ORDINANCE NO. 163913

An ordinance amending the Specific Plan for the Management of Flood Hazards established by Ordinance No. 154,405.

THE PEOPLE OF THE CITY OF LOS ANGELES DO ORDAIN AS FOLLOWS:

Ordinance No. 154,405 establishing a Specific Plan for the Management of Flood Hazards is hereby amended to read as follows:

WHEREAS, the Congress of the United States has enacted the National Flood Insurance Act of 1968, as amended (42 USC 4001 et seq.), and the Flood Disaster Protection Act of 1973 (Public Law 93-234, 87 Stat. 975), and subsequent laws for the protection of life and property and to forestall to the extent possible, flood-related disaster, and

WHEREAS, in enacting those laws, Congress has found that;

(1) annual losses throughout the Nation from floods and mudslides are increasing at an alarming rate, largely as a result of the accelerating development of, and concentration of population in areas of flood and mudslide hazards;

(2) the availability of Federal loans, grants, guaranties, insurance and other forms of financial assistance are often determining factors in the utilization of land and the location and construction of public and private industrial, commercial and residential facilities;

(3) property acquired or constructed with grants or other Federal assistance may be exposed to risk of loss through floods, thus frustrating the purpose for which such assistance was extended;

(4) Federal instrumentalities insure or otherwise provided financial protection to banking and credit institutions whose assets include a substantial number of mortgage loans and other indebtedness secured by property exposed to loss and damage from floods and mudslides;

(5) The Nation cannot afford the tragic loss of life caused annually by flood occurrences, nor the increasing losses of property suffered by flood victims, most of whom are still inadequately compensated despite the provision of costly disaster relief benefits; and

(6) it is in the public interest for persons already living in flood-prone areas to have both the opportunity to purchase flood insurance and access to more adequate limits of coverage, so they will be indemnified for their losses in the event of future flood disaster, and

WHEREAS, the Flood Disaster Protection Act of 1973:

(1) substantially increases the limits of coverage authorized under the National Flood Insurance Program;

(2) provides for the expeditious identification of, and the dissemination of information concerning flood-prone areas;

(3) requires State or local communities, as a condition of future Federal financial assistance, including disaster relief and federally insured mortgages, to participate in the National Flood Insurance Program and to adopt adequate floodplain ordinances with effective enforcement provisions consistent with (at the minimum) Federal standards to reduce or avoid future flood losses; and

(4) requires the purchase of flood insurance by property owners who are being assisted by Federal programs or by federally supervised, regulated or insured agencies or institutions in the acquisition or improvement of land or facilities located or to be located in identified areas having special flood hazards, and

WHEREAS, it is imperative that the City adopt a floodplain management program in order to transfer from the Emergency Phase to Regular status in the National Flood Insurance Program, and

WHEREAS, Regular Status will significantly increase the limits of coverage and significantly reduce the overall premium rates of flood insurance, and

WHEREAS, Congress intended the National Flood Insurance Program to be only the minimum basis upon which local communities should design their floodplain management regulations, and

WHEREAS, the Federal Regulations, being designed for national coverage, do not fully recognize certain flood and/or mudflow hazards unique to the western States and particularly to Southern California, and

WHEREAS, for the protection of human life, health, safety and for the protection of property, it is essential to fully develop an adequate floodplain management plan, and

WHEREAS, the State Constitution empowers to the City to make and enforce all laws and regulations in respect to Municipal affairs, and

WHEREAS, Section 96.5 of the City Charter provides that the purpose of the General Plan shall be to serve as a basic and continuous reference in: (a) planning for the development of the City, (b) developing, correlating and coordinating official regulations, controls, programs and services, and (c) attaining coordination of planning and administration by all agencies of the City government, other governmental bodies and private organizations and individuals involved in the development of the City, and

WHEREAS, the policies, objectives and programs of the Conservation Plan, an element of the City's General Plan, adopted by the City Council on December 20, 1973, are consistent with the applicable provisions and intent of the Flood Disaster Protection Act of 1973, and

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WHEREAS, it is a policy of the Safety Element of the General Plan, adopted by the City Council on September 19, 1975, that "hazards to life and property due to mudflow and storm runoff be minimized," and

WHEREAS, Section 97.1 of the City Charter sets forth the authority for the establishment of specific plans as may be required to insure the execution of the General Plan, and

WHEREAS, Section 11.5.7 of the Los Angeles Municipal Code declares that a specific plan shall provide by ordinance such regulatory controls or incentives as may be necessary for the sytematic execution of the General Plan, and

WHEREAS, the Federal Emergency Management Agency, Federal Insurance Administration, has adopted final rules effective October 1, 1984, January 4, 1986 and October 1, 1986 revising the National Flood Insurance Program, and it is required that the Flood Hazard Management Specific Plan be amended to be consistent with said final rules in order for the City to continue to be eligible for participation in the National Flood Insurance Program;

Section 1. PURPOSE AND OBJECTIVES.

The Council hereby establishes this Specific Plan. The Plan shall apply to all public and private development. This Plan is intended to provide for the establishment, management and regulatory control of flood hazard areas.

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Being hazard-specific, this Plan provides sections designed to deal with the unique problems of each hazard in addition to the citywide policies and goals. This Plan is not intended as a Geographically Specific Plan as referred to in Paragraph D, Section 11.5.7 of the Los Angeles Municipal Code and that Paragraph is not applicable to this Plan

This Plan does not imply that land outside the areas of special flood hazard identified on the Los Angeles Flood Hazard Map or that uses permitted within such areas will be free from flooding or flood-related damages. This map identifies areas expected to be impacted by 100-year floods. As a matter of practicality, the City cannot provide protection against every eventuality and no guarantee is given or implied that all eventualities are protected against.

Objectives of the Plan include:

A. To protect human life and health;

B. To forestall, to the extent possible, flood-related disaster (from any cause);

C. To provide a means by which public and private development is planned in such a manner as to avoid or otherwise minimize flood-related risks to residents and structures on or near hillside areas, as well as upstream or downstream of any project;

D. To minimize expenditures of public money for costly flood control projects;

E. To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;

F. To provide the authority under which special programs can be devised in order to provide for the relief from flood-related hazards;

G. To minimize prolonged business interruption;

H. To minimize damage to 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;

I. To help maintain a stable tax base by providing for the second use and development of areas of special flood hazard so as to minimize future blight areas;

J. To assure that potential buyers and renters are notified when property is located in an area of special flood hazard; and,

K. To assure that those who occupy the areas of special flood hazard assume responsibility for their actions.

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Sec. 2. DEFINITIONS.

For the purposes of this Plan, certain terms require special definitions. All other words or terms not herein defined shall be construed as defined in Sections 11.01, 12.03 and 17.02 of the Los Angeles Municipal Code.

Administrator. The Federal Insurance Administrator. The person delegated the responsibility of the administration of the National Flood Insurance Program.

Appeal. A request for a review of a decision-maker's interpretation of any provision of this ordinance or a request for a waiver.

Area of Coastal High-hazard. Any area, subject to high velocity waters including, but not limited to wave wash or tsunami. This area is designated V1-30, V or VE zones on the Los Angeles Flood Hazard Map (LAFHM).

Area of Shallow Flooding. A designated AO, AH, A or AE Zone on the LAFHM with base flood depths from one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable, and indeterminate and where velocity flow may be evident.

Area of Special Flood-related Erosion Hazard. Land which is most likely to be subject to severe

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flood-related erosion losses. This area is a designated E Zone on the LAFHM.

Area of Special Flood Hazard. All land in the floodplain subject to a one percent or greater chance of flooding in any given year. This area is designated as A, AO, AE, AH, A1-30, A-99, V, VE and V1-30 zones on the LAFHM.

Area of Special Mudflow Hazard. Land which is most likely to be subject to severe mudflow. This area is a designated Zone M on the LAFHM.

Base Flood. Any flood having a one percent chance of being equaled or exceeded in any given year.

Basement. Any area of the building having its floor subgrade below ground level on all sides.

Debris. Any natural material such as, but not limited to, silt, sand, rock, wood, and any man-made objects, including, but not limited to, vehicles and structures or their component parts capable of being transported by water or mudflow and deposited in a location other than the point of origin.

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

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Emergency. Any occurrence which by reason of its magnitude is or is likely to become beyond the control of the normal services, personnel, equipment and facilities of the regularly constituted branches and departments of the City government.

Existing Construction. Any development for which "Start of Construction" commenced prior to adoption of this Plan. "Existing Construction" may also be referred to as "Existing Structures."

Flood or Flooding.

1. A general and temporary condition of partial or complete inundation of normally dry land areas resulting from:

a. Overflow of inland or tidal waters, including storm waves, or seiches.

b. Unusual and rapid accumulation or runoff of surface waters from any source.

c. Rupture or breaching of water retaining structures including, but not limited to dams, canals and viaducts caused by an unpreventable force of nature.

d. Mudflow which is proximately caused or precipitated by accumulations of water on or under the ground.

e. The collapse or subsidence of land resulting from flood-related erosion.

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Flood Boundary and Floodway Map (FBFM). The official map issued by the Administrator which delineates floodways within the City of Los Angeles.

Flood Elevation Determination. A determination by the Administrator or by the City Engineer of the water surface elevations of the base flood.

Flood Hazard or Flood-related Hazard. Any hazard covered by this Plan including, but not limited to: flooding, mudflow, coastal high-hazards and flood-related erosion.

Flood Hazard Study. An examination, evaluation and determination of flood hazards from all causes and if appropriate, corresponding water surface elevations, or an examintion, evaluation and determination of mudflow and/or flood-related erosion hazards prepared by a licensed hydrologist or civil engineer.

Flood Insurance. Insurance coverage provided under the National Flood Insurance Program.

Flood Insurance Rate Map (FIRM). The official map issued by the Administrator delineating both the special hazard areas and the risk premium zones for the City of Los Angeles.

Floodplain or Flood-prone Area. Any land susceptible to being inundated by water from any source (see definition of "Flooding").

Flood Protection System. Structural works which have been constructed specifically to modify flooding

in order to reduce the extent of the area and/or of flood waters within areas of "Special (flood) Hazard." Such a system of specialized flood modifying works typically includes hurricane tidal barriers, dams, reservoirs, levees or dikes and improved channels and are constructed in conformance with sound engineering standards.

Flood-proofing. Any combination of structural and non-structural additions, changes or adjustments to structures which reduce or eliminate flood-related damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

Flood-related Erosion Area or Flood-related Erosion-Prone Area. An area which is likely to suffer flood-related erosion damage resulting from the collapse or subsidence of land along the shore or bank of an ocean, lake, river or watercourse as a result of 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, resulting from a severe storm, or by an unanticipated force of nature, such as a tsunami, an abnormal tidal surge, flash flood or some similarly unusual and unforseeable event which results in flooding.

Floodway. The channel of a river or other major drainage course 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 a designated height.

Freeboard. A factor of safety denoting the vertical distance above a flood level for the purposes of floodplain management. The determination of freeboard should take into account factors that could contribute to flood heights greater than the height calculated for a selected size flood and floodway conditions, such as wave action, bridge openings and the hydrological effect of urbanization of the watershed and/or burn of the natural vegetation cover of the watershed.

Functionally Dependent Use. 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, ship building and ship repair facilities, but does not include long-term storage or related manufacturing facilities.

Highest adjacent grade. The highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

Los Angeles Flood Hazard Map (LAFHM). The official map for the City of Los Angeles showing the boundaries of hazard areas and consists of a number of

separate sheets, actual or computer-stored, bearing marks, notations, references and other pertinent information.

Lowest Floor. The lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access or storage, in an area other than a basement area, is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable nonelevation design requirements of this ordinance.

Manufactured Home. A structure, transportable in one or more sections which is built on a permanent chassis and designed to be used with or without a permanent foundation when connected to the required utilities. Recreational vehicles or travel trailers used only for vacations are not considered manufactured homes. The term includes, but is not limited to, the definition of "Manufactured Home" as set forth in the regulations governing the Mobile Home Safety and Construction Standards Program (24 CFR 3282.7(u)). 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 180 consecutive days.

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Manufactured Home Park or Subdivisions. A parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale and having facilities for servicing the lot on which the manufactured home is to be affixed (including at a minimum site grading or the pouring of concrete pads, installation of utilities and the construction of streets).

Mean Sea Level. The National Geodetic Vertical Datum (NGVD) of 1929 or other datum, to which base flood elevations shown on the Community Flood Insurance Rate Maps (FIRM) are referenced and applicable to the National Flood Insurance Program (NFIP).

Mudflow. The condition wherein there is a river, flow or inundation of liquid mud down a hillside usually, but not limited to the result of a dual condition of loss of brush cover and the subsequent accumulation of water on or under the ground preceded by a period of unusually heavy or sustained rain. A mudflow may occur as a distinct phenomenon while a landslide is in progress.

Mudflow-Prone Areas. An area with land surfaces and slopes of unconsolidated material where the history, geology and climate indicate a potential for mudflow.

New Construction, New Development or New Project. Any public project or any phase of a public project for

which a contract has not been entered into or any private project for which a grading and/or building permit is issued on or after the effective date of Ordinance No. 154,405. It is not intended in this definition that the issuance of a grading permit prior to said effective date abrogate the necessity for compliance with this Plan for any additional permits issued after said effective date.

New Manufactured Home Parks or Manufactured Home Subdivision. Any "Manufactured Home Park" or "Manufactured Home Subdivision" for which a grading and/or building permit is issued on or after the effective date of the Plan.

One Hundred-Year Flood. Synonymous with "Base Flood."

Person. Includes any individual or group of individuals, corporation, partnership, association or other entity, including Federal, State, regional and local governments and agencies.

Plan. The Flood Hazard Management Specific Plan.

Project. Synonymous with "Development."

Special Hazard Area. An area having special flood, mudflow, coastal high hazard and/or flood-related erosion hazards and shown on a FIRM or FBFM as Zone A, AO, AE, AH, A1-30, V1-30, VE or V.

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Start of Construction. For other than new construction or substantial improvements under the Coastal Barrier Resources Act (Pub. L 92-348), include 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 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 stage of excavation; or placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading, and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure.

Structure. Anything constructed or erected either upon or below the surface of the earth and which is supported directly or indirectly by the earth including manufactured homes.

Substantial Improvement. Any repair, reconstruction or improvement of a structure, the cost

of which equals or exceeds fifty-percent of the market value of the structure either, (a) before the improvement or repair is started, or (b) if the structure has been damaged, and is being restored, before the damage occurred. For the purposes of this definition "Substantial Improvement" is considered to occur when the alteration of any wall, ceiling, floor, or other structural part of a structure commences, whether or not that alteration affects the external dimensions of the structure. The term does not include 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 any alteration of a structure listed on the National Register of Historic Places or a state inventory of Historic Places.

Waiver. A grant of relief from any or all of the terms of this Plan or implementing regulations thereof.

Water Surface Elevation. The projected heights in relation to National Geodetic Vertical Datum (NGVD) of 1929 or other datum reached by floods of various magnitudes and frequencies in the flood plains of coastal, lacustrine, riverine or other riparian areas.

Sec. 3. LOS ANGELES FLOOD HAZARD MAP.

The LAFHM is designated the official map for the City of Los Angeles showing the boundaries of flood

hazard areas and shall consist of a number of separate sheets bearing marks, notations, references and other pertinent information and shall be established and revised by ordinance. The LAFHM is on file in the office of the City Engineer.

A. The LAFHM shall include:

1. The FIRM and the FBFM, which maps, together with the Flood Insurance Study for the City of Los Angeles, issued by the Federal Insurance Administration, are by this reference incorporated herein.

2. Other maps designated by the City Council.

B. The LAFHM shall be executed at a scale sufficient to allow a lot-by-lot determination of applicability to these regulations.

C. Copies of the LAFHM shall be available for inquiry and inspection at the public counters in the central and district offices of the:

1. Department of City Planning

2. Bureau of Engineering

3. Department of Building and Safety

Sec. 4. POLICIES.

A. Citywide. It is the City's policy:

1. That public and private development be prohibited in areas where flood-related hazards

would seriously endanger human life, health or property.

2. That nonessential public utilities, public or quasi-public facilities not be located in special hazard areas. When public utilities, public or quasi-public facilities must be located in hazard areas, assure that they are constructed to minimize or eliminate any flood hazards.

3. That, as the General Plan Elements and Community Plans are restudied and revised, areas needing the protection provided by this Specific Plan will be appropriately designated.

4. That the City consider during the processing of development proposals the potential for flooding and flood-related damage in areas not otherwise identified as flood hazard areas due, but not limited to, the rupture, breakage or structural failure of a dam, reservoir, aqueduct or other large water or sewer conduit, whether by an earthquake or by any other cause.

5. That uses compatible with flooding shall be encouraged in special hazard areas as opposed to other uses.

6. That the City in considering proposals for all new public and private development take into account the potential for adverse effects on

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development already existing within special hazard areas.

7. That all future public and private developments, including rehabilitation, reconstruction and add-on construction be located and designed with regard to flood-related hazards.

8. That all development presently existing in flood-related hazard areas be encouraged to institute protective and remedial measures for protection from flood hazards.

9. That land subject to repeated and/or severe flood damage where feasible and practicable be acquired by the City and held as open space or be used in a manner compatible with flood-related hazards.

10. That the City prepare flood warning and emergency preparedness plans as a part of the City's Emergency Preparedness Plan, with an emphasis on phased early warning to citizens in potentially affected areas.

11. That alternative access and escape routes be designated when normal routes may be blocked or destroyed by flooding.

12. That all persons who occupy property which is subject to flood hazards bear full responsibility for their actions.

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13. That as more information becomes available and/or new situations arise, additional flood hazard studies be undertaken and, pursuant to such studies, provisions be added to this Plan as become necessary for the fullest implementation of the spirit and intent of the Plan.

14. That the City coordinate with neighboring jurisdictions its efforts in the management of flood-related hazard areas.

15. That means be sought by which relief from flood-related disasters can be expedited.

16. That the broadest range of design and construction alternatives consistent with this Plan be considered for new development in flood-related hazard areas and that the choice of acceptable alternatives rest with the applicant.

17. That the City seek innovative means to achieve the goals and to carry-out the intent and purpose of this Plan.

18. That demonstration grants be applied for as one of many methods to carry-out the Programs of this Plan.

B. Floodways. In addition to the Citywide Policies, in floodways it is the policy of the City:

1. That drainage channels adequate to discharge the flood waters or runoff of a Base

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Flood be preserved from encroachment in areas which are still substantially undeveloped.

2. That no new development be allowed in floodways.

3. That where existing development now occupies floodways measures be taken to either:

(a) provide flood works sufficient to discharge a Base Flood or,

(b) encourage relocation of such development outside of areas which must be preserved as floodways as required for the overall safety, health and well-being of the community.

4. That floodways be maintained in good repair and free of debris by the agency or organization (public or private) responsible for such activity.

C. Floodplains. In addition to the Citywide policies, in floodplains it is the policy of the City:

1. That the existence and extent of flooding be considered in the planning, siting, design and construction of public and private development.

2. That full consideration be given to the fact that development in flood-prone areas may create a potential for loss of life and personal

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injuries, loss to public and private property and exposure to flood hazards.

D. Mud-prone Areas. In addition to the Citywide policies, in mud-prone areas, it is the policy of the City:

1. That the existence and extent of mudflow hazard areas be considered in the planning, siting, design and construction of public and private development.

2. That full consideration be given to the fact that development in mudflow areas may create a potential for loss of life and personal injuries, loss to public and private property and exposure to mud-prone hazards.

E. Coastal High-hazard and Flood-related Erosion Hazard Areas. In addition to the Citywide policies in areas of coastal high-hazard and of special flood-related erosion hazard, it is the policy of the City:

1. That the existence and extent of coastal high-hazard and/or flood-related erosion be considered in the planning, siting, design and construction of public and private development.

2. That full consideration be given to the fact that development in coastal high-hazard and/or flood-related erosion areas may create a potential for loss of life and personal injuries,

loss to public and private property and exposure to coastal high-hazard and/or flood-related erosion hazards.

Sec. 5. DEVELOPMENT REGULATIONS.

This Section prescribes the regulations by which all public and private development shall be governed.

A. General.

1. These regulations apply to the special flood hazard area designations and water surface elevations furnished by the Administrator and the City Engineer.

2. To the extent permitted by law, all public and private development shall be subject to these regulations and construction may not commence without compliance with the provisions and intent of this Plan and permits from those governmental agencies from which approval is required by Federal or State law.

3. These regulations shall be considered to be the minimum requirements and where sound engineering and prudence demand, such additional measures shall be taken to assure full compliance with the intent and purpose of this Plan.

4. This Section shall not create liability on the part of the City of Los Angeles, the United States or any officer or employee thereof.

5. It is not the intent of these regulations to abrogate or lessen in any respect any other provision of the Los Angeles Municipal Code. Should any provisions of this Section conflict with any other provision of the Los Angeles Municipal Code, the more restrictive shall prevail.

B. Planning Development Permits.

1. Applications and procedures for Zone Changes, Variances, Conditional Use Permits, Divisions of Land, Coastal Development Permits, Environmental Clearances, or any other permit procedure pertinent to this Plan shall contain additional information on the application forms sufficient to determine the existence and extent of flood-related hazards, and to provide sufficient data to enable thorough and complete review of the development as it relates to this Plan.

2. For all projects processed by the Department of City Planning including the office of Zoning Administrator a finding of fact shall be made as to whether or not a project is located within a special hazard area. For projects found to be located in a special hazard area the following finding shall be made: "that the project conforms with both the specific provisions

and the intent of the Floodplain Management Specific Plan." Specific factual evidence supporting this finding shall be contained in the record pertaining to the project.

3. No new zone variance or conditional use permit may be granted or existing zone variance or conditional use permit extended for development within a floodway.

4. Subdivisions. Notwithstanding the provisions of Section 5-A,1, herein, these regulations shall also apply to all subdivisions located within the boundaries of a "Hillside Area" as defined in Section 91.0400 of the Municipal Code.

(a) Subdivisions shall be designed in such a manner as to prevent flood-related damage to the subdivision and to existing downstream development, both during construction and subsequently.

(b) Public and private drainage and sanitary facilities and utilities shall be designed and installed so as to eliminate or minimize damage from flood-related hazards.

(c) For areas involving natural or man-made channels for potential run-off of a Base Flood, subdividers shall be required to furnish delineation for floodways, if not

already mapped or if changes are proposed to the mapped floodways.

(d) Alterations of drainage courses shall be governed by the procedure set forth in Section 8.

(e) All division of land proposals shall include within such proposals base flood elevation data.

(f) Provisions for alternative vehicular access and escape routes when normal routes are blocked or destroyed by flooding and/or mudflow shall be required wherever possible.

(g) The City in approving the location of new manufactured home parks shall require an evacuation plan indicating alternate vehicular access and escape routes to be filed with the Emergency Operations Board.

C. Construction Regulations.

1. General.

(a) All public and private development which has the potential to cause flooding or mud damage to neighboring communities shall be designed in such a manner as to be consistent with the floodplain management programs of those communities.

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(b) Site exploration and investigation by the developer shall be required before approving any development in a special flood-related hazard area.

(c) Insofar as enforceable by State law, public and quasi-public facilities including schools, hospitals, nursing homes, orphanages, correctional and other residential institutions, fire and police stations, communication centers, electric power transformers and substantions, water and sewer pumping stations and any other public or quasi-public institutions situated in a special hazard area shall be located and designed so as to enable them to withstand flood-related damage and to facilitate emergency operations.

(d) Water and sewer conduits shall not be installed in any special hazard area unless provisions have been made to avoid health hazards by the contamination of water conduits or discharges from sewer conduits into floodwaters. On site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

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(e) It shall be mandatory that sellers, lessors or rentors give written notice to all prospective and interested parties including, but not limited to purchasers, lessees and renters, prior to finalization of such a transaction when the subject land and/or structures are located within special hazard areas.

The notice shall contain the following information:

(1) The nature and classification of the special hazard,

(2) The hazard zone designation,

(3) Whether waivers have been granted for development located within the special hazard area, and

(4) That premium rates for flood hazard insurance of new structures built at elevations below the base flood shall substantially increase as the elevations decrease.

Failure to give such notice shall be a basis for rescinding any sale, lease or rental agreement.

2. Floodways. In addition to the General Regulations, the following shall apply in floodways:

(a) No new structures, construction, add-on construction, reconstruction, rehabilitation or other improvements to existing structures shall be permitted within a floodway.

(b) All development existing within floodways at the time of the adoption of Ordinance No. 154,405 may continue. No grants, privileges or considerations shall be given which would prolong the life of the development unless alternative means are provided for the unimpeded discharge of a Base Flood.

(c) Manufacturing buildings or other facilities in which hazardous substances are stored, manufactured or used shall be prohibited within any floodway.

3. Floodplains. In addition to the General Regulations, the following shall apply in areas of special flood hazard:

(a) The lowest floor of all structures shall be constructed at least one foot above the base flood elevation, and in Zones AH, AO and VO shall be elevated above the highest adjacent grade at least one foot higher than the depth number specified in feet on the FIRM, or at least two feet if no depth number

is specified. The elevation of the lowest floor shall be provided to and maintained by the Superintendent of Building and Safety. Construction below the base flood level shall be flood-proofed. In areas where base flood data has not been furnished by the Administrator, the office of the City Engineer shall provide the base flood elevation.

(b) Adverse cumulative effects of new development on development already existing in floodplains shall be considered in determining whether to issue a permit, and the new development shall not be approved unless it can be adequately demonstrated that the project will not increase the exposure of existing devcelopment to flood-related hazards.

(c) All new construction and substantial improvements in areas subject to subsidence shall have the lowest floor elevated a minimum of one foot above the base flood level plus a factor for the expected subsidences for a ten year period and the elevation of the lowest floor shall be provided to and maintained by the Superintendent of Building and Safety.

(d) 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 requirement must either be certified by a Registered Civil Engineer, Structural Engineer, or Architect or must meet or exceed the following minimum criteria: a miniumum of two openings having a total net area of not less than 1 square inch for every 1 square foot of enclosed area subject to flooding shall be provided. The bottom of all openings shall be no higher than 1 foot above grade. Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

(e) Electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

(f) Where floodproofing is utilized, either a registered professional engineer or architect shall certify that the floodproofing methods are adequate to withstand the flood depths, pressures, velocities, impact and uplift forces and other factors associated with the base flood and a record of such certificates indicating the specific elevation (in relation to mean sea level) to which such structures are floodproofed shall be maintained by the Superintendent of Building and Safety.

(g) In zones AH and AO adequate drainage paths shall be provided around structures on slopes to guide floodwaters around and away from proposed structures.

(h) To the extent permitted by State law, all manufactured homes and additions to manufactured homes to be placed within a floodplain shall be anchored to resist flotation, collapse, or lateral movement by one of the following methods:

(1) by providing an anchoring system designed to withstand horizontal forces of 25 pounds per square foot and uplift forces of 15 pounds per square foot, or;

(2) by providing over-the-top and frame ties to ground anchors as follows:

(i) over-the-top ties shall be provided at each of the four corners of the manufactured home, with two additional ties per side at intermediate locations; manufactured homes less than 50 feet long shall require only one additional tie per side;

(ii) frame ties shall be provided at each corner of the manufactured home, with five additional ties per side at intermediate locations; manufactured homes less than 50 feet long shall require four additional ties per side, and;

(iii) all components of the anchoring system shall be capable of withstanding a force of 4,800 pounds.

(i) Within Zones A1-30, A-99, AO, AH and AE on the LAFHM, for all new manufactured home parks and manufactured home subdivisions, expansions to existing manufactured home parks and manufactured home

subdivisions and existing manufactured home parks and manufactured home subdivisions where the repair, reconstruction or improvement of the streets, utilities and pads equals or exceeds 50% of the value of the streets, utilities and pads before the repair, reconstruction or improvement has commenced, and for all manufactured homes to be placed within Zones A1-30, A-99, AO, AH and AE on the LAFHM, but not into a manufactured home park or manufactured home subdivision, the following shall be required:

(1) stands or lots shall be elevated on compacted fill or on pilings so that the lowest floor of the manufactured home will be at least one-foot above the base flood level,

(2) adequate surface drainage and access for a hauler shall be provided and,

(3) in the instance of elevation on pilings, lots shall be large enough to permit steps, piling foundations shall be placed in stable soil no more than ten feet apart and reinforcement shall be provided for pilings more than six feet above the ground level.

(j) In areas of flooding adequate freeboard and additional flood-proofing, where necessary, shall be required.

4. Mudflow areas and Mudflow-prone Areas. In addition to the General Regulations, the following shall apply in areas of special mudflow hazard.

(a) Each permit application shall be reviewed to determine whether the proposed site and improvements will be reasonably safe from mudflows.

(b) To the extent permitted by State law the location and design of public utilities and service facilities, such as sewer, water, gas, and electrical systems shall be such as to minimize exposure to mudflow hazards.

(c) Require, if a proposed site and improvements may have mudflow hazards, that:

(1) site investigation review be made by persons qualified and licensed in geology and/or soil engineering to ascertain the location and extent of the mudflow hazard and to recommend remedial measures,

(2) the proposed grading, excavations, new construction and

substantial improvements are adequately designed and protected to withstand mudflow damages,

(3) the proposed grading, excavations, new construction and substantial improvements do not aggravate the existing hazard by creating either on-site or off-site disturbances, and

(4) the proposed drainage, planting, watering and maintenance be such as not to endanger slope stability.

(d) Enforce and periodically review the grading ordinance or regulations with regard to the following:

(1) regulation of the location of foundation systems and utility systems of new construction and substantial improvements,

(2) regulation of the location, drainage and maintenance of all excavations, cuts and fills and planted slopes,

(3) providing special requirements for protective measures including, but not necessarily limited to, retaining

walls, buttress fills, subdrains, diverter terraces, benchings, etc., and

(4) requiring engineering drawings and specifications to be submitted for all corrective measures, accompanied by supporting soils engineering and geology reports.

5. Coastal High-hazard. In addition to the General Regulations, the folowing shall be required in areas of coastal high hazard:

(a) Each permit application shall contain information sufficient to determine whether the proposed site alterations and improvements will be reasonably safe from coastal high-hazards and will not cause or otherwise aggravate the existing coastal high-hazards. Each application shall further provide 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; and the Superintendent of Building and Safety shall maintain a record of such elevations.

(b) Where a proposed improvement is found to be in the path of coastal

high-hazards or to increase coastal high-hazards, require the improvement to be relocated or adequate protective measures to be taken which will not aggravate the hazard or shift the hazard to another location.

(c) All new construction within Zones V1-30, V or VE on the LAFHM shall be located landward of the reach of mean high tide.

(d) All new construction and substantial improvements within Zones V1-30, V or VE on the LAFHM shall be elevated on adequately anchored pilings or columns and securely anchored to such piles or columns so that the lowest portion of the structural members of the lowest floor (excluding the pilings or columns) is elevated to or above the base flood level. A Registered Civil Engineer, Structural Engineer or Architect shall certify that the structure is securely anchored to adequately anchored pilings or columns in order to withstand velocity waters and hurricane wave wash.

(e) All new construction and substantial improvements within Zones V1-30, V or VE on the LAFHM shall have the space below the lowest floor free of obstructions or be constructed with "breakaway walls"

intended to collapse under stress without jeopardizing the structural support of the structure so that the impact on the structure by abnormally high tides or wind-driven water is minimized. Such temporarily enclosed space shall not be used for human habitation.

(f) The use of fill for structural support of buildings within Zones V1-30, V or VE on the LAFHM shall be prohibited.

(g) The placement of manufactured homes, except in existing manufactured home parks and manufactured home subdivisions, within Zones V1-30, V or VE on the LAFHM will not be prohibited if they are in compliance with conventional housing standards; and

(h) The alteration of sand dunes which would increase potential flood damage shall be prohibited.

6. Flood-related Erosion Hazard Areas. In addition to the General Regulations, the following shall be required in areas of special flood-related erosion hazards:

(a) Each permit application for construction or other development, shall contain sufficient information to determine the extent of exposure to flood-related erosion hazards and to provide sufficient

data to enable thorough review of the development;

(b) Each permit application shall be reviewed to determine whether the proposed site alterations and improvements will be reasonably safe from flood-related erosion and will not cause or otherwise aggravate the existing flood-related erosion hazard; and

(c) Where a proposed improvement is found to be in the path of flood-related erosion or to increase the erosion hazard, require the improvement to be relocated or adequate protective measures to be taken which will not aggravate the existing erosion hazard.

(d) All new development shall be set back from the ocean, lake, bay, river front or other body of water to create a safety buffer consisting of natural vegetation or a contour strip. The buffer may be used for suitable open space purposes, such as for open space purposes and temporary and portable structures only.

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Sec. 6. CITY IMPLEMENTATION.

A. General.

1. All City codes, ordinances, regulations, policies and procedures shall be amended as necessary to carry out the provisions and intent of this plan.

2. All City development permit forms and processes shall be amended as necessary to carry out the provisions and intent of this Plan.

3. If the Administrator has not provided sufficient data, the City shall obtain, review and reasonably utilize other data in the development of regulations adequate to carry out the intent and purpose of this Plan.

B. City Planning. It shall be the duty of the Director of Planning to establish, insofar as the responsibilities of the Planning Department are affected, all standards and other regulations and to propose codes necessary to carry out the provisions of this Plan. He shall take into consideration and implement this Plan in all areas of the planning process including, but not limited to:

1. Geographically Specific Plans shall include regulations implementing the policies of this Plan and the applicable Community Plan where that Plan has specifically addressed flood-related hazards within the Plan area.

2. Annexations. All territory annexed to the City shall first have a flood hazard study. If a flood hazard study has been completed under another jurisdiction, it shall be reviewed. If it is deficient in any way or if it is more than one year old, it shall be amended or supplemented.

Any areas subject to special flood-related hazards shall be incorporated into the City's adopted flood hazard maps (LAFHM). In addition to the flood hazard study, a report shall be prepared containing recommendations for the elimination or minimization of flood-related hazards by appropriate land uses and/or physical improvements. Both the flood hazard study and report shall be submitted to the City Council when considering the annexation.

C. Public Works. The Board of Public Works is the head of the Department of Public Works and responsible for the activities of the various Bureaus within the Department. The Board may require the chief executives of the appropriate Bureaus which make up the Department of Public Works to promolgate all standards and codes or other regulations necessary to carry out the provisions and intent of this Plan.

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1. Bureau of Engineering.

(a) The City Engineer shall acquire or cause to be acquired all data necessary for the identification and delineation of flood hazard areas for the purposes of reporting to the Administrator in accordance with this Plan and to advise the City Council of flood hazards which he recommends be delineated on the LAHFM.

(b) The City Engineer shall generate and maintain the Los Angeles Flood Hazard Map including the preparation and presentation of any and all ordinances required to establish and maintain the LAFHM.

(c) The City Engineer shall maintain, at one central location, a file of all flood, drainage and mud-related hazard information including all waivers, findings and appeals.

(d) The City Engineer shall be responsible for precise determination of the location of the boundaries of flood-related hazard areas shown on the LAFHM and to make determinations as to whether a property or portion thereof is located within a special hazard area.

(e) The City Engineer shall assure compliance with this Plan in the planning,

design, construction or reconstruction of all projects within his jurisdiction.

2. Bureau of Sanitation. The Director of Sanitation shall assure compliance with this Plan in the operation of:

(a) Industrial waste operations, including but not limited to, the handling, storage, collection, transportation and disposal of chemical waste or other hazardous materials;

(b) Refuse collection, transportation, reclamation and disposal;

(c) Sewer and storm drain maintenance;

(d) Pumping plants; and

(e) Sewer treatment facilities.

D. Building and Safety. It shall be the duty of the Superintendent of Building and Safety to establish, insofar as the responsibilities of the Department of Building and Safety are affected, all standards and regulations and to propose codes necessary to carry out the provisions and intent of this Plan relating to:

1. New construction and substantial improvements.

2. Rehabilitation or reconstruction.

3. Grading, including excavation and fills.

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4. Complete and thorough flood and/or mudflow studies as may be appropriate in keeping with the intent of this Plan.

5. The granting of Certificates of Occupancy and final approval of projects.

6. The maintenance of records sufficient to document compliance with the intent and purpose of this Plan.

E. Water and Power. It shall be the duty of the appropriate Chief Engineer of the respective Systems which make up the Department of Water and Power to promolgate all standards and other regulations and to implement planning necessary to carry out the provisions and intent of this Plan insofar as it pertains to their respective systems including, but not limited to the design, construction, reconstruction and maintenance of the following:

1. Water System
   - (a) Storage systems
   - (b) Transmission systems
   - (c) Treatment systems
   - (d) Distribution systems

2. Power System
   - (a) Generation systems
   - (b) Transmission systems
   - (c) Distribution systems

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F. Harbor.

It shall be the duty of the Executive Director of the Harbor Department to establish, insofar as the responsibilities of the Harbor Department are affected, all standards and regulations and to propose codes necessary to carry out the provisions and intent of the Plan relating to:

1. New construction or substantial improvements.

2. Rehabilitation or reconstruction.

3. Dredging, excavation, and fills.

4. Complete and thorough flood and Coastal High-hazard studies as may be appropriate with the intent of this Plan.

5. Floodproofing of Functionally Dependent Use facilities and variances; to contend with the needs of the City for:

loading and unloading of cargo, ship building, ship repair, storage and manufacturing, flood processing, and any other harbor functionally dependent use works.

G. Other Departments.

At the discretion of the City Council such other City Departments or agencies not hereinabove mentioned may be directed to render assistance and/or implement their own regulations and

policies in the effectuation of the provisions of this Plan.

Sec. 7. EMERGENCIES.

Temporary remedial measures may be taken in response to an emergency caused by a sudden and unanticipated flooding, mudlow or coastal high-hazards when such measures are required for the immediate protection of life, property, essential services and the general health and safety of the people.

A. All emergency projects undertaken under this emergency clause shall be permitted to proceed without prior approval or approvals that would otherwise be necessary in absentia of a genuine emergency.

B. All emergency projects excepted by this Section shall be deemed temporary and no vested rights are implied or granted by the City.

C. All projects which would otherwise require licenses and/or permits and which are undertaken under the emergency provisions of this Section shall have the required applications filed with the appropriate agency of the City within seven working days after the emergency abates.

D. Any emergency project which remains in place after the emergency abates shall be constructed or altered to meet all applicable standards and shall be

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inspected to verify that all applicable standards have been met.

Sec. 8. ALTERATION OF DRAINAGE COURSES.

A. No natural or man-made drainage course shall be altered or relocated without prior notification to all adjacent communities affected or potentially affected by such alteration or relocation. Copies of such notifications shall be submitted to the State Coordinating Office (the California Department of Water Resources) and the Administrator at the same time the affected communities are notified.

B. No natural or man-made drainage course shall be altered or relocated in any way which would diminish its flood carrying capacity.

C. No natural or man-made drainage course shall be altered or relocated in any way not in keeping with the provisions and intent of the Plan.

Sec. 9. WAIVERS.

A. Responsibilities.

1. The City Engineer for the Department of Public Works and the General Manager of the Department of Building and Safety or their designees, and a zoning administrator for the Department of City Planning may grant waivers from the requirements of this Plan.

2. The Authority to grant waivers shall be delegated as follows:

(a) The City Engineer - Design and construction of Public Works,

(b) General Manager, Department of Building and Safety - Construction of private structures and grading on private property, and

(c) Director of Planning - all other projects.

B. Findings. Before granting a waiver, the following findings must be made:

1. For a waiver in a floodway, that no increase in flood levels during the base flood discharge will result.

2. For areas in excess of one-half acre, that the waiver is consistent with the objectives of sound floodplain management.

3. For all areas, that exceptional hardship will result if the waiver is not granted.

4. That the waiver will not result in increased flood height; additional threats to public safety; create extraordinary public or private expense; create nuisances; cause fraud or victimization of the public; or conflict with Los Angeles Municipal Code.

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5. That the waiver is the minimum necessary to afford relief.

C. Procedures.

1. An application for a waiver shall be filed with the office of the City authorized to grant waivers upon a form and accompanied by such data and information as has been prescribed for that purpose. Each application shall be verified by the owner or lessee of the property concerned and accompanied by the fee set forth in LAMC Section 12.17(B) for zone use variances.

2. Upon the filing of a verified application for waiver, the matter shall be set for public hearing before the City official authorized to grant variances. Notice of the time, place and purpose of the public hearing shall be mailed not less than ten days prior to the date of such hearing to the applicant and to the owners of property within 300 feet of the subject property. The names addresses of owners of property located within the City shall be determined by reference to the records of the City Clerk, and for property outside the City from records of the County Assessor. The decision maker authorized to grant variance shall investigate each such application as expeditiously as possible and render a decision thereon within

75 days from the date the completed application is accepted for filing.

3. The determination of the decision maker shall be in writing and shall be supported by findings of fact based on evidence presented to the decision maker. A copy of the determination of the decision maker together with notification that (a) issuance of a waiver to construct a structure below the base flood level will result in increased premium rates as high as $25 for $100 of insurance coverage and (b) such construction below the base flood level increases risk to life and property shall be mailed to the applicant. Copies of a determination approving a waiver shall be sent to the Citywide Hazard Coordination Officer.

D. Appeals of Waivers. If the applicant, or any other affected party is dissatisfied with the action of the decision maker pertaining to a waiver, he or she may appeal such action as follows:

1. The actions of the City Engineer shall be appealed to the Board of Public Works; the actions of a Zoning Administrator to the Board of Zoning Appeals; the actions of the General Manager of the Department of Building and Safety to the Building and Safety Commission.

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2. The appeal shall be on a form prescribed therefore and shall contain in detail the basis on which the applicant is dissatisfied with the action of the decision maker and a statement as to whether the waiver is in violation of this Plan or implementing regulations and if so, in what respect is it in violation.

3. The appeal must be filed with the appropriate body within 15 days after the mailing of the determination by decision maker. The commission or board shall hear the matter within 30 days after filing of the appeal.

4. At the appeal hearing the Commission or Board shall hear the testimony of the appellant, the applicant, the person rendering the decision on the waiver and any witnessess called by such participants.

5. Within ten days after the conclusion of the hearing the Commission or Board shall declare its determination. It may sustain, modify, reject or overrule any determination by the decision maker. In granting or sustaining a waiver, findings as required by this Section must be adopted by the appeal body.

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Sec. 10. REVISIONS.

A. Amendments or revisions to this specific plan may be initiated by the City Council or the City Planning Commission and processed in accordance with the procedures set forth in Section 12.32 of the Los Angeles Municipal Code.

B. The City Engineer and/or Director of Planning shall review changes in applicable Federal Regulations and, as necessary, report and make recommendation to the City Council.

Sec. 11. CITYWIDE FLOOD HAZARD COORDINATION AND REPORTING.

A. Coordinating.

1. The City Administrative Officer is designated as liaison between the City and the Federal Emergency Management Agency and other Federal, State, regional and local agencies. Flood-related disaster relief activities shall be coordinated through this office.

2. The City Engineer is designated as the Flood Hazard Mitigation Coordinator for the City. He shall submit all reports required by Federal regulations and/or this plan in accordance with procedures set forth below.

3. All affected Divisions of the Emergency Operations Organization shall cooperate with and

assist the above-designated officials. The Citywide Flood Hazard Coordination Program will be the responsibility of the Emergency Operations Board. Under Los Angeles Administrative Code Section 8.41, the Board is responsible for preparation for and response to emergency situations within the City. The Board is composed of department managers who are primarily involved in various aspects of the flood hazards program.

A. Reporting.

1. The Flood Hazard Mitigation Planner shall be responsible for the required notification to the Administrator and the State and regional clearinghouses of waivers from the Plan. Each department shall submit copies of each waiver, its findings and supporting justifications to the Flood Hazard Mitigation Planner.

2. Annually, each affected Department shall submit a summary report of: (a) the number of permits approved in areas of special hazard, (b) the number of waivers applied for, (c) the number of waivers approved, and (d) any other data requested by the Flood Hazard Mitigation Planner. These Departmental reports shall be received by the Flood Hazard Mitigation Planner in sufficient time for him to make his Annual or Biennial Summary Report to the Administrator.

3. The Flood Hazard Mitigation Planner shall submit an annual or biennial Summary Report to the Administrator in the form and including such information as is required by federal regulations or as requested by the Administrator.

4. The Flood Hazard Mitigation Planner shall be responsible for notifications of intent to charge or alter drainage courses as required in Section 8 of this Plan.

5. The Flood Hazard Mitigation Planner shall submit to the Adminsitrator, as often as necessary, requests for revision to the federally regulated components (FIRM and FBFM) of the Los Angeles Flood Hazard Map.

6. The Flood Hazard Mitigation Planner shall notify the Administrator, upon occurrence, whenever the boundaries of the City have been modified by annexation or when the City has otherwise assumed or no longer has authority to adopt and enforce floodplain management regulations for a particular area.

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Sec. 12. SEVERABILITY.

If any section, subsection, paragraph, sentence, clause, phrase or portion of this Plan is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this Plan which shall remain in full force and effect.

Sec. 13. PROGRAMS.

These programs are suggested for possible future study and their inclusion in this Plan not imply either a rigid methodology or any budgetary obligation on the part of the City. Each program must be individually authorized and funded by the City Council and their inclusion here does not obligate the City of Los Angeles to their implementation.

Recommended are:

A. Initiation of a program for the relocation of occupants away from flood-related hazard areas wherein human life, safety and health is endangered as follows:

1. Examination of the inventory of vacant properties owned by the City for the purpose of implementing the intent of this Program by an equitable arrangement of exchange for property rights to be acquired within floodways;

2. Perservation of the flood-prone areas for open space purposes;

3. Acquisition, where feasible, of land or land development rights for public purposes consistent with a policy of minimization of future property losses;

4. Acquisition of frequently flood-damaged structures.

B. Designation of the City's Automated Mapping System as the replacement for the present District Maps and accelerate its implementation by:

1. Increasing the present capability of the Bureau of Engineering to construct the computerized base map;

2. Allocation of staff positions for each Department to transfer its District Map data items onto the Automated Mapped System;

3. Acquisition of the remote terminals for the public counters of the central and district offices as required.

C. Initiation of a program to study the relationship between fire and flood-related hazards by:

1. Taking into account that the native vegetation (particularly the climax vegetation) which covers hillside areas is extremely flammable and that brush fires in such areas are frequently followed by floods and mudflows.

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2. Studying the complex interplay between drought, fire, heavy rain and mudflow so as to be better able to identify potentially hazardous situations.

3. Establishing plans and procedures aimed at minimizing such hazards and preventing the possible disasters they may cause.

D. Initiation of a program for the purpose of assessing Coastal High-hazards for the purpose of establishing coastal development criteria, including preventive and remedial measures, for the protection of human life and property by:

1. Completing a bathymetric study to chart the ocean floor in sufficient detail (including topography and depths) to permit engineering calculations to be made concerning hypothetical tsunami and hurricane wave behavior and coastal impacts;

2. Studying the inter-relationships between: (i) type of origin (i.e., earthquake or hurricane), (ii) strength of origins (i.e., magnitude of earthquake or strength of winds), (iii) directional orientation of origin (i.e., is it aimed directly at us; the directness of path), (iv) distance from origin, (v) travel-time between origin and point of coastal impact, (vi) degeneration factor (i.e., diminution of strength over distance and time), (vii) bathymetry of our coastal shelf, (viii) shoaling

effect, and (ix) coastal landforms and landward barriers or features, so as to be able to identify hazardous situations and to be able to forecast problems areas.

3. Investigating means to mitigate impacts of Coastal High-hazards on human life, safety and welfare, such as: (i) construction of submarine barriers to "trip" incoming waves, (ii) construction of shore works, (iii) prohibition of new habitable development on or near unprotected coast frontage, and (iv) relocation of habitable development and/or vital public facilities away from coastal frontages which are unfeasible to protect.

4. Developing early warning and emergency preparedness plans, including evacuation, temporary relocation alternatives, disaster relief centers and adequate contingencies for policing the area.

E. Initiation of a program to prevent mudlows, erosion and floods including, but not limited to:

1. Inspection of flood control and drainage facilities on private property to recommend clearing or cleaning of debris and/or construction of new facilities.

2. Strengthen the brush clearance ordinance and enforcement to prevent brush fires and concomitant erosion problems.

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3. Promote the use of low fuel volume and erosion control landscaping through public education and displays.

4. Provide intensive slope rehabilitation after brush fires, including grading and planting with barley and other stiff, deep rooting grasses.

Sec. 14. URGENCY CLAUSE.

This Ordinance amendment is urgently necessary for the preservation of the public peace, health and safety and shall take effect immediately upon its publication. The following is a statement of the facts supporting its urgency. A Federal review of this amended Specific Plan is required prerequisite for continued eligibility of property in the City of Los Angeles for Federal flood hazard insurance and Federal disaster assistance monies. So that Federal flood insurance will continue to be available for City of Los Angeles property owners, it is imperative that this Amended Specific Plan be made effective at the earliest possible time.

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Sec. 15. The City Clerk shall certify to the passage of this ordinance and cause the same to be published by posting for ten days in three public places in the City of Los Angeles, to wit: one copy on the bulletin board located at the Main Street entrance to the City Hall of the City of Los Angeles; one copy on the bulletin board located at the east entrance to the Hall of Justice in said City; and one copy on the bulletin board located at the Temple Street entrance to the Hall of Records in the said City.

I hereby certify that the foregoing ordinance was passed by the Council of the City of Los Angeles, at its meeting of JUL 26 1988 by a vote of not less than three-quarters of all of its members.

ELIAS MARTINEZ, City Clerk,

By Edward W Addison, Deputy.

Approved JUL 28 1988

John Ferraro, ACTING Mayor.

Approved as to Form and Legality

June 30, 1988

JAMES K. HAHN, City Attorney,

By KENNETH CIRLIN Deputy.

File No. 83-1373-S1

City Clerk Form 193

ORDINANCE NO. 163913

DECLARATION OF POSTING ORDINANCE

I, MELISSA MARIE HERNANDEZ, state as follows:

I am, and was at all times hereinafter mentioned, a resident of the State of California, over the age of eighteen years, and a Deputy City Clerk of the City of Los Angeles, California.

Ordinance No. 163913, entitled: AMENDMENT TO THE SPECIFIC PLAN FOR THE MANAGEMENT OF FLOOD HAZARDS ESTABLISHED BY ORDINANCE 154,405 a copy of which is hereto attached, was finally adopted by the Council of the City of Los Angeles on JULY 26 19 88, and under direction of said Council and said City Clerk, pursuant to Section 31 of the Charter of the City of Los Angeles, on JULY 28 19 88 I posted a true copy of said ordinance at each of three public places located in the City of Los Angeles, California, as follows: one copy on the bulletin board at the Main Street entrance to City Hall of said City, one copy on the bulletin board at the east entrance to the Hall of Justice of the County of Los Angeles in said City, and one copy on the bulletin board at the Temple Street entrance to the Hall of Records of the County of Los Angeles in said City.

The copies of said ordinance posted as aforesaid were kept posted continuously and conspicuously for ten days, or more, beginning JULY 28 19 88 to and including AUGUST 8 19 88.

I declare under penalty of perjury that the foregoing is true and correct.

Signed this 28 day of JULY, 19 88 at Los Angeles, California.

Melissa Marie Hernandez
Deputy City Clerk

Effective Date: SUNDAY, AUGUST 7, 1988