

Rules and Regulations  
THE BOARD OF COUNTY COMMISSIONERS  
County of Natrona

I certify that the attached is a true and correct copy of the rules of the Board of County Commissioners, Natrona County, Wyoming relating to the National Electric Code, 2014 Edition as amended, applicable to the unincorporated areas of Natrona County. This Code is adopted in accordance with the Wyoming Administrative Procedures Act, 16-3-101 to 16-3-115, W.S. 1977 and pursuant to the authority provided in W. S. 18-5-101 through 18-5-207 and W.S. 35-9-101 through 35-9-131. These rules superseded all other rules previously filed.

Prior to adoption these rules were made available for public inspection on April 1, 2014 and notices of intended adoption were mailed to all persons requesting notice of proposed rules.

The attached rules are effective immediately upon filing with the County Clerk.

Signed this 3rd day of June 2014.



Bill McDowell, Chairman  
Natrona County Commission

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Resolution No. 21-14

2014 National Electrical Code

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RESOLUTION NO. \_\_\_\_\_

A RESOLUTION ADOPTING THE NATIONAL ELECTRICAL CODE, 2014 EDITION, PRESCRIBING REGULATIONS GOVERNING THE INSTALLTION, ALTERATIONS, MAINTENANCE, OR REPAIR OF ELECTRICAL INSTALLATIONS AND INSPECTIONS THEREOF, THAT CERTAIN SUGGESTED CODE KNOWN AS NFPA 70, NATIONAL ELECTRICAL CODE®, OF THE NATIONAL FIRE PROTECTION ASSOCIATION, 2014 EDITION, AND THE WHOLE THEREOF, SAVE AND EXCEPT SUCH PORTIONS AS ARE HEREIN DELETED, ADDED, MODIFIED, OR AMENDED.

BE IT ORDAINED BY THE GOVERNING BODY OF THE COUNTY OF NATRONA, WYOMING:

Section 1 Short Title:

The Code adopted by this resolution shall be known as the “Electrical Code of Natrona County, Wyoming.”

Section 2 National Electrical Code – Adopted

- a. There is hereby adopted by the County, for the purpose of prescribing regulations governing the installation, alteration, maintenance, or repair of electrical installations and inspections thereof, that certain suggested code known as NFPA 70, National Electrical Code®, of the National Fire Protection Association, 2014 Edition, and the whole thereof, save and except such portions as are herein deleted, added, modified, or amended. A copy has been filed in the office of the County Clerk, together with the Resolution, and the same are hereby adopted and incorporated as fully as if set out at length herein, and from the date on which this Code shall take effect, shall be controlling within the unincorporated areas of Natrona County. The Electrical Code of Natrona County, Wyoming, adopted September 6, 2011, is hereby revoked.

Section 3 Unsafe Electrical Systems or Equipment

Electrical Systems or equipment regulated by this Code which constitute a fire hazard, or are 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 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.

Unsafe electrical systems or equipment are hereby declared to be public nuisances and shall be abated by repair, rehabilitation, demolition, or removal in accordance with the procedures set forth in the Uniform Code for the Abatement of Dangerous Building adopted as resolution 89-03 or an alternative procedure as may be

adopted by this jurisdiction. As an alternative, the County Electrical Inspector or other employee or official of this jurisdiction as designated by the governing body, may institute other appropriate action to prevent, restrain, correct, or abate the violation.

#### Section 4 Same Compliance

All wiring within the unincorporated areas of the County shall be, at all times, installed in accordance with the requirements of NFPA 70, National Electrical Code®, 2014 Edition. In the interest of safety and sound construction practice, the following additional requirements shall apply:

- a. Modular or Manufactured Buildings – see Section 5.
- b. All electrical materials, devices, or appliances installed shall be listed or labeled by Underwriter's Laboratories, Inc. or Factory Mutual Research Corporation or other nationally recognized testing agencies.
- c. Requirements for electric services:

(1) All services installed within or on all new buildings, structures, or utility poles and all alterations in, and additions to, wiring in or on buildings now existing, shall be a minimum of 125 Amperes when the calculated load is not more than 100 Amperes. Where the calculated load exceeds 100 Amperes, the service shall be increased in size to a value no less than 125 percent of the calculated load. Basements shall be included when computing the square foot area of a building where calculating the size of service required.

#### (a) Exceptions

- (i) Individual occupancies of not more than 1600 square feet and a calculated load of not over 80 Amperes may be served by a 100 Ampere service with prior approval of the County Electrical Inspector.
- (ii) Individual services, when approved by the County Electrical Inspector due to limitations of supply source or load requirements, shall not be smaller than three No. 6 A.W.G. copper conductors when serving no more than three circuits.
- (iii) For installations to supply limited loads of a single branch circuit, when approved by the County Electrical Inspector, the conductors shall not be smaller than the conductors of the branch circuit and shall be a minimum of three No. 6 A.W.G. copper conductors.
- (iv) Billboards with no more than a 30 Ampere calculated load may be served by three No. 6 A.W.G. copper conductors.

(v) Other. For other installations and for temporary services on construction poles serving not more than two 20 Ampere 120 Volt circuits may be served by three No. 6 A.W.G. copper conductors.

(2) A maximum of six main disconnects will permitted at one service entrance location served by a service drop or service lateral. Additional services at the same location shall not increase the maximum number of service disconnecting means at that location.

(3) All service entrance conductors installed from overhead public utility service drop conductors into buildings or structures to be served, shall be in an approved metal conduit or raceway system (rigid conduit, intermediate, or electrical metallic tubing) equipped at the outer end with a service entrance fitting. When a service mast is required, it shall be at least 2 inch galvanized rigid metal conduit. Service drop and meter location shall be in accordance with the power company specifications.

(4) Underground service laterals may be installed using rigid non-metallic conduit approved for the purpose. A junction box shall be installed for all underground service laterals. The junction box shall be sized and constructed to power company requirements and may be above the ground or underground. In no case shall junction boxes be smaller than 12 inches wide by 18 inches high by 6 inches deep above ground or 13 inches by 24 inches by 18 inches deep underground. Service lateral installation and junction box and meter location shall be in accordance with the power company specifications.

(5) Service entrance disconnect switches or any electrical distribution equipment including branch circuit breaker panels, shall not be installed within a bathroom, toilet room, or clothes closet.

(6) Back-fed main circuit breakers will not be permitted on main lug only panels used as service equipment. Back-fed main circuit breakers that are factory installed in panels or listed factory main breaker kits will be permitted in residential services. Back-fed circuit breakers or plug in main lug devices that are back-fed shall be secured in place by an additional mechanical fastener that is approved for the purpose, whether the device is field or factory installed.

(7) Where permanent overhead services are mounted on poles for serving mobile homes or other approved service installations, the pole shall be at least 20 feet long so that when buried, the top of the pole will be at least 16 feet above the ground. The top of the pole must not be less than 5 ½ inches by 5 ½ inches, if square, or 5 ½ inches in diameter, if round. The pole shall be either rot-resistant wood (redwood, cedar, hemlock, etc.) or treated to resist rot with pentachlorophenol, creosote, or other substances or methods approved by the County Electrical Inspector.

(8) Temporary construction services shall be located on the same side of the alley, street, or driveway as the construction for which the service is required.

d. Requirements for Protection of Service Entrance Conductors

(1) Protection of ungrounded service entrance conductors shall be provided by an overcurrent device in series with each ungrounded conductor having a rating or setting not higher than the allowable ampacity of the conductor.

(2) Where more than one and not more than six overcurrent devices provide the required protection for the ungrounded conductors, their total ampacity shall not exceed the allowable ampacity of the ungrounded conductors. Refer to Sections 240.4(B) and (C) of the National Electrical Code for overcurrent protection of wire.

e. Requirements for Grounding and Bonding

(1) Equipment and service grounds will be inspected by the County Electrical Inspector and inspection tags will not be attached to any installation which is not adequately grounded in accordance with the grounding requirements contained in the 2014 Edition of the National Electrical Code. Bonding requirements for services shall be determined by Section 250.92 of the National Electrical Code.

(2) Concrete encased electrodes (Ufer grounds) shall be required for electrical services for all new residences and buildings. Consult the County Electrical Inspector prior to the start of construction to determine acceptable alternatives if these electrodes will not be available. The concrete encased electrode shall be supplemented by a minimum of two 5/8 inch by 8 foot copper clad ground rods.

(3) All grounding electrode conductors shall be copper.

(4) The minimum size of conductor used for grounding electrode conductors and bonding jumpers for services and separately derived systems shall be No. 6 A.W.G. copper.

(5) Water meters, heaters and softeners when installed with metallic piping systems shall have bonding jumpers electrically connecting the inlet and outlet water lines together.

(6) Satellite TV reception dish antennas used for private TV reception shall be grounded with a No.6 A.W.G. copper wire to the building's grounding electrode system. If the dish is more than 50 feet from the building, a 5/8 inch by 8 foot ground rod shall be permitted.

f. Requirements for Conductors

(1) No conductors smaller than No. 12 A.W.G copper shall be used in wiring for systems that are a nominal 90 Volts or over within the unincorporated areas of the County.

(a) Exceptions:

(i) For wiring and interconnection of smoke detectors in one and two family dwellings, No. 14 A.W.G. wire within nonmetallic-sheathed cable shall be permitted if protected by a dedicated 15 Ampere branch circuit.

(ii) For remote control circuits.

(2) No aluminum conductors smaller than No. 2 A.W.G shall be used for wiring or services.

#### g. Requirements for Raceways

(1) Metal raceways are defined as galvanized rigid conduit (thick wall conduit), intermediate metal conduit, electrical metallic tubing (thin wall conduit), metal molding, metal troughs, metal ducts and flexible metallic conduit.

(2) All wiring installed outdoors or exposed on inside concrete or masonry walls of any building within the unincorporated area of Natrona County shall be installed in metal raceway.

(a) Exceptions: PVC conduit as allowed in the exceptions to Section 4g(6)(c) of this code.

(3) Flexible metal conduit shall not be installed outdoors or exposed to weather.

(4) Raceways installed in commercial, industrial or public buildings:

(a) Metal raceways shall be used for all electric power, light, heat, and any wiring supplying systems that are 90 volts and over in all commercial, industrial, or public types of buildings, and in buildings or any part of buildings whose use is changed from residential to any other use.

(b) Exceptions:

(i) Metal-clad cable shall be permitted for branch circuits and feeders. Such cable shall be required to have a factory installed insulated copper equipment grounding conductor as an integral part of the cable.

(ii) Raceways bedded underground and in concrete slabs as permitted and installed as referenced in Sections 4g(5)(b), (d) and (e) of this code.

(iii) ENT as permitted in Section 4g(7)(a) of this code.

(iv) PVC as permitted in Section 4g(6)(b) of this code.

(5) Raceways installed underground and in concrete slabs:

(a) All raceways installed below grade outdoors shall have approved expansion joints installed within 1 foot immediately above grade on each end.

(b) All underground raceways shall have a sleeve installed where passing through concrete or masonry.

(c) Electrical metallic tubing shall not be installed in contact with the earth or in concrete at ground level or below.

(d) Rigid and intermediate conduits shall be PVC coated, or taped and field coated when buried or when subject to direct contact with earth.

(e) Fiber duct, PVC, or equivalent raceways may be installed underground and in concrete slabs in accordance with the National Electrical Code.

(6) PVC (Rigid Non-Metallic Conduit) shall be permitted for use in the unincorporated portions of Natrona County in accordance with Article 352 of the National Electrical Code subject to the following requirements:

(a) PVC conduit may be installed underground and in slabs.

(b) PVC conduit may be installed in buildings or structures, including commercial, industrial or public buildings, where combustible construction is allowed and where such buildings or structures are of not more than 3 floors.

(c) PVC conduit shall not be permitted for exposed work, high temperature areas, or exposed to physical damage with the following exceptions:

(i) Short runs of PVC conduit needed to meet the requirements of Section 4g(5)(a) shall be permitted.

(ii) Short runs of PVC conduit used to protect grounding conductors or bonding jumpers on the exterior or interior of buildings shall be permitted.

(d) Metal plates of the proper type shall be used for the protection of PVC conduit when installed in wooden stud walls and unable to be run in the center of the stud.

(e) Tie wire shall not be used as a strapping method for PVC conduit.



(f) PVC conduit may only be installed in corrosive atmospheres with special permission from the County Electrical Inspector.

(7) ENT (Electrical Nonmetallic Tubing) shall be permitted for use in the unincorporated portions of Natrona County in accordance with Article 362 of the National Electrical Code subject to the following requirements:

(a) ENT may be installed in buildings or structures, including commercial, industrial or public buildings, where combustible construction is allowed and where such buildings or structures are of not more than 3 floors.

(b) ENT shall not be permitted for exposed work, high temperature areas, or exposed to physical damage.

(c) Where ENT is installed in metal studs, it shall be protected by listed bushings.

(d) Metal plates of the proper type shall be used for the protection of ENT when installed in wooden stud walls and unable to be run in the center of the stud.

(e) Tie wire shall not be used as a strapping method for ENT.

#### h. Requirements for Identifying Ungrounded Conductors

(1) The method for identifying ungrounded conductors in buildings having two voltage systems shall be: brown, orange and yellow outer finishes or marking of conductors for a 277/480 Volt system and shall be: black, red and blue outer finishes or marking of conductors for a 120/208 Volt system or 120/240 Volt single phase system.

(2) Orange outer finishes or marking of conductors shall also be used to designate the 208 Volt conductor on a 120/240 Volt three phase four wire delta-connected system as required in Article 110.15 of the National Electrical Code. Consult the County electrical inspector if there is a conflict with Section 4h(1) of this code.

(3) Orange outer finishes for conductors shall also be used as required by Article 517.160 of the National Electrical Code for isolation circuits.

(4) Orange outer finishes or marking for ungrounded conductors shall be permitted in any building with only one voltage system and no three phase delta power or isolation circuits.

i. Nonmetallic sheathed cable with ground wire may be used in wood frame one and two family dwellings and wood frame multi-family dwellings not exceeding three floors above grade. Flexible armored cable (such as AC or BX) shall not be installed

within residential structures within the unincorporated areas of the County. Nonmetallic sheathed cable shall not be used to wire assembly area of multi-family dwellings.

j. Nonmetallic sheathed cables shall be protected from physical damage and avoid proximity to all sources of heat such as flues, ducts, and hot water lines. Exposed nonmetallic sheathed cable installed in accessible attics, unfinished garages and basements shall be routed either parallel or perpendicular to structural members and walls.

k. Where extensions are made to commercial or residential installations which have been originally wired in metal raceways, flexible metallic conduit (Green Field) of the type allowing the pulling and withdrawing of wires when the conduit is in place may be used, provided existing circuits are adequate. Where extensions are made to residential installations which are originally wired in knob and tube, non-metallic sheathed cable may be used for extension, providing existing circuits are adequate and provided that such building or structure is not of a commercial nature, where metal raceways are required.

l. Separate circuits shall be provided for furnaces, ranges, dryers, dishwashers, disposals, and any appliance exceeding 50% of the circuit capacity. Ranges, dryers, dishwashers, disposals, and washing machines in residences may be cord connected. Built-in-ovens and cook-top units may be direct wired with flexible conduit from a junction box not more than 3 feet away and the conductors shall have an ampacity equal to the branch circuit overcurrent protection device. All furnaces and boilers shall have over-current devices responsive to the motor current and shall be rated or selected to trip at not more than 125% of motor current. Range and dryer receptacles shall be 3 pole, 4 wire when the branch circuit originates from a feeder panel.

m. A separate 20 Ampere 120 volt circuit shall be provided for each 3/4 or full bathroom and for every two 1/2 bathrooms in a dwelling. Where non-dwelling building bathrooms have outlets, there shall be a separate 20 Ampere 125 Volt circuit for every 2 bathrooms.

n. A separate 15 Ampere or 20 Ampere 120 Volt circuit shall be provided for all residential smoke alarms in new construction or for substantial remodels.

o. Smoke alarms and carbon monoxide detectors shall be installed in all hotels, motels, and residential dwellings as required by the current International Building Code and International Residential Code. All smoke alarms shall be supplied by line voltage with a battery backup in all new construction and buildings completely rewired. All smoke alarms installed in new construction and complete rewires shall be interconnected to provide common alarm notification.

p. A three phase circuit breaker panel shall not be permitted for use as a lighting and appliance panel for 120/240 Volt three phase four wire delta-connected systems. Separate panels shall be furnished for three phase and single phase loads.

q. Wafer, twin or tandem circuit breakers are not permitted in circuit breaker panels or load centers installed for new construction or for electrical panel replacements. Such circuit breakers shall be allowed only for modifications, extensions or additions to existing equipment.

r. All electric signs and outline lighting shall be wired to comply with Article 600 of the 2014 Edition of the National Electrical Code. All new signs or outline lighting shall be inspected by the County Electrical Inspector prior to connection to any electrical supply source. Portable electric signs shall have GFCI protection of the type approved for signs provided on the sign. Any portable sign without GFCI protection on the sign shall have GFCI protection as an integral part of the supply cord to the sign and be of the type approved for use with portable signs. Supply cords for portable signs shall be type S.O. cord or equivalent. The supply cords shall be no longer than 10 feet and sized for the electrical load, but no smaller than No. 14 A.W.G. Permits for connection of portable signs to outlets for power shall be applied for by the owner of the signs. The owners of the signs shall apply for the electrical permit for rented/leased signs.

s. Nails that pass through the interior of electrical boxes or equipment shall not secure the boxes or equipment to walls, studs, poles or ceilings unless they are installed as required by Article 314.23 of the National Electrical Code. 4 inch square boxes, 4 inch round or octagon boxes, 4 inch by 2 1/8 inch handy boxes and 4 11/16 inch square boxes mounted to structural members by the side of the box shall be attached by using brackets on the outside of the enclosure.

t. Crawl spaces containing receptacle outlets in commercial structures shall have ground fault circuit interrupter protection for those receptacles.

u. All ground fault circuit interrupters shall be readily accessible. They shall not be installed in any attic, crawl space, behind panels or any other similar area, except for those outlets required for service of equipment in such areas.

v. All spas and hot tubs shall have an emergency disconnect switch or shut off regardless of the type of occupancy. It shall be installed and located as required by Article 680.41 of the National Electrical Code. The emergency disconnect switch or shut off shall be clearly labeled in an effective and permanent manner acceptable to the County Electrical Inspector.

w. All 120 Volt single phase 15 and 20 ampere receptacle outlets on construction sites shall have ground fault circuit interrupters. 230 Volt outlets shall only be used for 230 Volt utilization equipment.

x. No electrical wiring shall be permanently attached to living trees or shrubs. Temporary decorative lighting is exempt from this ordinance and is the responsibility of the owner to maintain in safe operating condition. Extension cords shall not be left

attached to building or through windows or doors more than 90 days once a year for decorative lighting. (Exception to article 400.8 of the NEC.)

y. Electrically charged fences may be installed unless prohibited by the Natrona County Zoning Resolution.

z. Electrical permits and inspections shall be obtained before any of the items included in Article 525 of the National Electrical Code are open to the general public. The owner of the property on which the event takes place shall insure that all permits are obtained and operators/owners of the equipment have passed inspection before allowing that equipment to be operated on their property. All International Building Code and National Electrical Code requirements shall be met and the following items are also required:

(1) All rides and amusement attractions and structures shall have a certificate of inspection from an acceptable certified amusement ride inspector not more than sixty (60) days prior to the opening of the amusement ride.

(2) A certificate from an acceptable testing agent that an amusement ride has passed a magna flux or other non-destructive test as required by manufacture not more than six (6) months prior to the operation in Natrona County.

(3) All cords and wiring laid on the ground shall be protected by mats that are listed and labeled by an approved testing agency for that purpose, or approved by the administrative authority.

(4) Fees for inspection shall be as found in Section 15.

#### Section 5 Modular or Manufactured Buildings

All manufactured, mobile, modular or prefabricated homes or buildings, shall comply with the following requirements:

a. A manufactured, mobile, modular or prefabricated building shall be inspected for conformance with appropriate Federal Code or this Code, either by a certifying agency or authority acceptable to the Natrona County Development Board of Appeals or by the County Electrical Inspector. This manufactured, mobile, modular or prefabricated building shall be inspected at the plant where being built or fabricated. The owner, builder, or fabricator shall arrange with the certifying agency or the County for inspection, pay all required fees and, if approved, have the certifying agency furnish to the County Electrical Inspector written certification that the electrical wiring does conform to the requirements of the appropriate Federal Code or this Code.

The County Electrical Inspector shall inspect each building to determine the point of service attachment.

Any electrical wiring required to be done at the building erection site shall be in accordance with this Code, including payment of permit fees to the County and inspection by the County Electrical Inspector.

b. Service Exceptions on Manufactured or Mobile Homes. Permanent service on manufactured or mobile homes shall be allowed when the following requirements are met:

- (1) Service will be of the meter and exterior main type of no less than 125 amperes.
- (2) The manufactured or mobile home is not located on leased property.
- (3) The home is permanently set on a foundation designed to meet all of the local jurisdiction's requirements.

#### Section 6 Permit Required.

a. All companies, firms, partnerships, corporations, individuals, or entities who begin new electrical wiring or interfere with any existing electric wiring for electric signs, electric fixtures, appliances, alarm systems, communication systems or utilization equipment installed in or on any buildings, or property, or removed from the interior or exterior on any building or property (except as allowed by Section 16(a) exceptions 2, 3, and 4) shall procure a permit from the County Electrical Inspector for each project started. Permits shall only be issued to a contractor holding a valid, unexpired, or unrevoked contractor's license of the proper category as covered in Section 16 or an individual for private work as covered in Section 17. Permits may also be issued for all work requiring a permit where the person doing the work is exempted from the licensing requirements provided in Section 16.

b. It shall be unlawful for all contractors, workmen, or individuals to begin new electric wiring or interfere with any existing electric wiring (except as allowed by Section 16(a) exceptions 2, 3, and 4) in or on any building or property in any manner whatsoever without first having secured a permit therefore. Failure to obtain a permit prior to the start of the work shall result in the applicable permit fees being doubled. Permits shall expire and become null and void if the work authorized by such permit is not commenced within 180 days unless an extension is granted by the Natrona County Development Board of Appeals or their authorized representative. Before such work can be recommenced, a renewal permit shall be obtained and the fee therefore shall be one-half the amount of the original permit. An extension permit shall be requested within 30 days of the ending of the original permit.

c. Maintenance. All electrical systems and equipment, both existing and new, and all parts thereof, shall be maintained in a proper operating condition in accordance with the original design and in a safe and hazard-free condition. All devices or safeguards which are required by this Code shall be maintained in conformance with

this Code. The owner shall be responsible for the maintenance of the electrical system. Permits are not required to perform normal maintenance work. To determine compliance with this subsection, the County Electrical Inspector may cause any electrical system to be reinspected.

(1) Repair and maintenance by persons other than the building owner shall be done by persons properly licensed for the type of electrical system being repaired or maintained.

#### Section 7 Definitions.

a. The term electrical wiring herein used is intended to mean the fixed installation of electrical wire, appliances, fixtures, or utilization equipment, used or to be used or to be maintained on or in any building or property for electric heat, light, or power, electric signs, smoke detectors, electric generation plants, electric heaters, fire alarms, burglar alarms, electric bells, electric signal and communication systems, telegraph messenger call systems, lighting fixtures or electrical utilization equipment of any kind or description. It does not include portable appliances, portable fixtures, or utilization equipment capable of being readily moved where established practices or the condition of use make it necessary or convenient for it to be detached from its source of current by means of flexible cord and attachment plug, except for portable signs.

b. The term electrical contractor means any person, firm, partnership, corporation, association, or combination thereof, which contracts or offers to contract for another the planning, laying out, supervising, and installing or the making of additions, alterations, and repairs in the installation or wiring of apparatus and equipment for electric light, heat, and power. Such contractor shall hold a current State Electrical Contractor's License and be, or employ, a master electrician of record. Any person who only plans or designs electrical installations need not be classed as an electrical contractor.

c. The term master electrician means a person having at least eight (8) years practical experience in the electrical wiring industry with technical knowledge to properly plan, lay out, and supervise the physical installation and repair of wiring apparatus and equipment for electric light, heat, power, and other purposes in accordance with the National Electrical Code, the Electrical Code of Natrona County, Wyoming and holding a current State Master Electrician's License.

d. The term master electrician of record means a Natrona County licensed master electrician who is actively employed by a licensed electrical contractor in a full time capacity and who assumes responsibility to ensure that all National Electrical Code, State of Wyoming statute, State of Wyoming rules and regulations and Natrona County Electrical Code requirements are adhered to on all electrical work undertaken by the electrical contractor in Natrona County and who is not the master electrician of record for, or employed by, any other electrical contractor.

e. The term journeyman electrician means a person having at least four (4) years experience in the electrical wiring industry with technical knowledge to wire, supervise, install, and repair electrical apparatus and equipment for light, heat, power, and other purposes, in accordance with the National Electrical Code, the Electrical Code of Natrona County, Wyoming and holding a current State Journeyman's License.

f. The term apprentice electrician means any person with insufficient qualifications to be a journeyman electrician and who is hired by a licensed electrical contractor to assist a journeyman or master electrician, and under the direct supervision of a journeyman or master electrician, in accordance with State of Wyoming Statute 35-9-127, as amended and the State of Wyoming Electrical Board Rules and Regulations.

f. The term limited electrical contractor means any person, firm, partnership, corporation, association, or combination thereof, which contracts or offers to contract for another the planning, laying out, supervising, and installing or the making of additions, alterations, and repairs in the installation or wiring for only certain restricted apparatus and equipment for electric light, heat, and power. Such contractor shall hold a current State Limited Electrical Contractor's license and be, or employ, a master electrician of record or limited electrical technician of record. Any person who only plans or designs such electrical installations need not be classed as a limited electrical contractor. Categories of limited electrical contractors and the equipment or apparatus they are restricted to are:

(1) Elevators – installation and repair or remodel of elevator systems limited to wiring on the load side of the equipment disconnect.

(2) Signs - installation and repair or remodel of electrical sign systems limited to wiring on the load side of the equipment disconnect.

(3) Water Wells and Irrigation Systems - installation and repair or remodel of electrical water well and irrigation systems limited to wiring on the load side of the equipment disconnect.

(4) Light Fixtures – routine checking and repair of light fixtures, limited to replacement of ballasts and fixture parts located in buildings and their premises.

(5) HVAC - installation and repair or remodel heating, ventilating, air conditioning, refrigeration and HVAC energy management systems limited to wiring on the load side of the equipment disconnect.

g. The term low voltage contractor means any person, firm, partnership, corporation, association, or combination thereof, which contracts or offers to contract for another the planning, laying out, supervising, and installing or the making of additions, alterations, and repairs in the installation or wiring for only certain restricted apparatus and equipment for electric and electronic communication and control. This apparatus and equipment and the systems created by them shall not exceed a nominal 90 Volts.

Such contractor shall hold a current State Low Voltage Electrical Contractor's license and be, or employ, a master electrician of record or low voltage electrical technician of record. Any person who only plans or designs such electrical installations need not be classed as a low voltage electrical contractor. Categories of low voltage electrical contractors and the equipment or apparatus they are restricted to are:

(1) General – installations for systems under 90 Volts such as sound systems, burglar alarm systems, fire alarm systems, communication systems, television and satellite systems, cathodic protections systems and other similar systems.

(2) Alarms – installation and repair or remodel of burglar alarms, fire alarms and other alarm signaling systems.

(3) Communication - installation and repair or remodel of telephone systems, intercom systems, related fiber optics, computer systems and other such communication systems.

(4) Sound - installation and repair or remodel of sound systems.

(5) Television - installation and repair or remodel of cable TV systems, satellite receiver systems and community antenna systems.

(6) Control - installation and repair or remodel of low voltage control and instrumentation systems and related fiber optics.

(7) Lawn sprinklers - installation and repair or remodel of lawn sprinkler systems under 90 Volts.

h. The term limited technician means a person having at least two (2) years of experience in that portion of electrical wiring industry covered by his limited electrical license with technical knowledge to wire, supervise, install, and repair electrical apparatus and equipment associated with the category of limited license held in accordance with the National Electrical Code, the Electrical Code of Natrona County, Wyoming and holding a current State Limited Technician's License.

i. The term low voltage technician means a person having at least two (2) years of experience in that portion of electrical wiring industry covered by his low voltage electrical license with technical knowledge to wire, supervise, install, and repair electrical apparatus and equipment associated with the category of low voltage license held in accordance with the National Electrical Code, the Electrical Code of Natrona County, Wyoming and holding a current State Low Voltage Technician's License.

j. The term apprentice technician means any person with insufficient qualifications to be a limited or low voltage technician and who is hired by a licensed electrical contractor, limited electrical contractor or low voltage electrical contractor to assist a licensed limited or low voltage technician. An apprentice technician must be



registered in accordance with State of Wyoming Statute 35-9-127, as amended, and the State of Wyoming Electrical Board Rules and Regulations.

k. The term technician of record means a Natrona County licensed limited or low voltage technician who is actively employed by a licensed limited or low voltage electrical contractor in a full time capacity and who assumes responsibility to ensure that all National Electrical Code, State of Wyoming statute, State of Wyoming rules and regulations and Natrona County Electrical Code requirements are adhered to on all limited or low voltage electrical work undertaken by the limited or low voltage electrical contractor in Natrona County and who is not the technician of record for, or employed by, any other limited or low voltage electrical contractor.

#### Section 8 Board of Appeals

Any appeal of an order, decision, or determination made by the building official relative to the application and interpretation of this Code shall be made in writing to the Natrona County Building Department detailing the nature of the complaint or appeal, the specific section or sections challenged, and the relief requested. The Building Department shall transmit the complaint to the Natrona County Development Board of Appeals, adopted as Resolution 84-03 on March 27, 2003. The Board of Appeals shall conduct a contested case hearing, take evidence, and render a written decision.

#### Section 9 Questions Not Provided for in This Code.

All questions not provided for in this Code or covered by the 2014 National Electrical Code pertaining to the installation of electrical wiring and utilization equipment and any questions that may arise concerning the interpretation of this Code shall be decided by the Natrona County Development Board of Appeals, adopted as Resolution 84-03 on March 27, 2003.

#### Section 10 County Electrical Inspector

a. Office Created. There is hereby created the office of County Electrical Inspector. The County Electrical Inspector shall be a competent electrician, shall have had at least four (4) years experience as a wireman or electrical contractor, and shall obtain certification as a County Electrical Inspector by the International Code Council and/or other competent authority. Said County Electrical Inspector shall be appointed by or engaged by contract by the Board of County Commissioners. It shall be unlawful for the County Electrical Inspector to engage in the business of the installation and the maintenance of electrical wiring and appliances, either directly or indirectly, and he shall have no financial interest in any concern engaged in such business in the County at any time while holding the office of County Electrical Inspector.

b. Duties and Authority

(1) Authority to refuse to Issue a Certificate of Approval. The County Electrical Inspector is hereby given the authority to refuse to issue a Certificate of Approval of any addition or extension to any wiring system in or on any building, structure, or property where, in his professional opinion, the wiring is in an unsafe condition. In case the work does not comply with this Code and the 2014 Edition of the National Electrical Code, the County Electrical Inspector shall issue and mail a written statement and telephone the electrical contractor within 24 normal business hours stating the changes necessary to bring the work up to the required standard.

(2) Condemned Defective Wiring. Whenever any electrical wire or other piece of electrical utilization equipment is defective, by reason of improper or insufficient insulation, or for any other cause becomes dangerous, the County Electrical Inspector shall at once notify the owner, or the agent of the owner of said electrical utilization equipment to repair or remove the same, and upon the owner's failure to repair or remove the wire or utilization equipment within a reasonable time, the said County Electrical Inspector shall cause interruption of all electrical current.

(3) Exemptions. Whenever there are practical difficulties involved in carrying out the provisions of this Code, the County Electrical Inspectors may grant modifications for individual cases, provided that a special individual reason makes the strict letter of this Code impractical and the modification is in conformity with the intent and purpose of this Code, and that such modification does not lessen health, life, and fire safety requirements, The details of actions granting modifications shall be recorded and entered in the files of the code enforcement agency.

(4) Action if Case of Fire. Every company, firm, partnership, or individual owning or controlling electrical wires and utilization equipment for the transmission of electricity for light, heat, or power shall, as soon as possible, after receipt of notice of a fire, have an agent or representative at the fire, whose duty shall be to cut, deaden, and test any of the power wires that might endanger the lives or property of anyone in that vicinity. The County Electrical Inspector shall ensure such actions are performed.

(5) Inspect Old Work Upon Request. Upon request of the property owner, lessee, or occupant, the County Electrical Inspector shall inspect, for electrical safety, any old wiring or electrical utilization equipment in or on any building, structure, or property within the unincorporated areas of the County, upon payment of a fee as listed in the permit fee schedule. In case the installation does not comply with this Code, he shall file a report of his inspection with the property owner, lessee, or occupant, identifying the areas of non-compliance. Code compliance inspections shall also be required when the meter or service drop has been removed or disconnected from any structure or building, by the electric utility company or as ordered by the County Electrical Inspector, his authorized representative, or the Fire Department.

(6) Notice from Inspector to Connect or Disconnect Electric Service. It shall be unlawful for any light or power company to make any electrical connections to any building or property until a certificate of approval has been issued by the County Electrical Inspector. All such firms, corporations, or individuals shall, upon written notice from the County Electrical Inspector, disconnect from any service as designated by such notice and shall not reconnect such service except upon written notice from the County Electrical Inspector.

The County Electrical Inspector is also hereby authorized and shall have the authority to order the termination of all electric current and cut or disconnect in cases of emergency or hazard, any wire where such electrical currents are dangerous to life or property or may interfere with the work of the Fire Department.

(7) Notice Given on Completion of Inspection Other Than Final Inspection. After inspection of the electrical wiring of any building, the County Electrical Inspector shall leave notice in the form of a tab attached in a prominent location. This notice shall clearly state that the work has or has not, passed the inspection by the County Electrical Inspector. On new or remodeled construction, no workman shall lath, seal, or in any manner conceal any electric wiring until he knows that it has passed the County Electrical Inspector inspection. If the wiring is in such a position as to interfere with the completion of the building as called for by the Plans, the electrical contractor must be notified within 24 hours of the necessary changes to be made. The County Electrical Inspector must in all cases when such is practical, inspect all electrical wiring within the unincorporated areas of the County within 48 hours of the receipt of notice from the electrical contractor, stating that the work is completed. Saturdays, Sundays, and holidays shall not be included in computing this time.

(8) General Safety Supervision. The County Electrical Inspector shall have the general supervision over the placing, stringing, and attaching of telephone, telegraph, electric, light, or other wires, only insofar as fire prevention, accident or injury or persons or property is concerned and any or all of such wires or electrical utilization equipment now existing, and hereafter constructed and placed shall be subject to such supervision.

(9) Right of Entry. Whenever necessary to make an inspection to enforce the provisions of this Code, or whenever the County Electrical Inspector or an authorized representative has reasonable cause to believe that there exists in a building or upon a premises a condition or code violation which makes such building or premises unsafe, dangerous, or hazardous, the County Electrical Inspector or an authorized representative may enter such building or premises at all reasonable times to inspect the same or to perform any duty imposed upon the County Electrical Inspector by such codes, provided that if such building or premises be occupied, the County Electrical Inspector shall first present proper credentials and request entry. If such building or premises is unoccupied, the County electrical Inspector shall first make reasonable effort to locate the owner, or other persons having charge or control of the building or

premises, and request entry. If entry is refused, the County Electrical Inspector or an authorized representative shall have recourse to every remedy provided by law to secure entry.

When the County Electrical Inspector or an authorized representative shall have first obtained a proper inspection warrant or other remedy provided by Law to secure entry, an owner or occupant or other person having charge, care, or control of the building or premises, shall not fail or neglect, after proper request is made herein provided, to promptly permit entry therein by the County Electrical Inspector or authorized representative for the purpose of inspection and examination pursuant to this Code.

(10) Liability. This Code shall not be construed to relieve from or lessen the responsibility of a person owning, operating, or controlling any building, structure, or building service equipment therein for any damages to persons or property caused by defects, nor shall the code enforcement agency or its parent jurisdiction be held as assuming such liability by reason of the inspections authorized by this Code or approvals issued under this Code.

(11) Suspension or Revocation. The County Electrical Inspector may, in writing, suspend or revoke a permit issued under the provisions of this Code whenever the permit is issued in error, or on the basis of incorrect information supplied, or in violation of any ordinance or regulation of the jurisdiction.

#### Section 11 Changes in Buildings

a. Changes in Building Occupancy. Electrical systems and equipment which are a part of any building or structure undergoing a change in use or occupancy, as defined in the Building Code, shall comply with the requirements of this Code which are applicable to the new use or occupancy.

b. Moved Building. Electrical systems and equipment which are part of buildings or structures moved into or within this jurisdiction shall comply with the provisions of this Code for new installations.

#### Section 12 Existing Lawful Work

No provision of this Code shall be deemed to require a change in any portion of the electrical system or any other work regulated by this Electrical Code in or on an existing building or lot when such work was installed and is maintained in accordance with law in effect prior to the effective date of this Code, except when any such electrical system or other work regulated by this Code is determined by the administrative authority to be in dangerous, unsafe, and a threat to life, health, or property.

#### Section 13 Final Inspection

When requested by the owner, a Certificate of Approval shall be issued by the County Electrical Inspector provided all electric work covered by a permit is completed to the satisfaction of the County Electrical Inspector. It is further provided, but not limited, that all plumbing, heating and ventilation, furnace work, gas fitting, telephone wiring, and alarm systems which are to be installed or to be made part of the construction, must be in place before a certificate is granted.

#### Section 14 Requirements for Plans, Specifications and Calculations

a. Any person, firm corporation, partnership, architect, or builder is required, when drawing plans and specifications, to state in such plans and specifications, the location and circuiting of all outlets. The locations of the main distribution panel and service attachment point shall be approved by the County electrical Inspector and a power company representative. All electrical work shown on plans and incorporated in the specifications shall conform to this Code.

b. Applicants for permits shall be required to furnish plans and specifications of the proposed work, as may be deemed necessary by the County Electrical Inspector, before a permit is issued. The County Electrical Inspector shall be notified of any revision or change orders prior to the implementation of any change. A copy of said change shall be filed with the County Electrical Inspector.

c. Voltage drop for all service entrance, feeder, branch circuit, and control circuit conductors shall be properly calculated. In no case shall voltage drop of conductors be such as to damage or prevent the operation of equipment that is properly attached to a circuit. Such calculations shall be presented in writing to the County Electrical Inspector upon his request.

d. Load calculations shall be provided to the County Electrical Inspector when derating the grounded conductor for a reduction in size and reducing it by more than one size.

e. Equipment installed under Article 505 of the National Electrical Code shall only be installed after approval by the County Electrical Inspector and then only installed under the design and general supervision of a registered licensed electrical engineer.

#### Section 15 Permits and Fees

a. Written Application and Schedule of fees. Before any company, firm, partnership, corporation, or individual shall do any electric wiring, either new work or any addition to old work, for which a permit is required under this Code, a written application must be filed with the County Electrical Inspector for a permit. The fee for such permit shall be in accordance with the currently adopted building permit fee schedule and shall be paid at the time the permit is issued.

The permit fee shall be the total of a base permit fee (permit application fee) plus any ancillary permit fees plus a permit fee based on the value of the electrical work performed, if applicable. The base permit fee is a set fee for all permits. Ancillary permit fees are additional fees which may be required depending on the type of electrical inspection requested, whether inspections are needed outside of normal business hours, and/or if additional inspections for the same work are needed. Additional permit fees may be required which depend on the fair market value for electrical work performed for certain projects.

Valuation of electrical work shall be determined by multiplying the number of openings, motors, and fixtures by the proper multiplier, then adding all subtotals and fixed values then finally applying additional multipliers, if required, to provide a total valuation of the work. That total valuation is then to be used to determine the additional permit fee from the County Table of Permit Fees. As an alternative, the electrical inspector may elect to use a bid or contract price for electrical work in lieu of the calculated total valuation. The final determination of value or valuation under any of the provisions of this Code shall be made by the County Electrical Inspector.

b. Base Permit Fee. The base permit fee shall be <i>(County Fair is exempted from \$25.00 base fee)</i>	\$ 25.00
c. Ancillary Permit Fees.	
(1) Inspections performed outside of normal business hours <i>(Minimum charge one and one half hours)</i>	\$ 50.00/hr
(2) Reinspection fee <i>(Minimum charge one hour)</i>	\$ 50.00/hr
(3) Manufactured Home Attachment	\$ 25.00
(4) Water Well, Residential (each)	\$ 25.00
(5) Portable Electric Signs (each)	\$ 20.00
(6) Swimming Pool Grounding and Bonding	\$ 40.00
(7) Fees for Carnivals, Circuses, Fairs, etc.:	
Concession Stands (each)	\$ 25.00
Games and Display Booths (each)	\$ 35.00
Rides and Generators (each)	\$ 45.00
Maximum per Operator	\$ 400.00
<i>(County Fair is exempted from \$25.00 base fee)</i>	

(8) Fees for Code Compliance Inspections:

Single Family Dwelling:	
0 to 11,999 square feet	\$ 35.00
12,000 sq. ft. and over, additional per 1,000 sq. ft.	\$ 3.50
Multiple Family Dwelling:	
First Meter	\$ 25.00
Additional Meter (each)	\$ 10.00
Non-residential Building:	
0 to 11,999 square feet	\$ 60.00
12,000 sq. ft. and over, additional per 1,000 sq. ft.	\$ 25.00
Multi-Occupant Non-Residential Building:	
0 to 11,999 square feet and first meter	\$ 70.00
12,000 sq. ft. and over, additional per 1,000 sq. ft.	\$ 25.00
Additional Meter (each)	\$ 25.00

d. Permit Fees based on Valuation.

(1) Table of Valuations

**Type of Electrical  
Work**

**Valuation of Work**

**Alarm Systems:**

Residential Base Value	\$500.00
additional per opening	\$40.00
Commercial Base Value	\$700.00
additional per opening	\$65.00

**Communication Systems:**

Residential Base Value	\$500.00
additional per opening	\$40.00
Commercial Base Value	\$750.00
additional per opening	\$65.00

**Electrical Signs:**

0 to 20 Amp load	\$650.00
21 to 30 Amp load	\$900.00
31 to 50 Amp load	\$1,150.00
51 to 100 Amp load	\$1,400.00
Over 100 Amps, additional 10% for each 20 Amp increment	

**Generators:**

Value for each KVA or portion thereof \$80.00 per KVA

**Light Poles:**

Residential, 0 to 8 ft tall \$50.00  
each ft over 8 ft \$20.00  
Commercial, 0 to 8 ft tall \$80.00  
each ft over 8 ft \$15.00

**Motors:**

Each Hp or fraction thereof \$50.00 per Hp

**Outlets, switches, Fixture Openings, etc.:**

Residential (each) \$70.00  
Commercial (each) \$90.00

**Electrical Service, New or repaired, per Amp:**

600 Volts or less:  
Single Phase (including temporary) \$8.50 per Amp  
Three Phase (including temporary) \$21.00 per Amp  
Over 600 Volts:  
Single Phase (including temporary) \$1,350.00 per Amp  
Three Phase (including temporary) \$2,000.00 per Amp

**Electrical Sub-Panels, New or Repaired, per Amp:**

600 Volts or less:  
Single Phase \$7.00 per Amp  
Three Phase \$15.00 per Amp  
Over 600 Volts:  
Single Phase \$1,000.00 per Amp  
Three Phase \$1,500.00 per Amp

**Transformers:**

Each KVA or portion thereof over 0.5 KVA \$85.00 per KVA

**Underground Conduits, Feeders or Branch Circuits over 25 ft**

Residential, 50 Amp or less, per foot \$15.00 per foot  
(Wire Sizes #12 through #8  
AWG)  
Residential, 51 Amp or more, per foot \$20.00 per foot  
(Wire Sizes #6 AWG and over)  
Commercial, 50 Amp or less, per foot \$20.00 per foot



(Wire Sizes #12 through #8  
AWG)

Commercial, 51 Amp or more, per foot  
(Wire Sizes #6 AWG and over)

\$35.00 per foot

(2) Hazardous areas. Valuation for all wiring in hazardous locations, as defined in NFPA 70, National Electrical Code, 2014 Edition, shall be at double the appropriate valuation for standard installations.

(3) Specialty Equipment or Work. Valuation for miscellaneous equipment for which no fee is herein set or for work not herein described shall be determined by the contract or bid price or established by the County Electrical Inspector.

### Section 16 Licenses, Bonds and Fees

a. License Required A valid Master's, Journeyman's or Technician's License of the proper category or proper registration as an apprentice electrician or technician shall be required of any and all persons employed by an electrical contractor, limited electrical contractor or low voltage electrical contractor performing any electric wiring as defined in this Code within the unincorporated areas of the County, except as provided for in Section 17 and Section 18. Further exceptions from the licensing requirements are provided for:

- (1) Installation by persons on their own property, if the property is not for immediate resale, and is allowed under Section 17;
- (2) Oilfield operations, railroads, petroleum refineries, mines, and their appurtenant facilities;
- (3) A gas, electric, or communication facility in the exercise of its function as a public utility; and
- (4) Cable TV, AM, or FM radio stations, television stations, and related service, but not including premises wiring systems.

Exceptions 1 through 4 shall not apply to anyone who contracts or subcontracts to or for any exempt person, partnership, or corporation.

b. Licensing and Fees Issuing of licenses and the fees therefore shall be as required by the current Licensing Resolution.

### Section 17 Private Work

a. The owner of residential property is not required to obtain a license to perform electrical work on his own property if the premises: 1) is not a public place; 2) is

not a place of business; 3) is not a rental home, unit, apartment or similar property; or 4) is not a place of worship. The owner shall apply for a permit as required in Section 6 of this code. The owner shall perform all electrical work.

b. A permit or license is not required for normal maintenance work required on any building, structure or residence. Normal maintenance shall mean the routine, re-occurring work required to keep a facility in such condition that it may be utilized at its original or designed capacity and efficiency for its installed purpose. Any extensions to, or modifications of, existing electrical circuitry shall require a permit. Any maintenance work performed by a person other than the owner must be done by a licensed contractor.

#### Section 18 Temporary Work Permit

A temporary work permit may be issued to an individual allowing them to perform electrical work for a contractor upon presentation by the applicant of a temporary permit issued by the State of Wyoming Department of Fire Prevention Electrical Safety. The fee for a temporary work permit is to be one-half (1/2) of Journeyman's Fee, and is non-renewable.

#### Section 19 Violation of Resolution

a. Any person, firm, partnership, corporation or other entity violating any provision of this act, is guilty of a misdemeanor and shall upon conviction thereof, if a person, be punished by a fine not more than Seven Hundred and Fifty Dollars (\$750.00) for each offense, or by revocation of his license or permit in the discretion of the County. Each day's continuance of the violation shall be considered a separate offense. (W.S. 18-5-206).

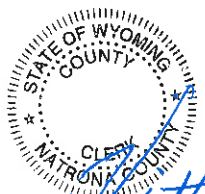
b. The provisions of this Code may be enforced by the Board by any remedy provided by law. (W.S. 18-5-205).

PASSED, APPROVED, AND ADOPTED THIS 3rd day of June 2014.

My term of office expires  
January 5, 2015

ATTEST:

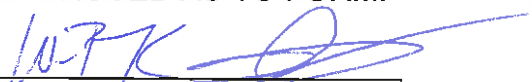
  
Renea Vitto, County Clerk



BOARD OF COUNTY COMMISSIONERS

  
Bill McDowell, Chairman

APPROVED AS TO FORM:

  
William P. Knight Jr., County Attorney