AN ORDINANCE AMENDING THE LAND DEVELOPMENT CODE OF THE CITY OF IRVING, TEXAS, BY AMENDING SECTIONS 8B-6 THROUGH 8B-8, ADOPTING THE 2021 EDITION OF THE INTERNATIONAL RESIDENTIAL CODE AS THE RESIDENTIAL BUILDING CODE FOR THE CITY OF IRVING, TEXAS; PROVIDING LOCAL AMENDMENTS, ADDITIONS, AND DELETIONS THERETO; ADOPTING PENALTY PROVISIONS; AND PROVIDING FOR SEVERABILITY, SAVINGS, AND AN EFFECTIVE DATE.

WHEREAS, the North Central Texas Council of Governments encourages local jurisdictions to adopt the 2021 International Codes; and

WHEREAS, the Construction Board of Appeals, among its other duties, has been created to obtain public comment on the periodic update of the code; and

WHEREAS, the Construction Board of Appeals has conducted a public meeting to receive public comments from persons affected by the proposed amendments to the code, and recommends adoption of the 2021 International Residential Code as the residential building code for the City with the following local amendments;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF IRVING, TEXAS:

SECTION 1. That Chapter 8B entitled “Building Codes” of The Land Development Code of the City of Irving, Texas, is hereby amended by amending Sections 8B-6, 8B-7, and 8B-8 to read as follows:

Sec. 8B-6. International Residential Code.

Sec. 8B-7. Local Amendments, additions, and deletions to the 2021 edition of the International Residential Code.
Amendments included in this section are intended to be specific code provisions. If there is a conflict between a provision in the published 2021 International Residential Code and this section, the specific provisions of this section shall control. Amendments, modifications, and deletions to the 2021 International Residential Code are adopted as follows:
a) Chapter 1 (Scope and Administration), Section R101.1 (Scope and General Requirements) is amended to read as follows:

**R101.1 Title.** These regulations shall be known as the Residential Code for One- and Two- family Dwellings of the City of Irving, and shall be cited as such and will be referred to herein as “this code” or “IRC.”

b) Chapter 1 (Scope and Administration), Section R102.4 is amended to read as follows:

**R102.4 Referenced codes and standards.** The codes, when specifically adopted, and standards referenced in this code shall be considered part of the requirements of this code to the prescribed extent of each such reference and as further regulated in Sections R102.4.1 and R102.4.2. Whenever amendments have been adopted to the referenced codes and standards, each reference to said code and standard shall be considered to reference the amendments as well. Any reference made to NFPA 70 or the Electrical Code shall mean the Electrical Code as adopted.

c) Chapter 1 (Scope and Administration), Section R103.1 is amended to read as follows:

**R103.1 Creation of enforcement agency.** The Department of Inspections is hereby created and the official in charge thereof shall be known as the building official.

d) Chapter 1 (Scope and Administration), Section R104 (Duties and Powers of the Building Official), Subsection R104.10.1 (Flood Hazard areas) is hereby deleted in its entirety.

e) Chapter 1 (Scope and Administration), Section R105 (Permits), Subsection R105.1 is amended to add:

105.1.1 Permits that have been approved for which payment has not been received within 14 days may be cancelled.

105.1.2 Permits may be cancelled for a lack of continuous and reasonable progress comparable to similar projects.

f) Chapter 1 (Scope and Administration), Section R105 (Permits), subsection R105.2 is amended to read as follows:

**R105.2 Work exempt from permit.** Exemption from permit requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction. Permits shall not be required for the following:

**Building**

1. Other than storm shelters, one-story detached accessory structures, not exceeding 6 feet in any dimension (includes height measured from adjacent grade to the highest point of the roof).
2. Fences require permits in accordance with Chapter 15 "Fences" of The Land Development Code of the City of Irving, Texas.
3. Installation or repair of retaining walls which are not over 30 inches in height of exposed face, unless supporting a surcharge or impounding Class I, II, or III-A liquids.
4. Water tanks supported directly on grade if the capacity is not greater than 5,000 gallons (18 925 L) and the ratio of height to diameter or width is not greater than 2:1.
5. Sidewalks and driveways.
   a. Sidewalks not exceeding 4 feet in width, which are:
      i. On private property;
      ii. Not more than 30 inches above adjacent grade; and
      iii. Not over any basement or story below.
   b. Paving or driveways, which are:
      i. On private property;
      ii. Not exceeding 1,000 square feet in area;
      iii. Not creating or reconfiguring parking spaces; and
      iv. Not replacing any required landscape area.
6. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.
7. Prefabricated swimming pools that are less than 24 inches (610 mm) deep.
8. Swings and other playground equipment other than indoor children's play structures as regulated by this code.
9. Window awnings supported by an exterior wall that do not project more than 54 inches (1372 mm) from the exterior wall and do not require additional support.
10. Decks not exceeding 200 square feet (18.58 m2) in area, that are not more than 30 inches (762 mm) above grade at any point, are not attached to a dwelling and do not serve the exit door required by Section R311.4.

  g) Chapter 1 (Scope and Administration), Section R105 (Permits), Subsection R105.3.1.1 (Determination of substantially improved or substantially damaged existing buildings in flood hazard areas) is hereby deleted in its entirety.
  h) Chapter 1 (Scope and Administration), Section R106 (Construction Documents), Subsection R106.1.4 (Information for construction in flood hazard areas) is hereby deleted in its entirety.
  i) Chapter 1 (Scope and Administration), Section R110 (Certificate of Occupancy) is hereby deleted in its entirety.
  j) Chapter 2 (Definitions), Section R202 (Definitions) is amended to change the definition of “Townhouse Unit” to read as follows:

    **TOWNHOUSE UNIT.** A single-family dwelling unit separated by property lines in a townhouse that extends from foundation to roof and that has a yard or public way on not less than two sides.

  k) Chapter 3 (Building Planning), Section R301 (Design Criteria), Subsection R301.1 (Application) is amended to add Section R301.1.5 to read as follows:

    **301.1.5 Zones**

    1. **Two zones.** For the purposes of this code, certain sections of the city are zones subject to significant noise from aircraft. These zones are the "65-70 DNL noise zone" and the "over 70 DNL noise zone."
2. **Map.** These noise zones shall include such territory or portions of the city as are designated and shown on the aircraft noise impact map (a copy of which is on file with the building official) and incorporated into this code and made a part of it for all intents and purposes.

3. **Certified plans.** The building official shall not issue a building permit for any building or structure within the noise zones shown on the aircraft noise impact map unless the plans and specifications accompanying the application for the permit are certified by a bona fide acoustical consultant as meeting the required noise level reduction standards of this section.

4. **Noise consultants.** Bona fide acoustical noise consultants include members of the National Council of Acoustical Consultants and others who are approved by the building official, such approval being based on the demonstration of competence and credentials in the area of architectural acoustics.

5. **Building intrusion in a noise zone.** A building or structure which is located partly within a noise zone and partly without or located partly within one noise zone and partly within another noise zone shall be considered within the most restrictive of the noise zones within which it is located for purposes of this section.

6. **Noise reductions standards.** Plans for the construction of buildings or structures within noise zones shall be certified as achieving at least the outdoor to indoor noise level reductions as measured in decibels within the building as follows:

<table>
<thead>
<tr>
<th>Building Use</th>
<th>65-70 DNL Noise Zone</th>
<th>Over 70 DNL Noise Zone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential: Residential within each unit including transient lodgings.</td>
<td>25</td>
<td>30</td>
</tr>
<tr>
<td>Public: Schools, hospitals, and nursing homes</td>
<td>25</td>
<td>30</td>
</tr>
</tbody>
</table>

1) Chapter 3 (Building Planning), Section R301 (Design Criteria), Subsection R301.1 (Application) is amended to add Subsection 301.1.6 to read as follows:

**301.1.6 Retaining Walls.**

1. Retaining walls shall be designed, inspected, and approved by a registered structural engineer.
2. Retaining walls which require a permit shall not be constructed of wood.
3. The proper performance of retaining walls shall not be based on restrictions or requirements placed on property owners which will require
future design or review by the retaining wall design engineer. Any exposed soil in the vicinity of a retaining wall shall be assumed to be landscaped and irrigated. Restrictions that may deprive property owners of full use and enjoyment of property shall not be included in the design or related maintenance requirements of a retaining wall.

4. **Exception:** Restrictions that are clearly stated in easements which are designated on the subdivision plat of record.

m) Chapter 3 (Building Planning), Table R301.2(1) is amended to fill in the blanks with the following table, delete “Manual J Design Criteria,” and delete footnote “n”:

<table>
<thead>
<tr>
<th>GROUND SNOW LOAD</th>
<th>WIND DESIGN</th>
<th>SEISMIC DESIGN CATEGORY</th>
<th>SUBJECT TO DAMAGE FROM</th>
<th>WINTER DESIGN TEMP.</th>
<th>ICE BARRIER UNDERM.</th>
<th>FLOOD HAZARDS</th>
<th>AIR-FREEZING IND.</th>
<th>MEAN ANNUAL TEMP.</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 lb/ft²</td>
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<td></td>
<td>115 (3 asses.</td>
<td>No</td>
<td>No</td>
<td>Moderate</td>
<td>0°F</td>
<td>No</td>
<td>150</td>
<td>64.9°F</td>
</tr>
</tbody>
</table>

n) Chapter 3 (Building Planning), Section R302 (Fire-Resistant Construction), Subsection R302.1 (Exterior Walls) is amended to add exception number 6:

6. When allowed by other adopted ordinances, open, non-combustible carport structures may be constructed within 3 feet of the property line without fire-resistant construction or opening protection.

o) Chapter 3 (Building Planning), Section R302 (Fire-Resistant Construction), Subsection R302.2 (Townhouses), Subsection R302.2.6 (Structural Independence) is amended to delete exception number 6 in its entirety.

p) Chapter 3 (Building Planning), Section R302 (Fire-Resistant Construction), Subsection R302.3 (Two-family dwellings) is amended to add exception number 3:

3. Two-family dwelling units that are also divided by a property line through the structure shall be separated as required for townhouses.

q) Chapter 3 (Building Planning), Section R302 (Fire-Resistant Construction), Subsection R302.5.1 is amended to read as follows:

**R302.5.1 Opening protection.** 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 13/8 inches (35 mm) in thickness, solid or honeycomb core steel doors not less than 13/8 inches (35 mm) thick, or 20-minute fire-rated doors.

r) Chapter 3 (Building Planning), Section R303 (Light, Ventilation and Heating), Subsection R303.3 (Bathrooms) is amended to read as follows:

**R303.3 Bathrooms.** 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 shall 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 M1505. Exhaust air from the space shall be exhausted directly to the outdoors. Spaces containing only a water closet or water closet and a lavatory may be ventilated with an approved mechanical recirculating fan or similar device designed to remove odors from the air.

s) Chapter 3 (Building Planning), Section R307 (Toilet, Bath and Shower Spaces) is amended to add the following:

**R307.3 Blocking.** Required at one toilet at grade level. Blocking per Sec. R307.4 and Figure 307.4, shall be installed at rear wall and one wall adjacent to toilet at the lowest living level where a toilet is provided.

**R307.4 Blocking.** Blocking may be ½” plywood or equivalent or 2 x solid wood blocking flush with wall.

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t) Chapter 3 (Building Planning), Section R313 (Automatic Fire Sprinkler Systems) is deleted, and the 2021 International Fire Code as adopted by the City of Irving shall control.

u) Chapter 3 (Building Planning), Section R322 (Flood-Resistant Construction) is hereby deleted in its entirety.

v) Chapter 3 (Building Planning), Section R327 (Swimming Pools, Spas and Hot Tubs) is amended to add Subsection R327.1.1 to read as follows:

**Section 327.1.1 Adjacency to Structural Foundation.** Depth of the swimming pool and spa shall maintain a ratio of 1:1 from the nearest building foundation or footing of a retaining wall.

**Exception:** A sealed engineered design drawing of the proposed new structure shall be submitted for approval.

w) Chapter 4 (Foundations), Section R401 (General), Subsection R401.2 is amended to read as follows:

**R401.2 Requirements.** Foundation construction shall be capable of accommodating all loads in accordance with Section R301 and of transmitting the resulting loads to the supporting soil. Fill soils that support footings and foundations...
shall be designed, installed and tested in accordance with accepted engineering practice. Every foundation and/or footing, or any size addition to an existing post-tension foundation, regulated by this code shall be designed and sealed by a Texas-registered engineer.

x) Chapter 6 (Wall Construction), Section R602 (Wood Wall Framing), Subsection 602.6.1 is amended to read as follows:

**R602.6.1 Drilling and notching of top plate.** When piping or ductwork is placed in or partly in an exterior wall or interior load-bearing wall, necessitating cutting, drilling or notching of the top plate by more than 50 percent of its width, a galvanized metal tie not less than 0.054 inch thick (1.37 mm) (16 Ga) and 5 inches (127 mm) wide shall be fastened across and to the plate at each side of the opening with not less than eight 10d (0.148 inch diameter) having a minimum length of 1 ½ inches (38 mm) at each side or equivalent. Fasteners will be offset to prevent splitting of the top plate material. The metal tie must extend a minimum of 6 inches past the opening. See figure R602.6.1.

**Exception:** Where the entire side of the wall with the notch or cut is covered by wood structural panel sheathing.

y) Chapter 6 (Wall Construction), Section R602 (Wood Wall Framing), Figure R602.6.1 is deleted and the following new Figure R602.6.1 is inserted:

![Diagram of top plate notching](image)

z) Chapter 7 (Wall Covering), Section R703 (Exterior Covering), Subsection R703.8 (Anchored stone and masonry veneer, general.) is amended to add R703.8.4.1.2 to read as follows:

**R703.8.4.1.2 Veneer Ties for Wall Studs.** In stud framed exterior walls, all ties may be anchored to studs as follows:

1. When studs are 16 in (407 mm) o.c., stud ties shall be spaced no further apart than 24 in (737 mm) vertically starting approximately 12 in (381 mm) from the foundation; or
2. When studs are 24 in (610 mm) o.c., stud ties shall be spaced no further apart than 16 in (483 mm) vertically starting approximately 8 in (254 mm) from the foundation.

aa) Chapter 9 (Roof Assemblies), Section R902 (Fire Classification), Subsection R902.1 is amended to read as follows:

**R902.1 Roofing covering materials.** Roofs shall be covered with materials as set forth in Sections R904 and R905. Class A, B, or C roofing shall be installed. Class A, B and C roofing required by this section to be listed shall be tested in accordance with ASTM E108 or UL 790.

**Exception:**

1. Class A roof assemblies include those with coverings of brick, masonry, and exposed concrete roof deck.
2. Class A roof assemblies include ferrous or copper shingles or sheets, metal sheets and shingles, clay or concrete roof tile, or slate installed on noncombustible decks.
3. Class A roof assemblies include minimum 16 ounces per square foot (4.882 kg/m²) copper sheets installed over combustible decks.
4. Class A roof assemblies include slate installed over underlayment over combustible decks.
5. Non-classified roof coverings shall be permitted on one-story detached accessory structures used as tool and storage sheds, playhouses, and similar uses, provided the floor area does not exceed 400 square feet.

bb) Chapter 11 [RE] (Energy Efficiency) is hereby deleted in its entirety and the reader is directed to the 2021 International Energy Conservation Code, as adopted by the City of Irving, for residential energy provisions.

cc) Chapter 13 (General Mechanical System Requirements), Section M1305 (Appliance Access), Subsection M1305.1.2 is amended to read as follows:

**M1305.1.2 Appliances in attics.** Attics containing appliances shall be provided with an opening and a clear and unobstructed passageway large enough to allow removal of the largest appliance, but not less than 30 inches (762 mm) high and 22 inches (559 mm) wide and not more than 20 feet (6096 mm) long measured along the centerline of the passageway from the opening to the appliance. The passageway shall have continuous solid flooring in accordance with Chapter 5 not less than 24 inches (610 mm) wide. A level service space not less than 30 inches (762 mm) deep and 30 inches (762 mm) wide shall be present along all sides of the appliance where access is required. The clear access opening dimensions shall be not less than of 20 inches by 30 inches (508 mm by 762 mm), and large enough to allow removal of the largest appliance. As a minimum, for access to the attic space, provide one of the following:

1. A permanent stair.
2. A pull down stair with a minimum 300 lb (136 kg) capacity.
3. An access door from an upper floor level.

**Exceptions:**
1. The passageway and level service space are not required where the appliance can be serviced and removed through the required opening.

2. Where the passageway is unobstructed and not less than 6 feet (1829 mm) high and 22 inches (559 mm) wide for its entire length, the passageway shall be not more than 50 feet (15 250 mm) long.

dd) Chapter 14 (Heating and Cooling Equipment and Appliances), Section M1411 (Heating and Cooling Equipment), Subsection M1411.3 is amended to read as follows:

**M1411.3 Condensate disposal.** Condensate from all cooling coils or evaporators shall be conveyed from the drain pan outlet to a sanitary sewer through a trap, by means of a direct or indirect drain. 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 (1-percent slope). Condensate shall not discharge into a street, alley or other area where it would cause a nuisance.

ee) Chapter 14 (Heating and Cooling Equipment and Appliances), Section M1411 (Heating and Cooling Equipment), Subsection M1411.3.1 is amended to read as follows:

**M1411.3.1 Auxiliary and secondary drain systems.** In addition to the requirements of Section M1411.3, 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 (1-percent slope). Drain piping shall be not less than 3/4-inch (19 mm) nominal pipe size. 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 be not 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. Galvanized sheet steel pans shall have a minimum thickness of not less than 0.0236-inch (0.6010 mm) (No. 24 Gage). 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 condensation 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 pan shall be equipped with a fitting to allow for drainage. The auxiliary drain
pan shall be constructed in accordance with Item 1 of this section. A water level detection device may be installed only with prior approval of the building official.

4. A water-level detection device conforming to UL 508 shall be installed that will shut off the equipment served in the event that the primary drain is blocked. The device shall be installed in the primary drain line, the overflow drain line or the equipment-supplied drain pan, located at a point higher than the primary drain line connection and below the overflow rim of such pan. A water level detection device may be installed only with prior approval of the building official.

ff) Chapter 14 (Heating and Cooling Equipment and Appliances), Section M1411 (Heating and Cooling Equipment), Subsection M1411.3.1.1 is amended to read as follows:

M1411.3.1.1 Water-level monitoring devices. On down-flow units and other coils that do not have secondary drain or provisions to install a secondary or auxiliary drain pan, a water-level monitoring device shall be installed inside the primary drain pan. This device shall shut off the equipment served in the event that the primary drain becomes restricted. Devices shall not be installed in the drain line. A water level detection device may be installed only with prior approval of the building official.

gg) Chapter 15 (Exhaust Systems), Section M1503 (Domestic Cooking Exhaust Equipment), Subsection M1503.6 is amended to read as follows:

M1503.6 Makeup air required. Where one or more gas, liquid or solid fuel-burning appliance that is neither direct-vent nor uses a mechanical draft venting system is located within a dwelling unit’s air barrier, each exhaust system capable of exhausting in excess of 400 cubic feet per minute (0.19 m³/s) shall be mechanically or passively provided with makeup air at a rate approximate to the difference between exhaust air rate and 400 cubic feet per minute. Such makeup air systems shall be equipped with not fewer than one damper complying with Section M1503.6.2

Exception: Makeup air is not required for exhaust systems installed for the exclusive purpose of space cooling and intended to be operated only when windows or other air inlets are open. Where all appliances in the house are of sealed combustion, power-vent, unvented, or electric, the exhaust hood system shall be permitted to exhaust up to 600 cubic feet per minute (0.28 m³/s) without providing makeup air. Exhaust hood systems capable of exhausting in excess of 600 cubic feet per minute (0.28 m³/s) shall be provided with a makeup air at a rate approximately to the difference between the exhaust air rate and 600 cubic feet per minute

hh) Chapter 20 (Boilers and Water Heaters), Section M2005 (Water Heaters), Subsection M2005.2 is amended to read as follows:

M2005.2 Prohibited locations. Fuel-fired water heaters shall not be installed in a room used as a storage closet. Water heaters located in a bedroom or bathroom shall be installed in a sealed enclosure so that combustion air will not be taken from
the living space. Access to such enclosure may be from the bedroom or bathroom when through a solid door, weather-stripped in accordance with the exterior door air leakage requirements of the International Energy Conservation Code and equipped with an approved self-closing device. Installation of direct-vent water heaters within an enclosure is not required.

ii) Chapter 24 (Fuel Gas), Section G2408 (305) [Installation], Subsection G2408.3 (305.5) [Private Garages] is hereby deleted in its entirety.

jj) Chapter 24 (Fuel Gas), Section G2415 (404) [Piping System Installation], Subsection G2415.2 (404.2) is amended to read as follows:

**G2415.2 (404.2) CSST.** CSST piping systems shall be installed in accordance with the terms of their approval, the conditions of listing, the manufacturer’s instructions and this code. Both ends of each section of medium pressure gas piping shall identify its operating gas pressure with an approved tag. The tags are to be composed of aluminum or stainless steel and the following wording shall be stamped into the tag: "WARNING: 1/2 to 5 psi gas pressure - Do Not Remove"

kk) Chapter 24 (Fuel Gas), Section G2415 (404) [Piping System Installation], Subsection G2415.12 (404.12) are amended to read as follows:

**G2415.12 (404.12) Minimum burial depth.** Underground piping systems shall be installed a minimum depth of 18 inches (457 mm) below grade.

ll) Chapter 24 (Fuel Gas), Section G2415 (404) [Piping System Installation], Subsection G2415.12.1 (404.12.1) Individual Outdoor Appliances is deleted in its entirety.

mm) Chapter 24 (Fuel Gas), Section G2417 (406) [Inspection, Testing and Purging] Subsection G2417.1 (406.1) is amended to read as follows:

**G2417.1 (406.1) General.** Prior to acceptance and initial operation, all piping installations shall be inspected and pressure tested to determine that the materials, design, fabrication, and installation practices comply with the requirements of this code. The permit holder shall make the applicable tests prescribed in Sections 2417.1.1 through 2417.1.5 to determine compliance with the provisions of this code. The permit holder shall give reasonable advance notice to the building official when the piping system is ready for testing. The equipment, material, power and labor necessary for the inspections and test shall be furnished by the permit holder and the permit holder shall be responsible for determining that the work will withstand the test pressure prescribed in the following tests.

nn) Chapter 24 (Fuel Gas), Section G2417 (406) [Inspection, Testing and Purging] Subsection G2417.4 (406.4) is amended to read as follows:

**G2417.4 (406.4) Test pressure measurement.** Test pressure shall be measured with a monometer or with a pressure-measuring device designed and calibrated to read, record, or indicate a pressure loss caused by leakage during the pressure test period. The source of pressure shall be isolated before the pressure tests are made.

oo) Chapter 24 (Fuel Gas), Section G2417 (406) [Inspection, Testing and Purging] Subsection G2417.4.1 (406.4.1) is amended to read as follows:

**G2417.4.1 (406.4.1) Test pressure.** The test pressure to be used shall be no less than 3 psig (20 kPa gauge), or at the discretion of the Code Official, the piping and
valves may be tested at a pressure of at least six (6) inches (152 mm) of mercury, measured with a manometer or slope gauge. For tests requiring a pressure of 3 psig, diaphragm gauges shall utilize a dial with a minimum diameter of three and one half inches (3 ½”), a set hand, 1/10 pound incrementation and pressure range not to exceed 6 psi for tests requiring a pressure of 3 psig. For tests requiring a pressure of 10 psig, diaphragm gauges shall utilize a dial with a minimum diameter of three and one-half inches (3 ½”), a set hand, a minimum of 2/10 pound incrementation and a pressure range not to exceed 20 psi. For welded piping, and for piping carrying gas at pressures in excess of fourteen (14) inches water column pressure (3.48 kPa) (1/2 psi) and less than 200 inches of water column pressure (52.2 kPa) (7.5 psi), the test pressure shall not be less than ten (10) pounds per square inch (69.6 kPa). For piping carrying gas at a pressure that exceeds 200 inches of water column (52.2 kPa) (7.5 psi), the test pressure shall be not less than one and one-half times the proposed maximum working pressure. Diaphragm gauges used for testing must display a current calibration and be in good working condition. The appropriate test must be applied to the diaphragm gauge used for testing.

pp) Chapter 24 (Fuel Gas), Section G2417 (406) [Inspection, Testing and Purging] Subsection G2417.4.2 (406.4.2) is amended to read as follows:

**G2417.4.2 (406.4.2) Test duration.** The test duration shall be held for a length of time satisfactory to the Building Official, but in no case for less than fifteen (15) minutes. For welded piping, and for piping carrying gas at pressures in excess of fourteen (14) inches water column pressure (3.48 kPa) (1/2 psi) and less than 200 inches of water column pressure (52.2 kPa) (7.5 psi), the test pressure shall not be less than ten (10) pounds per square inch (69.6 kPa). For piping carrying gas at a pressure that exceeds 200 inches of water column (52.2 kPa) (7.5 psi), the test pressure shall be not less than one and one-half times the proposed maximum working pressure. Diaphragm gauges used for testing must display a current calibration and be in good working condition. The appropriate test must be applied to the diaphragm gauge used for testing.

qq) Chapter 24 (Fuel Gas), Section G2420 (406) [Shutoff Valves], Subsection G2420.1 (406.1) is amended to add the following:

**G2420.1.4 Valves in CSST installations.** Shutoff valves installed with corrugated stainless steel (CSST) piping systems shall be supported with an approved termination fitting, or equivalent support, suitable for the size of the valves, of adequate strength and quality, and located at intervals so as to prevent or damp out excessive vibration but in no case greater than 12-inches from the center of the valve. Supports shall be installed so as not to interfere with the free expansion and contraction of the system's piping, fittings, and valves between anchors. All valves and supports shall be designed and installed so they will not be disengaged by movement of the supporting piping.

rr) Chapter 24 (Fuel Gas), Section G2420 (406) [Shutoff Valves], Subsection G2420.5.1 (409.5.1) is amended to read as follows:

**G2420.5.1 (409.5.1) Located within the same room.** The shutoff valve shall be located in the same room as the appliance. The shutoff valve shall be within 6 feet (1829 mm) of the appliance, and shall be installed upstream of the union, connector or quick disconnect device it serves. Such shutoff valves shall be provided with access. Shutoff valves serving movable appliances, such as cooking appliances and clothes dryers, shall be considered to be provided with access where installed.
behind such appliances. Appliance shutoff valves located in the firebox of a fireplace shall be installed in accordance with the appliance manufacturer’s instructions. A secondary shutoff valve must be installed within 3 feet (914 mm) of the firebox if appliance shutoff is located in the firebox.

ss) Chapter 24 (Fuel Gas), Section G2421 (410) [Flow Controls], Subsection G2421.1 (410.1) is amended to read as follows:

**G2421.1 (410.1) Pressure regulators.** A line pressure regulator shall be installed where the appliance is designed to operate at a lower pressure than the supply pressure. Line gas pressure regulators shall be listed as complying with ANSI Z21.80. 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. Access to regulators shall comply with the requirements for access to appliances as specified in Section M1305.

**Exception:** A passageway or level service space is not required when the regulator is capable of being serviced and removed through the required attic opening.

tt) Chapter 24 (Fuel Gas), Section G2422 (411) [Appliance Connections], Subsection G2422.1.2.3 (411.1.3.3) [Prohibited locations and penetrations] is amended to delete exception 1 and exception 4.

uu) Chapter 24 (Fuel Gas), Section G2445 (621) [Unvented Room Heaters], Subsection G2445.2 (621.2) is amended to read as follows:

**G2445.2 (621.2) Prohibited use.** One or more unvented room heaters shall not be used as the sole source of comfort heating in a dwelling unit.

**Exception:** Existing approved unvented room heaters may continue to be used in dwelling units, in accordance with the code provisions in effect when installed, when approved by the Building Official unless an unsafe condition is determined to exist as described in International Fuel Gas Code Section 108.7 of the Fuel Gas Code.

vv) Chapter 24 (Fuel Gas), Section G2448 (624) [Water Heaters], Subsection G2448.1.1 (624.1.1) is amended to read as follows:

**G2448.1.1 (624.1.1) Installation requirements.** The requirements for water heaters relative to access, sizing, relief valves, drain pans and scald protection shall be in accordance with this code.

ww) Chapter 26 (General Plumbing Requirements), Section P2603 (Structural and Piping Protection) is amended to read as follows:

**P2603.3 Protection against corrosion.** Metallic piping, except for cast iron, ductile iron and galvanized steel, shall not be placed in direct contact with steel framing members, concrete or cinder walls and floors or other masonry. Metallic piping shall not be placed in direct contact with corrosive soil. Where sheathing is used to prevent direct contact, the sheathing shall have a thickness of not less than 0.008 inch (8 mil) (0.203 mm) and the sheathing shall be made of approved material. Where sheathing protects piping that penetrates concrete or masonry walls
or floors, the sheathing shall be installed in a manner that allows movement of the piping within the sheathing.

xx) Chapter 26 (General Plumbing Requirements), Section P2603 (Structural and Piping Protection), Subsection P2603.5.1 is amended to read as follows:

**P2603.5.1 Sewer depth.** Building sewers that connect to private sewage disposal systems shall be a minimum of 12 inches (304 mm) below finished grade at the point of septic tank connection. Building sewers shall be a minimum of 12 inches (304 mm) below grade.

yy) Chapter 26 (General Plumbing Requirements), Section P2604 (Trenching and Backfilling) is amended to add P2604.2.1 to read as follows:

**P2604.2.1 Plastic sewer and DWV piping installation.** Plastic sewer and DWV piping installed underground shall be installed in accordance with the manufacturer’s installation instructions. Trench width shall be controlled to not exceed the outside the pipe diameter plus 16 inches or in a trench which has a controlled width equal to the nominal diameter of the piping multiplied by 1.25 plus 12 inches. The piping shall be bedded in 4 inches of granular fill and then backfilled compacting the side fill in 6-inch layers on each side of the piping. The compaction shall be to minimum of 85 percent standard proctor density and extend to a minimum of 6 inches above the top of the pipe.

zz) Chapter 28 (Water Heaters), Section P2801 (General), Subsection P2801.6 is amended to read as follows:

**P2801.6 Required pan.** Where a storage tank-type water heater or a hot water storage tank is installed in a location where water leakage from the tank will cause damage, the tank shall be installed in a pan constructed of one of the following:

1. Galvanized steel or aluminum of not less than 0.0236 inch (0.6010 mm) in thickness.
2. Plastic not less than 0.036 inch (0.9 mm) in thickness.
3. Other approved materials.

aaa) Chapter 28 (Water Heaters), Section P2801 (General), Subsection P2801.6.1 is amended to read as follows:

**Section P2801.6.1 Pan size and drain.** The pan shall be not less than 11/2 inches (38 mm) in depth and shall be of sufficient size and shape to receive all dripping or condensate from the tank or water heater. The pan shall be drained by an indirect waste pipe having a diameter of not less than 3/4 inch (19 mm). Piping for safety pan drains shall be of those materials listed in Table P2906.5. Multiple pan drains may terminate to a single discharge piping system when approved by the administrative authority and permitted by the manufactures installation instructions and installed with those instructions. Where a pan drain was not previously installed, a pan drain shall not be required for a replacement water heater installation.

bbb) Chapter 28 (Water Heaters), Section P2804 (Relief Valves), Subsection P2804.6.1 is amended to read as follows:
Section P2804.6.1 Requirements for discharge piping. The discharge piping serving a pressure relief valve, temperature relief valve or combination thereof shall:

1. Not be directly connected to the drainage system.
2. Discharge through an air gap
3. Not be smaller than the diameter of the outlet of the valve served and shall discharge full size to the air gap.
4. Serve a single relief device and shall not connect to piping serving any other relief device or equipment.
   Exception: Multiple relief devices may be installed to a single T & P discharge piping system when approved by the administrative authority and permitted by the manufacturers installation instructions and installed with those instructions.
5. Discharge to an approved location or to the outdoors.
6. Discharge in a manner that does not cause personal injury or structural damage.
7. Discharge to a termination point that is readily observable by the building occupants.
8. Not be trapped.
9. Be installed to flow by gravity.
10. Terminate not more than 6 inches (152 mm) and not less than two times the discharge pipe diameter above the floor or waste receptor flood level rim.
11. Not have a threaded connection at the end of the piping.
12. Not have valves or tee fittings.
13. Be constructed of those materials indicated in Section P2906.5 or materials tested, rated and approved for such use in accordance with ASME A112.4.1.
14. Be one nominal size larger than the size of the relief-valve outlet, where the relief-valve discharge piping is installed with insert fittings. The outlet end of such tubing shall be fastened in place.

Chapter 29 (Water Supply and Distribution), Section P2902 (Protection of Potable Water Supply), Subsection P2902.5.3 is amended to read as follows:

P2902.5.3 Lawn irrigation systems. The potable water supply to lawn irrigation systems shall be protected against backflow by an atmospheric-type vacuum breaker, a pressure-type vacuum breaker, a double-check assembly or a reduced pressure principle backflow preventer. A valve shall not be installed downstream from an atmospheric vacuum breaker. Where chemicals are introduced into the system, the potable water supply shall be protected against backflow by a reduced pressure principle backflow preventer.

Chapter 30 (Sanitary Drainage), Section P3003 (Joints and Connections), Subsection P3003.9 is amended to read as follows to delete the exception:
**P3003.9.2 Solvent cementing.** Joint surfaces shall be clean and free from moisture. A purple primer that conforms to ASTM F 656 shall be applied. Solvent cement not purple in color and conforming to ASTM D 2564, CSA B137.3, CSA B181.2 or CSA B182.1 shall be applied to all joint surfaces. The joint shall be made while the cement is wet and shall be in accordance with ASTM D 2855. Solvent cement joints shall be permitted above or below ground.

eee) Chapter 31 (Vents), Section P3111(Combination Waste and Vent Systems) is deleted in its entirety.

fff) Chapter 31 (Vents), Section 3112 (Island Fixture Venting), Subsection P3112.2 (Vent Connection) is deleted and replaced with the following:

**P3112.2 Installation.** Traps for island sinks and similar equipment shall be roughed in above the floor and may be vented by extending the vent as high as possible, but not less than the drainboard height and then returning it downward and connecting it to the horizontal sink drain immediately downstream from the vertical fixture drain. The return vent shall be connected to the horizontal drain through a wye-branch fitting and shall, in addition, be provided with a foot vent taken off the vertical fixture vent by means of a wye-branch immediately below the floor and extending to the nearest partition and then through the roof to the open air or may be connected to other vents at a point not less than six (6) inches (152 mm) above the flood level rim of the fixtures served. Drainage fittings shall be used on all parts of the vent below the floor level and a minimum slope of one-quarter (1/4) inch per foot (20.9 mm/m) back to the drain shall be maintained. The return bend used under the drain-board shall be a one (1) piece fitting or an assembly of a forty-five (45) degree (0.79 radius), a ninety (90) degree (1.6 radius) and a forty-five (45) degree (0.79 radius) elbow in the order named. Pipe sizing shall be as elsewhere required in this Code. The island sink drain, upstream of the return vent, shall serve no other fixtures. An accessible cleanout shall be installed in the vertical portion of the foot vent.

**Sec. 8B-8. Penalty.**

a) A person commits an offense if the person violates a provision of the 2021 International Residential Code, as adopted and amended by the City of Irving, allows another person to violate a provision of the 2021 International Residential Code, as adopted and amended by the City of Irving, or fails to perform an act required of the person by the 2021 International Residential Code, as adopted and amended by the City of Irving. A person commits a separate offense each day or portion of a day during which the violation is committed, allowed, or continued.

b) An offense described in Section 8B-8(a) is a class “C” misdemeanor and shall be punishable by a fine not to exceed $500.00. However, a fine for the violation of a provision of this chapter that governs fire safety, zoning, or public health and sanitation, including dumping or refuse, may not exceed $2,000.00.
c) The penalties provided for in this section are in addition to any other enforcement remedies that the city may have under other city ordinances or state law.

SECTION 3. That terms and provisions of this ordinance shall be deemed to be severable and that if the validity of any section, subsection, sentence, clause, or phrase of this ordinance should be declared to be invalid, the same shall not affect the validity of any other section, subsection, sentence, clause, or phrase of this ordinance.

SECTION 4. That it is the intent of the Irving City Council that pending prosecutions, brought under the previous code, which this ordinance replaces, should continue under the terms and penalties of said code and be saved from dismissal as if said prior ordinances had not been repealed.

SECTION 5. That this ordinance shall become effective on February 13, 2023.

PASSED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF IRVING, TEXAS, on __________.