

CITY OF GRANITE FALLS
Granite Falls, Washington
ORDINANCE 985-2020

**AN ORDINANCE OF THE CITY OF GRANITE FALLS,
WASHINGTON, ADOPTING FINDINGS OF FACT;
ADOPTING INTERIM ZONING CODE REGULATIONS
REGULATING FLOOD DAMAGE PREVENTION;
PROVIDING FOR THE DURATION OF THIS ORDINANCE
AND PUBLIC HEARING; ESTABLISHING A WORK
PROGRAM; PROVIDING FOR SEVERABILITY,
EXPIRATION AND AN EFFECTIVE DATE.**

WHEREAS, the City of Granite Falls is authorized to impose moratoria and interim land use controls pursuant to RCW 36.70A.390 and RCW 35A.63.220; and

WHEREAS, the City of Granite Falls finds that health, safety and welfare is addressed in the proposed interim zoning code changes for flood damage prevention; and

WHEREAS, the City is proposing that interim regulations be adopted concerning floodplain management to address the adoption of the current preliminary Flood Insurance Study (FIS) and accompanying Flood Insurance Rate Map's (FIRM) by the Federal Emergency Management Agency (FEMA). The Council will analyze the effectiveness of the interim standards with the information and data acquired during the interim timeframe; and

WHEREAS, in order to maintain participation in the National Flood Insurance Program (NFIP) and allow citizens within the community to obtain flood insurance and certain types of federal disaster aid, the City must adopt an updated floodplain ordinance that meets current state and NFIP standards and include the new FIS and FIRM as the basis for establishing areas of special flood hazard within 6 months of the Letter of Final Determination; and

WHEREAS, state statute allows interim land use controls to be effective for up to one year if a work plan is developed for related studies providing for such longer period pursuant to RCW 36.70A.390 and RCW 35A.63.220; and

WHEREAS, the Granite Falls City Council is directing the Granite Falls Planning Commission to review the interim language and definitions consistent with the work plan/schedule attached hereto as Exhibit A, which exhibit is incorporated herein by this reference, and provide a recommendation to the Council for the adoption of permanent amendments to the city basic definitions in Chapter 19.03 GFMC.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF GRANITE FALLS DO HEREBY ORDAIN AS FOLLOWS:

Section 1. Findings. The City Council hereby adopts the recitals expressed above as findings in support of this ordinance.

Section 2. Purpose. The purpose of this interim zoning ordinance is to enact for the term of this ordinance an update to Section 19.07.035 Flood Damage Prevention attached hereto as Exhibit B.

Section 3. Duration of Interim Zoning Regulations/public Hearing. The interim Zoning Code amendments adopted by this ordinance shall remain in effect for a period of six months from the effective date and shall automatically expire unless the same are extended as provided in RCW 36.70A.390 and RCW 354.63.220 prior to that date, or unless the same are repealed or superseded by permanent amendments prior to that date. A public hearing on the interim amendments shall be held on or about April 15, 2020 but no later than sixty days following the effective date of this Ordinance. Following the public hearing the City Council may take action to amend this ordinance, including the making of additional findings.

Section 4. Planning Commission Work Plan. The City of Granite Falls Planning Commission is hereby directed to review the interim regulations consistent with Exhibit A attached hereto and to make a recommendation on whether said amendments, some modification thereof, or other amendments should be permanently adopted. The Granite Falls Planning Commission is directed to complete its review, to conduct such public hearings as may be necessary or desirable, and to forward its recommendation to the Granite Falls City Council as scheduled.

Section 5. Copy to Commerce Department. Pursuant to RCW 36.70A.106(3), the City Clerk is directed to send a copy of this ordinance to the State Department of Commerce for its files within ten (10) days after adoption of this ordinance.

Section 6. Severability. If any section, sentence, clause or phrase of this Ordinance should be held to be unconstitutional by a court of competent jurisdiction, such invalidity or unconstitutionality shall not affect the validity or constitutionality of any other section, sentence, clause or phrase of this Ordinance.

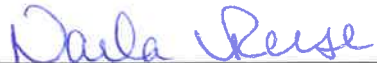
Section 7. Effective Date. This Ordinance shall take effect and be in full force five (5) days after passage and publication of an approved summary consisting of the title.

ADOPTED by the City Council and **APPROVED** by the Mayor this 18th day of March, 2020.

CITY OF GRANITE FALLS


Matthew Hartman, Mayor

ATTEST:


Darla Reese, MMC, City Clerk

APPROVED AS TO FORM:


Thom Graafstra, City Attorney

Passed by City Council: March 18, 2020

Date of Publication: March 21, 2020

Effective Date: March 26, 2020

EXHIBIT A

City of Granite Falls Docket/Flood Damage Work Plan 2020

Work Plan					
Activity	April	May	June	July	August
Planning Commission Review	4/14 – PC Review	5/12 – PC Review			
Planning Commission Recommend Docket List					
City Council Review		5/6 – City Council Review	6/17 – City Council Review Planning Commission Recommendation		
		5/20 – City Council Review			
City Council Approve Docket List					
Prepare SEPA & Issue	4/10				
Commerce Review	4/10 Commerce Review Begins		6/1 – End of Commerce Review		
Publish NOI, SEPA, and Planning Commission Public Hearing	4/10				
Planning Commission Hearing & Recommendation to Council			6/9 - PH		
Draft Ordinance		5/11			
Attorney Review		5/18			
Publish Notice City Council Public Hearing				7/1	
City Council Public Hearing				7/15 - PH	
City Council Adopt Ordinance					8/5
Effective Date					8/12

B=Briefing
PH=Public Hearing

EXHIBIT B

Section 19.07.035 Flood Damage Prevention

19.07.035 Flood damage prevention

(A) General.

(1) Statutory Authorization. The Legislature of the state of Washington has delegated the responsibility to local governmental units to adopt floodplain management regulations designed to promote the public health, safety, and general welfare of its citizenry. Therefore, the city of Granite Falls does ordain as follows:

(2) Findings of Fact.

(a) Areas of the city of Granite Falls are subject to periodic inundation and channel migration which may results in loss of life and property, health, and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for protection and relief from flooding and channel migration, and impairment of the tax base, all of which adversely affect the public health, safety, and general welfare.

(b) When floodplains and watersheds are developed without taking appropriate care and precautions, flood heights, frequencies, and velocities increase, causing a greater threat to humans, damage to property, destruction of natural floodplain functions, and adverse impacts to water quality and habitat.

(c) Rivers, streams, lakes, estuarine and marine areas and their floodplains are major elements of healthy aquatic and riparian habitats and conveyance of flood waters. If watersheds, rivers, streams, lakes, estuaries, floodplains and other systems are not viewed holistically as biological and geomorphological units, it can lead to serious degradation of habitat and increased flood hazards to people and human development.

(d) Over the years, natural processes have evolved that manage flood waters and channel flows in the most effective and efficient manner. Disruption of these processes by altering land cover, stream channels, wetlands, and other water bodies leads to increased flood hazards, loss of life and property, threats to public health, and loss of habitat.

(3) Purpose. It is the purpose of this section to promote the public health, safety, and general welfare by managing development in order to:

(a) Protect human life, health and property from the dangers of flooding;

(b) Minimize the need for publicly funded and hazardous rescue efforts to save those who are isolated by flood waters;

(c) Minimize expenditure of public money for costly flood damage repair and flood control projects;

(d) Minimize disruption of commerce and governmental services;

(e) Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets, and bridges;

(f) Maintain a stable tax base by providing for the sound use of flood prone areas so as to minimize future flood blight areas;

(g) Ensure that those who occupy areas subject to flooding and channel migration assume responsibility for their actions;

(h) Qualify the city of Granite Falls for participation in the National Flood Insurance Program, thereby giving citizens and businesses the opportunity to purchase flood insurance and making available flood disaster relief;

(i) Maintain the quality of water in rivers, streams, lakes, estuaries, and marine areas and their floodplains so as to protect public water supplies, areas of the public trust, and wildlife habitat protected by the Endangered Species Act;

(j) Retain the natural channel, shoreline, and floodplain creation processes and other natural floodplain functions that protect, create, and maintain habitat for threatened and endangered species;

(k) Prevent or minimize loss of hydraulic, geomorphic, and ecological functions of floodplains and stream channels.

(4) Lands to Which This Section Applies. This section shall apply to the regulatory floodplain, which is comprised of the special flood hazard area and all protected areas within the jurisdiction of the city of Granite Falls, as defined in subsection (C) of this section.

(5) Approach. In order to achieve the listed purposes, this section:

(a) Defines and clarifies the terms and phrases used in this section in subsection (B) of this section.

(b) Identifies in subsection (C) of this section the regulatory floodplain, the special flood hazard area, and the protected area and the supporting technical data needed to delineate those areas.

(c) Establishes a permit requirement in subsection (D) of this section so that all human development that may affect flood hazards, water quality, and habitat is reviewed before it is constructed.

(d) Sets minimum protection standards in subsection (E) of this section for all development to ensure that the development will not increase the potential for flood damage or adversely affect natural floodplain functions.

(e) Sets minimum standards to protect new and substantially improved structures from flood damage in subsection (F) of this section.

(f) Specifies additional habitat protection criteria in subsection (G) of this section.

Some small projects do not need a permit. For all other development projects, the applicant must assess their impact on those factors that contribute to increased flood hazard and degradation of habitat. If the assessment concludes that there will be an adverse impact, the permit will be denied, unless the project is redesigned to mitigate the adverse impacts.

(6) Penalties for Noncompliance. No development shall be undertaken or placed in the areas regulated by this section without full compliance with the terms of this section and other applicable regulations of the city of Granite Falls. Violations of the provisions of this section by failure to comply with any requirements (including violations of conditions and safeguards established in connection with conditions) shall constitute a misdemeanor. Any person who violates this section or fails to comply with any of its requirements shall upon conviction thereof be fined not more than \$1,000 for each violation, and in addition shall pay all costs and expenses involved in the case. Nothing herein contained shall prevent the city of Granite Falls from taking such other lawful action as is necessary to prevent or remedy any violation. Each violation or each day of continued unlawful activity shall constitute a separate violation.

(7) Interpretation. In the interpretation and application of this section, all provisions shall be:

- (a) Considered as minimum requirements;
- (b) Liberally construed in favor of the city of Granite Falls; and
- (c) Deemed neither to limit nor repeal any other powers granted under state statutes.

(8) Abrogation and Greater Restrictions. This section is not intended to repeal, abrogate, or impair any existing easements, covenants, deed restrictions, codes or chapters. However, where this section and another code, chapter, easement, covenant, or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

(9) Warning and Disclaimer of Liability. The degree of property and habitat protection required by this section is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods and movement of channels outside of mapped channel migration zone areas can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This section does not imply that land outside the regulated areas or development permitted within such areas will be free from flood or erosion damage. This section shall not create liability on the part of the city of Granite Falls or any officer or employee thereof for any damage to property or habitat that results from reliance on this section or any administrative decision lawfully made hereunder.

(10) Severability. The provisions and sections of this section shall be deemed separable and the invalidity of any portion of this section shall not affect the remainder.

(B) Definitions. Unless specifically defined below, terms or phrases used in this section shall be interpreted so as to give them the meaning they have in common usage and to give this section its most reasonable application.

“Adversely affect/adverse effect” means effects that are a direct or indirect result of the proposed action or its interrelated or interdependent actions and the effect is not discountable,

insignificant or beneficial. Discountable effects are extremely unlikely to occur. Insignificant effects relate to the size of the impact and should never reach the scale where a take occurs. Based on best judgment, a person would not: (a) be able to meaningfully measure, detect, or evaluate insignificant effects; or (b) expect discountable effects to occur. Beneficial effects are contemporaneous positive effects without any adverse effects. In the event that the overall effect of the proposed action is beneficial, but is also likely to cause some adverse effects, then the proposed action is considered to result in an adverse effect.

“Alteration of watercourse” any action that will change the location of the channel occupied by water within the banks of any portion of a riverine waterbody.

“Appeal” a request for a review of the interpretation of any provision of this ordinance or request for a variance.

“Appurtenant structure” means a structure which is on the same parcel of property as the principle structure to be insured and the use of which is incidental to the use the principle structure.

“Area of shallow flooding” means designated Zone AO, AH, AR/AO or AR/AH (or VO) on a community’s Flood Insurance Rate Map (FIRM) with a one percent or greater annual chance of flooding to an average depth of one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

“Area of special flood hazard” means the land in the floodplain within a community subject to a 1 percent or greater chance of flooding in any given year. It is shown on the Flood Insurance Rate Map (FIRM) as Zone A, AO, AH, A1-30, AE, A99, AR (V, VO, V1-30, VE). “Special flood hazard area” is synonymous in meaning with the phrase “area of special flood hazard”.

“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”). ~~The area subject to the base flood is the special flood hazard area designated on flood insurance rate maps as Zones “A” or “V” including AE, AO, AH, A1—99 and VE, FEMA 2010 FIRM map.~~

“Base flood elevation” means the elevation ~~to which floodwaters are expected to rise during~~ of the base flood ~~above the datum of the 2010 FIRM map.~~

“Basement” means any area of the structure having its floor subgrade (below ground level) on all sides.

~~“Building” means “see “Structure”.~~

“Channel migration area” means the area within the lateral extent of likely stream channel movement due to stream bank destabilization and erosion, rapid stream incision, aggradation, avulsions, and shifts in location of stream channels ~~plus 50 feet.~~

“Critical facility” means a facility necessary to protect the public health, safety and welfare during a flood. Critical facilities include, but are not limited to, schools, nursing homes, hospitals, police, fire and emergency operations and installations, water and wastewater treatment plants, electric power stations, and installations which produce, use, or store hazardous materials or hazardous waste (other than consumer products containing hazardous

substances or hazardous waste intended for household use).

“Development” means any manmade change to improved or unimproved real estate in the Special Flood Hazard Area (SPHA), including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations, storage of equipment or materials, subdivision of land, removal of more than five percent of the native vegetation on the property, or alteration of natural site characteristics.

~~“Dry Flood proofing” means any combination of structural and nonstructural measures that prevent flood waters from entering a structure.~~

“Elevation certificate” means ~~the official form (FEMA Form 81-31)~~ an administrative tool of the National Flood Insurance Program used to provide elevation information, ~~necessary to ensure compliance with provisions of this section and to~~ determine the proper flood insurance premium rate, ~~and to support a request for a Letter of Map Amendment (LOMA) or Letter of Map Revision based on fill (LOMR-F).~~

“FEMA” means the Federal Emergency Management Agency, the agency responsible for administering the National Flood Insurance Program.

“Fish and wildlife habitat conservation area” means lands needed to maintain species in suitable habitats within their natural geographic distribution so that isolated subpopulations are not created. These areas are designated by the city of Granite Falls pursuant to the Washington State Growth Management Act (WAC [365-190-080](#)).

“Flood” or “flooding” means (a) 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 surface waters from any source.

(3) Mudslides (i.e., mudflows) which are proximately caused by flooding as defined in (2) of this definition and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas, as when earth is carried by a current of water and deposited along the path of the current.

(2) The collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding as defined in (a)(1) of this definition.

“Flood insurance rate map (FIRM)” means the official map on which the Federal ~~Emergency Management Agency Insurance Administrator~~ has delineated both the special flood hazard areas and the risk premium zones applicable to the community. ~~Granite Falls has adopted the FEMA 2010 FIRM map.~~

“Flood insurance study” means an examination, evaluation and determination of flood hazards

and, if appropriate, corresponding water surface elevations, or an examination, evaluation and determination of mudslide (i.e., mudflow) and/or flood-related erosion hazards. Also known as a Flood Elevation Study, the official report provided by the Federal Emergency Management Agency that includes flood profiles, the flood insurance rate map, and the water surface elevation of the base flood.

"Floodplain or flood-prone area" means any land area susceptible to being inundated by water from any source. See "Flood or flooding."

"Floodplain administrator" means the community official designated by title to administer and enforce the floodplain management regulations.

"Floodplain management" means the operation of an overall program of collective and preventive measures for reducing flood damage, including but not limited to emergency preparedness plans, flood control works, and floodplain management regulations.

"Floodplain management regulations means zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances (such as floodplain ordinance, grading ordinance and erosion control ordinance) and other application of police power. The term describes such state or local regulations, in any combination thereof, which provide standards for the purpose of flood damage prevention and reduction.

"Flood protection elevation (FPE)" means the elevation above the datum of the FEMA 2010 FIRM map.

"Flood proofing" means any combination of structural and nonstructural additions, changes, or adjustments to structures which reduce or eliminate risk of flood damage to real estate or improved real property, water and sanitary facilities, structures, and their contents.

"Floodway" means the channel of a stream or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than ~~one-half foot at any point~~ a designated height.

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

"Historic structure" ~~as utilized in this section means a structure that means any structure that is:~~

- 1) Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
- 2) Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
- 3) Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of Interior; or

4) Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:

a) By an approved state program as determined by the Secretary of the Interior, or

b) Directly by the Secretary of the Interior in states without approved programs.

~~(1) —Is listed on the National Register of Historic Places, the Washington Heritage Register, or the Washington Heritage Barn Register; or~~

~~(2) Has been certified to contribute to the historical significance of a registered historic district.~~

“Hyporheic zone” means a saturated layer of rock or sediment beneath and/or adjacent to a stream channel that contains some proportion of channel water or that has been altered by channel water infiltration.

“Impervious surface” means a hard surface area which causes water to run off the surface in greater quantities or at an increased rate of flow from the flow present under natural conditions prior to development. Common impervious surfaces include, but are not limited to, roof tops, walkways, patios, driveways, parking lots or storage areas, concrete or asphalt paving, gravel roads, packed earthen materials, and oiled, macadam or other surfaces which similarly impede the natural infiltration of stormwater.

“Lowest floor” means the lowest floor of the lowest enclosed area (including basement ~~or crawlspace~~). 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 structure’s lowest floor; provided, that such enclosure is compliant with subsection (F)(2)(f) of this section (i.e., provided there are adequate openings to allow flood waters into the area).

“Manufactured home” means a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term “manufactured home” does not include a “recreational vehicle.”

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

“Native vegetation” means plant species that are indigenous to the community’s area and that reasonably could be expected to naturally occur on the site

“Natural floodplain functions” means the contribution that a floodplain makes to support habitat, including, but not limited to, providing flood storage and conveyance, reducing flood velocities, reducing sedimentation, filtering nutrients and impurities from runoff, processing organic wastes, moderating temperature fluctuations, and providing breeding and feeding grounds, shelter, and refugia, for aquatic or riparian species.

“New construction” means for the purposes of determining insurance rates, structures for which the “start of construction” commenced on or after the effective date of an initial Flood Insurance Rate Map or after December 31, 1974, whichever is later, and includes any subsequent improvements to such structures. For floodplain management purposes, “new construction” means structures for which the “start of construction” commenced on or after the effective date

~~of a floodplain management regulation adopted by a community and includes any subsequent improvements to such structures for which the “start of construction” commenced on or after the effective date of the ordinance codified in this section.~~

“Protected area” means the lands that lie within the boundaries of the floodway, the riparian habitat zone, and the channel migration area. Because of the impact that development can have on flood heights and velocities and habitat, special rules apply in the protected area.

“Recreational vehicle” means a vehicle:

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

“Regulatory floodplain” means the area of the special flood hazard area plus the protected area, as defined in this subsection ~~(C) of this section~~. The term also includes newly designated areas that are delineated pursuant to subsection (C)(5) of this section.

“Riparian” means of, adjacent to, or living on the bank of a river, lake, pond, ocean, sound, or other water body.

“Riparian habitat zone” means the water body and adjacent land areas that are likely to support aquatic and riparian habitat as detailed in subsection (C)(4)(c) of this section.

“SFHA” means special flood hazard area.

“Special flood hazard area” means the land in the floodplain within a community subject to inundation by the base flood. Special flood hazard areas are designated on flood insurance rate maps with the letters “A” or “V” including A, AE, AO, AH, A1 – 3099 and VE. The special flood hazard area is also referred to as the area of special flood hazard or SFHA.

“Start of construction” includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, or other improvement was within 180 days from the date of the permit. ~~actual start of construction, repair, reconstruction, rehabilitation, addition, placement or other improvement that occurred before the permit’s expiration date.~~ The “actual start” is either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation.

Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets 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 structures 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, that is principally above ground, as well as a manufactured home.

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

“Substantial damage” also means flood-related damage sustained by a structure on two separate occasions during a 10-year period for which the cost of repairs at the time of each such flood event, on the average, equals or exceeds 25 percent of the market value of the structure before the damage occurred.

“Substantial improvement” means any ~~repair~~, reconstruction, rehabilitation, addition, ~~replacement~~, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the “start of construction” of the improvement. This term includes structures which have incurred “substantial damage,” regardless of the actual repair work performed.

The term does not include any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been previously identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions.

The term does not include any alteration of a "historic structure," provided that the alteration will not preclude the structure's continued designation as a "historic structure."

“Variance” means a grant of relief from the requirements of this section which permits construction in a manner that would otherwise be prohibited by this section.

“Water typing” means a system for classifying water bodies according to their size and fish habitat characteristics. The Washington Department of Natural Resources’ forest practices water typing classification system is hereby adopted by reference. The system defines four water types:

(1) Type “S” – shoreline: Streams that are designated “shorelines of the state,” including marine shorelines.

(2) Type “F” – fish: Streams that are known to be used by fish or meet the physical criteria to be potentially used by fish.

(3) Type “Np” – nonfish perennial streams.

(4) Type “Ns” – nonfish seasonal streams.

“Zone” means one or more areas delineated on the FIRM. The following zones may be used on the adopted FIRM. The special flood hazard area is comprised of the A and V zones.

(1) A: SFHA where a detailed study was not performed, and no base flood elevation is provided.

(2) A#: Numbered A zones (e.g., A7 or A14), SFHA with a base flood elevation.

(3) AE: SFHA with a base flood elevation.

(4) AO: SFHA subject to inundation by shallow flooding usually resulting from sheet flow on sloping terrain, with average depths between one and three feet. Average flood depths are shown.

(5) AH: SFHA subject to inundation by shallow flooding (usually areas of ponding) with average depths between one and three feet. Base flood elevations are shown.

(6) B: An area of moderate risk flood hazard, usually shown as tThe area between the SFHA and the 500-year flood of the primary source of flooding. It may also be used to show areas of lesser hazard, such as an area with a local, shallow flooding less than one foot problem, an area with a contributing watershed of less than 1 sq. mile, or an area protected by a levee from the base flood. Also shown on FIRM as X(shaded).

(7) C: An area of minimal flood hazard, as above the 500-year flood level of the primary source of flooding. B and C zones may have ponding and local drainage problems flooding that does not meet the criteria to be warrant a detailed study or being mapped as a special flood hazard area, especially ponding and local drainage problems. Also shown on FIRM as X.

(8) D: Area of undetermined but possible flood hazard.

(9) V: The SFHA subject to coastal high hazard flooding including waves of three feet or greater in height. There are three types of V zones: V, V1-30#, and VE, and they correspond to the A zone designations.

(10) X: The area outside the mapped SFHA, the same as Zone C.

(11) Shaded X: The same as a Zone B, in subsection (6) of this definition.

(C) Regulatory Data.

(1) Regulatory Floodplain. The regulatory floodplain is comprised of the special flood hazard area and all protected areas within the jurisdiction of the city of Granite Falls. The term also includes areas delineated pursuant to subsection (C)(5) of this section.

(2) Special Flood Hazard Area.

(a) The special flood hazard area (SFHA) is the area subject to flooding by the base flood and subject to the provisions of this chapter.

(b) Upon receipt of a floodplain development permit application, the city's designated official shall compare the elevation of the site to the base flood elevation. A development project is not subject to the requirements of this section if

it is located on land that can be shown to be:

- (i) Outside the protected area; and
- (ii) Higher than the base flood elevation.

The city's designated official shall inform the applicant that the project may still be subject to the flood insurance purchase requirements unless the owner receives a letter of map amendment from FEMA.

(c) The city's designated official shall make interpretations where needed, as to the exact location of the boundaries of the regulatory floodplain, the SFHA and the protected area (e.g., where there appears to be a conflict between the mapped SFHA boundary and actual field conditions as determined by the base flood elevation and ground elevations). The applicant may appeal the city's designated official interpretation of the location of the boundary to the Granite Falls city council.

(3) Flood Hazard Data.

~~(a) The base flood elevation for the SFHAs of the city of Granite Falls shall be as delineated on the 2010 FIRM map. The special flood hazard areas identified by the Federal Insurance Administrator in a scientific and engineering report titled "The Flood Insurance Study (FIS) for Snohomish County, Washington, and Incorporated Areas dated June 19, 2020, with accompanying Flood Insurance Rate Maps (FIRMs) dated June 19, 2020, are hereby adopted by reference and declared to be a part of this ordinance. The FIS and FIRM panels are on file at City Hall located at 215 S. Granite Avenue.~~

(b) The base flood elevation for each SFHA delineated as a "Zone AH" or "Zone AO" shall be that elevation (or depth) delineated on the flood insurance rate map. Where base flood depths are not available in Zone AO, the base flood elevation shall be considered to be two feet above the highest grade adjacent to the structure.

(c) The base flood elevation for all other SFHAs shall be as defined in subsections (C)(3)(f) and (C)(5)(d) of this section.

(d) The flood protection elevation (FPE) shall be the base flood elevation as shown on the ~~FEMA-2010~~ FIRM ~~map~~ plus two feet.

(e) The floodway shall be as delineated on the flood insurance rate map or in accordance with subsections (C)(3)(f) and (C)(5)(d) of this section.

(f) Where base flood elevation and floodway data have not been provided in special flood hazard areas, the city's designated official shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a federal, state, or other source. ~~Granite Falls shall utilize the FEMA-2010 FIRM map when evaluating the floodplain.~~

(4) Protected Area.

(a) The protected area is comprised-composed of those lands that lie within the boundaries of the floodway, the riparian habitat zone, and the channel migration area.

(b) In riverine areas, where a floodway has not been designated in accordance with subsections (C)(3)(e), (C)(3)(f) and (C)(5)(d) of this section, the protected area is comprised-composed of those lands that lie within the boundaries of the riparian habitat zone, the channel migration zone area, and the SFHA.

(c) Riparian Habitat Zone. The riparian habitat zone includes those watercourses within the SFHA and adjacent land areas that are likely to support aquatic and riparian habitat.

(i) The size and location of the riparian habitat zone is dependent on the type of water body. The riparian habitat zone includes the water body and adjacent lands, measured perpendicularly from ordinary high water on both sides of the water body:

A. Marine and lake shorelines and Type S streams that are designated "shorelines of the state": 250 feet.

B. Type F streams (fish bearing) streams greater than five feet wide and marine shorelines: 200 feet.

C. Type F streams less than five feet wide and lakes: 150 feet.

D. Type N (non-salmonid-bearing) perennial and seasonal streams with unstable slopes: 225 feet.

E. All other Type N (non-salmonid-bearing) perennial and seasonal streams: 150 feet.

(ii) The riparian habitat zone shall be delineated on the site plan by the applicant at the time of application for subdivision approval or floodplain development permit for all development proposals within 300 feet of any stream or shoreline.

(d) Channel Migration Area.

(i) The channel migration zone area has not been delineated for the city of Granite Falls.

~~(ii) If there is no channel migration zone map that has been adopted by the city of Granite Falls for regulatory purposes, there is no requirement to prepare a new delineation of a channel migration area.~~

(ii) Where more than one channel migration zone has been delineated, the city's designated official shall use the delineation that has been adopted for other local regulatory purposes.

(iii) Where a channel migration zone has not yet been mapped, the provisions of Section C.5.E shall apply at the time of permit application.

(5) New Regulatory Data.

(a) All requests to revise or change the flood hazard data, including requests for a letter of map revision and a conditional letter of map revision, shall be reviewed by the city's designated official.

(i) The city's designated official shall not sign the community acknowledgement form for any requests based on filling or other development, unless the applicant for the letter documents that such filling or development is in compliance with this section.

(ii) The city's designated official shall not approve a request to revise or change a floodway delineation until FEMA has issued a conditional letter of map revision that approves the change.

(b) If an applicant disagrees with the regulatory data prescribed by this subsection, he/she may submit a detailed technical study needed to replace existing data with better data in accordance with ~~FEMA mapping guidelines or "Regional Guidance for NFIP-ESA Hydrologic and Hydraulic Studies," published by FEMA Region X, 2010 44CFR Part 65.~~ If the data in question are shown on the published FIRM, the submittal ~~must~~ may also include a request to FEMA for a conditional letter of map revision.

(c) Where base flood elevation data are not available in accordance with subsection (C)(3) of this section, applicants for approval of new subdivisions and other proposed developments (including proposals for manufactured home parks and subdivisions) greater than 50 lots or five acres, whichever is the lesser, shall include such data with their permit applications.

~~(d) Where a floodway data area delineation is not available in accordance with subsection (C)(3) of this section, applicants for approval of new subdivisions and other proposed developments (including proposals for manufactured home parks and subdivisions) greater than 50 lots or five acres, whichever is the lesser, shall include such data with their permit applications. This provision does not apply to applications for permits for small projects on large lots, such as constructing a single-family home.~~

(e) Where channel migration zone data are not available in accordance with Section C.4.D, the permit applicant shall either:

(i) Designate the entire SFHA as the channel migration zone or

(ii) Identify the channel migration area in accordance with Regional Guidance for Hydrologic and Hydraulic Studies in Support of the Model Ordinance for Floodplain Management under the National Flood Insurance Program and the Endangered Species Act, FEMA Region X, 2012.

(f) All new hydrologic and hydraulic flood studies conducted pursuant to this section shall consider future conditions, and the cumulative effects from anticipated future land use changes in accordance with Regional Guidance for Hydrologic and Hydraulic Studies in Support of Model Ordinance for Floodplain Management under the National Flood Insurance Program and the Endangered Species Act, FEMA Region X, 2012.

~~(d)(g)~~ The floodplain administrator shall use the most restrictive data available for the channel migration zone, floodways, future conditions, and riparian habitat areas.

~~(e) All new hydrologic and hydraulic flood studies conducted pursuant to this subsection (C)(5) shall consider future conditions and the cumulative effects from anticipated future land use changes in accordance with "Regional Guidance for NFIP-ESA Hydrologic and Hydraulic Studies," published by FEMA Region X, 2010. If there is an existing study that meets the rest of this subsection's criteria, it may be used, even if it does not account for future conditions.~~

(D) Administration.

(1) Establishment of Floodplain Development Permit. A floodplain development permit shall be obtained before construction or development begins within the regulatory floodplain. The permit shall be for all development as set forth in subsection (B) of this section, Definitions.

(2) Floodplain Development Permit Application. Application for a floodplain development permit shall be made on forms furnished by the city's designated official and shall include, but not be limited to:

(a) One or more site plans, drawn to scale, showing:

(i) The nature, location, dimensions, and elevations of the parcel property in question;

(ii) Names and location of all lakes, water bodies, waterways and drainage facilities within 300 feet of the site;

(iii) The elevations of the 10-, 50-, 100- and 500-year floods, where the data are available;

(iv) The boundaries of the ~~regulatory floodplain~~, SFHA, floodway, riparian habitat zone, and channel migration zone area, delineated in accordance with subsection (C) of this section;

(v) The proposed drainage system including, but not limited to, storm sewers, overland flow paths, detention facilities and roads;

(vi) Existing and proposed structures, fill, pavement and other impervious surfaces, and sites for storage of materials;

(vii) All wetlands;

(viii) Designated fish and wildlife habitat conservation areas, [and habitat areas identified for conservation or protection under state or federal or local laws or regulations \(e.g: Endangered Species Act, Magnuson-Stevens Fishery Conservation and Management Act, Growth Management Act, Shorelines Management\);](#) and

(ix) Existing native vegetation and proposed revegetation.

(b) If the proposed project involves ~~re~~grading, excavation, or filling, the site plan

shall include proposed post-development terrain at one- foot contour intervals.

(c) If the proposed project includes a new structure, substantial improvement, or repairs to a substantially damaged structure that will be elevated, the application shall include the FPE for the building site and the proposed elevations of the following:

- (i) The top of bottom floor (including basement, crawlspace, or enclosure floor).
- (ii) The top of the next higher floor.
- (iii) The bottom of the lowest horizontal structural member (in V zones only).
- (iv) The top of the slab of an attached garage.
- (v) The lowest elevations of all machinery and/or equipment servicing the structure.
- (vi) The lowest adjacent (finished) grade next to structure.
- (vii) The highest adjacent (finished) grade next to structure.
- (viii) The lowest adjacent grade at the lowest elevation of a deck or stairs, including structural support.

(d) If the proposed project includes a new structure, substantial improvement, or repairs to a substantially damaged nonresidential structure that will be ~~dry~~-flood proofed, the application shall include the FPE for the building site and the elevation in relation to the datum of the effective FIRM to which the structure will be ~~dry~~-flood proofed and a certification by a registered professional engineer or licensed architect that the ~~dry~~-flood proofing methods meet the flood proofing criteria in subsection (F)(3) of this section.

~~(d)~~(e) The proposed project must be designed and located so that new structural flood protection is not needed.

(f) The application shall include a description of the extent to which a stream, lake, or other water body, including its shoreline, will be altered or relocated as a result of the proposed development.

(i) Bank stabilization measures along salmonid-bearing streams, channel migration zones, and along estuarine and marine shoreline must be minimized to the maximum extent possible. If Bank stabilization measures are necessary, bioengineered armoring of streambanks and shorelines must be used.

(ii) Channel Migration: No activity is allowed that limits the natural meandering pattern of the channel migration zone; however, natural channel migration patterns may be enhanced or restored.

~~(e)~~(g) The application shall include documentation that the applicant has applied for all necessary permits, which have been received from those governmental agencies from

~~which approval is~~ required by federal, state, or local law. The application shall include written acknowledgment that the applicant understands that the final certificate of occupancy will be issued only if the applicant has received the required federal, state, and local permits or letters stating that a permit is not required. The floodplain permit is not valid if those other permits and approvals are not obtained prior to any ground disturbing work or structural improvements.

~~(f)(h)~~ The application shall include acknowledgment by the applicant that representatives of any federal, state or local unit of government with regulatory authority over the project are authorized to enter upon the property to inspect the development.

(3) Floodplain Development Permit Expiration. If there has been no start of construction, a floodplain development permit shall expire 180 days after the date of issuance. Where the applicant demonstrates or documents a need for an extension beyond this period due to documented regulatory requirements conditions beyond the applicant's control, the city's designated official may authorize up to two 90-day extensions.

(4) Designation of the City's Designated Official. The city's designated official shall be ~~appointed by the mayor~~ City Manager or his/her designee to administer and implement this section by granting or denying floodplain development permit applications in accordance with its provisions.

(5) Duties of the City's Designated Official. Duties of the city's designated official shall include, but not be limited to:

(a) Review all floodplain development permits to determine that the permit requirements of this section have been satisfied.

(b) Review all floodplain 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, including those local, state or federal permits that may be required to assure compliance with the Endangered Species Act and/or other appropriate state or federal laws.

(c) Review all floodplain development permits to determine if the proposed development is located in the protected area. If located in the protected area, ensure that the provisions of subsection (G) of this section are met.

(d) Ensure that all development activities within the regulatory floodplain of the jurisdiction of the city of Granite Falls meet the requirements of this section ordinance.

(e) Inspect all development projects before, during and after construction to ensure compliance with all provisions of this section, including proper elevation of the structure.

(f) Maintain for public inspection all records pertaining to the provisions of this section.

(g) Submit reports to include the projects for which they issue floodplain development permits, including effects to flood storage, fish habitat, and all indirect effects of

[development and mitigation to FEMA](#) as required for the National Flood Insurance Program.

(h) Notify FEMA of any proposed amendments to this section.

(i) Cooperate with state and federal agencies to improve flood and other technical data and notify FEMA of any new data that would revise the FIRM.

(6) Records.

(a) Where base flood elevation data have been obtained pursuant to subsections (C)(3) and (C)(5) of this section, the city's designated official shall obtain, record, and maintain the actual "finished construction" elevations for the locations listed in subsection (D)(2)(c) of this section. This information shall be recorded on a current FEMA elevation certificate (FEMA Form 81-31), signed and sealed by a professional land surveyor currently licensed in the state of Washington.

(b) For all new or substantially improved ~~dry~~-flood proofed nonresidential structures, where base flood elevation data has been obtained pursuant to subsections (C)(3) and (C)(5) of this section, the city's designated official shall obtain, record and maintain the elevation (in relation to the datum of the effective FIRM) to which the structure was flood proofed. This information shall be recorded on a current FEMA flood proofing certificate (FEMA Form 81-65), by a professional engineer currently licensed in the state of Washington.

(7) Certificate of Occupancy.

(a) A certification of use for the property or a certificate of occupancy for a new or substantially improved structure or an addition shall not be issued until:

(i) The permit applicant provides a properly completed, signed and sealed elevation or flood proofing certificate showing finished construction data as required by subsection (D)(6) of this section;

(ii) If a mitigation plan is required by subsections (G)(7) and (G)(8) of this section, all work identified in the plan has been completed according to the plan's schedule;

(iii) [The applicant provides copies of](#) All federal, state, and local permits noted in the permit application per subsection (D)(2)(f) of this section;

(iv) All other provisions of this section have been met.

(b) The city's designated official may accept a performance bond or other security that will ensure that unfinished portions of the project will be completed after the certification of use or certificate of occupancy has been issued.

(8) Board of Appeals.

(a) The Granite Falls city council, or a hearing examiner appointed by the council,

shall hear and decide appeals and requests for variances from the requirements of this section.

(b) The Granite Falls city council, or a hearing examiner appointed by the council, shall hear and decide appeals when it is alleged there is an error in any requirement, decision, or determination made by the city's designated official in the enforcement or administration of this section.

(c) Upon consideration of the factors in subsection (D)(9) of this section and the purposes of this section, the Granite Falls city council, or a hearing examiner appointed by the council, may attach such conditions to the granting of variances as it deems necessary to further the purposes of this section.

(d) The city's designated official shall maintain the records of all appeal actions and report any variances to the Federal Emergency Management Agency upon request.

(9) Variance Criteria.

(a) In passing upon reviewing applications for a variance, the Granite Falls city council, or a hearing examiner appointed by the council, shall consider all technical evaluations, all relevant factors, standards specified in other subsections of this section and:

- (i) The danger to life and property due to flooding or erosion damage;
- (ii) The danger that materials may be swept onto other lands to the injury of others;
- (iii) The safety of access to the property in times of flood for ordinary and emergency vehicles;
- (iv) 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;
- (v) The susceptibility of the proposed facility and its contents to flood or erosion damage and the effect of such damage on the individual owner;
- (vi) The availability of alternative locations for the proposed use which are not subject to flooding or channel migration and are not in designated fish and wildlife habitat conservation areas;
- (vii) The relationship of the proposed use to the comprehensive plan, growth management regulations, and floodplain management program for that area;
- (viii) 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;
- (ix) The potential of the proposed development project to destroy or adversely modify a fish and wildlife habitat conservation area;

(x) The potential of the proposed development project to affect, or be affected by, channel migration;

(xi) Shall not result in a violation of this section; and

(xii) Must be compliant with ESA.

(b) No variance shall be granted to the requirements of this section unless the applicant demonstrates that:

(i) The development project cannot be located outside the regulatory floodplain;

(ii) An exceptional hardship would result if the variance were not granted;

(iii) The relief requested is the minimum necessary;

(iv) The applicant's applicable circumstances are unique and do not represent a problem faced by other area properties;

(v) If the project is within a designated floodway, no increase in flood levels during the base flood discharge would result;

(vi) The project will not adversely affect any fish and/or wildlife habitat;

(vii) There will be no additional threat to public health, safety, beneficial stream or water uses and functions, especially habitat, or creation of a nuisance;

(viii) There will be no additional public expense for flood protection, lost environmental functions, rescue or relief operations, policing, or repairs to streambeds, shorelines, banks, roads, utilities, or other public facilities; and

(ix) All requirements of other permitting agencies will still be met.

(c) Variances requested in connection with restoration of a historic site, building or structure may be granted using criteria more permissive than the above requirements, provided:

(i) The repair or rehabilitation is the minimum necessary to preserve the historic character and design of the site, building or structure; and

(ii) The repair or rehabilitation will not result in the site, building or structure losing its historic designation.

Variances to the provisions of subsection (F) of this section may be issued for a structure on a ~~small or irregularly shaped~~ lot ½ acre or less in size and contiguous to and surrounded by lots with existing structures constructed below the FPE, providing the other variance criteria are met. The applicant for such a variance shall

be notified, in writing, that the structure (i) will be subject to increased premium rates for flood insurance up to amounts as high as \$25.00 for \$100.00 of insurance coverage and (ii) such construction below the FPE increases risks to life and property. Such notification shall be maintained with a record of all variance actions.

(d) Variances pertain to a physical piece of property. They are not personal in nature and are not based on the inhabitants or their health, economic, or financial circumstances.

(E) General Development Standards. The provisions of this subsection (E) shall apply in the regulatory floodplain.

(1) ~~Subdivisions.~~ Development proposals.

All new development proposals, including subdivisions and manufactured home parks, shall:

(a) All proposals shall be consistent with the need to minimize flood damage.

(b) The proposed subdivision shall have one or more new lots in the regulatory floodplain set aside for open space use through deed restriction, easement, subdivision covenant, or donation to a public agency.

(i) In the SFHA outside of the Protected Area, zoning must maintain a low density of floodplain development.

(ii) Areas in the SFHA but outside of the Protected Area in which the current zoning is less than 5 acres must maintain the current zoning.

~~(i)(iii)~~ The density of the development in the portion of the development outside the regulatory floodplain may be increased to compensate for the amount of land in the regulatory floodplain preserved as open space in accordance with GPMC 19.06.010(B).

~~(b)(c)~~ If a parcel has a buildable site outside the regulatory floodplain, it shall not be subdivided to create a new parcel lot that does not have a buildable site outside the regulatory floodplain. This provision does not apply to parcel lots set aside from development and preserved as open space.

~~(e)(d)~~ All proposals shall have utilities and facilities, such as sewer, gas, electrical, and water systems, located and constructed to minimize or eliminate flood damage.

~~(d)(e)~~ All proposals shall ensure that all buildable lots shall have at least one access road connected to land outside the regulatory floodplain with the top surface of the road at or above the FPE.

~~(e)(f)~~ All proposals shall have adequate drainage provided to avoid exposure to water-flood damage.

~~(f)(g)~~ The final recorded subdivision plat shall include a notice that part of the property is in the SFHA, riparian habitat zone and/or channel migration area, as appropriate.

(2) Site Design.

(a) Structures and other development shall be located to avoid flood damage.

(i) If a lot has a buildable site out of the regulatory floodplain, all new structures shall be located in that area.

(ii) If a lot does not have a buildable site out of the regulatory floodplain, all new structures, pavement, and other development must be sited in the location that has the least impact on habitat by locating the structures as far from the water body as possible or placing the structures on the highest land on the lot.

(b) All new development shall be designed and located to minimize the impact on flood flows, flood storage, water quality, and habitat.

(i) Stormwater and drainage features shall incorporate low impact development techniques that mimic predevelopment hydrologic conditions, such as stormwater infiltration, rain gardens, grass swales, filter strips, disconnected impervious areas, permeable pavement, and vegetative roof systems.

(ii) If the proposed project will create new impervious surfaces so that more than 10 percent of the parcel portion of the lot in the regulatory floodplain is covered by impervious surface, the applicant shall demonstrate that there will be no net increase in the rate and volume of the stormwater surface runoff that leaves the site or that the adverse impact is mitigated, as provided by subsections (G)(7) and (G)(8) of this section.

(c) The site plan required in subsection (D)(2) of this section shall account for surface drainage to ensure that:

(i) Existing and new buildings on the site will be protected from stormwater runoff; and

(ii) The project will not divert or increase surface water runoff onto neighboring properties.

(3) Hazardous Materials. No new development shall create a threat to public health, public safety, or water quality. Chemicals, explosives, gasoline, propane, buoyant materials, animal wastes, fertilizers, flammable liquids, pollutants, or other materials that are hazardous, toxic, or a threat to water quality are prohibited from the regulatory floodplain. This prohibition does not apply to small quantities of these materials kept for normal household use.

(4) Critical Facilities.

(a) Construction of new critical facilities shall be, to the extent possible, located outside the limits of the regulatory floodplain.

(b) Construction of new critical facilities shall be permissible if no feasible alternative site is available, provided:

(i) Critical facilities shall have the lowest floor elevated three feet above the base flood elevation or to the height of the 500-year flood, whichever is higher. If there is no available data on the 500-year flood, the permit applicants shall develop the needed data in accordance with FEMA mapping guidelines.

(ii) Access to and from the critical facility shall be protected to the elevation of the 500-year flood.

(5) ~~Sand Dunes. Manmade alterations of sand dunes within Zones V1—30, VE, and V which would increase potential flood damage are prohibited.~~

(F) Standards for Protection of Structures. The provisions of this subsection shall apply in the special flood hazard area. All new structures and substantial improvements shall be protected from flood damage below the flood protection elevation.

(1) Applicability. This subsection's protection requirement applies to all new structures and substantial improvements, which include:

- (a) Construction or placement of a new structure.
- (b) Reconstruction, rehabilitation, or other improvement that will result in a substantially improved building.
- (c) Repairs to an existing building that has been substantially damaged.
- (d) Placing a manufactured home on a site.
- (e) Placing a recreational vehicle or travel trailer on a site for more than 180 days.

(2) Flood Protection Standards.

- (a) All new structures and substantial improvements shall have the lowest floor, including basement, elevated two feet above the base flood elevation. ~~Minimum floor elevations are shown in Table 6, at the end of this section.~~
- (b) The structure shall be aligned parallel with the direction of flood flows.
- (c) The structure shall be anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.
- (d) All materials below the FPE shall be resistant to flood damage and firmly anchored to prevent flotation. Materials harmful to aquatic wildlife, such as creosote, are prohibited below the FPE.
- (e) Electrical, heating, ventilation, duct work, plumbing, and air-conditioning equipment and other service facilities shall be elevated above the FPE. Water, sewage, electrical, and other utility lines below the FPE shall be constructed so as to prevent water from entering or accumulating within them during conditions of flooding.

(f) Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be used only for parking, storage, or building access and shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of flood waters. Designs for meeting this requirement shall either be certified by a registered professional engineer or licensed architect ~~and/or~~ meet or exceed the following minimum criteria:

- (i) 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.
- (ii) The bottom of all openings shall be no higher than one foot above grade.
- (iii) Openings may be equipped with screens, louvers, or other coverings or devices; provided, that they permit the automatic entry and exit of flood waters.

~~(g) In Zones V, V1—30 and VE, new structures and substantial improvements shall be elevated on pilings or columns so that:~~

- ~~(i) The bottom of the lowest horizontal structural member of the lowest floor (excluding the pilings or columns) is elevated above the FPE.~~
- ~~(ii) 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 any given year (100-year mean recurrence interval).~~
- ~~(iii) The areas below the lowest floor that are subject to flooding shall be free of obstruction.~~
- ~~(iv) The structure or improvement shall be located landward of the reach of mean high tide.~~
- ~~(v) The use of fill for structural support of a structure or improvement addition is prohibited.~~
- ~~(vi) 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 these provisions.~~

(3) Nonresidential Construction. New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall be elevated in accordance with subsection (F)(2) of this section. As an alternative to elevation, a new or substantial improvement to a nonresidential structure and its attendant utility and sanitary facilities may be ~~dry~~ flood proofed ~~in A-zones~~. The project must meet the following:

~~(a) The structure is not located in Zones V, V1—30, or VE; and~~

~~(b)(a)~~ _____ Below the FPE the structure is watertight with walls substantially

impermeable to the passage of water; and

~~(e)~~(b) The structural components are capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and

~~(d)~~(c) The plans are certified by a registered professional engineer or licensed architect that the design 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 city's designated official as set forth in subsections (D)(6)(b) and (D)(7)(a)(i) of this section.

(4) Manufactured Homes. All manufactured homes to be placed or substantially improved on sites shall be:

(a) Elevated on a permanent foundation in accordance with subsection (F)(2) of this section; and

(b) Securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement. Methods of anchoring may include, but are not to be

limited to, use of over-the-top or frame ties to ground anchors. This requirement is in addition to other applicable anchoring requirements for resisting wind forces.

(5) Recreational Vehicles. Recreational vehicles placed on sites shall:

(a) Be on the site for fewer than 180 consecutive days; or

(b) Be fully licensed and ready for highway use, on their wheels or jacking system, attached to the site only by quick disconnect type utilities and security devices, and have no permanently attached additions; or

(c) Meet the requirements of subsection (F)(4) of this section.

(6) Small Structures. A low-cost building such as a detached garage, boathouse, pole barn, or storage shed, that is no larger than 500 square feet and is not used for human habitation, may be exempt from the elevation requirement of subsection (F)(2)(a) of this section, provided:

(a) It is used only for parking or storage;

(b) It is constructed and placed on the building site so as to offer minimum resistance to the flow of flood waters;

(c) It is anchored to prevent flotation, collapse and lateral movement, which may result in damage to other structures;

(d) All portions of the structure below the FPE must be constructed of flood-resistant materials;

(e) Service utilities such as electrical and heating equipment meet the standards of subsections (F)(2)(e) and (F)(2)(f) of this section;

(f) It has openings to allow free flowage of water that meet the criteria in subsection (F)(2)(f) of this section;

(g) The project meets all the other requirements of this section, including subsection (G) of this section.

(7) Utilities.

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

(b) Water wells shall be located outside the floodway and shall be protected to the FPE;

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

(d) On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding. A habitat impact assessment shall be conducted in accordance with subsection (G)(7) of this section as a condition of approval of an on-site waste disposal system to be located in the regulatory floodplain.

(G) Standards for Habitat Protection. The provisions of this subsection shall apply in the regulatory floodplain.

(1) Nondevelopment Activities. Activities that do not meet the definition of “development” are allowed in the regulatory floodplain without the need for a floodplain development permit under this section, provided all other federal, state, and local requirements are met. The following are examples of activities not considered development or “manmade changes to improved or unimproved real estate.”

(a) Routine maintenance of landscaping that does not involve grading, excavation, or filling;

(b) Removal of noxious weeds and hazard trees and replacement of nonnative vegetation with native vegetation;

(c) Normal maintenance of structures, such as reroofing and replacing siding, provided such work does not qualify as a substantial improvement;

(d) Normal maintenance of above ground public utilities and facilities, such as replacing downed power lines;

(e) Normal street and road maintenance, including filling potholes, repaving, and installing signs and traffic signals, but not including expansion of paved areas;

(f) Normal maintenance of a levee or other flood control facility prescribed in the operations and maintenance plan for the levee or flood control facility; and

(g) Plowing and other normal farm practices (other than structures or filling) on farms in existence as of the effective date of this section.

(2) Activities Allowed with a Floodplain Permit. The following activities are allowed in the regulatory floodplain without the analysis required in subsection (G)(5) of this section or the habitat impact assessment required under subsection (G)(7) of this section, providing all other requirements of this section are met, including obtaining a floodplain development permit:

(a) Repairs or remodeling of an existing structure; provided, that the repairs or remodeling are not a substantial improvement or a repair of substantial damage.

(b) Expansion of an existing structure that is no greater than 10 percent beyond its existing footprint; provided, that the repairs or remodeling are not a substantial improvement or a repair of substantial damage. This measurement is counted cumulatively from the effective date of this section. If the structure is in the floodway, there shall be no change in the dimensions perpendicular to flow.

(c) Activities with the sole purpose of creating, restoring or enhancing natural functions associated with floodplains, streams, lakes, estuaries, marine areas, habitat, and riparian areas that meet federal and state standards, provided the activities do not include structures, grading, fill, or impervious surfaces.

(d) Development of open space and recreational facilities, such as parks, trails, and hunting grounds, that do not include structures, grading, fill, or impervious surfaces or removal of more than five percent of the native vegetation on that portion of the property in the regulatory floodplain.

(3) Other Activities. All other activities not listed in subsection (G)(1) or (G)(2) of this section that are allowed by the city's development regulations are allowed, provided they meet all the other requirements of this section, including the analysis required in subsection (G)(5) of this section and the habitat impact assessment required under subsection (G)(7) of this section, and a floodplain development permit is issued.

(4) Native Vegetation. The site plan required in subsection (D)(2) of this section shall show existing native vegetation.

(a) In the riparian habitat zone, native vegetation shall be left undisturbed, except as provided in subsections (G)(1) and (G)(2)(c) of this section.

(b) Outside the riparian habitat zone, removal of native vegetation shall not exceed 35 percent of the surface area of the portion of the site in the regulatory floodplain. Native vegetation in the riparian habitat zone portion of the parcel property can be counted toward this requirement.

(c) If the proposed project does not meet these criteria of subsections (G)(4)(a) and

(b) of this section, a habitat impact assessment shall be conducted pursuant to subsection (G)(7) of this section and, if necessary, a habitat mitigation plan shall be prepared and implemented pursuant to subsection (G)(8) of this section.

(5) Floodway Standards.

(a) In addition to the other requirements of this section, a project to develop in the floodway as delineated pursuant to subsection (C)(3)(e), (C)(3)(f) or (C)(5)(d) of this section shall meet the following criteria:

(i) The applicant shall provide a certification by a registered professional engineer demonstrating through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed development would not result in any increase in flood levels within the community during the occurrence of the base flood discharge.

(ii) Construction or reconstruction of residential structures is prohibited within designated floodways, except for the following. The following exceptions must still meet all other requirements in this section, including subsection (G)(5)(a)(i) of this section.

A. Repairs, reconstruction, or improvements to a residential structure which do not increase the ground floor area, providing the cost of which does not exceed 50 percent of the market value of the structure either (1) before the repair or reconstruction is started, or (2) if the structure has been damaged, and is being restored, before the damage occurred. Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by a local code enforcement official and which are the minimum necessary to assure safe living conditions, or to an historic structure as defined under subsection (B) of this section, may be excluded from the 50 percent calculations;

B. Repairs, replacement, reconstruction, or improvements to existing farmhouses located in designated floodways and located on designated agricultural lands that do not increase the building's total square footage of encroachment and are consistent with all requirements of WAC [173-158-075](#);

C. Repairs, replacement, reconstruction, or improvements to substantially damaged residential dwellings other than farmhouses that do not increase the building's total square footage of encroachment and are consistent with all requirements of WAC [173-158-076](#); or

D. Repairs, reconstruction, or improvements to residential structures identified as historic structures as defined under subsection (B) of this section that do not increase the building's dimensions.

(b) In riverine special flood hazard areas where a floodway has not been delineated pursuant to subsection (C)(3)(e), (C)(3)(f) or (C)(5)(d) of this section, the applicant for a project to develop in the SFHA shall provide a certification by a registered professional engineer demonstrating through hydrologic and hydraulic

analyses performed in accordance with standard engineering practice that the proposed development, ~~and all other past or future similar~~ when combined with all other existing and anticipated development, ~~s would will~~ not cumulatively result in ~~an increase of flood level~~ the water surface elevation of the base flood during the occurrence of the base flood discharge by more than one foot at any point within the community.

(6) Compensatory Storage. New development shall not reduce the effective flood storage volume of the regulatory floodplain. A development proposal shall provide compensatory storage if grading or other activity displaces any effective flood storage volume. Compensatory storage shall:

- (a) Provide equivalent volume at equivalent elevations to that being displaced. For this purpose, "equivalent elevation" means having similar relationship to ordinary high water and to the best available 10-year, 50-year and 100-year water surface profiles;
- (b) Be hydraulically connected to the source of flooding; and
- (c) Provide compensatory storage in the same construction season as when the displacement of flood storage volume occurs and before the flood season begins.
- (d) The newly created storage area shall be graded and vegetated to allow fish access during flood events without creating fish stranding sites.

(7) Habitat Impact Assessment. Unless allowed under subsections (G)(1) and (G)(2) of this section, a permit application to develop in the regulatory floodplain shall include an assessment of the impact of the project on water quality and aquatic and riparian habitat. The assessment shall be either:

- (a) A biological evaluation or biological assessment that has received concurrence from the U.S. Fish and Wildlife Service or the National Marine Fisheries Service, pursuant to the Endangered Species Act; or
- (b) Documentation that the activity fits within a habitat conservation plan approved pursuant to Section 10 of the Endangered Species Act; or
- (c) Documentation that the activity fits within Section 4(d) of the Endangered Species Act; or
- (d) An assessment prepared in accordance with "Regional Guidance on Floodplain Habitat Assessment and Mitigation," published by FEMA Region X, 2013³⁹. The assessment shall determine if the project would adversely impact or affect the following:

(i) Species that are Federal, state or locally listed as threatened or endangered.

~~(i)(ii)~~ The primary constituent elements identified when a species is listed as threatened or endangered; for critical habitat, when designated, including but not limited to water quality, water quantity, flood volumes, flood velocities, spawning substrate, and/or floodplain refugia for listed salmonids.

~~(ii)(iii)~~ Essential fish habitat designated by the National Marine Fisheries Service;

~~(iv)~~ Fish and wildlife habitat conservation areas;

~~(iii)(v)~~ Other protected areas and elements necessary for species conservation.

~~(iv)~~ Vegetation communities and habitat structures;

~~(v)~~ Water quality;

~~(vi)~~ Water quantity, including flood and low flow depths, volumes and velocities;

~~(vii)~~ The channel's natural meandering pattern;

~~(viii)~~ Spawning substrate, if applicable; and/or

~~(ix)~~ Floodplain refugia, if applicable.

(8) Habitat Mitigation Plan.

(a) If the assessment conducted under subsection (G)(7) of this section concludes the project is expected to have an adverse impact on water quality and/or aquatic or riparian habitat or habitat functions, the applicant shall provide a plan to mitigate those impacts, in accordance with "Regional Guidance on Floodplain Habitat Assessment and Mitigation," published by FEMA Region X, 2010.

(i) If the USFWS or NMFS issues an Incidental Take Permit under Section 10 of ESA or a Biological Opinion under Section 7 of the ESA; then it can be considered to qualify as a plan to mitigate those impacts.

(ii) If the project is located outside the ~~P~~protected ~~A~~area, the mitigation plan shall include such avoidance, minimization, restoration, or compensation measures ~~as are appropriate for the situation so that indirect adverse effects of development in the floodplain are mitigated such that equivalent or better habitat protection is provided for the following functions:~~

A. Stormwater: Reduce flood volumes and stormwater runoff from new development by ensuring that increased volumes of stormwater reach the river at the same frequency, timing and duration as historical runoff. LID is required to be incorporated as described in Section 5.2.B above.

B. Riparian vegetation: maintain or replace riparian function by providing equivalent area, diversity, and function of riparian vegetation as currently exists on the site.

C. Hyporheic zones: No activity is allowed that interferes with the natural exchange of flow between surface water, groundwater, and hyporheic zone; however, natural hyporheic exchange may be enhanced or restored.

D. Wetlands: Wetland function must be maintained or replaced by providing equivalent function.

A.E. ~~Large woody debris:~~ Any large wood debris (LWD) removed

from the floodplain must be replaced in kind, replicating or improving the quantity, size, and species of the existing LWD.

~~(ii)(iii)~~ If the project is located in the protected area, the mitigation plan shall include such avoidance, restoration, or compensation measures as are needed to ensure that there is no net loss of habitat function due to the project.

Minimization measures

~~(iv)~~ are not allowed in the protected area, unless they, in combination with other measures, result in no adverse effect. Protected Area, the mitigation plan shall stipulate avoidance measures as are needed to ensure that there is no adverse effect during any phase of the project. No compensatory mitigation is allowed in the Protected Area.

~~(iii)(v)~~ No new stream crossings are allowed unless approval has been obtained as stated in (G)(8)(A)(1).

(b) The plan's habitat mitigation activities shall be incorporated into the proposed project. The floodplain development permit shall include the provisions of the acceptable mitigation plan and the plan shall become part of the permit record and be based on the redesigned project and its mitigation components.

(c) As required in subsection (D)(7) of this section, the city's designated official shall not issue a certification of use or a certificate of occupancy until all work identified in the biological evaluation, biological assessment, or mitigation plan has been completed or the applicant has provided the necessary assurance that unfinished portions of the project will be completed, in accordance with subsection (D)(7)(b) of this section.

(9) Alteration of Watercourses.

(a) In addition to the other requirements in this subsection (G), an applicant for a project that will alter or relocate a watercourse shall also submit a request for a conditional letter of map revision (CLOMR), where required by the Federal Emergency Management Agency. The project will not be approved unless FEMA issues the CLOMR and the provisions of the letter are made a part of the permit requirements.

(b) The city's designated official shall notify adjacent communities and the Department of Ecology prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal ~~Emergency Management Agency Insurance Administrator.~~

~~(c) Maintenance shall be provided. Assure within the altered or relocated portion of said watercourse so that the flood carrying capacity of said watercourse is maintained. is not diminished.~~ If the maintenance program does not call for cutting of native vegetation, the system shall be oversized at the time of construction to compensate for said vegetation growth or any other natural factor that may need future maintenance.

~~(e)(d)~~ Base Flood Elevations may increase or decrease resulting from physical changes affecting flooding conditions. As soon as practicable, but not later than six months after the date such information becomes available, the Floodplain Administrator shall notify the Federal Insurance Administrator of the changes by submitting technical or scientific data in accordance with Volume 44

Code of Federal Regulations Section 65.3. Such a submission is necessary so that upon confirmation of those physical changes affecting flooding conditions, risk premium rates and floodplain management requirements will be based upon current data.

(d)(e) Notify the Federal Insurance Administrator in writing of acquisition by means of annexation, incorporation or otherwise, of additional areas of jurisdiction.

Table 6

Granite Park Division I and II – Paradise Lane

Minimum Floor Elevations

Lot #	Ground Elevation ¹	Estimated Base Flood Elevation ²	Safety Factor	Minimum Floor Elevation ³	Approx. Height of Floor Above Ground
Granite Park Division 1					
1	305	314.00	2	316.00	11
2	305	314.00	2	316.00	11
3	305	314.00	2	316.00	11
4	306	314.00	2	316.00	10

Table 6

Granite Park Division I and II – Paradise Lane

Minimum Floor Elevations

Lot #	Ground Elevation ¹	Estimated Base Flood Elevation ²	Safety Factor	Minimum Floor Elevation ³	Approx. Height of Floor Above Ground
5	306	314.00	2	316.00	10
6	306	314.00	2	316.00	10
7	306	314.00	2	316.00	10
8	307	314.00	2	316.00	9
9	307	314.00	2	316.00	9
40	307	314.00	2	316.00	9
11	308	314.00	2	316.00	8
12	308	314.00	2	316.00	8
13	308	314.00	2	316.00	8
14	308	314.00	2	316.00	8
15	309	314.00	2	316.00	7
16	309	314.00	2	316.00	7
17	309	314.00	2	316.00	7
18	309	314.00	2	316.00	7
19	307	314.00	2	316.00	9
20	307	314.00	2	316.00	9
21	307	314.00	2	316.00	9
22	307	314.00	2	316.00	9
23	308	314.00	2	316.00	8
24	308	314.00	2	316.00	8
25	309	314.00	2	316.00	7
26	310	314.00	2	316.00	6
27	311	314.00	2	316.00	5
28	312	314.25	2	316.25	4
29	313	314.75	2	316.75	4
30	315	315.50	2	317.50	3
31	315	316.25	2	318.25	3
32	315	316.25	2	318.25	3
33	315	316.25	2	318.25	3

Table 6

Granite Park Division I and II – Paradise Lane

Minimum Floor Elevations

Lot #	Ground Elevation ¹	Estimated Base Flood Elevation ²	Safety Factor	Minimum Floor Elevation ³	Approx. Height of Floor Above Ground
34	315	316.50	2	318.50	4
35	315	317.00	2	319.00	4
36	317	317.00	2	319.00	2
37	319	317.00	2	320.00	1
38	320	318.00	2	321.00	1
39	320	318.00	2	321.00	1
40	320	318.00	2	321.00	1
41	320	318.00	2	321.00	1
42	320	318.00	2	321.00	1
43	317	317.00	2	319.00	2
44	317	317.00	2	319.00	2
Granite Park Division 2					
1	309	314.00	2	316.00	7
2	309	314.00	2	316.00	7
3	309	314.25	2	316.25	7
4	309	314.50	2	316.50	8
5	309	314.75	2	316.75	8
6	309	315.00	2	317.00	8
7	309	315.25	2	317.25	8
8	309	315.50	2	317.50	9
9	309	315.75	2	317.75	9
10	309	316.00	2	318.00	9
11	310	316.25	2	318.25	8
12	310	316.50	2	318.50	9
13	310	316.75	2	318.75	9
14	310	317.00	2	319.00	9
15	310	317.25	2	319.25	9
16	310	317.50	2	319.50	10
17	316	317.75	2	319.75	4

Table 6

Granite Park Division I and II – Paradise Lane Minimum Floor

Elevations

Lot #	Ground Elevation ¹	Estimated Base Flood Elevation ²	Safety Factor	Minimum Floor Elevation ³	Approx. Height of Floor Above Ground
18	316	318.00	2	320.00	4
19	316	318.10	2	320.10	4
20	316	318.20	2	320.20	4
21	316	318.30	2	320.30	4
22	316	318.40	2	320.40	4
23	315	318.50	2	320.50	6
24	315	318.60	2	320.60	6
25	315	318.70	2	320.70	6

1. For waterfront lots the ground elevation shown is at a point approximately 200 feet from the shoreline. For other lots the elevation is approximately in the center of the lot.

2. Based upon Snohomish County August 2007 Pilchuck River – Interim Flood Hazard Mapping.

3. All elevations shall be based upon NAVD 1988.

4. Note the minimum floor elevation in Division 1 Lots 37, 38, 39, 40, 41 and 42 shall be a minimum of one foot above grade or the elevation shown, whichever is greater.

[Ord. 905 § 1 (Att. A), 2016; Ord. 904 § 30, 2015; Ord. 827 §§ 21 – 25, 2012; Ord. 799 § 1 (Exh. A), 2010.]