

SECTION 5

Before You Dig

Soil Protection

Underground Utilities

Before you dig

- Plan and implement traffic control measures as necessary to protect workers
- Air quality and atmospheric testing of the trench: Harmful gases may build up at the bottom of trenches as a result of damaged utilities or pipes
- Workers must be protected from atmospheric contaminants, oxygen deficiency, toxic vapors, fumes or gases
- If hazardous fumes exist or may exist, adequate ventilation and rescue equipment must be provided and ready to use at the site.

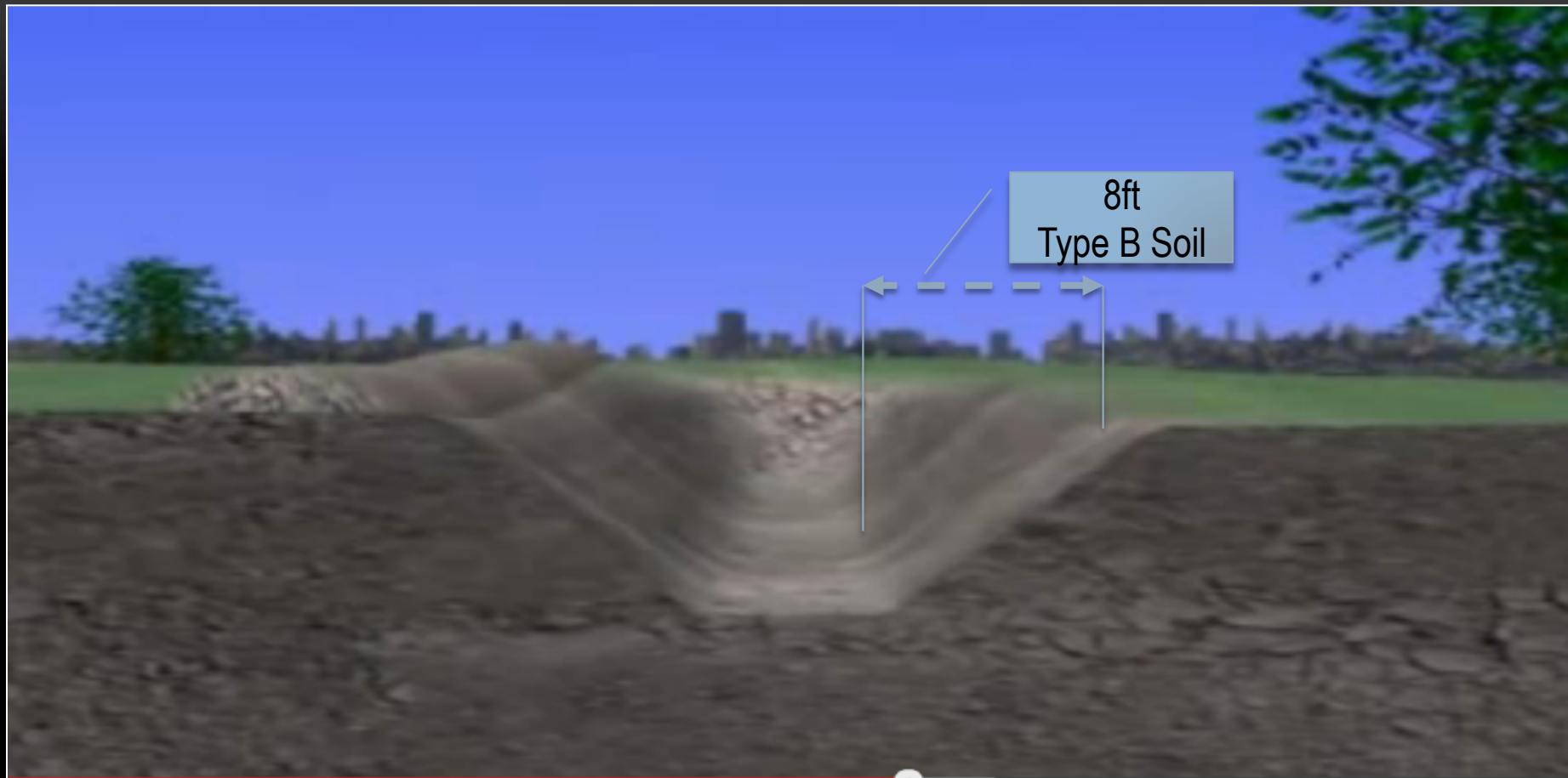


Underground utilities

- All underground utilities must be identified and marked by calling #811 to locate underground utilities
- Protect, support, or remove underground utilities while excavation is open
- Immediately notify utility operators if an underground utility is damaged
- If utility damage results in release of gas, call the utility operator and emergency services or 911 if necessary

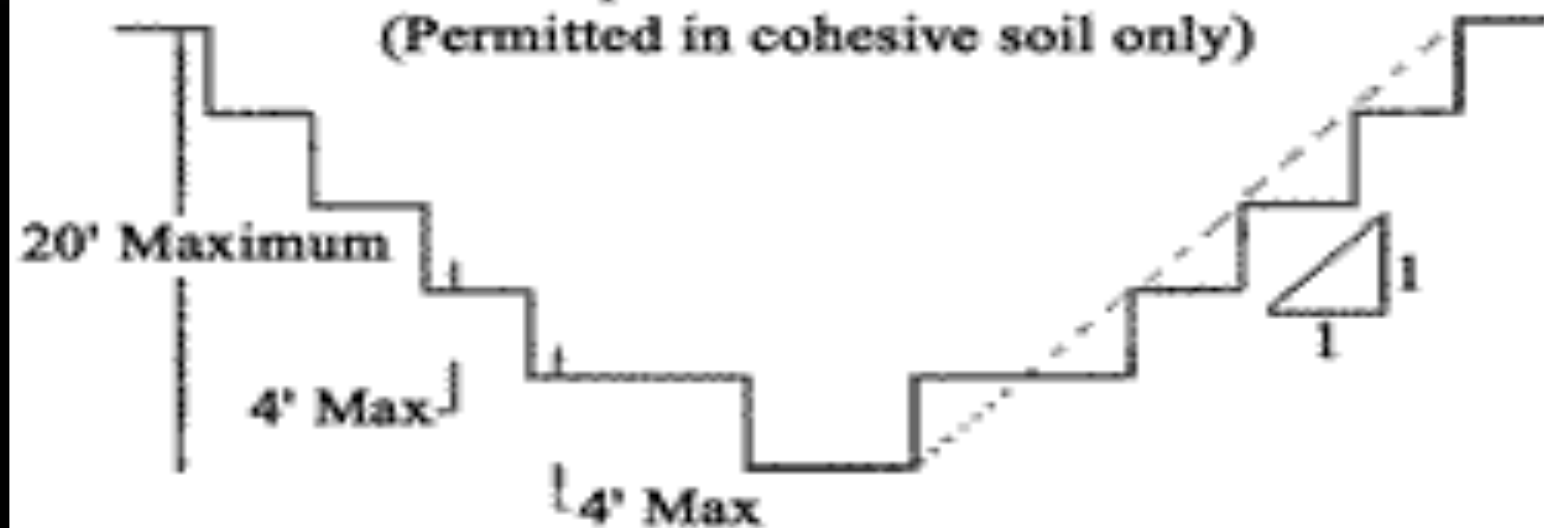






8ft
Type B Soil

TYPE B SOIL
Multiple Bench Excavation
(Permitted in cohesive soil only)





Protection

- Workers must stand away from vehicles being loaded to avoid being struck by equipment or spillage
- All workers on an excavation site must wear hard hats
- All equipment must have an operational back up alarm
- Appropriate walk ways with guard rails must be provided for trenches being crossed



Per OSHA Standard 29 CFR 1926 Sub Part P

Protection (Talking Head)

- Choose and construct the appropriate excavation protection according to OSHA standards and based on soil type (A, B, or C).
 - Sloping
 - Benching
 - Shoring or shielding (must use for trenches greater than 4 ft.)

Protection (Talking Head)

Trenches deeper than 4ft must have a method of entry and exit such as a ladder.

The ladder must extend at least 3 feet above the opening of the excavation and be within 25 feet of any workers inside the trench

Earth ramps used as exits from excavations can only be used if a worker can walk on them in an upright position and are designed by a competent person

Per OSHA Standard 29 CFR 1926 Sub Part P



Protection (Talking Head)

- Never enter a trench with water inside of it
- Have pump equipment ready to pump out any free standing water inside of a trench
- The competent person must inspect the trench **DAILY, AT THE BEGINNING OF EACH SHIFT, AFTER A RAINSTORM, AND IF THERE HAVE BEEN ANY CHANGES TO THE TRENCH**
- Place excavated dirt as far away as possible from the trench
- Trench boxes will extend the top of the trench
- Workers shall never stand under loads that are being handled or lifted by digging equipment