- WAC 468-34-250 Pipelines—Installation. Installation or replacement of pipelines along or crossing highways shall ordinarily be controlled by end-product specifications. However, to insure safety of traffic and preservation of the earth structure supporting the pavement, any required construction shall be in accordance with the following controls:
- (1) Trenched construction and backfill. The essential features for trench and backfill construction are:
- (a) Restoration of the structural integrity of entrenched roadbed.
- (b) Security of the pipe against deformation likely to cause leakage.
- (c) Assurance against the trench becoming a drainage channel or against drainage being blocked by the backfill.
  - (2) Trenched construction bedding and backfill.
- (a) Trenches shall be cut to have vertical faces, where soil and depth conditions permit, with a maximum width of outside diameter of pipe plus two feet. Shoring shall comply with the department of labor and industries safety code for construction and/or as directed by the department.
- (b) Bedding shall be provided to a depth of six inches or half the diameter of the pipe, whichever is least. Bedding should consist of granular material free of lumps, clods, stones, and frozen material. Bedding shall be graded to a firm but yielding surface without abrupt change in bearing value. Unstable soils and rock ledges should be subexcavated from the bedding zone and replaced with suitable material or as directed by the department. The bottom of the trench should be prepared to provide the pipe with uniform bedding throughout the length of the installation.
  - (c) Backfill shall be placed in two stages:
  - (i) Sidefill to the level of top of pipe.
- (ii) Overfill to former grade surface. Sidefill and overfill shall consist of granular material laid in six-inch layers, each consolidated by mechanical tamping and controlled addition of moisture, to a density of ninety-five percent in accordance with the current Standard Specifications for Road, Bridge, and Municipal Construction. Consolidation by saturation or ponding is not permitted. Backfilling and methods of compaction should be adapted to achieve prompt restoration of traffic. Additional cutback of base and surfacing and transitioning of trench shoulders to minimize later development of sag in the grade of the pavement over the trench shall be as directed by the department.
- (3) Untrenched construction shall be required on all pipeline crossings of limited access highways and:
- (a) The width of untrenched construction shall extend a minimum of six feet outside the roadway prism.
- (b) Pipelines installed under a highway without disturbing the surface shall be made using a technique approved by the department.
- (c) The size of the opening shall not exceed five percent over-size in diameter. Backfill is required for pipes over twelve inches in diameter.
- (d) Overbreaks, unused holes, or abandoned casings shall be backfilled as directed by the department.

[Statutory Authority: Chapter 47.44 RCW. WSR 89-05-022 (Order 119), § 468-34-250, filed 2/10/89. Statutory Authority: 1977 ex.s. c 151. WSR

79-01-033 (DOT Order 10 and Comm. Order 1, Resolution No. 13), § 468-34-250, filed 12/20/78. Formerly WAC 252-04-215.]