

VILLAGE OF BRADLEY

ORDINANCE NO. O-5-14-8

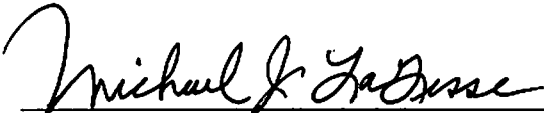
AN ORDINANCE ADOPTING THE  
2014 NATIONAL ELECTRICAL CODE

ADOPTED BY THE  
BOARD OF TRUSTEES  
VILLAGE OF BRADLEY

This 27 day of MAY, 2014

Published in pamphlet form by authority of the Board of Trustees of the Village of Bradley, Kankakee County, Illinois, this 27 day of MAY, 2014.

CERTIFICATE:

  
\_\_\_\_\_  
Michael J. LaGessee, Village Clerk

**ORDINANCE NO. O-5-14-8**

**AN ORDINANCE ADOPTING THE  
2014 NATIONAL ELECTRICAL CODE**

**BE IT ORDAINED** by the President and Board of Trustees of the Village of Bradley, Kankakee County, State of Illinois, as follows:

**Section 1. Code of Ordinances Amended.** Chapter 5 (“Buildings and Development”), Article I (“In General”), Section 5-6 (“Electrical code adopted; amendments, changes.”) of the Village of Bradley Code of Ordinances is hereby amended by adding the underlined language and deleting the stricken language to read as follows:

**Sec. 5-6. Electrical code adopted; amendments, changes.**

(a) *Adopted.* The National Electrical Code, ~~2008~~ 2014 Edition (NFPA 70), as published by the National Fire Protection Association, is adopted as the Electrical Code of the Village of Bradley and hereby is amended, explained and supplemented as hereinafter set forth for the control and safeguarding of persons and property from hazards arising from the use of electricity; and each and all of the regulations of the National Electrical Code, ~~2008~~ 2014 Edition, are hereby referred to, adopted, and made a part of this section as if fully set out in this section with additions, insertions, deletions, and changes, if any, prescribed in subsection (b) of this section.

(b) *Amendments, additions, and changes.*

(A) Article 80.15 is hereby amended in its entirety to read as follows:

“Creation of Electrical Board. There hereby is created the Electrical Board of the Village of Bradley hereinafter designated as the Board, which board shall consist of the Zoning Board of Appeals from time to time as appointed by the President and the Board of Trustees.”

(B) Permits.

1. Permits issued by the Building Standards Department shall be required of all persons performing or contracting to have done any electrical work within the confines of ~~this~~ the Village of Bradley.

2. Such work shall include wiring of, but is not limited to, single-family residential, multi-family, commercial and industrial buildings, garages and storage sheds or workshops.

3. Permits shall be required for all work as defined by the adopted codes of the Village of Bradley covering exterior lighting, sign, warning, alarm and security systems and shall be in the possession of such persons before any work is begun. Violators of this stipulation shall be subject to citation and penalties as described in this Ordinance.

4. A qualified person(s) shall be one who can, by his performance, demonstrate his ability to properly perform electrical work to the reasonable satisfaction of the Electrical Inspector, the Authority Having Jurisdiction (AHJ). Failure to so demonstrate shall culminate in the denial of that privilege and shall then ~~be required to~~ the employment of a qualified tradesman or contractor to complete the work.

5. A permit issued to a qualified homeowner shall allow the homeowner to do electrical work on the residence. It does not, however, allow the homeowner to do work on rental, commercial or multi-family properties unless said homeowner is an insured, licensed and certified Electrical Contractor.

6. Permits shall be issued to those persons qualified, registered and insured as Electrical Contractors who may be under contract to perform a given work, and the permit shall bear the Contractor's name or the name of the person or persons responsible for its completion.

(C) Registration of Contractors.

1. It shall be required of every Electrical Contractor working in the Village of Bradley to be registered with the ~~Village~~ the County of Kankakee and the Building Standards Department.

2. All persons who are not Electrical Contractors and wish to do electrical work in this village shall be registered with the Building Standards Department before the work begins. Such persons shall show proof of qualifications to perform work to the reasonable satisfaction of the AHJ, and said person's name shall appear on the electrical permit.

(D) Penalties

1. Any person who violates any provision of this ordinance shall be subject to a fine of up to \$750.00 for the first day of the offense and up to \$750.00 for each subsequent day in offense thereafter. Each day that such violation continues unassuaged shall be deemed a separate offense and shall be charged cumulatively.

(E) Electrical Inspector.

1. It shall be the duty of the AHJ to administer and enforce all of the regulations outlined in these ordinances and in the NEC.

2. The AHJ shall have full authority to modify or waive said regulations or to permit alternative methods where it is assured that equivalent objectives can be established and still maintain effective safety. See NEC Article 90.4.

(F) Responsibility and Liability.

1. The electrical regulations of this ordinance shall not be construed to relieve from or lessen the responsibility of any person owning, operating, selling, offering for sale, or installing any electrical wires, apparatus, appliance or equipment to anyone injured by any defect therein by reason of the approved inspection authorized herein or the certificate of inspection issued by the Building Standards Department or the authority having jurisdiction ~~Electrical Inspector~~.

2. The Village of Bradley shall not be held responsible for any damages resulting from the enforcement of the regulations of this ordinance.

3. The Village of Bradley or the AHJ shall not be held responsible for any damages resulting from any deviations from the Electrical Code made surreptitiously and hidden from inspection, nor for alterations made after the final inspection of the work and workmanship.

4. Upon completion of the work and the final inspection having been made and accepted, the contractor or electrical practitioner shall be fully responsible for his work.

(G) Notification of Progress for Inspection.

1. It shall be incumbent upon the permit holder, the person to whom the permit is issued or the registered contractor and/or agent performing the work to inform the Building Standards Department that a job has progressed to a point requiring inspection.

2. Points at which inspection and approval are mandatory:

(a) When service entrance is completely wired and ready.

(b) At the point commonly referred to as “roughed in”, i.e., NM cables are installed at proposed outlets or, in the case of having used EMT system, all conduit is in place and permanently installed.

(c) Wire has been pulled into EMT, but no devices have been installed.

(d) Final inspection to qualify for occupancy permit.

(I) Authority to Stop Work.

1. The AHJ shall have the power to stop at once any installations made prior to having procured a proper permit for the work or found to be a violation of these Ordinances, ~~the AHJ shall have the power to stop all such work at once~~ and to order any and all persons engaged on ~~this~~ the job site in question to stop and desist their work until a proper permit has been secured.

2. Failure to comply with such order shall merit a citation for non-compliance, and the violation shall be subject to the penalties as already outlined in this Ordinance.

(J) Notices and Seals.

1. The AHJ is hereby empowered to attach to cabinets, equipment or structures any official notice or seal to prevent the use of electricity or the premises.

2. It shall be unlawful for any other person to put or attach such a seal.

3. It shall be unlawful for any person other than the AHJ to break, change, destroy, tear, mutilate, cover or otherwise deface or injure any such official notice or seal posted by the AHJ. Penalties for such violation are as already outlined in this Ordinance.

(L) Approved Equipment And Installation Methods.

1. Only those electrical equipments, appliances and devices which have been listed and approved for use by Underwriters Laboratories (UL), Canadian Standards Association (CSA) or other ~~NEC-approved~~ National Recognized Testing Laboratories (NRTLs) ~~agency~~ shall be installed in the Village of Bradley.

2. Aluminum or copper clad aluminum wire shall not be used for general wiring in the Village of Bradley.

3. No wiring system which includes the use of BX or cables shall be used in the wiring of any residential or commercial installation in the Village of Bradley without the express written approval of the AHJ. See NEC Article 110.2. Cables are acceptable only if approved.

4. Where re-working or re-wiring of any building or structure which involves fifty percent (50%) or more, at the discretion of the AHJ, it shall be required that ALL WIRING be made compliant to current electrical codes and ordinances.

5. All service entrance systems installed in the Village of Bradley shall be installed by qualified electrical contractors who are registered with the County of Kankakee and Building Department. Violators of this article shall be subject to fines as outlined in a previous article.
6. All service entrances shall be made in accordance with the specifications outlined in the current NEC, Article 338, except that types SE or USE mineral insulated or metal sheathed cable shall not be used as service entrance conductors.
7. All overhead type service entrance installations shall be made using Rigid, or Intermediate Metal Conduit (IMC), or Rigid Aluminum Conduit as the riser from the meter socket to the weather head. The use of Plastic Vinyl Conduit (PVC) is allowed with the permission of the AHJ.
8. Service entrance installations shall be made in a workman-like manner and firmly attached to the building or structure that it is designed to serve.
9. No service entrance smaller than 100 Amp capacity shall be installed within the Village of Bradley ~~which is smaller than 100 Amp capacity~~ without the specific approval and permission of the AHJ and shall be governed by the anticipated load application in question.
10. A 100 Amp residential service entrance conduit riser shall be of 1 1/4 inch diameter conduit. The service conductors for a single-family residence shall be three (3) number 3 copper THHN conductors or the equivalent.
11. A 200 Amp residential service entrance conduit riser shall not be less than 1 1/2 inch conduit and shall have three (3) #3/0 copper THHN conductors or the equivalent. It shall be permissible, in a residential service entrance conduit riser, to downsize the neutral (grounded) conductor one size per the NEC.
12. In cases where the service riser is intended to serve as the support for the service drop from the pole, it shall be of rigid steel conduit not be less than two (2) inches in diameter. In no case will PVC be considered for such an application.
13. All electrical distribution panels shall be fed in conduit from the metering source.
14. No distribution panel shall be installed in a closet unless approved by the authority having jurisdiction ~~where working space is limited or combustible materials may be stored in hazardous proximity.~~
15. Electrical distribution panels using plug or cartridge fuses for circuit interrupters shall not be approved for use in this village to protect more than two (2) circuits.

(M) Grounding and Bonding.

1. In residential wiring, the grounding electrode shall be a copper coated steel rod five-eighths (5/8) of an inch in diameter, eight (8) feet in length. It shall be driven into the earth to the grade level or deeper. A grounding electrode conductor from the neutral bus in the meter socket to the grounding electrode shall be firmly attached to the building it is intended to serve.

2. All metallic parts of the service entrance systems, raceways and enclosures shall be effectively bonded to the grounding electrode. See NEC Articles that apply.

3. For a 100 Amp service, no grounding electrode conductor shall be less than a Copper #6 AWG, bare or insulated, and it shall be sheathed to protect it from inadvertent damage. A second grounding electrode conductor, of the same size as the first, shall be installed from the neutral bus in the enclosure of the first disconnect or distribution panel to the street side of the water supply nearest cold ~~water line on the premises~~. A jumper shall be provided to shunt the grounding circuit around the water meter to assure continuity to the street side of the water supply.

4. For a 200 Amp service, the grounding electrode conductor shall be of #4 copper wire, bare or insulated, and shall be treated the same as the electrode conductor in the above article.

5. If it is elected to sheath the electrode conductor in a metallic sheath (EMT), the sheath shall be firmly attached to the meter socket and the earth end of the metallic sheath shall be bonded to the electrode conductor. It will not be required to bond a non metallic (PVC) sheath to the conductor or the meter socket.

6. All equipment grounding conductors shall be of copper.

7. All grounding electrodes are to be of copper clad steel. Galvanized rod or pipe will not be accepted as a grounding electrode.

8. GFCI receptacles shall be individually bonded to their metal enclosure with a green bonding jumper.

(N) Wiring and Wiring Systems.

1. Wire used for all 120 volt wiring systems in the Village of Bradley shall be of #12 AWG or heavier including switch legs.

~~2. NM wire (Romex) used in any building or structure where it is approved shall be installed per the methods outlined in the NEC or as permitted by the AHJ.~~

3. BX or AC cable is not allowed to be used to wire any residential or commercial buildings in the Village of Bradley.

~~4. NM wire (Romex) shall be approved for the purpose of wiring single family residences in elevations not to exceed three (3) stories. A tri-level house being considered to be a three (3) story house for the purposes of this application, the first floor being fifty percent (50%) above grade at a point six (6) feet away from the foundation wall.~~

~~5. NM wire (Romex) shall be acceptable for wiring in multi-family attached structures (town houses) where all units are two (2) story units on basements or crawl spaces and are separated by appropriate fire-rated party walls that enclose each unit from the foundation to the roof sheeting.~~

6. NM wire shall not be permitted without the permission of the authority having jurisdiction. ~~to be:~~

~~(a) installed in contact with or buried in the earth or earth fill;~~

~~(b) used as work exposed to the elements;~~

~~(c) used in construction of single family dwellings which are "stacked"; where one dwelling is above another; or where attached to similar dwelling structures not separated by properly fire-rated party walls.~~

7. Multi-family buildings, condominium or apartment styles shall be wired using electrical metallic tubing (EMT).

8. All buildings or parts of buildings which serve a commercial or industrial enterprise shall be required to be wired in EMT or MC cable.

9. Flat conductor cable (FCC) shall not be used in any construction without the written permission of the AHJ.

10. Flexible metal tubing (Greenfield) may be used in concealed work in dry locations where it is fished in existing walls or in partitions where it is not possible to install conduit, EMT or other approved raceway. FMT (Greenfield) larger than one (1) inch or exceeding six (6) feet in length shall be required to carry a ground wire.

11. FMT (Greenfield) larger than 1 1/4 inches in diameter or exceeding six (6) feet in length shall be required to carry a ground wire.

12. EMT shall not be used underground or in contact with the earth or earth fill, on outside walls where it is exposed to the elements, on roofs, exposed to



permanent moisture, in concrete slabs or where it will be subject to mechanical injury. The use of plastic, visqueen or similar materials placed under or over the tubing shall be considered the same as earth or earth fill.

~~13. NM wire run in stud spaces shall be stapled as near as possible to the center line of the wide face of the stud. It shall be supported by staples sufficient to affect control of the cable and to prevent any damage to the conductors throughout the length of the installation.~~

14. Cables run in attic areas shall be so located as to avoid the open areas of the most physically accessible part of the attic, the purpose being to protect such wiring from possible damage by the occupant who may choose to put down flooring or to other wise utilize the area for storage.

15. When wiring with NM (Romex) the use of the crawl space as a wire chase or wire way shall be avoided. The load side wiring or "Home Run" shall not be installed in a crawl space without a special permission of the AHJ BEFORE it is installed. It shall be permissible to run NM wire into a crawl space to subtend some otherwise impossible structural corner or floor treatment with the approval of the AHJ.

16. All wire runs shall be made along the lateral or longitudinal axis of the building. Wire run on diagonal orientation will be rejected.

17. It shall be permitted to run SE wire in a crawl space in order to add power to an electric dryer, range or an air conditioner in an existing residence. It shall be run in a protected and controlled manner and run in parallel or perpendicular orientation to existing structural members.

18. In all commercial construction, places where public assembly is encouraged or is a condition of operation, it shall be required in (but not limited to) hotels, motels, lounges, taverns, office waiting rooms, theaters, restaurants or any areas of similar application, wiring of fire alarms, smoke detectors and emergency lighting shall be run entirely in conduit. Splices and terminations shall be made in listed enclosures using appropriate listed fittings. Flexible conduit (FMT or Greenfield) used in this application shall not be longer than two (2) feet.

19. In multi-family buildings where a balcony is a feature, one (1) weather proof GFCI receptacle shall be provided on each balcony.

~~20. Closets or storage rooms where combustible materials may be stored that are lighted by incandescent bulbs shall have the bulb(s) enclosed inside of a fixture. It shall not be necessary to enclose a fluorescent bulb in such an application.~~

21. All light fixtures shall have at least one bulb in working condition for the final inspection.

22. The enclosures for smoke detectors shall be prominently identified for the AHJ and Fire Inspector when they make the rough-in inspection. ~~Smoke detectors shall be electrically interlocked on a single circuit separate from all other devices and shall be of the battery back-up design.~~

~~23. Unfinished basement areas may be wired in EMT. NM wire may be used but the work must be installed per the instructions in the NEC article 334.15.~~

~~24. Structures, buildings, basements or garages which are remodeled or revised to serve any commercial application shall be required to obtain proper permits from said adaptation and shall be subject to the rules of variance of the Village of Bradley.~~

25. Rigid non-metallic conduit (PVC) raceways and flexible tubing may be incorporated into any construction installations. PVC may be approved for underground power circuits, branch circuits, under buildings or in concrete slab work. Such PVC introduced into an EMT or other metallic wiring system shall carry a ground wire for the purpose of maintaining continuity to ground.

26. The GFCI utilization receptacle over the cabinetry in a residential kitchen may only protect those other utilization devices on its branch circuit. It shall not be allowed to include any soffit lights, ceiling lights, exhaust fan or any receptacles in adjoining rooms on the utilization circuit.

27. It shall not be necessary to GFCI the circuits that feed a garage door opener, sump pump, ejector pump, refrigerator, freezer, or vacuum system.

(O) Residential Garages, Storage Units, And Similar Buildings.

1. Where more than one (1) building or other structure is on the same property and under single electrical management, each building or other structure served shall be provided with a means for disconnecting all ungrounded conductors.

2. In cases where only one (1) circuit is fed into the second unit, a single pole switch may serve as the "Main Disconnect" for this unit. The entire circuit will be controlled by that switch.

~~3. In cases where more than one circuit is introduced into the second unit, it shall be required to provide a fused disconnect or breaker panel that will provide over current protective devices (breakers) such that a Main Breaker can be used to control the ensuing circuitry. A grounding electrode will be required to provide~~

~~grounding for the second unit, and there is to be no ground wire from the first unit.~~

4. Feeders to supply a second unit may be run overhead or underground. They shall be of copper unless permission of the AHJ allows the use of Aluminum wire. They shall be of sufficient ampacity to support the anticipated load and supported per NEC and AHJ.

~~5. In no case will overhead feeders be allowed to be supported by or by being passed through any tree or live vegetation.~~

6. Feeders installed underground shall be in PVC or shall be conductors designed for direct burial in the earth. Such trench shall not be covered until it is inspected and approved by the AHJ.

7. Private or residential garages shall be provided with not less than one "Main Switch", one (1) light over each bay, switch, one (1) ceiling light and one (1) approved receptacle. A two-car or larger garage requires two approved receptacles, one each on opposite walls. The garage shall be fed by its own individual branch circuits.

(P) Temporary Electrical Services.

1. In no case shall a temporary electrical service be maintained for a period longer than six (6) calendar months without the approval of the AHJ.

**Section 2. Severability and Repeal of Inconsistent Ordinances.** If any section, paragraph, clause or provision of this Ordinance shall be held invalid, the invalidity thereof shall not affect any of the other provisions of this Ordinance. All existing ordinances of the Village of Bradley are hereby repealed insofar as they may be inconsistent with the provisions of this Ordinance.

**Section 3. Effective Date.** The Clerk of the Village of Bradley shall certify to the adoption of this Ordinance and shall cause it to be published in pamphlet form, and this Ordinance shall take effect upon its approval and publication in pamphlet form as so certified and as soon thereafter upon the passage of thirty (30) days of this Ordinance's identification on the Internet by the Illinois Public Building Commission or any successor agency of the State of Illinois.

PASSED this 27 day of MAY, 2014.

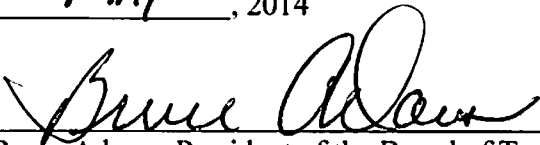
TRUSTEES:

|                   |   |                                |                                   |
|-------------------|---|--------------------------------|-----------------------------------|
| Jerry Balthazor:  | Aye - <input checked="" type="checkbox"/> | Nay - <input type="checkbox"/> | Absent - <input type="checkbox"/> |
| Robert Redmond:   | Aye - <input checked="" type="checkbox"/> | Nay - <input type="checkbox"/> | Absent - <input type="checkbox"/> |
| Lori Gadbois:     | Aye - <input checked="" type="checkbox"/> | Nay - <input type="checkbox"/> | Absent - <input type="checkbox"/> |
| George Golwitzer: | Aye - <input checked="" type="checkbox"/> | Nay - <input type="checkbox"/> | Absent - <input type="checkbox"/> |
| Melissa Carrico:  | Aye - <input checked="" type="checkbox"/> | Nay - <input type="checkbox"/> | Absent - <input type="checkbox"/> |
| Eric Cyr:         | Aye - <input checked="" type="checkbox"/> | Nay - <input type="checkbox"/> | Absent - <input type="checkbox"/> |


Bruce Adams: Aye -  Nay -  Absent -

TOTALS: AYE - 6 NAY - 0 ABSENT - 0

APPROVED this 27 day of MAY, 2014

  
\_\_\_\_\_  
Bruce Adams, President of the Board of Trustees  
of the Village of Bradley

ATTEST:

  
\_\_\_\_\_  
Michael J. LaGessee, Village Clerk