



# CITY of BETHEL

P O Box 537 • Bethel, Alaska 99559

543-2297 — Area Code 907

## ORDINANCE # 66

AN ORDINANCE OF THE CITY OF BETHEL ESTABLISHING  
LAND USE REGULATIONS TO CONFORM TO REQUIREMENTS  
OF THE NATIONAL FLOOD INSURANCE PROGRAM;  
AND PROVIDING FOR AN EFFECTIVE DATE

WHEREAS, AS 29.48.035 empowers the City of Bethel to adopt  
a building permit system and codes;

WHEREAS, AS 29.43.040 empowers the City of Bethel to provide  
for planning, platting and zoning;

WHEREAS, land use control regulations in flood hazard areas  
are required in order to participate in the National Flood Insurance  
Program; and

WHEREAS, it is desirable to provide the residents of the City  
of Bethel the opportunity to purchase flood insurance;

NOW, THEREFORE, THE CITY COUNCIL OF BETHEL ORDAINS:

### Section 1. Findings of Fact and Statement of Purpose.

a. Areas within the City of Bethel are periodically subject  
to inundation with 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 tax base, all of which adversely  
affect the public health, safety and general welfare.

b. Areas within the City of Bethel have been designated as  
flood-prone pursuant to Section 201 of the Flood Disaster Protection  
Act of 1973 and the City is required to join the National Flood  
Insurance Program to make flood insurance and Federal and federally  
regulated financial assistance available to the residents within  
the flood-hazard areas.

c. The purpose of this ordinance is to promote the public  
health, safety and general welfare and to minimize those losses  
described in (a) of this section and to meet the requirements for  
participation in the National Flood Insurance Program. To accomplish  
this purpose, it is the intent of this ordinance to:

- (1) Establish a land use permit system within the Flood Plain  
area as delineated by the Flood Plain Study dated January  
1975, City of Bethel, Alaska.

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- (2) Require that land use vulnerable to floods, including public facilities and utilities which serve such uses, shall be protected against flood damages at the time of initial construction or substantial improvement.
- (3) Restrict or prohibit land uses which are dangerous to health, safety or property in times of flood or cause excessive increases in flood heights or velocity.
- (4) Insure that subdivision and development of land within Bethel are consistent with the need to minimize flood.

Section 2. Land Use Permit.

a. No party shall construct, substantially improve or relocate a structure within the flood plain of the City of Bethel without first securing from the City Council a land use permit for each structure.

b. Violation of this ordinance shall constitute a misdemeanor and upon conviction thereof, is punishable by a fine of not more than \$25.00 dollars. Each day in violation shall be considered a separate offense.

Section 3. Application.

a. Application for a land use permit for each structure shall be filed with the City Clerk and shall be accompanied by a fee of \$10.00 dollars. The application for a permit shall be made on a form furnished by and returned to the City Clerk.

b. The information furnished in the application shall include, but is not limited to:

- (1) The name and address of the owner or builder of the structure on the tract.
- (2) A legal description of the tract.
- (3) Statement of the following elevations with respect to mean sea level:
  - (a) the ground elevation after site preparation.
  - (b) Projected first floor elevation.
  - (c) The basement floor elevation, if applicable.
- (4) If the structure is located in a Flood Hazard Area, information which demonstrates that the structure will be adequately protected against flood damage and that the structure or site preparation will not adversely affect flood elevations or velocities. The required protective measures set forth in Section 4 of this ordinance.

Section 4. Protection Against Flood Damage.

a. Within Flood Hazard Areas, no land use permit shall be

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approved by the Council unless all of the following requirements are satisfied.

- (1) Any new substantially improved structure shall be designed ( or modified) and anchored to prevent flotation, collapse or lateral movement of the structure.
- (2) Construction materials and utility equipment that are resistant to flood damage and construction practices and methods that will minimize flood damages shall be utilized.
- (3) Construction or substantial improvement shall not be permitted unless the applicant demonstrates that any associated new or replacement water supply system and sanitary sewage system, including on-site systems, will be designed and constructed to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into flood waters. All systems shall be flood-proofed at least to the Regulatory Flood Water surface elevation.
- (4) The lowest floor, including basement, of any new residential construction and substantial improvements to residential structures shall be one foot above the Regulatory Flood Water surface elevation.
- (5) The lowest floor of new construction and substantial improvements of non-residential structures shall be one foot above the Regulatory Flood Water surface elevation or, together with attendant utility and sanitary facilities shall be flood-proofed to one foot above the Regulatory Flood Water surface elevation.
- (6) If flood-proofing is utilized pursuant to paragraph (5) of this section, it shall be in accordance with the standards for completely flood-proofed structures contained within Section 210.2.1 FPL or 210.2.2 FP2 of the U.S. Army Corp of Engineers Publication entitled "Flood-Proofing Regulations", June 1972 Edition or any subsequent edition thereto. A professional engineer or architect shall certify that the flood-proofing measures taken are reasonably adequate to withstand the flood depths, pressures, velocities, impact and uplift forces and other factors associated with the 100-year flood and a record of certification shall be part of the land use permit records.
- (7) Construction or substantial improvement, including land fill, shall not, when combined with all other existing and anticipated uses, increase the Regulatory Flood level by more than one (1) foot at any point. It shall be the responsibility of the applicant to demonstrate that this requirement will be fulfilled. However, the City reserves the right to certify, at its own expense, any such statement.

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- (8) New mobile home parks, expansions to existing mobile home parks, and new mobile homes not in a mobile home park and existing mobile home parks where the repair, reconstruction or improvement of streets, utilities and pads equals or exceeds 50 percent of the value of the streets, utilities and pads before the repair, reconstruction or improvement has commenced, shall have ground anchors for tie downs as required in accordance with the Mobile Home Manufacturers Association standards or standards determined by the Federal Insurance Administration; stands or lots elevated on compacted fill or on piers so that the lowest floor of the home will be at or above the 100-year flood level; adequate surface drainage and easy access for a hauler; and in the instance of elevation on piers, lots large enough to permit steps; pier foundations placed on stable soil no more than 10 feet apart and steel reinforcement provided for piers more than 6 feet high.
- (9) Mobile homes moving into existing mobile home parks where concrete pads for the placement of mobile homes are in existence and where streets and utility connections are in existence shall have ground anchors for tie downs required in accordance with the Mobile Home Manufacturers Association standards or standards determined by the Administrator; the fact that the mobile home is being located in a flood plain area having special flood hazards shall be disclosed to the mobile home and/or lot purchaser or lessee in the purchase contract, deed or lease; and an evacuation plan indicating alternate vehicular access and escape routes shall be filed with Disaster Preparedness Authorities.

b. Pursuant to part (a) of this section, the council shall require at least the following flood damage control measures:

- (1) Installation of watertight doors, bulkheads, and shutters, or similar methods of closure.
- (2) Reinforcement of walls to resist water pressures.
- (3) Use of paints, membranes, or mortars to reduce seepage of water through walls.
- (4) Addition of mass or weight to structures to resist flotation.
- (5) Installation of pumps to lower water levels in structures.
- (6) Installation of pumps or comparable facilities for subsurface drainage systems to relieve external foundation wall and basement flood pressures.

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- (7) Building design and construction to resist rupture or collapse caused by water pressure or floating debris.
- (8) Location and installation of all electrical equipment, circuits, appliances and heating systems so that they are protected from inundation by the Regulatory Flood.
- (9) Location of storage facilities for chemicals, explosives, buoyant materials, flammable liquids or other toxic materials which could be hazardous to public health, safety and welfare; or design of such facilities to prevent flotation of storage containers which could result in the escape of toxic materials into flood waters.
- (10) Use of materials such as sheathing, siding, subflooring and underlayment that are not subject to water damage due to prolonged submersion below Regulatory Flood level.
- (11) Use of closed cell insulation to prevent waterlogging and consequent loss of insulating ability below the Regulatory Flood level.
- (12) Location of oil storage tanks outside the structure and anchoring to prevent disturbance by flood water. Tanks should be placed upon and secured to a concrete slab of sufficient volume to prevent flotation. In the calculation of required anchorage, little recognition should be given to shear or friction values of the soils as they will be substantially reduced due to saturation. Both fill and vent pipes should extend above the expected high water level.
- (13) Installation of a back water valve in sewer lines in an accessible location immediately adjacent to the exterior foundation wall.

Section 5. Subdivision and Utility Regulations.

a. The Planning Commission shall deny permission to subdivide land within Flood Hazard Areas unless the following requirements have been fulfilled:

- (1) The land subdivision and associated development are consistent with the need to minimize flood damages.
- (2) All public utilities and facilities such as sewer, gas, electrical and water systems shall be located, elevated or constructed to minimize or eliminate flood damage.
- (3) Adequate drainage shall be provided to reduce the exposure of structures, utilities and facilities to flood hazards.

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(4) The preliminary and final plat shall include the ground elevation and the Regulatory Flood elevation at convenient reference points.

(5) The Flood Hazard Area shall be labeled "Flood Hazard Area" on preliminary and final plats. The fact that a lot is in the Flood Hazard Area shall be disclosed in any contract to purchase or lease the lot.

b. All new or replacement water supply systems and sanitary sewage systems, including on-site systems, shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters.

c. All new or replacement public utilities such as gas, electric and telephone systems shall be designed or constructed to eliminate disruptions due to flooding and associated hazards.

d. In determining if the requirements of this section are fulfilled, the Planning Commission shall consider the intent of this ordinance and at least:

- (1) The danger to life and property due to the increased flood heights or velocities caused by subdivision fill, roads and intended uses.
- (2) The danger that intended uses may be swept on to other lands or downstream to the injury of others.
- (3) The adequacy of proposed water supply and sanitation systems and the ability of these systems to prevent disease, contamination and unsanitary conditions under flood conditions.
- (4) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner.
- (5) The importance of the services provided by the proposed facility to the community.
- (6) The requirements of the subdivision for a waterfront location.
- (7) The availability of alternative locations not subject to flooding for the proposed subdivision and land uses.
- (8) The compatibility of the proposed uses with existing development and development anticipated in the foreseeable future.
- (9) The relationship of the proposed subdivision to the comprehensive plan and flood plain management program for the area.

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- (10) The safety of access to the property for emergency vehicles in times of flood.
- (11) The expected heights, velocity, duration, rate of rise and sediment transport of the flood waters expected at the site.
- (12) The cost 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.
- (13) The installation of valves or controls on sanitary and storm drains which permit the drains to be closed to prevent backup of sewage and storm waters into buildings or structures.

Section 6. Implementation.

a. Permits issued pursuant to this ordinance shall conform to all ordinances or regulations as are from time to time established or amended; however, this ordinance shall control in the event of any conflict unless specifically stated otherwise or unless the conflicting ordinance is more restrictive.

b. In case any structure is constructed or substantially improved in violation of this ordinance, the City, in addition to other remedies, shall institute any proper actions or proceedings necessary, including enjoining of connections to public utilities, to restrain, correct or abate such violations.

c. The City of Bethel is hereby authorized to enter into contracts and agreements with other government entities for the purpose of neighboring municipalities when enforcing this ordinance or developing a flood plain management program.

e. Nothing in this ordinance shall be construed as applying to any structure existing prior to the effective date of this ordinance unless they are substantially improved after the effective date.

f. Nothing in this ordinance shall be construed as applying to any structure for which 50% or more of the materials have been already ordered, prior to the effective date.

Section 7. Definitions.

"Federal Insurance Administration" (FIA) means the division of the United States Department of Housing and Urban Development which is responsible for administration of the National Flood Insurance Program.

"Flood Hazard Area" includes all area within the corporate limits subject to the 100-year flood as delineated on the Flood Insurance Rate Map for Bethel published by the Federal Insurance Administration.

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"Flood Hazard Boundary Map" means the map of the municipality issued by the Federal Insurance Administration which delineates the area subject to the 100-year flood. This area is called the "Special Flood Hazard Area" on the map.

"Flood Insurance Rate Map" means the map of the municipality issued by the Federal Insurance Administration which delineates the area subject to the 100-year flood, the water surface elevation of the 100-year flood and the flood insurance rate zones.

"One Hundred Year Flood" means a flood of a magnitude which can be expected to occur on the average of once every 100 years.\*

"Regulatory Flood" is the 100-year flood. The water surface elevation of the Regulatory Flood is the water surface elevation delineated on the Flood Insurance Rate Map.

"Structure" means a building which is used for residential, business, agricultural, or religious purposes, or which is occupied by a private, nonprofit organization, or which is owned by a State or local government or any agency thereof; the term includes mobile homes or other modular units.

"Substantially Improved" means any remodeling, repair, reconstruction or improvement of a structure, the cost of which equals or exceeds 50 percent of the fair market value of the property either (1) as such value exists before the improvement is started or (2) if the property has been damaged and is being restored, as such value existed before the damage occurred.

Section 8. Severability and Disclaimer of Liability.

a. If any section, subsection, paragraph, sentence, clause or phrase of this ordinance should be declared invalid for any reason whatsoever, such decision shall not affect the remaining portions of this ordinance which shall remain in full force and effect, and for this purpose the provisions of this ordinance are hereby declared to be severable.

b. The grant of a land use permit or approval of a subdivision plan in the flood hazard area shall not constitute a representation, guarantee or warranty of any kind by the City

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\*It is possible for this size flood to occur during any year. The odds are one to a hundred that this size flood will occur during a given year; there is a one percent chance that a flood of this magnitude will occur each year. Statistical analysis of available streamflow or coastal storm records, or analysis of rainfall and runoff characteristics of the watershed, or coastal topography and storm characteristics are used to determine the extent and depth of the 100-year flood.

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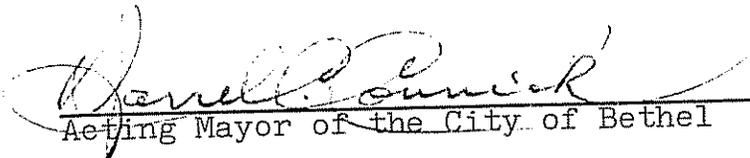
of Bethel, Alaska or any official or employee thereof of the practicability of safety of the proposed use, and shall create no liability upon the City, its officials or employees.

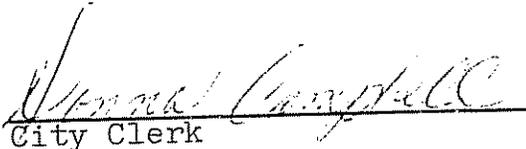
Section 9. Effective Date.

This ordinance shall become effective on passage.

Passed and approved this 21st day of April, 1975.

Approved:

  
\_\_\_\_\_  
Acting Mayor of the City of Bethel

  
\_\_\_\_\_  
City Clerk

AMENDMENT 1  
to  
ORDINANCE 66

AN AMENDMENT TO CITY OF BETHEL ORDINANCE 66, AN ORDINANCE ESTABLISHING LAND USE REGULATIONS WITH RESPECT TO THE NATIONAL FLOOD INSURANCE PROGRAM.

WHEREAS, AS 29.48.035 empowers the City of Bethel to adopt a building permit system and codes; and

WHEREAS, AS 29.43.040 empowers the City of Bethel to provide for planning, platting, and zoning; and

WHEREAS, land use control regulations in flood hazard areas are required in order to participate in the National Flood Insurance Program; and

WHEREAS, it is desirable to provide the residents of the City of Bethel the opportunity to purchase flood insurance.

NOW THEREFORE, THE CITY COUNCIL OF BETHEL, ALASKA HEREBY ORDAINS THAT ORDINANCE 66 SHALL BE AMENDED TO READ AS FOLLOWS:

Section 1. Findings of Fact and Statement of Purpose

- a. Areas within the City of Bethel are periodically subject to inundation by flood waters which flooding 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 local tax base, all of which adversely affect the general welfare of Bethel, Alaska.
- b. Areas within the City of Bethel have been designated as flood-prone pursuant to Section 201 of the Flood Disaster Protection Act of 1973 and the City is required to join the National Flood Insurance Program to make flood insurance and Federal and federally regulated financial assistance available to the residents within the flood-hazard areas.
- c. The purpose of this ordinance is to promote the public health, safety, and general welfare and to minimize those losses described in (a) above of this section and to meet the requirements for participation in the National Flood Insurance Program. To accomplish this purpose, it is the intent of this ordinance to:
  1. establish a land use permit system within the Flood Plain area as delineated by the Flood Plain Study dated January, 1975;
  2. require that land use vulnerable to floods, including public facilities and utilities which serve such uses, shall be protected against flood damages at the time of initial construction or substantial improvement;

3. restrict or prohibit land uses which are dangerous to health, safety, or property in times of flood or cause excessive incieases in flood heights or velocity;
4. insure that subdivision and development of land within Bethel are consistant with the need to minimize flood damage.

### Section 2. Eleveation Certificate

- a. No party shall construct, substantially improve, or relocate a structure within the flood plain of the City of Bethel without first securing from the City Planner a signed Fcderal Emergency Management Agency National Flood Insurance Elevation Certificate for each structure.
- b. The City Planner shall not sign an elevation certificate until
  1. all other sections of the certificate have been completed;
  2. the City Planner has reviewed the proposed development to assure that all necessary permits have been received from those governmental agencies from which approval is required by Federal or State law including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334.
- c. The City Planner shall make a copy of the signed elevation certificate and file it in the City Planner's office.

### Section 3. Application

- a. Application for a land use permit for each structure shall be filed with the City Clerk and shall be accompanied by a fee of \$10.00 dollars. The application for a permit shall be made on a form furnished by and returned to the City Clerk.
- b. The information furnished in the application shall include, but is not limited to:
  1. the name and address of the owner or builder of the structure on the tract;
  2. a legal description of the tract;
  3. a statement of the following elevations with respect to mean sea level:
    - a) the ground clevation after site preparation
    - b) projected first floor elevation
    - c) the basement floor elevation, if applicable;
  4. if the structure is located in a Flood Hazard Area, information which demonstrates that the structure will be adequately protected against flood damage and that the structure or site preparation will not adversely affect flood elevations or velocities. The required protective measures arc set forth in Section 4 of this ordinance.

#### Section 4. Protection Against Flood Damage

- a. Within Flood Hazard Areas, no land use permit shall be approved unless all of the following requirements have been satisfied:
  1. any new or substantially improved structure shall be designed or modified and anchored to prevent flotation, collapse, or lateral movement of the structure;
  2. construction materials and utility equipment that are resistant to flood damage and construction practices and methods that will minimize flood damages shall be utilized;
  3. construction or substantial improvement shall not be permitted unless the applicant demonstrates that any associated new or replacement water supply system and sanitary sewage system, including on-site systems, will be designed and constructed to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into flood waters. All systems shall be flood-proofed at least to the regulatory flood water surface elevation;
  4. the lowest floor, including basement, of any new or substantially improved residential structure, shall be one (1) foot above the regulatory flood water surface elevation. If the construction or other improvement is located in an area where the flood insurance agency has not provided the City with base flood elevation data, the City shall use the best available data to administer the elevation requirements of this subsection.
  5. the lowest floor of new construction and substantial improvements of non-residential structures shall be one (1) foot above the regulatory flood water surface elevation, or, together with attendant utility and sanitary facilities, shall be flood-proofed to one (1) foot above the regulatory flood water surface elevation. If the construction or structure improvement is located in an area where the flood insurance agency has not provided the City with base flood elevation data, the City shall use the best available data to administer the elevation requirements of this subsection.
  6. if flood-proofing is utilized pursuant to paragraph (5) of this section, it shall be in accordance with the standards for completely flood-proofed structures contained within Section 210.2.1 FPL or 210.2.2 FPL of the U.S. Army Corps of Engineers publication entitled "Flood-Proofing Regulations", June 1972 Edition or any subsequent edition thereto. A professional engineer or architect shall certify that the flood-proofing measures taken are reasonably adequate to withstand the flood depths, pressures, velocities, impact and uplift forces, and other factors associated with the 100-year flood and a record of certification shall be part of the land use permit records.
  7. construction or substantial improvement, including land fill, shall not, when combined with all other existing and anticipated uses, increase the regulatory flood level by more than one (1) foot at any point. It shall be the responsibility of the applicant to demonstrate that this requirement will be fulfilled. However, the City reserves the right to certify, at its own expense, any such statement.

8. new mobile home parks, expansions to existing mobile home parks, and new mobile homes not in a mobile home park and existing mobile home parks where the repair, re-construction or improvement of streets, utilities and pads equals or exceeds fifty (50%) percent of the value of the streets, utilities and pads before the repair, re-construction or improvement have commenced, shall have ground anchors for tie downs as required in accordance with the Mobile Home Manufacturers Association standards or standards determined by the Federal Insurance Administration; stands or lots elevated on compacted fill or on piers so that the lowest floor of the home will be at or above the 100-year flood level; adequate surface drainage and easy access for a hauler; and in the instance of elevation on piers, lots large enough to permit steps; pier foundations placed on stable soil no more than 10 feet apart and steel reinforcement provided for piers more than 6 feet high.
  9. mobile homes moving into existing mobile home parks where concrete pads for the placement of mobile homes are in existence and where streets and utility connections are in existence shall have ground anchors for tie downs required in accordance with the Mobile Home Manufacturers Association standards or standards determined by the Administrator; the fact that the mobile home is being located in a flood plain area having special flood hazards shall be disclosed to the mobile home and/or lot purchaser or lessee in the purchase contract, deed or lease; and an evacuation plan indicating alternate vehicular access and escape route shall be filed with Disaster Preparedness Authorities.
- b. Pursuant to part (a) of this section, the council shall require at least the following flood damage control measures:
1. installation of watertight doors, bulkheads, and shutters or similar methods of closure;
  2. reinforcement of walls to resist water pressures;
  3. use of paints, membranes, or mortars to reduce seepage of water through walls;
  4. addition of mass or weight to structures to resist flotation;
  5. installation of pumps to lower water levels in structures;
  6. installation of pumps or comparable facilities for subsurface drainage systems to relieve external foundation wall and basement flood pressures;

7. building design and construction to resist rupture or collapse caused by water pressure or floating debris;
8. location and installation of all electrical equipment, circuits, appliances and heating systems so that they are protected from inundation by the Regulatory Flood;
9. location of storage facilities for chemicals, explosives, buoyant materials, flammable liquids or other toxic materials which could be hazardous to public health, safety and welfare; or design of such facilities to prevent flotation of storage containers which could result in the escape of toxic materials into flood waters;
10. use of materials such as sheathing, siding, subflooring and underlayment that are not subject to water damage due to prolonged submersion below Regulatory Flood level;
11. use of closed cell insulation to prevent waterlogging and consequent loss of insulating ability below the Regulatory Flood level;
12. location of oil storage tanks outside the structure and anchoring to prevent disturbances by flood water. Tanks should be placed upon and secured to a concrete slab of sufficient volume to prevent flotation. In the calculation of required anchorage, little recognition should be given to shear or friction values of the soils as they will be substantially reduced due to saturation. Both fill and vent pipes should extend above the expected high water level;
13. installation of a back water valve in sewer lines in an accessible location immediately adjacent to the exterior foundation wall.

#### Section 5. Subdivision and Utility Regulations

- a. The Planning Commission shall deny permission to subdivide land within Flood Hazard Areas unless the following requirements have been fulfilled:
  1. the land subdivision and associated development are consistent with the need to minimize flood damages;
  2. all public utilities and facilities such as sewer, gas, electrical and water systems shall be located, elevated, or constructed to minimize or eliminate flood damage;
  3. adequate drainage shall be provided to reduce the exposure of structures, utilities and facilities to flood hazards;

4. the preliminary and final plat shall include the ground elevation and the Regulatory Flood elevation at convenient reference points;
  5. the Flood Hazard Area shall be labeled "Flood Hazard Area" on preliminary and final plats. The fact that a lot is in the Flood Hazard Area shall be disclosed in any contract to purchase or lease the lot.
- b. All new or replacement water supply systems and sanitary sewage systems, including on-site systems, shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters.
  - c. All new or replacement public utilities such as gas, electric and telephone systems shall be designed or constructed to eliminate disruptions due to flooding and associated hazards.
  - d. In determining if the requirements of this section are fulfilled, the Planning Commission shall consider the intent of this ordinance and at least:
    1. the danger to life and property due to the increased flood heights or velocities caused by subdivision fill, roads and intended uses;
    2. the danger that intended uses may be swept on to other lands or downstream to the injury of others;
    3. the adequacy of proposed water supply and sanitation systems and the ability of these systems to prevent disease, contamination and unsanitary conditions under flood conditions;
    4. the susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
    5. the importance of the services provided by the proposed facility to the community;
    6. the requirements of the subdivision for a waterfront location;
    7. the availability of alternative locations not subject to flooding for the proposed subdivision and land uses;
    8. the compatibility of the proposed uses with existing development and development anticipated in the foreseeable future;
    9. the relationship of the proposed subdivision to the comprehensive plan and flood plain management program for the area;
10. the safety of access to the property for emergency vehicles in times of flood;
  11. the expected heights, velocity, duration, rate of rise and sediment transport of the flood waters expected at the site;

12. the cost 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;
13. the installation of valves or controls on sanitary and storm drains which permit the drains to be closed to prevent backup of sewage and storm waters into buildings or structures.

#### Section 6. Implementation

- a. Permits issued pursuant to this ordinance shall conform to all ordinances or regulations as are from time to time established or amended; however, this ordinance shall control in the event of any conflict unless specifically stated otherwise or unless the conflicting ordinance is more restrictive.
- b. In case any structure is constructed or substantially improved in violation of this ordinance, the City, in addition to other remedies, shall institute any proper actions or proceedings necessary, including enjoining of connections to public utilities, to restrain, correct or abate such violations.
- c. The City of Bethel is hereby authorized to enter into contracts and agreements with other government entities for the purpose of neighboring municipalities when enforcing this ordinance or developing a flood plain management program.
- d. Nothing in this ordinance shall be construed as applying to any structure existing prior to the effective date of this ordinance unless they are substantially improved after the effective date.
- e. Nothing in this ordinance shall be construed as applying to any structure for which 50% or more of the materials have been already ordered, prior to the effective date.

#### Section 7. Definitions

"Federal Insurance Administration" (FIA) means the division of the United States Department of Housing and Urban Development which is responsible for administration of the National Flood Insurance Program.

"Flood Hazard Area" includes all area within the corporate limits subject to the 100-year flood as delineated on the Flood Insurance Rate Map for Bethel published by the Federal Insurance Administration.

"Flood Hazard Boundary Map" means the map of the municipality issued by the Federal Insurance Administration which delineates the area subject to the 100-year flood. This area is called the "Special Flood Hazard Area" on the map.

"Flood Insurance Rate Map" means the map of the municipality issued by the Federal Insurance Administration which delineates the area subject to the 100-year flood, the water surface elevation of the 100-year flood and the flood insurance rate zones.

"One Hundred Year Flood" means the flood of a magnitude which can be expected to occur on the average of once every 100 years.\*

"Regulatory Flood" is the 100-year flood. The water surface elevation of the Regulatory Flood is the water surface elevation delineated on the Flood Insurance Rate Map.

"Structure" means a building which is used for residential, business, agricultural, or religious purposes, or which is occupied by a private, nonprofit organization, or which is owned by a State or local government or any agency thereof; the term includes mobile homes or other modular units.

"Substantially Improved" means any remodeling, repair, reconstruction or improvement of a structure, the cost of which equals or exceeds 50% of the fair market value of the property either (1) as such value exists before the improvement is started, or (2) if the property has been damaged and is being restored, as such value existed before the damage occurred.

#### Section 8. Severability and Disclaimer of Liability

- a. If any section, subsection, paragraph, sentence, clause or phrase of this ordinance should be declared invalid for any reason whatsoever, such decision shall not affect the remaining portions of this ordinance which shall remain in full force and effect, and for this purpose the provisions of this ordinance are hereby declared to be severable.
- b. The grant of a land use permit or approval of a subdivision plan in the flood hazard area shall not constitute a representation, guarantee or warranty of any kind by the City of Bethel, Alaska or any official or employee thereof of the practicability of safety of the proposed use, and shall create no liability upon the City, its officials or employees.

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\* It is possible for this size flood to occur during any year. The odds are one to a hundred that this size flood will occur during a given year; there is a one percent chance that a flood of this magnitude will occur each year. Statistical analysis of available streamflow or coastal storm records, or analysis of rainfall and runoff characteristics of the watershed, or coastal topography and storm characteristics are used to determine the extent and depth of the 100-year flood.

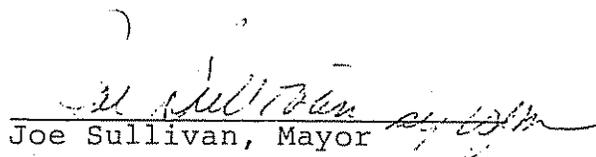
Section 9. Effective Date

This ordinance amendment shall become effective upon passage.

Section 10. Penalties

Violation of this ordinance shall constitute a misdemeanor and upon conviction thereof is punishable by a fine of not more than twenty-five (\$25.00) dollars. Each day in violation shall be considered a separate offense.

PASSED AND APPROVED THIS *2<sup>nd</sup>* DAY OF JUNE, 1985.

  
Joe Sullivan, Mayor

ATTEST:

  
Wayne J. Maiers, City Clerk

AMENDMENT 2  
to  
ORDINANCE 66

AN AMENDMENT TO CITY OF BETHEL ORDINANCE 66, AN ORDINANCE ESTABLISHING LAND USE REGULATIONS WITH RESPECT TO THE NATIONAL FLOOD INSURANCE PROGRAM.

WHEREAS, recent changes in the National Flood Insurance Program (NFIP) necessitate revisions of local ordinance #66 to retain eligibility in the NFIP.

NOW THEREFORE, THE CITY COUNCIL OF BETHEL, ALASKA HEREBY ORDAINS THAT ORDINANCE 66 SHALL BE AMENDED TO READ AS FOLLOWS:

15.08.020.

Line 2, Delete: "Flood Plain Study dated January, 1975."  
Insert: "Federal Insurance Administration in a scientific and engineering report entitled "The Flood Insurance Study for the City of Bethel," dated February 15, 1985, with accompanying Flood Insurance Maps on file at the City of Bethel Planning Department, P.O. Box 388, Bethel, Ak 99559.

15.08.040.

Line 1, Delete: "substantially improve or relocate a structure"  
Insert: "relocate a structure or make substantial improvements on any parcel of land"

15.08.050.

Line 3, Delete: "Clerk and shall be accompanied by a fee of \$10.00 dollars. The application for a permit shall"  
Insert "Planning Office and"

Line 5, Delete: "and returned to the City Clerk." Insert: "the Planning Department."

Line 11, Delete: "a Statement of the following...c) the basement floor elevation if applicable;" Insert: "Flood Hazard Zone Status;"

Insert: "5. Where elevation data is not available either through the Flood Insurance Study or from another authoritative source, applications for 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 past flooding, etc., where available. Failure to elevate at least two feet above grade in these zones may result in higher insurance rates."

Insert: "6. Prior to any alteration or relocation of a water course, the City Planner shall notify adjacent communities and the Department of Community and Regional Affairs, and submit evidence of such notification to the Federal Insurance Administration, and require that maintenance will be provided within the altered or relocated portion of said watercourse so that the flood carrying capacity is not diminished."

15.08.070.

Line 3, Insert after... movement of the structure: "All manufactured homes must likewise be anchored to prevent flotation, collapse or lateral movement, and shall be installed using methods and practices

15.08.120

Re-title existing paragraph "15.08.130". Insert: "If the construction or structure improvement is located in an area where the flood insurance agency has not provided the City with the base flood elevation data, the City shall use the best available data to administer the elevation requirements."

15.08.130

Re-title existing paragraph "15.08.140"

15.18.140

Delete: "new mobile home parks...more than 6 feet high."

15.08.150

Delete: "mobile homes moving into...filed with Disaster Preparedness Authorities." Insert: "All manufactured homes to be placed or substantially improved within Zones A-1, and AE shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is at or above that base flood elevation and be securely anchored to an adequately anchored foundation system in accordance with the provisions of this chapter."

15.08.170

A-4, Re-title "5." Insert: "4. Where base flood elevation data has not been provided or is not available from another authoritative source, it shall be generated for subdivision proposals and other proposed developments which contain at least 50 lots or 5 acres (whichever is less).

A-5, Re-title "6."

Insert: "15.08.250"

All costs incurred in conforming to application procedures and standards set forth in this chapter shall be the responsibility of the applicant.

Insert: "15.08.260 Variance Procedures"

- A. General conditions under which a variance from the elevation standard may be issued is for new construction and substantial improvements to be erected on a lot one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing items in 15.08.260(L) have been fully considered. As the lot size increases the technical justification required for issuing the variance increases.
- B. Variances may be issued for the reconstruction, rehabilitation, or restoration of structures listed on the National Register of Historic Places or State Inventory of Historic places, without regard to the procedures set forth in the section.
- C. Variances shall not be issued within a designated floodway if any increase in flood levels during the base flood discharge would result.
- D. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
- E. Variances shall only be issued upon:
  - 1. a showing of good and sufficient cause;
  - 2. a determination that failure to grant the variance would result in exceptional hardship to the applicant;
  - 3. 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 15.08.260(L) or conflict with existing local law or ordinances.
- F. Variances as interpreted in the National Flood Insurance Program are based on the general zoning law principle that they pertain to a physical piece of property; they are not personal in nature and do not pertain to the structure, its inhabitants, economic or financial circumstance. They primarily address small lots in densely populated residential neighborhoods as such; variances from the flood elevations should be quite rare.
- G. Variances may be issued for nonresidential buildings in very limited circumstances to allow a lesser degree of floodproofing than water-tight or dry-floodproofing, where it can be determined that such action will have low damage potential, complies with all variance criteria except 15.08.260(B) and otherwise complies with 15.08.070 and 15.08.080 of this chapter.
- H. Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with a lowest floor elevation below the base flood elevation and that the cost of flood insurance will be commensurate with the increase risk resulting from the reduced lowest floor elevation.

- I. The Planning Commission as established by the Bethel City Council shall hear and decide appeals and request for variances from the requirements of this ordinance.
- J. The Planning Commission shall hear and decide appeals when it is alleged there is an error in any requirement, decision, or determination made by the Planning Department in the enforcement or administration of this ordinance.
- K. Those aggrieved by the decision of the Planning Commission, or any taxpayer, may appeal such decision to the Bethel City Council.
- L. In passing upon such applications, the Planning Commission shall consider all technical evaluations, all relevant factors, standards specified in other sections of this ordinance, and:
  - 1. the danger that materials may be swept onto other lands to the injury of others;
  - 2. the danger to life and property due to flooding or erosion damage.
  - 3. the susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
  - 4. the importance of the services provide by the proposed facility to the community;
  - 5. the necessity to the facility of a waterfront location, where applicable;
  - 6. the availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;

that minimize flood damage. Anchoring methods may include, but are not limited to, use of over the top of frame ties to ground anchors. (Prior code 14.08.050(1))"

15.08.090.

Line 9, Insert after ...floodwater surface elevation: "Electrical, heating, ventilation, plumbing, 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. (Prior code 14.08.050(3))"

15.08.100.

Delete: "the lowest floor, ...floodwater surface elevation."

Insert: "New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated to or above base flood elevation. 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 either be certified by a registered professional engineer or architect, or must meet or exceed the following minimum criteria:

- a) 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.
- b) the bottom of all openings shall be no higher than one foot above grade.
- c) openings may be equipped with screens, louvres, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters."

15.08.110

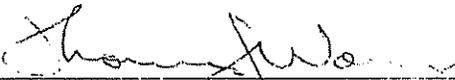
Delete: "the lowest floor, ...of this subsection."

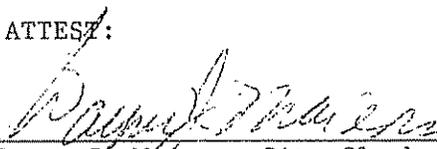
Insert: "New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall either have the lowest floor, including basement, elevated to the level of the base flood elevation; or together with attendant utility and sanitary facilities, shall:

- 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 design 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 certification shall be provided to the official as set forth in 15.08.040.
- d) nonresidential structures that are elevated, not floodproofed, must meet the same standards for space below the lowest flood as described in 15.08.100.
- e) applicants floodproofing nonresidential buildings shall be notified that the flood insurance premiums will be based on rates that are one foot below the floodproofed level (eg. a building constructed to the base flood level will be rated as one foot below that level)."

7. the compatibility of the proposed use with existing and anticipated development;
  8. the relationship of the proposed use to the comprehensive plan and flood plain management program for that area;
  9. the safety of access to the property in times of flood for ordinary and emergency vehicles;
  10. 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,
  11. the costs of providing governmental services during and after flood condition, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.
- M. Upon consideration of the factors of 15.08.260(L) and the purpose of this ordinance, the Planning Commission may attach such conditions to the granting of variances as it deems necessary to further the purpose of this ordinance.
- N. The Planning Department shall maintain the records of all appeal actions and report any variances to the Federal Insurance Administration upon request.

PASSED AND APPROVED THIS 26th DAY OF MAY, 1987.

  
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Tom Warner, Mayor

ATTEST:  
  
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Wayne J. Maier, City Clerk