ORDINANCE NO. 2024-028

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF WOLFFORTH, TEXAS, AMENDING CHAPTER 3, ARTICLE VIII-INTERNATIONAL RESIDENTIAL CODE OF THE CODE OF ORDINANCES BY ADOPTING THE 2021 EDITION OF THE **INTERNATIONAL** RESIDENTIAL CODE, PROVIDING A SEVERABILITY CLAUSE: PROVIDING FOR THE REPEAL OF ORDINANCES IN CONFLICT HEREWITH; **PROVIDING FOR** PUBLICATION: AND PROVIDING FOR AN EFFECTIVE DATE.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF WOLFFORTH, TEXAS, THAT:

Part 1. Enacted

THAT, Chapter 3, Article VII INTERNATIONAL RESIDENTIAL CODE of the Code of Ordinances is hereby amended by amending Sec. 3.08.001, which shall read as follows:

Sec. 3.08.001 Adopted

The International Residential Code, as published by the International Code Council, is hereby adopted by reference as the city residential code as if fully set out in this article with the additions, deletions, insertions and changes as follows.

Amendments:

(a) <u>Definitions</u>. Section R202 is hereby amended by adding a new definition as follows:

ENGINEERED FILL. Soil used for fill or backfill that has been placed, compacted and tested in accordance with the specifications of the structural or geotechnical engineer of record, or, where such specifications do not exist, that has been classified, placed, compacted and tested to a minimum 95% of standard proctor density in accordance with accepted industry standards.

(b) <u>Climatic and geographic design criteria</u>. Table R301.2 is hereby deleted and replaced with the following. Footnotes to Table R301.2 shall remain unchanged, except for the deletion of footnote e and n:

TABLE R301.2 CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA			
	GROUND SNOW LOAD 15 psf		
	Speed (mph)	115	
ind sign	Topographic effects	No	
De: U	Special wind region	No	
	Windborne debris zone	No	
SEISMI	C DESIGN CATEGORY	А	
rom	Weathering	Moderate	
bject to mage F	Frost line depth	12 inches	
Su Dai	Termite	Moderate to Heavy	
v	VINTER DESIGN TEMP	15 Degrees	
ICE BARRIER UNDERLAYMENT REQUIRED		No	
AIR FREEZING INDEX		172	
	MEAN ANNUAL TEMP	59.9 Degrees	
For SI: 1 pound per square foot= 0.0479 kPa, I mile per hour= 0.447 mis			

(c) <u>Exterior walls</u>. Section R302.1 is hereby amended by the addition of a new exception #6 to read as follows:

6. In garden home developments with casements specifically allowing overhangs to project into adjacent lots, overhangs may project a maximum of 2 feet (609.6 mm) across the property line. Such overhangs must be one-hour fire resistive construction and be decked with fire retardant treated decking. The overhang shall not be equipped with soffit vents or penetrations.

(d) Exterior walls. Table R302.1(2). Table R.302.1(2) is hereby amended to read as follows:

TABLE R302.1(2)			
EXTERIOR WALLS			
Exterior Wall Element	Minimum Fire- Resistance Rating	Minimum Fire Separation Distance	

Walls	Fire-resistance rated	1-hour in accordance with ASTM E119 or UL 263 with exposure from both sides	less than 5 feet	
waits	Non Fire-resistance rated	0 Hours	5 feet or greater	
	Not allowed	N/A	Less than 2 feet	
	Fire-resistance rated	1 hour on the underside ^{a,b}	2 feet to less than 3 feet	
Projections	Non Fire-resistance rated	0 Hours	3 feet	
	Not allowed	N/A	Less than 3 feet	
Opening in walls	Maximum of 25% of wall area	0 Hours	3 feet	
	Unlimited	0 Hours	5 feet	
Penetrations	All	Comply with Section R302.4	Less than 3 feet	
		None required	3 feet or greater	

a. Roof eave fire-resistance rating shall be permitted to be reduced to 0 hours on the underside of the eave if fire blocking is provided from the wall top plate to the underside of the roof sheathing.

b. Roof eave fire-resistance rating shall be permitted to be reduced to 0 hours on the underside of the cave provided that gable vent openings are not installed.

(e) <u>Opening protection</u>. Section R302.5.1 is hereby amended to read as follows:

R302.5. l <u>Opening protection</u>. Openings from a private garage directly into a room used for sleeping purposes shall not be permitted. Other openings between the garage and residence shall be equipped with solid wood doors not less than 1-3/8 inches (35 mm) in thickness, solid or honeycomb-core steel doors not less than 1-3/8 inches (35 mm) thick, or 20-minute fire-rated doors. A hard-wired Carbon Monoxide Detector shall be installed within five (5) feet (1524 mm) on the residence side of the garage door entrance to the structure.

(f) <u>Bathrooms</u>. Section R303.3 is hereby amended to read as follows:

R.303.3 <u>Bathrooms</u>. Bathrooms, water closet compartments and other similar rooms shall be provided with aggregate glazing area in windows of not less than 3 square feet (0.3 m2), one-half of which must be openable.

Exception: The glazed areas shall not be required where artificial light and a local exhaust system are provided. The minimum local exhaust rates shall be determined in accordance with Section MI505. Exhaust air from the space shall be exhausted directly to the outside, or into a ventilated attic at least 10" above the ceiling insulation line or to a soffit, gable or cave vent.

(g) Mechanical ventilation. Section R303.4 is hereby deleted in its entirety.

(h) <u>Emergency escape and rescue required</u>. Section R31 0.1 is hereby amended to read as follows:

R310.1 Emergency escape and rescue required. Basements, habitable allies and every sleeping room shall have not less than one operable emergency escape and rescue opening. Emergency escape and rescue openings shall open directly into a street, public alley, or other approved public way, or into a yard or court on the same property that opens to an approved public way. Where basements contain one or more sleeping rooms, an emergency escape and rescue opening shall be required in each sleeping room, but shall not be required in adjoining areas of the basement. Where emergency escape and rescue openings are provided, they shall have a sill height of not greater than 44 inches (1118 mm) above the floor or a permanent adjacent standing surface of not less than 36 in. x 36 in. (914 mm. x 914 mm.). Where a door opening having a threshold below the adjacent ground elevation serves as an emergency escape and rescue opening and is provided with a bulkhead enclosure, the bulkhead enclosure shall comply with Section R310.4.4. The net clear opening dimensions required by this section shall be obtained by the normal operation of the emergency escape and rescue opening from the inside. Emergency escape and rescue openings with a finished sill height below the adjacent ground elevation shall be below the adjacent ground elevation street opening from the inside. Emergency escape and rescue openings with a finished sill height below the adjacent ground elevation shall be provided with an area well in accordance with Section R310.4.

Exceptions:

1. Basements used only to house mechanical equipment and not exceeding a total floor area of 200 square feet (18.6 m2).

2. Basements not containing bathing facilities or designated as bedrooms may be provided with alternatives to emergency escape and rescue openings as follows:

a. Basements not exceeding 500 square feet (46.5 m2) and designated for use as a storm shelter - No requirement.

b. I not exceeding 800 square feet (74.3 m2) and designated for use as a storm shelter:

i. Top of basement stairs to be located within 1 0 feet (3048 mm) of an approved emergency escape and rescue opening, or within 20 feet (6096 mm) where entirely protected by an approved one-hour fire rated corridor constructed in accordance with the International Building Code. For purposes of this Section, "travel distance" shall mean the centerline of the shortest route that affords a minimum 36 inches (914.4 mm) wide unobstructed path of travel;

ii. Basement and path of travel to an approved emergency escape and rescue opening to be protected by an NFPA 13D fire suppression system;

iii. As otherwise approved by the building official.

c. Basements of any size where the entire dwelling is provided with an automatic fire suppression system throughout in accordance with NFPA 13D - No requirement.

(i) Automatic fire sprinkler systems. Section R313 is hereby deleted.

(j) Storm shelters (General). Section R323.1 is hereby amended to read as follows:

R323.1 <u>Storm shelters (General)</u>. This section applies to storm shelters where constructed as separate detached buildings or where constructed as safe rooms within buildings for the purpose of providing refuge from storms that produce high winds, such as tornados and hurricanes. In addition to other applicable requirements in this code, such storm shelters shall be constructed in accordance with ICC 500.

Exception: Basements designated as storm shelters for purposes of complying with exception 1 or 2 to Section R31 0.1 need not be constructed in accordance with ICC 500.

(k) Mezzanines. Section 325.3 is hereby amended to read as follows:

R325.3 <u>Area limitation</u>. The aggregate area of a mezzanine or mezzanines shall be not greater than one-third of the floor area of the room or space in which they are located. The enclosed portion of a room shall not be included in a determination of the floor area of the room in which the mezzanine is located.

Exception: The aggregate area of a mezzanine located within a dwelling unit shall not be greater than one-half of the floor area of the room, provided that the mezzanine meets all of the following requirements:

1. Except for enclosed closets and bathrooms, the mezzanine is open to the room in which such mezzanine is located.

2. The opening to the room is unobstructed except for walls not more than 42 inches (1067 mm) in height, columns and posts.

3. The exceptions to Section R325.5 are not applied.

(1) <u>Minimum size (of footings)</u>. Section R403.1.1 is hereby amended to read as follows:

R403.1.1 <u>Minimum size</u>. Minimum sizes for concrete and masonry footings shall be as set forth in The City of Wolfforth Residential Foundation Details, adopted by reference as though fully set out herein.

(m) Minimum depth. Section R403.1.4 is hereby amended to read as follows:

Section R403.1.4. <u>Minimum depth</u>. All exterior footings shall be placed at least 12 inches (305 mm) below the undisturbed ground or engineered fill (see definition) surface. Where applicable, the depth of footings shall also conform to Section R403.1.4. 1.

(n) <u>Foundation anchorage</u>. Section R403.1.6. is hereby amended by the addition or a third exception to read as follows:

3. On exterior walls, *approved* powder-actuated pins may be used in lieu of anchor bolts within twelve (12) inches (304.8 mm) of the joints of sole plates, not including corners.

(o) Foundation elevation. Section R403.1.7.3 is hereby amended to read as follows:

R.403.1.7.3. <u>Foundation elevation</u>. The lowest portion of a building finished floor elevation shall be installed no lower than that indicated in Table R.403.1.7.3 below:

TABLE R403.1.7.3.

Elevation Difference-Top of curb to rear property line (inches)	Min. Floor Elevation above top of curb when slope is from front to rear (inches)	Min. Floor Elevation above top of curb when slope is from rear to front (inches)
0	12	12
б	10.5	13.5
12	9	15
18	8	16.5
24	6	18
30	6	19.5
36	6	21

Minimum Floor Elevations for Structures Relative to Lot Slope

1) The ground shall slope away from the structure in all directions as required elsewhere in this code;

2) The minimum distance from the finished ground elevation to the top of the floor shall be eight(8) inches at all locations around the building;

3) Minimum floor elevations. The minimum floor elevation shall be determined by using the top of the floor slab and shall be a minimum of six (6) inches above the calculated peak water surface elevation as determined by the city engineer, or that determined by Table R403. 1.7.3, whichever results in the more stringent requirement. It shall be the responsibility of the builder/contractor to provide the city building official with a survey certificate indicating the required finish floor elevation as determined by the surveyor. The required elevation shall be indicated on the construction plans and marked on the front street curb. Structures located in any floor hazard area shall comply with all F.E.M.A.

TABLE R403.1.7.3

Minimum Floor Elevations for Structures Relative to Lot Slope

Elevation Difference-Top of	Min. Floor Elevation above	Min. Floor Elevation above
curb to rear property line	top of curb when slope is	top of curb when slope is
(inches)	from front to rear (inches)	from rear to front (inches)

regulations, which will supersede the above.

4) Alternate elevations are permitted subject to the approval of the building official and city engineer, provided it can be demonstrated that required drainage to an approved point of discharge and away from the structure is provided at all locations on the site.

(p) <u>Concrete and masonry Foundation walls</u>. Sections R404. 1.2. I and R404. 1.3 arc hereby amended to read as follows:

R404. 1.2.1 <u>Masonry foundation walls</u>. Concrete masonry and clay masonry foundation walls shall be constructed as set forth in Tables R404. 1. 1 (1), R404. 1.1(2), R404. 1.1(3) or R404. 1.1(4) and shall also comply with the applicable provisions of Sections R606. Where applicable, such walls shall be designed and constructed in accordance with the City of Wolfforth Residential Foundation Details, adopted by reference as though fully set out herein. In

Seismic Design Categories Do, D1 and D2, concrete masonry and clay masonry foundation walls shall 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, or in I in *Seismic Design Category C*.

R404. 1.3 Concrete foundation walls. Concrete foundation walls that support light-frame walls shall be designed and constructed in accordance with the provisions of this section, ACI 318, ACI 332, PCA 100, or the City of Wolfforth Residential Foundation Details, adopted by reference as though fully set out herein. Concrete foundation walls that support above-grade concrete walls that are within the applicability limits of Section R608.2 shall be designed and constructed in accordance with the provisions of this section, ACI 318, ACI 332 or PCA 100. Concrete foundation walls that support above-grade concrete walls that are not within the applicability limits of Section R608.2 shall be designed and constructed in accordance with the provisions of this section, ACI 318, ACI 332 or PCA 100. Concrete foundation walls that support above-grade concrete walls that are not within the applicability limits of Section R608.2 shall be designed and constructed in accordance with the provisions of ACI 318, ACI 332 or PCA 100. When ACI 318, ACI 332, PCA 100 or the provisions of this section arc used to design concrete foundation walls, project drawings, typical details and specifications are not required to bear the seal of the architect or engineer responsible for design, unless otherwise required by the state law of the *jurisdiction* having authority.

(q) Concrete or masonry foundations. The exceptions to Section 405. l arc hereby amended to read as follows:

Exceptions:

1. A drainage system is not required when the foundation is installed on well-drained ground or sand-gravel mixture soils according to the Unified Soil Classification System, Group I soils, as detailed in Table R405.1.

2. A drainage system is not required for a basement wall footing where the excavation for the basement wall does not result in a soil disturbance closer than three (3) feet (914.4 mm) to the exterior roof drip line and there is no evidence of groundwater infiltration.

(r) Foundation water management. Section R406 is hereby amended by re-titling of the Section and amended to read as follows:

SECTION R406

FOUNDATION WATER MANAGEMENT

R406. 1 <u>Concrete and masonry foundation dampness resistance</u>. Except where required by Section R406.2 to be made water-resistant, foundation walls that retain earth and enclose interior spaces and floors below *grade* shall be treated to resist dampness from the top of the footing to the finished grade. Masonry walls shall have not less than 3/8 inch (9.5 mm) Portland cement parging applied to the exterior of the wall. The parging shall be treated in accordance with one of the following:

- 1. Bituminous coating,
- 2. 3 pounds per square yard (1.63 kg/m2) of acrylic modified cement.
- 3. 1/8-inch (3.2 mm) coat of surface-bonding cement complying with ASTM C887.
- 4. Any material permitted in Section R406.2.
- 5. Other *approved* materials or methods.

Exception: Parging of unit masonry walls is not required where a material is *approved* for direct application to the masonry.

Concrete walls shall be treated for resistance to dampness by applying any one of the above listed materials or any one of the materials listed in Section R.406.2 to the exterior of the wall.

R406.2 <u>Concrete and masonry foundation water resistant barriers</u>. In areas where a high water table or other severe soil-water conditions are known to exist, exterior foundation walls that retain earth and enclose interior spaces and floors below grade shall be provided with water resistant barriers from the top of the footing to the finished grade. Such barriers shall be in accordance with one of the following:

- 1. 2-ply hot-mopped felts.
- 2. 55 pound (25 kg) roll roofing.
- 3. 6-mil (0.15 mm) polyvinyl chloride.
- 4. 6-mil (0.15 mm) polyethylene.
- 5. 40-mil (1 mm) polymer-modified asphalt.
- 6. 60-mil (1.5 mm) flexible polymer cement.
- 7. 1/8-inch (3 mm) cement-based, fiber-reinforced waterproof coating.
- 8. 60-mil, (0.22 mm) solvent-free, liquid-applied synthetic rubber.
- 9. Other approved materials or methods.

Exception: Organic-solvent-based products such as hydrocarbons, chlorinated hydrocarbons, ketones and esters shall not be used for ICF walls with expanded polystyrene form material. Plastic roofing cements, acrylic coatings, latex coatings, mortars and pargings are permitted to be used to seal ICF walls. Cold setting asphalt or hot asphalt shall conform to type C of ASTM D449. Hot asphalt shall be applied at a temperature of less than 200 degrees Fahrenheit (93 degrees Celsius).

All joints in membrane barriers shall be lapped and scaled with an adhesive compatible with the membrane.

R406.3 <u>Dampness resistance for wood foundations</u>. Wood foundations enclosing habitable or usable spaces located below grade shall be treated for resistance to dampness in accordance with Sections R406.3. 1 through R.406.3.4.

(s) <u>Wood floor framing design and construction</u>. Sections R502.2 and R502.3 arc hereby amended to read as follows:

R502.2 <u>Wood floor framing design and construction</u>. Floors shall be designed and constructed in accordance with the provisions of this chapter, Figure R.502.2 and Sections R317 and R318 or in accordance with ANSI AWC NDS. Basement floor-ceiling structural assemblies, where supporting a concrete floor slab above, shall be constructed in accordance with Section R502.3 and as applicable (figures contained in the City of Wolfforth Residential Foundation Details, adopted by reference as though fully set out herein).

R.502.3 <u>Allowable joist spans</u>. Spans for floor joists shall be in accordance with Tables R502.3. 1(1) and R502.3. 1 (2), as applicable. For the most current data, other grades and species, or other loading conditions, refer to the latest AF & PA Span Tables for Joists and Rafters and/or current data available from the American Wood Council.

(t) Concrete floors on ground, general. Section R506.1 is hereby amended to read as follows:

R506.1 <u>Concrete floors on ground, General</u>. Concrete slab-on-ground floors shall be a minimum 3.5 inches (89 mm) thick (for expansive soils, see Section R403.1.8). The specified compressive strength of concrete shall be as set forth in Section R402.2.

(u) <u>Alternative attachments to fastening schedule</u>. Footnote g to Table 602.3(2) is hereby deleted in its entirety.

(v) <u>Headers</u>. Section R602.7 is hereby amended as follows:

R602.7 <u>Headers</u>. For header spans, see Tables R602.7(1), R602.7(2) and R602.7(3). For the most current data, other grades and species, or other loading conditions, refer to the latest AF & PA Span Tables for Joists and Rafters and/or current data available from the American Wood Council.

(w) Garage door labeling. Section R609.4.1 is hereby deleted in its entirety.

(x) <u>Flashing</u>. Section R703.4 is hereby amended to read as follows:

R703.4 <u>Flashing</u>. *Approved* corrosion-resistive flashing shall be provided in the exterior wall envelope in such a manner as to prevent entry of water into the wall cavity or penetration of water to the building structural framing components. Self-adhered membranes used as flashing shall comply with AAMA 711. The flashing shall extend to the surface of the exterior wall finish and shall be installed to prevent water from re- entering the exterior wall envelope. *Approved* corrosion-resistant flashings shall be installed at all of the following locations:

1. At top of all exterior window and door openings in such a manner as to be leak proof.

2. At the intersection of chimneys or other masonry construction with frame or stucco walls, with projecting lips on both sides under stucco copings.

3. Under and at the ends of masonry, wood or metal copings and sills.

4. Continuously above all projecting wood or composite trim.

5. Where exterior porches, decks or stairs attach to a wall or floor assembly of wood-frame construction.

- 6. At wall and roof intersections.
- 7. At built-in gutters.

Exceptions:

1. The requirements of Item 3 above may be omitted if a poured concrete foundation is used with a minimum 8-inch brick ledge drop.

2. The requirements of Item 3 above may be omitted where soffits, porches or awnings serve as protection for the upper course of brick veneer.

TABLE 703.8.4 (1)				
THE ATTACHMENT AND AIRSPACE REQUIREMENTS				
BACKING AND TIE	MINIMUM TIE ^a	MINIMUM TIE FASTENER ^a	AIRSPACE	
Wood stud backing with corrugated sheet metal	22 U.S. gage (0.0299 in) x 7/8 in. wide	6D- 2" nail, ring shank or #8 – 2" screw	Nominal 1 in. between sheathing and veneer	
Wood stud backing with metal strand wire	W1.7 (No. 9 U.S. gage; 0.148 in) with hook embedded in mortar joint	60 – 2" nail, ring shank or #8 – 2" screw	Minimum nominal 1 in. between sheathing and veneer	Maximum 4-1/2 in. between backing and veneer
Cold-formed steel stud backing with adjustable metal strand wire	W1.7 (No. 9 U.S. gage; 0.148 in) with hook embedded in mortar joint	No. 10 screw extending through the steel framing a minimum of three exposed threads	Minimum nominal 1 in. between sheathing and veneer	Maximum 4-1/2 in. between backing and veneer

a. All ties and fasteners to be corrosion-resistant

(y) <u>Flashing</u>. Section R703.8.5 is hereby amended to read as follows:

R703.8.5 <u>Flashing</u>. Flashing shall be located beneath the first course of masonry within the first mortar bed joint above finished ground level above the foundation wall or slab and at other points of support, including structural floors, shelf angles and lintels that are not protected by caves or patio covers when masonry veneers are designed in accordance with Section R703.8. See Section R703.4 and the City of Wolfforth Residential Foundation Details for additional requirements.

Exception: The requirements of R703.8.5 may be omitted if a poured concrete foundation is used with a minimum 8-inch brick ledge drop and all exterior window and door openings are caulked with sealant.

(z) <u>Weepholes</u>. Section R703.8.6 is hereby amended to read as follows:

R703.8.6 <u>Weepholes</u>. Weepholes shall be provided in the outside wythe of masonry walls at a maximum spacing of 33 inches (838 mm) on center.

Weepholes shall not be less than 3/16 inch (5 mm) in diameter. Weepholes shall be located immediately above the flashing.

Exception: The requirements of R703.8.6 may be omitted if a poured concrete foundation is used with a minimum 8-inch brick ledge drop and all exterior window and door openings arc flashed in accordance with Section R703.8.5, as amended.

(aa) <u>Rafter size</u>. Section R802.4.1 is hereby amended to read as follows:

R.802.4.1 <u>Rafter size</u>. Rafters shall be sized based on the rafter spans in Tables R802.4.1 (1) through R802.4. I (8). For the most current data, other grades and species, or other loading conditions, refer to the latest AF & PA Span Tables for Joists and Rafters and/or current data available from the American Wood Council. Rafter spans shall be measured along the horizontal projection of the rafter.

(bb) Ceiling joist size. Section R802.5.1 is hereby amended to read as follows:

R802.5.1 <u>Ceiling joist size</u>. Ceiling joists shall be sized based on the joist spans in Tables R802.5.1(1) and R802.5.1(2). For the most current data, other grades and species, or other loading conditions, refer to the latest AF & PA Span Tables for Joists and Rafters and/or current data available from the American Wood Council.

(cc) <u>Ventilation required</u>. Section R806. 1 is hereby amended by adding the following exception after the section:

Exception: Attic ventilation shall not be required when drywall is installed directly on the interior side of the rafters, the roof deck is insulated with spray foam, or is deemed unnecessary by the building official due to atmospheric or climatic conditions.

(dd) <u>Roof re-cover not allowed</u>. Section R908.3.1.1 is hereby amended to read as follows:

R908.3.1.1 A roof recover shall not be permitted where any of the following conditions occur:

1. Where the existing roof or roof covering is water soaked or has deteriorated to the point that the existing roof or roof covering is not adequate as a base for additional roofing.

2. Where the existing roof covering is wood shake, slate, clay, cement, asbestos-cement tile, or asphalt, fiberglass or composition shingles.

3. Where the existing roof has two or more applications of any type of roof covering.

(ff) <u>Energy efficiency (Chapter 11)</u>. The entire text of Chapter 11 is hereby deleted and replaced with the following:

Chapter 11 - <u>Energy Efficiency</u>. One- and two-family dwellings shall comply with the applicable energy conservation provisions of the 2021 International Energy Conservation Code, as amended.

(ff) <u>Protection against physical damage</u>. Section M1308.2.1 is hereby amended to read as follows:

M1308.2.1 <u>Protection against physical damage</u>. In concealed locations where piping is installed through holes or notches in studs, joists, rafters or similar members less than 1.5 inches (38 mm) from the nearest edge of the framing member face to which wall, ceiling or floor membranes will be attached, the pipe shall be protected by steel shield plates. Such shield plates shall have a thickness of not less than 0.0575 inch (1.463 mm) (No. 16 gage). Such plates shall cover the area of the pipe where the member is notched or bored.

(gg) <u>Auxiliary and secondary drain systems</u>. Section M1411.3.1 is hereby amended to read as follows:

M1411.3.1 <u>Auxiliary and secondary drain systems</u>. In addition to the requirements of Section M1411.3.1, a secondary drain or auxiliary drain pan shall be required for each cooling or evaporator coil where damage to any building components will occur as a result of overflow from the equipment drain pan or stoppage in the condensate drain piping. Such piping shall maintain a minimum horizontal slope in the direction of discharge of not less than 1/8-unit vertical in 12 units horizontal (I-percent slope). Drain piping shall be a minimum of 3/4- inch (19 mm) nominal pipe site. One of the following methods shall be used:

1. An auxiliary drain pan with a separate drain shall be installed under the coils on which condensation will occur. The auxiliary pan drain shall discharge to a conspicuous point of disposal to alert occupants in the event of a stoppage of the primary drain. The pan shall have a minimum depth of 1.5 inches (38 mm), shall not be less than 3 inches (76 mm) larger than the unit or the coil dimensions in width and length and shall be constructed of corrosion-resistant material. Metallic pans shall have a minimum thickness of not less than 0.0276- inch (0.7 mm) galvanized sheet metal. Nonmetallic pans shall have a minimum thickness of not less than 0.0625 inch (1.6 mm).

2. A separate overflow drain line shall be connected to the drain pan installed with the *equipment*. This overflow drain shall discharge to a conspicuous point of disposal to alert occupants in the event of a stoppage of the primary drain. The overflow drain line shall connect to the drain pan at a higher level than the primary drain connection.

3. An auxiliary drain pan without a separate drain line shall be installed under the coils on which condensate will occur. This pan shall be equipped with a water-level detection device conforming to UL 508 that will shut off the equipment served prior to overflow of the pan. The auxiliary drain pan shall be constructed in accordance with Item 1 of this section.

(hh) Auxiliary drain pan. Section M1411.5 is hereby amended to read as follows:

M1411.5 <u>Auxiliary drain pan</u>. Category IV condensing appliances shall have an auxiliary drain pan where damage to any building component will occur as a result of stoppage in the condensate drainage system. These pans shall be installed in accordance with the applicable provisions of Section M1411.3.

(ii) Insulation of refrigerant piping. Section M1411 .6 is hereby amended to read as follows:

Section M1411.6. <u>Insulation of refrigerant piping</u>. Piping and fittings for refrigerant vapor (suction) lines shall be insulated with 3/8-inch (9.53 mm) wall closed cell insulation having a thermal resistivity of at least R = 2.D hr-ft² -- F/BTU and having external surface permanence not exceeding 0.05 perm [2.87 ng/(s * m² * Pa)] when tested in accordance with ASTM E96.

(jj) Locking port access caps. Section M1411.9 is hereby deleted.

(kk) Outdoor discharge. Section M1501.1 is hereby amended to read as follows:

M1501.1 <u>Outdoor discharge</u>. The air removed by every mechanical exhaust system shall be discharged to the outdoors in accordance with Section M1504.3. Air shall not be exhausted into an attic, soffit, ridge vent or crawl space.

Exception: Whole-house ventilation-type attic fans and bathroom ventilation fans that discharge into a ventilated attic space of dwelling units having private aUics shall be permitted.

(ll) <u>Duct termination</u>. Section M1502.3 is hereby amended to read as follows:

M1502.3. <u>Duct termination</u>. Exhaust ducts shall terminate on the outside of the building. Exhaust duct terminations shall be in accordance with the dryer manufacturer's installation instructions. If the manufacturer's instructions do not specify a termination location, exhaust ducts shall terminate not less than 3 feet (914 mm) in any direction from openings into buildings. Exhaust duct terminations shall be equipped with a backdraft damper. Screens shall not be installed at the duct termination.

Exception: Backdraft dampers shall not be required where exhaust ducts terminate vertically through the roof.

(mm) <u>Specified length</u>. Section M] 502.4.6.1 is hereby amended to read as follows:

M1502.4.6.1 <u>Specified length</u>. The maximum length of the exhaust duct shall be 35 feet (10,668 mm) from the connection to the transition duct from the dryer to the outlet terminal. Where fittings are used, the maximum length of the exhaust duct shall be reduced in accordance with Table M1502.4.6.1.

(nn) Recirculation of air. Section MI505.2 is hereby amended to read as follows:

M1505.2 Recirculation of air. Exhaust air from bathrooms and toilet rooms shall not be recirculated within a residence or circulated to another *dwelling unit*. Exhaust air from bathrooms and toilet rooms shall either discharge directly to the outdoors or into an attic space ventilated as required by Section R806 and at least 18 inches above the ceiling joists, or to a soffit or gable or eave vent. The terminal end of the exhaust duct shall be permanently secured in place.

(oo) <u>Underground duct systems</u>. Section M160 1.1.2 is hereby amended to read as follows:

M1601.1.2 Underground duct systems. Underground *duct systems* shall be constructed of approved concrete, clay, metal or plastic. The maximum design temperature for systems utilizing plastic duct and fittings shall be 150 F (66°C). Metal ducts shall be protected from corrosion in an *approved* manner or shall be completely encased in concrete not less than 2 inches (51 mm) thick. Nonmetallic ducts shall be installed in accordance with the manufacturer's instructions. Plastic pipe and fitting materials shall conform to cell classification 12454-B of ASTM D1248 or ASTM D1784 and external loading properties of ASTM D2412. Ducts shall slope to a drainage point that has access. Ducts shall be verified as required by Section R403.3 of the International Energy Conservation Code, as amended. Metallic ducts having an *approved* protective coating and nonmetallic ducts shall be installed in accordance with the manufacturer's instructions.

Location. Section M2006 is hereby amended by the addition of a new subsection M2006.5 to read as follows:

M2006.5 Location. Pool heaters shall be located or protected to guard against accidental contact of hot surfaces by persons. Compliance with this Section may be accomplished by installing pool and spa heaters in an equipment room or building, or by enclosure with a fence or other suitable barrier.

(pp) <u>Protection methods against corrosion</u>. Section 02415.11.2 (404.11.2) is hereby amended to read as follows:

G2415.11.2 (404.11.2) <u>Protection methods</u>. Underground piping shall comply with one or more of the following:

1. The *piping* shall be made of corrosion-resistant material that is suitable for the environment in which it will be installed.

2. Pipe shall have a factory-applied, electrically-insulating coating. Fittings and joints between sections of coated pipe shall be coated in accordance with the coating manufacturer's instructions.

3. The *piping* shall have a cathodic protection system installed and the system shall be monitored and maintained in accordance with an approved program.

4. *Approved* protective coatings or wrap may be field installed if piping that has a factory-applied, electrically-insulating coating is not readily available.

(qq) Located at manifold. Section G2420.5.3 (409.5.3) is hereby amended to read as follows:

G2420.5.3 (409.5.3) <u>Located at manifold</u>. Where the *appliance* shutoff valve is installed at a manifold, such shutoff valve shall be located within 50 feet (15,240 mm) of the *appliance* served and shall be readily accessible and permanently identified. The *piping* from the manifold to within 6 feet (1829 mm) of the *appliance* shall be designed, sized and installed in accordance with Sections 02412 (401) through 02419 (408). Shutoff valves located within attic spaces shall not be considered readily accessible.

(ss) <u>Pressure regulators</u>. Section 02421.1 (410.1) is hereby amended to read as follows:

02421.1 (410.1) <u>Pressure regulators</u>. A line pressure regulator shall be installed where the appliance is designed to operate at a lower pressure than the supply system. Access shall be provided to pressure regulators. Pressure regulators shall be protected from physical damage. Regulators installed on the exterior of the building shall be approved for outdoor installation. All regulators must be installed near a walkway or an access point.

(tt) Log lighters. Section 02433 (603) is hereby deleted in its entirety.

(uu) Exhaust installation. Section 02439.3 (614.4) is hereby amended to read as follows:

02439.3 (614.4) Exhaust installation. Dryer exhaust ducts for clothes dryers shall terminate on the outside of the building and shall be equipped with a backdraft damper. Screens shall not be installed at the duct termination. Ducts shall not be connected or installed with sheet metal screws or other fasteners that will obstruct the flow. Clothes dryer exhaust ducts shall not be connected to a vent connector, vent or chimney. Clothes dryer exhaust ducts shall not extend into or through ducts or plenums unless properly sleeved with materials conforming to Section 602.2.1 of the International Mechanical Code (in the case of plenums), or with materials meeting the requirements for Class O or 1 duct materials (in the case of ducts). Backdraft dampers shall not be required for vertical terminations through roofs.

(vv) Building sewer testing. Section P2503.4 is hereby amended to read as follows:

P2503.4. <u>Building sewer testing</u>. The building sewer shall be tested by the insertion of a test plug at the point of connection with the public sewer and filling the building sewer with water, testing with not less than a 5-foot (1524 mm) head of water and be able to maintain such a pressure for fifteen (15) minutes.

(ww) <u>Rough plumbing</u>. Section P2503.5.1 is hereby amended to read as follows:

P2503.5.1 <u>Rough plumbing</u>. DWV systems shall be tested on completion of the rough piping installation by water or air with no evidence of leakage. Either test shall be applied to the drainage system in its entirety or in sections after rough piping has been installed, as follows:

1. Water test. Each Section shall be filled with water to a point not less than5 feet (1524 mm) above the highest fitting connection in that section, or to the highest point in the completed system. Water shall be held in the section under test for a period of 15 minutes. The system shall prove leak free by visual inspection.

2. Air test. The portion under test shall be maintained al a gauge pressure of 5 pounds per square inch (psi) (34 kPa) or 10 inches of mercury column (34 kPa). This pressure shall be held without introduction of additional air for a period of 15 minutes. Exception: Air tests shall not be used on PVC piping if not approved by the piping manufacturer.

(xx) <u>Finished plumbing</u>. Section P2503.5.2 is hereby amended to read as follows:

P2503.5.2 Finished plumbing. After the plumbing fixtures have been set and their traps filled with water, their connections shall be tested and proved gaslight and/or watertight as follows:

1. Water tightness. Top out inspection shall be water tested to no less than the top of the washing machine box drain. Each fixture shall be filled and then drained. Traps and fixture connections shall be proven water tight by visual inspection.

2. Gas tightness. When required by the building official, a final test for gas tightness of the DWV system shall be made by the smoke or peppermint test as follows:

2.1 Smoke test. Introduce a pungent, thick smoke into the system. When the smoke appears at vent terminals, such terminals shall be sealed and a pressure equivalent to a I-inch water column (249 Pa) shall be applied and maintained for a test period of not less than 15 minutes.

2.2 Peppermint test. Introduce 2 ounces (59 mL) of oil of peppermint into the system. Add 10 quarts (9464 mL) of hot water and seal all vent terminals. The odor of peppermint shall not be detected at any trap or other point in the system.

(yy) Shower liner test. Section P2503.6 is hereby deleted.

(zz) <u>Protection against physical damage</u>. Section P2603.2.1 is hereby amended to read as follows:

P2603.2. 1 Protection against physical damage. In concealed locations, where piping, other than cast-iron or galvanized steel, is installed through holes or notches in studs, joists, rafters or similar members less than 1.5 inches (38 mm) from the nearest edge of the member, the pipe shall be protected by steel shield plates. Such shield plates shall have a thickness of not less than 0.0575 inch (1.463 mm) (No. 16 gage). Such plates shall cover the area of the pipe where the member is notched or bored.

(aaa) Pan size and drain. Section P2801.6.1 is hereby amended to read as follows:

P2801.6. l Pan size and drain. The pan shall be not less than 1.5 inches (38 mm) deep and shall be of sufficient size and shape to receive all dripping and condensate from the tank or water heater. The pan shall be drained by an indirect waste pipe having a minimum diameter of 3/4 inch (19 mm) or the outlet diameter of the relief valve, whichever is larger. Piping for safety pan drains shall be of those materials listed in Table P2906.5, except that PVC meeting ASTM DI 785, D2241 or D2672 shall also be considered an acceptable material for this purpose. Where a pan was not previously installed, a pan drain shall not be required for a replacement water heater installation.

(bbb) <u>Water heaters installed in garages</u>. Section P2801.7 is hereby amended to read as follows:

P2801.7 <u>Water heaters installed in garages</u>. Water heaters having an ignition source shall be elevated such that the source of ignition is not less than 18 inches (457 mm) above the garage floor.

Exceptions:

1. Elevation of the *ignition source* is not required for fuel gas-fired water heaters that arc listed as flammable vapor ignition-resistant. (Sec Section 02408.2).

2. Electric water heaters are not required to be elevated, as the elements are not considered an *ignition source*.

(ccc) Vacuum relief valve. Section P2804.7 is hereby amended to read as follows:

P2804.7 Vacuum relief valve. Bottom fed tank-type water heaters and bottom fed tanks connected to water heaters shall have a vacuum relief valve installed that complies with ANSI 221.22.

Exception: Where such water heaters and tanks are part of a circulating hot water system and have a storage capacity of ten gallons or less.

(ddd) Water hammer. Section P2903.5 is hereby deleted in its entirety.

(eee) Hose bibb bleed. Section P2903.8.5 is hereby deleted.

(fff) Service valve. Section P2903.9.1 is hereby amended to read as follows:

P2903.9.1 <u>Service valve</u>. Where indicated below, each *dwelling unit* shall be provided with an accessible main shutoff valve. The valve shall be of a full-open type having nominal restriction to flow. Service valves shall be installed in the following locations:

1. On the water service pipe from the public water supply at or near the water meter.

2. On the water service pipe at the entrance into the building(s) if the service valve required by (1) above is more than 100 feet (30.48 m) from said building(s).

3. On the water supply pipe to a gravity or pressurized water tank.

4. On the water supply pipe to every water heater.

(ggg) Hose bibb. Section P2903.10 is hereby deleted.

(hhh) <u>Horizontal to vertical (multiple connection fittings)</u>. Section P3005.1.1. is hereby amended to read as follows:

P3005.1.1 Horizontal to vertical (multiple connection fittings). Double fittings such as double sanitary tees and tee-wyes or *approved* multiple connection fittings and back-to-back fixture arrangements that connect two or more branches at the same level shall be permitted as long as directly opposing connections are the same size and the discharge into directly opposing connections is from similar fixture types or fixture groups. Double sanitary tee patterns shall not receive the discharge of back-to-back water closets and fixtures or *appliances* with pumping action discharge.

(iii) (<u>Cleanouts at) Building drain and building sewer junction</u>. Section P3005.2.3 is hereby amended to read as follows:

P3005.2.3 (<u>Cleanouts at</u>) <u>Building drain and building sewer junction</u>. The junction of the building drain and the building sewer shall be served by a two- way cleanout that is located at the junction or within 10 feet (3048 mm) of developed length of piping upstream of the junction. Where the depth of the horizontal building drain at the two-cleanout location exceeds 4 feet (1219.2 mm), a two-pipe two-way cleanout shall be provided. For the requirements of this section, removal of a water closet shall not be required to provide cleanout access.

(jjj) <u>Electrical</u>. Part VIII, Chapters 34-43 inclusive, is hereby deleted and replaced with the following:

Chapters 34-43 - Electrical. One- and two-family dwellings shall comply with the applicable electrical provisions of the 2020 National Electrical Code, as amended.

Part 2. Open Meetings Act

This meeting was open to the public as required by law and that public notice of the time, place, and purpose of said meeting was given as required.

Part 3. Severability Clause

If any section, sub-section, clause, phrase, or portion of this ordinance shall be held unconstitutional or invalid by a court of competent jurisdiction, such section, sub-section, sentence, clause, phrase, or portion shall be deemed to be a separate, distinct and independent provision and such invalidity shall not affect the validity of the remaining portions.

Part 4. Repeal

All ordinances or parts of ordinances and sections of any of the City Code of Ordinances in conflict with this Ordinance are hereby repealed.

Part 5. Effect on Pending Proceedings

That nothing in this legislation or in the Residential Code hereby adopted shall be construed to affect any suit or proceeding pending in any court, or any rights acquired, or liability incurred, or any cause or causes of action acquired or existing, under any act or ordinance hereby repealed

as cited in Part 4 of this Ordinance; nor shall any just or legal right or remedy of any character be lost, impaired or affected by this legislation.

Part 6. Publication

The City Secretary is authorized and directed to publish the caption and penalty prescribed by this ordinance in accordance with State Law.

Part 7. Enforcement

Any person, firm or individual who shall violate any of the provisions of this Ordinance shall be guilty of a misdemeanor, and upon conviction shall be fined not less than one dollar (\$1.00) or more than two thousand dollars (\$2,000.00) in accordance with Code of Ordinance Sec. 1.01.009. Each day the violation continues shall constitute a separate and distinct offense.

Part 8. Effective Date

This Ordinance shall be in force and effect from and after October 1, 2024.

CITY OF WOLFFORTH

CHARLES ADDINGTON II, MAYOR

ATTEST:

Terri Robinette, City Secretary