ORDINANCE NO. O2023-017

AN ORDINANCE of the City Council of the City of Tumwater, Washington, amending Chapter 18.38, FP Flood Plain Overlay, of the Tumwater Municipal Code to address updates needed to bring the regulations into compliance with National Flood Insurance Program and State of Washington standards.

WHEREAS, the Legislature of the State of Washington has delegated the responsibility to local governmental units to adopt regulations designed to promote the public health, safety, and general welfare; and

WHEREAS, areas of the City are subject to periodic inundation and channel migration which 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; and

WHEREAS, 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; and

WHEREAS, 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 geomorphologic units, it can lead to serious degradation of habitat and increased flood hazards to people and human development; and

WHEREAS, 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 through alterations to 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; and

WHEREAS, State Department of Ecology staff completed a Federal Emergency Management Agency floodplain community assistance visit with City staff in May 2023 to review the City's participation in the National Flood Insurance Program (NFIP); and

WHEREAS, State Department of Ecology staff and City staff reviewed the City's NFIP community profile; and

WHEREAS, State Department of Ecology staff prepared a field report and completed an ordinance review based on 44 CFR 60, the Washington Model Ordinance and the checklist used to review local ordinances for NFIP compliance; and

WHEREAS, it was determined that Tumwater Municipal Code (TMC) 18.38 *FP Floodplain Overlay* should be updated to reflect current standards; and

WHEREAS, the Federal Emergency Management Agency has produced a new digital Flood Insurance Study and Flood Insurance Rate Map for the Deschutes River that will become effective on May 8, 2024; and

WHEREAS, the City is required to adopt the new digital Flood Insurance Study and Flood Insurance Rate Map for the Deschutes River and to regulate development within flood prone areas by the effective date using up to date regulations; and

WHEREAS, it is timely to amend the City's existing floodplain regulations to be more consistent with the Model Ordinance for Floodplain Management under the NFIP and the Endangered Species Act prior to May 8, 2024; and

WHEREAS, this Ordinance meets the goals and requirements of the Growth Management Act; and

WHEREAS, the proposed amendments to the City's existing floodplain regulations are consistent with the City's Comprehensive Plan; and

WHEREAS, the Attorney General *Advisory Memorandum and Recommended Process for Evaluating Proposed Regulatory or Administrative Actions to Avoid Unconstitutional Takings of Private Property* (September 2018) was reviewed and utilized by the City in objectively evaluating the proposed amendments; and

WHEREAS, this Ordinance was sent to the Washington State Department of Commerce on December 14, 2023 at least sixty days before the proposed code amendments were adopted, in accordance with RCW 36.70A.106; and

WHEREAS, on December 14, 2023, the Washington State Department of Commerce notified the City of Tumwater that the requirements for State Agency notification for the proposed amendments had been met, as required by RCW 36.70A.106; and

WHEREAS, an Environmental Checklist for a non-project action was prepared under the State Environmental Policy Act (Chapter 43.21C RCW),

pursuant to Chapter 197-11 WAC on December 13, 2023, and a Determination of Non-Significance (DNS) was issued on December 29, 2023; and

WHEREAS, the Planning Commission had a briefing on the code amendments on January 9, 2024, and a work session on the code amendments on January 23, 2024; and

WHEREAS, the Planning Commission held a public hearing on the code amendments on February 13, 2024; and

WHEREAS, following the public hearing and deliberations, the Planning Commission recommended approval of the code amendments by the City Council; and

WHEREAS, the City Council discussed the Planning Commission's recommendation on the code amendments at a work session on March 12, 2024; and

WHEREAS, the City Council considered the proposed code amendments on March 19, 2024; and

WHEREAS, the City Council finds that the provisions of this Ordinance are in the best interest of and protect the health, safety, and welfare of the residents of the City.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF TUMWATER, STATE OF WASHINGTON, DOES ORDAIN AS FOLLOWS:

Section 1. Section 18.38.070, Definitions, of the Tumwater Municipal Code is hereby amended to read as follows:

18.38.070 Definitions.

Unless specifically defined below, terms or phrases used in this chapter shall be interpreted so as to give them the meaning they have in common usage and to give this chapter 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" means any action that will change the location of the channel occupied by water within the banks of any portion of a riverine waterbody.

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

"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 "one-hundred-year flood"). The area subject to the base flood is the special flood hazard area (SFHA) designated on flood insurance rate maps (FIRMs) as zones "A" or "V" including AE, AO, AH, A1-99 and VE.

"Base flood elevation (BFE)" means the elevation of the base flood above the datum of the effective FIRM.

"Basement" means any area of the structure having its floor sub-grade (below ground level) on all sides.

"Channel migration zone" 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.

"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 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 (SFHA), 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, or storage of equipment or materials.

"Dry floodproofing" 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)~~ used to provide elevation information necessary to ensure compliance with provisions of this chapter and determine the proper flood insurance premium rate.

"FEMA" means the Federal Emergency Management Agency, the agency responsible for administering the National Flood Insurance Program (NFIP).

"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 Tumwater pursuant to the Washington State Growth Management Act and implementing regulations.

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

A. The overflow of inland or tidal waters; and/or

B. The unusual and rapid accumulation of runoff of surface waters from any source.

C. 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 paragraph (A) of this definition.

"Flood elevation study (FES)" 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 insurance study (FIS).

"Flood insurance rate map (FIRM)" means the official map on which the Federal Emergency Management Agency (FEMA) has delineated both the special flood hazard areas and the risk premium zones applicable to the city of Tumwater.

"Flood insurance study (FIS)" means the official report provided by the Federal Emergency Management Agency that includes flood profiles, the flood insurance rate map (FIRM), and the water surface elevation of the base flood.

"Flood protection elevation (FPE)" means the elevation above the datum of the effective FIRM to which new and substantially improved structures must be protected from flood damage.

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

"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. Flood proofed structures are those that have the structural integrity and design to be impervious to floodwater below the base flood elevation (BFE).

"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 foot at any point. Also referred to as "regulatory floodway".

"Functionally dependent use" means a use that must be located or carried out close to water, e.g., docking or port facilities necessary for the unloading of cargo or passengers or shipbuilding and ship repair, and does not include long term storage or related manufacturing facilities.

"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" means a structure that:

A. Is listed on the National Register of Historic Places, the Washington Heritage Register, or the Washington Heritage Barn Register; or

B. 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 TMC 18.38.260(F) (i.e., provided there are adequate openings to allow floodwaters 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.

"Mean sea level" means for the purposes of the National Flood Insurance Program (NFIP), the vertical datum to which base flood elevations (BFEs) shown on a community's flood insurance rate map (FIRM) are referenced.

"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 structures for which the "start of construction" commenced on or after the effective date of this chapter 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.

"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:

A. Built on a single chassis; and

B. Four hundred square feet or less when measured at the largest horizontal projection; and

C. Designed to be self-propelled or permanently towable by an automobile or light duty truck; and

D. Designed primarily for use as temporary living quarters for recreational, camping, travel, or seasonal use, not as a permanent dwelling.

"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 TMC 18.38.110(C).

"Special flood hazard area (SFHA)" means the land subject to inundation by the base flood. Special flood hazard areas are designated on flood insurance rate maps (FIRMs) with the letters "A" or "V" including AE, AO, AH, A1-99 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 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 fifty 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 ten-year period for which the cost of repairs at the time of each such flood event, on the average, equals or exceeds twenty-five 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 fifty 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 identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions, 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 chapter which permits construction in a manner that would otherwise be prohibited by this chapter.

"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:

A. Type "S" = shoreline: streams that are designated "shorelines of the state," including marine shorelines.

B. Type “F” = fish: streams that are known to be used by fish or meet the physical criteria to be potentially used by fish.

C. Type “Np” = nonfish perennial streams.

D. 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 (SFHA) is comprised of the A and V zones.

“A” means SFHA where no base flood elevation (BFE) is provided.

“A#” means numbered A zones (e.g., A7 or A14), SFHA with a ~~base flood~~ elevation BFE.

“AE” means SFHA with a ~~base flood~~ elevation BFE.

“AO” means 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.

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

“B” means the area between the SFHA and the five-hundred-year flood of the primary source of flooding. It may also be an area with a local, shallow flooding problem or an area protected by a levee.

“C” means an area of minimal flood hazard, as above the five-hundred-year flood level of the primary source of flooding. B and C zones may have flooding that does not meet the criteria to be mapped as a special flood hazard area, especially ponding and local drainage problems.

“D” means area of undetermined but possible flood hazard.

“V” means 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, V#, and VE, and they correspond to the A zone designations.

“X” means the area outside the mapped SFHA.

“Shaded X” means the same as a zone B, above.

(Ord. O2015-007, Amended, 02/02/2016)

Section 2. Section 18.38.090, Special flood hazard area, of the Tumwater Municipal Code is hereby amended to read as follows:

18.38.090 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. It is identified by the Federal Emergency Management Agency in a scientific and engineering report entitled,

"Flood Insurance Study for Thurston County, Washington and Incorporated Areas," dated ~~October 16, 2012~~May 8, 2024 and any revisions thereto, with an accompanying Flood Insurance Rate Map (FIRM) for Thurston County, Washington and Incorporated Areas, dated ~~October 16, 2012~~May 8, 2024, and any revisions thereto, which are hereby adopted by reference and declared to be a part of this chapter. The flood insurance study (FIS) and the FIRM are on file at Tumwater City Hall, 555 Israel Road SW, Tumwater, Washington 98501.

B. Upon receipt of a floodplain development permit application, the floodplain administrator shall compare the elevation of the site to the base flood elevation (BFE). A development project is not subject to the requirements of this chapter if it is located on land that can be shown to be:

1. Outside the protected area; and

2. Higher than the ~~base flood elevation~~ BFE as demonstrated by an elevation certificate.

The floodplain administrator shall inform the applicant that the project will still be subject to the flood insurance purchase requirements unless the owner receives a letter of map amendment from FEMA.

C. The floodplain administrator shall make interpretations where needed, as to the exact location of the boundaries of 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~~ BFE and ground elevations). The applicant may appeal the floodplain administrator's interpretation of the location of the boundary to the hearing examiner.

(Ord. O2016-009, Amended, 07/09/2016; Ord. O2015-007, Amended, 02/02/2016)

Section 3. Section 18.38.100, Flood hazard data, of the Tumwater Municipal Code is hereby amended to read as follows:

18.38.100 Flood hazard data.

A. The base flood elevation (BFE) for the SFHAs of the city of Tumwater shall be as delineated on the one-hundred-year flood profiles in the Flood Insurance Study for Thurston County, Washington and Incorporated Areas.

B. The ~~base flood elevation~~ BFE for each SFHA delineated as a "zone AH" or "zone AO" shall be that elevation (or depth) delineated on the flood insurance rate map (FIRM). 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~~ BFE for all other SFHAs shall be as defined in subsection F of this section and 18.38.120(C).

D. The flood protection elevation (FPE) shall be the base flood elevation plus one foot.

E. The floodway shall be as delineated on the ~~flood insurance rate map~~ FIRM or in accordance with subsection F of this section and TMC 18.38.120(D).

F. Where ~~base flood elevation~~ BFE and floodway data have not been provided in special flood hazard areas in accordance with 18.38.090, the floodplain administrator shall obtain, review, and reasonably utilize any ~~base flood elevation~~ BFE and floodway data available from a federal, state, or other source.

(Ord. O2015-007, Amended, 02/02/2016)

Section 4. Section 18.38.130, Establishment of floodplain development permit, of the Tumwater Municipal Code is hereby amended to read as follows:

18.38.130 ~~Establishment of f~~Floodplain development permit required.
A floodplain development permit ~~shall be obtained~~ is required before construction or development begins within the special flood hazard area (SFHA) established in TMC 18.38.090. The permit shall be for all development as set forth in TMC 18.38.070, Definitions.

(Ord. O2015-007, Amended, 02/02/2016)

Section 5. Section 18.38.140, Floodplain development permit application, of the Tumwater Municipal Code is hereby amended to read as follows:

18.38.140 Floodplain development permit application.
Application for a floodplain development permit shall be made on forms furnished by the floodplain administrator and shall include, but are not limited to:

A. One or more site plans, drawn to scale, showing:

1. The nature, location, dimensions, and elevations of the property in question;

2. Names and location of all lakes, water bodies, waterways and drainage facilities within three hundred feet of the site;

3. The elevations of the ten-, fifty-, one-hundred-, and five-hundred-year floods, where such data are available;

4. The boundaries of the SFHA, floodway, riparian habitat zone, and channel migration area, delineated in accordance with TMC 18.38.080 through 18.38.120;

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

6. Existing and proposed structures, fill, pavement and other impervious surfaces, and sites for storage of materials;

7. All wetlands;

8. 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 Act, Priority Habitat and Species List); and

9. Existing native vegetation and proposed revegetation.

B. If the proposed project involves 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 flood protection elevation (FPE) for the building site and the proposed elevations of the following:

1. The top of bottom floor (including basement, crawlspace, or enclosure floor).

2. The top of the next higher floor.

3. The bottom of the lowest horizontal structural member (in V zones only).

4. The top of the slab of an attached garage.

5. The lowest elevation of machinery or equipment servicing the structure.

6. The lowest adjacent (finished) grade next to structure.

7. The highest adjacent (finished) grade next to structure.

8. 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 floodproofed, the application shall include the FPE for the building site, the elevation in relation to the datum of the effective FIRM to which the structure will be dry floodproofed, and a certification by a registered professional engineer or licensed architect that the dry floodproofing methods meet the floodproofing criteria in TMC 18.38.270.

E. If a project will alter the base flood elevation data (BFE) or boundaries of the SFHA, the project applicant shall provide the floodplain administrator with engineering documentation and analysis regarding the proposed change. If the change to the BFE or boundaries of the SFHA would normally require a Letter of Map Change, the project approval shall be conditioned accordingly.

F~~E~~. The proposed project must be designed and located so that new structural flood protection is not needed.

G~~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.

1. Bank stabilization measures along salmonid-bearing streams, channel migration zones, and along estuarine and marine shorelines must be minimized

to the maximum extent possible. If bank stabilization measures are necessary, bioengineered armoring of streambanks and shorelines must be used.

2. 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.

HG. The application shall include documentation that the applicant will apply for all necessary permits required by federal, state, or local law. The application shall include written acknowledgment that the applicant understands that the final certification of use or certificate of occupancy will be issued only if the applicant provides copies of 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.

IH. 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.

J. The application shall include the elevation in relation to mean sea level, of the lowest floor (including basement) of all structures recorded on a current elevation certificate with section B completed by the floodplain administrator.

K. The application shall include the elevation relation to mean sea level to which any structure has been flood proofed.

L. The application shall include, where development is proposed in a floodway, an engineering analysis indicating no rise of the base flood elevation (BFE).

M. The application shall include any other such information that may be reasonably required by the floodplain administrator in order to review the application.

(Ord. O2015-007, Amended, 02/02/2016)

Section 6. Section 18.38.170, Duties of the floodplain administrator, of the Tumwater Municipal Code is hereby amended to read as follows:

18.38.170 Duties of the floodplain administrator.

Duties of the floodplain administrator shall include, but not be limited to:

A. Review all floodplain development permits to determine that the permit requirements of this chapter 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~~ floodway. If located in the ~~protected area~~ floodway, ensure that the provisions of TMC 18.38.320 through 18.38.400 are met.

D. Ensure that all development activities within the special flood hazard area (SFHA) of the jurisdiction of the city of Tumwater meet the requirements of this chapter.

E. Inspect all development projects before, during and after construction to ensure compliance with all provisions of this chapter, including proper elevation of the structure.

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

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 provided to FEMA as required for the National Flood Insurance Program (NFIP).

H. Notify FEMA of any proposed amendments to this chapter.

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.

J. Interpretations as to exact location of the boundaries of the areas of special flood hazards where needed (e.g., where there appears to be a conflict between a mapped boundary and actual field conditions). The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation. Such appeals shall be granted consistent with the standards of 44 CFR 60.6 of the Rules and Regulations of the NFIP.

(Ord. O2015-007, Amended, 02/02/2016)

Section 7. Section 18.38.180, Records, of the Tumwater Municipal Code is hereby amended to read as follows:

18.38.180 Records.

A. Where base flood elevation data (BFE) have been obtained pursuant to TMC 18.38.100 and 18.38.120, the floodplain administrator shall obtain, record, and maintain the actual "finished construction" elevations (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved structures, for the locations listed in TMC 18.38.140(C), and whether or not the structure contains a basement. 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 floodproofed nonresidential structures, where ~~base flood elevation~~ BFE data has been obtained pursuant to TMC 18.38.100 and 18.38.120, the floodplain administrator shall~~:~~ ~~obtain~~

1. Obtain, record and maintain the elevation (in relation to ~~the datum of the effective FIRM~~ mean sea level) to which the structure was floodproofed.

2. This information shall be recorded on a current FEMA floodproofing certificate ~~(FEMA FORM 81-65)~~ by a professional engineer currently licensed in the state of Washington.

C. Where elevation data is not available, either through the FIS, FIRM, or from another authoritative source (as required by TMC 18.38.100(F)), the floodplain administrator shall review applications for floodplain development to assure that proposed construction will be reasonably safe from flooding based on the use of historical data, high water marks, photographs of past flooding, etc., where available.

Failure to elevate habitable buildings at least two feet above the highest adjacent grade in these zones may result in higher insurance rates.

D. The floodplain administrator shall obtain, record, and maintain the records for public inspection of the following:

1. Certification required by TMC 18.38.360(1).

2. Records of all variance actions, including justification for their issuance.

3. Improvement and damage calculations.

4. All records pertaining to the provisions of this ordinance.

(Ord. O2015-007, Amended, 02/02/2016)

Section 8. Section 18.38.210, Subdivisions, of the Tumwater Municipal Code is hereby amended to read as follows:

18.38.210 Development and ~~S~~ subdivisions.

This section applies to all development and subdivision proposals~~:~~. Subdivision proposals include short subdivisions, short plats, binding site plans, planned developments, and new and expansions to manufactured housing parks.

A. All proposals shall be consistent with the need to minimize flood damage.

B. ~~The~~ A proposed subdivision must have one or more new lots in the special flood hazard area (SFHA) set aside for open space use through deed restriction, easement, subdivision covenant, or donation to a public agency.

1. In the ~~special flood hazard area~~ (SFHA) outside the protected area, zoning must maintain a low density of floodplain development.

2. In the ~~special flood hazard area~~ (SFHA) outside the protected area in which the current zoning is less than five acres must maintain the current zoning.

3. The density of the development in the portion of the development outside the ~~special flood hazard area~~ (SFHA) may be increased to compensate for the amount of land in the ~~special flood hazard area~~ (SFHA) preserved as open space in accordance with TMC Title 18.

C. If a parcel has a buildable site outside the special flood hazard area, it shall not be subdivided to create a new lot, tract, or parcel within a binding site plan that does not have a buildable site outside the special flood hazard area. This provision does not apply to lots set aside from development and preserved as open space.

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.

E. All subdivision proposals shall ensure that ~~all subdivisions have~~ there is at least one access road connected to land outside the ~~special flood hazard area~~ (SFHA) with the surface of the road at or above the FPE wherever possible.

F. All proposals shall have adequate drainage provided to avoid exposure to water damage.

G. ~~The~~ A 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.

H. Where subdivision proposals and other proposed developments contain greater than fifty lots or five acres (whichever is the lesser) base flood elevation data (BFE) shall be included as part of the application.

(Ord. O2015-007, Amended, 02/02/2016)

Section 9. Section 18.38.260, Flood protection standards, of the Tumwater Municipal Code is hereby amended to read as follows:

18.38.260 Flood protection standards.

A. In AE and A1-30 zones or other A zoned areas where the base flood elevation data (BFE) has been determined or can be reasonably obtained, ~~A~~ all new structures and substantial improvements of any structure shall have the lowest floor, including basement, elevated at least one foot above the ~~FPE~~ BFE.

B. The structure shall be aligned parallel with the direction of flood flows where practicable.

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

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

E. ~~The structure~~ All new construction and substantial improvements, including those related to manufactured homes, shall be anchored to prevent flotation,

collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads including the effects of buoyancy.

FD. 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.

GE. 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.

HF. Fully enclosed areas below the lowest floor that are subject to flooding 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 floodwaters. 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:

1. 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.

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

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

IG. In zones V, V1-30 and VE, new structures and substantial improvements shall be elevated on pilings or columns so that:

1. The bottom of the lowest horizontal structural member of the lowest floor (excluding the pilings or columns) is elevated above the FPE.

2. 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 (one-hundred-year mean recurrence interval).

3. The areas below the lowest floor that are subject to flooding shall be free of obstruction.

4. The structure or improvement shall be located landward of the reach of mean high tide.

5. The use of fill for structural support of a structure or addition is prohibited.

6. 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.

J. New construction and substantial improvement of any residential structure in an Unnumbered A zone for which a BFE is not available and cannot be reasonably obtained the lowest floor shall be at least two feet above the highest adjacent grade.

K. A garage attached to a residential structure, constructed with the garage floor slab below the BFE, must be designed to allow for the automatic entry and exit of floodwaters.

(Ord. O2015-007, Amended, 02/02/2016)

Section 10. Section 18.38.270, Nonresidential construction, of the Tumwater Municipal Code is hereby amended to read as follows:

18.38.270 Nonresidential construction.

~~New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall be elevated in accordance with TMC 18.38.260. As an alternative to elevation, a new or substantial improvement to a nonresidential structure and its attendant utility and sanitary facilities may be dry floodproofed in A zones. The project must meet the following:~~

~~A. The structure is not located in zones V, V1-30, or VE; and~~

~~B. Below the FPE the structure is watertight with walls substantially impermeable to the passage of water; and~~

~~C. The structural components are capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and~~

~~D. 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 floodplain administrator as set forth in TMC 18.38.180(B) and 18.38.190(A)(1).~~

New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall meet the requirements of TMC 18.38.270(A) or (B), below.

A. New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall meet all of the following requirements:

1. In AE and A1-30 zones or other A zoned areas where the base flood elevation data (BFE) has been determined or can be reasonably obtained:

New construction and substantial improvement of any commercial, industrial, or other nonresidential structure shall have the lowest floor, including basement, elevated one foot or more above the BFE, or elevated as required by ASCE 24,

whichever is greater. Mechanical equipment and utilities shall be waterproofed or elevated at least one foot above the BFE, or as required by ASCE 24, whichever is greater.

2. If located in an unnumbered A zone for which a BFE is not available and cannot be reasonably obtained, the lowest floor shall be at least two feet above the highest adjacent grade.

3. Fully enclosed areas below the lowest floor that are subject to flooding are prohibited or shall meet the requirements of TMC 18.38.210.

B. If the requirements of TMC 18.38.270(A) are not met, new construction and substantial improvement of any commercial, industrial or other nonresidential structure shall meet all of the following requirements:

1. Be dry flood proofed so that below one foot or more above the base flood level the structure is watertight with walls substantially impermeable to the passage of water or dry flood proofed to the elevation required by ASCE 24, whichever is greater;

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

3. Be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice based on their development and/or review of the structural design, specifications and plans. Such certifications shall be provided to the official as set forth in TMC 18.38.180.

(Ord. O2015-007, Amended, 02/02/2016)

Section 11. Section 18.38.280, Manufactured homes, of the Tumwater Municipal Code is hereby amended to read as follows:

18.38.280 Manufactured homes.

All manufactured homes to be placed or substantially improved on sites shall be:

A. Elevated on a permanent foundation in accordance with TMC 18.38.260; 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, and shall be installed using methods and practices that minimize flood damage. This requirement is in addition to other applicable anchoring requirements for resisting wind forces.

(Ord. O2015-007, Amended, 02/02/2016)

Section 12. A new Section TMC 18.38.285, Detached accessory structures, is hereby added to the Tumwater Municipal Code to read as follows:

18.38.285 Detached accessory structures.

A. Detached accessory structures used solely for parking of vehicles or limited storage may be constructed such that the floor is below the base flood elevation data (BFE), provided the structure is designed and constructed in accordance with the following requirements:

1. In special flood hazard areas other than coastal high hazard areas (Zones A, AE, AH, AO, and A1-30), the structure is not larger than a one-story two-car garage;

2. In coastal high hazard areas (Zones V, VE, V1 30, and VO), the structure is not larger than 100 sq. ft. in area;

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

4. The structure must be adequately anchored to prevent flotation, collapse, and lateral movement;

5. Any machinery or equipment servicing the structure must be elevated or floodproofed to or above the BFE;

6. The structure must comply with floodway encroachment provisions in TMC 18.38.360(1);

7. The structure must be designed to allow for the automatic entry and exit of flood waters in accordance with TMC 18.38.240(F);

8. The structure shall have low damage potential;

9. If the structure is converted to another use, it must be brought into full compliance with the standards governing such use; and

10. The structure shall not be used for human habitation.

Section 13. A new Section TMC 18.38.325, Storage of materials and equipment, is hereby added to the Tumwater Municipal Code to read as follows:

18.38.325 Storage of materials and equipment.

A. The storage or processing of materials that could be injurious to human, animal, or plant life if released due to damage from flooding is prohibited in special flood hazard areas.

B. Storage of other material or equipment may be allowed if not subject to damage by floods and if firmly anchored to prevent flotation, or if readily removable from the area within the time available after flood warning.

Section 14. Section 18.38.360, Floodway standards, of the Tumwater Municipal Code is hereby amended to read as follows:

18.38.360 Floodway standards.

A. In addition to the other requirements of this chapter, a project to develop in the floodway as delineated pursuant to TMC 18.38.100(E) and (F) or 18.38.120(D) shall meet the following criteria:

1. Encroachments, including fill, new construction, substantial improvements, and other development is prohibited unless ~~T~~the applicant ~~shall~~ provides ~~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 during the occurrence of the base flood discharge.

2. Construction or reconstruction of residential structures is prohibited within designated floodways, except for ~~the following~~ repairs, reconstruction, or improvements to a residential structure which do not increase the ground floor area. The following exceptions must still meet all other requirements in the chapter, including subsection (A)(1) of this section:

a. Repairs, reconstruction, or improvements to a residential structure that do not increase the ground floor area, providing the cost of which does not exceed fifty percent of the market value of the structure either:

i. Before the repair, or reconstruction is started; or

ii. 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 that 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, may be excluded from the fifty 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 that do not increase the building's dimensions.

B. In riverine special flood hazard areas where a floodway has not been delineated pursuant to TMC 18.38.100(E) and (F) or 18.38.120(D), 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 developments would not cumulatively result in an increase of flood levels during the occurrence of the base flood discharge by more than one foot.

C. If TMC 18.38.360(A)(1) is satisfied or construction is allowed pursuant to TMC 18.38.360(A)(2), all new construction and substantial improvements in the floodway shall comply with all applicable flood hazard reduction provisions of this chapter.

(Ord. O2015-007, Amended, 02/02/2016)

Section 15. A new Section TMC 18.38.450, Penalties for noncompliance, is hereby added to the Tumwater Municipal Code to read as follows:

18.38.450 Penalties for noncompliance.

A. No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the terms of this ordinance and other applicable regulations. Violations of the provisions of this ordinance by failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with conditions), shall constitute a misdemeanor. Nothing herein contained shall prevent the city of Tumwater from taking such other lawful action as is necessary to prevent or remedy any violation.

B. Enforcement under this section is in addition to and does not preclude or limit any other forms of enforcement available to the city including, but not limited to, enforcement under any provision of TMC Chapter 1.10, nuisance actions, actions for injunctions, or any other civil or equitable actions to abate, discontinue, or correct, acts in violation of this code.

Section 16. Corrections. The City Clerk and codifiers of this ordinance are authorized to make necessary corrections to this ordinance including, but not limited to, the correction of scrivener/clerical errors, references, ordinance numbering, section/subsection numbers and any references thereto.

Section 17. Ratification. Any act consistent with the authority and prior to the effective date of this ordinance is hereby ratified and affirmed.

Section 18. Severability. The provisions of this ordinance are declared separate and severable. The invalidity of any clause, sentence, paragraph, subdivision, section, or portion of this ordinance or the invalidity of the application thereof to any person or circumstance, shall not affect the validity of the remainder of the ordinance, or the validity of its application to other persons or circumstances.

Section 19. Effective Date. This ordinance shall become effective thirty (30) days after passage, approval and publication as provided by law.

ADOPTED this _____day of _____, 2024.

CITY OF TUMWATER

_____
Debbie Sullivan, Mayor

ATTEST:

_____
Melody Valiant, City Clerk

APPROVED AS TO FORM:

_____
Karen Kirkpatrick, City Attorney

Published:_____

Effective Date:_____