

Gatech How to Prevent Trenching Accidents



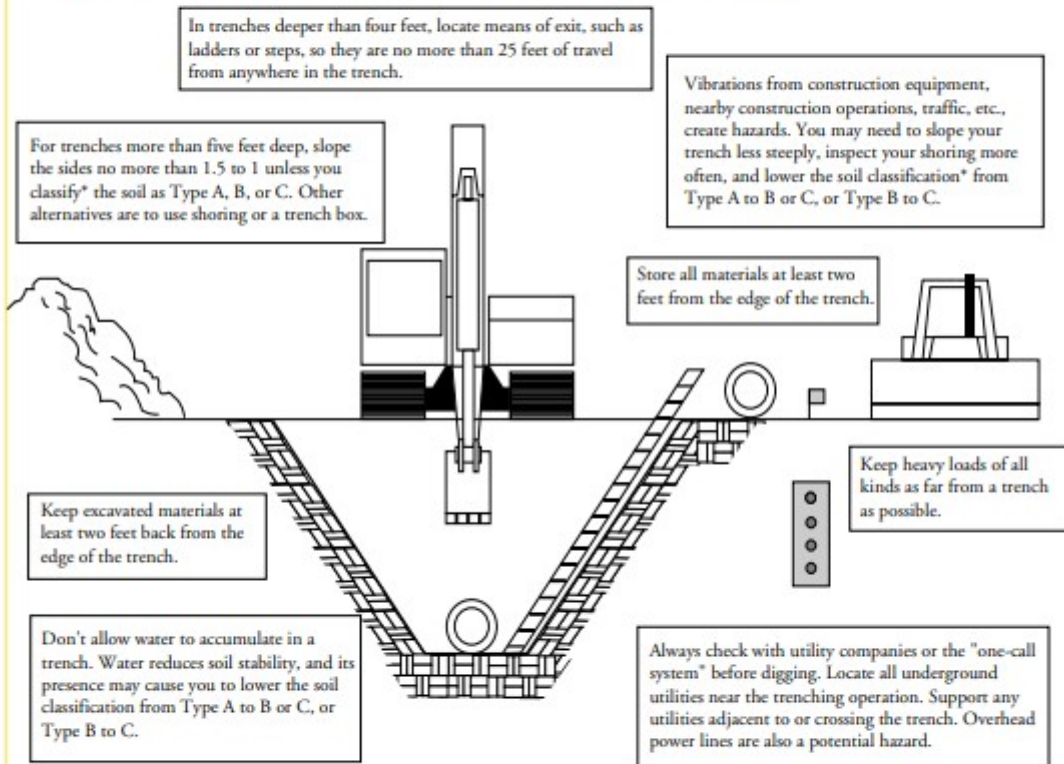
Easy to use handout and diagram on techniques and tips to prevent trenching accidents.

**TECH** Assist Program

Georgia Tech's Safety and Health Consultation Program<http://www.gtassist.org>

How to Prevent Trenching Accidents

Georgia Tech's Safety and Health Consultation Program is a free and confidential service funded by the U.S. Department of Labor and available to small businesses in the state of Georgia.



The diagram illustrates a trenching operation. An excavator is shown at the top of a V-shaped trench. To the left, a pile of excavated material is shown. To the right, a backhoe loader is positioned. A vertical pipe or utility is shown on the right side of the trench. Various callout boxes provide safety instructions related to the different parts of the operation.

In trenches deeper than four feet, locate means of exit, such as ladders or steps, so they are no more than 25 feet of travel from anywhere in the trench.

For trenches more than five feet deep, slope the sides no more than 1.5 to 1 unless you classify* the soil as Type A, B, or C. Other alternatives are to use shoring or a trench box.

Vibrations from construction equipment, nearby construction operations, traffic, etc., create hazards. You may need to slope your trench less steeply, inspect your shoring more often, and lower the soil classification* from Type A to B or C, or Type B to C.

Store all materials at least two feet from the edge of the trench.

Keep excavated materials at least two feet back from the edge of the trench.

Keep heavy loads of all kinds as far from a trench as possible.

Don't allow water to accumulate in a trench. Water reduces soil stability, and its presence may cause you to lower the soil classification from Type A to B or C, or Type B to C.

Always check with utility companies or the "one-call system" before digging. Locate all underground utilities near the trenching operation. Support any utilities adjacent to or crossing the trench. Overhead power lines are also a potential hazard.

Soil classification must be performed by a competent person using acceptable visual and manual tests such as those noted in Appendix A, paragraph (d).*

***A competent person is one who is capable of identifying existing and predictable hazards in the surroundings, or working conditions that are unsanitary, hazardous, or dangerous, and who has the authority to take prompt corrective measures to eliminate them.*

A competent person** must inspect the trench, adjacent areas, and any protective systems for possible cave-ins, failure of protective systems, hazardous atmospheres, or other hazardous conditions. Inspections must be performed daily: before work begins, throughout the shift, and after every rainstorm or other hazard-increasing occurrence.

