Filling of Roadside Ditches

This Assistance Bulletin only applies to property within unincorporated Snohomish County and does not apply to property within incorporated city limits.

Q: I’d like to fill in the ditch along the frontage of my property within the County right-of-way. Am I allowed to do that?
A: That depends on several factors, including the slope of the existing ditch. According to the 2016 Engineering Development & Design Standards (EDDS), open channel conveyance systems (ditches) with slopes of 8 percent or less must be open and vegetation-lined in rural areas. If you want to fill in such a ditch, you must apply for a special deviation from the EDDS (deviations process is explained below).

The County Engineer may require use of a standard rock-lined ditch or a closed (pipe) drainage system under a paved shoulder with asphalt thickened edge or turnpike shoulder under certain circumstances. See Standard Drawing 5-010 in Chapter 5 of the online EDDS at http://www.snohomishcountywa.gov/492/Design-Standards-EDDS.

If the ditch gradient exceeds 15-percent, the ditch must be filled unless an alternative is designed by a professional civil engineer and approved by the County Engineer, per EDDS, Chapter 5-04.

Q: I’d like to extend the existing culvert under my driveway to widen my driveway. Am I allowed to do that?
A: Residential access can be a maximum of 30’ in width. A right of way use permit is required in order to extend the existing culvert to widen the driveway. An application fee is $92.70 due at submittal. A permit fee $267.80 is due at permit issuance. Please contact the Right of Way division at 425 388 3385 or email Shawn Toevs at s.toevs@snoco.org or Kris Mumma at kristine.mumma@snoco.org.

Q: Why do I need a permit to fill in a ditch in the right-of-way?
A: All grading within the County right-of-way requires a right-of-way permit. When an application is received, an site inspection will determine conditions for the work allowed, as well as advising the required materials to be used. Cost of permit and materials is the responsibility of the applicant. Snohomish County does not perform this service.

Q: Why can’t I just fill the ditch and replace it with a pipe?
A: There are two reasons the County needs to review proposals to convert open ditches to piped drainage: to protect potential fish habitat and other critical areas and to ensure proper design and installation associated with the proposed pipe. Vegetation in ditches improves water quality and protects habitat for threatened or endangered species such as bull trout and Chinook salmon. Many road-side ditches in the County were once natural streams that have been channelized or they connect to natural streams. As such, many ditches contain fish. Culvert pipe makes poor habitat and can impede fish passage preventing them from access to up or down stream habitat areas.

This bulletin is intended only as an information guide. The information may not be complete and is subject to change. For complete legal information, refer to Snohomish County Code.
Any proposed pipe must be of adequate size to conduct stormwater flow volumes, meet materials standards for connections to adjacent pipes and ensure adequate catch basin design when necessary. This may require engineering review. Without adequate design considerations, pipes could fail causing washouts, flooding and property damage.

Q: Under what circumstances am I allowed to fill my ditch?
A: If it can be demonstrated that the filling of your ditch will not impact downstream critical areas such as wetlands or streams. This can be done by showing there is water quality treatment such as a detention and biofiltration pond between your ditch and the critical area. Also, if the ditch gradient is greater than 15-percent slope, filling would be allowed.

Q: How much does all this cost?
A: Right of way permit type and application fee will be determined during the application process. A nonrefundable application fee will be $123.60 or $154.80 based on type of work and permit required. After initial site inspection, the permit fee will vary between $154.80 or $442.90 plus $1.34 per lineal foot of installation based on type of work required. Initial site review takes place within 5-7 business days of receiving/processing the initial application.

Q: Whom should I contact to submit a deviation request if work is denied?
A: The applicant will be notified after site inspection if the work has been approved, what the next permit issuance steps are and fees involved. If the proposal is denied and the applicant wishes to request a deviation for reconsideration to all the installation, forms will be provided at that time. Submittal of the deviation request and a nonrefundable fee of $1,390.50 will be coordinated by Planning and Development Services for review by Public Works.

Q: How long does it take?
A: About three weeks.

Q: If my deviation request is denied, can I seek an appeal?
A: Yes, by submitting a letter of appeal to the Chief Engineering Officer of PDS, along with additional justification demonstrating how you have met the criteria in this bulletin.

Q: How long does the appeal process take?
A: About three weeks.

Q: Does it make any difference if there are wetlands on my property?
A: Perhaps. If there are streams, wetlands or other environmentally sensitive areas in the immediate vicinity, it may be necessary to provide mitigation for impacting a wetland or stream. This will be determined after initial review and will be referred to a biologist.

Q: What’s the best way to fill in the ditch?
A: The ditch must be filled in accordance with the EDDS (see illustration, or go to the EDDS website listed above). Typically, this means 6 inches of bedding below the pipe, 12 inches of bedding around the pipe and 12 inches of bedding covering the pipe. A shallow, grass-lined swale should lie on top of the installation to prevent stormwater from collecting in the roadway.

Q: What size and type of materials should I use?
A: You should use pipe of like materials to those of adjoining properties. Minimum pipe diameter is 12 inches, but may need to be larger for ditches that convey larger flows. (See illustration.) Upon receipt of the application and site plan, specific materials and requirements will be determined at an initial site visit.
Q: Do I need to connect to existing culverts in the neighborhood?
A: Yes. Connections should be of like materials to those of adjoining properties. Pipe ends must be beveled in accordance with EDDS 5-050. (See illustration.)

Q: What if the adjoining properties have dissimilar materials?
A: A catch basin is required to join pipes of dissimilar materials. The catch basin must be installed at the downstream end of your property to collect swale water. (See illustration or see Standard Illustration 5-060 on the EDDS website.)

Q: What if there are no other culverts or ditches to connect to?
A: Couplings without catch basins can be used for like materials. For information on how pipe ends should be beveled, see EDDS Standard Drawings 5-040 and 5-050.
Q: Whom should I call for more information?
A: Contact the PDS Right of Way division at (425) 388-3385 or email Shawn Toevs, s.toeys@snoco.org or Kris Mumma at kristine.mumma@snoco.org.

Glossary of Terms

Catch basin—A reservoir for collecting surface drainage or run-off.

culvert—A drain or conduit, not incorporated in a closed system, that carries drainage water under a driveway, roadway, railroad, pedestrian walk or public way.

mitigation—Measures taken to reduce adverse impacts on the environment.

right-of-way—A strip of land platted, dedicated, condemned, established by prescription or otherwise legally established for the use of pedestrians, vehicles or utilities.

swale—A shallow, vegetation-lined ditch.

wetlands—An area that is saturated by surface or ground water with vegetation adapted for life under those soil conditions, as swamps, bogs, fens, marshes, and estuaries.