## HAINES BOROUGH, ALASKA ORDINANCE No. 22-05-617

### Adopted

# An Ordinance of the Haines Borough amending Haines Borough Code Title 12 Road Construction Standards- Drainage and Culvert Material.

#### BE IT ENACTED BY THE HAINES BOROUGH ASSEMBLY:

- Section 1. <u>Classification</u>. This ordinance is of a general and permanent nature and the adopted amendment shall become a part of the Haines Borough Code.
- Section 2. <u>Severability</u>. If any provision of this ordinance or any application thereof to any person or circumstance is held to be invalid, the remainder of this ordinance and the application to other persons or circumstances shall not be affected thereby.
- Section 3. <u>Effective Date</u>. This ordinance is effective upon adoption.
- Section 4. Repeal and replace Section 12.08.120. Section 12.08.120 of the Haines Borough Code is hereby repealed and replaced in its entirety, as follows:

NOTE: **Bolded**/<u>UNDERLINED</u> ITEMS ARE TO BE ADDED STRIKETHROUGH ITEMS ARE DELETED

#### 12.08.120 Road construction standards - Drainage.

A. *Drainage Plan*. The developer shall submit a written Drainage Plan for all proposed development, roadways, and existing drainage facilities immediately downstream of the tributary being analyzed. Drainage Plan should include drainage improvements or facilities relative to site grading, lot development, roadway improvements, drainage structures, ditches, swales, detention ponds, above or below-grade retention facilities, and other surface water control facilities. The following table of minimum return periods shall be used for the design of critical drainage facilities described in the Drainage Plan:

Type of Drainage Structure	Return Period (Exceedance Probability)
Ponds, Stormwater Retention/Detention Facilities	100-year (1%)
Category II or III Roadway Culverts	50-year (2%)
Category I Roadway Culverts	25-year (4%)

Design return periods other than those listed above may be specified for any type of drainage structure at the written direction of the Director of Public Facilities.

Drainage Plans that require critical drainage structures, as listed in the table above, shall be prepared by a civil engineer licensed to practice in the State of Alaska and submitted to the Director of Public Facilities for review and approval.

#### 1. Driveway Culverts

- a. Shall be a minimum diameter of 18 inches. Larger diameter culverts may be specified by the Director of Public Facilities.
- b. Pipe slope shall match the flowline of the adjacent ditch.
- c. Minimum cover shall be 12 inches.

### Haines Borough Ordinance No. 22-05-617 Page 2 of 2

- 2. Drainage Ditches, Swales.
  - a. Shall be constructed to prevent ponding.
  - b. Shall outlet into an established drainage channel within the corporate limits of the Borough on property within its jurisdiction, unless otherwise approved by the Director of Public Facilities.
  - c. Foreslopes shall have a maximum slope of one and one-half to one.
  - d. Backslopes shall have a maximum slope of one to one, except in cases where bedrock is present.
- 3. Stormwater Conveyance Systems, Feeder Lines, Culverts of Any Type.
  - a. Shall be constructed to prevent excessive siltation of riparian habitats, channel erosion or drainage to public or private property.
  - b. Shall outlet into an established drainage channel within the corporate limits of the Borough on property within its jurisdiction, unless otherwise approved by the Director of Public Facilities.
  - c. Shall extend two feet beyond the outer edge of road/driveway.
  - d. All plastic pipe, coupling bands and fittings shall meet AASHTO M294 Type S or Type D for corrugated polyethylene pipe (CPP) or non-corrugated polyethylene pipe (PE), ASTM D2680 for polyvinyl chloride (PVC) or acrylonitrile-butadienestyrene (ABS) pipe, and AASHTO M230 Type S or Type D for polypropylene (PP) pipe. Alternative pipe materials must be approved by the Director of Public Facilities.

ADOPTED BY A DULY CONSTITUTED QUORUM OF THE HAINES BOROUGH ASSEMBLY THIS 14th DAY OF JUNE, 2022.

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NAMES BOR Douglas Olerud, Mayor

Alekka Fullerton, CMC, Borough Clerk

SEAL

OCTOBER

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Date Introduced:

5/10/22

Date of First Public Hearing:

5/24/22

Date of Second Public Hearing: 6/14/22 - Adopted