

Safety-Gram

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Trenching and Excavation

Hazard Categories

- Underground Utilities
- Confined Spaces
- Cave-ins
- Falling Loads
- Hazards from Mobile Equipment
- Hazardous atmosphere

Preplanning: Why it is Important to Operations?

No matter how many jobs an employer has done in the past, it is important to meticulously approach each new job with proper groundwork. Many on-the-job incidents result from poor preliminary planning. Waiting until after the work starts to correct mistakes slows down the operation, adds to the cost of the project, and increases the probability of failure.

Jobsite Considerations

Before preparing a bid, employers should know as much as possible about the jobsite and the materials they will need to have on hand to perform the work safely.

- Traffic
- Proximity and physical condition of nearby structures
- Soil classification
- Surface and ground water
- Location of the water table
- Weather

- Overhead and underground utilities
- Quantity of shoring or protective systems that may be required
- Fall protection needs
- Number of ladders that may be needed
- Other equipment needs.

Preventative Measures

- Always Provide a Means of Access and Egress
- Know Where Underground Utilities are Located Before Digging
- Test for Atmospheric Hazards
- Inspect Trenches at the Start of Each Shift
- Inspect Trenches After Any Occurrence
- Do Not Work Under Suspended Loads
- Ensure That Personnel Wear Proper PPE

- Sloping and Benching
- Excavation Side Support
- Excavation Shield
- Warning Systems (barricades, hand or mechanical signals)
- General Safety Protocols
- Proper Material and Equipment Placement Protocols