

AN ORDINANCE TO PREVENT OR MINIMIZE FLOOD DAMAGE IN
THE CITY OF GREENLAND, ARKANSAS, AND FOR OTHER PURPOSES

ARTICLE I

STATUTORY AUTHORIZATION, FINDINGS OF FACT, PURPOSE
AND METHODS

SECTION A. STATUTORY AUTHORIZATION

The Legislature of the State of Arkansas has in Ark.Stat. (1968 Replacement) 19-2801 to 19-2833 delegated the responsibility to local governmental units to adopt regulations designed to minimize flood losses. Therefore, the City Council of Greenland, Arkansas, does ordain as follows:

SECTION B. FINDINGS OF FACT

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

(2) These flood losses are created by the cumulative effect of obstructions in flood plains which cause an increase in flood heights and velocities, and by the occupancy of flood hazard areas by uses vulnerable to floods and hazardous to other lands because they are inadequately elevated, floodproofed, or otherwise protected from flood damage.

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) Protect human life and health;
- (2) Minimize expenditure of public money for costly flood control projects;
- (3) Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- (4) Minimize prolonged business interruptions;
- (5) Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in flood plains;
- (6) 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 future flood blight areas;
and,

(7) Insure the potential buyers are notified that property is in a flood area.

SECTION D. METHODS OF REDUCING FLOOD LOSSES

In order to accomplish its purposes, this ordinance used the following methods:

- (1) Restrict or prohibit uses that are dangerous to health, safety or property in times of flood, or cause excessive increases 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 flood plains, 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 flood damage;
- (5) Prevent or regulate the construction of flood barriers which will increase flood hazards to other lands.

ARTICLE II

DEFINITIONS

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

Appeal-- means a request for a review of the building official's interpretation of any provision of this ordinance or a request for a variance.

Area of Shallow Flooding--means a designated AO Zone on a community's Flood Insurance Rate Map (FIRM) with base flood depths from one to three feet. This condition occurs where a clearly defined channel does not exist, where the path of flooding is unpredictable and indeterminate, and where velocity flow may be evident.

Area of Special Flood Hazard--is the land in the flood plain 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.

Development-- means any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations.

Existing Mobile Home Park or Mobile Home Subdivision-- means a parcel (or contiguous parcels) of land divided into two or more mobile home lots for rent or sale for which the con-

struction of facilities for servicing the lot on which the mobile home is 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) is completed before the effective date of this ordinance.

Expansion to an Existing Mobile Home Park or Mobile Home Subdivision-- means the preparation of additional sites by the construction of facilities for servicing the lots on which the mobile homes are to be affixed (including the installation of utilities, either final site grading or pouring of concrete pads, or the construction of streets).

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.

Flood Hazard Boundary Map (FHBM)-- means an official map of a community, issued by the Federal Insurance Administration, where the areas within the boundaries of special flood hazards have been designated as Zone A.

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

Flood Insurance Study-- is the official report provided by the Federal Insurance Administration. The report contains flood profiles, the water surface elevation of the base flood, as well as the Flood Hazard Boundary-Floodway Map.

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.

Habitable Floor-- means any floor usable for living purposes, which includes working, sleeping, eating, cooking or recreation, or a combination thereof. A floor used for storage purposes only is not a "habitable floor."

Mean Sea Level-- means the average height of the sea for all stages of the tide.

Mobile 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. It does not include recreational vehicles or travel trailers.

New Mobile Home Park or Mobile Home Subdivision-- means a parcel (or contiguous parcels) of land divided into two or more mobile home lots for rent or sale for which the construction of facilities for servicing the lot on which the mobile home is 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) is completed on or after the effective date of this ordinance.

Start of Construction-- means the first placement of permanent construction of a structure (other than a mobile home) on a

site, such as the pouring of slabs or footings or any work beyond the stage of excavation. 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 as part of the main structure. For a structure (other than a mobile home) without a basement or poured footings, the "start of construction" includes the first permanent framing or assembly of the structure or any part thereof on its piling or foundation. For mobile homes not within a mobile home park or mobile home subdivision, "start of construction" means the affixing of the mobile home to its permanent site. For mobile homes within mobile home parks or mobile home subdivisions, "start of construction" is the date on which the construction of facilities for servicing the site on which the mobile home is to be affixed (including, at a minimum, the construction of streets, either final site grading or the pouring of concrete pads, and installation of utilities) is completed.

Structure-- means a walled and roofed building that is principally above ground, as well as a mobile home.

Substantial Improvement-- means any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure either, (1) before the improvement or repair is started, or (2) if the structure has been damaged and is being restored, before the damage occurred. For the purposes of this definition "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure. The term does not, however, include either (1) any project for improvement of a structure to comply with existing state or local health, sanitary, or safety code specifications which are solely necessary to assure safe living conditions, or (2) any alteration of a structure listed on the National Register of Historic Places or a State Inventory of Historic Places.

Variance-- is a grant of relief to a person from the requirements of this ordinance when specific enforcement would result in unnecessary hardship. A variance, therefore, permits construction or development in a manner otherwise prohibited by this ordinance.

ARTICLE III

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 Greenland, Arkansas.

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

The areas of special flood hazard identified by the Federal Insurance Administration on its Flood Hazard Boundary Map (FHBM),

Community NO. 050217A, dated June 20, 1974, and any revisions thereto are hereby adopted by reference and declared to be a part of this ordinance.

SECTION C. ESTABLISHMENT OF DEVELOPMENT PERMIT

A Development Permit shall be required to ensure conformance with the provisions of this ordinance.

SECTION D. COMPLIANCE

No structure or land shall hereafter be located, altered, or have its use changed 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 considerations. On rare occasions greater floods can and will occur and flood heights may be increased by man-made or natural causes. This ordinance does not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This ordinance shall not create liability on the part of the building official or any officer or employee thereof for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made thereunder.

ARTICLE IV

ADMINISTRATION

SECTION A. DESIGNATION OF BUILDING OFFICIAL

The building official is hereby appointed to administer and implement the provisions of this ordinance.

SECTION B. DUTIES AND RESPONSIBILITIES OF THE BUILDING OFFICIAL

Duties and responsibilities of the building official shall include, but not be limited to, the following:

(1) Maintain and hold open for public inspection all records pertaining to the provisions of this ordinance;

(2) Review, approve or deny all applications for development permits required by Article III, Section C of this ordinance;

(3) Review permits for proposed development to assure that all necessary permits have been obtained from those Federal, State or local governmental agencies from which prior approval is required;

(4) Where interpretation is needed as to the exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions) the building official shall make the necessary interpretation.

(5) Notify adjacent communities and the Division of Soil and Water Resources prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration;

(6) Assure that maintenance is provided within the altered or relocated portion of said watercourse so that the flood carrying capacity is not diminished.

(7) When base flood elevation data has not been provided in accordance with Article III, Section B, the building official shall obtain, review, and reasonably utilize any base flood elevation data available from a Federal, State, or other source, in order to administer the provision of Article V.

SECTION C. PERMIT PROCEDURES

(1) Application for a Development Permit shall be presented to the building official on forms furnished by him and may include, but not be limited to, plans in duplicate drawn to scale showing the location, dimensions, and elevation of proposed landscape alterations, existing and proposed structures, and the location of the foregoing in relation to areas of special flood hazard. Additionally, the following information is required:

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

b. Elevation in relation to mean sea level to which any non-residential structure shall be floodproofed;

c. A certificate from a registered professional engineer or architect that the non-residential floodproofed structure shall meet the floodproofing criteria of Article V, Section B(2);

d. Description of the extent to which any water-course or natural drainage will be altered or relocated as a result of proposed development.

(2) Approval or denial of a Development Permit by the building official shall be based on all of the provisions of this ordinance and the following relevant factors:

a. The danger to life and property due to flooding or erosion damage;

b. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;

c. The danger that materials may be swept onto other lands to the injury of others;

d. The compatibility of the proposed use with existing and anticipated development;

e. The safety of access to the property in times of flood for ordinary and emergency vehicles;

f. The costs of providing governmental services during and after flood conditions including maintenance and repair of streets and bridges, and public utilities and facilities such as sewer, gas, electrical, and water systems.

g. 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;

h. The necessity to the facility of a waterfront location, where applicable;

i. The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use;

j. The relationship of the proposed use to the comprehensive plan for that area.

SECTION D. VARIANCE PROCEDURES

(1) The City Council shall hear and render judgment on request for variances from the requirements of this ordinance.

(2) The City Council shall hear and render judgment on an appeal only when it is alleged there is an error in any requirement, decision, or determination made by the building official in the enforcement or administration of this ordinance.

(3) Any person or persons aggrieved by the decision of the City Council may appeal such decision in the courts of competent jurisdiction.

(4) The building official shall maintain a record of all actions involving an appeal and shall report variances to the Federal Insurance Administration upon request.

(5) 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.

(6) Generally, variances may be issued for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing the relevant factors in Section C(2) of this Article have been fully considered. As the lot size increases beyond the one-half acre, the technical justification required for issuing the variance increases.

(7) Upon consideration of the factors involved above and the intent of this ordinance, the City Council may attach such conditions to the granting of variances as as it deems necessary to further the purpose and objectives of this ordinance.

(8) Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.

Prerequisites for granting variances:

a. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.

b. 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 to the applicant, and (iii) and a determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.

c. Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with the lowest floor elevation no more than two feet below the base flood elevation, and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.

ARTICLE V

PROVISIONS FOR FLOOD HAZARD REDUCTION

SECTION A. GENERAL STANDARDS

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

(1) All new construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure;

(2) All new construction or substantial improvements shall be constructed by methods and practices that minimize flood damage;

(3) All new construction or substantial improvements shall be constructed with materials and utility equipment resistant to flood damage;

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

(5) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the system and discharges from the systems into flood waters; and,

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

SECTION B. SPECIFIC STANDARDS

In all areas of special flood hazards where base flood elevation data has been provided as set forth in (i) Article III, Section B, (ii) Article IV, Section B,(7), or (iii) Article V, Section C(3) the following provisions are required:

- (1) Residential Construction - New Construction or substantial improvement of any residential structure shall have the lowest floor, including basement, elevated two feet above the base flood elevation. A registered professional engineer, architect, or land surveyor shall submit a certification to the building official that the standard of this subsection, as proposed in Article IV, Section C(1)(a), is satisfied.
- (2) Non-residential Construction - New Construction or substantial improvement of any commercial, industrial or other non-residential structure shall either have the lowest floor, including basement, elevated two feet above the base flood elevation or, together with attendant utility and sanitary facilities, be floodproofed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. A registered professional engineer or architect shall submit a certification to the building official that the standards of this subsection as proposed in Article IV, Section C(1)(c), are satisfied.
- (3) Mobile Homes
 - a. No mobile home shall be placed in a floodway, or if applicable, a coastal high hazard area, except in an existing mobile home park or existing mobile home subdivision.
 - b. All mobile homes shall be anchored to resist flotation, collapse, or lateral movement. Specific requirements shall be:
 - (i) over-the-top ties at each of the four corners of the mobile home, with two additional ties per side at intermediate locations and mobile homes less than 50 feet long requiring one additional tie per side;
 - (ii) frame ties at each corner of the home with five additional ties per side at intermediate points and mobile homes less than 50 feet long requiring four additional ties per side;
 - (iii) all components of the anchoring system be capable of carrying a force of 4,800 pounds;
 - (iv) any additions to the mobile home be similarly anchored.

SECTION C. STANDARDS FOR SUBDIVISION PROPOSALS

(1) All subdivision proposals shall be consistent with Article 1, Sections B, C, and D of this ordinance.

(2) All proposals for the development of subdivisions shall meet Development Permit requirements of Article III, Section C, Article IV, Section C, and the provisions of Article V of this ordinance.

(3) Base flood elevation data shall be generated for subdivision proposals and other proposed development which is greater than the lesser of 50 lots or 5 acres, if not otherwise provided pursuant to Article III, Section B or Article IV, Section B (7) of this ordinance.

(4) All subdivision proposals shall have adequate drainage provided to reduce exposure to flood hazards

(5) All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage.

PASSED this 7th day of February, 1978.

Bruce C. Corder
MAYOR

ATTEST

Ron Tomlinson
RECORDER