

WEEKLY SAFETY MEETING

TRENCHING & EXCAVATION

American Public Works Association Utility Location & Coordination Council Uniform Color Code Underground Utility Markings

An excavation is any manmade cut, cavity, trench or depression in the earth that was formed by the removal of earth. **PRIOR TO EXCAVATING**, make sure that all underground utilities such as sewer lines, telephone lines, fuel, electrical power lines, and water lines have been identified and properly marked.

 ${\bf Red:} \ {\rm Electric} \ {\rm Power} \ {\rm Lines}, \ {\rm Cables}, \ {\rm Conduit} \ {\rm and} \ {\rm Lighting} \ {\rm Cables}$

Yellow: Gas, Oil, Steam, Petroleum or Gaseous Materials

Orange: Communication, Alarm or Signal Lines, Cables or Conduit

Blue: Water, Irrigation and Slurry Lines

Green: Sewers and Drain Lines

Pink: Temporary Survey Markings

White: Proposed Excavation

Purple: Reclaimed Water

Access and Egress

- Ladders, ramps or other safe means of access or egress for any excavation deeper than 4 feet is required. Whatever safe means of egress is used, it will be located at intervals with no more than 25 feet of lateral travel distance from employees.
- An earth ramp may be considered a safe mean of egress only if employees are able to walk the ramp in an upright manner when entering or exiting the trench.
- Ladders MUST extend at least 3 feet above the top of the excavation and be anchored securely on the top and bottom.

Competent Person Responsibilities

A **competent person** will be assigned to each excavation in which employees MUST enter and work. The competent person will inspect the excavation and resolve any deficiencies or hazards before entry. A competent person will not be needed if employees **DO NOT** have to enter the excavation.

Competent persons are employees who are capable of identifying existing and predictable hazards in the surrounding area, or working conditions which are unsanitary, hazardous, or dangerous to employees, and has been given the authority to take prompt corrective measures to eliminate them, including temporary shutdown, if required. In addition, competent persons are responsible for:

- Designing structural ramps or seeking the qualified assistance of others in the construction of ramps that will be used as a means of access or egress from excavations.
- Monitoring water removal and equipment operations.
- Inspecting excavations, adjacent areas, and protective systems daily, prior to the start of work, as needed throughout the shift, and after every rainstorm or other hazard-increasing occurrence.
- Document required daily inspections on the Winger Trench & Excavation Safety Checklist.
- Removing employees from the hazard area until the necessary precautions are taken.
- Examining materials and equipment for continued use, and if unusable, removing from service.
- Classifying the soil by accepted methods and if necessary, reclassifying the soil after changed conditions. Unless appropriate tests have been made, the competent person MUST assume type C soil is present and protect accordingly.
- Reducing soil slope below maximum allowable slope when surcharge loads are present.

Meeting Date: Supervisor:		Trainer: Location:
	Attendees: (Please print clearly)	



TRENCHING & EXCAVATION – PART 1 QUIZ

- 1. An excavation is any manmade cut, cavity, trench or depression in the earth that was formed by the removal of earth. True or False?
- 2. According to the uniform code, make sure the utility color is placed with the correct description:
 - Red electric power lines, cables, conduit & lighting cables
 - Yellow gas, oil, steam, petroleum or gaseous materials
 - Orange communication, alarm or signal lines, cables or conduit
 - Blue water, irrigation & slurry lines
 - Green sewers & drain lines
 - Pink temporary survey markings
 - White proposed excavation
 - Purple reclaimed water
 - True or False?
- It doesn't make any difference if we locate utilities or not, the heavy equipment operator will hit them anyway. True or False?

4.	4. Ladders, ramps or other safe means of access or egress for any excavation deeper the	
	4 feet is required. True or False?	

- 5. Ladders, ramps or other means of egress must be provided every 25 feet. True or False?
- 6. Ladders must extend 3 feet above the top of the excavation for easy egress. True or False?
- 7. A competent person must be provided to inspect the trench/excavation BEFORE entry. True or False?
- 8. Daily inspections are required to be recorded on the Winger Trench & Excavation Safety Checklist. True or False?
- 9. Soil classification must be performed. Typically, the soil we work in is Class C and must be sloped or use a trench box. True or False?
- 10. Employees must be removed from a trench or excavation if hazards are found. True or False?

Printed Name:	Trained by:
Signature:	Trained by Signature:
Date:	Location: