

City of Cleveland
Department of Public Works
UTILITY/STREET CUT GUIDELINES

PURPOSE: The purpose of these guidelines is to establish the proper methods for installing utility lines across roadways in a manner which preserves the integrity of all street/roadway base structures. The primary objective of this policy is to prevent the installation of improperly installed utility street cuts which ultimately settle and sink requiring repeated pavement repairs. This policy also applies to sidewalk repairs.

1.0 BORING ACROSS ROADWAYS

- 1.1 Boring under and across roadways shall be the preferred method for installing utility lines across City owned or maintained streets.
- 1.2 Roadway bores of two-inches and less in diameter shall be installed at a minimum depth of twenty-four (24) inches below the pavement surface.
- 1.3 Roadway bores of greater than two-inches in diameter shall be installed at a minimum depth of thirty-six (36) inches below the pavement surface.
- 1.4 The utility shall submit a list of all proposed roadway boring locations to the Director of Public Works for approval at least three (3) days prior to installation. In emergency or service calls, the utility must notify the Public Works Department as soon as possible.
- 1.5 Roadway borings shall not be performed without prior written approval of the Director of Public Works, except in emergencies or service work as outlined in Subsection 1.4 above.

2.0 EXCAVATION ACROSS ROADWAYS

- 2.1 Excavations (utility cuts) across City owned or maintained roadways, or state and federal highways within the corporate limits, shall be avoided unless roadway subsurface conditions and/or the potential damage to adjoining utility lines located under the roadway prevent safe boring.
- 2.2 Utility cuts shall not be performed without an approved permit from the Department of Public Works. Permits for each utility cut are required, although those in close proximity may be combined on the application form.
- 2.3 All utility cuts shall be excavated to a minimum depth of eighteen (18) inches.

- 2.3.1 All utility cuts shall have the edges cut with an asphalt or concrete saw, with any section of raised pavement removed.
- 2.4 Unless otherwise approved by the Director of Public Works, all utility cuts shall be backfilled as prescribed herein using approved FLOWABLE FILL (flowable mortar) installed in the trench in a manner which results in the finished surface of the material being two (2) inches from the pavement surface at the edge of the roadway and approximately four (4) inches from the pavement surface at the center of the roadway.
 - 2.4.1 Care should be used to cover the utility pipe or conduit with twelve (12) inches of crushed stone or #57 washed stone prior to installing the flowable fill to prevent the conduit from floating to the surface. Natural gas companies can substitute twelve (12) inches of a substitute for crushed stone material approved by the Public Works Director. This is due to cathodic protection needs of natural gas lines. However, the substitute material must render at least the same level of compaction as the crushed stone or #57 washed stone.
 - 2.4.2 A minimum of eighteen (18) inches depth of flowable fill shall be used in each utility cut repair unless the existing piping is so shallow that the Public Works Director has no choice but to authorize a lower minimum depth.
 - 2.4.3 The City recognizes that due to the need to encourage gravity-flow sewers, that these lines may be buried up to depths of twenty (20) feet. This presents a unique backfilling problem due to the cost, and the additional weight on the piping itself if flowable fill were required for the full depth. Therefore, on any sewer line in a depth of four (4) feet or greater, Cleveland Utilities can use #57 washed stone as a substitute backfill material up to a depth of four (4) feet below street level. The final four (4) feet of depth must be backfilled using flowable fill as specified herein. If any deep depth sewer line cut (those four feet or deeper) shall sink or settle for any reason, then Cleveland Utilities will be responsible for the cost of any further street repairs.
 - 2.4.4 In unusual situations, ie., unstable soil conditions, the Public Works Director can require, or allow, concrete bridging as a substitute for flowable fill. In such cases, the ability to access all existing utility lines in the immediate area must be considered.
 - 2.4.5 Steel plating of one (1) inch thickness shall be placed over the utility cut for the period of time necessary for the flowable fill to cure (approximately 48 hrs.) and until the street pavement has been repaired by the City. The plating shall be of such size which assures that each edge extends at least twelve (12) inches from the edge of the cut pavement. The permittee is required to maintain the plating in the proper position at all times until removed by the City to apply the asphalt repair.

- 2.4.6 The Public Works Director shall make arrangements with all franchised utilities to return steel plating to one or more designated areas. The Public Works Director may lend some of the City's steel plating to private contractors if necessary, but shall require a deposit equal to the replacement cost of all such plating loaned.
- 2.5 Roadway (utility) cuts shall not be performed without prior notification to and written approval by the Director of Public Works, except in emergency situations.
- 2.6 Pavement repairs to the utility cut shall be performed by the City with all cost being charged to the permittee.
- 2.7 Sidewalk cuts will be repaired by using Class A concrete at 3000 pounds per square inch (PSI) strengths. All Cuts and repairs must have the edges sawed with a concrete saw, and be formed in a neat manner so as to match all existing lines and grades as established by the Public Works Director or his designee.