CITY OF JOPLIN
COUNCIL AGENDA ITEM

ITEM
Council Bill No. 2019- 356, Building Regulations

MEETING DATE
March 4, 2019

REVIEWED BY
Building Regulations-Bryan Wicklund, Director of Planning, Development & Neighborhood Services-Troy Bolander, Director of Finance-Leslie Haase, City Attorney- Peter Edwards, City Manager- Sam Anselm.

SUMMARY
The City of Joplin updates our Building Codes approximately every six (6) years. Our last update of the codes took place in 2015, at which time the 20012 editions of the International Codes were adopted. At this time, we are proposing to adopt the 2018 editions of the International Codes, and the 2017 edition of the National Electrical Code.

By keeping our building codes current we receive a higher rating for that particular item from the I.S.O, as well as staying current with new life safety standards. Today we use and enforce modern Building Codes that address structural, fire, electrical, and mechanical safety as well as health and security issues. Our job is to make sure homes, schools, businesses, and other structures are safe places to live, work, and play. We provide inspection of construction projects at several stages to ensure that happens.

2018 International Building Code addresses design and installation of building systems with requirements that emphasize performance.

2018 International Residential Code brings uniformity to construction of one and two-family dwellings and townhouses up to three stories.

2018 International Plumbing Code sets minimum standards for fixtures, piping, fittings, and devices, as well as design and installation methods for water supply, sanitary drainage, and storm drainage.

2018 International Mechanical Code comprehensively regulates mechanical systems and equipment including heating, ventilation, air-conditioning, exhaust systems, chimneys and vents, ducts, appliances, boilers, water heaters, refrigeration, hydronic piping, and solar systems.

2018 International Fuel and Gas Code sets standards for fuel gas systems and gas fired appliances using prescriptive and performance related provisions.

2018 International Swimming Pool and Spa Code establishes minimum standards to Provide a reasonable level of safety and protection of health, property and public welfare by regulating and controlling the design, construction, installation, quality of materials, location and maintenance or use of pools and spas.

2017 Edition of the National Electrical Code regulates the installation of fixtures, wiring, panels, etc., and the distribution of electrical power within all structures.

2018 International Existing Building Code is intended to provide alternative approaches to remodeling, repair or alteration of existing buildings. This code allows for options for controlled departure from full compliance with the International Codes dealing with new construction, while maintaining basic levels for fire prevention, structural and life safety features of the rehabilitated building.

BACKGROUND

It is with the adoption of the latest Codes that the Building Department and Fire Department can continue to serve the public's interest in regard to life, health, and safety issues within the buildings constructed and existing in the City of Joplin, and staff requests the Council to approve the adoption of the Codes outlined above, along with appendix sections and various amendments with an effective date of April 8, 2019.

Attached is a draft of the Ordinance to adopt the codes and chapter 26 changes. The amended or changed portions have been marked through but included in an effort to help identify the changes.

FUNDING SOURCE

N/A

RECOMMENDATION

Approval of the adoption of the 2018 ICC Building Codes and the 2017 National Electrical Code along with appendix sections and amendments with an effective date of April 8, 2019.

ATTACHMENTS

Council Bill No. 2015-362, Council Bill No. 2019-356 (Revised)

COUNCIL BILL NO. 2015-362 ORDINANCE NO.

AN ORDINANCE amending Chapter 26 Buildings and Building Regulations by repealing and enacting a new Article III, Building Code, and setting a date when this ordinance shall become effective.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF JOPLIN, MISSOURI, as follows:

Section 1. That Chapter 26, Buildings and Building Regulations, Article III Building Code, be repealed, and a new Chapter 26, Buildings and Building Regulations, Article III, Building Code, be enacted to read as follows:

"ARTICLE III BUILDING CODE*

Sec. 26-61. - Building code adopted.

The ~~2012~~ **2018** Edition of the International Building Code **including Appendix Chapters C, F, G, I, J**, as supplemented or amended, is hereby adopted and made a part hereof by reference as the basic building code of the city. ~~Not less than three copies~~ **A copy** of said code as supplemented or amended, duly certified, ~~have~~ **has** been and now ~~are~~ **is** filed in the office of the city clerk.

Sec. 26-62. - Amendments to the International Building Code.

The building code adopted by **section 26-61** of this article is hereby amended, changed, and altered, as follows:

Section 101.1 is amended by inserting ***[City of Joplin, Missouri]***

Section 105.2 - "Building Item ~~2~~ **1**" replace 120 square feet with 200 square feet.

Section 105.2 – "Building Item 2" Deleted in its entirety.

Chapter 13 Energy Efficiency is deleted in its entirety.

Section ~~1405.10~~ 1404.11 is amended by adding the following paragraph:
Material commonly known as "corrugated sheet iron"; "corrugated sheet steel", "strong barn", etc., will not be permitted to be used as an exterior finish on any commercial or residential building. It shall also not be permitted or allowed as roofing material on any type building or structure.

Section ***1608*** of the building code is hereby amended to provide that 30 pounds per square foot, non-reduced snow load be utilized in determining the design snow loads for roofs, in no case, shall the design ***roof*** snow load be less than 30 pounds per square foot.

Section 1612.3 is amended by inserting: **[City of Joplin].**

Section 1612.3 is amended by inserting: [***The most current Effective Flood Insurance Rate Map***].

Section ***1809.5*** is amended by adding the following paragraphs to the existing section.
The depth of footings for frost protection shall be 30 inches from finish grade to bottom of footing.

Accessory - residential or commercial storage type buildings with approved treated skids or the "portable" type for moving from one location to another, are exempt from the footing requirements if under 200 square feet, but shall be required to be anchored or tied down in an approved manner to prevent possible overturning from ***a minimum 90 mph*** wind.

Sec. 26-63. - Penalties.

Notwithstanding any other provision of this article, a person violating any provisions of this article or obstructing its enforcement shall be deemed guilty of a misdemeanor, and upon conviction thereof in municipal court, shall be subject to punishment as provided in section 1-5 of the Joplin City Code.

Sec. 26-64. – Work by homeowners.

Nothing in this article shall prevent any bona fide home-owner from doing their own work in, or on, their own family residence in which they, or they and their family legally reside, providing that all materials and methods used comply with this article and other applicable codes, that the owner has a permit from the City of Joplin, that they personally, purchases all materials used and personally perform all labor, and that all required inspections are made and a certificate of completion issued by the building official or his designee.

Sec. 26-65. – Work by other than homeowners.

Work on any structure, other than work by bona fide homeowners as defined under section 26-64, shall be performed by permitted, licensed contractors.

Sec. 26-66. - Residential code adopted.

The ~~**2012**~~ 2018 Edition of the International Residential Code for One and Two Family Dwellings including Appendix Chapters A, B, C, D, ~~G,~~ H, I, J, M, N, ***O, P,*** ~~Q,~~ as supplemented or amended, is hereby adopted and made a part hereof by reference as the basic residential building code of the city. ~~Not less than three copies~~ A copy of said code as supplemented or amended, duly certified, ~~have~~ has been and now ~~are~~ is filed in the office of the city clerk and the same is incorporated as if fully set out at length in this article.

Sec. 26-67. - Amendments to the International Residential Code.

The [residential] building code adopted by section 26-66 of this article is hereby amended, changed, and altered, as follows:

Section R101.1 is amended by inserting: [**City of Joplin, *Missouri.***].

Section R104.11 is amended by adding the following paragraph to the existing section:
The alternative method commonly known as "pole barn" or "laminated pole" type structures shall be limited to commercial buildings and accessory buildings only and not for residential dwelling units.

Section R105.2 is amended by deleting item 2 in its entirety.

Section R105.2 is amended by deleting item 5 in its entirety.

Table R301.2 (1) is amended by inserting:

GROUND SNOW LOAD	***30 psf***
WIND SPEED	***90 mph***
TOPOGROPHIC EFFECTS	***NO***
SPEACIAL WIND REGION	***NO***
SEISMIC DESIGN CATEGORY	***A***
WEATHERING	***Severe***
FROST LINE DEPTH	***30 inches***
TERMITE	***Moderate to heavy***
WINTER DESIGN TEMP	***9 degrees***
ICE BARRIER UNDERLAYMENT REQUIRED	***No***
FLOOD HAZARDS	***December 8, 1976***
	November 2, 2012 ***FIRM panels, 29097CINDOC0C, 29097C0142E, 29097C0144E, 29097C0161E, 29097C0163E, 29097C0255E, 29097C0256E, 29097C0257E, 29097C0258E, 29097C0259E, 29097C0266E, , 29097C0267E, 29097C0268E, 29097C0269E, 29097C0276E, 29097C0277E, 29097C0278E, 29097C0279E, 29097C0283E, 29097C0284E, 29097C0285E, 29097C0286E, 29097C0287E, 29097C0288E, 29097C0295E***
AIR FREEZING INDEX	***500***
MEAN ANNUAL TEMP	***55 degrees F***

Section R403.1.1 is amended by adding wording: "All footings for residential construction are to be at least 16 inches in width and eight inches in thickness."

R403.1.6 Foundation anchorage. Replace "…anchor bolts spaced a maximum of 6 feet on center" with ***"anchor bolts spaced a maximum of four (4) feet on center".***

Section ***R ~~404.1.1.1~~ 404.1.2.1*** Masonry foundation walls is amended to read as follows:

"*R ~~404.1.1.1~~* 404.1.2.1 Masonry foundation walls. Concrete masonry and clay masonry foundation walls shall be constructed as set forth in Table R404.1.1(1), R404.1.1(2), R404.1.1(3) or R404.1.1(4) and shall ~~also~~ comply with ~~the provisions of Section R404 and the~~ applicable provisions of Sections R606~~, R607 and R608~~. In buildings assigned to Seismic Design Categories D0, D1 and D2, concrete masonry and clay masonry foundation walls shall also comply with Section R404.1.4. Rubble stone masonry foundation walls shall be constructed in accordance with Sections R404.1.8 and R~~607.2.2~~ 606.4.2. Rubble stone masonry walls shall not be used in Seismic Design Categories D0, D1 and D2.

Regardless of the height of unbalanced backfill referenced in the tables, every masonry foundation shall have a minimum of one #4 reinforcing bar a maximum of every 4′ on center that is securely anchored in the supporting footing under the wall. The block cells that contain the reinforcing steel and the anchor bolts shall be filled with concrete. If the tables require more than this minimum, then the requirements of the tables shall apply."

Section R802.11 Roof tie-down. is amended to read by adding the following paragraph:

"All trusses and rafters shall be fastened to the supporting wall assembly by mechanical connections capable of providing the resistance required in Table R802.11. In no case shall the connections be made by solely toe-nailing."

Chapter 11 Energy Efficiency is deleted in its entirety and replaced with the Chapter 11 provisions of the 2006 International Residential Code.
Exception: The insulation requirement for floors shall not be required.

Section ~~R~~ P3008.1 Backwater Valves is amended to read as follows:
"All plumbing fixtures shall be protected by a backwater valve installed in the building drain."

Section ***E3406.11.1****, Exception* is amended to read:
"Splices shall be permitted within surface-mounted raceways that have removable covers, subject to fill requirements."

Section ***E3608*** shall be amended by adding the following paragraph at the beginning:
"The primary grounding electrode for all new construction shall be a concrete-encased electrode as defined by section ***E 3608.1.2***"

Sec. 26-68. - Mechanical code adopted.

The ***~~2012~~*** 2018 Edition of the International Mechanical Code including Appendix Chapters A, as supplemented or amended, is hereby adopted and made a part hereof by reference for the purpose of regulating and controlling the installation of mechanical systems, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings, and/or appurtenances thereto, including ventilating, heating, cooling, air conditioning and refrigeration systems, incinerators and other energy related systems. ~~Not less than three copies~~ A copy of said code as supplemented or amended ~~have~~ has been and now ~~are~~ is filed in the office of the city clerk and the same is incorporated as if fully set out at length in this division.

Sec. 26-69. - Amendments to the International Mechanical Code.

The mechanical code adopted by section 26-68 of this article is hereby amended, altered, and changed as follows:

Section 101.1 is amended by inserting the name of this jurisdiction, "City of Joplin, Missouri."

Section 106.5.2 is amended to read as follows:
106.5.2 Fee Schedule: The permit fees for all mechanical work shall be as indicated in section Article IV of Chapter 26 of the Joplin City Code.

Section 106.5.3, Fee Refunds, is deleted.

Section 108.4 is amended to read as follows:

108.4 Violation Penalties: Any person who shall violate a provision of this code or who shall fail to comply with any of the requirements thereof, or who shall install mechanical work in violation of an approved plan or directive of the Building Official or his designee or of a permit or certificate issued under the provisions of this code, shall be guilty of a misdemeanor, punishable as provided in section 1-5 of the Joplin City Code.

Section 108.5 is amended to read as follows:

108.5 Stop Work Orders: Any person who shall continue any mechanical work in or about the structure after having been served with a stop work order, except such work as he/she is directed to perform to remove a violation or unsafe conditions, shall be subject to punishment as provided in section 1-5 of the Joplin City Code.

Sec. 26-70. – Fuel and Gas Code adopted.

The ~~***2012***~~ **2018** Edition of the International Fuel Gas Code including Appendix Chapters A, B, C, as supplemented or amended, is hereby adopted and made a part hereof by reference for the purpose of regulating and governing fuel gas systems and gas fired appliances in the city. ~~Not less than three copies.~~ A copy of said code as supplemented or amended, duly certified, ~~have~~ has been and now ~~are~~ is filed in the office of the city clerk and the same is incorporated as if fully set out at length in this chapter.

Sec. 26-71. - Amendments to the International Fuel and Gas Code.

The Fuel Gas Code adopted by section 26-70 of this article is hereby amended, changed, and altered, as follows:

Section-101.1. Insert: **[City of Joplin].**

Section ***106.6.2****.* Insert: [Fee schedule from Article IV of Chapter 26 of the Joplin City Code].

Section ***106.6.3*** ~~Delete provision number 2 and number 3.~~ Fee Refunds, is deleted.

Section 108.4 is hereby amended to read as follows:

108.4 Violations and Penalties: Any person who shall violate a provision of this code, fail to comply with any of the requirements thereof or erect, install, alter or repair work in violation of the approved construction documents or directive of the code official, or of a permit or certificate issued under the provisions of this code, shall be guilty of a misdemeanor, punishable as provided in Section 1-5 of the Joplin City Code.

Section 108.5 is hereby amended to read as follows:

108.5 Stop work orders: Any person who shall continue any fuel gas work in or about the structure after having been served with a stop work order, except such work as he/she is directed to perform to remove a violation or unsafe conditions, shall be subject to punishment as provided in section 1-5 of the Joplin City Code.

Sec. 26-72. - Plumbing code adopted.

The ~~***2012***~~ **2018** Edition of the International Plumbing Code including Appendix Chapters B, ~~***C,***~~ D, E, ~~F~~, as supplemented or amended, is hereby adopted and made a part hereof by reference for the purpose of prescribing regulations governing plumbing. ~~Not less than three copies~~ A copy of said code as supplemented or amended ~~have~~ has been and now ~~are~~ is filed in the office of the city clerk and the same is incorporated as if fully set out at length in this division.

Sec. 26-73. - Amendments to the International Plumbing Code.

The plumbing code adopted by section 26-72 of this article is hereby amended, altered, and changed in the following respects:

Section 101.1 is amended by inserting: **[City of Joplin, *Missouri*]**.

Section 106.6.2 is amended to read as follows:

106.6.2 Fee Schedule. The permit fees for all plumbing work shall be as indicated in Article IV of Chapter 26 and 118-235 of the Joplin City Code.

Section 106.6.3, Fee Refunds, ***is deleted***.

Section 108.4 is amended to read as follows:

108.4 Violation Penalties: Any person who shall violate a provision of this code or who shall fail to comply with any of the requirements thereof or who shall install plumbing work in violation of an approved plan or directive of the plumbing official, or of a permit or certificate issued under the provisions of this code, shall be guilty of a misdemeanor punishable as provided in Section 1-5 of the Joplin City Code.

Section 108.5 is amended to read as follows:

108.5 Stop Work Orders: Any person who shall continue any plumbing work in or about the structure after having been served with a stop work order, except such work as he is directed to perform to remove a violation or unsafe conditions, shall be subject to punishment as provided in Section 1-5 of the Joplin City Code.

Section 701.2 is added to read as follows:

~~***701.2.1* Sewer~~ 701.2 Connection to Sewer Required: See **Section *118-83*,** et seq., of the Joplin City Code pertaining to availability of sanitary sewer.

Section ~~715~~ 714 is amended to read as follows:

~~715.1~~ 714.1 Sewage backflow: All plumbing fixtures shall be protected by a backwater valve installed in the building drain.

Section ***903.1*** is amended by inserting: [12 inches].

Sec. 26-74. Electrical code adopted.

The ~~**2011**~~ 2017 Edition of the National Electrical Code for electrical wiring and apparatus as recommended by the National Fire Protection Association, as supplemented or amended, is hereby adopted and made a part hereof by reference. ~~Not less than three copies.~~ A copy of said code as supplemented or amended ~~have~~ has been and now ~~are~~ is filed in the office of the city clerk and the same is incorporated as if fully set out at length in this division.

Sec. 26-75. – Reserved.

Sec. 26-76. Soil Testing for lead and cadmium prior to building permit issuance in designated areas.

In areas of the city designated as potentially contaminated with soil lead or cadmium, no building permit shall be Issued pursuant to this chapter on any property to be used for a residential dwelling or dwelling unit, child Occupied facility including, but not limited to, day care centers, preschools or kindergartens, or recreational areas Such as parks or ball fields where children are likely to congregate, until after testing of soil has been conducted and results indicate less than 400 parts per million (ppm) lead and less than 75 (ppm) cadmium.

In the area of the city designated as the expedited debris removal (EDR) area, no building permit shall be issued for any property to be used for a residential dwelling or dwelling unit, child occupied facility including, but not limited to, day care centers, preschools or kindergartens, or recreational areas such as parks or ball fields where children are likely to congregate, until after testing of soil has been conducted and results indicate less than 400 ppm lead and 75 ppm cadmium if such property is more than 50 percent of the value of the structure at the time of destruction or if additions to any structure are going to be made that require soil excavation.

In the event testing indicates 400 ppm lead or more, or 75 ppm cadmium or more, no building permit shall be issued on such property until such time as a remediation plan approved by the Jasper County Health Department has been completed and a certificate of approval has been issued for the property.

Failure to comply with any provisions of this section or the provisions of the Jasper County Health Department Shall be punishable as provided in section 1-5 of the Code of Ordinances of the City of Joplin. Further, no occupancy permit for affected property may be issued if a violation of this section is in place.

~~Sec. 26-77—26-78. Reserved.~~

Sec. 26-77. – Swimming Pool Code Adopted

The 2018 Edition of the International Swimming Pool and Spa Code as supplemented or amended, is hereby adopted and made a part hereof by reference for the purpose of prescribing regulations governing swimming pools and spas. A copy of said code as supplemented or amended has been and now is filed in the office of the city clerk and the same is incorporated as if fully set out at length in this division.

Sec. 26-78. - Amendments to the International Swimming Pool and Spa Code.

The swimming pool and spa code adopted by section 26-77 of this article is hereby amended, altered, and changed in the following respects:

Section 101.1 is amended by inserting: [City of Joplin, ***Missouri***].

***Section 101.5* is added by adding the following paragraph:**

Locations. Private swimming pools shall not encroach on any front or side yard required by the basic code, abridged code or the governing zoning law, except by specific rules of the community in which it may be located. No wall of a swimming pool shall be located less than three feet from any rear or side property line, *12 feet from any primary or accessory structure,* or ten feet from any street property line, except by specific rules of the community in which it may be located.

Section 105.6.2 is amended to read as follows:

105.6.2 Fee Schedule. The permit fees for all swimming pools and spas shall be as indicated in Article IV of Chapter 26 of the Joplin City Code.

Section 105.6.3, Fee Refunds, ***is deleted***.

Section 107.4 is amended to read as follows:

107.4 Violation Penalties: Any person who shall violate a provision of this code or who shall fail to comply with any of the requirements thereof or who shall install swimming pool or spa work in violation of an approved plan or directive of the building official, or of a permit or certificate issued under the provisions of this code, shall be guilty of a misdemeanor punishable as provided in Section 1-5 of the Joplin City Code.

Section 107.5 is amended to read as follows:

107.5 Stop Work Orders: Any person who shall continue any work on or about the structure after having been served with a stop work order, except such work as he is directed to perform to remove a violation or unsafe conditions, shall be subject to punishment as provided in Section 1-5 of the Joplin City Code.

Section 301.2 Consult the current operational pool ordinance for lifeguard requirements and other considerations. (residential pools excluded)

Section 307.1.2 is amended as follows:

307.1.2 Colors and finishes. The colors, patterns, or finishes of the pools and spa interiors shall Be white or light pastel in color such that from the pool deck a bather is visible on the pool floor. The finish shall be at least 6.5 on the Munsell color value scale. Exceptions shall be made for the following:

1.) Residential pools and spa's
2.) Competitive lane markings
3.) Dedicated competitive diving well floors
4.) Step or bench edge markings
5.) Pools shallower than 24 inches (61.0 cm)
6.) Water line tiles
7.) Wave pool and surf pool depth change indicator tiles
8.) Depth markings and lines
9.) Other approved designs

Section 307.1.5 is amended as follows:

307.1.5 Floor transition line. For pools, other than residential pools and spas, deeper than 5 feet (1.5 m), a line of contrasting color, not less than 2 inches (5.1 cm) and not more than 6 inches (15.2 cm) in width, shall be clearly and permanently installed on the pool floor at the shallow side of the break in the floor slope, and extend up the pool walls to the waterline.

Sec.409.5 Shallow-to-deep-end rope and float line. Where a pool has a water depth ranging from less than 5 feet to greater than 5 feet, a rope and float line shall be located 1 foot horizontally from the 5- foot depth location, toward the shallow end of the pool.

Sec 26-79- Existing Building Code Adopted

The ~~2012~~ 2018 Edition of the International Existing Building Code including appendix B as supplemented or amended, is hereby adopted and made a part hereof by reference for the purpose of prescribing regulations governing energy conservation requirements. ~~Not less than three copies~~ A copy of said code as supplemented or amended ~~have~~ has been and now ~~are~~ is filed in the office of the city clerk and the same is incorporated as if fully set out at length in this division.

Sec. 26-80. – Amendments to the Existing Building Code

The Existing building code adopted by section 26-79 of this article is hereby amended, changed, and altered, as follows:

Section 101.1 is amended by inserting [**City of Joplin, Missouri**]

Section 113.4 is hereby amended to read as follows:

113.4 Violations and Penalties: Any person who shall violate a provision of this code, fail to comply with any of the requirements thereof or erect, install, alter or repair work in violation of the approved construction documents or directive of the code official, or of a permit or certificate issued under the provisions of this code, shall be guilty of a misdemeanor, punishable as provided in Section 1-5 of the Joplin City Code.

Secs. 26-81 – 26-90. Reserved.

Section 2. This ordinance shall become effective ~~November 10, 2015~~, April 8, 2019.

PASSED BY THE COUNCIL OF THE CITY OF JOPLIN, MISSOURI, this _____ day of _____, ~~2015.~~ 2019.

_____
Michael L. Seibert – Mayor

ATTEST:

_____
Barbara Hogelin – City Clerk

APPROVED AS TO FORM

_____
Peter C. Edwards, City Attorney

COUNCIL BILL NO. 2019-356 ORDINANCE NO.

AN ORDINANCE amending Chapter 26 Buildings and Building Regulations by repealing and enacting a new Article III, Building Code, and setting a date when this ordinance shall become effective.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF JOPLIN, MISSOURI, as follows:

Section 1. That Chapter 26, Buildings and Building Regulations, Article III Building Code, be repealed, and a new Chapter 26, Buildings and Building Regulations, Article III, Building Code, be enacted to read as follows:

"ARTICLE III BUILDING CODE*

Sec. 26-61. - Building code adopted.

The **2018** Edition of the International Building Code **including Appendix Chapters C, F, G, I, J**, as supplemented or amended, is hereby adopted and made a part hereof by reference as the basic building code of the city. **A copy** of said code as supplemented or amended, duly certified, **has** been and now **is** filed in the office of the city clerk.

Sec. 26-62. - Amendments to the International Building Code.

The building code adopted by **section 26-61** of this article is hereby amended, changed, and altered, as follows:

*Section 101.1 is amended by inserting **[City of Joplin, Missouri]***

Section 105.2 - "Building Item **1**" replace 120 square feet with 200 square feet.

Section 105.2 – "Building Item 2" Deleted in its entirety.

Chapter 13 Energy Efficiency is deleted in its entirety.

*Section **1404.11*** is amended by adding the following paragraph:
Material commonly known as "corrugated sheet iron"; "corrugated sheet steel", "strong barn", etc., will not be permitted to be used as an exterior finish on any commercial or residential building. It shall also not be permitted or allowed as roofing material on any type building or structure.

*Section **1608*** of the building code is hereby amended to provide that 30 pounds per square foot, non-reduced snow load be utilized in determining the design snow loads for roofs, in no case, shall the design ***roof*** snow load be less than 30 pounds per square foot.

Section 1612.3 is amended by inserting: **[City of Joplin].**

Section 1612.3 is amended by inserting: [***The most current Effective Flood Insurance Rate Map***].

Section 1809.5 is amended by adding the following paragraphs to the existing section.
The depth of footings for frost protection shall be 30 inches from finish grade to bottom of footing.

Accessory - residential or commercial storage type buildings with approved treated skids or the "portable" type for moving from one location to another, are exempt from the footing requirements if under 200 square feet but shall be required to be anchored or tied down in an approved manner to prevent possible overturning from ***a minimum 90 mph*** wind.

Sec. 26-63. - Penalties.

Notwithstanding any other provision of this article, a person violating any provisions of this article or obstructing its enforcement shall be deemed guilty of a misdemeanor, and upon conviction thereof in municipal court, shall be subject to punishment as provided in section 1-5 of the Joplin City Code.

Sec. 26-64. – Work by homeowners.

Nothing in this article shall prevent any bona fide home-owner from doing their own work in, or on, their own family residence in which they, or they and their family legally reside, providing that all materials and methods used comply with this article and other applicable codes, that the owner has a permit from the City of Joplin, that they personally, purchases all materials used and personally perform all labor, and that all required inspections are made and a certificate of completion issued by the building official or his designee.

Sec. 26-65. – Work by other than homeowners.

Work on any structure, other than work by bona fide homeowners as defined under section 26-64, shall be performed by permitted, licensed contractors.

Sec. 26-66. - Residential code adopted.

The **2018** Edition of the International Residential Code for One and Two Family Dwellings including Appendix Chapters A, B, C, D, H, I, J, M, N, ***O, P,*** as supplemented or amended, is hereby adopted and made a part hereof by reference as the basic residential building code of the city. **A copy** of said code as supplemented or amended, duly certified, **has** been and now **is** filed in the office of the city clerk and the same is incorporated as if fully set out at length in this article.

Sec. 26-67. - Amendments to the International Residential Code.

The [residential] building code adopted by section 26-66 of this article is hereby amended, changed, and altered, as follows:

Section R101.1 is amended by inserting: [**City of Joplin, *Missouri.***].

Section R104.11 is amended by adding the following paragraph to the existing section:
The alternative method commonly known as "pole barn" or "laminated pole" type structures shall be limited to commercial buildings and accessory buildings only and not for residential dwelling units.

Section R105.2 is amended by deleting item 2 in its entirety.

Section R105.2 is amended by deleting item 5 in its entirety.

Table R301.2 (1) is amended by inserting:

GROUND SNOW LOAD	***30 psf***
WIND SPEED	***90 mph***
TOPOGROPHIC EFFECTS	***NO***
SPEACIAL WIND REGION	***NO***
SEISMIC DESIGN CATEGORY	***A***
WEATHERING	***Severe***
FROST LINE DEPTH	***30 inches***
TERMITE	***Moderate to heavy***
WINTER DESIGN TEMP	***9 degrees***
ICE BARRIER UNDERLAYMENT REQUIRED	***No***
FLOOD HAZARDS	***December 8, 1976*** ***November 2, 2012*** ***FIRM panels, 29097CINDOC0C, 29097C0142E, 29097C0144E, 29097C0161E, 29097C0163E, 29097C0255E, 29097C0256E, 29097C0257E, 29097C0258E, 29097C0259E, 29097C0266E, , 29097C0267E, 29097C0268E, 29097C0269E, 29097C0276E, 29097C0277E, 29097C0278E, 29097C0279E, 29097C0283E, 29097C0284E, 29097C0285E, 29097C0286E, 29097C0287E, 29097C0288E, 29097C0295E***
AIR FREEZING INDEX	***500***
MEAN ANNUAL TEMP	***55 degrees F***

Section R403.1.1 is amended by adding wording: "All footings for residential construction are to be at least 16 inches in width and eight inches in thickness."

R403.1.6 Foundation anchorage. Replace "…anchor bolts spaced a maximum of 6 feet on center" with ***"anchor bolts spaced a maximum of four (4) feet on center".***

Section ***R 404.1.2.1*** Masonry foundation walls is amended to read as follows:

"*R 404.1.2.1* Masonry foundation walls. Concrete masonry and clay masonry foundation walls shall be constructed as set forth in Table R404.1.1(1), R404.1.1(2), R404.1.1(3) or R404.1.1(4) and shall comply with applicable provisions of Sections R606. In **buildings assigned to** Seismic Design Categories D0, D1 and D2, concrete masonry and clay masonry foundation walls shall also comply with Section R404.1.4. Rubble stone masonry foundation walls shall be constructed in accordance with Sections R404.1.8 and **R606.4.2**. Rubble stone masonry walls shall not be used in Seismic Design Categories D0, D1 and D2.

Regardless of the height of unbalanced backfill referenced in the tables, every masonry foundation shall have a minimum of one #4 reinforcing bar a maximum of every 4′ on center that is securely anchored in the supporting footing under the wall. The block cells that contain the reinforcing steel and the anchor bolts shall be filled with concrete. If the tables require more than this minimum, then the requirements of the tables shall apply."

Section R802.11 Roof tie-down. is amended to read by adding the following paragraph:

"All trusses and rafters shall be fastened to the supporting wall assembly by mechanical connections capable of providing the resistance required in Table R802.11. In no case shall the connections be made by solely toe-nailing."

Chapter 11 Energy Efficiency is deleted in its entirety and replaced with the Chapter 11 provisions of the 2006 International Residential Code.
Exception: The insulation requirement for floors shall not be required.

Section P3008.1 Backwater Valves is amended to read as follows:

"All plumbing fixtures shall be protected by a backwater valve installed in the building drain."

Section ***E3406.11.1****, Exception* is amended to read:

"Splices shall be permitted within surface-mounted raceways that have removable covers, subject to fill requirements."

Section ***E3608*** shall be amended by adding the following paragraph at the beginning:

"The primary grounding electrode for all new construction shall be a concrete-encased electrode as defined by section ***E 3608.1.2***"

Sec. 26-68. - Mechanical code adopted.

The ***2018*** Edition of the International Mechanical Code including Appendix Chapters A, as supplemented or amended, is hereby adopted and made a part hereof by reference for the purpose of regulating and controlling the installation of mechanical systems, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings, and/or appurtenances thereto, including ventilating, heating, cooling, air conditioning and refrigeration systems, incinerators and other energy related systems. **A copy** of said code as supplemented or amended **has** been and now **is** filed in the office of the city clerk and the same is incorporated as if fully set out at length in this division.

Sec. 26-69. - Amendments to the International Mechanical Code.

The mechanical code adopted by section 26-68 of this article is hereby amended, altered, and changed as follows:

Section 101.1 is amended by inserting the name of this jurisdiction, "City of Joplin, Missouri."

Section 106.5.2 is amended to read as follows:

106.5.2 Fee Schedule: The permit fees for all mechanical work shall be as indicated in section Article IV of Chapter 26 of the Joplin City Code.

Section 106.5.3, Fee Refunds, is deleted.

Section 108.4 is amended to read as follows:

108.4 Violation Penalties: Any person who shall violate a provision of this code or who shall fail to comply with any of the requirements thereof, or who shall install mechanical work in violation of an approved plan or directive of the Building Official or his designee or of a permit or certificate issued under the provisions of this code, shall be guilty of a misdemeanor, punishable as provided in section 1-5 of the Joplin City Code.

Section 108.5 is amended to read as follows:

108.5 Stop Work Orders: Any person who shall continue any mechanical work in or about the structure after having been served with a stop work order, except such work as he/she is directed to perform to remove a violation or unsafe conditions, shall be subject to punishment as provided in section 1-5 of the Joplin City Code.

Sec. 26-70. – Fuel and Gas Code adopted.

The ***2018*** Edition of the International Fuel Gas Code including Appendix Chapters A, B, C, as supplemented or amended, is hereby adopted and made a part hereof by reference for the purpose of regulating and governing fuel gas systems and gas fired appliances in the city. **A copy** of said code as supplemented or amended, duly certified, **has** been and now **is** filed in the office of the city clerk and the same is incorporated as if fully set out at length in this chapter.

Sec. 26-71. - Amendments to the International Fuel and Gas Code.

The Fuel Gas Code adopted by section 26-70 of this article is hereby amended, changed, and altered, as follows:

Section-101.1. Insert: **[City of Joplin].**

Section 106.6.2. Insert: [Fee schedule from Article IV of Chapter 26 of the Joplin City Code].

*Section **106.6.3*** **Fee Refunds, is deleted.**

Section 108.4 is hereby amended to read as follows:

108.4 Violations and Penalties: Any person who shall violate a provision of this code, fail to comply with any of the requirements thereof or erect, install, alter or repair work in violation of the approved construction documents or directive of the code official, or of a permit or certificate issued under the provisions of this code, shall be guilty of a misdemeanor, punishable as provided in Section 1-5 of the Joplin City Code.

Section 108.5 is hereby amended to read as follows:

108.5 Stop work orders: Any person who shall continue any fuel gas work in or about the structure after having been served with a stop work order, except such work as he/she is directed to perform to remove a violation or unsafe conditions, shall be subject to punishment as provided in section 1-5 of the Joplin City Code.

Sec. 26-72. - Plumbing code adopted.

The ***2018*** Edition of the International Plumbing Code including Appendix Chapters B, D, E, as supplemented or amended, is hereby adopted and made a part hereof by reference for the purpose of prescribing regulations governing plumbing. **A copy** of said code as supplemented or amended **has** been and now **is** filed in the office of the city clerk and the same is incorporated as if fully set out at length in this division.

Sec. 26-73. - Amendments to the International Plumbing Code.

The plumbing code adopted by section 26-72 of this article is hereby amended, altered, and changed in the following respects:

Section 101.1 is amended by inserting: **[City of Joplin, *Missouri*]**.

Section 106.6.2 is amended to read as follows:

106.6.2 Fee Schedule. The permit fees for all plumbing work shall be as indicated in Article IV of Chapter 26 and 118-235 of the Joplin City Code.

Section 106.6.3, Fee Refunds, ***is deleted***.

Section 108.4 is amended to read as follows:

108.4 Violation Penalties: Any person who shall violate a provision of this code or who shall fail to comply with any of the requirements thereof or who shall install plumbing work in violation of an approved plan or directive of the plumbing official, or of a permit or certificate issued under the provisions of this code, shall be guilty of a misdemeanor punishable as provided in Section 1-5 of the Joplin City Code.

Section 108.5 is amended to read as follows:

108.5 Stop Work Orders: Any person who shall continue any plumbing work in or about the structure after having been served with a stop work order, except such work as he is directed to perform to remove a violation or unsafe conditions, shall be subject to punishment as provided in Section 1-5 of the Joplin City Code.

Section 701.2 is added to read as follows:

701.2 Connection to Sewer Required: See **Section *118-83*,** et seq., of the Joplin City Code pertaining to availability of sanitary sewer.

Section *714* is amended to read as follows:

714.1 Sewage backflow: All plumbing fixtures shall be protected by a backwater valve installed in the building drain.

*Section **903.1*** is amended by inserting: [12 inches].

Sec. 26-74. Electrical code adopted.

The **2017** Edition of the National Electrical Code for electrical wiring and apparatus as recommended by the National Fire Protection Association, as supplemented or amended, is hereby adopted and made a part hereof by reference. **A copy** of said code as supplemented or amended **has** been and now **is** filed in the office of the city clerk and the same is incorporated as if fully set out at length in this division.

Sec. 26-75. – Reserved.

Sec. 26-76. Soil Testing for lead and cadmium prior to building permit issuance in designated areas.

In areas of the city designated as potentially contaminated with soil lead or cadmium, no building permit shall be Issued pursuant to this chapter on any property to be used for a residential dwelling or dwelling unit, child Occupied facility including, but not limited to, day care centers, preschools or kindergartens, or recreational areas Such as parks or ball fields where children are likely to congregate, until after testing of soil has been conducted and results indicate less than 400 parts per million (ppm) lead and less than 75 (ppm) cadmium.

In the area of the city designated as the expedited debris removal (EDR) area, no building permit shall be issued for any property to be used for a residential dwelling or dwelling unit, child occupied facility including, but not limited to, day care centers, preschools or kindergartens, or recreational areas such as parks or ball fields where children are likely to congregate, until after testing of soil has been conducted and results indicate less than 400 ppm lead and 75 ppm cadmium if such property is more than 50 percent of the value of the structure at the time of destruction or if additions to any structure are going to be made that require soil excavation.

In the event testing indicates 400 ppm lead or more, or 75 ppm cadmium or more, no building permit shall be issued on such property until such time as a remediation plan approved by the Jasper County Health Department has been completed and a certificate of approval has been issued for the property.

Failure to comply with any provisions of this section or the provisions of the Jasper County Health Department Shall be punishable as provided in section 1-5 of the Code of Ordinances of the City of Joplin. Further, no occupancy permit for affected property may be issued if a violation of this section is in place.

Sec. 26-77. – Swimming Pool Code Adopted

The 2018 Edition of the International Swimming Pool and Spa Code as supplemented or amended, is hereby adopted and made a part hereof by reference for the purpose of prescribing regulations governing swimming pools and spas. A copy of said code as supplemented or amended has been and now is filed in the office of the city clerk and the same is incorporated as if fully set out at length in this division.

Sec. 26-78. - Amendments to the International Swimming Pool and Spa Code.

The swimming pool and spa code adopted by section 26-77 of this article is hereby amended, altered, and changed in the following respects:

***Section 101.1* is amended by inserting: [City of Joplin, *Missouri*].**

***Section 101.5* is added by adding the following paragraph:**

Locations. Private swimming pools shall not encroach on any front or side yard required by the basic code, abridged code or the governing zoning law, except by specific rules of the community in which it may be located. No wall of a swimming pool shall be located less than three feet from any rear or side property line, *12 feet from any primary or accessory structure,* or ten feet from any street property line, except by specific rules of the community in which it may be located.

***Section 105.6.2* is amended to read as follows:**

***105.6.2* Fee Schedule. The permit fees for all swimming pools and spas shall be as indicated in Article IV of Chapter 26 of the Joplin City Code.**

***Section 105.6.3,* Fee Refunds, *is deleted*.**

***Section 107.4* is amended to read as follows:**

***107.4* Violation Penalties: Any person who shall violate a provision of this code or who shall fail to comply with any of the requirements thereof or who shall install swimming pool or spa work in violation of an approved plan or directive of the building official, or of a permit or certificate issued under the provisions of this code, shall be guilty of a misdemeanor punishable as provided in Section 1-5 of the Joplin City Code.**

***Section 107.5* is amended to read as follows:**

***107.5* Stop Work Orders: Any person who shall continue any work on or about the structure after having been served with a stop work order, except such work as he is directed to perform to remove a violation or unsafe conditions, shall be subject to punishment as provided in Section 1-5 of the Joplin City Code.**

Section 301.2 Consult the current operational pool ordinance for lifeguard requirements and other considerations. (residential pools excluded)

Section 307.1.2 is amended as follows:

307.1.2 Colors and finishes. The colors, patterns, or finishes of the pools and spa interiors shall

Be white or light pastel in color such that from the pool deck a bather is visible on the pool floor.

The finish shall be at least 6.5 on the Munsell color value scale. Exceptions shall be made for the

following:

1. **Residential pools and spa's**
2. **Competitive lane markings**
3. **Dedicated competitive diving well floors**
4. **Step or bench edge markings**
5. **Pools shallower than 24 inches (61.0 cm)**
6. **Water line tiles**
7. **Wave pool and surf pool depth change indicator tiles**
8. **Depth markings and lines**
9. **Other approved designs**

Section 307.1.5 is amended as follows:

307.1.5 Floor transition line. For pools, other than residential pools and spas, deeper than 5 feet (1.5 m), a line of contrasting color, not less than 2 inches (5.1 cm) and not more than 6 inches (15.2 cm) in width, shall be clearly and permanently installed on the pool floor at the shallow side of the break in the floor slope, and extend up the pool walls to the waterline.

Sec.409.5 Shallow-to-deep-end rope and float line. Where a pool has a water depth ranging from less than 5 feet to greater than 5 feet, a rope and float line shall be located 1 foot horizontally from the 5- foot depth location, toward the shallow end of the pool.

Sec 26-79- Existing Building Code Adopted

The **2018** Edition of the International Existing Building Code including appendix B as supplemented or amended, is hereby adopted and made a part hereof by reference for the purpose of prescribing regulations governing energy conservation requirements. **A copy** of said code as supplemented or amended **has** been and now **is** filed in the office of the city clerk and the same is incorporated as if fully set out at length in this division.

Sec. 26-80. – Amendments to the Existing Building Code

The Existing building code adopted by section 26-79 of this article is hereby amended, changed, and altered, as follows:

Section 101.1 is amended by inserting [**City of Joplin, Missouri**]

Section 113.4 is hereby amended to read as follows:

113.4 Violations and Penalties: Any person who shall violate a provision of this code, fail to comply with any of the requirements thereof or erect, install, alter or repair work in violation of the approved construction documents or directive of the code official, or of a permit or certificate issued under the provisions of this code, shall be guilty of a misdemeanor, punishable as provided in Section 1-5 of the Joplin City Code.

Secs. 26-81 – 26-90. Reserved.

Section 2. This ordinance shall become effective April 8, 2019.

PASSED BY THE COUNCIL OF THE CITY OF JOPLIN, MISSOURI, this _____ day of _____, 2019.

_____
Gary L. Shaw, Mayor

ATTEST:

_____
Barbara J. Gollhofer, City Clerk

APPROVED AS TO FORM

_____
Peter C. Edwards, City Attorney