

**CITY OF SEATTLE**

**ORDINANCE \_\_\_\_\_**

**COUNCIL BILL \_\_\_\_\_**

..title

AN ORDINANCE relating to floodplains; adopting permanent regulations consistent with the Federal Emergency Management Agency (FEMA) regulations; adopting the February 2020 updated National Flood Insurance Rate Maps to allow individuals to continue to obtain flood insurance through FEMA’s Flood Insurance Program; repealing Ordinances 126113, 126271, 126536, 126651, 126763, 126885, 126994 and what has been introduced to the Seattle City Council as Council Bill 120808; and amending Chapter 25.06 and Section 25.09.030 of the Seattle Municipal Code.

..body

**BE IT ORDAINED BY THE CITY OF SEATTLE AS FOLLOWS:**

Section 1. Ordinances 126113 and 126271, 126536, 126651, 126763, 126885, and 126994, which enacted and extended interim floodplain regulations, are repealed. The ordinances are attached to this ordinance as Exhibits 3, 4, 5, 6, 7, 8, and 9.

Section 2. Chapter 25.06 of the Seattle Municipal Code, last amended by Ordinance 126113, is amended as follows:

**CHAPTER 25.06 FLOODPLAIN DEVELOPMENT**

**25.06.010 Title((s))**

This ~~((chapter))~~ Chapter 25.06 shall be known and may be cited as the "~~((Seattle))~~ Floodplain Development ~~((Ordinance))~~ Regulations."

**25.06.015 Statutory authorization and findings of fact**

A. The Legislature of the State of Washington has delegated the responsibility to local communities to adopt floodplain management regulations designed to promote the public health, safety, and general welfare of its citizenry.

B. The flood hazard areas of the City of Seattle are subject to periodic inundation, which may result in loss of life and property, health and safety hazards, disruption of commerce and

1 governmental services, extraordinary public expenditures for flood protection and relief, and  
2 impairment of the tax base, all of which adversely affect the public health, safety, and general  
3 welfare. These flood losses may be caused by the cumulative effect of obstructions in areas of  
4 special flood hazards that increase flood heights and velocities, and when inadequately anchored,  
5 damage uses in other areas. Uses that are inadequately floodproofed, elevated, or otherwise  
6 protected from flood damage also contribute to the flood loss.

7 **25.06.020 Purpose**

8 A. The purpose of this Chapter 25.06 is to regulate development in ~~((areas of))~~ special  
9 flood hazard areas and flood-prone areas as defined in subsection 25.09.012.B in accordance  
10 with standards established by the National Flood Insurance Program and the Washington State  
11 Department of Ecology ~~((and areas identified as flood-prone in subsection 25.09.012.B))~~. This  
12 Chapter 25.06 is intended to: promote the public health, safety, and general welfare~~((and is not~~  
13 ~~intended to protect or benefit any individual or any class or group of persons specifically, or to~~  
14 ~~create or form the basis for any liability on the part of the City or its officers, employees, or~~  
15 ~~agents in connection with administration of this Chapter 25.06.))~~; reduce the annual cost of flood  
16 insurance; and minimize public and private losses due to flood conditions in specific areas by  
17 provisions designed to:

18 1. Protect human life and health;

19 2. Minimize expenditure of public money for costly flood control projects;

20 3. Minimize the need for rescue and relief efforts associated with flooding and

21 generally undertaken at the expense of the general public;

22 4. Minimize prolonged business interruptions;

1                    5. Minimize damage to public facilities and utilities, such as water and gas mains;  
2 electric, telephone, and sewer lines; and streets and bridges located in flood hazard areas;

3                    6. Help maintain a stable tax base by providing for the sound use and  
4 development of flood hazard areas so as to minimize blight areas caused by flooding;

5                    7. Notify potential buyers that the property is in a Special Flood Hazard Area;

6                    8. Notify those who occupy flood hazard areas that they assume responsibility for  
7 their actions; and

8                    9. Participate in and maintain eligibility for flood insurance and disaster relief.

9                    B. This Chapter 25.06 is not intended to protect or benefit any individual or any class or  
10 group of persons specifically, or to create or form the basis for any liability on the part of the  
11 City or its officers, employees, or agents in connection with administration of this Chapter 25.06.

12                    C. This Chapter 25.06 shall be administered by affected City departments and interpreted  
13 to accomplish its stated purpose.

14 **25.06.022 Methods of reducing flood losses**

15 In order to accomplish its purposes, this Chapter 25.06 includes methods and provisions for:

16                    A. Restricting or prohibiting development that is dangerous to health, safety, and  
17 property due to water or erosion hazards, or which result in damaging increases in erosion or in  
18 flood heights or velocities;

19                    B. Requiring that development vulnerable to floods be protected against flood damage at  
20 the time of initial construction;

21                    C. Controlling the alteration of natural floodplains, stream channels, and natural  
22 protective barriers, which help accommodate or channel flood waters;

1 D. Controlling filling, grading, dredging, and other development, which may increase  
2 flood damage; and

3 E. Preventing or regulating the construction of flood barriers that unnaturally divert  
4 floodwaters or may increase flood hazards in other areas.

5 **25.06.025 Warning and disclaimer of liability**

6 The degree of flood protection required by the Floodplain Development Regulations is  
7 considered reasonable for regulatory purposes and is based on scientific and engineering  
8 considerations. Larger floods can and will occur on occasion. Flood heights may be increased by  
9 man-made or natural causes. This Chapter 25.06 does not imply that land outside the special  
10 flood hazard areas or outside flood-prone areas as defined in subsection 25.09.012.B or uses  
11 permitted within such areas will be free from flooding or flood damages. The Floodplain  
12 Development Regulations shall not create liability on the part of The City of Seattle, any officer,  
13 or employee thereof, or the Federal Insurance Administration, for any flood damages that result  
14 from reliance on this Chapter 25.06, or any administrative decision lawfully made under it.

15 **25.06.030 Definitions**

16 Unless specifically defined (~~((below))~~) in this Section 25.06.030, words or phrases used in this  
17 Chapter 25.06 shall be interpreted to give them the meaning they have in common usage. For  
18 purposes of this Chapter 25.06(~~((, the following words or phrases are defined as set out below))~~):

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

21 ~~((A-)) "Area of shallow flooding" means ((a designated AO or AH Zone on the Flood~~  
22 ~~Insurance Rate Map (FIRM). The base flood depths range from one (1) to three (3) feet; a clearly~~  
23 ~~defined channel does not exist; the path of flooding is unpredictable and indeterminate; and,~~

1 ~~velocity flow may be evident. AO is characterized as sheet flow and AH indicates ponding-)) a~~  
2 designated zone AO on a community's Flood Insurance Rate Map (FIRM) with one percent or  
3 greater annual chance of flooding to an average depth of 1 to 3 feet where a clearly defined  
4 channel does not exist, where the path of flooding is unpredictable, and where velocity flow may  
5 be evident. Such flooding is characterized by ponding or sheet flow. Also referred to as the sheet  
6 flow area.

7 ~~((B-)) "Area of special flood hazard" or "special flood hazard area" means the land~~  
8 ~~((subject to a one (1) percent or greater chance of flooding in any given year. Designation on the~~  
9 ~~Flood Insurance Rate Map (FIRM) for areas of special flood hazard always includes the letters A~~  
10 ~~or V-))~~ in the floodplain within Seattle subject to a one percent or greater chance of flooding in  
11 any given year. It is shown on the Flood Insurance Rate Map (FIRM) as zone A, AO, AE, and  
12 VE.

13 "ASCE 24" means the most recently published version of ASCE 24, Flood Resistant  
14 Design and Construction, published by the American Society of Civil Engineers.

15 "Attendant utilities and equipment" means mechanical, electrical, fuel gas, plumbing,  
16 HVAC, and related equipment, as well as services associated with new construction and  
17 substantial improvements and includes equipment containers that are not occupiable and not  
18 habitable.

19 "Base flood" means the flood having a one percent chance of being equaled or exceeded  
20 in any given year (also referred to as the "100-year flood").

21 ~~((C-))~~ "Base flood ((level)) elevation (BFE)" ((and)) or "base flood ((elevation)) level"  
22 ~~((both))~~ means the level or elevation above mean sea level, as calculated by reference to the  
23 vertical datum ((for Seattle under Section 1.20.020-)) of NAVD88, ((of floodwaters in a particular

1 ~~area during flood having a one percent chance of occurring in any given year)) to which~~  
2 floodwater is anticipated to rise during the base flood.

3 “Basement” means any area of the building having its floor sub-grade (below ground  
4 level) on all sides.

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

9 “Cabinet” means a weather protection and floodproofed container that is used for storage  
10 and not occupiable and not habitable.

11 “Coastal high hazard area” means an area of special flood hazard extending from  
12 offshore to the inland limit of a primary frontal dune along an open coast and any other area  
13 subject to high velocity wave action from storms or seismic sources. The area is designated on  
14 the FIRM as zone V1-30, VE, or V.

15 “Community” means any state, or area or political subdivision thereof, or any Indian tribe  
16 or authorized tribal organization or Alaska Native village or authorized native organization, that  
17 has authority to adopt and enforce floodplain management regulations for the areas within its  
18 jurisdiction.

19 ~~((D:))~~ "Critical facility" means a facility for which even a slight chance of flooding might  
20 be too great. Critical facilities include~~((:))~~ but are not limited to schools, nursing homes,  
21 hospitals, installations that use, or store hazardous materials or hazardous waste and non-Port of  
22 Seattle police, fire and emergency response installations. ~~((police, fire, and emergency response~~

1 ~~installations, nonresidential installations which produce, use or store hazardous materials or~~  
2 ~~hazardous waste.))~~

3 ((E.)) "Development" means any man-made change to improved or unimproved real  
4 estate, including but not limited to buildings or other structures, mining, dredging, filling,  
5 grading, paving, excavation or drilling operations, or storage of equipment or materials.

6 ((F.)) "Director" means the Director of the Seattle Department of Construction and  
7 Inspections (SDCI). As used in this Chapter 25.06, the term includes authorized representatives  
8 of the Director of the Seattle Department of Construction and Inspections.

9 ((G.)) "Flood" or "flooding" means:

10 1. ((a)) A general and temporary condition of partial or complete inundation of  
11 normally dry land areas from:

12 ((1.)) a. The overflow of inland or tidal waters; and/or

13 ((2.)) b. The unusual and rapid accumulation of runoff of surface waters  
14 from any source.

15 2. Mudslides (i.e. mudflows) that are proximately caused by flooding as defined  
16 in subsection G.1.b of this definition and area akin to a river of liquid and flowing mud on the  
17 surfaces of normally dry land areas, as when earth is carried by a current of water and deposited  
18 along the path of the current.

19 3. The collapse or subsidence of land along the shore of a lake or other body of  
20 water as a result of erosion or undermining caused by waves or currents of water exceeding  
21 anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body  
22 of water, accompanied by a severe storm, or by an unanticipated force of nature, such as flash

1 flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which  
2 results in flooding as defined in subsection G.1.a of this definition.

3 “Flood damage” means harmful inundation, water erosion of soil, stream banks  
4 and beds, stream channel shifting and changes, harmful deposition by water of eroded and  
5 shifting soils and material and debris upon property or in the beds of streams or other bodies of  
6 water; damages by high water, to public roads, highways, bridges, utilities and to works built for  
7 protection against floods or inundation; the interruption by floods of travel, communication and  
8 commerce; and all other high water influences and results which injuriously affect the public  
9 health and the safety of property.

10 “Flood elevation study” means an examination, evaluation, and determination of flood  
11 hazards and, if appropriate, corresponding water surface elevations, or an examination,  
12 evaluation, and determination of mudslide (i.e., mudflow) and/or flood-related erosion hazards.  
13 Also known as a Flood Insurance Study (FIS).

14 ~~((H.))~~ "Flood Insurance Rate Map (FIRM)" means the ~~((Flood Insurance Study for King~~  
15 ~~County, Washington and incorporated areas, dated May 16, 1995, with accompanying Flood~~  
16 ~~Insurance Rate Maps, that has delineated both the areas of special flood hazards and the risk~~  
17 ~~premium zones applicable to The City of Seattle, or as otherwise required by the Department of~~  
18 ~~Homeland Security))~~ official map of a community on which the Federal Insurance Administrator  
19 has delineated both the special hazard areas and the risk premium zones applicable to the  
20 community. A FIRM that has been made available digitally is called a Digital Flood Insurance  
21 Rate Map (DFIRM).

22 ~~((I. "Flood Insurance Study" means the official report, entitled "The Flood Insurance~~  
23 ~~Study for King County, Washington and Incorporated Areas," dated May 16, 1995, provided by~~

1 ~~the Federal Insurance Administration, that includes flood profiles, the Flood Boundary Floodway~~  
2 ~~Map, and the water surface elevation of the base flood.))~~ “Flood proofing” means any  
3 combination of structural and nonstructural additions, changes, or adjustments to structures that  
4 reduce or eliminate risk of flood damage to real estate or improved real property, water and  
5 sanitary facilities, structures, and their contents. Flood proofed structures are those that have the  
6 structural integrity and are designed to be impervious to floodwater below the flood protection  
7 elevation.

8 Flood proofing, dry means a combination of measures that results in a structure,  
9 including the attendant utilities and equipment, being watertight with all elements substantially  
10 impermeable to the passage of water and with structural components having the sufficient  
11 strength to resist hydrostatic and hydrodynamic loads including buoyance.

12 Flood proofing, wet means a floodproofing method that relies on the use of flood  
13 damage-resistant materials and construction techniques in areas of a structure that are below the  
14 flood protection elevation, by intentionally allowing those areas to flood.

15 “Flood protection elevation” means an elevation that is three feet above the base flood  
16 elevation.

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

19 “Floodplain administrator” means the official or officials designated by the Seattle  
20 Municipal Code to administer and enforce Seattle’s floodplain development regulations.

21 “Floodplain variance” means a grant of relief by a community from the terms of a  
22 floodplain management regulation.

1            ~~((F))~~ "Floodway" means the channel of a river or other watercourse and the adjacent land  
2 areas that must be reserved in order to discharge the base flood without cumulatively increasing  
3 the water surface elevation more than ~~((one foot (1').))~~ a designated height. Also referred to as  
4 "Regulatory floodway."

5            "Functionally dependent use" means a use that cannot perform its intended purpose  
6 unless it is located or carried out in close proximity to water. The term includes only docking  
7 facilities, port facilities that are necessary for the loading and unloading of cargo or passengers,  
8 and ship building and ship repair facilities, and does not include long-term storage or related  
9 manufacturing facilities, hotels, office buildings, schools, and restaurants.

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

12           "Historic structure" means any structure that is:

13                1. Listed individually in the National Register of Historic Places (a listing  
14 maintained by the Department of the Interior) or preliminarily determined by the Secretary of the  
15 Interior as meeting the requirements for individual listing on the National Register;

16                2. Certified or preliminarily determined by the Secretary of the Interior as  
17 contributing to the historical significance of a registered historic district or a district preliminarily  
18 determined by the Secretary to qualify as a registered historic district;

19                3. Individually listed on a state inventory of historic places in states with historic  
20 preservation programs that have been approved by the Secretary of Interior; or

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

1                                    a. By an approved state program as determined by the Secretary of the  
2 Interior, or

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

5                    “Long-term storage” see “Storage, long-term”

6                    ((K-)) "Lowest floor" means the lowest floor of the lowest enclosed area (including  
7 basement). An unfinished or flood-resistant enclosure, usable solely for parking of vehicles,  
8 building access or storage, in an area other than a basement area, is not considered a building's  
9 lowest floor, provided that such enclosure is not built so as to render the structure in violation of  
10 applicable non-elevation design requirements of subsection ((A2 of Section)) 25.06.110.A.2.

11                    “Lowest horizontal structural member” means the lowest horizontal member that resists  
12 loads or load combinations required by the Seattle Building Code or the Seattle Residential Code  
13 excluding piles, pile caps, columns, grade beams at or below grade, and bracing.

14                    ((L-)) "Manufactured home" means a structure, transportable in one ((+)) or more  
15 sections, ((which))that is built on a permanent chassis and is designed for use with or without a  
16 permanent foundation when connected to the required utilities. The term "manufactured home"  
17 ((also includes travel trailers and other similar vehicles placed on a site for greater than one  
18 hundred eighty (180) consecutive days))does not include a “recreational vehicle.”

19                    ((M-)) "Manufactured home park" or "manufactured home subdivision" means a parcel  
20 (or contiguous parcels) of land divided into two ((2-)) or more manufactured home lots for rent  
21 or sale.

22                    “Mean sea level” means, for purposes of the National Flood Insurance Program, the  
23 vertical datum to which base flood elevations shown on a community’s FIRM are referenced.

1           ~~((N:))~~ "New construction" means structures for which the ~~((("))~~start of construction~~((("))~~  
2 commenced on or after the effective date of ~~((the ordinance codified in this chapter.))~~ floodplain  
3 management regulations adopted by a community and includes any subsequent improvements to  
4 such structures.

5           "Principally above ground" means that at least 51 percent of the actual cash value of  
6 the structure, less land value, is above ground.

7           "Reasonably safe from flooding"

8                   1. For the purpose of evaluating a Letter of Map Revision (LOMR),  
9 "reasonably safe from flooding" means base flood waters will not inundate the land or damage  
10 structures to be removed from the floodplain/SFHA and that any subsurface waters related to the  
11 base flood will not damage existing or proposed buildings.

12                   2. For the purpose of evaluating development, "reasonably safe from  
13 flooding" means development that is designed and built to be safe from flooding based on  
14 consideration of current flood elevation studies, estimated base flood elevation, flood hazard and  
15 flood prone designation, historical data, high water marks and other reliable data known to the  
16 community.

17           ~~((Θ:))~~ "Recreational vehicle" means a vehicle that is (a) built on a single chassis; (b)  
18 ~~((four hundred (400)))~~ 400 square feet or less in area when measured at the largest horizontal  
19 projection; (c) designed to be self-propelled or permanently towable by a light-duty truck; and  
20 (d) designed primarily not for use as a permanent dwelling but as temporary living quarters for  
21 recreational, camping, travel, or seasonal use.

1           “Recreational vehicle ready for highway use” means that it is on its wheels or a jacking  
2 system, is attached to the site only by quick disconnect type utilities and security devices and has  
3 no permanently attached additions.

4           ~~((P-))~~ "Start of construction" ~~((means and))~~ includes substantial improvement, and means  
5 the date the building permit was issued, provided the actual start of construction, repair,  
6 reconstruction, rehabilitation, addition, placement, or other improvement was within ~~((one~~  
7 ~~hundred eighty (180)))~~ 180 days of the permit issuance date. The "actual start" means either the  
8 first placement of permanent construction of a structure on a site, such as the pouring of slabs or  
9 footings, the installation of piles, the construction of columns, or any work beyond the stage of  
10 excavation, or the placement of a manufactured home or factory-built structure on a foundation.

11 "Permanent construction" does not include ~~((site))~~ land preparation, such as a clearing, grading,  
12 or filling; nor does it include the installation of streets and/or walkways; nor does it include  
13 excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor  
14 does it include the installation on the property of accessory buildings, such as garages or sheds  
15 not occupied as dwelling units or not part of the main structure. For substantial improvement, the  
16 actual start of construction means the first alteration of any wall, ceiling, floor, or other structural  
17 part of a building, whether or not that alteration affects the external dimensions of the building.

18           “Storage” means a space or place for putting things for future use or safekeeping and  
19 does not include facilities in regular use as a conveyance (e.g., pipeline).

20           “Storage, long-term” means a period longer than 3 months for storage that occurs  
21 between April 2 and October 30 and a period longer than 1 week for storage that occurs between  
22 October 31 and April 1.

1           ~~((Q-))~~ "Structure" means ~~((anything that is built or constructed, an edifice or building of~~  
2 ~~any kind, or any piece of work artificially built up or composed of parts joined together in some~~  
3 ~~definite manner.))~~ a walled and roofed building, including a gas or liquid storage tank, that is  
4 principally above ground, as well as a manufactured home and a factory-built structure.

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

8           ~~((R-1.))~~ "Substantial improvement" means any ~~((repair, reconstruction or improvement~~  
9 ~~of a structure, the cost of which equals or exceeds fifty (50) percent of the market value of the~~  
10 ~~structure either:~~

11                           ~~a. Before the improvement or repair is started; or~~

12                           ~~b. If the structure has been damaged and is being restored, before the~~  
13 ~~damage occurred.~~

14                           ~~2. For the purpose of this definition, a "substantial improvement" commences~~  
15 ~~when the first alteration on any wall, ceiling, floor or other structural part of the building is~~  
16 ~~made, whether or not that alteration affects the external dimensions of the structure. The term~~  
17 ~~does not, however, include either:~~

18                           ~~a. Any project for improvement of a structure to comply with existing~~  
19 ~~state or local health, sanitary or safety code specifications which are solely necessary to assure~~  
20 ~~safe living conditions; or~~

21                           ~~b. Any alteration of a structure which is listed on the National Register of~~  
22 ~~Historic Places or a State Inventory of Historic Places, which is designated as a landmark~~  
23 ~~pursuant to SMC Chapter 25.12 or which is included in a landmark or historic district.))~~

1 reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which  
2 equals or exceeds 50 percent of the market value of the structure before the “start of  
3 construction” of the improvement. This term includes structures that have incurred “substantial  
4 damage,” regardless of the actual repair work performed. The term does not include either:

5 1. Any project for improvement of a structure to correct previously  
6 identified existing violations of state or local health, sanitary, or safety code specifications that  
7 have been identified by the local code enforcement official and that are the minimum necessary  
8 to assure safe living conditions; or

9 2. Any alteration of a historic structure, provided that the alteration will  
10 not preclude the structure’s continued designation as a historic structure.

#### 11 **25.06.040 Applicability**

12 This Chapter 25.06 shall apply to all ~~((areas of-))~~special flood hazard~~((s))~~ areas and flood-prone  
13 areas as defined in subsection 25.09.012.B as identified in Section 25.06.050 within the  
14 jurisdiction of The City of Seattle. ~~((This Chapter 25.06 shall also apply to flood-prone areas as~~  
15 defined in subsection 25.09.012.B that are not located within areas of special flood hazards, as  
16 provided in this Chapter 25.06 by cross reference to subsection 25.09.012.B.)) Floodplain  
17 regulations include provisions in this Chapter 25.06 and provisions in Title 22 that address the  
18 risk of flooding.

#### 19 **25.06.044 Abrogation and greater restrictions**

20 This Chapter 25.06 is not intended to repeal, abrogate, or impair any existing easements,  
21 covenants, or deed restrictions. However, where this Chapter 25.06 and another ordinance,  
22 easement, covenant, or deed restriction conflict or overlap, whichever imposes the more stringent  
23 restrictions shall prevail.

1 **25.06.045 Interpretation**

2 In the interpretation and application of this Chapter 25.06, all provisions shall be:

3 A. Considered as minimum requirements;

4 B. Liberally construed to provide the maximum flood protection; and

5 C. Deemed neither to limit nor repeal any other powers granted under state statutes.

6 **25.06.050 Identification of ~~((areas of))~~ special flood hazard areas**

7 A. The ~~((Areas of))~~ special flood hazard ~~((in The City of Seattle are))~~ areas as identified  
8 by the Federal Insurance Administrator~~((ion))~~ in a scientific and engineering report entitled "The  
9 Flood Insurance Study for King County, Washington and Incorporated Areas," dated ~~((May 16,~~  
10 ~~1995,))~~ August 19, 2020, and any revisions thereto, with ~~((an))~~ accompanying Flood Insurance  
11 Rate Maps (FIRMs), ~~((which))~~ dated August 19, 2020, and any revisions thereto ("the Maps").

12 The study and the Maps are included as Exhibit 1 and 2 to this ordinance, respectively, and are  
13 ~~((hereby))~~ adopted by reference and declared to be a part of this Chapter 25.06. These mapped  
14 areas are special flood hazard areas. The study and ~~((map))~~ the Maps shall be maintained on file  
15 at the Seattle Department of Construction and Inspections and Seattle ~~((Public Utilities))~~  
16 Department of Transportation.

17 B. If the FIRM boundaries identified on the Maps are not clear, SDCI shall interpret the  
18 exact location of the boundaries of the special flood hazard areas based on actual field  
19 conditions. These determination of boundary locations can be formally interpreted through a  
20 FEMA Letter of Map Change consistent with the standards of Section 65 of the Rules and  
21 Regulations of the National Flood Insurance Program (44 CFR Section 65).

22 C. Special flood hazard areas also include flood-prone areas as defined in subsection  
23 25.09.012.B.

1 **25.06.060 Floodplain development approval required((:))**

2 Construction or development including the placement of or substantial improvement to  
3 manufactured homes, factory-built structures, and recreational vehicles not ready for highway  
4 use, shall not be undertaken within any ((area of))special flood hazard area and flood-prone  
5 areas as defined in subsection 25.09.012.B as established in Section 25.06.050 without approval  
6 under this ((chapter))Chapter 25.06. For development where no other permit or authorization  
7 from The City of Seattle or its departments or agencies is necessary to begin or to accomplish the  
8 work, the approval shall be documented by issuance of a floodplain development  
9 ((license))permit or approval. For development where some other permit or authorization from  
10 The City of Seattle or its departments or agencies is required to begin or accomplish the work,  
11 including but not limited to development performed by City departments, the floodplain  
12 development approval shall be incorporated in such other permit or authorization.

13 **25.06.070 Application for floodplain development approval or license**

14 Application for a floodplain development ((license-))permit or((~~for floodplain development~~))  
15 approval shall be made on forms furnished by the ((Administrators))floodplain administrator.  
16 The application ((shall-))may include, but ((shall-))is not ((be-))limited to, plans drawn to scale  
17 showing the nature, location, dimensions, and elevations of the area in question, existing or  
18 proposed structures, fill, storage of materials, drainage facilities, and the location of the  
19 foregoing. Specifically, the following information is required:

20 A. Elevation prepared by a licensed surveyor ((or a registered professional civil engineer  
21 ))in relation to mean sea level, as calculated based on the vertical datum ((for Seattle under  
22 Section 1.20.020))of NAVD88, of the lowest floor (including basement) of all structures

1 recorded on a current elevation certificate with Section B completed by the floodplain  
2 administrator;

3 B. Elevation prepared by a licensed surveyor (~~((or a registered professional civil engineer~~  
4 ~~))~~in relation to mean sea level, as calculated based on the vertical datum (~~((for Seattle under~~  
5 ~~Section 1.20.020))~~of NAVD88, to which any structure has been or will be floodproofed;

6 C. (~~((Certification))~~)Where a structure is to be flood proofed, certification by a registered  
7 professional (~~((civil))~~)engineer or architect that the floodproofing methods for any nonresidential  
8 structure meet the floodproofing criteria in Section 25.06.110;~~((and))~~

9 D. Description of the extent to which any watercourse will be altered or relocated as a  
10 result of the proposed development(~~((:))~~);

11 E. Where a structure is proposed in a V, V1-30, or VE zone, a V-zone designation design  
12 certificate;

13 F. Where development is proposed in a floodway, an engineering analysis indicating no  
14 rise of the Base Flood Elevation; and

15 G. Any other such information that may be reasonably required by the floodplain  
16 administrator in order to review the application.

17 **25.06.080 Designation of (~~((Administrators.))~~)administrators**

18 (~~((Each City department which has responsibility for review and approval of any development or~~  
19 ~~which performs any development in areas of special flood hazard in The City of Seattle is~~  
20 ~~designated as an Administrator of this chapter and shall approve or deny floodplain development~~  
21 ~~proposals only in accordance with the provisions of this chapter. Each Administrator shall be~~  
22 ~~responsible for enforcing the provisions of this chapter as they apply to that Administrator's~~

1 ~~jurisdiction. The Director shall approve or deny applications for floodplain development licenses~~  
2 ~~in accordance with the provisions of this chapter.))~~

3 The Director of the Department of Construction and Inspections or designee is appointed  
4 as the floodplain administrator charged to administer, implement, and enforce this Chapter 25.06  
5 by granting or denying development permits, approvals, or licenses in accordance with its  
6 provisions for all areas within Seattle except for areas in the City’s public right-of-way. For all  
7 areas in the City’s public right-of-way, the Director of Seattle Department of Transportation or  
8 designee is appointed to administer, implement, and enforce this Chapter 25.06 by granting or  
9 denying development and use permits in Title 15 in accordance with this Chapter 25.06.

10 **25.06.090 Functions of the ~~((Administrators))~~administrators**

11 ~~((Functions of the Administrators under this Chapter 25.06 shall include the following:))~~ Duties  
12 of the Director of the Department of Construction and Inspections and the Director of Seattle  
13 Department of Transportation shall include but not be limited to:

14 A. Reviewing development proposals to determine that:

15 1. ~~((the-))~~The requirements of this ~~((chapter-))~~Chapter 25.06 have been satisfied;

16 ~~((B. Review development proposals to determine that all necessary permits have~~  
17 ~~been obtained from those federal, state or local governmental agencies from which prior~~  
18 ~~approval is required;))~~ 2. Review proposed development to assure that all necessary permits have  
19 been received from those governmental agencies from which approval is required by Federal or  
20 State law, including section 404 of the Federal Water Pollution Control Act Amendments of  
21 1972, 33 U.S.C. 1334;

22 3. The site is reasonably safe from flooding; and

1                   4. The proposed development is not located in the floodway. If located in the  
2 floodway, assure the encroachment provisions of Section 25.06.120 are met.

3                   B. Notify the Federal Emergency Management Agency when annexations occur in the  
4 special flood hazard area;

5                   C. When base flood elevation data has not been provided in A or V zones in accordance  
6 with Section 25.06.050, the floodplain administrator shall obtain, review, and reasonably utilize  
7 any base flood elevation and floodway data available from a federal, state, or other source, in  
8 order to administer Sections 25.06.110 and 25.06.120;

9                   D. Where base flood elevation data is provided through the ~~((Flood Insurance Study))~~  
10 FIS, FIRM, or required ~~((and obtained))~~ through subsection 25.06.090.C~~((above))~~, obtain and  
11 maintain a record of the actual (as-built) elevation (in relation to mean sea level as calculated  
12 based on the vertical datum ~~((for Seattle under Section 1.20.020))~~ of NAVD88 of the lowest  
13 floor, including basement, of all new or substantially improved structures, and indicate whether  
14 or not the structure contains a basement;

15                   E. Documentation of the elevation of the bottom of the lowest horizontal structural  
16 member of the lowest floor (excluding pilings and columns) of new and substantially improved  
17 structures in VE zones;

18                   ~~((E.))~~ F. For all new or substantially improved floodproofed nonresidential structures  
19 where base flood elevation data is provided through the FIS, FIRM, or as required in subsection  
20 25.06.100.E.4:

21                   1. ~~((Verify and))~~ Obtain and maintain a record of the ~~((actual))~~ elevation (in  
22 relation to mean sea level) ~~((as calculated based on the National Geodetic Vertical Datum))~~ to  
23 which the structure was flood proofed; and

1                   2. Maintain the floodproofing certifications required in subsection ~~((C of Section~~  
2 ~~))25.06.070.C;~~

3                   ~~((F.))~~ G. Maintain for public inspection all records pertaining to the provisions of this  
4 ~~((chapter))Chapter 25.06, including all floodplain variance actions with justification for their~~  
5 issuance and all certifications;

6                   H. Obtain and maintain a record of improvement and damage calculations;

7                   ~~((G.))~~ I. Whenever a watercourse is to be altered or relocated:

8                   1. Notify ~~((affected))adjacent~~ communities and the Washington State Department  
9 of Ecology prior to any alteration or relocation of a watercourse, and submit evidence of such  
10 notification to the Federal Insurance Administration through appropriate notification and means;  
11 and

12                   ~~((H.))~~ 2. Require that ~~((maintenance is provided within the altered or relocated~~  
13 portion of such watercourse so that))the flood-carrying capacity ~~((is not diminished;))~~of the  
14 altered or relocated portion of the watercourse is maintained.

15 **25.06.100 General standards in A Zones including Zones A, AE, and AO**

16 ~~((In all areas of special flood hazards and in all other flood-prone areas defined in subsection~~  
17 ~~25.09.012.B, the following standards are required))The following standards are required in all A~~

18 zoned areas:

19                   A. Accessory structures (detached garages and small storage structures)

20                   1. Accessory structures limited to 500 square feet and used solely for parking of  
21 vehicles or limited storage may be constructed such that the floor is below the flood protection  
22 elevation, provided the structure is designed and constructed in accordance with the following  
23 requirements:

1                                    a. Use of the accessory structure must be limited to parking of vehicles or  
2 limited storage;

3                                    b. The portions of the accessory structure located below the BFE must be  
4 built using flood resistant materials;

5                                    c. The accessory structure must be adequately anchored to prevent  
6 flotation, collapse, and lateral movement. Accessory structures designed to float (e.g. boat  
7 sheds, covered moorage floating piers) shall be securely anchored to an adequately anchored  
8 foundation system that resists flotation, collapse, and lateral movement;

9                                    d. Any machinery or equipment servicing the accessory structure must be  
10 elevated or flood proofed to or above the BFE;

11                                   e. The accessory structure must comply with floodway encroachment  
12 provisions in subsection 25.06.120.A;

13                                   f. The accessory structure must be designed to allow for the automatic  
14 entry and exit of floodwaters in accordance with subsection 25.06.110.A.4.

15                                   g. The structure shall have low damage potential, and

16                                   h. If the structure is converted to another use, it must be brought into full  
17 compliance with the standards governing such use.

18                                   i. The structure shall not be used for human habitation.

19                                   2. Detached garages, storage structures, and other accessory structures not  
20 meeting the above standards must be constructed in accordance with all applicable standards in  
21 subsections 25.06.110.A, 25.06.110.B, 25.06.130.

22                                   B. Anchoring

23                                   1. All new construction, ~~((and))~~ substantial improvements, manufactured homes,

1 and factory-built structures shall be anchored to prevent flotation, collapse, or lateral movement  
2 of the structure resulting from hydrodynamic and hydrostatic loads including the effects of  
3 buoyancy. Anchoring methods may include, but are not limited to, use of over-the-top or frame  
4 ties to ground anchors.

5           2. All new construction and substantial improvement of structures designed to  
6 float as part of their function (e.g., boat sheds, covered moorage, floating piers) shall be securely  
7 attached to an adequately anchored foundation system that resists flotation, collapse, and lateral  
8 movement.

9           ~~((All manufactured homes shall be anchored to prevent flotation, collapse, or~~  
10 ~~lateral movement of the structure and shall be installed using methods and practices that~~  
11 ~~minimize flood damage.))~~

12           ~~((B))~~C. Construction materials and methods

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

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

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

20           ~~((C))~~D. Processing, storage and use of materials and equipment

21           1. Processing. As part of new construction and substantial improvements, the  
22 processing of hazardous and toxic materials and the process of using one or more operations that  
23 transforms a material into hazardous or toxic material is prohibited in special flood hazard areas.

1                   2.Storage and Use of Materials and Equipment.

2                   a. As part of new construction and substantial improvements, storage of  
3 non-hazardous material or equipment may be allowed if stored in a manner that is reasonably  
4 safe from flooding, using methods that may include, but are not limited to, storage in a structure  
5 meeting floodplain standards in this Chapter 25.06 or firmly anchored following the provisions  
6 of 25.06.100.B.

7                   b. As part of substantial improvements, the storage of hazardous material  
8 in special flood hazard areas shall:

9                   i. On land, be stored at or above the flood protection elevation; or  
10 in a dry flood proofed non-residential building, structure or cabinet securely anchored using  
11 methods that may include, but are not limited to, use of over-the-top or frame ties to ground  
12 anchors to prevent the hazardous material from entering the water for any reason including wind  
13 or wave action;

14                   ii. Overwater, be kept in a floodproofed container that is securely  
15 attached to the pier and at or above the flood protection elevation or in a dry floodproofed non-  
16 residential building.

17                   c. As part of a change of use, new construction, or substantial  
18 improvement that proposes new storage of materials-or equipment, best management practices  
19 are required, and include:

20                   i. All materials shall be stored in a secure manner and leak-proof  
21 condition so that they do not enter the water for any reason including wind and wave action.



1 the effects of buoyancy, during the occurrence of flooding to the design flood elevation in  
2 accordance with ASCE 24; and

3 c. Electrical wiring systems are permitted to be located below the flood  
4 protection elevation provided that they conform to the provisions of the electrical part of this  
5 code for wet locations and shall be anchored following the provisions of 25.06.100.A.

6 ~~((D))~~F. Subdivision, short plat, other platting actions, and other new development  
7 proposals;

8 1. ~~((All subdivision proposals shall))~~Shall be consistent with the need to  
9 minimize flood damage.

10 2. ~~((All subdivision proposals shall))~~Shall have public utilities and facilities, such  
11 as sewer, gas, electrical, and water systems, located and constructed to minimize flood damage.

12 3. ~~((All subdivision proposals shall))~~Shall have adequate drainage to ~~((minimize~~  
13 ~~to))~~reduce exposure to flood damage.

14 4. ~~((If base flood elevation data has not been provided or is not available from~~  
15 ~~another authoritative source, the applicant shall provide such data for subdivision proposals and~~  
16 ~~other proposed developments that contain at least 50 lots or five acres, whichever is less.))~~Shall  
17 include base flood elevation data as part of the application for proposed development that  
18 contains at least 50 lots or 5 acres, whichever is the lesser.

19 ~~((E))~~G. ~~((H))~~ Where elevation data is not available, ~~((either through))~~whether from the  
20 ~~((most current map provided by the Federal Emergency Management Agency (FEMA) for~~  
21 ~~administration of the National Flood Insurance Program))~~ FIS, the FIRM, or ((from-))another  
22 authoritative source((;)) as listed in subsection 25.06.090.G, applications for floodplain  
23 development shall be reviewed to assure that proposed construction shall be made reasonably

1 safe from flooding. The evaluation of reasonableness shall include consideration of historical  
2 data, high water marks, photographs of past flooding, and similar information if available.

3 **25.06.110 Standards involving base flood elevations in A zones, including Zones A, AE, and**  
4 **AO**

5 ~~((H))~~In all special flood hazard areas and flood-prone areas as defined in subsection 25.09.012.B,  
6 where base flood elevation data has been provided under Section 25.06.050 or subsection  
7 25.06.090.C, the standards of subsections 25.06.110.A through 25.06.110.~~((E))~~H apply~~((to areas~~  
8 ~~of special flood hazards and to flood-prone areas defined in subsection 25.09.012.B)).~~

9 A. Residential construction

10 1. In AE zones or other A zoned areas where the BFE has been determined or can  
11 be reasonably obtained,~~((N))~~new construction and substantial improvement of any residential  
12 structure shall have the elevation of the lowest floor, including basements,~~((elevated to 2 feet or~~  
13 ~~more above base flood elevation))~~ at or above the flood protection elevation.

14 2. New construction and substantial improvement of any residential structure in  
15 an AO zone shall meet the requirements under Section 25.06.130.

16 3. New construction and substantial improvement of any residential structure in  
17 an unnumbered A zone for which a BFE is not available and cannot be reasonably obtained shall  
18 be reasonably safe from flooding, but in all cases the elevation of the lowest floor shall be at  
19 least 3 feet above the highest adjacent grade.

20 4. For new construction and substantial improvement of any residential structure,  
21 ~~((Fully))~~ fully enclosed areas below the lowest floor~~((that are subject to flooding))~~ are:

22 a. prohibited; or

1                                    b. shall be used solely for parking of vehicles, building access, crawl  
2 space, or storage, and shall be designed to automatically equalize hydrostatic flood forces on  
3 exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this  
4 requirement (~~((either are required to))~~shall be certified by a registered professional civil engineer  
5 or architect; or (~~(are required to))~~shall meet or exceed the following minimum criteria:

6                                    ~~((a-))1) ((A))~~ Have a minimum of two openings having a total net  
7 area of not less than 1 square inch for every square foot of enclosed area subject to flooding((  
8 shall be provided));

9                                    ~~((b-))2)~~ The bottom of all openings shall be no higher than 1-foot  
10 above the adjacent grade and located on the lowest sides of the structure that allows for the flow  
11 of water through the enclosed area or 1-foot above an elevated slab on grade, whichever is  
12 higher; and

13                                    ~~((e-))3)~~ Openings may be equipped with screens, louvers, valves,  
14 or other coverings or devices (~~((#))~~provided that they permit the automatic entry and exit of  
15 floodwaters.

16                                    4) A garage attached to a residential structure, constructed with the  
17 garage floor slab below the flood protection elevation, must be designed to allow for the  
18 automatic entry and exit of floodwaters.

19                                    B. ~~((Non-residential and live-work unit construction-))~~ New construction and substantial  
20 improvement of any commercial, industrial, or other non-residential structure(~~(, including a~~  
21 structure with one or more live-work units, shall either have the lowest floor, including  
22 basement, elevated to 2 feet or more above the level of the base flood elevation or, together with  
23 attendant utility and sanitary facilities,)) shall:

1                   ~~((1. Be floodproofed so that below 2 feet above the base flood level the structure~~  
2 ~~is watertight with walls substantially impermeable to the passage of water;~~

3                   ~~2. Have structural components capable of resisting hydrostatic and hydrodynamic~~  
4 ~~loads and effects of buoyancy;~~

5                   ~~3. Be certified by a registered professional civil engineer that the design and~~  
6 ~~methods of construction are in accordance with accepted standards of practice for meeting~~  
7 ~~provisions of this subsection 25.06.110.B based on the civil engineer's development or review of~~  
8 ~~the structural design, specifications and plans.~~

9                   ~~Non-residential structures or structures with one or more live work units that are~~  
10 ~~elevated, not floodproofed, shall meet the same standards for space below the lowest floor as set~~  
11 ~~out in subsection 25.06.110.A.2 above.))~~ 1. In AE or other A zoned areas where the BFE has

12 been determined or can be reasonably obtained, new construction and substantial improvement  
13 of any commercial, industrial, or other nonresidential structure shall:

14                   a. have the elevation of the lowest floor , including basements, at  
15 or above the flood protection elevation; or

16                   b. be dry flood proofed so that the structure below the flood  
17 protection elevation is watertight with walls substantially impermeable to the passage of water or  
18 dry flood proofed to the elevation required by ASCE 24, whichever is greater:

19                   1) Have structural components capable of resisting  
20 hydrostatic and hydrodynamic loads and effects of buoyancy;

21                   2) Be certified by a registered professional engineer or  
22 architect that the design and methods of construction are in accordance with accepted standards  
23 of practice for meeting provisions of this subsection 25.06.110.B.2 based on their development

1 and/or review of the structural design, specifications, and plans. Such certifications shall be  
2 provided to the official as set forth in subsection 25.06.070.C.

3 2. In an AO zone, the structure shall meet the requirements under Section  
4 25.06.130.

5 3. In an unnumbered A zone for which a BFE is not available and cannot be  
6 reasonably obtained, the structure shall be reasonably safe from flooding, but in all cases the  
7 elevation of the lowest floor shall be 3 feet or more above the highest adjacent grade or flood  
8 proofed to this elevation.

9 4. For new construction and substantial improvement of any nonresidential  
10 structure that is not dry floodproofed per 25.06.110.B.1.b fully enclosed areas below the lowest  
11 floor that are usable solely for parking of vehicles, building access or storage in an area other  
12 than a basement and which are subject to flooding shall be designed to:

13 a. Automatically equalize hydrostatic flood forces on exterior walls by  
14 allowing for the entry and exit of floodwaters. Designs for meeting this requirement shall be  
15 certified by a registered professional engineer or architect; or shall meet or exceed the following  
16 minimum criteria:

17 b. Have a minimum of two openings with a total net area of not less than 1  
18 square inch for every square foot of enclosed area subject to flooding;

19 c. The bottom of all openings shall be no higher than 1-foot above either  
20 interior or exterior adjacent grade;

21 d. Openings may be equipped with screens, louvers, valves, or other  
22 coverings or devices; or a registered engineer or architect may design and certify engineered  
23 openings, provided that they permit the automatic entry and exit of floodwater; and

1                                    e. A garage attached to an elevated or dry floodproofed non-residential  
2 structure, constructed with the garage floor slab below the BFE, must be designed to allow for  
3 the automatic entry and exit of floodwaters.

4                                    5.Exception to elevation standards for overwater structures. New construction or  
5 substantial improvement on piers and wharves that existed on or before August 19, 2020, for  
6 commercial, industrial, or other non-residential structures, shall meet FEMA’s standard of BFE.  
7 FEMA’s BFE is measured from the top of the deck of the pier or wharf.

8                                    C. Critical facilities.

9                                    1. Construction of new critical facilities shall be located outside the limits of the  
10 ((areas of))special flood hazard areas and outside the limits of all other flood-prone areas as  
11 defined in Chapter 25.09 where possible.

12                                    2. Construction of new critical facilities shall be permissible within ((areas of  
13 ))special flood hazard areas and all other flood-prone areas as defined in Chapter 25.09 if no  
14 feasible alternative site is available.

15                                    a. New Critical facilities constructed within ((areas of))special flood  
16 hazard areas and all other flood-prone areas as defined in Chapter 25.09 shall have the elevation  
17 of the lowest floor ((elevated to 3 feet above the level of the base flood elevation))at or above  
18 the flood protection elevation at the site or to the height of the 500-year flood if available,  
19 whichever is higher.

20                                    b. The storage of hazardous material in special flood hazard areas shall use  
21 ((F))floodproofing and sealing measures ((shall be taken))so that toxic substances will not be  
22 displaced by or released into floodwaters((-)) and include:



1 E. Recreational vehicles. Recreational vehicles placed on sites within ~~((areas of))~~ special  
2 flood hazard areas or flood-prone areas as defined in subsection 25.09.012.B shall

3 ~~((be))~~:

4 1. ~~((On))~~ Be on the site for fewer than 180 consecutive days; or

5 2. ~~((Fully))~~ Be fully licensed and ready for highway use, on their wheels or jacking  
6 system, attached to the site only by quick disconnect type utilities and security devices, and be  
7 without permanently attached additions; or

8 3. Meet the requirements for manufactured homes and factory-built structures  
9 specified in subsection 25.06.110.D(~~(, above))~~).

10 F. If a project will alter the BFE or boundaries of the special flood hazard area or the  
11 flood-prone area as defined in subsection 25.09.012.B, then the project proponent shall provide  
12 engineering documentation and analysis regarding the proposed change and:

13 1. If the change to the BFE or boundaries of the special flood hazard area would  
14 normally require a Letter of Map Change, then the project proponent shall initiate, and receive  
15 approval of, a Conditional Letter of Map Revision (CLOMR) prior to approval of the  
16 development permit. The project shall be constructed in a manner consistent with the approved  
17 CLOMR.

18 2. If a CLOMR application is made, then the project proponent shall also submit  
19 the full CLOMR documentation package to the floodplain administrator to be attached to the  
20 floodplain development permit, including all required property owner notifications.

21 3. Before approval of the final inspection the Letter of Map Revision (LOMR) will be  
22 attained and submitted to SDCI.

23 **25.06.120 Standards for floodways**

1           ~~((Areas))~~Located within special flood hazard areas established in Section 25.06.050 are  
2 areas designated as floodways~~((are areas of special flood hazard established in Section~~  
3 ~~25.06.050. The following provisions apply to development in designated floodways))~~. Since the  
4 floodway is an extremely hazardous area due to the velocity of floodwaters that can carry debris,  
5 and increase erosion potential, the following provisions apply:

6           A. Encroachments, including fill, new construction, substantial improvements, and other  
7 development, are prohibited unless certification by a registered professional civil engineer is  
8 provided demonstrating through hydrologic and hydraulic analyses performed in accordance  
9 with standard engineering practice that the proposed encroachment will not result in any increase  
10 in flood levels during the occurrence of the base flood discharge.

11           B. Construction or reconstruction of residential structures is prohibited within designated  
12 floodways, except for:

13           ~~((1) repairs))~~1. Repairs, reconstruction, or improvements to a structure ~~((which))~~  
14 that do not increase the ground-floor area; and

15           ~~((2) repairs))~~2. Repairs, reconstruction, or improvements to a structure, the cost  
16 of which does not exceed ~~((fifty-))~~50 ~~(( ))~~ percent of the market value of the structure either:

17           ~~((a) before))~~a. Before the repair, reconstruction, or repair is started, or

18           ~~((b) if))~~b. If the structure has been damaged, and is being restored, before  
19 the damage occurred. ~~((Work done on structures to comply with))~~Any project for improvement

20 of a structure to correct existing violations of state or local health, sanitary, or safety code ~~((s,))~~

21 specifications that have been identified by the local code enforcement official and that are the

22 minimum necessary to assure safe living conditions, or to structures identified as historic or

23 landmark structures may be excluded from the ~~((fifty-))~~50 ~~(( ))~~ percent requirement.

1           C. Substantially damaged residences in floodway

2                   1. For all substantially damaged residential structures, other than farmhouses,  
3 located in a designated floodway, the floodplain administrator may make a written request that  
4 the Department of Ecology assess the risk of harm to life and property posed by the specific  
5 conditions of the floodway. Based on analysis of depth, velocity, flood-related erosion, channel  
6 migration, debris load potential, and flood warning capability, the Department of Ecology may  
7 exercise best professional judgment in recommending to the local permitting authority repair,  
8 replacement, or relocation of a substantially damaged structure consistent with WAC 173-158-  
9 076. The property owner shall be responsible for submitting to the local government and the  
10 Washington State Department of Ecology any information necessary to complete the assessment.  
11 Without a favorable recommendation from the department for the repair or replacement of a  
12 substantially damaged residential structure located in the regulatory floodway, no repair or  
13 replacement is allowed per WAC 173-158-070(1).

14                   2. Before the repair, replacement, or reconstruction is started, all requirements of  
15 the National Flood Insurance Program, the state requirements adopted pursuant to chapter 86.16  
16 RCW, and all applicable local regulations must be satisfied. In addition, the following conditions  
17 must be met:

18                           a. There is no potential safe building location for the replacement  
19 residential structure on the same property outside the regulatory floodway.

20                           b. A replacement residential structure is a residential structure built as a  
21 substitute for a legally existing residential structure of equivalent use and size.

22                           c. Repairs, reconstruction, or replacement of a residential structure shall  
23 not increase the total square footage of floodway encroachment.

1 d. The elevation of the lowest floor of the substantially damaged or  
2 replacement residential structure is at or above the flood protection elevation.

3 e. New and replacement water supply systems are designed to eliminate or  
4 minimize infiltration of floodwater into the system.

5 f. New and replacement sanitary sewerage systems are designed and  
6 located to eliminate or minimize infiltration of floodwater into the system and discharge from the  
7 system into the floodwaters.

8 g. All other utilities and connections to public utilities are designed,  
9 constructed, and located to eliminate or minimize flood damage.

10 D. If the certification of subsection 25.06.120.A ((of this section above-)) is obtained, all  
11 new construction and substantial improvements shall comply with all applicable flood hazard  
12 reduction provisions of this ((chapter))Chapter 25.06.

13 **25.06.130 Standards for shallow flooding areas**

14 Areas designated as AO zones on the ((Flood Insurance Rate Maps))FIRMs are areas of  
15 shallow flooding. The following provisions apply to such areas of shallow flooding:

16 A. New construction and substantial improvements of residential structures within AO  
17 zones shall have the lowest floor (including basement) elevated above the highest grade adjacent  
18 to the building ((one (1 foot)))2 feet or more above the depth number specified on the FIRM, or  
19 if no depth number is specified, at least ((two (2)))3 feet above the highest grade adjacent to the  
20 building.

21 B. New construction and substantial improvements of nonresidential structures ((with one  
22 ((1) or more live-work units-)) within AO zones shall: ((either (1-))

1                   1. ~~((h))~~Have the lowest floor (including basement) elevated above the highest  
2 adjacent grade of the building site (~~((one (1 foot)))~~) 2 feet or more above the depth number  
3 specified on the FIRM, or if no depth number is specified, at least (~~((two (2)))~~) 3 feet above the  
4 highest adjacent grade of the building site; or(~~((2))~~)

5                   2. ~~((t))~~Together with utilities and attendant (~~((utility))~~)equipment, and sanitary  
6 facilities, be completely floodproofed so that any space below the level specified in subsection  
7 (~~((1) above))~~25.06.130.B.1 is watertight with walls substantially impermeable to the passage of  
8 water and with structural components having the capability of resisting hydrostatic and  
9 hydrodynamic loads and effects of buoyancy. If floodproofing is used, compliance with these  
10 standards must be certified by a registered professional engineer or architect.

11                   C. Adequate drainage paths around structures on slopes to guide floodwaters around and  
12 away from proposed structures shall be required.

13 **25.06.132 AE riverine zones with base flood elevations but no floodways**

14                   A. In AE FIRM designated zones with identified BFEs and there is an effective flood  
15 insurance study that has determined that no floodway exists: New construction, substantial  
16 improvements, or other development (including fill) is prohibited unless:

17                   1. The applicant can demonstrate that the cumulative effect of the proposed  
18 development, when combined with all other existing and anticipated development, will not  
19 increase the water surface elevation of the base flood more than 1 foot at any point within the  
20 community based on FEMA’s guidelines and standards for flood risk analysis and mapping; or

21                   2. The standards for VE zones in Section 25.06.134 are met.

1           B. If the flood risk analysis determines that the proposed project will increase the water  
2 surface elevation of the base flood more than 1 foot at any point within the community the  
3 applicant shall meet the standards in subsection 25.06.110.F.

4           C. Exceptions. The following projects are not required to provide a flood risk analysis.

5                   1. Substantial improvement projects in the same footprint that do not increase the  
6 volume of material in the SFHA; and

7                   2. New development that replaces existing development in the same footprint and  
8 does not increase the volume of material in the SFHA.

9           **25.06.134 Standards for VE zones**

10           The following standards apply to all areas zoned V, V1-30, or VE.

11           A. Elevation.

12                   1. New construction and substantial improvement for residential structures, and  
13 for commercial, industrial, or other non-residential structures shall:

14                           a. Be elevated on pilings and columns and have the elevation of the  
15 bottom of the lowest horizontal structural member of the lowest enclosed floor (excluding pilings  
16 or columns) at or above the flood protection elevation, or elevated as required by ASCE 24,  
17 whichever is greater; and

18                           b. Provide the actual (as-built) elevation (in relation to mean sea level) of  
19 the bottom of the lowest horizontal structural member of the lowest floor (excluding pilings and  
20 columns) and whether or not a basement exists.

21                   2. Exception to Elevation Standards.

22                           a. New construction or substantial improvement of commercial,  
23 industrial, or other non-residential structures on piers and wharves that existed on or before

1 August 19, 2020, shall meet FEMA’s standard of BFE. FEMA’s BFE is measured the bottom of  
2 the lowest horizontal structural member of the pier or wharf; and/or

3 b. Substantial improvement of piers and wharves that have structures built  
4 on the pier or wharf and existed on or before August 19, 2020, shall meet FEMA’s standard of  
5 BFE. FEMA’s BFE is measured from the bottom of the lowest horizontal structural member of  
6 the pier or wharf elevated to a minimum of BFE.

7 B. Anchoring. Provide that all new construction and substantial improvements:

8 1. Are elevated on pilings and columns so that. Piles and column foundations, and  
9 structures attached thereto, shall be anchored to resist floatation, collapse, and lateral movement  
10 due to the effects of wind and water loads acting simultaneously on all building components.

11 a. Water loading values used shall be those associated with the base flood.

12 b. Wind loading values used shall be those required by applicable State or  
13 local building standards.

14 2. A registered professional engineer or architect shall develop or review the  
15 structural design, specifications, and plans for the construction, and shall certify that the design  
16 and methods of construction to be used are in accordance with accepted standards of practice for  
17 meeting the provisions of subsection 25.06.134.A and 25.06.134.B; and

18 3. For structures that are designed to float as part of their function (e.g. boat  
19 sheds, covered moorage, floating piers), shall be securely attached to an adequately anchored  
20 foundation system that resists flotation, collapse, and lateral movement.

21 C. Siting. New construction, not including substantial improvements, shall be located  
22 landward of the reach of mean high tide.

1           D. Areas below lowest floor for all new construction and substantial improvements have  
2 the space below the lowest floor either:

3                   1. Free of obstruction; or

4                   2. Constructed with non-supporting breakaway walls, open wood latticework, or  
5 insect screening intended to collapse under wind and water loads without causing collapse,  
6 displacement, or other structural damage to the elevated portion of the building or supporting  
7 foundation system.

8                   a. For the purposes of this subsection, a breakaway wall shall have a  
9 design safe loading resistance of not less than 10 and no more than 20 pounds per square foot.  
10 Use of breakaway walls which exceed a design safe loading resistance of 20 pounds per square  
11 foot (either by design or when so required by local or State codes) may be permitted only if a  
12 registered professional engineer or architect certifies that the designs proposed meet the  
13 following conditions:

14                           1) Breakaway wall collapse shall result from a water load less than  
15 that which would occur during the base flood; and,

16                           2) The elevated portion of the building and supporting foundation  
17 system shall not be subject to collapse, displacement, or other structural damage due to the  
18 effects of wind and water loads acting simultaneously on all building components (structural and  
19 non-structural). Water loading values used shall be those associated with the base flood. Wind  
20 loading values used shall be those required by applicable State or local building standards.

21                           3) Such enclosed space shall not be used for human habitation and  
22 shall be useable solely for parking of vehicles, building access, or storage.

23           E. Use of fill. Fill material used for structural support of buildings is prohibited.

1           F. Processing, storage, and use of materials and equipment.

2                   1. Processing. As part of new construction and substantial improvements, the  
3 processing of hazardous and toxic materials and the process of using one or more operations that  
4 transforms a material into hazardous or toxic material is prohibited in special flood hazard areas.

5                   2. Storage and Use of Materials and Equipment.

6                           a. As part of new construction and substantial improvements, the storage  
7 of non-hazardous material or equipment may be allowed if stored in a manner that is reasonably  
8 safe from flooding, using methods that may include, but are not limited to, storage in a structure  
9 meeting floodplain standards, including the elevation standards in 25.06.134.A and anchoring  
10 standards in 25.06.134.B.

11                           b. As part of substantial improvements, the storage of hazardous material  
12 in special flood hazard areas shall:

13                                   i. On land, be stored at or above the flood protection elevation; or  
14 in a dry flood proofed non-residential building, structure or cabinet securely anchored using  
15 methods that may include, but are not limited to, use of over-the-top or frame ties to ground  
16 anchors to prevent the hazardous material from entering the water for any reason including wind  
17 or wave action;

18                                   ii. Overwater, be stored in a floodproofed container that is securely  
19 attached to the pier and at or above the flood protection elevation or in a dry floodproofed non-  
20 residential building.

21                           c. As part of a change of use, new construction, or substantial  
22 improvement that proposes new storage of materials or equipment, best management practices  
23 are required, and include:

1 i. All materials shall be stored in a secure manner and leak-proof  
2 condition so that they do not enter the water for any reason including wind and wave action.

3 ii. All materials shall be handled to prevent them from entering the  
4 water; for liquids a double containment system or other method to prevent spills of liquid  
5 including hazardous material is required.

6 iii. Open containers of hazardous materials shall not be left  
7 unattended.

8 iv. Maintain all machinery and equipment in good working order  
9 to prevent the entry of debris, waste materials, and toxic materials from machinery or equipment  
10 from entering any water body.

11 G. Utilities and attendant equipment

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

14 2. Water wells shall be located outside the floodway.

15 3. New and replacement sanitary sewage systems shall be designed to eliminate or  
16 minimize infiltration of floodwaters into the systems and discharge from the systems into  
17 floodwaters.

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

20 5. New or replacement utilities and attendant equipment shall be:

21 a. Located at an elevation at or above the flood protection elevation or  
22 elevated as required by ASCE 24, whichever is greater; or

1                            b. Designed and installed to prevent water from entering or accumulating  
2 within the components and to resist hydrostatic and hydrodynamic loads and stresses, including  
3 the effects of buoyancy, during the occurrence of flooding to the design flood elevation in  
4 accordance with ASCE 24; and

5                            c. Electrical wiring systems are permitted to be located below the flood  
6 protection elevation provided that they conform to the provisions of the electrical part of this  
7 code for wet locations and shall be anchored following the provisions of 25.06.134.B.

8                            H. Manufactured homes and factory-built structures. All manufactured homes and  
9 factory-built structures to be placed or substantially improved shall be installed using methods  
10 and practices which minimize flood damage including:

11                            1. Having the elevation of the lowest floor at or above the flood protection  
12 elevation;

13                            2. Having the manufactured home or and factory-built structure chassis supported  
14 by reinforced piers or other foundation elements of at least equivalent strength that are no less  
15 than the flood protection elevation in height; and

16                            3. Meeting the anchoring requirements in subsection 25.06.134.A.

17                            I. Recreational vehicles shall:

18                            1. Be on the site for fewer than 180 consecutive days; and

19                            2. Be fully licensed and ready for highway use, on its wheels or jacking system,  
20 attached to the site only by quick disconnect type utilities and security devices, and have no  
21 permanently attached additions; or

22                            3. Meet the manufactured homes requirements in subsection 25.06.134.H.

23                            J. Critical facilities.

1                   1. Construction of new critical facilities shall be located outside the limits of the  
2 special flood hazard areas and outside the limits of all other flood-prone areas as defined in  
3 Chapter 25.09 where possible.

4                   2. Construction of new critical facilities shall be permissible within special flood  
5 hazard areas and all other flood-prone areas as defined in Chapter 25.09 if no feasible alternative  
6 site is available.

7                   a. Critical facilities constructed within special flood hazard areas and all  
8 other flood-prone areas as defined in Chapter 25.09 shall have the elevation of the lowest floor at  
9 or above the flood protection elevation at the site or to the height of the 500-year flood if  
10 available, whichever is higher.

11                   b. Floodproofing and sealing measures shall be taken so that hazardous  
12 material will not be displaced by or released into floodwaters and includes:

13                                 1) On land, be stored at or above the flood protection elevation in a  
14 secure manner and leak-proof condition so that they do not enter the water for any reason  
15 including wind or wave action;

16                                 2) Overwater, be stored in floodproofed containers at or above the  
17 flood protection elevation securely anchored using methods that may include, but are not limited  
18 to, use of over-the-top or frame ties to ground anchors; or stored in a non-residential building  
19 that is at or above the flood protection elevation.

20                   c. Access routes to all critical facilities shall be elevated to or above the  
21 level of the base flood elevation to the extent possible.

1 **25.06.136 Floodplain variances**

2 The floodplain variance criteria set forth in this Section 25.06.136 are based on the general  
3 principle of zoning law that floodplain variances pertain to a piece of property and are not  
4 personal in nature. The long-term goal of preventing and reducing flood loss and damage can  
5 only be met if floodplain variances are strictly limited. Therefore, the floodplain variance  
6 guidelines provided in this Chapter 25.06 are more detailed and contain multiple provisions that  
7 must be met before a floodplain variance can be properly granted. The criteria are designed to  
8 screen out those situations in which alternatives other than a floodplain variance are more  
9 appropriate.

10 A. Types of variances issued

11 1. Historic Structures. Floodplain variances may be issued for the repair,  
12 rehabilitation, or restoration of historic structures, upon a determination that the proposed repair  
13 or rehabilitation will not preclude the structure’s continued designation as a historic structure and  
14 the floodplain variance is the minimum necessary to preserve the historic character and design of  
15 the structure.

16 2. Functionally Dependent Uses. Floodplain variances may be issued for new  
17 construction and substantial improvements and for other development necessary for the conduct  
18 of a functionally dependent use defined as a “functionally dependent use” under Section  
19 25.06.030, provided that the requirements in Section 25.06.136.A.3 and 25.06.136.B.1,  
20 25.06.136.B.2, 25.06.136.B.3, are met and the structure or other development is protected by  
21 methods that minimize flood damages during the base flood and create no additional threats to  
22 public safety.

1                   3. Other Development. Generally, floodplain variances may be issued on a lot of  
2 one-half acre or less in size contiguous to and surrounded by lots with existing structures  
3 constructed below the BFE, provided that the requirements in subsections 25.06.136.B and  
4 25.06.136.C are met and the procedures and standards of this Chapter 25.06 have been fully  
5 considered. As the lot size increases beyond one-half acre, the technical justification required for  
6 issuing the floodplain variance increases.

7                   B. General requirements for floodplain variances

8                   1. Floodplain variances shall not be issued within any floodway if any increase in  
9 flood levels during the base flood discharge would result.

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

12                   3. Variances shall only be issued upon the following:

13                   a. A showing of good and sufficient cause;

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

16                   c. A determination that the granting of a floodplain variance will not result  
17 in increased flood heights, additional threats to public safety, extraordinary public expense,  
18 create nuisances, cause fraud on or victimization of the public, or conflict with existing local  
19 laws or ordinances.

20                   4. When evaluating a variance, the expected heights, velocity, duration, rate of  
21 rise, and sediment transport of the flood waters expected at the site will be evaluated.

22                   C. Additional requirements for the issuance of a floodplain variance

1                   1. Any applicant to whom a floodplain variance is granted shall be given written  
2 notice over the signature of a community official that:

3                   a. The issuance of a floodplain variance to construct a structure below the  
4 BFE will result in increased premium rates for flood insurance up to amounts as high as \$25 for  
5 \$100 of insurance coverage; and

6                   b. Such construction below the flood protection elevation or below BFE  
7 increases risks to life and property.

8                   2. The floodplain administrator shall maintain a record of all floodplain variance  
9 actions, including justification for their issuance.

10                   3. The floodplain administrator shall condition the floodplain variance as needed  
11 to ensure that the requirements and criteria of this Section 25.06.136 are met.

#### 12 **25.06.140 Penalties for noncompliance**

13                   No development shall occur in a(~~n area of~~) special flood hazard area or a flood-prone  
14 area as defined in subsection 25.09.012.B in The City of Seattle without full compliance with the  
15 terms of this (~~chapter~~)Chapter 25.06 and other applicable regulations. Any person who violates  
16 this (~~chapter~~)Chapter 25.06 or fails to comply with any of its requirements shall be subject to a  
17 cumulative civil penalty in the amount of (~~Fifty Dollars (\$50.00)~~)\$500 per day for each day  
18 from the date the violation began until the date compliance with the requirements of this  
19 (~~chapter~~)Chapter 25.06 is achieved. Nothing (~~herein~~)contained in this Chapter 25.06 shall  
20 prevent The City of Seattle from taking such other lawful action as is necessary to prevent or  
21 remedy any violation.

#### 22 **25.06.150 Wetlands management**

1 To the maximum extent possible, development shall avoid the short-term and long-term  
2 adverse impacts associated with the destruction or modification of wetlands, especially  
3 development (~~(which)~~)that limits or disrupts the ability of wetland to alleviate flooding impacts.

4 The (~~(Administrators)~~)floodplain administrators shall implement the following process:

5 A. Review proposals for development within (~~(areas of)~~)special flood hazard areas for  
6 their possible impacts on wetlands located within such areas;

7 B. Ensure that development activities in or around wetlands do not negatively affect  
8 public safety, health, and welfare by disrupting the wetland's ability to reduce flood and storm  
9 drainage; and

10 C. Request technical assistance from the Washington State Department of Ecology in  
11 identifying wetland areas.

12 Section 3. Section 25.09.030 of the Seattle Municipal Code, last amended by Ordinance  
13 126113, is amended as follows:

14 **25.09.030 Location of environmentally critical areas and buffers**

15 A. Environmentally critical areas are defined in Section 25.09.012, and buffers are  
16 described in Sections 25.09.090 and 25.09.160. Environmentally critical areas are mapped by the  
17 Department whenever possible. The Department's maps are advisory except as follows:

18 1. The maps adopted as designations for geologically hazardous areas in  
19 subsections 25.09.012.A.5, 25.09.012.A.6, and 25.09.012.A.7;

20 2. The FEMA maps showing (~~(areas of)~~)special flood hazard areas defined in  
21 (~~(subsection)~~)Section 25.06.030(~~(-B)~~);

22 3. Areas mapped or designated by the Washington Department of Fish and  
23 Wildlife (WDFW) in subsections 25.09.012.D.1 and 25.09.012.D.2; and



1 Section 5. This ordinance shall take effect as provided by Seattle Municipal Code  
2 Sections 1.04.020 and 1.04.070.

3 Passed by the City Council the \_\_\_\_\_ day of \_\_\_\_\_, 2024,  
4 and signed by me in open session in authentication of its passage this \_\_\_\_\_ day of  
5 \_\_\_\_\_, 2024.

6 \_\_\_\_\_  
7 President \_\_\_\_\_ of the City Council

Approved / returned unsigned / vetoed this \_\_\_\_\_ day of \_\_\_\_\_, 2024.

8 \_\_\_\_\_  
9 Bruce A. Harrell, Mayor

10 Filed by me this \_\_\_\_\_ day of \_\_\_\_\_, 2024.

11 \_\_\_\_\_  
12 Scheereen Dedman, City Clerk

13 (Seal)

- 14 Attachments:  
15 Exhibit 1 – The Flood Insurance Study for King County Washington  
16 Exhibit 2 – Floodplain and Flood-prone Area Maps  
17 Exhibit 3 – Ordinance 126113  
18 Exhibit 4 – Ordinance 126271  
19 Exhibit 5 – Ordinance 126536.

- 1 Exhibit 6 – Ordinance 126651
- 2 Exhibit 7 – Ordinance 126763
- 3 Exhibit 8 – Ordinance 126885
- 4 Exhibit 9 – Ordinance 126994