

CITY OF VALDEZ, ALASKA

ORDINANCE NO. 19-01

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF VALDEZ,  
ALASKA REPEALING AND REENACTING CHAPTER 15.30 OF THE  
VALDEZ MUNICIPAL CODE TITLED FLOOD HAZARD PROTECTION  
REGULATIONS

WHEREAS, participation in the National Flood Insurance Program (NFIP) enables property owners to purchase insurance protection against losses from flooding; and

WHEREAS, participation in the National Flood Insurance Program is an agreement between local communities and the Federal Government, under which the City agrees to adopt and enforce floodplain management regulations to reduce future flood risks to new construction and substantially improved structures in the Special Flood Hazard Areas; and

WHEREAS, the Special Flood Hazard Areas are delineated on the community's Flood Insurance Rate Maps; and

WHEREAS, a Flood Risk Public Open House was held at which copies of the preliminary map drafts were distributed on April 6, 2017; and

WHEREAS, a public appeals period was conducted November 29, 2017 – February 27, 2018; public notifications were mailed to affected property owners on March 26, 2016 and public notices were published in the local newspaper on 10/12/16, 11/22/17, and 11/29/17; and

WHEREAS, a notification of public hearing for Ordinance No. 19-01 was mailed to affected property owners on January 9, 2019; and

Whereas the City's floodplain management regulations must meet or exceed criteria established in accordance with Title 44 Code of Federal Regulations Part 60.3, Criteria for Land Management and Use.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF VALDEZ, ALASKA, that:

Section 1: Chapter 15.30 is hereby reenacted to read as follows:

## Chapter 15.30

### FLOOD HAZARD PROTECTION REGULATIONS

#### Sections:

- 15.30.010 Purpose.
- 15.30.020 Definitions.
- 15.30.030 General provisions.
- 15.30.040 Administration.
- 15.30.050 Provisions for flood hazard reduction.

#### **15.30.010 Purpose.**

It is the purpose of this chapter to promote the public health, safety and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed:

- A. To protect human life and health;
- B. To minimize expenditure of public money and costly flood-control projects;
- C. To minimize need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the public projects;
- D. To minimize prolonged business interruptions;
- E. 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;
- F. To help maintain a stable tax base providing for the sound use and development of areas of special flood hazard so as to minimize future flood blight areas;
- G. To ensure that potential buyers are notified that property is in an area of special flood hazard; and
- H. To ensure that those who occupy the areas of special flood hazard assume responsibility of their actions. (Ord. 00-025 § 6 (part))

#### **15.30.020 Definitions.**

Unless specifically defined below in this section, words or phrases used in this chapter shall be interpreted so as to give them meaning they have in common usage

and to give this chapter it's most reasonable application. These definitions are applicable to Chapter 15.30 only.

"Accessory Structures" mean low cost buildings such as detached garages, boathouses, small pole barns and storage sheds not to be used for human habitation, shall be constructed and placed on the building site so as to offer minimum resistance to the flow of floodwaters; shall be anchored to prevent floatation which may result in damage to other structures; service utilities such as electrical and heating equipment shall be elevated or flood-proofed.

"Appeal" means a request for a review of the interpretation of any interpretation of any provision of this ordinance or a request for a variance.

"Area of shallow flooding" means a designated AO, or AH 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. AO is characterized as sheet flow and AH indicates ponding.

"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. Designation on maps always includes the letters A or V.

"Base flood" means the flood having a one percent chance of being equaled or exceeded in any given year. Also referred to as the "100-year flood." Designation on maps always includes the letters A or V.

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

"Breakaway wall" means a wall that is not part of the structural support of the building and is intended through its design and construction to collapse under specific lateral loading forces, without causing damage to the elevated portion of the building or supporting foundation system.

"Coastal high hazard area" means an area of special flood hazard extending from offshore to the inland limit of a primary frontal dune along an open coast and any other area subject to high velocity wave action from storms or seismic sources. The area is designated on the FIRM as Zone V1-V30, VE or V.

"Critical facility" means a facility for which even a slight chance of flooding might be too great. Critical facilities include, but are not limited to schools, nursing homes, hospitals, police, fire and emergency response installations, installations which produce, use or store hazardous materials or hazardous waste.

"Development" means any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving excavation or drilling operations or storage of equipment or materials located within the area of special flood hazard.

“Elevated building” means for insurance purposes, a non-basement building which has its lowest elevated floor raised above ground level by foundation walls, shear walls, post, piers, pilings or columns.

“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 the 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 the ordinance codified in this chapter.

“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).

“Federal Emergency Management Agency (FEMA)” is the agency responsible for administration of the National Flood Insurance Program.

“Flood” or “flooding” means a general and temporary condition of partial or complete inundation of normally dry land areas from:

- (1) The overflow of inland or tidal waters and/or
- (2) The unusual and rapid accumulation of runoff of surface waters from any source.

“Flood hazard area” means the land in the floodplain having a one percent or greater change of flooding in any given year. Designation on maps always includes the letters A and V.

“Flood Insurance Rate Map (FIRM)” means the official map on which the Federal Insurance Administration has delineated both the areas of special flood hazards (the water surface elevation of the base flood and the flood insurance rate zones) and the risk premium zones applicable to the community.

“Flood Insurance Study (FIS)” means the official report provided by the Federal Insurance Administration that includes flood profiles, the Flood Boundary-Floodway Map, and the water surface elevation of the base flood.

“Floodplain or flood-prone” means any land area susceptible to being inundated by water from any source (see definition of “flooding”)

“Floodway” means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than (a designated height, usually) one foot at any point.

“Lowest floor” means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of

vehicles, 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 non-elevation design requirements of 15.30.050 (B)(2)(a).

"Mobile home" means 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. The term "mobile home" does not include a "recreational vehicle". For floodplain management purposes the term mobile home also includes park trailers, travel trailers, and other similar vehicles placed on site for greater than 180 consecutive days. For insurance purposes the term mobile home does not include park trailers, travel trailers, and other similar vehicles. The term manufactured home is used interchangeably with the term mobile home.

"New construction" means structures for which the "start of construction" commenced on or after the effective date of the ordinance codified in this chapter.

"New 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 for 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 the ordinance codified in this chapter.

"Recreational vehicle" means a vehicle which is:

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

"Start of construction" includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, placement or other improvement was within 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 the placement of a mobile 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 the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part

of a building, whether or not that alteration affects the external dimensions of the building.

“Structure” means a walled and roofed building including a gas or liquid storage tank (as well as a mobile home) that is principally above ground.

“Substantial damage” means damage of any origin sustained by a structure whereby the cost of restoring the structure to it’s before damaged condition would equal or exceed fifty percent of the market value of the structure before the damage occurred.

“Substantial improvement” means 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:

- (1) Before the improvement or repair is started; or
- (2) If the structure (property) 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 structural part of the building commences, whether or not that alteration affects the external dimensions of the structure.

The term does not, however, include either:

- (1) Any project for improvement of a structure to correct existing violations of states or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions or
- (2) Any alteration of a 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 chapter which permits construction in a manner that would otherwise be prohibited by this chapter.

“Water dependent” means a structure for commerce or industry which cannot exist in any other location and is dependent on the water by reason of the intrinsic nature of its operations.

#### **15.30.030 General provisions.**

A. Lands to which this chapter applies. This chapter shall apply to all areas of special flood hazards within the jurisdiction of the city.

B. Basis for Establishing the Areas of Special Flood Hazard. The areas of special flood hazard identified by the Federal Insurance Administration in a scientific and engineering report entitled “The Flood Insurance Study” (FIS) for the City of Valdez dated January 3, 2019 and subsequent maps and reports prepared by the Federal Insurance Administration or Federal Emergency Management Agency (FEMA) delineating the flood hazard district floodway and floodplain areas within the city shall

become part of this chapter upon publication. A copy of the reports and maps cited in this section shall be on file in the Planning Department at the city.

C. **Warning and Disclaimer of Liability.** The degree of flood protection required by this section is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasion. Flood heights may be increased by man-made or natural causes. This chapter does not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This chapter shall not create liability on the part of the city, any officer or employee thereof, or the Federal Insurance Administration, for any flood damages that result from reliance on this chapter or any administrative decision lawfully made thereunder.

#### **15.30.040 Administration.**

A. **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 15.30.030(B). The permit shall be for all structures including mobile homes, as defined in Section 15.30.020, and for all other development including fill and other activities also including those defined in Section 15.30.020. Application for a development permit shall be made on forms furnished by the city building official or his or her designee 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:

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

a. Certification by a registered professional engineer or surveyor confirming the elevation in relation to mean sea level, of the lowest floor (including basement) is above the base flood elevation.

2. Elevation in relation to mean sea level to which any structure has been floodproofed;

a. Certification by a registered professional engineer or architect that the floodproofing methods for any nonresidential structure meet the floodproofing criteria in Section 15.30.050(B)(3).

4. Description of the extent to which any watercourse will be altered or relocated as a result of proposed development.

a. Assurance that the flood-carrying capacity within the altered or relocated portion of any watercourse is maintained.

B. **Application for a Development Permit.** Application for a development permit shall be made on forms furnished by the Planning Department 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:

1. Elevation in relation to mean sea level, of the lowest floor including basement of all structures;

a. Certification by a registered professional engineer or surveyor confirming the elevation in relation to mean sea level, of the lowest floor (including basement) is above the base flood elevation.

2. Elevation in relation to mean sea level to which any structure has been flood proofed;

a.. Certification by a registered professional engineer or architect that the flood proofing methods for any nonresidential structure meet the flood proofing criteria.

4. Description of the extent to which a watercourse will be altered or relocated as a result of proposed development.

C. Designation of the City Building Official. The city building official or their designee is appointed to administer and implement this chapter by granting or denying development permit applications in accordance with its provisions.

D. Duties and Responsibilities of the Building Official. Duties of the building official or their designee shall include, but not be limited to:

1. Permit Review.

a. Review all development permits to determine that the permit requirements of this chapter have been satisfied;

b. 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.

c. Review all development permit (applications) to determine if the proposed development is located in the floodway. If located in the floodway, assure that the encroachment provisions of 15.30.050(B) (1) are met.

2. Issue Permit.

a. Upon determination that the submitted and recorded information connected with the permit application meets the terms of this chapter, the building official or their designee shall issue a floodplain development permit to the original applicant.



b. The floodplain development permit shall be valid for a period of one year from the issue date.

c. The floodplain development permit is not assignable without permission from the building official.

D. Use of Other Base Flood Data in A and V Zones. When base flood elevation data has not been provided for A and V Zones in accordance with Section 15.30.030 (B), the building official or his/her designee shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from Federal, State or other source, in order to administer Sections 15.30.050 (B) and 15.30.050 (D).

E. Information to be Obtained and Maintained. Where base flood elevation data is provided through the Flood Insurance Study, FIRM, or as provided in 15.30.040(D), 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, and whether or not the structure contains a basement.

1. For all new or substantially improved flood-proofed structures where base flood elevation data is provided through the Flood Insurance Study, FIRM, or as required in Section 15.30.050:

- a. Verify and record the actual elevation in relation to mean sea level;
- b. Maintain the floodproofing certifications required in Section 15.30.050.
- c. Maintain the floodproofing certifications required in Section 15.30.050, and

2. Maintain for public inspection all records pertaining to the provisions of this chapter.

F. Interpretation of FIRM Boundaries. Make interpretations where needed, as to exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions). The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in Section 15.30.040 (I).

G. Permit Fee. The city may charge fees for permits and variances. Fees shall be established by resolution of the city council to be paid by the applicant at the time that the floodplain development permit application is submitted.

H. Appeal Board.

1. The planning and zoning commission as established by the city Charter shall hear and decide appeals and requests for variances from the requirements of this chapter.

2. The planning and zoning commission shall hear and decide appeals when it is alleged there is an error in any requirement, decision or administration of this chapter.

3. Those aggrieved by the decision of the planning and zoning commission, or any taxpayer, may appeal such decision to the city council in accordance with the procedures set forth in Section 17.06.110.

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

- a. The danger that materials may be swept onto other lands to the injury of others;
- b. The danger to life and property due to flooding or erosion damage;
- c. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
- d. The importance of the services provided by the proposed facility to the community;
- e. The necessity to the facility of a waterfront location, where applicable;
- f. The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;
- g. The compatibility of the proposed use with existing and anticipated development;
- h. The relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
- i. The safety of access to the property in times of flood for ordinary and emergency vehicles;
- j. The expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site; and
- k. The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.

5. Upon the consideration of factors of Section 15.30.050 (l), of this section and purposes of this chapter, the planning and zoning commission may attach such conditions to the granting of variances as it deems necessary to further the purpose of this chapter.

6. The city clerk shall maintain the records of all appeal actions and report any variances to the Federal Insurance Administration upon request.

I. Conditions for Variances.

1. 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 contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing the items set out in subsection (H)(4) of this section have been fully considered. As the lot size increases beyond the one-half acre, the technical justification required for issuing the variance increases.

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 this section.

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

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

5. Variances shall only be issued upon:

a. A showing of good and sufficient cause;

b. A determination that failure to grant the variance would result in exceptional hardship to the applicant; and

c. 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 subsection H of this section, or conflict with existing local laws or ordinances.

6. Variances as interpreted in the National Flood Insurance Program are based on the general zoning law principle that they pertain to a physical piece or property; they are not personal in nature and do not pertain to the structure, its inhabitants, economic or financial circumstances. They primarily address small lots in densely populated residential neighborhoods. As such, variances from the flood elevations should be quite rare.

7. Variances may be issued for nonresidential buildings in very limited circumstances to allow a lesser degree of floodproofing than watertight or dry-floodproofing, where it can be determined that such action will have a low damage potential, complies with all other variance criteria except 15.30.040 (I) (1), and otherwise complies with Sections 15.30.050 (1) and (2) of the General Standards.

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

### **15.30.050 Provisions for Flood Hazard Reduction.**

A. General Standards. In all areas of special flood hazards, the following standards are required:

1. Anchoring.

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

b. All mobile homes shall be anchored to prevent flotation, collapse, or lateral movement and shall be installed using methods and practices that minimize flood damage. Mobile homes shall be installed in accordance with the manufacturer's guidelines and the International Building Code adopted by the city.

2. AH Zone Drainage. Adequate drainage paths are required around structures on slopes to guide floodwaters around and away from proposed structures.

3. Construction Materials and Methods.

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

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

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

d. All new construction and substantial improvements within B zones or any shaded X zones included in Flood Insurance Studies adopted under this chapter in/or adjacent to Alpine Woods and Nordic Subdivisions shall have the lowest floor, including basement, elevated to at least twelve inches above the highest adjacent grade of the building site.

e. Where there are hazardous velocities, consideration shall be given to mitigating the effects of the velocities through proper techniques and measures.

4. Utilities.

a. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system;

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

c. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

5. Subdivision Proposals.

a. All subdivision proposals shall be consistent with the need to minimize flood damage;

b. All proposed improvements such as water, sewer, natural gas, telephone and electrical facilities shall be located and constructed in a manner which will minimize damage in the event of a flood. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage;

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

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

6. Review of Building Permits. Where elevation data is not available either through the Flood Insurance Study, or from another authoritative source (Section 15.30.040(D) ), applications for building permits shall be reviewed to assure that proposed construction will be reasonably safe from flooding. The test of reasonableness is a local judgement and includes use of historical data, high water marks, photographs of the past flooding, etc., where available. Failure to elevate at least two feet above grade in these zones may result in higher insurance rates.

B. Specific Standards. In all areas of special flood hazards where base flood elevation data has been provided (Zones A1-30, AH, and AE) as set forth in 15.30.030 (B) or in (Zones A and V) as set forth in 15.30.040 (D), the following provisions are required:

1. Encroachments, including fill, new construction, substantial improvements, and other development within the adopted regulatory floodway that would result in any increase in flood levels within the community during the occurrence of the base flood discharge shall be prohibited.

2. Residential Construction. New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated one foot or more above the base flood elevation.

a. Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or 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 be either certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria:

b. A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided.

c. The bottom of all openings shall be no higher than one foot above grade.

d. Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

e. For zones AH and AO, drainage paths are required around structures on slopes to drain floodwaters away from proposed structures.

3. Nonresidential Construction. New construction and substantial improvement of any commercial, industrial or nonresidential structure either have the lowest floor, including basement, elevated at or above the base flood elevation; or, together with attendant utility and sanitary facilities, shall:

a. Be floodproofed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water;

b. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy;

c. Be certified by a registered professional engineer or architect that the designs and methods of construction are in accordance with accepted standards of practice for meeting provisions of this subsection based on their development and/or review of the structural design, specifications and plans. Such certifications shall be provided to the official as set forth in Sections 15.30.040 (E);

d. Nonresidential structures that are elevated, not floodproofed, must meet the same standards for space below the lowest floor as described in 15.30.050 (B) (2).

e. Applicants floodproofing nonresidential buildings shall be notified that flood insurance premiums will be based on rates that are one foot below the floodproofed level (e.g. a building floodproofed to the base flood level will be rated as one foot below.)

4. Mobile Homes. All mobile homes that are placed or substantially improved within Zones A1 – A30, AH, and AE on sites outside of a mobile home park or subdivision, in a new manufactured home park or subdivision, in an expansion to an existing mobile home park or subdivision, or in an existing mobile home park or subdivision on which a mobile home has incurred “substantial damage” as the result of a flood; shall be elevated on a permanent foundation such that the lowest floor of the mobile home is elevated one foot or more above the base flood elevation and be securely anchored to an adequately designed foundation system to prevent flotation, collapse and lateral movement as required by Section 15.30.050(A)(1)

5. Recreational Vehicles. Recreational vehicles placed on sites within Zone A1- A30, AH, AE, AO, V1-V30, VE and V shall be fully licensed and ready for highway

use, on its wheels or jacking system, attached to the site only by quick disconnect type utilities, and have no permanently attached additions.

C. Areas Where No Floodway Designated. In areas where a regulatory floodway has not been designated, no new construction substantial improvements, or other development (including fill) shall be permitted within Zones A1-30 and AE, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the City's jurisdiction.

D. Floodways. Sites located within areas of special flood hazard established in Section 15.30.030(B) are areas designated as floodways. Since the floodway is an extremely hazardous area due to the erosion potential and velocity of floodwaters which carry debris, potential projectiles, and erosion potential, the following provisions apply:

1. Prohibit all encroachments, including fill, new construction, substantial improvements, and other development unless certification by a registered professional civil engineer is provided demonstrating through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.

2. If Section 15.30.050(D) (1) is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Section 15.30.050.

E. Standard for Shallow Flooding Areas (AO Zones). Shallow flooding areas appear on FIRMs as AO zones with depth designations. The base flood depths in these zones range from 1 to 3 feet above ground where a clearly defined channel does not exist, or where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is usually characterized as sheet flow. In these areas, the following provisions apply:

1. New construction and substantial improvements of residential structures and mobile homes within AO zones shall have the lowest floor (including basement) elevated above the highest grade adjacent to the building, one foot or more above the depth number specified on the FIRM (at least two feet if no depth number is specified).

2. New construction and substantial improvements of nonresidential structures within AO zones shall either:

- a. Have the lowest floor (including basement) elevated above the adjacent grade of the building site, one foot or more above the depth number specified on the FIRM (at least two feet if no depth number is specified); or

- b. Together with attendant utility and sanitary facilities, be completely flood proofed 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. If this method is used, compliance shall be certified by a registered professional engineer or architect as in Section 15.30.050 (B) (3) (C).

c. Require adequate drainage paths around structures on slopes to guide floodwaters around and away from proposed structures.

d. Recreational vehicles placed on sites within AO Zones be fully licensed and ready for highway use, on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices and has no permanently attached additions.

F. Coastal High Hazard Areas. Sites located within areas of special flood hazard established in Section 15.30.030 (B) are Coastal High Hazard Areas, designated as Zones V1-V30, VE, and/or V. These areas have special flood hazards associated with high velocity waters from tidal surges and, therefore, in addition to meeting all provisions in this ordinance, the following provisions shall also apply:

1. All new construction shall be located landward of the reach of mean high tide.

2. All new construction and substantial improvements in Zones V1-V30 and VE (V if base flood elevation data is available) shall be elevated on adequately anchored pilings and columns so that:

a. The bottom of the lowest horizontal structural member of the lowest floor (excluding the pilings or columns) is elevated one foot or more above the base flood level; and

b. The pile or column foundation and structure attached thereto is anchored to resist flotation, collapse and lateral movement due to the effects of wind and water loads acting simultaneously on all building components. Wind and water loading values shall each have a one percent chance of being equaled or exceeded in a given year (100-year mean recurrence interval); and

3. A registered professional engineer or architect shall develop or review the structural design, specifications and plans for the construction, and shall certify that the design and methods of construction to be used are in accordance with accepted standards of practice for meeting the provisions of (2) (a) and (b) of this Section.

4. Obtain the elevation (in relation to mean sea level) of the bottom of the lowest structural member of the lowest floor (excluding pilings and columns) of all new and substantially improved structures in Zones V1-30, VE, and V, and whether or not such structures contain a basement. The local floodplain administrator shall maintain a record of all such information.

5. All new construction shall be located landward of the reach of mean high tide.



6. Provide that all new construction and substantial improvements have the space below the lowest floor either free of obstruction or constructed with non-supporting breakaway walls, (open wood lattice-work, or insect screening intended to collapse under wind and water loads without causing collapse, displacement, or other structural damage to the elevated portion of the building or supporting foundation system.) For the purpose of this section, a breakaway wall shall have a design safe loading resistance of not less than 10 and no more than 20 pounds per square foot. Use of breakaway walls which exceed a design safe loading resistance of 20 pounds per square foot (either by design or when so required by local or state codes) may be permitted only if a registered professional engineer or architect certifies that the designs proposed meet the following conditions:

a. Breakaway wall collapse shall result from water load less than that which would occur during the base flood; and

b. The elevated portion of the building and supporting foundation system shall not be subject to collapse, displacement, or other structural damage due to the effects of wind and water loads acting simultaneously on all building components (structural and nonstructural). Maximum wind and water loading values to be used in this determination shall each have a one percent chance of being equaled or exceeded in any given year (100-year recurrence interval).

7. The use of fill for structural support of buildings within Zones VE, V1-V30, and V is prohibited.

8. Recreational vehicles placed on sites within Zones VE, V1-30,V and V1-V30 be fully licensed and ready for highway use, on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices and has no permanently attached additions.

9. If breakaway walls are utilized, such enclosed space shall be useable solely for parking of vehicles, building access, or storage. Such space shall not be used for human habitation.

10. Prohibit the use of fill for structural support of buildings.

11. Prohibit man-made alteration of sand dunes which would increase potential flood damage.

12. All mobile homes to be placed or substantially improved within Zones V1-V30, V and VE outside of a mobile home park or subdivision, in a new mobile home park or subdivision, in an expansion to an existing mobile home park subdivision, or in an existing mobile home park or subdivision on which a mobile home has incurred "substantial damage" as the result of a flood must meet the standards of (1) through (10) of this section. All mobile homes placed or substantially improved on other sites in an existing mobile home park or subdivision within Zones V1-V30, V and VE must meet the requirements of Section 15.30.050(B)(4).

G. Critical Facilities. Construction of new critical facilities shall be, to the extent possible, located outside the limits of the Special Flood Hazard Area (SFHA) (100-year floodplain). Construction of new critical facilities shall be permissible within the SFHA if no feasible alternative site is available. Critical facilities constructed within the SFHA shall have the lowest floor elevated three feet above the highest adjacent grade or to the height of the 500-year flood, whichever is higher. Access to and from the critical facility should also be protected to the height utilized above. Floodproofing and sealing measures must be taken to ensure that toxic substances will not be displaced by or released into floodwaters. Access routes elevated to or above the level of the base flood elevation shall be provided to all critical facilities to the extent possible.

Section 2. This ordinance shall take effect immediately upon adoption by the Valdez City Council.

PASSED AND APPROVED BY THE VALDEZ CITY COUNCIL THIS  
\_\_\_\_\_day of February, 2019.

CITY OF VALDEZ, ALASKA

\_\_\_\_\_  
Jeremy O'Neil, Mayor

ATTEST:

\_\_\_\_\_  
Sheri L. Pierce, MMC, City Clerk

APPROVED AS TO FORM:

\_\_\_\_\_  
Jon Wakeland, City Attorney  
Brena, Bell, & Clarkson, P.C.

First Reading:  
Second Reading:  
Adoption:  
Ayes:  
Noes:  
Absent:  
Abstain: