Sec. 38-37. - Permit procedures.

Application for a development permit shall be made to the building official on forms furnished by the community prior to any development activities, and may include, but not be limited to the following: Plans in duplicate drawn to scale showing the elevations of the area in question and the nature, location, dimensions, of existing or proposed structures, earthen fill placement, storage of materials or equipment, and drainage facilities.

(1) Application stage—The following are required at the application stage:

   a. Elevation in relation to mean sea level (or highest adjacent grade) of the lowest floor, including basement, of all proposed structures;

   b. Elevation in relation to mean sea level to which any nonresidential structure will be flood-proofed;

   c. Design certification from a registered professional engineer or architect that any proposed nonresidential flood-proofed structure will meet the flood-proofing criteria of subsection 38-62(2) and subsection 38-64(2);

   d. Design certification from a registered professional engineer or architect that any new construction or substantial improvement placed in a coastal high hazard area will meet the criteria of subsection 38-66(5); and,

   e. Description of the extent to which any watercourse will be altered or relocated as a result of a proposed development.

(2) Construction stage—For all new construction and substantial improvements, the permit holder shall provide to the administrator an as-built certification of the regulatory floor elevation or flood-proofing level immediately after the lowest floor or flood-proofing is completed. Where a structure is subject to the provisions applicable to coastal high hazards areas, after placement of the lowest horizontal structural members. Any regulatory floor certification made relative to mean sea level shall be prepared by or under the direct supervision of a registered land surveyor or professional engineer and certified by same. When flood-proofing is utilized for nonresidential structures, said certification shall be prepared by or under the direct supervision of a professional engineer or architect and certified by same. Any work undertaken prior to submission of these certifications shall be at the permit holder's risk. The building official shall review the above referenced certification data submitted. Deficiencies detected by such review shall be corrected by the permit holder immediately and prior to further progressive work being allowed to proceed. Failure to submit certification or failure to make said corrections required hereby, shall be cause to issue a stop-work order for the project.

(Ord. No. 2008-22, § 1, 10-6-08)

Sec. 38-61. - General standards.

In all areas of special flood hazard the following provisions are required:

(1) New construction and substantial improvements of existing structures shall be anchored to prevent flotation, collapse or lateral movement of the structure.

(2) New construction and substantial improvements of existing structures shall be constructed with materials and utility equipment resistant to flood damage.

(3) New construction or substantial improvements of existing structures shall be constructed by methods and practices that minimize flood damage.

(4) Elevated buildings—All New construction or substantial improvements of existing structures that include any fully enclosed area located below the lowest floor formed by foundation and other exterior walls shall be designed so as to be an unfinished or flood resistant enclosure. The enclosure shall be designed to equalize hydrostatic flood forces on exterior walls by allowing for the automatic entry and exit of floodwater.

   a. Designs for complying with this requirement must either be certified by a professional engineer or architect or meet the following minimum criteria:

      1. Provide 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;

      2. The bottom of all openings shall be no higher than one-foot above grade; and,

      3. Openings may be equipped with screens, louvers, valves or other coverings or devices provided they permit the automatic flow of floodwater in both directions.

   b. So as not to violate the "lowest floor" criteria of this chapter, the unfinished or flood resistant enclosure shall only be used for parking of vehicles, limited storage of maintenance equipment used in connection with the premises, or entry to the elevated area.

   c. The interior portion of such enclosed area shall not be partitioned or finished into separate rooms.

(5) All heating and air conditioning equipment and components (including ductwork), all electrical, ventilation, plumbing, and other service facilities shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

(6) Manufactured homes shall be anchored to prevent flotation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This standard shall be in addition to and consistent with applicable state requirements for resisting wind forces.

(7) New and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.

(8) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharges from the systems into floodwaters.

(9) On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding.

(10) Any alteration, repair, reconstruction or improvement to a structure, which is not compliant with the provisions of this chapter, shall be undertaken only if the nonconformity is not furthered, extended or replaced.

(Ord. No. 2008-22, § 1, 10-6-08)

Sec. 38-62. - Specific standards.

In all areas of special flood hazard designated as A1-30, AE, AH, A (with estimated BFE), the following provisions are required:

(1) New construction and/or substantial improvements—Where base flood elevation data are available, new construction and/or substantial improvement of any structure or manufactured home shall have the lowest floor, including basement, elevated no lower than one-foot above the base flood elevation. Should solid foundation perimeter walls be used to elevate a structure, openings sufficient to facilitate the unimpeded movements of floodwaters shall be provided in accordance with standards of subsection 38-61(4), "elevated buildings".

   a. All heating and air conditioning equipment and components (including ductwork), all electrical, ventilation, plumbing and other service facilities shall be elevated at or above one-foot above the base flood elevation.

(2) Nonresidential construction—New construction and/or the substantial improvement of any structure located in A1-30, AE, or AH zones, may be flood-proofed in lieu of elevation. The structure, together with attendant utility and sanitary facilities, must be designed to be water tight to one-foot above the base flood elevation, with walls substantially impermeable to the passage of water, and structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. A registered professional engineer or architect shall certify that the design and methods of construction are in accordance with accepted standards of practice for meeting the provisions above, and shall provide such certification to the official as set forth above and in subsection 38-36(b)(6).

(3) Manufactured homes and recreational vehicles.

   a. All manufactured homes placed and/or substantially improved on:

      1. Individual lots or parcels,

      2. In new and/or substantially improved manufactured home parks or subdivisions,

      3. In expansions to existing manufactured home parks or subdivisions, or

      4. On a site in an existing manufactured home park or subdivision where a manufactured home has incurred "substantial damage" as the result of a flood, must have the lowest floor including basement, elevated no lower than one-foot above the base flood elevation.

   b. Manufactured homes placed and/or substantially improved in an either existing manufactured home park or subdivision may be elevated so that:

      1. The lowest floor of the manufactured home is elevated no lower than one-foot above the level of the base flood elevation; or

      2. The manufactured home chassis is elevated and supported by reinforced piers (or other foundation elements of at least an equivalent strength) of no less than 36 inches in height above grade.

   c. All manufactured homes must be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement.

   d. All recreational vehicles placed on sites must either:

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

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

3. The recreational vehicle must meet all the requirements for "new construction", including the anchoring and elevation requirements of above.

(4) Floodway—Located within areas of special flood hazard established in section 38-5, are areas designated as floodway. A floodway may be an extremely hazardous area due to velocity floodwaters, debris or erosion potential. In addition, the area must remain free of encroachment in order to allow for the discharge of the base flood without increased flood heights. Therefore, the following provisions shall apply:

a. Encroachments are prohibited, including earthen fill, new construction, substantial improvements or other development within the regulatory floodway. Development may be permitted however, provided it is demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the encroachment shall not result in *any* increase in flood levels or floodway widths during a base flood discharge. A registered professional engineer must provide supporting technical data and certification thereof.

b. Only if subsection 38-62(4)(a) above is satisfied, then any new construction or substantial improvement shall comply with all other applicable flood hazard reduction provisions of Article III.

(Ord. No. 2008-22, § 1, 10-6-08)