



## Floodplain Development Permit Application Information Sheet

### Process:

By the time you receive this document it is assumed you are interested in developing within the floodplain. To facilitate this process, you or your representative should come to the Public Works Shop at 1155 East North Bend Way or call (425) 888-0486 and secure flood zone information and a Base Flood Elevation that will pertain to your site development. Once you have this information, you can then fill out the application and prepare the drawings for submittal to secure a floodplain development permit. Before preparing the needed drawings, please carefully review the items listed below for guidance in meeting the National Floodplain Insurance Program (NFIP) requirements. Once the drawings and application have been submitted to the Community & Economic Development at 126 East 4<sup>th</sup> Street, and the application fee paid, the city will review the documents for conformance and either request additional information or take action on the permit. During construction, certifications may be required of elevations of finished floors, equipment, or other elements of the project as may be conditioned in the permit. The required elevation certification form(s) are required to be provided by you along with your permit application. These will have to be fully and correctly completed by a Washington State registered land surveyor and turned in to the city before proceeding with work or securing occupancy.

### Submittal:

**The application must be accompanied by plans incorporating the following items. Some projects do not include a structure, substantial improvement, and/or do not require some of the following information. Provide the items as applicable.**

1. Provide existing and proposed topographic survey of the site, and the floodplain and/or floodway delineation. Identify the highest adjacent natural grade next to the building prior to construction (in the AO zones) or the Base Flood Elevation (BFE) of the site (in the AE zones) at a scale 1" = 20' minimum. You can obtain the BFE or flood zone in which your site is located by going to the PW Department and requesting the information.  
NOTE: Depending upon the scope of your project, a topographical survey may not be required. For smaller projects, contact the city's Building Official or City Engineer to inquire if this requirement can be waived.
2. Identify which building diagram number from the FEMA Elevation Certificate (EC) you propose to construct.
3. Provide the proposed "top of next higher floor" elevation of the structure as described on the Building Diagram of the Elevation Certificate and provide survey datum used as well (NAVD 88).
4. Provide the appropriate size and location of required foundation and/or flood vents. Provide a cross section of the foundation, the location of flood vents, and the internal/external proposed finished grades. Identify existing and proposed final elevations for both the internal and external ground next to the foundation walls. Identify the elevation of the "top of the bottom floor", basement and garage elevations. (See Building Diagrams on the Elevation Certificate).
5. Identify the type of flood resistant materials to be used to the required "flood protected" elevation of the structure, including garage, if applicable. The "flood protected" elevation is the BFE plus two feet. For non-residential structures, provide the proposed floodproofing elevation.

6. If fill is proposed and compensatory storage is required, calculations must be submitted to verify sufficient compensatory storage is being provided.
7. If a subdivision or other development contains either 50 lots or 5 acres, then the base flood elevation data must be provided by the developer, prior to the issuance of a permit. Additional flood studies may be required.
8. The building plans shall indicate the building's utilities, ventilation, ductwork, machinery and equipment, such as furnaces, water heaters, heat pumps, air conditioners, plumbing, and elevators and their associated equipment, will be properly elevated to or above the "flood protected" elevation or that the components located below the "flood protected" elevation will be protected with FEMA approved flood resistant material such that floodwater is prevented from entering or accumulating within the system components (impermeable and watertight) to the flood protected elevation at a minimum.
9. The water and fuel piping associated with HVAC systems must be properly protected from damage during flooding. PVC piping generally requires special consideration when used in flood prone areas. This type of pipe is more susceptible to impact breakage. In addition, the nature of the material sometimes fractures or shatters when exposed to the heaving and settling that a structure experiences when withstanding floodwaters. If the lines are ruptured, it may result in contamination, leaking, or even fire. **Therefore, the City of North Bend requires copper, crosslinked polyethylene (PEX) and/or galvanized metal piping for use in flood-prone areas below the flood protected elevation.**
10. Fully enclosed areas below the lowest floor that are usable solely for parking of vehicles, building access or storage in an area other than a basement and which are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect, or meet or exceed the following minimum criteria:
  - a. There must be a minimum of two openings on different sides of each enclosed area. If a building has more than one enclosed area, each area must have openings on exterior walls to allow floodwater to directly enter.
  - b. A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area (including attached garage if constructed) subject to flooding shall be provided. **The bottom of all openings shall be no higher than one foot above grade.** Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic unrestricted entry and exit of floodwaters.
11. Any new or substantially improved residential building constructed in an A zone must have its lowest floor at or above the BFE. Many of the buildings have structurally attached garages with floor slabs below the BFE. Because such a below-BFE attached garage is an enclosed area below the BFE, openings are required either in the exterior walls of the garage or in the garage doors themselves to meet the NFIP openings criteria. Openings are required because they prevent flood damage to the garage and subsequently to the structurally attached residence. Garage doors without openings specifically designed to allow for the free flow of floodwaters do not meet the openings requirement. The human intervention necessary to open garage doors when flooding threatens is not an acceptable means of meeting the openings requirements. Gaps that may be present between the door segments and between the garage door and the garage doorjamb do not guarantee the automatic entry and exit of floodwaters.

12. If the proposed development is located in an identified floodway then a “no-rise” certification completed by a registered professional engineer must be submitted prior to the issuance of a permit or the start of construction
13. The City *requires* elevating all existing structures 2 feet above the BFE or refurbishing them with flood resistant materials.
14. A floodplain habitat assessment and mitigation plan shall be required unless the CED director makes and documents a determination of no adverse effect on any species listed under the Federal Endangered Species Act. North Bend and its floodplain are located above Snoqualmie Falls, which is a natural barrier to the migration of applicable species listed under the Endangers Species Act. As a result, Habitat Assessment in North Bend is limited to water quality and/or any project that results in a change to the water regime. Unless a project requires a permit that may be applied for with a JARPA Permit or Amy Corps of Engineers 404 Permit, strict compliance with the City’s stormwater, sensitive areas and shoreline management regulations ensures that there will be no adverse effect on any species listed under the Endangered Species Act. If the project triggers any of the following permits, a full Habitat Assessment will be required. Please check the box if your project triggers in any of the following permits:
  - Requires a JARPA Permit
  - Requires an Army Corps of Engineers 404 Permit

### FLOODPLAIN DEVELOPMENT PERMIT

#### **CONDITIONS OF APPROVAL:**

1. Required elevation of the “top of the next higher floor” shall be: \_\_\_\_\_ **(AE)** feet (1988 NAVD)
2. Required elevation of the “top of the next higher floor” shall be: \_\_\_\_\_ **(AO)** feet (1988 NAVD)  
Highest adjacent natural grade next to the structure prior to grading is \_\_\_\_\_.
3. Required elevation of flood resistant materials, utilities, etc., or flood proofing construction for non-residential structures (the flood protected elevation) shall be: \_\_\_\_\_ feet (1988 NAVD)
4. A “Construction Drawings” elevation verification (top of next higher floor)  shall  N/A be completed and submitted to the city for review and
4. A “Building Under Construction” elevation verification (top of the next higher floor)  shall  N/A be completed and submitted to the City for review and approval *prior to any vertical construction*. This certificate shall be completed by a Washington State Licensed Professional Surveyor.
5. A “Finished Construction” Elevation Certificate shall be submitted for review and approval **prior to** human occupancy or final inspection of the building(s), whichever comes first. This certificate shall be completed by a Washington State Licensed Professional Surveyor. **NO HUMAN OCCUPANCY OR FINAL INSPECTION SHALL BE GRANTED PRIOR TO SUBMITTAL AND APPROVAL OF THIS “FINISHED CONSTRUCTION” CERTIFICATION.**
6. A Floodproofing Certificate, certified by a professional engineer or architect  shall  N/A be submitted at the time of completion, **prior to a final inspection or human occupancy, whichever one comes first.**
7. A Letter of Map Revision issued by the FEMA  shall  N/A be required within six (6) months of completion of the project, as a condition of proposed alteration of a watercourse.
8. Other attached applicable provisions  shall  N/A be required.

**CITY APPROVAL:**

- Because cost of improvements is less than 50% of assessed value of the existing structure(s), this permit does not require the applicant to comply with the floodplain regulations per FEMA regulations and City of North Bend Administration Interpretation #1999-01.
- Minor interior remodel only. Value of construction: \$ \_\_\_\_\_ Value of Structure: \$ \_\_\_\_\_  
No Floodplain Development Permit will be issued until all other permit approvals have been granted.

Plans, reports, and specifications of the proposed work, structures or improvements are part of this permit application and are attached.

**Plans Examiner/Building Official:** X \_\_\_\_\_ Date: \_\_\_\_\_

**City Engineer and/or Designee:** X \_\_\_\_\_ Date: \_\_\_\_\_

The Permittee agrees to save, indemnify and hold harmless the City of North Bend, its boards, officers, employees and agents from all liabilities imposed by law by reason of injury to or death of any person(s) or damage to property, including without limitation, liability for trespass, nuisance or inverse condemnation, which may arise out of the work covered by this permit, and does agree to defend the City, its officers, employees and agents against any claim or action asserting such liability. Accepting this permit or starting any work hereunder shall constitute acceptance and agreement to all of the conditions and requirements of this permit and the ordinance and specifications authorizing issuance of such permit.

**EXPIRATION DATE:** This permit expires with the building permit(s) or in the absence of a building permit, 12 months from date of issuance.

*I have read, understand and agree to abide by the instructions and conditions as stated in this permit. I will ensure that the proper City Official completes all certifications required below. These construction/improvements may require you to purchase flood insurance. Please check with your insurance agent!*

**Signature of Permittee (at time of permit issuance):**

X \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name of Permittee: \_\_\_\_\_

\_\_\_\_\_

**APPLICATION DENIED (REVIEWER):** \_\_\_\_\_ **DATE:** \_\_\_\_\_

**REASONS FOR DENIAL:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

### ELEVATION CERTIFICATIONS

The "Under Construction" elevation verification has been reviewed and approved:

- Structure elevated to or above the flood protected elevation (BFE + 2')
- Structure built with waterproofed materials to the flood protected elevation or more
- Structure built with water resistant materials to the flood protected elevation or more

◆ Plans Examiner/Building Official:

X \_\_\_\_\_ Date: \_\_\_\_\_

◆ City Engineer and/or Designee:

X \_\_\_\_\_ Date: \_\_\_\_\_

The "Finished Construction" elevation certificate has been received on \_\_\_\_\_

It has been reviewed and  returned for more information on \_\_\_\_\_ (date)

Approved on \_\_\_\_\_ (date)

City Engineer and/or Designee

X \_\_\_\_\_ Date: \_\_\_\_\_

### FIELD CERTIFICATION

All floodplain regulations and conditions of approval have been satisfied and inspected by the Building Department including utilities, ductwork, machinery, and equipment, such as furnaces, water heaters, heat pumps, air conditioners, and elevators and their associated equipment, is/are properly elevated to or above the "flood protected" elevation or that the components located below the "flood protected" elevation will be protected such that floodwater is prevented from entering or accumulating within the system components (watertight) to the flood protected elevation at a minimum.

◆ Field Inspector: X \_\_\_\_\_ Date: \_\_\_\_\_