

### **KITTITAS COUNTY** DEPARTMENT OF PUBLIC WORKS

#### MEMORANDUM

TO:All StaffFROM:Public Works Plan Review TeamDATE:April 22, 2022SUBJECT:SX-22-00008 Grasst

# Public Works has reviewed the Shoreline Exemption Application. Please see comments below:

Public Works has issued Floodplain Development Permit No. FD-21-00033 for the proposed project (attached). We note:

- This parcel contains land designated by FEMA as floodway. The structure must be located outside of the floodway. The site plan submitted shows the proposed location of the structure as outside of the FEMA-identified floodway.
- The accessory structure may only be used for parking and storage.
- Filling or regrading is not authorized by this permit. Any proposal to fill or regrade must be authorized in by the Kittitas County Floodplain Manager in writing before the activity commences.



## KITTITAS COUNTY FLOOD CONTROL ZONE DISTRICT

#### FLOOD DEVELOPMENT PERMIT

Project:	FD-21-00033 Throm
Date:	March 14, 2022
Description:	Construct a new 24'x33' pole building.
Landowner:	Michael Throm & Jennifer Grasst
Location:	The project is located at address 1001 McDonald Rd, Cle Elum, WA 98922 in a portion of Section 31, T20N, R16E, WM, in Kittitas County, Washington. Map number: 20-16-31040-0012; Parcel number: 555135
Watercourse:	Yakima River
FIRM Panel:	53037C 0692 D
Zone:	AE
<b>Base Flood Elevation</b>	1859.2 FT NAVD 88

Permission is granted under the provisions of RCW 86.16 and KCC 14.08, to complete the proposed project. This permit is subject to the flood hazard reduction provisions in Kittitas County Code 14.08. All construction materials shall be resistant to flood damage, and the project shall be constructed using methods and practices that minimize flood damage.

A Final Inspection with the Flood Control Zone District is required prior to final approval. Please call Kittitas County Public Works at (509) 962-7523 to schedule the final inspection with the Floodplain Manager.

This permit will expire if no work is commenced within 6 months of the date of issue. If a building permit is also required, a valid building permit must be maintained for this permit to remain valid.

This parcel contains land designated by FEMA as floodway. The structure must be located outside of the floodway. The site plan submitted shows the proposed location of the structure as outside of the FEMA-identified floodway.

The accessory structure may not be used for human habitation and may only be used for parking and storage.

Since the accessory structure is smaller 800 square feet, the structure is not required to be elevated and the applicant is not electing to elevate the structure. The structure must have openings to allow floodwater in and out as required by KCC 14.08.250(2) and be constructed using flood resistant materials below the BFE. Flood insurance premium rates may be higher since the structure is not elevated.

Since the structure will not be elevated, Kittitas County Public Works does not require elevation certificates. The Building Department may require the applicant provide site elevation data during plan review, to ensure compliance with KCC 14.08.260.

Filling or regrading is not authorized by this permit. Any proposal to fill or regrade must be authorized in by the Kittitas County Floodplain Manager in writing before the activity commences.

Relevant codes that must be followed are shown below:

#### 14.08.190 Anchoring.

1. 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.

#### 14.08.200 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 conditions of flooding.

#### KCC 14.08.250(2)

- 2. Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or if used solely for parking access or storage shall be designed to automatically equalize hydrostatic and hydrodynamic 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 must meet or exceed the following minimum criteria:
  - a. 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.
  - b. The bottom of all openings shall be no higher than one foot above grade.
  - c. Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.
  - d. 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.

e. Because of hydrodynamic loads, below grade crawlspace construction is not permitted in areas with flood velocities greater than 5 feet per second unless the design is approved by a registered architect or licensed engineer.

#### 14.08.260 Detached accessory buildings (garages and small storage sheds).

- Detached accessory structures shall have the lowest floor elevated above the base flood elevation. When an accessory structure investment is not larger than one-story and 800 square feet, the structure need not be elevated. However, the structure must have openings to allow floodwater in and out as required by KCC <u>14.08.250(2)</u> and be constructed using flood resistant materials below the BFE.
- 2. For floodplain management purposes, accessory structures shall not be used for human habitation and must be limited to parking and storage.
- 3. Accessory structures shall comply with the foundation opening requirements in <u>KCC</u> <u>14.08.250(2)</u>.
- 4. Accessory structures shall be constructed and placed on the building site so as to offer the minimum resistance to the flow of floodwaters.
- 5. Accessory structures must be adequately anchored to prevent flotation, collapse, or lateral movement of the structure which may result in damage to other structures.
- 6. Accessory structures must comply with floodway encroachment provisions in KCC <u>14.08.300</u>.
- 7. Service facilities such as electrical and heating equipment shall be elevated one foot or more above the base flood elevation.
- 8. If the structure is converted to another use, it must be brought into full compliance with the standards governing this ordinance.
- 9. Detached garages, storage structures, and other accessory structures not meeting the above standards must be constructed in accordance with all applicable standards in Section <u>14.08.250</u>.
- 10. Upon completion of the structure, certification that the requirement of this section have been satisfied shall be provided to the Floodplain Administrator for verification.
- 11. Applicants that elect not to elevate the lowest floor of accessory structures under the provisions of this section shall be notified that flood insurance premium rates may be increased as a result of this practice. The applicant shall be aware that flood insurance rates may be increased as a result of this practice, and a note stating such shall be included in the issuance of related permits.

(<u>Ord. 2021-010</u>, 2021; <u>Ord. 2014-015</u>, 2014; <u>O-2012-009</u>, 2012; Ord. 2007-34, 2007; Ord. 2007-22, 2007; Ord. 2001-03; Ord. 93-18 § 5.2.2, 1993)

#### 14.08.300 Floodways.

Located within areas of special flood hazard established in KCC 14.08.040 are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of floodwaters which carry debris and potential projectiles, and erosion potential, the following provisions apply:

- 1. Prohibit encroachments, including fill, new construction, substantial improvements, and other development, unless certification by a registered professional engineer is provided demonstrating through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment 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:
  - a. Repairs, reconstruction, or improvements to a structure which do not increase the ground floor area; and
  - b. Repairs, reconstruction or improvements to a structure, the cost of which does not exceed 50 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 codes which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions or to structures identified as historic places shall not be included in the 50 percent.
- If subsection (1) of this section is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of KCC 14.08.180 through 14.08.310, provisions for flood hazard reduction, except for construction and reconstruction of residential structures that is prohibited by subsection (2) of this section.
- 4. Traditional agricultural practices are exempt.

#### 14.08.305 Wetlands management.

See KCC Title 17A. (Ord. 2001-03; Ord. 93-18 § 5.4, 1993. Formerly 14.08.310).

#### 14.08.315 Standards for filling, grading in floodplain.

Filling, grading or other activity that would reduce the effective storage volume shall be mitigated by creating compensatory storage on-site, or off-site if legal arrangements can be made, to assure that the effective compensatory storage volume will be preserved over time; provided, however, that no increased upstream or downstream flood hazard shall be created by any fill authorized in the floodplain by this chapter or other applicable chapters.

Signed:

Date: 3-14-22

Arden Thomas, Certified Floodplain Manager Kittitas County Flood Control Zone District