

## **CHAPTER 7**

### **LEE'S SUMMIT BUILDING CODE<sup>1</sup>**

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<sup>1</sup> Editor's Note--Ord. No. 6399, § 1, adopted May 18, 2007, repealed Ch. 7 in its entirety and enacted a new Ch. 7 to read as set out herein. Former Ch. 7 pertained to similar subject matter and derived from Ord. No. 5742, § 1, adopted May 6, 2004; Ord. No. 6124, §§ 1--7, adopted Jan 19, 2006; Ord. No. 6164, §§ 1, 2, adopted Apr. 6, 2006; and Ord. No. 6277, §§ 1, 2, adopted Sept. 14, 2006.

Cross References--Fire prevention and protection, Ch. 13; fair housing code, § 15-21 et seq.; transportation and disposal of demolition and construction wastes, § 25-148; streets, sidewalks and other public places, Ch. 26; depositing dirt, rock, building material, rubbish on public property, § 26-4; subdivision regulations, Ch. 27; water and sewers, Ch. 32; zoning, Ch. 33.

**Art. I. Administration, §§ 7-100--7-199**

**Art. II. Building Code, §§ 7-200--7-299**

**Art. III. Electrical Code, §§ 7-300--7-399**

**Art. IV. Plumbing Code, §§ 7-400--7-499**

**Art. V. Mechanical Code, §§ 7-500--7-599**

**Art. VI. Fuel Gas Code, §§ 7-600--7-699**

**Art. VII. Private Sewage Disposal, §§7-700--7-799**

**Art. VIII. Energy Conservation Code, §§ 7-800--7-899**

**Art. IX. Residential Code, §§ 7-900--7-999**

**Art. X. Swimming Pool, Spa, and Hot Tub Code, §§ 7-1000--7-1099**

**Art. XI. Removal of Structures, §§ 7-1100--7-1199**

**Art. XII. Dangerous and Nuisance Building Code, §§ 7-1200--7-1299**

**Art. XIII. Subterranean Space Building and Fire Code, §§ 7-1300--7-1304**

**Art. XIV. Security Code, §§ 7-1400--7-1411**

## **ARTICLE I.**

### **ADMINISTRATION**

#### **Sec. 7-100. Title.**

These regulations shall be known as the Building Code of the City of Lee's Summit, Missouri hereinafter ['Code'].

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-101 Scope.**

This code shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures. Detached one- and two-family dwellings and townhouses not more than three stories in height with separate means of egress, and their accessory structures shall comply with article IX (International Residential Code) of this chapter.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-102. Intent.**

The purpose of this code 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, energy conservation, property maintenance, and safety to life and property from fire and other hazards attributed to the built environment.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-103. Applicability.**

Where, in any specific case, different sections of this code 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.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-104. Other laws.**

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

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-105. Application of references.**

References to chapter or section numbers, or to provisions not specifically identified by number, shall be construed to refer to such chapter, section, or provision of this code.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-106. Referenced codes and standards.**

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

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-107. Partial invalidity.**

In the event any part or provision of this code is held to be illegal or void, this shall not have the effect of making void or illegal any of the other parts or provisions.  
(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-108. Existing structures.**

The legal occupancy of any structure existing on the date of adoption of this code shall be permitted to continue without change, except as is specifically covered in this code, the property maintenance code or the International Fire Code, or as is deemed necessary by the building official for the general safety and welfare of the occupants and the public.  
(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-109. Duties and powers of building official.**

The building official is hereby authorized and directed to enforce the provisions of this code. The building official shall have the authority to render interpretations of this code 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 code. Such policies and procedures shall not have the effect of waiving requirements specifically provided for in this code. The building official shall be known as the director of codes administration, and such term shall include his/her authorized representatives. Further, whenever the term or title "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 code, it shall be construed to mean the building official.  
(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-110. Applications and permits.**

The building official shall receive applications, review construction documents and issue permits for the erection, and alteration, demolition and moving of buildings and structures, inspect the premises for which such permits have been issued and enforce compliance with the provisions of this code.  
(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-111. Notices and orders.**

The building official shall issue all necessary notices or orders to ensure compliance with this code.  
(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-112. 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 approval of the appointing authority.  
(Ord. No. 6399, § 1, 5-18-07)

### **Sec. 7-113. Right of entry.**

Where it is necessary to make an inspection to enforce the provisions of this code, 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 code 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 code, 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.

(Ord. No. 6399, § 1, 5-18-07)

### **Sec. 7-114. 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.

(Ord. No. 6399, § 1, 5-18-07)

### **Sec. 7-115. Liability.**

The building official, member of the building and fire code board of appeals or employee charged with the enforcement of this code, while acting for the jurisdiction in good faith and without malice in the discharge of the duties required by this code 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 code shall be defended by legal representative of the jurisdiction 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 code.

(Ord. No. 6399, § 1, 5-18-07)

### **Sec. 7-116. Approved materials and equipment.**

Materials, equipment, and devices approved by the building official shall be constructed and installed in accordance with such approval.

(Ord. No. 6399, § 1, 5-18-07)

### **Sec. 7-117. Used materials and equipment.**

The use of used materials, which meet the requirements of this code for new materials, is permitted. Used equipment and devices shall not be reused unless approved by the building official.

(Ord. No. 6399, § 1, 5-18-07)

### **Sec. 7-118. Insurance proceeds from damage or loss to buildings or structures.**

If there are proceeds of any insurance policy based upon a covered claim payment made for damage or loss to a building or other structure caused by or arising out of any fire, explosion, or other casualty loss, and if the covered claim payment is in excess of 50 percent of the face value of the policy covering a building or other structure, then the following procedure shall apply:

The insurer shall withhold from the covered payment ten percent of the covered claim payment and shall pay that amount to the city to deposit into an interest-bearing account. Any named mortgagee on the insurance policy shall maintain priority over any obligation under this section. If a special tax bill or assessment is issued by the city for the expenses of demolition of such building as a dangerous building, the moneys held by the city shall be applied toward payment of a special tax bill or assessment. If there is any excess, it shall be paid by the city to the insured or as the terms of the policy, including any endorsements thereto, provide.

The city shall release the proceeds and any interest, which has accrued on such proceeds received under the above paragraph, to the insured or as the terms of the policy and endorsements thereto provide within 30 days after receipt of such insurance moneys, unless the city has instituted legal proceedings under the provisions of the Uniform Code for the Abatement of Dangerous Buildings. All moneys in excess of that necessary to comply with the provisions of article XII (Dangerous and Nuisance Building Code) for the removal of the building or structure, less salvage value, shall be paid to the insured. The city may certify that, in lieu or payment of all or part of the covered claim payment under this section, it has obtained satisfactory proof that the insured has removed or will remove debris, and repair, rebuild or otherwise make the premises safe and secure. In this event, the city shall issue a certificate within 30 days after receipt of proof to permit covered claim payment to the insured without deduction. It shall be the obligation of the insured or other person making claim to provide the insurance company with the written certificate provided for in this subsection.

No provisions of this section shall be construed to make the city a party to any insurance contract.  
(Ord. No. 6399, § 1, 5-18-07)

#### **Sec. 7-119. Sanitary sewer service construction and connection.**

Residential properties with 150 feet of public sewer and nonresidential properties within 300 feet of public sewer shall be required to connect to the public sewer in accordance with the plumbing code and chapter 32 of the Lee's Summit Code of Ordinances. When public sewers are not available, permits for private sewage systems must be obtained from the Jackson County Public Works Department prior to issuance of the building permit.

(Ord. No. 6399, § 1, 5-18-07)

#### **Sec. 7-120. Sanitary facilities for construction workers.**

The contractor, builder, or other person having the management and control of construction work shall prevent the commission of any nuisance by the workers on the premises connected therewith and if a temporary privy is located on the premises it shall be properly screened and maintained in a sanitary manner.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-121. Barbed wire and electric fences.**

It shall be unlawful to erect or maintain barbed wire or electric fences other than in zoning districts AG, PI-1 and PI-2; provided, however, that not more than three strands of barbed wire shall be permitted on top of a chain link or other type of fence not less than six feet in height as outside security for storage of equipment or materials in any zoning district other than residential. The provisions of this section shall not apply when a special use permit specifically authorizes a different type or method of fencing.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-122. 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.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-123. Natural gas detectors.**

Dwelling units, congregate residences, and hotel or lodging houses erected within a natural gas or oil field as identified by the State of Missouri Department of Natural Resources, shall be provided with at least one approved detector, unless otherwise required by the building official, capable of detecting natural gas. Detectors shall be installed and located in accordance with the approved manufacturer's instructions.

In new construction, required natural gas detectors shall receive their primary power from the building wiring when such wiring is served from a commercial source and shall be equipped with a battery backup. The detector shall emit a signal when the batteries are low. Wiring shall be permanent without a disconnecting switch other than those required for overcurrent protection. Natural gas detectors may be solely battery operated when installed in existing buildings; or in buildings without commercial power; or in buildings which undergo alterations, repairs, or additions as regulated by this section.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-124. Modifications.**

Wherever there are practical difficulties involved in carrying out the provisions of this code, 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 code impractical and the modification is in compliance with the intent and purpose of this code 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 of codes administration.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-125. Alternative materials, design, and methods of construction and equipment.**

The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, 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 code, and that the material, method or work offered is, for the purpose intended, at least the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety.

(Ord. No. 6399, § 1, 5-18-07)

#### **Sec. 7-126. Tests.**

Whenever there is insufficient evidence of compliance with the provisions of this code, or evidence that a material or method does not conform to the requirements of this code, 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 jurisdiction. Test methods shall be as specified in this code 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.

(Ord. No. 6399, § 1, 5-18-07)

#### **Sec. 7-127. Permits.**

Any owner or authorized agent who intends to construct, enlarge, alter, repair, move, demolish, or change the occupancy of a building or structure, or to erect, install, enlarge, alter, repair, remove, convert or replace any electrical, gas, mechanical, plumbing, or elevator system, the installation of which is regulated by this code, or to cause any such work to be done, shall first make application to the building official and obtain the required permit.

In addition, a hazardous materials permit may be required based upon the type and quantities of materials proposed to be used or stored. When required by the fire chief, a hazardous materials permit application must be submitted prior to the issuance of the building permit.

(Ord. No. 6399, § 1, 5-18-07)

#### **Sec. 7-128. Work exempt from permit.**

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

(a) Building:

- (1) Retaining walls which are not over four feet (1,219 mm) 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 (762 mm) 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 (1753 mm) 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) Oil derricks.
- (12) 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.

(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 code 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 code;
- (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 code.
- (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.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-129. Application for permit.**

To obtain a permit, the applicant shall first file an application therefore in writing on a form furnished by the building official for that purpose.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-130. Contractor license requirements.**

Permits shall be issued only to individuals or persons responsible to a company or organization who are the legal possessors of a valid occupation license in the city. Certification of at least one employee of the respective company as a master electrician, master plumber or master mechanical shall be a requisite for licensing a plumbing, electrical or mechanical contractor.

Applicants shall provide proof of a master certification from Kansas City, Missouri, Independence Missouri, Johnson County, Kansas or other municipality utilizing the Thompson Prometric (formerly Experior/Block & Associates) Competency Examination or the ICC Contractor Examination Services, or other recognized equivalent with a 70 percent passing score. The certification of the master and the city occupation license must remain current throughout the period of construction.

Persons requesting the city to sponsor a master certification examination must submit a completed examination form and documentation of three years of related experience working under a person with a master certification, or equivalent. The city will not sponsor persons to take examinations other than for master certifications.

Each plumbing, electrical and mechanical contractor must show proof of comprehensive general liability insurance coverage with minimum limits of \$300,000.00 per occurrence for personal injuries and/or property damage that arises from work the contractor performed during the term of the building permit or during actual construction, whichever date is later. Proof of insurance shall be a current copy of the "certificate of insurance" naming the city as a certificate holder.

Plumbing contractors shall comply with applicable ordinances of the city and applicable rules of the water department and local gas companies.

Plumbing contractors shall obtain a permit for excavating in a street, alley, or other public property in accordance with the provisions of the City of Lee's Summit Design and Construction Manual. Street cuts and backfilling and repair of pavement in street cuts shall be in compliance with existing ordinances and policies or by procedures established by the city engineer.

The public works director shall render the plumbing contractor a bill for repaving or resurfacing of excavation, and the plumbing contractor shall pay all such bills by the tenth day of the following month. In case the plumbing contractor shall fail to pay these bills or a bill rendered by the city for services, permits, or materials, the amount of such bills may be charged to and deducted from the plumbing contractor's deposit. Failure of the

plumbing contractor to pay such bills or to maintain his deposit at the full amount of \$375.00 shall be grounds for denial of further permits until such bills are paid. Persistent violation of this provision may be considered cause for revoking the plumbing contractor's license held by the offender.

The applicant in accepting the license, hereby agrees that when the applicant or his subcontractor or agent makes an excavation in a street, sidewalk, alley, curb, or public place in Lee's Summit with or without a permit, the applicant does:

- (1) Indemnify, save harmless and defend the city on any claim or loss, damage or expense sustained on account of damages to persons or property occurring by reason of an excavation made by the applicant, his subcontractor or agent;
- (2) Assume the sole responsibility for maintaining proper barricades or lights as required by ordinance of the city from the time of the opening of the excavation until the excavation is backfilled with approved material and opened for travel;
- (3) For any and all other liability incurred subsequent to the completion of the operation and the excavation having been opened for travel, indemnify the city for work performed by the applicant in the city except liability arising out of the sole negligence of the city.

Licenses are not transferable. The right of an individual, firm, partnership or corporation to do business as an electrical, plumbing or mechanical contractor depends upon the retention of the person holding the master certification as an employee, member or officer. The building official may request documentation to verify the person holding the master certification is a current employee, member or officer of the firm, partnership or corporation.

No person, other than a licensed contractor or employees of a licensed contractor, shall engage in electrical, plumbing or mechanical business, construction, installation or maintenance unless duly licensed in accordance with this section.

*Exception:* Permits may be issued to homeowners doing construction work at their own residence who do not possess a valid license, insurance, or registration. Homeowners, however, must comply with all other ordinances of the city and this code.

(Ord. No. 6399, § 1, 5-18-07)

#### **Sec. 7-131. 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 code and laws and ordinances applicable thereto, the building official shall issue a permit therefore as soon as practicable.

(Ord. No. 6399, § 1, 5-18-07)

#### **Sec. 7-132. Time limitation of 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 justifiable cause demonstrated.  
(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-133. 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 code or of any other ordinance of the jurisdiction. Permits presuming to give authority to violate or cancel the provisions of this code 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 code or of any other ordinances of this jurisdiction.  
(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-134. 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 code.  
(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-135. Suspension or revocation.**

The building official is authorized to suspend or revoke a permit issued under the provisions of this code 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 code.  
(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-136. Placement of permit.**

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.

*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.

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.  
(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-137. Submittal documents.**

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 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.

*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 code.  
(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-138. 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 code 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 code. 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 code.  
(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-139. Fire protection system shop drawings.**

Shop drawings for the fire protection system(s) shall be submitted to indicate conformance with this code 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 code.  
(Ord. No. 6399, § 1, 5-18-07)

### **Sec. 7-140 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 but not limited to easements, distances from lot lines, established street grades, existing and proposed finished grades, drainage swales and proposed storm water drainage flow patterns for the site. In addition to identifying flow patterns proposed for the site, flow patterns for areas five feet adjacent to property lines of the site shall be shown. Proposed finished grades and storm water drainage flow patterns for the site shall conform to the master drainage plan for the development unless otherwise approved by the building official. 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.

(Ord. No. 6399, § 1, 5-18-07)

### **Sec. 7-141. Examination of documents.**

The building official shall examine or cause to be examined the accompanying construction documents and shall ascertain by such examinations whether the construction indicated and described is in accordance with the requirements of this code and other pertinent laws or ordinances. Fees shall be assessed at the time the building permit is issued for such examination. Such fee shall be based on the city fee schedule. The building official reserves the right to have such examination performed by a third party when deemed necessary. Any plan review fees associated with a third party examination will be assessed to the cost of the permit unless other arrangements have been approved and properly documented by the building official.

(Ord. No. 6399, § 1, 5-18-07)

### **Sec. 7-142. Approval of construction documents.**

When the building official issues a permit, the construction documents shall be stamped "Released For Construction." 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 stamped construction documents on site may result in inspections not being performed.

(Ord. No. 6399, § 1, 5-18-07)

### **Sec. 7-143. Previous approvals.**

This code 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 code and has not been abandoned.

(Ord. No. 6399, § 1, 5-18-07)

### **Sec. 7-144. 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 code. 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.  
(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-145. 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. If the circumstances require, the owner shall designate a substitute registered design professional in responsible charge who shall perform the duties required of the original 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 code, 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.  
(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-146. 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.  
(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-147. 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.  
(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-148. Temporary structures and uses general.**

The building official is authorized to issue a permit for temporary structures and temporary uses. Such permits shall be limited as to time of service and in accordance with the requirements of the ordinances of the city. The

building official is authorized to grant extensions for demonstrated cause.  
(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-149. Conformance.**

Temporary structures and uses shall conform to the structural strength, fire safety, means of egress, accessibility, light, ventilation and sanitary requirements of this code as necessary to ensure the public health, safety and general welfare.  
(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-150. 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.  
(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-151. 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.  
(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-152. Payment of fees.**

A permit shall not be valid until the fees prescribed by law have been paid. Nor shall an amendment to a permit be released until the additional fee, if any, has been paid.  
(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-153. Schedule of permit fees.**

On buildings, structures, electrical, gas, mechanical, and plumbing systems or alterations requiring a permit, a fee for each permit shall be paid prior to issuance of said permit, in accordance with the city fee schedule.  
(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-154. Building permit valuations.**

The applicant for a permit shall provide an estimated permit value at time of application. Permit valuations shall include total value of work, including materials and labor, for which the permit is being issued, such as electrical, gas, mechanical, plumbing equipment, and permanent systems. If in the opinion of the building official, the valuation is underestimated on the application the valuation shall be determined by using the most current Building Valuation Data Table contained within the Building Safety Journal published by the International Code Council as a guide.  
(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-155. Work commencing before permit issuance.**

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 by the city fee schedule. The payment of such fee shall not exempt any person from compliance with all other provisions of this code 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 code.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-156. Related fees.**

The payment of the fee for the construction, alteration, removal or demolition for work done in connection with or concurrently with the work authorized by a building permit shall not relieve the applicant or holder of the permit from the payment of other fees that are prescribed by law.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-157. Refunds.**

The building official may authorize refunding of any fee paid hereunder, which was erroneously paid or collected. The building official may authorize refunding of not more than 80 percent of the permit fee paid when no work has been done under a permit issued in accordance with this code. The building official may authorize refunding of not more than 80 percent of the plan review fee paid when an application for a permit for which a plan review fee has been paid is withdrawn or canceled before any plan reviewing is done. The building official shall not authorize refunding of any fee paid except on written application filed by the original permittee not later than 180 days after the date of fee payment.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-158. Inspections general.**

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 code or of other ordinances of the jurisdiction. Inspections presuming to give authority to violate or cancel the provisions of this code or of other ordinances of the jurisdiction shall not be valid. It shall be the duty of the permit applicant to cause the work to remain accessible and exposed for inspection purposes. Neither the building official nor the jurisdiction shall be liable for expense entailed in the removal or replacement of any material required to allow inspection.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-159. Preliminary inspection.**

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.

(Ord. No. 6399, § 1, 5-18-07)

## **Sec. 7-160. Required inspections.**

The building official, upon notification, shall make the inspections set forth in this code and the policies and procedures for required inspections.

- A. *Footing or foundation inspection.* Footing and foundation inspections shall be made after excavations for footings are complete and any required reinforcing steel is in place. For concrete foundations, any required forms shall be in place before inspection. Materials for the foundation shall be on the job, except where concrete is ready mixed in accordance with ASTM C 94; the concrete need not be on the job.

*Exception:* Foundations for one and two family dwellings and accessory structures less than ten feet in height.

- B. *Concrete slab or under-floor inspection.* Concrete slab and under-floor inspections shall be made after in-slab or under-floor reinforcing steel and building service equipment, conduit, piping accessories and other ancillary equipment items are in place, but before any concrete is placed or floor sheathing installed, including the sub floor.
- C. *Elevation/grading survey.* An "as built" grading survey and elevation certification for each individual lot shall be prepared by a registered land surveyor after utility installation, final grading and all associated storm water drainage improvements required for the site have been completed unless specifically waived by the building official and city engineer or their designated representatives, after, by visual inspection they have determined that proper drainage is being achieved. The survey shall include information necessary to substantiate conformance with the master drainage plan. Said survey shall be submitted and approved prior to the issuance of a certificate of occupancy.
- D. *Frame inspection.* Framing inspections shall be made after the roof deck or sheathing, all framing, fire blocking and bracing are in place and pipes, chimneys and vents to be concealed are complete and the rough electrical, plumbing, heating wires, pipes and ducts are approved.
- E. *Lath or gypsum board inspection.* Lath and gypsum board inspections shall be made after lathing and gypsum board, interior and exterior, is in place, but before any plastering is applied or before gypsum board joints and fasteners are taped and finished.

*Exceptions:*

1. Gypsum board that is not part of a fire-resistive assembly or a shear assembly.
  2. One and two family dwellings.
- F. *Fire-resistant penetrations.* Protection of joints and penetrations in fire-resistance-rated assemblies shall not be concealed from view until inspected and approved.
- G. *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 code and other laws that are enforced by the building official.

- H. *Special inspections.* Special inspections as required by this code and the building official.
- I. *Fire protection inspections.* Inspection of all fire protection systems.
- J. *Final inspection.* The final inspection shall be made after all work required by the building permit is completed.
- K. *Reinspections.* A reinspection fee may be assessed in accordance with the city's schedule of fees, for each inspection or reinspection when such portion of work for which inspection is called is not complete or when corrections called for are not made. This subsection is not to be interpreted as requiring reinspection fees the first time a job is rejected for failure to comply with the requirements of this code, but as controlling the practice of calling for inspection before the job is ready for such inspection or reinspection. For the purpose of this section, reinspection fees will be assessed on the second reinspection if corrections have not been made or work is not ready for inspection. Reinspection fees may be assessed for failure to comply with: the provision of section 7-136 Placement of permit, the approved plans are not available to the inspector, for failure to provide access on the date for which inspection is requested, or for deviating from plans requiring the approval of the building official. A temporary certificate of occupancy may be issued with reinspection fees outstanding; however, no permit will be finalized or receive a full certificate of occupancy without all associated fees being received.

(Ord. No. 6399, § 1, 5-18-07)

#### **Sec. 7-161. Inspection agencies.**

The building official is authorized to accept reports of approved inspection agencies, provided such agencies satisfy the requirements as to qualifications and reliability.

(Ord. No. 6399, § 1, 5-18-07)

#### **Sec. 7-162. Inspection requests.**

It shall be the duty of the holder of the permit or their duly authorized agent to notify the building official 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 code. Inspection requests shall be made in advance and in accordance with the most current written policies of the codes administration department.

(Ord. No. 6399, § 1, 5-18-07)

#### **Sec. 7-163. Approval required.**

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 code. Any portions that do not comply shall be corrected and such portion shall not be covered or concealed until authorized by the

building official.  
(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-164. Use and occupancy.**

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 code or of other ordinances of the city.  
(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-165. Change in uses.**

Changes in the character or use of an existing structure shall not be made except as specified in this code. 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 code.  
(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-166. Certificate issued.**

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 code or other laws that are enforced by the building official, the building official shall issue a certificate of occupancy.  
(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-167. Posting the certificate of occupancy.**

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.

*Exception:* R-1, R-2 and R-3 occupancies.  
(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-168. Temporary occupancy.**

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.  
(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-169. Revocation.**

The building official is authorized to, in writing, suspend or revoke a certificate of occupancy or completion

issued under the provisions of this code 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 code.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-170. Connection of service utilities.**

No person shall make new connections from any source of energy, fuel, or power to any building or system that is regulated by this code for which a permit is required, until released by the building official.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-171. Temporary connection.**

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.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-172. Authority to disconnect service utilities.**

The building official shall have the authority to authorize disconnection of utility service to the building, structure or system regulated by this code 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.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-173. Board of appeals.**

In order to hear and decide appeals of orders, decisions or determinations made by the building official and fire chief relative to the application and interpretation of this code, there shall be and is hereby created a board of appeals. The board of appeals shall consist of seven members and two alternates appointed by the mayor with the advice and consent of the council, to serve for a period of three years, unless removed sooner for cause. The board of appeals shall hold office at its pleasure. The board shall adopt appropriate rules of procedure for conducting its business.

- A. *Qualifications.* The members of the board of appeals shall consist of persons qualified by experience and training to pass on matters pertaining to building construction, skilled in diversified building or construction trades or professions such as architect, engineer, builder, general contractor, licensed master contractor and one layman to represent the general public. Employees of the city are prohibited from being members of the board.
- B. *Limitations on authority.* An application for appeal to the board of appeals shall be based on a claim that the true intent of this code or the rules legally adopted thereunder has been incorrectly interpreted, the provisions of this code do not fully apply, or an equally good or better form of construction is proposed. The board of appeals shall have no authority to waive requirements of

this code or the fire code. The board of appeals may recommend waivers of this code to the city council, which may waive requirements of this code.

- C. *Fee for appeal.* Any person who appeals an order, decision, or determination made by the building official or fire chief, relative to the application and interpretation of this code, shall file an application and pay a fee in accordance with the city fee schedule.

(Ord. No. 6399, § 1, 5-18-07)

#### **Sec. 7-174. Unlawful acts.**

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

(Ord. No. 6399, § 1, 5-18-07)

#### **Sec. 7-175. Notice of violation.**

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, demolition or occupancy of a building or structure in violation of the provisions of this code, or in violation of a permit or certificate issued under the provisions of this code. Such order shall direct the discontinuance of the illegal action or condition and the abatement of the violation.

(Ord. No. 6399, § 1, 5-18-07)

#### **Sec. 7-176. Prosecution of violation.**

If the notice of violation is not complied with within the established abatement period, the code official is authorized to request the city law department 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 code or of the order or direction made pursuant thereto.

(Ord. No. 6399, § 1, 5-18-07)

#### **Sec. 7-177. Violation penalties.**

Any person who shall violate a provision of this code or fail to comply therewith or with any of the requirements of this code or who erects, constructs, alters, or repairs a building or structure in violation of the approved construction documents or directive of the building official or fire chief, or acts in violation of a permit or certificate issued under the provisions of this code, 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.

(Ord. No. 6399, § 1, 5-18-07)

#### **Sec. 7-178. Stop work order.**

Whenever the building official finds any work regulated by this code being performed in a manner contrary to

the provisions of this code or other city ordinances or in a dangerous or unsafe manner, the building official is authorized to issue a stop work order.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-179. Issuance of stop work order.**

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 or posted upon the property. 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 code.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-180. Unlawful continuance.**

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.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-181. Unsafe structures and equipment conditions.**

Structures or existing equipment that are or hereafter become unsafe, unsanitary or deficient because of inadequate means of egress facilities, inadequate light and ventilation, or which constitute a fire hazard, or are otherwise dangerous to human life or the public welfare, or which involve illegal or improper occupancy or inadequate maintenance, shall be deemed an unsafe condition. Unsafe structures shall be taken down and removed or made safe, as the building official deems necessary and as provided for in this section. A vacant structure that is not secured against entry shall be deemed unsafe.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-182. Record.**

The building official shall cause a report to be filed on an unsafe condition. The report shall state the occupancy of the structure and the nature of the unsafe condition.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-183. Notice.**

If an unsafe condition is found, the building official shall serve on the owner, agent or person in control of the structure, a written notice that describes the condition deemed unsafe and specifies the required repairs or improvements to be made to abate the unsafe condition, or that requires the unsafe structure to be demolished within a stipulated time. Such notice shall require the person thus notified to declare immediately to the building official acceptance or rejection of the terms of the order.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-184. Method of service.**

Such notice shall be deemed properly served if a copy thereof is (a) delivered to the owner personally; (b) sent by certified or registered mail addressed to the owner at the last known address with the return receipt requested; or (c) delivered in any other manner as prescribed by local law or posted upon the property. If the certified or registered letter is returned showing that the letter was not delivered, a copy thereof shall be posted in a conspicuous place in or about the structure affected by such notice. Service of such notice in the foregoing manner upon the owner's agent or upon the person responsible for the structure shall constitute service of notice upon the owner.

(Ord. No. 6399, § 1, 5-18-07)

#### **Sec. 7-185. Restoration.**

The structure or equipment determined to be unsafe by the building official is permitted to be restored to a safe condition. To the extent that repairs, alterations, or additions are made or a change of occupancy occurs during the restoration of the structure, such repairs, alterations, additions, or change of occupancy shall comply with the requirements of this code.

(Ord. No. 6399, § 1, 5-18-07)

#### **Secs. 7-186--7-199. Reserved.**

## **ARTICLE II.**

### **BUILDING CODE**

#### **Sec. 7-200. International Building Code adopted.**

The 2006 edition of the International Building Code, including Appendices C and I, and its most current errata as published by the International Code Council, is hereby adopted and incorporated in this chapter as fully as if set forth herein, excepting only such parts or portions thereof as are specifically added or amended.

(Ord. No. 6399, § 1, 5-18-07)

#### **Sec. 7-201. International Building Code deleted; Chapter 1. Administration.**

Chapter 1, Administration is hereby deleted. See article I of this chapter.

(Ord. No. 6399, § 1, 5-18-07)

#### **Sec. 7-202. International Building Code amended; Section 405.1. General.**

*Section 405.1* is hereby amended to read as follows: Exception 6. Structures as defined in the LSCO Chapter 7, Section 7-1300 Building/Fire Code.

(Ord. No. 6399, § 1, 5-18-07)

#### **Sec. 7-203. International Building Code amended; Section 501.2. Premises identification.**

*Section 501.2* is hereby amended to read as follows: Approved numbers or addresses shall be provided for new buildings in such a position as to be clearly visible and legible from the street or roadway fronting the property.

In multi-tenant commercial buildings where tenants have multiple entrances located on different sides of the building, each door shall be addressed. Letters or numbers shall be a minimum 4 inches (76 mm) in height and stroke of minimum 0.5 inch (12.7 mm) of a contrasting color to the background itself.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-204. International Building Code amended; Section 901.5 Acceptance test.**

*Section 901.5* is hereby amended to read as follows: Fire Detection and alarm systems, fire extinguishing systems, fire hydrant systems, fire standpipe systems, fire pump systems, private fire service main and all other fire protection systems and appurtenances thereto shall be subject to acceptance test(s) as contained in the installation standards and as approved by the code official. The code official shall be notified 48 hours before any required acceptance testing.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-205. International Building Code amended; Section 903.2.1.3. Group A-3.**

*Section 903.2.1.3* is hereby amended to read as follows: An automatic sprinkler system shall be provided throughout a fire area containing a Group A-3 occupancy where one of the following conditions exists:

1. The fire area exceeds 12,000 square feet (1,115m<sup>2</sup>).
2. The fire area has an occupant load of 300 or more.
3. The fire area is located on a floor other than the level of exit discharge.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-206. International Building Code amended; Section 903.2.1.4. Group A-4.**

*Section 903.2.1.4* is hereby amended to read as follows: An automatic sprinkler system shall be provided throughout a fire area containing a Group A-4 occupancy where one of the following conditions exists:

1. The fire area exceeds 12,000 square feet (1,115m<sup>2</sup>).
2. The fire area has an occupant load of 300 or more.
3. The fire area is located on a floor other than the level of exit discharge.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-207. International Building Code amended; Section 903.2.2 Group E.**

*Section 903.2.2* is hereby amended to read as follows: An automatic sprinkler system shall be provided for Group E occupancies as follows:

1. Throughout all group E fire areas greater than 20,000 square feet (1858m<sup>2</sup>) in area.
2. Throughout every portion of educational buildings below the level of exit discharge.

3. Where a Group E fire area is located more than two stories above grade.

*Exception:* An automatic sprinkler system is not required in any fire area or area below the level of exit discharge where every classroom throughout the building has a least one exterior exit door at ground level. (Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-208. International Building Code amended; Section 903.2.3. Group F-1.**

*Section 903.2.3* is hereby amended as follows: An automatic sprinkler system shall be provided throughout all buildings containing a Group F-1 occupancy where one of the following conditions exists: (1) Where a Group F-1 fire area exceeds 12,000 square feet (1,115m<sup>2</sup>); (2) Where a Group F-1 fire area is located more than two stories above grade; or (3) Where the combined area of all Group F-1 fire area on all floors, including any mezzanines, exceeds 24,000 square feet (2,230 m<sup>2</sup>) (Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-209. International Building Code amended; Section 903.2.6. Group M.**

*Section 903.2.6* is hereby amended as follows: An automatic sprinkler system shall be provided throughout buildings containing a Group M occupancy where one of the following conditions exists: (1) Where a group M fire area exceeds 12,000 square feet (1,115m<sup>2</sup>); (2) Where a Group M fire area is located more than two stories above grade; or (3) Where the combined fire area of all Group M fire areas on all floors, including any mezzanines, exceeds 24,000 square feet (2,230m<sup>2</sup>). (Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-210. International Building Code amended; Section 903.2.8. Group S-1.**

*Section 903.2.8* is hereby amended to read as follows: An automatic sprinkler system shall be provided throughout all buildings containing a group S-1 occupancy where one of the following conditions exists: (1) Where a group S-1 fire area exceeds 12,000 square feet (1,115m<sup>2</sup>); (2) A group S-1 fire area is located more than two stories above grade; or (3) The combined area of all group S-1 fire areas on all floors, including any mezzanines, exceeds 24,000 square feet (2,230m<sup>2</sup>). (Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-211. International Building Code amended; Section 903.2.8.1. Repair garages.**

*Section 903.2.8.1* is hereby amended to read as follows: An automatic sprinkler system shall be provided throughout all buildings used as repair garages in accordance with section 406, as shown: (1) Buildings two or more stories in height, including basements, with a fire area containing a repair garage exceeding 3,000 square feet; (2) Buildings with a fire area containing a repair garage exceeding 3,000 square feet; (3) Buildings with a repair garage in the basement. (Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-212 International Building Code amended; Section 903.2.10.3. Building more than two stories in height.**

*Section 903.2.10.3* is hereby amended to read as follows: An automatic sprinkler system shall be installed throughout buildings greater than two stories above the lowest level of fire department vehicle access.

*Exceptions:* Airports control towers, Open parking garages.  
(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-213. International Building Code amended; Section 903.3.7. Fire department connection.**

*Section 903.3.7* is hereby added to read as follows: The location of fire department connections shall be approved by the fire code official. Connections shall be 4 inch Storz type fittings and located within 100 feet of a fire hydrant, or as approved by the fire code official.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-214. International Building Code amended; Section 903.4.2. Alarms.**

*Section 903.4.2* is hereby amended to read as follows: Approved audible and visual devices shall be connected to every automatic sprinkler system. Such sprinkler water-flow alarm devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. Listed alarm notification devices shall be provided on the exterior and interior of the building in an approved location. Actuation of the automatic sprinkler system shall actuate the building fire alarm system.

*Exception:* Buildings protected by sprinkler heads connected to the domestic water service per Section 903.3.5.1

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-215. International Building Code amended; Section 905.1. General.**

*Section 905.1* is hereby amended to read as follows: Standpipe systems shall be provided in new buildings and structures in accordance with this section and as required by the fire code official. Fire hose threads used in connection with standpipe systems shall comply with NFPA 1963 or as otherwise approved and shall be compatible with fire department hose threads. The location of fire department hose connections shall be approved. In buildings used for high-piled combustible storage, fire protection shall be in accordance with Chapter 23 of the International Fire Code.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-216. International Building Code amended; Section 905.3. Required installations.**

*Section 905.3* is hereby amended to read as follows: Standpipe systems shall be installed where required by section 905.3.1 through 905.3.6 and in the locations indicated in sections 905.4, 905.5 and 905.6. Standpipe systems are permitted to be combined with automatic sprinkler systems.

*Exception:* Standpipe systems are not required in group R-3 occupancies.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-217. International Building Code amended; Section 905.3.1. Building height.**

*Section 905.3.1* is hereby amended to read as follows: Class I standpipe systems shall be installed throughout buildings where the floor level of the highest story is located more than two stories above the lowest level of the fire department vehicle access, or where the floor level of the lowest story is located more than two stories below the highest level of fire department vehicle access.

*Exceptions:*

1. Class I standpipes are allowed in buildings equipped throughout with an automatic sprinkler system in accordance with section 903.3.1 or 903.3.1.2.
2. Class I manual standpipes are allowed in open parking garages where the highest floor is located not more than 150 feet (4,4720 mm) above the lowest level of fire department vehicle access.
3. Class I manual dry standpipes are allowed in open parking garages that are subject to freezing temperatures, provided that the hose connections are located as required for Class II standpipes in accordance with section 905.5.
4. Class I standpipes are allowed in basements equipped throughout with an automatic sprinkler system.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-218. International Building Code deleted; Section 905.3.4.1. Hose and cabinet.**

*Section 905.3.4.1* is hereby deleted.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-219. International Building Code amended; Section 905.3.5. Underground buildings.**

*Section 905.3.5* is hereby amended to read as follows: Subterranean spaces developed by the extraction of subsurface material shall be regulated by the city subterranean space code (see article 13 of this chapter).

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-220. International Building Code deleted; Section 905.5. Location of class II standpipe hose connections.**

*Section 905.5* is hereby deleted.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-221. International Building Code deleted; Section 905.5.1. Groups A-1 and A-2.**

*Section 905.5.1* is hereby deleted.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-222. International Building Code deleted; Section 905.5.2. Protection.**

*Section 905.5.2* is hereby deleted.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-223. International Building Code deleted; Section 905.5.3. Class II system 1-inch hose.**

*Section 905.5.3* is hereby deleted.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-224. International Building Code amended; Section 907.2.7.1. Occupant notification.**

*Section 907.2.7.1* is hereby amended to read as follows: During times that the building is occupied, the initiation to activate the alarm notification appliances when an alarm signal is activated at a constantly attended location from which evacuation instructions shall be initiated over an emergency voice/alarm communication system installed in accordance with 907.2.12.2 and only when approved by the fire code official.

The emergency voice/alarm communication system shall be allowed to be used for other announcements, provided the manual fire alarm use take precedence over any other use.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-225. International Building Code amended; Section 907.2.9. Group R-2.**

*Section 907.2.9* is hereby amended to read as follows: A manual fire alarm system shall be installed in group R-2 occupancies where:

1. Any dwelling unit or sleeping unit is located two or more stories above the lowest level of exit discharge.
2. Any dwelling unit or sleeping unit is located more than one story below the highest level of exit serving the dwelling unit or sleeping unit, or
3. The building contains more than 16 dwelling units or sleeping units.

*Exceptions:*

1. A fire alarm system is not required in buildings not more than two stories in height where all dwelling units or sleeping units and contiguous attic and crawl spaces are separated from each other and public or common areas by at least 1-hour fire partitions and each dwelling unit or sleeping unit has an exit directly to a public-way, exit court or yard.
2. Manual fire alarm boxes are not required throughout the building when the following conditions are met:
  - 2.1. The building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2;
  - 2.2. The notification appliances will activate upon sprinkler water flow; and

3. A fire alarm system is not required in buildings that do not have interior corridors serving dwelling units and are protected by an approved automatic sprinkler system installed in accordance with Sections 903.3.1.1 or 903.3.1.2, provided that dwelling units either have a means of egress door opening directly to an exterior exit access that leads directly to the exits or are served by open-ended corridors designed in accordance with Section 1022.6, Exception 4.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-226. International Building Code amended; Section 910.4. Mechanical smoke exhaust.**

*Section 910.4* is hereby amended to read as follows: Where approved by the fire code official, engineered mechanical smoke exhaust shall be an acceptable alternative to smoke and heat vents. The request for the alternate method shall be presented in such detail and with such supporting information as may be required by the fire code official or the building official to permit their evaluation of the effect of the alternate design.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-227. International Building Code amended; Section 1007.6.2. Separation.**

*Section 1007.6.2* is hereby amended to read as follows: Each area of refuge shall be separated from the remainder of the story by a smoke barrier complying with Section 709 or a horizontal exit complying with Section 1021. Each area of refuge shall be designed to minimize the intrusion of smoke.

*Exceptions:*

1. Area of refuge located within a vertical exit enclosure.
2. Areas of refuge where the area of refuge and areas served by the area of refuge are equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-228. International Building Code amended; Section 1008.1.8.3. Locks and latches.**

Section 1008.1.8.3 is hereby amended to read as follows: Egress doors shall be readily openable from the egress side without the use of a key or special knowledge or effort.

*Exceptions:*

1. Places of detention or restraint.
2. Where egress doors are used in pairs, approved automatic flush bolts shall be permitted to be used, provided that the door leaf having the automatic flush bolts has no doorknob or surface-mounted hardware. The unlatching of any leaf shall not require more than one operation.
3. Doors from individual dwelling units and guestrooms of Group R occupancies having an occupant load of 10 or less are permitted to be equipped with a night latch, dead bolt or security chain, provided such devices are openable from the inside without the use of a key or tool.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-229. International Building Code amended; Section 1013.1. Guards.**

*Section 1013.1* is hereby amended to read as follows: Guards shall be located along open-sided walking surfaces, mezzanines, industrial equipment platforms, stairways, ramps and landings which are located more than 30 inches (762 mm) above the floor or grade below. Guards shall be adequate in strength and attachment in accordance with section 1607.7. Guards shall also be located along glazed sides of stairways, ramps and landings that are located more than 30 inches (762 mm) above the floor or grade below where the glazing provided does not meet the strength and attachment requirements in section 1607.7. In addition, guards are required at retaining walls over 30 inches above grade when walking surfaces are within ten feet of the high side of the retaining wall.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-230. International Building Code amended; Table 1505.1.**

*Table 1505.1* is hereby amended by deleting footnotes a, b, & c from the table.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-231. International Building Code amended; Section 1505.5. Non-classified roofing.**

*Section 1505.5* is amended to read as follows: Non-classified roofing shall not be installed unless utilized for the repair of ten percent or less of the total roof covering in any three-year period.

*Exceptions:*

1. Any roof replaced due to a covered insured loss prior to July 5, 2006 may be replaced with the same class and type of roofing material which were on the roof prior to the loss.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-232. International Building Code amended: Section 1510.1. General.**

*Section 1510.1* is hereby amended to read as follows: Materials and methods of application used for re-covering or replacing and existing roof covering shall comply with the requirements of chapter 15 as amended.

Re-roofing includes any repairs of more than 10% or less of the total roof covering in any three year period. A repair of 10% or less of the total roof covering in any three year period may utilize approved roofing materials comparable to the existing roofing materials.

*Exceptions:*

1. Re-roofing shall not be required to meet the minimum design slope requirement of one-quarter unit vertical in 12 units horizontal (2-percent slope) in Section 1507 for roofs that provide positive roof drainage.
2. Any roof replaced due to a covered insured loss prior to July 5, 2006 may be replaced with the same class and type of roofing material which were on the roof prior to the loss.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-233. International Building Code amended; Section 1803.3.1. Minimum standards.**

*Section 1803.3.1* is added to read as follows:

- A. All drainage facilities shall be designed to carry waters to the nearest drainage way, storm sewer conveyance, or other approved poi not collection and conveyance. Erosion of ground in the area of discharge shall be prevented by installation of erosive control devices. Unless specified drainage ways and swales are specifically approved by the building official, abutting property lines between structures shall be designed to function as drainage ways. The toe of slopes shall set back from the property line a minimum of one foot. The area surrounding the building foundation shall have a drainage gradient as provided for in the International Building Code, as amended from time to time with draining gradient thereafter of not less than two percent toward approved drainage facilities unless waived by the building official.
- B. *Prohibited conduct:* No person shall allow or cause any:
  - (1) Obstruction to be created, installed or maintained within any drainage way, detention facility, or engineered swale which will create ponding on adjacent property, divert water onto the adjoining property, or impede drainage. Fences may be erected in such areas provided they do not unnecessarily restrict the flow of water.
  - (2) Water form intermittent sources such as discharges from sump pumps, downspouts, foundation drains, swimming pools, swimming pool backwashes, or other similar sources excluding lawn sprinklers to be discharged closer than five feet from any adjoining property line.
- C. *Enforcement:* Where such conditions exist and the code official has given written notice of the violation, the owner of the property shall take appropriate measures to eliminate the problems caused on the adjacent property, within the time period stated on the notice, and failure to do so shall be a violation of this chapter.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-234. International Building Code amended; Section 1807.2.1.1. Interior underslab drains.**

*Section 1807.2.1.1* is hereby added to read as follows: Where foundations retain earth and enclose habitable or usable space located below grade, drains shall be provided below the floor slab. Drainage tiles, perforated pipe or other approved systems or materials shall be installed at or below the area(s) to be protected; shall be placed with positive or neutral slope to minimize the accumulation of deposits in the drainage system; and shall discharge by gravity or mechanical means to an approved storm water drainage system. The under-slab drainage system shall be installed around the inner perimeter of the area(s) to be protected, or, in a manner that will provide adequate drainage for all area(s) to be protected and is approved by the building official. Interior underslab drains installed on uncompacted fill material shall be supported by mechanical means which are adequately tied into the concrete slab to ensure proper drainage throughout the underslab drain(s).

(Ord. No. 6399, § 1, 5-18-07)

**Secs. 7-235--7-299. Reserved.**

### **ARTICLE III.**

#### **ELECTRICAL CODE**

**Sec. 7-300. National Electrical Code adopted.**

The 2005 edition of the National Electrical Code as published by the National Fire Protection Association (NFPA No. 70-2005) is hereby adopted and incorporated in this chapter as fully as if set forth herein, excepting only such parts or portions thereof as are specifically added or amended.  
(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-301. National Electrical Code amended; Section 210.12. Arc-fault circuit interrupter protection.**

*Section 210.12* is hereby amended to read as follows;

(A) *Definition:* Arc-fault circuit interrupter. An arc-fault circuit interrupter is a device intended to provide protection from the effects of arc-faults by recognizing characteristics unique to arcing and by functioning to de-energize the circuit when an arc-faults is detected.

(B) *Dwelling unit bedrooms.* All 120 volt, single-phase, 15- and 20- ampere branch circuits supplying outlets installed in dwelling unit bedrooms shall be protected by a listed arc-fault circuit interrupter.

*FPN:* For information of types of arc-fault circuit interrupters, see UL 1969-1999, Standard for Arc-Fault circuit interrupter.

*Exception:* The location of the arc-fault circuit interrupter shall be permitted to be at other than the origination of the branch circuit in compliance with (a) and (b).

(a) The arc-fault circuit interrupter installed within 1.8m (6 feet) of the branch circuit overcurrent device as measured along the branch circuit conductors.

(b) The circuit conductors between the branch circuit overcurrent device and the arc-fault circuit interrupter shall be installed in a metal raceway or a cable with metallic sheath.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-302. National Electrical Code amended; Section 230.70(A)(1). Location.**

*Section 230.70(A)(1)* is hereby amended to read as follows: The service disconnecting means shall be installed at a readily accessible location either outside of a building or inside nearest the point of entrance of the service conductors. When service entrance conductors are more than 10 feet in length from the point of entry to the service panel, a separate means of disconnect must be installed at the service cable entrance to the building or structure.

(Ord. No. 6399, § 1, 5-18-07)

**Secs. 7-303--7-399. Reserved.**

## **ARTICLE IV.**

### **PLUMBING CODE**

#### **Sec. 7-400. International Plumbing Code adopted.**

The 2006 edition of the International Plumbing Code, including Appendix F, and its most current errata as published by the International Code Council is hereby adopted and incorporated in this chapter as fully as if set forth herein, excepting only such parts or portions thereof as are specifically added or amended.  
(Ord. No. 6399, § 1, 5-18-07)

#### **Sec. 7-401. International Plumbing Code deleted; Chapter 1. Administration.**

*Chapter 1, Administration* is hereby deleted. See Article I of this chapter.  
(Ord. No. 6399, § 1, 5-18-07)

#### **Sec. 7-402. International Plumbing Code amended; Section 305.6.1. Sewer depth.**

Section 305.6.1 is hereby amended to read as follows: Building sewers connected to public and private sewage disposal systems shall be installed a minimum of twelve (12) inches below grade.  
(Ord. No. 6399, § 1, 5-18-07)

#### **Sec. 7-403. International Plumbing Code amended; Section 312.9. Inspection and testing of backflow prevention assemblies.**

*Section 312.9* is hereby amended to read as follows: Inspection and testing of backflow prevention assemblies shall be in accordance with the policies prescribed by the Water Utilities Department of the City of Lee's Summit, MO.  
(Ord. No. 6399, § 1, 5-18-07)

#### **Sec. 7-404. International Plumbing Code amended; Section Table 403.1.**

*Table 403.1* is hereby amended to read as follows: Footnote e - A service sink may not be required, at the discretion of the building official, if deemed unnecessary due to the size, type and finish of the space.  
(Ord. No. 6399, § 1, 5-18-07)

#### **Sec. 7-405. International Plumbing Code amended; Section 410.1. Approval.**

*Section 410.1* is hereby amended to read as follows: Drinking fountains shall conform to ASME A112.19.1M, ASMEA112.19.2M or ASMEA112.19.9M, and water coolers shall conform to ARI 1010. Drinking fountains and water coolers shall conform to NSF 61, Section 9. Where water is served in restaurants, drinking fountains shall not be required. In other occupancies, where drinking fountains are required, bottled water dispensers or break rooms with a kitchen sink shall be permitted to be substituted for the required drinking fountains.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-406. International Plumbing Code amended; Section 604.9. Water hammer.**

*Section 604.9* is hereby amended to read as follows: The flow velocity of the water distribution system shall be controlled to reduce the possibility of water hammer. A water-hammer arrestor shall be installed where quick-closing valves are utilized, unless otherwise approved. Water-hammers arrestors shall be installed in accordance with the manufacturer's specifications. Water-hammer arrestors shall conform to ASSE 1010.

*Exception:* Each water supply line to a fixture, except tank type water closets, may terminate with an air chamber. All air chambers shall be placed in a vertical position in a tee opening. Each air chamber shall be not less than 12 inches in length and of a diameter not less than the branch it serves.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-407. International Plumbing Code amended; Section 715.1. Sewage backflow.**

*Section 715.1* is hereby deleted.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-408. International Plumbing Code amended; Section 904.1. Roof extension.**

*Section 904.1* is hereby amended to read as follows: All open vent pipes that extend through a roof shall be terminated at least 6 inches above the roof, except that where a roof is to be used for any purpose other than weather protection, the vent extensions shall be run at least 7 feet above the roof.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-409. International Plumbing Code amended; Section 917.1. General.**

*Section 917.1* is hereby amended to read as follows: Individual vents, branch vents, circuit vents and stack vents shall be permitted to terminate with a connection to an air admittance valve only when approved by the Administrative Authority.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-410. International Plumbing Code amended; Section 1002.4. Trap seals.**

Section 1002.4 is hereby amended to read as follows: Each fixture trap shall have a liquid seal of not less than 2 inches (51mm) and not more than 4 inches (102mm), or deeper for special designs relating to accessible fixtures. Where a trap seal is subject to loss by evaporation, a deep-seal trap consisting of a 4-inch (102mm) seal or a trap seal primer valve shall be installed. A trap seal primer valve shall conform to ASSE 1018 or ASSE 1044.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-411. International Plumbing Code amended; Section 1101.3. Prohibited drainage.**

*Section 1101.3* is hereby amended to read as follows: Storm water shall not be drained into sewers intended for sewage only. Sanitary sewer systems shall be designed, built and maintained in such a manner to prevent all

storm or ground water from draining, discharging or entering into the sanitary sewer system. Connection of sump pumps, foundation drains, yard drains, gutter downspouts and any other storm water drainage receptacle(s) or system(s) are specifically prohibited from being connected to the sanitary sewer system. (Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-412. International Plumbing Code amended; Section 1113.1.1. Pump capacity and head.**

*Section 1113.1.1* is hereby amended to read as follows; The sump pump shall be of a capacity and head appropriate to anticipated use requirements. Sumps receiving storm water from any exposed exterior drain(s) or opening(s) shall be provided with back-up system(s) capable of assuring proper sump operation in case of power failure.

(Ord. No. 6399, § 1, 5-18-07)

**Secs. 7-413--7-499. Reserved.**

**ARTICLE V.**

**MECHANICAL CODE**

**Sec. 7-500. International Mechanical Code adopted.**

The 2006 edition of the International Mechanical Code, and its most current errata as published by the International Code Council is hereby adopted and incorporated in this chapter as fully as if set forth herein, excepting only such parts or portions thereof as are specifically added or amended.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-501. International Mechanical Code deleted; Chapter 1. Administration.**

*Chapter 1, Administration* is hereby deleted. See Article I of this chapter.

(Ord. No. 6399, § 1, 5-18-07)

**Secs. 7-502--7-599. Reserved.**

**ARTICLE VI.**

**FUEL GAS CODE**

**Sec. 7-600. International Fuel Gas Code adopted.**

The 2006 edition of the International Fuel Gas Code, and its most current errata as published by the International Code Council is hereby adopted and incorporated in this chapter as fully as if set forth herein, excepting only such parts or portions thereof as are specifically added or amended.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-601. International Fuel Gas Code deleted; Chapter 1. Administration.**

*Chapter 1, Administration* is hereby deleted (see article I of this chapter).  
(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-602. Interantional Fuel Gas Code amended; Section 403.4.3. Copper and brass.**

Section 403.4.3 is hereby amended to read as follows; Copper and brass tubing shall not be utilized to distribute fuel gas.  
(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-603. International Fuel Gas Code amended; Section 403.4.4. Aluminum.**

*Section 403.4.4* is hereby amended to read as follows; Aluminum or aluminum alloy tubing shall not be utilized for the distribution of fuel gas.  
(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-604. International Fuel Gas Code amended, Section 403.5.1. Steel tubing.**

*Section 403.5.1* is hereby amended to read as follows; Steel tubing shall not be utilized to distribute natural gas nor shall it be utilized to distribute any other fuel gas within a building or structure.  
(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-605. International Fuel Gas Code amended, Section 403.5.2. Copper and brass tubing.**

*Section 403.5.2* is hereby amended to read as follows: Copper and brass tubing shall not be utilized to distribute natural gas nor shall it be utilized to distribute any other fuel gas within a building or structure.  
(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-606. International Fuel Gas Code amended, Section 403.5.3. Aluminum tubing.**

*Section 403.5.3* is hereby amended to read as follows; Aluminum tubing shall not be utilized to distribute natural gas nor shall it be utilized to distribute any other fuel gas within a building or structure.  
(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-608. International Fuel Gas Code amended, Section 406.4.1. Test pressure.**

*Section 406.4.1* is hereby amended to read as follows: The test pressure to be used shall be not less than one and one-half times the proposed maximum working pressure, but not less than 10 psig (68.9 kPa) irrespective of design pressure. For welded piping, and for piping carrying gas at pressures in excess of fourteen (14) inches water column pressure, the test pressure shall not be less than 60 psig. Where the test pressure exceeds 125 psig (862 kPa), the test pressure shall not exceed a value that produces a hoop stress in the piping greater than 50 percent of the specified minimum yield strength of the pipe.  
(Ord. No. 6399, § 1, 5-18-07)

**Secs. 7-609--7-699. Reserved.**

**ARTICLE VII.**

## **PRIVATE SEWAGE DISPOSAL**

### **Sec. 7-700. Issuance of permits.**

The private sewage disposal system shall be in accordance with Chapter 32 of the Lee's Summit Code of Ordinances and requirements of Jackson County, Missouri. Building permits for structures utilizing private sewage disposal shall not be issued until permitted by the Jackson County, Missouri Department of Public Works.

(Ord. No. 6399, § 1, 5-18-07)

### **Secs. 7-701--7-799. Reserved.**

## **ARTICLE VIII.**

### **ENERGY CONSERVATION CODE**

#### **Sec. 7-800. Energy conservation code.**

This article shall be known as the city's energy conservation code and can be cited as such.

(Ord. No. 6399, § 1, 5-18-07)

#### **Sec. 7-801. Scope.**

This article sets forth energy efficiency related requirements for the design and construction of buildings regulated by this chapter.

*Exception:* Portions of the building thermal envelope that do not enclose conditioned space.

(Ord. No. 6399, § 1, 5-18-07)

#### **Sec. 7-802. Residential occupancies.**

The minimum required R-value for each element of the building thermal envelope shall be in accordance with the following:

- (a) Wall assemblies forming portions of a building envelope shall meet or exceed an R factor rating of R-13. This requirement does not apply to doors, windows, or other openings or approved penetrations nor does it apply to basement concrete walls when the basement is not finished as a habitable space.
- (b) Floor assemblies forming portions of a building envelope shall meet or exceed an R factor rating of 19. Garage ceilings with living area above shall comply with this requirement.

*Exception:* Concrete floors in contact with the earth need not be insulated.

- (c) Roof assemblies forming portions of a building envelope shall meet or exceed an R factor rating

of 19. This requirement does not apply to skylights or other approved penetrations.

- (d) Ceilings forming portions of a building envelope shall meet or exceed an R factor rating of 30 at the time of installation.
- (e) *Duct insulation.* All portions of the air distribution system shall be installed in accordance with Section M1601 and be insulated to an installed R-5 when system components are located within the building but outside of conditioned space, and R-8 when located outside of the building. When located within a building envelope assembly, at least R-8 shall be applied between the duct and that portion of the assembly furthest from conditioned space.

(Ord. No. 6399, § 1, 5-18-07)

### **Sec. 7-803. Nonresidential occupancies.**

The minimum required R-value for each element of the building thermal envelope shall be in accordance with the following:

*Exception:* The building official may approve a decreased R-value for building exterior walls provided the space is normally not occupied by employees and is associated with storage/warehouse or manufacturing

- (a) Wall assemblies forming portions of a building envelope shall meet or exceed an R factor rating of 11. This requirement does not apply to doors, windows or other openings or approved penetrations nor does it apply to unfinished basement concrete walls.
- (b) Floor assemblies forming portions of a building envelope shall meet or exceed an R factor rating of 19.

*Exception:* Concrete floors in contact with the earth need not be insulated.

- (c) Roof assemblies forming portions of a building envelope shall meet or exceed an R factor 19.

(Ord. No. 6399, § 1, 5-18-07)

### **Sec. 7-804. Materials and equipment.**

Materials and equipment shall be identified in a manner that will allow a determination of their compliance with this chapter. Materials and equipment shall be installed in accordance with the manufacturer's installation instructions.

*Insulation.* The thermal resistance (R-value) shall be indicated on all insulation and the insulation installed such that the R-value can be verified. Where blown-in or sprayed insulation is applied the installer shall provide a certification of the installed density and R-value if requested by the building official.

(Ord. No. 6399, § 1, 5-18-07)

### **Sec. 7-805. Definitions.**

For the purpose of this article, certain terms are defined as follows:

*Building envelope:* The elements of a building, which enclose conditioned spaces through which thermal energy may be transferred to or from the exterior.

*Floor assembly:* A floor assembly shall be considered as all components of any floor forming a portion of the building envelope through which heat flows, thereby creating a building transmission heat loss or gain.

*R-factor:* A measure of ability to retard heat flow, R is the numerical reciprocal of U, thus  $R=1/U$ . R is used in combination with numerals to designate thermal resistance units.

*Roof assembly:* A roof assembly shall be considered as all components of the roof or ceiling envelope through which heat flows, thereby creating a building transmission heat loss or gain, where such assembly is exposed to out door air and encloses a heated or mechanically cooled space.

*Thermal transmittance (J):* Coefficient of heat transmission expressed in units of BTU per hour square foot per degree F. The J value applies to combinations of different materials used in series along the heat flow path.

*Wall assembly:* A wall assembly shall be considered as all components of any wall forming a portion of the building envelope through which heat flows, thereby creating a building transmission heat loss or gain.  
(Ord. No. 6399, § 1, 5-18-07)

**Secs. 7-806--7-899. Reserved.**

## **ARTICLE IX.**

### **RESIDENTIAL CODE**

**Sec. 7-900. International Residential Code adopted.**

The 2006 edition of the International Residential Code, including appendices E, H, and J, and its most current errata as published by the International Code Council is hereby adopted and incorporated in this chapter as fully as if set forth herein, excepting only such parts or portions thereof as are specifically added or amended.  
(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-901. International Residential Code deleted; Chapter 1. Administration.**

*Chapter 1, entitled Administration* is hereby deleted (see article I of this chapter).  
(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-902. International Residential Code data entry; Table R301.2(1). Table R301.2(1) Climatic and geographic design criteria.**

Table R301.2(1) shall include the following data:

Ground Snow Load: 20 pounds per square foot.

Wind Speed: 90 miles per hour.

Seismic Design Category: A.

Weathering: Severe.

Frost Line Depth: 36 inches.

Termite: Moderate to heavy.

Decay: Slight to moderate.

Winter Design Temperature: Six degrees Fahrenheit.

Ice Shield Underlayment Required: No.

Flood Hazards: See Article 6, Division 2 of the Unified Development Ordinance.

Air Freezing Index: 927.

Mean Annual Temperature: 55.5 degrees Fahrenheit.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-903. International Residential Code amended; Section R301.5.**

Table R301.5

**MINIMUM UNIFORMLY DISTRIBUTED LIVE LOADS**

(in pounds per square foot)

| USE  | LIVE LOAD        |
|--|------------------|
| Attics with limited storage <sup>b,g,h</sup> | 20               |
| Attics without storage <sup>b</sup>          | 10               |
| Decks <sup>c</sup>                           | 40               |
| Exterior Balconies                           | 60               |
| Fire Escapes                                 | 40               |
| Guardrails and handrails <sup>d</sup>        | 200 <sup>i</sup> |
| Guardrails in-fill components <sup>i</sup>   | 50 <sup>i</sup>  |
| Passenger vehicle garages <sup>a</sup>       | 50 <sup>a</sup>  |
| Rooms other than sleeping rooms              | 40               |
| Sleeping rooms                               | 30               |
| Stairs                                       | 40 <sup>c</sup>  |

For SI: 1 pound per square foot = 0.0479kPa, 1 square inch = 645 mm<sup>2</sup>, 1 pound = 4.45 N.

- a. Elevated garage floors shall be capable of supporting a 2,000-pound load applied over a 20 square-inch area.

- b. Attics without storage are those attic areas that are not accessed by a pull-down stair, or a scuttle with a dimension of less than or equal to 30 inches high by 24 inches wide.
- c. Individual stair treads shall be designed for the uniformly distributed live load or a 300 pound concentrated load acting over an area of 4 square inches, whichever produces the greater stresses.
- d. A single concentrated load applied in any direction at any point along the top.
- e. See Section R502.2.1 for decks attached to exterior walls.
- f. Guard in-fill components (all those except the handrail), balusters and panel fillers shall be designed to withstand a horizontally applied normal load of 50 pounds on an area equal to 1 square foot. This load need not be assumed to act concurrently with any other live load requirement.
- g. For attics with limited storage and constructed with trusses, this live load need be applied only to those portions of the bottom chord where there are two or more adjacent trusses with the same web configuration capable of containing a rectangle 42 inches high or greater by 24 inches wide or greater, located within the plane of the truss. The rectangle shall fit between the top of the bottom chord and the bottom of any other truss member.
- h. Attic spaces served by a fixed stair shall be designed to support the minimum live load specified for sleeping rooms.
- i. Glazing used in handrail assemblies and guards shall be designed with a safety factor of 4. The safety factor shall be applied to each of the concentrated loads applied to the top of the rail, and to the load on the in-fill components. These loads shall be determined independent of one another, and loads are assumed not to occur with any other live load.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-904. International Residential Code amended; Section R303.3 Bathrooms.**

*Section R303.3* is hereby amended to read as follows: Bathrooms, water closet compartments and other similar rooms shall be provided with aggregate glazing area in windows of not less than 3 square feet (0.279 m<sup>2</sup>), one-half of which must be openable.

*Exception:* The glazed areas shall not be required where artificial light and a mechanical ventilation system are provided. The minimum ventilation rates shall be 50 cfm (23.6L/s) for intermittent ventilation or 20 cfm (9.4 L/s) for continuous ventilation. Ventilation air from the space shall be exhausted directly to the outside or to an attic ventilated in accordance with Section R806. The point of discharge of the exhaust air shall be at least 3 feet from any opening into the building. Bathrooms which contain only a water closet or lavatory, or combination thereof, and similar rooms, may be ventilated with an approved mechanical recirculating fan or similar device designed to remove odors from the air.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-905. International Residential Code amended; Section R303.4.2 Exhaust openings.**

*Section R303.4.2* is hereby amended to read as follows: Outside exhaust openings shall be located so that exhaust air is not directed onto public walkways.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-906. International Residential Code amended; Section R303.6 Stairway illumination.**

*Section R303.6* is hereby amended to read as follows: All interior stairways and any exterior stairways that are part of the required means of egress shall be provided with a means to illuminate the stairs, including the landings and treads. Interior stairways shall be provided with an artificial light source located in the immediate vicinity of each landing of the stairway. For interior stairs the artificial light sources shall be capable of illuminating treads and landings to levels not less than 1 foot-candle (11 lux) measured at the center of treads and landings. Exterior stairways providing access to a basement from the outside grade level shall be provided with an artificial light source located in the immediate vicinity of the bottom landing of the stairway.

*Exception:* An artificial light source is not required at the top and bottom landing, provided an artificial light source is located directly over each stairway section.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-907. International Residential Code amended; Section R305.1. Minimum height.**

*Section R305.1* is hereby amended to read as follows: Habitable rooms, hallways, corridors, the required bathroom and/or toilet room, laundry rooms and basements shall have a ceiling height of not less than 7 feet (2,134 mm). The required height shall be measured from the finish floor to the lowest projection from the ceiling.

*Exceptions:*

1. Beams and girders spaced not less than 4 feet (1219mm) on center may project not more than 6 inches (152 mm) below the required ceiling height.
2. Ceilings in basements without habitable spaces may project to within 6 feet, 8 inches (2032 mm) of the finished floor; and beams, girders, ducts or other obstructions may project to within 6 feet, 4 inches (1931mm) of the finished floor.
3. Not more than 50 percent of the required floor area of a room or space is permitted to have a sloped ceiling less than 7 feet (2,134mm) in height with no portion of the required floor area less than 5 feet (1,524 mm) in height.
4. The required bathroom and/or toilet room shall have a minimum ceiling height of 6 feet 8 inches (2036 mm) over the fixtures and at the front clearance area for fixtures as shown in Figure R307.2. A shower or tub equipped with a showerhead shall have a minimum ceiling height of 6 feet 8 inches (2,036 mm) above a minimum area 30 inches (762 mm) by 30 inches (762 mm) at the showerhead.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-908. International Residential Code amended; Section R309.2. Separation required.**

*Section R309.2* is hereby amended to read as follows: The garage shall be separated from the residence and its attic area by 5/8-inch, type X gypsum board, or equivalent materials approved for one-hour fire-resistive construction, applied to the garage side. Where the separation is a floor-ceiling assembly, the structure supporting the separation shall also be protected by 5/8-inch, type X gypsum board, or materials approved for one-hour fire-resistive construction or equivalent, applied to the garage side. Pull down stairs located within garages shall be rated or be adequately protected with materials approved for one-hour fire-resistive construction. Attic access panels located within garages shall be of, 5/8-inch, type X gypsum board or materials approved for one-hour fire-resistive construction.

*Exception:* Isolated concrete filled lolly columns supporting the separation shall not require a 5/8-inch, type X gypsum board application or equivalent.  
(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-909. International Residential Code amended; Section R310.1 Emergency escape and rescue.**

*Section R310.1* is hereby amended to read as follows: Any new basement or basement addition constructed on or after (insert effective date of ordinance) and every sleeping room shall have at least one operable emergency and rescue opening. Such opening shall open directly into a public street, public alley, yard or court. Where basements contain one or more sleeping rooms, emergency egress and rescue openings shall be required in each sleeping room, but shall not be required in adjoining areas of the basement. Where emergency escape and rescue openings are provided they shall have a sill height of not more than 44 inches (1118 mm) above the floor or adjacent interior standing surface. The adjacent interior standing surface shall be permanent in nature; the full width of the opening; consist of a minimum (10) ten inch tread; have a maximum rise of (7 3/4) seven and three-quarter inches. 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 openings with a finished sill height below the adjacent ground elevation shall be provided with a window well in accordance with Section R310.2. Emergency escape and rescue openings shall open directly into a public way, or to a yard or court that opens to a public way.

*Exception:* Basements used only to house mechanical equipment and not exceeding total floor area of 200 square feet (18.58 m<sup>2</sup>).  
(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-910. International Residential Code amended; Section R311.4.3. Landings at doors.**

*Section R311.4.3* is hereby amended to read as follows: There shall be a floor or landing on each side of each exterior door. The interior floor or landing at the exterior door shall not be more than 1.5 inches (38 mm) lower than the top of the threshold. The exterior landing at any exterior doorway shall not be more than 7 3/4 inches (196 mm) below the top of the threshold, provided the door, other than an exterior storm or screen door does not swing over the landing. The exterior floor or landing shall be permitted to have a slope not to exceed 0.25 unit vertical in 12 units horizontal (2-percent).

*Exception:*

1. Where a stairway of four or fewer risers is located on the exterior side of a door, other than the required exit door, and the total rise measured from the threshold of the door to the exterior grade or finished surface is thirty (30) inches or less, a landing is not required for the exterior side of the door provided the door, other than an exterior storm or screen door does not swing over the stairway.

The width of each landing shall not be less than the door served. Every landing shall have a minimum dimension of 36 inches (914 mm) measured in the direction of travel.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-911. International Residential Code amended; Section R311.5.6.2 Continuity.**

*Section R311.5.6.2* is amended to read as follows: Handrails for stairways shall be provided for the full length of the flight, from a point directly above the top riser of the flight to a point directly above lowest riser of the flight. Handrail ends shall be returned into a wall or shall terminate in newel posts or safety terminals. Handrails adjacent to a wall shall have a space of not less than 1 1/2 inches (38mm) between the wall and the handrail.

*Exceptions:*

1. Handrails shall be permitted to be interrupted by a newel post.
2. The use of a volute, turnout, starting easing or starting newel shall be allowed over the lowest tread.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-912. International Residential Code amended; Section R311.5.6.3 Handrail grip size.**

*Section R311.5.6.3* is hereby amended to read as follows; All required handrails shall be of one of the following types or provide equivalent graspability.

1. *Type I.* Handrails with a circular cross section shall have an outside diameter of at least 1 1/4 inches (32mm) and not greater than 2 inches (51 mm). If the handrail is not circular it shall have a perimeter dimension of at least 4 inches (102 mm) and not greater than 6 1/4 inches (160 mm) with a maximum cross section of dimension of 2 1/4 inches (57 mm).
2. *Type II.* Handrails with a perimeter greater than 6 1/4 inches (160mm) shall provide a graspable finger recess area on both sides of the profile. The finger recess shall begin within a distance of 3/4-inch (19 mm) measured vertically from the tallest portion of the profile and achieve a depth of at least 5/16-inch (8mm) within 7/8-inch (22mm) below the widest portion of the profile. This required depth shall continue for at least 3/8-inch (10mm) to a level that is not less than 1 3/4 inches (45 mm) below the tallest portion of the profile. The minimum width of the handrail above the recess shall be 1 1/4 inches (32 mm) to a maximum of 2 3/4 inches (70mm). Edges shall have a minimum radius of 0.01 inches (0.25 mm).

*Exception:* Handrails provided at other non-required exterior stairs may have a maximum horizontal cross-sectional dimension of 3-1/2 inches and shall be easily graspable.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-913. International Residential Code amended; Section R312.2 Guard opening limitations.**

*Section R312.2* is hereby amended to read as follows: Required guards on open sides of stairways, ramps, raised floor areas, balconies and porches shall have intermediate rails or ornamental closures which do not allow passage of a sphere 4 inches (102mm) or more in diameter.

*Exceptions:*

1. The triangular openings formed by the riser, tread and bottom rail of a guard at the open side of a stairway are permitted to be of such size that a sphere 6 inches (152 mm) cannot pass through.
2. Openings for required guards on the sides of stair treads shall not allow a sphere 4 3/8 inches (107 mm) to pass through.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-914. International Residential Code deleted; R319.1.1 Field treatment.**

*Section R319.1.1* is hereby deleted.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-915. International Residential Code deleted; Section R320.1.2 Field treatment.**

*Section R320.1.2* is hereby deleted.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-916. International Residential Code amended; Section R322.1 Scope.**

*Section R322.1* is hereby amended to read as follows; Where there are four or more dwelling units in a single structure, the provisions of Chapter 11 of the International Building Code for Group R-3 shall apply.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-917. International Residential Code added; Section R401.3.1 Minimum standards.**

*Section R401.3.1* is hereby added to read as follows:

- A. *Minimum standards:* All drainage facilities shall be designed to carry waters to the nearest drainage way, storm sewer conveyance, or other approved point of collection and conveyance. Erosion of ground in the area of discharge shall be prevented by installation of erosive control devices. Unless specified drainage ways and swales are specifically approved by the building official, abutting property lines between structures shall be designed to function as drainage ways. The toe of slopes shall set back from the property line a minimum of one foot. The area

surrounding the building foundation shall have a drainage gradient as provided for in the International Residential Code, as amended from time to time with a draining gradient thereafter of not less than two percent toward approved drainage facilities unless waived by the building official.

B. *Prohibited conduct:* No person shall allow or cause any:

- (1) Obstruction to be created, installed or maintained within any drainage way, detention facility, or engineered swale which will create ponding on adjacent property, divert water onto the adjoining property, or impede drainage. Fences may be erected in such areas provided they do not unnecessarily restrict the flow of water.
- (2) Water from intermittent sources such as discharges from sump pumps, downspouts, foundation drains, swimming pools, swimming pool backwashes, or other similar sources excluding lawn sprinklers to be discharged closer than five feet to any adjoining property line.

C. *Enforcement:* Where such conditions exist and the code official has given written notice of the violation, the owner of the property shall take appropriate measures to eliminate the problems caused on the adjacent property, within the time period stated in the notice, and failure to do so shall be a violation of this chapter.

(Ord. No. 6399, § 1, 5-18-07)

#### **Sec. 7-918. International Residential Code amended; Section R403.1. General.**

*Section R403.1* is hereby amended to read as follows; All exterior walls shall be supported on continuous solid or fully grouted masonry or concrete footings, wood foundations, or other approved structural systems which shall be of sufficient design to accommodate all loads according to Section R301 and to transmit the resulting loads to the soil within the limitations as determined from the character of the soil. Footings shall be supported on undisturbed natural soils or engineered fill.

*Exception:* One story detached accessory structures used as tool and storage sheds, playhouses, and similar uses, provided the floor area does not exceed 120 sq. ft., and the structure is associated with one or two-family dwelling units or townhouses.

(Ord. No. 6399, § 1, 5-18-07)

#### **Sec. 7-919. International Residential Code added; Section R403.1.1.1 Footing reinforcement.**

*Section R403.1.1.1* is hereby added to read as follows; Footings for basement foundation walls shall have a minimum reinforcement consisting of not less than two No. 4 bars, uniformly spaced, located a minimum of 3 inches clear from the bottom and edges of the footing.

(Ord. No. 6399, § 1, 5-18-07)

#### **Sec. 7-920. International Residential Code added; Section R403.1.1.2 Column pads.**

*Section R403.1.1.2* is hereby added and reads as follows; Column pads shall be a minimum of 24 inches by 24

inches and 8 inches deep (24" x 24" x 8"). Reinforcement shall consist of a minimum of three No. 4 bars each way, uniformly spaced, within each column pad.  
(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-921. International Residential Code amended; Section R404.1.3. Design required.**

*Section R404.1.3* is hereby amended to read as follows; A design in accordance with accepted engineering practice shall be provided for concrete or masonry foundation walls when any of the following conditions exist:

1. Walls are subject to hydrostatic pressure from ground-water.
2. Walls supporting more than 48 inches (1,219 mm) of unbalanced backfill that do not have permanent lateral support at the top and bottom.
3. Foundation Walls over 10 feet in height measured from the top of the footing to the top of the wall.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-922. International Residential Code amended; Section R404.1.7 Backfill placement.**

*Section R404.1.7* is hereby amended to read as follows; Backfill shall not be placed against the wall until the wall has sufficient strength or has been sufficiently braced to prevent damage by the backfill.

*Exception:* Such bracing is not required for walls supporting less than 4 feet (1219 mm) of unbalanced backfill.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-923. International Residential Code amended; Section R405.1 Concrete or masonry foundations.**

*Section R405.1* is hereby amended to read as follows: Drains shall be provided around all concrete or masonry foundations that retain earth and enclose habitable or usable spaces located below grade. Drainage tiles, perforated pipe or other approved systems or materials shall be installed at or below the area to be protected and shall discharge by gravity or mechanical means into an approved drainage system. The top of open joints of drain tiles shall be protected with strips of building paper, and the drainage tiles or perforated pipe shall be placed on a minimum of 2 inches (51 mm) 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 6 inches (152 mm) of the same material.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-924. International Residential Code amended; Section R405.2.3 Drainage system.**

*Section R405.2.3* is hereby amended to read as follows: A sump shall be provided to drain the porous layer, footings, and foundations that retain earth and enclose habitable or usable space located below grade that do not drain and discharge by gravity to an approved storm sewer system or to daylight. The sump shall be at least 24 inches (610mm) in diameter or 20 inches square (0.0129 m<sup>2</sup>), shall extend at least 24 inches (610mm) below the bottom of the basement floor and shall be capable of positive gravity or mechanical drainage to remove any accumulated water. Sumps receiving storm water from any exposed exterior drain(s) or opening(s) shall be

provided with back-up system(s) capable of assuring proper sump operation in case of power failure. The drainage system shall discharge into an approved storm sewer system or to daylight.  
(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-925. International Residential Code amended; Section R506.2.1 Fill.**

*Section R506.2.1* is hereby amended to read as follows; Fill material shall be free of vegetation and foreign material. The fill shall be compacted to assure uniform support of the slab, and except where approved, the fill depths shall not exceed 24 inches (610 mm) for clean sand or gravel and 8 inches (203 mm) for earth.

*Exception:* Concrete floor slabs may be engineered to span soils not in compliance with the R506.2.1, however all fills under buildings shall be free from vegetation and foreign material.  
(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-926. International Residential Code amended; Section R506.2.3 Vapor retarder.**

*Section R506.2.3* is hereby amended to read as follows: A 6 mil (0.006 inch) polyethylene or approved vapor retarder with joints lapped not less than 6 inches (152 mm) shall be placed between the concrete floor slab and the prepared sub-grade where no base course exists.

*Exceptions:* The vapor retarder may be omitted:

1. From garages, utility buildings and other unheated accessory structures.
2. From driveways, walks, patios and other flatwork not likely to be enclosed and heated at a later date.
3. Where approved by the building official, based on local site conditions.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-927. International Residential Code added; Section R506.2.5 Interior underslab drains.**

*Section R506.2.5* is hereby added to read as follows: Where foundations retain earth and enclose habitable or usable space located below grade, drains shall be provided below the floor slab. Drainage tiles, perforated pipe or other approved systems or materials shall be installed at or below the area(s) to be protected; shall be placed with positive or neutral slope to minimize the accumulation of deposits in the drainage system; and shall discharge by gravity or mechanical means to an approved storm water drainage system. The underslab drainage system shall be installed around the inner perimeter of the area(s) to be protected, or, in a manner that will provide adequate drainage for all area(s) to be protected and is approved by the building official. Interior underslab drains installed on uncompacted fill material shall be supported by mechanical means which are adequately tied into the concrete slab to ensure proper drainage throughout the underslab drain(s).

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-928. International Residential Code deleted; Section R613.2 Window sills.**

*Section R613.2* Window sills is hereby deleted.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-929. International Residential Code amended; Section R703.6.2 Plaster.**

*Section R703.6.2* is hereby amended and reads as follows: Plastering with portland cement plaster shall be not less than three coats when applied over metal lath or wire lath and shall be not less than two coats when applied over masonry, concrete, pressure-preservative treated wood or decay-resistant wood as specified in Section R319.1 or gypsum backing. If the plaster surface is completely covered by veneer or other facing material or is completely concealed, plaster application need be only two coats, provided the total thickness is as set forth in Table R702.1(1).

*Exception:* Decorative coatings consisting of a cementitious material applied to a concrete or masonry surface for cosmetic purposes only shall be approved materials and installed in accordance with the manufacturer's installation instructions.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-930. International Residential Code amended; Section R801.3 Roof drainage.**

*Section R801.3* is hereby amended to read as follows: All dwellings shall have a controlled method of water disposal from roofs that will collect and discharge all roof drainage to the ground surface at least 3 feet from foundation walls or to an approved drainage system.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-931. International Residential Code amended; Section R902.1. Roof covering materials.**

*Section R902.1* Roofing covering materials is hereby amended to read as follows: Roofs shall be covered with materials as set forth in Sections R904 and R905. Except where the code requires greater protection, roof coverings for new buildings or structures or additions thereto, or roof coverings utilized for re-roofing shall be a minimum of Class C. Class A, B or C roofing shall be installed in areas designated by law as requiring their use or when the edge of the roof is less than 3 feet (914 mm) from a property line. Classes A, B and C roofing required to be listed by this section shall be tested in accordance with UL 790 or ASTM E 108. Roof assemblies with coverings of brick, masonry, slate, clay or concrete roof tile, exposed concrete roof deck, ferrous or copper shingles or sheets, and metal sheets and shingles, shall be considered Class A roof coverings.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-932. International Residential Code amended; Section R907.1 General.**

*Section R907.1* is hereby amended to read as follows: Materials and methods of application used for re-covering or replacing an existing roof covering shall comply with the requirements of chapter 9 as amended. Re-roofing includes any repairs of more than 10% or less of the total roof covering in any three year period. A repair of 10% or less of the total roof covering in any three year period may utilize approved roofing materials comparable to the existing roofing materials.

*Exceptions:*

1. Re-roofing shall not be required to meet the minimum design slope requirement of one-quarter

unit vertical in 12 units horizontal (2-percent slope) in Section R905 for roofs that provide positive roof drainage.

2. Any roof replaced due to a covered insured loss prior to July 5, 2006 may be replaced with the same class and type of roofing material which were on the roof prior to the loss.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-933. International Residential Code deleted; Chapter 11.**

*Chapter 11* is hereby deleted (see article 8 of this chapter).

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-934. International Residential Code deleted; Chapter 12. Mechanical administration.**

*Chapter 12* is hereby deleted (see article 1 of this chapter).

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-935. International Residential Code amended; Section M1308.3 Foundations and supports.**

*Section R1308.3* is hereby amended to read as follows: Supports and foundations for the outdoor mechanical systems shall be sufficiently raised above the finished grade to permit free drainage, and shall conform to the manufacturer's installation instructions.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-936. International Residential Code amended; Section M1403.2 Foundations and supports.**

*Section M1403.2* is hereby amended to read as follows: Supports and foundations for the outdoor unit of a heat pump shall be sufficiently raised above the ground to permit free drainage of defrost water, and shall conform to the manufacturer's installation instructions.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-937. International Residential Code amended; Section M1413.1 General.**

*Section R1413.1* is hereby amended to read as follows; Cooling equipment that utilizes evaporation of water for cooling shall be installed in accordance with the manufacturer's installation instructions. Evaporative coolers shall be installed on a level platform or base and shall be sufficiently raised above the adjoining ground. Openings in exterior walls shall be flashed in accordance with Section R703.8.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-938. International Residential Code amended; Section M1501.1 Outdoor discharge.**

*Section M1501.1* is hereby amended to read as follows: The air removed by every mechanical exhaust system shall be discharged to the outdoors. Air shall not be exhausted into an attic, soffit, ridge vent or crawl space.

*Exception:*

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

2. Bathroom exhaust fans installed in accordance with amended section R303.3.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-939. International Residential Code amended; Section M1506.2 Recirculation of air.**

*Section M1506.2* is hereby amended to read as follows: Exhaust air from bathrooms and toilet rooms shall not be recirculated within a residence or to another dwelling unit and shall be exhausted in accordance with amended section R303.3.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-940. International Residential Code amended; Section M1601.3.1 Joints and seams.**

*Section M1601.3.1* is hereby amended to read as follows: Joints of duct systems shall be made substantially airtight by means of tapes, mastics, gasketing or other approved closure systems. Closure systems used with rigid fibrous glass ducts shall comply with UL 181A and shall be marked "181A-P" for pressure-sensitive tape, "181 A-M" for mastic or "181 A-H" for heat-sensitive tape. Closure systems used with flexible air ducts and flexible air connectors shall comply with UL 181B and shall be marked "181B-FX" for pressure-sensitive tape or "181B-M" for mastic. Duct connections to flanges of air distribution system equipment or sheet metal fittings shall be mechanically fastened. Crimp joints for round ducts shall have a contact lap of at least 1.5 inches (38 mm) and shall be mechanically fastened by means of at least three sheet metal screws or rivets equally spaced around the joint.

*Exception:* Crimp joints for round ducts may have less than three screws or rivets, but shall in no case have less than one; providing the joint is supported or secured by approved means to prevent displacement of the joint.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-941. International Residential Code amended; Section 1602.2 Prohibited sources.**

*Section M1602.2* is amended to read as follows: Outside or return air for a forced-air heating or cooling system shall not be taken from the following locations:

1. Closer than 10 feet (3048 mm) from an appliance vent outlet, a vent opening from a plumbing drainage system or the discharge outlet of an exhaust fan, unless the outlet is 3 feet (914 mm) above the outside air inlet.
2. Where there is the presence of flammable vapors; or where located less than 10 feet (3048 mm) above the surface of any abutting public way or driveway; or where located at grade level by a sidewalk, street, alley or driveway.
3. A room or space, the volume of which is less than 25 percent of the entire volume served by such system. Where connected by a permanent opening having an area sized in accordance with ACCA Manual D, adjoining rooms or spaces shall be considered as a single room or space for the purpose of determining the volume of such rooms or spaces.

*Exception:* The minimum volume requirement shall not apply where the amount of return air taken from a room or space is less than or equal to the amount of supply air delivered to such room or space.

4. A closet, bathroom, toilet room, kitchen, garage, mechanical room, furnace room or other dwelling unit.

*Exception:* Closets of such size that are provided with a supply duct(s) may have return air opening(s).

5. A room or space containing a fuel-burning appliance where such room or space serves as the sole source of return air.

*Exceptions:*

1. The fuel-burning appliance is a direct-vent appliance or an appliance not requiring a vent in accordance with Section M1801.1 or Chapter 24.
2. The room or space complies with the following requirements:
  - 2.1. The return air shall be taken from a room or space having a volume exceeding 1 cubic foot for each 10 Btu/h (9.6 L/W) of combined input rating of all fuel-burning appliances therein.
  - 2.2. The volume of supply air discharged back into the same space shall be approximately equal to the volume of return air taken from the space.
  - 2.3. Return-air inlets shall not be located within 10 feet (3048 mm) of any appliance firebox or draft hood in the same room or space.
3. Rooms or spaces containing solid-fuel burning appliances, provided that return-air inlets are located not less than 10 feet (3048mm) from the firebox of such appliances.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-942. International Residential Code amended; Section M1804.2.6 Mechanical draft systems.**

*Section 1804.2.6* is hereby amended to read as follows: Mechanical draft systems shall be installed in accordance with their listing, the manufacturer's installation instructions and, except for direct vent appliances, the following requirements:

1. The vent terminal shall be located not less than 3 feet (914 mm) above a forced air inlet located within 10 feet (3048 mm).
2. The vent terminal shall be located not less than 4 feet (1219 mm) below, 4 feet (1219 mm) horizontally from, or 1 foot (305 mm) above any door, window or gravity air inlet into a

dwelling.

3. The vent termination point shall not be located closer than 3 feet (914 mm) to an interior corner formed by two walls perpendicular to each other.
4. The bottom of the vent terminal shall be located at least 12 inches (305mm) above finished ground level.
5. The vent termination shall not be mounted directly above or within 3 feet (914 mm) horizontally from an oil tank vent or gas meter.
6. Power exhauster terminations shall be located not less than 10 feet (3048 mm) from adjacent buildings.

7. The discharge shall be directed away from the building.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-943. International Residential Code amended; Section G2414.5. Metallic tubing.**

*Section G2414.5* is hereby amended to read as follows: Seamless copper, aluminum alloy or steel tubing shall not be utilized for the distribution of fuel gas.

*Exception:* Corrugated stainless steel tubing as referenced in section 2414.5.3.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-944. International Residential Code amended; Section G2414.5.2 Copper tubing.**

*Section G2414.5.2* is hereby amended to read as follows: Copper tubing shall comply with standard Type K or L of ASTM B 88 or ASTM B 280. Copper and brass tubing shall not be utilized to distribute natural gas nor shall it be utilized to distribute any other fuel gas within a building or structure.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-945. International Residential Code amended; Section G2417.4.1 Test pressure.**

*Section G2417.4.1* is hereby amended to read as follows; The test pressure to be used shall be not less than one and one-half times the proposed maximum working pressure, but not less than 10 psig (68.9kPa) irrespective of design pressure. For welded piping, and for piping carrying gas at pressures in excess of fourteen (14) inches water column pressure, the test pressure shall not be less than 60 psig. Where the test pressure exceeds 125 psig (862 kPa gauge), the test pressure shall not exceed a value that produces a hoop stress in the piping greater than 50 percent of the specified minimum yield strength of the pipe.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-946. International Residential Code deleted; Chapter 25. Plumbing administration.**

*Chapter 25* is hereby deleted. (See article 1 of this chapter)

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-947. International Residential Code added; Section P2601.2.1 Prohibited drainage and connections.**

*Section P2601.2.1* is hereby added to read as follows: Sanitary sewer systems shall be designed, built and maintained in such a manner to prevent all storm or ground water from draining, discharging or entering into the sanitary sewer system. Connection of sump pumps, foundation drains, yard drains, gutter downspouts and any other storm water drainage receptacle(s) or system(s) are specifically prohibited from being connected to the sanitary sewer system.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-948. International Residential Code amended; Section P2603.6 Freezing.**

*Section P2603.6* is hereby amended to read as follows: Water, soil or waste pipe shall not be installed outside of a building, in exterior walls, in attics or crawl spaces, or in any other place subjected to freezing temperature unless adequate provision is made to protect it from freezing by insulation or heat or both. Water service pipe shall be installed not less than 42 inches in depth below grade.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-949. International Residential Code amended; Section P2603.6.1 Sewer depth.**

*Section P2603.6.1* is hereby amended to read as follows: Building sewers shall be a minimum of 12 inches below grade.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-950. International Residential Code added; Section P2604.5 Inspection.**

*Section P2604.5* is hereby added to read as follows: Excavations required for the installation of a building drainage system shall be open trench work and shall be kept open until the piping has been inspected and approved to cover.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-951. International Residential Code amended; Section P2902.5.3 Lawn irrigation systems.**

*Section P2902.5.3* is hereby amended to read as follows: The potable water supply to lawn irrigation systems shall be protected against backflow by a device approved by the Missouri Department of Natural Resources. Backflow devices installed within structures shall be installed a minimum of 6 inches away from any wall or vertical obstruction. The backflow device shall be installed between 12 inches and 48 inches above the floor and shall be accessible.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-952. International Residential Code amended; Section P2903.5 Water hammer.**

*Section P2903.5* is hereby amended to read as follows: The flow velocity of the water distribution system shall be controlled to reduce the possibility of water hammer. A water-hammer arrestor shall be installed where quick-closing valves are utilized. Water-hammer arrestors shall be installed in accordance with manufacturer's

specifications. Water-hammer arrestors shall conform to ASSE 1010.

*Exception:* Each water supply line to a fixture, except tank type water closets, may terminate with an air chamber. All air chambers shall be placed in a vertical position in a tee opening. Each air chamber shall be not less than 12 inches in length, and of a diameter not less than the branch it serves.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-953. International Residential Code amended; Section P3002.2 Building sewer.**

*Section P3002.2* is hereby amended to read as follows: Building sewer piping shall be as shown in Table P3002.2. Forced main sewer piping shall conform to one of the standards for ABS plastic pipe, cast-iron pipe, copper or copper-alloy tubing, PVC plastic pipe, or pressure-rated pipe listed in Table P3002.2. In addition, building sewer piping shall be a minimum of schedule 40 PVC/ABS or equivalent unless otherwise approved by the building official.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-954. International Residential Code amended; Section P3005.4.2 Building drain and sewer size and slope.**

*Section P3005.4.2* is hereby amended to read as follows: Pipe sizes and slope shall be determined from Table P3005.4.2 on the basis of drainage load in fixture units (d.f.u.) computed from Table P3004.1. The minimum size of a building sewer serving a dwelling unit shall be four inches.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-955. International Residential Code deleted; Section P3008.1. General.**

*Section P3008.1* is hereby deleted.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-956. International Residential Code deleted; Section P3008.2. Construction.**

*Section P3008.2* is hereby deleted.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-957. International Residential Code amended; Section P3103.1 Roof extension.**

*Section P3103.1* is hereby amended to read as follows: All open vent pipes which extend through a roof shall be terminated at least 6 inches above the roof, except that where a roof is to be used for any purpose other than weather protection, the vent extensions shall be run at least 7 feet (2,134 mm) above the roof.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-958. International Residential Code amended; Section P3114.3 Where permitted.**

*Section P3114.3* is hereby amended to read as follows: Individual vents, branch vents, circuit vents and stack vents shall be permitted to terminate with a connection to an air admittance valve only when approved by the Administrative Authority.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-959. International Residential Code amended; Section E3501.6.2 Service disconnect location.**

*Section E3501.6.2* is hereby amended to read as follows: The service disconnecting means shall be installed at a readily accessible location either outside of a building or inside nearest the point of entrance of the service conductors. When service conductors are more than 10 feet in length from the point of entry to the service panel, a separate means of disconnect shall be installed at the service cable entrance to the building or structure. Service disconnecting means shall not be installed in bathrooms. Each occupant shall have access to the disconnect serving the dwelling unit in which they reside.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-960. International Residential Code amended; Section E3802.12 Bedroom outlets.**

*Section E3802.12* is hereby amended to read as follows: All branch circuits that supply 120-volt, single-phase, 15- and 20-ampere outlets installed in bedrooms shall be protected by a combination type or branch/feeder type arc-fault circuit interrupter installed to provide protection of the entire branch circuit.

*Exception:* The location of the arc-fault circuit interrupter shall be permitted to be at other than the origination of the branch circuit provided that:

1. The arc-fault circuit interrupter is installed within 6 feet (1.8 m) of the branch circuit overcurrent device as measured along the branch circuit conductors and
2. The circuit conductors between the branch circuit overcurrent device and the arc-fault circuit interrupter are installed in a metal raceway or a cable with a metallic sheath.

(Ord. No. 6399, § 1, 5-18-07)

**Secs. 7-961--7-999. Reserved.**

**ARTICLE X.**

**SWIMMING POOL, SPA, AND HOT TUB CODE**

**Sec. 7-1000. Swimming pool defined.**

The term "swimming pool" is hereby defined as a receptacle for water or an artificial pool of water, with bottom and sides formed of material other than soil and rock, having a capacity of more than 5,000 gallons of water or having a depth of more than 24 inches at its deepest level, intended for the purpose of immersion or partial immersion therein of human beings, and including all appurtenant equipment.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-1001. Compliance with code required.**

It shall be unlawful to construct, maintain, install or enlarge any swimming pool in the city except in compliance with all the provisions of this article.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-1002. Permit required.**

It shall be unlawful to proceed with the construction, installation, enlargement or alteration of any private residential swimming pool and appurtenances within the city unless permits therefor shall have first been obtained from the codes administration department.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-1003. Permit fees.**

The fees for permits required by this article shall be the same as other building permits.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-1004. Cross reference(s).**

Building permit fees, section 7-28.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-1005. Drawings, plans required.**

All drawings and plans for the construction, installation, enlargement and alteration of any swimming pool and appurtenances shall first be presented to the codes administration department for examination and approval as to proper location and construction.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-1006. Requirements for plans, drawings.**

All plans and drawings shall be drawn to a scale of not less than one-eighth of an inch to the foot, on paper or cloth, in ink, or by some process that will not fade or obliterate. All distances and dimensions shall be accurately figured and drawings made explicit and complete, showing the lot line, and including information pertaining to the swimming pool, walk and fence construction, water supply system, drainage and water disposal systems, and all appurtenances pertaining to the swimming pool. Detail plans and vertical elevations shall also be provided in accordance with the city's building code.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-1007. Conformity with approved plans.**

All private residential swimming pools, appurtenances, water supply and drainage systems shall be constructed in conformity with the approved plans

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-1008. Reserved.**

**Sec. 7-1009. Recirculation required.**

All swimming pools shall be of the recirculation type in which circulation of the water is maintained through the pool by pumps; the water drawn from the pool being clarified and disinfected before being returned to the pool.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-1010. Design to be approved.**

All swimming pools must be of an approved design.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-1011. Fencing.**

A. The area which a swimming pool, sauna, hot tub, or jacuzzi is located shall be entirely enclosed and separated from adjoining property by a protective fence or other permanent structure not less than four feet in height, measured from grade. The enclosure shall be so constructed that a sphere four inches in diameter cannot pass through. Fence posts shall be decay or corrosion-resistant and shall be set in concrete bases. Such protective enclosure shall be provided with gates equipped with self-closing and self-latching devices placed at the top of the gate; provided, however, that above-grade structures of four feet or greater in height that are equipped with a ladder that can manually be lifted and locked shall not be required to have a protective enclosure. Said ladder shall be locked when the swimming pool, hot tub sauna or jacuzzi is not attended.

B. At the option of the property owner, a hot tub or jacuzzi may be covered with a latching, protective cover instead of the fencing or protective enclosure described in subsection A of this section. The cover on the hot tub or jacuzzi shall be closed and latched at all times that the hot tub or jacuzzi is not in use. If a covered hot tub or jacuzzi is located in the same area as a swimming pool or sauna, the swimming pool or sauna must still be fenced or enclosed with a permanent structure in the manner described in subsection A of this section.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-1012. Steps or ladders.**

Two or more means of egress in the form of steps or ladders shall be provided for all swimming pools. At least one such means of egress shall be located on a side of the pool at both the deep end and shallow end of the pool. Treads of steps and ladders shall be constructed of nonslip material and at least three inches wide for their full length. Steps and ladders shall have a handrail on both sides.

*Exception:* Pools accessory to 1 and 2 family dwellings.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-1013. Water supply.**

No source of water other than secured from the city waterworks distribution system shall be used in swimming pools.

(Ord. No. 6399, § 1, 5-18-07)

Cross reference(s)--Water service rules and regulations generally, § 32-51 et seq.

**Sec. 7-1014. Inlets; makeup water facilities.**

A. Swimming pools' water recirculation system inlet shall be located so as to produce so far as possible uniform circulation of water throughout the pool without the existence of dead spots and to carry pool bottom deposits to the outlets, and shall discharge at a minimum depth of ten inches below the pool overflow level.

B. Pools shall be equipped with suitable facilities for adding makeup water as needed. There shall be no physical connection between the water supply line and the pool system. If the makeup water supply is added directly to the pool, the outlet shall be at least six inches above the rim of the tank. If a hose connection from a sill cock or other plumbing fixture is to be used for supplying makeup water, then an approved backflow prevention device shall be installed between the sill cock or control valve at the fixture and the hose connection. The backflow prevention device shall be installed in accordance with its listing, chapter 32 of the Lee's Summit Code of Ordinances and the Plumbing Code. Stand when operating the sill cock or control valve. Maximum size of the fill pipe to be two inches.

C. The system supplying recirculated water and makeup water to the pool shall be constructed in conformance with ordinance regulating plumbing.  
(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-1015. Outlets.**

A. All pool drain outlets shall be equipped with gratings having an area of openings not less than four times the cross-sectional area of the outlet pipe. The gratings shall be of such design that they cannot be readily removable by bathers and will not injure bathers' fingers. One outlet shall be provided for each 800 square feet of surface area.

B. Swimming pools shall be equipped with facilities for completely emptying the pool and the discharge of the pool water to the sewer shall be at a rate not exceeding 200 gallons per minute. No direct connection shall be made to the sewer.

C. Water drained from the swimming pool shall not be discharged to the sewer system during period of rain or storms. At no time shall the rate of drain water discharge exceed a flow of 200 gallons per minutes.  
(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-1016. Recirculation, disinfection systems and appurtenances.**

A. The swimming pools' recirculation systems shall consist of pumping equipment, hair and lint catcher, filters, together with the necessary pipe connections to the pool inlets and outlets, facilities and pipe connections necessary for backwashing filters and facilities and equipment for disinfecting the pool water.

B. Every swimming pool shall have a recirculating system with an hourly capacity equal to the pool volume divided by eight.

C. A hair and lint catcher or strainer shall be installed on the suction side of the circulation pump to

prevent hair, lint and other extraneous matter from reaching the pump and filters. Hair and lint catchers shall be so designed that they can be easily dismantled for the cleaning and inspection and shall be so located as to be easily accessible for cleaning. The design features shall be as follows: Water passes through the strainer from the outside; the strainer is made of noncorrosive material; the width or diameter of strainer openings is not more than one-eighth inch; the area of the strainer openings shall be at least five times the cross-sectional area of the inlet pipe to the strainer.

D. Equipment shall be provided for the disinfection of all swimming pool water. Any disinfection method using materials other than chlorine compounds shall be subject to the approval of the building official. Disinfection equipment installed for the use of chlorine compounds shall have sufficient capacity to maintain a minimum free chlorine residual of 0.5 parts per million. The disinfectant shall be introduced into the recirculation system ahead of the filters.

E. Gaseous chlorination systems shall not be made use of as a disinfection method for swimming pool water.  
(Ord. No. 6399, § 1, 5-18-07)

#### **Sec. 7-1017. Electrical requirements.**

Electrical requirements for swimming pools shall be as provided in the city's electrical code.  
(Ord. No. 6399, § 1, 5-18-07)

#### **Sec. 7-1018. Safety devices.**

Every swimming pool shall be equipped with one or more throwing ring buoys not more than 15 inches in diameter and having 60 feet of three-sixteenths-inch line attached, and one ore more light but strong poles with blunted ends and not less than 12 feet in length, for making reach assists or rescues.

*Exception:* Pools accessory to one- and two-family dwellings.  
(Ord. No. 6399, § 1, 5-18-07)

Cross reference(s)--National Electrical Code adopted, § 7-52.

#### **Secs. 7-1019--7-1099. Reserved.**

### **ARTICLE XI.**

#### **REMOVAL OF STRUCTURES**

#### **Sec. 7-1100. Moving permits.**

*7-1100.1 Moving permit required.* No person shall move any building or structure having a floor area of 200 or more square feet, upon, across, or over any highway, street, alley, or sidewalk in the city without first obtaining a permit to do so, issued by the building official. Fees for moving permits shall be in accordance with City of Lee's Summit, MO Fee Schedule.

*7-1101.2 Moved buildings.* Buildings or structures moved into or within the jurisdiction shall comply

with the provisions of this code for new building or structures, except as otherwise permitted by the building official.

*7-1101.3 Proper foundation.* No building shall be moved to any lot within the City of Lee's Summit, unless and until a proper and suitable foundation or basement has been theretofore constructed on such lot of which such building will be permanently placed unless waived by the building official.

*7-1101.4 Application for permit.* All applications for permits to move buildings or other structures shall be made to the building official and such applications shall state and be in compliance with the following procedures:

- (a) The definite description of the building or structure proposed to be moved giving current use, street number, legal description and size of building in square feet.
- (b) The date and the moving is to commence and length of time of the move.
- (c) The highways, streets, alleys or sidewalks over, along or across which the building or structure is proposed to be moved;
- (d) Applicant shall furnish a certificate of liability insurance for personal and property damage exempting and saving harmless the city in a minimum amount of \$100,000 injury each person, \$300,000 each occurrence, and \$50,000 property damage;
- (e) The applicant, if other than the owner, shall file with the application a written statement or bill of sale signed by the owner, or other sufficient evidence that he or she is entitled to move the building or structure.

*7-1101.5 Duties of building official.*

- (a) The building official shall inspect the building or structure to determine whether the standard for issuance of a permit is met and issue or deny such permit.
- (b) The building official may refuse to issue a permit if he or she finds:
  - 1. That any application requirement of any fee or deposit, has not been complied with;
  - 2. That the building or structure is too large to move without injuring persons or property in the city;
  - 3. That the building or structure is in such a state of deterioration, disrepair or is otherwise so structurally unsafe that it cannot be moved without endangering persons or property within the city;
  - 4. That the building or structure is structurally unsafe or unfit for the purpose for which moved.

5. That zoning, subdivision or any other ordinances would be violated by the building or structure in its new location.

*7-1101.6 Duties of permittee.* Every permittee under this article shall:

- a) Notify the building official within 48 hours of move in writing of a desired change in moving date and route of move as proposed in the application.
- b) No building or structure or any part of any building or structure being moved shall be left in the parkway, street, or on the dedicated right-of-way between the curb and the front property line of any lot;
- c) Comply with the building code, fire zone, zoning ordinances and all other applicable traffic ordinances and laws upon relocating the building or structure in the city or move the same through the city;
- d) Remove all rubbish and materials and fill excavations to existing grade at the original building or structure site so that the premises are left in a safe and sanitary condition and can be maintained in accordance with the property maintenance code within 28 days from the date of the move;
- e) Notify all utilities having service connections within the building or structure and otherwise located within the city limit whose facilities and services to the public may be affected by the movement of the building or structure.
- f) Comply with the regulations and specifications of the moving permit.
- g) Secure each location, existing and proposed, in order to prevent access into or under the structure.

*7-1101.7 Original premises left unsafe.* The City of Lee's Summit, MO may proceed to do the work necessary to leave the original premises in a safe and sanitary condition, when the permittee does not comply within ten days with the requirements of this article, and the cost thereof shall be charged to the owner and/or applicant.

(Ord. No. 6399, § 1, 5-18-07)

## **Sec. 7-1102. Demolition.**

*7-1102.1 Demolition permit required.* Unless otherwise approved by the building official, the demolition of structures or buildings, partial or complete, shall require a demolition permit. Fees for demolition permits shall be in accordance with the City of Lee's Summit, Missouri Fee Schedule.

*7-1102.2 Application for demolition permit.* All applications for permits to demolish buildings or other structures, partial or complete, shall be made to the building official. Such applications for demolition permits shall be in submitted with the following:

- (a) The description of the building or structure proposed to be demolished, including street address, legal description and the extent and type of demolition being proposed.
- (b) Applicant shall furnish a certificate of liability insurance for personal and property damage in a minimum amount of \$100,000 injury each person, \$300,000 each occurrence, and \$50,000 property damage.
- (c) When requested by the building official, the applicant shall provide; a structural engineers report that describes the methods of demolition including all necessary shoring; plans and information necessary to determine no hazards will be created that endanger the occupants, adjoining properties or general public.
- (d) The applicant shall remove all rubbish and materials and fill excavations to existing grade so that the premises are left in a safe and sanitary condition and can be maintained in accordance with the property maintenance code within 28 days from the date of the demolition.

*7-1102.3 Original premises left unsafe.* The City of Lee's Summit, MO may proceed to do the work necessary to leave the premises in a safe and sanitary condition, when the permittee does not comply within ten days with the requirements of this article, and the cost thereof shall be charged to the owner and/or applicant.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-1103. Permit time limitation.**

Permits issued under and pursuant to this article shall be valid for a maximum time of 60 days.

(Ord. No. 6399, § 1, 5-18-07)

**Secs. 7-1104--7-1199. Reserved.**

**ARTICLE XII.**

**DANGEROUS AND NUISANCE BUILDING CODE**

**Sec. 7-1200. Title of article.**

The provisions contained in this article may be referred to as the Dangerous and Nuisance Building Code of the City of Lee's Summit, Missouri, and may be cited as such in any proceedings under this article.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-1201. Conditions of buildings or structures constituting a dangerous building and/or public nuisance.**

Any building or structure having any of the following conditions is hereby declared a dangerous building, provided that such conditions or defects exist to the extent that the life, health, property or safety of the public or its occupants are endangered and to constitute a public nuisance:

- (1) Those whose interior walls or other vertical structural members list, lean or buckle to such an extent that a plumb line passed through the center of gravity of any such wall or vertical structural member falls outside of the middle third of its base.
- (2) Those which, exclusive of the foundation, show 33 percent or more of damage or deterioration of the supporting members, or 50 percent of damage or deterioration of the non-supporting enclosing or outside walls or covering.
- (3) Those which have improperly distributed loads upon the floors or roofs or in which the floors or roofs are overloaded, or those having floors or roofs of insufficient strength to be reasonably safe for the purpose for which they are being used or intended to be used.
- (4) Those which have been substantially damaged by fire, earthquake, wind, flood, or by any other cause(s).
- (5) Those which are unoccupied and are open at door, window, wall or roof. As used herein an "unoccupied" building is one which is not being continuously and lawfully inhabited for residential or any nonresidential purpose. As used herein an unoccupied building is "open" at door, window, wall or roof when, because of removal, breakage, deterioration, destruction, or disrepair of original or replacement materials, the interior has become exposed to the elements or has become accessible for entry by animals, trespassers or others acting without the building owner's consent.
- (6) Those under construction upon which work has ceased to the point that substantial progress has not been made for a period of 30 consecutive calendar days after a notice has been issued under section 7-1204 for the completion or demolition thereof.
- (7) Those in the process of demolition upon which work has ceased to the point that substantial progress has not been made for a period of seven consecutive calendar days after a notice has been issued under section 7-1204 for the completion or demolition thereof.
- (8) Those containing therein substantial accumulations of trash, garbage or other materials susceptible to fire, or constituting or providing a harboring place for vermin or other obnoxious animals or insects or in any way threatening the health of the occupants thereof or the health of persons in the vicinity thereof.
- (9) Those condemned as unfit for human occupancy under section 16-143, et seq., of the Code, and upon which no substantial work has been performed to remedy the conditions causing the condemnation thereof for a period of 30 consecutive calendar days after a notice has been issued under section 7-1204 for the demolition or repair of the building.
- (10) Those having inadequate facilities for egress in case of fire or panic.
- (11) Those which have parts thereof which are so attached or deteriorated that they may fall upon public ways or upon the property of others or may injure members of the public or the occupants thereof.

- (12) Those built in violation of the building, plumbing, electrical, fuel gas or zoning codes of the city or used in violation thereof.
- (13) Those which are used or intended to be used for dwelling purposes, because of inadequate maintenance, dilapidation, decay, faulty construction or arrangement, inadequate light, air or sanitation facilities, or otherwise, is determined by the building official or his representatives to be unsanitary, unfit for human habitation or in such a condition that is likely to cause sickness or disease.
- (14) Those buildings or structures, because of obsolescence, dilapidated condition(s), deterioration, damage, inadequate exits, lack of sufficient fire-resistive construction, faulty electric wiring, gas connections or heating apparatus, or other cause is determined by the building official and fire chief to be a fire hazard.

(Ord. No. 6399, § 1, 5-18-07)

### **Sec. 7-1202. Duties of building official and inspectors.**

The building official shall from time to time appoint persons within the codes administration department as inspectors of dangerous buildings. These inspectors shall:

- (1) Inspect any building or structure about which complaints are filed by any person alleging that the building or structure contains any of the conditions described in section 7-1201.
- (2) Inspect any building or structure reported by any department of the city which has reason to believe that the building or structure has any of the conditions set forth in section 7-1201.
- (3) Inspect any building or structure of the city at any time whenever there is reason to believe that the building or structure has a condition described in section 7-1201.
- (4) Post any building, structure or property, when it reasonably appears to the inspector that there is an immediate danger to the health, safety or welfare of any persons because of any condition described in section 7-1201, with a notice reading substantially as follows:

UNSAFE: This structure has been deemed unsafe for occupancy per section 7-181 of the Lee's Summit Code of Ordinances.

Nothing contained in this subsection shall be construed to deprive any person entitled thereto by this article of the notice and hearings prescribed in this article.

- (5) Report to the building official any noncompliance with any notice given under this article.
- (Ord. No. 6399, § 1, 5-18-07)

### **Sec. 7-1203. Inspections by persons other than building inspectors.**

Whenever the building official shall deem it advisable, he may also request inspections be made by the fire

department, health department, or by any other department of the city or appropriate agency, or by any person who might have knowledge and information useful in the determination of whether a building or structure is a public nuisance or, if so, how it might be alleviated. In addition, the building official, if he deems it advisable, may request such an inspection be made by an architect or engineer especially employed by the city for the purpose of that inspection.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-1204. Notice of public nuisance and order of abatement.**

Whenever the building official or inspector has determined that any building or structure is a public nuisance under the provisions of this article, he shall as soon as possible thereafter notify the owner, occupant, lessee, mortgagee, agent and all other persons having an interest in the building or structure as shown by the land records of the recorder of deeds for the county that such building or structure has been found to be a public nuisance under the provisions of this article. The notice shall set forth the description of the conditions found in the building or structure so as to constitute the building or structure as a public nuisance under section 7-1201. The notice shall also provide for abatement of the nuisance by ordering the building or structure to be vacated, if such be the case, reconditioned, repaired or removed, giving a reasonable time for commencement of the work, and requiring the work to proceed continuously without unnecessary delay. The notice of public nuisance and order of abatement may be served, in the manner set forth in section 7-1205, together with the notice of hearing required under section 7-1207, provided that the building official may cancel or continue the hearing if prior to the scheduled hearing date the work required by the abatement order has commenced and has proceeded continuously thereafter without unreasonable delay.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-1205. Service of notices.**

Whenever under this article a notice is required to be served upon the persons interested in any building or structure, the notice shall be signed by the building official, or on his behalf by an inspector of buildings who shall have made an inspection of the building or structure of which the notice is to be given. The notice may be served by handing the notice to the person to be served by anyone competent to be a witness or by leaving the notice at the usual place of abode of the one to be served with a member of the household over the age of 15 years or service may be made by certified mail, return receipt requested, addressed to the person's last known address. Mail returned by the United States Post Office marked "refused" shall constitute proof of service; but if the address of the person to be served shall not be known, or if the certified mailing shall be returned by the United States Post Office marked "address unknown" or "unclaimed" and the person cannot be personally served within the city, then the service of notice may be by publication. The publication shall contain the full text of the notice and shall be published at least once each week for four consecutive weeks on the same day of the week in some newspaper of general circulation published in the county, and the time specified in the notice for a hearing to be held or for the commencement of work or for any other thing to be done shall be at least 45 days from the date of the first publication of notice.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-1206. Standards for determining action required to alleviate public nuisance.**

Whenever a notice shall be given that any building or structure constitutes a public nuisance under the provisions of this article, the building official or inspector giving the notice shall base his order as to the

necessary actions to abate the nuisance by observance of the following standards:

- (1) If the conditions which cause the building or structure to be a public nuisance can be reasonably repaired or maintained so that the building or structure will no longer exist in violation of the terms of this article, the building or structure shall be ordered so repaired or maintained, and if it is not repaired or maintained by the owner, then the city may abate the nuisance by repairing, securing, boarding, demolition or other appropriate means.
- (2) In any case where the state of deterioration of a building or structure constituting the public nuisance is such that necessary repairs would amount to a substantial reconstruction of the building or structure, it shall be ordered repaired or demolished, and if it is not repaired or demolished by the owner, then the city may abate the nuisance by repairing, securing, boarding, demolition or other appropriate means.
- (3) In all cases where the conditions causing the building or structure to be a public nuisance cannot be reasonably repaired or maintained so that the building or structure will no longer exist in violation of the terms of this article, the building or structure shall be demolished.
- (4) If the conditions are such as to make the building or structure immediately dangerous to the health, safety or welfare of its occupants, the building or structure shall be ordered vacated pending abatement of the nuisance.
- (5) Any building or structure constituting a public nuisance because of the conditions described in subsection 7-1201(6) shall be ordered to be completed in accordance with lawful plans and specifications, and if it shall not be so completed or demolished by the owner within the time specified in the order of abatement, then the city shall abate the nuisance by demolition.
- (6) Any building or structure found to be a public nuisance because of the conditions described in subsection 7-1201(7) shall be ordered demolished by the owner within the time specified in the order of abatement, and if the owner fails to do so, then the city shall abate the nuisance by demolition.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-1207. Failure to comply with notice; hearing.**

Whenever there shall be a failure to obey a notice to abate a public nuisance issued as provided in section 7-1204 by not commencing work in the time specified in the notice, or there shall be a failure to proceed continuously with the work required therein without unnecessary delay, the building official shall call and have a full and adequate hearing upon the matter giving all interested persons at least ten days written notice of the hearing. Any party may be represented by counsel, and all parties shall have an opportunity to be heard and present such evidence as shall be relevant to a determination of:

- (1) Whether or not the building or structure involved is a public nuisance under the terms of this article;
- (2) Whether the procedures required by this article have been substantially followed; and

- (3) Whether or not the abatement order of the building inspector was reasonable and within the standards of this article.

All testimony shall be under oath, which may be administered by the building official, and a recording of the hearing shall be made by an electronic device capable of recording the hearing, and the building official may cause a written record of the hearing to be made by a reporter to be employed by the city, the cost of which shall be paid by the city should the proceeding be eventually held against the city, and by the owner if it should not. In the latter case, the cost of such reporting shall be a lien upon the lot, tract or parcel of land upon which the building or structure stands, and shall be added to the costs of performance for demolition or repair if the city shall be required to do so, and shall be payable as provided for such costs. If an electronic recording is made of the hearing, then the building official shall maintain the recording and make it available to any party to the hearing upon request for transcription at the requesting party's expense. The building official may designate another representative of the codes administration department to perform all those duties of the director set forth in this article.

(Ord. No. 6399, § 1, 5-18-07)

#### **Sec. 7-1208. Findings by building official following hearing.**

Within 30 days from the date of the hearing required by section 7-1207, the building official shall, upon the basis of competent and substantial evidence offered at the hearing, make a conclusion of law as to whether or not the building or structure in question is a public nuisance under the terms of this article and detrimental to the health, safety or welfare of residents of the city, specifically finding as a matter of fact the conditions of such building or structure which constitute the nuisance. If it is found that the building or structure is a public nuisance, further findings shall be made as to whether or not the procedures required by this article have been substantially met and complied with, and whether or not the abatement order of the inspector of dangerous buildings to abate the nuisance was reasonable in its terms and conditions and within the standards of this article. If it is found that the abatement order was not reasonable or within the standards of this article, it shall be the duty of the building official to make his own finding of fact as to what is reasonably required to abate the public nuisance within the standards of this article. If the building official finds that a public nuisance does not exist or that the procedures of this article have not been substantially met and complied with, the proceeding against the building or structure shall be dismissed.

(Ord. No. 6399, § 1, 5-18-07)

#### **Sec. 7-1209. Order of abatement.**

If a proceeding is not dismissed following the findings required by section 7-1208, the building official shall issue an order of abatement directing the building or structure to be completed, secured, boarded, repaired or demolished, and vacated as the case may be, within the standards of this article. This order, together with the findings of fact and conclusions of law required by section 7-1208, shall be in writing and shall be immediately delivered or mailed to each party to the hearing or to his attorney of record. In addition, copies of the order and findings of fact and conclusions of law shall be posted in a conspicuous place in the office of the building official for a period of 30 days from the date of issuance thereof. The order shall state a reasonable time, which shall not be less than 30 days from the date of issuance, within which to comply with the order, and shall further provide that if it is not complied with within such time, the building official may, in his discretion, cause the work to be done by the city and its own crews or by contractors employed by the city for that purpose, or the

city may enter into contracts with persons engaged in the business of repairing, securing, boarding or demolishing buildings for the purpose of enforcing the order provided for in this section provided there are unencumbered funds in the city budget for that purpose.

In the alternative, upon the failure of the owner to comply with the order of abatement directing completion, securing, boarding, repair, demolition or other means of abatement of the building or structure as required, or upon the finding of the building official that the building is a public nuisance under section 7-1201 hereof, the building official may request that the city council exercise its authority of eminent domain under Article VI, Section 21 of the Constitution of the State of Missouri by declaring a public necessity for the taking of the property as blighted, substandard or unsanitary and directing the city attorney to commence proceedings to obtain ownership of the building or structure, and the property upon which it is located, by condemnation. If the city acquires title to the property by eminent domain, the building official shall therefore abate the nuisance on behalf of the city by repair, demolition or other appropriate action.  
(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-1210. Issuance of tax bill for cost of work; manner of payment.**

(a) Whenever the city shall have caused the work to be done as provided by section 7-1209, or incurred costs for emergency abatement as provided in section 7-1213, the building official shall certify the cost of the work to the city clerk, who shall cause to be prepared a special tax bill therefore and for the cost of the reporter at the hearing, which shall likewise be certified by the building official. This tax bill shall be issued against the lot, tract or parcel of land upon which the building or structure is located and against the property owner. The special tax bill, from the date of its issuance, shall be deemed the personal debt of the property owner and shall be a lien on the lot, tract or parcel of land until paid and shall be registered in the office of the director of finance of the city in a book kept by him for such purposes.

(b) At the written request of the taxpayer delivered to the city clerk, a tax bill for repair or demolition of a building or structure may be paid in ten equal annual installments, which installments with interest thereon to date on the unpaid balance shall be due annually on the anniversary of the date of issuance of the bill. Interest shall be at the rate of eight percent per annum on the unpaid balance of the special assessment computed from the date of issuance. If any annual payment of principal or interest shall not be paid within 30 days of its due date, the entire remaining balance of the tax bill shall immediately become due and payable.

(c) If request for ten annual payments is not made prior to the time the building official shall certify the cost of the work to the city clerk, the tax bill shall be payable in 60 days from its date of issuance with interest thereon at eight percent per annum until paid.  
(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-1211. Enforcement of tax bills.**

Special tax bills issued under section 7-1210 shall be prima facie evidence of the validity of the bill, the doing of the work and the liability of the property and the property owner for the charges stated in the bill and shall be collected if default should occur by suit brought in a court of competent jurisdiction on behalf of the city. Judgment in any such suit may at the election of the city order the property sold under special writ of execution, with the proceeds thereof being applied first to the costs of sale, and the remainder to the amount of the judgment, provided the property owner shall remain personally liable for the amount of any deficiency

remaining if the proceeds of sale are not sufficient to pay the full amount of the lien, or the city may forego the lien and elect to take a personal judgment against the property owner for the entire amount of the unpaid special tax bill, with a general execution to issue therefore.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-1212. Appeals.**

Any owner, occupant, lessee, mortgagee, agent or other person having an interest in the building or structure may appeal from the order and determination of the building official or his designee made under the provisions of section 7-1209. The appeal shall be made to the circuit court of the county in the manner set forth in chapter 536 of the Revised Statutes of Missouri. In any appeal provided for in this section, any person who owns or occupies property located within 1,200 feet of the perimeter of the building or structure which is the subject of the appeal shall be allowed to present evidence on behalf of the city in accordance with RSMo. 67.430.2.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-1213. Summary abatement where immediate danger exists.**

In all cases where it reasonably appears that an immediate danger to the health, safety or welfare of any person exists, the building official may take emergency measures to vacate, repair or demolish a building or structure which is a public nuisance under the provisions of this article.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-1214. Liability of city agents and employees; services by city agents and employees to be for benefit of city.**

No officer, agent or employee of the city shall be personally liable for any damage that may occur to any persons or property as a result of any act required of him or permitted to be taken by him under the terms of this article. Any suit brought against any such officer, agent or employee of the city as a result of any such acts required or permitted shall be defended by the city attorney until the final determination of the proceedings, and if judgment shall be obtained it shall be paid by the city. It is hereby further declared that no officer, agent or employee of the city owes any duty under the provisions of this article to any citizen or other individual, but that the duties prescribed in this article and imposed upon officers, agents or employees of the city are duties to be performed for the government of the city.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-1215. Penalty for failure to vacate.**

If the occupant of any building or structure shall fail to vacate such building or structure within the time specified by a notice issued under section 7-1204, he shall be punished upon conviction thereof as provided by section 1-13 of the Code of Ordinances.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-1216. Penalty for failure to comply with order of building official.**

It shall be unlawful for the owner, occupant, lessee, mortgagee, agent and all other persons having an interest in a building or structure not to comply with the order of the building official issued pursuant to section 7-1209 or

7-1213. Any person who violates the order of the building official shall be subject to a penalty under section 1-13 A. of the Code of Ordinances.  
(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-1217. Use of insurance proceeds for reimbursement of city's costs.**

(a) If there are proceeds of any insurance policy based on a covered claim payment for damage or loss to a building or other structure arising out of or caused by fire, explosion or other casualty loss, and the covered claim payment exceeds 50 percent of the face value of the policy covering such building or other structure, then the insurer shall pay to the department of finance a sum equal to 25 percent of the covered claim, within 30 days of the determination of coverage, to be held by the city in an interest-bearing account. The proceeds shall be used to reimburse the city for its costs in the removal of such building or other structure, if necessary.

(b) The city shall release the proceeds paid to it pursuant to subsection (a) of this section to the insured or in accordance with the provisions of the insurance policy and endorsements thereto as directed by the insurer unless within 30 days after receipt of the insurance proceeds the designated official of the city has commenced an action under section 7-1204 et seq., for the building or other structure to be repaired, secured or demolished.

(c) The city shall apply the insurance proceeds first to the cost of the removal of any building or other structure found to be a nuisance under this article, less any salvage value, prior to the expenditure of any city funds. Should any balance of insurance proceeds remain in the interest-bearing account after the expense of removal of such building or structure has been paid, the balance shall be paid over to the insured.

(d) Nothing in this section shall be construed to affect the priority of a named mortgagee on the insurance policy to the proceeds of the policy.

(e) It shall be unlawful for an insurance carrier to fail to pay insurance proceeds to the city after being notified pursuant to this article.  
(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-1218. Owner to allow entry for purposes of inspection.**

If at such time any of the conditions listed in section 7-1201 are determined to be in existence by the building official or inspector, the owner shall, upon request, provide entry to an inspector of the city for purpose of determining whether:

1. The building is characterized by violations of the applicable building and property maintenance codes of the city; and/or
2. The building has been properly boarded and secured from entry; and/or
3. The building is characterized by violations of other provisions of section 7-1201.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-1219. If entry denied for purpose of inspection.**

If the city inspector has requested entry to building from the property owner per section 7-1218 and if consent is refused, the building official may seek an administrative search warrant for entry as provided for in section 7-113 of the Lee's Summit City Code.  
(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-1220. Unlawful to allow an unoccupied building to become open.**

It shall be unlawful for the owner of any unoccupied building to allow the same to become open at door, window, wall or roof for a period of time exceeding 24 hours, except when such building is being boarded, repaired or demolished under a valid permit issued by the codes administration department of the city.  
(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-1221. Emergency procedures.**

The city council hereby finds and declares that unoccupied buildings which are open at door and/or window, wall or roof constitute a potential danger and/or a public nuisance and constitute an emergency under this article. The building official may, upon his determination that a building is unoccupied and open at door and/or window, wall or roof, temporarily close such building by proceeding as follows:

- a. The director shall post the property with a notice pursuant to section 7-1204, pertaining to notice of public nuisance, for not less than 24 hours.
- b. After the property has been posted for not less than 24 hours, the director shall hold a hearing to give the owner and any interested parties an opportunity to respond.
- c. The director is authorized to employ a contractor for the purpose of securing the building.
- d. Whenever the city shall have caused the work to be done as provided for in this subsection, the building official shall certify the cost of the work to the city clerk, who shall cause to be prepared a special tax bill assessment therefore, pursuant to the terms and conditions set forth in section 7-1210, pertaining to manner of payment of tax bills for work.
- e. If a building or structure is in violation of only subsection 7-1201(5), and the city has temporarily boarded the building under section 7-1221, the building official shall issue a notice pursuant to section 7-1204 to the property owner to abate the nuisance by removing any temporary boarding materials and to repair or restore the opening(s) back to their original material, design, function and/or intent.

(Ord. No. 6399, § 1, 5-18-07)

**Secs. 7-1223--7-1299. Reserved.**

**ARTICLE XIII.**

**SUBTERRANEAN SPACE BUILDING AND FIRE CODE**

**Sec. 7-1300. Title and purpose.**

This article shall be known as the city's Subterranean Space Building/Fire Code and may be cited as such.

These regulations shall apply only to subterranean spaces developed by the extraction of subsurface-located material from underground spaces. Except for related mine entrances or portals, ventilation shafts and surface utility easements, it is not the purpose of this article to provide direct regulation of surface uses which are separately regulated by the applicable above ground building and zoning codes. The further purposes of these regulations are:

To ensure that subterranean space uses are appropriate and reasonably safe (restricted storage/use of hazard materials and substances);

To provide efficient streamlined regulations for the circumstances of mixed subterranean space uses, including the need for planning flexibility with regard to potential future tenant occupancies; and

To protect the health, life, safety, public welfare and property both for those persons who use the subterranean spaces and of those who use the surface above and adjacent to them.

To provide a reasonable degree of safety for emergency response personnel.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-1301. Building and fire codes.**

*Building code:* The provisions of this article are in addition to the building code, as adopted and amended by the City of Lee's Summit.

*Fire code:* The provisions of this article are in addition to the fire code as adopted and amended by the city.

*Mechanical code:* The provisions of this article are in addition to the mechanical code as adopted and amended by the city.

*Plumbing code:* The provisions of this article are in addition to the plumbing code as adopted and amended by the city.

*Zoning codes:* All subterranean spaces shall comply with all provisions concerning planning and zoning of the city, including site plans which shall include proposed development of the subterranean space, the existing zoning and use of the surface above the subterranean space, and any existing zoning and existing and proposed use of adjacent lands within the development.

(Ord. No. 6399, § 1, 5-18-07)

**Sec. 7-1302. Permit and occupancy requirements.**

*7-1302.1 Application for permit and/or certificate:* The subterranean space as well as all tenant buildings inside the subterranean space shall be classified as Group US Occupancies. The subterranean space and all interior

buildings shall make application for a building permit and/or certificate of occupancy as required for surface occupancies. Approval shall be subject to compliance with all applicable sections of this article. Areas outside tenant spaces which are accessory to the use of a particular building including such areas as parking, loading docks, trash containers, public ways and streets are determined to be under the control of the owner of the subterranean space for the purposes of this code.

*7-1302.2 Subterranean master evacuation plan:* A master evacuation plan is required to be submitted to the building official and fire chief for review and approval. The plan shall define public ways, streets and paths intended to provide evacuation routes to the exterior. The plan shall indicate reflectors required by section 7-1304.13 of this article. The subterranean master evacuation plan shall be updated and resubmitted for approval when public ways, streets and other evacuation routes are altered.

*7-1302.3 Subterranean master ventilation plan:* A master ventilation plan is required to be submitted to the building official and fire chief for review and approval. The plan shall describe the intended approach to maintain air qualities described in section 7-1304.9.2 of this article. The plan shall show the location and size (in cfm) of all exhaust fans, ventilation fans and controls. The subterranean master ventilation plan shall be updated and resubmitted for approval when major systems are altered.

*7-1302.4 Geo-technical engineering studies:* Note that these studies shall only be required for the subterranean space occupancy. A registered engineer with competence in the field, and selected by the owner, shall prepare a report reviewing the structural integrity of the subterranean space. The owner shall select the engineer with approval from the public works director, provided that adequate information is submitted concerning:

The engineer's previous experience with mine stability investigations;

The engineer's geological, geological engineering, geo-technical engineering, rock or mining engineering expertise; and

Client contact listing of similar projects. Once selected, the engineer shall submit the following information in the form of a geo-technical report to the public works director for review.

*7-1302.5. Surveys.*

*7-1302.5.1 Surface survey:* The owner of the subterranean space shall provide a boundary survey of the surface of the proposed subterranean space at a scale of one inch = 100 feet (unless otherwise approved), tied to existing section corners, with USGS Sea Level datum contours at two foot intervals.

*7-1302.5.2 Subterranean survey:* The owner of the subterranean space shall provide a mine survey tying surface coordinate grid to subterranean space using section corners. This survey shall show locations, size, pattern and spacing of pillars, an existing and proposed portal entrances with a horizontal accuracy of plus or minus one foot. This survey shall also illustrate those areas of other mines directly adjacent (within 100 yards) to the subject tract as well as those portions of other mines being utilized for ventilation or access purposes to the subject subterranean development. Floor and ceiling spot elevations shall be made throughout the subterranean space as is necessary for drainage purposes.

*7-1302.6 Geological information:* The data requested below may be obtained through interpolation of the

preliminary plan data if the engineer believes the information is sufficient. (Note: The following information is required to be provided for the subject tract and for those portions of adjacent mines being utilized for ventilation or access purposes.)

- 7-1302.        *6.1 Borings:* A sufficient number of borings as needed for licensed registered engineer to determine geological profile and evaluate structural integrity of the roof beam.
- 7-1302.        *6.2 Profile section cuts:* Vertical profile of rock and overburden from the roof of mined area to ground surface labeling and the depth of each successive geological layer. Show the elevation of the ground surface, mine floor, and roof at each profile location. These vertical profiles shall be provided with a minimum of one longitudinal and one transverse section to give a clear picture of the entire area proposed for development. The vertical profile locations shall be shown on a plan of the total area and labeled for reference. On the same map, location and reference distance to outcrop shall be shown.
- 7-1302.        *6.3 Roof beam thickness:* Provide an isopach map illustrating roof beam thickness.
- 7-1302.        *6.4 Overburden thickness:* Provide an isopach map illustrating overburden thickness.
- 7-1302.        *6.5 Floor material:* In a short narrative format indicate floor material and composition thickness.

*7-1302.7 Geo-technical evaluations:*

*7-1302.7.1 Structural calculations:* Submittal of all necessary structural calculations Including; determination of original compressive stress loading of the rock layer prior to the mining operation; the projected loading to the support pillars; and a complete analysis of the loading patterns and support capability of the pillars, roof beam and floor of the mined area with the ultimate above ground/below ground development proposed.

*7-1302.7.2 Subterranean structural inspection:* An overall visual inspection of the subterranean space is required prior to development. An inspection report shall be prepared and be submitted to the building official. This report shall indicate major structural flaws and include a statement concerning the overall safety of the subterranean space.

Prior to construction in those areas where a building is proposed, and in all common spaces, a detailed room by room inspection of the subterranean space proposed before occupancy shall be undertaken. This inspection shall indicate such items as; the surface condition of the roof beam, pillars and floor with detailed descriptions of any observed cracking, sloughing, chipping or other deterioration. Show and describe any evidence of water infiltration.

*7-1302-7.3 Recommended structural modifications:* Submittal of all proposed structural modifications, including any needed blasting for final room/corridor trim work or loading dock creation.

*7-1302-7.4 Engineer's certification of structural adequacy:* The following certification shall be provided by the owner's geo-technical engineer:

I have personally observed the subterranean space described as:\_\_\_\_\_. I have personally supervised and reviewed the computations of data and supportive information; Required on-site room by room inspections were completed. I have also completed the calculations, analysis, recommendations and conclusions as set forth in the "Geo-Technical Engineering Studies" of this Section. As a professional engineer, I hereby certify, to the best of my professional judgment, that there is no visible evidence of structural integrity problems; and/or appropriate remedial corrective measures addressing structural integrity have been completed and/or the area is suitable for occupancy subject to completion of the remedial measures as recommended in the attached survey report in the areas outlined in the attached survey for final occupancy.

Name:\_\_\_\_\_Registration No:\_\_\_\_\_

Signature:\_\_\_\_\_Date\_\_\_\_\_

*7-1302.8 Annual certifications and reviews:*

*7-1302.8.1 Smoke management:* The owner of the subterranean space shall provide the City with an annual exhaust fan test showing results of air flow and clearing rates and conformance with the approved subterranean master ventilation plan. This exercise shall include operation of all fans, dampers, controls and testing of required smoke detectors in air handling systems.

*7-1302.8.2 Geo-technical engineering inspections:* A visual inspection of all portions of the subterranean development having final occupancy approvals shall be undertaken during the year [by] a person with competence in the field. This inspection shall indicate such items as; the surface condition of the roof beam, pillars and floor with detailed descriptions of any observed cracking, sloughing, chipping or other deterioration. Any water infiltration problems shall be described in detail. Additional inspection techniques, common to the industry shall be performed as needed. The consulting engineer shall review all inspection data, field verify potential problem areas, make recommendations, if needed and complete the following certification annually:

I have personally observed the subterranean space described as:\_\_\_\_\_. I have personally supervised and reviewed the monitoring data and supportive information. I completed on-site inspections of occupied areas where deemed necessary; and I have completed the analysis, recommendations and conclusions as set forth in the "Geo-Technical Engineering Studies" of this Section. I certify that I am currently a professional Engineer.

Name:\_\_\_\_\_Registration No:\_\_\_\_\_

Signature:\_\_\_\_\_Date:\_\_\_\_\_

*7-1302.8.3 Air quality:* A certified industrial hygienist or registered engineer shall annually certify that the air quality in the occupied areas of the subterranean development complies with the standards set forth for carbon monoxide in this article. The annual report, including required air quality readings (taken in those areas most likely to have high carbon monoxide readings) shall be submitted to the Building Official for review.

The owner shall take carbon monoxide readings at a frequency of every two months or more frequently as determined by the building official. These readings shall be recorded and available for review by the building official.

*7-1302.8.4 Emergency evacuation drill:* The owner shall conduct an annual emergency evacuation drill in conjunction with Lee's Summit Fire Department officials and modify subterranean master evacuation plan, as needed.

*7-1302.8.5 Fire sprinkler maintenance:* The owner shall maintain the sprinkler system in conformance with the fire code as amended.

*7-1302.8.6 Light, ventilation and sanitation:* All portions of Group US Occupancies customarily used by human beings shall be provided with artificial light, air and sanitary facilities as required in this article for the individual occupancy of the developed areas in accordance with surface building codes. Toilet facilities shall be located either in the developed occupancies or conveniently nearby in the subterranean space.

*7-1302.9 Emergency response station:* At intervals of approximately 600 feet along all roadways shall be an emergency response station that shall include an approved 2.5-inch fire department standpipe hose connection, a complex map showing evacuation routes, and a manual pull station. The manual pull station shall be accessible to the public and shall be connected to the subterranean space fire alarm system. These stations shall be marked by a luminescent sign and be provided with emergency powered illumination providing a minimum of one foot-candle at the station. The stations will be numbered consistent with the address and column grid system in the subterranean space.

*7-1302.10 Fire protection systems:* Fire protection systems shall be provided as required by this article and the building code, as amended. Such systems shall be continuously maintained in reliable operating condition at all times, and such periodic inspections and tests shall be made as are necessary to ensure proper maintenance. When an automatic sprinkler system is out of service for more than twelve hours within a 24-hour period, the building shall be evacuated.

*7-1302.11 Special hazards:*

No hazardous occupancies as defined in the building code as Group H occupancies will be allowed in any subterranean space.

No hazardous materials, liquids or chemicals shall be stored in Group US occupancies except as permitted in Table No. 307.1(1) of the building code for a single one-hour fire resistive control room.

All tenants occupying any space and the owner of the common spaces shall be required to adhere to the City of Lee's Summit hazardous materials permit process in accordance with sections 13-44.

No liquefied petroleum gas or natural gas shall be piped, stored, utilized, or transported within any portion of an underground space.

No explosives of any type or class; or fireworks of any type or class shall be manufactured, stored, utilized, or transported into any underground space. The exception to this provision are areas where active mining operations are underway and blasting permit has been issued by the City. No explosives shall be stored for mining operations except for those that are present for immediate utilization. Any magazines or other storage facilities shall be on the exterior of the underground space and shall be in accordance with an explosive storage permit issued by the Fire Department.

There shall be no utilization of the common spaces outside of any building except for vehicle parking and trash dumpsters. Vehicle parking shall be limited to a maximum of 72 hours in length for any one vehicle.

*Exception:* Owners vehicles used exclusively for the maintenance and operation of the subterranean space may be parked for longer than 72 hours.

#### *7-1302.12 Emergency and exit signs:*

All streets and roadways within the subterranean space shall be identified for emergency purposes by readily visible signs. Lettering shall be not less than four inches high and not less than a one-half-inch wide stroke and shall be of luminescent finish. The signs shall not be higher than four feet above the road surface.

Street names and building addresses shall be approved by the department of planning and development.

Each pillar on each side of a street or roadway shall be identified by name, letter or number; and below each street sign shall be a large directional arrow with the word "EXIT" in letters not less than six inches high nor less than a three-quarter-inch wide stroke. All signs and letters shall be of reflective or luminescent paint. The exit arrow shall point in the direction of the nearest exit or portal.

All street identification and exit routing shall be shown on color coded maps of the subterranean space, shall be available to all personnel using the subterranean space entrances and exits and shall be given to the police and fire departments having jurisdiction in the subterranean space. The maps shall be brought up-to-date annually or as required to be current.

All emergency evacuation routes shall be marked with roadway-mounted reflectors placed approximately 20 feet apart and as approved by the fire department or by another evacuation route marking system as approved by the fire department.

All common spaces and roadways shall be open at all times without security fences and/or gates provided. Portal and other perimeter exits from the subterranean space may be secured from unauthorized entry, however, any such portal or perimeter exits shall provide for emergency exiting. The undeveloped area of the subterranean space may be secured from non-authorized entry. The Fire Department shall have reasonable authority to require security by fences or other security measures to isolate specific conditions or equipment deemed hazardous by the fire department.

#### *7-1302.13 Fire control room:*

*7-1302.13.1 Required:* A Group US occupancy shall contain a fire control room immediately adjacent to an entrance portal of the subterranean space. The fire department shall have direct access to the fire control room via a Knox box system. The room shall contain an annunciator panel which has an electrically-operated visual signaling device for each remote alarm initiating (automatic) device, such as fire detectors, smoke detectors, water flow switches, and for each manual alarm initiating device, such as a manual pull station or manually-operated switch.

*7-1302.13.2 Site plan:* At or near the annunciator panel shall be a current large site plan indicating in reasonable detail the entire subterranean space, identifying by letter, name and/or number each pillar, each building, and each tenant space. The location of each manual or automatic detection device and exhaust fan shall be identified with coded letter/and/or number to match the visual signal on the annunciator panel. The site plan shall be clear and concise so that the person in charge or firemen may immediately locate an emergency.

*7-1302.13.3 Fire alarm:* Any one of the remote manual or automatic alarm indicating devices shall activate an alarm through audible and visual notification appliances. These shall be capable of being operated from the fire control room on a building by building basis and/or as a general alarm throughout the entire subterranean space as specified for the voice communication system, as well as transmitting an alarm automatically to the local fire department.

*7-1302.13.4 Ventilation controls:* Manual controls (on-off switches) shall be provided for exhaust fans and any other fans moving air in the common spaces.

*7-1302.13.5 Exhaust fans:* Moving air to or from the surface are required to have individual on/off switches. Fans in common spaces used for general circulation may be grouped together for control by the fire department on one or more manual control switches.

*7-1302.13.6 Radio:* A radio system shall be installed in the fire control room with the specific frequencies as required by the fire department. This radio system shall be capable of communicating with the communication repeaters that shall be located throughout the underground space and shall be able to communicate with the fire department's communication center.

*7-1302.13.7 Subterranean communication repeaters:* The owner shall provide a constant and unobstructed communication network for the fire department via repeaters or other such device throughout the developed areas of the subterranean space. The system shall be designed to provide communications from the developed spaces to the fire control room. The fire department shall be able to communicate from the fire control room to the fire department's communication center. The system shall have an emergency backup power source capable of operating this system for a minimum of four hours. Multiple frequencies are required if security, maintenance or other personnel use the same system. The design of the radio system is required to be approved by the fire department.

*7-1302.14 Streets:* Streets shall be provided with hard surfaces designed and maintained to support the imposed loads and shall be provided with a surface so as to provide all weather driving capabilities.  
(Ord. No. 6399, § 1, 5-18-07)

## **Sec. 7-1303. Definitions.**

For the purpose of this article, certain terms are defined as follows:

*Area gross:* Area of a building including pillars but excluding exterior walls.

*Area net usable:* Area of the subterranean space not including pillars and exterior building walls.

*Building* is an enclosed tenant space separated from public ways, roadways and other tenants.

*Building code:* Refers to the code adopted as the building code for the City of Lee's Summit, MO. (See article 2 of this chapter)

*Common spaces:* All subterranean spaces open and not separated used as public ways, streets or exits for the general public.

*Emergency response station:* A station that will include a fire department 2.5-inch standpipe hose connection, manual pull station and facility map showing emergency evacuation routes.

*Evacuation:* The term evacuation in this code is used to describe the means of egress within the common space of the subterranean space to the exterior.

*Exiting:* The term exiting in this code is used to describe means of egress within tenant buildings to the exterior of the tenant building (which is the common space of the subterranean space).

*Exterior building walls:* Walls separating interior tenant spaces from common spaces including public ways and streets.

*Owner:* The developer, landlord, and/or the party or entity responsible for all common spaces is referred to by this title throughout this code.

*Portal:* A large opening created by mining operations, which provide access to the underground space. These openings are usually large enough for the passage of vehicles.

*Public way:* Is any parcel of land (space) unobstructed by development not less than 16 feet in width and with a clear height not less than seven feet dedicated to the free passage of the public.

*Street:* Is a type of public way used as a vehicle roadway within the subterranean space, not less than 16 feet in width providing a clear height of 13 feet six inches in height which has been dedicated for public use.

*Subterranean master evacuation plan:* A written plan illustrating evacuation routes, exits, portals and buildings within the subterranean space.

*Subterranean master ventilation plan:* A written plan illustrating the location and size (in cfm) of all exhaust fans, ventilation fans and controls.

*Subterranean (space) structure:* Is the cavern resulting from the extraction of subsurface-located material from underground areas in such a manner that the surface area of the property is not disturbed except in the vicinity of the entrances and exhaust discharges.

*Tenant:* Any person, company, or entity occupying any of the buildings within the underground space shall be identified in this code by this title.

*Undeveloped spaces:* All areas of the subterranean space, which are neither tenant spaces nor common spaces.

(Ord. No. 6399, § 1, 5-18-07)

## **Sec. 7-1304. Application.**

*7-1304.1 General:* Group US occupancies shall be a subterranean space constructed out of a horizontal layer(s) of solid limestone and shale by an approved excavation method of mining, developed for use as manufacturing, office, warehousing and storage only. No other occupancies are permitted except for accessory uses as approved by the building official and the fire chief.

Because the structure of the subterranean space is formed of solid limestone or solid limestone and shale, it shall be considered Type I construction as defined in the building code as amended. All exit facilities such as passageways or enclosed stairs within the common subterranean space shall be consistent with Type I construction.

Each individual building within the subterranean space shall be classified and developed as Type I construction as modified herein.

*7-1304.2 Fire resistance rating of structural elements.* All construction on or within the subterranean space shall be of Type I construction as defined in the building code with the following modifications.

*7-1304.2.1 Mezzanine floors:* Zero-hour fire resistance including supporting columns.

*7-1304.2.2 Exterior building walls:* Exterior walls of buildings within subterranean spaces shall be at least two-hour fire resistive construction.

*7-1304.2.3 Openings:* All openings in exterior building walls shall conform to the requirements of the building code and shall be protected by a fire assembly having at least a one and one-half-hour fire protection rating.

*Exception:* Glazed openings not exceeding 25 percent of the length of the exterior wall of the tenant or building space near entrances may utilize tempered or laminated glass protected with sprinklers spaced approximately at six feet apart designed to wet the entire surface of the glass on both sides. Glazing shall be held in gasketed frames to allow expansion before the sprinkler activities. Curtains or other fixtures shall not obstruct the discharge of water.

*7-1304.2.4 Interior walls and permanent partitions:* All interior walls and permanent partitions shall be of non-combustible materials. Except where used as backing fire retardant treated wood shall not be

allowed within these assemblies.

*7-1304.2.5 Tenant separations walls:* Tenant separation walls shall be of at least two-hour fire resistive construction. Except where used as backing, fire retardant treated wood shall not be allowed within these assemblies.

*7-1304.2.6 Openings:* All openings between tenant spaces are required to be provided with one and one-half-hour automatic or self-closing doors.

*Exception:* Noncombustible penetrations for conduit and pipes if protected with approved fire stops.

*7-1304.2.7 Area separation walls:* Area separation walls used to subdivide spaces as required by subsection 1304.4. of this article shall be separated by two-hour fire resistive, non-combustible walls. Openings shall be one and one-half-hour fire resistive and be limited to 25 percent of the length of the wall.

*7-1304.3 Fire resistive occupancy and use requirements.*

Fuel fired equipment is prohibited except as allowed by a hazardous materials permit.

Buildings and tenant spaces storing hazardous materials shall be limited to a single one-hour fire resistive control area for materials listed in Table No. 307.1(1) as allowed by section 13-44 of the Lee's Summit Code of Ordinances.

*7-1304.4 Allowable floor areas-one story areas.*

No building of any occupancy classification shall be permitted to have unlimited area. The maximum net usable area for each building including mezzanines shall be limited to three hundred sixty thousand (360,000) square feet of gross area.

Combinations of spaces which are greater than three hundred sixty thousand (360,000) gross square feet due to area separation walls shall be provided with exterior access and standpipes as required by the Fire Chief.

*7-1304.5 Interior building exiting.* Except as specifically modified herein, every building or portion thereof shall be provided with exits as required by the requirements of chapter 10 of the Building Code.

*7-1304.5.1 Exit through adjoining areas:*

Exits from a room may open into a single adjoining room or area if such adjoining room or area provides a direct means of egress to an exit corridor, exit stairway, public way, street, horizontal exit or exit passageway.

Foyers, lobbies and reception rooms shall not be construed as adjoining rooms when provided obvious and unobstructed means to an exit.

*7-1304.5.2 Definition of exit:* Occupants reaching a street or public way may be considered exited from tenant building spaces when they reach a common space and adequate evacuation facilities from the subterranean space are provided in accordance with section 7-1304.6 of this article.

*7-1304.6 Subterranean evacuation facilities.*

*7-1304.6.1 Evacuation facilities:* Common spaces including streets and roadways throughout the subterranean space shall be considered to be horizontal, continuous and unobstructed means of egress to an exterior door, portal, horizontal exit, enclosed exit passageway or enclosed stair.

Any street less than 20 feet in width shall be designated for one-way traffic only.

*7-1304.6.2 Occupant load determination:* The occupant load used to determine the required exit capacity from the subterranean space shall be not less than one-fifth of the total occupant load of all interior building spaces considered simultaneously occupied.

*7-1304.6.3 Number of evacuation routes:*

Every subterranean space shall have not less than two vehicle entrances or portals.

Every subterranean space having an occupant load of 500 to 999 shall have not less than three separate evacuation routes.

Every subterranean space having an occupant load of over 1,000 persons shall have not less than four separate evacuation routes.

*7-1304.6.4 Width of evacuation routes:* The total width of evacuation routes in feet shall not be less than the total occupant load divided by 60 people per foot. Such width shall be divided approximately equally among the separate evacuation routes or portals provided.

*7-1304.6.5 Arrangement of evacuation routes:* Evacuation routes shall be arranged a reasonable distance apart so that if one becomes blocked, the other route or routes will be available. The minimum distance between the vehicle portals shall be a minimum of one-fourth of the maximum diagonal of the subterranean space but need not exceed 300 feet measured along the subterranean interior perimeter.

*7-1304.6.6 Travel distance:* The maximum distance from the discharge point of a tenant space or building to an exterior door, portal, horizontal exit, enclosed exit passageway or enclosed stair shall be limited to 2,640 feet.

*7-1304.6.7 Entrance prohibition:* Upon the sounding of a general fire alarm, red flashing lights shall activate at each portal. These lights shall be located adjacent to a sign which indicates "Do not enter when light flashing, Fire in the subterranean space ". The sign shall be subject to the approval of the fire department.

*7-1304.7 Fire protection systems.*

*7-1304.7.1 General:* Fire protection systems shall be provided as set forth in chapter 9 of the building code except when modified in this article.

*7-1304.7.2 Sprinkler system required:* All occupied areas of the subterranean space including all streets, public ways, parking lots, loading docks, and any other developed areas, shall be protected by an automatic fire sprinkler system.

*7-1304.7.3 Wet standpipes:* A 2.5-inch wet standpipe connection shall be installed inside the building at each exterior door of every building and at any door of any interior exit corridor. A 2.5-inch wet standpipe hose connection shall also be provided at each emergency response station. In addition, a 2.5-inch wet standpipe hose station shall be installed in all roadway areas at distances of approximately 300 feet apart, including those that are installed at the emergency response stations. All standpipe piping and valving shall be painted day-glo yellow as approved by the Fire Department.

*7-1304.7.4 Standby power:* Standby power shall be provided for emergency exit illumination, fire alarm, fire pump, and lighting and controls in the fire control room.

*7-1304.7.5 Emergency response vehicle:* The owner shall provide a one-time payment for an emergency response vehicle that will be owned and operated by the fire department. The emergency response vehicle shall be a heavy-duty, electric-powered vehicle that will operate for a minimum of two-hours continuous operation. It shall include the following minimum equipment.

On-board 4,500 psi air system with a supply of 60 minutes for four fire fighters with four fixed air supply ports.

Eight one-hour 4,500 psi SCBA OSHA approved bottles.

Six hundred feet of 1.75-inch fire hose.

Two 1.75 inch fire nozzles and two 2.5-inch reducers.

Sixteen channel UHF, five watt mobile radio with multiple frequencies.

20,000 cfm positive pressure ventilation fan.

Two minimum low mounted fog lights.

The owner shall provide a secure parking location near the fire control room with electrical power for recharging the cart.

*7-1304.7.6 Fire hydrants.*

*7-1304.7.6.1 Where required:* A minimum of one fire hydrant shall be located at each outside parking lot and each portal unless otherwise approved by the Fire Chief. Fire hydrants near portals may be fed from the subterranean space standpipe water supply system.

*7-1304.7.6.2 Hydrant requirements:* All fire hydrants installed on the exterior of the subterranean space shall be in accordance with the design and construction manual of the City of Lee's Summit.

*7-1304.8 Building mechanical systems.*

*7-1304.8.1 General:* When heating, cooling or ventilation systems are provided in buildings and tenant spaces of Group US Occupancies, such systems shall be installed in accordance with the mechanical code.

*7-1304.8.2 Air quality:* The quality of air in Group US Occupancies shall be certified annually as established in section 7-1302 of this article. Ventilation within buildings and tenant spaces shall be designed to limit the concentration of harmful gases gauged by carbon monoxide levels as follows:

Thirty-five ppm over a one-hour period.

Nine ppm over an eight-hour period.

*7-1304.9 Subterranean space ventilation.*

*7-1304.9.1 General:* The quality of air in Group US Occupancies shall be certified annually as established in this article.

*7-1304.9.2 Air quality:* Ventilation within the subterranean space to be designed to limit the concentration of harmful gases gauged by carbon monoxide levels. Carbon monoxide levels to be limited to an average 50 ppm in streets or public ways over any one-hour period.

Carbon monoxide levels exceeding this amount shall be rectified.

*7-1304.10 Plumbing systems.* Plumbing systems installed in Group US Occupancies, including developed areas therein, shall comply with the applicable requirements of the building code and the plumbing code, except as modified by this article.

*7-1304.10.1 Vent termination:* Each vent pipe or stack serving a plumbing system in a building in a subterranean space shall terminate vertically through the roof or horizontally through the wall of such building to a street or yard. When terminated through a well, the vent terminal shall be as high above the floor as possible and shall be at least 25 feet from any door, window or ventilation intake opening in the building wall. The open end of such vent terminal shall be covered with a protective screen.

*7-1304.10.2 Subterranean sewer structure trap:* Whenever a building sewer serving a subterranean space conveys sanitary sewage to a public sewer, a trap shall be installed on the main sewer line outside the subterranean space. The purpose of the trap is to prevent odors or gases and/or pests from entering the subterranean space plumbing system from the public sewer. It is not to be used as a ventilating duct for the public sewer.

A fresh-air inlet shall be connected on the upstream side of this trap so as not to interfere with the cleanouts therein. The upper end of the fresh-air inlet shall terminate in a protected area at least 20 feet from a portal or other opening into the subterranean space. The upper end of the inlet shall be turned down and shall be provided with a substantial protected, screened cover. The air inlet shall be sized properly and shall remain open in order to maintain fixture trap seals in the plumbing system.

*7-1304.11 Electrical systems.* Electrical systems installed in Group US occupancies, including developed areas therein, shall comply with the applicable requirements of the building code and the electrical code, except as modified by this article.

*7-1304.12 Undeveloped areas.* Undeveloped areas in Group US occupancies which are not protected by an automatic fire extinguishing system shall not be used for any purpose, including vehicle parking, truck or trailer parking, or material storage. The owner shall be responsible for providing and maintaining an effective system that shall prevent the unauthorized use of non-sprinklered undeveloped areas.

*Exception:* Non-sprinklered undeveloped spaces may be used for mining operations and storage of loose rock and sand.

*7-1304.13 Reflectors.*

A system of roadway-mounted reflectors shall be utilized for exiting and to indicate the location of Fire Department hose connection locations.

Green reflectors shall show a path indicating the direction of travel to the closest roadway exit or portal.

Yellow reflectors shall indicate the direction for a secondary egress point, whether from an exit or portal.

A red reflector shall indicate the travel direction toward a dead end where no egress can be accomplished from the underground space.

The reflectors shall be placed in accordance with the approval of the Fire Department but shall be placed approximately 20 feet apart, unless another exiting system is proposed by the owner and approved by the Fire Department.

*7-1304.14 Penalty.* It shall be unlawful for any person to violate any section of this code, or to fail to comply with mandatory requirements of this code. The violation of any such provision or provisions shall be punishable as set out in subsection 1-13 A. of the City Code of Ordinances.  
(Ord. No. 6399, § 1, 5-18-07)

## **ARTICLE XIV.**

### **SECURITY CODE**

**Sec. 7-1400. Title and purpose.**

This article shall be known as the city's security code and may be cited as such. The purpose of this article is to establish minimum standards that incorporate security measures to make dwelling units more resistant to unlawful entry.

(Ord. No. 6600, § 1, 3-13-08)

**Sec. 7-1401. Scope.**

These provisions shall apply to all new residential dwelling units and new structures that house multiple dwelling units. Additions and alterations made to existing residential dwelling units or existing structures housing multiple residential units shall comply with these provisions.

(Ord. No. 6600, § 1, 3-13-08)

**Sec. 7-1402. Adopted codes.**

The provisions of this article are in addition to the Building Code, Fire Code, Electrical Code and Residential Code as adopted and amended by the City of Lee's Summit.

(Ord. No. 6600, § 1, 3-13-08)

**Sec. 7-1403. Premises identification.**

Approved numbers or addresses shall be provided for all new dwelling unit structures in such a position as to be plainly visible and legible from the street or road fronting the property. Each dwelling unit within a multiple dwelling unit structure shall be identified at the main entry with premises identification unique to each dwelling unit. Residential dwelling units and structures housing multiple dwelling units accessed by private drive(s) or parking lot(s) shall also provide approved numbers or addresses in such a position as to be plainly visible and legible from such drive(s) or parking lot(s). Approved numbers or address characters shall be a minimum height of four inches (76 mm) and minimum stroke of 0.5 inches (12.7 mm). Approved numbers or address characters shall be of a contrasting color to the background itself.

(Ord. No. 6600, § 1, 3-13-08)

**Sec. 7-1404. Premises identification illumination.**

Required premises identification shall be capable of being illuminated during the hours of darkness with a power source connected to the dwelling unit electrical system or by other means approved by the building official.

(Ord. No. 6600, § 1, 3-13-08)

**Sec. 7-1405. Swinging doors.**

Except for vehicular access doors, all exterior swinging doors of residential buildings and attached garages, including the doors leading from the garage area into the dwelling unit, shall comply with sections 7-1405.1 through 7-1405.4 for the type of door installed.

Exceptions:

1. Screen or storm doors installed in addition to the buildings exterior door(s).
2. Exterior doors of structures within multi-family developments utilized to access interior common spaces such as hallways, laundry rooms and similar spaces.

(Ord. No. 6600, § 1, 3-13-08)

#### **Sec. 7-1405.1. Wood doors.**

Where installed, exterior wood doors shall be of solid core construction such as high-density particleboard, solid wood, or wood block core with a minimum thickness of one and three-fourths inches at any point. Doors with panel inserts shall be solid wood. The panels shall be a minimum of one-inch thick. The tapered portion of the panel that inserts into the groove of the door shall be a minimum of one-quarter-inch thick. The groove shall be a dado groove or applied molding construction. The groove shall be a minimum of one-half inch in depth.

(Ord. No. 6600, § 1, 3-13-08)

#### **Sec. 7-1405.2. Steel doors.**

Where installed, exterior steel doors shall be a minimum thickness of 24 gauge.

(Ord. No. 6600, § 1, 3-13-08)

#### **Sec. 7-1405.3. Fiberglass doors.**

Fiberglass doors shall have a minimum skin thickness of one-sixteenth inch and have reinforcement material at the location of the deadbolt.

(Ord. No. 6600, § 1, 3-13-08)

#### **Sec. 7-1405.4. Double doors.**

Where installed, the inactive leaf of an exterior double door shall be provided with flush bolts having an engagement of not less than one inch into the head and threshold of the doorframe.

(Ord. No. 6600, § 1, 3-13-08)

#### **Sec. 7-1406. Sliding doors.**

Where installed, exterior sliding doors shall comply with all of the following requirements:

1. Sliding door assemblies shall be installed to prevent the removal of the panels and the glazing from the exterior with the installation of shims or screws in the upper track.
2. All sliding glass doors shall be equipped with a secondary locking device consisting of a metal pin or a surface mounted bolt assembly. Metal pins shall be installed at the intersection of the inner and outer panels of the inside door and shall not penetrate the frame's exterior surface. The surface mounted bolt assembly shall be installed at the base of the door.

(Ord. No. 6600, § 1, 3-13-08)

#### **Sec. 7-1407. Door frames.**

The exterior door frames shall be installed prior to a rough-in inspection. Door frames shall comply with sections 7-1407.1--7-1407.3 for the type of assembly installed.

Exceptions:

1. Screen or storm doors installed in addition to the buildings exterior door(s)
2. Exterior doors of structures within multi-family developments utilized to access interior common spaces such as hallways, laundry rooms and similar spaces.

(Ord. No. 6600, § 1, 3-13-08)

#### **Sec. 7-1407.1. Wood frames.**

Wood door frames shall comply with all of the following requirements:

1. All exterior door frames shall be set in frame openings constructed of double studding or equivalent construction, including garage doors, but excluding overhead doors. Door frames, including those with sidelights shall be reinforced in accordance with ASTM F476-84 Grade 40.
2. In wood framing, horizontal blocking shall be placed between studs at the door lock height for three stud spaces or equivalent bracing on each side of the door opening.

(Ord. No. 6600, § 1, 3-13-08)

#### **Sec. 7-1407.2. Steel frames.**

All exterior door frames shall be constructed of 18 gauge or heavier steel, and reinforced at the hinges and strikes. All steel frames shall be anchored to the wall in accordance with manufacturer specifications. Supporting wall structures shall consist of double studding or framing of equivalent strength. Frames shall be installed to eliminate tolerances inside the rough opening.

(Ord. No. 6600, § 1, 3-13-08)

#### **Sec. 7-1407.3. Door jambs.**

A. Door jambs shall be installed with solid backing in a manner so no void exists between the strike side of the jamb and the frame opening for a vertical distance of twelve inches (12") each side of the strike. Filler material shall consist of a solid wood block.

B. Door stops on wooden jambs for in-swinging doors shall be of one-piece construction. Jambs for all doors shall be constructed or protected so as to prevent violation of the strike.

(Ord. No. 6600, § 1, 3-13-08)

#### **Sec. 7-1408. Door hardware.**

Exterior door hardware shall comply with sections 1408.1 through 1408.6.

Exceptions:

1. Screen or storm doors installed in addition to the buildings exterior door(s)
2. Exterior doors of structures within multi-family developments utilized to access interior common spaces such as hallways, laundry rooms and similar spaces.

(Ord. No. 6600, § 1, 3-13-08)

#### **Sec. 7-1408.1. Hinges.**

Hinges for exterior swinging doors shall comply with the following:

1. At least two wood screws, three inches in length, penetrating at least one inch into wall structure shall be used. Solid wood fillers or shims shall be used to eliminate any space between the wall structure and door frame behind each hinge.
2. Hinges for out-swinging doors shall be equipped with mechanical interlock to preclude the removal of the door from the exterior.

(Ord. No. 6600, § 1, 3-13-08)

#### **Sec. 7-1408.2. Strike plates.**

Exterior door strike plates shall be a minimum of 18 gauge metal with four offset screw holes. Strike plates shall be attached to wood with not less than three-inch wood screws, which shall have a minimum of one inch penetration into the nearest stud. Note: For side lighted units, refer to section 7-1408.6.

(Ord. No. 6600, § 1, 3-13-08)

#### **Sec. 7-1408.3. Escutcheon plates.**

All exterior doors shall have escutcheon plates or wraparound door channels installed around the lock protecting the door's edge.

(Ord. No. 6600, § 1, 3-13-08)

#### **Sec. 7-1408.4. Locks.**

Exterior doors shall be provided with a single cylinder deadbolt that has a minimum projection of one inch. The deadbolt shall penetrate at least three-fourths inch into the strike receiving the projected bolt. The cylinder shall have a twist-resistant, tapered hardened steel cylinder guard. The cylinder shall have a minimum of five pin tumblers, shall be connected to the inner portion of the lock by solid metal connecting screws at least one-fourth inch in diameter and two and one-fourth inches in length. Bolt assembly (bolt housing) unit shall be of single piece construction. All deadbolts shall meet ANSI grade 2 specifications.

(Ord. No. 6600, § 1, 3-13-08)

#### **Sec. 7-1408.5. Entry vision and glazing.**

All main or front entry doors to dwelling units shall be arranged so that the occupant has a view of the area

immediately outside the door without opening the door. The view may be provided by a door viewer having a field of view of not less than 180 degrees, by window(s), or by view port(s).  
(Ord. No. 6600, § 1, 3-13-08)

**Sec. 7-1408.6. Side lighted entry doors.**

Side light door units shall have framing of double stud construction or equivalent construction complying with sections 7-1407.1, 7-1407.2 and 7-1407.3. The doorframe that separates the door opening from the side light, whether on the latch side or the hinge side, shall be double stud construction or equivalent construction complying with sections 7-1407.1 and 7-1407.2. Double stud construction or construction of equivalent strength shall exist between the glazing unit of the side light and wall structure of the dwelling.  
(Ord. No. 6600, § 1, 3-13-08)

**Sec. 7-1409. Exterior lighting.**

Exterior lighting shall comply with sections 7-1409.1--7-1409.2.  
(Ord. No. 6600, § 1, 3-13-08)

**Sec. 7-1409.1. Front and street side exterior lighting.**

All front and street side door entrances shall be protected with a minimum of one light outlet having a minimum of 60 watts of lighting (or energy efficient equivalent). Those fixtures placed below eight feet shall be fixtures manufactured such that the light source is not "readily accessible" as defined in the adopted National Electrical Code (NEC).  
(Ord. No. 6600, § 1, 3-13-08)

**Sec. 7-1409.2. Rear exterior lighting.**

Homes with windows or doors near ground level below eight feet on the rear side of the house shall be equipped with a minimum of one light outlet having 100 watt lighting (or energy efficient equivalent) and shall be of the flood light type. Those fixtures placed below eight feet shall be fixtures manufactured such that the light source is not "readily accessible" as defined in the adopted National Electrical Code (NEC).  
(Ord. No. 6600, § 1, 3-13-08)

**Sec. 7-1410. Windows.**

All exterior windows, except storm windows, shall be capable of being locked. Said windows shall be capable of being opened from the interior without the use of keys, tools or special knowledge. Sliding window assemblies shall be installed to prevent the removal of the panels and the glazing from the exterior with the installation of shims or screws in the upper track.  
(Ord. No. 6600, § 1, 3-13-08)

**Sec. 7-1411. Alternate materials and methods of construction.**

The provisions of this section are not intended to prevent the use of any material or method of construction not specifically prescribed by this section, provided any such alternate has been approved by the enforcing building

official, nor is it the intention of this section to exclude any sound method of structural design or analysis not specifically provided for in this section. The materials, methods of construction, and structural design limitations provided for in this section shall be used, unless the building official grants an exception.

The building official is authorized to approve any such alternate provided they find the proposed design, materials, and methods of work to be at least equivalent to those prescribed in this section in quality, strength, effectiveness, burglary resistance, durability, and safety.

(Ord. No. 6600, § 1, 3-13-08)