### ORDINANCE NO. 1979

AN ORDINANCE OF THE CITY OF REDLANDS AMENDING ORDINANCE NO. 1673 TO PROVIDE REVISIONS TO THE NATIONAL FLOOD INSURANCE PROGRAM FLOOD PLAN MANAGEMENT CRITERIA

THE CITY COUNCIL OF THE CITY OF REDLANDS does ordain:

SECTION ONE: That Redlands Ordinance 1673 be amended by substituting entirely rewritten Sections 5.1-1(2) and 5.2-3(1) as follows:

# Section 5.1-1 Anchoring.

(2) All manufactured homes, including mobilehomes, park trailers, travel trailers and other similar vehicles to be placed within Zone A on a community's FHBM or FIRM shall be installed using methods and practices which minimize flood damage. For the purposes of this requirement, manufactured homes must elevated and anchored to resist flotation collapse, or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This requirement is in addition to over-the-top ties to be provided at each of the four corners of the mobilehome, with two additional ties per side at intermediate locations, with mobilehomes less than 50 feet long requiring one additional tie per side; frame ties be provided at each corner of the home with five additional ties per side at intermediate points, with mobilehomes less than 50 feet long requiring four additional ties per side; all components of the anchoring system be capable of carrying a force of 4,800 pounds; and any additions to the mobilehome be similarly anchored.

# Section 5.2-3 Mobile Homes.

(1) All manufactured homes, including mobilehomes, park trailers, travel trailers and other similar vehicles to be placed or substantially improved within Zones Al-30, AH, and AE shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is at or above the base flood elevation and be securely anchored to an adequately anchored foundation system in accordance with the provisions of Section 5.1-1(2).

SECTION TWO: That Redlands Ordinance 1673 be amended by adding Sections 5.1-3(4) and 4.3-3(4) as follows:

## Section 5.1-3 UTILITIES.

(4) MECHANICAL AND UTILITY EQUIPMENT. 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.

## Section 4.3-3 INFORMATION TO BE OBTAINED AND MAINTAINED.

FLOODPROOFING CERTIFICATE. Where a non-resi-(4) dential structure is intended to be made watertight below the base flood level, (i) a registered professional engineer or architect shall develop and/or review structural design, specifications, and plans for the construction, and shall certify that the design and methods of construction are in for accordance with accepted standards of practice for meeting the applicable provisions of Section 5. A record of such certificate which includes the specific elevation (in relation to mean sea level) to which such structures are floodproofed shall be maintained with the Chief Building Official of the City of Redlands.

SECTION THREE: This ordinance shall be in force and take effect as provided by law.

SECTION FOUR: The City Clerk shall certify to the adoption of this ordinance and cause it to be published once in the Redlands Daily Facts, a newspaper of general circulation printed and published in this city.

Mayor of the City of Redlands

ATTEST:

Ordinance No. 1979

Page two -

I, Lorrie Poyzer, City Clerk, City of Redlands, hereby certify that the foregoing ordinance was duly adopted by the City Council at a regular meeting thereof held on the 7th day of April, 1987, by the following vote:

AYES:

Councilmembers DeMirjyn, Johnson, Wormser;

Mayor Beswick

NOES:

None

ABSENT:

Councilmember Larsen

City Clerk

ORDINANCE NO. 1673

FLOOD DAMAGE PREVENTION ORDINANCE

AN ORDINANCE OF THE CITY OF REDLANDS ESTABLISHING PROCEDURES FOR THE PREVENTION AND/OR REDUCTION OF FLOOD HAZARDS WITHIN SPECIFIED AREAS OF THE CITY

- STATUTORY AUTHORIZATION. The Legislature of the State of California has delegated the responsibility to local governmental units to adopt regulations designed to promote the public health, safety and general welfare of its citizenry. Therefore, the City Council of the City of Redlands, California, does ordain as follows:
- FINDINGS OF FACT
  - The flood hazard areas of Redlands 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.
  - These flood losses are caused by the cumulative effect of obstructions in areas of special flood hazards which increase flood heights and velocities, and when inadequately anchored, damage uses in other areas. Uses that are inadequately floodproofed, elevated or otherwise protected from flood damage also contribute to the flood loss.
- STATEMENT OF PURPOSE. It is the purpose of this ordinance to promote the 1.3 public health, safety and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed:
  - To protect human life and health;
  - To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
  - To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
  - To minimize prolonged business interruptions;
  - 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;
  - 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 flood blight areas;
  - To insure that potential buyers are notified that property is in an area of special flood hazard; and
  - To insure that those who occupy the areas of special flood hazard assume responsibility for their actions
- METHODS OF REDUCING FLOOD LOSSES. In order to accomplish its purposes, this ordinance includes methods and provisions for:
  - Restricting or prohibiting uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;
  - Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction:
  - Controlling the alteration of natural flood plains, stream channels, and natural protective barriers, which help accommodate or channel flood
  - Controlling filling, upgrading, dredging, and other development which may increase flood damage; and
  - Preventing or regulating the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards in other areas.
- DEFINITIONS. Unless specifically defined below, words or phrases used in 20 this ordinance shall be interpreted so as to give them the meaning they have in common usage and to give this ordinance its most reasonable application.
  - "Appeal" means a request for a review of the Building Director's interpreta-
  - tion of any provision of this ordinance or a request for a variance.
    "Area of shallow flooding" means a designated AO or VO Zone on the Flood Insurance Rate Map (FIRM). 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; and velocity flow may be evident.
  - "Area of special flood hazard" means the land in the flood plain within a community subject to a one percent or greater chance of flooding in any given year. "Base flood" means the flood having a one percent chance of being equalled or
  - exceeded in any given year. "Development" means any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredg-ing, filling grading, paving, excavation or drilling operations located within the area of special flood hazard.
  - "Existing mobile home park or mobile home subdivision" means a parcel (or contiguous parcels) of land divided into two or more mobile home lots for rent or sale for which construction of facilities for servicing the lot on which the mobile home is to be affixed (including, at a minimum, the installation of utilities, either final site grading or the pouring of concrete pads, and the construction of streets) is completed before the effective date of this ordinance.
  - "Expansion to an existing mobile home park or mobile home subdivision" means the preparation of additional sites by the construction of facilities for servicing the lots on which the mobile homes are to be affixed (including the installation of utilities, either final site grading or pouring of concrete pads, or the
  - construction of streets).
    "Flood" or "flooding" means a general and temporary condition of partial or complete inundation of normally dry land areas from:
  - The overflow of inland or tidal waters and/or
  - The unusual and rapid accumulation on runoff of surface waters from (2) any source.
  - "Flood Insurance Rate Map (FIRM)" means the official map on which the Federal Insurance Administration has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.
  - "Flood Insurance Study" means the official report provided by the Federal Insurance Administration that includes flood profiles, the Flood Insurance Rate Map, and the water surface elevation of the base flood.
  - "Habitable floor" means any floor usable for living purposes, which includes working, sleeping, eating, cooking or recreation, or a combination thereof. A floor used only for storage purposes is not a "habitable floor."

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"Mobile home" means a structure that is transportable in one or n "Mobile home" means a structure that is trampor users with or without a perma-built on a permanent chassis, and designed to be used with or without a permanent foundation nent chassis, and designed to be used with or without a permanent four when connected to the required utilities. It does not include recreational vehicles or travel trailers.

"New construction" means structures for which the "start of construction"

commenced on or after the effective date of this ordinance.

"New mobile home park or mobile home subdivision" means a parcel (or cont'quous parcels) of land divided into two or more mobile home lots for rest or sale for which the construction of facilities for servicing the lot (including, at a minimum, the installation of utilities, either final site grading, or the pouring of concrete pads, and the construction of streets) is completed on or after the effective date of this ordinance.

"Start of construction" means the first placement of permanent construction of a structure (other than a mobile home) on a site, such as the pouring of stabs or footings or any work beyond the stage of excavation. Permanent construction does not include land preparation, such as clearing, grading, and filling, nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not as part of the main structure. For a structure (other than a mobile home) without a basement or poured footings, the "start of construction" includes the first permanent framing or assembly of the structure or any part thereof on its piling or foundation. For mobile homes not within a mobile home park or mobile home subdivision, "start of construction" means the affixing of the mobile home to its permanent site. For mobile homes within mobile home parks or mobile home subdivision, "start of construction" is the date on which the construction of facilities for servicing the site on which the mobile home is to be affixed tincluding, at a minimum, the construction of streets, either final site grading or the pouring of concrete pads, and installation of utilities) is completed. "Structure" means a walled and roofed building or mobile home that is prin-

cipally above ground. "Substantial improvement" means any repair, reconstruction, or improve ment of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure either:

before the improvement or repair is started, or

if the structure has been damaged and is being restored before the damage occurred. For the purposes of this definition "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor, or other structure part of the building commences, whether or not that alteration affects the external dimensions of the structure.

The term does not however, include either:

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

GENERAL PROVISIONS. 3.0

3.5

- LANDS TO WHICH THIS ORDINANCE APPLIES. This ordinance shall apply 3.1
- to all areas of special flood hazards within the jurisdiction of Redlands. BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD. 3.2 The areas of special flood hazard identified by the Federal Insurance Administration in a scientific and engineering report entitled "The Flood Insurance Study for the City of Redlands," dated July, 1978, with accompanying Flood Insurance Rate Maps is hereby adopted by reference and declared to be a part of this ordinance. The Flood Insurance Study is on file at 30 Cajon Street, Redlands, California, 92373.

COMPLIANCE. No structure or land shall hereafter be constructed, located, 3.3 extended, converted, or altered without full compliance with the terms of this

- ordinance and other applicable regulations.

  ABROGATION AND GREATER RESTRICTIONS. This ordinance is not in-3.4 tended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this ordinance and another ordinance, easement, covenant, or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

  INTERPRETATION. In the interpretation and application of this ordinance, all
  - provisions shall be:

Considered as minimum requirements; Liberally construed in favor of the governing body; and

- Deemed neither to limit or repeal any other powers granted under state
- WARNING AND DISCLAIMER OF LIABILITY. The degree of flood protection required by this ordinance is considered reasonable for regulatory purpor and is based on scientific and engineering consideration. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This ordinance does not imply that land outside the areas of special flood hazards or uses permitted within such areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This ordinance shall not create liability on the part of the City of Redlands, any officer or employee thereof, or the Federal Insurance Administration for any flood damages that result reliance on this ordinance or any administrative decision lawfully made thereunder.

Ordinance No. 1673 Page one

ADMINISTRATION.

4.1

4.2

4.3-3

ESTABLISHMENT OF DEVELOPMENT PERMIT. A Development Permit shall be obtained before construction or development begins within any area of special flood hazard established in Section 3.2. Application for a Development Permit shall be made on forms furnished by the Building Director and may include, but not be limited to: plans in duplicate drawn to scale showing the nature, location, dimensions, and elevations of the area in question; existing or proposed structures, fill, storage of materials, drainage facilities; and the location of the foregoing. Specifically, the following information is required:

Elevation in relation to mean sea level, of the lowest four (including basement) of all structures;

Elevation in relation to mean sea level to which any structure has been floodproofed:

Certification by a registered professional engineer or architect that the floodproofing methods for any nonresidential structure meet the flood-

proofing criteria in Section 5.2-2; and Description of the extent to which any watercourse will be altered or

relocated as a result of proposed development.

DESIGNATION OF THE BUILDING DIRECTOR. The Building Director is hereby appointed to administer and implement this ordinance by granting or denving Development Permit applications in accordance with its provisions.

DUTIES AND RESPONSIBILITIES OF THE BUILDING DIRECTOR. Duties 4.3 of the Building Director shall include, but are not limited to:

Permit Review.

Review all Development Permits to determine that the permit requirements of this ordinance have been satisfied.

Review all Development Permits to determine that all necessary permits have been obtained from those federal, state, or local governmental agencies from which prior approval is required.

Use of Other Base Flood Data. When base flood elevation data has not been pro-4 3-2 vided in accordance with Section 2.3 BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD, the Building Director shall review and reasonably utilize any base flood elevation data available from a federal, state, or other source in order to administer Sections 5.2-1 SPECIFIC STANDARDS, Residential Construction, and 5.2-2 SPECIFIC STANDARDS, Nonresidential

Information to be Obtained and Maintained.

Obtain and record the actual elevation (in relation to mean sea level) of the lowest habitable floor (including basement) of all new or substantially improved structures.

For all new or substantially improved floodproofed structures:

- (1) verify and record the actual elevation (in relation to mean sea level), and
- (ii) maintain the floodproofing certifications required in Section 4.1 (3).
- Maintain for public inspection all records pertaining to the provisions of this ordinance. attached

Alteration of Watercourses. Notify adjacent communities and the San Bernardino County Flood Control prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration.

Require that maintenance is provided within the altered or relocated portion of said watercourses so that the flood carrying capacity is not

diminished.

Interpretation of FIRM Boundaries. Make interpretations where needed as to the exact location of the boundaries of the areas of specific flood hazards (for 4.3-5 example, where there appears to be a conflict between a mapped boundary and actual field conditions). The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in Section 4.4

VARIANCE PROCEDURE.

Appeal Board. /

The Board of Building Commissioners as established by the City Council shall hear and decide appeals and requests for variances from the requirements of this ordinance.

The Board of Building Commissioners shall hear and decide appeals when it is alleged there is an error in any requirement, decision, or determination made by the Building Director in the enforcement or administration of this ordinance.

Those aggrieved by the decision of the Board of Building Commissioners, or any taxpayer, may appeal such decision to the Federal District Court

of San Bernardino County.

- In passing upon such applications, the appeal board shall consider all technical evaluations, all relevant factors, standards specified in other sections of this ordinance, and:
  - (i) the danger that materials may be swept onto other lands to the injury of others;

(ii) the danger to life and property due to flooding or erosion damage;

- the susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual
- the importance of the services provided by the proposed facili-(iv) ty to the community;
- the necessity to the facility of a waterfront location, where applicable:
- the availability of alternative locations, for the proposed use (vi) which are not subject to flooding or erosion damage:
- (vii) the compatibility of the proposed use with existing and anticipated development;
- the relationship of the proposed use to the comprehensive plan and flood plain management program for that area;
- (ix) the safety of access to the property in times of flood for ordinary and emergency vehicles;
  (x) the expected heights, velocity, duration, rate of rise, and sedi-
- ment transport of the flood waters and the effects of wave action, if applicable, expected at the site; and,
- (xi) the costs of providing governmental services during and after flood conditions, including maintenance and repair of public

Generally, variances may be issued for new construction and substantial improvements to be erected on a lot of one-half acre or less in size co tiguous to and surrounded by lots with existing structures constructed below the base flood level, providing items (1-x1) in Section 4.4-1 (4) have been fully considered. As the lot size increases beyond the one-half acre, the technical justification required for issuing the variance increases.

Upon consideration of the factors of Section 4.4-1 (4) and the purpose of this ordinance, the Board of Building Commissioners may attach such conditions to the granting of variances as it deems necessary to further

the purposes of this ordinance.

The Building Director shall maintain the records of all appeal actions and report any variances to the Federal Insurance Administration upon request

Conditions of Variances. 4.4-2

Variances may be issued for the reconstruction, rehabilitation, or restoration of structures listed on the National Register of Historic Places or the State Inventory of Historic Places, without regard to the procedures set forth in the remainder of this section.

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

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

Variances shall only be issued upon

(i) a showing of good and sufficient cause;

(ii) a determination that failure to grant the variance would result

in exceptional hardship to the applicant; and

(iii) a determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud

on or victimization of the public as identified in Section 4.1-4 (4), or conflict with existing local laws or ordinance

Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with a lowest floor eleva-tion below the base flood elevation and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced floor elevation.

PROVISIONS FOR FLOOD HAZARD REDUCTION 5.0

GENERAL STANDARDS. In all areas of special flood hazards, the following 5.1 standards are required:

Anchoring. 5.1-1

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

All mobile homes shall be anchored to resist flotation, callapse, or lateral

All mobile homes shall be anchored to resist flotation, callapse, or lateral movement by providing over-the-top and frame ties to ground anchors. Specific requirements shall be that:

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

(ii) frame ties be provided at each corner of the home with five additional ties per side at intermediate points, with mobile homes less than 50 feet long requiring four additional ties per side;

(iii) all components of the anchoring system be sanable of carrying

(iii) all components of the anchoring system be expable of carrying a force of 4,800 pounds; and

(iv) any additions to the mobile home be similarly anchored

Construction Materials and Methods. 5.1-2

All new construction and substantial improvements shall be constructed (1) with materials and utility equipment resistant to flood damage.

All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.

Utilities. 5.1-3

All new and replacement water supply systems shall be designed to (1) minimize or eliminate inflitration of flood waters into the system;

New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into flood waters; and

On-site waste disposal systems shall be located to avoid impairment to

them or contamination from them during flooding.

5.1-4

All subdivision proposals shall be consistent with the need to minimize flood damage:

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

All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage; and

Base flood elevation data shall be provided for subdivision proposals and other proposed development which contain at least 50 lots or 5 acres (whichever is less).

Encroachments. The cumulative effect of any proposed development, when 5.1-5 combined with all other existing and anticipated development, shall not in-crease the water surface elevation of the base flood more than one foot at any

SPECIFIC STANDARDS. In all areas of special flood hazards where base flood 5.2 elevation data has been provided as set forth in Section 3.2 BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD or Section 4.3-2 Use of Other Base Flood Data, the following provisions are required:

Residential Construction. New construction and substantial improvements of 5.2-1 any residential structure shall have the lowest floor, including basement, elevated to or above base flood elevation.

> Ordinance No. 1673 Page two

of any commercial, industrial, or other nonresidential structure shall either have the lowest floor, including basement, elevated to the level of the base flood elevations, or, together with attendant utility and sanitary facilities, shall:

- be floodproofed so that below the base flood level, the structure is watertight with walls substantially impermeable to the passage of water;
- have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and
- (3) be certified by a registered professional engineer or architect that the standards of this subsection are satisfied. Such certifications shall be provided to the official as set forth in Section 4.3-3 (2).

#### 5.2-3 Mobile Home.

(1) Mobile homes shall be anchored in accordance with Section 6.1.1 (8)

- (2) For new mobile home parks and mobile home subdivisions; for expansions to existing mobile home parks and mobile home subdivisions; for existing mobile home parks and mobile home subdivisions where the repair, reconstruction, or improvement of the streets, utilities, and pads equals or exceeds 50 percent of value of the streets, utilities, and pads before the repair, reconstruction, or improvement has commenced; and for mobile homes not placed in a mobile home park or mobile home subdivision, require that:
  - stands or lots are elevated on compacted fill or on pilings so that the lowest floor of the mobile home will be at or above the base flood level;
  - adequate surface drainage and access for a hauler are provided; and
  - (iii) in the instance of elevation on pilings, that:
    - (a) lots are large enough to permit steps;
    - (b) piling foundations are placed in stable soil no more than ten feet apart; and
    - (c) reinforcement is provided for pilings more than six feet above the ground level.
- 5.3 SHALLOW FLOODING. Located within the areas of special flood hazard established in Section 3.2 are areas designated as shallow flooding. These areas have special flood hazards associated with base flood depths of 1 to 3 feet where a clearly defined channel does not exist and where the path of flooding is unpredictable and indeterminate; therefore, the following provisions apply:
  - All new construction and substantial improvements of residential structures have the lowest floor, including basement, elevated above the crown of the nearest street to or above the depth number specified on the community's FIRM.
  - (2) All new construction and substantial improvements of nonresidential structures shall:
    - have the lowest floor, including basement, elevated above the crown of the nearest street to or above the depth number specified on the FIRM, or
    - (ii) together with attendant utility and sanitary facilities be completely floodproofed to or above that level so that any space below that level is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.
- 6.0 This ordinance shall be in force and take effect as provided by law.
- 7.0 The City Clerk shall certify to the adoption of this ordinance and cause it to be published once in the Redlands Daily Facts, a newspaper of general circulation printed and published in the City of Redlands.

s/Oddie J. Martinez, Jr. Mayor of the City of Redlands

ATTEST: s/Peggy A. Moseley City Clerk APPROVED FOR FORM: s/Edward F. Taylor City Attorney

I, Peggy A. Moseley, City Clerk of the City of Redlands, do hereby certify that the foregoing ordinance was duly adopted by the City Council at a regular meeting thereof held on the 2nd day of January, 1979, by the following vote:

AYES: Councilmembers Knudsen, DeMirjyn, Elliott, Riordan; Mayor Martinez.

NOES: None ABSTAIN: None ABSENT: None

s/Peggy A. Moseley City Clerk

(Publish Jan. 9, 1979)