

Title 16

ENVIRONMENT

Chapters:

- 16.04 Hazardous Materials Release and Response Plans**
- 16.06 Underground Storage Tanks and Hazardous Waste**
- 16.08 Watercourses**
- 16.12 Flood Control Regulations**

Chapter 16.04**HAZARDOUS MATERIALS RELEASE AND
RESPONSE PLANS**

Sections:

- 16.04.010 Findings.
- 16.04.020 Responsibility for implementation.
- 16.04.030 Jurisdiction.
- 16.04.040 Designation of administering agency.
- 16.04.050 Penalty for violation.

16.04.010 Findings.

The city council finds the following:

A. The county of Alameda is currently responsible for implementing Chapter 6.95 of Division 20 of the California Health and Safety Code (Section 25500 et seq.), relating to hazardous materials release response plans and inventory;

B. Section 25502 of the Health and Safety Code allows the city to assume responsibility for the implementation of Chapter 6.95;

C. The county has agreed to relinquish responsibility for implementing Chapter 6.95, and the city desires to assume such responsibility. (Ord. 1394 § 1, 1992; Ord. 1367 § 1, 1991)

16.04.020 Responsibility for implementation.

The city assumes responsibility for the implementation of Chapter 6.95 of Division 20 of the California Health and Safety Code (Section 25500 et seq.). (Ord. 1394 § 1, 1992; Ord. 1367 § 1, 1991)

16.04.030 Jurisdiction.

The city shall have the exclusive jurisdiction within its boundary for the purpose of carrying out Chapter 6.95. (Ord. 1394 § 1, 1992; Ord. 1367 § 1, 1991)

**16.04.040 Designation of administering
agency.**

The Livermore fire department is designated as the administering agency responsible for administering and enforcing Chapter 6.95. (Ord. 1394 § 1, 1992; Ord. 1367 § 1, 1991)

16.04.050 Penalty for violation.

Any person who violates Section 25507 of the Health and Safety Code shall be subject to the penalties specified in Section 25515 of the Health and Safety Code. (Ord. 1394 § 1, 1992; Ord. 1367 § 1, 1991)

Chapter 16.06**UNDERGROUND STORAGE TANKS AND
HAZARDOUS WASTE**

Sections:

- 16.06.010 Responsibility for implementation.
- 16.06.020 Designation of responsible agency.
- 16.06.030 Penalty for violation.
- 16.06.040 Fees.

16.06.010 Responsibility for implementation.

The city of Livermore hereafter assumes enforcement responsibility for the implementation of Title 23, Division 3, Chapter 16 of the California Code of Regulations and Chapter 6.7 of the California Health and Safety Code relating to the underground storage of hazardous materials. (Ord. 1476 § 1, 1996)

16.06.020 Designation of responsible agency.

The Livermore fire department is hereby designated as the agency responsible for administering and enforcing Title 23, Division 3, Chapter 16 of the California Code of Regulations and Chapters 6.5 and 6.7 of Division 20 of the California Health and Safety Code. (Ord. 1476 § 1, 1996)

16.06.030 Penalty for violation.

Any person who violates Chapters 6.5 and 6.7 of Division 20 of the California Health and Safety Code shall be subject to the penalties specified in Chapters 6.5 and 6.7 of Division 20 of the California Health and Safety Code. (Ord. 1476 § 1, 1996)

16.06.040 Fees.

The fire department may charge fees that reasonably reflect the cost of administering these programs. The fees shall be set by city council resolution. (Ord. 1476 § 1, 1996)

Chapter 16.08

WATERCOURSES

Sections:

- 16.08.010 Purpose of provisions.
- 16.08.020 Declaration of findings.
- 16.08.030 Policy declaration.
- 16.08.040 Definitions.
- 16.08.050 Obstructing watercourses prohibited.
- 16.08.060 Changing banks or increasing flow of water in watercourses prohibited.
- 16.08.070 Degrading water quality prohibited.
- 16.08.080 Enforcement authority – Abatement procedures.

16.08.010 Purpose of provisions.

The purpose of the provisions codified in this chapter is prohibition against obstructing watercourses or degrading water quality of waters flowing through watercourses not within rights-of-way under Alameda County Flood Control and Water Conservation District and city of Livermore ownership. (1960 code § 25.1)

16.08.020 Declaration of findings.

The city council does find and declare as follows:

A. That, in consonance with the finding of the State Legislature that the state has a primary interest in preserving and maintaining watercourses to provide beneficial use of waters to the people of the state, the people of the city of Livermore have a primary interest in the conservation, control and utilization of the water resources contained in the city, and that the quality of all waters of the city shall be protected for use and enjoyment of the residents thereof; that the activities and factors which may affect the quality of the waters of the city and the assured free flow of such waters be regulated to attain the highest water quality which is reasonable, considering all demands being made and to be made on those waters; and further, that the health, safety and welfare of the people of the city require that there be, in addition to the statewide program for the control of quality of all waters in the state, a local program consistent with and in furtherance of said state program to insure the removal of all authorized obstructions, impediments and unlawful deviations of the free flow of water through the watercourses of the city;

B. That the city and the Alameda County Flood Control and Water Conservation District, hereinafter referred to as “ACFCWCD,” own respectively certain watercourses or portions thereof within the city which, because of said ownership, are adequately protected and maintained;

C. That obstruction or degradation of water quality of watercourses not under the ownership of the ACFCWCD and the city within the city adversely affects the integrated program of flood control and water conservation pursued since the inception of ACFCWCD as well as the health, safety and welfare of the inhabitants of the city who suffer detriment by virtue of said obstruction or degradation of water quality;

D. That investigation and study of watercourses not under the ownership of ACFCWCD or the city disclose an increasing incidence of obstruction and degradation of water quality by the depositing of foreign material within said watercourses, with resulting injury to property owners both riparian and nonriparian;

E. That unobstructed flow of high-quality water is necessary to maximize the beneficial use of water by the inhabitants of the city. (1960 code § 25.2)

16.08.030 Policy declaration.

It is declared to be in the interest of the public health, safety and welfare that:

A. Watercourses located within the city and not under ownership of ACFCWCD or the city be maintained free of obstructions and materials which contribute to the degradation of water quality;

B. The owners of property through which said watercourses flow are primarily responsible for maintaining a free flow of water through said property and to maintain the quality of water as such water passes to downstream users;

C. The city shall assume responsibility for abatement of watercourse obstruction or water quality degradation in the absence of exercise by owners of such primary responsibility, through commencement and prosecution of abatement proceedings before the city council. (1960 code § 25.3)

16.08.040 Definitions.

The definitions contained in this chapter shall govern the construction of this chapter, unless the context otherwise requires.

1. “Bank” means embankments, dikes, levees, walls or other natural or artificial bordering facili-

ties or features adjoining or parallel to any natural or artificial watercourse, channel or reservoir.

2. "Beneficial uses of water" means, but is not necessarily limited to, domestic, municipal, agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife and other aquatic resources or preserves.

3. "Conduit" means any pipe, flume, box, culvert or any other natural or artificial facility intended for the passage or conveyance of water, open or closed, above, on or below the surface of the ground.

4. "Dam" means any natural or artificial structure or barrier of either a temporary or permanent nature, the effect of which is to impound or hold back water or the flow thereof, and includes check dams, weirs, walls, dikes and levees.

5. "City" means the city of Livermore.

6. "District" means the Alameda County Flood Control and Water Conservation District, sometimes referred to herein as "ACFCWCD."

7. "Levee" means any embankment, dike, wall or other structure, permanent or temporary, of any materials or combinations thereof, the purpose of which is to stop, confine, divert or otherwise control the flow of water in an area, channel or watercourse.

8. "Nuisance" means anything which is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property, or unlawfully obstructs the free passage or use, in the customary manner, of any lake, creek, pond, stream, canal, basin or watercourse, and affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal, or occurs during or as a result of treatment or disposal of wastes.

9. "Obstruction" means, but shall not be limited to, any object or thing, consisting of any material whatsoever, which object or thing or accumulation of matter tends to obstruct, hinder or impede the flow of water within a watercourse, or tends to affect adversely the hydraulic characteristics of any watercourse, to such an extent as to create a hazard to life, health or property or to the beneficial use of water of any watercourse by reduction or impair-

ment of water flow therein, or eminent danger thereof.

10. "Person" means any person, firm, corporation, municipality, district, public agency, county, the state or any department or agency thereof, and the United States, to the extent authorized by federal law.

11. "Random fill material" means earth material placed within a watercourse in an uncompacted condition and without benefit of engineering relating to hydraulic ramifications of such deposit.

12. "Regional board" means any California regional water quality control board for a region, as specified in Section 13200 of the Water Code of the state.

13. "Right-of-way" means land which, by deed, conveyance, agreement, easement, dedication, gift, usage or process of law, is reserved for and dedicated to the uses and purposes of the city or ACFCWCD.

14. "Rubbish" means debris, garbage or refuse of any kind, combustible or noncombustible, organic or inorganic, liquid or solid, water soluble or insoluble materials, and shall include, but not be limited to, swill, refuse, cans, bottles, paper, vegetable matter, carcasses of dead animals, offal from any slaughter pen or butcher shop, trash, abandoned and unidentifiable vehicles or vehicle bodies, abandoned iceboxes and refrigerators, other abandoned appliances, broken cement or concrete, tree stumps or brush, random fill material or riprap.

15. "State board" means the State Water Resources Control Board.

16. "Structure" means any works or construction of any kind, including those of earth or rock, permanent or temporary, and including fences, poles, buildings, linings or pavings, inlets, levees, tide gates, spillways, drop structures and similar facilities.

17. "Waste" includes sewage and any and all other waste substances, liquid, solid, gaseous or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing or processing operation of whatever nature, including such waste placed within containers of whatever nature prior to and for purposes of disposal.

18. "Water quality" or "quality of waters" refers to chemical, physical, biological, bacteriological, radiological and other properties and characteristics of water which affect its use.

16.08.050

19. "Water quality degradation" means an impairment of water quality of the waters flowing through the watercourses of the city by alteration of the chemical, physical, biological, bacteriological, radiological or other properties and characteristics of water which impair the quality of such water to a degree which creates a hazard to the public health through poisoning or through the spread of disease, resulting from deposit of waste, rubbish or other foreign materials, which materials contribute to the lowering of quality of such waters to a degree below that established by the State Board or regional board having jurisdiction over the waters of the city. For the purposes of this chapter, contamination and pollution shall be embraced within the definition of water quality degradation.

20. "Watercourse" means any natural or artificial streams, rivers, rivulets, brooks, creeks, streams, ditches, canals, conduits, boxes, culverts, bridgeways, drains, waterways, gullies, arroyos, washes, basins, ponds, reservoirs or flumes, flowing continuously or intermittently in a definite direction and course, or used for the holding, delay or storage of waters. (1960 code § 25.4)

16.08.050 Obstructing watercourses prohibited.

It is unlawful for any person to obstruct, or cause or allow to be obstructed, any watercourse within the city not under the ownership of or included as right-of-way within the flood control and water conservation system of the city or the ACFCWCD, by damming, by random filling, by depositing or otherwise placing rubbish or any other thing or material, or by suffering the natural growth of vegetable matter including, but not limited to, weeds, trees and brush, if any such obstruction impedes or impairs the flow of water within any watercourse to the extent that a hazard to life, health or property is created thereby, or if beneficial use of the waters of said watercourse is reduced, impaired or endangered by any such obstruction. (1960 code § 25.5)

16.08.060 Changing banks or increasing flow of water in watercourses prohibited.

It is further unlawful for any person to, by any of the acts described in LMC 16.08.050, increase the flow of water within any watercourse or to enlarge or alter any levee or bank without permis-

sion, to the extent that a hazard to life, health or property is created thereby. (1960 code § 25.5)

16.08.070 Degrading water quality prohibited.

It is further unlawful for any person to degrade the water quality of water flowing through such watercourses by any of the acts prohibited in LMC 16.08.050 and 16.08.060. (1960 code § 25.5)

16.08.080 Enforcement authority – Abatement procedures.

A violation of this chapter is a threat to the public health, safety and welfare, and is declared a nuisance which may be abated pursuant to the provisions of Chapter 15.56 LMC. The public works director of the city is designated as the enforcing and administering official for the purpose of such abatement in lieu of the building official specified in Chapter 15.56 LMC. (1960 code § 25.6)

Chapter 16.12

FLOOD CONTROL REGULATIONS*

Sections:

- 16.12.010 Purpose of provisions.
- 16.12.020 Declaration of findings.
- 16.12.030 Objectives of chapter provisions.
- 16.12.040 Definitions.
- 16.12.050 Administration – Community development director authority.
- 16.12.060 Applicability – Jurisdiction.
- 16.12.070 Areas of special flood hazard – Documents adopted by reference.
- 16.12.080 Compliance with regulations.
- 16.12.090 Development permit – Required.
- 16.12.100 Development permit – Application – Information required.
- 16.12.110 Variance issuance conditions.
- 16.12.120 Standards of construction.

*Prior legislation: 1960 code §§ 25.7 – 25.17 and Ord. 1260.

16.12.010 Purpose of provisions.

It is the purpose of this chapter to promote the public health, safety and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:

- A. Restrict or prohibit uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or flood heights or velocities;
- B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
- C. Control the alteration of natural floodplains, stream channels and natural protective barriers which help accommodate or channel floodwaters;
- D. Control filling, grading, dredging and other development which may increase erosion or flood damage;
- E. Prevent or regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards in other areas;
- F. Ensure that potential buyers are notified that property is in an area of special flood hazard; and
- G. Ensure that those who occupy the areas of special flood hazard assume responsibility for their actions. (Ord. 1843 § 1, 2008; Ord. 1426 § 1, 1994)

16.12.020 Declaration of findings.

A. The flood hazard areas of Livermore are subject to periodic inundation which results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety and general welfare.

B. The flood losses are caused by the cumulative effect of obstructions in floodplains, causing increases in flood heights and velocities, and by the occupancy in flood hazard areas by uses vulnerable to floods or hazardous to other lands which are inadequately elevated, floodproofed or otherwise protected from flood damages. (Ord. 1843 § 1, 2008; Ord. 1426 § 1, 1994)

16.12.030 Objectives of chapter provisions.

The objectives of this chapter are:

- A. To protect human life and health;
- B. To minimize expenditure of public money for costly flood control projects;
- C. To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- D. To minimize prolonged business interruptions;
- E. To minimize damage to public facilities and utilities, such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in floodplains;
- F. To help maintain a stable tax base by providing for the sound use and development of flood-prone areas in such a manner as to minimize future flood-blight areas;
- G. To ensure that potential home buyers are notified that property is in a flood area. (Ord. 1843 § 1, 2008; Ord. 1426 § 1, 1994)

16.12.040 Definitions.

Unless specifically defined in this section, words or phrases used in this chapter shall be interpreted so as to give them the meanings they have in common usage and to give this chapter its most reasonable application.

A Zone. See “Special flood hazard area.”

“Accessory structure” means a structure that is either:

1. Solely for the parking of no more than two cars; or

16.12.040

2. A small, low-cost shed for limited storage, less than 150 square feet and \$1,500 in value.

“Accessory use” means a use which is incidental and subordinate to the principal use of the parcel of land on which it is located.

“Appeal” means a request for a review of the community development director’s or designee’s interpretation of any provision of this chapter, or a request for a variance.

“Area of shallow flooding” means a designated AO or AH Zone on the city’s Flood Insurance Rate Map (FIRM) with base flood depths from one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable and indeterminate, and where velocity may be evident.

“Area of special flood hazard” means the land in the floodplain within Livermore subject to a one percent or greater chance of flooding in any given year and designated an AH Zone.

“Area of special flood-related erosion hazard” is the land within a community which is most likely to be subject to severe flood-related erosion losses. The area may be designated as Zone E on the Flood Insurance Rate Map (FIRM).

“Area of special mudslide (i.e., mudflow) hazard” is the area subject to severe mudslides. The area is designated as Zone M on the Flood Insurance Rate Map (FIRM).

“Base flood” means the flood having a one percent chance of being equaled or exceeded in any given year.

“Base flood elevation (BFE)” means the elevation shown on the Flood Insurance Rate Map for Zones AE, AH, A1 – 30, VE and V1 – V30 that indicates the water surface elevation resulting from a flood that has a one percent or greater chance of being equaled or exceeded in any given year.

“Basement” means any area of the building having its floor subgrade, i.e., below ground level on all sides.

Building. See “Structure.”

“Development” means any manmade change to improved or unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operation or storage of equipment or materials.

“Encroachment” means the advance or infringement of uses, plant growth, fill, excavation, buildings, permanent structures or development into a floodplain which may impede or alter the flow capacity of a floodplain.

“Existing manufactured home park subdivision” means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale for which the construction of facilities for servicing the lot on which the manufactured home is to be affixed (including, at a minimum, the installation of utilities, either final site grading or the pouring of concrete pads, and the construction of streets) is completed before July 27, 1994.

“Expansion to an existing mobile home park or mobile home subdivision” means the preparation of additional sites by the construction of facilities for servicing the lots on which the mobile homes are to be affixed (including the installation of utilities, either final site grading or pouring of concrete pads, or the construction of streets).

“Flood Hazard Boundary Map (FHBM)” means an official map of Livermore on which the Federal Emergency Management Agency or Federal Insurance Administration has delineated both the areas of special flood hazards and the floodway.

“Flood Insurance Rate Map (FIRM)” means an official map of Livermore on which the Federal Insurance Administration has delineated both the areas of special flood hazards and the risk premium zones applicable to Livermore.

“Flood insurance study” means the official report provided by the Federal Insurance Administration. The report contains flood profiles, as well as the flood hazard boundary-floodway map and the water surface elevation of the base flood.

“Floodplain” or “flood-prone area” means any land area susceptible to being inundated by water from any source – see “Flooding.”

“Floodplain administrator” is the community official designated by title to administer and enforce the floodplain management regulations.

“Floodplain management” means the operation of an overall program of corrective and preventive measures for reducing flood damage and preserving and enhancing, where possible, natural resources in the floodplain, including but not limited to emergency preparedness plans, flood control works, floodplain management regulations, and open space plans.

“Floodplain management regulations” means this chapter and other zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances (such as grading and erosion control) and other applications of police power which control development in flood-prone areas. This term describes federal, state, or local regulations in any combination thereof which provide standards for preventing and reducing flood loss and damage.

“Floodproofing” means any combination of structural and nonstructural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures, and their contents. For guidelines on dry and wet floodproofing, see FEMA Technical Bulletins TB 1-93, TB 3-93, and TB 7-93.

“Floods,” “flooding” or “floodwaters” means a general and temporary condition of partial or complete inundation of normally dry land from the overflow of inland or tidal waters; the unusual and rapid accumulation or runoff of surface waters from any sources; and/or mudslides; or the condition resulting from flood-created erosion.

“Floodway” means the channel of a river or other watercourse, and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot.

“Floodway fringe” is that area of the floodplain on either side of the “regulatory floodway” where encroachments may be permitted.

“Highest adjacent grade” means the highest natural elevation of the ground surface next to the proposed walls of a structure prior to construction.

“Historic structure” means any structure that is:

1. Listed individually in the National Register of Historic Places (a listing maintained by the Department of the Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;

2. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;

3. Individually listed on a state inventory of historic places in states with historic preservation

programs which have been approved by the Secretary of the Interior; or

4. Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either by an approved state program as determined by the Secretary of the Interior or directly by the Secretary of the Interior in states without approved programs.

“Levee” means a manmade structure, usually an earthen embankment, designed and constructed in accordance with sound engineering practices to contain, control or divert the flow of water so as to provide protection from temporary flooding.

“Levee system” means a flood protection system which consists of a levee or levees and associated structures, such as closures and drainage devices, which are constructed and operated in accordance with sound engineering practices.

“Lowest floor” means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood-resistant enclosure, usable solely for parking of vehicles, building access or storage, in an area other than a basement area, is not considered a building’s lowest floor; provided, that such enclosure is not built so as to render the structure in violation of the applicable nonelevation design requirements of this chapter.

“Manufactured home” means a structure, transportable in one or more sections, which is built on a permanent chassis and designed to be used with or without a permanent foundation when connected to the required utilities. It does not include recreational vehicles or travel trailers.

“Mean sea level” means, for purposes of the National Flood Insurance Program, the National Geodetic Vertical Datum (NGVD) of 1929, North American Vertical Datum (NAVD) of 1988, or other datum, to which base flood elevations shown on a community’s Flood Insurance Rate Map are referenced.

“New construction” means structures for which the start of construction commenced on or after July 27, 1994.

“New manufactured home park or home subdivision” means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of

16.12.040

streets, and either final site grading or pouring of concrete pads) is completed on or after July 27, 1994.

“Obstruction” includes, but is not limited to, any dam, wall, wharf, embankment, levee, dike, pile, abutment, protection, excavation, channel, bridge, conduit, culvert, building, wire, fence, rock, gravel, refuse, fill, structure, vegetation or other material in, along, across or projecting into any watercourse which may alter, impede, retard or change the direction and/or velocity of the flow of water, or, due to its location, has the propensity to snare or collect debris carried by the flow of water, or may be carried downstream.

One-Hundred-Year Flood or 100-Year Flood. See “Base flood.”

“Recreational vehicle” means a vehicle which is built on a single chassis, 400 square feet or less when measured at the largest horizontal projection, designed to be self-propelled or permanently towable by a light-duty truck and designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel or seasonal use.

“Special flood hazard area (SFHA)” means an area having special flood, mudslide or flood-related erosion hazards, and shown on an FHBM or FIRM as Zone A, AO, A1 – A30, AE, A99, AH, E or M.

“Start of construction” includes substantial improvement and means the date the building permit was issued; provided the actual start of construction, repair, reconstruction, placement or other improvement was within 180 days of the permit date. The “actual start” means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. “Permanent construction” does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure.

“Structure” means a walled and roofed building that is principally aboveground; this includes a gas or liquid storage tank or manufactured home.

“Substantial damage” means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before-damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

“Substantial improvement” means any repair, reconstruction or improvement of a structure, equaling or exceeding 50 percent of the market value measured before construction of the improvement or repair is started, or, if the structure has been damaged and is being restored, before the damage occurred.

1. For the purposes of this definition, substantial improvement is considered to occur when the first alteration of any wall, ceiling, floor or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure.

2. The term does not, however, include either:

a. Any project for improvement of a structure to comply with existing state or local health, sanitary or safety code specifications which are solely necessary to assure safe living conditions; or

b. Any alteration of a structure listed on the National Register of Historic Places or a State Inventory of Historic Places.

“Variance” means a grant of relief to a person from the requirements of this chapter which permits construction in a manner otherwise prohibited by this chapter where specific enforcement would result in unnecessary hardship.

“Violation” means the failure of a structure or other development to be fully compliant with this chapter. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in this chapter is presumed to be in violation until such time as this documentation is provided.

“Water surface elevation” means the height of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas with respect to the National Geodetic Vertical Datum (NGVD) of 1929, North American Vertical Datum (NAVD) of 1988, or other datum.

“Watercourse” means a lake, river, creek, stream, wash, arroyo, channel, or other topographic feature on or over which waters flow at least periodically. Watercourses include specifically designated areas in which substantial flood damage may occur. (Ord. 1843 § 1, 2008; Ord. 1426 § 1, 1994)

16.12.050 Administration – Community development director authority.

A. Appointment. The community development director (CDD) or designee is appointed to administer and implement the provisions of this chapter.

B. Duties and Responsibilities. Duties of the CDD or designee shall include, but not be limited to:

1. Review all development permits to assure that the permit requirements of this chapter have been satisfied;

2. Review permits for proposed development to assure that all necessary permits have been obtained from those federal, state or local governmental agencies from which prior approval is required;

3. Notify adjacent communities and the Department of Water Resources prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration;

4. Assure that maintenance is provided within the altered or relocated portion of such watercourses, so that the flood-carrying capacity is not diminished;

5. Verify and record the actual elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved structures;

6. Verify and record the actual elevation (in relation to mean sea level) to which the new or substantially improved structures have been flood-proofed;

7. When floodproofing is utilized for a particular structure, the CDD or designee shall obtain certification from a registered professional engineer or architect;

8. Where interpretation is needed as to the exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions), the CDD or designee shall make the necessary interpretation. The

person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in this chapter;

9. When base flood elevation data has not been provided in accordance with LMC 16.12.070, then the CDD or designee shall obtain, review and reasonably utilize any base flood elevation data available from a federal, state or other source, in order to administer the provisions of LMC 16.12.120.

C. All records pertaining to the provisions of this chapter shall be maintained in the office of the CDD or designee and shall be open for public inspection. (Ord. 1843 § 1, 2008; Ord. 1426 § 1, 1994)

16.12.060 Applicability – Jurisdiction.

This chapter shall apply to all areas of special flood hazards within the jurisdiction of the city. (Ord. 1843 § 1, 2008; Ord. 1426 § 1, 1994)

16.12.070 Areas of special flood hazard – Documents adopted by reference.

The areas of special flood hazard identified by the Federal Insurance Administration through a scientific and engineering report entitled “The Flood Insurance Study for the City of Livermore,” dated September 17, 1997, accompanying Flood Insurance Rate Maps and flood boundary and floodway maps, and all subsequent revisions and amendments are adopted by reference and declared to be a part of this chapter. (Ord. 1843 § 1, 2008; Ord. 1426 § 1, 1994)

16.12.080 Compliance with regulations.

No structure or land shall hereafter be located, extended, converted or altered without full compliance with the terms of this chapter and other applicable regulations. A violation of any section under this chapter (including violations of conditions and safeguards established in connection with conditions) shall constitute a misdemeanor. Nothing herein shall prevent the city council from taking such lawful action as is necessary to prevent or remedy any violation. (Ord. 1843 § 1, 2008; Ord. 1426 § 1, 1994)

16.12.090 Development permit – Required.

A development permit shall be required in conformance with the provisions of this chapter and shall be obtained before construction or develop-

16.12.100

ment begins within any area of special flood hazard. It shall be the responsibility of the developer to apply for and receive all necessary approvals from the Federal Emergency Management Agency (FEMA) and any other agency in order to remove a project from a floodway or special flood hazard area. The developer shall pay all fees and undertake all the necessary studies to satisfy FEMA requirements. The city will consider the developer's obligations complete when the city has received a revised map or letter from FEMA. The city shall not issue any permit or occupancy certificate until such obligations are complete. (Ord. 1843 § 1, 2008; Ord. 1426 § 1, 1994)

16.12.100 Development permit – Application – Information required.

Application for a development permit shall be made to the CDD or designee on forms furnished by him and may include, but not be limited to, the following plans in duplicate, drawn to scale, showing the nature, location, dimensions and elevations of the area in question, existing or proposed structures, fill, storage of materials, drainage facilities, and the location of the foregoing:

A. Proposed locations of water supply, sanitary sewer, and other utilities;

B. Grading information showing existing and proposed contours, any proposed fill, and drainage facilities;

C. Location of the regulatory floodway when applicable;

D. Base flood elevation information as specified in LMC 16.12.050(B)(9) or 16.12.070;

E. Proposed elevation in relation to mean sea level to which any nonresidential structure will be floodproofed, as required in LMC 16.12.120(C)(2) and detailed in FEMA Technical Bulletin TB 3-93;

F. Certification from a registered civil engineer or architect that the nonresidential floodproofed building meets the floodproofing criteria in LMC 16.12.120(C)(2);

G. For a crawl-space foundation, location and total net area of foundation openings as required in LMC 16.12.120(C)(3) and detailed in FEMA Technical Bulletins 1-93 and 7-93;

H. All appropriate certifications listed in LMC 16.12.050(B)(5), (6) and (7);

I. Proposed elevation in relation to mean sea level of the lowest floor (including basement) of all structures in Zone A, elevation of highest adjacent grade and proposed elevation of lowest floor of all structures;

J. Proposed elevation in relation to mean sea level to which any nonresidential structure has been floodproofed, if required;

K. Provide a certificate from a registered professional engineer or architect that the nonresidential floodproofed structure meets the floodproofing criteria in LMC 16.12.120;

L. Description of the extent to which any watercourse will be altered or relocated as a result of proposed development. (Ord. 1843 § 1, 2008; Ord. 1426 § 1, 1994)

16.12.110 Variance issuance conditions.

A. The planning commission, as established by the city council, shall hear and decide appeals and requests for variances from the requirements of this chapter.

B. The planning commission shall hear and decide appeals when it is alleged there is an error in any requirement, decision or determination made by the CDD or designee in the enforcement or administration of this chapter.

C. Any person aggrieved by the decision of the planning commission or any taxpayer may appeal such decision to the superior court, as provided in applicable statutes.

D. Variances may be issued for the reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places or the State Inventory of Historic Places, without regard to the procedures set forth in the remainder of this section.

E. In passing upon such applications, the planning commission shall consider all technical evaluations, all relevant factors, standards specified in other sections of this chapter, and:

1. The danger that materials may be swept onto other lands to the injury of others;

2. The danger to life and property due to flooding or erosion damage;

3. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;

4. The importance of the services provided by the proposed facility to the community;

5. The necessity to the facility of a water-front location, where applicable;

6. The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use;

7. The compatibility of the proposed use with existing and anticipated development;

8. The relationship of the proposed use to the comprehensive plan and floodplain management program for that area;

9. The safety of access to the property in times of flood for ordinary and emergency vehicles;

10. The expected height, velocity, duration, rate of rise and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site; and

11. The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities, such as sewer, gas, electrical and water systems, and streets and bridges.

F. Generally, variances may be issued for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing subsections (E)(1) through (11) of this section have been fully considered. As the lot size increases beyond one-half acre, the technical justification required for issuing the variance increases.

G. Upon consideration of the factors listed above and the purposes of this chapter, the planning commission may attach such conditions to the granting of variances as it deems necessary to further the purposes of this chapter.

H. Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.

I. Conditions for Variances.

1. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.

2. Variances shall only be issued upon:

a. A showing of good and sufficient cause;

b. A determination that failure to grant the variance would result in exceptional hardship to the applicant; and

c. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, or extraordinary public expense; create nuisances; cause fraud on or victimization of the public; or conflict with existing local laws or ordinances.

J. All applicants receiving a variance shall be notified in writing by the CDD or designee that the issuance of a variance to construct a structure below the 100-year flood level will result in increased premium rates for flood insurance, up to an amount as high as \$25.00 for \$100.00 of insurance coverage, and that such construction below the 100-year flood level increases risks to life and property. The CDD or designee shall maintain a record of all such notifications, with a record of all variance actions, including justification for their issuance, and report such variances issued to the Federal Insurance Administrator annually. (Ord. 1843 § 1, 2008; Ord. 1426 § 1, 1994)

16.12.120 Standards of construction.

In all areas of special flood hazards, the following standards are required:

A. Anchoring.

1. All new construction and substantial improvements shall be adequately anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.

2. All manufactured homes shall meet the anchoring standards of this chapter.

B. Construction Materials and Methods. All new construction and substantial improvements shall be constructed:

1. With materials and utility equipment resistant to flood damage;

2. Using methods and practices that minimize flood damage;

3. With electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities that are designated and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding; and

4. Within Zones AH or AO, so that there are adequate drainage paths around structures on slopes to guide floodwaters around and away from proposed structures.

16.12.120

C. Elevation and Floodproofing.

1. Residential construction, new or substantial improvement shall have the lowest floor including basement:

a. In an AO Zone, elevated above the highest adjacent grade to a height of one foot exceeding the depth number specified in feet on the FIRM, or elevated at least two feet above the highest adjacent grade if no depth number is specified;

b. In an A Zone, elevated to one foot above the base flood elevation, as determined by the city;

c. In all other zones, elevated to one foot above the base flood elevation.

Upon completion of the structure, the elevation of the lowest floor including basement shall be certified by a registered professional engineer or surveyor, or verified by the city building inspector to be properly elevated. Such certification or verification shall be provided to the CDD or designee.

2. Nonresidential construction shall either be elevated to conform with subsection (C)(1) of this section or, together with attendant utility and sanitary facilities:

a. Be floodproofed below the elevation recommended under subsection (C)(1) of this section so that the structure is watertight with walls substantially impermeable to the passage of water;

b. Have structural components capable of resisting hydrostatic and hydrodynamic loads and the effects of buoyancy; and

c. Be certified by a registered professional engineer or architect that the standards of this section are satisfied. Such certification shall be provided to the CDD or designee.

3. All new construction and substantial improvements with fully enclosed areas below the lowest floor (excluding basements) that are usable solely for parking of vehicles, building access or storage, and which are subject to flooding, shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwater. Designs for meeting this requirement must exceed the following minimum criteria:

a. The designs shall be certified by a registered professional engineer or architect; or

b. The designs shall be certified to comply with a local floodproofing standard approved by the Federal Insurance Administration and Federal Emergency Management Agency; or

c. The designs shall have a minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding. The bottom of all openings shall be no higher than one foot above grade. Openings may be equipped with screens, louvers, valves or other coverings or devices; provided, that they permit the automatic entry and exit of floodwater.

4. Manufactured homes shall also meet the standards of subsection F of this section.

5. Garages and low-cost accessory structures.

a. Attached Garages.

i. A garage attached to a residential structure, constructed with the garage floor slab below the BFE, must be designed to allow for the automatic entry of flood waters. See subsection (C)(3) of this section. Areas of the garage below the BFE must be constructed with flood-resistant materials. See subsection (B) of this section.

ii. A garage attached to a nonresidential structure must meet the above requirements or be dry floodproofed. For guidance on below-grade parking areas, see FEMA Technical Bulletin TB-6.

b. Detached Garages and Accessory Structures.

i. Accessory structure used solely for parking (two-car detached garages or smaller) or limited storage (small, low-cost sheds), as defined in LMC 16.12.040, may be constructed such that its floor is below the base flood elevation (BFE), provided the structure is designed and constructed in accordance with the following requirements:

(A) Use of the accessory structure must be limited to parking or limited storage;

(B) The portions of the accessory structure located below the BFE must be built using flood-resistant materials;

(C) The accessory structure must be adequately anchored to prevent flotation, collapse and lateral movement;

(D) Any mechanical and utility equipment in the accessory structure must be elevated or floodproofed to or above the BFE;

(E) The accessory structure must comply with floodplain encroachment provisions in subsection (H) of this section; and

(F) The accessory structure must be designed to allow for the automatic entry of flood

waters in accordance with subsection (H) of this section.

ii. Detached garages and accessory structures not meeting the above standards must be constructed in accordance with all applicable standards in this section.

D. Standards for Utilities.

1. All new and replacement water supply and sanitary sewage systems shall be designed to minimize or eliminate:

a. Infiltration of floodwaters in the systems; and

b. Discharge from the systems into floodwaters.

2. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

E. Standards for Subdivisions.

1. All preliminary subdivision proposals shall identify the flood hazard area and the elevation of the base flood.

2. All subdivision plans will provide the elevation of proposed structure(s) and pad(s). If the site is filled above the base flood elevation, the lowest adjacent grade, the final first floor and pad elevations shall be certified by a registered professional engineer or surveyor and provided to the CDD or designee.

3. All subdivision proposals shall be consistent with the need to minimize flood damage.

4. All subdivision proposals shall have public utilities and facilities, such as sewer, gas, electrical and water systems, located and constructed to minimize flood damage.

5. All subdivisions shall provide adequate drainage to reduce exposure to flood hazards.

F. Standards for Manufactured Homes.

1. All manufactured homes that are placed or substantially improved within Zones A1 – 30, AH, or AE on the city's FIRM, or on sites located:

a. Outside of a manufactured home park or subdivision;

b. In a new manufactured home park or subdivision;

c. In an expansion to an existing manufactured home park or subdivision; or

d. In an existing manufactured home park or subdivision on a site upon which a manufactured home has incurred substantial damage as the result of a flood;

shall be elevated on a permanent foundation such that the lowest floor is elevated to at least one foot above the base flood elevation and be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement.

2. All manufactured homes to be placed or substantially improved on sites in an existing manufactured home park or subdivision within Zones A1 – 30, AH or AE on the community's FIRM that are not subject to the provisions of subsection F of this section shall be elevated so that either:

a. The lowest floor of the manufactured home is at least one foot above the base flood elevation; or

b. The manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than 36 inches in height above grade and be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement. Upon the completion of the structure, the elevation of the lowest floor including basement shall be certified by a registered civil engineer or licensed land surveyor, and verified by the community building inspector to be properly elevated. Such certification and verification shall be provided to the floodplain administrator.

G. Standards for Recreational Vehicles.

1. All recreational vehicles placed on sites within Zones A1 – 30, AH or AE on the city's FIRM shall either:

a. Be on the site for fewer than 180 consecutive days;

b. Be fully licensed and ready for highway use; a recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick-disconnect type utilities and security devices, and has no permanently attached additions; or

c. Meet the permit requirements of this chapter and the elevation and anchoring requirements for manufactured homes in subsection (F)(1) of this section.

H. Floodways. Located within areas of special flood hazard are areas designated as floodways. Since floodways are extremely hazardous areas due to the velocity of floodwaters which carry debris, potential projectiles and erosion potential, the following provisions apply:

16.12.120

1. Encroachments are prohibited, including fill, new construction, substantial improvements and other new development unless certified by a registered professional engineer or architect, and it is demonstrated that encroachments will not result in any increase in the base flood elevation during the occurrence of the base flood discharge.

2. If subsection (H)(1) of this section is satisfied, all new construction, substantial improvement and other proposed new development shall comply with all other applicable flood hazard reduction provisions of this section.

I. Mudslide (i.e., Mudflow) Prone Areas.

1. The CDD or designee shall review permits for proposed construction or development to determine if it is proposed within a mudslide area.

2. Permits shall be reviewed to determine that the proposed site and improvement will be safe from mudslide hazards. Factors to be considered in making this determination include but are not limited to the:

- a. Type and quality of soils;
- b. Evidence of groundwater or surface water problems;
- c. Depth and quality of any fill;
- d. Overall slope of the site; and
- e. Weight that any proposed development will impose on the slope.

3. Within areas which may have mudslide hazards, the planning department shall require that:

a. A site investigation and further review be made by persons qualified in geology and soils engineering;

b. The proposed grading, excavation, new construction and substantial improvement be adequately designed and protected against mudslide damages;

c. The proposed grading, excavation, new construction and substantial improvement not aggravate the existing hazard by creating either on-site or off-site disturbances; and

d. Drainage, planting, watering and maintenance not endanger slope stability.

J. Flood-Related Erosion-Prone Areas.

1. The CDD or designee shall require permits for proposed construction and other development within all flood-related erosion-prone areas as known to the community.

2. Permit applications shall be reviewed to determine whether the proposed site alterations and improvements will be reasonably safe from

flood-related erosion and will not cause flood-related erosion hazards or otherwise aggravate the existing hazard.

3. If a proposed improvement is found to be in the path of flood-related erosion or would increase the erosion hazard, such improvement shall be relocated, or adequate protective measures shall be taken to avoid aggravating the existing erosion hazard.

4. Within Zone E on the FIRM, a setback is required for all new development within the body of water to create a safety buffer consisting of a natural vegetative or contour strip. This buffer shall be designated according to the flood-related erosion hazard and erosion rate, in relation to the anticipated useful life of structures, and depending upon the geologic, hydrologic, topographic and climatic characteristics of the land. The buffer may be used for suitable open space purposes, such as for agricultural, forestry, outdoor recreation and wildlife habitat areas, and for other activities using temporary and portable structures only. (Ord. 1843 § 1, 2008; Ord. 1426 § 1, 1994)