

**DEPARTMENT OF PUBLIC WORKS**

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TO: Municipal Services Committee

FROM: Kurt W. Craanen, Inspections Supervisor *KWC*  
Paula Vandehey, Director of Public Works

SUBJECT: Proposed Ordinance Change to Chapter 4-341 to 4-420

DATE: February 24, 2015

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Below is proposed language to Article VI Chapter 4 of the Municipal Code. The reason for the proposed language is to update our local ordinances to be consistent with recent changes in the Wisconsin State Statues related to the adoption of the State Electrical Code and the requirements for electrical contractors.

Cc: Brian Schewe, Electrical Inspector  
Kevin Kettner, Electrical Inspector



ARTICLE VI. ELECTRICAL\*

DIVISION 1. GENERALLY

Sec. 4-~~342~~ 341. Adoption of the State Electrical Code, State Statutes and other standards.

The Wisconsin Administrative Code, SPS chapters 305 and 316, §101 subchapter IV and We Energies meter manuals are hereby adopted by reference and made a part of this article with the same force and effect as though set out in full in this article.

Sec. 4-~~341~~ 342. Definitions.

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

**Electrical work.**

(1) Electrical work means and includes the installation ~~or superintending~~ of electrical wiring, devices and equipment for the production, modification, utilization or safeguarding of electrical energy as covered by the code adopted in §4-~~342~~ 341.

**Maintenance.**

(2) Electrical maintenance includes only the necessary repairs to provide the safe operation of previously installed electrical equipment ~~within a plant, building or other structure.~~

*Giving a more general definition will make it possible to address existing installations in other areas previously not listed.*

**Electrical contractor.**

Electrical contractor means a any legal entity engaged in installing, altering or repairing any electrical wiring, fixtures, devices or equipment, including all electrical work as defined in this section, licensed by the State of Wisconsin under SPS 305.41.

*Change made due to the licensing law which is as of effective April 1, 2014. Wis. Stats. 101.862 (1)*

~~**Industrial electrician** means an electrician regularly employed by a person and whose work for such employer is limited exclusively to the plant or shop of his employer.~~

~~**Master electrician.** The work of a master electrician consists of the planning and supervising of the installing, altering or repairing of electrical wiring and equipment as covered by subsection (1) of this section. Before any person shall be considered to be a master electrician he must hold a current state master's certificate or he must hold a valid City of Appleton Master's Electrician license issued prior to November 1, 2001.~~

*The definition of a master electrician is no longer needed because it is addressed under Wis. Stat. 101.868.*

#### **Sec. 4-343. Enforcement generally.**

The ~~Inspection Division~~ electrical inspector shall enforce all the ordinances or laws relating to electrical installation, including any lawful orders issued by the Department of Safety and Professional Services or any other agency of the State; there is hereby vested in the ~~Department~~ electrical inspector the necessary power and authority to properly execute such duties.

*"Inspection Division" was struck out and replaced with "electrical inspector" because of Wis. Stats. 101.875 (1). "Department" was struck out and replaced with "electrical inspector" because of the definition of this word in SPS 316.100 (a) and the lack of the definition within the Appleton Municipal Code.*

#### **Sec. 4-344. Authority to discontinue electrical service.**

In case of emergency and where electrical currents are dangerous to life or property or may interfere with the work of the Fire Department, the ~~Inspection Supervisor~~ electrical inspector may order all electrical currents disconnected.

*"Inspection Supervisor" was struck out and replaced with electrical inspector because of Wis. Stats. 101.875 (1).*

#### **Sec. 4-345. Periodic inspection.**

The ~~Inspection Supervisor~~ electrical inspector periodically shall make thorough examinations of all the electrical wires and appliances installed in places of public use and occupancy within the City. When such wires or appliances are found to be in a dangerous or unsafe condition, he shall notify the person owning, using, operating or installing the wires or appliances to place them in a safe condition. The ~~Inspection Supervisor~~ electrical inspector may order the discontinuance of electrical service to such defective wires or equipment until they have been repaired, removed or changed as directed by the ~~Inspection Supervisor~~ electrical inspector, subject to the limitations of this article.

*"Inspection Supervisor" was struck out and replaced with electrical inspector because of Wis. Stats. 101.875 (1).*

#### **Sec. 4-346. Notification for inspection; concealment of wiring.**

Upon the completion of the wiring of any building or before any wiring is to be hidden from view, or prior to reconnecting of service drop or reattachment of electric meter, the person doing the wiring shall notify the ~~Inspection Supervisor~~ electrical inspector. The ~~Supervisor~~ electrical inspector shall inspect within ~~forty-eight (48) hours of the time such notice is received~~ two full business days following the day of notification, excluding weekends and holidays. If, upon inspection, it is found that such installation is fully in compliance with this article and does not constitute a hazard to life or property, the ~~Supervisor~~ electrical inspector shall approve the installation and authorize concealment of such

wiring or connection for electrical service. If the installation is not strictly in accordance with this article, he shall issue orders to the person installing the wiring to remove all hazards and make the necessary changes or additions within ten (10) days. Concealment of electrical work before inspection or failure to comply with the order of the ~~Inspection Supervisor~~ electrical inspector shall constitute a violation of this article. A contractor or his employee, or an owner doing his own work as permitted by section 4-392(e) shall be present for the final inspection.

*"Inspection Supervisor" was struck out and replaced with electrical inspector because of Wis. Stats. 101.875 (1).*

*The 48 hour inspection requirement was changed to be consistent with the state requirement under SPS 320.10 (2)(b)(3).*

#### **Sec. 4-347. ~~Exemption from inspections.~~ Reserved**

~~The provisions of §4-344, §4-345 and §4-346 shall be considered waived for work performed in an institution or industrial plant wherein electrical work is performed under responsible supervision.~~

*Change made because of Wis. Stats. 101.875 (2).*

#### **Sec. 4-348. Certificate of Inspection.**

No Certificate of Inspection shall be issued for work regulated under this article unless the electric light, power or heating installation and all other electric apparatus connected with it are in strict conformity with the provisions of this article ~~and the rules and regulations of the State Electrical Code.~~

#### **Sec. 4-349. Exceptions to construction requirements.**

(a) Type NM or NMC nonmetallic sheathed cable shall not be used as the wiring method in buildings and structures other than single-family and multifamily dwellings.

(b) All service entrance conductors shall be installed in a raceway.

#### **Sec. 4-350. Review of condemnation order.**

When the ~~Inspection Supervisor~~ electrical inspector condemns all or part of the electrical installation in any building, the owner, within five (5) days after receiving written notice from the ~~Inspection Supervisor~~ electrical inspector, may file a petition in writing for review of the action of the ~~Inspection Supervisor~~ electrical inspector to the chairman of the Board of Building Inspection in accordance with §4-26.

*"Inspection Supervisor" was struck out and replaced with electrical inspector because of Wis. Stats. 101.875 (1).*

#### Sec. 4-351. Liability for defects in work.

This article shall not be construed to relieve from or lessen the responsibility or liability of any party owning, operating, controlling or installing or repairing any electrical equipment for damages to anyone injured or any property destroyed by any defect therein. The City and its elected or appointed officials shall not be held as assuming any liability by reason of this article, the inspection authorized in this article, or the certificate issued.

### DIVISION 2. LICENSE

#### Sec. 4-391. Required.

No person, either individually, as a member of a firm, or as an officer or employee of a corporation, shall conduct the business of electrical wiring, electrical construction or contracting, unless such person has a license as required by this division § 101.862. ~~No electrical work shall be done in the City without an electrical permit first being issued therefore by the Inspection Supervisor and paying the proper fee as provided in this division.~~

~~(a) Contractor's license. Before entering into a contract to install, alter or repair any electrical wiring, fixtures, devices or equipment or for any electrical work as defined in §4-341(1), such person shall be qualified and licensed as an electrical contractor. Each contractor shall have a full-time master electrician with a valid City license or a state master certificate in said contractor's full-time employment who shall apply for all permits and be in responsible charge of all work executed by the contractor.~~

~~(b) Master's license. Before any person shall be considered to be a master electrician he must hold a current state master's certificate or he must hold a valid City of Appleton Master's Electrician license issued prior to November 1, 2001.~~

*Changes to this section are because of Wis. Stats. 101.862.*

#### Sec. 4-392. Exemptions.

As allowed under § 101.862 (4)(a), a residential property owner may perform electrical work in his own dwelling which he owns and occupies without a license as long as the work is being conducted in a single family dwelling. Electrical work performed on a residential property which is not a single family owner occupied dwelling will need to be performed by a licensed electrical contractor. The owner of the property must procure a permit prior to starting any electrical work.

~~(a) Employees of electrical, telephone, telegraph and railway utilities may perform the planning or superintending and installation, operation and maintenance of equipment and materials required for the operation of the business of such utilities without holding a license pursuant to this division, but when the employees perform the work on property or premises of others, except when making service~~

connections and installing and testing transformers, meters and other equipment ordinarily furnished by and remaining the property of the utility, they shall be licensed in the same manner provided for in this division.

(b) The operating engineers and their assistants in charge of power generating plants, prime movers and all auxiliary equipment, maintenance, repairs in the operation of the electrical equipment under their jurisdiction shall be exempt from the license requirements.

(c) A homeowner may personally wire his own single family dwelling without obtaining a license, but a permit must be procured and work inspected and approved in the same manner as for a licensed contractor. An owner must prove his competence to conform with all rules and regulations. For purposes of this section, homeowner means a person owning and occupying as his permanent address a single family dwelling.

Changes to this section were made to close a loop hole in the state law which did not restrict the homeowner to a single family dwelling. The state law made is possible for any homeowner of any dwelling to be able to perform work in his or her own dwelling that they occupied. This change will be consistent with our previous municipal code section 4-392 (c).

#### **Sec. 4-393. Industrial electricians.**

An industrial electrician need not be licensed while doing electrical work or maintenance that is limited exclusively to the plant or shop of his employer. An industrial electrician with a master's license and who is a full-time employee of a plant or shop may take permits for new electrical work.

#### **Sec. 4-394. Issuance; term.**

(a) Contractor's licenses shall be issued by the City to all qualifying persons subject to Wis. Stats. §101.87. Such license shall not be assignable or transferable. Application for a license shall be made to the Inspection Supervisor on forms furnished by him, and approved by an electrical inspector, who shall determine the fitness of the applicant for a license.

(b) All contractor's licenses shall be issued for one (1) year commencing on July 1 and expiring on the following June 30, unless sooner revoked. Existing master's licenses granted will exist for a continuous period unless sooner revoked.

#### **Sec. 4-395. Fees.**

Fees for licenses issued under this division shall be as approved by the Common Council and on file in the office of the Inspection Supervisor.

~~Sec. 4-396. Reserved.~~

~~Sec. 4-397. Revocation.~~

~~Any license issued under the provisions of this division may be revoked by the Inspections Supervisor if the licensee violates any ordinance or law relating to electrical work or the licensee is guilty of installing electrical construction which is a hazard to life or property. When a license is revoked, a new license shall not again be granted to the same licensee for a period of thirty (30) days nor until the licensee shall have corrected the faulty construction in accordance with the provisions of this article and has made application and paid the fees as required for the original license. The Inspections Supervisor shall have discretionary power to withhold the granting of a new license for cause for a period not to exceed six (6) months.~~

~~Secs. 4-398 393 – 4-415. Reserved.~~

### DIVISION 3. PERMITS

~~Sec. 4-416. Application; issuance.~~

~~The Inspection Supervisor Department shall issue permits for all electrical installations to the ~~master electrician~~ licensed electrical contractor in charge for light, heat or power upon filing of proper application, which shall be made on forms furnished by the Director, ~~and~~ The permit application shall describe the nature of the work as well as such other information as may be required for inspection. Permits shall be issued prior to the start of any electrical work. No permit shall be required for repairs necessary for the proper maintenance of an existing installation. Electrical permits are required for demolition of any part of an electrical system. The ~~Inspection Supervisor~~ electrical inspector may require the applicant to furnish additional plans and specifications covering the work to be done in addition to the items that are required in (a) and (b) of this section.~~

**(a) A photometric study:**

For commercial and industrial projects where emergency lighting is required, modified or where exit paths have changed, a photometric plan is required. Illumination levels shall be noted on the study using the point-to-point method having a maximum spacing of two feet on center.

**(b) Photovoltaic (PV) Systems:**

Requirements as listed in the "Photovoltaic System Permit Requirements" handout

Master electrician was replaced with licensed electrical contractor because we are issuing the permit to the entity not the person. Through Wis. Stats. 101.862 (3) a master electrician is required to be responsible for the work at all times.



**Sec. 4-417. Exemption for industrial electricians. Reserved**

~~Electrical work performed by an industrial electrician in the plant or shop of his employer, where such electrical work does not involve a service charge, or work in a new or remodeled building requiring plan approval by the State Department of Safety and Professional Services, Wisconsin Administrative Code SPS 350.10, is exempt from the electrical permit requirement.~~

~~This exemption is covered under Wis. Stats. 101.875 (2).~~

**Sec. 4-418. Electrical fees.**

(a) **Generally.** Permit fees for the installation of wiring and electrical equipment shall be as provided in this section.

(b) **One- and two-family dwellings.** The amount of the permit fee for one- (1-) and two- (2-) family dwellings (new construction and additions) shall be on file in the Office of the City Clerk.

(c) **Multiple-family buildings.** The amount of the permit fee for multiple-family buildings (new construction and additions) shall be on file in the Office of the City Clerk.

(d) **Commercial or industrial buildings.** For commercial or industrial buildings (new construction and additions) and alterations to all existing buildings, the amount of the permit fees shall be on file in the Office of the City Clerk.

(e) **Change of service.** The fee for change of service shall be on file in the Office of the City Clerk.

**(f) Photovoltaic (PV) Systems.** The fee for a PV system shall be on file in the Office of the City Clerk.

~~This section added because in the past years we have had an increase in these types of installations. These systems are specialized and require more time to do a plan review and site inspection than do our other type of inspections. That alone would justify a fee schedule separate from the rest of the electrical installations.~~

~~(f)~~**(g) Penalty for commencing work without permit.** The fee for installation of wiring or electrical equipment without a permit shall be triple the permit fee prescribed in this section when a permit is obtained. Payment of any fee mentioned in this subsection shall in no way relieve any person of the penalties that may be imposed for violation of this Article.

~~(g)~~**(h) Reinspection.** A thirty-five dollar (\$35.00) call back inspection fee may be charged each time a reinspection is necessary due to failure to correct, faulty, defective or incomplete work identified during a prior inspection.

**Sec. 4-419. Use of license to obtain permit for another.**

It shall be unlawful for any licensed electrical contractor or person with a master's license to allow the use of his said license, directly or indirectly, for the purpose of obtaining local electrical permits for others.

**Sec. 4-420. Temporary installations.**

On applying for an electrical permit for temporary work, a specified period of time for which such wiring is to remain in service must be stated. Service shall be cut off at the end of this period and shall not again be connected without written permission from the electrical inspector.

**Secs. 4-421 – 4-435. Reserved.**