

BILL NO. 2015-06-08-03

ORDINANCE NO. 2015-06-08-03

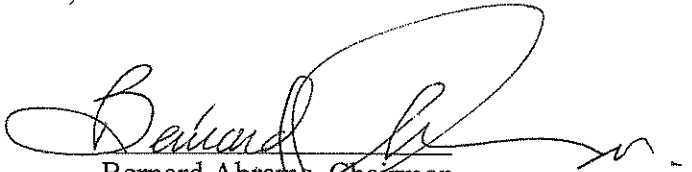
AN ORDINANCE OF THE VILLAGE OF LOCH LLOYD, MISSOURI, ADOPTING CERTAIN TECHNICAL CODES AND PROVIDING FOR THEIR ADMINISTRATION.

BE IT ORDAINED BY THE BOARD OF TRUSTEES OF THE VILLAGE OF LOCH LLOYD, MISSOURI, AS FOLLOWS, TO WIT:

Section 1. The Village of Loch Lloyd Building Code Ordinance, attached hereto and incorporated herein by this reference as if fully set forth, is hereby adopted.

Section 2. This Ordinance shall be effective upon its passage and approval.

PASSED THIS 17th DAY OF December, 2015, BY THE BOARD OF TRUSTEES OF THE VILLAGE OF LOCH LLOYD, MISSOURI.


Bernard Abrams, Chairman


Wayne Little, Village Clerk

Village of Loch Lloyd, Missouri

Building Code Ordinance

Adopted on December 17, 2015

ARTICLE I. ADMINISTRATION

SECTION 1.1 INTENT.

The purpose of this Ordinance is to establish the minimum requirements to safeguard the public health, safety and general welfare through structural strength, means of egress facilities, stability, sanitation, adequate light and ventilation, and safety to life and property from fire and other hazards attributed to the built environment.

SECTION 1.2 APPLICABILITY.

Where, in any specific case, different sections of this Ordinance specify different materials, methods of construction, or other requirements, the most restrictive shall govern. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable.

SECTION 1.3 OTHER LAWS.

The provisions of this Ordinance shall not be deemed to nullify any provisions of local, state, or federal law.

SECTION 1.4 REFERENCED CODES AND STANDARDS.

The codes and standards referenced in this Ordinance shall be considered part of the requirements of this Ordinance to the prescribed extent of each such reference. Where differences occur between provisions of this Ordinance and referenced codes and standards, the provisions of this Ordinance shall apply.

SECTION 1.5 EXISTING STRUCTURES.

The legal occupancy of any structure existing on the date of adoption of this Ordinance shall be permitted to continue without change, except as is specifically covered in this Ordinance or as is deemed necessary by the building official for the general safety and welfare of the occupants and the public.

SECTION 1.6 DUTIES AND POWERS OF BUILDING OFFICIAL.

The building official is hereby authorized and directed to enforce the provisions of this Ordinance. The building official shall have the authority to render interpretations of this Ordinance and to adopt policies and procedures in order to clarify the application of its provisions. Such interpretations, policies, and procedures shall comply with the intent and purpose of this Ordinance. Such policies and procedures shall not have the effect of waiving requirements specifically provided for in this Ordinance. The term building official shall include his/her authorized representatives. Further, whenever the term or Ordinance "administrative authority," "code enforcement officer," "responsible official", "codes administrator", "director" or other similar designation is used in any of the codes adopted by reference by this Ordinance, it shall be construed to mean the building official. The Board of Trustees may appoint the building official by motion.

SECTION 1.7 APPLICATIONS AND PERMITS.

The building official shall receive applications, review construction documents and issue permits, inspect the premises for which such permits have been issued and enforce compliance with the provisions of this Ordinance.

SECTION 1.8 NOTICES AND ORDERS.

The building official shall issue all necessary notices or orders to ensure compliance with this Ordinance.

SECTION 1.9 INSPECTIONS.

The building official shall make all of the required inspections, or the building official shall have the authority to accept reports of inspection by approved agencies or individuals. Reports of such inspections shall be in writing and be certified by a responsible officer of such approved agency or by the responsible individual. The building official is authorized to engage such expert opinion as deemed necessary to report upon unusual technical issues that arise, subject to the budgetary approval of the Board of Trustees.

SECTION 1.10 RIGHT OF ENTRY.

Where it is necessary to make an inspection to enforce the provisions of this Ordinance, or where the building official has reasonable cause to believe that there exists in a structure or upon a premises a condition which is contrary to or in violation of this Ordinance which makes the structure or premises unsafe, dangerous or hazardous, the building official is authorized to enter the structure or premises at reasonable times to inspect or to perform the duties imposed by this Ordinance, provided that if such structure or premises be occupied that credentials be presented to the occupant and entry requested. If such structure or premises be unoccupied, the building official shall first make a reasonable effort to locate the owner or other person having charge or control of the structure or premises and request entry. If entry is refused, the building official shall have recourse to the remedies provided by law to secure entry.

SECTION 1.11 RECORDS.

The building official shall keep official records of applications received, permits and certificates issued, fees collected, reports of inspections, and notices and orders issued. Such records shall be retained in the official records for the period required for retention of public records.

SECTION 1.12 LIABILITY.

The building official, member of the board of appeals or any employee or agent charged with the enforcement of this Ordinance, while acting for the jurisdiction in good faith and without malice in the discharge of the duties required by this Ordinance or other pertinent law or ordinance, shall not thereby be rendered liable personally and is hereby relieved from personal liability for any damage accruing to persons or property as a result of any act or by reason of an act or omission in the discharge of official duties. Any suit instituted against an officer or employee because of an act performed by that officer or employee in the lawful discharge of duties and under the provisions of this Ordinance shall be defended by legal representative of the Village until the final termination of

the proceedings. The building official or any subordinate shall not be liable for cost in any action; suit or proceeding that is instituted in pursuance of the provisions of this Ordinance.

SECTION 1.13 SANITARY FACILITIES FOR CONSTRUCTION WORKERS.

The contractor, builder, or other person having the management and control of construction work shall provide temporary sanitary facilities on the premises connected therewith and they shall be properly maintained.

SECTION 1.14 EXCAVATIONS.

Any excavation for foundations and/or footings of buildings and structures shall be backfilled within 28 days from the date of permit issuance unless otherwise approved by the building official.

SECTION 1.15 MODIFICATIONS.

Wherever there are practical difficulties involved in carrying out the provisions of this Ordinance, the building official shall have the authority to grant modifications for individual cases, upon application of the owner or owner's representative, provided the building official shall first find that special individual reason makes the strict letter of this Ordinance impractical and the modification is in compliance with the intent and purpose of this Ordinance and that such modification does not lessen health, accessibility, life and fire safety, or structural requirements. The details of action granting modifications shall be recorded and entered in the files.

SECTION 1.16 ALTERNATIVE MATERIALS, DESIGN, AND METHODS OF CONSTRUCTION AND EQUIPMENT.

The provisions of this Ordinance are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this Ordinance, provided that any such alternative has been approved. An alternative material, design or method of construction shall be approved where the building official finds that the proposed design is satisfactory and complies with the intent of the provisions of this Ordinance, and that the material, method or work offered is, for the purpose intended, at least the equivalent of that prescribed in this Ordinance in quality, strength, effectiveness, fire resistance, durability and safety.

SECTION 1.17 TESTS.

Whenever there is insufficient evidence of compliance with the provisions of this Ordinance, or evidence that a material or method does not conform to the requirements of this Ordinance, or in order to substantiate claims for alternative materials or methods, the building official shall have the authority to require tests as evidence of compliance to be made at no expense to the Village. Test methods shall be as specified in this Ordinance or by other recognized test standards. In the absence of recognized and accepted test methods, the building official shall approve the testing procedures. Tests shall be performed by an approved agency. Reports of such tests shall be retained by the building official for the period required for retention of public records.

SECTION 1.18 PERMITS.

Any owner or authorized agent who intends to construct, enlarge, alter, move, demolish, remodel or change the occupancy of a building or structure, or to erect, install, remove, convert or replace any electrical, gas, mechanical, plumbing, or elevator system, the installation of which is regulated by this Ordinance, or to cause any such work to be done, shall first make application to the building official and obtain the required permit. A separate mechanical, electrical, plumbing, gas or elevator permit is required when the work being done is not covered by a building or remodeling permit.

In determining whether a permit is required, the following definitions are established with interpretative guidance:

Alteration

“The reconfiguration of any space, the addition or elimination of any door or window, the reconfiguration or extension of any system, or the installation of additional equipment.”

Interpretative guidance:

This would normally include any additions to an existing residence or adding a DRC approved outbuilding; such as, a detached garage, storage shed, green house, etc. All design should be completed and stamped by a licensed MO architect or engineer.

Reconstruction

“The reconfiguration of a space that affects an exit, a renovation and/or alteration when the work area is not permitted to be occupied because means of egress and fire protection systems, or their equivalent, are not in place or continuously maintained; and/or there are Extensive Alterations.” Extensive Alterations are defined in the Code as follows: “When the total area of all work areas included in an alteration exceeds 50% of the area of the dwelling unit, the work shall be considered as a reconstruction and shall comply with the requirements of these provisions for Reconstruction work. The Exception includes work areas in which the alteration work is exclusively plumbing, mechanical or electrical shall not be included in the computation of total area of all work areas.”

Interpretative guidance:

Any addition to the structure to an existing residence or addition of finished basement spaces that affect structure, HVAC, electrical or plumbing systems is subject to a permit and Code compliant inspections. All design to be completed and stamped by a licensed MO architect or engineer.

Rehabilitation

“Any repair, renovation, alteration or reconstruction work undertaken in an existing building.”

Interpretative guidance:

If the work modifies HVAC, plumbing, electrical systems or structural elements the work should be designed and stamped by a licensed MO architect or engineer and the work will require a permit and Code compliant inspection.

Renovation

The change, strengthening, or additions of load-bearing elements; and/or the refinishing, replacement, bracing, strengthening, upgrading or extensive repair of existing materials, elements, components, equipment and/or fixtures. Renovation involves no reconfiguration of spaces. Interior and exterior painting are not considered refinishing for purposes of this definition, and are not renovation.”

Interpretative guidance:

Any modifications or alterations of structural elements should require a permit and Code complaint inspection. All work should be designed and stamped by a licensed MO structural engineer.

Decks

Any replacement of decks, alteration/addition to the structural elements, adding a roof or enclosing the deck is subject to a permit and Code compliant inspections. Inspections will include proper footings (if modified or added) and structural elements. All such modifications should be deigned and stamped by a MO licensed architect or engineer. Replacing rotted wood deck boards would not require a permit or inspection.

Pools and Hot Tubs

Pools and Hot tubs require a permit and Code complaint inspections. This construction requires pool/hot tub shell and apron bonding inspections; completed in two separate inspections.

Repair:

Repair is not considered as work requiring a permit. Repair is defined as follows: “The patching, restoration and/or minor replacement of materials, elements, components, equipment and/or fixtures for the purposes of maintaining such materials, elements, components, equipment and/or fixtures in good sound condition.”

Interpretative guidance:

Replacement of an existing driveway is included in this category and does not require a permit.

SECTION 1.19 WORK EXEMPT FROM PERMIT.

Exemptions from permit requirements of this Ordinance shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this Ordinance or any other laws or ordinances of this jurisdiction. Permits shall not be required for the following:

A. BUILDING:

1. Retaining walls which are not over four feet in height measured from the bottom of the footing to the top of the wall, unless supporting a surcharge or impounding Class I, II or III-A liquids. In addition, the building official may waive the requirements for a permit or engineered drawings for walls over four feet in height if it is deemed unnecessary to require such submittals due to the location and type of wall to be installed.
2. Exterior decks, walkways and balconies accessory to one and two family dwellings and townhouses, when no portion of the walking surface is constructed more than 30 inches above grade and not supporting a roof.
3. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.
4. Temporary motion picture, television, and theater stage sets and scenery.
5. Swings and other playground equipment.
6. Window awnings supported by an exterior wall of Group R-3 and Group U occupancies.
7. Movable cases, counters and partitions not over five feet nine inches in height.
8. One-story detached accessory structures used as tool and storage sheds, playhouses, and similar uses, provided the floor area does not exceed 120 square feet.
9. Fences not over six feet high.
10. Prefabricated swimming pools accessory to a Group R-3 occupancy, which are less than 24 inches deep, do not exceed 5,000 gallons and are installed entirely above grade.
11. Water tanks supported directly upon grade if the capacity does not exceed 5,000 gallons and the ratio of height to diameter or width does not exceed two to one.
12. Re-installing roof coverings on existing buildings when no structural elements are being repaired or replaced.

B. ELECTRICAL:

1. Repairs and maintenance: Minor repair work, including the replacement of lamps or the connection of approved portable electrical equipment to approved permanently installed receptacles.
2. Radio and television transmitting stations: The provisions of this Ordinance shall not apply to electrical equipment used for radio and television transmissions, but does apply to equipment and wiring for power supply, the installations of towers and antennas.

3. Temporary testing systems: A permit shall not be required for the installation of any temporary system required for the testing or servicing of electrical equipment or apparatus.

C. GAS:

1. Portable heating appliance.
2. Replacement of any minor part that does not alter approval of equipment or make such equipment unsafe.

D. MECHANICAL:

1. Portable heating appliance;
2. Portable ventilation equipment;
3. Portable cooling unit;
4. Steam, hot or chilled water piping within any heating or cooling equipment regulated by this Ordinance;
5. Replacement of any part which does not alter its approval or make it unsafe;
6. Portable evaporative cooler;
7. Self-contained refrigeration system containing ten pounds (4.54 kg) or less of refrigerant and actuated by motors of one horsepower (746 W) or less.

E. PLUMBING:

1. The stopping of leaks in drains, water, soil, waste or vent pipe; provided, however, that if any concealed trap, drainpipe, water, soil, waste or vent pipe becomes defective and it becomes necessary to remove and replace the same with new material, such work shall be considered as new work and a permit shall be obtained and inspection made as provided in this Ordinance.
2. The clearing of stoppages or the repairing of leaks in pipes, valves or fixtures, and the removal and reinstallation of water closets, provided such repairs do not involve or require the replacement or rearrangement of valves, pipes, or fixtures.
3. The replacement of water heaters in one- and two-family dwellings.

F. EMERGENCY REPAIRS. Where equipment replacements and repairs must be performed in an emergency, the permit application shall be submitted within the next working business day to the building official.

G. REPAIRS. Application or notice to the building official is not required for ordinary repairs to structures, replacement of lamps or the connection of approved portable electrical equipment to approved permanently installed receptacles. Such repairs shall not include the cutting away

of any wall, partition or portion thereof, the removal or cutting of any structural beam or load bearing support, or the removal or change of any required means of egress, or rearrangement of parts of a structure affecting the egress requirements; nor shall ordinary repairs include addition to, alteration of, replacement or relocation of any standpipe, water supply, sewer, drainage, drain leader, gas, soil, waste, vent or similar piping, electric wiring or mechanical or other work affecting public health or general safety.

- H. PUBLIC SERVICE AGENCIES. A permit shall not be required for the installation, alteration, or repair of generation, transmission, distribution or metering or other related equipment that is under the ownership and control of public service agencies by established right.

SECTION 1.20 APPLICATION FOR PERMIT.

To obtain a permit, the applicant shall first file an application on a form furnished by the building official.

SECTION 1.21 ACTION ON APPLICATION.

The building official shall examine or cause to be examined applications for permits and amendments thereto within a reasonable time after filing. If the application or the construction documents do not conform to the requirements of pertinent laws, the building official shall reject such application in writing, stating the reasons therefore. If the building official is satisfied that the proposed work conforms to the requirements of this Ordinance and laws and ordinances applicable thereto, the building official shall issue a permit therefore as soon as practicable.

SECTION 1.22 TIME LIMITATION ON APPLICATION.

An application for a permit for any proposed work shall be deemed to have been abandoned 180 days after the date of filing, unless such application has been pursued in good faith or a permit has been issued; except that the building official is authorized to grant one or more extensions of time for additional periods not exceeding 90 days each. The extension shall be requested in writing and good cause demonstrated.

SECTION 1.23 VALIDITY OF PERMIT.

The issuance or granting of a permit shall not be construed to be a permit for, or an approval of, any violation of any of the provisions of this Ordinance or of any other ordinance of the jurisdiction. Permits presuming to give authority to violate or cancel the provisions of this Ordinance or other ordinances of the jurisdiction shall not be valid. The issuance of a permit based on construction documents and other data shall not prevent the building official from requiring the correction of errors in the construction documents and other data. The building official is also authorized to prevent occupancy or use of a structure where in violation of this Ordinance or of any other ordinances of the Village.

SECTION 1.24 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 abandoned for a period of 180 days after the time the work is commenced. Permits for

exterior work, i.e., walls, fences, decks, patios, patio covers and similar type work requiring permits, as well as permits for residential room additions and remodels shall be limited to 180 days duration. Permits for other new construction shall be limited to one-year duration. The building official is authorized to grant, in writing, one or more extensions of time, for periods not more than 180 days each. The extension shall be requested in writing and justifiable cause demonstrated upon finding by same that substantial progress has been made toward completion. Substantial progress is to mean that the project is over 50 percent complete and, in the opinion of the building official; the project applicant has the capability to finish the work permitted within one time period extension. If questionable, the building official may require proof of performance, i.e., a list of contractors and subcontractors under contract for the completion of the project, before the granting of the time extension. Failure to complete a project in the time limits stated above or failure to maintain a valid permit constitutes a violation of this Ordinance.

SECTION 1.25 SUSPENSION OR REVOCATION.

The building official is authorized to suspend or revoke a permit issued under the provisions of this Ordinance wherever the permit is issued in error or based on incorrect, inaccurate, or incomplete information, or in violation of any ordinance or regulation or any of the provisions of this Ordinance.

SECTION 1.26 PLACEMENT OF PERMIT.

- A. All permits shall be posted to be visible from the street and kept on the site of the work until the completion of the project.
- B. EXCEPTIONS:
 - 1. Permits for the construction of one- and two-family dwellings are not required to be posted on the site when the property address is clearly identified and visible from the street.
 - 2. Permits for other than one- and two-family dwellings are not required to be visible from the street when kept on the site in a location accessible to the building official.
 - 3. Whenever permits are not visible from the street, the property address must be clearly identified. Failure to clearly identify the address or display permits may result in inspections not being performed.

SECTION 1.27 SUBMITTAL DOCUMENTS.

- A. Construction documents, special inspection and structural observation programs, and other data shall be submitted in two or more sets with each application for a permit. A registered design professional licensed by the State of Missouri shall prepare and seal the construction documents. Where special conditions exist, the building official is authorized to require additional construction documents to be prepared by a registered design professional licensed by the State of Missouri.
- B. 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 reviewing of construction documents is not necessary to obtain compliance with this Ordinance.

SECTION 1.28 INFORMATION ON CONSTRUCTION DOCUMENTS.

Construction documents shall be dimensioned and drawn upon suitable material. Construction documents shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of this Ordinance and relevant laws, ordinances, rules and regulations, as determined by the building official. The construction documents shall show in sufficient detail the location, construction, size, and character of all portions of the means of egress in compliance with the provisions of this Ordinance. In other than occupancies in Groups R-2, R-3, and I-1, the construction documents shall designate the number of occupants to be accommodated on every floor, and in all rooms and spaces. Construction documents for all buildings shall describe the exterior wall envelope in sufficient detail to determine compliance with this Ordinance.

SECTION 1.29 FIRE PROTECTION SYSTEM SHOP DRAWINGS.

Shop drawings for the fire protection system(s) shall be submitted to indicate conformance with this Ordinance and the construction documents and shall be approved before the start of system installation. Shop drawings shall contain all information as required by the referenced installation standards in this Ordinance.

SECTION 1.30 SITE PLAN.

There shall be a site plan showing to scale the size and location of all the new construction and all existing structures on the site including easements, distances from lot lines, established street grades, and proposed finished grades. All decks, balconies, overhangs, or other building protrusions shall be indicated and dimensioned. In the case of partial demolition, the plot plan shall show all construction to be demolished and the location and size of all existing structures and construction that are to remain on the site of the plot. The building official is authorized to waive or modify the requirement for a site plan when the application for permit is for alteration or repair and does not affect the exterior features of the building. The proposed finished grades shall be reviewed by the Building Official to determine the direction of flow of surface drainage. The Building Official shall not issue a permit under this Ordinance if the surface drainage will drain onto another lot so as to adversely affect (e.g., excessive ponding) adjacent properties. The Building Official may require of the applicant a storm water drainage plan sealed by a licensed engineer, which shall include a statement regarding the impact the water drainage will have on surrounding properties. Prior to the issuance of a certificate of occupancy and at anytime prior thereto, the Building Official may inspect the as-built conditions of the site to confirm that surface drainage will not likely drain onto another lot so as to adversely affect adjacent properties, and issue a stop work order or require appropriate mitigation work as the Building Official may deem necessary.

SECTION 1.31 EXAMINATION OF DOCUMENTS.

The building official shall examine or cause to be examined the construction documents and shall ascertain by such examinations whether the construction indicated and described is in accordance with the requirements of this Ordinance and other pertinent laws or ordinances. The building official

reserves the right to have such examination performed by a third party when deemed necessary. Plan review fees associated with a third party examination may be assessed to the cost of the permit.

SECTION 1.32 APPROVAL OF DOCUMENTS.

When the building official issues a permit, the construction documents shall be marked "Approved," or something similar. The building official shall retain one set of construction documents so reviewed. The other set shall be returned to the applicant, shall be kept at the site of work and shall be open to inspection by the building official or his or her authorized representative. Failure to maintain city marked construction documents on site may result in inspections not being performed.

SECTION 1.33 PREVIOUS APPROVALS.

This Ordinance shall not require changes in the construction documents, construction or designated occupancy of a structure for which a lawful permit has been heretofore issued or otherwise lawfully authorized, and the construction of which has been pursued in good faith within 180 days after the effective date of this Ordinance and has not been abandoned.

SECTION 1.34 PHASED APPROVAL.

The building official is authorized to issue a permit for the construction of foundations or any other part of a building or structure before the construction documents for the whole building or structure have been submitted, provided that adequate information and detailed statements have been filed complying with pertinent requirements of this Ordinance. The holder of such permit for the foundation or other parts of a building or structure shall proceed at the holder's own risk with the building operation and without assurance that a permit for the entire structure will be granted.

SECTION 1.35 DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE.

When it is required that documents be prepared by a registered design professional, the building official shall be authorized to require the owner to engage and designate on the building permit application a registered design professional who shall act as the registered design professional in responsible charge. The owner shall notify the building official in writing if the registered design professional in responsible charge is changed or is unable to continue to perform the duties. The registered design professional in responsible charge shall be responsible for reviewing and coordinating submittal documents prepared by others, including phased and deferred submittal items, for compatibility with the design of the building. Where structural observation is required by this Ordinance, the inspection program shall name the individual or firms who are to perform structural observation and describe the stages of construction at which structural observation is to occur.

SECTION 1.36 DEFERRED SUBMITTALS.

For the purposes of this section, 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 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 registered design professional in responsible charge 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 general conformance with the design of the building. The deferred submittal items shall not be installed until the building official has approved their design and submittal documents.

SECTION 1.37 AMENDED CONSTRUCTION DOCUMENTS.

Work shall be installed in accordance with the reviewed construction documents, and any changes made during construction that are not in compliance with the approved construction documents shall be resubmitted for approval as an amended set of construction documents.

SECTION 1.38 TEMPORARY STRUCTURES AND USES.

- A. The building official is authorized to issue a permit for temporary structures and temporary uses. The building official is authorized to grant extensions for good cause.
- B. Temporary structures and uses shall conform to the structural strength, fire safety, means of egress, accessibility, light, ventilation and sanitary requirements of this Ordinance as necessary to ensure the public health, safety and general welfare.

SECTION 1.39 TEMPORARY POWER.

The building official is authorized to give permission to temporarily supply and use power in part of an electric installation before such installation has been fully completed and the final certificate of completion has been issued. The part covered by the temporary certificate shall comply with the requirements specified for temporary lighting, heat, or power in the National Electrical Code.

SECTION 1.40 TERMINATION OF APPROVAL.

The building official is authorized to terminate such permit for a temporary structure or use and to order the temporary structure or use to be discontinued.

SECTION 1.41 WORK COMMENCING BEFORE PERMIT ISSUED.

Any person who commences any work on a building, structure, electrical, gas, mechanical, elevator equipment, or plumbing system before obtaining the necessary permits shall be subject to an additional fee equal to the amount of the permit as established herein. The payment of such fee shall not exempt any person from compliance with all other provisions of this Ordinance nor from any penalty prescribed by law. Work that has commenced on a building, structure, electrical, gas, mechanical, elevator equipment, or plumbing system before obtaining the necessary permits constitutes a violation of this Ordinance.

SECTION 1.42 INSPECTIONS.

- A. Construction or work for which a permit is required shall be subject to inspection by the building official and such construction or work shall remain accessible and exposed for inspection purposes until approved. Approval because of an inspection shall not be construed to be an approval of a violation of the provisions of this Ordinance or of other ordinances of the Village. Inspections presuming to give authority to violate or cancel the provisions of this Ordinance or of other ordinances of the jurisdiction shall not be valid. Neither the building

official nor the Village shall be liable for expense entailed in the removal or replacement of any material required to allow inspection.

- B. Before issuing a permit, the building official is authorized to examine or cause to be examined buildings, structures and sites for which an application has been filed.
- C. It shall be the duty of the permit holder or his duly authorized agent to notify the building official in advance of when work is ready for inspection. It shall be the duty of the permit holder to provide access to and means for inspection of such work for any inspections that are required by this Ordinance.
- D. Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the building official. The building official, upon notification, shall make the requested inspections and shall either indicate the portion of the construction that is satisfactory as completed, or shall notify the permit holder or an agent of the permit holder wherein the same fails to comply with this Ordinance. Any portions that do not comply shall be corrected and such portion shall not be covered or concealed until authorized by the building official.

SECTION 1.43 REQUIRED INSPECTIONS.

- A. The following inspections are required for new construction including add-ons:
 - 1. Footing, foundation and pier inspection.
 - 2. Erosion Control.
 - 3. Pre-backfill.
 - 4. Structural Slabs.
 - 5. Rough-in. (Framing, plumbing, electrical and HVAC).
 - 6. Gas Pressure Test.
 - 7. Sewer and Water Line.
 - 8. Final inspection. The final inspection shall be made after all work required by the building permit is completed.
 - 9. Other inspections. In addition to the inspections specified above, the building official is authorized to make or require other inspections of any construction work to ascertain compliance with the provisions of this Ordinance and other laws that are enforced by the building official.
 - 10. Reinspections, if necessary.
- B. The following inspections are required for remodeling work:
 - 1. Rough-in. (e.g., plumbing, electrical, HVAC, life-safety).

2. Final.
 3. Other inspections. In addition to the inspections specified above, the building official is authorized to make or require other inspections of any construction work to ascertain compliance with the provisions of this Ordinance and other laws that are enforced by the building official.
 4. Reinspections, if necessary.
- C. The following inspections are required for a mechanical, electrical, plumbing, gas or elevator permit:
1. Rough-in.
 2. Final, if deemed necessary by the building official. Generally, it is intended that only one inspection will be necessary for mechanical, electrical, plumbing or gas permits. However, if the building official determines that because of the nature or quality of the work project a second inspection will be necessary, then the building official is authorized to make or require second and subsequent inspections.
 3. Reinspections, if necessary.
- D. The building official is authorized to accept reports of approved inspection agencies, provided such agencies satisfy the requirements as to qualifications and reliability.

SECTION 1.44 CERTIFICATE OF OCCUPANCY AND CHANGE IN USE.

- A. No building or structure shall be used or occupied, and no change in the existing occupancy classification of a building or structure or portion thereof shall be made until the building official has issued a certificate of occupancy therefore as provided herein. Issuance of a certificate of occupancy shall not be construed as an approval of a violation of the provisions of this Ordinance or of other ordinances of the Village.
- B. Changes in the character or use of an existing structure shall not be made except as specified in this Ordinance. The building official may require a design professional registered within the State of Missouri perform a code analysis and submit plans and/or other information as deemed necessary to determine the proposed use will be in compliance with this Ordinance.
- C. It shall be the responsibility of the permit holder to request a final inspection and to apply for a certificate of occupancy when required. The permit holder shall be excused from this responsibility only if the owner of property has applied for and secured a certificate of occupancy. After the building official inspects the building or structure and finds no violations of the provisions of this Ordinance or other laws that are enforced by the building official, the building official shall issue a certificate of occupancy.
- D. The certificate of occupancy, or a copy, shall be posted in a conspicuous place on the premises and shall not be removed except by the building official.
 1. EXCEPTION: residential occupancies.

- E. The building official is authorized to issue a temporary certificate of occupancy before the completion of the entire work covered by the permit, provided that such portion or portions shall be occupied safely. The building official shall set a time period during which the temporary certificate of occupancy is valid.
- F. The building official is authorized to, in writing, suspend or revoke a certificate of occupancy or completion issued under the provisions of this Ordinance wherever the certificate is issued in error, or on the basis of incorrect information supplied, or where it is determined that the building or structure or portion thereof is in violation of any ordinance or regulation or any of the provisions of this Ordinance.

SECTION 1.45 CONNECTION OF UTILITIES.

- A. No person shall make new connections from any source of energy, fuel, or power to any building or system that is regulated by this Ordinance for which a permit is required, until released by the building official.
- B. The building official shall have the authority to authorize the temporary connection of the building or system to the source of energy, fuel, or power.
- C. The building official shall have the authority to authorize disconnection of utility service to the building, structure or system regulated by this Ordinance and the codes referenced in case of emergency where necessary to eliminate an immediate hazard to life or property. The building official shall notify the serving utility, and wherever possible the owner and occupant of the building, structure or service system of the decision to disconnect before taking such action. If not notified prior to disconnecting, the owner or occupant of the building, structure or service system shall be notified in writing, as soon as practical thereafter.

SECTION 1.46 BOARD OF APPEALS.

- A. There is hereby created a Building Board of Appeals ("Building Board") consisting of no less than three and no more than seven members, who shall be appointed by the Chairman with the consent of the Board of Trustees. Members shall be appointed on an as-needed basis to hear a specific case, and their term shall end when the case ends. The Building Board shall designate one of its members as Chairperson, and the Building Board may adopt reasonable and necessary procedural rules to govern its proceedings. A member shall comply with all applicable conflict of interest laws.
- B. Any decision of the building official in the enforcement of this section may be appealed to the Building Board by any person aggrieved by the decision. Such appeal must be taken within thirty (30) days from the date of the order or other ruling appealed by filing with the building official a written notice of appeal setting forth the grounds therefor. Before the Building Board is called, the person aggrieved shall pay a fee of two hundred fifty dollars (\$250.00), payable to the Village. The building official shall then transmit to the Building Board all papers constituting the record upon which action appealed from is taken. An appeal to the Building Board stays all enforcement of the determination from which the appeal is being taken.

- C. The Building Board shall have the power to hear and render decisions on all appeals from the interpretive decisions of the building official. The Building Board shall further be empowered to interpret the intent of this Ordinance in specific cases and to authorize responsible, minimum modification from the literal provisions of the code where it is determined that such modification is, for the purpose intended, at least the equivalent of that prescribed in the code with respect to strength, fire resistance or safety. All rulings and actions of the Building Board shall be consistent with the spirit and intent of this Ordinance. The Building Board is not empowered to waive requirements of the building code.
- D. The Building Board shall fix a reasonable time for the public hearing of appeals, as well as for due notice to the parties in interest, and decide the matter within a reasonable time. Upon the hearing before the Building Board, any party may appear in person or by agent or by attorney. The proceedings of the Building Board shall be recorded by a court reporter. A transcript may be obtained from the court reporter at the cost of the requesting party.
- E. All decisions of the Building Board shall be by a majority vote of the attending members or their alternates, provided that a quorum is present. All decisions of the Building Board shall be in writing and shall be filed with the Village Clerk, with a copy to the appellant and the building official.

SECTION 1.47 UNLAWFUL ACTS.

It shall be unlawful for any person, firm or corporation to erect, construct, alter, extend, repair, remodel, move, remove, demolish or occupy any building, structure or equipment regulated by this Ordinance, or cause same to be done, in conflict with or in violation of any of the provisions of this Ordinance.

SECTION 1.48 NOTICE OF VIOLATION.

- A. The building official is authorized to serve a notice of violation or order on the person responsible for the erection, construction, alteration, extension, repair, moving, removal, remodel, demolition or occupancy of a building or structure in violation of the provisions of this Ordinance, or in violation of a permit or certificate issued under the provisions of this Ordinance. Such order shall direct the discontinuance of the illegal action or condition and the abatement of the violation.
- B. If the notice of violation is not complied with within the established abatement period, the building official is authorized to request the Village Attorney to institute the appropriate proceeding at law or in equity to restrain, correct or abate such violation, or to require the removal or termination of the unlawful occupancy of the structure in violation of the provisions of this Ordinance or of the order or direction made pursuant thereto.
- C. Any person who shall violate a provision of this Ordinance or who erects, constructs, alters, remodels or repairs a building or structure in violation of the approved construction documents or directive of the building official, or acts in violation of a permit or certificate issued under the provisions of this Ordinance, shall be punished by a fine of not more than \$500.00 or by imprisonment not exceeding 90 days or both such fine and imprisonment, and any other penalties prescribed by law. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

- D. Whenever the building official finds any work regulated by this Ordinance being performed in a manner contrary to the provisions of this Ordinance or other City Ordinances or in a dangerous or unsafe manner, the building official is authorized to issue a stop work order.
- E. 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, to the person doing the work. Upon issuance of a stop work order, the cited work shall immediately cease or as otherwise determined by the building official. The stop work order shall state the reason for the order, and the conditions under which the cited work will be permitted to resume. Any violation of a stop work order will constitute a violation of this Ordinance.
- F. 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 penalties as prescribed by law.

SECTION 1.49 RESERVED.

SECTION 1.50 RESERVED.

SECTION 1.51 RESERVED.

SECTION 1.52 RESERVED.

SECTION 1.53 RESERVED.

ARTICLE II. TECHNICAL CODES

SECTION 1.54 TECHNICAL CODES ADOPTED

- A. The following technical codes are adopted and incorporated herein by reference as if fully set forth, except as they may be amended by other provisions of this Ordinance:
 - 1. 2012 International Building Code.
 - 2. 2012 International Residential Code for One and Two Family Dwellings and Appendices G, H, I, and O.
 - 3. 2012 International Existing Building Code and Appendix B.
 - 4. 2011 National Electrical Code
 - 5. 2012 International Property Maintenance Code (No Appendices)
 - 6. 2012 International Swimming Pool and Spa Code (No Appendices)

SECTION 1.55 LOCAL AMENDMENTS

- A. Section 1, Administration, of the 2012 International Building Code and International Residential Code for One and Two Family Dwellings is hereby deleted. See Article I of this Ordinance.
- B. See **Exhibit A** herein for additional Local Amendments to the 2012 International Residential Code for One and Two Family Dwellings, incorporated herein by this reference as if fully set forth.
- C. Notwithstanding any provision of the 2012 International Residential Code for One and Two Family Dwellings to the contrary, the following items shall be required as if fully set forth therein:
1. All new construction shall include interior perimeter footing drains tied to a minimum 20-gallon sump pit/pump or extended to daylight.
 2. All interior non-load bearing stud walls constructed in the basement of the home (new or future) shall be provided with a 1-inch expansion joint (approximately) to allow for minor changes in floor elevation. Such walls shall not be tight between the slab and the floor framing in order to accommodate minor changes in slab elevations due to expansion and contraction of the supporting soil over time. The expansion joint is not required at the perimeter walls or on engineered, reinforced slabs.
 3. Interior support columns shall bear directly on footings or a slab where a bond break has been installed to isolate the column from the floor slab. A vapor barrier is not required (an engineering report shall be provided if groundwater is observed). The basement floor shall be isolated from column pads, interior columns and interior bearing walls by an approved material to act as a bond breaker. Two layers of 15-pound asphalt impregnated felt shall be considered adequate to act as a bond breaker. Not applicable if an engineered (reinforced) slab.
 4. Driveways and Patio Slabs: Settlement of backfill (overdig) around the foundation system may adversely affect driveway, garage floor and patio slabs. To limit settlement of the slabs do not place such slabs on fill next to the foundation wall (overdig) unless supported by columns or piers carried down to the basement footing or by ledgers, dowels, brackets or haunches.
 5. Soil tests and/or assistance from a licensed Missouri structural and/or Geotechnical engineer shall be obtained when unusual foundation conditions are encountered. Unusual conditions include but are not limited to:
 - (a) Foundation walls over nine feet in height (measured from the top of wall to the bottom of the slab). Such walls shall be designed by a Missouri licensed architect or engineer (stamp on drawings). A design shall be submitted for approval prior to obtaining a footing inspection.
 - (b) If fill in excess of six feet is encountered on a lot.

- (c) If fill soils are encountered below footing levels.
 - (d) Sloping lots are steeper than 4:1 before grading.
 - (e) Lots where some footings will bear on soil and others on rock.
6. All slabs with fill in excess of 24 inches of compacted sand or gravel or 8 inches of compacted soil shall be an engineered slab. Two car garages will have a minimum of one concrete center support pedestal with a center reinforced grade beam across the width of the garage (in addition to the reinforced engineered slab). Three car garages shall have a minimum of two concrete pedestals with the reinforced grade beam in addition to the reinforced concrete slab. If a garage pedestal is to carry the load of a house support column a properly sized reinforced concrete footing shall be installed under the concrete pedestal(s). All pedestals or footings shall bear on virgin soil or engineered piers. All slabs and support systems to be designed and stamped by a Missouri licensed architect or engineer.

SECTION 1.56 RESERVED.

SECTION 1.57 RESERVED.

SECTION 1.58 RESERVED.

SECTION 1.59 RESERVED.

SECTION 1.60 RESERVED.

SECTION 1.61 RESERVED.

ARTICLE III. FEES

SECTION 1.62 PAYMENT OF FEES.

- A. A permit shall not be valid until the prescribed fees have been paid. Nor shall an amendment to a permit be released until the additional fee, if any, has been paid.
- B. A fee for a building or remodeling permit shall be paid in accordance with Section 1.63.
 - 1. At the time of application for a building permit, the applicant shall pay a five hundred dollar (\$500) deposit. If a building permit is subsequently issued, this deposit shall then be credited toward the total building permit fee and the applicant shall pay the remainder prior to being issued a building permit. If a building permit is not subsequently issued, this deposit shall be non-refundable.
 - 2. At the time of application for a remodeling permit involving external space, the applicant shall pay a five hundred dollar (\$500) deposit. If a remodeling permit is subsequently issued, this deposit shall then be credited toward the total remodeling permit fee and the applicant shall pay the remainder prior to being issued a remodeling permit. If a remodeling permit is not subsequently issued, this deposit shall be non-refundable.

3. At the time of application for a remodeling permit involving internal space, the applicant shall pay a two hundred fifty dollar (\$250) deposit. If a remodeling permit is subsequently issued, this deposit shall then be credited toward the total remodeling permit fee and the applicant shall pay the remainder prior to being issued a remodeling permit. If a remodeling permit is not subsequently issued, this deposit shall be non-refundable.

C. The building official may authorize refunding of any fee paid hereunder, which was erroneously paid or collected.

SECTION 1.63 FEE SCHEDULE.

The fees for building and remodel permits and other inspections are hereby established in the attached Building Permit Fee Schedule.

SECTION 1.64 REPEALER CLAUSE.

All ordinances or parts of ordinances in conflict with this Ordinance are hereby repealed.

SECTION 1.65 SEVERABLE.

If any section, subsection, sentence, clause, phrase or portion of this Ordinance is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed a separate and independent provision and such holding shall not affect the validity of the remaining portions thereof.

SECTION 1.66 EFFECTIVE DATE.

This Ordinance shall be in full force and effect from and after the date of its passage and approval.

Village of Loch Lloyd

Building Permit Fee Schedule

Permit Type	Fee	Comments
Building Permit	Greater of \$2500, or \$0.82 per square feet of finished footage, \$0.37 per square feet of unfinished footage \$0.18 per square feet of garage space	<ul style="list-style-type: none"> •Finished footage shall include any space that requires any inspection other than a footing or foundation inspection. •3-season rooms counted as unfinished space. •Permit includes the following inspections: footings and foundations; pre-backfill/foundation drainage; ground rough-in for plumbing; structural slab (basement and garage); framing (top plumbing rough-in, electrical rough-in, HVAC rough-in); rough-in reinspection, electrical service (w/letter to utility); gas service (w/letter to utility); Certificate of Occupancy (temporary and final).
Remodel Permit – External Space (e.g., room additions)	Greater of \$500, or \$0.82 per square feet of finished footage, \$0.37 per square feet of unfinished footage	<ul style="list-style-type: none"> •Includes plan review, rough-in inspection, final inspection.
Remodel Permit – Internal Space (e.g., basement finishing)	Greater of \$250, or \$0.52 per square feet	<ul style="list-style-type: none"> •Includes plan review, rough-in inspection, final inspection.
Mechanical, Electrical, Plumbing or Elevator permit	\$150.00 (each)	Applicable when the work being done is not otherwise covered by a building or remodeling permit.
Deck footing inspection	\$100.00	Applicable when the work being done is not otherwise covered by a building or remodeling permit.
Deck structural elements inspection	\$100.00	Applicable when the work being done is not otherwise covered by a building or remodeling permit.

Reinspection	\$100.00	Applicable to new construction and remodels (internal or external space).
Water service line installation inspection	\$100.00	
Driveway approach inspection	\$100.00	
Pool, pool apron or hot tub inspections	\$175.00	Includes 2 separate grounding inspections.

Exhibit A
Section 1.55.B
Local Amendments to the
2012 International Residential Code for One and Two Family Dwellings

R101.1

Section R101.1 of the 2012 International Residential Code for One- and Two-family dwelling is hereby amended to read as follows:

R101.1 Title. These provisions shall be known as the Residential Code for One-and Two-family Dwellings of the Village of Loch Lloyd Missouri and shall be cited as such and will be referred to herein as "this Code."

RI02.5

Section RI02.5 of the 2012 International Residential Code for One- and Two-Family Dwellings is hereby amended to read as follows:

RI02.5 Appendices adopted. The following appendices are adopted as part of the Code:

1. Appendix G - Swimming Pools Spas and Hot Tubs.
2. Appendix H - Patio Covers.
3. Appendix I - Private Sewage Disposal.
4. Appendix O – Automatic Vehicular Gates

R301.2(1)

Table No. R301.2(l) of Section 301 of the 2012 International Residential Code for One and Two-Family Dwellings is hereby amended to read as follows:

**TABLE R301.2(1)
CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA**

GROUND SNOW LOAD	WIND DESIGN		SEISMIC DESIGN CATEGORY ^f	SUBJECT TO DAMAGE FROM			WINTER DESIGN TEMP ^e	ICE BARRIER UNDERLAYMENT REQUIRED ^d	FLOOD HAZARDS ^g	AIR FREEZING INDEX ^h	MEAN ANNUAL TEMP ⁱ
	Speed ^d (mph)	Topographic effects ^k		Weathering ^a	Frost line depth ^b	Termite ^c					
20	90	No	A	Severe	36"	Yes	6° F	No	6/17/2002	1000	54.7° F

For SI: 1 pound per square foot = 0.0479 kPa, 1 mile per hour = 0.447 m/s.

- a. Weathering may require a higher strength concrete or grade of masonry than necessary to satisfy the structural requirements of this Code. The weathering column shall be filled in with the weathering index (i.e., "negligible," "moderate" or "severe") for concrete as determined from the Weathering Probability Map [Figure R301.2(3)]. The grade of masonry units shall be determined from ASTM C 34, C 55, C 62, C 73, C 90, C 129, C 145, C 216 or C 652.
- b. The frost line depth may require deeper footings than indicated in Figure R403.1(1). The jurisdiction shall fill in the frost line depth column with the minimum depth of footing below finish grade.
- c. The jurisdiction shall fill in this part of the table to indicate the need for protection depending on whether there has been a history of local subterranean termite damage.
- d. The jurisdiction shall fill in this part of the table with the wind speed from the basic wind speed map [Figure R301.2(4)A]. Wind exposure category shall be determined on a site-specific basis in accordance with Section R301.2.1.4.
- e. The outdoor design dry-bulb temperature shall be selected from the columns of 97 ½-percent values for winter from Appendix D of the International Plumbing Code. Deviations from the Appendix D temperatures shall be permitted to reflect local weather experience as determined by the Building Official.
- f. The jurisdiction shall fill in this part of the table with the Seismic Design Category determined from Section R301.2.2.1.

g. The jurisdiction shall fill in this part of the table with (a) the date of the jurisdiction's entry into the National Flood Insurance Program (date of adoption of the first code or ordinance for management of flood hazard areas), (b) the date(s) of the currently effective FIRMs and FBFM, or other flood hazard map adopted by the community, as may be amended.

h. In accordance with Sections R905.2.7.1, R905.4.3.1, R905.5.3.1, R905.6.3.1, R905.7.3.1 and R905.8.3.1, where there has been a history of local damage from the effects of ice damming, the jurisdiction shall fill in this part of the table with "YES." Otherwise, the jurisdiction shall fill in this part of the table with "NO."

i. The jurisdiction shall fill in this part of the table with the 100-year return period air freezing index (BF-days) from Figure R403.3(2) or from the 100-year (99%) value on the National Climatic Data Center data table "Air Freezing Index- USA Method (Base 32° Fahrenheit)" at www.ncdc.noaa.gov/fpsf.html.

j. The jurisdiction shall fill in this part of the table with the mean annual temperature from the National Climatic Data Center data table "Air Freezing Index- USA Method (Base 32° Fahrenheit)" at www.ncdc.noaa.gov/fpsf.html.

k. In accordance with Section R301.2.1.5, where there is local historical data documenting structural damage to buildings due to topographic wind speed-up effect, the jurisdiction shall fill in this part of the table with "YES." Otherwise the jurisdiction shall indicate "NO" in this part of the table.

R306.S

Section R306.5 of the 2012 International Residential Code for One- and Two-Family Dwellings is hereby added to read as follows:

R306.S New single-family dwellings toilet facilities.

Toilet facilities shall be provided within 500 feet (measured from the property line adjacent to the street for platted subdivisions along the public way) for all new single-family dwellings starting from the time of the first footing inspection until facilities are available in the dwelling. If the facilities are not located on the job site, the location of the required facilities shall be posted on the job site or other certification provided to the Building Official to verify the availability of toilet facilities. The facilities on the site shall be removed prior to issuance of a Temporary Certificate of Occupancy.

R309.6

Section R309.6 of the 2012 International Residential Code for One- and Two-Family Dwellings is hereby added to read as follows:

R309.6 Residential driveways.

Residential concrete and asphalt driveway slabs shall be a minimum of four inches (4") thick. The driveway shall have a constant slope so as to avoid ponding of water. The slope shall be away from the house or building or drain by means approved by the Building Official.

R310.1

Section R310.1 of the 2012 International Residential Code for One- and Two-Family Dwellings is hereby amended to read as follows:

R310.1 Emergency escape and rescue required.

Basements, habitable attics and every sleeping room shall have at least one operable emergency escape and rescue opening. Where basements contain one or more sleeping rooms, emergency egress and rescue openings shall be required in each sleeping room. Where emergency escape and rescue openings are provided they shall have a sill height of not more than forty - four inches (44") measured from the finished floor to the bottom of the clear opening. Where a door opening having a threshold below the adjacent ground elevation serves as an emergency escape and rescue opening and is provided with a bulkhead enclosure, the bulkhead enclosure shall comply with Section R310.3. The net clear opening dimensions required by this Section shall be obtained by the normal operation

of the emergency escape and rescue opening from the inside. Emergency escape and rescue window openings with a finished sill height below the adjacent ground elevation shall be provided with a window well in accordance with Section R31 0.2. Emergency escape and rescue openings shall open directly into a public way, or to a yard or court that opens to a public way.

Exceptions:

1. Dwellings for which the building permit for the initial construction of that dwelling was issued prior to January 1, 2001, are exempt from the above requirement for subsequent basement remodels; provided, however, that exemption shall only apply if the basement has not been expanded subsequent to January 1, 2001, or that basement does not at any time contain any sleeping areas; conversion of any habitable area to a sleeping area at any time will trigger the emergency escape and rescue requirements set forth above. All currently existing openings that provide for emergency escape and rescue, regardless of whether or not they comply with the above escape and rescue requirements, cannot be removed or altered without bringing the basement into full compliance with the minimum requirements of this Section, regardless of when building permits for the dwelling were issued.
2. Basements used only to house mechanical equipment and not exceeding total floor area of 200 square feet.

R310.1.1 Minimum opening area.

All emergency escape and rescue openings shall have a minimum net clear opening of 5.7 square feet.

Exception: Grade floor openings shall have a minimum net clear opening of 5 square feet.

R310.1.2 Minimum opening height. The minimum net clear opening height shall be 24 inches.

R310.1.3 Minimum opening width. The minimum net clear opening width shall be 20 inches.

R310.1.4 Operational constraints. Emergency escape and rescue openings shall be operational from the inside of the room without the use of keys, tools or special knowledge.

R314.1 which refers to smoke detector locations: Add item 4. In unfinished interior storage areas.

R401.2

Section R401.2 of the 2012 International Residential Code for One- and Two- Family dwellings is hereby amended to read as follows:

R401.2 Requirements.

Foundation construction shall be capable of accommodating all loads according to Section R301 and of transmitting the resulting loads to the supporting soil. Fill soils that support footings and foundations shall be designed, installed and tested in accordance with accepted engineering practice. Gravel fill used as footings for wood and precast concrete foundations shall comply with Section

R403.

R401.2.1 Design required.

A design in accordance with accepted engineering practice shall be provided for concrete or masonry foundation walls when any of the conditions listed below exist.

1. Walls are subject to hydrostatic pressure from ground water.
2. Walls supporting more than 48 inches (48") of unbalanced backfill that do not have permanent lateral support at the top and bottom.
3. Sites containing CH, MR, OL, or OH soils as identified in Table R405.1
4. Foundation walls exceeding ten feet (10') in height, measured from the top of the wall to the bottom of the slab.
5. Lots identified on the subdivision grading plan as having more than six feet (6') of fill or having a finished slope steeper than 4 horizontal to 1 vertical before grading.
6. Footings and foundations with existing fill soils below the footing level.
7. Sloping lots steeper than 4 to 1 before grading.
8. Lots where some footings will bear on soil and others will bear on rock.
9. Areas where problems have historically occurred.
10. Stepped footing and foundation walls.

R401.2.2 Continuous footing reinforcement.

Continuous footings for basement foundation walls shall have minimum horizontal reinforcement consisting of not less than two No.4 bars, uniformly spaced, located a minimum 3 inches (3") clear from the bottom of the footing.

R401.2.3 Foundation anchorage.

The spacing of anchor bolts or foundation anchor straps required by Section R403.1.6 shall be reduced to a maximum of 3 feet (3') on center for basement foundation walls.

R405.1

Section R405.1 of the 2012 International Residential Code for One- and Two- Family dwellings is hereby amended to read as follows:

R405.1 Concrete or masonry foundations.

Interior and exterior drains shall be provided around all concrete or masonry foundations that retain earth and enclose habitable or usable spaces located below grade. Drainage tiles, gravel or crushed stone drains, perforated pipe or other approved systems or material shall be installed at or below the area to be protected and shall discharge by gravity or mechanical means into an approved drainage system. Gravel or crushed stone drains shall extend at least one foot (1') beyond the outside edge of the footing and six inches (6") above the top of the footing and be covered with an approved filter membrane material. The top of open joints of drain tiles shall be protected with strips of building paper. Perforated drains shall be surrounded with an approved filter membrane or the filter membrane shall cover the washed gravel or crushed rock covering the drain. Drainage tiles or perforated pipe

shall be placed on a minimum of two inches (2") of washed gravel or crushed rock at least one sieve size larger than the tile joint opening or perforation and covered with not less than six inches (6") of the same material.

Exceptions:

1. A drainage system is not required when the foundation is installed on well-drained ground or sand-gravel mixture soils according to the Unified Soil Classification System, Group I Soils, as detailed in Table R405.1.
2. A filter membrane is not required where perforated drains are covered with at least eighteen inches (18") of washed gravel or crushed rock.
3. For gravel or crushed stone drains a filter membrane is not required when the gravel or crushed stone extends at least eighteen inches (18") above the top of the footing.

R405.1.1 Precast concrete foundation.

Precast concrete foundation walls that retain earth and enclose habitable or useable space located below-grade that rest on crushed stone footings shall have a perforated drainage pipe installed below the base of the wall on the interior and exterior side of the wall, at least one foot (1 ') beyond the edge of the wall. If the exterior drainage pipe is used, an approved filter membrane material shall cover the pipe. The drainage system shall discharge into an approved sump pit or to daylight.

R501.3

Section R501.3 of the 2012 International Residential Code for One- and Two- Family dwellings is hereby amended to read as follows:

R501.3 Open web floor trusses.

Floor assemblies utilizing open web trusses shall be protected on the underneath side of the floor truss with a one-half inch (1/2") gypsum wallboard membrane, five-eighths inch (5/8") wood structural panel membrane, or equivalent on the underside of the floor framing member.

Exceptions:

1. Floor assemblies located directly over a space protected by an automatic sprinkler system in accordance with Section P2904, NFPA13D, or other approved equivalent sprinkler system.
2. Floor assemblies located directly over a crawl space not intended for storage or fuel-fired appliances.
3. Portions of floor assemblies can be unprotected when complying with the following:

3.1 The aggregate area of the unprotected portions shall not exceed 80 square feet per story.

3.2 Fire blocking in accordance with Section R302.11.1 shall be installed along the perimeter of the unprotected portion to separate the unprotected portion from the remainder of the floor assembly.

R506.3

Section R506.3 of the 2012 International Residential Code for One- and Two-Family dwellings is hereby added to read as follows.

R506.3 Design required.

A design in accordance with accepted engineering practice shall be provided for concrete floors when the limitations for fill material set forth in Section R506.2.1 are exceeded. Where applicable, a standard design approved by the City may be used in lieu of a design from the design professional.

R506.4

Section R506.4 of the 2012 International Residential Code for One- and Two-Family Dwellings is hereby added to read as follows:

R506.4 Basement floor slab isolation.

Basement floor slabs shall be isolated from column pads, interior columns and interior bearing walls to facilitate differential movement. Nonbearing walls supported on basement floor slabs shall be provided with a minimum one inch (1") expansion joint to facilitate differential movement between the floor slab and the floor framing above. Isolation and/or an expansion joint are not required within six inches (6") of the exterior walls.

R602.6

Section R602.6 of the 2012 International Residential Code for One- and Two-family dwellings is hereby amended to read as follows:

R602.6 Drilling and notching of studs.

Drilling and notching of studs shall be in accordance with the following:

1. Notching. Any stud in an exterior wall or bearing partition may be cut or notched to a depth not exceeding twenty-five percent (25) of its width. Studs in nonbearing partitions may be notched to a depth not to exceed forty percent (40) of a single stud width.

2. Drilling. Any stud may be bored or drilled, provided that the diameter of the resulting hole is no more than sixty percent (60) of the stud width, the edge of the hole is no more than five-eighths inch (5/8") to the edge of the stud, and the hole is not located in the same section as a cut or notch. Studs located in exterior walls or bearing partitions drilled over forty percent (40) and up to sixty percent (60) shall also be doubled with no more than two successive doubled studs bored. See Figures R602.6(1) and R602.6(2).

Exception: Use of approved stud shoes is permitted when they are installed in accordance with the manufacturer's recommendations.

R602.6.1 Drilling and notching of top plate.

When piping or ductwork is placed in or partly in an exterior wall or interior load-bearing wall, necessitating cutting, drilling or notching of the top plate by more than fifty percent (50) of its width, a galvanized metal tie not less than 0.054 inch thick (16 ga) and one and one-half inches (1 ½") wide shall be fastened across and to the plate at each side of the opening with not less than four 10d (0.148 inch diameter) nails having a minimum length of one and one-half inches (1 ½") at each side or equivalent. The metal tie must extend a minimum of six inches (6") past the opening. See Figure R602.6.1.

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

N1102.1.1

Table N1102.1.1 of the 2012 International Residential Code for One and Two Family dwellings is hereby amended to read as follows:

**TABLE N1102.1.1
INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT^a**

CLIMATE ZONE	FENESTRATION U-FACTOR ^b	SKYLIGHT ^b U-FACTOR	GLAZED FENESTRATION SHGC ^c	CEILING ^b R-VALUE	WOOD FRAME WALL R-VALUE	MASS WALL R-VALUE ^e	FLOOR R-VALUE	BASEMENT ^e WALL R-VALUE	SLAB ^d R-VALUE & DEPTH	CRAWL SPACE ^f WALL R-VALUE
4	0.35	0.55	0.40	49	13	8/13	19	10/13	NR	10/13

For SI: 1 foot – 304.8 mm.

- a. R-values are minimums. U-factors and SHGC are maximums. When insulation is installed in a cavity which is less than the label or design thickness of the insulation, the installed R-value of the insulation shall not be less than the R-value specified in the table.
- b. The fenestration U-factor column excludes skylights. The SHGC column applies to all glazed fenestration.
- c. "10/13" means R-10 continuous insulation on the interior or exterior of the home or R-13 cavity insulation at the interior of the basement walls.
- d. 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. The second R-value applies when more than half the insulation is on the interior of the mass wall.
- g. Loose-fill-insulation shall be installed at the rate recommended by the manufacturer's statement "so many bags per 1000 sq. ft."

Where the pitch of the roof restricts the "minimum thickness" at the exterior wall line, the insulation shall be blown into the cavity so as to achieve a greater compacted density to a point where the "minimum thickness" can be achieved. An alternative is to install high-density batts around the perimeter edge per N1102.2.

N1102.4

Section N1102.4 of the 2012 International Residential Code for One- and Two- Family dwellings is hereby amended to read as follows:

N1102.4 Air leakage (Mandatory).

The building thermal envelope shall be constructed to limit air leakage in accordance with the requirements of Sections N1102.4.1 through N1102.4.4.

N1102.4.1 Building thermal envelope.

The building thermal envelope shall comply with Sections N 1102.4.1.1 and N 1102.4.1.2. The sealing methods between dissimilar materials shall allow for differential expansion and contractions.

N1102.4.1.1 Installation.

The components of the building thermal envelope as listed in Table N1102.4.1.1 shall be installed in accordance with the manufacturer's instructions and the criteria listed in Table N1102.4.1.1, as applicable to the method of construction. Where required by the Code Official, an approved third party shall inspect all components and verify compliance.

N1102.4.1.2 Testing.

Where required by the Code Official, the building or dwelling unit shall be tested and verified as having an air leakage rate not exceeding five air changes per hour. Testing shall be conducted with a blower door at a pressure of 0.2 inches w.g. (50 Pascals). Where required by the Code Official, testing shall be conducted by an approved third party. A written report of the results of the test shall be signed by the party conducting the test and provided to the Code Official. Testing shall be performed at any time after creation of all penetrations of the building thermal envelope.

During testing:

1. Exterior windows and doors, fireplace and stove doors shall be closed, but not sealed, beyond the intended weather-stripping or other infiltration control measures;
2. Dampers including exhaust, intake, makeup air, backdraft and flue dampers shall be closed, but not sealed beyond intended infiltration control measures;
3. Interior doors, if installed at the time of the test, shall be open;
4. Exterior doors for continuous ventilation systems and heat recovery ventilators shall be closed and sealed;
5. Heating and cooling systems, if installed at the time of the test, shall be turned off; and
6. Supply and return registers, if installed at the time of the test, shall be fully open.

N1102.4.2 Fireplaces.

New wood-burning fireplaces shall have tight-fitting flue dampers and outdoor combustion air.

N1102.4.3 Fenestration air leakage.

Windows, skylights and sliding glass doors shall have an air infiltration rate of no more than 0.3 cfm per square foot, and swinging doors no more than 0.5 cfm per square foot, when tested according to NFRC 400 or AAMA/WDMA/CSA 101/I.S.2/A440 by an accredited, independent laboratory and listed and labeled by the manufacturer.

Exception: Site-built windows, skylights and doors.

N1102.4.4 Recessed lighting.

Recessed luminaires installed in the building thermal envelope shall be sealed to limit air leakage between conditioned and unconditioned spaces. All recessed luminaires shall be IC-rated and labeled as having an air leakage rate not more than 2.0 cfm when tested in accordance with ASTM E 283 at a 1.57 psf (75 Pa) pressure

differential.: All recessed luminaires shall be sealed with a gasket or caulk between the housing and the interior wall or ceiling covering.

N1102.1.1

Table N1102.4.1.1 of the 2012 International Residential Code for One- and Two- Family dwellings is hereby amended to read as follows:

**TABLE N1102.4.1.1
AIR BARRIER AND INSULATION INSTALLATION**

COMPONENT	CRITERIA^a
Air barrier and thermal barrier	A continuous air barrier shall be installed in the building envelope. Exterior thermal envelope contains a continuous air barrier. Breaks or joints in the air barrier shall be sealed. Air-permeable insulation shall not be used as sealing material.
Ceiling/attic	The air barrier in any dropped ceiling/soffit shall be aligned with the insulation and any gaps in the air barrier sealed. Access opening, dropdown stair or knee wall doors to unconditioned attic spaces shall be sealed.
Walls	Corners and the junction of the foundation and sill plate shall be sealed. Exterior thermal envelope insulation for framed walls shall be installed in substantial contact and continuous alignment with the air barrier. Knee walls shall be sealed.
Windows, skylights and doors	The space between window/door jambs and framing and skylights and framing shall be sealed.
Rim joists	Rim shall be sealed to prevent air leakage.
Floors (including above-garage and cantilevered floors)	Insulation shall be installed to maintain permanent contact with underside of subfloor decking. The air barrier shall be installed at any exposed edge of insulation.
Crawl space walls	Where provided in lieu of floor insulation, insulation shall be permanently attached to the crawlspace walls. Exposed earth in unvented crawl spaces shall be covered with a Class I vapor retarder with overlapping joints taped.
Shafts, penetrations	Duct shafts, utility penetrations, and flue shafts opening to exterior or unconditioned space shall be sealed.
Narrow cavities	Batts in narrow cavities shall be cut to fit, or narrow cavities shall be filled by insulation that on installation readily conforms to the available cavity space.
Garage separation	Air sealing shall be provided between the garage and conditioned spaces.
Recessed lighting	Recessed light fixtures installed in the building thermal envelope shall be air tight, IC rated, and sealed to the drywall.
Plumbing and wiring	Batt insulation shall be cut neatly to fit around wiring and plumbing in exterior walls, or insulation that on installation readily conforms to available space shall extend behind piping and wiring.
Shower/tub on exterior wall	Exterior walls adjacent to showers and tubs shall be insulated and the air barrier installed separating them from the showers and tubs.
Electrical/phone box on exterior walls	The air barrier shall be installed behind electrical or communication boxes or air-sealed boxes shall be installed.
HVAC register boots	HVAC register boots that penetrate building thermal envelope shall be sealed to the sub floor or drywall.

Fireplace	An air barrier shall be installed on fireplace walls.
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- a. In addition, inspection of log walls shall be in accordance with the provisions of ICC-400.

NI103.2

Section NI103.2 of the 2012 International Residential Code is hereby amended to read as follows:

NI103.2 Ducts.

Ducts and air handlers shall be in accordance with Sections NI103.2.1 through NI103.2.3.

NI103.2.1 Insulation (Prescriptive).

Supply ducts in attics shall be insulated to a minimum of R-8. All other ducts shall be insulated to a minimum of R-6.

Exception: Ducts or portions thereof located completely inside the building thermal envelope.

NI103.2.2 Sealing (Mandatory).

Ducts, air handlers, and filter boxes shall be sealed. Joints and seams shall comply with Section MI601.4.1 of this Code.

Exceptions:

1. Air-impermeable spray foam products shall be permitted to be applied without additional joint seals.
2. Where a duct connection is made that is partially inaccessible, three screws or rivets shall be equally spaced on the exposed portion of the joint so as to prevent a hinge effect.
3. Continuously welded and locking-type longitudinal joints and seams in ducts operating at static pressures less than two inches (2") of water column (500 Pa) pressure classification shall not require additional closure systems. Where required by the Code Official, duct tightness shall be verified by either of the following:
 1. Post construction test: Total leakage shall be less than or equal to 4 cfm (113.3 L/min) per 100 square feet (9.29 m²) of conditioned floor area when tested at a pressure differential of 0.1 inches w.g. (25 Pa) across the entire system, including the manufacturer's air handler enclosure. All register boots shall be taped or otherwise sealed during the test.
 2. Rough-in test: Total leakage shall be less than or equal to 4 cfm (113.3 L/min) per 100 square feet (9.29 m²) of conditioned floor area when tested at a pressure differential

of 0.1 inches w.g. (25 Pa) across the system, including the manufacturer's air handler enclosure. All registers shall be taped or otherwise sealed during the test. If the air handler is not installed at the time of the test, total leakage shall be less than or equal to 3 cfm (85 L/min) per 100 square feet (9.29 m²) of conditioned floor area. Exceptions:

1. The total leakage test is not required for ducts and air handlers located entirely within the building thermal envelope.
2. On the post construction test, it is permissible to test for "leakage to the outdoors" versus a "total leakage." Leakage to the outdoors shall be less than or equal to 8 cfm per 100 square feet of conditioned floor area.

N1103.2.2.1 Sealed air handler.

Air handlers shall have a manufacturer's designation for an air leakage of no more than 2 percent of the design air flow rate when tested in accordance with ASHRAE 193.

N1104.1

Section N1104.1 of the 2012 International Residential Code for One- and Two- Family dwellings is hereby amended to read as follows:

N1104.1 Lighting equipment.

Fuel gas systems shall not have continuous burning pilot lights.

P2503.3

Section P2503.3 of the 2012 International Residential Code for One- and Two-Family Dwellings is hereby amended to read as follows:

P2503.3 Responsibility of permittee. The permit holder shall make the applicable test prescribed in Section 2503.5 through Section 2503.8 to determine compliance with the provisions of this Code. Test equipment, materials and labor shall be furnished by the permittee.

Exceptions:

1. The testing of the DWV rough plumbing system shall be done in accordance with Section P2503.5.1 when required by the Code Official.
2. The testing of the building sewer shall be done in accordance with Section P2503.4 when required by the Code Official.

E3902.2

Section E3902.2 of the 2012 International Residential Code for One- and Two- Family dwellings is hereby amended to read as follows:

E3902.2 Garage and accessory building receptacles.

All 125-volt, single-phase, 15- and 20-ampere receptacles installed in garages and grade-level portions of unfinished accessory buildings used for storage or work areas shall have ground-fault circuit-interrupter protection for personnel.

Exception: A dedicated receptacle supplying a sprinkler system or garage door opener.

E3902.5

Section E3902.5 of the 2012 International Residential Code for One- and Two- Family dwellings is hereby amended to read as follows:

E3902.5 Unfinished basement receptacles.

All 125-volt, single-phase, 15- and 20-ampere receptacles installed in unfinished basements shall have ground-fault circuit-interrupter protection for personnel. For purposes of this Section, unfinished basements are defined as portions or areas of the basement not intended as habitable rooms and limited to storage areas, work areas, and the like.

Exceptions:

1. A receptacle supplying only a permanently installed fire alarm or burglar alarm system.
2. A dedicated receptacle supplying a sump pump.

E3902.12

Section E3902.12 of the 2012 International Residential Code for One- and Two- Family dwellings is hereby amended to read as follows:

E3902.12 Arc-fault circuit-interrupters.

All branch circuits that supply 120-volt, single phase 15- and 20-ampere receptacles installed in bedrooms shall be protected by a combination type arc-fault circuit interrupter installed to provide protection of the branch circuit.

Exceptions:

1. Where an outlet branch-circuit type AFCI is installed at the first outlet to provide protection for the remaining portion of the branch circuit, the portion of the branch circuit between the branch-circuit over-current device and the first outlet shall be installed with metal outlet and junction boxes and RMC, IMC, EMT, type MC, or steel armored type AC cables meeting the requirements of Section E3908.8.
2. Where an outlet branch-circuit type AFCI is installed at the first outlet to provide protection for the remaining portion of the branch circuit, the portion of the branch circuit, between the branch-circuit over-current device and the first outlet shall be installed with metal or nonmetallic conduit or tubing that is encased in not less than two inches (2") of concrete.
3. AFCI protection is not required for an individual branch circuit supplying only a fire alarm or smoke alarm system where the branch circuit is wired with metal outlet and junction boxes and RMC, IMC, EMT or steel-sheathed armored cable Type AC, or Type MC meeting

the requirements of Section E3908.8.

AG10S.2

Section AG10S.2 of Appendix G of the 2012 International Residential Code is hereby amended to read as follows:

AG10S.2 Outdoor swimming pool.

An outdoor swimming pool, including an in-ground or on-ground pool, hot tub or spa, shall be surrounded by a barrier which shall comply with the following:

1. The top of the barrier shall be at least forty-eight inches (48") above grade measured on the side of the barrier which faces away from the swimming pool. The maximum vertical clearance between grade and the bottom of the barrier shall be two inches (2") measured on the side of the barrier which faces away from the swimming pool. Where the top of the pool structure is above grade, such as an above-ground pool, the barrier may be at ground level, such as the pool structure, or mounted on top of the pool structure. Where the barrier is mounted on top of the pool structure, the maximum vertical clearance between the top of the pool structure and the bottom of the barrier shall be four inches (4").
2. Openings in the barrier shall not allow the passage of a four inch (4") diameter sphere.
3. Solid barriers which do not have openings, such as a masonry or stone wall, shall not contain indentations or protrusions, except for normal construction tolerances and tooled masonry joints.
4. Where a barrier is composed of horizontal and vertical members, and the distance between the tops of the horizontal members shall be equal to or greater than 32 (32"). Where vertical members are spaced one and three-fourths inches (1 3/4") or less the horizontal members shall be allowed to be spaced at a distance less than thirty-two inches (32"). The horizontal members shall be located on the swimming pool side of the fence.
5. Maximum mesh size for chain link fences shall be a two and one-fourth inch (2 1/4") square, unless the fence has slats fastened at the top or the bottom which reduce the openings to not more than one and three-fourths inches (1 3/4").
6. Where the barrier is composed of diagonal members, such as a lattice fence, the maximum opening formed by the diagonal members shall not be more than one and three-fourths inches (1 3/4").
7. Access gates shall comply with the requirements of Items 1 through 6, and shall be equipped to accommodate a locking device. Pedestrian access gates shall open outward away from the pool, and shall be self-closing and have a self-latching device. Gates,

other than pedestrian access gates, shall have a self-latching device. Where the release mechanism of the self-latching device is located less than fifty-four inches (54") from the bottom of the gate, the release mechanism and openings shall comply with the following.

7.1 The release mechanism shall be located on the pool side of the gate at least three inches (3") below the top of the gate: and

7.2 The gate and barrier shall have no opening larger than one-half inch (1/2") within eighteen inches (18") of the release mechanism.

8. Where a wall of a dwelling serves as part of the barrier, one of the following conditions shall be met:

8.1 The pool shall be equipped with a powered safety cover in compliance with ASTM F 1346.

8.2 Doors with direct access to the pool through that wall shall be equipped with an alarm which produces an audible warning when the door and/or its screen, if present, are opened. The alarm shall be listed and labeled in accordance with UL 2017. The deactivation switch(es) shall be located at least fifty-four inches (54") above the threshold of the door; or

8.3 Other means of protection, such as self-closing doors with self-latching devices, which are approved by the Governing Body, shall be acceptable as long as the degree of protection afforded is not less than the protection afforded by Item 7.1 or 7.2 described herein.

9. Where an above-ground pool structure is used as a barrier or where the barrier is mounted on top of the pool structure, and the means of access is a ladder or steps:

9.1 The ladder or steps shall be capable of being secured, locked or removed to prevent access; or

9.2 The ladder or steps shall be surrounded by a barrier which meets the requirements of Items 1 through 7. When the ladder or steps are secured, locked or removed, any opening created shall not allow the passage of a four inch (4") diameter sphere.