First Reading ______ Second Reading ______

ORDINANCE NO.

AN ORDINANCE AMENDING TITLE 15 OF THE LOVELAND MUNICIPAL CODE AND ADOPTING BY REFERENCE THERETO THE INTERNATIONAL RESIDENTIAL CODE, 2012 EDITION

WHEREAS, pursuant to Section 4-12 of the Charter of the City of Loveland, the City Council is authorized to adopt, by ordinance, any code by reference in accordance with the procedures established by state law; and

WHEREAS, the City Council has received the recommendation of the Construction Advisory Board recommending the adoption of the International Residential Code, 2012 Edition, and amendments thereto; and

WHEREAS, The City Council has conducted a public hearing pursuant to Section 31-16-203, C.R.S. concerning the adoption of the International Residential Code by reference and finds and determines that it is necessary to the health, safety and general welfare of the public that the City regulate conditions hazardous to life and property by the adoption of the International Residential Code, 2012 Edition, and certain amendments and modifications thereto.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF LOVELAND, COLORADO:

Section 1. Chapter 15.10 of the Loveland Municipal Code is hereby repealed in its entirety and reenacted to read as follows:

Chapter 15.10

RESIDENTIAL CODE

Sections:

15.10.010	International Residential Code – Adopted.
15.10.020	Modifications to the International Residential Code, 2006 Edition.
15.10.030	Violations and penalties.

Section 15.10.010 – International Residential Code – Adopted.

The International Residential Code, 2012 Edition, issued and published by the International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478-5795, including appendices A, B, C, D, H, J, K, and O is hereby adopted by reference as the residential code of the city. This code is a complete code covering certain buildings hereafter constructed, erected, enlarged, altered or moved into the city and its purpose is to provide minimum standards to safeguard life

and limb, health, property and public welfare by regulating and controlling the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, removal and demolition of detached one and two family dwellings and multiple single family dwellings (townhouses) not more than three stories in height with separate means of egress and their accessory structures, and providing for issuance of permits and collection of fees therefore. At least one copy of the International Residential Code, 2012 Edition, which has been certified by the mayor and city clerk, shall be on file in the office of the city clerk and may be inspected during regular business hours.

Section 15.10.020 - Modifications to International Residential Code, 2012 Edition.

The International Residential Code, 2012 Edition, adopted in this chapter, is modified as follows:

A. Section R101.1 is amended to read as follows:

R101.1 Title. These provisions shall be known as the Residential Code of the City of Loveland, hereinafter referred to as "this code" or "residential code."

- B. Section R103 is deleted in its entirety.
- C. Section R105.2 is amended as follows:
 - (1) Item #2 under "Building" is amended to read as follows:
 - 2. Fences not over 6 feet 3 inches high.
 - (2) Item #3 under "Building" is amended to read as follows by adding the following sentence:

3. Specific manufacturer's instructions of retaining wall products may be more restrictive regardless of height of the retaining wall, thereby the more restrictive will apply.

(3) Item #7 under "Building:" is amended to read as follows:

7. Prefabricated swimming pools that are less than 24 inches (610 mm) deep, do not exceed 5,000 gallons (19,000 L), and are installed entirely above ground.

(4) The following paragraphs shall be added under "Building" to read as follows:

11. Replacement and repair of roofing of like materials on buildings classified as Group R-3 and U Occupancies, when such work is determined not to be historical as defined otherwise in this code.

12. Replacement and repair of nonstructural siding or siding which is not part of a required fire rated assembly on buildings classified as Group R-3 and U Occupancies.

13. Gutters, downspouts and storm windows (unless specified through design).

14. Pergola^{**} (unenclosed, no roof decking or covering) which are not placed in any required setback or connected to a deck.

**a structure of parallel colonnades supporting as open roof of beams and crossing rafters or trellis work, over which climbing plants are trained to grow.

Unless otherwise exempt by this code, separate plumbing, electrical, and mechanical permits will be required for the above exempted items.

Exemption from the permit requirements of this code shall not be deemed to grant authorization for work to be done in a manner in violation of the provisions of this code or any other laws or resolutions of the City of Loveland.

- D. Section R105.3.1.1 is deleted in its entirety.
- E. Section R105 is amended by modifying Section 105.5 to read as follows:

105.5 Expiration

Every permit issued shall become invalid unless the work on the site authorized by such permit is commenced within 180 days after its issuance, or if the work authorized on the site by such permit is suspended or abandon for a period of 180 days after the time the work is commenced. All permits shall become null and void regardless of the provisions of this section within twelve (12) months of issuance. The building official is authorized to grant, in writing, one or more extensions of time, for periods not more than 180 days each. The extensions shall be requested in writing and justifiable cause demonstrated.

F. Section R105.8 is amended by the addition of two new subsections, R105.8.1 and R105.8.2, to read as follows:

R105.8.1. Transfer of permit. A building permit or application may be transferred from one party to the other upon written request to the building official, provided there are no changes to the plans and specifications. Additionally, the party to which the permit is transferred must be licensed in the appropriate license category and in good standing.

R105.8.2. Owner assuming role as contractor. Provided that no change in ownership has occurred since the permit was issued, the building official may allow the property owner to assume the role of contractor at any time on an active building permit provided the building official is in receipt of a written request from the application holder stating that the applicant is no longer the contractor of record on the permit application. Additionally, the letter shall list the permit number, the address of the project and stating that the original contractor is no longer in the

employ of the owner. This change may be done at no charge. No change will be made in the expiration date of the original building permit.

G. Section R106 is amended by the addition of new subsections R106.3.4 and R106.3.5 to read as follows:

R106.3.4 Responsibility for preparation of plans and specifications. In accordance with this section of the building code, the building official shall require plans, computations, and specifications to be prepared, designed, and stamped by an engineer or architect licensed in the State of Colorado in certain circumstances, including but not limited to the following:

- (1) Foundations are constructed on caissons or any other method. The building official may exempt this provision on additions to existing residential and accessory structures constructed on spread footing conforming to the requirements of Chapter 4.
- (2) Roof framing or wall framing is construction not conforming to the requirements of Chapter 8 and 9.
- (3) Confirmation of beam sizes and spans, loading, or any structural element affecting the integrity of the building.

R106.3.5 Deferred submittals. For the purpose this section R106, deferred submittals are defined as those portions of the design that are not submitted at the time of the application and that are to be submitted to the building official within a specified period. Deferral of any submittal items shall have the prior approval of the building official. The registered design professional in responsible charge (if required), shall list the deferred submittals on the construction documents for review by the building official.

Submittal documents for deferred submittal items shall be submitted to the design professional in responsible charge (if required), who shall review them and forward them to the building official with a notation indicating that the deferred submittal documents have been reviewed and that they have been found to be in conformance with the design of the building or structure. The deferred submittal items shall not be installed until their design and submittal documents have been approved by the building official.

H. Section R108.2 is amended to read as follows and by the addition of subsections R108.2.1 and R108.2.2 to read as follows:

R108.2 Schedule of permit and inspection fees. On buildings, structures, electrical, gas, mechanical and plumbing systems or alterations requiring a permit, a fee for each permit, or inspection, shall be paid as required in accordance with the schedule established from time to time by resolution of the City Council.

R108.2.1 Plan Review Fee. When submittal of documents are required by Section R105, a plan review fee shall be paid. The plan review fees specified in this section are separate fees from the permit fees specified as established by resolution in Section 108.2 and are in addition to the permit fees.

R108.2.2 Expiration of plan review. Applications for which no permit is issued within ninety (90) days following the date of last action of review without any response or additional information submitted by the applicant shall expire. Such plans submitted for checking may therefore be returned to the applicant or destroyed by the building official. The building official may extend the time for action by the applicant for a period not to exceed sixty (60) days upon written request by the applicant showing circumstances beyond the control of the applicant have prevented action from being taken. In order to renew action on an application after expiration, the applicant shall resubmit plans and review fee.

I. Section R108.4 is amended by the addition of new subsections R108.4.1, R108.4.2, R108.4.3 to read as follows:

R108.4.1 Fee for commencing work without a permit. The fee for commencing work without a permit could be up to or equal to the amount of the permit fee required by this code. The payment of such fee shall not exempt an applicant from compliance with all other provisions of either this code or other requirements nor from penalty prescribed by law.

R108.4.2 Investigative fees - work without permit. Whenever any work for which a permit is required by this code has been commenced without first obtaining said permit, a special investigation shall be made before a permit may be issued for such work. An investigative fee, in addition to the permit fee, shall be collected whether or not a permit is then subsequently issued. The investigative fee could be up to or equal to the amount of the permit fee required by this code. The minimum investigative fee shall be the same fee as the minimum set forth and adopted by the City Council. The payment of such investigative fee shall not exempt any person from compliance with all other provisions of either this code or other requirements nor from any penalty prescribed by law.

R108.4.3 Re-inspections. A re-inspection fee may be assessed for each inspection or reinspection when such portion of work for which a permit is called is not complete or when corrections called for are not made. This section is not to be interpreted as requiring re-inspection fees the first time a job is rejected for failure to comply with the requirements of this code, but as controlling the practice of calling for inspections before the job is ready for such inspection or re-inspection. Re-inspection fees may be assessed when the inspection card is not posted or otherwise not available on the work site, the approved plans are not readily available to the inspector, failure to provide access on the date for which inspection is requested, or for deviating from plans requiring the approval of the building official. The re-inspection fees specified in this section are separate fees from the permit fees specified in Section 108.2 and are in addition to the permit fees. J. Section R108.5 is amended to read as follows:

R108.5 Refunds. The building official is authorized to establish a refund policy in accordance with the following criteria:

1. The building official shall be permitted to authorize refunding of not more than 50 percent of the permit fee paid when no work has been done under the permit issued in accordance with this code; and

2. The building official shall be permitted to authorize refunding of not more than 50 percent of the plan review fee paid when an application for a permit for which a plan review fee has been paid is withdrawn or canceled provided that no examination time has been expended; and

3. The building official shall not be permitted to authorize refunding of any fee paid except upon written application filed by the original permittee not later than sixty (60) days after the date of fee payment.

K. Section R109.1 is amended to read as follows:

R109.1 Types of inspections – **inspection card.** For onsite construction, from time to time the building official, upon notification from the permit holder or his agent, shall make or cause to be made any necessary inspections and shall either approve that portion of the construction as completed or shall notify the permit holder or his or her agent wherein the same fails to comply with this code. Work requiring a building permit shall not be commenced until the permit holder or his agent shall have posted an inspection record card in a conspicuous place on the premises and in a position to allow the building official to make the required entries conveniently thereon regarding inspection of the work. The address of the building site must be posted in a conspicuous place readily visible from the public road. This card shall be maintained in such a position by the permit holder until all inspections have been made and final approvals have been granted by the building official. No permanent electric meters will be released until the card has all the required signatures and verified by the building official.

L. Section R109.1 is amended by the addition of a new subsection R109.1.1.1 to read as follows:

R109.1.1.1 Drilled pier inspection. Drilled pier inspections will be made while the piers are being drilled. The design engineer of record or his authorized representative shall be present during the drilling operations and shall be available to the City inspector during required inspections.

M. Section R109.1.3 is amended by the addition of a new subsection R109.1.3.1 to read as follows:

R109.1.3.1 Lowest floor elevation. The elevation certificate required in Section R109.1.3 shall be submitted when required by the building official or as required by Chapter 15.14 of the Loveland Municipal Code.

N. Section R109.1.5 is amended by the addition of the following exception to R109.1.5.1 to read as follows:

R109.1.5.1 Fire-resistance-rated construction inspection. Lath or gypsum board inspections shall be made after lathing and gypsum board, interior and exterior, is in place, but before any plastering is applied or before gypsum board joints and fasteners are taped and finished.

Exception: Gypsum board that is not part of a fire-resistive assembly or a shear assembly.

O. Section R109.1.5 shall be amended by the addition of new subsections R109.1.5.2 and R109.1.5.3 to read as follows:

R109.1.5.2 Fire-resistant penetrations. Protection of joints and penetrations in fire-resistance-rated assemblies shall not be concealed from view until inspected and approved.

R109.1.5.3. Special inspections. For special inspections, Section 1704 of the building code shall apply. The building official is authorized to accept reports of approved inspection agencies, provided such agencies satisfy the requirements as to qualifications and reliability as set forth in the building code.

All footing and foundation inspections shall be performed by a Colorado licensed engineer and to include, but not limited to, reinforcing, concrete-encased electrode (UFER ground), and when required damp-proofing and perimeter drain.

- P. Section R112 is deleted in its entirety.
- Q. Section R114 is amended to read as follows:

R114.1 Notice to owner and/or posting property. Upon notice from the *building official* that work on any building or structure is being prosecuted contrary to the provisions of this code or in an unsafe and dangerous manner, such work shall be immediately stopped. The stop work order shall be in writing and shall be given to the owner of the property involved, or to the owner's agent, or to the person doing the work, or posted on the property and shall state and shall state the conditions under which work will be permitted to resume.

R. Section R202 is amended by the addition of the following definitions of "Room, Sleeping (Bedroom)," "Townhouse," and "Utility Space (Room)" to read as follows:

Room, Sleeping (Bedroom). A habitable room within a dwelling unit designated primarily for the purpose of sleeping. Built in features such as closets and similar storage facilities shall not be considered as relevant factors in determining whether or not a room is a sleeping room.

Townhouse. A single-family dwelling unit constructed in a group of two or more attached units in which each unit extends from foundation to roof and open on at least two sides.

Utility Space (Room). A room designed or used to house heating, general maintenance equipment.

S. Section R301.2 is amended by the addition of the following criteria to Table R301.2(1):

Table R301.2(1), insert the following:

Ground Snow Load: 30 psf (1436.4 pa)*

- *designed in accordance with Table 1608.1, 2012 International Building Code Wind speed: Minimum design 100 mph (3 second gust), exposure C**
- **Exposure B may be allowed if site plan and Colorado licensed engineer's calculations show that exposure B is acceptable for the project location due to site conditions and it is approved by the Building Official. Additional Wind Design Speed for any given project area shall reference the Colorado Front Range Wind Speed Study Map. See the attached map BWS-1.

Seismic Design Category: B Weathering: SEVERE Frost Line Depth: Minimum 30" (762 mm) below finished grade Termite: SLIGHT TO MODERATE Decay: NONE TO SLIGHT Winter Design Temperature: -2 F (-18.9 C) Flood Hazards: VARIES***

***Chapter 15.14 Floodplain Building Code of City of Loveland Municipal Code

S. Section R301.5 is amended by the modification of the minimum uniformly distributed live loads for "habitable attics and attics served with stairs," and "sleeping rooms" set forth in Table R301.5 to read as follows:

TABLE R301.5 MINIMUM UNIFORMLY DISTRIBUTED LIVE LOADS (In pounds per square foot)

USE	LIVE LOAD
Habitable attics and attics served by stairs ^{b,e}	40 min.
Sleeping rooms	40

T. Section R302 is amended by modification of the minimum fire separation distance for "Walls" and "Projections" as set forth in Table R302.1 to read as follows:

EXTERIOR WALLS						
EXTERIOR WALL ELEMENT		MINIMUM FIRE- RESISTANCE RATING	MINIMUM FIRE SEPERATION DISTANCE			
Walls	(Fire-resistance rated)	1 hour with exposure from both sides	0 feet			
	(Not fire-resistance rated)	0 hours	3 feet			
Projections	(Fire-resistance rated)	1 hour on the underside	2 feet			
5	(Not fire-resistance rated)	0 hours	3 feet			
Openings	Openings Not allowed		< 3 feet			
1 0	25% max. of wall area	0 hours	3 feet			
	Unlimited	0 hours	5 feet			
Penetrations	All	Comply with Section R302.4	< 5 feet			
		None required	5 feet			

TABLE R302.1(1) EXTERIOR WALLS

Table 302.1 (2) – CAB discussion – possible deletion

U. Section R303.1 is amended by the addition of exception #4 to read as follows:

4. Adequate artificial light shall be provided as approved by the building official upon documented information demonstrating practical difficulties providing additional natural light.

V. Section R305.1 is amended to read as follows:

R305.1 Minimum height. Habitable rooms shall have a ceiling height of 7 feet 6 inches (2286 mm). Hallways, corridors, bathrooms, toilet rooms, laundry rooms and basements shall have a ceiling height of not less than 7 feet (2134 mm). The required height shall be measured from the finished floor to the lowest projection from the ceiling.

Exceptions: . . .

Section 309.5 – CAB discussion – garage sprinklers

X. Section R310.2.1 is amended by adding a second paragraph to read as follows:

R310.2.1 Ladder and steps.

••••

Window wells with a vertical depth greater than 44 inches (1118 mm) shall be equipped with a permanently affixed ladder or steps usable with the window in the fully open position. If the window well is stepped and has a horizontal dimension less than 36 inches, a ladder is required out of that said level complying with requirements for ladders or steps.

Y. Section R311.7.5 is amended by adding a fifth and sixth paragraph to read as follows:

R311.7.6 Landings for stairways.

. . . .

Where a stairway of two or fewer risers is located on the exterior side of a door, a landing is not required for the exterior side of the door, but a landing is required at the bottom of the risers.

Provided that the exterior doorway is not for the exit doorway required by Section 311, the step between the landing and an exterior doorway and top of the threshold shall have a rise not greater than permitted in Section R311.7.5.1. The door, other than an exterior storm or screen door shall not swing over the landing.

Z. Section R311.8.3.1 is amended to read as follows:

R311.8.3.1 Height. Handrail height, measured vertically from the sloped plane adjoining the tread nosing, or finish surface of ramp slope, shall be not less than 32 inches (812.8 mm) and not more than 38 inches (965 mm).

AA. Section R313 is deleted in its entirety.

BB. Section R315 is amended by adding the following paragraph to read as follows:

R315.5 Carbon monoxide alarms and detectors shall also be installed per Title 38 of the Colorado Revised Statutes.

CC. Section 322.1.5, Lowest floor, is amended by adding the following paragraph:

The elevation certificate required by this section shall be submitted when required by the building official or as required by Chapter 15.14 of the City of Loveland Municipal Code.

DD. Section R401.4 is amended by the addition of the following sentence at the end of the paragraph to read as follows:

R401.4 Requirements.

. . . .

Investigation of the potential for subsurface water and, if necessary, designs for the control of subsurface water shall be required.

EE. Section R905.1 is amended by the addition of the following sentence at the end of the paragraph to read as follows:

R905.1 Roof covering application.

• • • •

Table 1505.1 Minimum Roof Covering Classification for Types of Construction as adopted in the 2009 International Building Code shall be used for all roof coverings.

FF. Section N1101.1 Scope is amended to read as follows:

N1101.1 Scope. This chapter regulates the energy efficiency for the design and construction of buildings regulated by this code.

Exceptions:

- 1) Portions of the building envelope that do not enclose conditioned space.
- 2) Utility and miscellaneous group U occupancies and agricultural structures.

GG. Section N1101.2, first paragraph is amended with the addition to read as follows:

N1101.2 Compliance. Thermal design parameters for the City of Loveland is Zone 5B, and shall be used for calculations required under this code. All ducted air-distribution heating and cooling systems shall be sized using cooling loads. All heating and cooling equipment shall be tested to ensure such equipment is operating within the manufacturers' recommended parameters and standards according to the applicable protocols established by the building code official and in accordance with the mechanical code adopted by City of Loveland.

HH. Table N1102.1 is amended to read as follows: (CAB discussion)

Table N1102.1 Single-Family Prescriptive Package^{(a) (h)(i)}

Max	Max	Max	Min	Min	Min	Min	Min	Min	Min	Min
Glazing area window to wall %	Fenestration U-Factor	Skylight U-factor (b)	Ceiling R-value	frame wall R- value	Mass Wall R- value (g)	Floor R-value over unheat- ed space (e)	Basement Wall R-Value Contiuous cavity	Slab perimeter R-value/ Depth (d)	Crawl Space R value Cont./ cavity (C)	Heating/ Cooling efficiency Rating (AFUE)
NA	.35	.60	38	19 or 13+5 (f)	13	30	10/13	10, 2ft.	10/13	80/13
NA	.35	.60	38	13	8	30	10/13	10, 2ft.	10/13	90/13

- (a) R-values are minimums. U-factors Solar Heat Gain Coefficient (SHGC) are maximums. R-19 shall be permitted to be compressed into a 2x6 cavity.
- (b) The fenestration U-factor column excludes skylights. The SHGC column applies to all glazed fenestration.
- (c) The first R-value applies to continuous insulation, the second to framing cavity insulation; either insulation meets the requirement.
- (d) The R-5 shall be added to the required slab edge R-values for heated slabs.
- (e) Or insulation sufficient to fill the framing cavity, R-19 minimum.
- (f) 13+5 means R-13 cavity insulation plus R-5 insulated sheathing. If structural sheathing cover 25% or less of the exterior, R-5 sheathing is not required where structural sheathing is used. If structural cover more than 25% of exterior, structural sheathing shall be supplemented with insulated sheathing of at least R-2.
- (g) Nominal log thickness of 6 inches has a mass wall R-Value (8.3), an 8 inch log is (11.3), a 10 inch log is (13.9), and a 12 inch log is (16.5).
- (h) The thermal design parameters shall be used for calculations required under this code as listed in Design Value section.

Winter Outdoor, Design Dry-bulb (⁰ F)	= 4
Winter Indoor, Design Dry-bulb (⁰ F)	= 72
Summer, Outdoor Design Dry-bulb (⁰ F)	= 94
Summer, Indoor Design Dry-bulb (⁰ F)	= 75
Summer, Design Wet-bulb (⁰ F)	= 63
Degree days heating	= 6600
Degree days cooling	= 479
Degrees North Latitude	= 40 degrees 35 minutes

- (i) In addition City of Loveland will accept any Climate Zone 5B Single Family Prescriptive Packages in the 2012 International Energy Conservation Code (IECC) and ResCheck Compliance Report that passes using 2012 IECC and HDD = 6600, and any Home Energy Rating Score (HERS) less than 100 by an approved qualified energy rater. For additional information on energy codes or free software download of ResCheck go to <u>www.energycodes.gov</u>.
- II. Section M1307 is amended by the addition of a new subsection M1307.7 to read as follows:

M1307.7 Liquefied Petroleum Appliances. Equipment burning liquefied petroleum gas (LPG) shall not be located in a pit, basement, underfloor space, below grade, attic or similar location where vapors or fuel may unsafely collect. Liquefied petroleum gases, including construction and temporary heating, shall only be installed per adopted fire code and per manufacturers specifications and listing per appliances.

JJ. Section M1410.1 is amended by the addition of the following sentence at the end of the paragraph to read as follows:

M1410.1 General.

. . . .

Un-vented gas appliance(s) and room heaters are prohibited, except for listed domestic gas range installations.

M1411.6...CAB...possible deletion

KK. Section M2005.1 is amended to read as follows:

M2005.1 General. The minimum Energy Factor for water heaters shall be .60 for fuelfired type, and .92 for electrical types.

Section 15.10.030 – Violations and penalties.

It shall be unlawful for any person, firm or corporation to erect, construct, enlarge, alter, repair, move, improve, remove, convert or demolish, equip, use, occupy or maintain any building or structure in the city or cause the same to be done contrary to or in violation of any of the provisions of the residential code, as adopted and modified by the city. Any person, firm or corporation violating any of the provisions of the residential code, as adopted and modified by the city, shall be deemed guilty of a misdemeanor, and subject to penalties as set forth in Section 1.12.010 of the code of the city of Loveland.

<u>Section 2.</u> That as provided in City Charter Section 4-9(a)(7), this Ordinance shall be published by title only by the City Clerk after adoption on second reading unless the Ordinance has been amended since first reading in which case the Ordinance shall be published in full or the amendments shall be published in full. This Ordinance shall be in full force and effect ten days after its final publication, as provided in City Charter Section 4-8(b).

Signed this _____ day of _____, 2013

Mayor

ATTEST:

City Clerk

APPROVED AS TO FORM:

Assistant City Attorney