Ordinance No. 1-21-2025-A

AN ORDINANCE TO UPDATE THE BUILDING CODES TO THE MOST RECENT EDITIONS OF THE INTERNATIONAL CONSTRUCTION CODES AND NATIONAL ELECTRICAL CODE; TO ADAPT THESE CODES TO THE LOCAL CONTEXT AND STANDARD CONSTRUCTION PROCEDURES FOR THE REGION; AND TO PROVIDE A SEVERABILITY CLAUSE.

WHEREAS, the City of Caldwell is a Type A general law municipality located in Burleson County, created in accordance with Chapter 6 of the Local Government Code, and operating pursuant to the enabling legislation of the State of Texas.

WHEREAS, the City of Caldwell acknowledges the need to regularly adopt updated versions of the International Construction Codes and National Electrical Code to ensure that structures within the city are constructed according to the highest safety standards.

WHEREAS, the City of Caldwell acknowledges the need to amend the International Construction Codes and National Electrical Code to adapt the regulations to local needs and standard practices.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF CALDWELL, BURLESON COUNTY, TEXAS, THAT:

SECTION 1: The City of Caldwell Code of Ordinances, Article 3.03 Technical and Construction Codes and Standards, Section 3.03.031 "Building code adopted" is hereby amended by deleting the section in its entirety and replacing it with the following:

Section 3.03.031. Building code adopted.

(a) Adoption. The International Building Code, 2021 edition, a copy of which is on file in the office of the city secretary, is hereby adopted and designated as the building code of the city, the same as though the provisions of the International Building Code, 2021 edition, were copied at length in this section, subject to the deletions, amendments, and additions provided in subsection (b).

(b) Amendments. The International Building Code, 2021 edition, as adopted in Section 3.03.031 of the Code of Ordinances of the City of Caldwell, Texas, is hereby amended as set out in Exhibit A.

SECTION 2: The City of Caldwell Code of Ordinances, Article 3.03 Technical and Construction Codes and Standards, Section 3.03.032 "Residential code adopted" is hereby amended by deleting the section in its entirety and replacing it with the following:

Section 3.03.032. Residential code adopted.

(a) Adoption. The International Residential Code, 2021 edition; including appendices AE, AH, AN and AQ; a copy of which is on file in the office of the city secretary, is hereby adopted and designated as the residential building code of the city, the same as though these provisions of the International Residential Code, 2018 edition, were copied at length in this section; subject to the deletions, amendments, and additions provided in subsection (b).

(b) Amendments. The International Residential Code, 2021 edition, as adopted in Section 3.03.032 of the Code of Ordinances of the City of Caldwell, Texas, is hereby amended as set out in Exhibit B.

SECTION 3: The City of Caldwell Code of Ordinances, Article 3.03 Technical and Construction Codes and Standards, Section 3.03.040 "Existing building code adopted" is hereby amended by deleting the section in its entirety and replacing it with the following:

Section 3.03.040. Existing building code adopted.

(c) Adoption. The International Existing Building Code, 2021 edition, a copy of which is on file in the office of the city secretary, is hereby adopted and designated as the residential building code of the city, the same as though these provisions of the International Existing Building Code, 2021 edition, were copied at length in this section; subject to the deletions, amendments, and additions provided in subsection (b).

SECTION 4: The City of Caldwell Code of Ordinances, Article 3.03 Technical and Construction Codes and Standards, Section 3.03.141 "Plumbing code adopted" is hereby amended by deleting the section in its entirety and replacing it with the following:

Section 3.03.141. Plumbing code adopted.

(a) Adoption. The International Plumbing Code, 2021 edition, a copy of which is on file in the office of the city secretary, is hereby adopted and designated as the plumbing code of the city, the same as though these provisions of the International Plumbing Code, 2021 edition, were copied at length in this section; subject to the deletions, amendments, and additions provided in subsection (b).

(b) Amendments. The International Plumbing Code, 2021 edition, as adopted in Section 3.03.141 of the Code of Ordinances of the City of Caldwell, Texas, is hereby amended as set out in Exhibit C.

SECTION 5: The City of Caldwell Code of Ordinances, Article 3.03 Technical and Construction Codes and Standards, Section 3.03.142 "Fuel gas code adopted" is hereby amended by deleting the section in its entirety and replacing it with the following:

Section 3.03.142. Fuel gas code adopted.

(a) The International Fuel Gas Code, 2021 edition, a copy of which is on file in the office of the city secretary, is hereby adopted and designated as the fuel gas code of the city, the same as though these provisions of the International Fuel Gas Code, 2021 edition, were copied at length in this section; subject to the deletions, amendments, and additions provided in subsection (b).

(b) Amendments. The International Fuel Gas Code, 2021 edition, as adopted in Section 3.03.142 of the Code of Ordinances of the City of Caldwell, Texas, is hereby amended as set out in Exhibit D.

SECTION 6: The City of Caldwell Code of Ordinances, Article 3.03 Technical and Construction Codes and Standards, Section 3.03.241 "Adopted" is hereby amended by deleting the section in its entirety and replacing it with the following:

Section 3.03.241. Mechanical code adopted.

(a) The International Mechanical Code, 2021 edition, a copy of which is on file in the office of the city secretary, is hereby adopted and designated as the mechanical code of the city, the same as though these provisions of the International Fuel Gas Code, 2021 edition, were copied at length in this section; subject to the deletions, amendments, and additions provided in subsection (b).

(b) Amendments. The International Mechanical Code, 2021 edition, as adopted in Section 3.03.241 of the Code of Ordinances of the City of Caldwell, Texas, is hereby amended as set out in Exhibit E.

SECTION 7: The City of Caldwell Code of Ordinances, Article 3.03 Technical and Construction Codes and Standards, Section 3.03.291 "Electrical code adopted" is hereby amended by deleting the section in its entirety and replacing it with the following:

Section 3.03.291. Electrical code adopted.

(a) The following document, copies of which are on file in the office of the city secretary, being marked and designated as the National Electrical Code (NEC), 2023 edition, published by the National Fire Protection Association (NFPA 70), is hereby adopted as the electrical code of the city, regulating the design, construction, quality of materials, erection, installation, alteration, repair, location, relocation, replacement, addition to, or maintenance of electrical systems, wiring, or electrical equipment within the city; providing for the issuance of permits and collection of fees therefor.

(b) Amendments. The National Electrical Code, 2023 edition, as adopted in Section 3.03.291 of the Code of Ordinances of the City of Caldwell, Texas, is hereby amended as set out in Exhibit F.

SECTION 8: The City of Caldwell Code of Ordinances, Article 3.03 Technical and Construction Codes and Standards, Section 3.03.391 "Adopted" is hereby amended by deleting the section in its entirety and replacing it with the following:

Section 3.03.391. Property maintenance code adopted.

(a) The International Property Maintenance Code, 2021 edition, a copy of which is on file in the office of the city secretary, is hereby adopted and designated as the property maintenance code of the city, the same as though the provisions of the International Property Maintenance Code, 2021 edition, were copied at length in this section, subject to the deletions, amendments, and additions provided in subsection (b).

(b) Amendments. The International Property Maintenance Code, 2021 edition, as adopted in Section 3.03.391 of the Code of Ordinances of the City of Caldwell, Texas, is hereby amended as set out in Exhibit G.

SECTION 9: The City of Caldwell Code of Ordinances, Article 3.03 Technical and Construction Codes and Standards, Section 3.03.401 "Energy conservation code adopted" is hereby amended by deleting the section in its entirety and replacing it with the following:

Section 3.03.401. Energy conservation code adopted.

(a) The International Energy Conservation Code, 2021 edition, a copy of which is on file in the office of the city secretary, is hereby adopted and designated as the property maintenance code of the city, the same as though the provisions of the International Energy Conservation Code, 2021 edition, were copied at length in this section, subject to the deletions, amendments, and additions provided in subsection (b).

(b) Amendments. The International Energy Conservation Code, 2021 edition, as adopted in Section 3.03.401 of the Code of Ordinances of the City of Caldwell, Texas, is hereby amended as set out in Exhibit H.

SECTION 10: The City of Caldwell Code of Ordinances, Article 5.04 Fire Code, Section 5.04.001 "Adopted" is hereby amended by deleting the section in its entirety and replacing it with the following:

Section 5.04.001. Fire code adopted.

(a) The International Fire Code, 2021 edition, copies of which is on file in the office of the city secretary, is hereby adopted and designated as the fire code of the city, the same as though the provisions of the International Fire Code, 2021 edition, were copied at length in this section, subject to the deletions, amendments, and additions provided in subsection (b).

(b) Amendments. The International Fire Code, 2021 edition, as adopted in Section 5.04.001 of the Code of Ordinances of the City of Caldwell, Texas, is hereby amended as set out in Exhibit I.

SECTION 11: Severability Clause

That it is hereby declared to be the intention of the City Council of Caldwell 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 should be declared unconstitutional by the valid judgement or decree of any court of competent jurisdiction, such unconstitutionality shall not affect any of the remaining phrases, clauses, sentences, paragraphs or sections of the Ordinances, since the same would have been enacted by the City Council without incorporation in this ordinance of any such unconstitutional phrases, clause, sentence, paragraph or section.

PASSED AND APPROVED in substantial form, by the City Council of the City of Caldwell on this the 21st of January, 2025.

CITY OF CALDWELL, TEXAS

APPROVED

_____
Janice Easter, Mayor

Attest:

_____
Melissa Gonzalez-Sebesta, City Secretary

EXHIBIT A: AMENDMENTS TO INTERNATIONAL BUILDING CODE, 2021

The International Building Code, 2021 edition, adopted by reference in Section 3.03.031 of the Code of Ordinances of the City of Caldwell is hereby amended as follows:

(1) Section 105**.** of the International Building Code, 2021 edition is hereby amended by adding the following subsection:

Section 105.1.3 Registration of Contractors. It shall be the duty of every individual who makes contracts to construct, enlarge, alter, repair, move, demolish, or change the occupancy of a building or structure, or to erect, install enlarge, alter, repair, remove, convert or replace any electrical, gas, mechanical, or plumbing system, the installation of which is regulated by this code, or to cause any such work to be done, and every individual making such contracts and subletting the same or any part thereof, to first register with the Building Official, giving full name, residence, name and place of business, and in case of removal from one place to another to have made corresponding change to the Building Official.

Plumbing Contractors - Plumbing contractors shall be licensed as prescribed by the State of Texas and shall register their license with the City of Caldwell before a plumbing permit is issued by the City.

Air Conditioning, Refrigeration and Heating Contractors - Air Conditioning, Refrigeration and Heating Contractors shall be licensed by the State of Texas and shall register their license with the City of Caldwell before a mechanical permit is issued by the City.

Licensed Irrigators - Irrigation Contractors shall be licensed Irrigators by the State of Texas shall register their license with the City of Caldwell before a lawn irrigation permit is issued by the City.

Electrical Contractors - Electrical Contractors shall be licensed by the State shall register their license with the City of Caldwell before an electrical permit is issued by the City.

Electrical Sign Contractors – Electrical Sign Contractors shall be licensed by the State shall register their license with the City of Caldwell before a permit is issued.

Before any license is registered with the City, the applicant shall have adequate insurance coverage for general liability as provided for by State law for the respective trade.

Exception: Homeowner permits as provided per local amendment by added Section R105.2.4, International Residential Code.

(2) Section 105.2. of the International Building Code, 2021 edition is hereby amended by adding the following under "**Electrical**":

Section 105.2. Work exempt from permit.
Electrical:

4. **Replacing Fuses:** No permit shall be required for replacing fuses of like rating.
5. **Replacing Flush or Snap Switches:** No permit shall be required for replacing flush or snap switches, receptacles, lamp sockets, the installation of lamps, or minor repairs on permanently connected electrical appliances.
6. **Conveying Signals:** No permit shall be required for the installation, maintenance or

alteration of wiring, poles and down guys, apparatus, devices, appliances or equipment for telegraph, telephone, signal service or central station protective service used in conveying signals or intelligence, except where electrical work is done on the primary side of the source of power at a voltage over 50 volts and of more than 500 watts.

7. **Wiring by Electric Public Service Company:** No permit shall be required for the installation, maintenance or alteration of electric wiring, apparatus devices, appliances or equipment to be installed by an electric public service company for the use of such company in the generation, transmission, distribution, sale or utilization of electrical energy. However, an electric public service company shall not do any wiring on a customer's distribution system, including metering equipment wherever located and transformer vaults in which customer's transformers are located, nor shall any of its employees do any work other than done for said company as hereinbefore provided for by virtue of this exception.
8. **Temporary Wiring:** No permit shall be required for the installation of temporary wiring, apparatus, devices, appliances or equipment used by a recognized electrical training school or college.
9. **Railway Crossing Signal Devices:** No permit shall be required for the installation and maintenance of railway crossing signal devices, when such is performed by due authority of the railroad and in accordance with the standards of the American Railroad Association, and in collaboration with and approval of the Department of Public Works of the City of Caldwell.

(3) Section 107.1. of the International Building Code, 2021 edition is hereby amended to read as follows:

Section 107.1. General. Submittal documents consisting of *construction documents*, statement of *special inspections*, geotechnical report and other data shall be submitted in two or more sets, or in a digital format where allowed by the building official, with each *permit* application. The *construction documents* shall be prepared by a *registered design professional* where required by the statutes of the jurisdiction in which the project is to be constructed. Where special conditions exist, the *building official* is authorized to require additional *construction documents* to be prepared by a *registered design professional*. The design professional shall be an architect or engineer legally registered and in compliance under the laws of Texas and shall affix his official seal to the construction documents for the following:

1. All group A, E and I occupancies.
2. Building and structures three or more stories in height
3. Buildings and structures 5,000 square feet or more in total area Exception: “Group R-3 buildings, regardless of size”

Exception: The *building official* is authorized to waive the submission of *construction documents* and other data not required to be prepared by a *registered design professional* if it is found that the nature of the work applied for is such that review of *construction documents* is not necessary to obtain compliance with this code.

(4) Section 109.4. of the International Building Code, 2021 edition is hereby amended to read as follows:

Section 109.4. Work commencing before permit issuance. Any person who commences any work on a building, structure electrical, gas, mechanical or plumbing system before obtaining the necessary permits shall be subject to a penalty of 100% of the usual fee in addition to the required permit fees.

(5) Section 109.6. of the International Building Code, 2021 edition is hereby amended to read as follows:

Section 109.6. Refunds. The City Manager or his designee is authorized to establish a refund policy.

(6) Section 110.3.1. of the International Building Code, 2021 edition is hereby amended to read as follows:

Section 110.3.1. Footing and foundation inspection. Footing and foundation inspections shall be made after excavations for footings are complete and any required reinforcing steel is in place. For concrete foundations, any required forms shall be in place prior to inspection. Materials for the foundation shall be on the job, except where concrete is ready mixed in accordance with ASTM C94, the concrete need not be on the job.

The Building Official shall have the authority to require a form survey to verify building setbacks. Such survey shall be provided to the Building Official prior to placement of concrete and prepared by a surveyor licensed to perform work in the State of Texas.

(7) Section 111.2. of the International Building Code, 2021 edition is hereby amended by deleting items 4, 5, 7, 10, and 11.

(8) Section 113. of the International Building Code, 2021 edition is hereby amended by deleting the section in its entirety.

(9) Section 202. of the International Building Code, 2021 edition is hereby amended by adding the following definition:

PORT-COCHERES.

1. A passageway through a building or screen wall designed to let vehicles pass from street to an interior courtyard.
2. A roofed structure extending from the entrance of a building over an adjacent driveway and sheltering those getting in or out of vehicles.

(10) Section 202. of the International Building Code, 2021 edition is hereby amended by deleting the "Townhouse" definition and replacing it with the following:

TOWNHOUSE. A single-family dwelling unit constructed in a group of attached units separated by property lines in which each unit extend from foundation to roof and with open space on at least two sides.

(11) Section 502.1. of the International Building Code, 2021 edition is hereby amended to read as follows:

502.1 Address identification. The 911 Addressing Database Coordinator, with Burleson County shall assign all 911 addresses. This address shall be provided and placed pursuant to this section in such a position as to be clearly visible from the public street or roadway fronting the property. Addresses placed pursuant to this section shall be a minimum four (4) inches in height and stroke of minimum one-half (1/2) inch, composed of a durable material and of a color that provides a contrast to the background itself. The official address shall be placed a minimum of thirty-six (36) inches and a maximum of thirty (30) feet in height measured from the ground level. Buildings or structures located more than fifty (50) feet from the street curb shall have an official address at least five (5) inches in height.

Durable materials used for the official address shall include, but not be limited to, wood, plastic, metal, weather resistant paint, weather resistant vinyl, or weather resistant material designed for outside use on a glass surface. For single family residences, the requirement of this section may be met by providing a minimum of two (2) inch high numbers on both sides of a U. S. mailbox located near the curb in front of the house, or a freestanding structure with numbers at least four (4) inches in height.

A building complex composed of multiple structures or dwellings shall have an official suite or unit number assigned to each building, suite or tenant as well as a street address number. If there is sufficient street frontage, each building, suite or tenant may also be assigned an official street address number. The official street address number of each structure must be prominently posted on the building so that it is visible from the nearest public street or designated fire lane. Each number designated by the 911 Addressing Database Coordinator, with Burleson County, for each individual suite or unit must be conspicuously posted on each suite or unit.

Commercial buildings with side or rear access in addition to the main entrance, shall also display the business name and official address on each side or rear door with characters at least two (2) inches in height. Residential structures which provide for rear vehicular access from a dedicated public alley, street or designated fire lane shall conspicuously post an official address at least two (2) inches in height so that it is visible from the public alley, street or designated fire lane.

The owner or manager of a building complex, which contains an enclosed shopping mall, shall submit to the Fire Official four (4) copies of diagrams acceptable to the Fire Marshal of the entire complex, indicating the location and number of each business. When a change in a business name or location is made, the owner or manager shall so advise the Fire Marshal in writing of the change.

When required by the Fire Code Official, address numbers shall be provided in additional approved locations to facilitate emergency response.

(12) Table 803.13. of the International Building Code, 2021 edition is hereby amended by deleting the existing text in footnote "d" and replacing it with the following:

Table 803.13 (footnote d). Interior Wall and Ceiling Finish Requirements by Occupancy. Class A interior finish material shall be required in all areas of all assembly occupancies, whether sprinklered or not, except as provided for in notes e and f below.

(13)Section 902.1.2. of the International Building Code, 2021 edition is hereby amended to read as follows:

Section 902.1.2. Marking on access doors. Access doors for *automatic sprinkler system* riser rooms and fire pump rooms shall be labeled with an approved sign. The lettering shall be in contrasting color to the background. Letters shall have a minimum height of 4 inches (102 mm) with a minimum stroke of 3/8 inch (10mm).

(14) Section 1004.5.1. of the International Building Code, 2021 edition is hereby amended by deleting the subsection in its entirety.

(15) Section 1004.9. of the International Building Code, 2021 is hereby amended to read as follows:

Section 1004.9. Posting of occupant load. Every room or space that is an assembly occupancy shall have the *occupant load* of the room or space posted in a conspicuous place, near the main *exit* or *exit access doorway* from the room or space, for the intended configurations. Posted signs shall be an approved legible permanent design and shall be maintained by the owner or the owner's authorized agent. For the purposes of this section, the occupant load shall be the number of occupants computed at the rate of one occupant per unit of area as prescribed in Table 1004.5.

(16) Section 1612.3. of the International Building Code, 2021 edition is hereby amended by inserting "Burleson County" for name of jurisdiction and "January 6th, 2011" for the date of issuance.

EXHIBIT B: AMENDMENTS TO THE INTERNATIONAL RESIDENTIAL CODE, 2021

The International Residential Code, 2021 edition, adopted by reference in Section 3.03.032 of the Code of Ordinances of the City of Caldwell is hereby amended as follows:

(1) Section R102.4. of the International Residential Code, 2021 edition is hereby amended by adding the following exception:

> **Exception:** Any reference to the *ICC Electrical Code* shall mean the *National Electrical Code,* as adopted and amended by the City of Caldwell.

(2) Section R105.2. of the International Residential Code, 2021 edition is hereby amended by deleting number one under "**Building**" and replacing it with the following:

> Section R105.2. Work Exempt from permit.
>
> 1. One detached accessory structure per residential lot, provided the floor area does not exceed 120 square feet and the structure complies with all of the following:
>
> (a) The accessory structure is not located in a surface drainage easement.
> (b) The accessory structure is not permanently affixed to the ground.
> (c) The accessory structure is located in the rear yard.
> (d) The accessory structure is not provided with utilities (sewer, water, gas or electricity).

(3) Section R105.2. of the International Residential Code, 2021 edition is hereby amended by adding the following subsection:

> Section R105.2.4. Homeowner permit**.** A property owner may obtain a building permit to perform work on a building owned and occupied by the homeowner as their homestead without registering with the City as a contractor. However, work involving the electrical, plumbing and mechanical systems must be permitted and installed by licensed contractors.

(4) Section R106.3.1. of the International Residential Code, 2021 edition is hereby amended to read as follows:

> Section R106.3.1. Approval of construction documents. Where the *building official* issues a *permit*, the *construction documents* shall be *approved* in writing or by a stamp that states "REVIEWED FOR CODE COMPLIANCE". One set of *construction documents* so reviewed shall be retained by the *building official*.

(5) Section R108.3. of the International Residential Code, 2021 edition is hereby amended to read as follows:

> Section R108.3. Building permit valuations. Building *permit* valuation shall include total value of the work for which a *permit* is being issued, such as electrical, gas, mechanical, plumbing equipment and other permanent systems, including materials and labor. If, in the opinion of the building official, the valuation is underestimated on the application, the permit shall be denied, unless the applicant can show detailed estimates to meet the approval of the building official. Final permit valuation shall be set by the building official.

(6) Section R109.1.1. of the International Residential Code, 2021 edition is hereby amended to read as follows:

Section R109.1.1. Foundation inspection. Inspection of the foundation shall be made after poles or piers are set or trenches or *basement* areas are excavated and any required forms erected and any required reinforcing steel is in place and supported prior to the placing of concrete. The foundation inspection shall include excavations for thickened slabs intended for the support of bearing walls, partitions, structural supports, or equipment and special requirements for wood foundations. The Building Official shall have the authority to require a form survey to verify building setbacks. Such survey shall be provided to the Building Official prior to placement of concrete and prepared by a surveyor licensed to perform work in the State of Texas.

(7) Section R112. of the International Residential Code, 2021 edition is hereby amended by deleting the section in its entirety.

(8) Section R202. of the International Residential Code, 2021 edition is hereby amended by adding the following definitions:

Air Gap, Irrigation System. A complete physical separation between the free-flowing discharge end of a potable water supply pipeline and an open or non-pressure receiving vessel.

Atmospheric Vacuum Breaker. An assembly containing an air inlet valve, a check seat, and an air inlet port. The flow of water into the body causes the air inlet valve to close the air inlet port. When the flow of water stops the air inlet valve falls and forms a check against back-siphonage. At the same time it opens the air inlet port allowing air to enter and satisfy the vacuum. Also known as an Atmospheric Vacuum Breaker Back-Siphonage Prevention Assembly.

Backflow Prevention, Irrigation System. The mechanical prevention of reverse flow, or back siphonage, of nonpotable water from an irrigation system into the potable water source.

Backflow Prevention Assembly. Any assembly used to prevent backflow into a potable water system. The type of assembly used is based on the existing or potential degree of health hazard and backflow condition.

Completion of Irrigation System Installation. When the landscape irrigation system has been installed, all minimum standards met, all tests performed, and the irrigator is satisfied that the system is operating correctly.

Consulting, Irrigation System. The act of providing advice, guidance, review or recommendations related to landscape irrigation systems.

Cross-Connection. An actual or potential connection between a potable water source and an irrigation system that may contain contaminates or pollutants or any source of water that has been treated to a lesser degree in the treatment process.

Design, Irrigation System. The act of determining the various elements of a landscape irrigation system that will include, but not be limited to, elements such as collecting site specific information, defining the scope of the project, defining plant watering needs, selecting and laying out emission devices, locating system components, conducting hydraulics calculations, identifying any local regulatory requirements, or scheduling

irrigation work at a site. Completion of the various components will result in an irrigation plan.

Design Pressure, Irrigation System. The pressure that is required for an emission device to operate properly. Design pressure is calculated by adding the operating pressure necessary at an emission device to the total of all pressure losses accumulated from an emission device to the water source.

Emission Device. Any device that is contained within an irrigation system and that is used to apply water. Common emission devices in an irrigation system include, but are not limited to, spray and rotary sprinkler heads, and drip irrigation emitters.

Employed, Irrigation Systems. Engaged or hired to provide consulting services or perform any activity relating to the sale, design, installation, maintenance, alteration, repair, or service to irrigation systems. A person is employed if that person is in an employer-employee relationship as defined by Internal Revenue Code, 26 United States Code Service, §3212(d) based on the behavioral control, financial control, and the type of relationship involved in performing employment related tasks.

Head-to-Head Spacing, Irrigation System. The spacing of spray or rotary heads equal to the manufacturer's published radius of the head.

Health Hazard, Irrigation System. A cross-connection or potential cross-connection with an irrigation system that involves any substance that may, if introduced into the potable water supply, cause death or illness, spread disease, or have a high probability of causing such effects

Hydraulics. The science of dynamic and static water; the mathematical computation of determining pressure losses and pressure requirements of an irrigation system

Installer, Irrigation System. A person who actually connects an irrigation system to a private or public raw or potable water supply system or any water supply, who is licensed according to Title 30, Texas Administrative Code, Chapter 30 (relating to Occupational Licenses and Registrations).

Irrigation Inspector. A person who inspects irrigation systems and performs other enforcement duties for a municipality or water district as an employee or as a contractor and is required to be licensed under Title 30, Texas Administrative Code, Chapter 30 (relating to Occupational Licenses and Registrations).

Irrigation Plan. A scaled drawing of a landscape irrigation system which lists required information, the scope of the project, and represents the changes made in the installation of the irrigation system.

Irrigation Services. Selling, designing, installing, maintaining, altering, repairing, servicing, permitting, providing consulting services regarding, or connecting an irrigation system to a water supply.

Irrigation System. An assembly of component parts, including the backflow device and all equipment downstream, that is permanently installed for the controlled distribution and conservation of water to irrigate any type of landscape vegetation in any location, and/or to

reduce dust or control erosion. This term does not include a system that is used on or by an agricultural operation as defined by Texas Agricultural Code, §251.002.

Irrigation Technician. A person who works under the supervision of a licensed irrigator to install, maintain, alter, repair, service or supervise installation of an irrigation system, including the connection of such system in or to a private or public, raw or potable water supply system or any water supply, and who is required to be licensed under Title 30, Texas Administrative Code, Chapter 30 (relating to Occupational Licenses and Registrations).

Irrigation Zone. A subdivision of an irrigation system with a matched precipitation rate based on plant material type (such as turf, shrubs, or trees), microclimate factors (such as sun/shade ratio), topographic features (such as slope) and soil conditions (such as sand, loam, clay, or combination) or for hydrological control.

Irrigator. A person who sells, designs, offers consultations regarding, installs, maintains, alters, repairs, services or supervises the installation of an irrigation system, including the connection of such system to a private or public, raw or potable water supply system or any water supply, and who is required to be licensed under Title 30, Texas Administrative Code, Chapter 30.

Irrigator-in-Charge. The irrigator responsible for all irrigation work performed by an exempt business owner, including, but not limited to obtaining permits, developing design plans, supervising the work of other irrigators or irrigation technicians, and installing, selling, maintaining, altering, repairing, or servicing a landscape irrigation system.

Landscape Irrigation. The science of applying the necessary amount of water to promote or sustain healthy growth of plant material or turf.

Irrigation License. An occupational license that is issued by the Texas Commission on Environmental Quality under Title 30, Texas Administrative Code, Chapter 30 to an individual that authorizes the individual to engage in an activity that is covered by Title 30, Texas Administrative Code, Chapter 30.

Mainline, Irrigation System. A pipe within an irrigation system that delivers water from the water source to the individual zone valves.

Maintenance Checklist, Irrigation System. A document made available to the irrigation system's owner or owner's representative that contains information regarding the operation and maintenance of the irrigation system, including, but not limited to: checking and repairing the irrigation system, setting the automatic controller, checking the rain or moisture sensor, cleaning filters, pruning grass and plants away from irrigation emitters, using and operating the irrigation system, the precipitation rates of each irrigation zone within the system, any water conservation measures currently in effect from the water purveyor, the name of the water purveyor, a suggested seasonal or monthly watering schedule based on current evapotranspiration data for the geographic region, and the minimum water requirements for the plant material in each zone based on the soil type and plant material where the system is installed.

Major Maintenance, Alteration, Repair, or Service (Irrigation System). Any activity that involves opening to the atmosphere the irrigation main line at any point prior to the

discharge side of any irrigation zone control valve. This includes, but is not limited to, repairing or connecting into a main supply pipe, replacing a zone control valve, or repairing a zone control valve in a manner that opens the system to the atmosphere.

Master Valve, Irrigation System. A remote-control valve located after the backflow prevention device that controls the flow of water to the irrigation system mainline.

Matched Precipitation Rate. The condition in which all sprinkler heads within an irrigation zone apply water at the same rate.

New Installation, Irrigation System. An irrigation system installed at a location where one did not previously exist.

Pass-through Contract. A written contract between a contractor or builder and a licensed irrigator or exempt business owner to perform part or all of the irrigation services relating to an irrigation system.

Pressure Vacuum Breaker. An assembly containing an independently operating internally loaded check valve and an independently operating loaded air inlet valve located on the discharge side of the check valve. Also known as a Pressure Vacuum Breaker Back-siphonage Prevention Assembly.

Reclaimed Water. Domestic or municipal wastewater which has been treated to a quality suitable for beneficial use, such as landscape irrigation.

Records of Landscape Irrigation Activities. The irrigation plans, contracts, warranty information, invoices, copies of permits, and other documents that relate to the installation, maintenance, alteration, repair, or service of a landscape irrigation system.

Reduced Pressure Principle Backflow Prevention Assembly. An assembly containing two independently acting approved check valves together with a hydraulically operating mechanically independent pressure differential relief valve located between the two check valves and below the first check valve.

Static Water Pressure. The pressure of water when it is not moving.

Supervision, Landscape Irrigation. The on-the-job oversight and direction by a licensed irrigator who is fulfilling his or her professional responsibility to the client and/or employer in compliance with local or state requirements. Also a licensed installer working under the direction of a licensed irrigator or an irrigation technician who is working under the direction of a licensed irrigator to install, maintain, alter, repair or service an irrigation system.

Water Conservation, Irrigation System. The design, installation, service, and operation of an irrigation system in a manner that prevents the waste of water, promotes the most efficient use of water, and applies the least amount of water that is required to maintain healthy individual plant material or turf, reduce dust, and control erosion.

Zone Flow. A measurement, in gallons per minute or gallons per hour, of the actual flow of water through a zone valve, calculated by individually opening each zone valve and obtaining a valid reading after the pressure has stabilized. For design purposes, the zone

flow is the total flow of all nozzles in the zone at a specific pressure.

Zone Valve, Irrigation System. An automatic valve that controls a single zone of a landscape irrigation system.

(9) Section R302.6. of the International Residential Code, 2021 edition is hereby amended by adding the following exception:

Exception: One unprotected attic access opening, not exceeding 30 inches by 54 inches in size, is allowed per garage.

(10) Section R311.7.8.4. of the International Residential Code, 2021 edition is hereby amended to read as follows:

Section R311.7.8.4. Continuity. Handrails shall be continuous for the full length of the flight, from a point directly above the top riser of the flight to a point directly above the lowest riser of the flight

(11) Section R313. of the International Residential Code, 2021 edition is hereby amended by deleting the section in its entirety.

(12)Section R318.2. of the International Residential Code, 2021 edition is hereby amended to read as follows:

Section R318.2. Chemical termiticide treatment. Chemical termiticide treatment shall include soil treatment or field-applied wood treatment. The concentration, rate of application and method of treatment of the chemical termiticide shall be in strict accordance with the termiticide *label*. The method of application and contractor hired to apply the chemicals shall submit to the Building Department when applying for the Building Permit, and verification of the application turned in prior to issuance of the Certificate of Occupancy.

(13) Section R319.1. of the International Residential Code, 2021 edition is hereby amended to read as follows:

Section R319.1 Address identification. Premises identification shall comply with Section 502.1, International Building Code, as amended.

(14) Section 322.2.1. of the International Residential Code, 2021 edition is hereby amended to read as follows:

Section 322.2.1. Elevation requirements.

1. *Buildings and structures shall have the lowest floors elevated in accordance with* City of Caldwell Code of Ordinances Article 3.05 Flood Damage Prevention and Exhibit 10B Infrastructure Design Standards, Specifications, and Details.
2. In areas of shallow flooding (AO Zones), buildings and structures shall have the lowest floor (including basement) elevated above the highest adjacent grade as the depth number specified in feet on the Flood Insurance Rate Maps, or at least 2 feet if a depth number is not specified, plus the additional footage requirements in City of Caldwell Code of Ordinances Article 3.05 Flood Damage Prevention and Exhibit 10B Infrastructure Design

Standards, Specifications, and Details.

3. Basement floors that are below grade on all sides shall be elevated in accordance with City of Caldwell Code of Ordinances Article 3.05 Flood Damage Prevention and Exhibit 10B Infrastructure Design Standards, Specifications, and Details

Exception: Enclosed areas below the elevation required in this section, including *basements* with floors that are not below *grade* on all sides, shall meet the requirements of Section R322.2.2.

(15) Chapter 11. of the International Residential Code, 2021 edition is hereby amended to read as follows:

Chapter 11. Energy Efficiency. One-and-two family dwellings shall comply with the International Energy Conservation Code, 2021 edition as amended.

(16) Section M1411.3. of the International Residential Code, 2021 edition is hereby amended by to read as follows:

Section M1411.3. Condensate disposal. Condensate from all cooling coils or evaporators shall be conveyed from the drain pan outlet to the sanitary sewer system, if available. The condensate drain shall be connected to the sanitary sewer system in a manner approved by the code official.

Exception: When a sanitary sewer system is not available on the premises, or connection thereto is not practical, the condensate shall discharge into an approved french drain.

(17) Section M1501.1. of the International Residential Code, 2021 edition is hereby amended to read as follows:

Section M1501.1. Outdoor discharge. The air removed by every mechanical system shall be discharged to the outdoors in accordance with Section M1504.3.

Exception: Whole-house *ventilation*-type attic fans that discharge into the attic space of *dwelling units* having private *attics* shall be permitted.

(18) Section M1505.2. of the International Residential Code, 2021 edition is hereby amended to read as follows:

Section M1505.2. Recirculation of air. Exhaust air from bathrooms and toilet rooms shall not be recirculated within a residence or circulated to another *dwelling unit* and shall be exhausted directly to the outdoors. Exhaust air from bathrooms and toilet rooms shall discharge directly to the outdoors or the vent termination shall be unobstructed and within 6 inches of the soffit vent or ridge vent. This section shall not prohibit the installation of ductless range hoods in accordance with the exception to Section M1505.3.

(19) Section G2408.3. of the International Residential Code, 2021 edition is hereby amended by deleting the subsection in its entirety.

(20) Section G2414.4.3. of the International Residential Code, 2021 edition is hereby amended by deleting said section in its entirety.

(21) Section G2417.1.2. of the International Residential Code, 2021 edition is hereby amended to read as follows:

Section G2417.1.2. Repairs and additions. In the event repairs or additions are made after the pressure test, the affected piping shall be tested. If approved by the code official, minor repairs and additions are not required to be pressure tested provided the work is inspected and connections are tested with a noncorrosive leak-detecting fluid or other leak detecting methods.

(22) Section G2417.4. of the International Residential Code, 2021 edition is hereby amended to read as follows:

Section G2417.4. Test pressure measurement. Test pressure measurement shall comply with Section 406.4, 2021 International Fuel Gas Code, as amended.

(23) Section G2417.4.1. of the International Residential Code, 2021 edition is hereby amended to read as follows:

Section G2417.4.1. Test pressure. Test pressure shall comply with Section 406.4.1, 2021 International Fuel Gas Code, as amended.

(24) Section P2503.8. of the International Residential Code, 2021 edition is hereby amended to read as follows:

Section P2503.8. Inspection and testing of backflow prevention devices. Inspection and testing of backflow prevention devices shall comply with Section 312.10, 2021 International Plumbing Code, as amended.

(25) Section P2902.5.3. of the International Residential Code, 2021 edition is hereby amended by adding the following subsections:

P2902.5.3.1. Valid License Required. Any person who connects an irrigation system to the water supply within the city or the city's extraterritorial jurisdiction, commonly referred to as the ETJ, must hold a valid license, as defined by Title 30, Texas Administrative Code, Chapter 30 and required by Chapter 1903 of the Texas Occupations Code, or as defined by Chapter 365, Title 22 of the Texas Administrative Code and required by Chapter 1301 of the Texas Occupations Code. Exception: A property owner is not required to be licensed in accordance with Texas Occupations Code, Title 12, §1903.002(c)(1) if he or she is performing irrigation work in a building or on a premises owned or occupied by the person as the person's home. A home or property owner who installs an irrigation system must meet the standards contained in Title 30, Texas Administrative Code, Chapter 344 regarding spacing, water pressure, spraying water over impervious materials, rain or moisture shut-off devices or other technology, backflow prevention and isolation valves. See Texas Occupations Code §1903.002 for other exemptions to the licensing requirement.

P2902.5.3.2. Permit Required. Any person installing an irrigation system within the territorial limits or extraterritorial jurisdiction of the city is required to obtain a permit from the city prior to beginning work on the irrigation system. A completed irrigation permit application and irrigation plan must be a submitted to the city and approved before a permit will be issued by the city. The irrigation plan must be in compliance

with the requirements of this section.

Exceptions:

1. An irrigation system that is an on-site sewage disposal system, as defined by Section 366.002, Health and Safety Code; or
2. An irrigation system used on or by an agricultural operation as defined by Section 251.002, Agriculture Code; or
3. An irrigation system connected to a groundwater well used by a property owner strictly for domestic use.

P2902.5.3.3. Backflow Prevention Methods and Devices. Any irrigation system that is connected to the potable water supply must be connected through a backflow prevention method in accordance with Section P2902.5.3. The backflow prevention device must be approved by the Foundation for Cross-Connection Control and Hydraulic Research, the University of Southern California, the International Plumbing Code, or any other laboratory that has equivalent capabilities for both the laboratory and field evaluation of backflow prevention assemblies. The backflow prevention device must be installed in accordance with the laboratory approval standards or if the approval does not include specific installation information, the manufacturer's current published recommendations. If conditions that present a health hazard exist, one of the following methods must be used to prevent backflow;

1. An air gap may be used if:
   (a) there is an unobstructed physical separation; and
   (b) the distance from the lowest point of the water supply outlet to the flood rim of the fixture or assembly into which the outlet discharges is at least one inch or twice the diameter of the water supply outlet, whichever is greater.
2. Reduced pressure principle backflow prevention assemblies may be used if:
   (a) the device is installed at a minimum of 12 inches above ground in a location that will ensure that the assembly will not be submerged; and

   (b) drainage is provided for any water that may be discharged through the assembly relief valve.
3. Atmospheric vacuum breakers may only be used as replacements on existing systems utilizing atmospheric vacuum breakers if:
   (a) no back-pressure will be present;
   (b) there are no shutoff valves downstream from the atmospheric vacuum breaker;
   (c) the device is installed at a minimum of six inches above any downstream piping and the highest downstream opening. Pop-up sprinklers are measured from the retracted position from the top of the sprinkler;
   (d) there is no continuous pressure on the supply side of the atmospheric vacuum breaker for more than 12 hours in any 24-hour period; and
   (e) a separate atmospheric vacuum breaker is installed on the discharge side of each irrigation control valve, between the valve and all the emission devices that the valve controls.
4. Pressure vacuum breakers may be used if:
   (a) no back-pressure condition will occur; and
   (b) the device is installed at a minimum of 12 inches above any downstream piping and the highest downstream opening. Pop-up sprinklers are measured from the

retracted position from the top of the sprinkler.

All backflow prevention devices used in applications designated as health hazards must be tested upon installation and annually thereafter.

If an existing irrigation system without a backflow-prevention assembly requires major maintenance, alteration, repair, or service, the system must be connected to the potable water supply through an approved, properly installed backflow prevention method before any major maintenance, alteration, repair, or service is performed.

If an irrigation system is connected to a potable water supply through a double check valve, pressure vacuum breaker, or reduced pressure principle backflow assembly and includes an automatic master valve on the system, the automatic master valve must be installed on the discharge side of the backflow prevention assembly.

The irrigator shall ensure the backflow prevention device is tested by a licensed Backflow Prevention Assembly Tester prior to being placed in service. The tester must be registered with the City of Caldwell and the test results must be provided to the local water purveyor and the irrigation system's owner or owner's representative within ten business days of testing of the backflow prevention device.

P2902.5.3.4. Specific Conditions and Cross-Connection Control. Before any chemical is added to an irrigation system connected to the potable water supply, the irrigation system must be connected through a reduced pressure principle backflow prevention assembly or air gap.

Connection of any additional water source to an irrigation system that is connected to the potable water supply can only be done if the irrigation system is connected to the potable water supply through a reduced-pressure principle backflow prevention assembly or an air gap.

Irrigation system components with chemical additives induced by aspiration, injection, or emission system connected to any potable water supply must be connected through a reduced pressure principle backflow device.

If an irrigation system is designed or installed on a property that is served by an on-site sewage facility, as defined in Title 30, Texas Administrative Code, Chapter 285, then:

1. all irrigation piping and valves must meet the separation distances from the On-Site Sewage Facilities system as required for a private water line in Title 30, Texas Administrative Code, Section 285.91(10);
2. any connections using a private or public potable water source that is not the city's potable water system must be connected to the water source through a reduced pressure principle backflow prevention assembly as defined in Title 30, Texas Administrative Code, Section 344.50; and
3. any water from the irrigation system that is applied to the surface of the area utilized by the On-Site Sewage Facility system must be controlled on a separate irrigation zone or zones so as to allow complete control of any irrigation to that area so that there will not be excess water that would prevent the On-Site Sewage Facilities system from operating effectively.

P2902.5.3.5. Water Conservation. All irrigation systems shall be designed, installed, maintained, altered, repaired, serviced, and operated in a manner that will promote water conservation as defined in the Definitions section of this ordinance.

P2902.5.3.6. Irrigation Plan Design. An irrigator shall prepare an irrigation plan for each site where a new irrigation system will be installed. A paper or electronic copy of the irrigation plan must be on the job site at all times during the installation of the irrigation system. A drawing showing the actual installation of the system is due to each irrigation system owner after all new irrigation system installations. During the installation of the irrigation system, variances from the original plan may be authorized by the licensed irrigator if the variance from the plan does not:

1. diminish the operational integrity of the irrigation system;
2. violate any requirements of this ordinance; and
3. go unnoted in red on the irrigation plan.

The irrigation plan must include complete coverage of the area to be irrigated. If a system does not provide complete coverage of the area to be irrigated, it must be noted on the irrigation plan.

All irrigation plans used for construction must be drawn to scale. The plan must include, at a minimum, the following information:

1. the irrigator's seal, signature, and date of signing;
2. all major physical features and the boundaries of the areas to be watered;
3. a North arrow;
4. a legend;
5. the zone flow measurement for each zone;
6. location and type of each:
   (a) controller; and
   (b) sensor (for example, but not limited to, rain, moisture, wind, flow, or freeze);
7. location, type, and size of each:
   (a) water source, such as, but not limited to a water meter and point(s) of connection;
   (b) backflow prevention device;
   (c) water emission device, including, but not limited to, spray heads, rotary sprinkler heads, quick-couplers, bubblers, drip, or micro-sprays;
   (d) valve, including but not limited to, zone valves, master valves, and isolation valves;
   (e) pressure regulation component; and
   (f) main line and lateral piping.
   (g) the scale used; and
   (h) the design pressure.

P2902.5.3.7. Design and Installation. No irrigation design or installation shall require the use of any component, including the water meter, in a way which exceeds the manufacturer's published performance limitations for the component.

P2902.5.3.7.1. Spacing. The maximum spacing between emission devices must not exceed the manufacturer's published radius or spacing of the device(s). The radius or spacing is determined by referring to the manufacturer's published specifications for a specific emission device at a specific operating pressure. New irrigation systems shall

not utilize above-ground spray emission devices in landscapes that are less than 48 inches not including the impervious surfaces in either length or width and which contain impervious pedestrian or vehicular traffic surfaces along two or more perimeters. If pop-up sprays or rotary sprinkler heads are used in a new irrigation system, the sprinkler heads must direct flow away from any adjacent surface and shall not be installed closer than four inches from a hardscape, such as, but not limited to, a building foundation, fence, concrete, asphalt, pavers, or stones set with mortar.

Exception: Narrow paved walkways, jogging paths, golf cart paths or other small areas located in cemeteries, parks, golf courses or other public areas if the runoff drains into a landscaped area.

P2902.5.3.7.2. Water Pressure. Emission devices must be installed to operate at the minimum and not above the maximum sprinkler head pressure as published by the manufacturer for the nozzle and head spacing that is used. Methods to achieve the water pressure requirements include, but are not limited to, flow control valves, a pressure regulator, or pressure compensating spray heads.

P2902.5.3.7.3. Piping. Piping in irrigation systems must be designed and installed so that the flow of water in the pipe will not exceed a velocity of five feet per second for polyvinyl chloride (PVC) pipe.

P2902.5.3.7.4. Irrigation Zones. Irrigation systems shall have separate zones based on plant material type, microclimate factors, topographic features, soil conditions, and hydrological requirements.

P2902.5.3.7.5. Matched Precipitation Rate. Zones must be designed and installed so that all of the emission devices in that zone irrigate at the same precipitation rate.

P2902.5.3.7.6. Impervious Surfaces. Irrigation systems shall not spray water over surfaces made of concrete, asphalt, brick, wood, stones set with mortar, or any other impervious material, such as, but not limited to, walls, fences, sidewalks, streets, etc.

P2902.5.3.7.7. Master Valve. When provided, a master valve shall be installed on the discharge side of the backflow prevention device on all new installations.

P2902.5.3.7.8. PVC Pipe Primer Solvent. All new irrigation systems that are installed using PVC pipe and fittings shall be primed with a colored primer prior to applying the PVC cement in accordance with the International Plumbing Code (Section 605).

P2902.5.3.7.9. Rain or Moisture Sensor. All new automatically controlled irrigation systems must include sensors or other technology designed to inhibit or interrupt operation of the irrigation system during periods of moisture or rainfall. Rain or moisture shut-off technology must be installed according to the manufacturer's published recommendations. Repairs to existing automatic irrigation systems that require replacement of an existing controller must include a sensor or other technology designed to inhibit or interrupt operation of the irrigation system during periods of moisture or rainfall.

P2902.5.3.7.10. Isolation Valve. All new irrigation systems must include an isolation valve between the water meter and the backflow prevention device.

P2902.5.3.7.11. Depth Coverage of Piping. Piping in all irrigation systems must be installed according to the manufacturer's published specifications for depth coverage of piping. If the manufacturer has not published specifications for depth coverage of piping, the piping must be installed to provide minimum depth coverage of six inches of select backfill, between the top of the pipe and the natural grade of the topsoil. All portions of the irrigation system that fail to meet this standard must be noted on the irrigation plan. If the area being irrigated has rock at a depth of six inches or less, select backfill may be mounded over the pipe. Mounding must be noted on the irrigation plan and discussed with the irrigation system owner or owner's representative to address any safety issues. If a utility, man- made structure or roots create an unavoidable obstacle, which makes the six-inch depth coverage requirement impractical, the piping shall be installed to provide a minimum of two inches of select backfill between the top of the pipe and the natural grade of the topsoil. All trenches and holes created during installation of an irrigation system must be backfilled and compacted to the original grade.

P2902.5.3.7.12. Irrigation System Wiring. Underground electrical wiring used to connect an automatic controller to any electrical component of the irrigation system must be listed by Underwriters Laboratories as acceptable for burial underground. Electrical wiring that connects any electrical components of an irrigation system must be sized according to the manufacturer's recommendation. Electrical wire splices which may be exposed to moisture must be waterproof as certified by the wire splice manufacturer. Underground electrical wiring that connects an automatic controller to any electrical component of the irrigation system must be buried with a minimum of six inches of select backfill.

P2902.5.3.7.13. Irrigation System Water. Water contained within the piping of an irrigation system is deemed to be non-potable. No drinking or domestic water usage, such as, but not limited to, filling swimming pools or decorative fountains, shall be connected to an irrigation system. If a hose bib (an outdoor water faucet that has hose threads on the spout) is connected to an irrigation system for the purpose of providing supplemental water to an area, the hose bib must be installed using a quick coupler key on a quick coupler installed in a covered purple valve box and the hose bib and any hoses connected to the bib must be labeled "non potable, not safe for drinking." An isolation valve must be installed upstream of a quick coupler connecting a hose bib to an irrigation system.

P2902.5.3.7.14. Licensed Person On Site During Installation. Beginning January 1, 2010, either a licensed irrigator or a licensed irrigation technician shall be on-site at all times while the landscape irrigation system is being installed.

When an irrigator is not onsite, the irrigator shall be responsible for ensuring that a licensed irrigation technician is on-site to supervise the installation of the irrigation system.

P2902.5.3.8. Completion of Irrigation System Installation. Upon completion of the irrigation system, the irrigator or irrigation technician who provided supervision for the on-site installation shall be required to complete the following four items:

1. a final walk through with the irrigation system's owner or the owner's representative to explain the operation of the system;

2. The maintenance checklist on which the irrigator or irrigation technician shall obtain the signature of the irrigation system's owner or owner's representative and shall sign, date, and seal the checklist. If the irrigation system's owner or owner's representative is unwilling or unable to sign the maintenance checklist, the irrigator shall note the time and date of the refusal on the irrigation system's owner or owner's representative's signature line. The irrigation system owner or owner's representative will be given the original maintenance checklist and a duplicate copy of the maintenance checklist shall be maintained by the irrigator.

   The items on the maintenance checklist shall include but are not limited to:
   (a) the manufacturer's manual for the automatic controller, if the system is automatic;
   (b) a seasonal (spring, summer, fall, winter) watering schedule based on either current/real time evapotranspiration or monthly historical reference evapotranspiration (historical ET) data, monthly effective rainfall estimates, plant landscape coefficient factors, and site factors;
   (c) a list of components, such as the nozzle, or pump filters, and other such components; that require maintenance and the recommended frequency for the service; and
   (d) the statement, "This irrigation system has been installed in accordance with all applicable state and local laws, ordinances, rules, regulations or orders. I have tested the system and determined that it has been installed according to the Irrigation Plan and is properly adjusted for the most efficient application of water at this time."
3. A permanent sticker which contains the irrigator's name, license number, company name, telephone number and the dates of the warranty period shall be affixed to each automatic controller installed by the irrigator or irrigation technician. If the irrigation system is manual, the sticker shall be affixed to the original maintenance checklist. The information contained on the sticker must be printed with waterproof ink and include:
4. The irrigation plan indicating the actual installation of the system must be provided to the irrigation system's owner or owner representative.

<u>P2902.5.3.9. Maintenance, Alteration, Repair, or Service of Irrigation Systems</u>. The licensed irrigator is responsible for all work that the irrigator performed during the maintenance, alteration, repair, or service of an irrigation system during the warranty period. The irrigator or business owner is not responsible for the professional negligence of any other irrigator who subsequently conducts any irrigation service on the same irrigation system. All trenches and holes created during the maintenance, alteration, repair, or service of an irrigation system must be returned to the original grade with compacted select backfill. Colored PVC pipe primer solvent must be used on all pipes and fittings used in the maintenance, alteration, repair, or service of an irrigation system in accordance with the adopted International Plumbing Code (Section 605). When maintenance, alteration, repair or service of an irrigation system involves excavation work at the water meter or backflow prevention device, an isolation valve shall be installed, if an isolation valve is not present.

<u>P2902.5.3.10. Reclaimed Water</u>. Reclaimed water may be utilized in landscape irrigation systems if:

1. there is no direct contact with edible crops, unless the crop is pasteurized before consumption;
2. the irrigation system does not spray water across property lines that do not belong to the irrigation system's owner;

3. the irrigation system is installed using purple components;
4. the domestic potable water line is connected using an air gap or a reduced pressure principle backflow prevention device, in accordance with §290.47(i) of this title (relating to Appendices);
5. a minimum of an eight inch by eight inch sign is prominently posted on/in the area that is being irrigated, that reads, "RECLAIMED WATER – DO NOT DRINK" ; and
6. backflow prevention on the reclaimed water supply line shall be provided in accordance with the regulations of the city's water provider.

P2902.5.3.11. Advertisement Requirements. All vehicles used in the performance of irrigation installation, maintenance, alteration, repair, or service must display the irrigator's license number in the form of "LI_____" in a contrasting color of block letters at least two inches high, on both sides of the vehicle. All forms of written and electronic advertisements for irrigation services must display the irrigator's license number in the form of "LI_____." Any form of advertisement, including business cards, and estimates which displays an entity's or individual's name other than that of the licensed irrigator must also display the name of the licensed irrigator and the licensed irrigator's license number. Trailers that advertise irrigation services must display the irrigator's license number. The name, mailing address, and telephone number of the commission must be prominently displayed on a legible sign and displayed in plain view for the purpose of addressing complaints at the permanent structure where irrigation business is primarily conducted and irrigation records are kept.

P2902.5.3.12. Contracts. All contracts to install an irrigation system must be in writing and signed by each party and must specify the irrigator's name, license number, business address, current business telephone numbers, the date that each party signed the agreement, the total agreed price, and must contain the statement, "Irrigation in Texas is regulated by the Texas Commission on Environmental Quality (TCEQ), MC-178, P.O. Box 13087, Austin, Texas 78711-3087. TCEQ's website is: www. tceq.state.tx.us." All contracts must include the irrigator's seal, signature, and date. All written estimates, proposals, bids, and invoices relating to the installation or repair of an irrigation system(s) must include the irrigator's name, license number, business address, current business telephone number(s), and the statement: "Irrigation in Texas is regulated by the Texas Commission On Environmental Quality (TCEQ) (MC-178), P.O. Box 13087, Austin, Texas 78711-3087. TCEQ's web site is: www.tceq.state.tx.us." An individual who agrees by contract to provide irrigation services as defined in §344.30 of this title (relating to License Required) shall hold an irrigator license issued under Title 30, Texas Administrative Code, Chapter 30 (relating to Occupational Licenses and Registrations) unless the contract is a pass-through contract as defined in §344.1(36) of this title (relating to Definitions). If a pass-through contract includes irrigation services, then the irrigation portion of the contract can only be performed by a licensed irrigator. If an irrigator installs a system pursuant to a pass-through contract, the irrigator shall still be responsible for providing the irrigation system's owner or through contract, the irrigator shall still be responsible for providing the irrigation system's owner or owner's representative a copy of the warranty and all other documents required under this chapter. A pass-through contract must identify by name and license number the irrigator that will perform the work and must provide a mechanism for contacting the irrigator for irrigation system warranty work. The contract must include the dates that the warranty is valid.

P2902.5.3.13. Warranties for Irrigation Systems. On all installations of new irrigation systems, an irrigator shall present the irrigation system's owner or owner's representative with a written warranty covering materials and labor furnished in the new installation of the irrigation system. The irrigator shall be responsible for adhering to terms of the warranty. If the irrigator's warranty is less than the manufacturer's warranty for the system components, then the irrigator shall provide the irrigation system's owner or the owner's representative with applicable information regarding the manufacturer's warranty period. The warranty must include the irrigator's seal, signature, and date. If the warranty is part of an irrigator's contract, a separate warranty document is not required. An irrigator's written warranty on new irrigation systems must specify the irrigator's name, business address, and business telephone number(s), must contain the signature of the irrigation system's owner or owner's representative confirming receipt of the warranty and must include the statement: "Irrigation in Texas is regulated by the Texas Commission on Environmental Quality (TCEQ), MC-178, P.O. Box 130897, Austin, Texas 78711-3087. TCEQ's website is: www.tceq.state.tx.us." On all maintenance, alterations, repairs, or service to existing irrigation systems, an irrigator shall present the irrigation system's owner or owner's representative a written document that identifies the materials furnished in the maintenance, alteration, repair, or service. If a warranty is provided, the irrigator shall abide by the terms. The warranty document must include the irrigator's name and business contact information.

P2902.5.3.14. Duties and Responsibilities of City Irrigation Inspectors. A licensed irrigation inspector or plumbing inspector shall enforce the ordinance of the city, and shall be responsible for:

1. verifying that the appropriate permits have been obtained for an irrigation system and that the irrigator and installer or irrigation technician, if applicable, are licensed;
2. inspecting the irrigation system;
3. determining that the irrigation system complies with the requirements of this section;
4. determining that the appropriate backflow prevention device was installed and tested;
5. investigating complaints related to irrigation system installation, maintenance, alteration, repairs, or service of an irrigation system and advertisement of irrigation services; and
6. maintaining inspection records according to this section.

(26) Section P2906.5. of the International Residential Code, 2021 edition is hereby amended to read as follows:

Section P2906.5. Water distribution pipe. Water distribution piping within *dwelling units* shall conform to NSF 61 and shall conform to one of the standards indicated in Table P2906.5. Water distribution pipe and tubing shall have a pressure rating of not less than 100 psi at 180°F (689 kPa at 82°C). Inaccessible water distribution piping under slabs shall be copper (minimum type K) or cross-linked polyethylene (PEX) tubing all installed without joints or connections. Materials subject to corrosion shall be protected when exposed to concrete or corrosive soils.

(27) Section 2906.10. of the International Residential Code, 2021 edition is hereby amended by adding the following subsection:

P2906.10.3. Sleeving. When a sleeve is provided for cross-linked polyethylene (PEX)

plastic piping or tubing installed under concrete slabs the annular space between the piping or tubing and the sleeve must be caulked, foamed, or otherwise sealed to prevent the entrance of termiticide.

(28) Section P3002.2. of the International Residential Code, 2021 edition is hereby amended by adding the following subsection:

P3002.2.1 Depth of building sewer**.** Building sewer pipe shall be installed with a minimum of twelve (12) inches of cover. Where conditions prohibit the required amount of cover, cast iron pipe with approved joints may be used unless other means of protecting the pipe is provided as approved by the Building Official.

(29) Section E3401.1. of the International Residential Code, 2021 edition is hereby amended to read as follows:

Section E3401.1. Applicability. Electrical installations shall comply with the *National Electrical Code*, as adopted and amended by the City of Caldwell.

(30) Section AQ102.1. of the International Residential Code, 2021 edition is hereby amended by deleting the definition of "TINY HOUSE" and replacing it with the following:

Tiny house. A single occupancy dwelling unit that is between 500 (46 m^2) and 700 square feet (65 m^2) in floor area, excluding lofts. All tiny homes must receive a building permit from the City of Caldwell before being placed or constructed. All tiny homes must comply with Article 3.06 of the Code of Ordinances and all building codes adopted by the City of Caldwell, as amended.

EXHIBIT C: AMENDMENTS TO THE INTERNATIONAL PLUMBING CODE, 2021

The International Plumbing Code, 2021 edition, adopted by reference in Section 3.03.141 of the Code of Ordinances of the City of Caldwell is hereby amended as follows:

(1) Section 102.8. of the International Plumbing Code, 2021 edition is hereby amended by adding the following exception:

> **Exception:** Any reference to the ICC Electrical Code shall mean the National Electrical Code, as adopted and amended by the City of Caldwell.

(2) Section 106.3. of the International Plumbing Code, 2021 edition is hereby amended to read as follows:

> Section 106.3 Application for permit. The code official may require a permit application for work regulated by this code.

(3) Section 114. of the International Plumbing Code, 2021 edition is hereby amended by deleting the section in its entirety.

(4) Section 305.4.1. of the International Plumbing Code, 2021 edition is hereby amended to read as follows:

> Section 305.4.1. Sewer Depth. Building sewers that connect to private sewage disposal systems shall be installed not less than twelve (12) inches (304.8 mm) below finished grade at the point of septic tank connection. Building sewers shall be installed not less than twelve (12) inches (304.8 mm) below grade. Where conditions prohibit the required amount of cover, cast iron pipe with approved joints may be used unless other means of protecting the pipe is provided as approved by the Building Official.

(5) Section 312.2. of the International Plumbing Code, 2021 edition is hereby amended to read as follows:

> 312.2 Drainage water test. A water test shall be applied to the drainage system either in its entirety or in sections. If applied to the entire system, all openings in the piping shall be tightly closed, except the highest opening, and the system shall be filled with water to the point of overflow. If the system is tested in sections, each opening shall be tightly plugged except the highest opening of the section under test, and each section shall be tested with not less than a 10-foot head of water. This pressure shall be held for at least 15 minutes. The drainage system shall then be tight at all points.

(6) Subsection 312.10.01. of the International Plumbing Code, 2021 edition is hereby amended to read as follows:

> Section 312.10.01. Inspections. Annual inspections shall be made of all commercial backflow prevention assemblies and *air gaps* to determine whether the assemblies are operable and air gaps exist.

(7) Section 410.4. of the International Plumbing Code, 2021 edition is hereby amended to read as follows:

> 410.4. Substitution. Where restaurants provide drinking water in a container free of charge, drinking foundations shall not be required in those restaurants. Where bottled water

dispensers are provided in other occupancies, drinking fountains shall not be required.

(8) Section 606. of the International Plumbing Code, 2021 edition is hereby amended by adding the following subsection:

606.7 Sleeved cross-polyethylene piping or tubing. When a sleeve is provided for cross-linked polyethylene (PEX) plastic piping or tubing installed under concrete slabs the annular space between the piping or tubing and the sleeve must be caulked, foamed, or otherwise sealed to prevent the entrance of termiticide.

(9) Section 701.2. of the International Plumbing Code, 2021 edition is hereby amended to read as follows:

701.2 Connection to sewer required. Every building in which plumbing fixtures are installed and all premises having sanitary drainage piping shall be connected to an approved sewer. Private sewage systems must comply with City of Caldwell's Code of Ordinances. All private sewage disposal systems must comply with the latest adopted standards of the Texas Commission on Environmental Quality and be installed under the direction of the Burleson County Environmental Department. The installer shall be licensed by the Texas Commission on Environmental Quality.

EXHIBIT D: AMENDMENTS TO THE INTERNATIONAL FUEL GAS CODE, 2021

The International Fuel Gas Code, 2021 edition, adopted by reference in Section 3.03.142 of the Code of Ordinances of the City of Caldwell is hereby amended as follows:

(1) Section 102.8. of the International Fuel Gas Code, 2021 edition is hereby amended by adding the following exception:

> **Exception**: Any reference to the ICC Electrical Code shall mean the National Electrical Code, as adopted and amended by the City of Caldwell.

(2) Section 106.3. of the International Fuel Gas Code, 2021 edition is hereby amended to read as follows:

> Section 106.3. Application for permit. The code official may require a permit application for work regulated by this code.

(3) Section 113. of the International Fuel Gas Code, 2021 edition is hereby amended by deleting the section in its entirety.

(4) Section 305.5. of the International Fuel Gas Code, 2021 edition is hereby amended by deleting the section in its entirety.

(5) Section 403.3.3. of the International Fuel Gas Code, 2021 edition is hereby amended by deleting the section in its entirety.

(6) Section 403.4.3. of the International Fuel Gas Code, 2021 edition is hereby amended by deleting the section in its entirety.

(7) Section 406.1.2. of the International Fuel Gas Code, 2021 edition is hereby amended to read as follows:

> Section 406.1.2. Repairs and additions. In the event repairs or additions are made after the pressure test, the affected piping shall be tested. If approved by the code official, minor repairs and additions are not required to be pressure tested provided the work is inspected and connections are tested with a noncorrosive leak-detecting fluid or other leak detecting methods.

(8) Section 406.4. of the International Fuel Gas Code, 2021 edition is hereby amended to read as follows:

> Section 406.4. Test pressure measurement. Test pressure shall be measured with a manometer 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 pressure shall have a range such that the highest end of the scale is not greater than five times the test pressure. For gas systems with a working pressure up to and including five (5) psi., a diaphragm gauge utilizing a dial with a minimum diameter of three and one-half inches (3 ½”), a set hand, 2/10 pound incrementation and a pressure range not more than twenty (20) psi shall be acceptable. A mechanical spring gauge is only acceptable for use on gas systems requiring a pressure test of more than 20 psig.

(9) Section 406.4.1. of the International Fuel Gas Code, 2021 edition is hereby amended to read as follows:

Section 406.4.1. Test pressure. The test pressure to be used shall be no less than twice the proposed maximum working pressure, but no less than five (5) psig, irrespective of design pressure.

EXHIBIT E: AMENDMENTS TO THE INTERNATIONAL MECHANICAL CODE, 2021

The International Mechanical Code, 2021 edition, adopted by reference in Section 3.03.241 of the Code of Ordinances of the City of Caldwell is hereby amended as follows:

(1) Section 102.8. of the International Mechanical Code, 2021 edition is hereby amended by adding the following exception:

> **Exception:** Any reference to the ICC Electrical Code shall mean the National Electrical Code, as adopted and amended by the City of Caldwell

(2) Section 106.3. of the International Mechanical Code, 2021 edition is hereby amended to read as follows:

> Section 106.3. Application for permit. The code official may require a permit application for work regulated by this code.

(3) Section 109.2. of the International Mechanical Code, 2021 edition is hereby amended by deleting the section in its entirety.

(4) Section 109.6. of the International Mechanical Code, 2021 edition is hereby amended to read as follows:

> Section 109.6. Refunds. The City Manager or his designee is authorized to establish a refund policy.

(5) Section 113.4. of the International Mechanical Code, 2021 edition is hereby amended to read as follows:

> Section 113.4. Failure to comply. Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be subject to fines established by the authority having jurisdiction. Fines shall be not less than twenty-five ($25.00) and not more than two-thousand ($2,000.00).

(6) Section 114. of the International Mechanical Code, 2021 edition is hereby amended by deleting the section in its entirety.

(7) Section 304.7. of the International Mechanical Code, 2021 edition is hereby amended by deleting the section in its entirety.

EXHIBIT F: AMENDMENTS TO THE NATIONAL ELECTRICAL CODE, 2023

The National Electrical Code, 2023 edition, adopted by reference in Section 3.03.291 of the Code of Ordinances of the City of Caldwell is hereby amended as follows:

(1) Article 230. of the National Electrical Code, 2023 edition is hereby amended by adding the following section and exception:

230.11. Meter Mounting Heights. Individual meters shall be mounted at a height not greater than 5'-6" or less than 4'-6" above finished grade, measured to the center line of the meter base. Meter packs shall be mounted with its horizontal centerline not greater than 4'-6" or less than 4'-0" above finished grade."

(2) Section 230.70. of the National Electrical Code, 2023 edition is hereby amended by adding the following subsection:

(D) **Service Disconnecting Means for Commercial Buildings and Structures**. For commercial buildings and structures, the service disconnecting means shall be installed on the outside of the building or structure. A power operated disconnect switch (shunt trip) is permitted for service disconnects rated 1000 amps or more. All shunt trip disconnecting means shall be of the maintained contact type in an approved, lockable enclosure. All service disconnects shall be clearly marked in a permanent manner.

Exception: A power operated disconnect switch (shunt trip) may be allowed on service disconnects rated less than 1000 amps, if the applicant requests an exception from the Electrical Division and Building Official and satisfies the official that one of the following criteria has been met.

(a) A power operated disconnect switch (shunt trip) may be used for a service disconnect rated less than 1000 amps when the building or structure is served by a single transformer and the transformer is not anticipated to be used for multiple services; or

(b) A power operated disconnect switch (shunt trip) may be used for a service disconnect rated less than 1000 amps on an existing building or structure when space is not available to mount an external disconnect.

(3) Section 230.70. of the National Electrical Code, 2023 edition is hereby amended by adding the following subsection:

(E) **Outside Disconnect Locking Device**. Factory installed key operated lock shall have an alternate locking mechanism approved by the local jurisdiction."

(4) Section 230.71(A). of the National Electrical Code, 2023 edition is hereby amended to read as follows:

(A) **General**. For the purpose of this section, disconnecting means installed as part of listed equipment and used solely for the following shall not be considered a service disconnecting means:

(1) Powering monitoring equipment

(2) Surge-protective devices

(3) Control circuit of the ground-fault protection system

(4) Power-operable service disconnecting means

Any multi-tenant building larger than 5,000 square feet shall have a service disconnect.

EXHIBIT G: AMENDMENTS TO THE INTERNATIONAL PROPERTY MAINTENANCE CODE, 2021

The International Property Maintenance Code, 2021 edition, adopted by reference in Section 3.03.391 of the Code of Ordinances of the City of Caldwell is hereby amended as follows:

(1) Section 102.8. of the International Property Maintenance Code, 2021 edition is hereby amended by adding the following exception:

Exception: Any reference to the ICC Electrical Code shall mean the *National Electrical Code,* as adopted and amended by the City of Caldwell.

(2) Section 107. of the International Property Management Code, 2021 edition is hereby amended by deleting the section in its entirety.

(3) Section 302.4. of the International Property Management Code, 2021 edition is hereby amended by deleting the section in its entirety.

(4) Section 304.3. of the International Property Management Code, 2021 edition is hereby amended to read as follows:

Section 304.3. Premises identification. Premises identification shall be in compliance with Section 502.1 of the International Building Code, 2021 edition, as amended.

(5) Section 304.14. of the International Property Maintenance Code, 2021 edition is hereby amended to read as follows:

Section 304.14. Insect screens. Every door, window, and other outside opening required for ventilation of habitable rooms, food preparation areas, food service areas or any other areas where products to be included or utilized in food for human consumption are processed, manufactured, packaged or stored, shall be supplied with approved tightly fitting screens of not less than 16 mesh per inch (16 mesh per 25mm) and every swinging door shall have a self-closing device in good working condition.

Exceptions:

(1) Screens shall not be required where other approved means, such as air curtains or insect repellant fans, are employed.

(2) Screens shall not be required for windows and doors enclosing habitable spaces that contain central heating and air conditioning equipment that provide mechanical ventilation.'

(6) Section 602.3. of the International Property Maintenance Code, 2021 edition is hereby amended to read as follows:

Section 602.3. Heat supply. Every *owner* and *operator* of any building who rents, leases, or lets one or more *dwelling units* or *sleeping units* on terms, either expressed of implied, to furnish heat to the *occupants* thereof shall supply heat during the period from October 1st to April 30th to maintain a minimum temperature of 68°F (20°C) in all habitable rooms, *bathrooms* and *toilet rooms*.

Exceptions:

(1) When the outdoor temperature is below the winter outdoor design temperature for the locality, maintenance of the minimum room temperature shall not be required provided that the heating at its full design capacity. The winter outdoor design temperature for the locality shall be as indicated in Appendix D of the International Plumbing Code, 2021, as amended.

(2) In areas where the average monthly temperature is above 30°F (-1°C) a minimum temperature of 65°F (18°C) shall be maintained.

(7) Section 602.4. of the International Property Maintenance Code, 2021 edition is hereby amended by adding the following exception:

(3) Warehouse, storage rooms and similar areas that are not occupied on a constant basis.

(Reason: The added exception allows warehouses, storage rooms, and similar work areas that are not occupied on a constant basis to be unheated.)

EXHIBIT H: AMENDMENTS TO INTERNATIONAL ENERGY CONSERVATION CODE, 2021

The International Energy Conservation Code, 2021 edition, adopted by reference in Section 3.03.401 of the Code of Ordinances of the City of Caldwell is hereby amended as follows:

(1) Section C&R108.1. of the International Energy Conservation Code, 2021 edition are hereby amended to read as follows:

Section C&R108.1. Referenced codes and standards. The codes and standards referenced in this code shall be those listed in Chapter 6, and such codes 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 Sections C&R108.1.1 and C&R108.1.2. Any reference to the ICC Electrical Code shall mean the National Electrical Code, as adopted and amended by the City of Caldwell.

(2) Section C&R110. of the International Energy Conservation Code, 2021 edition are hereby amended by deleting the sections in their entirety.

(3) Section C402.5. of the International Energy Conservation Code, 2021 edition is hereby amended by adding the following exception:

Exception: The air leakage – thermal envelope shall be considered acceptable when the items listed in Table R402.4.1.1, applicable to the method of construction, are field verified. Where required by the code official, an approved third party, independent from the installer, shall inspect and approve the thermal envelope and insulation installation.

(4) Section R401.3. of the International Energy Efficiency Code, 2021 edition is hereby amended by inserting the following subsection:

(8) The certificate shall list the types and efficiencies of heating, cooling and service water heating equipment. Where a gas-fired unvented room heater, electric furnace, or baseboard electric heater is installed in the residence, the certificate shall list "gas-fired unvented room heater," "electric furnace" or "baseboard electric heater." as appropriate. An efficiency shall not be listed for gas- fired unvented room heaters, electric furnaces or electric baseboard heaters.

(5) Section R402.4.6. of the International Energy Efficiency Code, 2021 edition is hereby amended to read as follows:

Section R402.4.6. Electrical and communication outlet boxes (air-sealed boxes). Electrical and communication outlet boxes installed in the building thermal envelope shall be sealed to limit air leakage between conditioned and unconditioned spaces. Electrical and communication outlet boxes shall be tested in accordance with NEMA OS 4, *Requirements for Air-Sealed Boxes for Electrical and Communication Applications*, and shall have an air leakage rate of not greater than 2.0 cubic feet per minute (0.944 L/s) at a pressure differential of 1.57 psf (75 Pa). Electrical and communication outlet boxes shall be marked "NEMA OS 4" or "OS 4" in accordance with NEMA OS 4. Electrical and communication outlet boxes shall be installed per the manufacturer's instructions and with any supplied components required to achieve compliance with NEMA OS 4. On-site sealing of boxes is acceptable, when using approved sealant materials.

(6) Section R403.3.1. of the International Energy Efficiency Code, 2021 edition is hereby amended to read as follows:

R403.3.1. Ducts located outside conditioned space. Supply and return ducts located outside conditioned space shall be insulated to and *R*-value of not less than R-8 for ducts 3 inches (76 mm) in diameter and larger and not less than R-6 for ducts smaller than 3 inches (76 mm) in diameter. Ducts buried beneath a building shall be insulated as required per this section and have an equivalent thermal distribution efficiency. Underground ducts utilizing the thermal distribution efficiency method shall be listed and *labeled* to indicate the *R*-value equivalency. Supply and return air ducts in unconditioned spaces may have an insulation R-Value of 6 when installed in conjunction with an air conditioner having a minimum SEER rating of 16.

(7) Section R404.2. of the International Energy Efficiency Code, 2021 edition is hereby amended by deleting this section in its entirety.

(8) Section R406.6. of the International Energy Efficiency Code, 2021 edition is hereby amended to read as follows:

Section R406.6. Verification by approved agency. The Code Official may require verification of compliance with Section R406 be completed by an approved third party.

EXHIBIT I: AMENDMENTS TO THE INTERNATIONAL FIRE CODE, 2021

The International Fire Code, 2021 edition, adopted by reference in Section 5.04.001 of the Code of Ordinances of the City of Caldwell is hereby amended as follows:

(1) Section 101.1. of the International Fire Code, 2021 edition is hereby amended to read as follows:

> Section 101.1. Title. These regulations shall be known as the Fire Code of City of Caldwell, Texas, hereinafter referred to as "this code."

(2) Section 111. of the International Fire Code, 2021 edition is hereby amended by deleting the section in its entirety.

(3) Section 112.4. of the International Fire Code, 2021 edition is hereby amended to read as follows:

> Section 112.4. Violation Penalties. Any person who shall violate any of the provisions of this chapter, or shall fail to comply therewith, or with any of the requirements thereof, or who shall erect, install, alter, repair or do work in violation of the approved construction documents or directives of the fire code official, or of a permit or certificate used [issued] under provisions of this chapter, shall be guilty of an offense and shall be liable for a fine not to exceed the sum of two thousand dollars ($2,000.00). Each day the violation exists shall constitute a separate offense. Such penalty shall be in addition to all the other remedies provided herein.

(4) Section 113.4. of the International Fire Code, 2021 edition is hereby amended to read as follows:

> Section 113.4 Failure to Comply. Any person who shall continue any work after having been served with a stop-work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be guilty of an offense and shall be liable for a fine not to exceed the sum of two thousand dollars ($2,000.00). Each day the violation exists shall constitute a separate offense. Such penalty shall be in addition to all the other remedies provided herein.

(5) Section 503.2.1. of the International Fire Code, 2021 edition is hereby amended to read as follows:

> Section 503.2.1 Dimensions. Fire apparatus access roads shall have an unobstructed width of not less than 20 feet (6096 mm), exclusive of shoulders, except for approved security gates in accordance with Section 503.6, and an unobstructed vertical clearance of not less than 13 feet 6 inches (4115 mm).

(6) Section 903.3.1.3. of the International Fire Code, 2021 edition is hereby amended to read as follows:

> Section 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.

(7) Section 1103.5.3. of the International Fire Code, 2021 edition is hereby amended to read as follows:

> Section 1103.5.3. Group I-2, Condition 2. In addition to the requirements of Section 1103.5.2, existing buildings of Group I-2, Condition 2 occupancy shall be equipped

throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1. The automatic sprinkler system shall be installed as established by the adopting ordinance. Fire sprinkler system installation shall be completed within 24 months from date of notification by the fire code official.

(8) Section 3103.3.1. of the International Fire Code, 2021 edition is hereby amended by deleting the subsection in its entirety.

(9) Section 5601.1.3. of the International Fire Code, 2021 edition is hereby amended by deleting the subsection in its entirety.

(10) Section 5704.2.9.6.1. of the International Fire Code, 2021 edition is hereby amended to read as follows:

Section 5704.2.9.6.1. Locations where above-ground tanks are prohibited. Storage of Class I and II liquids in above-ground tanks outside of buildings is prohibited within the limits established by the Zoning Code of the City of Caldwell.

(11) Section 5704.2.11.5. of the International Fire Code, 2021 edition is hereby amended by adding the following subsection:

Section 5704.2.11.5. Observation wells. Approved sampling tubes, or observation wells, shall be installed in the backfill material of each underground flammable or combustible liquid storage tank. The tubes shall extend from a point twelve (12) inches below the average grade of the excavation to ground level and shall be provided with suitable surface access caps. The number, location, and size of such observation wells shall be in accordance with the requirements of the Texas Commission on Environmental Quality (TCEQ).

(12) Section 5706.2.4.4. of the International Fire Code, 2021 edition is hereby amended to read as follows:

Section 5706.2.4.4 Locations where above-ground tanks are prohibited. The storage of Class I and II liquids in above-ground tanks is prohibited within the limits established by the Zoning Code of the City of Caldwell.

(13) Section 5806.2. of the International Fire Code, 2021 edition is hereby amended to read as follows:

Section 5806.2. Limitations. Storage of flammable cryogenic fluids in stationary containers outside of buildings is prohibited within the limits established by the Zoning Code of the City of Caldwell.