

# FLOOD DAMAGE PREVENTION ORDINANCE

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# **ARTICLE 1. STATUTORY AUTHORIZATION, FINDINGS, PURPOSE AND OBJECTIVES**

## **SECTION A. STATUTORY AUTHORIZATION**

The Legislature of the State of Mississippi has in Title 17, Chapter 1, Mississippi Code 1972 Annotated delegated the responsibility to local government units to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry. Therefore, the Board of Aldermen of the City of Verona, Mississippi does hereby adopt the following floodplain management regulations.

## **SECTION B. FINDINGS OF FACT**

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

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 hazard areas by uses vulnerable to floods or hazardous to other lands which are inadequately elevated, flood-proofed, 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, which result in damaging increases in erosion or in flood heights 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 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 interruptions;
- (5) To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, street 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 ensure that potential homebuyers are notified that property is in a flood area.

## **SECTION E. METHODS OF REDUCING FLOOD LOSSES**

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

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

## SECTION F. SEVERABILITY

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

## 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.

**A Zone** means portions of the SFHA in which the principle source of flooding is runoff from rainfall, snowmelt, or a combination of both. In A zones, floodwaters may move slowly or rapidly, but waves are usually not a significant threat to buildings. Areas of 100-year flood, base flood elevations and flood hazard factors not determined.

**A1 – A30 and AE zone** is the Special Flood Hazard Area inundated by the 100-year flood, base flood elevations are determined.

**Accessory structure** (Appurtenant structure) means a structure, which is located on the same parcel of property as the principle structure and the use of which is incidental to the use of the principle structure. Accessory structures should constitute a minimal initial investment, may not be used for human habitation, and be designed to have minimal flood damage potential. Examples of accessory structures are detached garages, carports, storage sheds, pole barns, and hay sheds.

**Addition** (to an existing building) means any walled and roofed expansion to the perimeter of a building in which the addition is connected by a common load-bearing wall other than a firewall. Any walled and roofed addition, which is connected by a firewall or is separated by independent perimeter load-bearing walls, is new construction.

**Appeal** means a request for a review of the floodplain administrator’s interpretation of any provision of this ordinance or a request for a variance.

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

**B and X zones (shaded)** are areas of 500-year flood, areas subject to the 100-year flood with average depths of less than 1 foot or with contributing drainage area less than 1 square mile, and areas protected by levees from the base flood.

**Base flood** means the flood having a one percent chance of being equaled or exceeded in any given year (also called the “100-year flood”).

**Base Flood Elevation (BFE)** is the elevation shown on the Flood Insurance Rate Map (FIRM) for Zones AE, AH, A1-30, AR, AR/A, AR/AE, AR/A1-A30, AR/AH, AR/AO, V1-V30, and VE that indicates the water surface elevation resulting from a flood that has a 1-percent or greater chance of being equaled or exceeded in any given year.

**Basement** means that portion of a building having its floor sub-grade (below ground level) on all sides.

**Building** see **Structure**.

**C and X (unshaded) zones** are areas determined to be outside the 500-year floodplain.

**Community** is a political entity that has the authority to adopt and enforce floodplain ordinances for the area under its jurisdiction.

**Community Rating System (CRS)** is a program developed by the Federal Insurance Administration to provide incentives for those communities in the Regular Program that have gone beyond the minimum floodplain management requirements to develop extra measures to provide protection from flooding.

**Critical facility** means a facility for which even a slight chance of flooding might be too great. Critical facilities include, but are not limited to schools, nursing homes, hospitals, police, fire and emergency response installations, installations which produce, use or store hazardous materials or hazardous waste.

**Dam** is any artificial barrier, including appurtenant works, constructed to impound or divert water, waste-water, liquid borne materials, or solids that may flow if saturated. All structures necessary to maintain the water level in an impoundment or to divert a stream from its course will be considered one dam.

**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, excavating, drilling operations, or storage of materials or equipment.

**Elevated building** means a non-basement building built to have the lowest floor elevated above the ground level by means of fill, solid foundation perimeter walls, pilings, columns (posts and piers), shear walls, or breakaway walls.

**Elevation Certificate** is a certified statement that verifies a building's elevation information.

**Emergency Program** means the first phase under which a community participates in the NFIP. It is intended to provide a first layer amount of insurance at subsidized rates on all insurable buildings in that community before the effective date of the initial FIRM.

**Enclosure below the Lowest Floor** see "Lowest Floor."

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

**Executive Order 11988 (Floodplain Management)** issued by President Carter in 1977, this order requires that no federally assisted activities be conducted in or have the potential to affect identified Special Flood Hazard Areas, unless there is no practicable alternative.

**Existing Construction** any structure for which the "start of construction" commenced before October 20, 1999.

**Existing 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 pads) is completed before October 20, 1999.

**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 pads).

**Fill** means a deposit of earth material placed by artificial means.

**Five-Hundred Year Flood** means the flood that has a 0.2 percent chance of being equaled or exceeded in any year. Areas subject to the 500-year flood have a moderate to low risk of flooding.

**Flood or flooding** means a general and temporary condition of partial or complete inundation of normally dry land areas from:

- a.) The overflow of inland or tidal waters;
- b.) The unusual and rapid accumulation or runoff of surface waters from any source.

**Flood Boundary and Floodway Map (FBFM)** means the official map on which the Federal Emergency Management Agency (FEMA) or Federal Insurance Administration (FIA) has delineated the areas of flood hazards and regulatory floodway.

**Flood Hazard Boundary Map (FHBM)** means an official map of a community, issued by FEMA, where the boundaries of the areas of special flood hazard have been identified as Zone A.

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

**Flood Insurance Study (FIS)** is the official hydraulic & hydrologic report provided by FEMA. The report contains flood profiles, as well as the FIRM, FHBM (where applicable) and the water surface elevation of the base flood.

**Floodplain** means any land area susceptible to being inundated by flood waters from any source.

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

**Floodplain management 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 Certificate** is a form used to certify compliance for non-residential structures as an alternative to elevating buildings to or above the BFE.

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

**Floodway fringe** means that area of the floodplain on either side of the regulatory floodway where encroachment may be permitted without additional hydraulic and/or hydrologic analysis.

**Freeboard** means a factor of safety, usually expressed in feet above the BFE, which is applied for the purposes of floodplain management. It is used to compensate for the many unknown factors that could contribute to flood heights greater than those calculated for the base flood.

**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.

**Hardship** (as related to variances of this ordinance) means the exceptional hardship that would result from a failure to grant the requested variance. The Board of Aldermen requires that the variance is exceptional, unusual, and peculiar to the property involved. Mere economic or financial hardship alone is NOT exceptional. Inconvenience, aesthetic considerations, physical handicaps, personal preferences, or the disapproval of one's neighbors likewise cannot, as a rule, qualify as an exceptional hardship. All of these problems can be resolved through other means without granting a

variance, even if the alternative is more expensive, or requires the property owner to build elsewhere or put the parcel to a different use than originally intended.

**Hazard potential** means the possible adverse incremental consequences that result from the release of water or stored contents due to failure of a dam or mis-operation of a dam or appurtenances. The hazard potential classification of a dam does not reflect in any way on the current condition of a dam and its appurtenant structures (e.g., safety, structural integrity, flood routing capacity).

**High hazard potential dam** means a dam assigned the high hazard potential classification where failure or mis-operation will probably cause loss of human life.

**Highest adjacent grade** means the highest natural elevation of the ground surface, prior to construction, next to the proposed walls of a building.

**Historic Structure** means any structure that is:

- a.) Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
- b.) Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic 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 in states with historic preservation programs which have been approved by the Secretary of the Interior; or
- d.) Individually listed on a local inventory historic places in communities with historic preservation programs that have been certified either:
  1. By an approved state program as determined by the Secretary of the Interior, or
  2. Directly by the Secretary of the Interior in states without approved programs.

**Hydrologic and hydraulic engineering analysis** means an analysis performed by a professional engineer, registered in the State of Mississippi, in accordance with standard engineering practices as accepted by FEMA, used to determine flood elevations and / or floodway boundaries.

**Increased Cost of Compliance (ICC)** means the cost to repair a substantially damaged building that exceeds the minimal repair cost and that is required to bring a substantially damaged building into compliance with the local flood damage prevention ordinance. Acceptable mitigation measures are elevation, relocation, demolition, or any combination thereof. All renewal and new business policies with effective dates on or after June 1, 1997, will include ICC coverage.

**Letter of Map Change (LOMC)** is an official FEMA determination, by letter, to amend or revise effective Flood Insurance Rate Maps, Flood Boundary and Floodway Maps, and Flood Insurance Studies. LOMC's are broken down into the following categories:

**Letter of Map Amendment (LOMA)** a revision based on technical data showing that a property was incorrectly included in a designated SFHA. A LOMA amends the current effective FIRM and establishes that a specific property is not located in a SFHA.

**Letter of Map Revision (LOMR)** a revision based on technical data that, usually due to manmade changes, shows changes to flood zones, flood elevations, floodplain and floodway delineations, and plan metric features. One common type of LORM, a LOMR-F, is a determination concerning whether a structure or parcel has been elevated by fill above the BFE and is, therefore, excluded from the SFHA.

**Conditional Letter of Map Revision (CLOMR)** a formal review and comment by FEMA as to whether a proposed project complies with the minimum NFIP floodplain management criteria. A CLOMR does not amend or revise effective Flood Insurance Rate Maps, Flood Boundary and Floodway Maps, or Flood Insurance Studies.

**Levee** means a man-made structure; usually earthen embankments designed and constructed in accordance with sound engineering practices to contain, control, or divert the flow of water so as to provide protection from temporary flooding.

**Levee system** means a flood protection system which consists of a levee, or levees, and associated structures, such as closure and drainage devices, which are constructed and operated in accordance with sound engineering practices. For a levee system to be recognized, the following criteria must be met. All closure devices or mechanical systems for internal drainage, whether manual or automatic, must be operated in accordance with an officially adopted operation manual (a copy of which must be provided to FEMA by the operator when levee or drainage system recognition is being sought or revised). All operations must be under the jurisdiction of a Federal or State agency, an agency created by Federal or State law, or an agency of a community participating in the NFIP.

**Low hazard potential dam** means a dam assigned the low hazard potential classification where failure or mis-operation results in no probable loss of human life and low economic and/or environmental losses. Losses are limited to the owner's property.

**Lowest adjacent grade** means the elevation of the sidewalk, patio, deck support, or basement entryway immediately next to the structure and after the completion of construction. It does not include earth that is emplaced for aesthetic or landscape reasons around a foundation wall. It does include natural ground or properly compacted fill that comprises a component of a building's foundation system.

**Lowest floor** means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, used solely for parking of vehicles, building access, or storage, in an area other than a basement, is not considered a building's lowest floor, *provided* that such enclosure is not built so as to render the structure in violation of the non-elevation provisions of this code.

**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 attached 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.

**Map Panel Number** is the four-digit number followed by a letter suffix assigned by FEMA on a flood map. The first four digits represent the map panel, and the letter suffix represents the number of times the map panel has been revised. (The letter "A" is not used by FEMA, the letter "B" is the first revision.)

**Map Amendment** means a change to an effective NFIP map that results in the exclusion from the SFHA or an individual structure or a legally described parcel of land that has been inadvertently included in the SFHA (i.e., no alterations of topography have occurred since the date of the first NFIP map that showed the structure or parcel to be within the SFHA).

**Market value** means the building value, excluding the land (as agreed between a willing buyer and seller), as established by what the local real estate market will bear. Market value can be established by independent certified appraisal; replacement cost depreciated by age of building (Actual Cash Value) or adjusted assessed values.

**Mean Sea Level** means the average height of the sea for all stages of the tide. It is used as a reference for establishing various elevations within the floodplain. For purposes of this ordinance, the term is synonymous with National Geodetic Vertical Datum (NGVD).

**Mitigation** means sustained actions taken to reduce or eliminate long-term risk to people and property from hazards and their effects. The purpose of mitigation is twofold: to protect people and structures, and to minimize the costs of disaster response and recovery.

**National Flood Insurance Program (NFIP)** is the federal program that makes flood insurance available to owners of property in participating communities nationwide through the cooperative efforts of the Federal Government and the private insurance industry.

**National Geodetic Vertical Datum (NGVD)** as corrected in 1929 is a vertical control used as a reference for establishing varying elevations within the floodplain.

**New Construction** means any structure for which the “start of construction” commenced on or after the effective date of this ordinance. This term also includes any subsequent improvements to such a structure.

**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 pads) is completed on or after the effective date of floodplain regulations adopted by a community.

**Non-Residential** means, but is not limited to; small business concerns, churches, schools, farm buildings (including grain bins and silos), poolhouses, clubhouses, recreational buildings, mercantile structures, agricultural and industrial structures, warehouses, and hotels or motels with normal room rentals for less than 6 months duration.

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

**One-Hundred Year Flood (100-Year Flood)** is the flood that has a 1-percent or greater chance of being equaled or exceeded in any given year. Any flood zone that begins with the letter A or V is subject to the 100-year flood. Over the life of a 30-year loan, there is a 26-percent chance of experiencing such a flood with the SFHA.

**Participating Community** is any community that voluntarily elects to participate in the NFIP by adopting and enforcing floodplain management regulations that are consistent with the standards of the NFIP.

**Post-FIRM Construction** means construction or substantial improvement that started on or after the effective date of the initial FIRM of the community or after December 31, 1974, whichever is later.

**Pre-FIRM Construction** means construction or substantial improvement, which started on or before December 31, 1974, or before the effective date of the initial FIRM of the community, whichever is later.

**Probation** is a means of formally notifying participating communities of violations and deficiencies in the administration and enforcement of the local floodplain management regulations.

**Public safety and nuisance**, anything which is injurious to 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** means a vehicle that 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.

**Regular Program** means the phase of the community’s participation in the NFIP where more comprehensive floodplain management requirements are imposed and higher amounts of insurance are available based upon risk zones and elevations determined in a FIS.

**Regulatory 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.



**Repair** means the reconstruction or renewal of any part of an existing building.

**Repetitive Loss** means flood-related damages 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, equals or exceeds twenty-five percent of the market value of the structure before the damage occurred.

**Reservoir** means any basin, which contains or will contain impounded water, wastewater, or liquid-borne materials by virtue of its having been impounded by a dam.

**Section 1316** is that section of the National Flood Insurance Act of 1968, as amended, which states that no new flood insurance coverage shall be provided for any property that the Administrator finds has been declared by a duly constituted state or local zoning authority or other authorized public body to be in violation of state or local laws, regulations, or ordinances that are intended to discourage or otherwise restrict land development or occupancy in flood-prone areas.

**Significant hazard potential dam** means a dam assigned the significant hazard potential classification where failure or mis-operation results in no probable loss of human life but can cause major economic loss, environmental damage, disruption of critical facilities, or impact other concerns. Significant hazard potential classification dams are often located in predominantly rural or agricultural areas but could be located in areas with population and significant infrastructure.

**Special flood hazard area (SFHA)** means that portion of the floodplain subject to inundation by the base flood and/or flood-related erosion hazards as shown on a FHBM or FIRM as Zone A, AE, A1 – A30, AH, AO, AR, V, VE, or V1-V30.

**Start of construction** (for other than new construction or substantial improvements under the Coastal Barrier Resources Act P. L. 97-348), includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, or improvement was within 180 days of the permit date. The actual start means the first placement of permanent construction of a building (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 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 building. For substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

**Structure** means all walled and roofed buildings, including gas or liquid storage tanks and manufactured homes that are principally above ground.

**Subdivision** means any division, for the purposes of sale, lease, or development, either on the installment plan or upon any and all other plans, terms and conditions, of any tract or parcel of land into two (2) or more lots or parcels.

**Subrogation** means an action brought by FEMA when flood damages have occurred, flood insurance has been paid, and all or part of the damage can be attributed to acts or omissions by a community or other third party.

**Substantial Damage** means repair to a building for which the value of damage equals or exceeds fifty percent of the market value of the building prior to the damage occurring and regardless of the actual repair work done. The term includes Repetitive Loss buildings (see definition). For the purposes of this definition, “repair” is considered to occur when the first repair or reconstruction of any wall, ceiling, floor, or other structural part of the building commences. The term does not apply to:

- a.) Any project for improvement of a building required to comply with existing health, sanitary, or safety code specifications which have been identified by the Code Enforcement Official and which are solely 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”, or

- c.) Any improvement to a building.

**Substantial Improvement** means any combination of reconstruction, alteration, or improvement to a building, taking place during a ten-year period, in which the cumulative percentage of improvement equals or exceeds fifty percent of the current market value of the building. For the purposes of this definition, an improvement occurs when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the building. This term includes structures, which have incurred “repetitive loss” or “substantial damage”, regardless of the actual repair work done. The term does not apply to:

- a.) any project for improvement of a building required to comply with existing health, sanitary, or safety code specifications which have been identified by the Code Enforcement Official and which are solely 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.” Or
- c.) Any building that has been damaged from any source or is categorized as repetitive loss.

**Substantially improved existing manufactured home parks or subdivisions** is 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.

**Suspension** means the removal of a participating community from the NFIP because the community has not enacted and/or enforced the proper floodplain management regulations required for participation in the NFIP.

**Variance** is a grant of relief 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 this ordinance. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in this ordinance is presumed to be in violation until such time as that documentation is provided.

**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.

**Water surface elevation** means the height, in relation to the National Geodetic Vertical Datum (NGVD) of 1929, (or other datum, where specified) of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.

**X zone** means the area where the flood hazard is less than that in the SFHA. Shaded X zones shown on recent FIRMs (B zones on older FIRMs) designate areas subject to inundation by the flood with a 0.2-percent annual probability of being equaled or exceeded (the 500-year flood). Unshaded X zones (C zones on older FIRMS) designate areas where the annual exceedance probability of flooding is less than 0.2 percent.

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

## **ARTICLE 3. GENERAL PROVISIONS**

### **SECTION A. LANDS TO WHICH THIS ORDINANCE APPLIES**

This ordinance shall apply to all areas of special flood hazard (SFHA) within the jurisdiction of the Board of Aldermen of City of Verona.

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

The areas of special flood hazard identified by the Federal Emergency Management Agency in the City of Verona, Mississippi Flood Insurance Rate Map numbers 28081C0228D, 28081C0229D, and 28081C0240D dated October 20, 1999 respectively and other supporting data are adopted by reference and declared to be a part of this ordinance.

### **SECTION C. ESTABLISHMENT OF FLOODPLAIN DEVELOPMENT PERMIT**

A development permit shall be required in conformance with the provision of this ordinance prior to the commencement of any development activities in the areas of special flood hazard.

### **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 Board of Aldermen of City of Verona or by any officer or employee thereof for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made thereunder.

### **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 \$1,000 or imprisoned for not more than 30 days, or both, and in addition, shall pay all costs and expenses involved in the case. Each day such violation continues shall be considered a separate offense. Nothing herein contained shall prevent the floodplain administrator from taking such other lawful actions as is necessary to prevent or remedy any violation.

## **ARTICLE 4. ADMINISTRATION**

### **SECTION A. DESIGNATION OF FLOODPLAIN ADMINISTRATOR**

The Board of Aldermen of City of Verona hereby appoints the Mayor to administer and implement the provisions of this ordinance and is herein referred to as the Floodplain Administrator and/or the administrator.

### **SECTION B. PERMIT PROCEDURES**

Application for a Development Permit shall be made to the Floodplain Administrator on forms furnished by him or her prior to any development activities, and may include, but not be limited to, the following plans in duplicate drawn to scale showing the nature, location, dimensions, and elevations of the area in question; existing or proposed structures, earthen fill, storage of materials or equipment, drainage facilities, and the location of the foregoing. Specifically, the following information is required:

- (1) Application Stage:
  - a.) Elevation in relation to mean sea level of the proposed lowest floor (including basement) of all buildings;
  - b.) Elevation in relation to mean sea level to which any non-residential building will be flood-proofed;
  - c.) Certificate from a registered professional engineer or architect that the non-residential flood-proofed building will meet the flood-proofing criteria in Article 5, Section B (2) and Section D (2);
  - d.) Description of the extent to which any watercourse will be altered or relocated as result of proposed development, and;
- (2) Construction Stage:

Upon placement of the lowest floor, or flood-proofing by whatever construction means, it shall be the duty of the permit holder to submit to the Floodplain Administrator a certification of the NGVD elevation of the lowest floor or flood-proofed elevation, 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 undertaken prior to submission of the certification shall be at the permit holder's risk. (The Floodplain Administrator shall review the lowest floor & flood-proofing elevation survey data submitted.) The permit holder immediately and prior to further progressive work being permitted to proceed shall correct deficiencies detected by such review. 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. POWERS, DUTIES AND RESPONSIBILITIES OF ADMINISTRATOR**

The Floodplain Administrator and/or staff is hereby authorized and directed to enforce the provisions of this ordinance. The administrator is further authorized to render interpretations of this ordinance, which are consistent with its spirit and purpose.

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

- (1) Review all development permits to assure that the permit 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 permit requirements are known, require that copies of such permits be provided and maintained on file with the development permit.
- (3) Notify adjacent communities, the State NFIP Coordinator, and other federal and/or state agencies with statutory or regulatory authority prior to any alteration or relocation of a watercourse.
- (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) Verify and record the actual elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved buildings, in accordance with Article 4, Section B (2).

- (6) Verify and record the actual elevation (in relation to mean sea level) to which the new or substantially improved buildings have been flood-proofed, in accordance with Article 4, Section B (2).
- (7) Review certified plans and specifications for compliance.
- (8) 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) the Floodplain Administrator shall make the necessary interpretation. The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in this article.
- (9) When base flood elevation data or floodway data have not been provided in accordance with Article 3, Section B, then the Floodplain Administrator shall obtain, review and reasonably utilize any base flood elevation and floodway data available from a federal, state or other source, in order to administer the provisions of Article 5.
- (10) Provide information, testimony, or other evidence, as needed during variance request hearings.

## **ARTICLE 5. PROVISIONS FOR FLOOD HAZARD REDUCTION**

### **SECTION A. GENERAL STANDARDS**

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

- (1) New construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure;
- (2) Manufactured homes shall be anchored to prevent flotation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This standard shall be in addition to and consistent with applicable state requirements for resisting wind forces;
- (3) New construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage;
- (4) New construction or substantial improvements shall be constructed by methods and practices that minimize flood damage;
- (5) 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, such facilities shall be located a minimum of one (1) foot above the Base Flood Elevation;
- (6) New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;
- (7) 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;
- (8) On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding;
- (9) Any alteration, repair, reconstruction or improvements to a building that is in compliance with the provisions of this ordinance shall meet the requirements of "new construction" as contained in this ordinance; and,
- (10) Any alteration, repair, reconstruction or improvements to a building that is not in compliance with the provisions of this ordinance, shall be undertaken only if said non-conformity is not furthered, extended, or replaced.

### **SECTION B. SPECIFIC STANDARDS**

In all areas of special flood hazard where base flood elevation data have been provided, as set forth in Article 3, Section B, the following provisions are required:

- (1) Residential Construction. New construction or substantial improvement of any residential building or manufactured home shall have the lowest floor, including basement, elevated no lower than one foot above the base flood elevation. Should solid foundation perimeter walls be used to elevate a structure, openings sufficient to facilitate the unimpeded movements of floodwaters shall be provided in accordance with standards of Article 5, Section B (3).

- (2) Non-Residential Construction. New construction or substantial improvement of any commercial, industrial, or non-residential building or manufactured home shall have the lowest floor, including basement, elevated to no lower than one foot above the level of the base flood elevation. Buildings located in all A-Zones may be flood-proofed in lieu of being elevated provided that all areas of the building below the elevation are water tight with walls substantially impermeable to the passage of water, and use 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 C (9).
- (3) Elevated Buildings. New construction or substantial improvements of elevated buildings that include fully enclosed areas formed by foundation and other exterior walls below the base flood elevations shall be designed to preclude finished living space and designed to allow for the entry and exit of floodwaters to automatically equalize hydrostatic flood forces on exterior walls.
- 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 openings shall be no higher than one foot above foundation interior grade (which must be equal to in elevation or higher than the exterior foundation 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 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); and
- c.) The interior portion of such enclosed area shall not be partitioned or finished into separate rooms.
- (4) Standards for Manufactured Homes and Recreational Vehicles.
- a.) All manufactured homes placed, or substantially improved, on individual lots or parcels, in existing manufactured home parks or subdivisions, expansions, new or in substantially improved manufactured home parks or subdivisions, must meet all the requirements for new construction, including elevation and anchoring.  
Manufactured homes must be:
- (i) Elevated on a permanent foundation, and
  - (ii) Have its lowest floor elevated no lower than one (1) foot above the base flood elevation, and
  - (iii) Be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement, as specified under the Mississippi Insurance Department’s “Rules and Regulations of Mobile Home Division of State Fire Marshall’s Office” as revised, Section IX entitled Minimum Standards for Blocking, Anchors and Tie-Downs.
- b.) All recreational vehicles placed on sites must either:
- (i) Be on site for fewer than 180 consecutive days, or
  - (ii) Be fully licensed and ready for highway use, or
  - (iii) Must meet all the requirements for new construction, including anchoring and elevation requirements of Article 5, Section B (4)(a) or (b) (i) and (iii), above.

A recreational vehicle is ready for highway use if it is licensed and insured in accordance with the State of Mississippi motor vehicle regulations, is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices and has no permanently attached additions. All

recreational vehicles, which are not self-propelled, must comply with FEMA Technical Bulletin “Guidelines for the Placement of Temporary Structures in Special Flood Hazard Areas.

- d.) All above ground gas or liquid storage tanks shall be anchored to prevent flotation or lateral movement.
- (5) Floodways. Located within areas of special flood hazard established in Article 3, Section B, are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles and has erosion potential, the following provisions shall apply:\*
- a.) Prohibit encroachments, including fill, new construction, substantial improvements and other developments unless certification (with supporting technical data) by a registered professional engineer is provided demonstrating that encroachments shall not result in any increase in flood levels during occurrence of the base flood discharge;
  - b.) If Article 5, Section B (5) (a) is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Article 5.
  - c.) Prohibit the placement of manufactured homes (mobile homes), except in an existing manufactured homes (mobile homes) park or subdivision. A replacement manufactured home may be placed on a lot in an existing manufactured home park or subdivision provided the anchoring standards of Article 5, Section A (2), and the elevation standards of Article 5, Section B (1) and the encroachment standards of Article 5, Section B (5) (a), are met.

### **SECTION C. STANDARDS WITHOUT ESTABLISHED BASE FLOOD ELEVATION**

Located within the areas of special flood hazard established in Article 3, Section B, where flood sources exist but where no base flood data has been provided or where base flood data has been provided without floodways, then a registered land surveyor or professional engineer shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a federal, state, or other source, in order to administer the provisions of Article 5.

### **SECTION D. STANDARDS FOR ACCESSORY BUILDINGS IN ALL A ZONES**

For all accessory buildings in Special Flood Hazard Areas (SFHA) designated ‘A’ the following provisions shall apply:

- (1) Building to be non-habitable;
- (2) Must be anchored to resist floatation forces;
- (3) Will require flood openings / vents no more than one-foot above grade, total openings are to be one square inch per one square foot of floor area, at least two openings required on opposite walls;
- (4) Built of flood resistant materials;
- (5) Must elevate utilities above the base flood elevation;
- (6) Can only be used for storage or parking;
- (7) Cannot be modified for a different use after permitting; and,
- (8) Must have its lowest floor elevation documented.

### **SECTION E. STANDARDS FOR SUBDIVISION PROPOSALS**

All subdivision proposals shall be consistent with the need to minimize flood damage. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood hazards. Base flood elevation data shall be provided for all new subdivision proposals and other proposed development (including manufactured home parks and subdivisions), which is greater than fifty lots or five acres, whichever is the lesser.

### **SECTION F. CRITICAL FACILITIES**

Construction of new or substantially improved critical facilities shall be, to the extent possible, located outside the limits of the special flood hazard area (SFHA) (100-year floodplain). Construction of new critical facilities shall be

permissible within the SFHA if no feasible alternative site is available. Critical facilities constructed within the SFHA shall have the lowest floor elevated three feet (approximate 500-year floodplain) or more above the level of the base flood elevation at the site. Floodproofing and sealing measures must be taken to ensure that toxic substances will not be displaced by or released into floodwaters. Access routes elevated to or above the level of the base flood elevation shall be provided to all critical facilities to the extent possible.

## **ARTICLE 6. VARIANCE PROCEDURES**

### **SECTION A. DESIGNATION OF VARIANCE AND APPEALS BOARD**

The Board of Aldermen of City of Verona shall hear and decide appeals and requests for variances from requirements of this ordinance.

### **SECTION B. DUTIES OF VARIANCE AND APPEALS BOARD**

The board shall hear and decide appeals when it is alleged an error in any requirement, decision, or determination is made by the Floodplain Administrator in the enforcement or administration of this ordinance. Any person aggrieved by the decision of the board may appeal such decision to the Circuit Court.

### **SECTION C. VARIANCE PROCEDURES**

In passing upon such applications, the board shall consider all technical evaluations, all relevant factors, standards specified in other sections of this ordinance, and:

- (1) The danger that materials may be swept onto other lands to the injury of others;
- (2) The danger of life and property due to flooding or erosion damage;
- (3) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
- (4) The importance of the services provided by the proposed facility to the community;
- (5) The necessity to the facility of a waterfront location, where applicable;
- (6) The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;
- (7) The compatibility of the proposed use with existing and anticipated development;
- (8) The relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
- (9) The safety of access to the property in times of flood for ordinary and emergency vehicles;
- (10) The expected heights, velocity, duration, rate of rise, and sediment of transport of the flood waters and the effects of wave action, if applicable, expected at the site; and,
- (11) The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.
- (12) Upon consideration of factors listed above, and the purpose of this ordinance, the board may attach such conditions to the granting of variances as it deems necessary to further the purposes of this ordinance.
- (13) Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.

### **SECTION D. CONDITIONS FOR VARIANCES**

Variances shall only be issued when there is:

- a.) A showing of good and sufficient cause;
- b.) A determination that failure to grant the variance would result in exceptional hardship; and,
- c.) A determination that the granting of a variance will not result in increased flood heights, additional threats to public expense, create nuisance, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.



Variations shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief; and in the instance of an "historic structure," a determination that the variance is the minimum necessary so as not to destroy the historic character and design of the building.

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 lowest floor is to be built and stating that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation. (See Article 6, Section E.)

The Floodplain Administrator shall maintain the records of all appeal actions and report any variances to the Federal Emergency Management Agency or Mississippi Emergency Management Agency upon request. (See Section E.)

## **SECTION E. VARIANCE NOTIFICATION**

Any applicant to whom a variance is granted shall be given written notice over the signature of a community official that:

- (1) The issuance of a variance to construct a structure below the base flood elevation will result in increased premium rates for flood insurance up to amounts as high as \$25 for \$100 of insurance coverage, and;
- (2) Such construction below the base flood level increases risks to life and property.

The Floodplain Administrator will maintain a record of all variance actions, including justification for their issuance, and report such variances issued in the community's biennial report submission to the Federal Emergency Management Agency.

## **SECTION F. HISTORIC STRUCTURES**

Variations may be issued for the repair or rehabilitation of "historic structures" upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as an "historic structure" and the variance is the minimum to preserve the historic character and design of the structure.

## **SECTION G. SPECIAL CONDITIONS**

Upon consideration of the factors listed in Article 6, and the purposes of this ordinance, the board may attach such conditions to the granting of variances, as it deems necessary to further the purposes of this ordinance.

## **SECTION H. FLOODWAY**

Variations shall not be issued by a community within any designated regulatory floodway if any increase in flood levels during the base flood discharge would result.

## APPENDIX

### **Unnumbered A Zones:**

In times past, a default value of (3) feet above highest adjacent grade was the very last ditch effort by a community to provide a safe elevation for a new structure within the Special Flood Hazard Area, if all other methods could not be used. The use of a default is not based on technical data and could result in liability for the community! DO NOT ADOPT A DEFAULT FOR UNNUMBERED A ZONES.

A building in a SFHA as stated above, can never be elevated less than 2 feet above the highest adjacent grade (HAG) as defined in Article 2 without a Letter of Map Correction being issued first by FEMA. (That is where the old three feet assumption came into play). The insurance rates for Post-FIRM buildings in these areas drop drastically after 5 feet of elevation. A building elevated no higher than 6 feet 8 inches above the HAG, maintains an “uninhabitable” space below the lowest floor and a space usable for parking, storage, and access is created. It also is provided with a high level of flood damage protection for a flood condition that is virtually unknown.

### **Substantial Improvement Tracking:**

Here’s the formula:

Improvement value divided by building value = percent improvement. Percent improvement value accumulates over life of building. When percent improvement totals 50%, building must be brought into conformance with flood ordinance.

I.E.:     \$20,000 / \$100,000 = 20% improvement in 1990  
           \$10,000 / \$120,000 = 8% improvement in 1991  
           \$28,600 / \$130,000 = 22% improvement in 1999

50% cumulative improvement  
(Building must be brought up to (flood) code)

### **New Construction and Additions/Improvements to existing structures:**

Here’s the method:

Example A:     A Pre-FIRM structure (with lowest floor below BFE), valued at \$100,000.00 is improved with an addition worth \$20,000.00. Only the addition is required to be elevated above the BFE (less than 50% of market value).

Example B:     Same structure as above is improved with an addition worth \$50,000.00 or more. The entire structure must be elevated above the BFE (more than 50% of the market value).