

ORDINANCE NO. 2159

AN ORDINANCE OF THE TOWN COUNCIL OF THE TOWN OF HIGHLAND PARK, TEXAS, AMENDING THE CODE OF ORDINANCES OF THE TOWN OF HIGHLAND PARK, TEXAS, BY AMENDING CHAPTER 3, BUILDING REGULATIONS, BY AMENDING ARTICLE 3.02, BUILDING CODE; ARTICLE 3.04, PLUMBING, DIVISION 2, PLUMBING CODE; ARTICLE 3.05, GAS CODE; ARTICLE 3.06, MECHANICAL CODE; ARTICLE 3.07, ENERGY CONSERVATION CODE; ARTICLE 3.08, RESIDENTIAL CODE; AND ARTICLE 3.18, SWIMMING POOL AND SPA CODE; ALL FOR THE PURPOSE OF ADOPTING THE 2024 EDITIONS OF SUCH INTERNATIONAL CODES AND LOCAL AMENDMENTS THERETO; AND BY AMENDING ARTICLE 3.03, ELECTRICITY, DIVISION 2, ELECTRICAL CODE FOR THE PURPOSE OF ADOPTING THE 2023 EDITION OF SUCH INTERNATIONAL CODE AND LOCAL AMENDMENTS THERETO; AND BY AMENDING ARTICLE 3.15, PERMIT APPLICATION REVIEW PROCEDURES AND VESTED RIGHTS DETERMINATIONS, TO UPDATE REFERENCES TO ADOPTED INTERNATIONAL CODES; PROVIDING FOR THE INCORPORATION OF RECITALS; PROVIDING A SEVERABILITY CLAUSE; PROVIDING A REPEALER CLAUSE; PROVIDING FOR INCORPORATION INTO THE CODE OF ORDINANCES; AND PROVIDING FOR AN EFFECTIVE DATE

WHEREAS, the Town of Highland Park, Texas (the “Town”), is a Home Rule municipality having full powers of self-government and may enact ordinances relative to its citizens’ health, safety, and welfare that are not inconsistent with the Constitution and laws of the State; and

WHEREAS, the Town Council of the Town of Highland Park, Texas (“Town Council”) previously adopted the 2021 editions of the: International Building Code, International Residential Code, International Mechanical Code, International Plumbing Code, International Fuel Gas Code, International Energy Conservation Code, and International Swimming Pool and Spa Code, and adopted amendments each thereto, and Town Council previously adopted the 2020 edition of the National Electric Code and amendments thereto, all of which are set forth and codified in Chapter 3 of the Code of Ordinances of the Town of Highland Park (“Town Code”); and

WHEREAS, the Town Council desires to update the International Building Code, National Electric Code, International Residential Code, International Mechanical Code, International Plumbing Code, International Fuel Gas Code, International Energy Conservation Code, and International Swimming Pool and Spa Code; and

WHEREAS, the adoption of the 2024 editions of the International Codes and the 2023 edition of the National Electric Code, including the local amendments, will provide the most current life

safety applications with respect to construction, occupancy, use and maintenance of buildings and structures in the Town of Highland Park; and

WHEREAS, the Town Council deems it to be in the best interest of the citizens of the Town of Highland Park to update its building code standards and adopt the 2024 editions of the International Building Code, International Residential Code, International Mechanical Code, International Plumbing Code, International Fuel Gas Code, International Energy Conservation Code, and International Swimming Pool and Spa Code and the 2023 edition of the National Electric Code, as amended, as the minimum standard for the continued construction, occupancy, use and maintenance of buildings and structures within the Town's corporate limits.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE TOWN OF HIGHLAND PARK, TEXAS, THAT:

SECTION 1. That the findings set forth in the recitals above are incorporated into the body of this Ordinance as if fully set forth herein.

SECTION 2. Amendments.

2.1 BUILDING CODE: Chapter 3, Building Regulations, Article 3.02, Building Code, is hereby amended as follows, with all other Articles and Sections not herein amended to remain in full force and effect:

A. Section 3.02.002, Adopted, is amended to read as follows:

The International Building Code, 2024 edition, and all amendments thereto, shall be, and the same are hereby made, a part of this article by reference, the same as if copied herein and made a part hereof, and copies of said International Building Code, 2024 edition, and all amendments thereto, shall be kept on file in the office of the Building Official.

B. Section 3.02.003, Requirements varying from or not covered by code, is amended to read as follows:

Any requirement considered necessary for the safety, strength, or stability of an existing or proposed building or structure, or for the safety or health of the occupants thereof, which varies from provisions of the International Building Code, 2024 edition, and all amendments thereto, or which is not specifically covered by the International Building Code, 2024 edition, and all amendments thereto, shall be determined by the Building Official subject to appeal to the Town Council.

C. Section 3.02.004, References in code, is amended to read as follows:

The International Building Code, 2024 edition, and all amendments thereto, is hereby amended as follows:

- (1) Throughout the International Building Code, 2024 edition, and all amendments thereto, wherever the term “Building Official” is used, there may be substituted therefore the term “Building Inspector.”
- (2) Throughout the International Building Code, 2024 edition, and all amendments thereto, wherever the term “Board of Appeals” is used, there shall be substituted therefore the term “Town Council.”

D. Section 3.02.005, Amendments, is amended to read as follows:

The deletions, additions, and amendments to the 2024 International Building Code, included as Exhibit A, attached hereto and incorporated herein for all purposes, are hereby approved and adopted.

E. Section 3.02.006, Appendices adopted, is amended to read as follows:

The following appendices in the International Building Code, 2024 edition, and all amendments thereto, are hereby adopted as follows:

- (1) Appendix “D,” Fire Districts, as amended in previous Section.
- (2) Appendix “E,” Supplementary Accessibility Requirements.
- (3) Appendix “F,” Rodent Proofing.
- (4) Appendix “G,” Flood Resistant Construction.
- (5) Appendix “H,” Signs, except sub-section H101.2, signs exempt from permits,
 - i. which shall be deleted in its entirety.
- (6) Appendix “I,” Patio Covers.
- (7) Appendix “J,” Grading.
- (8) Appendix “K,” Administrative Provisions.

F. Section 3.02.007, Appendices not adopted, is amended to read as follows:

The following appendices in the International Building Code, 2024 edition, are hereby deleted as follows:

- (1) Appendix “A,” Employee Qualifications.
- (2) Appendix “B,” Board of Appeals.
- (3) Appendix “C,” Group U - Agriculture Buildings.

2.2 ELECTRICAL CODE: Chapter 3, Building Regulations, Article 3.03, Electricity, Division 2, Electrical Code is hereby amended as follows:

A. Section 3.03.032, Adopted, is amended to read as follows:

The National Electrical Code, 2023 edition, together with all amendments thereto, shall be and the same are hereby made a part of this division by reference, the same

as if copied at length herein, and made a part hereof for all purposes, and copies of said National Electrical Code, 2023 edition, together with all amendments thereto, shall be kept on file in the office of the Town Electrical Inspector.

- B. Section 3.03.033, Requirements varying from or not covered by code, is amended to read as follows:

Any requirement considered necessary for the safety of existing or proposed electric wiring, electric apparatus or electric equipment, or for the safety of occupants of any building or structure in which wiring, electric apparatus or electric equipment is installed, altered or repaired, which varies from provisions of the National Electrical Code, 2023 edition, or any amendments thereto, or which is not specifically covered by the National Electrical Code, 2023 edition, or any amendments thereto, shall be determined by the Town Electrical Inspector subject to appeal to the Town Council.

- C. Section 3.03.034, Amendments, is amended to read as follows:

The deletions, additions, and amendments to the 2023 National Electric Code, included as Exhibit B, attached hereto and incorporated herein for all purposes, are hereby approved and adopted.

2.3 PLUMBING CODE: Chapter 3, Building Regulations, Article 3.04, Plumbing, Division 2, Plumbing Code, is hereby amended as follows:

- A. Section 3.04.032, Adopted, is amended to read as follows:

The International Plumbing Code, 2024 edition, shall be, and same is hereby made, a part of this division by reference, the same as if copied at length herein, and made a part hereof for all purposes, and copies of said International Plumbing Code, 2024 edition, shall be kept on file in the office of the Building Inspector.

- B. Section 3.04.033, Requirements varying from or not covered by code, is amended to read as follows:

Any requirement considered necessary for the safety, strength or stability of an existing or proposed plumbing installation, or for the safety of the occupants of a building or structure, which varies from provisions of the International Plumbing Code, 2024 edition, or which is not specifically covered by the International Plumbing Code, 2024 edition, shall be determined by the Plumbing Inspector subject to appeal to the Town Council.

- C. Section 3.04.034, References in code, is amended to read as follows:

The International Plumbing Code, 2024 edition, is hereby amended as follows:

- (1) Throughout the International Plumbing Code, 2024 edition, and any amendments thereto, wherever the term “Plumbing Official” is used, there may be substituted therefor the term “Plumbing Inspector.”
- (2) Throughout the International Plumbing Code, 2024 edition, and any amendments thereto, wherever the term “Board of Adjustment and Appeals” is used, there shall be substituted therefor the term “Town Council.”

D. Section 3.04.035, Amendments, is amended to read as follows:

The deletions, additions, and amendments to the 2024 International Plumbing Code, included as Exhibit C, attached hereto and incorporated herein for all purposes, are hereby approved and adopted.

E. Section 3.04.036, Appendices adopted, is amended to read as follows:

The following appendices in the 2024 International Plumbing Code are hereby adopted as follows:

- (1) Appendix “B,” Rates of Rainfall for Various Cities.
- (2) Appendix “C,” Structural Safety.
- (3) Appendix “D,” Degree Day and Design Temperatures.
- (4) Appendix “E,” Sizing of Water Piping System.

F. Section 3.04.037, Appendices not adopted, is amended to read as follows:

The following appendices in the 2024 International Plumbing Code are hereby deleted as follows:

- (1) Appendix “A,” Fee Schedule.

2.4 FUEL GAS CODE: Chapter 3, Building Regulations, Article 3.05, Gas Code, is hereby amended as follows:

A. Section 3.05.002, Adopted, is amended to read as follows:

The International Fuel Gas Code, 2024 edition, together with all amendments thereto, shall be and the same is hereby made a part of this article by reference, the same as if copied herein, and made a part hereof for all purposes, and copies of said International Fuel Gas Code, 2024 edition, together with all amendments thereto, shall be kept on file in the office of the Plumbing Inspector.

B. Section 3.05.003, Requirements varying from or not covered by code, is amended to read as follows:

Any requirement considered necessary for the safety, strength or stability of an existing or proposed gas piping installation and/or gas appliance which varies from

provisions of the International Fuel Gas Code, 2024 edition, and all amendments thereto, or which is not specifically covered by the International Fuel Gas Code, 2024 edition, and all amendments thereto, shall be determined by the Plumbing Inspector subject to appeal to the Town Council.

C. Section 3.05.004, References in code, is amended to read as follows:

The International Fuel Gas Code, 2024 edition, is hereby amended as follows:

- (1) Throughout the International Fuel Gas Code, 2024 edition, and all amendments thereto, wherever the term “Gas Official” is used, there may be substituted therefor the term “Plumbing Inspector.”

D. Section 3.05.005, Amendments, is amended to read as follows:

The deletions, additions, and amendments to the 2024 International Fuel Gas Code, included as Exhibit D, attached hereto and incorporated herein for all purposes, are hereby approved and adopted.

E. Section 3.05.006, Appendices adopted, is amended to read as follows:

The following appendices in the International Fuel Gas Code, 2024 edition, and all amendments thereto, are hereby adopted as follows:

- (1) Appendix “A,” Sizing and Capacities of Gas Piping.
- (2) Appendix “B,” Sizing of Venting Systems.
- (3) Appendix “C,” Recommended Procedure for Safety Inspection of an Existing Appliance Installation

F. Section 3.05.007, Appendices not adopted, is amended to read as follows:

The following appendices in the International Fuel Gas Code, 2024 edition, are hereby deleted as follows:

- (1) Appendix “D,” Board of Appeals, shall be deleted in its entirety.

2.5 MECHANICAL CODE: Chapter 3, Building Regulations, Article 3.06, Mechanical Code, is hereby amended as follows:

G. Section 3.06.002, Adopted, is amended to read as follows:

The International Mechanical Code, 2024 edition, together with all amendments thereto, shall be and same is hereby made a part of this article by reference, the same as if copied herein and made a part hereof, and copies of said International Mechanical Code, 2024 edition, and all amendments thereto, shall be kept on file in the office of the Mechanical Inspector.

H. Section 3.06.003, Requirements varying from or not covered by code, is amended to read as follows:

Any requirement considered necessary for the safety, strength or stability of an existing or proposed mechanical installation, or for the safety of the occupants thereof, which varies from provisions of the International Mechanical Code, 2024 edition, and all amendments thereto, or which is not specifically covered by the International Mechanical Code, 2024 edition, and all amendments thereto, shall be determined by the Mechanical Inspector subject to appeal to the Town Council.

I. Section 3.06.004, References in code, is amended to read as follows:

The International Mechanical Code, 2024 edition, and all amendments thereto, is hereby amended as follows:

(1) Throughout the International Mechanical Code, 2024 edition, and all amendments thereto, wherever the term "Mechanical Official" is used, there may be substituted therefor the term "Mechanical Inspector."

J. Section 3.06.005, Amendments, is amended to read as follows:

The deletions, additions, and amendments to the 2024 International Mechanical Code, included as Exhibit E, attached hereto and incorporated herein for all purposes, are hereby approved and adopted.

K. Section 3.06.006, Appendices adopted, is amended to read as follows:

The following appendices in the International Mechanical Code, 2024 edition, and all amendments thereto, are hereby adopted as follows:

(1) Appendix "A," Chimney Connector Pass-Throughs.

L. Section 3.06.007, Appendices not adopted, is amended to read as follows:

The following appendices in the International Mechanical Code, 2024 edition, are hereby deleted as follows:

(1) Appendix "B," Fee Schedule, shall be deleted in its entirety.

(2) Appendix "C," Board of Appeals

(3) Appendix "D," Clean Air Delivery

(4) Appendix "E," Clean Air Delivery and Monitoring

2.6 ENERGY CONSERVATION CODE: Chapter 3, Building Regulations, Article 3.07, Energy Conservation Code, is hereby amended as follows:

A. Section 3.07.002, Adopted, is amended to read as follows:

The International Energy Conservation Code, 2024 edition, together with all amendments thereto, shall be and same is hereby made a part of this article by reference, the same as if copied herein and made a part hereof, and copies of said

International Energy Conservation Code, 2024 edition, shall be kept on file in the office of the Building Inspector.

B. Section 3.07.003, Amendments, is amended to read as follows:

The deletions, additions, and amendments to the International Energy Conservation Code, included as Exhibit F, attached hereto and incorporated herein for all purposes, are hereby approved and adopted.

2.7 RESIDENTIAL CODE: Chapter 3, Building Regulations, Article 3.08, Residential Code is hereby amended as follows:

A. Section 3.08.002, Adopted, is amended to read as follows:

The International Residential Code, 2024 edition, and all amendments thereto, shall be, and the same are hereby made, a part of this article by reference, the same as if copied herein and made a part hereof, and copies of said International Residential Code, 2024 edition, and all amendments thereto, shall be kept on file in the office of the Building Inspector.

B. Section 3.08.003, Requirements varying from or not covered by code, is amended to read as follows:

Any requirement considered necessary for the safety, strength, or stability of an existing or proposed building or structure, or for the safety or health of the occupants thereof, which varies from provisions of the International Residential Code, 2024 edition, and all amendments thereto, or which is not specifically covered by the International Residential Code, 2024 edition, and all amendments thereto, shall be determined by the Building Inspector subject to appeal to the Town Council.

C. Section 3.08.004, References in code, is amended to read as follows:

The International Residential Code, 2024 edition, and all amendments thereto, hereby is amended as follows:

(1) Throughout the International Residential Code, 2024 edition, and all amendments thereto, wherever the term “Building Official” is used, there may be substituted therefore the term “Building Inspector.”

D. Section 3.08.005, Amendments, is amended to read as follows:

The deletions, additions, and amendments to the International Residential Code, included as Exhibit G, attached hereto and incorporated herein for all purposes, are hereby approved and adopted.

E. Section 3.08.006, Appendices adopted, is amended to read as follows:

The following appendices in the International Residential Code, 2024 edition, and all amendments thereto, are hereby adopted as follows:

- (1) Appendix “BE” Radon Control Methods
- (2) Appendix “BH” Automatic Vehicular Gates
- (3) Appendix “CA” Sizing and Capacities of Gas Piping
- (4) Appendix “CB” Sizing of Venting Systems Serving Appliances Equipped with Draft Hoods, Category I Appliances and Appliances Listed for Use with Type B Vents
- (5) Appendix “CC” Recommended Procedure for Safety Inspection of an Existing Appliance Installation
- (6) Appendix “CD” Piping Standards for Various Applications
- (7) Appendix “CE” Venting Methods
- (8) Appendix “CF” Sizing of Water Piping Systems

F. Section 3.08.007, Appendices not adopted, is amended to read as follows:

The following appendices in the International Residential Code, 2024 edition, are hereby deleted as follows:

- (1) Appendix “AB” Permit Fees
- (2) Appendix “BA” Manufactured Housing used as Dwellings
- (3) Appendix “BB” Tiny Houses
- (4) Appendix “BC” Accessory Dwelling Units ADU
- (5) Appendix “BD” Home Day Care Occupancy
- (6) Appendix “BF” Patio Covers
- (7) Appendix “BG” Sound Transmission
- (8) Appendix “BI” Light Straw-Clay Construction
- (9) Appendix “BJ” Strawbale Construction
- (10) Appendix “BK” Cob Construction
- (11) Appendix “BL” Hemp-Lime (Hempcrete) Construction
- (12) Appendix “BM” 3D- Printed Building Construction
- (13) Appendix “BN” Extended Plate Wall Construction
- (14) Appendix “BO” Existing Building and Structures
- (15) Appendix “CH” Private Sewage Disposal
- (16) Appendix “NB” Solar-Ready Provisions- One- and Two-Family Dwellings and Townhouses
- (17) Appendix “NC” Zero Net Energy Residential Building Provisions
- (18) Appendix “ND” Electric Energy Storage Provisions
- (19) Appendix “NE” Electrical Vehicle Charging Infrastructure
- (20) Appendix “NF” Alternative Building Thermal Envelope Insulation R-Value Options

- (21) Appendix “NG” 2024 IECC Stretch Code
- (22) Appendix “NH” Operational Carbon Rating and Energy Reporting
- (23) Appendix “NI” On-site Renewable Energy
- (24) Appendix “NJ” Demand Responsive Controls
- (25) Appendix “NK” Electric-Ready Residential Building Provisions
- (26) Appendix “NL” Renewable Energy Infrastructure

2.8 Chapter 3, Building Regulations, Article 3.15, Permit Application Review Procedures and Vested Rights Determinations, is hereby amended as follows:

A. Section 3.15.002, Application review and decision procedures, subsection (j), Prior review and decision procedures superseded, is hereby amended to read as follows:

(j) Prior review and decision procedures superseded. To the extent that any permit application review and decision procedures incorporated in this code are in conflict or inconsistent with the provisions of this section, such provisions hereby are superseded to the extent of the conflict by the provisions of this section, including without limitation those procedures contained in the current adopted edition of each of the following: International Building Code, section 105, as may be amended by article 3.02; International Plumbing Code, section 106, as may be amended by article 3.04; International Fuel Gas Code, section 106, as may be amended by article 3.05; International Mechanical Code, section 106, as may be amended by article 3.06; and International Residential Code, section R105, as may be amended by article 3.08.

B. Section 3.15.003, Vested rights appeal, subsection (h), Prior appellate procedures superseded, is hereby amended to read as follows:

(h) Prior appellate procedures superseded. To the extent that appellate review procedures incorporated in this code are in conflict with the provisions of this section, such provisions hereby are superseded to the extent of the conflict or inconsistency by the provisions of this section, including without limitation those procedures contained in the current adopted edition of each of the following: International Building Code, section 111.2, as may be amended by article 3.02; International Plumbing Code, section 109, as may be amended by article 3.04; International Fuel Gas Code, section 109, as may be amended by article 3.05; International Mechanical Code, section 109, as may be amended by article 3.06; International Residential Code, section R112, as may be amended by article 3.08.

2.9 Chapter 3, Building Regulations, Article 3.18, Swimming Pool and Spa Code, is hereby amended as follows:

A. Section 3.18.002, Adopted, is amended to read as follows:

The International Swimming Pool and Spa Code, 2024 edition, and all amendments thereto, shall be, and the same are hereby made, a part of this article by reference, the same as if copied herein and made a part hereof, and copies of said International Swimming Pool and Spa Code, 2024 edition, and all amendments thereto, shall be kept on file in the office of the Building Inspector.

B. Section 3.18.003, Requirements varying from or not covered by code, is amended to read as follows:

Any requirement considered necessary for the safety, strength or stability of an existing or proposed swimming pool or spa, or for the safety or health of the occupants thereof, which varies from provisions of the International Swimming Pool and Spa Code, 2024 edition, and all amendments thereto, or which is not specifically covered by the International Swimming Pool and Spa Code, 2024 edition, and all amendments thereto, shall be determined by the Building Inspector subject to appeal to the Town Council.

C. Section 3.18.004, References in code, is amended to read as follows:

The International Swimming Pool and Spa Code, 2024 edition, and all amendments thereto, hereby is amended as follows:

- (1) Throughout the International Swimming Pool and Spa Code, 2024 edition, and all amendments thereto, wherever the term “Building Official” is used, there may be substituted therefore the term “Building Inspector.”
- (2) Throughout the International Swimming Pool and Spa Code, 2024 edition, and all amendments thereto, wherever the term “Board of Appeals” is used, there shall be substituted therefore the term “Town Council.”

D. Section 3.18.005, Amendments, is amended to read as follows:

The deletions, additions, and amendments to the International Swimming Pool and Spa Code, included as Exhibit H, attached hereto and incorporated herein for all purposes, are hereby approved and adopted.

E. Section 3.18.006, Appendices not adopted, is amended to read as follows:

The following appendices in the International Swimming Pool and Spa Code, 2024 edition, are hereby deleted as follows:

- (1) Appendix “A,” Board of Appeals.

SECTION 3. That, any provision of any prior ordinance of the Town whether codified or uncodified, which are in conflict with any provision of this Ordinance, are hereby repealed to the

extent of the conflict, but all other provisions of the ordinances of the Town whether codified or uncodified, which are not in conflict with the provisions of this Ordinance, shall remain in full force and effect.

SECTION 4. That, it is hereby declared to be the intention of the Town Council that the phrases, clauses, sentences, paragraphs and sections of this Ordinance are severable, and if any phrase, clause, sentence, paragraph or section of this Ordinance shall be declared unconstitutional by the valid judgment or decree of any court of competent jurisdiction, such unconstitutionality shall not affect any of the remaining phrases, clauses, sentences, paragraphs and sections of this Ordinance, since the same would have been enacted by the Town Council without the incorporation into this Ordinance of any such unconstitutional phrase, clause, sentence, paragraph or section.

SECTION 5. That, this ordinance shall be deemed to be incorporated into the Code of Ordinances of the Town of Highland Park, Texas.

SECTION 6. That, this ordinance shall be in effect immediately following its passage, approval and publication as provided by law, and it is accordingly so ordained.

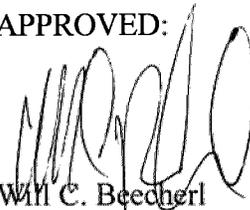
PASSED AND APPROVED the 6th day of January 2026.

APPROVED AS TO FORM:



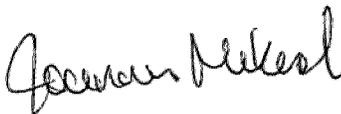
Susan Thomas
Town Attorney

APPROVED:



Will C. Beecherl
Mayor

ATTEST:



Joanna Mekeal
Town Secretary

Exhibit A
2024 International Building Code Local Amendments

The following sections, paragraphs, and sentences of the *2024 International Building Code* are hereby amended as follows: Standard type is text from the IBC. Underlined type is text inserted. ~~Lined through type is deleted text from IBC.~~ A double asterisk (**) at the beginning of a section identifies an amendment carried over from the 2021 edition of the code and a triple asterisk (***) identifies a new or revised amendment with the 2024 code.

Explanation of Options A and B:

Please note that as there is a wide range in firefighting philosophies / capabilities of cities across the region, OPTION "A" and OPTION "B" are provided in the Fire and Building Code amendments. Jurisdictions should choose one or the other based on their firefighting philosophies/capabilities when adopting code amendments.

****Section 101.4; change to read as follows:**

101.4 Referenced codes. The other codes listed in Sections 101.4.1 through 101.4.8 and referenced elsewhere in this code, when specifically adopted, shall be considered part of the requirements of this code to the prescribed extent of each such reference. 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 to NFPA 70 or the Electrical Code shall mean the Electrical Code as adopted.

(Reason: Legal wording to recognize locally adopted codes and amendments adopted with referenced codes.)

****Section 101.4.8; add the following:**

101.4.8 Electrical. The provisions of the local adopted Electrical Code shall apply to the installation of electrical systems, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings and appurtenances thereto.

(Reason: This was dropped when ICC quit publishing the ICC Electrical Code, but the Electrical Code still should be referenced regardless of how it is adopted.)

****Sections 103.1; amend to insert the Department Name**

103.1 Creation of enforcement agency. The Building Inspection Dept. is hereby created and the official in charge thereof shall be known as the *building official*.

[Remainder Unchanged]

(Reason: Reminder to be sure ordinance reads the same as designated by the city and amend Section 101.1.)

~~**Section 104.2.4.1; Flood hazard areas. (Jurisdictions may consider the option to amend or delete depending on local enforcement and flood hazard ordinances.)~~

~~(Reason: Flood hazard ordinances may be administered by other departments within the city.)~~

~~(Note: Sections 104.2.4.1, 104.3.1, 110.3.12.1, 1612, and 1603.1.7 are all interconnected related to flood hazard areas, and amendments or deletions should be considered as a whole.)~~

~~**Section [A] 104.3.1 Determination of substantially improved or substantially damaged existing buildings and structures in flood hazard areas. (Jurisdictions may consider the option to amend or delete depending on local enforcement and flood hazard ordinances.)~~

~~(Reason: Flood hazard ordinances may be administered by other departments within the city.)~~

~~**Section 105.2 Work exempt from permit; under sub-title entitled "Building" delete items 1, 2, 10 and 11 and re-number as follows:~~

Building:

- ~~1. One-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, provided the floor area does not exceed 120 square feet (11 m²).~~
- ~~2. Fences not over 7 feet (1829 mm) high.~~
- ~~3. 1. (Remainder Unchanged)~~
- ~~4. 2. (Remainder Unchanged)~~

- ~~5. 3. (Remainder Unchanged)~~
- ~~6. 4. (Remainder Unchanged)~~
- ~~7. 5. (Remainder Unchanged)~~
- ~~8. 6. (Remainder Unchanged)~~
- ~~9. 7. (Remainder Unchanged)~~
- ~~10. Shade cloth structures constructed for nursery or agricultural purposes, not including service systems.~~
- ~~11. 8. (Remainder Unchanged)~~
- ~~12. 9. (Remainder Unchanged)~~
- ~~13. 10. (Remainder Unchanged)~~

(Reason: Items deleted are for one and two-family dwellings regulated by the International Residential Code. Accessory structures, fences and shade cloth structures would require a permit for commercial properties to ensure compliance with local ordinance, egress, accessibility, flame spread of fabric, wind/snow design load, etc.)

****Section 109; add Section 109.7 to read as follows:**

109.7 Re-inspection Fee. A fee as established by city council resolution may be charged when:

1. The inspection called for is not ready when the inspector arrives.
2. No building address or permit card is clearly posted.
3. City approved plans are not on the job site available to the inspector.
4. The building is locked or work otherwise not available for inspection when called.
5. The job site is red-tagged twice for the same item.
6. The original red tag has been removed from the job site.
7. Failure to maintain erosion control, trash control or tree protection.

Any re-inspection fees assessed shall be paid before any more inspections are made on that job site.

(Reason: This fee is not a fine or penalty but is designed to compensate for time and trips when inspections are called for when not ready.)

Section 109; add Sections 109.8, 109.8.1, 109.8.2 and 109.9 to read as follows:

109.8 Work without a permit.

109.8.1 Investigation. Whenever work for which a permit is required by this code has been commenced without first obtaining a permit, a special investigation shall be made before a permit may be issued for such work.

109.8.2 Fee. An investigation fee, in addition to the permit fee, shall be collected whether or not a permit is subsequently issued. The investigation fee shall be equal to the amount of the permit fee required by this code or the city fee schedule as applicable. The payment of such investigation fee shall not exempt the applicant from compliance with all other provisions of either this code or the technical codes nor from penalty prescribed by law.

109.9 Unauthorized cover up fee. Any work concealed without first obtaining the required inspection in violation of Section 110 shall be assessed a fee as established by the city fee schedule.

****Section 110.3.6; Lath, gypsum board and gypsum panel product inspection; Delete exception**

~~**Exception:** Gypsum board and gypsum panel products that are not part of a fire resistance rated assembly or a shear assembly.~~

(Reason: Lath or gypsum board inspections are not typically performed in this area. Deleting the exception would then require all gypsum panels to be inspected)

Section 114.4 shall be deleted in its entirety and replaced with the following:

“The penalty for violation of this Code is as set out in the Highland Park Code of Ordinances section 1.01.009.”

****Section 202; amend definition of Ambulatory Care Facility as follows:**

AMBULATORY CARE FACILITY. Buildings or portions thereof used to provide medical, surgical, psychiatric, nursing or similar care on a less than 24-hour basis to persons who are rendered incapable of self-preservation by the services provided ~~or staff has accepted responsibility for care recipients already incapable.~~ This group may include but not be limited to the following:

- Dialysis centers

- Sedation dentistry

- Surgery centers

- Colonic centers

- Psychiatric centers

*(Reason: To clarify the range of uses included in the definition. [Explanatory note related to **Ambulatory Care Facilities**: This group of uses includes medical or dental offices where persons are put under for dental surgery or other services. Section 903.2.2.1 will now require such uses to be sprinklered if on other than the floor of exit discharge or if four or more persons are put under on the level of exit discharge. Recommend (1.) jurisdictions document any pre-existing non-conforming conditions prior to issuing a new C of O for a change of tenant and, (2.) On any medical or dental office specify on C of O the maximum number of persons permitted to be put under general anesthesia. It is recommended that before a Certificate of Occupancy is issued, a letter of intended use from the business owner shall be included and a C of O documenting the maximum number of care recipients incapable of self-preservation allowed.]*

****Section 202; add definition of Assisting Living Facilities to read as follows.**

ASSISTED LIVING FACILITIES. A building or part thereof housing persons, on a 24-hour basis, who because of age, mental disability or other reasons, live in a supervised residential environment which provides personal care services. The occupants are capable of responding to an emergency situation without physical assistance from staff.

(Reason: The code references Assisted Living facilities and definition was deleted.)

Section 202; amend definition to read as follows:

*****HIGH-PILED COMBUSTIBLE STORAGE: add a second paragraph to read as follows:**

Any building classified as a group S Occupancy or Speculative Building exceeding 6,000 sq. ft. that has a clear height in excess of 14 feet, making it possible to be used for storage in excess of 12 feet, shall be considered to be high-piled storage. When a specific product cannot be identified (speculative warehouse), a fire protection system and life safety features shall be installed for Class IV commodities, to the maximum pile height.

HIGH-RISE BUILDING. A building with an occupied floor or occupied roof located

more than ~~75 55~~ feet (~~22 860 mm~~) (16 764 mm) above the lowest level of fire department vehicle access.

(Reason: To define high-rise, as it influences sprinkler requirement thresholds based on the firefighting capabilities of a jurisdiction.)

****Section 202; add-amend definition of "Repair Garage" as follows:**

REPAIR GARAGE. A building, structure or portion thereof used for servicing or repairing motor vehicles. This occupancy shall also include garages involved in minor repair, modification and servicing of motor vehicles for items such as lube changes, inspections, windshield repair or replacement, shocks, minor part replacement and other such minor repairs.

(Reason: The code references aligns with fire code.)

****Section 202; amend definition of SPECIAL INSPECTOR to read as follows:**

SPECIAL INSPECTOR. A qualified person employed or retained by an approved agency who shall prove to the satisfaction of the registered design professional in responsible charge and approved by the Building Official as having the competence necessary to inspect a particular type of construction requiring special inspection.

(Reason: The registered design professional in responsible charge should be included.)

****Section 303.1.3; add a sentence to read as follows:**

303.1.3 Associated with Group E occupancies. A room or space used for assembly purposes that is associated with a Group E occupancy is not considered a separate occupancy, except when applying the assembly requirements of Chapters 10 and 11.

(Reason: To clarify that egress and accessibility requirements are applicable for assembly areas, i.e. cafeteria, auditoriums, etc.)

****Section 304.1; add the following to the list of occupancies:**

Fire stations

Police stations with detention facilities for 5 or less

(Reason: Consistent with regional practice dating back to the legacy codes.)

****Table 307.1.1; add the following sentence to Cleaning establishments with combustible liquid solvents** Cleaning establishments with combustible liquid solvents... {Text unchanged} ...with Section 707 or 1-hour horizontal assemblies constructed in accordance with Section 711 or both. See also IFC Chapter 21, Dry Cleaning Plant provisions.

(Reason: To call attention to detailed requirements in the Fire Code.)

****Section 403.1, Exception 3; change to read as follows:**

3. The open-air portion of a building [*remainder unchanged*]

(Reason: To clarify enclosed portions are not exempt.)

****Section 403.3, Automatic Sprinkler System. Delete exception.**

(Reason: To provide adequate fire protection to enclosed areas.)

****Section 403.3.2; change to read as follows:**

403.3.2 Water Supply to required Fire Pumps. In all buildings that are more than 420 120 feet (128 36.6 m) in building height, ~~and buildings of Type IVA and IVB construction that are more than 120 feet (36.6 m) in building height,~~ required fire pumps shall be supplied by connections to no fewer than two water mains located in different streets. Separate supply piping shall be provided between each connection to the water main and the pumps. Each connection and the supply piping between the connection and the pumps shall be sized to supply the flow and pressure required for the pumps to operate.

Exception: {No change to exception.}

(Reason: The 2009 edition of the IFC added this requirement based on a need for redundancy of the water supply similar to the redundancy of the power supply to the fire pumps required for such tall buildings, partially due to the fact that these buildings are rarely fully evacuated in a fire event. More commonly, the alarm activates on the floor of the event, the floor above and the floor below. Back-up power to the fire pump becomes critical for this reason. Certainly, the power is pointless if the water supply is impaired for

any reason, so a similar requirement is provided here for redundant water supplies. The 2015 edition changed the requirement to only apply to very tall buildings over 420 ft. This amendment modifies/lowers the requirement to 120 ft., based on this same height requirement for fire service access elevators. Again, the language from the 2009 and 2012 editions of the code applied to any high-rise building. This compromise at 120 ft. is based on the above technical justification of defend-in-place scenarios in fire incidents in such tall structures.)

****Section 406.3.3.1 Carport separation; add sentence to read as follows:**

A fire separation is not required between a Group R-2 and U carport provided that the carport is entirely open on all sides and that the distance between the two is at least 10 feet (3048 mm).

(Reason: Simplifies the fire separation distance and eliminates the need to obtain opening information on existing buildings when adding carports in existing apartment complexes. Consistent with legacy codes in effect in region for years and no record of problems with car fires spreading to apartments as a result.)

****Section 503.1.; add sentence to read as follows:**

503.1. General. [Existing Text to remain]

Where a building contains more than one distinct type of construction, the building shall comply with the most restrictive area, height, and stories, for the lesser type of construction or be separated by fire walls, except as allowed in Section 510.

(Reason: To create definite language that requires separation between dissimilar building types.)

****Table 506.2; delete footnote i from table**

~~i. The maximum allowable area for a single-story non-sprinklered Group U greenhouse is permitted to be 9000 square feet or the allowable area shall be permitted to comply with Table C102.1 of Appendix C.~~

(Reason: To eliminate the need for Appendix C adoption and remain consistent with 6000 sq. ft. sprinklering provision.)

****Section 506.3.1; add sentence to read as follows:**

506.3.1 Minimum percentage of perimeter. [Existing Text remains]

In order to be considered as accessible, if not in direct contact with a street or fire lane, a minimum 10-foot-wide pathway meeting fire department access from the street or approved fire lane shall be provided.

(Reason: To define what is considered accessible. Consistent with regional amendment to IFC 503.1.1)

****Section 708.4.3; change sentence to read as follows:**

708.4.3 Fireblocks and draftstops in combustible construction. [Body of text unchanged]

Exceptions:

1. Buildings equipped with an automatic sprinkler system installed throughout in accordance with Section 903.3.1.1, or in accordance with Section 903.3.1.2 provided that sprinkler protection is provided in the space between the top of the fire partition and the underside of the floor or roof sheathing, deck or slab above as required for systems complying with Section 903.3.1.1. Portions of buildings containing concealed spaces filled with noncombustible insulation as permitted for sprinkler omission shall not apply to this exception for draftstopping. [Remainder unchanged]

Reason: The most common exception used to eliminate the need for sprinklers in concealed spaces of combustible construction is to fill the space with noncombustible insulation. This exception was changed in 2010 to permit a 2-inch air gap at the top of the filled space. A space compliant with the permitted omission above would allow hot gas and smoke to spread unimpeded throughout a building not provided with draftstopping. For this reason, omission of sprinklers permitted in accordance with NFPA 13 referenced standard should not be permitted with IBC exception requiring draftstopping in combustible construction.

****Section 718.3; change sentence to read as follows:**

718.3 Draftstops in floors. [Body of text unchanged]

Exceptions: Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1. and provided that in combustible construction, sprinkler protection is provided in the floor space.

(Reason: To remain consistent with changes in 708.4.3 IBC code.)

****Section 718.4; change sentence to read as follows:**

718.4 Draftstops in attics. [Body of text unchanged]

Exceptions: Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 and provided that in combustible construction, sprinkler protection is provided in the attic space.

(Reason: To remain consistent with changes in 708.4.3 IBC code.)

****Section 901.6.1.1; add to read as follows:**

901.6.1.1 Standpipe Testing. Building owners/managers must maintain and test standpipe systems as per NFPA 25 requirements. The following additional requirements shall be applied to the testing that is required every 5 years:

1. The piping between the Fire Department Connection (FDC) and the standpipe shall be backflushed or inspected by approved camera when foreign material is present or when caps are missing, and also hydrostatically tested for all FDC's on any type of standpipe system. Hydrostatic testing shall also be conducted in accordance with NFPA 25 requirements for the different types of standpipe systems.
2. For any manual (dry or wet) standpipe system not having an automatic water supply capable of flowing water through the standpipe, the tester shall connect hose from a fire hydrant or portable pumping system (as approved by the *fire code official*) to each FDC, and flow water through the standpipe system to the roof outlet to verify that each inlet connection functions properly. Confirm that there are no open hose valves prior to introducing water into a dry standpipe. There are no required pressure criteria at the outlet. Verify that check valves function properly and that there are no closed control valves on the system.
3. Any pressure relief, reducing, or control valves shall be tested in accordance with the requirements of NFPA 25. All hose valves shall be exercised.
4. If the FDC is not already provided with approved caps, the contractor shall install such caps for all FDC's as required by the *fire code official*.
5. Upon successful completion of standpipe test, place a blue tag (as per Texas Administrative Code, Fire Sprinkler Rules for Inspection, Test and Maintenance Service (ITM) Tag) at the bottom of each standpipe riser in the building. The tag

shall be check-marked as "Fifth Year" for Type of ITM, and the note on the back of the tag shall read "5 Year Standpipe Test" at a minimum.

6. The procedures required by Texas Administrative Code Fire Sprinkler Rules with regard to Yellow Tags and Red Tags or any deficiencies noted during the testing, including the required notification of the local Authority Having Jurisdiction (*fire code official*) shall be followed.
7. Additionally, records of the testing shall be maintained by the owner and contractor, if applicable, as required by the State Rules mentioned above and NFPA 25.
8. Standpipe system tests where water will be flowed external to the building shall not be conducted during freezing conditions or during the day prior to expected nighttime freezing conditions.
9. Contact the *fire code official* for requests to remove existing fire hose from Class II and III standpipe systems where employees are not trained in the utilization of this firefighting equipment. All standpipe hose valves must remain in place and be provided with an approved cap and chain when approval is given to remove hose by the *fire code official*.

(Reason: Increases the reliability of the fire protection system and re-emphasizes the requirements of NFPA 25 relative to standpipe systems, as well as ensuring that FDC connections are similarly tested/maintained to ensure operation in an emergency incident.)

****Section 901.6.4; add to read as follows:**

901.6.4 False Alarms and Nuisance Alarms. False alarms and nuisance alarms shall not be given, signaled or transmitted or caused or permitted to be given, signaled or transmitted in any manner.

(Reason: Places the responsibility on the business or property owner to maintain their fire alarm systems in approved condition. Allows the enforcement of "prohibition of false alarms". Replaces text lost from the legacy codes that helps to ensure the maintenance of life safety systems.)

****Section 901.7; change to read as follows:**

901.7 Systems Out of Service. Where a required *fire protection system* is out of service or in the event of an excessive number of activations, the fire department and the *fire code official* shall be notified immediately and, where required by the *fire code official*, the building shall either be evacuated or an *approved fire watch* shall be provided for all occupants left unprotected by the shut down until the *fire protection system* has been returned to service. ... {Remainder of section unchanged}}

(Reason: Gives fire code official more discretion with regards to enforcement of facilities experiencing nuisance alarm or fire protection system activations necessitating correction/repair/replacement. The intent of the amendment is to allow local jurisdictions to enforce fire watches, etc., where needed to ensure safety of occupants where fire protection systems are experiencing multiple nuisance activations.)

****Section 903.1.1; change to read as follows:**

903.1.1 Alternative Protection. Alternative automatic fire-extinguishing systems complying with Section 904 shall be permitted ~~instead of~~ in addition to automatic sprinkler protection where recognized by the applicable standard ~~and, or as~~ approved by the *fire code official*.

(Reason: Such alternative systems do not provide the reliability of automatic sprinkler protection. Most gaseous type systems are highly susceptible to open doors, ceiling or floor tile removal, etc. However, an applicant could pursue an Alternate Method request to help mitigate the reliability issues with these alternative systems with the fire code official if so desired, or there may be circumstances in which the fire code official is acceptable to allowing an alternate system in lieu of sprinklers, such as kitchen hoods or paint booths.)

****Section 903.2; add paragraph to read as follows and delete the Exception:**

903.2 Where required. Approved automatic sprinkler systems in new buildings and structures shall be provided in the locations described in Sections 903.2.1 through 903.2.12. Automatic Sprinklers shall not be installed in elevator machine rooms, elevator machine spaces, and elevator hoistways, other than pits where such sprinklers would not necessitate shunt trip requirements under any circumstances.

Exception: Spaces or areas in telecommunications buildings used exclusively for telecommunications equipment, associated electrical power distribution equipment, batteries not required to have an automatic sprinkler system by Section 1207 for energy

~~storage systems and standby engines, provided that those spaces or areas are equipped throughout with an automatic smoke detection system in accordance with Section 907.2 and are separated from the remainder of the building by not less than 1-hour fire barriers constructed in accordance with Section 707 of the International Building Code or not less than 2-hour horizontal assemblies constructed in accordance with Section 711 of the International Building Code, or both.~~

(Reason: To ensure firefighter and public safety. This amendment eliminates the shunt trip requirement of International Building Code Section 3005.5 for the purpose of elevator passenger and firefighter safety. This amendment is contingent on the Building Code amendment eliminating the exceptions to Section 403.3 and Section 3005.4, such that passive fire barriers for these areas are maintained. (The exception deletion is due to the fact that such areas pose an undue fire risk to the structural integrity of the building.)



*****Section 903.2.2.1; change exception to read as follows:**

903.2.2.1 Ambulatory care facilities. An automatic sprinkler system shall be installed throughout the entire floor containing an ambulatory care facility where either of the following conditions exist at any time:

1. Four or more care recipients are incapable of self-preservation.
2. One or more care recipients that are incapable of self-preservation are located at other than the level of exit discharge serving such a facility.

In buildings where ambulatory care is provided on levels other than the level of exit discharge, an automatic sprinkler system shall be installed throughout the entire floor as well as all floors below where such care is provided, and all floors between the level of ambulatory care and the nearest level of exit discharge, the level of exit discharge, and all floors below the level of exit discharge.

Exception: Unless otherwise required by this code, floors classified as an open parking garage are not required to be sprinklered.

(Reason: To ensure that parking garages that are otherwise required to have automatic fire sprinkler protection are not unintendedly exempt by this exception.)



*****Section 903.2.4.2; change to read as follows:**

903.2.4.2 Group F-1 distilled spirits. An automatic sprinkler system shall be provided throughout a Group F-1 fire area used for the manufacture of distilled spirits involving more than 120 gallons of distilled spirits (>20% alcohol) in the fire area at any one time.

(Reason: To establish a sprinkler criteria limit based on existing maximum allowable quantities provided for flammable liquids in a non-sprinklered space from Chapter 50 and allow very small distillery type operations without sprinkler requirements as has been historically allowed.)

*****Section 903.2.9.3; change to read as follows:**

903.2.9.3 Group S-1 distilled spirits or wine. An automatic sprinkler system shall be provided throughout a Group S-1 fire area used for the bulk storage of distilled spirits or wine involving more than 120 gallons of distilled spirits or wine (>20% alcohol) in the fire area at any one time.

(Reason: To establish a sprinkler criteria limit based on existing maximum allowable quantities provided for flammable liquids in a non-sprinklered space from Chapter 50 and allow very small storage operations without sprinkler requirements as has been historically allowed.)

****Section 903.2.9.4; delete Exception:**

903.2.9.4 Group S-1 upholstered furniture and mattresses. An automatic sprinkler system shall be provided throughout a Group S-1 fire area where the area used for the storage of upholstered furniture or mattresses exceeds 2,500 square feet (232 m²).

~~**Exception:** Self service storage facilities not greater than one story above grade plane where all storage spaces can be accessed directly from the exterior.~~

(Reason: Fire departments are unable to regularly inspect the interior of these commercial occupancies and are unaware of the contents being stored.)

*****Section 903.2.9.5; add to read as follows:**

903.2.9.5 Self-Service Storage Facility. An automatic sprinkler system shall be installed throughout all self-service storage facilities. The minimum sprinkler system design shall be based on an Ordinary Hazard Group II classification, in accordance with NFPA 13 requirements. Physical construction in compliance with open-grid ceilings as per NFPA 13, such as an open metal grid ceiling or chicken wire that does not obstruct the overhead sprinkler protection, shall be installed to prevent storage from exceeding the lower of

either 12 feet above finished floor or 18 inches beneath standard sprinkler head deflectors. At least one sprinkler head shall be provided in each storage unit/room (additional sprinklers may be necessary for compliance with NFPA 13 spacing requirements), regardless of wall height or construction type separating such units.

(Reason: Fire departments are unable to regularly inspect the interior of these commercial occupancies and are unaware of the contents being stored. The physical obstruction specification is to ensure maximum storage heights are not exceeded in these self-storage occupancies where enforcement of such has shown to be historically problematic for fire code officials and building managers.)

Section 903.2.11; change 903.2.11.3 and add 903.2.11.7, 903.2.11.8, and 903.2.11.9 as follows:

903.2.11.3 Buildings ~~55~~ 35 feet or more in height. An automatic sprinkler system shall be installed throughout buildings that have one or more stories ~~with an occupant load of 30 or more, other than penthouses in compliance with Section 1511 of the *International Building Code*, located 55~~ 35 feet (~~16 764~~ 10 668 mm) or more above the lowest level of fire department vehicle access, measured to the finished floor.

Exception:

- ~~1. Occupancies in Group F-2.~~

903.2.11.7 High-Piled Combustible Storage. For any building with a clear height exceeding 12 feet (4572 mm), see Chapter 32 to determine if those provisions apply.

903.2.11.8 Spray Booths and Rooms. New and existing spray booths and spraying rooms shall be protected by an approved automatic fire-extinguishing system.

903.2.11.9 Buildings Over 6,000 sq. ft. An automatic sprinkler system shall be installed throughout all buildings with a building area 6,000 sq. ft. or greater and in all existing buildings that are enlarged to be 6,000 sq. ft. or greater. For the purpose

of this provision, fire walls shall not define separate buildings.

Exception: Open parking garages complying with 903.2.10

(Reason: Provides jurisdictions options as to their desired level of sprinkler protection based on multiple factors including firefighting philosophies/capabilities.)

*****Section 903.3.1.1.1; change to read as follows:**

903.3.1.1.1 Exempt Locations. When approved by the fire code official, automatic sprinklers shall not be required in the following rooms or areas where such ... {text unchanged}... because it is damp, of fire-resistance-rated construction or contains electrical equipment.

1. A room or space where sprinklers constitute a serious life or fire hazard because of the nature of the contents, where approved by the fire code official.
2. Generator and transformer rooms, under the direct control of a public utility, separated from the remainder of the building by walls and floor/ceiling or roof/ceiling assemblies having a fire-resistance rating of not less than 2 hours.
3. ~~Rooms or areas that are of noncombustible construction with wholly noncombustible contents.~~
4. ~~Fire service access~~ Elevator machine rooms, and machinery spaces, and hoistways, other than pits where such sprinklers would not necessitate shunt trip requirements under any circumstances.
5. ~~Machine rooms, machinery spaces, control rooms and control spaces associated with occupant evacuation elevators designed in accordance with Section 3008 of the International Building Code.~~

(Reason: Gives more direction to code official. Exception 3 deleted to provide protection where fire risks are poorly addressed. Amendment 903.2 addresses Exception 5 above relative to the elimination of sprinkler protection in these areas to avoid the shunt trip requirement.)

*****Section 903.3.1.1.4; add the following Section:**

903.3.1.1.4 Dry pipe sprinkler systems. Dry pipe sprinkler systems protecting fire areas of Type V construction shall be required to meet the 60 second water delivery time, per NFPA 13, to the system test connection regardless of the system size, unless more stringent criteria are applicable in NFPA 13, and all dry pipe sprinkler systems shall be

trip tested to flow/discharge water to verify compliance with this requirement, unless otherwise approved by the fire code official.

(Reason: This provision is limited to Type V construction due to the unique need discharge water on to light weight wood construction members for rapid fire control. This requirement for dry system trip tests to guarantee water delivery times across all system sizes. Faster water delivery improves fire control capabilities by supplying water before the growing fire size overwhelms the fire sprinklers. The water delivery time test aids in identifying any delays in water reaching the fire in dry pipe systems, detecting any blockages in the pipe network, and ensuring the dry pipe valve is in good condition.)

****Section 903.3.1.2.2; change to read as follows:**

903.3.1.2.2 Corridors and balconies in the means of egress. Sprinkler protection shall be provided in all corridors and for all balconies. ~~in the means of egress where any of the following conditions apply:~~

- ~~1. Corridors with combustible floor or walls.~~
- ~~2. Corridors with an interior change of direction exceeding 45 degrees (0.79 rad).~~
- ~~3. Corridors that are less than 50 percent open to the outside atmosphere at the ends.~~
- ~~4. Open ended corridors and associated exterior stairways and ramps as specified in Section 1027.6, Exception 3.~~
- ~~5. Egress balconies not complying with Sections 1021.2 and 1021.3.~~

(Reason: Corridor protection is critical to the means of egress, and corridors are regularly utilized for miscellaneous storage, fixtures, artwork, food kiosks and beverage dispensers, and furnishings. Balcony protection is required due to issues with fire exposure via soffit vents and the potential for significant combustible loading.)

****Section 903.3.1.2.3; delete section and replace as follows:**

Section 903.3.1.2.3 Attached Garages and Attics. Sprinkler protection is required in attached garages, and in the following attic spaces:

1. Attics that are used or intended for living purposes or storage shall be protected by an automatic sprinkler system.

2. Where fuel-fired equipment is installed in an unsprinklered attic, not fewer than one quick-response intermediate temperature sprinkler shall be installed above the equipment.
3. Attic spaces of buildings that are two or more stories in height above grade plane or above the lowest level of fire department vehicle access.
4. Group R-4, Condition 2 occupancy attics not required by Item 1 or 3 to have sprinklers shall comply with one of the following:
 - 4.1. Provide automatic sprinkler system protection.
 - 4.2. Provide a heat detection system throughout the attic that is arranged to activate the building fire alarm system.
 - 4.3. Construct the attic using noncombustible materials.
 - 4.4. Construct the attic using fire-retardant-treated wood complying with Section 2303.2 of the International Building Code.
 - 4.5. Fill the attic with noncombustible insulation.

Reason: Attic protection is required due to issues with fire exposure via soffit vents, as well as firefighter safety. Several jurisdictions indicated experience with un-protected attic fires resulting in displacement of all building occupants. NFPA 13 provides for applicable attic sprinkler protection requirements, as well as exemptions to such, based on noncombustible construction, etc. Attached garages already require sprinklers via NFPA 13R – this amendment just re-emphasizes the requirement.)

****Section 903.3.1.3; change to read as follows:**

903.3.1.3 NFPA 13D Sprinkler Systems. *Automatic sprinkler systems installed in one- and two-family dwellings; Group R-3; Group R-4, Condition 1; and townhouses shall be permitted to be installed throughout in accordance with NFPA 13D or in accordance with state law.*

(Reason: To allow the use of the Plumbing section of the International Residential Code (IRC) and recognize current state stipulations in this regard.)

*****Section 903.3.1.4; add to read as follows:**

903.3.1.4 Freeze protection. Freeze protection systems for automatic fire sprinkler systems shall be in accordance with the requirements of the applicable referenced NFPA standard and this section.

903.3.1.4.1 Attics. Only dry-pipe, preaction, or listed antifreeze automatic fire sprinkler systems shall be allowed to protect unheated attic spaces.

Exception: Wet-pipe fire sprinkler systems shall be allowed to protect non-ventilated attic spaces where:

1. The attic sprinklers are supplied by a separate floor control valve assembly to allow ease of draining the attic system without impairing sprinklers throughout the rest of the building, and
2. Adequate heat shall be provided for freeze protection as per the applicable referenced NFPA standard, and
3. The attic space is a part of the building's thermal, or heat, envelope, such that insulation is provided at the roof deck, rather than at the ceiling level.

903.3.1.4.2 Heat trace/insulation. Heat trace/insulation shall only be allowed where approved by the fire code official for small sections of large diameter water-filled pipe.

(Reason: In the last few years, severe winters brought to light several issues with current practices for sprinkling attics, not the least of which was wet-pipe sprinklers in ventilated attics provided with space heaters, etc. for freeze protection of such piping. This practice is not acceptable for the protection of water-filled piping in a ventilated attic space as it does not provide a reliable means of maintaining the minimum 40 degrees required by NFPA, wastes energy, and presents a potential ignition source to the attic space. The intent of this amendment is to help reduce the large number of freeze breaks that have occurred in the past with water-filled wet-pipe sprinkler systems in the future, most specifically in attic spaces.)

****Section 903.3.5; add a second paragraph to read as follows:**

Water supply as required for such systems shall be provided in conformance with the supply requirements of the respective NFPA standards; however, every water-based fire protection system shall be designed with a 10-psi safety factor. Reference Section 507.4 for additional design requirements.

(Reason: To define uniform safety factor for the region.)

*****Section 903.3.9; change to read as follows:**

903.3.9 High-rise Building floor control valves. Approved supervised indicating control valves shall be provided at the point of connection to the riser as indicated below: ~~in high-rise buildings~~

1. In High Rise Buildings, *floor control assemblies shall be located in protected stairwells, or as otherwise approved by the fire code official.*
2. In all other buildings, floor control assemblies shall be located as approved by the fire code official.

(Reason: Intent is to allow the ability to drain each floor's sprinkler system without draining the entire system, as well as to isolate each floor in the event of an impairment, such that only one floor is impaired at a time.)

*****Section 903.4.1; add a second paragraph after the Exceptions to read as follows:**

Sprinkler and standpipe system water-flow detectors shall be provided for each floor tap to the sprinkler system and shall cause an alarm upon detection of water flow for more than 45 seconds. Reference Section 903.3.9 for required floor control assemblies. All control valves in the sprinkler and standpipe systems except for fire department hose connection valves shall be electrically supervised to initiate a supervisory signal at the central station upon tampering.

(Reason: To avoid significant water losses, reduce false alarms, and eliminate undetected tampering of water supplies. Consistent with amendment to IFC 905.9.)

****Section 903.4.3; add second paragraph to read as follows:**

The alarm device required on the exterior of the building shall be a weatherproof horn/strobe notification appliance with a minimum 75 candela strobe rating, installed as close as practicable to the fire department connection.

(Reason: Fire department connections are not always located at the riser; this allows the fire department faster access and ease of recognition of the FDC location, especially at night.)

*****Section 905.3.8; add to read as follows:**

905.3.8 Buildings Exceeding 10,000 sq. ft. In buildings exceeding 10,000 square feet in area per story and where any portion of the building's interior area is more than 200

feet (60960 mm) of travel, vertically and horizontally, from the nearest point of fire department vehicle access. Class I standpipes shall be provided.

(Reason: Allows for the rapid deployment of hose lines to the body of the fire in larger structures.)

*****Section 905.4; change Item 5, and add Item 7 to read as follows:**

5. Where the roof has a slope less than 4 units vertical in 12 units horizontal (33.3-percent slope), each standpipe shall be provided with a two-way a-hose connection shall be located to serve the roof or at the highest landing of an interior exit stairway with stair access to the roof provided in accordance with Section 1011.12.
6. {No change.}
7. When required by this Chapter, standpipe connections shall be placed adjacent to all required exits to the structure and at two hundred feet (200') intervals along major corridors thereafter, or as otherwise approved by the fire code official.

(Reason: Item 5 reduces the amount of pressure required to facilitate the required testing of NFPA 14 and 25, and provides backup protection for fire fighter safety. Item 7 allows for the rapid deployment of hose lines to the body of the fire.)

****Section 905.8; change to read as follows:**

905.8 Dry standpipes. Dry standpipes shall not be installed.

Exception: Where subject to freezing and in accordance with NFPA 14. Additionally, manual dry standpipe systems shall be supervised with a minimum of 10 psig and a maximum of 40 psig air pressure with a high/low Supervisory alarm.

(Reason: To define manual dry standpipe supervision requirements. Helps ensure the integrity of the standpipe system via supervision, such that open hose valves will result in a supervisory low air alarm. NFPA 14 requires supervisory air for such, but does not provide pressure criteria for what that means.)

****Section 905.9; add a second paragraph after the exceptions to read as follows:**

Sprinkler and standpipe system water-flow detectors shall be provided for each floor tap to the sprinkler system and shall cause an alarm upon detection of water flow for more than 45 seconds. Reference Section 903.3.9 for required floor control assemblies. All

control valves in the sprinkler and standpipe systems except for fire department hose connection valves shall be electrically supervised to initiate a supervisory signal at the central station upon tampering.

(Reason: To avoid significant water losses. Consistent with amendment to IFC 903.4.1)

****Section 906.1(1); delete Exception 3 as follows:**

~~3. In storage areas of Group S occupancies where forklift, powered industrial truck or powered cart operators are the primary occupants,~~

~~fixed extinguishers, as specified in NFPA 10, shall not be required where in accordance with all of the following:~~

~~3.1. Use of vehicle-mounted extinguishers shall be approved by the fire code official.~~

~~3.2. Each vehicle shall be equipped with a 10 pound, 40A:80B:C extinguisher affixed to the vehicle using a mounting bracket approved by the extinguisher manufacturer or the fire code official for vehicular use.~~

~~3.3. Not less than two spare extinguishers of equal or greater rating shall be available on-site to replace a discharged extinguisher.~~

~~3.4. Vehicle operators shall be trained in the proper operation, use and inspection of extinguishers.~~

~~3.5. Inspections of vehicle-mounted extinguishers shall be performed daily.~~

(Reason: This provision of only having vehicle-mounted fire extinguishers is not at all consistent with the practice of requiring extinguishers throughout based on travel distance. Often times, the vehicle is what has caused the incident and/or may be the source of the incident, so having the extinguisher vehicle-mounted results in greater potential injury of the user. This assumes the only occupants in the building are on a vehicle, which again, significantly reduces access to fire extinguishers throughout the building to other occupants. Future use of the building/tenancy may change further complicating the issue.)

*****Section 907.1.4; add to read as follows:**

907.1.4 Design Standards. Where a new fire alarm system is installed, the devices shall be addressable.

(Reason: Provides for the ability of descriptive identification of alarms.)

*****Section 907.2.1; change to read as follows:**

907.2.1 Group A. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group A occupancies ~~where the having an occupant load due to the assembly occupancy is of 300 or more persons,~~ or where the Group A occupant load is more than 100 persons above or below the *lowest level of exit discharge*. Group A occupancies not separated from one another in accordance with Section 707.3.10 of the *International Building Code* shall be considered as a single occupancy for the purposes of applying this section. Portions of Group E occupancies occupied for assembly purposes shall be provided with a fire alarm system as required for the Group E occupancy.

Exceptions: {No change.}

(Reason: Increases the requirement to be consistent with Group B requirement.)

****Section 907.2.3; change to read as follows:**

907.2.3 Group E. A manual fire alarm system that initiates the occupant notification signal utilizing an emergency voice/alarm communication system meeting the requirements of Section 907.5.2.2 and installed in accordance with Section 907.6 shall be installed in Group E educational occupancies. When *automatic sprinkler systems* or smoke detectors are installed, such systems or detectors shall be connected to the building fire alarm system. An approved smoke detection system shall be installed in Group E day care occupancies. Unless separated by a minimum of 100' open space, all buildings, whether portable buildings or the main building, will be considered one building for alarm occupant load consideration and interconnection of alarm systems.

Exceptions:

1. {No change.}

- 1.1. Residential In-Home day care with not more than 12 children may use interconnected single station detectors in all habitable rooms. (For care of more than five children 2 1/2 or less years of age, see Section 907.2.6.)

{No change to remainder of exceptions.}

(Reason: To distinguish educational from day care occupancy minimum protection)

requirements. Further, to define threshold at which portable buildings are considered a separate building for the purposes of alarm systems. Exceptions provide consistency with State law concerning such occupancies.)

*****Section 907.2.10.1; change to read as follows:**

907.2.10.1 Public- and Self-Storage Occupancies. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group S public- and self-storage occupancies ~~three stories or greater in height~~ for interior corridors and interior common areas. Visible notification appliances are not required within storage units.

Exception: {No change.}

(Reason: Because of the potential unknown fire load and hazards in self-storage type facilities, which could include flammable liquids for instance, as well as other hazardous materials, prompt evacuation in the event of fire alarm is needed; therefore, notification in the corridors/common areas is critical to all such occupancies, regardless of height.)

****Section 907.2.13, Exception #3; change to read as follows:**

3. Open air portions of buildings with an occupancy in Group A-5 in accordance with Section 303.1 of the International Building Code; however, this exception does not apply to accessory uses including but not limited to sky boxes, restaurants, and similarly enclosed areas.

(Reason: To indicate that enclosed areas within open air seating type occupancies are not exempted from automatic fire alarm system requirements.)

****Section 907.4.2.7; add to read as follows:**

907.4.2.7 Type. Manual alarm initiating devices shall be an approved double action type.

(Reason: Helps to reduce false alarms.)

****Section 907.6.1.1; add to read as follows:**

907.6.1.1 Wiring Installation. All fire alarm systems shall be installed in such a manner that a failure of any single initiating device or single open in an initiating circuit conductor

will not interfere with the normal operation of other such devices. All signaling line circuits (SLC) shall be installed in such a way that a single open will not interfere with the operation of any addressable devices (Class A). Outgoing and return SLC conductors shall be installed in accordance with NFPA 72 requirements for Class A circuits and shall have a minimum of four feet separation horizontal and one foot vertical between supply and return circuit conductors. The initiating device circuit (IDC) from a signaling line circuit interface device may be wired Class B, provided the distance from the interface device to the initiating device is ten feet or less.

(Reason: To provide uniformity in system specifications and guidance to design engineers. Improves reliability of fire alarm devices and systems.)

****Section 907.6.3; delete all four Exceptions.**

907.6.3 Initiating device identification. The fire alarm system shall identify the specific initiating device address, location, device type, floor level where applicable and status including indication of normal, alarm, trouble and supervisory status, as appropriate.

Exceptions:

- ~~1. Fire alarm systems in single-story buildings less than 22,500 square feet (2090 m²) in area.~~
- ~~2. Fire alarm systems that only include manual fire alarm boxes, waterflow initiating devices and not more than 10 additional alarm initiating devices.~~
- ~~3. Special initiating devices that do not support individual device identification.~~
- ~~4. Fire alarm systems or devices that are replacing existing equipment.~~

(Reason: To assist responding personnel in locating the emergency event for all fire alarm systems.)

****Section 907.6.6; add sentence at end of paragraph to read as follows:**

See 907.6.3 for the required information transmitted to the supervising station.

(Reason: To assist responding personnel in locating the emergency event for all fire alarm systems.)

****Section 910.2.3; add to read as follows:**

910.2.3 Group H. Buildings and portions thereof used as a Group H occupancy as follows:

1. In occupancies classified as Group H-2 or H-3, any of which are more than 15,000 square feet (1394 m²) in single floor area.

Exception: Buildings of noncombustible construction containing only noncombustible materials.

2. In areas of buildings in Group H used for storing Class 2, 3, and 4 liquid and solid oxidizers, Class 1 and unclassified detonable organic peroxides, Class 3 and 4 unstable (reactive) materials, or Class 2 or 3 water-reactive materials as required for a high-hazard commodity classification.

Exception: Buildings of noncombustible construction containing only noncombustible materials.

(Reason: Maintains a fire protection device utilized in such occupancies where it is sometimes necessary to allow chemicals to burn out, rather than extinguish. This is based on legacy language establishing long-standing historical practice.)



****Section 910.4.3.1; change to read as follows:**

910.4.3.1 Makeup Air. Makeup air openings shall be provided within 6 feet (1829 mm) of the floor level. Operation of makeup air openings shall be ~~manual or~~ automatic. The minimum gross area of makeup air inlets shall be 8 square feet per 1,000 cubic feet per minute (0.74 m² per 0.4719 m³/s) of smoke exhaust.

(Reason: Makeup air has been required to be automatic for several years now in this region when mechanical smoke exhaust systems are proposed. This allows such systems to be activated from the smoke control panel by first responders without having to physically go around the exterior of the building opening doors manually. Such requires a significant number of first responders on scene to conduct this operation and significantly delays activation and/or capability of the smoke exhaust system.)



****Section 912.2.3; add to read as follows:**

912.2.3 Hydrant Distance. An approved fire hydrant shall be located within 100 feet of the fire department connection as the fire hose lays along an unobstructed path.

(Reason: To accommodate limited hose lengths, improve response times where the FDC is needed to achieve fire control, and improve ease of locating a fire hydrant in those

situations also. Also, consistent with NFPA 14 criteria.)

****Section 913.2.1; add second paragraph and exception to read as follows:**

When located on the ground level at an exterior wall, the fire pump room shall be provided with an exterior fire department access door that is not less than 3 ft. in width and 6 ft. – 8 in. in height, regardless of any interior doors that are provided. A key box shall be provided at this door, as required by Section 506.1.

Exception: When it is necessary to locate the fire pump room on other levels or not at an exterior wall, the corridor leading to the fire pump room access from the exterior of the building shall be provided with equivalent fire resistance as that required for the pump room, or as approved by the fire code official. Access keys shall be provided in the key box as required by Section 506.1.

(Reason: This requirement allows firefighters safer access to the fire pump room. The requirement allows access without being required to enter the building and locate the fire pump room interior access door during a fire event. The exception recognizes that this will not always be a feasible design scenario and as such, provides an acceptable alternative to protect the pathway to the fire pump room.)

****Section 914.3.1.2; add section:**

914.3.1.2 Water Supply to required Fire Pumps. In all buildings that are more than 420 ~~120~~ feet (428 ~~36.6~~ m) in *building height*, and buildings of Type IVA and IVB construction that are more than 120 feet (36.6 m) in building height, required fire pumps shall be supplied by connections to no fewer than two water mains located in different streets. Separate supply piping shall be provided between each connection to the water main and the pumps. Each connection and the supply piping between the connection and the pumps shall be sized to supply the flow and pressure required for the pumps to operate.

Exception: {No change to exception.}

(Reason: The 2009 edition of the IFC added this requirement based on a need for redundancy of the water supply similar to the redundancy of the power supply to the fire pumps required for such tall buildings, partially due to the fact that these buildings are rarely fully evacuated in a fire event. More commonly, the alarm activates on the floor of the event, the floor above and the floor below. Back-up power to the fire pump becomes critical for this reason. Certainly, the power is pointless if the water supply is impaired for any reason, so a similar requirement is provided here for redundant water supplies. The 2015 edition changes the requirement to only apply to very tall buildings over 420 ft. This

amendment modifies/lowers the requirement to 120 ft., based on this same height requirement for fire service access elevators. Again, the language from the 2009 and 2012 editions of the code applied to any high-rise building. This compromise at 120 ft. is based on the above technical justification of defend-in-place scenarios in fire incidents in such tall structures.)

*****Section 915 Carbon Monoxide (CO) Detection; delete and replace to read as follows:**

915.1 General. New and existing buildings shall be provided with carbon monoxide (CO) detection in accordance with Sections 915.2 through 915.5.

915.2 Where required. Carbon monoxide detection shall be provided in interior spaces, other than dwelling units or sleeping units, that are exposed to a carbon monoxide source in accordance with Sections 915.2.1 through 915.2.3. Carbon monoxide detection for dwelling units or sleeping units that are exposed to a carbon monoxide source shall be in accordance with Section 915.2.4.

915.2.1 Interior spaces with direct carbon monoxide sources. In all occupancies, interior spaces with a direct carbon monoxide source shall be provided with carbon monoxide detection located in close proximity to the direct carbon monoxide source and in accordance with Section 915.3.

Exception: Where environmental conditions in an enclosed space are incompatible with carbon monoxide detection devices, carbon monoxide detection shall be provided in an approved adjacent location.

915.2.2 Interior spaces adjacent to a space containing a carbon monoxide source. In Groups A, B, E, I, M and R Occupancies, interior spaces that are separated from and adjacent to an enclosed parking garage or an interior space that contains a direct carbon monoxide source shall be provided with carbon monoxide detection if there are communicating openings between the spaces. Detection devices shall be located in close proximity to communicating openings on the side that is furthest from the carbon monoxide source and in accordance with Section 915.3

Exceptions:

1. Where communicating openings between the space containing a direct carbon monoxide source and the adjacent space are permanently sealed airtight, carbon monoxide detection is not required for the adjacent space.
2. Where the fire code official determines that the volume or configuration of the adjacent interior space is such that dilution or geometry would diminish the

effectiveness of carbon monoxide detection devices located in such spaces, detection devices additional to those required by Section 915.2.1 shall be located on the side of communicating openings that is closest to the carbon monoxide source.

915.2.3 Interior spaces with forced-indirect carbon monoxide sources. In all occupancies, interior spaces with a forced-indirect carbon monoxide source shall be provided with carbon monoxide detection in accordance with either of the following:

1. Detection in each space with a forced-indirect carbon monoxide source, located in accordance with Section 915.3.
2. Detection only in the first space served by the main duct leaving the forced-indirect carbon monoxide source, located in accordance with Section 915.3, with an audible and visual alarm signal provided at an approved location.

915.2.4 Dwelling units and sleeping units. Carbon monoxide detection for dwelling units and sleeping units shall comply with Sections 915.2.4.1 and 915.2.4.2.

915.2.4.1 Direct carbon monoxide sources. Where a direct carbon monoxide source is located in a bedroom or sleeping room, or a bathroom attached to either, carbon monoxide detection shall be installed in the bedroom or sleeping room. Where carbon monoxide detection is not installed in bedrooms or sleeping rooms, carbon monoxide detection shall be installed outside of each separate sleeping

area in close proximity to bedrooms or sleeping rooms for either of the following conditions:

1. The dwelling unit or sleeping unit has a communicating opening to an attached, enclosed garage.
2. A direct carbon monoxide source is located in the dwelling unit or sleeping unit outside of bedrooms or sleeping rooms.

915.2.4.2 Forced-indirect carbon monoxide sources. Bedrooms or sleeping rooms in dwelling units or sleeping units that are exposed to a forced-indirect carbon monoxide source shall be provided with carbon monoxide detection in accordance with Section 915.2.4.1 or Section 915.2.3.

915.3 Location of detection devices. Carbon monoxide detection devices shall be installed in accordance with manufacturer's instructions in a location that avoids dead air spaces, turbulent air spaces, fresh air returns, open windows, and obstructions that would inhibit accumulation of carbon monoxide at the detection location. Carbon monoxide detection in air ducts or plenums shall not be permitted as an alternative to required detection locations.

915.4 Permissible detection devices. Carbon monoxide detection shall be provided by a carbon monoxide detection system complying with Section 915.4.2 unless carbon monoxide alarms are permitted by Sections 915.4.1.

915.4.1 Carbon monoxide alarms. Carbon monoxide alarms complying with Sections 915.4.1.1 through 915.4.1.3 shall be permitted in lieu of a carbon monoxide detection system in both of the following:

1. Dwelling units and sleeping units.
2. Locations other than dwelling units or sleeping units, where approved, provided that the manufacturer's instructions do not prohibit installation in locations other than dwelling units or sleeping units and that the alarm signal for any carbon monoxide alarm installed in a normally unoccupied location is annunciated by an audible and visual signal in an approved location.

915.4.1.1 Power source. In buildings with a wired power source, carbon monoxide alarms shall receive their primary power from a permanent connection to building wiring, with no disconnecting means other than for overcurrent protection, and shall be provided with a battery backup. In buildings without a wired power source, carbon monoxide alarms shall be battery powered.

Exception: For existing buildings not previously required to have carbon monoxide alarms permanently connected to a wired power source, existing battery-powered and plug-in with battery backup carbon monoxide alarms shall be permitted to remain in service. When replaced, replacement with battery-powered and plug-in with battery backup carbon monoxide alarms shall be permitted.

915.4.1.2 Listings. Carbon monoxide alarms shall be listed in accordance with UL 2034. Combination carbon monoxide/smoke alarms shall also be listed in accordance with UL 217.

915.4.1.3 Interconnection. Where more than one carbon monoxide alarm is installed, actuation of any alarm shall cause all of the alarms to signal an alarm condition.

915.4.2 Carbon monoxide detection systems. Carbon monoxide detection systems shall be installed in accordance with NFPA 72.

915.4.2.1 Fire alarm system integration. Where a building fire alarm system or combination fire alarm system, as defined in NFPA 72, is installed, carbon monoxide detection shall be provided by connecting carbon monoxide detectors to the fire alarm system. Where a building fire alarm system or a combination fire alarm system is not installed, carbon monoxide detection shall be provided by connecting carbon monoxide detectors to a carbon monoxide detection system complying with NFPA 72.

915.4.2.2 Listings. Carbon monoxide detectors shall be listed in accordance with UL 2075. Combination carbon monoxide/smoke detectors shall be listed in accordance with UL 268 and UL 2075.

915.4.2.3 Alarm notification. For other than Group E Occupancies, activation of a carbon monoxide detector shall initiate alarm notification in accordance with any of the following:

1. An audible and visible alarm notification throughout the building and at the control unit.
2. Where specified in an approved fire safety plan, an audible and visible alarm in the signaling zone where the carbon monoxide has been detected and other signaling zones specified in the fire safety plan, and at the control unit.
3. Where a sounder base is provided for each detector, an audible alarm at the activated carbon monoxide detector and an audible and visible alarm at the control unit.

For Group E Occupancies having an occupant load of 30 or less, alarm notification shall be provided in an on-site location staffed by school personnel or in accordance with the notification requirements for other occupancies. For Group E occupancies having an occupant load of more than 30, an audible and visible alarm shall be provided in an on-site location staffed by school personnel.

915.5 Maintenance. Carbon monoxide alarms and carbon monoxide detection systems shall be maintained in accordance with NFPA 72 and the manufacturer's instructions. Carbon monoxide alarms and carbon monoxide detectors that become inoperable or begin producing end-of-life signals shall be replaced.

(Reason: The final version of the 2024 edition text for Section 915 that was approved fell short of clearly conveying requirements. Furthermore, the adopted code text seems to require a level of protection for some occupancies that is excessive and for other occupancies insufficient. This wording matches the approved changes in the 2027 IFC)

****Section 1006.2.1 change exception 3 to read as follows;**

Section 1006.2.1 Egress based on occupant load and common path of egress travel distance.

3. Unoccupied rooftop mechanical rooms and penthouses are not required to comply with the common path of egress travel distance measurement.

(Reason: Add "rooftop" to Exception No. 3 to clarify that only such mechanical rooms located on the roof maybe exempted.)

*****Table 1010.2.4; amend Table - Manual Bolts, Automatic Flush Bolts and Constant Latching Bolts on the Inactive Leaf of A pair of Doors; to add Group M and A occupancies as follows:**

Add Group M to Line item #1 in Table 1010.2.4: Group B, F, M or S occupancies with occupant load less than 50. [Remainder unchanged]

Add Group A and M to Line item #2 in Table 1010.2.4: Group A, B, F, M or S occupancies where the building is equipped... [Remainder unchanged]

(Reason: 2024 Code revised this information into Table format. It is historically common in our region to see the 2nd leaf locked, when that leaf is not part of the required egress door clear width, such as in a typical Group M. Table 1010.2.4 line item 2 was expanded to Group A due to it being a similar situation for Group B restaurants. When the required door width capacity is met by a single door, the inactive leaf shall be allowed to be locked since it is not required for egress. This intent of the amendment remains unchanged from previous cycle(s) and has been adjusted to reflect the new format in the 2024 IBC.)

****Section 1020.2 Construction; add new exception 6 as follows:**

6. In unsprinklered group B occupancies, corridor walls and ceilings need not be of fire-resistive construction within a single tenant space when the space is equipped with approved automatic smoke-detection within the corridor. The actuation of any detector must activate self-annunciating alarms audible in all areas within the corridor. Smoke detectors must be connected to an approved automatic fire alarm system where such system is provided.

(Reason: Similar concept was previously in UBC. This scenario occurs primarily in existing, non-sprinklered buildings, which under current IBC would be required to have a fire resistance rated corridor. New exception provides a cost-effective solution for single tenant space in lieu of the base IBC requirement to retrofit a fire sprinkler system throughout the building.)

****Section 1030.1.1.1 Spaces under grandstands and bleachers; delete this section.**

(Reason: Unenforceable.)

****Section 1101.1 Scope; add exception to Section 1101.1 as follows:**

Exception: Components of projects regulated by and registered with Architectural Barriers Division of Texas Department of Licensing and Regulation shall be deemed to be in compliance with the requirements of this chapter.

(Reason: To accommodate buildings regulated under state law. Further clarified in 2018 to mean components that are specifically addressed by TDLR shall be exempt.)

****Section 2702.5; added to read as follows:**

Section 2702.5 Designated Critical Operations Areas (DCOA): In areas within a facility or site requiring continuous operation for the purpose of public safety, emergency management, national security or business continuity, the power systems shall comply with NFPA 70 Article 708.

(Reason: Identifying these areas of critical operations in the building code ensures designers are advised of the requirements outlined in the National Electrical Code which defines specific Critical Operations Power System (COPS) requirements.)

****Section 2901.1; add a sentence to read as follows:**

[P] 2901.1 Scope. *{existing text to remain}* The provisions of this Chapter are meant to work in coordination with the provisions of Chapter 4 of the International Plumbing Code. Should any conflicts arise between the two chapters, the Building Official shall determine which provision applies.

(Reason: Gives building official discretion.)

****Section 2902.1; add a second paragraph to read as follows:**

In other than E Occupancies, the minimum number of fixtures in Table 2902.1 may be lowered, if requested in writing, by the applicant stating reasons for a reduced number and approved by the Building Official.

(Reason: To allow flexibility for designer to consider specific occupancy needs.)

****Table 2902.1; add footnote g to read as follows:**

g. Drinking fountains are not required in M Occupancies with an occupant load of 100 or less, B Occupancies with an occupant load of 25 or less, and for dining and/or drinking establishments.

(Reason: To allow flexibility for designer to consider specific occupancy needs.)

****Add Section 2902.1.4 to read as follows:**

2902.1.4 Additional fixtures for food preparation facilities. In addition to the fixtures required in this Chapter, all food service facilities shall be provided with additional fixtures set out in this section.

2902.1.4.1 Hand washing lavatory. At least one hand washing lavatory shall be provided for use by employees that is accessible from food preparation, food dispensing and ware washing areas. Additional hand washing lavatories may be required based on convenience of use by employees.

2902.1.4.2 Service sink. In new or remodeled food service establishments, at least one service sink or one floor sink shall be provided so that it is conveniently located for the cleaning of mops or similar wet floor cleaning tool and for the disposal of mop water and similar liquid waste. The location of the service sink(s) and/or mop sink(s) shall be approved by the <Jurisdiction's> health department.

(Reason: Coordinates Health law requirements with code language for consistent regional practice.)

*****Section 3002.1 Hoistway Enclosure Protection required. Add pointer and exception as follows:**

A hoistway for elevators, dumbwaiters and other vertical-access devices shall comply with Sections 712 and 713. Where the hoistway is required to be enclosed, it shall be constructed as a shaft enclosure in accordance with 713. Refer to 712.1.10 for elevators in parking garages.

Exception:

1. Elevators completely located within atriums shall not require hoistway enclosure protection.

(Reason: Provides specific Code recognition for elevators completely within atriums. Amendment needed since specific Code language does not currently exist for elevators within atriums. A pointer has been added to the exception for enclosure requirements in parking garages.)

*****3004.2.1 Enclosure. Add text to read as follows:**

Escalator floor openings shall be enclosed with shaft enclosures complying with Section 712 and 713.

(Reason: Section 3004.2.1 does not acknowledge the multitude of ways in which IBC allows escalators in vertical openings. The addition of 712 to the base requirement sends the users to the escalator opening protection requirements contained in Section 712.)

*****Section 3005.4 Machine rooms, control rooms, machinery spaces and control spaces; Delete existing IBC exceptions and replace with two new NCTCOG exceptions as follows:**

Exceptions:

1. For other than FSAE and occupant evacuation elevators, elevator machine rooms, control rooms, machinery spaces and control spaces completely located within atriums shall not require enclosure protection.

2. For other than FSAE and occupant evacuation elevators, elevator machine rooms, control rooms, machinery spaces and control spaces in open or enclosed parking garages that serve only the parking garage, shall not require enclosure protection.

(Reason: This amendment eliminates the IBC Exceptions to Section 3005.4 and replaces them with new NCTCOG exceptions. The fire rating of these enclosures is permitted to be omitted by the above added NCTCOG exceptions where allowed by other provisions of the code such as in atriums and parking structures. Added "for other than FSAE and occupant evacuation elevators" in recognition of these special elevators requiring maximum code required protection and for consistency with IBC existing language in the deleted exceptions. See companion change to eliminate fire sprinklers to eliminate the need for shunt trip system.)

*****Section 3005.5: Add a new subsection to Section 3005.5.1 as follows:**

3005.5.1 Fire Protection in Machine rooms, control rooms, machinery spaces and control spaces.

3005.5.1.1 Automatic sprinkler system. The building shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, except as otherwise permitted by Section 903.3.1.1.1 and as prohibited by Section 3005.5.1.1.1.

3005.5.1.1.1 Prohibited locations. Automatic sprinklers shall not be installed in machine rooms, elevator machinery spaces, control rooms, control spaces and elevator hoistways.

3005.5.1.1.2 Automatic Sprinkler system monitoring. The automatic sprinkler system shall have a sprinkler control valve supervisory switch and water-flow initiating device provided for each floor that is monitored by the building's fire alarm system.

3005.5.1.2 Water protection. An approved method to prevent water from infiltrating into the hoistway enclosure from the operation of the automatic sprinkler system outside the elevator lobby shall be provided.

3005.5.1.3 Omission of Shunt trip. Means for elevator shutdown in accordance with Section 3005.5 shall not be installed.

(Reason: Firefighter and public safety. This amendment eliminates the shunt trip requirement of the International Building Code Section 3005.5 for the purpose of elevator passenger and firefighter safety. The new section above is intended to be identical to Sections 3007.2, 3007.3, and 3007.4 for Fire Service Access Elevators and Sections 3008.2, 3008.3 and 3008.4 for Occupant Evacuation Elevators except where amended by the NCTOG Amendments.)

****Section 3005; add Section 3005.7 as follows:**

3005.7 Storage. Storage shall not be allowed within the elevator machine room, control room, machinery spaces and or control spaces. Provide approved signage at each entry to the above listed locations stating: "No Storage Allowed".

(Reason: Reinforces the need to maintain space clean and free of combustibles. See companion change to eliminate fire sprinklers therein, Section 3005.5.1.)

****Section 3006.2, Hoistway opening protection required; Revise text in item 5 as follows:**

5. The building is a high rise and the elevator hoistway is more than ~~75 feet (22 860 mm)~~ 55 feet (16 764 mm) in height. The height of the hoistway shall be measured from the lowest floor at or above grade to the highest floors served by the hoistway.

(Reason: 2024 IBC text does not address hoistways that are greater than 75'-0" in height that are both below grade and above grade but not located above the high-rise classification nor does the IBC address hoistways wholly located above grade such as those that serve sky lobbies.)

****Section 3007.3 and Section 3008.3: Revise text by deleting "enclosed" as follows:**

3007.3 Water Protection. Water from the operation of an automatic sprinkler system outside the elevator ~~enclosed~~ lobby shall be prevented from infiltrating into the hoistway enclosure in accordance with an approved method.

3008.3 Water Protection. Water from the operation of an automatic sprinkler system outside the elevator ~~enclosed~~-lobby shall be prevented from infiltrating into the hoistway enclosure in accordance with an approved method.

(Reason: The lobbies for FSAE and or OEE elevators may be open (i.e., at ground level), or may not require a lobby enclosure on those upper floors with secondary cab entry doors opening into a nonrequired FSAE or OEE lobby. Regardless of whether or not the lobby is enclosed, the objective is to preclude fire sprinkler water from entering into the hoistway serving FSAE and OEE elevators. The deletion of "enclosed" clarifies the original intent of this provision and is consistent with ICC interpretations. Added the word "elevator" to clarify which type of lobbies.)

End

Exhibit B
2023 National Electrical Code (NFPA 70) Local Amendments

100; change the following to read as follows:

Article 100; amend the following definition by adding the sentence below:

Authority Having Jurisdiction (AHJ). Add the following sentence to the end of the definition
“The AHJ shall be the Town of Highland Park and its employees or agents as assigned.”

110.2; change the following to read as follows:

110.2 Approval. The conductors and equipment required or permitted by this *Code* shall be acceptable only if approved. Approval of equipment may be evident by listing and labeling of equipment by a Nationally Recognized Testing Lab (NRTL) with a certification mark of that laboratory or a qualified third-party inspection agency or a field evaluation by a Field Evaluation Body accredited by either the International Code Council International Accreditation Service AC354 or ANSI National Accreditation Board programs and approved by the AHJ.

Exception: Unlisted equipment that is relocated to another location within a jurisdiction or is field modified is subject to the approval by the AHJ. This approval may be by a field evaluation by a NRTL or qualified third-party inspection agency or a field evaluation by a Field Evaluation Body accredited by either the ICC IAS AC354 or ANAB programs and approved by the AHJ
~~Manufacturer’s self-certification of any equipment shall not be used as a basis for approval by the AHJ.~~

110.12 B; add the following to:

(B) Integrity of Electrical Equipment and Connections.

Internal parts of electrical equipment, including busbars, wiring terminals, insulators, and other surfaces, shall not be damaged or contaminated by foreign materials such as paint, plaster, cleaners, abrasives, corrosive residues or influences, fire, products of combustion, or water. There shall be no damaged parts that may adversely affect safe operation or mechanical strength of the equipment such as parts that are broken; bent, cut; or deteriorated by corrosion, chemical action, or overheating. Except where prohibited elsewhere in this Code, equipment shall be specifically evaluated by its manufacturer or a qualified testing laboratory prior to being returned to service .

210.8 A 1 Bathrooms Exception; change the following to read as follows:

(A) Dwelling Units.

All 125-volt through 250-volt receptacles installed in the following locations and supplied by single-phase branch circuits rated 150 volts or less to ground shall have ground-fault circuit-interrupter protection for personnel:

(1) Bathrooms

Exception No. 4: Factory-installed receptacles that are not readily accessible and are mounted internally to bathroom exhaust fan assemblies shall not require GFCI protection unless required by the installation instructions or listing.

210.52 C 1 Countertop and Work Surfaces Exception; change the following to read as follows:

C) Countertops and Work Surfaces.

In kitchens, pantries, breakfast rooms, dining rooms, and similar areas of dwelling units, receptacle outlets for countertop and work surfaces that are 300 mm (12 in.) or wider shall be installed in accordance with 210.52(C)(1) through (C)(3) and shall not be considered as the receptacle outlets required by **210.52(A)**.

For the purposes of this section, where using multioutlet assemblies, each 300 mm (12 in.) of multioutlet assembly containing two or more receptacles installed in individual or continuous lengths shall be considered to be one receptacle outlet.

(1) Wall Spaces.

Receptacle outlets shall be installed so that no point along the wall line is more than 600 mm (24 in.) measured horizontally from a receptacle outlet in that space. The location of the receptacles shall be in accordance with **210.52(C)(3)**.

*Exception No. 1: Receptacle outlets shall not be required directly behind a range, counter-mounted cooking unit, or sink in the installation described in **Figure 210.52(C)(1)**.*

*~~Exception No. 2: Where a required receptacle outlet cannot be installed in the wall areas shown in **Figure 210.52(C)(1)**, the receptacle outlet shall be permitted to be installed as close as practicable to the countertop area to be served. The total number of receptacle outlets serving the countertop shall not be less than the number needed to satisfy **210.52(C)(1)**. These outlets shall be located in accordance with **210.52(C)(3)**.~~*

210.52 C 2 Island and Peninsular Countertops and Work Surfaces: Change the following to read as follows:

Receptacle outlets, if installed to serve an island or peninsular countertop or work surface, shall be installed in accordance with **210.52(C)(3)**. If a receptacle outlet is not provided to serve an island or peninsular countertop or work surface, ~~provisions shall be provided at the island or peninsula~~ for a chapter 3 wiring method shall be installed and supplied from a Small Appliance Branch Circuit to a Listed Outlet Box in the Peninsular or Island Cabinet at an Accessible Location, for future addition of a receptacle outlet to serve the island or peninsular countertop or work surface.

210.63 B 1 Equipment Requiring Servicing.; change the following to read as follows:

(B) Other Electrical Equipment.

In other than one- and two-family dwellings, a receptacle outlet shall be located as specified in **210.63(B)(1)** and (B)(2).

(1) Indoor Service Equipment.

The required receptacle outlet shall be located within the same room or area as the service equipment.

(2) Indoor Equipment Requiring Dedicated Equipment Spaces.

Where equipment, other than service equipment, requires dedicated equipment space as specified in **110.26(E)**, the required receptacle outlet shall be located within the same room or area as the electrical equipment and shall not be connected to the load side of the equipment's disconnecting means.

220.7 Load Calculation; add the following:

A load calculation shall be provided ~~upon request~~ when modifications to the electrical installation occur.

230.85 C Emergency Disconnects: Change the following to read as follows:

For one- and two-family dwelling units, an emergency disconnecting means located on the exterior of the building shall be installed.

(C) Replacement.

Where service equipment is replaced, all of the requirements of this section shall apply.

Exception: Where a pre-existing installation is Code Compliant with 230.70 A, only meter sockets, service entrance conductors, or related raceways and fittings are replaced, the requirements of this section shall not apply.

408.4 Descriptions Field Identification Required: Change the following to read as follows

(A) Circuit Directory or Circuit Description.

Every circuit and circuit modification shall be provided with a legible and permanent description that complies with all of the following conditions as applicable:

- (1) Located at each switch or circuit breaker in a switchboard or switchgear
- (2) Included in a circuit directory that is located on the face of, inside of, or in an approved location adjacent and permanently affixed to the panel door in the case of a panelboard
- (3) Clear, evident, and specific to the purpose or use of each circuit including spare positions with an unused overcurrent device
- (4) Described with a degree of detail and clarity that is unlikely to result in confusion between circuits
- (5) Not dependent on transient conditions of occupancy
- (6) Clear in explaining abbreviations and symbols when used

410.118: Change the following to read as follows

410.118 Access to other boxes.

Luminaires recessed in the ceilings, floors, or walls shall not be used to access outlet, pull, or junction boxes or conduit bodies, unless the box or conduit body is an integral part of the listed luminaire.

Exception: removable luminaires with a minimum measurement of 22 in. X 22 in. shall be permitted to be used as access to outlet, pull, junction boxes or conduit bodies.

422.31 B: Change the following to read as follows

422.31 B Appliances Rated over 300 Volt-Amperes

(B) Appliances Rated over 300 Volt-Amperes. For permanently connected appliances rated over 300 volt-amperes, the branch-circuit switch or circuit breaker shall be permitted to serve as the disconnecting means where the switch or circuit breaker is within sight from and is readily accessible to the appliance it serves or is capable of being locked in the open position in accordance with 110.25 and is readily accessible to the appliance it serves.

Informational Note No. 1: For appliances employing unit switches, see 422.34.

Informational Note No 2: The following means of access are considered to constitute readily accessible for this code change when conforming to the additional access requirements of the I Codes:

- (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.~~

500.8 (A) (3); change to read as follows:

500.8 Equipment.

Articles 500 through 504 require equipment construction and installation that ensure safe performance under conditions of proper use and maintenance.

Informational Note No. 1: It is important that inspection authorities and users exercise more than ordinary care with regard to installation and maintenance.

Informational Note No. 2: Since there is no consistent relationship between explosion properties and ignition temperature, the two are independent requirements.

Informational Note No. 3: Low ambient conditions require special consideration. Explosion proof or dust-ignition proof equipment may not be suitable for use at temperatures lower than -25°C (-13°F) unless they are identified for low-temperature service. However, at low ambient temperatures, flammable concentrations of vapors may not exist in a location classified as Class I, Division 1 at normal ambient temperature.

(A) Suitability. Suitability of identified equipment shall be determined by one of the following:

- (1) Equipment listing or labeling;
- (2) Evidence of equipment evaluation from a qualified testing laboratory or inspection agency concerned with product evaluation; or,
- (3) By Special Permission Only, Evidence acceptable to the authority having jurisdiction such as a manufacturer's self-evaluation *accompanied by* or an owner's engineering judgment an engineering judgment signed and sealed Under Supervision by a Qualified State of Texas Licensed Professional Engineer engaged primarily in the design or maintenance of electrical installations as referenced by TBPELS 137.59 (a)(b) as acceptable by the AHJ.

Informational Note: Additional documentation for equipment may include certificates demonstrating compliance with applicable equipment standards, indicating special conditions of use, and other pertinent information.

505.7 and 505.7 (A); change to read as follows:

505.7 Special Precaution.

~~Article 505~~ This article requires equipment construction and installation that ensures safe performance under conditions of proper use and maintenance.

Informational Note No. 1: It is important that inspection authorities and users exercise more than ordinary care with regard to regarding the installation and maintenance of electrical equipment in hazardous (classified) locations.

Informational Note No. 2: ~~Low ambient conditions require special consideration.~~ Electrical equipment depending that is dependent on the protection techniques described technique permitted by 505.8(A) may not be suitable for use at temperatures lower than -20°C (-4°F) unless they are identified for use at lower temperatures. However, Low ambient conditions require special consideration. At low ambient temperatures, flammable concentrations of vapors may might not exist in a location classified Class I, Zones 0, 1, or 2 at normal ambient temperature.

(A) Implementation of Zone Classification System. Classification of areas, engineering and design, selection of equipment and wiring methods, installation, and inspection shall be performed ~~By Special Permission Only,~~ under Supervision by a Qualified State of Texas Licensed Professional Engineer engaged primarily in the design or maintenance of electrical installations as referenced by TBPELS 137.59 (a)(b) as acceptable by the AHJ.

(B) GO TO TBPE LAW FOR THE DEFINITION OF AN ENGINEER
<https://pels.texas.gov/>
<https://pels.texas.gov/downloads/lawrules.pdf>

695.6 A 1: Change the following to read as follows:

695.6 (A) Supply Conductors.

(1) **Services and On-Site Power Production Facilities.** Service conductors and conductors supplied by on-site power production facilities shall be physically routed outside a building(s) and shall be installed as service-entrance conductors in

accordance with 230.6, 230.9, and Parts III and IV of Article 230. Where supply conductors cannot be physically routed outside of buildings, the conductors shall be permitted to be routed through the building(s) where installed in accordance with 230.6(1) or (2).

~~*Exception: The supply conductors within the fire pump room shall not be required to meet 230.6 (1) or (2)*~~

(REASON FOR CHANGE: To add clarity and provide more positive options for enforcement and approval. All Fire Pump rooms are not Fire Rated as on all 4 sides. There are Fault Currents that could exceed 150,000-190,000 amps and protection of these Service Conductors is essential and conflict with other codes, specifically 230.70(A)(1).)

690.9 D: Change the following to read as follows:

690.9(D) Transformers. Overcurrent protection for power transformers shall be installed in accordance with 705.30(F).

~~*Exception: A power transformer with a current rating on the side connected toward the interactive inverter output, not less than the rated continuous output current of the inverter, shall be permitted without overcurrent protection from the inverter.*~~

705.8 System Installation: Change the following to read as follows:

705.8 System Installation. Installation of one or more electrical power production sources operating in parallel with a primary source(s) of electricity shall be performed only by qualified persons. During the installation there shall be on site one of the following:

(1) A person holding a Master Electrician License issued by the Texas Department of Licensing and Regulation.

(2) A person holding a Journeyman Electrician License issued by the Texas Department of Licensing and Regulation.

~~(3) A person holding a Residential Wireman License issued by the Texas Department of Licensing and Regulation. Additionally this person must have formal training in interconnected electric power production sources. This training must be approved by the AHJ.~~

705.80 Power Source Capacity.

For interconnected power production sources that operate in island mode, capacity shall be calculated using the sum of all power source output maximum currents for the connected power

production source. Solar photovoltaic (PV) and wind systems shall not be included in the sum capacity.

710.15 A: Change the following to read as follows

~~710.15 General~~

~~710.15(A) Supply Output.~~

~~Power supply to premises wiring systems fed by stand-alone or isolated microgrid power sources shall be permitted to have less capacity than the calculated load. The capacity of the sum of all sources of the stand-alone supply shall be equal to or greater than the load posed by the largest single utilization equipment connected to the system. Calculated general lighting loads shall not be considered as a single load have adequate capacity to meet the calculated load in accordance with Article 220.~~

~~Informational Note: For general-use loads the system capacity can be calculated using the sum of the capacity of the firm sources, such as generators and ESS inverters. For specialty loads intended to be powered directly from a variable source, the capacity can be calculated using the sum of the variable sources, such as PV or wind inverters, or the combined capacity of both firm and variable sources.~~

END

Exhibit C
2024 International Plumbing Code Local Amendments

102.8; change to read as follows:

102.8 Referenced codes and standards. The codes and standards referenced in this code shall be those that are listed in Chapter 15 and such codes, when specifically adopted, and standards shall be considered as part of the requirements of this code to the prescribed extent of each such reference and as further regulated in Section 102.8.1 and 102.8.2. Whenever amendments have been adopted to the referenced codes and standards, each reference to said code and standard shall be considered to reference the adopted amendments. Any reference to NFPA 70 shall mean the National Electrical Code as adopted.

106.5.3 shall be amended in part as follows:

Every permit issued shall become invalid unless work authorized by such permit is commenced within ninety (90) days after its issuance, or if the work authorized by such permit is suspended or abandoned for a period of ninety (90) days after the time the work has commenced.

106.6.2; change to read as follows:

106.6.2 Fee schedule. The fees for all plumbing work shall be as adopted by resolution of the governing body of the jurisdiction.

106.6.3 Fee Refunds. The code official shall establish a policy for authorizing the refunding of fees.

106.7 shall be added, which shall read as follows:

106.7 Registration of Contractors.

- a. Any person who engages in the design, installation, construction, maintenance, service repair, alteration or modification of a product, plumbing system or irrigation system requiring a permit as set forth in this ordinance shall be licensed by the State of Texas to perform such work as a plumbing contractor or irrigation contractor, respectively.
- b. Plumbing contractors and irrigation contractors are required to register annually with the Town. Registration for plumbing contractors shall be maintained annually, corresponding with their State-issued responsible master plumber's license. Registration for irrigation contractors will expire one calendar year from the date on which they are issued. Registration shall be made in writing on Department of Building Inspection furnished forms for that purpose. A registration fee shall be required as established by Town Council resolution. This registration shall be accompanied by a copy of the person's State-issued responsible master plumber's license or State-issued irrigator's license, and a copy of their driver's license.

Exception: A homeowner is not required to be licensed as a registered contractor to perform work in his own home.

108.3 shall be deleted in its entirety.

108.4 shall be deleted in its entirety and replaced with the following:

“The penalty for violation of this Code is as set out in the Highland Park Code of Ordinances section 1.01.009.

305; change to read as follows:

305.1 Protection against contact. 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 plastic. 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.

305.4.1; changed to read as follows:

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

306.2.5; added to read as follows:

306.2.5 Plastic sewer and DWV piping installation. Plastic sewer and DWV piping installed underground shall be installed in accordance with the manufacturer’s installation instructions and ASTM D2321. Trench width shall be controlled to not exceed the outside pipe diameter plus 16 inches or in a trench which has a controlled width equal to the nominal diameter of the 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 a minimum of 85 percent standard proctor density and extend to a minimum of 6 inches above the top of the pipe.

403.1; add a second paragraph to read as follows:

403.1 Minimum number of fixtures. Plumbing fixtures shall be provided in the minimum number as shown in Table 403.1, based on the actual use of the building or space. Uses not shown in Table

403.1 shall be considered individually by the Code Official. The number of occupants shall be determined by the *International Building Code*.

In other than E Occupancies, the minimum number of fixtures in Tabel 403.1 may be lowered, if requested in writing, by the applicant stating reasons for a reduction number and approved by the Building Official.

403.1; add footnote g to read as follows:

g. Drinking fountains are not required in M Occupancies with an occupant load of 100 or less, B Occupancies with an occupant load of 25 or less, and for dining and/or drinking establishments.

h. Each restroom in A, I, M Occupancies shall have at least one baby changing table with clear access that meets ADA

413.4; change to read as follows:

413.4 Required location for floor drains Public laundries and central washing facilities. Floor drains shall be installed in the following areas:

1. In public laundries and in the central washing facilities of multiple family dwellings, the rooms containing automatic clothes washers shall be provided with floor drains located to readily drain the entire floor area. Such drains shall have a minimum outlet of not less than 3 inches (76 mm) in diameter.
2. Commercial kitchens.
Exception: In lieu of floor drains in commercial kitchens, the Code Official may accept floor sinks.
3. Public restrooms.
4. Closets containing mop/service sinks.

502.3; change to read as follows:

502.3 Water heaters installed in attics. (Remain the same) As a minimum access to the attic space shall be provided by one of the following:

1. A permanent stair.
2. A pull-down stair rated for 300 lb. minimum.
3. ~~An access door from an upper floor level.~~

608.17.5; change to read as follows:

608.17.5 Connections to 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 principal 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 principal backflow preventer.

703.6; Combined sanitary and storm public sewer. Delete -Not allowed to combine

704.5; added to read as follows:

704.5 Single stack fittings. Single stack fittings with internal baffle, PVC schedule 40 or cast-iron single stack shall be designed by a registered engineer and comply to a national recognized standard.

712.4.3; add Section 712.4.3 to read as follows:

712.4.3 Dual Pump System. All sumps shall be automatically discharged and, when in any “public use” occupancy where the sump serves more than 10 fixture units, shall be provided with dual pumps or ejectors arranged to function independently in case of overload or mechanical failure. For storm drainage sumps and pumping systems, see Section 1113.

903.1.1; change to read as follows:

903.1.1 Roof extension unprotected. Open vent pipes that extend through a roof shall terminate not less than six (6) inches (152 mm) above the roof.

1109; Combined Sanitary and Storm Public Sewer: delete this section.

1202.1; delete Exceptions 1 and 2.

Chapter 15; ASTM D2321; added to Referenced Standards

ASTM D2321 - Underground Installation of Thermoplastic Pipe for Sewers and Other Gravity-Flow Applications. 306.2.5

END

Exhibit D
2024 International Fuel Gas Code Local Amendments

102.2; add an exception to read as follows:

Exception: Existing dwelling units shall comply with Section 621.2.

102.8; change to read as follows:

102.8 Referenced codes and standards. The codes and standards referenced in this code shall be those that are listed in Chapter 8 and such codes, when specifically adopted, and standards shall be considered part of the requirements of this code to the prescribed extent of each such reference and as further regulated in Sections 102.8.1 and 102.8.2. 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 to NFPA 70 or the National Electrical Code shall mean the National Electrical Code as adopted.

Exception: Where enforcement of a code provision would violate the conditions of the listing of the equipment or appliance, the conditions of the listing and the manufacturer's installation instructions shall apply.

Section 105.5.8 Shall be added as follows:

106.7 Registration of Contractors.

(a) Any contractor engaging in the design, installation, construction, maintenance, service repair, alteration or modification of a product, or plumbing fuel gas system requiring a permit as set forth in this ordinance shall be licensed by the State of Texas to perform such work.

(b) Plumbing contractors are required to register with the Town. Registration for plumbing contractors shall be maintained annually, corresponding with their State issued responsible master plumber's license. Registration shall be made in writing on Department of Building Inspection furnished forms for that purpose. This registration shall be accompanied by a copy of the person's State issued Master Plumber's license and driver's license.

Exception: a homeowner is not required to be licensed as a registered contractor to perform work in his own home.

Section 106.5.3; shall be amended in part as follows:

“Every permit issued shall become invalid unless work authorized by such permit is commenced within ninety (90) days after its issuance, or if the work authorized by such permit is suspended or abandoned for a period of ninety (90) days after the time the work has commenced.”

Section 108.3 Permit Evaluation; shall be deleted;

Section 108.6 Fee refunds; shall be deleted;

Section 112- Means of Appeals shall be deleted

Add Section 115- Licensing of Gas Installers

Add Section 115 as follows:

Section 115 - LICENSING OF GAS INSTALLERS.

Subsection 115.1 - GENERAL: Any person, firm or corporation engaging in the installation of consumer's gas piping, gas appliances and related accessories, shall be qualified, as set forth herein, and a license shall be obtained from the State of Texas as required by the Plumbing License Law of 1947, Chapter 1301 Texas Occupations Code and any subsequent amendments thereto. Where any plumbing work is being done a licensed Master or Journeyman Plumber shall at all times be present on the job and in actual control, and in charge of the work being done.

Subsection 115.2 - ILLEGAL WORK, REVOCATION OF LICENSE: Any person, firm or corporation engaged in the gas installation business whose work does not conform to the rules and regulations hereinafter set out, or whose workmanship or materials are of inferior quality, shall on notice from the Plumbing Inspector make necessary changes or corrections at once so as to conform to this code, if work has not been so changed after ten (10) days' notice from the Plumbing Inspector; the Plumbing Inspector shall then refuse to issue any further permits until such work has fully complied with the rules and regulations of this code. The Plumbing Inspector may appear before the Governing Authority and request that all licenses be revoked because of continuous violations. When the revocation of any such license is to be considered at any meeting, the person, firm, company, association, or corporation to whom the license has been issued shall have at least three (3) days' notice in writing of the time and place of such meeting, together with a statement of the grounds upon which it is proposed to revoke such license. Any person violating any provision of the Town Fuel Gas Code may be charged with a violation regardless of whether the provisions of this section have been followed.

Subsection 115.3 - ALLOWING ONE'S NAME OR LICENSE TO BE USED

TO OBTAIN PERMIT FRAUDULENTLY: No person, firm or corporation engaged in the business of gas installation shall allow its name to be used by any other person, firm, or corporation, directly or indirectly, to obtain a permit, or for the construction of any work under its name or license.

306.3; change to read as follows:

306.3 Appliances in attics. Attics containing *appliances* shall be provided with an opening and unobstructed passageway large enough to allow removal of the largest *appliance*. The passageway shall be not less than 30 inches (762 mm) high and 22 inches (599 mm) wide and to more than 20 feet (6096 mm) in length measured along the centerline of the passageway from the opening to the *appliance*. The passageway shall have continuous solid flooring 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 at the front or service side of the *appliance*. The clear access opening dimensions shall be not less than 20 inches by 30 inches (508 mm by 762 mm), and large enough to allow removal of the largest appliance. As a minimum access to the attic space shall be provided by 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* is capable of being serviced and removed through the required opening with the approval of the code official.~~
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 greater than 50 feet (15,250 mm) in length.~~
3.

306.5.1; change to read as follows:

[M] 306.5.1 Sloped roofs. Where appliances, *equipment*, fans or other components that require service are installed on a roof having a slope of 3 units vertical in 12 units horizontal (25-percent slope) or greater and having an edge more than 30 inches (762 mm) above grade at such edge, a catwalk at least 16 inches in width with substantial cleats spaced not more than 16 inches apart shall be provided from the roof *access* to a level platform at the appliance. The level platform shall be provided on each side of the appliance to which *access* is required for service, repair or maintenance. The platform shall be not less than 30 inches (762 mm) in any dimension and shall be provided with guards. The guards shall extend not less than 42 inches (1067 mm) above the platform, shall be constructed so as to prevent the passage of a 21-inch-diameter (533 mm) sphere and shall comply with the loading requirements for guards specified in the *International Building Code*. (*remainder of text unchanged*).

401.5; add a second paragraph to read as follows:

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"

404.12; change to read as follows:

404.12 Minimum burial depth. Underground piping systems shall be installed a minimum depth of ~~12~~ 18 inches (305 ~~458~~ mm) top of pipe below grade, ~~except as provided for in Section 404.12.1.~~

406.4; change to read as follows:

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. Mechanical gauges used to measure test pressures shall have a range such that the highest end of the scale is not greater than five times the test pressure. Spring type gauges do not meet the requirement of a calibrated gauge.

406.4.1; change to read as follows:

406.4.1 Test pressure. The test pressure to be used shall be no less than ~~1 1/2 times the proposed maximum working pressure, but no less than 3~~ 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, ~~irrespective of design pressure. Where the test pressure exceeds 125 psig (862 kPa gauge), the test pressure shall not exceed a value that produces a hoop stress in the piping greater than 50 percent of the specified minimum yield strength of the pipe.~~ 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 1/2"), a set hand, 1/10 pound incrementation and pressure range not to exceed 15 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 1/2"), a set hand, a minimum of 2/10 pound incrementation and a pressure range not to exceed 50 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.

409.1; add Section 409.1.4 to read as follows:

409.1.4 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.

410.1; add a second paragraph and exception to read as follows:

Access to regulators shall comply with the requirements for *access* to appliances as specified in Section 306.

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.

621.2; add exception as follows:

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 heaters may continue to be used in dwelling units, in accordance with the code provisions in effect when installed, when *approved* by the Code Official unless an unsafe condition is determined to exist as described in Section 108.7.

END

Exhibit E
2024 International Mechanical Code Local Amendments

102.8; change to read as follows:

102.8 Referenced Codes and Standards. The codes and standards referenced herein shall be those that are listed in Chapter 15 and such codes and standards, when specifically adopted, shall be considered part of the requirements of this code to the prescribed extent of each such reference and as further regulated in Sections 102.8.1 and 102.8.2.

Whenever amendments have been adopted to the referenced codes and standards, each reference to said code and standard shall be considered to reference the adopted amendments. Any reference to NFPA 70 shall mean the National Electrical Code as adopted.

Exception: Where enforcement of a code provision would violate the conditions of the listing of the *equipment* or *appliance*, the conditions of the listing and the manufacturer's installation instruction shall apply.

106.4.3, Expiration, shall be amended in part as follows:

Every permit issued shall become invalid unless work authorized by such permit is commenced within ninety (90) days after its issuance, or if the work authorized by such permit is suspended or abandoned for a period of ninety (90) days after the time the work has commenced.

Add 106.6, which shall read as follows:

106.6 Registration of Contractors.

(a) Any person who installs, repairs or alters environmental air conditioning, refrigeration, or process cooling or heating systems or ventilation shall be licensed by the State of Texas to perform such work as a mechanical contractor.

(b) Mechanical contractors are required to register annually with the Town. Registration will expire 365-days from issuance. To register, an application shall be made in writing on forms furnished for that purpose by the Building Inspection Department along with a registration fee, as established by Town Council resolution, and filed with the Building Inspection Department. This application shall contain a copy of the person's State air-conditioning and refrigeration license and a copy of their driver's license. Exception: a homeowner is not required to be licensed as a registered contractor to perform work on his/her homestead.

108.3 Permit Valuations shall be deleted in its entirety.

Section 108.4 shall be deleted in its entirety and replaced with the following:

"The penalty for violation of this Code is as set out in the Highland Park Code of Ordinances section 1.01.009."

108.6 Refunds shall be deleted in its entirety.

202; add definition of Effective Dispersal Volume Charge as follows:

Effective Dispersal Volume Charge (EDVC). The maximum refrigerant charge permitted for an effective dispersal volume.

202; add definition of Refrigerant Detection System as follows:

Refrigerant Detection System - The product safety standard addresses both refrigerant detection systems and leak detection systems. In the product safety standard, a leak detection system is defined as “a sensing system which responds to refrigerant leaking from a refrigerating system.” A leak detection system may include gas sensing, ultrasonic, or other such methods that meet the standards UL 60335-2-40/CSA C22.2 No. 60335-2-40 or UL 60335-2-89/CSA C22.2 No. 60335-2-89. [ASHRAE 15-2022: 3.1]

202; add definition of Refrigerant Detector as follows:

Refrigerant Detector - “Refrigerant sensor” is another term for refrigerant detector. A refrigerant sensor is a sensing element combined with electronic circuitry that provides a digital output or an analog signal output that corresponds to the sensed refrigerant gas concentration. [ASHRAE 15-2022: 3.1]

306.3; change to read as follows:

306.3 Appliances in attics. Attics containing *appliances* shall be provided with an opening and unobstructed passageway large enough to allow removal of the largest *appliance*. The passageway shall be not less than 30 inches (762 mm) high and 22 inches (599 mm) wide and to more than 20 feet (6096 mm) in length measured along the centerline of the passageway from the opening to the *appliance*. The passageway shall have continuous solid flooring 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 at the front or service side of the *appliance*. The clear access opening dimensions shall be not less than 20 inches by 30 inches (508 mm by 762 mm), and large enough to allow removal of the largest appliance. As a minimum access to the attic space shall be provided by 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* is capable of being serviced and removed through the required opening with the approval of the code official.
- ~~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 greater than 50~~

feet (15,250 mm) in length.

306.5.1; change to read as follows:

306.5.1 Sloped Roofs. Where appliances, *equipment*, fans or other components that require service are installed on a roof having a slope of 3 units vertical in 12 units horizontal (25-percent slope) or greater and having an edge more than 30 inches (762 mm) above grade at such edge, a catwalk at least 16 inches in width with substantial cleats spaced not more than 16 inches apart shall be provided from the roof *access* to a level platform at the appliance. The level platform shall be provided on each side of the *appliance* or *equipment* to which *access* is required for service, repair or maintenance. The platform shall be not less than 30 inches (762 mm) in any dimension and shall be provided with guards. The guards shall extend not less than 42 inches (1067 mm) above the platform, shall be constructed so as to prevent the passage of a 21-inch-diameter (533 mm) sphere and shall comply with the loading requirements for guards specified in the *International Building Code...{remainder of text unchanged}*.

501.3; add an exception to read as follows:

501.3 Exhaust Discharge. The air removed by every mechanical exhaust system shall be discharged outdoors at a point where it will not cause a public nuisance and not less than the distances specified in Section 501.3.1. The air shall be discharged to a location from which it cannot again be readily drawn in by a ventilating system. Air shall not be exhausted into an attic, crawl space, or be directed onto walkways.

Exceptions:

1. Whole-house ventilation-type attic fans shall be permitted to discharge into the attic space of dwelling units having private attics.
2. Commercial cooking recirculating systems.
3. Where installed in accordance with the manufacturer's instructions and where mechanical or natural ventilation is otherwise provided in accordance with Chapter 4, listed and labeled domestic ductless range hoods shall not be required to discharge to the outdoors.
4. Toilet room exhaust ducts may terminate in a warehouse or shop area when infiltration of outside air is present.

1104.2 Machinery Room ; add an exception to read as follows:

Exception:

3. Machinery Rooms are not required when in compliance with ASHRAE 15 Section 7.4.

1104.3.1.1 Group A2L High-Probability Systems. Add this section to read:

1104.3.1.1 Group A2L High-Probability Systems. High-probability systems using Group A2L refrigerants shall comply with ASHRAE 15 section 7.6.

1109.2.5 Refrigerant pipe shafts. Change to read:

[Existing text to remain]

Exceptions:

1. [Existing text to remain]
2. Piping in a direct refrigeration system ~~using Group A1~~ where the refrigerant quantity does not exceed the limits of Table 1103.1 for the smallest occupied space through which the piping passes.
3. [Existing text to remain]

END

Exhibit F
2024 IECC (Energy Provisions of the 2024 IRC) Local Amendments

C102/R102 General; add Section C102.1.2 and R102.1.2 (N1101.4.1) to read as follows:

C104.1.2 Alternative compliance. A building certified by a national, state, or local accredited energy efficiency program and determined by the Energy Systems Laboratory to be in compliance with the energy efficiency requirements of this section may, at the option of the Code Official, be considered in compliance. The United States Environmental Protection Agency's Energy Star Program certification of energy code equivalency shall be considered in compliance.

R104.1.2 (N1101.4.1) Alternative compliance. A building certified by a national, state, or local accredited energy efficiency program and determined by the Energy Systems Laboratory to be in compliance with the energy efficiency requirements of this section may, at the option of the Code Official, be considered in compliance. The United States Environmental Protection Agency's Energy Star Program certification of energy code equivalency shall be considered in compliance. Regardless of the program or the path to compliance, each 1- and 2-family dwelling shall be tested for air and duct leakage as prescribed in Section R402.5.1.2 (N1102. 5.1.2) and R403.3.7 (N1103.3.7) respectively.

C403.7.4.1 Nontransient dwelling units.; amend as follows.

C403.7.4.1 Nontransient dwelling units. Nontransient dwelling units shall be provided with outdoor air energy recovery ventilation systems complying with not less than one of the following:

1. The system shall have an enthalpy recovery ratio of not less than 50 percent at cooling design condition and not less than 60 percent at heating design condition.
2. The system shall have a sensible recovery efficiency (SRE) that is not less than 65 percent at 32°F (0°C) and in Climate Zones 0A, 1A, 2A and 3A shall have a net moisture transfer (NMT) that is not less than 40 percent at 95°F (35°C). SRE and NMT shall be determined from a listed value or from interpolation of listed values at an airflow not less than the design airflow, based on testing in accordance with CAN/CSA C439.

Exceptions:

1. Nontransient dwelling units in Climate Zone 3C.
2. Nontransient dwelling units with not more than 500 square feet (46 m²) of conditioned floor area in Climate Zones 0, 1, 2, 3, 4C and 5C.
3. Enthalpy recovery ratio requirements at heating design condition in Climate Zones 0, 1 and 2.
4. Enthalpy recovery ratio requirements at cooling design condition in Climate Zones 4, 5, 6, 7 and 8.
5. Dwelling units using ventilation systems per the Fan Efficacy Table in R406, shall be considered in compliance.

C405.2.10 Sleeping unit and dwelling unit lighting and switched receptacle controls; deleted in its entirety.

R105.2.2 Solar Ready System; deleted in entirety.

R106.3 Permit Valuation; deleted in entirety.

Section R202 (N1101.6) Definitions; add the following definition:

DYNAMIC GLAZING. Any fenestration product that has the fully reversible ability to change its performance properties, including U-factor, solar heat gain coefficient (SHGC), or visible transmittance (VT).

R401.2.1 Prescriptive Compliance Option; deleted reference to R408.

R402.2.10 (N1102.2.10) Slab-on-grade floors; amend as follows.

Exception: Slab-edge insulation is not required in jurisdictions designated by the *code official* as having a moderate to heavy or very heavy termite infestation probability.

R402.5.5 (N1102.5.5) Air-sealed electrical and communication outlet boxes; amend as follows.

R402.5.5 (N1102.5.5) Air-sealed electrical and communication outlet boxes. Air-sealed electrical and communication outlet boxes that penetrated the air barrier of the building thermal envelope shall be caulked, taped, gasketed or otherwise sealed to the air barrier element being penetrated. Air-sealed boxes shall be buried in or surrounded by insulation. Air-sealed boxes shall be tested and marked in accordance with NEMA OS 4. Air-sealed boxes shall be installed in accordance with the manufacturer's instructions.

Exception: Boxes may be air-sealed in the field using caulk, tape, gasket or other approved method to prevent air leakage through the box in lieu of NEMA OS 4 boxes. Boxes air-sealed in the field shall be sealed to the air barrier element being penetrated and installed in accordance with manufacturer's instructions

Table 402.1.2 (1102.1.2) Maximum Assembly/Climate Zone items: amend table as follows.

TABLE R402.1.2 (N1102.1.2) - MAXIMUM ASSEMBLY U-FACTOR AND FENESTRATION REQUIREMENTS

Portions of table not shown remain unchanged.

<i>CLIMATE ZONE</i>	<i>2</i>	<i>3</i>
<i><u>Attic Roofline</u></i>	<i><u>0.035</u></i>	<i><u>0.035</u></i>
<i><u>U-factor^f</u></i>		

f. Air-impermeable insulation located at the attic roofline but below the roof deck may be used if mechanical equipment and air distribution system are located entirely within the building thermal envelope. "Air-impermeable" shall be defined as having an air permeance not exceeding 0.02 L/s-m² at 75 Pa pressure differential tested according to ASTM E 2178 or ASTM E 283.

402.1.3 (N1102.1.3) Insulation/Climate Zone items: amend table as follows.

TABLE R402.1.3 (N1102.1.3) - INSULATION MINIMUM R-VALUES AND FENESTRATION REQUIREMENTS BY COMPONENT

Portions of table not shown remain unchanged.

<i>CLIMATE ZONE</i>	<i>2</i>	<i>3</i>
<i><u>attic roofline R-valueⁱ</u></i>	<i><u>30+0ci</u></i>	<i><u>30+0ci</u></i>

i. Air-impermeable insulation of R-30 or greater located at the attic roofline but below the roof deck may be used if mechanical equipment and air distribution system are located entirely within the building thermal envelope. "Air-impermeable" shall be defined as having an air permeance not exceeding 0.02 L/s-m² at 75 Pa pressure differential tested according to ASTM E 2178 or ASTM E 283.

R404.2 (N1104.2) Interior lighting controls; deleted in its entirety.

TABLE R405.4.2(1) (N1105.4.2(1)) - SPECIFICATIONS FOR THE STANDARD REFERENCE AND PROPOSED DESIGNS: amend table as follows.

TABLE R405.4.2(1) (N1105.4.2(1)) SPECIFICATIONS FOR THE STANDARD REFERENCE AND PROPOSED DESIGNS

Portions of table not shown remain unchanged.

BUILDING COMPONENT	STANDARD REFERENCE DESIGN	PROPOSED DESIGN
Foundations	Type: same as proposed.	As proposed
	Foundation wall or slab extension above grade: 1 foot (30cm) Foundation wall or slab extension below grade: same as proposed Foundation wall or slab perimeter length: same as proposed Soil characteristics: same as proposed.	As proposed
	Foundation wall U-factor and slab-on-grade F-factor: as specified in Table R402.1.2. ⁿ	As proposed

For SI: 1 square foot = 0.93 m², 1 British thermal unit = 1055 J, 1 pound per square foot = 4.88 kg/m², 1 gallon (US) = 3.785 L, °C = (°F-32)/1.8, 1 degree = 0.79 rad.

n. In accordance with Section R402.2.10, a maximum F-factor of 0.73 shall apply for the reference design in jurisdictions designated by the code official as having a moderate to heavy or very heavy termite infestation probability.

TABLE R406.5 (N1106.5) MAXIMUM ENERGY RATING INDEX; amend to read as follows:

TABLE R406.5 (N1106.5) ²

MAXIMUM ENERGY RATING INDEX

CLIMATE ZONE	ENERGY RATING INDEX NOT INCLUDING OPP	ENERGY RATING INDEX WITH OPP
2	51 59	34
3	50 59	33

² The table is effective from September 1, 2022 to August 31, 2025.

TABLE R406.5 (N1106.5) ³

MAXIMUM ENERGY RATING INDEX

CLIMATE ZONE	ENERGY RATING INDEX NOT INCLUDING OPP	ENERGY RATING INDEX WITH OPP
2	51 57	34
3	50 57	33

³ The table is effective from September 1, 2025 to August 31, 2028.

TABLE R406.5 (N1106.5) ⁴

MAXIMUM ENERGY RATING INDEX

CLIMATE ZONE	ENERGY RATING INDEX NOT INCLUDING OPP	ENERGY RATING INDEX WITH OPP
2	51 55	34
3	50 55	33

⁴ This table is effective on or after September 1, 2028.

R408 Additional Efficiency Requirements; deleted in entirety.

NOTE : HB 3215 was signed into law by the Governor on June 14, 2021 as part of the 87th Regular Session Codified in Chapter 388 Texas Building Energy Performance Standards: §388.003 (i), (j), and (k). HB 3215 now allows a **Home Energy Rating System Index (ex. HERS Index)** utilizing ANSI/RESNET/ICC Standard 301 (as it existed on January 1, 2021) shall be considered in compliance with State law provided that:

- o The home includes compliance with the Mandatory requirements of 2018 IECC Section R406.2.
- o The home includes compliance with Building thermal envelope provisions of Table R402.1.2 or Table R402.1.4 of the 2018 IECC

END

Exhibit G
2024 International Residential Code Local Amendments

R102.4 Referenced codes and standards; change 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.

R103 and R103.1 Amend to insert the Department Name

BUILDING INSPECTION DEPARTMENT TOWN OF HIGHLAND PARK

R103.1 Creation of enforcement agency. The BUILDING INSPECTION DEPARTMENT TOWN OF HIGHLAND PARK is hereby created and the official in charge thereof shall be known as the building official.

R104.2.3.1 Flood Hazard areas; delete this section.

R104.3.1 & R106.1.4; delete these sections regarding flood hazards.

R104.7 to read as follows:

R104.7 Official records. The building official shall keep official records as required in Sections R104.7.1 through R104.7.5.

Such official records shall be retained for as long as the building or structure to which such records relate remains in existence, unless otherwise provided by other regulations.

R105.2 Work exempt from permit; shall be deleted entirely, except for the following that shall remain exempt from permit:

Building-

#6 Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.

#8 Swings and other playground equipment

Gas-

#2 Replacement of any minor part that does not alter approval of equipment or make such equipment unsafe.

Mechanical-

#5 Replacement of any minor part that does not alter approval of equipment or make such equipment unsafe.

Add into section 105.3-

Irrigation- Replacement of any minor part or piping that does not alter approval of equipment or make such equipment unsafe. Copper repair piping that requires soldering will require a permit.

R105.3 Application for permit.

Delete item # 5 – regarding valuation of work

Add #8- Construction Documents (see also section 106.6.1)

R105.5 Amend to read as follows

R105.5 Commencement, suspension, or abandonment of work. A building permit shall automatically terminate if construction activities authorized by the permit have not been commenced at the construction site on or before the ninetieth (90th) day following the date on which the permit was issued; provided however, the date on which the permit shall automatically terminate may be extended in accordance with the provisions of subsection 2 immediately below.

1. If construction activities authorized by a permit have not been commenced at the construction site and the permit has not already automatically terminated, the date on which a permit shall automatically terminate may be extended by the Building Official for up to an additional ninety (90) days; provided however, (i) a permit may be extended only one time; and (ii) if a permit has already automatically terminated, it shall not be extended. An application for an extension shall be in writing, shall be signed by the owner, shall demonstrate justifiable cause for the extension, and shall be delivered to the Town. The permit shall be extended only if, in the discretion of the Building Official, the owner demonstrates that justifiable cause exists for the extension. In exercising discretion, the Building Official shall consider (i) the objectives of the Town set forth below in R105.5.1.3 Intent; and (ii) such other matters as he/she may deem relevant. Upon receipt of an application, the Building Official shall, as soon as reasonably possible: (i) evaluate the application; (ii) exercise his/her discretion as to whether an extension will be granted; (iii) determine the duration of any extension; and (iv) inform the owner in writing of his/her decision, including, if an extension is granted, the new date on which the permit shall automatically terminate.

2. A building permit shall automatically terminate, if after construction activities authorized by the permit have been commenced at the construction site, such activities are suspended or abandoned for a period of sixty (60) or more consecutive days.

Add Section R105.5.1, Major residential construction activities - time for completion, which shall read as follows:

R105.5.1 Major residential construction activities - time for completion. Major residential construction activities, as that term is defined below, shall be conducted and completed in compliance with the following provisions:

R105.5.1.1 Definitions. The following definitions apply to section R105.5.1 and to no other subsection:

1. The phrase “major residential construction activities” means any and all activities involved in:
 - A. Building, erecting, or constructing: (i) a new residential structure; and (ii) any other structure, facility, or feature associated with the new residential structure; or
 - B. Renovating, reconfiguring, repairing, improving, or adding to any: (i) existing residential structure; or (ii) any structure, facility, or feature associated with an existing residential structure which, in the judgment of the Building Official, will likely require more than six (6) months to complete. If the Building Official concludes that such activities will not likely require more than six (6) months to complete, such activities shall not be deemed major residential construction activities and this subsection R105.5.1 shall have no application to such activities.
2. The phrase “residential building site” means any building site that is zoned “one-family residence (detached),” “one-family residence (attached) townhouse,” or “two-family residence duplex.”
3. The word “owner” means any natural person, proprietorship, corporation, partnership, association, estate, trust, foundation, or other entity that owns, possesses, or controls any interest in any residential building site located in the Town of Highland Park. In any situation in which any such property is owned, possessed, or controlled by multiple natural persons and/or multiple other such entities, the word “owner” (in the singular) encompasses all such natural persons and other entities.
4. The phrase “highly extraordinary circumstances” refers to any objectives, characteristics, conditions, and/or situations: (i) that are related to, or involved in, proposed major residential construction activities; and that:
 - A. Are highly likely to preclude completion of construction activities within twenty-four (24) months from the date of commencement of such activities.

B. Significantly distinguish such construction activities from comparable construction activities which have been, or could be, completed within twenty-four (24) months from the date of commencement; and

C. Cannot be overcome, minimized, or eliminated through more thorough planning, more intensified efforts, or use of alternative building materials or techniques, provided however, the owner shall not be expected to unreasonably compromise the design, quality, or function of the residence or incur unreasonable additional expense.

R105.5.1.2 Application. The provisions of this subsection R105.5.1 shall apply to all major residential construction activities that are conducted, or to be conducted, on a residential building site, but this subsection shall not apply to other construction activities.

R105.5.1.3 Intent. The intent of section R105.5.1 is to assure that:

1. Prior to commencing any major residential construction activities at a residential building site, the owner of the site and all architects, engineers, contractors, subcontractors, vendors, and other persons who will participate in any such activities shall design, plan, organize, manage, and oversee the contemplated construction activities to the extent, and in a manner that, following commencement of construction activities at the site:

A. The construction activities will be completed as rapidly as reasonably possible.

B. The interests of the Town, neighboring residents, and visitors in:

(i) maintaining a safe, orderly, and attractive neighborhood; and

(ii) having easy access to and along streets, sidewalks, driveways, alleyways and easements, will be respected at all times; and

C. Any disruption, inconvenience, or aggravation experienced by residents and visitors will be minimized to the extent reasonably possible; and

2. Upon commencement of any major residential construction activities at a residential building site and throughout the performance of such activities, the owner of the site and all architects, engineers, contractors, subcontractors, vendors, and other persons who participate in any such activities shall diligently and persistently strive to: (i) complete such activities as quickly as reasonably possible; and (ii) to achieve the objectives set forth above in subsections “A,” “B,” and “C” of subsection 1 of section R105.5.1.3.

R105.5.1.4 Expiration date. The expiration date of a building permit issued for major residential construction activities shall be determined in accordance with the following provisions:

1. Except as provided in the subsections below and/or in section R105.5.1.5, extensions, all building permits for major residential construction activities shall require that such activities be

completed within a period of not more than twenty-four (24) consecutive months commencing on the date on which the building permit is issued.

2. The owner of a residential building site may apply for the issuance of a building permit that allows construction activities to continue for a period of more than twenty-four (24) consecutive months by delivering to the Town a written, signed application. The application shall: (i) set forth generally the owner's contentions concerning each of the matters which are described immediately below in subsection 3 and which must be established by the owner at a hearing before the administrative committee of the Town Council (the "committee"); and (ii) state the number of months and days the owner seeks to have allowed by the building permit for completion of the construction activities.

3. At the hearing before the committee, the owner shall have the burden of presenting compelling reasons and information that establish the following with reasonable certainty:

A. That highly extraordinary circumstances existing connection with the proposed major residential construction activities; and

B. The number of months and days that will likely be required for completion of the proposed construction activities, assuming that the construction activities are conducted in a manner consistent with the objectives set forth above in subsection "A," "B," and "C" of subsection 1 of section R105.5.1.3.

4. The committee may authorize issuance of a building permit that allows construction activities to continue for a period of more than twenty-four (24) consecutive months, if and only if, it finds that the owner met his/her/its burden set forth in subsection 3 above.

5. Any authorization for the issuance of such a permit shall state a specific number of months and/or days for which construction will be allowed by the permit. Such number of months and/or days shall not exceed the number reasonably required to complete the construction activities if the activities are conducted in a manner consistent with the objectives set forth above in subsections "A," "B," and "C" of subsection 1 of section R105.5.1.3.

6. The committee may condition the issuance of any permit on the owner strictly abiding by whatever practices, rules, or obligations the committee may reasonably conclude are necessary to complete the construction activity as quickly as reasonably possible.

R105.5.1.5 Extensions.

1. The owner of a residential building site for which a building permit has been issued for major residential construction activities may apply for an extension of the expiration date of the permit by delivering to the Town a written, signed application. The application shall: (i) state a specific

date to which the owner seeks to extend the duration of the permit; (ii) explain the reasons why the owner seeks to extend the duration of the permit; (iii) demonstrate that remaining construction activities can be fully completed by the date to which the owner seeks to extend the permit; and (iv) establish that at all times prior to the date on which the application was filed;

A. The construction activities have been performed diligently and persistently; and

B. The owner of the site and all architects, engineers, contractors, subcontractors, vendors, and other persons who participate in any such activities have striven to achieve the objectives set forth above in section R105.5.1.3.

2. Upon receipt of an application for an extension of a permit:

A. The Building Official shall: (i) evaluate the application; (ii) assess any notice of the occurrence of an alleged unforeseeable event made by the owner in accordance with the provisions set forth below in section R105.5.1.6; and (iii) make whatever inquiries he/she may deem appropriate.

B. If the Building Official concludes that: (i) the requirements of section R105.5.1.3 have been satisfied; and (ii) granting an extension is in the best interest of the Town, he/she may extend the duration of the building permit for a specific period not to exceed: (i) the number of days within which the construction activities can reasonably be completed; or (ii) ninety (90) days following the original expiration date of the building permit, whichever number of days is less.

C. The Building Official may condition any extension of the permit on the owner strictly abiding by whatever practices, rules, or obligations such official may reasonably conclude are necessary to complete such construction activity as quickly as reasonably possible.

D. The Building Official may entertain and grant successive extensions of a particular building permit, if in the exercise of his/her judgment, granting an extension is appropriate under the terms of section R105.5.1.3 and is in the best interest of the Town; provided however, the Building Official shall not grant an extension that would extend the duration of a building permit more than ninety (90) days beyond the original expiration date of the permit.

3. If the Building Official concludes in the exercise of his/her judgment that granting an extension is not in the best interest of the Town, he/she shall deny the extension.

4. Within fifteen (15) [days] of his/her receipt of an application for an extension, the Building Official shall render a decision and advise the owner in writing of his/her decision.

5. If the Building Official concludes: (i) that construction activities cannot reasonably be completed within ninety (90) days following the expiration date of the original building permit; or (ii) that granting an extension is not in the best interest of the Town, the owner may request that

the Building Official's decision to deny the application for an extension be appealed to the Town Council for its consideration.

6. Upon receipt of an owner's appeal as set forth in subsection 5 above, the Town Council shall: (i) evaluate the application for an extension; (ii) assess any notice of the occurrence of an alleged unforeseeable event made by the owner in accordance with the provisions set forth below in section R105.5.1.6; and (iii) make whatever inquiries it may deem appropriate. Thereafter, the Town Council may:

- A. Deny the application to extend the duration of the building permit;
- B. Extend the duration of the building permit for a specific period of time not to exceed the number of days within which the construction activities can reasonably be completed; and/or
- C. Grant an extension conditioned on the owner strictly abiding by whatever practices, rules, or obligations the Town Council may reasonably conclude are necessary to complete the construction activity as quickly as reasonably possible.

7. Prior to the issuance of an extension of a building permit for major residential construction activities:

- A. If the date to which a building permit is extended is a date that is no more than ninety (90) days after the original expiration date of the permit, the owner shall pay to the Town a building permit extension penalty fee in an amount equal to two hundred fifty dollars per day (\$250/day). Building permit extensions shall be purchased in nonrefundable increments no less than 15 days; or
- B. If the date to which a building permit is extended is a date that is more than ninety (90) days after the original expiration date of the permit, the owner shall pay to the Town a building permit extension fee in an amount equal to five hundred dollars per day (\$500/day). Building permit extensions shall be purchased in nonrefundable increments no less than 15 days.

8. Any extension of a building permit must be in writing, state the date to which the permit is extended, and be signed by the Building Official.

9. All major residential construction activities shall be completed no later than the expiration date of the building permit, including the date to which any permit is extended.

10. Any new building permit issued to an owner who is required to obtain a new permit for the performance of any construction activities which were authorized in a previously issued permit that was: (i) suspended; or (ii) terminated because construction activities were abandoned, shall not have an expiration date beyond the expiration date of the previously issued building permit; provided however, the provisions of this subsection shall not preclude the owner from obtaining an extension of the new permit under the provisions of section R105.5.1.5.

R105.5.1.6 Unforeseeable events or circumstances. A delay or possible delay in construction activities directly resulting from an unforeseeable event or circumstance which is beyond the control of the owner and the control of persons providing goods or services related to such activities shall not be deemed to result from a lack of diligence or persistence if:

1. Upon learning of the delay or the possibility of a delay, the owner promptly delivers to the Town a written, signed notice that: (i) describes the unforeseeable event or circumstance in sufficient detail to permit a Building Official to understand the cause and nature of the event or circumstance and to assess its potential impact on such construction activities; and (ii) states the owner's best estimate of the duration of any delay the unforeseeable event or circumstance has caused, and may thereafter cause; and

2. The Owner and such persons have acted, and are acting, diligently and persistently to minimize any adverse impact of the unforeseeable event or circumstance on the timely completion of the construction activity.

3. Any failure to perform any of the following responsibilities shall not constitute an unforeseeable event or circumstance:

- A. The responsibility to make timely decisions related to construction activities;
- B. The responsibility to order or schedule the timely delivery of goods, materials, or services;
- C. The responsibility to employ or deploy sufficient person-power, tools, and equipment to complete the construction activities as rapidly as reasonably possible; or
- D. The responsibility to make prudent decisions concerning pre-construction, and construction-related activities.

4. Any difficulty or inability on the part of an owner to definitively estimate the likely duration of any delay that may be caused by an unforeseeable event or circumstance shall not excuse an owner from promptly delivering to the Town notice of any such event or circumstance. If at any time an owner learns that any estimate of any delay is materially incorrect, he/she/it shall promptly deliver to the Town a supplementary notice that states his/her/its revised best estimate of the duration of the delay that will likely be caused by the unforeseeable event or circumstance.

5. If an owner fails to comply with the provisions of subsections 1, 2, or 4 immediately above, an event or circumstance that might otherwise be deemed an unforeseeable event or circumstance may be disregarded by the Building Official or the committee.

R105.5.1. All CMP's shall include milestone benchmarks with date specific completion deadlines. Milestone benchmarks shall include: site grading, basement (if applicable), foundation,

mechanical, electrical and plumbing roughs, framing, exterior weatherproofing, drywall, energy, mechanical, electrical and plumbing finals and building final.

Section R106.1 Submittal Documents; change to read as follows:

Section R106.1 Submittal Documents. ... The construction documents shall be prepared by a registered design professional where required by the jurisdiction in which the project is to be constructed. (remainder unchanged)

Add Section R106.1.6

Section R106.1.6 Construction Management Plan for Major Residential Construction Activities. A Construction Management Plan (CMP) shall be required for all Major Residential Construction Activities as referenced and defined in section.

R106.6.1 Information on Construction Documents

CONSTRUCTION DOCUMENT PERMIT REQUIREMENTS

Requirements for construction documents on New, remodel and additions- 2024 IRC and 2023 NEC.

See minimum requirements below. Note that additional information may be required depending on the complexity and size of project.

All buildings/residences over 15,000 sq ft shall have all MEP plans stamped by an active licensed engineer in the State of Texas.

All structures over 4'-0" require an engineer stamp (including masonry walls, retaining walls, etc). Measurement taken from bottom of footing to top of structure.

Architectural plans

- Site plan with lot coverages identifying all zoning requirements, setbacks and easements
- Survey showing lot elevations in sea level. (4) corners, at least 3 points at front setback to take average grade
- Floor plan, section and elevation views (must show elevation at sea level and distance for plate heights
- Architectural details

Structural plans-stamped by engineer

- Foundation letter identifying type of foundation, geotechnical report, 2021 IRC, ACI 318, concrete psi strength
- Foundation, basement, crawl spaces, framing plans, shear wall plans, open portal details, roof plan, roof brace locations

- Section view
- 6 mil vapor retarder
- Foundation insulation

Mechanical, electrical, plumbing plans- stamped by engineer (stamp can be omitted if drawings are detailed and complete)

- Site MEP with utility connections

Mechanical

- Layout at each level with duct sizes
- Equipment schedules for all equipment identifying brand, model, sizes
- Condenser heat pump locations
- Furnace locations
- Section identifying mechanical in crawl spaces, attics, etc.
- Identify if there are any geothermal heat pumps (engineer design is required)
- Details for all equipment
- Hanger attachment and fasteners

Electrical

- Layout for all receptacles and lighting
- Panel and subpanel locations
- Load calculations
- One line diagram
- GFCI locations
- Grounding detail, bonding detail
- Details and charts for wire type and gauge from NEC

Plumbing

- Layout and point of connection
- Water supply pipe sizes and material going back to point of connection at water meter
- DFU calculations
- Sewer layout and sizes
- Clean out locations
- Gas routing and pipe sizing, regulators, btu demand
- Sump pumps drain to storm (not to daylight)
- Sewage pumps
- Details for plumbing
- Vent and vent to roof location and sizes
- Section view that identifies crawl space, attic, etc

Energy Report

- 2024 IECC compliance signed by an energy consultant with ICC certification

109.5 Re-inspection Fee. A fee as established by city council resolution may be charged when:

1. The inspection called for is not ready when the inspector arrives.
2. No building address or permit card is clearly posted.
3. Town approved plans are not on the job site available to the inspector.
4. The building is locked or work otherwise not available for inspection when called.
5. The job site is red-tagged twice for the same item.
6. The original red tag has been removed from the job site.
7. Failure to maintain erosion control, trash control or tree protection.

Any re-inspection fees assessed shall be paid before any more inspections are made on that job site.

R202 Definitions; change 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.

(Reason: To distinguish Townhouse Units within a Townhouse building on separate lots allowing construction regulations using the IRC.)

Table R301.2 Climatic and Geographic Design Criteria; fill in as follows:

Delete remainder of table Manual J Design Criteria and footnote N

GROUND SNOW LOAD ^g	WIND DESIGN				SEISMIC DESIGN CATEGORY ^f	SUBJECT TO DAMAGE FROM			Winter Design Temp	ICE BARRIER UNDER-LAYMENT ^h	FLOOD HAZARD ^g	AIR FREEZING INDEX ⁱ	MEAN ANNUAL TEMPE ^j
	SPEED ^d (MPH)	Topographic Effects ^k	Special wind Region ^l	Windborne Debris Zone ^m		Weathering ^a	Frost Line Depth ^b	Termite ^c					
9 lb/ft ²	105 (3 sec-gust)/ 33 lb/ft ² ground Exposure ^c	No	No	No	A	Moderate	6"	Very Heavy	22° F	No	Local Code	150	64.9° F

R302.1 Exterior walls; add exception #6 to read as follows:

Exceptions:

6. Open non-combustible carport structures may be constructed when also approved within adopted ordinances.

R302.2.6 Structural independence; delete exception #6:

~~6. Townhouse units protected by an automatic fire sprinkler system complying with Section P2904 or NFPA 13D.~~

R302.5.1 Opening protection; change 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 dwelling unit 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. Doors shall be self-latching and equipped with a self-closing or automatic closing device.

Section R306 Flood Resistant Construction; deleted entire section. (Reference Floodplain hazard ordinances instead)

Section R309.2 One- and two-family dwellings automatic sprinkler systems; Delete this section and subsection in their entirety. (Reference 2024 IFC local amendments)

R311.7 Stairway remove as follow:

Delete exception #1

Delete exception #2

R325.2 Bathrooms, Exception; amend to read as follows:

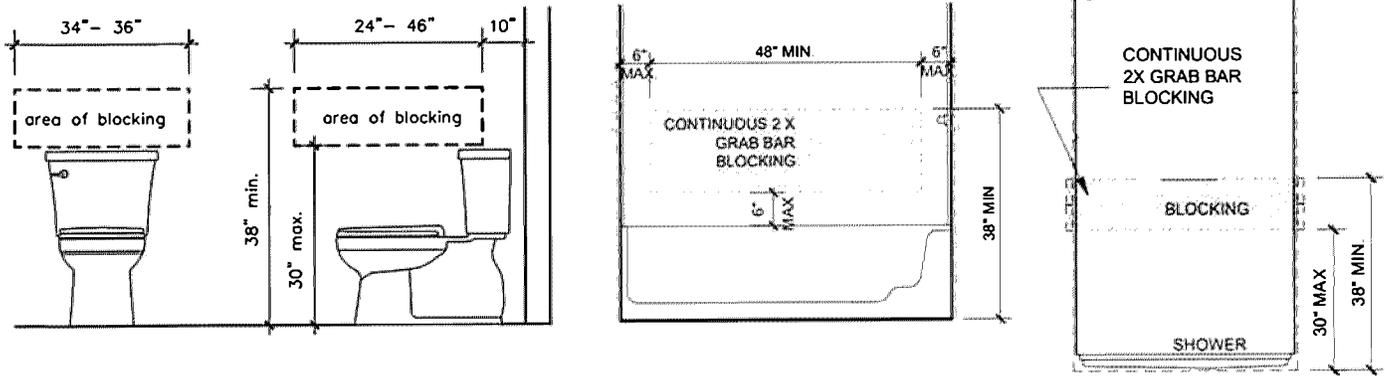
Exception: {existing text unchanged} Spaces containing only a water closet or water closet and a lavatory may be ventilated with an approved mechanical recirculating fan or similar device designed to remove odors from the air.

R326.5 Add in section for hose bibbs:

A minimum of two required exterior hose bibbs (freeze protected) are required at the rear and front of home and may be located on the side of the front/back of home.

R327.3 Blocking Locations; add to read as follows:

R327.3 Blocking locations. Required at one toilet at grade level with blocking installed at rear wall and, if available, one wall adjacent to toilet and at one tub or shower at grade level. Blocking as shown in Figure R327.3.



Toilet

Tub

Shower

Fig R327.3

R327.4 Wall Blocking; add to read as follows:

R327.4 Wall Blocking: Blocking may be 1/2" plywood or 2 x solid wood blocking or equivalent, flush with wall as shown in Figure R327.4.

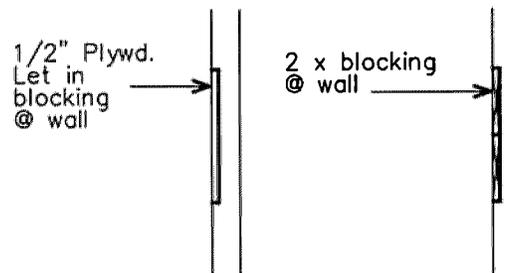


Fig R327.4

R328.1.1; add to read as follows: 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. Must be at least 5'-0 away or 1:1, which ever is greater.

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

R401.2; add a new paragraph following the existing paragraph to read as follows.

Requirements. {existing text unchanged} ...

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. All structural plans to be stamped by an active licensed engineer in the state of Texas.

R402.2 Concrete: Add in section R402.2.2 Minimum concrete design:

1. All private driveways and patio slabs (non-structural) shall be a minimum 3/8" Rebar spaced 18" o.c. maximum, 4" thick concrete, 3500 psi.
2. All structural footings, grade beams to be designed to have a minimum 12"x12"x12" deep perimeter footing if supporting a structure (patio cover, pergola, etc). Minimum 1/2 "rebar cage is required. Habitable living space and garages shall be engineered design.
3. Piers supporting exterior posts shall have a minimum 6" of additional length added to the post size and be a minimum of 24" deep hole must have a minimum 3/8" rebar cage. Example: 6" post would require a 12" minimum pier hole.
4. Posts embedded down in concrete to be at least 36" deep and shall have a minimum 6" of additional length added to the post size. Example: 6" post would require a 12" minimum pier hole.

R602.6.1; amend the following:

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 ~~1 1/2 inches (38) mm~~ 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 1/2 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. {remainder unchanged}

****Figure R602.6.1; delete the figure and insert the following figure:**

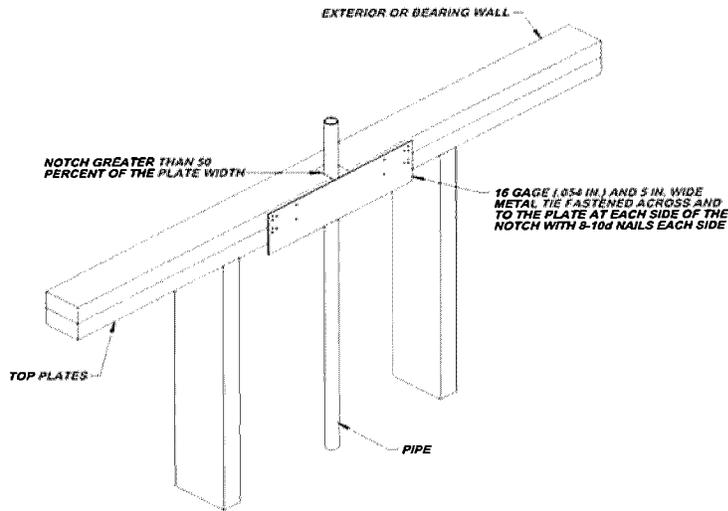


Table R603.7(2); change footnotes to read as follows:

- a. All screw sizes shown are minimum size, not to exceed 2 sizes larger.
- b. {delete}
- c. {delete}
- d. {unchanged}

Add R703.8.4.1.2 Veneer Ties for Wall Studs; to read as follows: 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.

R1005.7 Factory-built chimney offsets; change to read as follows: Factory-built chimney offsets.

Where a factory-built chimney assembly incorporates offsets or where a fireplace manufacturer's instructions do not address factory-built chimney offsets, no part of the chimney shall be at an angle of more than 30 degrees (0.52 rad) from vertical at any point in the assembly and the chimney assembly shall not include more than four elbows.

Delete Section R1005.9 Factory-built chimney offsets.

Chapter 11– Energy Efficiency is deleted in its entirety; Reference the 2024 IECC for energy code provisions and recommended amendments.

Section M1305.1.2; change to read as follows:

M1305.1.2 Appliances in attics. Attics containing appliances shall be provided . . . {bulk of paragraph unchanged} . . . side of the appliance. The clear access opening dimensions shall be a minimum 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:

3. The passageway and level service space are not required where the appliance is capable of being serviced and removed through the required opening with the approval of the code official.
4. 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 greater than 50 feet (15,250 mm) in length.

M1401.1.1; is added to read as follows: M1401.1.1 Air conditioning equipment. All residential dwelling units shall be designed and installed with an air conditioning system with the ability to condition and maintain conditioned air 20 degrees below the ambient outside air temperature in all habitable spaces.

Section M1411.9; change to read as follows:

M1411.9 Condensate disposal. Condensate from all cooling coils or evaporators shall be conveyed from the drain pan outlet to ~~an approved place of disposal~~ a sanitary sewer through a trap, by means of a direct or indirect drain. {remaining text unchanged}

M1411.9.1, Items 3 and 4; add text to read as follows:

M1411.9.1 Auxiliary and secondary drain systems. {bulk of paragraph unchanged}

1. {text unchanged}
2. {text unchanged}
3. An auxiliary drain pan... {bulk of text unchanged}... 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... {bulk of text unchanged}... overflow rim of such pan. A water level detection device may be installed only with prior approval of the building official.

M1411.9.1.1; add text to read as follows:

M1411.9.1.1 Water-level monitoring devices. On down-flow units ...{bulk of text unchanged}... installed in the drain line. A water level detection device may be installed only with prior approval of the building official.

M1503.6 Makeup Air Required; amend and add exception 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 approximately equal 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.

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.

G2408.3 (305.5) Private Garages; delete this section in its entirety.

G2415.2 (404.2) CSST; add a second paragraph to read as follows:

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"

G2415.12 (404.12) and G2415.12.1 (404.12.1); change to read as follows:

G2415.12 (404.12) Minimum burial depth. Underground piping systems shall be installed a minimum depth of ~~12 in~~ 18 inches (457 mm) below grade, ~~except as provided for in Section G2415.12.1.~~

G2415.12.1 (404.12.1) Individual Outdoor Appliances; Delete in its entirety

Section G2417.1 (406.1); change 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.

G2417.4; change 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. ~~Mechanical gauges used to measure test pressures shall have a range such that the highest end of the scale is not greater than five times the test pressure.~~

G2417.4.1; change 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, irrespective of design pressure. Where the test pressure exceeds 125 psig (862 kPa gauge),

the test pressure shall not exceed a value that produces a hoop stress in the piping greater than 50 percent of the specified minimum yield strength of the pipe. 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.

G2417.4.2; change 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 ~~be not~~ less than ~~10~~ 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), the test duration shall be held for a length of time satisfactory to the Building Official, but in no case for less than thirty (30) minutes.

G2420.1 (409.1) add Section G2420.1.4 (409.1.4) to read as follows:

G2420.1.4 (409.1.4) 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.

G2420.5.1 (409.5.1); add text to read as follows:

G2420.5.1 (409.5.1) Located within the same room. The shutoff valve...{bulk of paragraph unchanged}... 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.

G2421.1 (410.1); add text and Exception to read as follows:

G2421.1 (410.1) Pressure regulators. A line pressure regulator shall be ... {bulk of paragraph unchanged}... 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.

G2445.2 (621.2); add Exception 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.

G2453.1 (635.1) Outdoor Decorative Appliances ; Add in additional language below-

Permanently fixed-in-place outdoor decorative appliances shall be listed in accordance with ANSI Z21.97 and shall be installed in accordance with the manufacturer's instructions... If no distance is specified in the manufacturer's instructions, then a minimum of 5'-0 away from combustible material.

P2603; add 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 ~~plastic~~. 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.

P2603.5.1 Sewer Depth; change 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.

P2604; P2604.1.1 add to read as follows:

P2604.1.1 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 fil 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.

P2801.5.1; change to read as follows:

P2801.5.1 Pan size and drain. The pan shall be not less than 1 1/2 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 manufacturers installation instructions and installed with those instructions. {existing text unchanged}

P2804.6.1; change to read as follows:

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 ~~located in the same room as the water heater.~~
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 manufactures installation instructions and installed with those instructions.

5. Discharge to the floor, to the pan serving the water heater or storage tank, to a waste receptor an approved location or to the outdoors.

Add text: All discharge pipe from a T & P shall not be pvc.

[remainder unchanged]

P2902.5.3; change 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.

P2904.6 ; change to read as follows:

P2904.6 Pipe sizing for fire sprinklers. The piping to sprinklers shall be sized for the flow required by Section P2904.4.2. The flow required to supply the plumbing fixtures shall ~~not~~ be required to be added to the sprinkler design flow.

P3003.9; change to read as follows:

P3003.9.2 Solvent cementing. Joint surfaces shall be clean and free from moisture. A purple primer, ~~or other approved 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.

~~Exception: A primer is not required where all of the following conditions apply:~~

- ~~1. The solvent cement used is third-party certified as conforming to ASTM D 2564~~
- ~~2. The solvent cement is used only for joining PVC drain, waste, and vent pipe and fittings in not pressure applications in sizes up to and including 4 inches (102mm) in diameter.~~

3. The joint is made in accordance with ASTM F3328

P3112.2 Vent Connection; delete and replace 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.

END

Exhibit H
2024 International Swimming Pool and Spa Code Local Amendments

102.9; Change to read as follows:

102.9 Other laws. The provisions of this code shall not be deemed to nullify any provisions of local, state or federal law, to include but not limited to:

1. Texas Department of State Health Services (TDSHS); Standards for Public Pools and Spas; §265.181 through §265.198. (TDSHS rules do not apply to pools serving one- and two-family dwellings or townhouses).
2. Texas Department of Licensing and Regulation (TDLR); 2012 Texas Accessibility Standards (TAS), TAS provide the scoping and technical requirements for accessibility for Swimming Pool, wading pools and spas and shall comply with 2012 TAS, Section 242. (TAS rules do not apply to pools serving one- and two-family dwellings or townhouses).

Exception: Elements regulated under Texas Department of Licensing and Regulation (TDLR) and built in accordance with TDLR approved plans, including any variances or waivers granted by the TDLR, shall be deemed to be in compliance with the requirements of this Chapter.

113.4 Violation penalties; Changed to read as follows:

113.4 Violation penalties. Any person who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter or repair a pool or spa 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 may be punishable for each day of the violation set forth by the authority having jurisdiction. ~~, shall be guilty of a [SPECIFY OFFENSE], punishable by a fine of not more than [AMOUNT] dollars or by imprisonment not exceeding [NUMBER OF DAYS], or both such a fine and imprisonment. Each day that a violation continues after due notice has been served shall be deemed a separate offense.~~

305; Change to read as follows:

305.1 General.

The provisions of this section shall apply to the design of barriers for restricting entry into areas

having pools and spas. In only one-and two-family dwellings and townhouses, where spas or hot tubs are equipped with a lockable safety cover complying with ASTM F1346 and swimming pools are equipped with a powered safety cover that complies with ASTM F1346, the areas where those spas, hot tubs or pools are located.

***305.2.8.1; to read as follows:**

305.2.8.1 Chain link fencing prohibited. Chain link fencing is not permitted as a barrier in public pools built after January 1, 1994.

305.4 structure wall as a barrier; Changes as follows:

305.4 Structure wall as a barrier. Where a wall of a dwelling or structure of a one- and two-family dwelling or townhouse or its accessory structure serves as part of a barrier and where doors or windows provide direct access to the pool or spa through that wall, one of the following shall be required:

1. Operable windows having a sill height of less than 48 inches (1219 mm) above the indoor finished floor, doors and gates shall have an alarm that produces an audible warning when the window, door or their screens are opened. The alarm shall be *listed* and labeled as a water hazard entrance alarm in accordance with UL 2017
2. In dwellings not required to be Accessible units, Type A units or Type B units, the operable parts of the alarm deactivation switches shall be located at not less than 54 inches (1372 mm) above the finished floor.
3. In dwellings that are required to be Accessible units, Type A units or Type B units, the operable parts of the alarm deactivation switches shall be located not greater than 54 inches (1372 mm) and not less than 48 inches (1219 mm) above the finished floor.
4. In structures other than dwellings, the operable parts of the alarm deactivation switches shall be located not greater than 54 inches (1372 mm) and not less than 48 inches (1220 mm) above the finished floor.
5. A safety cover that is *listed* and *labeled* in accordance with ASTM F1346 is installed for the pools and spas.
6. An *approved* means of protection, such as self-closing doors with self-latching devices, is provided. Such means of protection shall provide a degree of protection that is not less than the protection afforded by Item 1 or 2.

305.6; Change to read as follows:

305.6 Natural barriers used in a one- and two-family dwelling or townhouse. In the case where the pool or spa area abuts the edge of a lake or other natural body of water, public access is not

permitted or allowed along the shoreline, and required barriers extend to and beyond the water's edge a minimum of eighteen (18) inches, a barrier is not required between the natural body of water shoreline and the pool or spa.

305.9; Add in section Gates:

Double gates, sliding gates, or automated gates across driveways or parking areas shall not be considered as meeting the requirements of a pool barrier.

307.1.5 Accessibility; Add exception to Section to 307.1.5 as follows:

Exception: Components of projects regulated by and registered with Architectural Barriers Division of Texas Department of Licensing and Regulation shall be deemed to be in compliance with the requirements of this chapter.

307.2.2.2; add to read as follows:

Section 307.2.2.2. 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 or at least 5'-0 away, which ever is greater.

Exception:

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

310; Change to read as follows:

310.1 General. Suction entrapment avoidance for pools and spas shall be provided in accordance with APSP 7 (ANSI/PHTA/ICC 7) or for public swimming pools in accordance with State of Texas Rules for Public Swimming Pools and Spas, Title 25 TAC Chapter 265 Subchapter L, Rule §265.190.

[Remainder unchanged]

Add Chapter 327 Required removal of pools

327.1 Pools that are empty shall be removed.

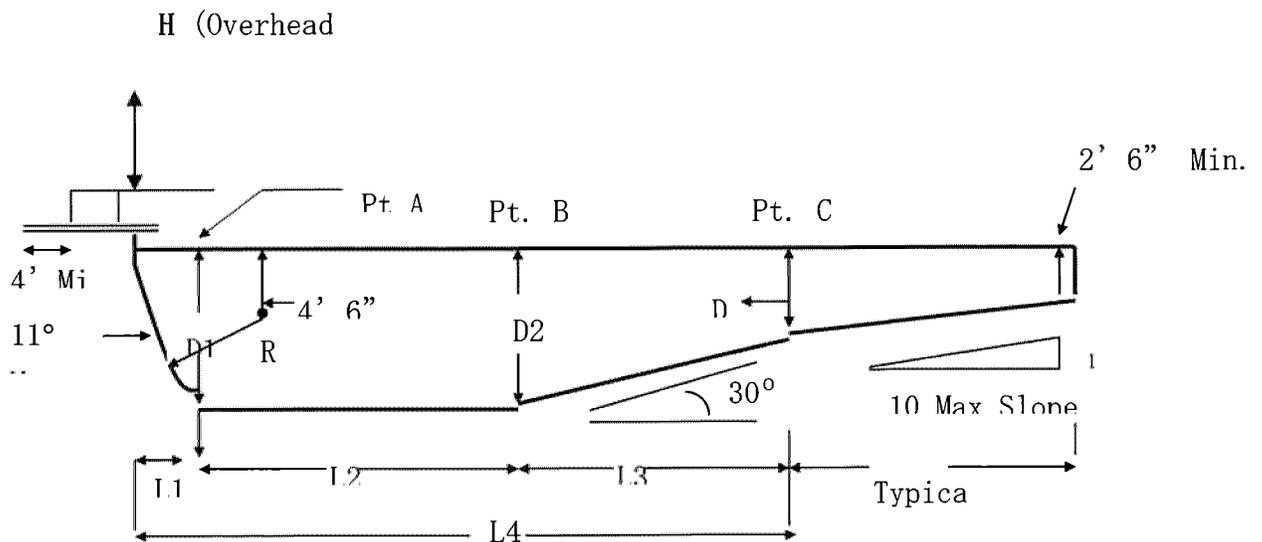
327.2 All pool demolition debris shall be removed offsite. Site to be filled and compacted with a final grade survey provided at final inspection.

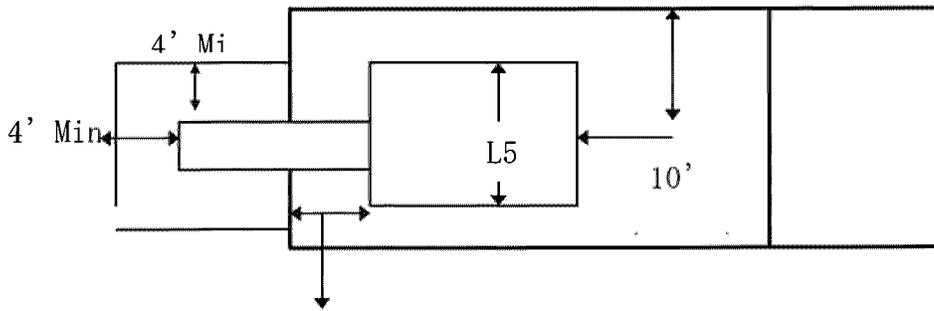
402.12; Change to read as follows:

402.12 Water envelopes. The minimum diving water envelopes shall be in accordance with ~~Table 402.12~~ **Texas department of State Health services, Administrative Code Title 25, Chapter 265, Section 186 (e) and Figure: 25 TAC 256.186 (e) (6).** (Delete Table 402.12 and Figure 402.12)

ADD: Figure: 25 TAC §265.186 (e) (6)

Maximum Diving Board Height Over Water	¾ Meter	1 Meter	3 Meters
Max. Diving Board Length	12 ft.	16 ft.	16 ft.
Minimum Diving Board Overhang	2 ft. 6 in.	5 ft.	5 ft.
D1 Minimum	8 ft. 6 in.	11 ft. 2 in.	12 ft. 2 in.
D2 Minimum	9 ft.	10 ft. 10 in.	11 ft. 10 in.
D3 Minimum	4 ft.	6 ft.	6 ft.
L1 Minimum	4 ft.	5 ft.	5 ft.
L2 Minimum	12 ft.	16 ft. 5 in.	19 ft. 9 in.
L3 Minimum	14 ft. 10 in.	13 ft. 2 in.	13 ft. 11 in.
L4 Minimum	30 ft. 10 in.	34 ft. 7 in.	38 ft. 8 in.
L5 Minimum	8 ft.	10 ft.	13 ft.
H Minimum	16 ft.	16 ft.	16 ft.
From Plummet to Pool Wall at Side	9 ft.	10 ft.	11 ft. 6 in.
From Plummet to Adjacent Plummet	10 ft.	10 ft.	10 ft.





411.2.1 & 411.2.2; Change to read as follows:

411.2.1 Tread dimensions and area. Treads shall have a minimum unobstructed horizontal depth (i.e., horizontal run) of 12 inches and a minimum width of 20 inches, not be less than 24 inches (607mm) at the leading edge. Treads shall have an unobstructed surface area of not less than 240 square inches (154838mm²) and an unobstructed horizontal depth of not less than 10 inches (254 mm) at the center line.

411.2.1 Risers. Risers for steps shall have a maximum uniform height of 10 inches, with the bottom riser height allowed to taper to zero except for the bottom riser, shall have a uniform height of not greater than 12 inches (305 mm) measured at the center line. The bottom riser height is allowed to vary to the floor.

411.5.1 & 411.5.2; Change to read as follows:

411.5.1 Swimouts. Swimouts, located in either the deep or shallow area of a pool, shall comply with all of the following:

1. The horizontal surface shall be not greater than 20 inches (508 mm) below the waterline.
2. An unobstructed surface shall be provided that is equal to or greater than that required for the top tread of the pool stairs in accordance with Section 411.2.
3. Where used as an entry and exit access, swimouts shall be provided with steps that comply with the pool stair requirements of Section 411.2.
4. The leading edge shall be visibly set apart and provided with a horizontal solid or broken stripe at least 1 inch wide on the top surface along the front leading edge of each step. This stripe shall be plainly visible to persons on the pool deck. The stripe shall be a contrasting color to the background on which it is applied, and the color shall be permanent in nature and shall be a slip-resistant surface.

411.5.2 Underwater seats and benches. Underwater seats and benches, whether used alone or in conjunction with pool stairs, shall comply with all of the following:

1. The horizontal surface shall be not greater than 20 inches (508 mm) below the waterline.
2. An unobstructed surface shall be provided that is not less than 10 inches (254 mm) in depth and not less than 24 inches (607 mm) in width.
3. Underwater seats and benches shall not be used as the required entry and exit access.
4. Where underwater seats are located in the deep area of the pool where manufactured or constructed diving equipment is installed, such seats shall be located outside of the minimum diving water envelope for diving equipment.
5. The leading edge shall be visually set apart and provided with a horizontal solid or broken stripe at least 1 inch wide on the top surface along the front leading edge of each step. This stripe shall be plainly visible to persons on the pool deck. The stripe shall be a contrasting color to the background on which it is applied, and the color shall be permanent in nature and shall be a slip-resistant surface.
6. The horizontal surface shall be at or below the waterline.
7. A tanning ledge or sun shelf used as the required entry and exit access shall be located not greater than 12 inches (305 mm) below the waterline.

610.5.1; Change to read:

610.5.1 Uniform height of 9-10 inches. Except for the bottom riser, risers at the centerline shall have a maximum uniform height of 9-10 inches (229-254 mm). The bottom riser height shall be permitted to vary from the other risers.

804 Diving Water Envelopes; Change to read as follows:

804.1 General. The minimum diving water envelopes shall be in accordance with Table 804.1 and Figure 804.1, or the manufacturer's specifications, whichever is greater. Negative construction tolerances shall not be applied to the dimensions of the minimum diving water envelopes given in Table 804.1.

END