

ELECTRICAL PLAN REVIEW APPLICATION

All information for review should be submitted (two sets) on 11" x 17" minimum to the Building Dept clerical staff and not the electrical inspectors so that it will be logged in correctly.

Applicant: _____ Phone: _____

eMail address: _____

Date of Submittal: _____ Electrical Permit #: _____

Job Site Address: _____

Description of Work (be specific): _____

Check which of the following criteria is the reason for the review:

- _____ Service or feeder 400 amps with an AFC over 14,000 amps
- _____ Service or feeder 600 amps or larger
- _____ 75 KVA or larger separately derived system (transformer, generator, solar-system, etc.)
- _____ New motor load of 100 HP or more
- _____ Fire pump installations (NEC Article 695)
- _____ Emergency (back up power) systems (only systems covered by NEC Article 700)
- _____ Over 600 volts
- _____ Building height over three (3) stories
- _____ Six or more residential units in one structure
- _____ Rated "A" (Assembly), "E" (Educational), or "I-2, I-3" (Institutional)
- _____ Hazardous location (NEC Articles 500 through 516)
- _____ Patient care areas (NEC Article 517)
- _____ Agricultural buildings used for commercial purposes (NEC Article 547)
- _____ Floating buildings (NEC Article 553)
- _____ Marinas and boat yards (NEC Article 555)
- _____ Recreational Vehicle Park (new, addition or alteration)(NEC Article 551)
- _____ Solar installation of over 25KW AC or DC

Permit #	Name
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ELECTRICAL PLAN REVIEW INFORMATION

The following suggestions are general in nature and are offered to assist you in preparing information to submit for electrical plan review. The requirements for individual projects will vary, so this information should not be considered complete or absolute.

When preparing information to submit for electrical plan review, it is important to consider what criteria is triggering the plan review requirement.

1. For projects where the service and/or feeder are the triggering criteria, concentrate on the following:
 - A. Single line diagram showing all service equipment, feeders, non-utility owned transformers, and sub-panels. Include the following information on the single line diagram:
 - a. Voltage, amperage, and phase ratings for service equipment and transformers.
 - b. Available fault current at service equipment.
 - c. Available fault current for sub-panels (might be easier to submit at plan review instead of during on site inspections.)
 - d. Available fault current on transformer secondary for non-utility owned transformers.
 - e. Amp rating (and setting, if adjustable) of each service disconnects and each feeder disconnects.
 - f. AIC rating for service panel and each sub-panel.
 - g. Conductor and conduit information for each feeder.
 - h. All panels on the diagram to be identified in such a manner as to allow them to be easily located and identified on the floor plan.
 - i. Show location of required service grounding connections (indicate conductor size and type) including:
 - Connection to grounding electrode.
 - Water pipe bonding connection (if metal water pipe is installed.)
 - Gas pipe bonding connection (if metal gas pipe is installed).
 - Bonding connection to building steel (if it is structurally steel and/or steel skin).
 - Bonding connections to any other metal piping systems (i.e., fire sprinklers).
 - B. Provide a floor plan showing the physical location of all major electrical components. Show required working clearances also.
 - C. Provide a service load calculation computed in accordance with 2005 NEC Article 220.
2. 75 KVA or larger separately derived system will need the information same as required for services.
3. New motor load of 100 hp or more:
 - A. Provide load calculations for the affected feeder(s) and service equipment.
 - B. Provide single line diagram showing over-current devices (with ratings), conductor sizes and types, and conduit sizes and types.
4. Fire pump installations require information specific to the fire pump.
5. Emergency (back up) Systems (only required systems) require information specific to the system.
6. Over 600 volts require information specific to high voltage installation.
7. Building height over three (3) stories require the same information for services.
8. Six (6) or more residential units in one structure:
 - A. Provide information as required for services.
 - B. Clearly identify any fire separation walls on floor plan.
9. Rated "A" (assembly), "E" (educational), or "I-2, I-3" (institutional):
 - A. Provide information as required for services.

- B. Clearly identify any fire separation walls on floor plan.
10. Hazardous locations:
Provide a floor plan (and/or plot plan) that includes the following:
- A. The location and nature of all items creating the hazardous location (i.e., gasoline dispensing pump.)
 - B. Boundaries, including dimensions, of all hazardous areas as defined in 2005 NEC Article 500. Identify each location by class and division (i.e. class 1, division2.)
 - C. Identify type of conduits used.
 - D. Indicate depth of buried conduits.
 - E. Show location of all seal offs.
 - F. Show location of emergency shut off switches, if applicable.
11. Patient care areas:
Provide a floor plan with the following information:
- A. Each room on plan is identified with a unique name and/or number.
 - B. Clearly identify which areas are, and which areas are not, patient care areas. This is not necessary if you indicate wiring methods throughout will comply with requirements for patient care areas. *Note: Patient care areas are defined in 2005 NEC 517.2.*
 - C. Identify patient care areas at **General Care** (517.18) or **Critical Care** (517.19.)
 - D. Identify each patient bed locations.
 - E. Identify any wet locations (517.20.)
 - F. Identify wiring methods to be used in the patient care areas.
12. Agricultural buildings used for commercial purposes:
- A. Describe the intended usage of the structure.
 - B. If there are areas where animals will be confined on concrete, provide all necessary information to verify compliance with Article 547.10 (equipotential planes.)
 - C. Indicate, if applicable, what wiring methods will be utilized to protect the electrical installation from dust, dampness, and/or corrosive atmosphere.
 - D. Provide a floor plan showing the location of all electrical panels. Indicate the NEMA rating of each panel.
13. Floating buildings will need information to verify compliance with Article 553.
14. Marinas and boatyards will need information to verify compliance with Article 555.
15. Recreational vehicle park (new, addition or alteration):
- A. Provide a load calculation for all new or affected branch circuits, feeders, and services.
 - B. Provide a single line diagram (as for services) that reflects all new or affected branch circuits, feeders, and services.
 - C. Identify type of receptacles to be installed at each site.
 - D. Indicate total number sites in park, and total number of each type of receptacle required by Article 551.71.
 - E. Provide a plot plan, with dimensions, sufficient to verify compliance with Article 551.77(A.)
16. Solar systems over 25KW will need a separate sheet which includes a one line drawing
- A. Provide calculations required in Article 690 for the size of conductors
 - B. Provide size of the breaker(s) in the combiners or the panel for a backfed system
 - C. Provide cut sheets for the equipment such as panels, inverters, combiners, etc;
 - D. Provide drawing with location of equipment on site or on buildings pertaining to the installation.