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COMMUNITY DEVELOPMENT

MEMORANDUM

Planning,
Zoning,
Building Safety,
Construction Inspection Services,
Public Health,
Housing Inspections,
Code Enforcement

To: Planning and Zoning Commission

From: Andrew Fangman, City Planner

Date: November 8, 2016

Re: Ordinance Amending Chapter Four of Title Ten of the City Code,
Floodplain Management Regulations

BACKGROUND:

In order to allow for City of Muscatine residents and businesses to continue participating in the National Flood Insurance Program, the City's floodplain management must be compliant with standards contained within Title 44 Code of Federal Regulations 60.3. The City of Muscatine's current floodplain management regulations can be found in Chapters 4 and 5 of Title 10 of the City Code of Muscatine. The Iowa Department of Natural Resources has reviewed the City's floodplain regulations, and is requiring the following changes to be made in order for the City to be compliant with City's floodplain management must be compliant with standards contained within Title 44 Code of Federal Regulations 60.3. Amended language is highlighted in yellow.

1. Amend 10-4-5 (C) 1 (g):
 - g. All new and substantially improved residential and nonresidential structures with fully enclosed areas below the "lowest floor" (not including basements) that are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of flood waters. Designs for meeting this requirement must either be certified by a registered professional engineer or meet or exceed the following minimum criteria:
 1. 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 shall be provided.
 2. The bottom of all openings shall be no higher than one foot above grade.
 3. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.
 4. Such areas shall be used solely for parking of vehicles, building access, low damage potential storage.

2. Amend 10-4-5 (C) 1 (h):

h. All new construction or substantial improvements of nonresidential structures located in the Flood Plain District shall have the lowest floor (including basement) elevated one (1) foot above the level of the one hundred (100) year flood or together with all attendant utility and sanitary systems be floodproofed. When floodproofing is utilized, a professional engineer registered in the State of Iowa shall certify that:

3. Amend 10-4-5 (C) 1 (u):

u. Detached garages, sheds, and similar structures that are incidental to a residential use are exempt from the base flood elevation requirements where the following criteria are satisfied.

1. The structure shall be designed to have low flood damage potential. Its size shall not exceed 600 sq. ft. in size. Those portions of the structure located less than 1 foot above the BFE must be constructed of flood-resistant materials.
2. The structure shall be used solely for low flood damage potential purposes such as vehicle parking and limited storage. The structure shall not be used for human habitation.
3. The structure shall be constructed and placed on the building site so as to offer minimum resistance to the flow of floodwaters.
4. The structure shall be firmly anchored to resist flotation, collapse and lateral movement.
5. The structure's service facilities such as electrical and heating equipment shall be elevated or floodproofed to at least one foot above the base flood elevation.
6. The structure's walls shall include openings that satisfy the provisions of Chapter 10-4-5 (C) 1g of this Ordinance.

2. Exemption from the 100-year flood elevation requirements for such a structure may result in increased premium rates for flood insurance coverage of the structure and its contents.

4. Amend 10-4-5 (C) 2:

2. All subdivision proposals and all other proposed new developments located in the Flood Plain District shall be reviewed by the appropriate agency to assure that:

- a. All such proposals are consistent with the need to minimize flood damage.
- b. All public utilities and facilities, such as sewer, gas, electrical, and water systems, are located and constructed to minimize or eliminate flood damage.
- c. Adequate drainage is provided to reduce exposure to flood hazards.
- d. All such proposals greater than fifty (50) lots or five (5) acres, whichever is lesser, include, within such proposals, base flood elevation data.

e. Subdivision proposals intended for residential use shall provide all lots with a means of access which will be passable by wheeled vehicles during the 100-year flood.

5. Amend 10-4-8:

Duties and responsibilities of the City Administrator or his/her designee, specifically relating to this Chapter, shall include, but not necessarily be limited to the following:

A. Review conditional use permit applications to assure that all necessary permits have been obtained from federal, state and local governmental agencies including approval when required from the Department of Natural Resources for floodplain construction.

B. Record and maintain a record of (i) the elevation (in relation to North American Vertical Datum 1988) of the lowest floor (including basement) of all new or substantially improved structures or (ii) the elevation to which new or substantially improved structures have been floodproofed.

C. Notify adjacent communities/counties and the Department of Natural Resources prior to any proposed alteration or relocation of a watercourse and submit evidence of such notifications to the Federal Emergency Management Agency.

D. Submit to the Federal Insurance Administrator an annual report concerning the City of Muscatine's participation, utilizing the annual report form supplied by the Federal Insurance Administrator.

E. Notify the Federal Insurance Administration of any annexations or modifications to the City of Muscatine corporate limit.

F. A conditional use permit issued by the Administrator shall be secured prior to any floodplain development (any man-made change to improved and unimproved real estate, including but not limited to buildings or other structures, mining, filling, grading, paving, excavation or drilling operations), including the placement of factory-built homes.

Add

10-4-9 Variance

The Board of Adjustment may authorize upon request in specific cases such variances from the terms of this Ordinance that will not be contrary to the public interest where, owing to special conditions, a literal enforcement of the provisions of this Ordinance will result in unnecessary hardship. Variances granted must meet the following applicable standards.

A. Variances shall only be granted 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) a determination that the granting of the 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 codes or ordinances.

B. Variances shall not be issued within any designated floodway if any increase in flood levels during the 100-year flood would result. Consideration of the effects of any development on flood levels shall be based upon the assumption that an equal degree of development would be allowed for similarly situated lands.

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

D. In cases where the variance involves a lower level of flood protection for buildings than what is ordinarily required by this Ordinance, the applicant shall be notified in writing over the signature of the Administrator that: (i) the issuance of a variance will result in increased premium rates for flood insurance up to amounts as high as \$25 for \$100 of insurance coverage and (ii) such construction increases risks to life and property.

E. All variances granted shall have the concurrence or approval of the Department of Natural Resources.

RECOMMENDATION/RATIONALE: It is recommended that the proposed ordinance revising the City of Muscatine Floodplain Management Regulations, as required by the Iowa Department of Natural Resources be recommended for approval. Adoption of this ordinance will for City of Muscatine residents and businesses to continue participating in the National Flood Insurance Program

BACKUP INFORMATION:

1. Ordinance amending Chapter Four of Title Ten of the City Code, floodplain management.