

**CITY OF SAN MATEO
ORDINANCE NO. 2015 - 7**

**AMENDING CHAPTER 23.33, "FLOODPLAIN MANAGEMENT," OF THE SAN MATEO
MUNICIPAL CODE TO ADDRESS NEW FEMA REQUIREMENTS**

WHEREAS, Government Code Sections 65302, 65560 and 65800 confer upon cities authority to adopt regulations designed to promote the public health, safety and general welfare; and

WHEREAS, certain portions of the City have been designated as flood hazard areas on the latest Federal Emergency Management Agency (FEMA) maps; and

WHEREAS, this Ordinance is substantially based on a model ordinance from the California Department of Water Resources; and

WHEREAS, the City has obtained prior approval of this Ordinance from FEMA regarding the suitability of this ordinance for purposes of enabling San Mateo citizens within flood hazard areas to purchase flood insurance; and

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

WHEREAS, these flood losses are caused by uses that are inadequately elevated, floodproofed, or protected from flood damage; and

WHEREAS, the cumulative effect of obstructions in areas of special flood hazards which increase flood heights and velocities also contribute to the flood loss; and

WHEREAS, the study and Flood Insurance Rate Maps ("FIRMs") are on file at San Mateo City Hall, 330 W. 20th Avenue, San Mateo, CA 94403;

WHEREAS, larger floods can and will occur on rare occasions, but the degree of flood protection required by this Chapter is considered reasonable for regulatory purposes and is based on scientific and engineering considerations;

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF SAN MATEO,
CALIFORNIA, ORDAINS THAT:

Section 1. Chapter 23.33, "Floodplain Management," of the San Mateo Municipal Code is amended to read:

Chapter 23.33

FLOODPLAIN MANAGEMENT

- 23.33.010 Purpose and methods.**
- 23.33.020 Definitions.**
- 23.33.030 General provisions.**
- 23.33.040 Administration.**
- 23.33.050 Provisions for flood hazard reduction.**
- 23.33.060 Alternate design standard procedure.**
- 23.33.070 Termination.**

23.33.010 PURPOSE AND METHODS.

(a) 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 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; and streets and bridges located in areas of special flood hazard;
- (6) Help maintain a stable tax base by providing for the sound use and development of areas of special flood hazard so as to minimize future blighted areas caused by flood damage;
- (7) Assist in notifying potential buyers that property is in an area of special flood hazard; and
- (8) Ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.

(b) Methods of Reducing Flood Losses. In order to accomplish its purposes, this Chapter includes methods and provisions to:

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

23.33.020 DEFINITIONS. Unless specifically 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. These definitions are not intended to supersede or to be applicable to other codes or regulations.

- (a) **“A zone”** has the same meaning as “special flood hazard area.”
- (b) **“Accessory use”** means a use which is incidental and subordinate to the principal use of the parcel of land on which it is located with a structure that is either: 1) solely for the parking of two cars or 2) a shed for limited storage, which is less than 150 square feet in size and \$1,500 in value.
- (c) **“Alluvial fan”** means a geomorphologic feature characterized by a cone or fan-shaped deposit of boulders, gravel, and fine sediments that have been eroded from mountain slopes, transported by flood flows, and then deposited on the valley floors, and which is subject to flash flooding, high velocity flows, debris flows, erosion, sediment movement and deposition, and channel migration.
- (d) **“Alternate design standard approval”** 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.
- (e) **“Apex”** means the point of highest elevation on an alluvial fan, which on undisturbed fans is generally the point where the major stream that formed the fan emerges from the mountain front.
- (f) **“Appeal”** means a request for a review of the Floodplain Administrator’s interpretation of any provision of this Chapter.
- (g) **“Area of shallow flooding”** means a designated AO or AH Zone on the Flood Insurance Rate Map (“FIRM”) where the base flood depths range from one to three feet, a clearly defined channel does not exist, the path of flooding is unpredictable and indeterminate, velocity flow may be evident, and such flooding is characterized by ponding or sheet flow.
- (h) **“Area of special flood hazard”** has the same meaning as “special flood hazard area.”
- (i) **“Base flood”** means a flood which has a one percent chance of being equaled or exceeded in any given year (also called the “100-year flood”).
- (j) **“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 one percent or greater chance of being equaled or exceeded in any given year.
- (k) **“Basement”** means any area of the building having its floor subgrade (below ground level) on all sides.
- (l) **“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 or any buildings to which they might be carried by flood waters.
- (m) **“Building”** has the same meaning as “Structure.”
- (n) **“Coastal high hazard area”** means an area of special flood hazard extending from offshore to the inland limit of a primary frontal dune along an open coast and any other area subject to high velocity wave action from storms or seismic sources. It is an area subject to high velocity waters, including coastal and tidal inundation or tsunamis. The area is designated on a Flood Insurance Rate Map (FIRM) as Zone V1-V30, VE, or V.
- (o) **“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 or storage of equipment or materials.
- (p) **“Encroachment”** means the advance or infringement of uses, plant growth, fill, excavation, buildings, permanent structures, or development into a floodplain which may impede or alter the flow capacity of a floodplain.

(q) **“Existing manufactured home park or subdivision”** means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before the effective date of the floodplain management regulations adopted by a community.

(r) **“Expansion to an existing manufactured home park or subdivision”** means the preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

(s) **“Flood,”** or **“flooding,”** or **“flood water”** means:

(1) A general and temporary condition of partial or complete inundation of normally dry land areas from the overflow of inland or tidal waters; the unusual and rapid accumulation or runoff of surface waters from any source; and/or mudslides (i.e., mudflows); and

(2) The condition resulting from flood-related erosion.

(t) **“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 floodway.

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

(v) **“Flood Insurance Study”** means the official report provided by the Federal Insurance and Mitigation Administration that includes flood profiles, the Flood Insurance Rate Map, and the water surface elevation of the base flood.

(w) **“Floodplain”** or **“flood-prone area”** means any land area susceptible to being inundated by water from any source.

(x) **“Floodplain Administrator”** is the individual appointed to administer and enforce the floodplain management regulations.

(y) **“Floodplain management”** means the operation of an overall program of corrective and preventive measures for reducing flood damage and preserving and enhancing, where possible, natural resources in the floodplain, including but not limited to emergency preparedness plans, flood control works, floodplain management regulations, and open space plans.

(z) **“Floodplain management regulations”** means this Chapter and other zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances (such as grading and erosion control) and other application of police power which control development in flood-prone areas. This term describes federal, state or local regulations in any combination thereof which provide standards for preventing and reducing flood loss and damage.

(aa) **“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.

(bb) **“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.”

(cc) **“Floodway Fringe”** is that area of the floodplain on either side of the “Regulatory Floodway” where encroachment may be permitted.

(dd) **“Fraud and victimization”** as related to Section 23.33.060, Alternate Design Standards Procedure, of this Chapter, means that the alternate design standard granted must not cause fraud on or

victimization of the public. In examining this requirement, the City will consider the fact that every newly constructed building adds to government responsibilities and remains a part of the community for 50 to 100 years. Buildings that are permitted to be constructed below the base flood elevation are subject during all those years to increased risk of damage from floods, while future owners of the property and the community as a whole are subject to all the costs, inconvenience, danger, and suffering that those increased flood damages bring. In addition, future owners may purchase the property, unaware that it is subject to potential flood damage, and can be insured only at very high flood insurance rates or may purchase the property with knowledge that it is within the special flood hazard area.

(ee) **“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 ship building and ship repair facilities, and does not include long-term storage or related manufacturing facilities.

(ff) **“Governing body”** is the City.

(gg) **“Hardship”** as related to Section 23.33.060, Alternate Design Standards Procedure, of this Chapter means the exceptional hardship that would result from a failure to grant the requested alternate design standard. The City requires that the need for the alternate design standard be exceptional, unusual, and peculiar to the property involved. Mere economic or financial hardship alone is not exceptional. Inconvenience, aesthetic considerations, physical handicaps, personal preferences, or the disapproval of one’s neighbors likewise cannot, as a rule, qualify as an exceptional hardship. All of these problems can be resolved through other means without granting an alternate design standard, even if the alternative is more expensive, or requires the property owner to build elsewhere or put the parcel to a different use than originally intended.

(hh) **“Highest adjacent grade”** means the highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

(ii) **“Historic structure”** means any structure that is:

- (1) Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
- (2) Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
- (3) Individually listed on a state inventory of historic places; or
- (4) Individually listed on a local inventory of historic places certified either by an approved state program as determined by the Secretary of the Interior or directly by the Secretary of the Interior.

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

(kk) **“Levee system”** means a flood protection system which consists of a levee, or levees, and associated structures, such as closure and drainage devices, which are constructed and operated in accord with sound engineering practices.

(ll) **“Lowest floor”** means the lowest enclosed area, including basement (see “Basement” definition).

1. An unfinished or flood resistant enclosure below the lowest floor that is usable solely for parking of vehicles, building access or storage in an area other than a basement area, is not considered a building’s lowest floor provided it conforms to applicable non-elevation design requirements, including, but not limited to:

- a. The flood openings standard in 23.33.050(a)(3)(iv);
- b. The anchoring standards in 23.33.050(a)(1);
- c. The construction materials and methods standards in 23.33.050(a)(2);
- d. The standards for utilities in 23.33.050(d).

(2) For residential structures, all subgrade enclosed areas are prohibited as they are considered to be basements (see "Basement" definition). This prohibition includes below-grade garages and storage areas.

(mm) "**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 attached to the required utilities. The term "manufactured home" does not include a "recreational vehicle."

(nn) "**Manufactured home park or subdivision**" means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

(oo) "**Market value**" shall be determined by estimating the cost to replace the structure in new condition and adjusting that cost figure by the amount of depreciation which has accrued since the structure was constructed. The cost of replacement of the structure shall be based on a square foot cost factor determined by reference to a building cost estimating guide recognized by the building construction industry. The amount of depreciation shall be determined by taking into account the age and physical deterioration of the structure and functional obsolescence as approved by the Floodplain Administrator, but shall not include economic or other forms of external obsolescence. Use of replacement costs or accrued depreciation factors different from those contained in recognized building cost estimating guides may be considered only if such factors are included in a report prepared by an independent professional appraiser and supported by a written explanation of the differences.

(pp) "**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.

(qq) "**New construction**," for floodplain management purposes, means structures for which the "start of construction" commenced on or after the effective date of floodplain management regulations adopted by this community, and includes any subsequent improvements to such structures.

(rr) "**New manufactured home park or subdivision**" means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of floodplain management regulations adopted by this community.

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

(tt) "**One-hundred-year flood**" or "**100-year flood**" has the same meaning as "Base flood."

(uu) "**Primary frontal dune**" means a continuous or nearly continuous mound or ridge of sand with relatively steep seaward and landward slopes immediately landward and adjacent to the beach and subject to erosion and overtopping from high tides and waves during major coastal storms. The inland limit of the primary frontal dune occurs at the point where there is a distinct change from a relatively mild slope.

(vv) **“Public safety nuisance”** as related to Section 23.33.060, Alternate Design Standards Procedure, of this Chapter means that the granting of an alternate design standard must not result in anything which is injurious to safety or health of an entire community or neighborhood, or any considerable number of persons, or unlawfully obstructs the free passage or use, in the customary manner, of any navigable lake, or river, bay, stream, canal, or basin.

(ww) **“Recreational vehicle”** means a vehicle which is:

- (1) Built on a single chassis;
- (2) 400 square feet or less when measured at the largest horizontal projection;
- (3) Designed to be self-propelled or permanently towable by a light-duty truck; and
- (4) Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

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

(yy) **“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 this Chapter or otherwise deterring future similar violations, or reducing state or federal financial exposure with regard to the structure or other development.

(zz) **“Residential construction”** means structures containing residential dwelling units or residential living space. Hotels, motels, and mixed use buildings with no residential dwelling units at or below base flood elevation are not considered residential construction.

(aaa) **“Riverine”** means relating to, formed by, or resembling a river (including tributaries), stream, brook, etc.

(bbb) **“Sand dunes”** mean naturally occurring accumulations of sand in ridges or mounds landward of the beach.

(ccc) **“Sheet flow area”** has the same meaning as “Area of shallow flooding.”

(ddd) **“Special flood hazard area (SFHA)”** means an area in the floodplain subject to a one percent or greater chance of flooding in any given year. It is shown on the FIRM as Zone A, AO, A1-A30, AE, A99, AH, V1-V30, VE or V.

(eee) **“Start of construction”** includes substantial improvement and other proposed new development and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, or other improvement was within 180 days from the date of the permit. 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 stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading, and filling; nor does it include the installation of streets or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

(fff) **“Structure”** means a walled and roofed building that is principally above ground; this includes a gas or liquid storage tank or a manufactured home.

(ggg) **“Substantial damage”** means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50% of the market value of the structure before the damage occurred.

(hhh) **“Substantial improvement”** means any reconstruction, rehabilitation, addition, or other proposed new development of a structure, the cost of which equals or exceeds 50% of the market value of the structure before the “start of construction” of the improvement. This term includes structures which have incurred “substantial damage,” regardless of the actual repair work performed. It shall be presumed that additions to the existing structure which cover an area which is 50% of the before the “start of construction” floor area, will trigger the 50% of market value standard. The term does not, however, include either:

(1) Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions, or

(2) Any alteration of a “historic structure,” provided that the alteration will not preclude the structure’s continued designation as a “historic structure.”

(iii) **“V zone”** has same meaning as “Coastal high hazard area.”

(jjj) **“Violation”** means the failure of a structure or other development to be fully compliant with this Chapter. 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.

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

(lll) **“Watercourse”** means a lake, river, creek, stream, wash, arroyo, channel or other topographic feature on or over which waters flow at least periodically. Watercourse includes specifically designated areas in which substantial flood damage may occur.

23.33.030 GENERAL PROVISIONS.

(a) Applicability. This Chapter shall apply to all areas of special flood hazards within the jurisdiction of the City of San Mateo.

(b) Basis for Establishing the Areas of Special Flood Hazard. The areas of special flood hazard identified by the Federal Insurance and Mitigation Administration (FIMA) of the Federal Emergency Management Agency (FEMA) in the Flood Insurance Study (FIS) initiated on October 19, 2001, on the Flood Insurance Rate Maps (FIRMs), dated October 19, 2001, and all subsequent amendments or revisions, are hereby adopted by reference and declared to be a part of this Chapter. This 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.

(c) Compliance. No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the term of this Chapter and other applicable regulations. Violation of the requirements (including violations of conditions and safeguards established in connection with conditions) shall constitute a public offense. Nothing herein shall prevent the City from taking such lawful action as is necessary to prevent or remedy any violation.

(d) 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 restrictions shall prevail.

- (e) Interpretation. In the interpretation and application of this Chapter, all provisions shall be:
- (i) Considered as minimum requirements;
 - (ii) Liberally construed in favor of the governing body; and
 - (iii) Deemed neither to limit nor repeal any other powers granted under state statutes.

23.33.040 ADMINISTRATION.

(a) Application of Development Standards. Development standards contained in this Chapter shall apply to all Development located within an Area of Special Flood Hazard. Formal City approval in the form of a building permit or some other development permit shall be obtained before any construction or other development begins within any Area of Special Flood Hazard. Application of these development standards shall be made by use of 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.

(b) Designation of the Floodplain Administrator. The City Manager for the City of San Mateo or designee is appointed to administer, implement, and enforce this Chapter.

(c) Duties and Responsibilities of the Floodplain Administrator. The duties and responsibilities of the Floodplain Administrator shall include, but not be limited to, the following:

(1) Making determinations concerning the implementation of the requirements of this Chapter on development projects within the City of San Mateo and to determine that:

- (i) Permit requirements of this Chapter have been satisfied;
- (ii) All other required state and federal permits have been obtained;
- (iii) The site is reasonably safe from flooding; and

(iv) 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 increase the water surface elevation of the base flood more than one foot at any point. (v) All Letters of Map Revision (LOMRs) for flood control projects are approved prior to the issuance of building permits. Building Permits shall not be issued based on Conditional Letters of Map Revision (CLOMRs). Approved CLOMRs allow construction of the proposed flood control project and land preparation as specified in the "start of construction" definition.

(2) Development of Substantial Improvement and Substantial Damage Procedures.

(i) Using FEMA publication FEMA 213, "Answers to Questions About Substantially Damaged Buildings," develop detailed procedure for identifying and administering requirements for substantial improvement and substantial damage, to include defining "Market Value."

(ii) Coordinating and implementing procedures with other departments/divisions.

(3) Review and Use of Any Other Base Flood Data.

(i) When base flood elevation data has not been provided, the Floodplain Administrator shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a federal or state agency, or other source, and adopted by the City in order to administer Section 23.33.050.

(4) Notification of Other Agencies. In the event of alteration or relocation of a watercourse and Base Flood Elevation changes due to physical alterations and changes in corporate boundaries:

(i) Notify adjacent communities and the California Department of Water Resources prior to alteration or relocation;

(ii) Submit evidence of such notification to the Federal Insurance and Mitigation Administration, Federal Emergency Management Agency; and

(iii) Assure that the flood carrying capacity within the altered or relocated portion of said watercourse is maintained.

(5) Documentation of Floodplain Development. Obtain and maintain for public inspection and make available as needed all development and building permits issued, plans approved and certifications required for projects governed by this Chapter. The records of the Floodplain Administrator shall include, but not be limited to, the following:

(i) The certified elevation of the lowest floor for each new building or substantially improved building;

(ii) The method of floodproofing of all construction below the Base Flood Elevation and the elevation to which non-residential structures are floodproofed and certification of floodproof design;

(iii) The design calculations and design details confirming structure can automatically equalize hydrostatic forces on exterior walls;

(iv) Records of all inspections necessary to ensure compliance with Floodplain Management Regulations;

(v) Documentation of Floodproofing below the elevation recommended under Section 23.33.050(a)(3)(i) so that the structure is watertight with walls substantially impermeable to the passage of water;

(vi) Documentation of structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy;

(vii) Certification by a registered professional engineer or architect that the standards of this section are satisfied.

(6) Map Determinations. Make interpretations where needed, as to the exact location of the boundaries of the Areas of Special Flood Hazard 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 23.33.040(d).

(7) Remedial Action. Take action to remedy violations of this Chapter as specified in Section 23.33.040(c).

(d) Appeals. The City Manager of the City of San Mateo 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. Appeals shall be filed at the City Clerk's office within ten days of the Floodplain Administrator's mailing of his or her decision.

23.33.050 PROVISIONS FOR FLOOD HAZARD REDUCTION.

(a) Standards of Construction. In all Areas of Special Flood Hazards the following standards are required:

(1) Anchoring.

(i) All new construction and substantial improvements shall be adequately anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.

(ii) All manufactured homes shall meet the anchoring standards of subsection (e).

(2) Construction Materials and Methods. All new construction and substantial improvements of structures, including manufactured homes, shall be constructed:

- (i) With flood resistant materials, and utility equipment resistant to flood damage for areas below the base flood elevation;
- (ii) Using methods and practices that minimize flood damage;
- (iii) With electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding; and
- (iv) Within Zones AH or AO, so that there are adequate drainage paths around structures on slopes to guide flood waters around and away from proposed structures.

(3) Elevation and Floodproofing (See Section 23.33.020, Definitions, for “basement,” “lowest floor,” “new construction,” “substantial damage” and “substantial improvement.”)

(i) Residential Construction. All new construction or substantial improvements of residential structures shall have the lowest floor, including basement:

(A) In AE, AH, A1-30 Zones, elevated to or above the base flood elevation.

(B) In an AO zone, elevated above the highest adjacent grade to a height equal to or exceeding the depth number specified in feet on the FIRM, or elevated at least 2 feet above the highest adjacent grade if no depth number is specified.

(C) In an A zone, without BFEs specified on the FIRM, elevated to or above the base flood elevation; as determined under 23.33.040(c)(2).

(ii) Upon the completion of the structure, the elevation of the lowest floor including basement shall be certified by a registered professional engineer or surveyor, and submitted to a City building inspector and represented to be properly elevated. Such certification shall be provided to the Floodplain Administrator for review.

(iii) New nonresidential construction or substantial improvements to existing nonresidential construction, shall either be elevated to conform with subsection (a)(3)(i) or together with attendant utility and sanitary facilities:

(A) Be floodproofed below the elevation recommended under subsection (a)(3)(i) so that 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 section are satisfied. Such certification shall be provided to the Floodplain Administrator.

(iv) Flood openings. All new construction and substantial improvements of structure 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 flood water. Designs for meeting this requirement must meet the following minimum criteria:

(A) For non-engineered openings:

1. 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;
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 floodwater; and

4. 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.

(v) Manufactured homes shall also meet the standards in subsection (e).

(b) Garages and low cost accessory structures.

(1) Attached garages.

(A) 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 See Section 23.33.050(a)(3). Areas of the garage below the BFE must be constructed with flood resistant materials in accordance with Section 23.33.050(a)(2).

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

(2) Detached garages and accessory structures.

(A) "Accessory structures," as defined in Section 23.33.020, "Definitions," may be constructed with a floor below the Base Flood Elevation (BFE), provided the structure is designed and constructed in accordance with the following requirements:

(i) Use of the accessory structure must be limited to parking or limited storage.

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

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

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

(v) The accessory structure must comply with floodplain encroachment provisions in Section 23.33.050; and

(vi) The accessory structure must be designed to allow for the automatic entry of flood waters in accordance with Section 23.33.050.

(B) Detached garages and accessory structures not meeting the above standards must be constructed in accordance with all applicable standards in 23.33.050.

(c) Breakaway Walls. A breakaway wall shall have a safe design loading resistance of not less than ten and no more than twenty 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 that which 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.

(d) Standards for Utilities.

(1) All new and replacement water supply and sanitary sewage systems shall be designed to minimize or eliminate:

(i) Infiltration of flood waters into the systems; and

(ii) Discharge from the systems into flood waters.

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

(e) Standards for Subdivisions. All subdivision proposals must:

(1) Identify the special Flood Hazard Area and the BFE.

(2) Provide the elevation of proposed structure(s) and pad(s). If the site is filled above the BFE, the lowest floor and pad elevations shall be certified by a registered professional engineer or surveyor and provided to the Floodplain Administrator.

(3) Be consistent with the need to minimize flood damage.

(4) Have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage.

(5) Provide adequate drainage to reduce exposure to flood hazards.

(f) Standards for Manufactured Homes.

(1) All manufactured homes that are placed or substantially improved, within Zones A1-30, AH, and AE on the community's Flood Insurance Rate Map, on sites located:

(i) Outside of a manufactured home park or subdivision;

(ii) In a new manufactured home park or subdivision;

(iii) In an expansion to an existing manufactured home park or subdivision; or

(iv) In an existing manufactured home park or subdivision on a site upon which a manufactured home has incurred "substantial damage" as the result of a flood, shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated to or above the BFE and be securely fastened to an adequately anchored foundation system to resist flotation collapse and lateral movement.

(2) All manufactured homes that are placed or substantially improved on sites located within Zones V1-30, V, and VE on the community's Flood Insurance Rate Map will meet the requirements of subsection (d)(1).

(3) All manufactured homes to be placed or substantially improved on sites in an existing manufactured home park or subdivision within Zones A1-30, AH, AE, V1-30, V, and VE on the community's Flood Insurance Rate Map that are not subject to the provisions of subsection (e)(1) will be securely fastened to an adequately anchored foundation system to resist flotation collapse and lateral movement, and be elevated so that either the:

(i) Lowest floor of the manufactured home is at or above the BFE; or

(ii) Manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than 36 inches in height above grade. Upon the completion of the structure, the elevation of the lowest floor including basement shall be certified by a registered professional engineer or surveyor, and submitted to the community building inspector and represented to be properly elevated. Such certification shall be provided to the Floodplain Administrator for review.

(g) Standards for Recreational Vehicles.

(1) All recreational vehicles placed on sites within Zones A1-30, AH, and AE on the Flood Insurance Rate Map will either:

(i) Be on the site for fewer than 180 consecutive days, and be fully licensed and ready for highway use. A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions, or

(ii) Meet the permit requirements of Section 23.33.040 of this Chapter and the elevation and anchoring requirements for manufactured homes in subsection (e)(1).

(2) Recreation vehicles placed on sites within Zones V1-30, V, and VE on the community's Flood Insurance Rate Map will meet the requirements of subsection (e)(1).

(h) Floodways. Since floodways are an extremely hazardous area due to the velocity of flood water 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 one foot at any point within the city boundary.

(2) Within an adopted regulatory floodway, the city shall prohibit encroachments, including fill, new construction, substantial improvements, and other development, unless certification by a registered civil engineer is provided demonstrating that the proposed encroachment shall not result in any increase in flood levels during the occurrence of the base flood discharge.

(3) All new construction and substantial improvements, must comply with all other applicable flood hazard reduction provisions of Section 23.33.050.

(i) Coastal High Hazard Areas. Within Coastal High Hazard Areas as established under Sections 23.33.030(b), the following standards shall apply:

(1) All new construction and substantial improvement shall be elevated on adequately anchored pilings or columns and securely anchored to such pilings or columns so that the lowest horizontal portion of the structural members of the lowest floor (excluding the pilings or columns) is elevated to or above the base flood level. The pile or column foundation and structure attached thereto is anchored to resist flotation, collapse, and lateral movement due to the effects of wind and water loads acting simultaneously on all building components. Water loading values used shall be those associated with the base flood. Wind loading values used shall be those required by applicable state or local building standards.

(2) All new construction and other development shall be located on the landward side of the reach of mean high tide.

(3) All new construction and substantial improvements shall have the space below the lowest floor free of obstructions or constructed with Breakaway Walls. Such enclosed space shall not be used for human habitation and will be usable solely for parking of vehicles, building access or storage.

(4) Fill shall not be used for structural support of buildings.

(5) Man-made alteration of sand dunes which would increase potential flood damage is prohibited.

(6) The Floodplain Administrator shall obtain and maintain the following records:

(i) Reserved.

(ii) The elevation (in relation to mean sea level) of the bottom of the lowest structural member of the lowest floor (excluding pilings or columns) of all new and substantially improved structures, and whether such structures contain a basement.

23.33.060 ALTERNATE DESIGN STANDARD PROCEDURE

(a) Applicability. Alternate design standards may be approved for new construction or, substantial improvements necessary for the conduct of a functionally dependent use provided that the provisions of this Chapter are satisfied and that the structure or other development is protected by methods that minimize flood damage during the base flood, does not result in additional threats to public safety and does not create a public nuisance. The alternate design standard criteria set forth in this section pertain to a piece of property and are not personal in nature. An alternate design standard may be granted for a parcel of property with physical characteristics so unusual that complying with the requirements of this Chapter would create an exceptional hardship to the applicant or the surrounding property owners. The characteristics must be unique to the property. The unique characteristic must pertain to the land itself, not to the structure, its inhabitants, or the property owners.

Initial determination regarding issuance of a permit based upon alternate design standards shall be by the Floodplain Administrator.

(b) Requirements for Alternate Design Standards.

(1) Alternate design standards 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 that the procedures of Sections 23.33.040 and 23.33.050 of this Chapter have been fully considered. As the lot size increases beyond one-half acre, the technical justification required for issuing the alternate design standard increases.

(2) Alternate design standards may be approved for the repair or rehabilitation of Historic Structures upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as an historic structure and the alternate design standard is the minimum necessary to preserve the historic character and design of the structure.

(c) Limitations on Use of Alternate Design Standards.

(1) Alternate design standards shall not be approved within any mapped regulatory floodway if any increase in flood levels during the base flood discharge would result.

(2) Alternate design standards shall only be approved upon a determination that the alternate design standard is the "minimum necessary" considering the flood hazard, to afford relief. "Minimum necessary" means to afford relief with a minimum of deviation from the requirements of this Chapter. For example, in the case of alternate design standards to an elevation requirement, this means the City need not grant permission for the applicant to build at grade, or even to whatever elevation the applicant proposes, but only to that elevation which the City believes will both provide relief and preserve the integrity this Chapter.

(d) Required Findings for Use of Alternate Design Standards. Alternate design standard shall only be approved upon the Building Official's determination that:

(i) There is showing of good and sufficient cause;

(ii) Failure to grant the alternate design standard would result in exceptional "hardship" (as defined in Section 23.33.020 of this Chapter) to the applicant; and

(iii) The approval of an alternate design standard will not result in increased flood heights, additional threats to public safety, or extraordinary public expense, Public safety nuisance, Fraud or Victimization of the public, or conflict with existing local laws or ordinances.

(e) Conditions of Approval. Upon consideration of the factors of subsection (a) and the purposes of this Chapter, the Building Official may attach such conditions to the granting of alternate design standard as he or she deems necessary to further the purposes of this Chapter.

(f) Relevant Facts for Alternate Design Standards. In passing upon requests for alternate design standards, the Floodplain Administrator shall consider all technical evaluations, all relevant factors, standards specified in other sections of this Chapter, and the:

(i) Danger that materials may be swept onto other lands to the injury of others;

(ii) Danger of life and property due to flooding or erosion damage;

(iii) Susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the existing individual owner and future owners of the property;

(iv) Importance of the services provided by the proposed facility to the community;

(v) Necessity to the facility of a waterfront location, where applicable;

(vi) Availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;

(vii) Compatibility of the proposed use with existing and anticipated development;

(viii) Relationship of the proposed use to the comprehensive plan and floodplain management program for that area;

(ix) Safety of access to the property in time of flood for ordinary and emergency vehicles;

(x) Expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters expected at the site; and

(xi) Costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water system, and streets and bridges.

(g) Notice. Any applicant to whom an alternate design standard is granted shall be given written notice over the signature of the Floodplain Administrator or designee that:

(i) The approval of an alternate design standard to construct a structure below the base flood level will result in increased premium rates for flood insurance up to amounts as high as \$25.00 for \$100.00 of insurance coverage; and

(ii) Such construction below the base flood level increases risks to life and property.

A copy of the notice shall be recorded by the Floodplain Administrator in the Office of the San Mateo County Recorder so that it appears in the chain of title of the affected parcel of land.

(h) Records. The Floodplain Administrator will maintain a record of all alternate design standards actions, including justification for their issuance, and report such alternate design standards issued in its biennial report submitted to the Federal Insurance and Mitigation Administration, Federal Emergency Management Agency.

23.33.070 TERMINATION. This Chapter shall terminate and be of no further force and effect when there are no properties within the special flood hazard area.

Section 2. SEVERABILITY. This Chapter and the various parts thereof are hereby 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.

Section 3. ENVIRONMENTAL DETERMINATION. In accordance with California Environmental Quality Act (CEQA) Guidelines section 15061(b)(3), adoption of this Ordinance is not a project subject to CEQA because it can be seen with certainty that it won't have a significant impact on the environment.


Section 4. PUBLICATION. This Ordinance shall be published in summary in the Examiner Peninsula Edition, posted in the City Clerk's Office, and posted on the City's website, all in accord with Section 2.15 of the City Charter.

Section 5. EFFECTIVE DATE. This Ordinance shall be effective 30 days from the date of adoption.


The foregoing ordinance was introduced on June 1, 2015, and adopted by the City Council of the City of San Mateo, State of California on the 15th day of June, 2015, by the following vote:

AYES: Council Members Matthews, Bonilla, Goethals and Lim
NOES: None
ABSENT: Council Member Freschet

ATTEST:



Patrice M. Olds, City Clerk



Jack Matthews, Deputy Mayor