

REQUEST FOR BOARD ACTION

HENDERSON COUNTY BOARD OF COMMISSIONERS

MEETING DATE: June 15, 2005

SUBJECT: Draft Flood Damage Prevention Ordinance

ATTACHMENTS:

1. Comparison Table
2. Draft Fee Schedule
3. City of Hendersonville Natural Resources Protection Standards
4. City of Hendersonville Flood Damage Prevention Ordinance
5. Town of Fletcher Food Damage Prevention Ordinance

SUMMARY OF REQUEST:

At the June 6, 2005 Board of Commissioners' meeting, the Board directed staff to develop a table comparing the Draft Henderson County Flood Damage Prevention Ordinance (dated May 24, 2005), the City of Hendersonville Flood Damage Prevention Ordinance and Natural Resource Protection Standards, the Town of Fletcher Flood Damage Prevention Ordinance, the state minimum standards model, and the draft Flood Damage Prevention Ordinance submitted by Angie Beeker. Attached to this Request for Board Action you will find the comparison table. The Board has already received copies of the Draft Henderson County Flood Damage Prevention Ordinance (dated May 24, 2005), the state model, and the draft Flood Damage Prevention Ordinance submitted by Angie Beeker. Please contact the Planning Department if additional copies are needed.

When the Board is ready to adopt a Flood Damage Prevention Ordinance, it will need to establish an effective date. The next items that must be addressed are initiating the National Flood Insurance Program (NFIP) application process and developing a fee schedule associated with the Flood Damage Prevention Ordinance. A draft fee schedule is attached for your consideration.

COUNTY MANAGER'S RECOMMENDATION/BOARD ACTION REQUESTED:

In accordance with the Board of Commissioners' 2005 Strategic Plan, I recommend that the Board approve the revised Henderson County Flood Damage Prevention Ordinance (dated May 24, 2005) as presented by Planning Staff, with an effective date of July 1, 2005. I also recommend that the Board adopt the draft fee schedule and direct Planning Staff to initiate the NFIP application process.

Flood Damage Prevention Ordinance
Comparison Table

Henderson County/Hendersonville/State Minimum Requirements/Becker Document

6/8/2005

Regulation	Draft Henderson County (May 24, 2005)	Hendersonville*	Fletcher	State Minimum Requirements	Becker Document
Definition of Special Flood Hazard Area	Floodway and 100-year floodplain	Floodway and 100-year floodplain	Floodway and 100-year floodplain	Floodway and 100-year floodplain	Floodway and 100-year floodplain
Regulatory Flood Protection Elevation	2 feet above base flood elevation	2 feet above base flood elevation	3 feet above base flood elevation	2 feet above base flood elevation	2 feet above base flood elevation
Development in Floodway	Water dependent structures with no-rise certification only, infrastructure, and streambank restoration.	Limited uses associated with recreation, infrastructure, and redevelopment; limited percentages of the lot; with no-rise certification only.	Any development, including fill, new construction, substantial improvements, and other developments with a no-rise certificate.	Any development, including fill, new construction, substantial improvements, and other developments with a no-rise certificate.	Any development, including fill, new construction, substantial improvements, and other developments with a no-rise certificate.
Development in 100-year floodplain	Development associated with agriculture, recreation, infrastructure, expansion and additions to existing structures, construction of accessory buildings, with no-rise certificates, is permitted.	Limited uses associated with recreation, infrastructure, and redevelopment. Other development is permitted in the 100-year floodplain only with a no-rise certificate and only 10% or one-half acre (whichever is greater) on pre-existing lots.**	Any development with elevation and/or floodproofing.	Any development with elevation and/or floodproofing.	Any development with elevation and/or floodproofing.
Development in 500-year floodplain	Yes, unrestricted	Yes, unrestricted	Yes, unrestricted	Yes, unrestricted	Yes, unrestricted
Watercourse Alteration permitted	No	Yes, with monitoring requirement	Yes, with monitoring requirement	Yes, with monitoring requirement	Yes, with monitoring requirement
Manufactured Homes in Floodway	Permitted only as replacement and with development standards.	Permitted only in existing manufactured home parks or subdivisions, or as replacements on individual lots, with development standards.	Permitted as replacements in existing manufactured home parks or subdivisions with development standards.	Permitted as replacements in existing manufactured home parks or subdivisions with development standards.	Permitted only as replacement and with development standards.
Manufactured Homes in 100-Year Floodplain	Permitted only as replacement and with development standards.	Permitted with development standards.	Permitted with development standards.	Permitted with development standards.	Permitted only as replacement and with development standards.

*Hendersonville regulates the floodway and floodway fringe (100-year floodplain) through a stand-alone flood damage prevention ordinance and Section 17-7 of the Hendersonville Zoning Ordinance.

** See attached copy of Section 17-7

**Proposed Fee Schedule for the
Henderson County Flood Damage Prevention Ordinance
(FY 2005-2006)**

Item	Proposed Fee
Variance	\$250
Flood Development Permit for property located in the Floodway	\$500
Flood Development Permit for property located in the 100-Year Floodplain	\$250

ARTICLE XVII
NATURAL RESOURCE PROTECTION STANDARDS
(added 10-05-00, amended 03-07-02)

Section 17-1 Purpose. Recognizing that protection of the natural resources of the City of Hendersonville represents prudent stewardship and good business, this article is created to establish standards intended to accomplish the following:

- a) To preserve and enhance the quality of the water in creeks, streams, ponds and lakes that flow into and out of the City;
- b) To minimize future flooding problems by guiding development away from flood prone areas;
- c) To preserve the water carrying capacity of watercourses and the natural water storage capacity of the floodway fringe;
- d) To protect land and watercourses from pollutants, sedimentation and erosion;
- e) To retain open spaces in order to protect their environmentally-sensitive character; and
- f) To protect and conserve significant natural resources from degradation due to urbanization.

Section 17-2. Floodplain Protection Standards. The primary objective of floodplain protection standards is to preserve and maintain the natural floodplain in an undisturbed vegetated state in order to maintain flood storage capacity, control stormwater, improve water quality and conserve plant and wildlife habitat.

17-2-1. Development Prohibited in the Floodway and Floodway Fringe. Development and land disturbing activity within the floodway and floodway fringe, as defined in Section 12-2, above, shall be prohibited, except as provided by Section 17-2-2, below, or allowed pursuant to a variance approved by the Board of Adjustment as provided herein.

17-2-2. Development Allowed in the Floodway and Floodway Fringe.

- a) Land in the floodway and floodway fringe may be used for the following purposes, provided that such uses are designed and constructed to minimize clearing, grading, erosion and water quality degradation:
 - 1) Crossings by streets, driveways, culverts and railroads;
 - 2) Active and passive recreational activities authorized in the zoning district in which the property is situated;
 - 3) Intakes, docks, utilities (including water and wastewater treatment, stormwater control and sedimentation and erosion control facilities), bridges, other public facilities and water-dependent structures;
 - 4) Wetlands constructed or restored for mitigation purposes;
 - 5) Redevelopment pursuant to Section 17-2-4, below; and *(added 03-07-02)*
 - 6) Land within the floodway and floodway fringe can serve to meet minimum lot size requirements if there is sufficient buildable area remaining on the tract.
- b) Land in the floodway fringe may be used for up to 25 percent of the parking required for the development on the tract; provided, there is no increase in the elevation of the land resulting in a loss of flood storage. Furthermore, no more than one-third of the floodway fringe land on any development tract shall be used for parking. Parking in the floodway fringe shall undergo development review in accordance with Article VII, above. In considering the application for development approval, the City shall consider whether the proposed parking on the site is designed and arranged to minimize adverse environmental impact from placement of parking in the floodway fringe and whether the proposed development would result in significant degradation of water quality, loss of significant wetlands, increase in sedimentation and erosion, increase in stormwater runoff, loss of significant plant and wildlife habitat or would otherwise constitute a threat to public safety. Where feasible, the proposed parking shall be designed making maximum use of pervious materials.
- c) Streets and driveways may run generally within the floodway fringe and parallel to the stream only where no other access to the property is feasible. Such streets and driveways shall be designed to minimize loss of flood storage.

- d) In order to allow design flexibility to achieve high quality site design and better utilization of land adjacent to the floodway fringe, a property owner or developer may fill and/or use for development up to 10 percent of the floodway fringe area contained within the boundaries of any development site upon satisfactorily demonstrating the following:
- 1) The proposed fill and/or development provides for a higher quality site design and better utilization of land adjacent to the floodway fringe than would be possible without the intrusion necessary to achieve the high quality design; and
 - 2) The proposed fill and/or development represents the minimum amount of floodway fringe intrusion necessary to achieve the high quality design.

Public and private roads and sidewalks shall not count toward the allowable 10 percent of the floodway fringe on a tract that can be filled and/or used for development in accordance with Section 17-2-2(d).

A property owner or developer may fill and/or use for development more than 10 percent of the floodway fringe when such would be necessary so that the property to be developed, including both the floodway fringe and land adjacent thereto, equals one-half acre.

- e) Notwithstanding the foregoing, for parcels existing prior to the effective date of this ordinance situated entirely within the 100-year flood plain as depicted on the most recent Flood Boundary and Floodway Map a property owner or developer may fill and/or use for development up to one-half acre or ten percent of such property, whichever is greater. Provided, however, in order to develop such lands, the property owner or developer must comply with all applicable regulations of the Federal Emergency Management Administration including obtaining a "no-rise" certificate, if necessary. Furthermore, in order to qualify for the exception contained in this paragraph, proposed development shall be situated and designed in such a way as to be consistent with the purposes of this article as set forth in Section 17-1, above. *(amended 01-08-04)*
- f) It is intended that this ordinance be congruous with the City of Hendersonville Flood Damage Prevention Ordinance. Therefore, any uses, development or land disturbing activity allowed by Section 17-2 shall be conducted in accordance with the requirements of the Flood Damage Prevention Ordinance, including, without limitation, the requirement to obtain a "no-rise" certificate for activities within the floodway. *(amended 03-07-02)*

17-2-3 Density Credits. The amount of land in the floodway fringe may be credited for residential density on land adjacent to the floodway fringe at a rate of 100 percent of that allowed by the zoning.

17-2-4. Redevelopment in the Floodway and Floodway Fringe. Historically, some areas of the City's planning jurisdiction were developed despite the fact that they lie within the 100-year flood plain. In order to address concerns about urban blight, this section allows redevelopment to occur on existing developed sites which no longer function as natural flood plain and when such redevelopment will not result in any further loss of flood-plain functionality. Where feasible, redevelopment proposals should demonstrate an improvement in the site's functionality as a flood plain. In light of this intent, redevelopment of existing developed sites shall be permitted within the floodway and floodway fringe only when the applicant has satisfactorily demonstrated the following:

- a) The proposal is to redevelop an existing developed site as of the date of this ordinance evidenced by substantial coverage of the site by buildings, fill, gravel or paved drives or parking areas or other impervious surfaces.
- b) There shall be no loss of flood storage capacity on the site as a result of the redevelopment.
- c) The applicant, utilizing best management practices, shall reduce the post-redevelopment rate of stormwater runoff from the pre-redevelopment rate of runoff, if feasible. In any event, the post-redevelopment rate of runoff shall not be greater than the pre-redevelopment rate.
- d) The project design, including any best management practices (BMPs) will result in a project which is consistent with the purposes of the Natural Resources Protection Ordinance as stated in Section 17-1, above. In this regard, the applicant shall demonstrate the following:
 - 1) the project shall not degrade the quality of the water in creeks, streams, ponds and lakes that flow into and out of the City;
 - 2) the project shall not contribute to future flooding problems;

- 3) the project preserves the water carrying capacity of watercourses and the natural water storage of the floodway fringe;
 - 4) the project protects land and watercourses from pollutants, sedimentation and erosion;
 - 5) the project retains open spaces in order to protect their environmentally-sensitive character; and
 - 6) the project protects and conserves significant natural resources from degradation due to urbanization.
- e) The applicant shall comply with all relevant provisions of the Flood Damage Prevention Ordinance including obtaining a no-rise certificate, if needed.

Section 17-3 Stream Buffer Protection Standards. The primary objective of stream buffer protection standards is to maintain land adjacent to streams in an undisturbed vegetated state in order to enhance and maintain water quality, protect stream channel wetlands, minimize stormwater runoff, reduce sedimentation and erosion, conserve plant and wildlife habitat and protect wildlife movement corridors. The standards contained in this section will further this objective (1) by regulating water temperature through shading of the stream bed, (2) by limiting sedimentation from streambank erosion and stormwater flow, and (3) by supporting aquatic life through the provision of organic debris such as leaves and twigs.

17-3-1 Applicability. Except as modified in this section, stream buffer protection standards shall apply to all watercourses depicted as a solid blue line on the most recent USGS seven-and-one-half minute quadrangle topographic maps covering the City of Hendersonville and its area of extraterritorial jurisdiction. Stream buffers shall be clearly indicated on all development plans, including concept plans, preliminary plans and final plans, and on all preliminary and final plats.

17-3-2 Stream Buffer Size. Stream buffers shall apply on each side of the stream and shall measure 30 feet horizontally from the top of the stream bank in a direction perpendicular to the stream flow.

17-3-3 Prohibition Against Development Within the Stream Buffer. To avoid a loss of effectiveness in protecting streams, the stream buffer shall remain in natural undisturbed forest vegetation and no development or land-disturbing activities shall be undertaken therein, except as provided in Section 17-3-4. Furthermore, there shall be a 20-foot transitional area immediately landward of the stream buffer which may be graded, landscaped and/or used for pedestrian or vehicular purposes so long as no impervious materials are utilized. Certain uses of land, as specified in Section 17-3-4, below, may be permitted within the stream buffer so long as they meet the requirements of that Section and are designed and constructed to minimize the amount of intrusion into the stream buffer and to minimize clearing, grading, erosion and water quality degradation. Nothing herein is intended to preclude the removal of downed vegetation from the stream bed in order to improve stream flow dynamics. If it is necessary to remove downed or dead vegetation, it should be cut and the root ball left in place to help maintain stability of the shoreline. Nothing herein is intended to [or shall] preclude any activity specifically authorized pursuant to Section 401 and/or Section 404 of the Clean Water Act.

17-3-4 Exceptions. Subject to prior written authorization by the Planning Director, the following activities may be undertaken within the stream buffer provided they meet all the standards specified herein as well as other applicable provisions of the Zoning Ordinance:

- a) Crossings by streets, driveways, culverts, railroads, recreational features, intakes, docks, utilities, bridges or other facilities shall be allowed provided that they are designed to minimize the amount of intrusion into the stream buffer. Streets and driveways may run generally within and parallel to the stream buffer only where no other access to the property is feasible and when their design minimizes the amount of intrusion into the stream buffer. Crossings with a width of 40 feet or more are permitted only when it has been demonstrated that there is no practical alternative.
- b) Stream buffers may be used for passive recreational activities, such as unpaved or paved trails or greenways, provided that service facilities for such activities, including but not limited to parking, picnicking and sanitary facilities, are located outside of the stream buffer. Where practical, such activities shall be kept at least 15 feet from the stream bank.
- c) Clearing and revegetating the stream buffer pursuant to a plan approved by the Planning Director when it has been demonstrated that such clearing and revegetation will improve stream buffer's pollutant removal efficiency.
- d) Stormwater control structures and temporary erosion control structures shall be considered utilities for the purposes of this section and may be allowed in stream buffers, provided that:

- 1) The property owner or applicant demonstrates to the satisfaction of the Planning Director that such facilities cannot be practicably located outside of the stream buffer, and that any proposed stormwater control structure is sited and designed to minimize disturbance of the stream and stream buffer.
- 2) Alternate methods of stormwater and erosion control shall be considered prior to approval of such structures in the stream buffers.

- 3) A vegetated buffer of a width approved by the Planning Director shall be required around the stormwater control structures.
 - 4) Any land disturbed for these structures shall be revegetated with appropriate native species in accordance with a revegetation plan approved by the Planning Director.
- e) Sanitary sewer lines, on an alignment generally parallel to the stream, may be allowed in stream buffers, provided that:
- 1) The property owner or applicant demonstrates in writing to the satisfaction of the Director of Water & Sewer that the sanitary sewer lines cannot be practicably located outside of the stream buffer;
 - 2) Design and construction specifications minimize damage to the stream and the possibility of line leakage;
 - 3) The sewer line is located at least 15 feet from the top of the stream bank; and
 - 4) The sanitary sewer plan and a plan for revegetating the stream buffer disturbance shall be approved by the Director of Water & Sewer.
- f) Streams may be piped, thereby exempting the piped section of the stream from stream buffer requirements, provided such piping complies with the permitting/certification requirements of the Clean Water Act and any other applicable state and federal regulations. Piping undertaken for the purpose of accommodating public roads, railroads, greenways, recreational facilities and private roads and drives should be designed so that the right-of-way or roadway-and-shoulder width is no more than is necessary considering the design capacity of the facility and so that the proposed stream piping is not substantially in conflict with the other objectives of this Section. Where stream piping is approved, a vegetated buffer area or other device shall be provided at any intake or discharge structure. All buffers and physical improvements related to the stream piping shall be located entirely on the site or, pursuant to easement, on lands adjacent to the site.
- g) Selective removal of invasive exotic species in accordance with a plan approved by the Planning Director.
- h) View corridors are allowed so long as the soil is undisturbed and the natural forest floor, ground cover and understory vegetation are left intact. Pruning associated with the creation and maintenance of a view corridor is exempt. Thinning of the overstory and mid-canopy trees is permissible with the written authorization of the Planning Director.

Site plan approval by the Planning Director shall be required for any of the stream buffer intrusions described above. When any of the activities described above involves land clearing, the cleared area shall be revegetated pursuant to an approved plan. However, where a site plan is not required by any other provision of the Zoning Ordinance, the Director of Public Works is authorized to approve plans for stream piping and erosion control structures in stream buffers.

17-3-5 Minimum Lot Size Requirements. Land within the stream buffer can serve to meet minimum lot size and setback requirements if there is sufficient buildable area remaining on the lot.

17-3-6 Diffuse Flow Requirement. Diffuse flow of runoff shall be maintained in the stream buffer dispersing concentrated flow and reestablishing vegetation.

- a) Concentrated runoff from new ditches or manmade conveyances shall be converted to diffuse flow before the runoff enters the 20-foot setback area defined in Section 17-3-3, above.
- b) Periodic corrective action to restore diffuse flow shall be taken if necessary to impede the formation of erosion gullies. *(Section added 9-6-01)*

17-3-7 Special Provisions Pertaining to Certain Residential Uses. For certain residential uses as prescribed herein, the stream buffer shall be reduced to fifteen feet and the transitional area described in Section 17-3-3 shall be reduced to fifteen feet. To qualify for these special provisions, a proposed development must meet the following criteria:

- a) The lot on which the development is to occur must be a lot of record in the Henderson County Registry as of 6 September 2001.

- b) Use of the lot must be limited to a one- or two-family residential dwelling.
- c) The lot may not exceed one acre in area.
- d) The amount of impervious surface allowed on the lot shall not exceed 25% of the lot or 3,000 square feet, whichever is greater. *(section added 01-08-04)*

Section 17-4 Exemption When Existing Uses Are Present and Ongoing. The regulations contained in this Article shall not apply to portions of the stream buffer, the floodway or the floodway fringe where a use was existing and ongoing on the effective date of this ordinance.

- a) Existing uses shall include, but not be limited to agriculture, buildings, industrial facilities, commercial areas, transportation facilities, maintained lawns, utility lines and onsite sanitary sewage systems. Only the portion of the stream buffer, floodway, or floodway fringe that contains the footprint of the existing use is exempt from this Article. Activities necessary to maintain uses are allowed provided that the site remains similarly vegetated, no impervious surface is added within the stream buffer, floodway or floodway fringe where it did not previously exist as of the effective date of this ordinance, and existing diffuse flow is maintained..
- b) A use shall be considered as existing if projects or proposed development meet at least one of the following criteria:
 - 1) Project requires a 401 Certification / 404 Permit, and these were issued prior to the effective date of this ordinance;
 - 2) Projects which require a state permit, such as landfills, NPDES wastewater discharges, and road construction activities, which have begun construction or are under contract to begin construction, and which have received all required state permits prior to the effective date of this ordinance; or
 - 3) Projects that have been determined to have a vested right pursuant to Sections 40-46, et seq., of the Code of Ordinances of the City of Hendersonville. *(amended 9-6-01)*

Section 17-5 Other Laws and Regulations. Compliance with this Article does not preclude the requirement to comply with all federal and state laws and regulations.

Section 17-6 Varying Requirements When There Is an Increase in Functionality. Occasionally, development sites will contain flood plain and/or stream buffers which, due to previous clearing or development, diking, erosion, or other reasons, are of limited functionality. This ordinance seeks to encourage landowners and developers to find creative means to improve these existing conditions. Accordingly, the entity with the authority to grant development authorization pursuant to Article VII, above, may vary the requirements of this Article when the applicant for development authorization demonstrates the proposed development, along with any management practices, will result in an increase of functionality of any regulated natural resources on the development site. Any mitigation proposed to offset loss of a natural resource regulated herein must take place on the development site itself or on neighboring properties pursuant to a recorded easement authorizing such activities. *(section added 01-08-04)*

Section 17-7 Remedies for Violations of the Natural Resources Protection Ordinance. In addition to any other remedies provided in this Ordinance or elsewhere, the Zoning Administrator is authorized to require restoration of any natural resources damaged or destroyed in violation of the provisions of this section. *(section added 01-08-04)*

**AN ORDINANCE REPEALING THE CURRENT FLOOD DAMAGE PREVENTION
ORDINANCE OF THE CITY OF HENDERSONVILLE;
CREATING A NEW FLOOD DAMAGE PREVENTION ORDINANCE**

WHEREAS, certain areas of the City of Hendersonville are subject to periodic flooding or flood-related erosion, causing serious damages to properties within these areas; and

WHEREAS, relief is available in the form of Federally guaranteed flood insurance as authorized by the National Flood Insurance Act of 1968; and

WHEREAS, the Legislature of the State of North Carolina has in Part 6, Article 21 of Chapter 143; Parts 3, 5, and 8 of Article 19 of Chapter 160A; and Article 8 of Chapter 160A of the North Carolina General Statutes, delegated to local governmental units the responsibility to adopt regulations designed to promote the public health, safety and general welfare of its citizenry; and

WHEREAS, it is the intent of this BOARD to require the recognition and evaluation of flood or flood-related erosion hazards in all official actions relating to the land use, building construction repair and remodeling in areas having these hazards;

NOW, THEREFORE, be it ordained by the City Council of the City of Hendersonville:

1. The Flood Damage Prevention Ordinance of the City of Hendersonville is hereby repealed.
2. A new Flood Damage Prevention Ordinance of the City of Hendersonville is hereby enacted to read as follows:

**FLOOD DAMAGE PREVENTION ORDINANCE
Non-Coastal Regular Phase**

ARTICLE 1. STATUTORY AUTHORIZATION, FINDINGS OF FACT, PURPOSE AND OBJECTIVES.

SECTION A. STATUTORY AUTHORIZATION.

Municipal: The Legislature of the State of North Carolina has in Part 6, Article 21 of Chapter 143; Parts 3, 5, and 8 of Article 19 of Chapter 160A; and Article 8 of Chapter 160A of the North Carolina General Statutes, delegated the responsibility to local governmental units to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry.

Therefore, the City Council of the City of Hendersonville, North Carolina, does ordain as follows:

SECTION B. FINDINGS OF FACT.

1. The flood prone areas within the jurisdiction of the City of Hendersonville are subject to periodic inundation which results in loss of life, property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures of flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety, and general welfare.
2. These 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 prone areas of uses vulnerable to floods or other hazards.

SECTION C. STATEMENT OF PURPOSE. It is the purpose of this ordinance to promote public health, safety, and general welfare and to minimize public and private losses due to flood conditions within flood prone areas by provisions designed to:

1. restrict or prohibit uses that are dangerous to health, safety, and property due to water or erosion hazards or that result in damaging increases in erosion, flood heights or velocities;
2. require that uses vulnerable to floods, including facilities that serve such uses, be protected against flood damage at the time of initial construction;
3. control the alteration of natural floodplains, stream channels, and natural protective barriers, which are involved in the accommodation of floodwaters;
4. control filling, grading, dredging, and all other development that may increase erosion or flood damage; and
5. prevent or regulate the construction of flood barriers that will unnaturally divert floodwaters or which may increase flood hazards to other lands.

SECTION D. OBJECTIVES. The objectives of this ordinance are:

1. to protect human life and health;
2. to minimize expenditure of public money for costly flood control projects;
3. to minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
4. to minimize prolonged business losses and interruptions;
5. to minimize damage to public facilities and utilities (i.e. water and gas mains, electric, telephone, cable and sewer lines, streets, and bridges) that are located in flood prone areas;
6. to help maintain a stable tax base by providing for the sound use and development of flood prone areas; and
7. to ensure that potential buyers are aware that property is in a Special Flood Hazard Area.

ARTICLE 2. 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.

"Accessory Structure (Appurtenant Structure)" means a structure, which is located on the same parcel of property as the principal structure and the use of which is incidental to the use of the principal structure. Garages, carports and storage sheds are common urban accessory structures. Pole barns, hay sheds and the like qualify as accessory structures on farms, and may or may not be located on the same parcel as the farm dwelling or shop building.

"Addition (to an existing building)" means an extension or increase in the floor area or height of a building or structure.

"Appeal" means a request for a review of the floodplain administrator's interpretation of any provision of this ordinance.

"Area of Special Flood Hazard" see "Special Flood Hazard Area (SFHA)"

"Basement" means any area of the building having its floor subgrade (below ground level) on all sides.

"Base Flood" means the flood having a one (1) percent chance of being equaled or exceeded in any given year.

"Base Flood Elevation (BFE)" means a determination as published in the Flood Insurance Study of the water surface elevations of the base flood. This elevation, when combined with the "Freeboard", establishes the "Regulatory Flood Protection Elevation".

"Building" see "Structure"

"Chemical Storage Facility" means a building, portion of a building, or exterior area adjacent to a building used for the storage of any chemical or chemically reactive products.

"Development" means 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, or storage of equipment or materials.

"Disposal" defined as in NCGS 130A-290(a)(6).

"Elevated Building" means a non-basement building which has its reference level raised above ground level by foundation walls, shear walls, posts, piers, pilings, or columns.

"Encroachment" means the advance or infringement of uses, 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 or Manufactured 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 streets, and either final site grading or the pouring of concrete pads) was completed before the original effective date of the floodplain management regulations adopted by the community.

"Flood" or "Flooding" means 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 runoff of surface waters from any source.

"Flood Boundary and Floodway Map (FBFM)" means an official map of a community, issued by the Federal Emergency Management Agency, on which the Special Flood Hazard Areas and the floodways are delineated. This official map is a supplement to and shall be used in conjunction with the Flood Insurance Rate Map (FIRM).

"Flood Hazard Boundary Map (FHBM)" means an official map of a community, issued by the Federal Emergency Management Agency, where the boundaries of the Special Flood Hazard Areas have been defined as Zone A.

"Flood Insurance" means the insurance coverage provided under the National Flood Insurance Program.

"Flood Insurance Rate Map (FIRM)" means an official map of a community, issued by the Federal Emergency Management Agency, on which both the Special Flood Hazard Areas and the risk premium zones applicable to the community are delineated.

"Flood Insurance Study (FIS)" means an examination, evaluation, and determination of flood hazard areas, corresponding water surface elevations (if appropriate), flood insurance risk zones, and other flood data in a community issued by the Federal Emergency Management Agency. The Flood Insurance Study report includes Flood Insurance Rate Maps (FIRMs) and Flood Boundary and Floodway Maps (FBFMs), if published.

"Flood Prone Area" see "Floodplain"

"Floodplain" or "Flood Prone Area" means any land area susceptible to being inundated by water from any source.

"Floodplain Administrator" is the individual appointed to administer and enforce the floodplain management regulations.

"Floodplain Development Permit" means any type of permit that is required in conformance with the provisions of this ordinance, prior to the commencement of any development activity.

"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 Regulations" means this ordinance and other zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances, 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 risk of flood damage to real estate or improved real property, water and sanitation facilities, or structures with their contents.

"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 (1) foot.

"Flood Zone" means a geographical area shown on a Flood Hazard Boundary Map or Flood Insurance Rate Map that reflects the severity or type of flooding in the area.

"Freeboard" means the height added to the Base Flood Elevation (BFE) to account for watershed development as well as limitations of the engineering methodologies for the determination of flood elevations. The freeboard plus the Base Flood Elevation establishes the "Regulatory Flood Protection Elevation".

"Functionally Dependent Facility" means a facility which cannot be used for its intended purpose unless it is located in close proximity to water, such as a docking or port facility necessary for the loading and unloading of cargo or passengers, shipbuilding, or ship repair. The term does not include long-term storage, manufacture, sales, or service facilities.

"Hazardous Waste Management Facility" means a facility for the collection, storage, processing, treatment, recycling, recovery, or disposal of hazardous waste as defined in NCGS Article 9 of Chapter 130A.

"Highest Adjacent Grade (HAG)" means the highest natural elevation of the ground surface, prior to construction, immediately next to the proposed walls of the structure.

"Historic Structure" means any structure that is:

1. listed individually in the National Register of Historic Places (a listing maintained by the US Department of Interior) or preliminarily determined by the Secretary of Interior as meeting the requirements for individual listing on the National Register;
2. certified or preliminarily determined by the Secretary of 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 local inventory of historic landmarks in communities with a "Certified Local Government (CLG) Program"; or
4. certified as contributing to the historical significance of a historic district designated by a community with a "Certified Local Government (CLG) Program"

Certified Local Government (CLG) Programs are approved by the US Department of the Interior in cooperation with the North Carolina Department of Cultural Resources through the State Historic Preservation Officer as having met the requirements of the National Historic Preservation Act of 1966 as amended in 1980.

"Lowest Adjacent Grade (LAG)" means the elevation of the ground, sidewalk or patio slab immediately next to the building, or deck support, after completion of the building. For Zones A and AO, use the natural grade elevation prior to construction.

"Lowest Floor" means the subfloor, top of slab or grade of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access, or limited storage in an area other than a basement area is not considered a building's lowest floor, provided that such an enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this ordinance.

"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. The term "manufactured home" does not include a "recreational vehicle".

"Manufactured Home Park or Subdivision" means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

"Market Value" means the building value, excluding the land value and that of any accessory structures or other improvements on the lot, established by independent certified appraisal, replacement cost depreciated by age of building and quality of construction (Actual Cash Value), or adjusted tax assessed values.

"Mean Sea Level" means, for purposes of the NFIP, the National Geodetic Vertical Datum (NGVD) as corrected in 1929, the North American Vertical Datum (NAVD) as corrected in 1988, or other vertical control datum used as a reference for establishing varying elevations within the floodplain, to which Base Flood Elevations (BFEs) shown on a FIRM are referenced. Refer to each FIRM panel to determine datum used.

"New Construction" means structures for which the "start of construction" commenced on or after the effective date of the original version of this ordinance and includes any subsequent improvements to such structures.

"Nonconforming Building or Development" means any legally existing building or development which fails to comply with the current provisions of this ordinance.

"Non-Encroachment Area" 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 (1) foot as designated in the Flood Insurance Study report.

"Post-FIRM" means construction or other development which started on or after the effective date of the initial Flood Insurance Rate Map for the area.

"Pre-FIRM" means construction or other development which started before the effective date of the initial Flood Insurance Rate Map for the area.

"Principally Above Ground" means that at least 51% of the actual cash value of the structure is above ground.

"Public Safety" and/or "Nuisance" means anything which is injurious to the safety or health of an entire community or neighborhood, or any considerable number of persons, or unlawfully obstructs the free passage or use, in the customary manner, of any navigable lake, or river, bay, stream, canal, or basin.

"Recreational Vehicle (RV)" means a vehicle, which is:

- a. built on a single chassis;
- b. 400 square feet or less when measured at the largest horizontal projection;
- c. designed to be self-propelled or permanently towable by a light duty truck; and
- d. not designed for use as a permanent primary dwelling, but as temporary living quarters for recreational, camping, travel, or seasonal use.

"Reference Level" is the portion of a structure or other development that must be compared to the regulatory flood protection elevation to determine regulatory compliance. For structures within Special Flood Hazard Areas designated as Zone A1-A30, AE, A, A99 or AO, the reference level is the top of the lowest floor or bottom of lowest attendant utility including ductwork, whichever is lower.

"Regulatory Flood Protection Elevation" means the elevation, in relation to mean sea level, to which the reference level of all structures and other development located within Special Flood Hazard Areas must be protected. Where Base Flood Elevations (BFEs) have been determined, this elevation shall be the BFE plus two

(2) feet of freeboard. Where no BFE has been established, this elevation shall be at least two (2) feet above the highest adjacent grade.

"Remedy a Violation" means to bring the structure or other development into compliance with State and Community floodplain management regulations, or, if this is not possible, to reduce the impacts of its noncompliance. Ways that impacts may be reduced include protecting the structure or other affected development from flood damages, implementing the enforcement provisions of the ordinance or otherwise deterring future similar violations, or reducing Federal financial exposure with regard to the structure or other development.

"Repetitive Loss" means flood-related damages sustained by a structure on two (2) separate occasions during any 10-year period for which the cost of repairs at the time of each such flood event, on the average, equals or exceeds twenty-five percent (25%) of the market value of the structure before the damage occurred.

"Riverine" means relating to, formed by, or resembling a river (including tributaries), stream, brook, etc.

"Salvage Yard" means any non-residential property used for the storage, collection, and/or recycling of any type of equipment, and including but not limited to vehicles, appliances and related machinery.

"Solid Waste Disposal Facility" means any facility involved in the disposal of solid waste, as defined in NCGS 130A-290(a)(35).

"Solid Waste Disposal Site" defined as in NCGS 130A-290(a)(36).

"Special Flood Hazard Area (SFHA)" means the land in the floodplain subject to a one (1%) percent or greater chance of being flooded in any given year as determined in Article 3, Section B of this ordinance.

"Start of Construction" includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition 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 (including a manufactured home) on a site, such as the pouring of slabs or footings, installation of piles, 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. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of the building, whether or not that alteration affects the external dimensions of the building.

"Structure" means a walled and roofed building, a manufactured home, or a gas or liquid storage tank that is principally above ground. For floodplain management purposes, principally above ground means that at least 51% of the actual cash value of the structure is above ground.

"Substantial Damage" means damage of any origin sustained by a structure during any one year period 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. See definition of "substantial improvement". Substantial damage also means flood-related damage sustained by a structure on two separate occasions during a 10-year period for which the cost of repairs at the time of each such flood event, on the average, equals or exceeds 25 percent of the market value of the structure before the damage occurred.

"Substantial Improvement" means any combination of repairs, reconstruction, rehabilitation, addition, or other improvement of a structure, taking place during any one year period for which the cost equals or exceeds 50 percent of the market value of the structure before the "start of construction" of the improvement. This term includes structures which have incurred "substantial damage", regardless of the actual repair work performed. The term does not, however, include either:

- a. any correction of existing violations of State or Community health, sanitary, or safety code specifications which have been identified by the community code enforcement official and which are the minimum necessary to assure safe living conditions; or,

- b. any alteration of a historic structure, provided that the alteration will not preclude the structure's continued designation as a historic structure.

"Variance" is a grant of relief from the requirements of this ordinance.

"Violation" means the failure of a structure or other development to be fully compliant with the community's floodplain management regulations. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in Articles 4 and 5 is presumed to be in violation until such time as that documentation is provided.

"Water Surface Elevation (WSE)" means the height, in relation to mean sea level (existing grade in case of Zone AO), of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.

"Watercourse" means a lake, river, creek, stream, wash, channel or other topographic feature on or over which waters flow at least periodically. Watercourse includes specifically designated areas in which substantial flood damage may occur.

ARTICLE 3. GENERAL PROVISIONS.

SECTION A. LANDS TO WHICH THIS ORDINANCE APPLIES. This ordinance shall apply to all Special Flood Hazard Areas within the jurisdiction, including Extra-Territorial Jurisdictions (ETJ) if applicable, of the City of Hendersonville and within the jurisdiction of any other community whose governing body agrees, by resolution, to such applicability.

SECTION B. BASIS FOR ESTABLISHING THE SPECIAL FLOOD HAZARD AREAS. The Special Flood Hazard Areas are those identified by the Federal Emergency Management Agency (FEMA) or produced under the Cooperating Technical State (CTS) agreement between the State of North Carolina and FEMA in its Flood Hazard Boundary Map (FHBM) or Flood Insurance Study (FIS) and its accompanying flood maps such as the Flood Insurance Rate Map(s) (FIRM) and/or the Flood Boundary Floodway Map(s) (FBFM), for the City of Hendersonville dated January 20, 1982, which, with accompanying supporting data, and any revision thereto, including Letters of Map Amendment or Revision, are adopted by reference and declared to be a part of this ordinance. The Special Flood Hazard Areas also include those defined through standard engineering analysis for private developments or by governmental agencies, but which have not yet been incorporated in the FIRM. This includes, but is not limited to:

1. detailed flood data generated as a requirement of Article 4, Section C(11 & 12) of this Ordinance;
2. preliminary FIRMs where more stringent than the effective FIRM; or
3. post-disaster Flood Recovery Maps.

In addition, upon annexation to the City of Hendersonville or inclusion in the Extra-Territorial Jurisdiction (ETJ), the Special Flood Hazard Areas identified by the Federal Emergency Management Agency (FEMA) and/or produced under the Cooperating Technical State agreement between the State of North Carolina and FEMA as stated above, for the Unincorporated Areas of Henderson County, with accompanying maps and other supporting data, and any revision thereto, are adopted by reference and declared to be a part of this ordinance.

SECTION C. ESTABLISHMENT OF FLOODPLAIN DEVELOPMENT PERMIT. A Floodplain Development Permit shall be required in conformance with the provisions of this ordinance prior to the commencement of any development activities within Special Flood Hazard Areas as determined in Article 3, Section B.

SECTION D. COMPLIANCE. No structure or land shall hereafter be located, extended, converted, altered, or developed in any way without full compliance with the terms of this ordinance and other applicable regulations.

SECTION E. 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 conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

SECTION F. INTERPRETATION. In the interpretation and application of this 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.

SECTION G. 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 consideration. Larger floods can and will occur. Actual flood heights may be increased by man-made or natural causes. This ordinance does not imply that land outside the Special Flood Hazard Areas or uses permitted within such areas will be free from flooding or flood damages. This ordinance shall not create liability on the part of the City of Hendersonville or by any officer or employee thereof for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made hereunder.

SECTION H. PENALTIES FOR VIOLATION. Violation of the provisions of this ordinance or failure to comply with any of its requirements, including violation of conditions and safeguards established in connection with grants of variance or special exceptions, 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 \$50.00 or imprisoned for not more than thirty (30) days, or both. Each day such violation continues shall be considered a separate offense. Nothing herein contained shall prevent the City of Hendersonville from taking such other lawful action, including actions seeking injunctive or other equitable relief, as may be necessary to prevent or remedy any violation.

ARTICLE 4. ADMINISTRATION.

SECTION A. DESIGNATION OF FLOODPLAIN ADMINISTRATOR. The Zoning Administrator, hereinafter referred to as the "Floodplain Administrator", is hereby appointed to administer and implement the provisions of this ordinance.

SECTION B. FLOODPLAIN DEVELOPMENT APPLICATION, PERMIT AND CERTIFICATION REQUIREMENTS.

1. Application Requirements. Application for a Floodplain Development Permit shall be made to the floodplain administrator prior to any development activities located within Special Flood Hazard Areas. The following items shall be presented to the floodplain administrator to apply for a floodplain development permit:

- a. A plot plan drawn to scale which shall include, but shall not be limited to, the following specific details of the proposed floodplain development:
 - i. the nature, location, dimensions, and elevations of the area of development/disturbance; existing and proposed structures, utility systems, grading/pavement areas, fill materials, storage areas, drainage facilities, and other development;
 - ii. the boundary of the Special Flood Hazard Area as delineated on the FIRM or other flood map as determined in Article 3, Section B, or a statement that the entire lot is within the Special Flood Hazard Area;
 - iii. flood zone(s) designation of the proposed development area as determined on the FIRM or other flood map as determined in Article 3, Section B;
 - iv. the boundary of the floodway(s) or non-encroachment area(s) as determined in Article 3, Section B;
 - v. the Base Flood Elevation (BFE) where provided as set forth in Article 3, Section B; Article 4, Section C(11 & 12); or Article 5, Section D;
 - vi. the old and new location of any watercourse that will be altered or relocated as a result of proposed development;
 - vii. certification of the plot plan by a registered land surveyor or professional engineer.

- b. Proposed elevation, and method thereof, of all development within a Special Flood Hazard Area including but not limited to:
 - i. Elevation in relation to mean sea level of the proposed reference level (including basement) of all structures;
 - ii. Elevation in relation to mean sea level to which any non-residential structure in Zone AE, A or AO will be flood-proofed;
 - iii. Elevation in relation to mean sea level to which any proposed utility systems will be elevated or floodproofed;
 - c. If floodproofing, a Floodproofing Certificate (FEMA Form 81-65) along with detailed back-up computations and operational plans that specify the location on a FIRM panel of floodproofing measures, the entity responsible for transportation and installation according to the design within the warning time available, and maintenance of floodproofing measures assuring their effectiveness when installed. Floodproofing certificate and back-up computations and operational plans shall be certified by a registered professional engineer or architect to ensure that the non-residential floodproofed development will meet the floodproofing criteria in Article 5, Section B(2).
 - d. A Foundation Plan drawn to scale which shall include details of the proposed foundation system to ensure all provisions of this ordinance are met. These details include but are not limited to:
 - i. The proposed method of elevation, if applicable (i.e., fill, solid foundation perimeter wall, solid backfilled foundation, open foundation on columns/posts/piers/piles/shear walls);
 - ii. Openings to facilitate equalization of hydrostatic flood forces on walls in accordance with Article 5, Section B(4), when solid foundation perimeter walls are used in Zones A, AO, AE, and A1-30;
 - e. Usage details of any enclosed areas below the regulatory flood protection elevation.
 - f. Plans and/or details for the protection of public utilities and facilities such as sewer, gas, electrical, and water systems to be located and constructed to minimize flood damage;
 - g. Copies of all other Local, State and Federal permits required prior to floodplain development permit issuance (Wetlands, Endangered Species, Erosion and Sedimentation Control, Riparian Buffers, Mining, etc.)
 - h. Documentation for placement of Recreational Vehicles and/or Temporary Structures, when applicable, to ensure Article 5, Sections B(6 & 7) of this ordinance are met.
 - i. A description of proposed watercourse alteration or relocation, when applicable, including an engineering report on the effects of the proposed project on the flood-carrying capacity of the watercourse and the effects to properties located both upstream and downstream; and a map (if not shown on plot plan) showing the location of the proposed watercourse alteration or relocation.
2. Permit Requirements. The Floodplain Development Permit shall include, but not be limited to:
- a. A description of the development to be permitted under the floodplain development permit.
 - b. The Special Flood Hazard Area determination for the proposed development per available data specified in Article 3, Section B.
 - c. The regulatory flood protection elevation required for the reference level and all attendant utilities.
 - d. The regulatory flood protection elevation required for the protection of all public utilities.
 - e. All certification submittal requirements with timelines.

- f. A statement that no fill material shall encroach into the floodway or non-encroachment area of any watercourse, as applicable.
- g. The minimum opening requirements, if in Zone A, AO, AE or A1-30
- h. Limitations of below BFE enclosure uses. (i.e., Parking, Building Access and Limited Storage only).

3. Certification Requirements.

- a. Elevation Certificates:
 - i. A Final As-Built Elevation Certificate (FEMA Form 81-31) is required after construction is completed and prior to Certificate of Compliance/Occupancy issuance. It shall be the duty of the permit holder to submit to the floodplain administrator a certification of final as-built construction of the elevation of the reference level and all attendant utilities. Elevation certification shall be prepared by, or under the direct supervision of, a registered land surveyor or professional engineer and certified by same. The floodplain administrator shall review the certificate data submitted. Deficiencies detected by such review shall be corrected by the permit holder immediately and prior to Certificate of Compliance/Occupancy issuance. In some instances, another certification may be required to certify corrected as-built construction. Failure to submit the certification or failure to make required corrections shall be cause to withhold the issuance of a Certificate of Compliance/Occupancy.
 - b. If non-residential floodproofing is used to meet the regulatory flood protection elevation requirements, a Floodproofing Certificate (FEMA Form 81-65) is required prior to the actual start of any new construction. It shall be the duty of the permit holder to submit to the floodplain administrator a certification of the floodproofed design elevation of the reference level and all attendant utilities, in relation to mean sea level. Floodproofing certification shall be prepared by or under the direct supervision of a professional engineer or architect and certified by same. The floodplain administrator shall review the certificate data submitted. Deficiencies detected by such review shall be corrected by the permit holder prior to the beginning of construction. Failure to submit the certification or failure to make required corrections shall be cause to deny a floodplain development permit. Failure to construct in accordance with the certified design shall be cause to withhold the issuance of a Certificate of Compliance/Occupancy.
 - c. If a manufactured home is placed within Zone A, AO, AE, or A1-30 and the elevation of the chassis is more than 36 inches in height above grade, an engineered foundation certification is required per Article 5, Section B(3).
 - d. If a watercourse is to be altered or relocated, a description of the extent of watercourse alteration or relocation; an engineering report on the effects of the proposed project on the flood-carrying capacity of the watercourse and the effects to properties located both upstream and downstream; and a map showing the location of the proposed watercourse alteration or relocation shall all be submitted by the permit applicant prior to issuance of a floodplain development permit.
 - e. Certification Exemptions. The following structures, if located within Zone A, AO, AE or A1-30, are exempt from the elevation/floodproofing certification requirements specified in items (a) and (b) above:
 - i. Recreational Vehicles meeting requirements of Article 5, Section B(6)(a);
 - ii. Temporary Structures meeting requirements of Article 5, Section B(7); and
 - iii. Accessory Structures less than 150 square feet meeting requirements of Article 5, Section B(8).

4. Permit Duration. If work authorized pursuant to a permit issued under this Section is not commenced within two years of the date said permit was issued, such permit shall lapse and the permittee shall have no further right to develop pursuant to said permit.

SECTION C. DUTIES AND RESPONSIBILITIES OF THE FLOODPLAIN ADMINISTRATOR. The floodplain administrator shall perform, but not be limited to, the following duties:

1. Review all floodplain development applications and issue permits for all proposed development within Special Flood Hazard Areas to assure that the requirements of this ordinance have been satisfied.
2. Advise permittee that additional Federal or State permits (Wetlands, Endangered Species, Erosion and Sedimentation Control, Riparian Buffers, Mining, etc.) may be required, and require that copies of such permits be provided and maintained on file with the floodplain development permit.
3. Notify adjacent communities and the North Carolina Department of Crime Control and Public Safety, Division of Emergency Management, State Coordinator for the National Flood Insurance Program prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency (FEMA).
4. Assure that maintenance is provided within the altered or relocated portion of said watercourse so that the flood-carrying capacity is not diminished.
5. Prevent encroachments into floodways and non-encroachment areas unless the certification and flood hazard reduction provisions of Article 5, Section E are met.
6. Obtain actual elevation (in relation to mean sea level) of the reference level (including basement) and all attendant utilities of all new or substantially improved structures, in accordance with Article 4, Section B(3).
7. Obtain the actual elevation (in relation to mean sea level) to which the new or substantially improved structures and all utilities have been floodproofed, in accordance with Article 4, Section B(3).
8. Obtain actual elevation (in relation to mean sea level) of all public utilities in accordance with Article 4, Section B(3).
9. When floodproofing is utilized for a particular structure, obtain certifications from a registered professional engineer or architect in accordance with Article 4, Section B(3) and Article 5, Section B(2).
10. Where interpretation is needed as to the exact location of boundaries of the Special Flood Hazard Areas (for example, where there appears to be a conflict between a mapped boundary and actual field conditions), 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 article.
11. When Base Flood Elevation (BFE) data has not been provided in accordance with Article 3, Section B, obtain, review, and reasonably utilize any Base Flood Elevation (BFE) data, along with floodway data or non-encroachment area data available from a Federal, State, or other source, including data developed pursuant to Article 5, Section D(2)(b), in order to administer the provisions of this ordinance.
12. When Base Flood Elevation (BFE) data is provided but no floodway nor non-encroachment area data has been provided in accordance with Article 3, Section B, obtain, review, and reasonably utilize any floodway data or non-encroachment area data available from a Federal, State, or other source in order to administer the provisions of this ordinance.

13. When the exact location of boundaries of the Special Flood Hazard Areas conflict with the current, natural topography information at the site, the property owner may apply and be approved for a Letter of Map Amendment (LOMA) by FEMA. Maintain a copy of the Letter of Map Amendment (LOMA) issued by FEMA in the floodplain development permit file.
14. Permanently maintain all records that pertain to the administration of this ordinance and make these records available for public inspection.
15. Make on-site inspections of work in progress. As the work pursuant to a floodplain development permit progresses, the floodplain administrator shall make as many inspections of the work as may be necessary to ensure that the work is being done according to the provisions of the local ordinance and the terms of the permit. In exercising this power, the floodplain administrator has a right, upon presentation of proper credentials, to enter on any premises within the jurisdiction of the community at any reasonable hour for the purposes of inspection or other enforcement action.
16. Issue stop-work orders as required. Whenever a building or part thereof is being constructed, reconstructed, altered, or repaired in violation of this ordinance, the floodplain administrator may order the work to be immediately stopped. The stop-work order shall be in writing and directed to the person doing the work. The stop-work order shall state the specific work to be stopped, the specific reason(s) for the stoppage, and the condition(s) under which the work may be resumed. Violation of a stop-work order constitutes a misdemeanor.
17. Revoke floodplain development permits as required. The floodplain administrator may revoke and require the return of the floodplain development permit by notifying the permit holder in writing stating the reason(s) for the revocation. Permits shall be revoked for any substantial departure from the approved application, plans, or specifications; for refusal or failure to comply with the requirements of State or local laws; or for false statements or misrepresentations made in securing the permit. Any floodplain development permit mistakenly issued in violation of an applicable State or local law may also be revoked.
18. Make periodic inspections throughout all special flood hazard areas within the jurisdiction of the community. The floodplain administrator and each member of his or her inspections department shall have a right, upon presentation of proper credentials, to enter on any premises within the territorial jurisdiction of the department at any reasonable hour for the purposes of inspection or other enforcement action.
19. Follow through with corrective procedures of Article 4, Section D.
20. Maintain a current map repository to include, but not limited to, the FIS Report, FIRM and/or other official flood maps /studies adopted under Article 3, Section B of this ordinance, including any revisions thereto including Letters of Map Change), issued by State and/or FEMA. Notify State and FEMA of mapping needs.

SECTION D. CORRECTIVE PROCEDURES.

1. Violations to be Corrected: When the floodplain administrator finds violations of applicable State and local laws, it shall be his or her duty to notify the owner or occupant of the building of the violation. The owner or occupant shall immediately remedy each of the violations of law pertaining to their property.
2. Actions in Event of Failure to Take Corrective Action: If the owner of a building or property shall fail to take prompt corrective action, the floodplain administrator shall give the owner written notice, by certified or registered mail to the owner's last known address or by personal service, stating:
 - a. that the building or property is in violation of the Flood Damage Prevention Ordinance;
 - b. that a hearing will be held before the floodplain administrator at a designated place and time, not later than ten (10) days after the date of the notice, at which time the owner

shall be entitled to be heard in person or by counsel and to present arguments and evidence pertaining to the matter; and,

- c. that following the hearing, the floodplain administrator may issue an order to alter, vacate, or demolish the building; or to remove fill as appears appropriate.
3. Order to Take Corrective Action: If, upon a hearing held pursuant to the notice prescribed above, the floodplain administrator shall find that the building or development is in violation of the Flood Damage Prevention Ordinance, he or she shall issue an order in writing to the owner, requiring the owner to remedy the violation within a specified time period, not less than sixty (60) days, nor more than 365 days. Where the floodplain administrator finds that there is imminent danger to life or other property, he or she may order that corrective action be taken in such lesser period as may be feasible.
4. Appeal: Any owner who has received an order to take corrective action may appeal the order to the local elected governing body by giving notice of appeal in writing to the floodplain administrator and the clerk within ten (10) days following issuance of the final order. In the absence of an appeal, the order of the floodplain administrator shall be final. The local governing body shall hear an appeal within a reasonable time and may affirm, modify and affirm, or revoke the order.
5. Failure to Comply with Order: If the owner of a building or property fails to comply with an order to take corrective action for which no appeal has been made or fails to comply with an order of the governing body following an appeal, he or she shall be guilty of a misdemeanor and shall be punished at the discretion of the court.

SECTION E. VARIANCE PROCEDURES.

1. The City of Hendersonville Board of Adjustment as established by the City of Hendersonville, hereinafter referred to as the "appeal board", shall hear and decide requests for variances from the requirements of this ordinance.
2. Any person aggrieved by the decision of the appeal board may appeal such decision to the Court, as provided in Chapter 7A of the North Carolina General Statutes.
3. Variances may be issued for:
 - a. the repair or rehabilitation of historic structures upon the determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and that the variance is the minimum necessary to preserve the historic character and design of the structure.
 - b. functionally dependant facilities if determined to meet the definition as stated in Article 2 of this ordinance.
 - c. any other type of development, provided it meets the requirements stated in this section.
4. In passing upon variances, the appeal board shall consider all technical evaluations, all relevant factors, all 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 as defined under Article 2 of this ordinance as a functionally dependant facility, where applicable;
 - f. the availability of alternative locations, not subject to flooding or erosion damage, for the proposed use;
 - g. the compatibility of the proposed use with existing and anticipated development;
 - h. the relationship of the proposed use to the comprehensive plan and floodplain 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, and sediment transport of the floodwaters 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.
5. A written report addressing each of the above factors shall be submitted with the application for a variance.
 6. Upon consideration of the factors listed above and the purposes of this ordinance, the appeal board may attach such conditions to the granting of variances as it deems necessary to further the purposes of this ordinance.
 7. Variances shall not be issued within any designated floodway or non-encroachment area if any increase in flood levels during the base flood discharge would result.
 8. Conditions for Variances:
 - a. Variances shall not be issued when the variance will make the structure in violation of other Federal, State, or local laws, regulations, or ordinances.
 - b. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
 - c. Variances shall only be issued upon:
 - i. a showing of good and sufficient cause;
 - ii. a determination that failure to grant the variance would result in exceptional hardship; and
 - iii. 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 nuisance, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.
 - d. Any applicant to whom a variance is granted shall be given written notice specifying the difference between the Base Flood Elevation (BFE) and the elevation to which the structure is to be built and a written statement that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced reference level elevation. Such notification shall be maintained with a record of all variance actions.
 - e. The floodplain administrator shall maintain the records of all appeal actions and report any variances to the Federal Emergency Management Agency and the State of North Carolina upon request.

9. A variance may be issued for solid waste disposal facilities, hazardous waste management facilities, salvage yards, and chemical storage facilities that are located in Special Flood Hazard Areas provided that all of the following conditions are met.
 - a. The use serves a critical need in the community.
 - b. No feasible location exists for the use outside the Special Flood Hazard Area.
 - c. The reference level of any structure is elevated or floodproofed to at least the regulatory flood protection elevation.
 - d. The use complies with all other applicable Federal, State and local laws.
 - e. The City of Hendersonville has notified the Secretary of the North Carolina Department of Crime Control and Public Safety of its intention to grant a variance at least thirty (30) calendar days prior to granting the variance.

ARTICLE 5. PROVISIONS FOR FLOOD HAZARD REDUCTION.

SECTION A. GENERAL STANDARDS. In all Special Flood Hazard Areas the following provisions are required:

1. All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure.
2. All new construction and substantial improvements below the regulatory flood protection elevation shall be constructed with materials and utility equipment resistant to flood damage.
3. All new construction or substantial improvements shall be constructed by methods and practices that minimize flood damages.
4. Electrical, heating, ventilation, plumbing, air conditioning equipment, 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. These include, but are not limited to, HVAC equipment, water softener units, bath/kitchen fixtures, ductwork, electric/gas meter panels/boxes, utility/cable boxes, appliances (washers, dryers, refrigerators, freezers, etc.), hot water heaters, and electric outlets/switches.
5. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.
6. 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.
7. On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding.
8. Any alteration, repair, reconstruction, or improvements to a structure, which is in compliance with the provisions of this ordinance, shall meet the requirements of "new construction" as contained in this ordinance.
9. Nothing in this ordinance shall prevent the repair, reconstruction, or replacement of a building or structure existing on the effective date of this ordinance and located totally or partially within the floodway, non-encroachment area, or stream setback, provided that the bulk of the building or structure below the regulatory flood protection elevation in the floodway, non-encroachment area, or stream setback is not increased and provided that such repair, reconstruction, or replacement meets all of the other requirements of this ordinance.
10. New solid waste disposal facilities, hazardous waste management facilities, salvage yards, and chemical storage facilities shall not be permitted in Special Flood Hazard Areas, except by

variance as specified in Article 4, Section E(9). A structure or tank for chemical or fuel storage incidental to an allowed use or to the operation of a water treatment plant or wastewater treatment facility may be located in a Special Flood Hazard Area only if the structure or tank is either elevated or floodproofed to at least the regulatory flood protection elevation and certified according to Article 4, Section B(3) of this ordinance.

11. All development proposals shall be consistent with the need to minimize flood damage.
12. All development proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage.
13. All development proposals shall have adequate drainage provided to reduce exposure to flood hazards.

SECTION B. SPECIFIC STANDARDS. In all Special Flood Hazard Areas where Base Flood Elevation (BFE) data has been provided, as set forth in Article 3, Section B, or Article 4, Section C(11 & 12), the following provisions, in addition to Article 5, Section A, are required:

1. **Residential Construction.** New construction or substantial improvement of any residential structure (including manufactured homes) shall have the reference level, including basement, elevated no lower than the regulatory flood protection elevation, as defined in Article 2 of this ordinance.
2. **Non-Residential Construction.** New construction or substantial improvement of any commercial, industrial, or other non-residential structure shall have the reference level, including basement, elevated no lower than the regulatory flood protection elevation, as defined in Article 2 of this ordinance. Structures located in A, AO, AE and A1-30 Zones may be floodproofed to the regulatory flood protection elevation in lieu of elevation provided that all areas of the structure below the required flood protection elevation are watertight with walls substantially impermeable to the passage of water, using 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 standards of this subsection are satisfied. Such certification shall be provided to the official as set forth in Article 4, Section B(3), along with the operational and maintenance plans.
3. **Manufactured Homes.**
 - a. New or replacement manufactured homes shall be elevated so that the reference level of the manufactured home is no lower than the regulatory flood protection elevation, as defined in Article 2 of this ordinance.
 - b. Manufactured homes shall be securely anchored to an adequately anchored foundation to resist flotation, collapse, and lateral movement in accordance with the State of North Carolina Regulations for Manufactured/Mobile Homes, 1995 Edition, and any revision thereto adopted by the Commissioner of Insurance pursuant to NCGS §143-143.15 or a certified engineered foundation. Additionally, when the elevation would be met by an elevation of the chassis thirty-six (36) inches or less above the grade at the site, the chassis shall be supported by reinforced piers or engineered foundation. When the elevation of the chassis is above thirty-six (36) inches in height, an engineering certification is required.
 - c. All foundation enclosures or skirting shall be in accordance with Article 5, Section B(4).
 - d. An evacuation plan must be developed for evacuation of all residents of all new, substantially improved or substantially damaged manufactured home parks or subdivisions located within flood prone areas. This plan shall be filed with and approved by the floodplain administrator and the local Emergency Management coordinator.
4. **Elevated Buildings.** Enclosed areas, of new construction or substantially improved structures, which are below the regulatory flood protection elevation:

- a. shall not be designed or used for human habitation, but shall only be used for parking of vehicles, building access, or limited storage of maintenance equipment used in connection with the premises. Access to the enclosed area shall be the minimum necessary to allow for parking of vehicles (garage door) or limited storage of maintenance equipment (standard exterior door), or entry to the living area (stairway or elevator). The interior portion of such enclosed area shall not be partitioned or finished into separate rooms, except to enclose storage areas;
- b. shall be constructed entirely of flood resistant materials below the regulatory flood protection elevation;
- c. shall include, in Zones A, AO, AE, and A1-30, measures to automatically equalize hydrostatic flood forces on walls by allowing for the entry and exit of floodwaters. To meet this requirement, the openings must either be certified by a professional engineer or architect or meet the following minimum design criteria;
 - i. Provide a minimum of two openings on different sides of each enclosed area subject to flooding;
 - ii. The total net area of all openings must be at least one (1) square inch for each square foot of enclosed area subject to flooding;
 - iii. If a building has more than one enclosed area, each area must have openings to allow floodwaters to automatically enter and exit;
 - iv. The bottom of all required openings shall be no higher than one (1) foot above the adjacent grade;
 - v. Openings may be equipped with screens, louvers, or other opening coverings or devices, provided they permit the automatic flow of floodwaters in both directions; and
 - vi. Foundation enclosures made of flexible skirting are not considered enclosures for regulatory purposes, and, therefore, do not require openings. Masonry or wood underpinning, regardless of structural status, is considered an enclosure and requires openings as outlined above.

5. Additions/Improvements.

- a. Additions and/or improvements to pre-FIRM structures when the addition and/or improvements in combination with any interior modifications to the existing structure are:
 - i. not a substantial improvement, the addition and/or improvements must be designed to minimize flood damages and must not be any more non-conforming than the existing structure.
 - ii. a substantial improvement, both the existing structure and the addition and/or improvements must comply with the standards for new construction.
- b. Additions to post-FIRM structures with no modifications to the existing structure other than a standard door in the common wall shall require only the addition to comply with the standards for new construction.
- c. Additions and/or improvements to post-FIRM structures when the addition and/or improvements in combination with any interior modifications to the existing structure are:
 - i. not a substantial improvement, the addition and/or improvements only must comply with the standards for new construction.

- ii. a substantial improvement, both the existing structure and the addition and/or improvements must comply with the standards for new construction.
 - d. Where a fire wall or independent perimeter load-bearing wall is provided between the addition and the existing building, the addition(s) shall be considered a separate building and only the addition must comply with the standards for new construction.
- 6. Recreational Vehicles. Recreational vehicles placed on sites within a Special Flood Hazard Area shall either:
 - a. be on site for fewer than 180 consecutive days and 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 has no permanently attached additions); or
 - b. meet all the requirements for new construction, including anchoring and elevation requirements of Article 4, Section B and Article 5, Sections A and B(3).
- 7. Temporary Non-Residential Structures. Prior to the issuance of a floodplain development permit for a temporary structure, applicants must submit to the floodplain administrator a plan for the removal of such structure(s) in the event of a hurricane, flash flood or other type of flood warning notification. The following information shall be submitted in writing to the floodplain administrator for review and written approval;
 - a. a specified time period for which the temporary use will be permitted. Time specified should be minimal with total time on site not to exceed one year;
 - b. the name, address, and phone number of the individual responsible for the removal of the temporary structure;
 - c. the time frame prior to the event at which a structure will be removed (i.e., minimum of 72 hours before landfall of a hurricane or immediately upon flood warning notification);
 - d. a copy of the contract or other suitable instrument with a trucking company to ensure the availability of removal equipment when needed; and
 - e. designation, accompanied by documentation of a location outside the Special Flood Hazard Area, to which the temporary structure will be moved.
- 8. Accessory Structures. When accessory structures (sheds, detached garages, etc.) are to be placed within a Special Flood Hazard Area, the following criteria shall be met:
 - a. Accessory structures shall not be used for human habitation (including working, sleeping, living, cooking or restroom areas);
 - b. Accessory structures shall not be temperature-controlled;
 - c. Accessory structures shall be designed to have low flood damage potential;
 - d. Accessory structures shall be constructed and placed on the building site so as to offer the minimum resistance to the flow of floodwaters;
 - e. Accessory structures shall be firmly anchored in accordance with Article 5, Section A(1);
 - f. All service facilities such as electrical shall be installed in accordance with Article 5, Section A(4); and
 - g. Openings to relieve hydrostatic pressure during a flood shall be provided below regulatory flood protection elevation in conformance with Article 5, Section B(4)(a).

- h. An accessory structure with a footprint less than 150 square feet that satisfies the criteria outlined above does not require an elevation or floodproofing certificate. Elevation or floodproofing certifications are required for all other accessory structures in accordance with Article 4, Section B(3).

SECTION C. RESERVED.

SECTION D. STANDARDS FOR FLOODPLAINS WITHOUT ESTABLISHED BASE FLOOD ELEVATIONS.

Within the Special Flood Hazard Areas established in Article 3, Section B, where no Base Flood Elevation (BFE) data has been provided by FEMA, the following provisions, in addition to Article 5, Section A, shall apply:

1. No encroachments, including fill, new construction, substantial improvements or new development shall be permitted within a distance of twenty (20) feet each side from top of bank or five times the width of the stream, whichever is greater, unless certification with supporting technical data by a registered professional engineer is provided demonstrating that such encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.
2. The BFE used in determining the regulatory flood protection elevation shall be determined based on one of the following criteria set in priority order:
 - a. If Base Flood Elevation (BFE) data is available from other sources, all new construction and substantial improvements within such areas shall also comply with all applicable provisions of this ordinance and shall be elevated or floodproofed in accordance with standards in Article 4, Section C(11 & 12).
 - b. All subdivision, manufactured home park and other development proposals located within Special Flood Hazard Areas shall provide Base Flood Elevation (BFE) data if development is greater than five (5) acres or has more than fifty (50) lots/manufactured home sites. Such Base Flood Elevation (BFE) data shall be adopted by reference per Article 3, Section B to be utilized in implementing this ordinance.
 - c. When Base Flood Elevation (BFE) data is not available from a Federal, State, or other source as outlined above, the reference level shall be elevated above the highest adjacent grade as required in the regulatory flood protection elevation definition.

SECTION 3. STANDARDS FOR RIVERINE FLOODPLAINS WITH BFE BUT WITHOUT ESTABLISHED FLOODWAYS OR NON-ENCROACHMENT AREAS. Along rivers and streams where BFE data is provided but neither floodway nor non-encroachment areas are identified for a Special Flood Hazard Area on the FIRM or in the FIS report, the following requirements shall apply to all development within such areas:

1. Standards outlined in Article 5, Sections A and B; and
2. no encroachments, including fill, new construction, substantial improvements, or other development, shall be permitted unless certification with supporting technical data by a registered professional engineer is provided demonstrating 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 community.

SECTION F. FLOODWAYS AND NON-ENCROACHMENT AREAS. Areas designated as floodways or non-encroachment areas are located within the Special Flood Hazard Areas established in Article 3, Section B. The floodways and non-encroachment areas are extremely hazardous areas due to the velocity of floodwaters that have erosion potential and carry debris and potential projectiles. The following provisions, in addition to standards outlined in Article 5, Sections A and B, shall apply to all development within such areas:

1. No encroachments, including fill, new construction, substantial improvements and other developments shall be permitted unless it has been demonstrated through hydrologic and

hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in the flood levels during the occurrence of the base flood. Such certification and technical data shall be presented to the floodplain administrator prior to issuance of floodplain development permit.

2. If Article 5, Section F(1) is satisfied, all development shall comply with all applicable flood hazard reduction provisions of this ordinance.
3. No manufactured homes shall be permitted, except replacement manufactured homes in an existing manufactured home park or subdivision, provided the following provisions are met:
 - a. the anchoring and the elevation standards of Article 5, Section B(3); and
 - b. the no encroachment standard of Article 5, Section F(1) are met.

SECTION G. STANDARDS FOR AREAS OF SHALLOW FLOODING (ZONE AO). Located within the Special Flood Hazard Areas established in Article 3, Section B, are areas designated as shallow flooding areas. These areas have special flood hazards associated with base flood depths of one (1) to three (3) feet where a clearly defined channel does not exist and where the path of flooding is unpredictable and indeterminate. In addition to Article 5, Section A, all new construction and substantial improvements of all structures shall have the reference level elevated to:

1. at least as high as the depth number specified on the Flood Insurance Rate Map (FIRM), in feet, plus a freeboard of two (2) feet, above the highest adjacent grade; or
2. at least two feet above the highest adjacent grade plus a freeboard of two (2) feet if no depth number is specified.

All new construction and substantial improvements of all non-residential structures may, in lieu of elevation, floodproof to the same depths as listed above so that any space below that level shall be 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. Certification is required as per Article 4, Section B(3) and Article 5, Section B(2).

ARTICLE 6. LEGAL STATUS PROVISIONS.

SECTION A. EFFECT ON RIGHTS AND LIABILITIES UNDER THE EXISTING FLOOD DAMAGE PREVENTION ORDINANCE. This ordinance in part comes forward by re-enactment of some of the provisions of the flood damage prevention ordinance enacted August 6, 1987 as amended, and it is not the intention to repeal but rather to re-enact and continue to enforce without interruption of such existing provisions, so that all rights and liabilities that have accrued thereunder are reserved and may be enforced. The enactment of this ordinance shall not affect any action, suit or proceeding instituted or pending. All provisions of the flood damage prevention ordinance of the City of Hendersonville enacted on August 6, 1987, as amended, which are not reenacted herein are repealed.

SECTION B. EFFECT UPON OUTSTANDING FLOODPLAIN DEVELOPMENT PERMITS. Nothing herein contained shall require any change in the plans, construction, size, or designated use of any development or any part thereof for which a floodplain development permit has been granted by the floodplain administrator or his or her authorized agents before the time of passage of this ordinance; provided, however, that when construction is not begun under such outstanding permit within a period of six (6) months subsequent to the date of issuance of the outstanding permit, construction or use shall be in conformity with the provisions of this ordinance.

SECTION C. EFFECTIVE DATE. This ordinance shall become effective upon adoption.


SECTION D. ADOPTION CERTIFICATION. I hereby certify that this is a true and correct copy of the flood damage prevention ordinance as adopted by the City Council of the City of Hendersonville, North Carolina, on the tenth day of March, 2005.

WITNESS my hand and the official seal of the City of Hendersonville this the tenth day of March, 2005.

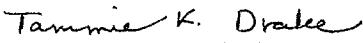
Tammie K. Drake, CMC, City Clerk

3. If any section, subsection, paragraph, sentence, clause, phrase or portion of this ordinance is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed severable and such holding shall not affect the validity of the remaining portions hereof.
4. The enactment of this ordinance shall in no way affect any existing violations of the Flood Damage Protection Ordinance or any existing enforcement actions under that Ordinance.

Adopted this tenth day of March, 2005.

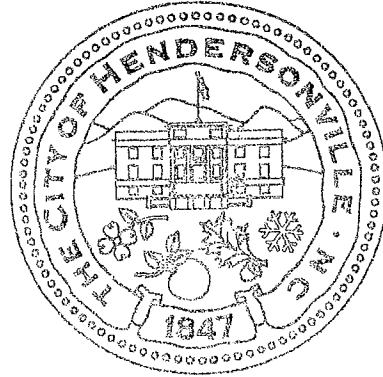

Fred H. Niehoff, Jr., Mayor, City of Hendersonville

Attest:


Tammie K. Drake, CMC, City Clerk

Approved as to form:


Samuel H. Fritschner, City Attorney



G:\Clerk\Ordinances\Ord 05\050308 adopt Flood Damage Prevention Ord.wpd

**FLOOD DAMAGE PREVENTION ORDINANCE
NORTH CAROLINA MODEL
TOWN OF FLETCHER**

*As would be applied as Article XVII
of the Town Zoning Ordinance
Approved by Fletcher Town Council: January 13, 2003*

Non-Coastal Regular Phase

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FLOOD DAMAGE PREVENTION ORDINANCE

Non-Coastal Regular Phase

ARTICLE 1. STATUTORY AUTHORIZATION, FINDINGS OF FACT, PURPOSE AND OBJECTIVES.

SECTION A. STATUTORY AUTHORIZATION.

Municipal: The Legislature of the State of North Carolina has in Part 6, Article 21 of Chapter 143; Parts 3, 5, and 8 of Article 19 of Chapter 160A; and Article 8 of Chapter 160A of the North Carolina General Statutes, delegated the responsibility to local governmental units to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry.

County: The Legislature of the State of North Carolina has in Part 6, Article 21 of Chapter 143; Parts 3 and 4 of Article 18 of Chapter 153A; and Article 6 of Chapter 153A of the North Carolina General Statutes, delegated the responsibility to local governmental units to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry.

Therefore, the Town Council of The Town of Fletcher, North Carolina, does ordain as follows:

SECTION B. FINDINGS OF FACT.

- (1) The flood hazard areas of Fletcher are subject to periodic inundation which results in loss of life, property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures of flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety, and general welfare.
- (2) These flood losses are caused by the cumulative effect of obstructions and the increase in impervious surfaces 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 unprotected from flood damages.

SECTION C. 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 to:

- (1) 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 in flood heights or velocities;
- (2) require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
- (3) control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of flood waters;
- (4) control filling, grading, dredging, and other development which may increase erosion or flood damage; and,

- (5) prevent or regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards to other lands.

SECTION D. OBJECTIVES.

The objectives of this ordinance are:

- (1) to protect human life and health;
- (2) to minimize expenditure of public money for costly flood control projects;
- (3) to minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- (4) to minimize prolonged business interruptions;
- (5) 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;
- (6) 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 flood blight areas; and,
- (7) to insure that potential home buyers are notified that property is in a flood area.

ARTICLE 2. 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.

"Accessory Structure" means structures which are located on the same parcel of property as the principal structure and the use of which is incidental to the use of the principal structure. Garages, carports and storage sheds are common urban accessory structures. Pole barns, hay sheds and the like qualify as accessory structures on farms, and may or may not be located on the same parcel as the farm dwelling or shop building.

"Addition (to an existing building)" means an extension or increase in the floor area or height of a building or structure. Additions to existing buildings shall comply with the requirements for new construction, unless the addition, renovation or reconstruction to any building, that was constructed prior to the **initial** Flood Insurance Study for that area, and the addition, renovation or reconstruction does not equal 50% of the present market value of the structure. Where a fire wall is provided between the addition and the existing building, the addition(s) shall be considered a separate building and must comply with the standards for new construction.

"Appeal" means a request for a review of the administrator's interpretation of any provision of this ordinance.

"Area of special flood hazard" is the land in the floodplain within a community subject to a one percent or greater chance of being flooded in any given year.

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

"Basement" means, for floodplain management purposes, any area of the building having its floor subgrade (below ground level) on all sides.

"Building" means any structure built for support, shelter, or enclosure for any occupancy or storage.

"Development" means, for floodplain management purposes, 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, or storage of equipment or materials.

"Elevated building" means, for floodplain management purposes, a non-basement building which has its lowest elevated floor raised above ground level by foundation walls, shear walls, posts, piers, pilings or columns.

"Existing construction" means for the purposes of determining rates, structures for which the start of construction" commenced before the effective date of the FIRM or before January 1, 1975, for FIRMs effective before that date. "Existing construction" may also be referred to as "existing structures".

"Existing manufactured home park or manufactured 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 streets, and either final site grading or the pouring of concrete pads) is completed before July 1, 2003.

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

"Flood" or "flooding" means 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,
- (2) the unusual and rapid accumulation of runoff of surface waters from any source.

"Flood Hazard Boundary Map (FHBM)" means an official map of a community, issued by the Federal Emergency Management Agency, where the boundaries of the areas of special flood hazard have been defined as Zone A.

"Flood Insurance Rate Map (FIRM)" means an official map of a community, on which the Federal Emergency Management Agency has delineated both the areas of special flood hazard and the risk premium zones applicable to the community.

"Flood Insurance Study" is the engineering study performed by the Federal Emergency Management Agency to identify flood hazard areas, flood insurance risk zones, and other flood data in a community. The study includes Flood Boundary and Floodway Maps (FBFMs), Flood Hazard Boundary Maps (FHBMs), and/or Flood Insurance Rate Map (FIRMs).

"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.

"Floor" means the top surface of an enclosed area in a building (including basement), i.e., top of slab in concrete slab construction or top of wood flooring in wood frame construction. The term does not include the floor of a garage used solely for parking vehicles.

"Functionally dependent facility" means a facility which cannot be used for its intended purpose unless it is located or carried out in close proximity to water, such as a docking or port facility necessary for the loading and unloading of cargo or passengers, shipbuilding, ship repair, or seafood processing facilities. The term does not include long-term storage, manufacture, sales, or service facilities.

"Highest Adjacent Grade" means the highest natural elevation of the ground surface, prior to construction, next to the proposed walls of the structure.

"Historic Structure" means any structure that is: (a) listed individually in the National Register of Historic Places (a listing maintained by the US Department of Interior) or preliminarily determined by the Secretary of Interior as meeting the requirements for individual listing on the National Register; (b) certified or preliminarily determined by the Secretary of 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; (c) individually listed on a State inventory of historic places;

(d) individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified (1) by an approved state program as determined by the Secretary of Interior, or (2) directly by the Secretary of Interior in states without approved programs.

"Lowest Floor" means, for floodplain management and flood insurance purposes, 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 an enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this ordinance.

"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. The term "manufactured home" does not include a "recreational vehicle".

"Manufactured home park or subdivision" means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

"Mean Sea Level" means, for purposes of the NFIP, the National Geodetic Vertical Datum (NGVD) of 1929 or other datum, to which base flood elevations shown on a FIRM are referenced.

"New construction" means, for floodplain management purposes, structures for which the "start of construction" commenced on or after the effective date of this ordinance and includes any subsequent improvements to such structures.

"New manufactured home park or 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 streets, and either final site grading or the pouring of concrete slabs) is completed on or after July 1, 2003.

"Nonconforming building or use" means any legally existing building or use which fails to comply with the provisions of the ordinance.

"Park Homes" or "Park Models" are distinct from "recreational vehicles" and require towing by a vehicle licensed for that purpose and are generally less than 400 sq feet.

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

"Remedy a violation" means to bring the structure or other development into compliance with State or local floodplain management regulations, or, if this is not possible, to reduce the impacts of its noncompliance. Ways that impacts may be reduced include protecting the structure or other affected development from flood damages, implementing the enforcement provisions of the ordinance or otherwise deterring future similar violations, or reducing Federal financial exposure with regard to the structure or other development.

"Start of construction" includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition,

or improvement was within 180 days of the permit date. The actual start means the first placement of permanent construction of a structure (including a manufactured home) on a site, such as the pouring of slabs or footings, installation of piles, 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. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of the building, whether or not that alteration affects the external dimensions of the building.

"Structure" means, for floodplain management purposes, a walled and roofed building, a manufactured home, a gas or liquid storage tank, or other man-made facility or infrastructure that is principally above ground.

"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. See definition of "substantial improvement".

"Substantial improvement" means any repair, reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the "start of construction" of the improvement. This term includes structures which have incurred "substantial damage", regardless of the actual repair work performed. The term does not, however, include either: (1) any project of improvement of a structure to correct existing violations of State or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions; or, (2) any alteration of a historic structure, provided that the alteration will not preclude the structure's continued designation as a historic structure.

"Substantially improved existing manufactured home park or subdivision" means where the repair, reconstruction, rehabilitation or improvement of the streets, utilities and pads equals or exceeds 50 percent of the value of the streets, utilities and pads before the repair, reconstruction, or improvement commenced.

"Variance" is a grant of relief to a person from the requirements of this ordinance which permits construction in a manner otherwise prohibited by this ordinance where specific enforcement would result in unnecessary hardship.

"Violation" means the failure of a structure or other development to be fully compliant with the community's floodplain management regulations. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in Articles 4 and 5 is presumed to be in violation until such time as that documentation is provided.

ARTICLE 3. GENERAL PROVISIONS.

SECTION A. LANDS TO WHICH THIS ORDINANCE APPLIES.

This ordinance shall apply to all areas of special flood hazard within the jurisdiction of The Town of Fletcher.

SECTION B. BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD

The Areas of Special Flood Hazard are those identified by the Federal Emergency Management Agency (FEMA) in its Flood Hazard Boundary Map or Flood Insurance Study and Flood Insurance Rate Map(s), for Henderson County dated March 1, 1982, which with accompanying supporting data, and any revision thereto, including Letters of Map Amendment or Revision, are adopted by reference and declared to be a part of this ordinance. The Areas of Special Flood Hazard also include those defined through standard engineering analysis for private developments or by governmental agencies, but which have not yet been incorporated in the FIRM. This includes detailed flood information generated as a requirement of Article 4, Section C (10) this Ordinance.

Municipal: In addition, upon annexation to the Town of Fletcher, or inclusion in the Extra-territorial Jurisdiction, the Areas of Special Flood Hazard identified by the Federal Emergency Management Agency in its Flood Hazard Boundary Map or Flood Insurance Study and Flood Insurance Rate Map(s) for Unincorporated Henderson County, with accompanying maps and other supporting data, and any revision thereto, are adopted by reference and declared to be a part of this ordinance.

SECTION C. ESTABLISHMENT OF DEVELOPMENT PERMIT.

A Development Permit shall be required in conformance with the provisions of this ordinance prior to the commencement of any development activities.

SECTION D. COMPLIANCE.

No structure or land shall hereafter be located, extended, converted, or structurally altered without full compliance with the terms of this ordinance and other applicable regulations

SECTION E. 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 conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

SECTION F. INTERPRETATION.

In the interpretation and application of this ordinance all provisions shall be: (1) considered as minimum requirements; (2) liberally construed in favor of the governing body; and, (3) deemed neither to limit nor repeal any other powers granted under state statutes.

SECTION G. 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 consideration. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This ordinance does not imply that land outside the areas of special flood hazard or uses permitted within such areas will be free from flooding or flood damages. This ordinance shall not create liability on the part of The Town of Fletcher or by any officer or employee thereof for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made hereunder.

SECTION H. PENALTIES FOR VIOLATION.

Violation of the provisions of this ordinance or failure to comply with any of its requirements, including violation of conditions and safeguards established in connection with grants of variance or special exceptions, 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 \$50.00 or imprisoned for not more than 30 days, or both. Each day such violation continues shall be considered a separate offense. Nothing herein contained shall prevent The Town of Fletcher from taking such other lawful action as is necessary to prevent or remedy any violation.

ARTICLE 4. ADMINISTRATION.

SECTION A. DESIGNATION OF ADMINISTRATOR.

The Zoning Administrator, hereinafter referred to as the "administrator", is hereby appointed to administer and implement the provisions of this ordinance.

SECTION B. DEVELOPMENT PERMIT AND CERTIFICATION REQUIREMENTS.

Application for a Development Permit shall be made to the administrator on forms furnished by the administrator prior to any development activities. The Development Permit shall 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; and the location of fill materials, storage areas, and drainage facilities. Specifically, the following information is required:

- (1) A plot plan that shows the 100 year floodplain contour or a statement that the entire lot is within the floodplain must be provided by the development permit applicant when the lot is within or appears to be within the floodplain as mapped by the Federal Emergency Management Agency or the floodplain identified pursuant to either Article 4, Section C(10) or Article 5 Sections C and D. The plot plan must be prepared by or under the direct supervision of a registered land surveyor or professional engineer and certified by same.
- (2) The plot plan required by Article 4, Section B(1) must show the floodway as identified by the Federal Emergency Management Agency or pursuant to either Article 4, Section C(10) or Article 5, Section C, or the setback required for streams without designated floodways as required by Article 5, Section C (2).
- (3) Where base flood elevation data is provided as set forth in Article 3 Section B, or Article 4, Section C(10), the application for a Development Permit within the flood hazard area shall show:
 - (a) the elevation (in relation to mean sea level) of the lowest floor (including basement) of all new and substantially improved structures, and
 - (b) if the non-residential structure will be floodproofed in accordance with Article 5, Section B(2), the elevation (in relation to mean sea level) to which the structure will be floodproofed.
- (4) Where the base flood elevation data is not provided, the application for a development permit must show construction of the lowest floor at least 3 feet above the highest adjacent grade.
- (5) Where any watercourse will be altered or relocated as a result of proposed development, the application for a development permit shall include: a description of the extent of watercourse

alteration or relocation; an engineering report on the effects of the proposed project on the flood-carrying capacity of the watercourse and the effects to properties located both upstream and downstream; and a map showing the location of the proposed watercourse alteration or relocation.

- (6) When a structure is floodproofed, the applicant shall provide a Floodproofing Certificate (FEMA Form 81-65) from a registered professional engineer or architect that the non-residential floodproofed structure meets the floodproofing criteria in Article 5, Section B(2).
- (7) An Elevation Certificate (FEMA Form 81-31) or a Floodproofing Certificate (FEMA Form 81-65) is required after the lowest floor is completed. Within twenty-one (21) calendar days of establishment of the lowest floor elevation, or floodproofing by whatever construction means, whichever is applicable, it shall be the duty of the permit holder to submit to the administrator a certification of the elevation of the lowest floor, or floodproofed elevation, whichever is applicable, as built, in relation to mean sea level. Said certification 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 a particular building, said certification shall be prepared by or under the direct supervision of a professional engineer or architect and certified by same. Any work done within the twenty-one (21) day calendar period and prior to submission of the certification shall be at the permit holder's risk. The administrator shall review the floor elevation survey data submitted. Deficiencies detected by such review shall be corrected by the permit holder immediately and prior to further progressive work being permitted to proceed. Failure to submit the survey or failure to make said corrections required hereby shall be cause to issue a stop-work order for the project.

SECTION C. DUTIES AND RESPONSIBILITIES OF THE ADMINISTRATOR.

Duties of the administrator shall include, but not be limited to:

- (1) Review all development permits to assure that the requirements of this ordinance have been satisfied.
- (2) Advise permittee that additional Federal or State permits may be required, and if specific Federal or State permits are known, require that copies of such permits be provided and maintained on file with the development permit.
- (3) Notify adjacent communities and the North Carolina Department of Crime Control and Public Safety, Division of Emergency Management, State Coordinator for the National Flood Insurance Program prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency.
- (4) Assure that maintenance is provided within the altered or relocated portion of said watercourse so that the flood-carrying capacity is not diminished.
- (5) Prevent encroachments within floodways unless the certification and flood hazard reduction provisions of Article 5 are met.
- (6) Obtain actual elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved structures, in accordance with Article 4, Section B(7).

- (7) Obtain the actual elevation (in relation to mean sea level) to which the new or substantially improved structures have been floodproofed, in accordance with Article 4, Section B(7).
- (8) When floodproofing is utilized for a particular structure, obtain certifications from a registered professional engineer or architect in accordance with Article 5, Section B(2).
- (9) Where interpretation is needed as to the exact location of boundaries of the areas of special flood hazard (for example, where there appears to be a conflict between a mapped boundary and actual field conditions), 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 article.
- (10) When base flood elevation data or floodway data has not been provided in accordance with Article 3, Section B, obtain, review, and reasonably utilize any base flood elevation data and floodway data available from a Federal, State, or other source, including data developed pursuant to Article 5, Section D(4), in order to administer the provisions of this ordinance.
- (11) When the exact location of boundaries of the areas special flood hazards conflict with the current, natural topography information at the site the property owner may apply and be approved for a Letter of Map Amendment (LOMA) by FEMA. A copy of the Letter of Map Amendment issued from FEMA will be maintained by the administrator in the permit file.
- (12) Make on-site inspections of projects in accordance with Article 4, Section D.
- (13) Serve notices of violations, issue stop-work orders, revoke permits and take corrective actions in accordance with Article 4, Section D.
- (14) Maintain all records pertaining to the administration of this ordinance and make these records available for public inspection.

SECTION D. ADMINISTRATIVE PROCEDURES.

- (1) Inspections of Work in Progress: As the work pursuant to a permit progresses, the administrator shall make as many inspections of the work as may be necessary to ensure that the work is being done according to the provisions of the local ordinance and the terms of the permit. In exercising this power, the administrator has a right, upon presentation of proper credentials, to enter on any premises within the territorial jurisdiction at any reasonable hour for the purposes of inspection or other enforcement action.
- (2) Stop-Work Orders: Whenever a building or part thereof is being constructed, reconstructed, altered, or repaired in violation of this ordinance, the administrator may order the work to be immediately stopped. The stop-work order shall be in writing and directed to the person doing the work. The stop-work order shall state the specific work to be stopped, the specific reasons for the stoppage, and the conditions under which the work may be resumed. Violation of a stop-work order constitutes a misdemeanor.
- (3) Revocation of Permits: The administrator may revoke and require the return of the

development permit by notifying the permit holder in writing stating the reason for the revocation. Permits shall be revoked for any substantial departure from the approved application, plans, or specifications; for refusal or failure to comply with the requirements of State or local laws; or for false statements or misrepresentations made in securing the permit. Any permit mistakenly issued in violation of an applicable State or local law may also be revoked.

- (4) Periodic Inspections: The administrator and each member of his inspections department shall have a right, upon presentation of proper credentials, to enter on any premises within the territorial jurisdiction of the department at any reasonable hour for the purposes of inspection or other enforcement action.
- (5) Violations to be Corrected: When the administrator finds violations of applicable State and local laws, it shall be his duty to notify the owner or occupant of the building of the violation. The owner or occupant shall immediately remedy each of the violations of law in the property he owns.
- (6) Actions in Event of Failure to Take Corrective Action: If the owner of a building or property shall fail to take prompt corrective action, the administrator shall give him written notice, by certified or registered mail to his last known address or by personal service,
 - (a) that the building or property is in violation of the Flood Damage Prevention Ordinance;
 - (b) that a hearing will be held before the administrator at a designated place and time, not later than 10 days after the date of the notice, at which time the owner shall be entitled to be heard in person or by counsel and to present arguments and evidence pertaining to the matter; and,
 - (c) that following the hearing, the administrator may issue such order to alter, vacate, or demolish the building; or to remove fill as appears appropriate.
- (7) Order to Take Corrective Action: If, upon a hearing held pursuant to the notice prescribed above, the administrator shall find that the building or development is in violation of the Flood Damage Prevention Ordinance, he shall make an order in writing to the owner, requiring the owner to remedy the violation within such period, not less than 60 days, the administrator may prescribe; provided that where the administrator finds that there is imminent danger to life or other property, he may order that corrective action be taken in such lesser period as may be feasible.
- (8) Appeal: Any owner who has received an order to take corrective action may appeal from the order to the local elected governing body by giving notice of appeal in writing to the administrator and the clerk within 10 days following issuance of the final order. In the absence of an appeal, the order of the administrator shall be final. The local governing body shall hear an appeal within a reasonable time and may affirm, modify and affirm, or revoke the order.
- (9) Failure to Comply with Order: If the owner of a building or property fails to comply with an order to take corrective action from which no appeal has been taken, or fails to comply with an order of the governing body following an appeal, he shall be guilty of a misdemeanor and

shall be punished in the discretion of the court.

SECTION E. VARIANCE PROCEDURES.

- (1) The Zoning Board of Adjustment as established by The Town of Fletcher, hereinafter referred to as the "appeal board", shall hear and decide requests for variances from the requirements of this ordinance.
- (2) Any person aggrieved by the decision of the appeal board may appeal such decision to the Court, as provided in Chapter 7A of the North Carolina General Statutes.
- (3) Variances may be issued for the repair or rehabilitation of historic structures upon the determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure.
- (4) In passing upon variances, the appeal board shall consider all technical evaluations, all relevant factors, all 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, not subject to flooding or erosion damage, for the proposed use;
 - (g) the compatibility of the proposed use with existing and anticipated development;
 - (h) the relationship of the proposed use to the comprehensive plan and floodplain 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, and 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.
- (5) A written report addressing each of the above factors shall be submitted with the application

for a variance.

- (6) Upon consideration of the factors listed above and the purposes of this ordinance, the appeal board may attach such conditions to the granting of variances as it deems necessary to further the purposes of this ordinance.
- (7) Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.
- (8) Conditions for Variances:
 - (a) Variances may not be issued when the variance will make the structure in violation of other Federal, State, or local laws, regulations, or ordinances.
 - (b) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
 - (c) Variances shall only be issued upon:
 - (i) a showing of good and sufficient cause;
 - (ii) a determination that failure to grant the variance would result in exceptional hardship; and,
 - (iii) a determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisance, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.
 - (d) Any applicant to whom a variance is granted shall be given written notice specifying the difference between the base flood elevation and the elevation to which the structure is to be built and a written statement that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation. Such notification shall be maintained with a record of all variance actions.
 - (e) The administrator shall maintain the records of all appeal actions and report any variances to the Federal Emergency Management Agency upon request.

ARTICLE 5. PROVISIONS FOR FLOOD HAZARD REDUCTION.

SECTION A. GENERAL STANDARDS.

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

- (1) All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure;
- (2) All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage;
- (3) All new construction or substantial improvements shall be constructed by methods and practices that minimize flood damages;
- (4) Electrical, heating, ventilation, plumbing, air conditioning equipment, 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;
- (5) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;
- (6) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters;
- (7) On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding; and,
- (8) Any alteration, repair, reconstruction, or improvements to a structure which is in compliance with the provisions of this ordinance, shall meet the requirements of "new construction" as contained in this ordinance.
- (9) Non-Conforming Buildings or Uses. Non-conforming buildings or uses may not be enlarged, replaced, or rebuilt unless such enlargement or reconstruction is accomplished in conformance with the provisions of this ordinance. Provided, however, nothing in this ordinance shall prevent the repair, reconstruction, or replacement of a building or structure existing on the effective date of this ordinance and located totally or partially within the floodway or stream setback, provided that the bulk of the building or structure below base flood elevation in the floodway or stream setback is not increased and provided that such repair, reconstruction, or replacement meets all of the other requirements of this ordinance.

SECTION B. SPECIFIC STANDARDS.

In all areas of special flood hazard where base flood elevation data has been provided, as set forth in Article 3, Section B, or Article 4, Section C(10), the following provisions are required:

- (1) Residential Construction. New construction or substantial improvement of any residential structure (including manufactured homes) shall have the lowest floor, including basement, elevated no lower than three (3) feet above the base flood elevation.

Should solid foundation perimeter walls be used to elevate a structure, openings sufficient to facilitate the unimpeded movements of flood waters shall be provided.

- (2) Non-Residential Construction. New construction or substantial improvement of any commercial, industrial, or non-residential structure shall have the lowest floor, including basement, elevated no lower than three (3) feet above the level of the base flood elevation. Structures located in A Zones may be floodproofed to the flood protection level in lieu of elevation provided that all areas of the structure below the required elevation are watertight with walls substantially impermeable to the passage of water, using 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 standards of this subsection are satisfied. Such certification shall be provided to the official as set forth in Article 4, Section B(7).

- (3) Manufactured Homes.

- (a) Manufactured homes that are placed or substantially improved on sites (i) outside a manufactured home park or subdivision; (ii) in a new manufactured home park or subdivision; (iii) in an expansion to an existing manufactured home park or subdivision; or, (iv) in an existing manufactured home park or subdivision on which a manufactured home has incurred "substantial damage" as the result of a flood, must be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated no lower than three (3) feet above the base flood elevation and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.
- (b) Manufactured homes that are to be placed or substantially improved on sites in an existing manufactured home park or subdivision that are not subject to the provisions of Article 5, Section B(3)(a) of this ordinance must be elevated on reinforced piers or other structural elements so that the lowest floor of the manufactured home is no lower than three (3) feet above the base flood elevation and be securely anchored to an adequately anchored foundation to resist flotation, collapse, and lateral movement.
- (c) Manufactured homes shall be anchored to prevent flotation, collapse, or lateral movement. For the purpose of this requirement, manufactured homes must be anchored to resist flotation, collapse, or lateral movement in accordance with the State of North Carolina **Regulations for Manufactured/Mobile Homes, 1995 Edition**, and any revision thereto adopted by the Commissioner of Insurance pursuant to NCGS §143-143.15. Additionally, when the elevation would be met by an elevation of the chassis 36 inches or less above the grade at the site, the chassis shall be supported by reinforced piers or other foundation elements of at least equivalent strength. When the elevation of the chassis is above 36 inches in height an engineering certification is required.

- (d) An evacuation plan must be developed for evacuation of all residents of all new, substantially improved or substantially damaged manufactured home parks or subdivisions located within flood prone areas. This plan shall be filed with and approved by the administrator and the local Emergency Management coordinator.
- (4) Recreational Vehicles. A recreational vehicle is ready for highway use if it is on wheels or jacking system, is attached to the site only by quick-disconnect type utilities and security devices, and has no permanently attached additions. Recreation vehicles placed on sites shall either:
 - (a) be on site for fewer than 180 consecutive days and be fully licensed and ready for highway use; or
 - (b) meet the requirements of Article 4, Section B and Article 5, Sections A and B(3).
- (5) Park Homes or Park Models are prohibited from locating in any flood hazard area.
- (6) Elevated Buildings. New construction or substantial improvements of elevated buildings that include fully enclosed areas that are usable solely for the parking of vehicles, building access or storage in an area other than a basement and which are subject to flooding shall be designed to preclude finished living space and be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters.
 - (a) Designs for complying with this requirement must either be certified by a professional engineer or architect or meet the following minimum criteria:
 - (i) 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;
 - (ii) The bottom of all required openings shall be no higher than one foot above grade; and,
 - (iii) Openings may be equipped with screens, louvers, valves, or other coverings or devices provided they permit the automatic flow of floodwaters in both directions.
 - (b) Access to the enclosed area shall be the minimum necessary to allow for parking of vehicles (garage door) or limited storage of maintenance equipment used in connection with the premises (standard exterior door) or entry to the living area (stairway or elevator).
 - (c) The interior portion of such enclosed area shall not be partitioned or finished into separate rooms, except to enclose storage areas.
- (7) Temporary Structures. Prior to the issuance of a development permit for a temporary structure the following requirements must be met:
 - (a) All applicants must submit to the administrator prior to the issuance of the development permit a plan for the removal of such structure(s) in the event of a hurricane or flash flood warning notification. The plan must include the following information:

- (i) a specified time period for which the temporary use will be permitted;
 - (ii) the name, address and phone number of the individual responsible for the removal of the temporary structure;
 - (iii) the time frame prior to the event at which a structure will be removed (i.e. minimum of 72 hours before landfall of a hurricane or immediately upon flood warning notification);
 - (iv) a copy of the contract or other suitable instrument with a trucking company to insure the availability of removal equipment when needed; and
 - (v) designation, accompanied by documentation, of a location outside the floodplain to which the temporary structure will be moved.
- (b) The above information shall be submitted in writing to the administrator for review and written approval.
- (8) Accessory Structure. When accessory structures (sheds, detached garages, etc.) with a value of \$3,000 or less, are to be placed in the floodplain the following criteria shall be met:
- (a) Accessory structures shall not be used for human habitation (including work, sleeping, living, cooking or restroom areas);
 - (b) Accessory structures shall be designed to have low flood damage potential;
 - (c) Accessory structures shall be constructed and placed on the building site so as to offer the minimum resistance to the flow of floodwaters;
 - (d) Accessory structures shall be firmly anchored in accordance with Article 5, Section A(1);
 - (e) Service facilities such as electrical and heating equipment shall be installed in accordance with Article 5 Section A(4); and
 - (f) Openings to relieve hydrostatic pressure during a flood shall be provided below base flood elevation in conformance with Article 5 Section B(5).
- (9) Floodways. Located within areas of special flood hazard established in Article 3, Section B, are areas designated as floodways. The floodway is an extremely hazardous area due to the velocity of flood waters which carry debris and potential projectiles and has erosion potential. The following provisions shall apply within such areas:
- (a) No encroachments, including fill, new construction, substantial improvements and other developments shall be permitted unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in the flood levels during the occurrence of the base flood. Such certification and technical data shall be presented to the administrator.
 - (b) If Article 5, Section B(8)(a) is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Article 5.
 - (c) No manufactured homes shall be permitted, except in an existing manufactured home

park or subdivision. A replacement manufactured home may be placed on a lot in an existing manufactured home park or subdivision provided the anchoring and the elevation standards of Article 5, Section B(3) and the encroachment standards of Article 5, Section B(8)(a) are met.

SECTION C. STANDARDS FOR STREAMS WITHOUT ESTABLISHED BASEFLOOD ELEVATIONS AND/OR FLOODWAYS.

Located within the areas of special flood hazard established in Article 3, Section B, are small streams where no base flood data has been provided or where no floodways have been identified. The following provisions apply within such areas:

- (1) No encroachments, including fill, new construction, substantial improvements or new development shall be permitted within a distance of thirty (30) feet each side from top of bank or five times the width of the stream whichever is greater, unless certification with supporting technical data by a registered professional engineer is provided demonstrating that such encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.
- (2) If Article 5, Section C(1) is satisfied and base flood elevation data is available from other sources, all new construction and substantial improvements within such areas shall comply with all applicable flood hazard ordinance provisions of Article 5 and shall be elevated or floodproofed in accordance with elevations established in accordance with Article 4, Section C(10). When base flood elevation data is not available from a Federal, State, or other source, the lowest floor, including basement, shall be elevated at least three (3) feet above the highest adjacent grade.

SECTION D. STANDARDS FOR SUBDIVISION PROPOSALS AND MAJOR DEVELOPMENTS.

- (1) Proposals for subdivisions and major developments shall be consistent with the need to minimize flood damage;
- (2) Proposals for subdivisions and major developments shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage;
- (3) Proposals for subdivisions and major developments shall have adequate drainage provided to reduce exposure to flood hazards; and,
- (4) Base flood elevation data shall be provided for subdivision proposals and other proposed development which is greater than the lesser of fifty lots or five acres.

ARTICLE 6. LEGAL STATUS PROVISIONS

SECTION A. EFFECT ON RIGHTS AND LIABILITIES UNDER THE EXISTING FLOOD DAMAGE PREVENTION ORDINANCE.

This Ordinance in part comes forward by re-enactment of some of the provisions of the flood damage prevention ordinance enacted January 13, 2003 as amended, and it is not the intention to repeal but rather to re-enact and continue to enforce without interruption of such existing provisions, so that all rights and liabilities that have accrued thereunder are reserved and may be enforced. The enactment of this ordinance shall not affect any action, suit or proceeding instituted or pending. All provisions of the flood damage prevention ordinance of The Town of Fletcher enacted on January 13, 2003, as amended, which are not reenacted herein are repealed.

SECTION B. EFFECT UPON OUTSTANDING BUILDING PERMITS.

Nothing herein contained shall require any change in the plans, construction, size or designated use of any building, structure or part thereof for which a building permit has been granted by the Chief Building Inspector or his authorized agents before the time of passage of this ordinance; provided, however, that when construction is not begun under such outstanding permit within a period of sixty (60) days subsequent to passage of this ordinance, construction or use shall be in conformity with the provisions of this ordinance.

SECTION C. EFFECTIVE DATE

This ordinance shall become effective on July 1, 2003.

SECTION D. ADOPTION CERTIFICATION

I hereby certify that this is a true and correct copy of the flood damage prevention ordinance as adopted by the Town Council of the Town of Fletcher, North Carolina, on the 13th Day of January, 2003.

WITNESS my hand and the official seal of _____, this the _____ day of _____, 2003.