ORDINANCE NO. 1999-09-056

AN ORDINANCE ADOPTING THE 1999 EDITION OF THE NATIONAL ELECTRICAL CODE AND REPLACING EXISTING CHAPTER 17.16 OF THE BELLINGHAM MUNICIPAL CODE WITH A NEW CHAPTER 17.16.

WHEREAS, the Washington Department of Labor and Industries has recently adopted the 1999 edition of the National Electrical Code together with state amendments; and

WHEREAS, in order to be consistent with state regulations the City of Bellingham should also adopt the 1999 edition of the National Electrical Code and the state amendments thereto;

NOW, THEREFORE, THE CITY OF BELLINGHAM DOES ORDAIN:

Section 1. The existing Chapter 17.16 of the Bellingham Municipal Code is repealed in its entirety and shall be replaced with a new Chapter 17.16 which shall read as follows:

17.16.010 - PURPOSE - ADOPTED

ELECTRICAL CODE

This chapter is enacted as an exercise of the police power of the city for the benefit of the public at large. It is not intended to create a special relationship with any individual, or individuals, or to identify and protect any particular class of persons. The purpose of this chapter is to provide minimum standards to safeguard life or limb, health, property, and public welfare, by regulating and controlling building construction and work related thereto.

The National Electrical Code, 1999 Edition, and Chapters 1 through 4 and Chapter 10 of the International Electrical Code, 1999 Edition, hereinafter referred to as the Administrative Code Provisions to the National Electrical Code, except as modified by amendments contained in Washington Administrative Code Chapter 296-46 Safety Standards – Installing Electrical Wires and Equipment, which is incorporated herein by reference, and as modified herein, shall be in full force in the City of Bellingham, upon adoption of this chapter.

17.16.020 – ADMINISTRATIVE CODE PROVISIONS, SECTION 301 AMENDED – CODE OFFICIAL.

Section 301.1 of the Administrative Code Provisions to the National Electrical Code is amended to add the following:

Section 301.1 - Code Official. The code official responsible for enforcement of this code shall be the Building Official of the City.

17.16.030 – ADMINISTRATIVE CODE PROVISIONS, SECTION 302 AMENDED – DUTIES AND POWERS OF THE CODE OFFICIAL

Section 302 of the Administrative Code Provisions to the National Electrical Code is amended as follows:

Section 302.5 – Inspections. The code official shall make all of the inspections necessary to determine compliance with the provisions of this code in accordance with 17.16.070.

Sections 302.6 and 302.7 are deleted in their entirety and new sections are added to read as follows:

Section 302.6 – Right of entry. When necessary to make an inspection to enforce any of the provisions of this code, or when the building official has reasonable cause to believe that there exists in any building or upon a premises a condition which is contrary to or in violation of this code which makes the building or premises unsafe, dangerous or hazardous, the building official may enter the building or premises at all reasonable times to inspect or to perform the duties imposed by this code, provided that if such building or premises be occupied, that credentials be presented to the occupant and entry requested. If such building or premises be unoccupied, the building official shall first make a reasonable effort to locate the owner or other persons having charge or control of the building or premises and request entry. Should entry be refused, the building official shall have recourse to the remedies provided by law to secure entry.

Section 302.7 – Authority to Disconnect Utilities. The building official or the building official's authorized representative shall have the authority to disconnect a utility service or energy supplied to the building, structure or building service equipment therein regulated by this code or the technical codes in case of emergency where necessary to eliminate an immediate hazard to life or property. The building official shall whenever possible notify the serving utility, the owner and occupant of the building, structure or building service equipment of the decision to disconnect prior to taking such action, and shall notify such serving utility, owner and occupant of the building, structure or building service equipment, in writing, of such disconnection immediately thereafter.

Section 302.7.1 – Authority to Condemn Building Service Equipment. When the building official ascertains that building service equipment regulated in the technical codes has become hazardous to life, health or property, or has become unsanitary, the building official shall order in writing that such equipment either be removed or restored to a safe or sanitary condition, as appropriate. The written notice itself shall fix a time limit for compliance with such order. Defective building service equipment shall not be maintained after receiving such notice.

When such equipment or installation is to be disconnected, a written notice of such disconnection and causes therefor shall be given within 24 hours to the serving utility, the owner and occupant of such building, structure or premises.

When any building service equipment is maintained in violation of the technical codes and in violation of a notice issued pursuant to the provisions of this section, the building official shall institute appropriate action to prevent, restrain, correct or abate the violation.

Persons shall not make connections from an energy, fuel or power supply nor supply energy or fuel to building service equipment which has been disconnected or ordered to be disconnected by the building official or the use of which has been ordered to be discontinued by the building official until the building official authorizes the reconnection and use of such equipment.

<u>17.16.040 – ADMINISTRATIVE CODE PROVISIONS, SECTION 401 AMENDED</u> - PERMITS.

Section 401.2 of the Administrative Code Provisions to the National Electrical Code is amended to read as follows:

Section 401.2 – Permits. Except as specified in this section, no electrical system regulated by this code shall be installed, altered, repaired, replaced or remodeled unless a separate electrical permit for each building or structure has first been obtained from the building official.

The building official may authorize issuance of a single permit for multiple Group U Division 1 occupancies when located on the same parcel.

A separate permit is required for each building of an apartment or condominium

complex. If individual buildings do not have a separate contract price, the total contract price shall be divided by the number of buildings in the complex to determine the contract price for each building.

The electrical permit shall be posted on the job site at the service switch or other conspicuous place and shall remain so posted during the entire course of work.

Section 401.3 of the Administrative Code Provisions to the National Electrical Code is amended to read as follows:

Section 401.3 - Exempt Work. An electrical permit shall not be required for the following:

- i. Portable motors or other portable appliances energized by means of a cord or cable having an attachment plug end to be connected to an approved receptacle when that cord or cable is permitted by this code.
- ii. Repair or replacement of fixed motors, transformers or fixed approved appliances of the same type and rating in the same location.
- iii. Repair or replacement of current-carrying parts of any switch, contractor or control device.
- iv. Reinstallation of attachment plug receptacles, but not the outlets.
- v. Repair or replacement of any overcurrent device of the required capacity in the same location.
- vi. Repair or replacement of electrodes of the same size and capacity for signs or gas tube systems.
- vii. Removal of electrical wiring.
- viii. Temporary wiring for experimental purposes in suitable experimental laboratories.
- ix. The wiring for temporary motion picture or television stage sets.
- x. A permit shall not be required for the installation, alteration or repair of electrical wiring, apparatus or equipment or the generation, transmission, distribution or

metering of electrical energy or in the operation of signals or the transmission of intelligence by a public or private utility in the exercise of its function as a serving utility.

Exemption from the permit requirements of this code shall not be deemed to grant authorization for any work to be done in violation of the provisions of this code or any other laws or ordinances of this jurisdiction.

<u>17.16.050 – ADMINISTRATIVE CODE PROVISIONS, SECTION 402 AMENDED</u> – APPLICATION FOR PERMITS.

Section 402.2 of the Administrative Code Provisions to the National Electrical Code is amended to read as follows:

Section 402.2 - Application. Application for an electrical permit shall be made on a form provided by the building official. Each application shall state the name and address of the owner, vendee or occupant in possession of the building or premises where the work is to be done, the name of the licensed contractor, if any, making the application, and such other information as the building official may require. The building official may refuse to issue or revoke a permit if any statement in a permit application is found to be untrue.

Section 402.2.1 - Plans and Specifications.

- 1) General. Two sets of plans and specifications shall be submitted with each application for an electrical permit for and installation of services or feeders of 400 amperes or over, and all switches or circuit breakers rated 400 amperes or over, new or altered installations in commercial buildings, any proposed installation which cannot be adequately described on the application form, and installation of emergency generators. *Exception*: Plans and specifications shall not be required for installations for one- and two-family dwellings.
- 2) Clarity of Plans. Plans shall be drawn to a clearly indicated and commonly accepted scale of not less than 1/8 inch to 1 foot upon substantial paper such as blueprint quality or standard drafting paper. Plans shall indicate the nature and extent of the work proposed and shall show in detail that it will confirm to the provisions of this code. All electrical work shall be readily distinguishable from other mechanical work. If plans are incomplete, unintelligible or indefinite, the building official may require that the plans be prepared by a Washington State

Professional Electrical Engineer, or may reject or refuse to examine such plans, even though a plan examination fee has been paid.

- 3) Information on Plans and Specifications. Plans and specification shall indicate the following:
 - a) The proposed use or occupancy of the various portions of the building in which the installation is to be made.
 - b) A complete riser diagram.
 - c) The calculated load schedule and demand factor selected for each branch circuit, feeder, subfeeder, main feeder and service. Panel and circuit schedules shall be shown.
 - d) Fault current calculations and the listed interrupting rating for feeder or service installation or alteration.
 - e) A key to any symbols used.
 - f) Letters and numbers designating mains, feeders, branch circuits and distribution panels.
 - g) Wattage, number of sockets and type of lighting fixture.
 - h) Wattage and purpose of all other outlets.
 - i) Voltage at which any equipment will operate.
 - j) Identification of size of wires, type of insulation and all conduit sizes.
 - k) Any other information as may be required by the building official.

Section 402.3 of the Administrative Code Provisions to the National Electrical Code is amended to read as follows:

Section 402.3 - Plan review. Plan review shall be required for all electrical plans for new or altered electrical installations in educational, institutional, and health or personal care occupancies classified or defined in WAC 296-46-130 and as indicated in WAC

296-46-240, and for installations in any other industrial or commercial occupancies where determined necessary by the Building Official.

17.16.060 – ADMINISTRATIVE CODE PROVISIONS, SECTION 404 AMENDED – ELECTRICAL PERMIT FEES

Section 404.2 of the Administrative Code Provisions to the National Electrical Code is amended and supplemented to establish electrical permit fees as follows:

NEC TABLE 1A ELECTRICAL PERMIT FEES

1)	Temporary service pole	\$20.00
2)	Mobile home – existing service pedestal	\$25.00
3)	Sign	\$25.00

4) New, altered or relocated single-family dwelling or duplex service:

Service Size	Fee Per Meter	Fee with Temporary Pole
Up to 100 amps	\$30.00	\$40.00
101 to 200 amps	40.00	50.00
201 to 400 amps	60.00	70.00
Over 400 amps	100.00	110.00
5) Residential Alterations		\$25.00

6) Commercial work. New or alteration/addition to existing: includes multi-family residential (three or more units), and accessory buildings.

Cost of Labor and Materials Fee

Value of Work	Permit Fee
Up to \$500	\$25.00
\$501 to 1,000	40.00
\$1,001 to 5,000	40.00 plus 3% of amount over \$1000 (.03)
\$5,001 to 10,000	180.00 plus 1.5% of amount over \$5,000 (.015)
\$10,001 to 25,000	250.00 plus .75% of amount over \$10,000 (.0075)
\$25,001 to 50,000	350.00 plus .5% of amount over \$25,000 (.005)
\$50,001 to 100,000	475.00 plus .25% of amount over \$50,000 (.0025)
\$100,001 to 250,000	600.00 plus .20% of amount over \$100,000 (.0020)
\$250,001+	900.00 plus .15% of amount over \$250,000 (.0015)
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- 7) Other inspections and fees.
 - a) Plan Review Fee. When plan review is required by 17.16.050, or when submittal documents are incomplete or changed so as to require additional plan review or when the project involves deferred submittal items, a plan review fee shall be charged at the rate of \$50.00 per hour.

b) Inspections outside of normal business hours 50.00 per hour

c) Reinspection fee as required by 17.16.070 50.00 per hour

d) Inspections for which no fee is specifically indicated 50.00 per hour

Section 404.3 of the Administrative Code Provisions to the National Electrical Code is amended to add the following:

Section 404.3 – Work Commencing Before Permit Issuance. An investigation fee, in addition to the permit fee, may be collected whether or not a permit is then or subsequently issued. The investigation fee shall be equal to the amount of the permit fee required by this code, or \$100, whichever is greater. The payment of such investigation fee shall not exempt any person from compliance with all other provisions of this code nor from any penalty prescribed by law.

17.16.070 - INSPECTIONS

The installation, alteration or extension of any electrical system, fixtures or components for which an electrical permit is required by this code shall be subject to inspection by the Building Official of the City and such electrical systems, fixtures and components shall remain accessible and exposed for inspection purposes until approved by the Building Official of the City. It shall be the duty of the permit applicant to cause the electrical systems to remain accessible and exposed for inspection purposes. The City shall not be liable for any expense entailed in the removal or replacement of any material required to permit inspection. When the installation of an electrical system is complete, an additional final inspection shall be required to be made. Electrical system and equipment regulated by the National Electrical Code shall not be connected to the energy source until authorized by the Building Official of the City.

- The Building Official of the City may require special inspection of equipment or wiring methods where the installation requires special training, equipment, expertise, knowledge, or other such factors. Where such special inspection is required, it shall be performed by an independent third party acceptable to the Building Official of the City. The special inspection person/agency shall be designated and approved prior to beginning the installation of wiring or equipment. A written report from the designated special inspection agency indicating that the installation conforms to the appropriate codes and standards shall be received by the Building Official of the City prior to the installation being approved. All costs for such testing and reporting shall be the responsibility of the permit holder.
- Approval as a result of an inspection shall not be construed to be an approval of a violation of the provisions of the National Electrical Code or other laws or ordinances of the City. Inspections presuming to give authority to violate or cancel provisions of the National Electrical Code or other laws or ordinances of the City shall not be valid.

17.16.080 – ADMINISTRATIVE CODE PROVISIONS, SECTION 302 AMENDED – APPEALS BOARD

A new Section 302.8.4 is added to the Administrative Code Provisions to the National Electrical Code to read as follows:

Section 302.8.4 – Appeals. The Board of Code Appeals shall have the authority set forth in Bellingham Municipal Code Chapter 2.63 to determine the suitability of alternate materials and methods of installation and to provide for reasonable interpretation of this code.

17.16.090 - NEC ARTICLE 310 AMENDED - WIRING AND CIRCUIT SPECIFICATIONS - NEW WORK

NEC Table 310.5 is amended as follows:

The minimum wire sizes permitted are:

A. In commercial installations, #12 American Wire Gauge copper. Exception: control wiring and voltages of 24 or less.

B. In residential installations, #14 American Wire Gauge copper.

17.16.100 – NEC ARTICLE 336 AMENDED – USE OF NONMETALLIC-SHEATHED CABLE NOT PERMITTED

NEC Article 336.5 is amended to read as follows:

336.5. Uses Not Permitted.

- (a) Types NM, NMC, and NMS. Types NM, NMC, and NMS cables shall not be used:
 - (1) In any dwelling or structure exceeding three floors. One additional level that is the first level and not designed for human habitation and used only for vehicle parking, storage, or similar use shall be permitted.

17.16.110 - NEC ARTICLE 680 AMENDED - POOL INSTALLATIONS

NEC Article 680 is amended as follows:

All electric equipment installed in the water, walls or deck of any pool or fountain shall comply in full with the provisions of Article 680 of the National Electrical Code, without distinguishing between "storable" and "permanently installed" pools and fountains.

17.16.120 - SALES OF ELECTRICAL APPARATUS

It is unlawful for any person to sell or offer for sale any electrical wire, fixture, motor, or other electrical apparatus which does not meet the standards of, and carry the approval of, the Underwriters' Laboratories or other testing agency recognized and approved by the Washington State Department of Labor and Industries.

<u>17.16.130 – ADMINISTRATIVE CODE PROVISIONS, SECTION 102.1.3</u> AMENDED – COMPLIANCE REQUIRED - METHODS

Section 102.1.3 of the Administrative Code Provisions to the National Electrical Code is amended to add the following:

When more than 50% of the wiring of any circuit, as measured in lineal feet, is changed then the entire circuit must be rewired to bring it into conformance with this chapter.

Whenever an existing electrical service is to be moved, altered or enlarged, the service equipment must be reinstalled in conformance with this chapter.

Additions or alterations to existing electrical systems shall be done using materials and methods equivalent to, or exceeding the materials and methods used in the existing system.

17.16.140 - EFFECT OF PROVISIONS ON PRIOR ACTIONS

- A. Nothing contained in any provision of this chapter shall apply to an act done or omitted or an offense committed any time prior to the effective date of this ordinance. Such act or omission shall be governed by and any such offense shall be punished according to the provisions of the ordinances existing when such act, omission or offense occurred.
- B. The repeal of prior ordinances by the repealing action of the ordinance codified in this chapter shall not affect any right existing or accrued or any act or proceeding commenced before the effective date of this ordinance.

PASSED BY COUNCIL this 13th day	of September, 1999 Council President
APPROVED BY ME this 2154 day of	September 1999. Mark Asundoren
Attest: Sum Cupentin Finance Director	
Approved as to Form: Office of the City Attorney	
Published:	
0/17/00	City of Be