

Proposed Updates to KPB Floodplain Management Ordinance Chapter 21.06

| # | Code | Current Language | Proposed Change | Reason for Change |
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| 1 | 21.06.030(B)(1) General Provisions: Basis for Establishing Flood Hazard Areas | By the areas of special flood hazard identified by the Federal Insurance Administration in scientific and engineering report entitled "Flood Insurance Study" (FIS) for the Kenai Peninsula Borough, Alaska dated May 19, 1981, revised on July 5, 1983, December 6, 1999, and September 27, 2013. These areas are depicted on the effective flood FIRM and DFIRM panels. | By the areas of special flood hazard identified by the Federal Insurance Administration in scientific and engineering report entitled "Flood Insurance Study" (FIS) for the Kenai Peninsula Borough, Alaska dated May 19, 1981, revised on July 5, 1983, December 6, 1999, and and October 20, 2016 . These areas are depicted on the effective flood FIRM and DFIRM panels. | This change is needed to adopt the new FIS and the accompanying FEMA maps that reflect the information in the FIS. The new FIS is dated October 20, 2016, which is also the date that the new maps become effective. |
| 2 | 21.06.040(A) Administration; Development Permit Required | Application for a development permit shall be made on forms furnished by the borough and shall include but not be limited to: plans in duplicate drawn to scale showing the nature, location, dimensions, and elevations of the area in question; logging, placement of storage tanks (fuel or other)... | Application for a development permit shall be made on forms furnished by the borough and shall include but not be limited to the following: plans drawn in duplicate to scale showing the nature, location, dimensions, and elevations of the area in question; logging, placement of storage tanks (fuel or other)... | Plans in duplicate are not requested or necessary. We can make copies. |
| 3 | 21.06.040(A)(1) Administration; Development Permit Required | Elevation in relation to mean sea level, of the lowest floor (including basement) of all structures; | Elevation in relation to mean sea level of the lowest floor (including basement) of all structures; | Removing unnecessary comma. |
| 4 | 21.06.040(C) Administration; Duties and Responsibilities of the Planning Department | <i>Duties and Responsibilities of the Planning Department.</i> Duties of the planning department shall include, but not be limited to: | <i>Duties and Responsibilities of the Planning Department.</i> Duties of the planning department shall include, but not be limited to the following: | Grammatical correction. |

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| 5 | 21.06.040(C)(1)(a) and (b) Administration; Duties and Responsibilities of the Planning Department | a. Review all development permit applications to determine that the permit requirements have been met, b. Review all development permit applications to determine that all necessary permits have been obtained from those federal, state, or local government agencies from which prior approval is required, | a. Review all development permit applications to determine that the permit requirements have been met; b. Review all development permit applications to determine that all necessary permits have been obtained from those federal, state, or local government agencies from which prior approval is required; | Replace commas at the end of items with semi-colons. |
| 6 | 21.06.040(C)(2)(a) Administration; Duties and Responsibilities of the Planning Department; Issue Permit | Upon determination that the submitted and recorded information connected with the permit application meets the terms of this chapter, the planning department shall issue a floodplain development permit to the original applicant. | Upon determination that the submitted and recorded information connected with the permit application meets the terms of this chapter, the planning department shall issue a floodplain development permit to the original applicant. <u>If the project involves the construction of a residential structure in a special flood hazard area, the planning department will issue an initial permit based on the building plans in the application. A final permit will be issued after the applicant submits an elevation certificate and floodplain management staff determine that the building is in compliance with all floodplain regulations.</u> | Clarification of permitting process for residential construction in special flood hazard areas. |

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| 7 | 21.06.040(C)(2)(b) Administration; Duties and Responsibilities of the Planning Department; Issue Permit | The floodplain permit shall be valid for a period of 1 year from the issue date, and the start of construction must occur within 180 days of the permit issue date. | The floodplain development permit shall be valid for a period of 1 year from the issue date, and the start of construction must occur within 180 days of the permit issue <u>until the expiration date, and provided that the start of construction must occur within 180 days of the permit issue date.</u> If construction does not begin within this time period, the permit will expire 180 days from the issue date. The planning department floodplain management office shall be notified at least three days prior to start of construction for possible site inspection and notice-to-proceed. | The FEMA minimum requirements do not include the one year limit on permits; they only require that construction needs to begin within 180 days. This one year limit causes problems with coordinating permit expiration dates with other agencies; many projects the River Center permits take more than one season to complete. The result of this one-year limit is extra work on the part of applicants to make sure that they get a time extension on their floodplain permits when their other permits are still valid. Due to this conflict in expiration dates, it is likely that many projects are completed long after the floodplain permits have expired. |
| 8 | 21.06.040(C)(3) Administration; Duties and Responsibilities of the Planning Department | <i>Use of Other Base Flood Data.</i> When base flood elevation data has not been provided in accordance with KPB 21.06.030(B), the Planning Department shall obtain, review, and reasonably utilize any base flood and floodway elevation data available from a federal, state or other source, in order to administer subsections (B)(1), (B)(2) and (C) of KPB 21.06.050 | <i>Use of Other Base Flood Data.</i> When base flood elevation data has not been provided in accordance with KPB 21.06.030(B), the P lanning D epartment shall obtain, review, and reasonably utilize any base flood and floodway elevation data available from a federal, state or other source, in order to administer subsections (B)(1), (B)(2) and (C) of KPB 21.06.050. | Planning department is not capitalized in the rest of the code. Added period at end of sentence. |
| 9 | 21.06.050(A)(4)(a) Standards; General Standards; Subdivision Proposals | Where base flood elevation data has not been provided or is not available from another authoritative source, it shall be generated for subdivision proposals which contain 50 lots or 5 acres, whichever is less. | Where base flood elevation data has not been provided or is not available from another authoritative source, it shall be generated for subdivision proposals which contain 50 lots or 5 acres, whichever is less. <u>The floodplain requirements for subdivision plats, detailed in KPB 20.30.280, apply to all subdivision proposals.</u> | Clarification of what is already required in FEMA minimums. |

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| 10 | 21.06.050(A)(5) Standards; Review of Building Permits | <i>Review of Building Permits.</i> Where elevation data is not available, applications for building permits shall be reviewed to assure that proposed construction will be reasonably safe from flooding. The test of reasonableness is a local judgment and includes use of historical data, high water marks, photographs of past flooding, etc., where available. | <i>Review of Building-Development Permits.</i> Where elevation data is not available, applications for building-development permits shall be reviewed to assure that proposed construction will be reasonably safe from flooding. The test of reasonableness is a local judgment and includes use of historical data, high water marks, photographs of past flooding, etc., where available. | We don't have building permits, only development permits. |
| 11 | 21.06.050(B)(1)(b)(i) Standards; Specific Standards; Residential Construction | A minimum of two openings having a total net area of not less than 1 square inch for every square foot of enclosed area subject to flooding shall be provided. | A minimum of two openings, <u>located on separate walls</u> , having a total net area of not less than 1 square inch for every square foot of enclosed area subject to flooding shall be provided. | The purpose of flood vents is to allow the entry and exit of flood waters in order to equalize the hydrostatic pressure on a foundation. To have both required vents on one wall is much less effective. |
| 12 | 21.06.050(B)(iv) Standards; Specific Standards; Residential Construction | New paragraph. | Enclosed areas below the base flood elevation must be unfinished and usable only for parking, access and/or storage of materials easily moved during a flood event. | This is already required by the code. It is being inserted here as clarification and for reference for the following new paragraph. |

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| 13 | 21.06.050(B)(v) Standards; New paragraph. Specific Standards; Residential Construction | | Before a final floodplain development permit is issued by the planning department for a residential building with an enclosed area below the base flood elevation, the owners shall sign and record a non-conversion agreement stating that the enclosed space shall remain in compliance with KPB 21.06.050(B)(1)(b)(iv). The non-conversion agreement shall be recorded by the Kenai Peninsula Borough so that future buyers of the property are made aware of the hazards of enclosed spaces below the base flood elevation and the requirements to keep their structure in compliance with KPB floodplain regulations. | With such an agreement recorded, the extreme safety hazard of converting enclosed spaces below BFE will be communicated to all subsequent owners of the property. In addition, the agreement would be enforceable long after the development permit has expired, ensuring that property owners do not convert these dangerous areas into habitable spaces. |
| 14 | 21.06.050(B)(4)(c) Standards; Specific Standards; Recreations vehicles | Be fully licensed and ready for highway use, on its wheels or jacking system, and attached to the site only by a quick disconnect type utilities and security devices, | Be fully licensed and ready for highway use, on its wheels or jacking system, and attached to the site only by a quick disconnect type utilities and security devices. | Replaced comma with period. |
| 15 | 21.06.050(B)(7) | <i>Logging or clearing.</i> Within any special flood hazard area of the current effective FIRM or DFIRM, logging or clearing is allowed only for 20 percent of the total area of a parcel, except clearing for the footprint of a building may exceed this 20 percent limit. Multiple cleared areas may exist on a parcel, but the total of all such areas may not exceed 50 percent of the total area of the parcel. Logging or clearing may not increase runoff and/or erosion to such levels that it may significantly damage the floodplain function, riparian habitat or wetlands. | <i>Logging or clearing.</i> Within any special flood hazard area of the current effective FIRM or DFIRM, logging or clearing is allowed only for 20 percent of the total area of a parcel, except clearing for the footprint of a building may exceed this 20 percent limit. Multiple cleared areas may exist on a parcel, but the total of all such areas may not exceed 50 percent of the total area of the parcel. Logging or clearing may not increase runoff and/or erosion to such levels that it may significantly damage the floodplain function, riparian habitat or wetlands. | This regulation is not in the FEMA minimum requirements. The clearing percentages are very difficult to determine and are therefore very difficult to enforce. The remaining language serves the floodplain management priorities. |

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| 16 | 21.06.050(C)(1) Standards; Floodways | All encroachments, including fill, new construction, substantial improvements, and other development are prohibited unless certification by a registered professional engineer or architect is provided demonstrating that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge. Letter-of-Map-Revision-Based-on-Fill for projects within a floodway are not allowed. | All encroachments, including fill, new construction, substantial improvements, and other development are prohibited unless certification by a registered professional engineer or architect is provided demonstrating that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge. Letter-of-Map-Revision-Based-on-Fill for projects within a floodway are not allowed. | This is not in the FEMA minimums and is an incorrect piece of code. It's intention was likely to prevent developers from placing fill in the floodway without a permit and then applying for a Letter of Map Revision based on Fill (LOMR F) afterwards. LOMRs for fill in the floodway ARE permissible, however, provided all permits and calculations are submitted and approved before the project begins. In addition, all LOMR applications must be approved and signed by the community before they are accepted by FEMA. |
| 17 | 21.06.050(D)(1) Standards; Coastal High Hazard Areas | All new construction shall be located landward of the reach of mean high tide. | All new construction shall be located landward of the reach of mean high tide and shall be anchored to prevent unintended lateral movement, floatation or collapse. | Already required by standards - reiterating language here to reinforce the importance of anchoring. |
| 18 | 21.06.050(D)(2) Standards; Coastal High Hazard Areas | When FEMA has identified FIRM or DFIRM Zones VE, V1-V30, and V (coastal high hazard areas) construction shall meet the following requirements in addition to all other provisions in this chapter: | Coastal High Hazard Areas. When-Where FEMA has identified <u>coastal high hazard areas (Zones V, VE, and V1-V30)</u> on the FIRM or DFIRM, Zones VE, V1-V30, and V (coastal high hazard areas) construction shall meet the following requirements in addition to all other provisions in this chapter: | Definition of coastal high hazards more clearly defined. |
| 19 | 21.06.050(D)(2) Standards; Coastal High Hazard Areas | All new construction, manufactured homes, and substantial improvements within Zones V1-30 on the FIRM shall be elevated on adequately anchored pilings or columns such that: | All new construction, manufactured homes, and substantial improvements within Zones V1-30 on the FIRM <u>coastal high hazard areas</u> shall be elevated on adequately anchored pilings or columns such that: | Coastal high hazard areas are defined in the beginning of paragraph D. |

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| 20 | 21.06.050(D)(3) Standards; All new construction and substantial General Standards; Coastal High Hazard Areas | improvements shall have the space below the lowest floor free of obstructions or constructed with breakaway walls. Such enclosed space shall not be used for human habitation. For the purpose of this section, a breakaway wall shall have a design safe loading resistance of not less than 10 and no more than 20 pounds per square foot. Use of breakaway walls which exceed a design safe loading resistance of 20 pounds per square foot (either by design or when so required by local or State codes) may be permitted only if a registered professional engineer or architect certifies that the designs proposed meet the following conditions: | All new construction and substantial improvements shall have the space below the lowest floor free of obstructions or constructed with breakaway walls. Such enclosed space shall not be used for human habitation <u>and must be in compliance with the residential construction standards in KPB 21.06.050(B)(1)(b)(iii) and (iv).</u> For the purpose of this section, a breakaway wall shall have a design safe loading resistance of not less than 10 and no more than 20 pounds per square foot. Use of breakaway walls which exceed a design safe loading resistance of 20 pounds per square foot (either by design or when so required by local or State codes) may be permitted only if a registered professional engineer or architect certifies that the designs proposed meet the following conditions: | Emphasis of what is already required (if KPB 21.06.050(B)(1)(6)(iv) is approved). Keeping enclosed areas below the BFE unfinished and free from obstruction is especially important in the coastal high hazard areas where wave and wind action are strongest. |
| 21 | 21.06.050(D)(4) Standards; The use of fill for structural support of buildings General Standards; Coastal High Hazard Areas | within Zones V1-V30 on the FIRM is prohibited. | The use of fill for structural support of buildings within <u>coastal high hazard areas Zones V1-V30</u> on the FIRM <u>or DFIRM</u> is prohibited. | Clarification of language. |
| 22 | 21.06.050(D)(5) Standards; Manufactured Homes. All manufactured homes General Standards; Coastal High Hazard Areas | to be placed or substantially improved within Zones VE, V1-30, and V shall meet the requirements for new and substantial improvement construction. | <i>Manufactured Homes</i> . All manufactured homes to be placed or substantially improved within <u>coastal high hazard areas Zones VE, V1-30, and</u> V shall meet the requirements for new and substantial improvement construction. | Clarification of language. |

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| 23 | 21.06.060(B)(6) Exceptions Procedure; Conditions for Exceptions | Exceptions, or 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, exceptions from the flood elevations should be quite rare. | Exceptions, or 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, or to economic or financial circumstances. They primarily address small lots in densely populated residential neighborhoods. As such, exceptions from the flood elevations should be quite rare. | Grammatical correction. |
| 24 | 21.06.060(B)(8) Exceptions Procedure; Conditions for Exceptions | Any applicant to whom a exception is granted shall be given written 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 lowest floor elevation. | Any applicant to whom a-an exception is granted shall be given written 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 lowest floor elevation. | Grammatical correction. |
| 25 | 21.06.070 Definitions | "Substantial damage" means damage of any origin sustained by a structure whereby the cost of restoring the structure to its pre-damage condition would equal or exceed 50 percent of the market value of the structure before damage occurred. | "Substantial damage" means damage of any origin sustained by a structure whereby the cost of restoring the structure to its pre-damage condition would equal or exceed 50 percent of the market-tax-assessed value of the structure before damage occurred. | The tax-assessed value can be obtained from borough records. This is much easier than requiring a assessment of market value. |

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| 26 | 21.06.070 Definitions | <p>"Substantial improvement" means any remodeling, repair, reconstruction or improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the improvement or repair is started or, if the property has been damaged and is being restored, before the damage occurred. This term does not, however, include either: (1) 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 or cited by the local code enforcement official, and which are necessary to assure safe living conditions, or</p> | <p>"Substantial improvement" means any remodeling, repair, reconstruction or improvement of a structure, the cost of which equals or exceeds 50 percent of the market-tax-<u>assessed</u> value of the structure before the improvement or repair is started or, if the property has been damaged and is being restored, before the damage occurred. This term does not, however, include either: (1) 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 or cited by the local code enforcement official, and which are <u>the minimum</u> necessary to assure safe living conditions, or</p> | <p>The tax-assessed value can be obtained from borough records. This is much easier than requiring an assessment of market value. Inserting "the minimum" in (1) makes this language match the FEMA requirements.</p> |