

BOLIVAR COUNTY
FLOOD DAMAGE PREVENTION ORDINANCE

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

SECTION A. STATUTORY AUTHORIZATION.

The Legislature of the State of Mississippi has in Title 17, Chapter 1 of the Mississippi Code of 1972 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 Board of Supervisors of Bolivar County, Mississippi, does ordain as follows:

SECTION B. FINDINGS OF FACT.

- (1) The flood hazard areas of Bolivar County 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 for flood protection and relief, and impairment for 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 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, 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.

“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 fire wall. Any walled and roofed addition which is connected by a fire wall or is separated by independent perimeter load-bearing walls is new construction.

“Appeal” means a request for a review of the local 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.

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

“Basement” means that portion of a 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 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 permanent storage of materials.

“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.

“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;
- (2) the unusual and rapid accumulation or runoff of surface waters from any source.

“Existing Manufactured Home Park or Subdivision” means a manufactured home park for which the construction of facilities for servicing the lot on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, either final site grading or the pouring of concrete pads, and the construction of streets) are completed before the effective date of flood-plain management regulations previously adopted by this county.

“Expansion to an Existing Manufactured Home Park or Subdivision” means the preparation or 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, either final site grading or pouring concrete pads, or the construction of streets.

“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 official report provided by the Federal Emergency Management Agency. The report contains flood profiles, as well as the Flood Boundary Floodway Map and the water surface elevation of the base flood.

“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 a docking or port facility necessary for the loading or 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 a structure.

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

violation of the applicable non-elevation design requirements of this ordinance.

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

“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 also includes park trailers, travel trailers, and similar transportable structures placed on a site for 180 consecutive days or longer and intended to be improved property.

“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.

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

“New Construction” means structures for which the “start of construction” commenced on or after the effective date of this ordinance.

“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 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.

“Structure” means a walled and roofed building that is principally above ground, a manufactured home, a gas or liquid storage tank, or other man-made facilities or infrastructures.

“Substantial Improvement” means any repair, reconstruction, alteration, or improvement to a structure, the cost of which equals or exceeds fifty percent of the market value of the structure, either (1) before the improvement or repair is started, or (2) if the structure has been damaged and is being restored, before the damage occurred. For the purposes of this definition, “substantial improvement” is considered to occur when the first alteration of any wall, ceiling, floor or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure. The term does not, however, include any project for improvement of a structure required to comply with existing health, sanitary, or safety code specifications which are solely necessary to assure safe living conditions.

“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.

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 Board of Supervisors of Bolivar County, Mississippi.

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 its Flood Insurance Study dated July 17, 1989, 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 Bolivar County 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 \$100 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 Bolivar County Board of Supervisors from taking such other lawful action as is necessary to prevent or remedy any violation.

ARTICLE 4. ADMINISTRATION.

SECTION A. DESIGNATION OF LOCAL ADMINISTRATOR

The County Administrator is hereby appointed to administer and implement the provisions of this ordinance. The County Administrator with the Board of Supervisors approval may appoint an Assistant Administrator in various departments to administrator and implement the provisions of this ordinance.

SECTION B. PERMIT PROCEDURES.

Application for a Development Permit shall be made to the Local 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, fill storage of materials, 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 structures;

(b) Elevation in relation to mean sea level to which any non-residential structure will be flood-proofed;

(c) Certificate from a registered professional engineer or architect that the non-residential flood-proofing criteria in Article 5, Section B (2);

(d) Description of the extent to which any watercourse will be altered or relocated as a result of proposed development, and;

(2) Construction Stage.

Provide a floor elevation or flood-proofing certification after the lowest floor is completed. 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 Local Administrator a certification of the 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 permit holder's risk. The Local 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 LOCAL ADMINISTRATOR.

Duties of the Local 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 and the Mississippi Emergency Management Agencies 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) Verify and record the actual elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved structures, 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 structures have been flood-proofed, in accordance with Article 4, Section B (2).
- (7) When flood-proofing is utilized for a particular structure, the Local

Administrator shall obtain certification from a registered professional engineer or architect, in accordance with Article 5, Section B (2).

- (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 Local 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 Local 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 administrator the provisions of Article 5.
- (10) All records pertaining to the provisions of this ordinance shall be maintained in the office of the Local Administrator and shall be open for public inspection.

SECTION D. VARIANCE PROCEDURES.

- (1) The Board of Supervisors as established by the Bolivar County Board shall hear and decide appeals and requests for variances from the requirements of this ordinance.
- (2) The Board of Supervisors shall hear and decide appeals when it is alleged there is an error in any requirement, decision, or determination made by the

Local Administrator in the enforcement or administration of this ordinance.

- (3) Any person aggrieved by the decision of the Board of Supervisors or any taxpayer may appeal such decision to the Circuit Court of Bolivar County, as provided in 11-51-75.
- (4) Variances may be issued for the reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places or the State Inventory of Historic Places without regard to the procedures set forth in the remainder of this section, except for Article 4, Section D. (8) (a) and (d), and provided the proposed reconstruction, rehabilitation, or restoration will not result in the structure losing its historical designation.
- (5) In passing upon such applications, the Board of Supervisors 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 of the facility to a waterfront location, in the case of functionally dependent facility;
 - (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.

(6) Upon consideration of the factors listed above, and purposes of this ordinance, the Board of Supervisors 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:

- (l) Variances 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 a historical building, a determination that

the variance is the minimum necessary so as not to destroy the historic character and design of the building;

(m) 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.

(n) 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 stating that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.

(o) The Local 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) 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. As specified in Mississippi Insurance Departments “Rules and Regulations for Proper Anchoring and Blocking of Movable Homes” titled minimum standards for blocking anchors and tie-downs: A. Minimum Blocking standards.

- (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 the conditions of flooding.
- (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, and;
- (9) 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.

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, or Article 4, Section C (9), the following provisions are required:

- (1) Residential Construction. New Construction or substantial improvement of any residential structure (including manufactured homes except those to be located in an existing manufactured home park or subdivision) shall have the lowest floor, including basement, elevated to or 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 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 structure (including manufactured homes except those to be located in an existing manufactured home park or subdivision) shall have the lowest floor, including basement, elevated to or above the level of the base flood elevation. Structures located in all A-zones may be flood-proofed in lieu of being elevated provided that all areas of the structure below the required 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 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 (2).

(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 elevation 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 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) Electrical, plumbing, and other utility connections are prohibited below the base flood elevations unless they are designed so as to prevent water from entering or accumulating within equipment

components (flood proofing).

- (c) Access to the enclosed area shall be the minimum necessary to allow for parking of vehicles (garbage 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
- (d) The interior portion of such enclosed area shall not be partitioned or finished into separate rooms.

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

Located within the areas of special flood hazard established in Article 3, Section B, where small streams exist but where no base flood data have been provided or where no floodways have been provided, the following provisions apply:

- (1) No encroachments, including fill material or structure shall be located within a distance of the stream bank equal to fifty feet each side from top of bank, unless certification 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) New construction or substantial improvements of structures shall be elevated or flood-proofed to elevations established in accordance with Article 4, Section C (9).

SECTION D. STANDARDS FOR SUBDIVISION PROPOSALS.

- (1) All subdivision proposals shall be consistent with the need to minimize flood damage;
- (2) All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage;
- (3) All subdivision proposals shall 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 (including manufactured home parks and subdivisions) which is greater than the lesser of fifty lots or five acres.

Adopted on _____.

By: _____

BOARD OF SUPERVISORS

Certified by: _____

Date: _____

BOLIVAR COUNTY
RULES AND REGULATIONS

FOR

PROPER ANCHORING AND BLOCKING OF MOVABLE HOMES

I. MINIMUM STANDARDS FOR BLOCKING, ANCHORS, AND TIE-DOWNS

A. Minimum Blocking Standards

1. Pier foundations shall be installed directly under the main frame (or chassis) of the manufactured home. The piers shall not be further apart than (10) feet on centers and the main frame, front or back, shall not extend further than five (5) feet beyond the center line of the end of the piers.

2. All grass and organic material shall be removed and the pier foundation placed on stable soil. The pier foundation shall be a 16" x 16" x 4" solid concrete pad, precast or poured in place or equivalent.
3. When concrete piers are used, they must be constructed of regular 8" x 8" x 16" concrete blocks, open cells, solid or equivalent (with open cells vertical), placed upon the foundation. A 2" x 8" x 16" pressure treated wood plate or equivalent shall be placed on top of pier with shims fitted and driven tight between the wood plate and the main frame. Shims shall not occupy more than one (1) inch of vertical space. Single tiered block piers shall be installed perpendicular to the main I-beam. Steel piers or other pier devices when approved by the Commissioner of Insurance may be used in lieu of concrete. (Combination of blocks and steel piers prohibited).
4. All piers over forty (40) inches in height shall be double tiered with blocks interlocked and capped with a 4" x 16" x 16" solid concrete blocks or equivalent, and cushioned with wood shims or pressure treated plate.

B. Minimum Anchoring Standards

1. Ground anchors shall be aligned close to the end of piers, but not in exact center that will interfere with frame ties. Also, they shall be situated immediately below the outer wall to accommodate over-the-top ties as well as frame ties.
2. Auger-type anchors shall be at least 4' in length, have a minimum diameter of six inches (6) (arrowheads 8") and be sunk their full depth. Steel rods shall be at least 5/8" diameter, have a forged or welded eye at top, or have a yoke-type fastening and tensioning device or a threaded connector and tensioning device. Anchors shall be capable of withstanding 4,750 pounds of pull (in a vertical or diagonal direction) without failure.
3. Anchors to reinforced concrete slabs must be of strength comparable to that presented above.
4. Other anchors which are capable of withstanding 4,750 pounds of pull without failure may be approved by the Mobile Home Division of the State Fire Marshal's Office as equivalent to above specifications.
5. All anchors previously approved by this office are void and must be reapproved by the Mobile Home Division of the State Fire Marshal's Office prior to their use in the State of Mississippi.

C. Tie-Downs

1. All manufacturing mobile homes shall have tie-downs with provisions for distributing the load of these tie-downs and provisions for attachment to the ground anchors so as to resist wind over-turning and sliding as imposed by the respective design loads of this part.
2. Each tie-down shall be designed to resist an allowable working load to or exceeding 3,150 pounds and shall be capable of withstanding a 50% overload without failure.
3. Unless the tie-down system is designed by a Registered Professional Engineer or Architect, tie-downs shall be placed as follows:

Not more than 24 feet on centers beginning from the front wall (first stud and/or first cross member). Not more than 6 feet open-end spacing shall be provided at the rear wall of the manufactured home unless additional tie-downs are installed.
4. Provisions for diagonal ties between ground anchors and the manufactured home shall be made in conjunction with each vertical tie-down.
5. Minimum specifications for tie-down materials shall be: 1 ¼ x .035 cold rolled, heat treated, hot dipped galvanized steel strapping. Said strapping shall be manufactured to conform to Federal Specification QQ-S-781F, Type 1, Class B, Grade 1. Breaking strength must be a minimum 4,750 pounds. Hot dipped, zinc coating shall be a minimum of 0.30 ounces per square foot of surface. Any materials (including cable) other than those specified above must be equal to or exceed said federal specification as regards strength and weather resistance.
6. The support and anchoring systems of all manufactured homes that bear the HUD label shall be designed by a Registered Professional Engineer or Architect and meet the requirements of Part 280.306 of the National Mobile Home Construction and Safety Standards. The manufacturer shall provide complete tie-down instructions with each manufactured home.

II. EFFECTIVE JULY 1, 1979

7. No dealer shall deliver or cause to be delivered any factory manufactured movable home to any person at any site where such home is used for human habitation without anchoring and blocking such home in accordance with these rules, regulations and procedures; provided, however, that a period of thirty (30) days from date of delivery shall be allowed for the anchoring and blocking of such homes.

**BOLIVAR COUNTY FLOOD DAMAGE
PREVENTION ORDINANCE, AS AMENDED**

The Bolivar County Flood Damage Prevention Ordinance hereto-fore adopted by the Board of Supervisors of Bolivar County, Mississippi, on June 19, 1989, is hereby amended by adding the following provision as subparagraph (4) of Article 5, Section B, to-wit:

- (4) Standards for Manufactured Homes and Recreational Vehicles.
- a) All manufactured homes placed, or substantially improved, or individual lots or parcels, in expansions to existing manufactured home parks or subdivision, must meet all the requirements for new construction, including elevation and anchoring.
 - b) All manufactured homes placed, or substantially improved, on individual lots or parcels, in expansions to existing manufactured home park or subdivision must be elevated so that:
 - (i) The lowest floor of the manufactured home is elevated at or above the level of the base flood elevation, or
 - (ii) The manufactured home chassis is supported by

reinforced piers or other foundation elements of at least an equivalent strength, of no less than 36 inches in height above grade.

- (iii) The manufactured home must be securely anchored to the adequately anchored foundation system to resist flotation, collapse and lateral movement.
 - (iv) In an existing manufactured home park or subdivision on which a manufactured home has incurred “substantial damage” as the result of a flood, any manufactured home placed or substantially improved must meet the standards of Article 5, Section B (4) (b) (i) and (iii) above.
- c) All recreational vehicles placed on sites must either:
- (v) Be fully licensed and ready for highway use, or
 - (vi) The recreational vehicle must meet all the requirements for new construction, including anchoring and elevation requirements of Article 5, Section B (4) (a) or (b), above.

The recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices and has no permanently attached structures.

All other terms, provisions, rules and regulations set forth in said Ordinance as originally adopted to remain in full force and effect.

ADOPTED on March 4, 1991.

BOARD OF SUPERVISORS OF BOLIVAR
COUNTY, MISSISSIPPI

CERTIFIED BY:

Jeanne R. Walker, Clerk
Board of Supervisors of
Bolivar County, Mississippi

Date: _____

Checklist of Possible Violations

Lowest floor below required base flood elevation
[Reference: 44 CFR, 60.3 (c) (2 & 3)].

Solid perimeter walls (A Zone) – No openings
[Reference: 44 CFR, 60.3 (c) (5)].

Machinery or equipment, i.e., hot water heater, furnace, air conditioning compressor, etc., located below the base flood elevation [Reference: 44CFR, 60.3 (a) (3) (iv)].

Uses below elevated floor, other than building access, parking or limited storage [Reference: 44 CFR, 60.3 (c) (2 & 3) and definition of “lowest floor,” Part 59.1].

Non-breakaway walls in Coastal High Hazard Area (V Zone).
[Reference: 44 CFR, 60.3 (e) (5)].

Substantially improved structure not elevated to base flood elevation. [Reference: 44 CFR, 60.3 (c) (2 & 3), and definition of “substantial improvement,” Part 59.1].

Required “certifications” not submitted for V Zone building foundation, breakaway walls, flood proofing, elevation, etc. [Reference: 44 CFR, 60.3 (e) (4), (e) (5) (i & ii), (c) (4), and (b) (5) (i, ii & iii)].