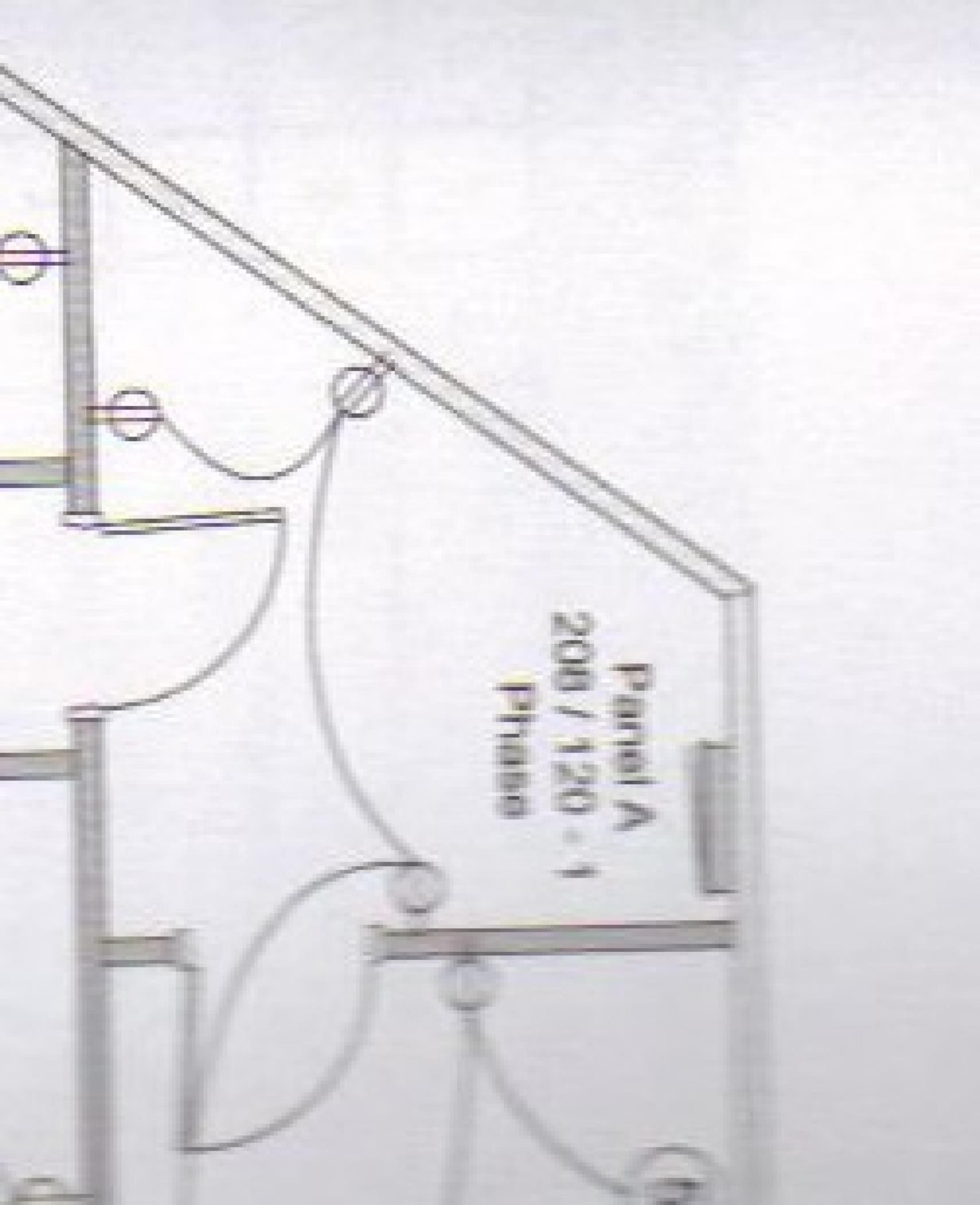


Electrical Drawing Requirements

- Electrical Riser Diagram (one line)
If any changes are made to the distribution system
See attached scan #3
- Service Load Calculations
If any load is added
See attached scan #4
- Service Equipment Size
If any changes are made to the building loads
i.e. 400 amp 3 phase 277/480 volts
See attached scan #3
- Service Equipment Location
If any changes are made to the service or any equipment is located near the equipment
See attached scan #1
- Size of Grounding Electrode Conductors
If any changes are made to the service
I.e. 1600 Amp service 3/0 copper wire to rebar, building steel, and water line
See attached scan #7
- Electrical Meter Location
If any changes are made to the service
See Attached scan #9
Location to be approved by E.P.B.
- Distribution Panel Locations
In all cases that circuits are run from the panels or equipment is installed near the equipment
See attached scan #6
- Distribution Panel Schedules
If any loads are added
See attached scan #2
- Distribution Panel Calculated Loads
If any load is added or changed
See attached scan #2
- Branch Circuit Layout for Lighting and Receptacles

If any changes are made
See attached scan #5

- Emergency Back-up Systems
If such are installed
See attached scan #9
- Street Addresses
In all cases
1234 Any Street
See attached scan # 8
- Equipment Locations
If any are added or changed or distribution locations are in near vicinity
See attached scan #6



Project A
2007/12/01

153 Commons Business Center Suite I Electrical Schedules

Planning Department

Panel Schedule

General Information

Panel ID: 153 Commons Business Center
 Panel Location: Suite I
 Fed From: Breaker 8 in Elect. Rm.

Breaker Details

Main Breaker 200 Amps
 Main Lugs Only
 Fed-thru Lugs

Phase Type

Single Phase
 Three Phase

Voltage Type

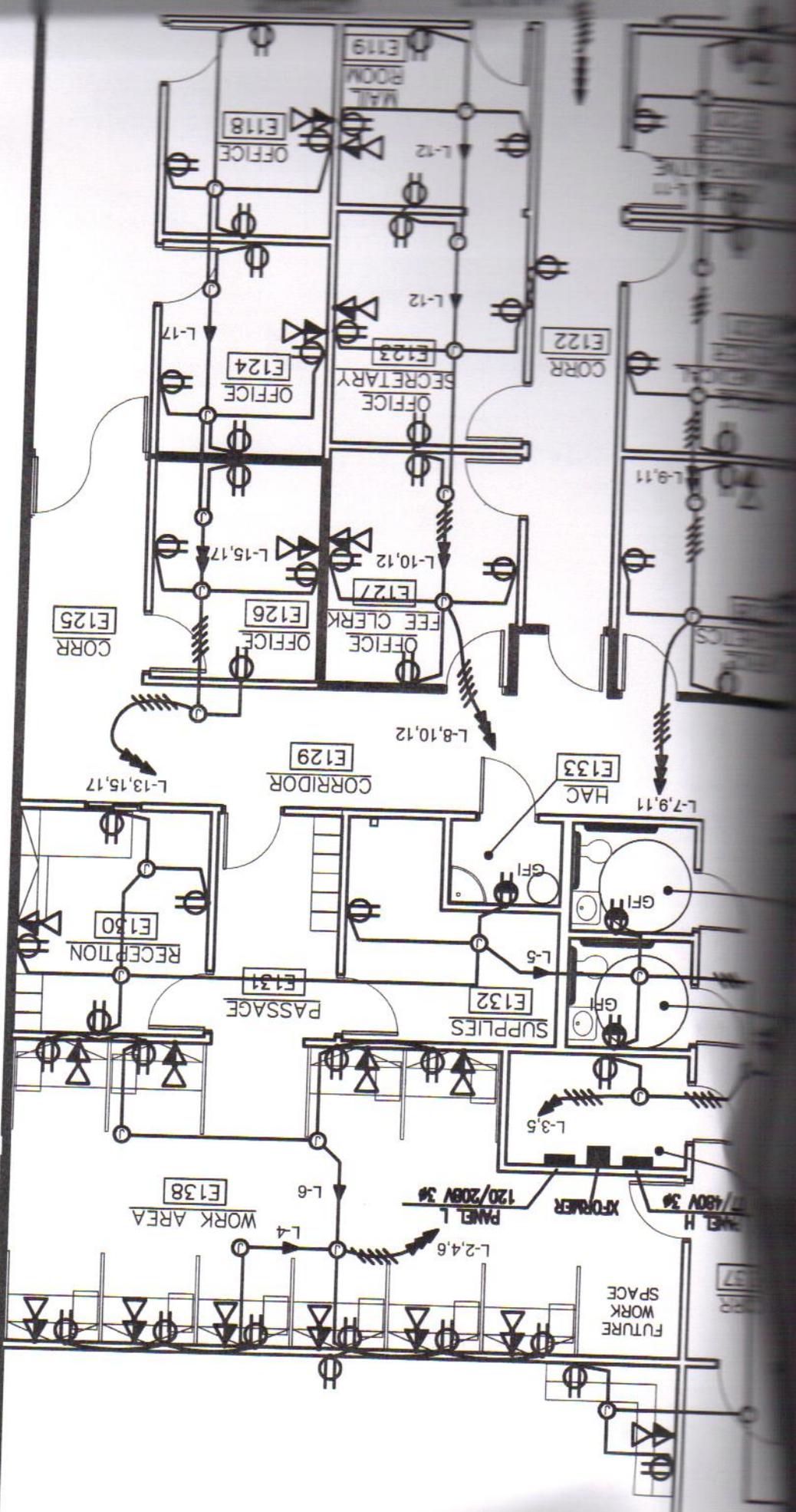
120 / 240 120 / 308
 277 / 480

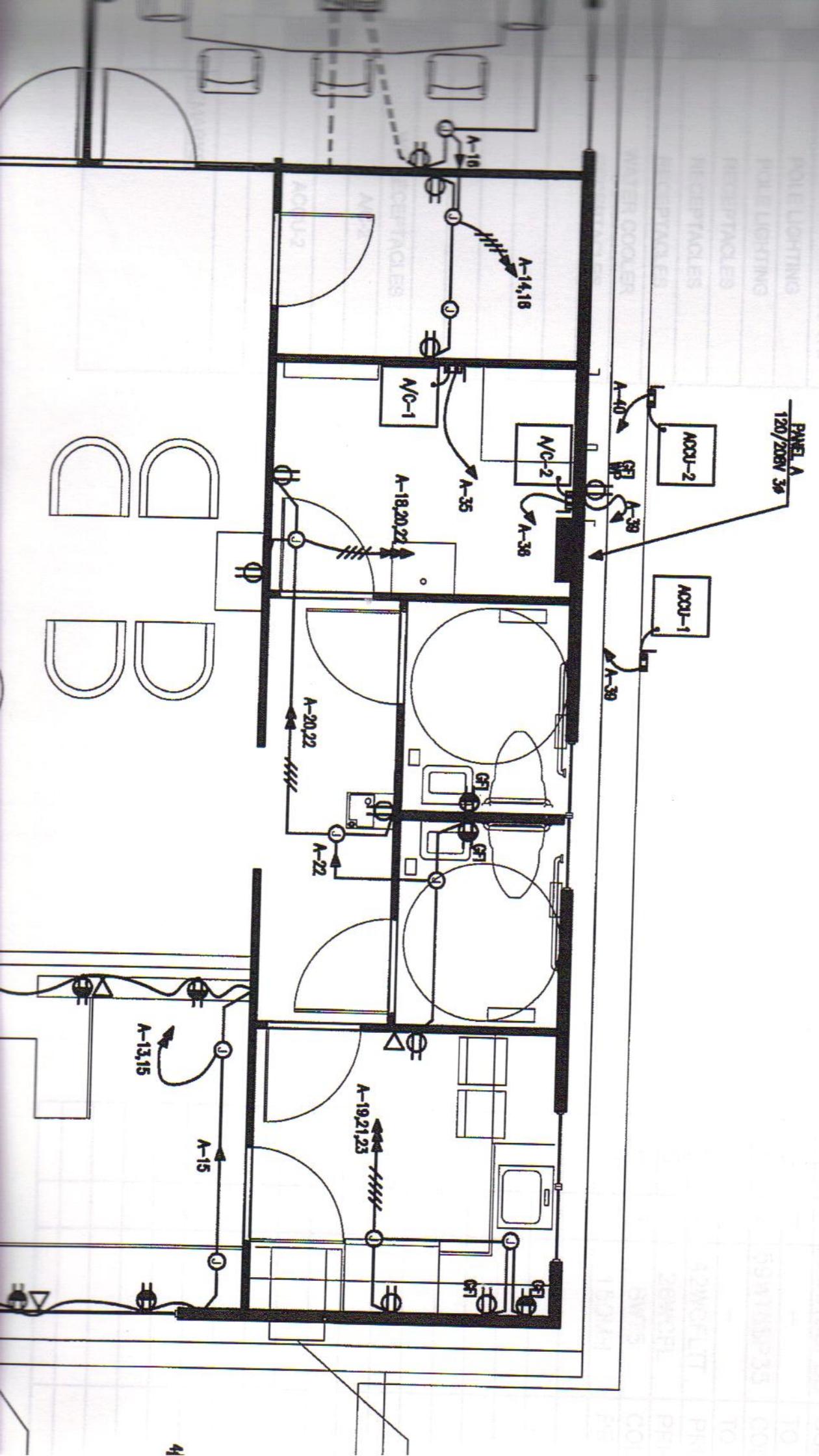
Bk/	Fuse	Wire (AWG)	Pipe Size	VA	Voltage	Description	Ckt	Ckt	Description	Voltage	VA	Pipe Size	Wire size (AWG)	Fuse	Bk/
1	1	12		350	120 / 208	Lights	1	2	Lights	120 / 208	350		12	1	1
2	1	12		350	120 / 208	Lights	3	4	Lights	120 / 208	350		12	1	2
3	1	12		1,080	120 / 208	Receptacles	5	6	Receptacles	120 / 208	1,080		12	1	3
4	1	12		1,080	120 / 208	Receptacles	7	8	Receptacles	120 / 208	1,080		12	1	4
5	2	10		2,704	120 / 208	Hvac Condensing Unit	9	10	Water Heater	120 / 208	2,704		10	2	5
6	2	10		2,704	120 / 208	Hvac Condensing Unit	11	12	Water Heater	120 / 208	2,704		10	2	6
7	2	10		2,500	120 / 208	Hvac Aux. Heat	13	14	Spare	120 / 208	0		12	1	7
8	2	10		2,500	120 / 208	Hvac Aux. Heat	15	16	Spare	120 / 208	0		12	1	8
9	1	12		1,440	120 / 208	Hvac Air Handler	17	18	Spare	120 / 208	0		12	1	9
10	1	12		0	120 / 208	Spare	19	20	Spare	120 / 208	0		12	1	10
					120 / 208		21	22		120 / 208					
					120 / 208		23	24		120 / 208					
					120 / 208		25	26		120 / 208					
					120 / 208		27	28		120 / 208					
					120 / 208		29	30		120 / 208					
					120 / 208		31	32		120 / 208					
					120 / 208		33	34		120 / 208					
					120 / 208		35	36		120 / 208					
					120 / 208		37	38		120 / 208					
					120 / 208		39	40		120 / 208					
					120 / 208		41	42		120 / 208					

Example No. 1

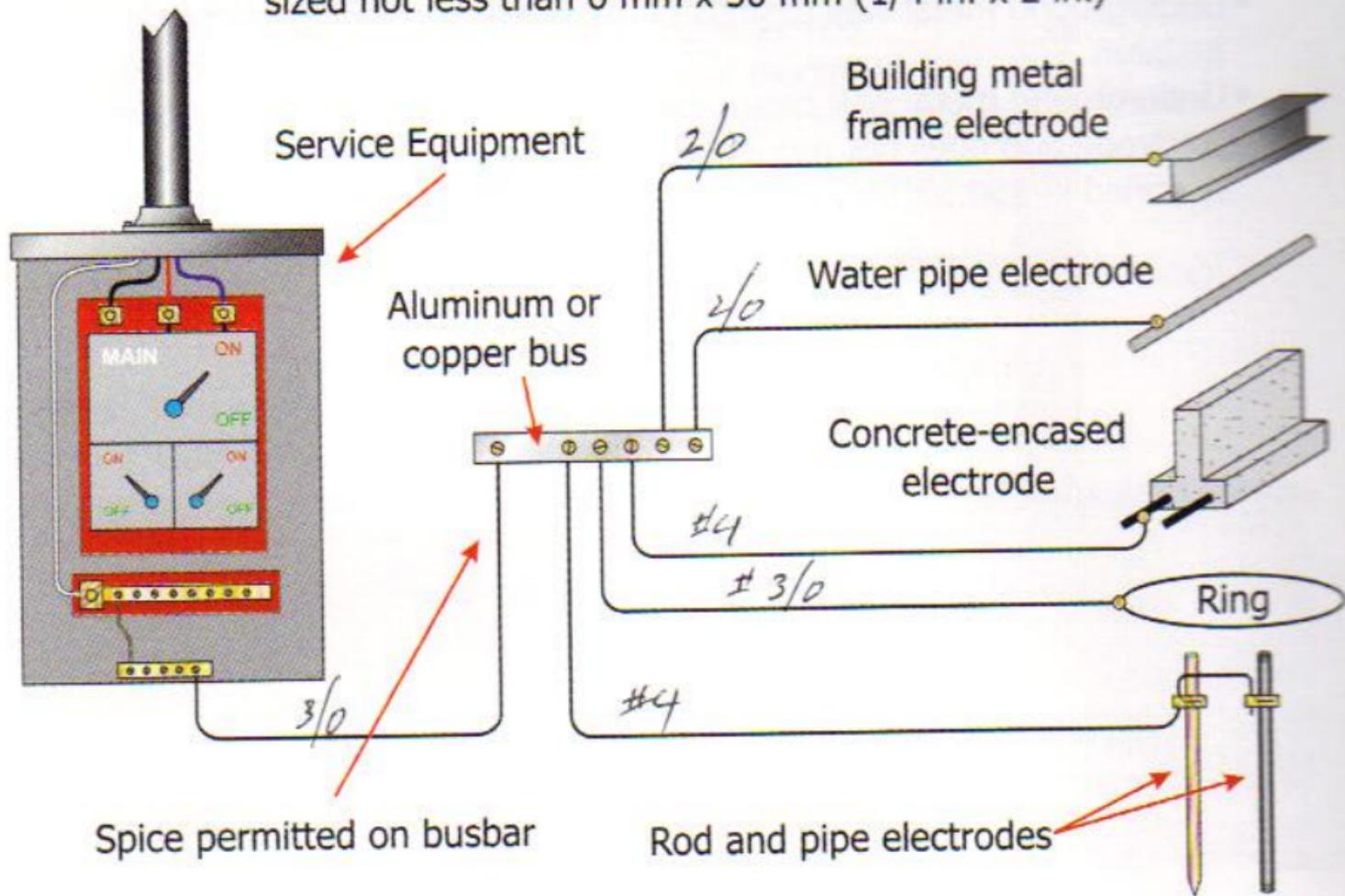
Factor	Quantity	VA Ungrnd	VA Neutral
General Lighting (Sq Ft x 3 wpf)	1,650	4,950	
General Lighting Circuit Amps @ 120 V	41.3		
Install <u>3</u> 15 Amp or <u>3</u> 20 Amp Gen. Ltg. Circuits			
Small Appliance Circuits	2	3,000	
Laundry Circuit	1	1,500	
Total General Lighting Load		9,450	
First 3000 VA at 100 percent		3,000	
Total VA - 3000 = <u>6,450</u> VA at 35 percent		2,258	
Net General Lighting Load		5,258	5,258
Appliances			
Dishwasher	1	1,500	1,500
Furnace (1/2 hp motor)	1	1,176	1,176
3 or less Appliances Total		2,676	2,676
4 or more Appliances Total at 75 percent		0	0
Other Loads			
Range (Table 220.19, Neutral at 70%)		0	0
Dryer (Section 220.18, Neutral at 70%)		0	0
25% of Largest Motor (430.24)		1,176	294
Total Volt-Amperes		8,228	8,228
Volt-Amperes ÷ 240 Volts = Amperes		34.3	34.3
Minimum Conductor Size (Copper or Aluminum)		4 AWG (CU)	8 AWG (CU)
Insulation Type		THW	THW

Standard calculation sheet 1





sized not less than 6 mm x 50 mm (1/4 in. x 2 in.)



Service Equipment

Building metal
frame electrode

Aluminum or
copper bus

Water pipe electrode

Concrete-encased
electrode

Ring

Spice permitted on busbar

Rod and pipe electrodes



**[F] SECTION R321
SITE ADDRESS**

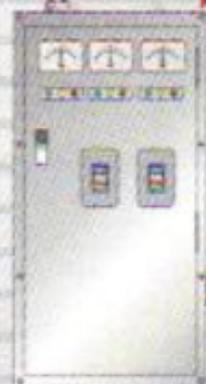
R321.1 Premises identification. Approved numbers or addresses shall be provided for all new buildings in such a position as to be plainly visible and legible from the street or road fronting the property.

e
e
v
p
n
f
n
a

Fuel cell system



Transfer equipment



Service equipment

