIRE ALARM SYSTEMS" WITH 1.5m HORIZONTALLY OF THE DUCT OR AIR TRANSFER OPENING IN THE FIRE SEPARATION. PROVIDE 120V AC TO FIRE AND SMOKE DAMPER AND WIRE DAMPER AND ACTUATOR TO CLOSE UPON SIGNAL FROM ADJACENT DUCT SMOKE DETECTOR. USE CIRCUIT G1-54.
- IN BARRIER FREE UNITS PROVIDE RECEPTACLES MOUNTED ON FACE OF COUNTER IN ADDITION TO RECEPTACLES SHOWN BEHIND COUNTER. COORDINATE WITH ARCHITECTURAL. SEE ONTARIO ELECTRICAL SAFETY CODE RULES 26-720 (d) AND 26-656(f) AND CSA 651.
- PROVIDE 120V POWER AND CONDUIT ROUGH-IN FOR PUSHBUTTONS FOR ADO IN BARRIER FREE SUITES.
- PROVIDE CENTRAL PANEL BOX FOR BELL AND CABLE AS NOTED IN NOTE 2 ON DETAILS 1 AND 2 ON DRAWING E11. PROVIDE 120V POWER TO THE RECEPTACLE IN THE BOX FROM THE LIVING ROOM RECEPTACLE CIRCUIT. COORDINATE LOCATION OF CENTRAL PANEL BOX WITH MECHANICAL TO ENSURE ADEQUATE WORKING SPACE IS PROVIDED. COORDINATE EXACT LOCATION WITH ARCHITECTURAL DRAWINGS.
- NOTE NOT USED.
- PROVIDE RECEPTACLE FOR 120V ERV IN EACH SUITE. COORDINATE WITH MECHANICAL. TYPICAL FOR ALL SUITES UNLESS OTHERWISE NOTED.
- PROVIDE 208V, 1P DIRECT CONNECTION FOR FAN COIL. FEED FROM SUITE PANEL. COORDINATE WITH MECHANICAL. TYPICAL FOR ALL SUITES UNLESS OTHERWISE NOTED.
- PROVIDE 208V, 1P DIRECT CONNECTION FOR FAN COIL BACKUP HEATER. FEED THIS FROM THE HOUSE PANEL ON EACH FLOOR. COORDINATE WITH MECHANICAL. TYPICAL FOR ALL SUITES UNLESS OTHERWISE NOTED.
- PROVIDE 208V, 1P POWER TO ERV HEATER. COORDINATE WITH MECHANICAL TYPICAL FOR ALL SUITES. FEED THIS FROM HOUSE PANEL ON EACH FLOOR UNLESS OTHERWISE NOTED.
- NOTE NOT USED.
- PROVIDE 30A, 1P, 120V DISCONNECT FUSED AT 20A FOR PRIMARY EQUIPMENT BOX (P.E.B.). COORDINATE WITH ELEVATOR INSTALLER.
- RUN 27mm CONDUIT FROM ELEVATOR CONTROLLER AT THIRD FLOOR LEVEL TO AUTOMATIC TRANSFER SWITCH ATS-1 IN GROUND FLOOR ELECTRICAL ROOM FOR PRE-TRANSFER SIGNAL.
- PROVIDE SINGLE GANG BACKBOX FOR CAMERA IN STAIRWELL. RUN 21mm CONDUIT FROM BACKBOX TO ACCESSIBLE CEILING SPACE.
- PROVIDE POWER TO WALL MOUNTED FAN COIL FROM SUITE PANEL.
- 3x53mm EMT CONDUITS TO RUN FROM ATTIC TO INVERTERS IN MECHANICAL ROOM 120. SEE NOTE 27 ON DRAWING E6.

GENERAL NOTES

- PROVIDE CIRCUITING IN THE SUITES AS INDICATED ON THE PANEL SCHEDULE FOR TYPICAL APARTMENTS, AND AS PER SECTION 26-656 OF THE ONTARIO ELECTRICAL SAFETY CODE. INCLUDE A SEPARATE CIRCUIT FOR DINING AREA RECEPTACLE.
- PROVIDE TAMPER RESISTANT RECEPTACLES AS PER RULE 26-706(i)(d) OF THE ONTARIO ELECTRICAL SAFETY CODE.
- CONNECT SMOKE/CARBON MONOXIDE ALARMS TO UNSWITCHED PORTION OF BATHROOM LIGHTING CIRCUITS. SMOKE/CARBON MONOXIDE ALARMS IN EACH SUITE TO BE INTERCONNECTED.
- MOUNT POWER RECEPTACLES FOR T.V.'S AND CATV OUTLETS AT 42" ABOVE FINISHED FLOOR.
- PROVIDE AFO PROTECTION OF BRANCH CIRCUITS AND RECEPTACLES AS PER ONTARIO ELECTRICAL SAFETY CODE RULE 26-658.
- ENSURE THAT BRANCH CIRCUITS ARE SIZED FOR VOLTAGE DROP.
- OAHs WILL ENTER INTO A SEPARATE CONTRACT WITH THE SEPARATE CONTRACT WITH THE SECURITY CONTRACTOR TO PROVIDE SECURITY CAMERAS AND ACCESS CONTROL.

THE SECURITY CONTRACTOR WILL PROVIDE:

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- SUPPLY AND INSTALL ALL REQUIRED CABLING
- SUPPLY AND INSTALL ALL CAMERAS AND MOUNTS
- SUPPLY AND INSTALL ALL NETWORK CABINETS, NETWORK SWITCHES AND UPS
- TERMINATE ALL CAMERA CABLING
- PROGRAM AND CONFIGURE SYSTEM

- ACCESS CONTROL (WORK BY SECURITY CONTRACTOR)
- SUPPLY AND INSTALL ALL REQUIRED ACCESS CONTROL CABLING FROM DOORS TO PANELS
- SUPPLY AND INSTALL ALL REQUIRED READERS AND DOOR CONTACTS
- CONNECT TO EXISTING ELECTRIC STRIKES AND DOOR OPERATORS (SUPPLIED BY OTHERS)
- TERMINATE ALL CABLING
- PROGRAM AND CONFIGURE SYSTEM

THE ELECTRICAL CONTRACTOR WILL PROVIDE SECURITY ROUGH INCLUDING:

- CONDUIT OR RACEWAY WITH PULL STRINGS
- CABLE TRAY OR BASKET TRAY AS REQUIRED
- COMMUNICATIONS BACKBOARD
- ELECTRIC STRIKES OR DOOR OPERATOR INTEGRATION
- FIRESTOPPING OR FLOOR/FIRE WALL PENETRATIONS

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321 John Street, Cobourg, Ontario

DRAWING TITLE:  
THIRD & ATTIC  
POWER AND SYSTEMS  
FLOOR PLANS

PROJECT NO: 251088  
SCALE: AS NOTED  
DRAWN BY: KER  
REVIEWED BY: RJV

PROJECT NORTH:  
N

DRAWING NO:

E8