

THE BANNOCK COUNTY FLOOD DAMAGE PREVENTION ORDINANCE  
ORDINANCE NO. 1987-4 AS AMENDED  
BANNOCK COUNTY, IDAHO

AN ORDINANCE ESTABLISHING REGULATIONS FOR DEVELOPMENT IN CERTAIN AREAS THAT ARE SUBJECT TO FLOODING, ESTABLISHING ADMINISTRATIVE AND ENFORCEMENT PROCEDURES; PROVIDING STANDARDS FOR FLOOD HAZARD REDUCTION; PROVIDING FOR REPEAL OF CONFLICTING ORDINANCES, AND PROVIDING PENALTIES FOR VIOLATION OF THE ORDINANCE.

BE IT ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF BANNOCK COUNTY, IDAHO:

SECTION 100 TITLE, STATUTORY AUTHORITY, FINDINGS OF FACT, PURPOSE AND OBJECTIVES

110 TITLE

This ordinance shall be known and cited as "The Bannock County Flood Damage Prevention Ordinance".

111 STATUTORY AUTHORIZATION

The Legislature of the State of Idaho in I.C. 46-1020 through 46-1024, authorized local government units to adopt a floodplain map and floodplain management ordinance that identifies floodplains and that sets forth minimum development requirements in floodplains that are designed to promote the public health, safety, and general welfare of its citizenry.

112 FINDINGS OF FACT

- A. The flood hazard areas of Bannock County are subject to periodic inundation that may result in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood relief and protection, and impairment of the tax base, all of which adversely affect the public health, safety and general welfare.
- B. Flood losses may result from structures in flood hazard areas, which are inadequately elevated, flood-proofed, or otherwise unprotected from flood damages, and by the cumulative effect of obstructions in floodplains causing increases in flood heights and velocities.

120 STATEMENT OF PURPOSE

It is the purpose of this ordinance 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:

- A. To protect human life and health;
- B. To minimize expenditure of public money and 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 areas of special flood hazard;
- F. To help maintain a stable tax base by providing for the sound use and development of areas of special flood hazard so as to minimize future flood blight areas;
- G. To ensure that potential buyers are notified that property is in an area of special flood hazard; and,
- H. To ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.

### 130 METHODS OF REDUCING FLOOD LOSSES

In order to establish its purposes, this ordinance includes methods and provisions for:

- A. Restricting or prohibiting uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;
- B. Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
- C. Controlling the alteration of natural flood plains, stream channels, and natural protective barriers, which help accommodate or channel flood waters;
- D. Controlling filling, grading, dredging, and other development which may increase flood damage; and,
- E. Preventing or regulating the construction of flood barriers which will unnaturally divert flood waters or may increase flood hazards in other areas.

## SECTION 200 DEFINITIONS

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

**APPEAL:** A request for a review of the Planning and Zoning Director's interpretation of any provision of this ordinance or a request for a variance.

**AREA OF SHALLOW FLOODING:** A designated AO or AH Zone on the Flood Insurance Rate Map (FIRM). The base flood depths range from one to three feet; a clearly defined channel does not exist; the path of flooding is unpredictable and indeterminate; and, velocity flow may be evident. AO is characterized as sheet flow and AH indicates ponding.

**AREA OF SPECIAL FLOOD HAZARD:** The land in the flood plain within a community subject to a one percent or greater chance of flooding in any given year. Designation on maps always includes the letters A or V.

**BASE FLOOD:** The flood having a one percent chance of being equaled or exceeded in any given year. Also referred to as the "100-year flood". Designation on maps always includes the letters A or V.

**BASEMENT:** Any area of the building having its floor sub-grade (below ground level) on all sides. A crawlspace foundation is classified as a non-basement foundation. (See Federal Emergency Management Agency Technical Bulletin No. 10-01, "Ensuring That Structures Built on Fill In or Near Special Flood Hazard Areas Are Reasonably Safe From Flooding.")

**DEVELOPMENT:** Any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations located within the area of special flood hazard.

**FLOOD OR FLOODING:** A general and temporary condition of partial or complete inundation of normally dry land areas from:

1. The overflow of inland or tidal waters and/or
2. The unusual and rapid accumulation of run-off of surface waters from any source.

**FLOOD INSURANCE RATE MAP:** The official map on which the Federal Insurance Administration has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.

**FLOOD INSURANCE STUDY:** The official report provided by the Federal Insurance Administration that includes flood profiles, the Flood Boundary-Floodway Map, and the water

surface elevation of the base flood.

**FLOOD PROTECTION ELEVATION:** An elevation that shall correspond to the elevation of the one percent (1%) chance flood (also referred to as the Base Flood or one hundred (100) year flood) plus any increased flood elevation to floodway encroachment, plus any required freeboard.

**FLOODWAY:** The channel of the river or stream and those portions of the floodplain adjoining the channel required to discharge and store the floodwater or flood flows associated with the regulatory flood.

**FREEBOARD:** An additional height used as a factor of safety in determining the elevation of a structure, or floodproofing, to compensate for factors that may increase the flood height. The required freeboard is two feet.

**LOWEST FLOOR:** 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 non-elevation design requirements of this ordinance found at Section 520 (i.e. provided there are adequate flood ventilation openings).

**MANUFACTURED HOME:** A structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. For flood plain management purposes, any manufactured home not placed on a permanent foundation shall be considered a mobile home. The term “manufactured home” does not include a recreational vehicle.

**MOBILE HOME:** A structure, transportable in one or more sections, which is built on a permanent chassis and is designed for year round use with or without a permanent foundation when connected to the required utilities. For flood plain management purposes the term "mobile home" also includes park trailers, travel trailers, and other similar vehicles placed on a site for greater than 180 consecutive days. For insurance purposes the term "mobile home" does not include park trailers, travel trailers, and other similar vehicles.

**MOBILE HOME PARK OR SUBDIVISION:** A parcel (or contiguous parcels) of land divided into two or more mobile home lots or spaces for rent or sale.

**NEW CONSTRUCTION:** Structures for which the "start of construction” commenced on or after the effective date of this ordinance.

**RECREATIONAL VEHICLE:** A vehicle,

- 1) Built on a single chassis;
- 2) 400 square feet or less when measured at the largest horizontal projection;
- 3) Designed to be self-propelled or permanently towable by a light duty truck;

- 4) Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

**REGULATORY FLOOD:** A flood determined to be representative of large floods known to have occurred in Idaho and which may be expected to occur on a particular stream because of like physical characteristics. The regulatory flood is based upon a statistical analysis of stream flow records available for the watershed or an analysis of rainfall and runoff characteristics in the watershed. In inland areas, the flood frequency of the regulatory flood is once in every one hundred (100) years; this means in any given year there is a one percent (1%) chance that a regulatory flood may occur or be exceeded.

**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 mobile 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 foundation 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:** A walled and roofed building including a gas or liquid storage tank.

**SUBSTANTIAL DAMAGE:** Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed fifty percent (50%) of the market value of the structure before the damage occurred.

**SUBSTANTIAL IMPROVEMENT:** Any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure either:

1. before the improvement or repair is started, or
2. if the structure has been damaged and is being restored, before the damage occurred. 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.
3. All improvements, modifications, additions, and reconstruction projects to an existing building will be counted cumulatively over a period of ten years, and once the cost of all the projects reach 50% of the assessed evaluation [at the time of the first project] of the building, the project is considered a substantial improvement and the building is treated as a new building and must be elevated. (Ordinance Amendment 1994-1)

The term does not, however, include either:

1. 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
2. any alteration of a structure listed on the National Register of Historic Places or a State Inventory of Historic Places.

VARIANCE: A grant of relief from the requirements of this ordinance which permits construction in a manner that would otherwise be prohibited by this ordinance (see Section 440).

## SECTION 300 GENERAL PROVISIONS

### 310 LANDS TO WHICH THIS ORDINANCE APPLIES

This ordinance shall apply to all areas of special flood hazards within the jurisdiction of Bannock County.

### 320 BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD

The areas of special flood hazard identified by the Federal Insurance Administration is a scientific and engineering report entitled "The Flood Insurance Study for Bannock County," dated July 7, 2009 with accompanying Flood Insurance Maps is hereby adopted by reference and declared to be a part of this ordinance. The Flood Insurance Study is on file in the Bannock County Office of Planning and Development Services at 130 North 6<sup>th</sup> Street, Suite C, Pocatello, Idaho 83201.

### 330 PENALTIES FOR NONCOMPLIANCE

No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the terms of this ordinance and other applicable regulations. Violation of the provisions of this ordinance by failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with conditions) shall constitute a misdemeanor. Any person who violates this ordinance or fails to comply with any of its requirements shall upon conviction thereof be fined not more than \$300 or imprisoned for not more than 180 days, or both, for each violation, and in addition shall pay all costs and expenses involved in the case. Each day on which the violation occurs shall be deemed a separate offense. Nothing herein contained shall prevent Bannock County from taking such other lawful action as is necessary to prevent or remedy any violation.

### 340 ABROGATION AND GREATER RESTRICTIONS

This ordinance is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this ordinance and another ordinance, easement, covenant, or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

350 INTERPRETATION

In the interpretation and application of his ordinance, all provisions shall be:

- A. Considered as minimum requirements;
- B. Liberally construed in favor of the governing body; and,
- C. Deemed neither to limit nor repeal any other powers granted under State statutes.

360 WARNING AND DISCLAIMER OF LIABILITY

The degree of flood protection required by this ordinance is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by manmade or natural causes. This ordinance does not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This ordinance shall not create liability on the part of Bannock County, any officer or employee thereof, or the Federal Insurance Administration, for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made hereunder.

SECTION 400 ADMINISTRATION

410 ESTABLISHMENT OF DEVELOPMENT PERMIT

411 Development Permit Required

A development permit shall be obtained before construction or development begins within any area of special flood hazard established in Section 320. The permit shall be for all structures including mobile homes, as set forth in the “DEFINITIONS” section, and for all development including fill and other activities, also as set forth in the “DEFINITIONS”.

412 Application for Development Permit

Application for a development permit shall be made on forms furnished by the Planning and Zoning Director and may include but not be limited to; 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. Specifically, the following information is required:

- A. Elevation in relation to mean sea level, or other datum approved by the County Engineer, of the lowest floor (including basement) of all structures;

- B. Elevation in relation to mean sea level to which any structure has been floodproofed;
- C. Certification by a registered professional engineer or architect that the floodproofing methods for any nonresidential structure meet the floodproofing criteria in Section 520; and
- D. Description of the extent to which a watercourse will be altered or relocated as a result of the proposed development.

420 DESIGNATION OF THE PLANNING AND ZONING DIRECTOR

The Planning and Zoning Director shall administer and implement this ordinance by granting or denying development permit applications in accordance with its provisions.

430 DUTIES AND RESPONSIBILITIES OF THE PLANNING AND ZONING DIRECTOR

A. Permit Review

1. Review of all development permits to determine that the permit requirements of this ordinance have been satisfied.
2. Review proposed development to determine that all necessary permits have been obtained from those Federal, State or local governmental agencies from which prior approval is required.
3. Review of all development permits to determine if the proposed development is located in the floodway. If located in the floodway, assure that the encroachment provision of Section 530-B are met.

B. Use of Other Base Flood Data

When Flood protection elevation or floodway data have not been provided in accordance with Section 320, BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD, the Planning and Zoning Director shall obtain, review, and reasonably utilize any Flood protection elevation and floodway data available from federal, State or other source, in order to administer Sections 520, SPECIFIC STANDARDS, and 530, FLOODWAYS.

C. Information to be Obtained and Maintained

1. The Planning and Zoning Director shall verify and record the actual elevation (in relation to mean sea level) of the regulatory floor level of all new or substantially improved structures located within the Area of Special Flood Hazard where the base flood elevation has been determined, and whether or not the structure contains a



basement.

2. For all new or substantially improved flood plain structures the Planning and Zoning Director shall:

- (a) Verify and record the actual elevation (in relation to mean sea level), and maintain the floodproofing certifications required in Section 412-C to which any new or substantially improved structures, located within the Area of Special Flood Hazard where the base flood elevation has been determined, have been floodproofed.
- (b) When floodproofing is utilized, maintain certification of design criteria from a registered professional engineer or architect and the floodproofing certifications required in Section 412-C.
- (c) A cumulative record of improvements to properties in all Areas of Special Flood Hazard to determine accumulated value. When the cost of all improvements, modifications, additions and reconstruction projects, over a period of ten years, to an existing building reach 50% of the assessed evaluation of the building at the time of the first project, the project is considered a substantial improvement and the entire building must be elevated as would a new building. (Ordinance Amendment 1994-1)

3. All records pertaining to the provisions of this ordinance shall be maintained.

D. Alteration of Watercourses

- 1. The Planning and Zoning Director shall notify adjacent communities and the Idaho Department of Water Resources prior to alteration or relocation of a watercourse, submit evidence of such notification to the Federal Insurance Administration and assure the flood carrying capacity of any altered or relocated waterway is maintained.
- 2. The Planning and Zoning Director shall require that maintenance is provided within the altered or relocated portion of said watercourse so that the flood carrying capacity is not diminished.

E. Interpretation of FIRM Boundaries

When interpretation is needed, the Planning and Zoning Director shall make the necessary interpretations, as to 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 the actual field conditions). The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in Section 440.

441 Appeal Board

- A. The Planning and Zoning Commission as established by Bannock County shall hear and decide appeals and requests for variances from the requirements of this ordinance.
- B. The Planning and Zoning Commission shall hear and decide appeals when it is it alleged there is an error in any requirement, decision, or determination made by the Planning and Zoning Director in the enforcement or administration of this ordinance.
- C. Those aggrieved by the decision of the Planning and Zoning Commission may appeal such decision to the Board of County Commissioners.
- D. In reviewing appeal and variance applications, the Planning and Zoning Commission shall consider all technical evaluations, all relevant factors, standards specified in other sections of this ordinance, and:
  - (a) the danger that materials may be swept onto other lands to the injury of others;
  - (b) the danger to life and property due to flooding or erosion damage;
  - (c) the susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
  - (d) the importance of the services provided by the proposed facility to the community;
  - (e) the necessity to the facility of a waterfront location, where applicable;
  - (f) the availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;
  - (g) the compatibility of the proposed use with existing and anticipated development;
  - (h) the relationship of the proposed use to the comprehensive plan and flood plain management program for that area;
  - (i) the safety of access to the property in times of flood for ordinary and emergency vehicles;
  - (j) the expected heights, velocity, duration, rate of rise, sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site; and,
  - (k) 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.

- E. Upon consideration of the factors of Section 441-D and the purposes of this ordinance, the Planning and Zoning Commission may attach such conditions to the granting of variances as it deems necessary to further the purposes of this ordinance.
- F. The Planning and Zoning Director shall maintain the records of all appeal actions and report any variances to the Federal Insurance Administration upon request.

442 Conditions under which Variances may be Granted

- A. Generally, the only condition under which a variance from the elevation standard may be issued is 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 items (a-k) in Section 441-D have been fully considered. As the lot size increases the technical justification required for issuing the variance increases.
- B. 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 this section.
- C. Variances shall not be issued within a designated floodway if any increase in flood levels during the base flood discharge would result.
- D. Variances shall only be issued upon determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
- E. 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;
  - (c) a determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public as identified in Section 441-D, or conflict with existing local laws or ordinances.
- F. Variances as interpreted in the National Flood Insurance Program are based on the general zoning law principle that they pertain to a physical piece of property; they are not personal in nature and do not pertain to the structure, its inhabitants, economic or financial circumstances. They primarily address small lots in densely populated residential neighborhoods. As such, variances from the flood elevations should be quite rare.
- G. Variances may be issued for nonresidential buildings in very limited circumstances to allow

a lesser degree of floodproofing than watertight or dry-floodproofing, where it can be determined that such action will have low damage potential, complies with all other variance criteria except 442-A, and other wise complies with Sections 510-A and 510-B of the GENERAL STANDARDS.

H. Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with a lowest floor elevation below the base flood elevation and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.

## SECTION 500 PROVISIONS FOR FLOOD HAZARD REDUCTION

### 510 GENERAL STANDARDS

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

#### A. Anchoring

1. All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure.
2. All mobile homes must likewise be anchored to prevent flotation, collapse or lateral movement, and shall be installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors (Reference FEMA's "Manufactured Home Installation in Flood Hazard Areas" guidebook for additional techniques).

#### B. Construction Materials and Methods

1. All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
2. All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.
3. Electrical, heating, ventilation, plumbing, and air-conditioning equipment and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

#### C. Utilities

1. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;

2. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the system and discharge from the system and discharge from the systems into flood waters; and,
3. On-site water disposal systems shall be located to avoid impairment of function or contamination from them during flooding.

D. Subdivision Proposals

1. All subdivision proposals shall be consistent with the need to minimize flood damage;
2. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage; and,
3. All subdivision proposals shall have adequate drainage provided to reduced exposure to flood damage; and,
4. Where Flood protection elevation data has not been provided or is not available from another authoritative source, it shall be generated for subdivision proposals and other proposed developments which contain at least 50 lots or 5 acres (whichever is less).

E. Review of Building Permits

Where elevation data is not available either through the Flood Insurance Study or from another source (Section 430. B), applications for building permits shall be reviewed to assure that proposed construction will be reasonably safe from flooding. The test of reasonableness is a local judgment and includes use of historical data, high water marks, photographs of past flooding, etc., where available. Failure to elevate at least two feet above grade in these zones may result in higher insurance rates.

F. Lowest Floor

To comply with the “Lowest Floor” criteria of this ordinance, 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.

520 SPECIFIC STANDARDS

In all areas of special flood hazards designated A or AO as set forth in Section 320, BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD or Section 430 (B), Use of Other Base Flood Data, the following provisions are required:

A. Residential Construction

1. Where Flood protection elevation data are available, new construction and substantial

improvement of any residential structure or manufactured home shall have the lowest floor, including basement, at or above flood protection elevation.

2. Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must be certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria:

- a. A minimum of two openings with a total net one square inch per square foot of enclosed area subject to flooding shall be provided.
- b. The bottom of all openings shall be no higher than one foot above grade.
- c. Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic flow of floodwater in both directions.

B. Nonresidential Construction

New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall either have the lowest floor, including basement, elevated to at least two feet above the base flood elevation or adjacent grade if BFE is not known or in 'AO' zone; or, together with attendant utility and sanitary facilities, shall: (Ordinance Amendment 1994-1)

- 1. Be floodproofed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water;
- 2. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy;
- 3. Be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this subsection based on their development and/or review of the structural design, specifications and plans. Such certifications shall be provided to the Planning and Zoning Director as set forth in Section 430-C (2).
- 4. Nonresidential structures that are elevated, not floodproofed, must meet the same standards for space below the lowest floor as described in 520-A (2).
- 5. Applicants floodproofing nonresidential buildings shall be notified that flood insurance premiums will be based on rates that are one foot below the floodproofed level (e.g. a building constructed to the base flood level will be rated as one foot below that level).

6. Critical facilities such as hospitals, jails, police and fire stations, government, road maintenance equipment stations, landfills, sewer treatment plants, transit facilities, utility control plants and the like shall not be located in 100 year 'A' floodplains. (Ordinance Amendment 1994-1)

C. Mobile Homes

All mobile homes to be placed or substantially improved within Zones 'A1-30', 'AH', 'A', 'AO' and 'AE' (that is, all 100-year flood plains) shall be elevated on a permanent foundation such that the lowest floor of the mobile home is two feet above the base flood elevation and be securely anchored to an adequately anchored foundation system in accordance with the provisions of the subsections 510-A. (Ordinance Amendment 1994-1)

- D. Grading or fill in the 100-year floodplain is prohibited unless compensatory flood water storage area is provided and the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the County. The Planning Director or designee must approve all plans for fill and compensatory storage areas.

E. Crawlspace construction

Crawlspace foundation types will follow the guidelines contained in the latest FEMA Technical Bulletin 11-01 "Crawlspace Construction for Buildings Located in Special Flood Hazard Areas: National Flood Insurance Program Interim Guidance."

Crawlspace construction for all crawlspaces that have enclosed areas or floors below the Base Flood Elevation shall require the following:

- (1) The structure must be designed and adequately anchored to resist flotation, collapse, and lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy;
- (2) The crawlspace must have openings that equalize hydrostatic pressures by allowing for the automatic entry and exit of floodwaters, and the bottom of each flood vent opening can be no more than one (1) foot above the lowest adjacent exterior grade;
- (3) Portions of the structure below the Base Flood Elevation including joists, insulation, and other material that extend below the Base Flood Elevation must be constructed with materials resistant to flood damage;
- (4) Any building utility systems within the crawlspace must be elevated above Base Flood Elevation or designed so that floodwaters cannot enter or accumulate within the system components during flood conditions;
- (5) The interior grade of a crawlspace below the Base Flood Elevation must not be more than two (2) feet below the lowest adjacent exterior grade;
- (6) The height of the below-grade crawlspace, measured from the interior grade of the crawlspace to the top of the crawlspace foundation wall must not exceed four (4) feet at any point;
- (7) There must be an adequate drainage system that removes floodwaters from the

- interior area of the crawlspace;
- (8) The velocity of floodwaters at the site should not exceed five (5) feet per second for any crawlspace.

F. Recreational Vehicles

Recreational vehicles placed on sites are required to either

- 1) Be on the site for fewer than 180 consecutive days; or
- 2) Be fully licensed and ready for highway use, on wheels or jacking system, attached to the site only by quick disconnect type utilities and security devices, and have no permanently attached additions; or
- 3) Meet the requirements of subsection 520-C.

530 ADDITIONAL STANDARDS FOR CERTAIN TYPES OF FLOOD HAZARD AREAS

A. Floodways

Located within areas of special flood hazard established in Section 320 are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles, and erosion potential, the following provisions apply:

- 1. Encroachments are prohibited, including fill, new construction, substantial improvements, and other development unless certification by a registered professional engineer or architect is provided demonstrating that encroachments will not result in any increase in flood levels during the occurrence of the base flood discharge.
- 2. If Section 520-A-1 is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Section 500, PROVISIONS FOR FLOOD HAZARD REDUCTION.

B. Encroachments in Floodplains Where Flood Protection Elevations have Been Provided But Floodways Have Not

Until a regulatory floodway is designated, no new construction, substantial improvements, or other development (including fill) shall be permitted within Zones A1-30, AE, AH and AO on the Flood Insurance Rate Map (FIRM) unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the County.

C. Shallow Flooding Areas (AO Zones)

Shallow flooding areas appear on FIRM's as AO zones with depth designations. The base



flood depths in these zones range from 1 to 3 feet where a clearly defined channel does not exist, or where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is usually characterized as sheet flow. In these areas, the following provisions apply:

1. New construction and substantial improvements of residential structures within 'AO' zones shall have the lowest floor (including basement) elevated above the highest adjacent grade at least as high as the depth number specified in feet on the FIRM (at least two feet if no depth number is specified) plus the required freeboard of two feet.
2. New construction and substantial improvements of nonresidential structures within AO zones shall either:
  - (a) have the lowest floor (including basement) elevated above the highest adjacent grade of the building site, to or above the depth number specified on the FIRM ( at least two feet in no depth number is specified); or
  - (b) together with attendant utility and sanitary facilities, be completely floodproofed to or above that level so that any space below that level is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. If this method is used, compliance shall be certified by a registered professional engineer or architect as in Section 520-A-1.
3. Adequate drainage swales or paths shall be provided around structures on slopes to guide floodwaters around and away from proposed structures.

#### 600 REPEALING CLAUSE

That Section VIII of the 1984 Interim Land Use Ordinance be, and the same is hereby repealed.

#### 700 SEVERABILITY

If any section, clause, sentence, or phrase of this Ordinance is held to be invalid or unconstitutional by any court of competent jurisdiction, then said holding shall in no way effect the validity of the remaining portions of this Ordinance.

