

City of Brisbane

Agenda Report

TO: Honorable Mayor and City Council

FROM: Randy Breault, Director of Public Works/City Engineer via City Manager

SUBJECT: Amendment to BMC Chapter 15.56 (Floodplain Management)

DATE: February 5, 2015

City Council Goals:

To promote intergovernmental opportunities that enhances services and/or reduces cost of operations and services to city residents. (#10)

Purpose:

To revise the City's floodplain management regulations found in the Brisbane Municipal Code (BMC) to meet current minimum National Flood Insurance Program (NFIP) standards.

Recommendation:

Introduce Ordinance No. 592, waiving first reading, amending Chapter 15.56 of the Brisbane Municipal Code concerning "Floodplain Management."

Background:

The city undergoes regular reviews of our municipal code chapter on floodplain management to retain eligibility for those parcels in Brisbane within a flood zone to participate in the NFIP. These reviews can be completed either in person as a Community Assistance Visit, or telephonically as a Community Assistance Call (CAC). The last time we were asked to make major changes is in 2007, when we were asked to revise our code to reflect the pending roll-out of a Digital Flood Insurance Rate Maps (DFIRM) map modernization upgrade.

During our 2014 CAC, the FEMA Region 9 NFIP Planner requested a number of upgrades to our BMC to bring the code in compliance with the "Model Floodplain Management Ordinance for Noncoastal Communities."

With the exception of three minor areas noted as needing revision by city staff, all of the remaining proposed changes are exactly as requested by FEMA staff, and have been approved by FEMA as written and presented to the Council.

Discussion:

Should the City not adopt these changes, the Code of Federal Regulations requires FEMA to automatically suspend NFIP participation for communities with ordinances that are not compliant.

Fiscal Impact:

None as a result of changes proposed herein.

Measure of Success

A Floodplain Management ordinance that has FEMA's approval for conformance with NFIP standards, and which allows city businesses in flood zones to continue their participation in the NFIP.

Attachments:

"Redline" version of Ordinance No. 592

"Clean" version of Ordinance No. 592



Director of Public Works/City Engineer



City Manager

A copy of supporting materials provided to the City Manager and Council Persons in connection with this agenda item is available for public inspection and copying at 50 Park Place, City of Brisbane Department of Public Works, Brisbane, CA, 94005. Telephone: (415) 508-2130.

ORDINANCE NO. 592

**AN ORDINANCE OF THE CITY OF BRISBANE
AMENDING CHAPTER 15.56 OF THE MUNICIPAL CODE
PERTAINING TO FLOODPLAIN MANAGEMENT**

The City Council of the City of Brisbane hereby ordains as follows:

SECTION 1: Chapter 15.56 of the Municipal Code is amended to read as follows:

• **15.56.010 - Statutory authorization.**

The Legislature of the state of California has in Government Code Sections 65302, 65560 and 65800 conferred upon local government units authority to adopt regulations designed to promote the public health, safety and general welfare of its citizenry.

(Ord. 340 § 2(part), 1988).

• **15.56.020 - Findings of fact.**

A. Certain areas of the city are subject to periodic inundation which could result 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.

B. Flood losses may be caused by the cumulative effect of obstructions in areas of special flood hazards which increase flood heights and velocities. Uses that are inadequately floodproofed, elevated or otherwise protected from flood damage also may contribute to flood loss.

(Ord. 340 § 2(part), 1988).

• **15.56.030 - Statement of purpose.**

It is the purpose of this chapter 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:

- A. To protect human life and health;
- B. To minimize expenditure of public money for costly flood control projects;
- C. To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- D. To minimize damage to the public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in areas of special flood hazard;

- E. To insure that potential buyers are notified that property is in an area of special flood hazard; and
- F. To insure that those who occupy the areas of special flood hazard assume responsibility for their actions.

(Ord. 340 § 2(part), 1988).

- **15.56.040 - Methods of reducing flood loss.**

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

- A. 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 flood heights or velocities;
- B. Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected from flood damage at the time of initial construction;
- C. Controlling the alteration of natural floodplains, stream channels and natural protective barriers, which help accommodate or channel floodwaters;
- D. Controlling filling, grading, dredging, and other development which may increase flood damage; and
- E. Preventing or regulating the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards in other areas.

(Ord. 340 § 2 (part), 1988).

- **15.56.050 - Definitions.**

Unless otherwise defined below, words or phrases used in this chapter shall be interpreted so as to give them the meaning they have in common usage and to give this chapter its most reasonable application:

- A. "Appeal" means a request for a review of the floodplain administrator's interpretation of any provision of this chapter or a request for a variance.
- B. "Area of special flood hazard" See "special flood hazard area."
- C. "Base flood" means the flood having a one percent (1%) chance of being equalled or exceeded in any given year. Also called the "one-hundred (100) year flood."

D. "Base flood elevation" (BFE) means the elevation shown on the Flood Insurance Rate Map for Zones AE, AH, A1-30, VE and V1-V30 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.

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

FE. "Breakaway walls" are any type of walls, whether solid or lattice, and whether constructed of concrete, masonry, wood, metal, plastic or any other suitable building material which is not part of the structural support of the building and which is designed to break away under abnormally high tides or wave action without causing any damage to the structural integrity of the building on which they are used for any buildings to which they might be carried by floodwaters. A breakaway wall shall have a safe design loading resistance of not less than ten (10) and no more than twenty (20) pounds per square foot. Use of breakaway walls must be certified by a registered engineer or architect and shall meet the following conditions:

1. Breakaway wall collapse shall result from a water load less than would occur during the base flood; and
2. The elevated portion of the building shall not incur any structural damage due to the effects of wind and water loads acting simultaneously in the event of the base flood.

GF. "Development" means any manmade 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.

HG. "Flood" or "flooding" means a general and temporary condition of partial or complete inundation of normally dry land areas from: (1) the overflow of floodwaters; (2) the unusual and rapid accumulation or runoff of surface waters from any source; and/or (3) the collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as a flash flood or abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding as defined in this definition.

IH. "Flood Boundary and Floodway Map" (**FBFM**) means the official map on which the Federal Emergency Management Agency or Federal Insurance Administration has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.

J. "Flood Hazard Boundary Map" (FHBM) means the official map of a community issued by the Federal Emergency Management Agency, where the boundaries of the flood, mudflow and related erosion areas having special hazards have been designated.

KI. "Flood Insurance Rate Map" (**FIRM**) means the official map on which the Federal Emergency Management Agency or Federal Insurance Administration has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.

LJ. "Flood insurance study" (**FIS**) means the official report provided by the Federal Insurance Administration that includes flood profiles, the FIRM, the Flood Boundary and Floodway Map, and the water surface elevation of the base flood.

MK. "Floodplain" or "flood-prone area" means any land area susceptible to being inundated by water from any source. (See definition of "flooding.")

NL. "Floodplain management" means the operation of an overall program of corrective and preventive measures for reducing flood damage, including but not limited to emergency preparedness plans, flood control works and floodplain management regulations.

- QM.** "Floodplain management regulations" means the zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances such as floodplain ordinances, grading ordinances and erosion control ordinances, and other applications of police power. The term describes such state and local regulations in any combination thereof, which provide standards for the purpose of flood damage prevention and reduction.
- PN.** "Floodproofing" means any combination of structural and nonstructural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.
- QQ.** "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. Also referred to as "regulatory floodway."
- RP.** "Functionally dependent use" means a use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and shipbuilding and ship repair facilities, but does not include long-term storage or related manufacturing facilities.
- SQ.** "Highest adjacent grade" means the highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.
- TR.** "Lowest floodfloor" means the lowest floor of the lowest enclosed area, including basement. An unfinished or flood-resistant enclosure, usable solely for parking of vehicles, 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 nonelevation design requirements of this chapter.
- US.** "Manufactured home" means a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. For floodplain management purposes the term "manufactured home" also includes park trailers, travel trailers and other similar vehicles placed on a site for greater than one hundred eighty (180) consecutive days.
- VF.** "Manufactured home park or subdivision" means a parcel or contiguous parcels of land divided into two or more manufactured home lots for sale or rent.
- WU.** "Mean sea level" means, for purposes of the National Flood Insurance Program, the National Geodetic Vertical Datum (NGVD) of 1929 or other datum, to which base flood elevations shown on a community's Flood Insurance Rate Map are referenced.
- XV.** "New construction" means, for floodplain management purposes, structures for which the "start of construction" commenced on or after the effective date of a floodplain management regulation adopted by this community.
- YW.** "One-hundred-year-flood" or "100-year flood" means a flood which has a one percent (1%) annual probability of being equalled or exceeded. It is identical to the "base flood," which will be the term used throughout the chapter.
- ZX.** "Person" means an individual or his agent, firm, partnership, association, or this state or its agencies or political subdivisions.

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

BBZ. "Special flood hazard area (SFHA)" means an area having special flood or flood-related erosion hazards, and shown on an FHBM or FIRM as Zone A, A1-30, AE, A99.

CCAA. "Start of construction" includes substantial improvement, and means the date the building permit was issued; provided, the actual start of construction, repair, reconstruction, placement, or other improvement was within one hundred eighty (180) days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the state 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 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.

DDBB. "Structure" means a walled and roofed building, including a gas or liquid storage tank that is principally aboveground as well as a manufactured home.

EEGG. 1. "Substantial improvement" means any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds fifty percent (50%) of the market value of the structure either:

- a. Before improvement or repair is started; or
 - b. If the structure has been damaged, and is being restored, before the damage occurred.
2. For the purpose 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:
- a. 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
 - b. Any alteration of a structure listed on the National Register of Historic Places or a State Inventory of Historic Places.

FFDD. "Variance" means a grant of relief from the requirements of this chapter which permits construction in a manner that would otherwise be prohibited by this chapter.

GGEE. "Violation" means the failure of a structure or other development to be fully compliant with the community's floodplain management regulations. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required

in this chapter is presumed to be in violation until such time as that documentation is provided.

(Ord. 340 § 2(part), 1988).

- **15.56.060 - General provisions.**

The following Sections ~~15.56.061~~ 15.56.061 through ~~15.56.067~~ 15.56.067 set out general provisions for floodplain management.

(Ord. 340 § 2(part), 1988).

- **15.56.061 - Lands to which this chapter applies.**

This chapter shall apply to all areas of special flood hazard within the jurisdiction of the city.

(Ord. 340 § 2(part), 1988).

- **15.56.062 - Basis for establishing the areas of special flood hazard.**

The areas of special flood hazard are those areas so identified by the Federal Emergency Management Agency (FEMA) in the "Flood Insurance Study (FIS) for San Mateo County (Unincorporated Areas)" dated August 5, 1986, with accompanying Flood Boundary and Floodway Maps (FBFM's) and Flood Insurance Rate Maps (FIRM's) for city of Brisbane, effective date March 29, 1983 and San Mateo County (unincorporated areas), effective date July 5, 1984, and all subsequent amendments and/or revisions, are hereby adopted by reference and declared to be a part of this chapter. The FIS and attendant mapping is the minimum area of applicability of this chapter and may be supplemented by studies for other areas which allow implementation of this chapter and which are recommended to the city council by the floodplain administrator. The study, FIRM's and FBFM's are on file in the city of Brisbane public works department at 50 Park Place, Brisbane, California.

(Ord. 523 § 1, 2007; Ord. 340 § 2(part), 1988).

- **15.56.063 - Compliance.**

No structure or land shall hereafter be constructed, located, extended, covered, or altered without full compliance with the terms of this chapter and other applicable regulations. Violations of the provisions of this chapter by failure to comply with any of its requirements, including violations of conditions and safeguards established in connection with conditions, shall constitute a misdemeanor. Nothing herein shall prevent the city council from taking such lawful action as is necessary to prevent or remedy any violation.

(Ord. 340 § 2(part), 1988).

- **15.56.064 - Abrogation and greater restrictions.**

This chapter is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this chapter and another ordinance, easement, covenant, or deed restriction conflict or overlap, whichever imposes the more stringent restriction shall prevail.

(Ord. 340 § 2(part), 1988).

- **15.56.065 - Interpretation.**

In the interpretation and application of this chapter, all provisions shall be:

- A. Considered as minimum requirement;
- B. Liberally construed in favor of the governing body; and
- C. Deemed neither to limit nor repeal any other powers granted under state statutes.

(Ord. 340 § 2(part), 1988).

- **15.56.066 - Warning and disclaimer of liability.**

The degree of flood protection required by this chapter is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by manmade or natural causes. This chapter 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 damage. This chapter shall not create liability on the part of the city of Brisbane, any officer or employee thereof, or the Federal Insurance Administration, for any flood damages that result from reliance on this chapter or any administrative decision lawfully made thereunder.

(Ord. 340 § 2(part), 1988).

- **15.56.067 - Severability.**

This chapter and the various parts thereof are declared to be severable. Should any section of this chapter be declared by the courts to be unconstitutional or invalid, such decision shall not affect the validity of the chapter as a whole, or any portion thereof other than the section so declared to be unconstitutional or invalid.

(Ord. 340 § 2(part), 1988).

- **15.56.070 - Administration.**

The following Sections ~~15.56.071~~ 15.56.071 through ~~15.56.073~~ 15.56.073 set out administrative procedures for floodplain management.

(Ord. 340 § 2(part), 1988).

- **15.56.071 - Establishment of development permit.**

A development permit shall be obtained before construction or development begins within any area of special flood hazards established in ~~Section 15.56.062~~ Section 15.56.062. Application for a development permit shall be made on forms furnished by the floodplain administrator and may include, but not be limited to: plans in duplicate drawn to scale showing the nature, location, dimensions, and elevation 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:

- A. Proposed elevation in relation to mean sea level, of the lowest floodfloor, including basement, of all structures;
- B Proposed elevation in relation to mean sea level to which any structure will be floodproofed;
- C All appropriate certifications listed in Section 15.56.073D of this chapter; and
- D. Description of the extent to which any watercourse will be altered or relocated as a result of proposed development.

(Ord. 340 § 2(part), 1988).

- **15.56.072 - Designation of the floodplain administrator.**

The building official, as defined in this code, is appointed to administer and implement this chapter by granting or denying development permits in accordance with its provisions.

(Ord. 340 § 2(part), 1988).

- **15.56.073 - Duties and responsibilities of the floodplain administrator.**

The duties and responsibilities of the floodplain administrator shall include, but not be limited to:

- A. Permit Review. Review all development permits to determine that:
 1. The permit requirements of this chapter have been satisfied;
 2. All other required state and federal permits have been obtained;
 3. The site is reasonably safe from flooding; and
 4. The proposed development does not adversely affect the carrying capacity of areas where base flood elevations have been determined but a floodway has not been designated. For purposes of this chapter, "adversely affects" means that the cumulative

effect of the proposed development when combined with all other existing and anticipated development will not increase the water surface elevation of the base flood more than one (1) foot at any point.

5. All Letters of Map Revision (LOMR's) for flood control projects are approved prior to the issuance of building permits. Building Permits must not be issued based on Conditional Letters of Map Revision (CLOMR's). Approved CLOMR's allow construction of the proposed flood control project and land preparation as specified in the "start of construction" definition.

B. Development of Substantial Improvement and Substantial Damage Procedures.

1. Using FEMA publication FEMA 213, "Answers to Questions About Substantially Damaged Buildings," develop detailed procedures for identifying and administering requirements for substantial improvement and substantial damage, to include defining "Market Value."
2. Assure procedures are coordinated with other departments/divisions and implemented by community staff.

BC. Use of Other Flood Data. When base flood elevation data has not been provided in accordance with ~~§ 15.56.062~~ § 15.56.062, 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 ~~Section 15.56.080~~ Section 15.56.080. Any such information shall be submitted to the city for adoption.

CD. Whenever a watercourse is to be altered or relocated it is the responsibility of the floodplain administrator to:

1. 4. Notify adjacent communities and the California Department of Water Resources prior to such alteration or relocation of watercourse, and submit evidence of such notification to the Federal Insurance Administration;
2. Submit evidence of such notification to the Federal Emergency Management Agency; and
23. Require that the flood-carrying capacity of the altered or relocated portion of said watercourse is maintained.

E. Base Flood Elevation changes due to physical alterations:

1. Within 6 months of information becoming available or project completion, whichever comes first, the floodplain administrator shall submit or assure that the permit applicant submits technical or scientific data to FEMA for a Letter of Map Revision (LOMR).
2. All LOMR's for flood control projects are approved prior to the issuance of building permits. Building Permits must not be issued based on Conditional Letters of Map Revision (CLOMR's). Approved CLOMR's allow construction of the proposed flood control project and land preparation as specified in the "start of construction" definition.

Such submissions are necessary so that upon confirmation of those physical changes affecting flooding conditions, risk premium rates and floodplain management requirements are based on current data.

F. Changes in corporate boundaries:

The floodplain administrator shall notify FEMA in writing whenever the corporate boundaries have been modified by annexation or other means and include a copy of a map of the community clearly delineating the new corporate limits.

DG. It is the responsibility of the floodplain administrator to obtain and maintain for public inspection and make available as needed:

1. The certification required in ~~Section 15.56.081~~ Section 15.56.081 (C)(1), floor elevations,
2. The certification required in ~~Section 15.56.081~~ Section 15.56.081 (C)(2)(c), elevation or floodproofing of nonresidential structures,
3. The certification required in ~~Section 15.56.081~~ Section 15.56.081 (C)(3)(a) or ~~15.56.081~~ 15.56.081 (C)(3)(b), wet floodproofing standard,
4. The certified elevation required in ~~Section 15.56.081~~ Section 15.56.081 (E)(2), subdivision standards,
5. The certification required in ~~Section 15.56.081~~ Section 15.56.081 ~~(6G)~~ (2) floodway encroachment.

EH. It is the responsibility of the floodplain administrator to make interpretations where 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 person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in ~~Section 15.56.090~~ Section 15.56.090

FI. It is the responsibility of the floodplain administrator to take action to remedy violations of this chapter as specified in ~~Section 15.56.063~~ Section 15.56.063 herein.

(Ord. 340 § 2(part), 1988).

• **15.56.080 - Provisions for flood hazard reduction.**

The following ~~Section 15.56.081~~ Section 15.56.081 sets out provisions for flood hazard reduction.

(Ord. 340 § 2(part), 1988).

• **15.56.081 - Standards for construction.**

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

A. Anchoring.

1. All new construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.
2. All manufactured homes shall meet the anchoring standards of subsection F of this section.

B. Construction of Materials and Methods.

1. All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
2. All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.
3. All new construction and substantial improvements shall be constructed with electrical, heating, ventilation, plumbing and air conditioning equipment and other facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

C. Elevation and Floodproofing.

1. New construction and substantial improvement of any structure shall have the lowest floor, including basement, elevated to or above the base flood elevation. Nonresidential structures may meet the standards in ~~subsection~~ Subsection C.2 "nonresidential construction" of this section. Upon the completion of the structure, the elevation of the lowest floor, including basement, shall be certified by a registered professional engineer or surveyor, or verified by the community building inspector to be properly elevated. Such certification or verification shall be provided to the floodplain administrator.

2. Nonresidential construction shall either be elevated in conformance with ~~subsection~~ Subsection C.1 "residential construction" of this section together with attendant utility and sanitary facilities, or:

- a. Be floodproofed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water;
- b. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and
- c. Be certified by a registered professional engineer or architect that the standards of this subsection are satisfied. Such certification shall be provided to the floodplain administrator.

3. Flood Openings

All new construction and substantial improvements of structures with fully enclosed areas below the lowest floor (excluding basements) that are usable solely for parking of vehicles, building access or storage, and which are subject to flooding, shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwater. Designs for meeting this requirement must meet the following minimum criteria:

- a. For non-engineered openings:

- i. Have a minimum of two openings on different sides 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;
- iii. Openings may be equipped with screens, louvers, valves or other coverings or devices provided that they permit the automatic entry and exit of floodwater; and
- iv. Buildings with more than one enclosed area must have openings on exterior walls for each area to allow flood water to directly enter; or

b. Be certified by a registered civil engineer or architect.

4. Garages and low cost accessory structures.

a. Attached garages.

- i. A garage attached to a residential structure, constructed with the garage floor slab below the BFE, must be designed to allow for the automatic entry of flood waters per Subsection C.3 "Flood Openings". Areas of the garage below the BFE must be constructed with flood resistant materials per Subsection B "Construction Materials and Methods".
- ii. A garage attached to a nonresidential structure must meet the above requirements or be dry floodproofed. For guidance on below grade parking areas, see FEMA Technical Bulletin TB-6.

b. Detached garages and accessory structures.

- i. "Accessory structures" used solely for parking (2 car detached garages or smaller) or limited storage (small, low-cost sheds), as defined in Subsection C.2 "nonresidential construction", may be constructed such that its floor is below the base flood elevation (BFE), provided the structure is designed and constructed in accordance with the following requirements:
 - a) Use of the accessory structure must be limited to parking or limited storage;
 - b) The portions of the accessory structure located below the BFE must be built using flood-resistant materials;
 - c) The accessory structure must be adequately anchored to prevent flotation, collapse and lateral movement;
 - d) Any mechanical and utility equipment in the accessory structure must be elevated or floodproofed to or above the BFE;
 - e) The accessory structure must comply with floodplain encroachment provisions in Subsection G "Floodways"; and
 - f) The accessory structure must be designed to allow for the automatic entry of flood waters in accordance with Subsection C.3 "Flood Openings".
- ii. Detached garages and accessory structures not meeting the above standards must be constructed in accordance with all applicable standards in Section 15.56.081.

~~For all new construction and substantial improvements, fully enclosed areas below the lowest floor 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 floodwaters. Designs for meeting this requirements must either be certified by a registered professional engineer or architect or meet or exceed the following minimum criteria:~~

- ~~a. Either a minimum of two (2) openings having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding shall be provided. The bottom of all openings shall be no higher than one (1) foot above grade. Openings may be equipped with screens, louvers, valves or other~~

~~coverings or devices; provided, that they permit the automatic entry and exit of floodwaters; or~~

~~b. Be certified to comply with a local floodproofing standard approved by the Federal Insurance Administration.~~

D. Standards for Utilities. All new and replacement water supply and sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the system and discharge from systems into floodwaters.

E. Standards for Subdivisions.

1. All preliminary subdivision proposals shall identify the flood hazard area and the elevation of the base flood.

2. If the site is filled above the base flood elevation, the following as-built information for each structure shall be certified by a registered civil engineer or licensed land surveyor and provided as part of an application for a Letter of Map Revision based on Fill (LOMR-F) to the Floodplain Administrator:

a. Lowest floor elevation.

b. Pad elevation.

c. Lowest adjacent grade.

All final subdivision plans will provide the elevation of the proposed structure(s) and pads. If the site is filled above the base flood, the final pad elevation shall be certified by a registered professional engineer or surveyor and provided to the floodplain administrator.

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

4. All subdivisions shall provide adequate drainage to reduce exposure to flood hazards.

F. Standards for Manufactured Homes. All new and replacement manufactured homes and additions to manufactured homes shall:

1. Be elevated so that the lowest floor is at or above the base flood elevation; and

2. Be securely anchored to a permanent foundation system to resist flotation, collapse or lateral movement.

G. Floodways. Located within areas of special flood hazard established in ~~Section 15.56.062~~ Section 15.56.062 are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of floodwaters which carry debris, potential projectiles and erosion potential, the following provisions apply:

1. Until a regulatory floodway is adopted, no new construction, substantial development, or other development (including fill) shall be permitted within Zones A1-30 and AE, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other development, will not increase the water surface elevation of the base flood more than 1 foot at any point within the City of Brisbane.

24. Encroachments in floodways are prohibited, including fill, new construction, substantial improvements, and other development, unless certification by registered professional

engineer or architect is provided demonstrating that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.

~~32.~~ If subsection G1 of this section is satisfied, all new construction and substantial improvements shall comply with all other applicable flood hazard reduction provisions of Sections ~~15.56.080~~ 15.56.080 and ~~15.56.081~~ 15.56.081

(Ord. 340 § 2(part), 1988).

• **15.56.090 - Variance procedure.**

A. Appeal Board.

1. The planning commission shall hear and decide appeals and requests for variances from the requirements of this chapter.

2. The planning commission shall hear and decide appeals when it is alleged there is an error in any requirement, decision, or determination made by the floodplain administrator in the enforcement or administration of this chapter.

3. In passing upon such applications, the planning commission shall consider all technical evaluations, all relevant factors, standards specified in other sections of this chapter, and:

- a. The danger that materials may be swept onto other lands to the injury of others;
- b. The danger to life and property due to flooding or erosion damage;
- c. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
- d. The importance of the services provided by the proposed facility to the community;
- e. The necessity to the facility of a waterfront location, where applicable;
- f. The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;
- g. The compatibility of the proposed use with existing and anticipated development;
- h. The relationship of the proposed use to the comprehensive plan and the floodplain management program for that area;
- i. The safety of access to the property in time of flood for ordinary and emergency vehicles;
- j. The expected heights, velocity, duration, rate of rise, and sediment transport of the floodwaters 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, water systems, and streets and bridges.

B. Upon consideration of the factors of ~~subsection~~ Subsection A.3 of this section and the purposes of this chapter, the planning commission may attach such conditions to the granting of variances as it deems necessary to further the purposes of this chapter.

C. The floodplain administrator shall maintain the records of all appeal actions and report any variances to the Federal Insurance Administration upon request.

(Ord. 340 § 2(part), 1988).

• **15.56.091 - Conditions for variances.**

A. Variances may be issued for the reconstruction, rehabilitation or restoration of structures listed in 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.

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

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

D. Variances shall only be issued upon:

1. A showing of good and sufficient cause;
2. A determination that failure to grant the variance will not result in increased floor 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.

E. Variances may be issued for new construction and substantial improvements and for other development necessary for the conduct of a functionally dependent use provided the provisions of subsections A through D of this section are satisfied and that the structure or other development is protected by methods that minimize flood damages during the base flood and create no additional threats to public safety.

F. Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with a lowest floor elevation below the regulatory flood elevation and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest flood elevation. A copy of the notice shall be recorded by the floodplain board in the office of the county recorder and shall be recorded in a manner so that it appears in the chain of title of the affected parcel of land.

(Ord. 340 § 2(part), 1988).

SECTION 2: If any section, subsection, sentence, clause or phrase of this Ordinance is for any reason held by a court of competent jurisdiction to be invalid or unconstitutional, such decision shall not affect the validity of the remaining portions of this Ordinance. The City Council of the City of Brisbane hereby declares that it would have passed this Ordinance and each section, subsection, sentence, clause and phrase thereof, irrespective of the fact that one or more sections, subsections, sentences, clauses or phrases may be held invalid or unconstitutional.

SECTION 3: This Ordinance shall be in full force and effect thirty days after its passage and adoption.

* * * *

The above and foregoing Ordinance was regularly introduced and after the waiting time required by law, was thereafter passed and adopted at a regular meeting of the City Council of the City of Brisbane held on the _____ day of _____, ~~2014~~2015, by the following vote:

AYES:
NOES:
ABSENT:
ABSTAIN:

~~W. Clarke Conway~~Terry O'Connell, Mayor

ATTEST:

Sheri Marie Spediacci, City Clerk

APPROVED AS TO FORM:

Michael Roush, City Attorney

ORDINANCE NO. 592

**AN ORDINANCE OF THE CITY OF BRISBANE
AMENDING CHAPTER 15.56 OF THE MUNICIPAL CODE
PERTAINING TO FLOODPLAIN MANAGEMENT**

The City Council of the City of Brisbane hereby ordains as follows:

SECTION 1: Chapter 15.56 of the Municipal Code is amended to read as follows:

15.56.010 - Statutory authorization.

The Legislature of the state of California has in Government Code Sections 65302, 65560 and 65800 conferred upon local government units authority to adopt regulations designed to promote the public health, safety and general welfare of its citizenry.

(Ord. 340 § 2(part), 1988).

15.56.020 - Findings of fact.

A. Certain areas of the city are subject to periodic inundation which could result 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.

B. Flood losses may be caused by the cumulative effect of obstructions in areas of special flood hazards which increase flood heights and velocities. Uses that are inadequately floodproofed, elevated or otherwise protected from flood damage also may contribute to flood loss.

(Ord. 340 § 2(part), 1988).

15.56.030 - Statement of purpose.

It is the purpose of this chapter 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:

- A. To protect human life and health;
- B. To minimize expenditure of public money for costly flood control projects;
- C. To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- D. To minimize damage to the public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in areas of special flood hazard;

- E. To insure that potential buyers are notified that property is in an area of special flood hazard;
and
- F. To insure that those who occupy the areas of special flood hazard assume responsibility for
their actions.

(Ord. 340 § 2(part), 1988).

15.56.040 - Methods of reducing flood loss.

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

- A. 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 flood heights
or velocities;
- B. Requiring that uses vulnerable to floods, including facilities which serve such uses, be
protected from flood damage at the time of initial construction;
- C. Controlling the alteration of natural floodplains, stream channels and natural protective
barriers, which help accommodate or channel floodwaters;
- D. Controlling filling, grading, dredging, and other development which may increase flood
damage; and
- E. Preventing or regulating the construction of flood barriers which will unnaturally divert
floodwaters or which may increase flood hazards in other areas.

(Ord. 340 § 2 (part), 1988).

15.56.050 - Definitions.

Unless otherwise defined below, words or phrases used in this chapter shall be interpreted so as to
give them the meaning they have in common usage and to give this chapter its most reasonable
application:

- A. "Appeal" means a request for a review of the floodplain administrator's interpretation of any
provision of this chapter or a request for a variance.
- B. "Area of special flood hazard" See "special flood hazard area."
- C. "Base flood" means the flood having a one percent (1%) chance of being equalled or
exceeded in any given year. Also called the "one-hundred (100) year flood."
- D. "Base flood elevation" (BFE) means the elevation shown on the Flood Insurance Rate Map for
Zones AE, AH, A1-30, VE and V1-V30 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.
- E. "Basement" means any area of the building having its floor subgrade (below ground level) on
all sides.

- F. "Breakaway walls" are any type of walls, whether solid or lattice, and whether constructed of concrete, masonry, wood, metal, plastic or any other suitable building material which is not part of the structural support of the building and which is designed to break away under abnormally high tides or wave action without causing any damage to the structural integrity of the building on which they are used for any buildings to which they might be carried by floodwaters. A breakaway wall shall have a safe design loading resistance of not less than ten (10) and no more than twenty (20) pounds per square foot. Use of breakaway walls must be certified by a registered engineer or architect and shall meet the following conditions:
1. Breakaway wall collapse shall result from a water load less than would occur during the base flood; and
 2. The elevated portion of the building shall not incur any structural damage due to the effects of wind and water loads acting simultaneously in the event of the base flood.
- G. "Development" means any manmade 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.
- H. "Flood" or "flooding" means a general and temporary condition of partial or complete inundation of normally dry land areas from: (1) the overflow of floodwaters; (2) the unusual and rapid accumulation or runoff of surface waters from any source; and/or (3) the collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as a flash flood or abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding as defined in this definition.
- I. "Flood Boundary and Floodway Map" (FBFM) means the official map on which the Federal Emergency Management Agency or Federal Insurance Administration has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.
- J. "Flood Hazard Boundary Map" (FHBM) means the official map of a community issued by the Federal Emergency Management Agency, where the boundaries of the flood, mudflow and related erosion areas having special hazards have been designated.
- K. "Flood Insurance Rate Map" (FIRM) means the official map on which the Federal Emergency Management Agency or Federal Insurance Administration has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.
- L. "Flood insurance study" (FIS) means the official report provided by the Federal Insurance Administration that includes flood profiles, the FIRM, the Flood Boundary and Floodway Map, and the water surface elevation of the base flood.
- M. "Floodplain" or "flood-prone area" means any land area susceptible to being inundated by water from any source. (See definition of "flooding.")
- N. "Floodplain management" means the operation of an overall program of corrective and preventive measures for reducing flood damage, including but not limited to emergency preparedness plans, flood control works and floodplain management regulations.

- O. "Floodplain management regulations" means the zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances such as floodplain ordinances, grading ordinances and erosion control ordinances, and other applications of police power. The term describes such state and local regulations in any combination thereof, which provide standards for the purpose of flood damage prevention and reduction.
- P. "Floodproofing" means any combination of structural and nonstructural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.
- Q. "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. Also referred to as "regulatory floodway."
- R. "Functionally dependent use" means a use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and shipbuilding and ship repair facilities, but does not include long-term storage or related manufacturing facilities.
- S. "Highest adjacent grade" means the highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.
- T. "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, 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 nonelevation design requirements of this chapter.
- U. "Manufactured home" means a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. For floodplain management purposes the term "manufactured home" also includes park trailers, travel trailers and other similar vehicles placed on a site for greater than one hundred eighty (180) consecutive days.
- V. "Manufactured home park or subdivision" means a parcel or contiguous parcels of land divided into two or more manufactured home lots for sale or rent.
- W. "Mean sea level" means, for purposes of the National Flood Insurance Program, the National Geodetic Vertical Datum (NGVD) of 1929 or other datum, to which base flood elevations shown on a community's Flood Insurance Rate Map are referenced.
- X. "New construction" means, for floodplain management purposes, structures for which the "start of construction" commenced on or after the effective date of a floodplain management regulation adopted by this community.
- Y. "One-hundred-year-flood" or "100-year flood" means a flood which has a one percent (1%) annual probability of being equalled or exceeded. It is identical to the "base flood," which will be the term used throughout the chapter.
- Z. "Person" means an individual or his agent, firm, partnership, association, or this state or its agencies or political subdivisions.

- AA. "Remedy a violation" means to bring the structure or other development into compliance with state or local floodplain management regulations, or, if this is not possible, to reduce the impacts of its noncompliance. Ways that impacts may be reduced include protecting the structure or other affected development from flood damages, implementing the enforcement provisions of the ordinance or otherwise deterring future similar violations, or reducing federal financing exposure with regard to the structure or other development.
- BB. "Special flood hazard area (SFHA)" means an area having special flood or flood-related erosion hazards, and shown on an FHBM or FIRM as Zone A, A1-30, AE, A99.
- CC. "Start of construction" includes substantial improvement, and means the date the building permit was issued; provided, the actual start of construction, repair, reconstruction, placement, or other improvement was within one hundred eighty (180) days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the state 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 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.
- DD. "Structure" means a walled and roofed building, including a gas or liquid storage tank that is principally aboveground as well as a manufactured home.
- EE. 1. "Substantial improvement" means any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds fifty percent (50%) of the market value of the structure either:
- a. Before improvement or repair is started; or
 - b. If the structure has been damaged, and is being restored, before the damage occurred.
2. For the purpose 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:
- a. 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
 - b. Any alteration of a structure listed on the National Register of Historic Places or a State Inventory of Historic Places.
- FF. "Variance" means a grant of relief from the requirements of this chapter which permits construction in a manner that would otherwise be prohibited by this chapter.
- GG. "Violation" means the failure of a structure or other development to be fully compliant with the community's floodplain management regulations. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required

in this chapter is presumed to be in violation until such time as that documentation is provided.

(Ord. 340 § 2(part), 1988).

15.56.060 - General provisions.

The following Sections_15.56.061 through_15.56.067 set out general provisions for floodplain management.

(Ord. 340 § 2(part), 1988).

15.56.061 - Lands to which this chapter applies.

This chapter shall apply to all areas of special flood hazard within the jurisdiction of the city.

(Ord. 340 § 2(part), 1988).

15.56.062 - Basis for establishing the areas of special flood hazard.

The areas of special flood hazard are those areas so identified by the Federal Emergency Management Agency (FEMA) in the "Flood Insurance Study (FIS) for San Mateo County (Unincorporated Areas)" dated August 5, 1986, with accompanying Flood Boundary and Floodway Maps (FBFM's) and Flood Insurance Rate Maps (FIRM's) for city of Brisbane, effective date March 29, 1983 and San Mateo County (unincorporated areas), effective date July 5, 1984, and all subsequent amendments and/or revisions, are hereby adopted by reference and declared to be a part of this chapter. The FIS and attendant mapping is the minimum area of applicability of this chapter and may be supplemented by studies for other areas which allow implementation of this chapter and which are recommended to the city council by the floodplain administrator. The study, FIRM's and FBFM's are on file in the city of Brisbane public works department at 50 Park Place, Brisbane, California.

(Ord. 523 § 1, 2007; Ord. 340 § 2(part), 1988).

15.56.063 - Compliance.

No structure or land shall hereafter be constructed, located, extended, covered, or altered without full compliance with the terms of this chapter and other applicable regulations. Violations of the provisions of this chapter by failure to comply with any of its requirements, including violations of conditions and safeguards established in connection with conditions, shall constitute a misdemeanor. Nothing herein shall prevent the city council from taking such lawful action as is necessary to prevent or remedy any violation.

(Ord. 340 § 2(part), 1988).

15.56.064 - Abrogation and greater restrictions.

This chapter is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this chapter and another ordinance, easement, covenant, or deed restriction conflict or overlap, whichever imposes the more stringent restriction shall prevail.

(Ord. 340 § 2(part), 1988).

15.56.065 - Interpretation.

In the interpretation and application of this chapter, all provisions shall be:

- A. Considered as minimum requirement;
- B. Liberally construed in favor of the governing body; and
- C. Deemed neither to limit nor repeal any other powers granted under state statutes.

(Ord. 340 § 2(part), 1988).

15.56.066 - Warning and disclaimer of liability.

The degree of flood protection required by this chapter is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by manmade or natural causes. This chapter 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 damage. This chapter shall not create liability on the part of the city of Brisbane, any officer or employee thereof, or the Federal Insurance Administration, for any flood damages that result from reliance on this chapter or any administrative decision lawfully made thereunder.

(Ord. 340 § 2(part), 1988).

15.56.067 - Severability.

This chapter and the various parts thereof are declared to be severable. Should any section of this chapter be declared by the courts to be unconstitutional or invalid, such decision shall not affect the validity of the chapter as a whole, or any portion thereof other than the section so declared to be unconstitutional or invalid.

(Ord. 340 § 2(part), 1988).

15.56.070 - Administration.

The following Sections 15.56.071 through 15.56.073 set out administrative procedures for floodplain management.

(Ord. 340 § 2(part), 1988).

15.56.071 - Establishment of development permit.

A development permit shall be obtained before construction or development begins within any area of special flood hazards established in Section 15.56.062. Application for a development permit shall be made on forms furnished by the floodplain administrator and may include, but not be limited to: plans in duplicate drawn to scale showing the nature, location, dimensions, and elevation 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:

- A. Proposed elevation in relation to mean sea level, of the lowest floor, including basement, of all structures;
- B Proposed elevation in relation to mean sea level to which any structure will be floodproofed;
- C All appropriate certifications listed in Section 15.56.073D of this chapter; and
- D. Description of the extent to which any watercourse will be altered or relocated as a result of proposed development.

(Ord. 340 § 2(part), 1988).

15.56.072 - Designation of the floodplain administrator.

The building official, as defined in this code, is appointed to administer and implement this chapter by granting or denying development permits in accordance with its provisions.

(Ord. 340 § 2(part), 1988).

15.56.073 - Duties and responsibilities of the floodplain administrator.

The duties and responsibilities of the floodplain administrator shall include, but not be limited to:

- A. Permit Review. Review all development permits to determine that:
 - 1. The permit requirements of this chapter have been satisfied;
 - 2. All other required state and federal permits have been obtained;
 - 3. The site is reasonably safe from flooding; and
 - 4. The proposed development does not adversely affect the carrying capacity of areas where base flood elevations have been determined but a floodway has not been designated. For purposes of this chapter, "adversely affects" means that the cumulative effect of the proposed development when combined with all other existing and anticipated

development will not increase the water surface elevation of the base flood more than one (1) foot at any point.

5. All Letters of Map Revision (LOMR's) for flood control projects are approved prior to the issuance of building permits. Building Permits must not be issued based on Conditional Letters of Map Revision (CLOMR's). Approved CLOMR's allow construction of the proposed flood control project and land preparation as specified in the "start of construction" definition.
- B. Development of Substantial Improvement and Substantial Damage Procedures.
1. Using FEMA publication FEMA 213, "Answers to Questions About Substantially Damaged Buildings," develop detailed procedures for identifying and administering requirements for substantial improvement and substantial damage, to include defining "Market Value."
 2. Assure procedures are coordinated with other departments/divisions and implemented by community staff.
- C. Use of Other Flood Data. When base flood elevation data has not been provided in accordance with §15.56.062, 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 Section 15.56.080. Any such information shall be submitted to the city for adoption.
- D. Whenever a watercourse is to be altered or relocated it is the responsibility of the floodplain administrator to:
1. Notify adjacent communities and the California Department of Water Resources prior to such alteration or relocation of watercourse, and submit evidence of such notification to the Federal Insurance Administration;
 2. Submit evidence of such notification to the Federal Emergency Management Agency; and
 3. Require that the flood-carrying capacity of the altered or relocated portion of said watercourse is maintained.
- E. Base Flood Elevation changes due to physical alterations:
1. Within 6 months of information becoming available or project completion, whichever comes first, the floodplain administrator shall submit or assure that the permit applicant submits technical or scientific data to FEMA for a Letter of Map Revision (LOMR).
 2. All LOMR's for flood control projects are approved prior to the issuance of building permits. Building Permits must not be issued based on Conditional Letters of Map Revision (CLOMR's). Approved CLOMR's allow construction of the proposed flood control project and land preparation as specified in the "start of construction" definition.

Such submissions are necessary so that upon confirmation of those physical changes affecting flooding conditions, risk premium rates and floodplain management requirements are based on current data.

F. Changes in corporate boundaries:

The floodplain administrator shall notify FEMA in writing whenever the corporate boundaries have been modified by annexation or other means and include a copy of a map of the community clearly delineating the new corporate limits.

- G. It is the responsibility of the floodplain administrator to obtain and maintain for public inspection and make available as needed:
 - 1. The certification required in Section 15.56.081 (C)(1), floor elevations,
 - 2. The certification required in Section 15.56.081 (C)(2)(c), elevation or floodproofing of nonresidential structures,
 - 3. The certification required in Section 15.56.081 (C)(3)(a) or 15.56.081(C)(3)(b), wet floodproofing standard,
 - 4. The certified elevation required in Section 15.56.081(E)(2), subdivision standards,
 - 5. The certification required in Section 15.56.081(G)(2) floodway encroachment.
- H. It is the responsibility of the floodplain administrator to make interpretations where 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 person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in Section 15.56.090,
- I. It is the responsibility of the floodplain administrator to take action to remedy violations of this chapter as specified in Section 15.56.063 herein.

(Ord. 340 § 2(part), 1988).

15.56.080 - Provisions for flood hazard reduction.

The following Section 15.56.081 sets out provisions for flood hazard reduction.

(Ord. 340 § 2(part), 1988).

15.56.081 - Standards for construction.

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

A. Anchoring.

- 1. All new construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.
- 2. All manufactured homes shall meet the anchoring standards of subsection F of this section.

B. Construction Materials and Methods.

- 1. All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
- 2. All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.

3. All new construction and substantial improvements shall be constructed with electrical, heating, ventilation, plumbing and air conditioning equipment and other facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

C. Elevation and Floodproofing.

1. New construction and substantial improvement of any structure shall have the lowest floor, including basement, elevated to or above the base flood elevation. Nonresidential structures may meet the standards in Subsection C.2 "nonresidential construction" of this section. Upon the completion of the structure, the elevation of the lowest floor, including basement, shall be certified by a registered professional engineer or surveyor, or verified by the community building inspector to be properly elevated. Such certification or verification shall be provided to the floodplain administrator.

2. Nonresidential construction shall either be elevated in conformance with Subsection C.1 "residential construction" of this section together with attendant utility and sanitary facilities, or:

- a. Be floodproofed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water;
- b. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and
- c. Be certified by a registered professional engineer or architect that the standards of this subsection are satisfied. Such certification shall be provided to the floodplain administrator.

3. Flood Openings

All new construction and substantial improvements of structures with fully enclosed areas below the lowest floor (excluding basements) that are usable solely for parking of vehicles, building access or storage, and which are subject to flooding, shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwater. Designs for meeting this requirement must meet the following minimum criteria:

- a. For non-engineered openings:
 - i. Have a minimum of two openings on different sides 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;
 - iii. Openings may be equipped with screens, louvers, valves or other coverings or devices provided that they permit the automatic entry and exit of floodwater; and
 - iv. Buildings with more than one enclosed area must have openings on exterior walls for each area to allow flood water to directly enter; or
- b. Be certified by a registered civil engineer or architect.

4. Garages and low cost accessory structures.

- a. Attached garages.
 - i. A garage attached to a residential structure, constructed with the garage floor slab below the BFE, must be designed to allow for the automatic entry of flood waters per Subsection C.3 "Flood Openings". Areas of the garage below the BFE must

be constructed with flood resistant materials per Subsection B "Construction Materials and Methods".

ii. A garage attached to a nonresidential structure must meet the above requirements or be dry floodproofed. For guidance on below grade parking areas, see FEMA Technical Bulletin TB-6.

b. Detached garages and accessory structures.

i. "Accessory structures" used solely for parking (2 car detached garages or smaller) or limited storage (small, low-cost sheds), as defined in Subsection C.2 "nonresidential construction", may be constructed such that its floor is below the base flood elevation (BFE), provided the structure is designed and constructed in accordance with the following requirements:

a) Use of the accessory structure must be limited to parking or limited storage;

b) The portions of the accessory structure located below the BFE must be built using flood-resistant materials;

c) The accessory structure must be adequately anchored to prevent flotation, collapse and lateral movement;

d) Any mechanical and utility equipment in the accessory structure must be elevated or floodproofed to or above the BFE;

e) The accessory structure must comply with floodplain encroachment provisions in Subsection G "Floodways"; and

f) The accessory structure must be designed to allow for the automatic entry of flood waters in accordance with Subsection C.3 "Flood Openings".

ii. Detached garages and accessory structures not meeting the above standards must be constructed in accordance with all applicable standards in Section 15.56.081.

D. Standards for Utilities. All new and replacement water supply and sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the system and discharge from systems into floodwaters.

E. Standards for Subdivisions.

1. All preliminary subdivision proposals shall identify the flood hazard area and the elevation of the base flood.

2. If the site is filled above the base flood elevation, the following as-built information for each structure shall be certified by a registered civil engineer or licensed land surveyor and provided as part of an application for a Letter of Map Revision based on Fill (LOMR-F) to the Floodplain Administrator:

a. Lowest floor elevation.

b. Pad elevation.

c. Lowest adjacent grade.

All final subdivision plans will provide the elevation of the proposed structure(s) and pads. If the site is filled above the base flood, the final pad elevation shall be certified by a registered professional engineer or surveyor and provided to the floodplain administrator.

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

4. All subdivisions shall provide adequate drainage to reduce exposure to flood hazards.

- F. Standards for Manufactured Homes. All new and replacement manufactured homes and additions to manufactured homes shall:
1. Be elevated so that the lowest floor is at or above the base flood elevation; and
 2. Be securely anchored to a permanent foundation system to resist flotation, collapse or lateral movement.
- G. Floodways. Located within areas of special flood hazard established in Section 15.56.062 are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of floodwaters which carry debris, potential projectiles and erosion potential, the following provisions apply:
1. Until a regulatory floodway is adopted, no new construction, substantial development, or other development (including fill) shall be permitted within Zones A1-30 and AE, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other development, will not increase the water surface elevation of the base flood more than 1 foot at any point within the City of Brisbane.
 2. Encroachments in floodways are prohibited, including fill, new construction, substantial improvements, and other development, unless certification by registered professional engineer or architect is provided demonstrating that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.
 3. If subsection G1 of this section is satisfied, all new construction and substantial improvements shall comply with all other applicable flood hazard reduction provisions of Sections 15.56.080 and 15.56.081

(Ord. 340 § 2(part), 1988).

15.56.090 - Variance procedure.

A. Appeal Board.

1. The planning commission shall hear and decide appeals and requests for variances from the requirements of this chapter.
2. The planning commission shall hear and decide appeals when it is alleged there is an error in any requirement, decision, or determination made by the floodplain administrator in the enforcement or administration of this chapter.
3. In passing upon such applications, the planning commission shall consider all technical evaluations, all relevant factors, standards specified in other sections of this chapter, and:
 - a. The danger that materials may be swept onto other lands to the injury of others;
 - b. The danger to life and property due to flooding or erosion damage;
 - c. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
 - d. The importance of the services provided by the proposed facility to the community;
 - e. The necessity to the facility of a waterfront location, where applicable;

- f. The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;
- g. The compatibility of the proposed use with existing and anticipated development;
- h. The relationship of the proposed use to the comprehensive plan and the floodplain management program for that area;
- i. The safety of access to the property in time of flood for ordinary and emergency vehicles;
- j. The expected heights, velocity, duration, rate of rise, and sediment transport of the floodwaters 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, water systems, and streets and bridges.

B. Upon consideration of the factors of Subsection A.3 of this section and the purposes of this chapter, the planning commission may attach such conditions to the granting of variances as it deems necessary to further the purposes of this chapter.

C. The floodplain administrator shall maintain the records of all appeal actions and report any variances to the Federal Insurance Administration upon request.

(Ord. 340 § 2(part), 1988).

15.56.091 - Conditions for variances.

A. Variances may be issued for the reconstruction, rehabilitation or restoration of structures listed in 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.

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

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

D. Variances shall only be issued upon:

- 1. A showing of good and sufficient cause;
- 2. A determination that failure to grant the variance will not result in increased floor 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.

E. Variances may be issued for new construction and substantial improvements and for other development necessary for the conduct of a functionally dependent use provided the provisions of subsections A through D of this section are satisfied and that the structure or other development is protected by methods that minimize flood damages during the base flood and create no additional threats to public safety.

F. Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with a lowest floor elevation below the regulatory flood elevation and that

the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest flood elevation. A copy of the notice shall be recorded by the floodplain board in the office of the county recorder and shall be recorded in a manner so that it appears in the chain of title of the affected parcel of land.

(Ord. 340 § 2(part), 1988).

SECTION 2: If any section, subsection, sentence, clause or phrase of this Ordinance is for any reason held by a court of competent jurisdiction to be invalid or unconstitutional, such decision shall not affect the validity of the remaining portions of this Ordinance. The City Council of the City of Brisbane hereby declares that it would have passed this Ordinance and each section, subsection, sentence, clause and phrase thereof, irrespective of the fact that one or more sections, subsections, sentences, clauses or phrases may be held invalid or unconstitutional.

SECTION 3: This Ordinance shall be in full force and effect thirty days after its passage and adoption.

* * * *

The above and foregoing Ordinance was regularly introduced and after the waiting time required by law, was thereafter passed and adopted at a regular meeting of the City Council of the City of Brisbane held on the _____ day of _____, 2015, by the following vote:

AYES:
NOES:
ABSENT:
ABSTAIN:

Terry O'Connell, Mayor

ATTEST:

Sheri Marie Spediacci, City Clerk

APPROVED AS TO FORM:



Michael Roush, City Attorney