



**Scappoose Planning Department**  
33568 E. Columbia Ave. Scappoose, OR 97056  
Phone: 503-543-7184  
[www.scappoose.gov](http://www.scappoose.gov)

## SENSITIVE LANDS – FLOODING DEVELOPMENT PERMIT APPLICATION

**NOTICE TO APPLICANT:** On original application form, please print legibly using black/dark blue ink or type. Applicants are advised to review the list of submittal requirements and recommendations indicated on each sensitive lands development permit application form and in the applicable code section prior to submitting an application. Applicants are advised to schedule a pre-application meeting with the staff prior to submitting final application. **INCOMPLETE APPLICATIONS WILL NOT BE PROCESSED UNTIL THE PLANNING DEPARTMENT RECEIVES ALL REQUIRED SUBMITTAL MATERIALS. REFER TO SUBMITTAL CHECKLIST PAGE.**

### TRACKING INFORMATION (For Office Use Only)

Application Submittal Includes:

☐ 3 Hard Copies Required (Initial Submittal)

☐ Electronic Submittal

☐ Fee

☐ 7 Hard Copies Required (Final Submittal, once deemed complete by City Planner)

Date application submitted: \_\_\_\_\_

Amount of Fee paid: \_\_\_\_\_

Receipt #: \_\_\_\_\_

Date accepted as complete: \_\_\_\_\_

### SITE LOCATION & DESCRIPTION

Tax Map #(s) \_\_\_\_\_ Tax Lot #(s) \_\_\_\_\_

Frontage Street or Address \_\_\_\_\_

Nearest Cross Street \_\_\_\_\_

Plan Designation \_\_\_\_\_ Zoning \_\_\_\_\_ Site Size \_\_\_\_\_ ☐ acres ☐ sq. ft.

Dimensions \_\_\_\_\_

### SUMMARY OF REQUEST

Proposed Project Name \_\_\_\_\_ Estimated Valuation \$ \_\_\_\_\_

Project Type/Narrative Summary: (Provide a brief summary and specify project type: Single-Family Residential (SFR), Multi-Family Residential (MFR), Accessory Dwelling Unit (ADU), Commercial, Industrial, Mixed Use) \_\_\_\_\_

Is a variance requested? ☐ Yes ☐ No (If yes, identify what type of request) ☐ Minor Variance ☐ Major Variance

**NOTE:** Procedures and applicable criteria for variances may be found in SDC Chapter 17.134

Subject to previous land use approval? ☐ Yes ☐ No File No. \_\_\_\_\_ (attach copy of Notice of Decision)

Landscaping (sq. ft.) \_\_\_\_\_ Paving (sq. ft.) \_\_\_\_\_

# of Parking Spaces \_\_\_\_\_ # of Accessible Parking Spaces \_\_\_\_\_

**NOTE:** *If a residential project is proposed, a Residential Density Calculation Worksheet must be submitted.*

*If Mixed Use, please specify types of uses and approximate percentages of overall site area in each use:*

Commercial \_\_\_\_\_% Industrial \_\_\_\_\_% Residential \_\_\_\_\_%

*If Commercial or Industrial:* List # of non-residential buildings and square footage of each; \_\_\_\_\_

## DETAILED SITE INFORMATION

Are any of the following present on site? *If so, please specify the number of acres and/or percentage of site affected.*

Floodplain \_\_\_\_\_ Wetlands \_\_\_\_\_ Riparian Corridors \_\_\_\_\_

Cultural Resources \_\_\_\_\_ Airport Noise Contours \_\_\_\_\_ Slopes greater than 20% \_\_\_\_\_

Water Provider: ☐ City of Scappoose ☐ Well

Does the site have access to City street(s)? ☐ Yes ☐ No (Please explain): \_\_\_\_\_

Does the site have access to County road(s)? ☐ Yes ☐ No (Please explain): \_\_\_\_\_

Are there existing structures on the site? ☐ Yes ☐ No (If Yes, briefly explain future status of structures.) \_\_\_\_\_

**APPLICANT AND OWNER INFORMATION** (Property owner signature must be a wet-ink signature. If the property is under-going a change of ownership, proof of purchase or purchase contract must be provided if property owner of record is not the signing party.)

Applicant Name \_\_\_\_\_

Mailing Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone # \_\_\_\_\_ Fax # \_\_\_\_\_ Email Address \_\_\_\_\_

Applicant's Signature \_\_\_\_\_ Date: \_\_\_\_\_

Property Owner Name \_\_\_\_\_

Mailing Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone # \_\_\_\_\_ Fax # \_\_\_\_\_ Email Address \_\_\_\_\_

Property Owner Signature \_\_\_\_\_ Date: \_\_\_\_\_

*(If more than one property owner, please attach additional sheet with names and signatures.)*

# APPROVAL CRITERIA AND REVIEW STANDARDS

## (SENSITIVE LANDS - FLOODING)

The approval criteria and requirements for a **Sensitive Lands - Flooding Development Permit** application are listed in Chapter 17.84 of the Scappoose Development Code as follows:

### **17.84.030 General provisions.**

A. This chapter shall apply to all special flood hazard areas (Zones A, AE, AO) within the jurisdiction of the city.

B. The areas of special flood hazard identified by the Federal Insurance Administration in a scientific and engineering report entitled the "Flood Insurance Study for Columbia County, Oregon and Incorporated Areas," effective November 26, 2010, with accompanying Flood Insurance Rate Maps, is adopted by reference and declared to be a part of this chapter. The Flood Insurance Study is on file at the Planning Department.

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

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

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

F. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system in accordance with the state of Oregon Building Codes and Plumbing Code.

G. All new construction, all manufactured homes and substantial improvements shall be anchored to prevent flotation, collapse and lateral movement of the structure.

H. New and replacement sanitary sewerage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharge from the systems into floodwaters.

### **17.84.040 Permitted Uses.**

A. The following uses shall be permitted in special flood hazard areas and shall not require a permit under this chapter:

1. Agricultural uses which do not meet the definition of "development";
2. Removal of poison oak, tansy ragwort, blackberry or other noxious vegetation; and
3. Fences outside the floodway with sufficient openings so as not to impede, retard, or change the direction of the flow of water or catch or collect debris carried by such water. All other fences shall require applicable development permits.

B. The following uses shall be permitted in special flood hazard areas and shall require a development permit under this Chapter in addition to any applicable federal, state or county permits:

1. Residential zones: A single-family detached dwelling or a single-family manufactured home and their accessory uses on lots greater than 20,000 square feet where a structure is to be placed within an area regulated by this Chapter;
2. Commercial and Industrial zones: Permitted uses of the underlying zone and their accessory uses on lots greater than 20,000 square feet where a structure is to be placed within an area regulated by this Chapter;
3. Installation, reconstruction or improvement of underground utilities or roadway improvements including sidewalks, curbs, streetlights and driveway aprons;
4. Minimal ground disturbance(s) but no landform alterations;
5. Substantial improvements to existing structures;

6. Community recreation uses such as bicycle and pedestrian paths or athletic fields or parks;
7. Public and private conservation areas for water, soil, open space, forest and wildlife resources; and
8. Public works projects.

C. A development permit shall be obtained before construction or development begins within any area of special flood hazard or drainageway unless specifically allowed in subsection A of this section. The permit shall apply to all structures including manufactured homes.

#### **17.84.050 Administration.**

A. The planner is appointed to administer and implement this chapter by granting or denying development permit applications in accordance with Chapter 17.162.

B. Duties of the planner shall include, but not be limited to:

1. Review all development permits to determine that the permit requirements of this chapter have been satisfied;
2. Review all 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;
3. Review all development permits to determine if the proposed development is located in the floodway. If located in the floodway, assure that the encroachment provisions of Section 17.84.180 are met;
4. Review all applications for a development permit to determine if the proposed project is located in the floodway fringe. If located in the floodway fringe, assure the special standards requirements are met (Section 17.84.200).

C. When base flood elevation data has not been provided in accordance with Section 17.84.030, the applicant shall supply such data. In this instance, applications for building permits shall be reviewed to assure that proposed construction will be reasonably safe from flooding. The test of reasonableness includes use of historical data, high water marks, photographs of past flooding, etc., where available. Failure to elevate at least two feet above the highest adjacent grade in these zones may result in higher insurance rates.

D. The recipient of a development permit shall provide certification from a registered engineer, or surveyor that buildings are elevated or flood-proofed according to standards set forth in Section 17.84.140. Appropriate certification forms will be provided by the city.

E. A development permit shall not be issued for construction in Zone AE or Zone AO within the Scappoose Creek floodway fringe until the application satisfies the requirements set forth in Section 17.84.200.

F. Applicants receiving a development permit to construct or substantially improve a residential or nonresidential structure in Zones A or AE shall comply with applicable standards in Sections 17.84.140, and 17.84.200.

G. Applicants receiving a development permit to construct or substantially improve a residential or nonresidential structure in Zone AO shall comply with applicable standards in Section 17.84.140, 17.84.190 and 17.84.200.

H. A special land use permit, requiring planning commission approval, shall be obtained prior to storing or stockpiling buoyant or hazardous materials in a special flood hazard area. (See Section 17.84.210.)

#### **17.84.060 Approval process.**

A. The applicant for a development permit shall be the recorded owner of the property or an agent authorized in writing by the owner.

B. The planner and public works director shall review all development permit applications to determine that all necessary permits are obtained from those federal, state, or local governmental agencies from which prior approval is also required.

C. The planner shall apply the standards set forth in this chapter when reviewing an application for a development permit.

**17.84.070 Maintenance of records.**

A. When base flood elevation data is provided through the Flood Insurance Study or required as in Section 17.84.050(C), the applicant shall provide certification of the actual elevation in relation to mean sea level of the lowest floor, including basement, of all new or substantially improved structures, and whether or not the structure contains a basement.

B. For all new or substantially improved floodproofed structures, the applicant shall submit a Floodproofing Certificate by a registered surveyor verifying and recording the actual elevation (in relation to mean sea level) prior to construction and the actual elevation (in relation to mean sea level) to which the structure was floodproofed.

C. The planner shall maintain the floodproofing certifications required in this chapter.

D. The planner shall maintain for public inspection all other records pertaining to the provisions in this chapter.

**17.84.120 Alteration of water courses.**

A. The planner shall notify adjacent communities and the State Department of Land Conservation and Development prior to any alteration or relocation of a water course, and submit evidence of such notification to the Federal Insurance Administration.

B. The planner shall require that maintenance is provided within the altered or relocated portion of said watercourse so that the flood-carrying capacity is not diminished.

**17.84.130 Interpretation of FIRM boundaries.**

The planner shall make interpretation, where needed, as to exact location of the boundaries of the areas of special flood hazard (for example, where there appears to be 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 Section 60.6 of the rules and regulations of the National Flood Insurance Program.

**17.84.140 Standards.**

In Zone A, Zone AE, and Zone AO, the following standards are required:

A. Anchoring.

1. All new construction and substantial improvements shall be anchored to prevent flotation, collapse and lateral movement of the structure.

2. All manufactured homes shall likewise be anchored to prevent flotation, collapse and lateral movement, and shall be installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors (reference FEMA's "Manufactured Home Installation in Flood Hazard Areas" guidebook for additional techniques).

B. Construction Materials and Methods.

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

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

3. Electrical, heating, ventilation, plumbing and air conditioning equipment and other

service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during condition of flooding.

C. Utilities.

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

2. New and replacement sanitary sewerage systems shall be designed to eliminate infiltration of floodwaters into the systems and discharge from the systems into floodwaters.

3. Onsite waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding, consistent with Oregon Department of Environmental Quality standards.

D. Subdivision Proposals.

1. All subdivision proposals shall be consistent with the need to minimize flood damage.
2. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize or eliminate flood damage.

3. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage.

4. Where base flood elevation data has not been provided or is not available from another authoritative source, the applicant shall provide such information.

E. New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated to one foot or more above base flood elevation. Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement shall either be certified by a registered professional engineer or shall meet or exceed the following minimum criteria:

1. A minimum of two openings with a 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; and

4. Screening, fencing or otherwise obstructing open areas between pillars on pile or pillar foundations shall be prohibited.

F. New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall either have the lowest floor, including basement, elevated to the level one foot or more above the base flood elevation or, together with attendant utility and sanitary facilities, shall:

1. Be floodproofed one foot or more above the base flood elevation. The structure shall be watertight below the base flood elevation with walls substantially impermeable to the passage of water;

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

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 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 official as set forth in Section 17.84.070(C).

4. Nonresidential structures that are elevated, not floodproofed, shall meet the same standards for space below the lowest floor as described in subsection E of this section.

5. Applicants floodproofing nonresidential buildings shall be notified that flood insurance premiums will be based on rates that are one foot below the floodproofed level (e.g., a

building floodproofed to one foot above the base flood elevation will be rated as if floodproofed to the base flood level).

G. Manufactured Homes. All manufactured homes to be placed or substantially improved in Areas of special flood hazard shall be placed on a permanent foundation such that the bottom of the longitudinal chassis frame beam is at or above base flood elevation. The permanent foundation shall be resistive to flood velocities and may include concrete slabs, stem walls, and piers that are firmly embedded in the ground. Manufactured homes may be placed on reinforced (not dry-stacked) concrete blocks providing the home is firmly anchored to the ground pursuant to this section. If placed on a stem wall, the structure shall meet the same standards for space below the lowest floor as described in subsection E of this section and the anchoring requirements of Section 17.84.140(A). Electrical crossover connections shall be a minimum of one foot above base flood elevation.

H. Recreational Vehicles. A recreational vehicle placed on site is required to either:

1. Be on the site for fewer than 180 consecutive days;
2. Be fully licensed and ready for highway use, on its wheels or jacking system, attached to the site only by quick disconnect type utilities and security devices, and have no permanently attached additions; or
3. Meet the requirements of subsection G above and the elevation and anchoring requirements for manufactured homes.

I. Accessory Structures. Accessory structures such as sheds, small detached garages, etc., to be located in Zone A, Zone AO, or Zone AE may be exempt from elevation provided the following conditions are met:

1. Accessory structures cannot be more than two hundred square feet in area and cannot be subject to state of Oregon Building Codes;
2. Accessory structures shall not be used for human habitation;
3. Accessory structures shall be designed to have low flood potential;
4. Accessory structures shall be constructed and placed on the building site so as to offer minimum resistance to the flow of floodwaters;
5. Accessory structures shall be firmly anchored to prevent flotation, collapse, and lateral movement which may result in damage to other structures;
6. The portions below the Base Flood Elevation shall be constructed with flood-resistant materials;
7. The structures shall be designed to equalize hydrostatic forces on exterior walls by allowing the automatic entry and exit of flood waters. Designs for complying with this requirement shall be certified by a licensed professional engineer or architect or:
  - a. provide a minimum of two openings with a total net area of not less than one square inch for every square foot of enclosed area subject to flooding;
  - b. the bottom of all openings shall be no higher than one foot above the higher of the exterior or interior grade or floor immediately below the opening;
  - c. openings may be equipped with screens, louvers, valves or other coverings or devices provided they permit the automatic flow of floodwater in both directions without manual intervention;
8. Mechanical, electrical, heating, and utility equipment shall be elevated or floodproofed to or above the Base Flood Elevation;
9. The structures are limited to parking and/or limited storage; and
10. If the structures are located in the floodway, they shall meet the requirements of Section 17.84.180.

**17.84.170 Regulations pertaining to fill.**

A. No filling operations of any kind shall be allowed in the floodway.

B. No fill in floodway fringe areas shall be allowed unless the net effect of excavation and filling operations (onsite) constitutes no positive change in fill volume, as certified by a registered professional engineer.

C. Fill shall be allowed under city fill permit procedures in shaded Zone X and shall not be regulated by this Chapter.

D. No structure shall be built nor any excavation grading, nor filling shall be done within the one hundred-year flood plain without first meeting the requirements of this chapter regulating construction, alteration, repair and moving of buildings.

#### **17.84.180 Floodways.**

A. Floodways are established in special flood hazard areas (SFHA) to transport the waters of a one hundred-year flood out of the community as quickly as possible. Encroachments on the floodway generally produce a rise in base flood elevations and contribute to other hydraulic problems.

Accordingly, the city prohibits encroachments, including fill, new construction, parking, substantial improvements, and other development unless certification by a registered professional civil engineer is provided demonstrating through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.

B. If subsection A above is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of this chapter.

C. Projects for stream habitat restoration may be permitted in the floodway provided:

1. The project qualifies for a Department of the Army, Portland District Regional General Permit for Stream Habitat Restoration (NWP-2007-1023) or Department of Army, Portland District Nationwide Regional Permit NWP 5, 13, 27, or 37; and,

2. A qualified professional (a Registered Professional Engineer or staff of NRCS, the City, or fisheries, natural resources, or water resources agencies) has provided a feasibility analysis and certification that the project was designed to keep any rise in 100-year flood levels as close to zero as practically possible given the goals of the project; and,

3. No structures would be impacted by a potential rise in flood elevation; and,

4. An agreement to monitor the project, correct problems, and ensure that flood carrying capacity remains unchanged is included as part of the local approval.

D. New installations of manufactured dwellings in floodways are prohibited. Manufactured dwellings may only be located in floodways according to one of the following conditions:

1. If the manufactured dwelling already exists in the floodway, the placement was permitted at the time of the original installation, and the continued use is not a threat to life, health, property, or the general welfare of the public; or

2. A new manufactured dwelling is replacing an existing manufactured dwelling whose original placement was permitted at the time of installation and the replacement home will not be a threat to life, health, property, or the general welfare of the public and it meets the following criteria:

a. As required by 44 CFR Chapter 1, Subpart 60.3(d)(3), it must be demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practices that the manufactured dwelling and any accessory buildings, accessory structures, or any property improvements (encroachments) will not result in any increase in flood levels during the occurrence of the base flood discharge;

b. The replacement manufactured dwelling shall have the bottom of the longitudinal chassis frame beam at or above the base flood elevation;

c. The replacement manufactured dwelling is placed and secured to a foundation support system designed by an Oregon professional engineer or architect and approved by the City; and



d. The replacement manufactured dwelling, its foundation supports, and any accessory buildings, accessory structures, or property improvements (encroachments) do not displace water to the degree that it causes a rise in the water level or diverts water in a manner that causes erosion or damage to other properties.

**17.84.190 Special standards for Zone AO.**

A. Zone AO is depicted on Flood Insurance Rate Maps (FIRMS). The zone coincides with areas subject to a one hundred-year flood where depths vary between one and three feet. Zone AO is associated with areas where sheet flow is most evident; i.e., where there is no clear channel. Flood depths appear on the FIRM.

B. Proposed construction in Zone AO shall comply with the General Standards provided in Section 17.84.140, excepting areas specifically covered in this section.

C. New construction and substantial improvements of residential structures in Zone AO shall:

1. Have the lowest floor, including basement, elevated above the highest adjacent grade of the building site a minimum of one foot above the flood depth number specified on the FIRM (at least two feet if no depth number is specified);

2. Have adequate drainage paths around structures on slopes to guide floodwaters around and away from proposed structures.

D. New construction and substantial improvements of nonresidential structures in Zone AO shall:

1. Have the lowest floor, including basement, elevated above the highest adjacent grade of the building site a minimum of one foot above flood depth number specified on the FIRM at least two feet if no depth number is specified); or together with attendant utility and sanitary facilities, be completely floodproofed to or above that level so that any space below is watertight; walls shall be substantially impermeable to the passage of water and structural components shall have the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. If floodproofing method is used, compliance shall be certified by a registered professional engineer. Such certifications shall be provided to the official as set forth in Section 17.84.070(C).

2. Have adequate drainage paths around structures on slopes to guide floodwaters around and away from proposed structures.

**17.84.195 Floodplain area density adjustment.**

In order to provide incentive for siting and re-siting residential dwelling units to avoid special flood hazard areas (SFHA), any partition, subdivision, or site development review application involving land that is subject to this chapter may be paired with a sensitive lands - flooding development permit application in such a manner as to provide for the development of allowed housing types to the net density that would have existed for the base zone without the restrictions provided by 17.84.040,B1-2. Density may be transferred out of SFHA to areas of the parcel not regulated by this chapter provided the following standards are met:

1. Density may be transferred only on contiguous lots under common ownership.

Density may not be transferred to properties under different ownership.

2. A map shall be submitted showing the net buildable area outside of the floodplain to which the density will be transferred.

3. The portion of the parcel within the SFHA shall be dedicated to the City as open space unless the City determines the SFHA should be placed in a conservation easement.

4. The density of the buildable area may not be increased to more than one and one-half (1.5) times the permitted density of the underlying zone. Fractional units are to be rounded down to the next whole number.

5. Development shall only qualify for such a density bonus if any structures existing previous to the adoption of the floodplain ordinance are removed or relocated outside of the SFHA.

**17.84.200 Special regulations for development in the Scappoose Creek floodway fringe (Zones A, AE, and AO).**

A. Proposed development or substantial improvement in the Scappoose Creek floodway fringe shall conform with applicable general and specific standards in Section 17.84.140, and special standards in Zone AO (Sections 17.84.190 and 17.84.200).

**17.84.210 Storage, placement or stockpiling buoyant or hazardous materials in flood hazard areas (Zones A, AE, and AO).**

A. The transportation of buoyant or hazardous materials (Note: see Section 17.84.015, Definitions) from rising floodwaters contributes to the community's flood hazard. Accordingly, a permit shall be obtained from the planning commission prior to storage, placement or stockpiling in a flood hazard zone (A, AE, AO). The application shall be processed according to Chapter 17.162.

1. In determining whether or not a permit will be granted to store, place or stockpile buoyant or hazardous materials in a flood hazard area, the planning commission shall consider the following:

- a. The nature of the materials (e.g., buoyancy, toxicity, flammability);
- b. The danger that materials may be swept onto other properties or structures with resulting injury or damage;
- c. The necessity of locating the materials on the particular site, especially in terms of public benefit;
- d. The ability of emergency vehicles to reach the site in times of flooding;
- e. The availability of alternative locations which are less susceptible to flooding;
- f. The applicant's plan for hazard mitigation;
- g. The requirements of development, including Section 17.84.200.

B. The placement, storage or stockpiling of buoyant or hazardous materials in a floodway is prohibited unless it is associated with a short-term public works project. The planning commission must consider the flood potential and establish a time in which the materials must be removed.

**17.84.220 Variances to flood damage prevention.**

A. A variance is a departure or grant of relief from the strict letter of the flood damage prevention chapter. It is designed for those situations where a proposed action is in keeping with the purpose of the chapter but there are practical difficulties in meeting strict chapter standards. The conditions for granting variances are stringent. When dealing with a flood hazard there is little margin for error.

B. All flood hazard variances are deemed to be a major variance as defined in Chapter 17.134 and shall be so administered and appealed.

C. The planner shall maintain the records of all appeal actions and report any variances to the Federal Emergency Management Agency (FEMA) upon request.

D. Variances may be issued for the reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places or the State Inventory of Historic Places, without regard to the procedures set forth in this section.

E. Variances shall not be issued within a designated floodway.

F. Variances shall only be issued upon:

- 1. A showing of good and sufficient cause;
- 2. A determination that failure to grant the variance would result in exceptional hardship to the applicant that outweighs the risk associated with the variance; and

3. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, or extraordinary public expense; create nuisances; cause fraud or a victimization of the public.

G. Variances as interpreted in the National Flood Insurance Program are based on the General Zoning Law Principle that they pertain to a physical piece of property; they are not personal in nature and do not pertain to the structure, its inhabitants, economic or financial circumstances. They primarily address small lots in densely populated residential neighborhoods. As such, variances from the flood elevations should be quite rare.

H. Variances may be issued for nonresidential buildings in very limited circumstances to allow a lesser degree of floodproofing than watertight or dry floodproofing, where it can be determined that such action will have low damage potential and complies with all other variance criteria.

I. Any applicant to whom a variance is granted shall be given notice that the structure will be permitted to be built with a lowest floor elevation below the base flood elevation and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced floor elevation.

#### **17.84.230 Expiration of approval--Standards for extension of time.**

A. Approval of a development permit shall be void under any of the following circumstances:

1. Substantial construction of the approved plan has not been completed within a one-year period; or
2. Construction on the site is a departure from the approved plan; or
3. If the start of construction, repair, reconstruction, placement or other improvement is not within 180 days of the permit date (see "start of construction" under 17.84.015 Definitions).

B. The planner may, upon written request by the applicant, grant an extension of the start of construction for 180 days, provided that:

1. No changes are made on the original plan as approved by the approval authority;
2. The applicant can show intent of initiating construction of the site within the extension period; and
3. There have been no changes to the applicable comprehensive plan policies, provisions of this title, Flood Insurance Study, or FIRMS on which the approval was based.

C. Notice of the decision shall be provided to the applicant.

#### **17.84.250 Application submission requirements.**

A. All applications shall be made on forms provided by the planner and shall be accompanied by:

1. For applications proposing encroachments on the floodway a registered professional engineer's certification that the proposed project will not cause a rise in base flood elevation during a one hundred-year event as it exists on the current FIRM Flood Insurance Rate Map or create additions that would be detrimental to adjacent or neighboring properties;
2. One reproducible copy of the development plan(s) and necessary data or narrative which explains how the development conforms to the standards. Sheet size for the development plan(s) and required drawings shall not exceed eighteen inches by twenty-four inches and the scale for all development plans shall be an engineering scale;
3. A list of the names and addresses of all who are property owners of record within two hundred feet of the site.

B. The development plan and narrative may be combined on one map and shall include the following information:

1. Existing site conditions including vicinity map showing the location of the property in relation to adjacent properties and including parcel boundaries, dimensions and gross area;

2. The location, dimensions and names of all existing and platted streets and other public ways, railroad tracks and crossings, and easements on adjacent property and on the site and proposed streets or other public ways, easements on the site;

3. The location, dimensions and setback distances of all existing structures, improvements, utility and drainage facilities on adjoining properties and existing structures, water, sewer, improvements, utility and drainage facilities to remain on the site; and proposed structures, water, sewer, improvements, utility and drainage facilities on the site;

4. Contour lines at two-foot intervals for slopes from zero to ten percent and five-foot intervals from slopes over ten percent;

5. The drainage patterns and drainage courses on the site and on adjacent lands;

6. Potential natural hazard areas including:

a. Floodplain areas,

b. Areas having a high seasonal water table within zero to twenty-four inches of the surface for three or more weeks of the year,

c. Unstable ground (areas subject to slumping, earth slides or movement).

Where the site is subject to landslides or other potential hazard, a soils and engineering geologic study based on the proposed project may be required which shows the area can be made suitable for the proposed development,

d. Areas having a severe soil erosion potential, and

e. Areas having severe weak foundation soils;

7. The location of trees having a six-inch caliper at four feet. Only those trees that will be affected by the proposed development need to be sited accurately. Where the site is heavily wooded, an aerial photograph at the same scale as the site analysis may be required;

8. Identification information, including the name and address of the owner, developer, and project designer, and the scale and north arrow;

9. A grading and drainage plan at the same scale as the site conditions and including the following:

a. The location and extent to which grading will take place indicating general contour lines, slope ratios, and slope stabilization proposals,

b. A statement from a registered engineer supported by factual data that all drainage facilities are designed in conformance A.P.W.A standards and as reviewed and approved by the public works director.

# SUBMITTAL REQUIREMENTS CHECK LIST

## (SENSITIVE LANDS - FLOODING DEVELOPMENT PERMIT)

### Pre-Submittal Requirements:

☐ Applicants are required to schedule a pre-application meeting with Planning staff to discuss application prior to submittal of land use application. **Incomplete applications will not be accepted. No loose pages will be accepted, each submittal set must be bound with page numbers.**

### Application Submittal Requirements:

The following is a summary of the application submittal requirements that must be received by the City. File order and details of each submittal item are shown on the following pages. Application materials must follow the specified order and the appropriate electronic file naming standards shown on the following pages to ensure a complete application. **Incomplete applications will not be accepted. No loose pages will be accepted; each submittal-set must be bound and under one cover. Refer to first page for required number of submittal-sets for distribution.**

☐ A signed original certification from a registered professional engineer that the proposed development will not cause a rise in base flood elevation during a 100 year event as it exists on the current version of the FIRM Flood Insurance Rate Map or create additions that would be detrimental to adjacent or neighboring properties.

☐ A legal description of the property.

☐ A list of the names and addresses of all property owners of record within 300 feet of the site.

☐ Provide a detailed written narrative describing how your application is in conformance with all applicable criteria within Chapter 17.84 – Sensitive Lands -- Flooding.

☐ Three reproducible copies of the development plan. Sheet size for the development plan shall not exceed 18 X 24 inches and the scale shall be an engineering scale. All development plans must include the following:

- Existing site conditions including a vicinity map showing the location of the property in relation to adjacent properties and including parcel boundaries, dimensions and gross area or a copy of the appropriate, most current Columbia County Assessor map.
- The location, dimensions and names of all existing and platted streets and other public ways, railroad tracks and crossings, and easements on adjacent property and on the site and proposed streets or other public ways and easements on the site.
- The location, dimensions and setback distances of all existing structures, improvements, utility and drainage facilities for adjoining properties, the location, dimensions and setback distances of all existing structures, improvements, utility and drainage facilities on the site and the proposed structures, water, sewer, improvements, utility and drainage facilities on the site.
- Name and address of the owner, developer and project designer and the scale and a north arrow.
- Location of the floodplain and floodway.
- A drainage plan at the same scale as the development plan that includes a statement from a registered engineer supported by factual data that all drainage facilities are designed in conformance with APWA standards as reviewed and approved by the Public Works Director.
- A grading plan at the same scale as the development plan that indicates the location and extent to which grading will occur indicating general contour lines, slope ratios and slope stabilization proposals.

☐ Development plans that include construction of a structure or siting of a manufactured home must include documentation of compliance with the following requirements:

- Anchored to prevent flotation, collapse or lateral movement, and installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors (reference FEMA's "Manufactured Home Installation in Flood Hazard Areas" guidebook for additional techniques).
- Placed on a permanent foundation such that the lowest floor of manufactured home is one foot above base flood elevation. The permanent foundation is resistive to flood velocities and may include concrete slabs, stem

walls, and piers that are firmly embedded in the ground. Manufactured homes may be placed on reinforced (not dry-stacked) concrete blocks providing the home is firmly anchored to the ground.

- Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or must meet or exceed the following minimum criteria:
  - A minimum of two openings with a net area of not less than two square inches for every square foot of enclosed area 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 or other coverings or devices, provided that they permit the automatic entry and exit of floodwaters;
  - Screening, fencing or otherwise obstructing open areas between pillars on pile or pillar foundations is prohibited.
- Constructed with materials and utility equipment resistant to flood damage.
- Constructed using methods and practices that minimize flood damage.
- Electrical, heating, ventilation, plumbing and air-conditioning equipment and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during condition of flooding.
- Certification by a registered professional engineer of adequate drainage paths around structures on slopes to guide floodwaters around and away from proposed structures.

☐ Development plans that include construction or substantial improvement of any residential structure must include documentation of compliance with the following requirements:

- Lowest habitable floor, including basement, elevated to one foot above base flood elevation.
- Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or must meet or exceed the following minimum criteria:
  - A minimum of two openings with a net area of not less than two square inches for every square foot of enclosed area 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 or other coverings or devices, provided that they permit the automatic entry and exit of floodwaters;
  - Screening, fencing or otherwise obstructing open areas between pillars on pile or pillar foundations is prohibited.
- Anchored to prevent flotation, collapse or lateral movement of the structure.
- Constructed with materials and utility equipment resistant to flood damage.
- Constructed using methods and practices that minimize flood damage.
- Electrical, heating, ventilation, plumbing and air-conditioning equipment and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during condition of flooding.
- Certification by a registered professional engineer of adequate drainage paths around structures on slopes to guide floodwaters around and away from proposed structures.

☐ Development plans that include construction of water systems must demonstrate compliance with the following:

- All new and replacement water supply systems are designed to eliminate infiltration of floodwaters into the system.
- New and replacement water supply systems are designed to eliminate infiltration of floodwaters into the systems and discharge from the systems into floodwaters.

☐ Development plans that include construction of partitioning or subdivision proposals must demonstrate compliance with the following:

- Consistent with the need to minimize flood damage.
- Public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage.
- Adequate drainage provided to reduce exposure to flood damage.

- Contour lines at two foot intervals for slopes from zero to ten percent and five foot intervals for slopes over ten percent.

☐ Development plans that include construction or substantial improvement of any commercial, industrial or other nonresidential structure must demonstrate compliance with the following:

- Either have the lowest floor, including basement, elevated to the level one foot above the base flood elevation or
- Together with attendant utility and sanitary facilities be flood proofed one foot above the base flood elevation. The structure shall be watertight below the base flood elevation with walls substantially impermeable to the passage of water; have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and be certified by a registered professional engineer or 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.
- Nonresidential structures that are elevated, not flood proofed, must be anchored to prevent flotation, collapse or lateral movement of the structure.
- Fully enclosed areas below the lowest floor that 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 must meet or exceed the following minimum criteria:
  - A minimum of two openings with a net area of not less than two square inches for every square foot of enclosed area 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 or other coverings or devices, provided that they permit the automatic entry and exit of floodwaters.
  - Screening, fencing or otherwise obstructing open areas between pillars on pile or pillar foundations is prohibited.
- Anchored to prevent flotation, collapse or lateral movement of the structure.
- Constructed with materials and utility equipment resistant to flood damage.
- Constructed using methods and practices that minimize flood damage.
- Electrical, heating, ventilation, plumbing and air-conditioning equipment and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during condition of flooding.

☐ Applicant's flood proofing nonresidential buildings are hereby notified that flood insurance premiums will be based on rates that are one foot below the flood proofed level (e.g., a building flood proofed to one foot above the base flood elevation will be rated as if flood proofed to the base flood level).

☐ Prior to issuance of a building permit, the applicant must provide certification by a registered engineer or surveyor verifying and recording the actual elevation (in relation to mean sea level) of the site.

☐ Prior to issuance of an occupancy permit, the applicant must provide certification by a registered engineer or surveyor verifying and recording the actual elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved structures, and whether or not the structure contains a basement. For nonresidential structures that are flood proofed rather than elevated, certification by a registered engineer of the flood proofing is required.