1	ORDINANCE NO. 350
2	AN ORDINANCE AMENDING MIDWEST CITY CODE, CHAPTER 9, BUILDINGS AND BUILDING REGULATIONS, ARTICLE IV, SECTION 9-90, NATIONAL ELECTRIC CODE ADOPTED; SECTION 9-103 UNSAFE EQUIPMENT AND USAGE; SECTION 9-161 CODE AMENDED; AND PROVIDING FOR REPEALER AND SEVERABILITY
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6	BE IT ORDAINED BY THE COUNCIL OF THE CITY OF MIDWEST CITY, OKLAHOMA:
7	<u>ORDINANCE</u>
8	<u>SECTION 1.</u> That Midwest City Code, Chapter 9, Buildings and Building Regulations, Article IV, Section 9-90, is hereby amended and to read as follows:
10	Sec. 9-90. – National Electric Code adopted.
11	Pursuant to 59 O.S. § 1000.23, the NFPA® 70, National Electrical Code, 2020 edition, as published by the National Fire Protection Association®, including modifications by the Oklahoma Uniform Building Code Commission as set forth in Title 748, Chapter 20, Subchapter 9 of the
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13	Oklahoma Administrative Code; hereinafter referred to as "NEC," is hereby adopted as the Electrical Code of the City of Midwest City for regulating electrical installations made, maintained
14	and operated with the same force and effect as if fully set out in this section with amendments thereto as prescribed in this section.
15	SECTION 2. That Midwest City Code, Chapter 9, Buildings and Building Regulations, Article IV, Section 9-103, is hereby amended and to read as follows:
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17	Sec. 9-103 Unsafe equipment and usage.
18	(a) Electrical systems or equipment regulated by this Code that constitute a fire hazard or are
19	otherwise dangerous to human life are, for the purpose of this section, unsafe. Use of electrical systems or equipment regulated by this Code constituting a hazard to safety, health or
20 21	public welfare by reason of inadequate maintenance, dilapidation, obsolescence, fire hazard, disaster, damage or abandonment is, for the purpose of this section, an unsafe use.  (b) Unsafe electrical systems or equipment are hereby declared to be public nuisances and shall
22	be abated by repair, rehabilitation, demolition or removal in accordance with the procedures
23	set forth in the International Building Code referenced in Sec. 9-4, Incorporated by Reference for the abatement of dangerous structures or otherwise as allowed by law. The city may institute other appropriate action to prevent, restrain, correct or abate the violation.
24	SECTION 3. That Midwest City Code, Chapter 9, Buildings and Building Regulations, Article
25	IV, Section 9-161, is hereby amended and to read as follows:
26	Sec. 9-161 Code amended.
27	The electrical code adopted in Section 9-90 is amended and modified in the following respects:
28 29	(a) None of the informative annexes of the NEC® 2020 have been adopted by the City of Midwest City.
30	Chapter 1 of the adopted NEC® 2020 is adopted with the following modifications:
31	(1) Article 100 Definitions. This section has been modified to include a definition of a nationally
32	recognized testing laboratory and a definition of a plaque. This section has been modified to read:
33	(A) Nationally Recognized Testing Laboratory. A testing facility given this designation from the United States Occupational Safety and Health Administration (OSHA) that provides product
34	safety testing and certification services to manufacturers.  (B) Plaque. A flat, thin piece of metal, wood, or non-conductive, UV, rain, corrosion, and ice re-
35	sistant material with a sustainable temperature rating from negative 20 degrees Fahrenheit to 130

degrees Fahrenheit or better. For the ambient temperature of the environment to which it is installed, with engraved writing on it that is used especially as a reminder or warning of something. A plaque shall be designed to be installed by adhesive means or mechanical fasteners, as determined by the environment where to be permanently installed. A plaque shall also be known as a Permanent Plaque, Directory, or substitute for a label, excluding circuit directories.

(2) 110.5 Conductors [Amended]. Conductors normally used to carry current shall be of copper unless otherwise provided in this Code. Where the conductor material is not specified, the material and the sizes given in this Code shall apply to copper conductors. Where other materials are used, the size shall be changed accordingly. The use of aluminum conductors shall be prohibited except for exterior uses and for underground service feeders for manufactured homes

(3) Section 110.12 (B) Integrity of Electrical Equipment and Connections. This section has been modified to allow for the reuse of existing electrical equipment, rather than requiring new replacements when certain conditions are met. This section has been modified to read: 110.12 (B) Integrity of Electrical Equipment and Connections. Internal parts of electrical equipment, including busbars, wiring terminals, insulators, and other surfaces, shall not be damaged or contaminated by foreign materials such as paint, plaster, cleaners, abrasives, or corrosive residues. There shall be no damaged parts that may adversely affect safe operation or mechanical strength of the equipment such as parts that are broken; bent; cut; or deteriorated by corrosion, chemical action or overheating. Damaged materials, equipment, appliances, and devices shall not be reused unless such elements have been reconditioned, tested, and placed in good and proper working condition and approved by a nationally recognized testing laboratory, or by the manufacturer of the equipment. Electrical equipment damaged by natural or man-made events shall be reused only as recommended by the manufacturer of such equipment.

Chapter 2 of the adopted NEC® 2020 is adopted with the following modification:

Section 210.08 (F) Outdoor Outlets. This section has been modified to include mini-split-type heating/ventilating/air-conditioning equipment and other HVAC units employing power conversion equipment as a means to control compressor speed. This section has been modified to read: 210.08 (F) Outdoor Outlets. All outdoor outlets for dwellings, other than those covered in 210.8 (A) (3), Exception to (3), and for mini-split-type heating/ventilating/air-conditioning (HVAC) equipment and other HVAC units employing power conversion equipment as a means to control compressor speed, that are supplied by single-phase branch circuits rated 150 volts to ground or less, 50 amperes or less, shall have ground-fault circuit-interrupter protection for personnel. Informational Note: Power conversion equipment is the term used to describe the components used in HVAC equipment that is commonly referred to as a variable speed drive. The use of power conversion equipment to control compressor speed differs from multistage compressor speed control. Exception: Ground-fault circuit-interrupter protection shall not be required on lighting outlets other than those covered in 210.8 (C).

210.23(A)(3) Dwelling Occupancies [Added]. Dwelling unit receptacle outlets installed in accordance with 210.52 and lighting outlets installed in accordance with 210.70 shall be limited to a minimum of 20-ampere and a maximum of 8 for 15-ampere branch circuits. Kitchen receptacle outlets installed in accordance with 210.52(B)(3) and 210.52(C) shall not exceed 5.

Subsection 230-42(d) is amended to read as follows:

All residences shall be provided with a minimum service capacity of a one hundred (100) AMP service with three (3) #4 THHN or equivalent in a minimum of one and one-fourth (1 1/4) inch conduit, with a #6 grounding conductor or larger.

(8)230.70(A)(1) Readily Accessible Location [Amended]. The service disconnecting means shall be installed at a readily accessible location on the outside of a building or structure nearest the point of entrance of the service conductors. The distance from the point of entrance of a building or structure to the service disconnecting equipment enclosure shall not exceed 24 inches measured horizontally or 60 inches measured vertically.

Chapter 3 of the adopted NEC 2020 is adopted with the following modification:

(9)312.8(4) Mounting Height [Added]. Enclosures for switches or over-current devices shall be installed so the bottom of the enclosure is not less than 600 mm (2 feet) above finish grade or working platform unless specifically listed or approved for an alternate mounting height.

Chapter 4 of the adopted NEC® 2020 is adopted with the following modification:

Section 422.16(B)(5) Gas-fired central furnaces. This section has been added to allow flexible cord-and-plug connections in dwelling units as an alternative means of temporarily supplying the gas-fired furnace by a portable generator for heating purposes. This section has been added to read: 422.16(B)(5) Gas-fired central furnaces. Gas-fired furnaces supplying dwelling units shall be permitted to be connected by a flexible cord-and-plug. The cord and attachment plug shall have sufficient ampacity for the load, and shall be routed or otherwise protected to prevent physical damage to the cord or attachment plug.

Chapter 5 of the adopted NEC® 2020 is adopted with the following modifications:

- (1) Section 505.7 (A) Implementation of zone classification system. This section has been modified to require a registered professional engineer to engineer and design, and select the equipment and wiring methods for classification areas. It allows for the installation of the equipment, wiring methods and inspections to be performed by qualified persons. This section has been modified to read: 505.7 (A) Implementation of zone classification system. Classification of areas, engineering and design, selection of equipment and wiring methods shall be performed by a Registered Professional Engineer with expertise in Hazardous (Classified) Locations and Zone Systems. The installation of equipment and wiring methods, and inspections shall be performed by qualified persons.
- (2) Section 506.7 (A) Implementation of zone classification system. This section has been modified to require a registered professional engineer to engineer and design, and select the equipment and wiring methods for classification areas. It allows for the installation of the equipment, wiring methods and inspections to be performed by qualified persons. This section has been modified to read: 506.7 (A) Implementation of zone classification system. Classification of areas, engineering and design, selection of equipment and wiring methods, shall be performed by a Registered Professional Engineer with expertise in Hazardous (Classified) Locations and Zone Systems. The installation of equipment and wiring methods and inspection shall be performed by qualified persons.
- (3) Section 555.30 (D) Luminaires and other electrical equipment. This section has been added to require the location of luminaires and other electrical equipment to be located not less than 5 feet horizontally from the nearest normal edge of the water. However, if the luminaire or other electrical equipment is within the 5 feet horizontal zone it must be 12 feet vertically from the nearest normal edge of the water. This section has been added to read: 555.30 (D) Luminaires and other electrical equipment. Luminaires and electrical connections to luminaires or other electrical equipment shall be located not less than 5 feet horizontally from the nearest normal edge of the water. If a luminaire is within the 5 foot horizontal zone it must be 12 feet vertically.

Chapter 6 of the adopted NEC® 2020 is adopted with the following modifications:

- (1)Section 680.23 (A)(4) Voltage Limitations. This section has been modified to prohibit the use of underwater luminaries if they operate above the low voltage contact limit as defined in Section 680.2 and limit the use of luminaires or other electrical connections while standing in either a natural or man-made body of water. This section has been modified to read: 680.23 (A)(4) Voltage Limitations. No luminaries shall operate above the low voltage contact limit as defined in Section 680.2. This requirement shall apply to new installations, repair, replacement and modification of underwater luminaires. This section shall not apply to relamping if the line-voltage luminaire is protected by a Class A ground-fault circuit-interrupter.
- (2) Section 682.10 Electrical Equipment and Transformers. This section has been modified to require luminaires or other electrical connections to be located at least 5 feet horizontally from the nearest normal edge of the water. This section has been modified to read: 682.10 Electrical Equipment and Transformers. Electrical equipment and transformers, including their enclosures, shall be specifically approved for the intended location. No portion of an enclosure for electrical

1 equipment not identified for operation while submerged shall be located below the electrical datum plane. Luminaires or other electrical connections shall be located at least 5 feet (1524 mm) 2 horizontally from the nearest edge of the water. 3 Chapter 7 of the adopted NEC® 2020 is adopted with the following modification: 4 Section 700.16 (B) System Reliability. This section has been modified to address errata to 5 change the reference for listed equipment to be in accordance with 700.12(F) to 700.12(I). This section has been modified to read: 700.16 (B) System Reliability. Emergency lighting systems 6 shall be designed and installed so that the failure of any illumination source cannot leave in total darkness any space that requires emergency illumination. Control devices in the emergency 7 lighting system shall be listed for use in emergency systems. Listed unit equipment in accordance with 700.12(I) shall be considered as meeting the provisions of this section. 8 9 SECTION 4. EFFECTIVE DATE. This ordinance shall be in force and effect on May 1, 2023 10 SECTION 5. REPEALER. All ordinances or parts of ordinances in conflict herewith are hereby repealed. 11 12 SECTION 6. SEVERABILITY. If any section, sentence, clause or portion of this ordinance is for any reason held to be invalid, such decision shall not affect the validity of the remaining por-13 tions of the ordinance. 14 15 16 17 THE CITY OF MIDWEST CITY, OKLAHOMA 18 19 MATTHEW D. DUKES II, Mayor ATTEST: 20 21 22 SARA HANCOCK 23 APPROVED as to form and legality this day of 24 25 26 27 28 29 30