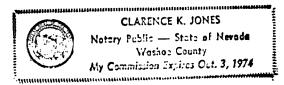
NEVADA STATE JOURNAL

PROOF OF PUBLICATION

NOTICE OF COUNTY ORDINANCE
Notice is hereby given that Bill No.
184, an ordinance adopting the 1971 edilon of the National Electrical Code approved by the National Fire Protection
association at its Annual Meeting, May,
7-21, 1971, together with such changes
a necessary to make the same applicable
to the conditions in Washoe County
arked Exhibit "A" have been filed in
the office of the County Clerk of Washoe
county for the use and examination of
the public.

STATE OF NEVADA COUNTY OF WASHOE ss.

DOROTHY YOCOM



SUMMARY: An Ordinance adopting a code for the regulation of electrical work in Washoe County.

BILL NO. <u>284</u>

ORDINANCE NO. 84

AN ORDINANCE OF THE COUNTY OF WASHOE REGULATING THE INSTALLATION, REPAIR, AND MAINTENANCE OF ELECTRICAL EQUIPMENT, WIRING, AND DEVICES; PROVIDING FOR THE ISSUANCE OF PERMITS FOR ELECTRICAL WORK AND THE INSPECTION THEREOF; PROVIDING FOR THE COUNTY'S NON-LIABILITY IN CERTAIN CASES; PROVIDING PENALTIES FOR THE VIOLATION THEREOF; REPEALING ALL ORDINANCES AND PARTS OF ORDINANCES IN CONFLICT THEREWITH.

THE BOARD OF COUNTY COMMISSIONERS OF WASHOE COUNTY DOES ORDAIN:

SECTION 1.

The 1971 edition of the National Electrical Code approved by the National Fire Protection Association at its Annual Meeting, May 17-21, 1971, a copy of which is placed on file in the Office of the County Clerk of Washoe County, Nevada, together with such changes as are necessary to make the same applicable to conditions in the County of Washoe and such other changes as are desirable, which changes are contained in that document marked Exhibit "A", attached hereto, shall be and hereby is adopted by reference; incorporated herein, and made a part hereof, and shall regulate all matters contained therein.

SECTION 2.

All ordinances or parts of ordinances in conflict herewith are hereby repealed.

SECTION 3.

That any person, firm, or corporation violating any of the provisions of this Code shall be deemed guilty of a misdemeanor, and each such person shall be deemed guilty of a separate offense for each and every day or portion thereof during which any violation of any of the provisions of this Code is committed, continued, or permitted, and upon conviction of any such violation, such person shall be punished by a fine of not more than \$500.00 or by imprisonment for not more than six months, or by both such fine and imprisonment.

SECTION 4.

This Ordinance shall be in full force and effect from and after its adoption pursuant to NRS 244.105.

Proposed on	the <u>1/th</u>	day of	January ,	1972.
Proposed by			Pagni	
Passed on t	he <u>15th</u>	day of	Pagni February ,	1972.

Vote:

Ayes:

Commissioners: Pagni, Coppa, McKissick, Rusk

and Nelson

Nays:

Commissioners: None

Absent:

Commissioners: None

Chairman of the Board



This Ordinance shall be in force and effect from and after the 15th day of February . 1972.

EXHIBIT A

1971 EDITION NATIONAL ELECTRICAL CODE

Enforcement of this code shall be the responsibility of the Building Department of the County of Washoe: the enforcing authority shall be the Building Official and Assistants appointed by the Board of County Commissioners. Upon notification by the occupants of a building, the Building Official may require the correction of defects in existing wiring which are dangerous or likely to cause fire. The Building Official may prohibit the sale, installation or use of any electrical appliance or fixture which, in his opinion, does not conform to the code or is in some manner hazardous.

SECTION 2. To Whom Permits May be Issued

An electrical permit as required by this code may be issued to any
person who shall comply with the provisions of the act and the rules
and regulations promulgated thereunder of the State of Nevada compiled
statutes in reference to the State Contractors Law.

- A. It shall be unlawful and a violation of the ordinance for any person, whether acting as principal, servant, agent, or employee, to do, or cause, or permit to be done, any electrical work, except that specifically allowed herein, without first securing a permit from the Building Department authorizing him to do so.
- B. Permits shall not be required for the following electrical work: The replacement of lamps, fuses, and similar devices or the connection of portable appliances to suitable receptacles which have been permanently installed, the installation of temporary wiring for testing electrical apparatus or equipment
- C. In cases where an emergency or urgent necessity can be shown to exist, such work may be begun prior to the issuance of a permit. A person who is licensed as required herein, shall notify the Building Department immediately upon beginning said work or as soon thereafter as possible. Application for permit shall be made within 24 hours, exclusive of weekends and holidays.
- D. Any person who shall commence any electrical work for which a permit is required by this Ordinance, without first having obtained a permit shall, if subsequently permitted to obtain a permit, pay double the permit fee fixed by Permit Fee Schedule for such work.

SECTION 3. Application for Permit

A. Application for permit shall be made to the Building Department by the person installing the work, on forms supplied

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by the Building Department. The application shall be accompanied by such plans, specification and schedule as may be necessary to determine whether the proposed installation shall conform to this code. If the applicant has complied with all provisions of this Ordinance, a permit for such installation will be issued: provided, however, that the issuance of a permit shall not be deemed permission to violate any of the requirements of this Ordinance, or any other State Law or County Ordinance.

- B. A permit when issued shall be for the installation described in the application and no deviation therefrom shall be made without the written approval of the Building Department.
- C. No other permit shall be issued to any applicant who, ten days after he has been duly notified to correct defective work, has failed to correct such work.

SECTION 4. Fees, New Construction

A. Residential (Single or Multi-Family).

Fees listed below in this paragraph for residential new construction shall include all electrical installations when formula is applied to the square footage of area.

One cent per square foot plus \$2.00 for permit issuance.

One-half cent per square foot for detached or attached garages on the same service.

- B. Commercial, Industrial, Assembly Building and All Alterations. One-half cent per square foot.
- C. Incidental Fee Schedule.

1.	Cooking appliances:	
	For each electrical range (standard)\$.50
	For cooking units with oven (domestic)	.50
	For each additional oven (domestic)	.50
	For each electric range (commercial)	.50
	For ovens (commercial) not over 15,000 W	1.50
		3.00
	For ovens (commercial) over 15,000 W	3.00
	For each fry-kettle, toaster, waffle iron,	1.00
	coffee maker or cooking device under 3,000 W	1.00
	For each fry-kettle, toaster, waffle iron,	
	coffee maker or cooking device 3,000 W or	1 50
	over	1.50
2.	Fixtures:	
	Fixtures, each	.20
•	Conomotous	
3.	Generators: Not more than 5 kw	3.00
		5.00
	Over 5 kw and not over 15 kw	10.00
	Over 15 kw	TOPOO

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as provided for the motor of the same HP, but no charge shall be made for the generator installation when in connection with any such motor generator set. 4. Heaters and Heating Appliances - Hair Dryers: For each air heater including 1,650 W...... .50 For each air heater over 1,650 W..... 1.00 For each water heater.... 1.00 .50 For each hair dryer..... For infra-red drying units not over 15,000W... 1.50 For infra-red drying units over 15,000W..... 3.00 For kilns..... 5. Home Appliances: .50 Clothes dryer..... .50 Dishwasher..... Furnace..... • 50 Garbage disposal..... Kitchen fan..... 6. Miscellaneous: For each moving picture machine, including sound equipment used in connection therewith..... For each ceiling fan..... For other permanently connected fans with a motor of not more than ½ HP..... 1.00 For all motors (permanently connected fans) same as indicated in motor table of fees -See table 2.50 For each X-ray Machine..... For each sterilizer..... For each dental unit..... For each barber pole..... For each capacitor over 5 kva capacity..... 1.50 For each welder of the transformer type..... For each self-contained vegetable and meat case..... 1.00 1.00 For each deep freeze box..... For each beverage and ice cream cabinet..... .50 For each drinking fountain..... For each show case with lights..... For each time clock..... For each building moved to a new location... 2.00 For each unitized type kitchen..... 7. Motors:

NOTE: For the inspection of the installation of any motor generator set, the same fee shall be charged

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ORD. 84

Extra outlet for portable motors over 2 HP

- 8. Signs and High Potential Gas Tube Lighting... 10.00
- 9. Transformers:

Not over ½ kw	.50
Over ½ kw and not over 1 kw	1.00
Over 1 kw and not over 5 kw	1.50
Over 5 kw and not over 10 kw	2.00
Over 10 kw and not over 15 kw	2.50
Over 15 kw and not over 25 kw	3.00
Over 25 kw and not over 50 kw	4.00
Over 50 kw and not over 100 kw	5.00
Over 100 kw and not over 500 kw	7.50
Over 500 kw	10.00

NOTE: For any electrical work for which a Building Permit is not required but for which no fee is herein provided, it shall be \$5.00 for the inspection plus 10 cents per mile round trip.

SECTION 5. Inspections

- A. All electrical work shall be inspected by the Building Department to insure compliance with the requirements of this Ordinance.
- B. It shall be the duty of the person doing the work authorized by the permit to notify the Building Department that said work is ready for inspection. Such notification shall be given not less than 24 hours before the inspection is desired and, in the case of rough wiring inspection, should be coordinated with the building frame and rough-in plumbing inspection.
- C. No part of the wiring installation shall be hidden from view by the permanent placement of parts of the building prior to inspection and approval by the Building Department. The Building Official shall have the authority to remove or require the removal of, any obstruction that prevents proper electrical inspection.

SECTION 6. Connection to Installation

- A. It shall be unlawful and a violation of this Ordinance for any person, firm or corporation to make connection from a source of electrical energy or to supply electric service to any electric wiring devices, appliances or equipment for the installation of which a permit is required, unless such person, firm or corporation shall have obtained satisfactory evidence from the Building Department that such wiring, devices, appliances or equipment are in all respects in conformity with all applicable laws and ordinances.
- B. It shall be unlawful and a violation of this Ordinance for any person, firm or corporation to make connections from a source of electrical energy or to supply electric service to any electric wiring, devices, appliances or equipment which has been disconnected or ordered to be disconnected by the Building Department, or the use of which

has been ordered by the Building Department to be discontinued until a certificate of approval has been issued by the Building Department authorizing the reconnection and use of such wiring, devices, appliances or equipment. The Building Department shall notify the serving utility of such order to discontinue use.

SECTION 7. Non-Liability of the County
This Ordinance shall not be construed to relieve from responsibility
any party owning, operating, controlling, or installing any electric wiring, electric devices, or electrical material for damages
to persons or property caused by any defect therein, nor shall the
County be liable for certificate of inspection issued.

SECTION 8. Board of Appeals
The fee for filing a Notice of Appeal is twenty-five dollars (\$25.00) to be paid to the Building Inspector and deposited to the General Fund of the County.

SECTION 9. General Conditions, Service Entrance Conductors

- A. Service entrance conductors shall not be run within the horizontal hollow spaces of frame buildings unless provided with over current protection at their outer end.
- B. All electrical wiring and equipment exposed to the weather shall be of rain tight (NEMA 3R) standard.
- C. Each building shall be served by a disconnecting means in accordance with NED-230-70(g) which shall permit disconnecting of all electrical services to the building, including emergency standby power generated within the building. Disconnecting means shall be on the outside of the building or in an electrical room, but not in furnace or boiler room and shall be accessible from outside of the building with unlocked doors.
- The minimum requirements for all dwellings of 750 square feet of floor area or over and all commercial buildings shall be a 100-A service of the 3-wire, single phase type, or a 70-A service of 3-phase characteristics. Minimum size periscope service riser shall be one and one-half inches (1½") rigid steel conduit. Conductors may be copper or aluminum of the required ampacity. Branch circuit panels shall have 100-A capacity and space for the equivalent of sixteen (16) single pole protective devices. Service entrance panels shall be provided with main breaker and switch.

Raceway - 1½" trade size.

Provisions shall be made in the branch circuit panel for 100 amp bussing and a minimum of 16 single pole overcurrent protective device spaces in addition to the main switch or main breaker.

E. Any dwelling of less than seven hundred fifty (750) square feet of floor area may have less than one hundred (100)

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ampere service at Electrical Inspector's discretion, but in no event less than one 120/240 volt sixty (60) ampere service.

Raceway - $1\frac{1}{2}$ " trade size ($1\frac{1}{2}$ " Conduit required for Periscope Riser).

Conductors - 3 No. 4 AWG TW (or equivalent in current carrying capacity).

Fusible Switch - 60 Ampere or Main Breaker - 60 Ampere

Provisions shall be made in the branch circuit panel for a minimum of 10 single pole over current protective device spaces in addition to the main switch or circuit breaker.

- F. Service Entrance Equipment Pole.

 The minimum requirements for all service entrance equipment poles (permanent and temporary) shall be:
 - 1. Construction grade solid timber (not laminated) having a minimum cross-section of 6" x 6" or a circular pole having a minimum top circumference of 16 inches. Sixteen (16) feet in height above ground. Poles shall be properly installed four (4) feet deep or in a manner approved by the Building Department and servicing Utility Company.
 - 2. Permanent service poles shall be treated with an approved wood preservative according to the standards of the servicing Utility Company.
- G. Service Entrance Equipment.

 The minimum services for all permanent use shall be 60 amp-120/240 volt single phase or three phase. All out-door switches, circuit breakers, receptacles, control equipment and metering devices shall be rain tight (NEMA 3R) standard equipment. Smaller services, for temporary and some permanent use may be installed with the approval of the Electrical Inspector.
- H. The minimum conductor size for all 120 and 240 volt branch circuits shall be AWG #12 with ground.
- I. A non-metallic sheathed cable shall contain a grounding conductor with the sheath.
- J. All non-metallic wiring system outlet, junction boxes, cabinet panel and other boxes or enclosures shall be bonded to the grounding conductor, to provide a continuous fault return path according to Article 250 of the 1971 National Electrical Code.

- K. Non-metallic wiring systems shall be secured to boxes and enclosures by approved clamps or fittings. (N.E.C. 370)
- L. All commercial buildings and all multi-family dwellings of three (3) family occupancy and over, shall be wired in EMT, rigid metallic conduit or flexible metallic conduit; one-half inch (½") minimum, installed with fittings approved by the Electrical Inspector.
- M. Bonding.
 - 1. Approved grounding type bushings shall be used in all metallic raceway wiring systems where connected to metallic boxes and enclosures through concentric and eccentric knock outs. All flexible metallic conduit shall have a minimum of a #12 ground wire pulled within.
- N. Underground Cable.
 A minimum depth of twenty-four (24) inches shall be maintained for all Service Entrance conductors and cables buried directly in the earth. A minimum depth of eighteen (18) inches shall be maintained for all Branch Circuit Conductors and Cables. All conductors and cables shall be embedded in six (6) inches of fine sand (3 inches under and 3 inches above conductors and cables) and a minimum of 2" x 6" redwood or cedar covering board.
- Low Voltage. All low voltage wiring that operates at 50 volts or less (e.g., Keno circuits, slot machines, juke boxes, coinoperated amusement machines, communication circuits except telephone circuits, control circuits, fire and burglar alarm circuits, public address and radio system, remote control circuits, low voltage power circuits, etc.) in or on any commercial or industrial building, shall be in a UL approved raceway, except certain fire alarm systems wherein special cable must be run exposed as it shall act as a thermostat to sound the signal and is further arranged to sound a trouble signal in the event of breakage in the wire. All such circuits which involve signals which protect human life, such as nurses call signals in hospitals, etc., shall be in a UL approved raceway irrespective of the voltage involved.
- P. Knob and tube wiring, and BX (Armored Cable) shall not be used in or on any type of building in the County of Washoe.
- Q. Furnace Rooms.

 All furnace and boiler rooms in buildings of Uniform

 Building Code groups A-B-C-D-E-F-G-H will require a disconnect means outside a furnace and boiler room conveniently located to disconnect all boiler and furnace or fuel controls therein in case of emergency.

SECTION 10. Minimum Requirements for all Dwellings

- A. Small Appliance Circuits.

 In addition to required fixed appliance circuits there shall be a minimum of two 20 amp capacity branch circuits installed for the small appliance load in kitchens. The required number of kitchen receptacles (20A-125V) shall be divided equally between these two circuits. These kitchen circuits may be extended to supply receptacles in pantry, dinette, breakfast room and dining room, but shall not supply other receptacles. No more than six receptacles shall be connected to each circuit and shall not include the outlets for clock and/or fan. Clock and fan outlets may be connected to lighting circuits.
- B. Appliance Receptacles.
 All appliance receptacles shall be rated at not less than
 (20Amp-125V) 20 amperes, said receptacles shall be threewire grounding type with parallel slots and "U" shaped
 slot for ground and shall be permanently and effectively
 grounded in an approved manner.
- Residential.
 In every livable room receptacle outlets shall be provided for every 12 feet of usable wall space and located so that no point along the floor line in any usable wall space is more than six feet from an outlet in that space. (A usable wall space is any space three feet wide or greater.)
- D. Lighting Outlets.

 Each single family dwelling and each occupancy of a multi-family dwelling shall have not less than one general lighting branch circuit with a maximum of eight (8) outlets per circuit installed.
- E. Convenience Outlet Circuits.

 Each single family dwelling and each occupancy of a multi-family dwelling shall have at least one twenty (20) ampere convenience outlet circuit with a maximum of eight (8) convenience outlets per circuit.
- F. Convenience Outlet Receptacles.

 All 120 Volt convenience outlet receptacles shall be of a grounding type and rated not less than 15 amperes and 125 volts. Such receptacles shall have contacts which will accept a standard parallel blade attachment plug cap and plug cap having parallel circuit contacts and a round or half-round grounding contact. The grounding contact or terminal shall be connected to an approved grounding electrical system.
- G. Requirements per Room. Every room shall have at least one switched general lighting outlet. Living rooms, bedrooms, family rooms, and dens may be excepted, provided at least one switched wall receptacle is installed.
- H. Attic and Underfloor Furnaces. A switched light outlet shall be provided at every furnace location; the switch shall be conveniently located

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inside the passage opening.

- I. Bathrooms.

 All bathrooms or part baths shall have at least one (1) grounded type receptacle, separated from fixture.
- J. No pull chain lighting fixture shall be installed within eight (8) feet of accessible water piping or grounded surfaces.
- K. Closets. Any walk-in closet of more than twenty (20) square feet of floor area shall have a light fixture: fixtures in clothes closets shall be installed on the ceiling or on the wall above the door.
- L. Appliances.

 Each appliance such as garbage disposal, dishwasher, washing machines, dryer, furnaces, and built-in heaters, or any other fixed appliance of 1/3 HP or 1500 watts or more shall be on a separate branch circuit.
- M. Herbert Ufer Grounding system shall be used as the method of grounding all services. Tests shall meet requirements of the latest edition of the N.E.C. for installation and tests. A minimum of twenty feet (20') of #4 bare copper wire installed in the footing of foundations for house or commercial buildings, bonded to the footing reinforcing bar every eighteen inches (18") copper wire shall not touch earth. Where ground wire leaves the foundation wall, the wire shall be protected by conduit pipe. Services of over 200 AMP shall comply with larger size of copper in footings to the latest edition of the N.E.C. Table 250-94 (a).
- N. No convenience outlet or appliance shall be installed or operated on a general lighting branch circuit in any occupancy, except as provided in Section 14A.
- O. Telephone Outlet.

 An electrical contractor shall install one telephone circuit conduit 3/4" minimum from the point of telephone line attachment on the outside of building to a conveniently located outlet in each occupancy or dwelling unit.

SECTION 11. Swimming Pools

- A. Swimming pools shall comply with Article 680 of the National Electric Code except that all lighting systems shall not exceed 12 volts.
- B. Reflector Pools and Display Fountains.
 The illumination systems of all reflector pools and display fountains shall comply with the National Electric Code and to not exceed 12 volts. An approved fail-safe ground detector system may be authorized by the Electrical Inspector.

SECTION 12. Trailers

- A. The minimum services for all Mobile Homes shall be 60 amperes 120/240 volt.
- B. Trailer Parks. Calculation of load for trailer spaces shall be computed in accordance with Chapter -9- Example #4 of the National Electric Code.
- C. Receptacles.

 Receptacles for supplying current to the Mobile home shall be of an approved type with a minimum rating of 60 amps. 120/240 volts. Said receptacle shall be designed to receive a 4-pole, 4-wire attachment plug cap.

SECTION 13. Signs
All electric outdoor signs shall be installed on separate circuits and a disconnect switch at each sign for protection of sign servicement. Sign circuits will also be protected in circuit panel.

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