


VILLAGE OF LOMBARD
REQUEST FOR BOARD OF TRUSTEES ACTION
For Inclusion on Board Agenda

Resolution or Ordinance (Blue) _____ *Waiver of First Requested*
 X Recommendations of Boards, Commissions & Committees (Green)
Other Business (Pink)

TO: PRESIDENT AND BOARD OF TRUSTEES
FROM: David A. Hulseberg, Village Manager
DATE: April 23, 2013 (B of T) Date: May 2, 2013
TITLE: Text Amendments to the Electrical Code (Chapter 150 of the Building Code)
SUBMITTED BY: Department of Community Development 

BACKGROUND/POLICY IMPLICATIONS:
The Electrical Commission transmits for your consideration an ordinance granting approval of text amendment to Title 15, Chapter 150, Section 150.060 et. seq. of the Lombard Village Code in regard to local amendments to Electrical Installation Rules and Regulations.

The Electrical Commission recommended approval of these amendments.

Please place this item on the May 2, 2013 Board of Trustees agenda.

Fiscal Impact/Funding Source:


Review (as necessary):
Village Attorney X _____ Date _____
Finance Director X _____ Date _____
Village Manager X _____ Date _____

NOTE: All materials must be submitted to and approved by the Village Manager's Office by 12:00 noon, Wednesday, prior to the Agenda Distribution.



MEMORANDUM

TO: David A. Hulseberg, AICP, ICMA-CM, Village Manager

FROM: William J. Heniff, AICP, Director of Community Development 

DATE: May 2, 2013

SUBJECT: Text Amendments to the Electrical Code (Chapter 150 of the Building Code)

Attached please find the following items for Village Board consideration as part of the May 2, 2013 Village Board meeting:

1. Electrical Commission referral letter;
2. A redlined version of the proposed amendments; and
3. An Ordinance granting approval of text amendments to Chapter 150 of the Village Code.

The Electrical Commission discussed the amendments at their March 26, 2013 meeting and unanimously recommended approval of the amendments herein. Key amendments included within the draft Ordinance is a requirement that each respective sump or ejector pump be provided with an individual branch circuit. Additional amendments pertain to clarification for insurance requirements and edits for clarity and consistency with the National Electrical Code (NEC) requirements.



VILLAGE OF LOMBARD

255 E. Wilson Ave.
Lombard, Illinois 60148-3926
(630) 620-5700 Fax (630) 620-8222
www.villageoflombard.org

May 2, 2013

Village President
Keith T. Giagnorio

Village Clerk
Sharon Kuderna

Trustees
Daniel Whittington, Dist. 1
Dist. 2
Reid Foltyniewicz, Dist. 3
Peter Breen, Dist. 4
Laura A. Fitzpatrick, Dist. 5
William "Bill" Ware, Dist. 6

Village Manager
David A. Hulseberg

"Our shared Vision for Lombard is a community of excellence exemplified by its government working together with residents and businesses to create a distinctive sense of spirit and an outstanding quality of life."

"The Mission of the Village of Lombard is to provide superior and responsive governmental services to the people of Lombard."

Keith T. Giagnorio
Village President, and
Board of Trustees
Village of Lombard

Subject: Amendments to Title 15, Chapter 150 – National Electrical Code - 2008

Dear President Giagnorio and Trustees:

The Electrical Commission transmits for your consideration its recommendation regarding the above-referenced request. The Village of Lombard is requesting text amendments to Title 15, Chapter 150, of the Lombard National Electrical Code – 2008 relative to several code changes recommended by staff.

On March 26, 2013 the Electrical Commission met to review this request. Len Farina, Chief Electrical Inspector, indicated that the proposed amendments were presented to the Electrical Commission in a redlined version of the Code. Text being added to Code was denoted by underlining and any deletions were struck.

Mr. Farina detailed the proposed change to Title 15, Chapter 150, Section 150.066, to better reflect the verbiage used in the National Electrical Code (2008); the word "Article" will be replaced with "Section"; as explained by Mr. Farina, there is no code change in this case, rather it is a reference change.

Mr. Farina went over the proposed change to Title 15, Chapter 150, Section 150.062. This section will refer to the contractor registration and insurance requirements in Section 150.143. This change is needed to avoid having several sections of the ordinance repeat the same information.

Mr. Farina explained the proposed change to Title 15, Chapter 150, Section 150.064, the word "of" will be replaced with the word "or".

Mr. Farina detailed the proposed change to Article 210. This proposed change is to include new language requiring separate electrical circuits for sump pumps and ejector pumps; while most contractors already install a dedicated electrical circuit for the sump pump, recently a new house was built in which the builder chose not to install the pump on a dedicated circuit. As this is important to prevent flooded basements, this change is being proposed. Section 210.52 (G)(3) states each pump shall be provided a dedicated circuit compliant with Section 210.21 (B)(1), (2) and (3) and a receptacle with a rating of not less than the branch circuit rating (usually 20 amps) and GFCI protected and Tamper Resistant.

Jim Roberts questioned if a twist lock would be required. Mr. Farina stated “no”, TR (tamper resistant) is required.

John Foulkes questioned if “we” want a TR. Mr. Farina stated that per the 2008 NEC, this is a requirement.

Mr. Foulkes suggested that a dog handle lock be placed on the circuit breaker. Mr. Farina agreed that this suggestion of a dog handle lock is not a bad idea, however, we have never had anyone turn off a breaker in the past, causing flooding.

Matt Komel made a motion to recommend to the Board of Trustees the adoption of the proposed text amendments to Title 15, Chapter 150, of the National Electrical Code - 2008 as proposed by staff. The motion was seconded by Jim Roberts and unanimously approved by the members present by a vote of 3-0.

Respectfully,

VILLAGE OF LOMBARD

The Electrical Commission



MEMORANDUM

TO: Electrical Commission Members

FROM: Len Farina, Chief Electrical Inspector *LF*

DATE: March 12, 2013

SUBJECT: National Electrical Code (NEC)

Attached for the Commission's review and consideration is a copy of the proposed changes to the Village of Lombard's ordinances. There are two primary changes. First, the word "section" has been inserted where the ordinance stated "article" in the past. This is to better reflect the verbiage used in the National Electrical Code.

The second change was to include new language requiring separate electrical circuits for sump pumps and ejector pumps. While most contractors have installed a dedicated electrical circuit for the sump pump in the past, it is not specifically required in the NEC. Additionally, a new house was built recently where the builder chose to not install the dedicated circuit. This particular house did have the circuit breaker open causing a power failure to the sump pump. It is thought that the code did not mention this dedicated circuit since it was common sense, but clearly this important ordinance is needed to help prevent flooded basements.

Staff will provide a detailed discussion of the proposed amendments at the meeting.

Should you have any questions in the interim, please feel free to contact me at 620-5732 or by e-mail at farinal@villageoflombard.org.

NATIONAL ELECTRICAL CODE-2008

§ 150.060 ESTABLISHMENT OF RULES AND REGULATIONS OF ELECTRICAL INSTALLATION

The National Electrical Code (2008 Edition), as hereby amended and as modified by this Chapter, shall establish the rules and regulations of electrical installations in the Village.

§ 150.061 DEFINITION

For the purpose of this Chapter the following definitions shall apply unless the context clearly indicates or requires a different meaning.

Electrical Contractor as used in this Chapter means any person, firm or corporation engaged in the business of installing or altering, by contract or otherwise, electrical equipment for the utilization of electricity supplied for light, heat or power or other installations covered in Article 90.2, Scope of the National Electrical Code (2008 Edition); but "electrical contractor" does not include employees of such contractor who perform or supervise such work.

Communications Contractor is one that installs only Class 2 or Class 3 type wiring as defined in Articles 725.1 and 725.2 of the National Electrical Code (2008 Edition) (NEC), and only that portion of the wiring system between the load side of a Class 2 or Class 3 power source and the connected equipment.
(Ord. 5481, Passed 5/6/04; Ord. 6522, passed 9/16/10)

§ 150.062 ELECTRICAL CONTRACTORS AND COMMUNICATIONS CONTRACTORS MUST BE REGISTERED; CERTIFICATE OF INSURANCE

It is unlawful for any person, firm or corporation to engage in the business of Electrical Contractor or Communications Contractor within the Village of Lombard, without being registered in the manner hereinafter set forth.

(A) Registration. Any person, firm or corporation desiring to engage in the business of an Electrical Contractor or Communications Contractor shall:

(1) Furnish a copy of current registration or license issued by any City, Village or Town in the State of Illinois that was obtained only after the passage of a recognized written test.

(2) Homeowner. A homeowner shall be registered by application to the Village. Said registration shall be restricted to allow work only on the homeowners' personal and primary residence. A qualification test shall be passed in order to secure this registration and permits. No electrical work shall be allowed under this provision in commercial,

industrial or multifamily residential occupancies. Work done on these type occupancies shall be performed only by a registered Electrical Contractor.

(B) Use of Permit Issued to Another. It shall be unlawful for any person to install, alter or repair any electrical wires or apparatus by authority of a permit issued to and for the use of some other person.

(C) Permit for Person Not Entitled to One. It shall be unlawful for any registered Electrical or Communications Contractor to secure or furnish a permit for the installation, alteration, and repair of electrical wires and apparatus to any person not entitled to such permit under the regulations of this Chapter.

(D) Revocation of Permits. The Community Development Director or his/her designee is authorized to revoke any permit or certificate obtained by fraud, misrepresentation, or in any way contrary to the provisions of the electrical regulations of this Chapter, for installation, alteration, repair and use of any electrical conductors, electrical equipment, signaling & communications conductors and equipment, and fiber optic cables and raceways.

(E) Certificate of Insurance. Refer to Contractor Registration and Insurance Requirements §150.143. ~~Any person, firm or corporation desiring to engage in the business of an Electrical Contractor or Communications Contractor shall furnish a \$300,000 single limit liability manufacturers and contractors liability certificate naming the Village of Lombard as Certificate Holder and Additional Insured.~~
(Ord. 6522, passed 9/16/10)

§ 150.063 PERMIT REQUIRED

No person shall install any electrical conduits, electrical wires, electrical equipment, apparatus or communications, data, computer or fiber optics cables, conduits, equipment or apparatus in any building or structure, for which a permit is required, until such permit shall have been secured. In case any work is begun without a permit authorizing said work, the Community Development Director or his/her designee shall have the power to stop said work and order all persons engaged therein to stop and desist until the proper permit is secured.

Underground installations in the parkway area require an additional permit (Right-of-Way Permit) from the Village of Lombard Public Works Department.
(Ord. 6522, passed 9/16/10)

§150.064 DISCONNECTION OF ELECTRICAL SERVICES

(A) If any person violates the provisions of this Chapter or maintains any electrical wiring or apparatus or communication, data, computer, or fiber optic cable or equipment found to be dangerous to life and property, the Community Development Director or his/her designee is hereby empowered to cut-off or otherwise disconnect current to said electrical wires or apparatus.

(B) Any person having been stopped from installing electrical work as outlined in Section 150.063 shall, when securing the permit to continue, pay double the permit fees as a penalty.
(Ord. 6522, passed 9/16/10)

§ 150.065 PERMIT FEES

All fees for inspection shall be in accordance with schedules under Section 150.140.

§ 150.066 ADOPTION BY REFERENCE AMENDMENTS, ADDITIONS, AND DELETIONS

(A) The National Electrical Code (2008 Edition), as amended, is adopted by reference as modified by this Chapter.

In the event any provisions, articles, wording, and the like, of the National Electrical Code (2008 Edition), as amended, are in conflict with any ordinances, amendments, and/or addendums, as recognized and approved by the Electrical Commission of the Village of Lombard and/or as adopted by the Village of Lombard, or in conflict with the state law, the most restrictive provisions, articles, wording, and the like, shall prevail.

Wiring methods and/or materials listed by the National Electrical Code (2008 Edition), but amended, deleted, prohibited or requiring Special Expressed Written Permission (SEWP) by this Chapter as noted in Subsections (B), (C), (D) below shall be considered to be amended, deleted, prohibited or requiring Special Expressed Written Permission (SEWP) where ever and there after mentioned or referenced in the National Electrical Code (2008 Edition).

(B) The following articles, or portions thereof, of the National Electric Code (2008 Edition) shall be deleted for the purpose of this Chapter:

Section Article 230.40, Ex.3
Delete Exception No. 3

Section Article 230.41, Ex.(4)
Aluminum wire not allowed

Article 320
Armored Cable: Type AC

Article 322
Flat Cable Assemblies: Type FC

Article 324
Flat Conductor Cable: Type FCC

Article 328

Medium Voltage Cable: Type MV

Article 334

Nonmetallic Sheathed Cable: Type NM, NMC, & NMS

Article 338

Service Entrance Cable: Type SE & USE

Article 362

Electrical Nonmetallic Tubing: Type ENT

Article 378

Nonmetallic Wireways

Article 382

Nonmetallic Extensions

Article 388

Surface Nonmetallic Raceways

Article 394

Concealed Knob & Tube

Article 396

Messenger Supported Wiring

Article 398

Open Wiring on Insulators

Table 310.15 (B) (6)

120/240 Volt, 3 wire, Single-Phase Dwelling Services and Feeders
Delete entire table

(C) Special Expressed Written Permission. Construction allowed by the following Articles of the National Electrical Code (2008 Edition) shall be permitted with the Special Expressed Written Permission (SEWP) of the Chief Electrical Inspector of the Building Division, and only in those instances where the conditions and standards that may be applicable to such construction are safe and existent, as determined by the Chief Electrical Inspector.

Article 330

Metal Clad Cable: Type MC

Article 340

Type UF

Article 352

Type RNC (See also Subsection (D))

Article 388

Surface Nonmetallic Raceways

Article 392

Cable Trays (See also Subsection (D))

(D) The following Articles ~~of~~ or Sections the National Electric Code (2008 Edition) are amended as follows:

~~Article-Section 110.14~~ Electrical Connections. (Add the following:)

(A) Terminals. The use of stab type screwless pressure terminals of the conductor push-in type is prohibited.

(B) Splices. The use of device terminals for splicing is strictly prohibited.

~~Article-Section 110.26~~ Spaces About Electric Equipment. (Add the following:)

(A) Dead Front Assemblies – When in the judgment of the Chief Electrical Inspector or his/her designee, the conditions of the installation or the equipment being installed or modified require additional clearances at front, sides or rear of electrical equipment, such additional clearances shall be provided.

~~Article-Section 210.6~~ Branch Circuit Voltage Limitations. (Add the following:)

(C) 277 volts to ground. Luminaires shall be mounted not less than 8' above the finished floor, measured at their lowest point.

Wall switching shall not exceed 150 volts to ground. All switching mechanisms shall be in listed enclosures. Wiring in concealed spaces shall be in conduit (in listed enclosures). All wall switching shall be installed only in one of the following methods:

Low voltage relay switches, panel board switches, SWD rated circuit breakers or approved 277 volt switching mechanisms shall be installed in listed enclosures. All wiring shall be in conduit unless Class 2, accessible and approved by the Electrical Inspector.

~~Article-Section 210.19~~ Conductors – Minimum Ampacity and Size. (Add the following:)

(1) General. All branch circuits shall be wired with copper conductors only.

Article 210

III. Required Outlets

Section 210.52 (G) (3) Where an installation includes a sump pump or pumps and an ejector pump or pumps, each pump shall be provided an Individual Branch Circuit (dedicated circuit) compliant with Section 210.21(B)(1), (2) and (3). That is, a receptacle with a rating of not less than the branch circuit rating (usually 20 amperes) and compliant with Section 210.8, (GFCI protected) and with Section 406.11, TR (Tamper Resistant).

Article-Section 230.1 Scope. (Add the following:)

Whenever a service is revised or replaced, all current pertinent provisions of this Chapter shall apply.

In residential occupancies, the laundry circuit required by Article 210.11 (C)(2) of the National Electrical Code (2008 Edition) shall be provided.

All service and feeder conductors shall be copper. It is intended that all electrical conductors be copper.

Article-Section 230.42 Size and Rating. (Add the following:)

(A) General. Service conductors shall be all copper. 100 ampere services requires AWG 3 copper conductors, 200 ampere service requires AWG 3/0 copper conductors.

Article-Section 230.43 Wiring Methods for 600 Volts, Nominal, or Less. (Delete the following methods:)

(1) Open Wiring on insulators; (2) TYPE IGS Cable; (5) Electrical metallic tubing; (6) Electrical Nonmetallic Tubing; (7) Service-entrance cables; (13) Type MC cable; (14) Mineral-insulated, metal-sheathed cable; (15) Flexible metal conduit and LFMC, Liquidtight flexible metal conduit; (16) Liquid tight flexible nonmetallic conduit.

Article-Section 230.70 General.

(A) Location. (1) Readily Accessible Location. (Amend to read as follows:) The service disconnecting means shall be installed at a readily accessible location either outside of a building or structure, or inside nearest the point of entrance of the service conductors, in any case within five (5) feet of conduit and conductor entrance to the building.

Article-Section 230.71 Maximum Number of Disconnects. (Replace NEC text with the following:)

(A) General. The service disconnecting means for each service permitted by Section 230.2, or for each set of service-entrance conductors permitted by Section 230.40, Exception Nos. 1, 4 or 5, shall consist of one main switch or circuit breaker. There shall be no more than six (6) main disconnects grouped in any one location. For the purpose of this section, disconnecting means installed as part of listed equipment and used solely for the following shall not be considered a service disconnecting means:

- (1) Power monitoring equipment
- (2) Surge-protective device(s)
- (3) Control circuit of the ground-fault protection system
- (4) Power-operable service disconnecting means

Article Section 250.64 Grounding Electrode Conductor Installation. (Delete (A) and (B) and replace with the following:)

(A) Only Copper grounding and bonding conductors are allowed.

(B) Securing and Protection from Physical Damage. A grounding electrode conductor or its enclosure shall be securely fastened to the surface on which it is carried. All grounding electrode conductors shall be in an approved raceway. The following raceways shall be approved: rigid metal conduit, intermediate metal conduit, rigid nonmetallic conduit (Schedule 80) for exterior use; electrical metallic tubing or cable armor for interior use. (C), (D), (E), & (F), (Retain NEC text.)

Article 340 (Add the following:)

UF & BC Cable: Type UF

Approved for use only in exterior underground installations without Special Expressed Written Permission (SEWP); all other uses require SEWP. Article 340 otherwise applies entirely.

Article 348 (Add the following:)

Flexible Metal Conduit: Type FMC

Not approved for use as a general wiring method. Article 348 otherwise applies entirely.

Article 350 (Add the following:)

Liquidtight Flexible Metal Conduit: Type LFMC

Not approved for use as a general wiring method. Article 350 otherwise applies entirely.

Article 352 (Add the following:)

Rigid Nonmetallic conduit: Type RNC

Not approved for use as a general wiring method. Approved for use only in exterior underground installations without Special Expressed Written Permission (SEWP); all other uses require SEWP. Article 352 otherwise applies entirely.

Article 356 (Add the following:)

Liquidtight Flexible Nonmetallic conduit: Type LFNC

Not approved as a general wiring method. Approved for use only in exterior installations and as listed and marked as suitable for the purpose. Article 356 otherwise applies entirely.

Article 366 (Add the following:)

Auxiliary gutters: Metal only are allowed. Article 366 otherwise applies entirely.

Article 392 (Add the following:)

Cable Trays

Section 392.3 Uses Permitted. (Amend first sentence to read:)

Cable trays shall be permitted to be used as a support system for (Delete: Service conductors, feeders, branch circuits) communications circuits, and signaling circuits unless conductors are installed in conduit. Article 392. otherwise applies entirely.

~~Article-Section 410.2~~ Definitions.

Closet Storage Space: (Add the following:)

In residential occupancies, all clothes closets over six (6) square feet shall have an approved (listed for use) luminaire installed.

~~Article-Section 545.4~~ Manufactured Building – Wiring methods.

(Replace (A) and (B) with the following):

Only wiring methods and materials previously approved by this Chapter shall be authorized for use in manufactured buildings, except that those constructions which require Special Expressed Written Permission for use may be considered on a case by case basis.

~~Article-Section 600.21~~ Ballasts, Transformers and Electronic Power Supplies.

(A) Accessibility. (Add the following:)

A code approved enclosure designed for that purpose including a self contained disconnecting means or a disconnecting means installed within (3) three feet and in sight is required.

~~Article-Section 605.3~~ (Add after code text:)

The separation of tele-communications, data, video and other Class 1, Class 2 or Class 3 wiring systems from electric light, power and other wiring formats as listed in Article 800; 800.133 (A) (1) (C) and elsewhere throughout National Electrical Code (2008 Edition) shall be maintained.

Optional components or alternate methods may be required.

(Ord. 3267, passed 6/21/90; Ord. 5481, passed 5/6/04; Ord. 6522, passed 9/16/10)

ORDINANCE NO. _____

**AN ORDINANCE GRANTING APPROVAL OF TEXT AMENDMENTS TO
TITLE 15, CHAPTER 150, SECTION 150.060 ET. SEQ.
OF THE LOMBARD VILLAGE CODE IN REGARD TO LOCAL AMENDMENTS TO
ELECTRICAL INSTALLATION RULES AND REGULATIONS**

WHEREAS, the Village of Lombard (the “Village”) has adopted a Code of Ordinances to regulate, among other things, the development of buildings and structures within the Corporate limits of the Village; and

WHEREAS, the Village has adopted regulations set forth within Title 15, Chapter 150, Section 150.060 et. seq. of the Village Code, that establishes rules and regulations for electrical installation; and

WHEREAS, the Village has determined that it is in the best interest of the community to periodically review the existing regulations and offer periodic changes to address issues pertaining to electrical code requirements.

BE IT ORDAINED by the President and Board of Trustees of the Village of Lombard, DuPage County, Illinois, as follows:

SECTION 1: That Title 15, Chapter 150, Section 150.062(E) of the Village Code is hereby amended to read as follows:

(E) Certificate of Insurance. Refer to Contractor Registration and Insurance Requirements §150.143.~~Any person, firm or corporation desiring to engage in the business of an Electrical Contractor or Communications Contractor shall furnish a \$300,000 single limit liability manufacturers and contractors liability certificate naming the Village of Lombard as Certificate Holder and Additional Insured.~~
(Ord. 6522, passed 9/16/10)

SECTION 2: That Title 15, Chapter 150, Section 150.066(B) of the Village Code is hereby amended to read as amended and as follows:

(B) The following articles, or portions thereof, of the National Electric Code (2008 Edition) shall be deleted for the purpose of this Chapter:

Section Article 230.40, Ex.3
Delete Exception No. 3

Section Article 230.41, Ex.(4)
Aluminum wire not allowed

Article 320
Armored Cable: Type AC

Article 322
Flat Cable Assemblies: Type FC

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Medium Voltage Cable: Type MV

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Nonmetallic Sheathed Cable: Type NM, NMC, & NMS

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Article 394
Concealed Knob & Tube

Article 396
Messenger Supported Wiring

Article 398

Open Wiring on Insulators

Table 310.15 (B) (6)

120/240 Volt, 3 wire, Single-Phase Dwelling Services and Feeders

Delete entire table

(C) Special Expressed Written Permission. Construction allowed by the following Articles of the National Electrical Code (2008 Edition) shall be permitted with the Special Expressed Written Permission (SEWP) of the Chief Electrical Inspector of the Building Division, and only in those instances where the conditions and standards that may be applicable to such construction are safe and existent, as determined by the Chief Electrical Inspector.

Article 330

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(D) The following Articles ~~of~~ or Sections the National Electric Code (2008 Edition) are amended as follows:

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(A) Dead Front Assemblies – When in the judgment of the Chief Electrical Inspector or his/her designee, the conditions of the installation or the equipment being installed or modified require additional clearances at front, sides or rear of electrical equipment, such additional clearances shall be provided.

~~Article-Section 210.6~~ Branch Circuit Voltage Limitations. (Add the following:)

(C) 277 volts to ground. Luminaires shall be mounted not less than 8' above the finished floor, measured at their lowest point.

Wall switching shall not exceed 150 volts to ground. All switching mechanisms shall be in listed enclosures. Wiring in concealed spaces shall be in conduit (in listed enclosures). All wall switching shall be installed only in one of the following methods:

Low voltage relay switches, panel board switches, SWD rated circuit breakers or approved 277 volt switching mechanisms shall be installed in listed enclosures. All wiring shall be in conduit unless Class 2, accessible and approved by the Electrical Inspector.

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~~Article Section 230.1~~ Scope. (Add the following:)

Whenever a service is revised or replaced, all current pertinent provisions of this Chapter shall apply.

In residential occupancies, the laundry circuit required by Article 210.11 (C)(2) of the National Electrical Code (2008 Edition) shall be provided.

All service and feeder conductors shall be copper. It is intended that all electrical conductors be copper.

~~Article Section 230.42~~ Size and Rating. (Add the following:)

(A) General. Service conductors shall be all copper. 100 ampere services requires AWG 3 copper conductors, 200 ampere service requires AWG 3/0 copper conductors.

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~~Article Section 230.70~~ General.

(A) Location. (1) Readily Accessible Location. (Amend to read as follows:) The service disconnecting means shall be installed at a readily accessible location either outside of a building or structure, or inside nearest the point of entrance of the service conductors, in any case within five (5) feet of conduit and conductor entrance to the building.

Article Section 230.71 Maximum Number of Disconnects. (Replace NEC text with the following:)

(A) General. The service disconnecting means for each service permitted by Section 230.2, or for each set of service-entrance conductors permitted by Section 230.40, Exception Nos. 1, 4 or 5, shall consist of one main switch or circuit breaker. There shall be no more than six (6) main disconnects grouped in any one location. For the purpose of this section, disconnecting means installed as part of listed equipment and used solely for the following shall not be considered a service disconnecting means:

- (1) Power monitoring equipment
- (2) Surge-protective device(s)
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- (4) Power-operable service disconnecting means

Article Section 250.64 Grounding Electrode Conductor Installation. (Delete (A) and (B) and replace with the following:)

(A) Only Copper grounding and bonding conductors are allowed.

(B) Securing and Protection from Physical Damage. A grounding electrode conductor or its enclosure shall be securely fastened to the surface on which it is carried. All grounding electrode conductors shall be in an approved raceway. The following raceways shall be approved: rigid metal conduit, intermediate metal conduit, rigid nonmetallic conduit (Schedule 80) for exterior use; electrical metallic tubing or cable armor for interior use. (C), (D), (E), & (F), (Retain NEC text.)

Article 340 (Add the following:)

UF & BC Cable: Type UF

Approved for use only in exterior underground installations without Special Expressed Written Permission (SEWP); all other uses require SEWP. Article 340 otherwise applies entirely.

Article 348 (Add the following:)

Flexible Metal Conduit: Type FMC

Not approved for use as a general wiring method. Article 348 otherwise applies entirely.

Article 350 (Add the following:)

Liquidtight Flexible Metal Conduit: Type LFMC

Not approved for use as a general wiring method. Article 350 otherwise applies entirely.

Article 352 (Add the following:)

Rigid Nonmetallic conduit: Type RNC

Not approved for use as a general wiring method. Approved for use only in exterior underground installations without Special Expressed Written Permission (SEWP); all other uses require SEWP. Article 352 otherwise applies entirely.

Article 356 (Add the following:)

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Article 366 (Add the following:)

Auxiliary gutters: Metal only are allowed. Article 366 otherwise applies entirely.

Article 392 (Add the following:)

Cable Trays

Section 392.3 Uses Permitted. (Amend first sentence to read:)

Cable trays shall be permitted to be used as a support system for (Delete: Service conductors, feeders, branch circuits) communications circuits, and signaling circuits unless conductors are installed in conduit. Article 392 otherwise applies entirely.

~~Article Section 410.2~~ Definitions.

Closet Storage Space: (Add the following:)

In residential occupancies, all clothes closets over six (6) square feet shall have an approved (listed for use) luminaire installed.

~~Article Section 545.4~~ Manufactured Building -- Wiring methods.

(Replace (A) and (B) with the following:)

Only wiring methods and materials previously approved by this Chapter shall be authorized for use in manufactured buildings, except that those constructions which require Special Expressed Written Permission for use may be considered on a case by case basis.

~~Article Section 600.21~~ Ballasts, Transformers and Electronic Power Supplies.

(A) Accessibility. (Add the following:)

A code approved enclosure designed for that purpose including a self-contained disconnecting means or a disconnecting means installed within (3) three feet and in sight is required.

~~Article Section 605.3~~ (Add after code text:)

The separation of telecommunications, data, video and other Class 1, Class 2 or Class 3 wiring systems from electric light, power and other wiring formats as listed in Article 800; 800.133 (A) (1) (C) and elsewhere throughout National Electrical Code (2008 Edition) shall be maintained.

Optional components or alternate methods may be required.

(Ord. 3267, passed 6/21/90; Ord. 5481, passed 5/6/04; Ord. 6522, passed 9/16/10)

SECTION 3: That this ordinance shall be in full force and effect from and after its passage, approval and publication as provided by law.

Passed on first reading this _____ day of _____, 2013.

First reading waived by action of the Board of Trustees this _____ day of _____, 2013.

Passed on second reading this ____ day of _____, 2013, pursuant to a roll call vote as follows:

Ayes: _____

Nays: _____

Absent: _____

Approved by me this _____, day of _____, 2013.

Keith Giagnorio, Village President

ATTEST:

Sharon Kuderna, Village Clerk

Published by me in pamphlet form this _____ day of _____, 2013.

Sharon Kuderna, Village Clerk