

## Toolbox Talks

### Weekly Tailgate Topic\_

**11-47**

Discuss with crews on \_\_\_\_\_ [INSERT DATE]

### EXCAVATION AND SHORING GUIDELINES

It is mandatory that any trench or excavation more than 1.2 m (4 feet) is properly sloped or shored to comply with the occupational health and safety regulations. No employee shall enter any trench or excavation that is not properly sloped or shored.

#### DEFINITIONS:

- Excavation: Any cut, cavity, trench, or depression in the earth's surface resulting from rock or soil removal.
- Prof. Engineer: A Professional Engineer registered in the province of BC.
- Shoring: A mechanical system that provides support to the sidewalls of an excavation or trench. The system must conform to the occupational health and safety regulations or be designed by a Prof. Engineer.
- Slope: The angle at which the side of a trench or excavation are cut to maintain soil stability.
- Spoil Pile: The material removed of an excavation or trench.
- Trench: An excavation less than 3.7 m (12 feet) wide at the bottom, over 1.2 m (4 feet) deep and of any length.

#### EXCAVATION

- Prior to commencing any excavation or trench, all underground utilities must be located and their positions identified.
- Extreme caution and care must be exercised when excavating or trenching in the vicinity of underground utility systems; the final 30 cm (1 foot) around an existing utility must be excavated by hand.
- Excavation work must be in accordance with the written instructions of a Professional Engineer if the excavation is more than 6 m (20 feet) deep.
- Above ground hazards such as trees, buildings, boulders and utility poles that encroach on the excavation need to be removed, or secured.
- Proper access for the excavation or trench must be provided. If ladders are used they must be placed every 8m (25 feet) and must extend 1m (3 feet) above the excavation or trench.
- Spoil piles must be placed;
  - 60 cm (2 feet) back from the edge of a trench,
  - 1.2 m (4 feet) back from the edge of a excavation.
- Barricades or warning devices must be erected to protect the public and other workers from the excavation or trench, if applicable.
- Frozen ground does not eliminate the need for shoring or sloping unless certified by a Professional Engineer.

- Water must not be allowed to accumulate in the excavation or trench.
- The safe limits of approach for overhead electrical lines must be observed when excavating or trenching in the vicinity of overhead power lines. If the safe limits cannot be maintained, then the utility company must be notified so that the line can be de-energized.
- Employees in an excavation must not work under the suspended bucket of the excavating machine or any load being placed by the machine.

