SECTION: HEALTH AND SAFETY - Organizational Rules
SUBJECT: Trenching, Shoring & Excavating

POLICY NO.: 12.4.6 EFFECTIVE DATE: January 26, 2004 PAGE: 1 OF 6
SUPERCEDES POLICY DATED: November 30, 1995 APPROVED BY: Council CW020 - 2004

#### **POLICY STATEMENT:**

Working in a trench can be hazardous. This policy, in combination with the Trenching, Shoring, and Excavating Program, is intended to minimize the hazards and to ensure necessary precautions are taken to ensure the safety of employees performing trenching, shoring, and excavating work.

#### **PURPOSE:**

To establish a policy and procedure to:

- ensure that the *Occupational Health and Safety Act*, Construction Project Regulation, are adhered to;
- ensure employees are trained and certified "competent" to perform trenching, shoring and excavating work;
- ensure employees are trained in the proper use of pertinent safety equipment;
- ensure employees are protected from hazards that are present or are likely to be present when trenching, shoring, excavating; and
- initiate a rescue in the event that such may be required.

#### **SCOPE:**

All employees who perform work which requires the removal of material that exceeds a depth of 1.2 meters (4 feet).

#### **DEFINITION:**

Excavation: The hole that is left in the ground as a result of removing material where the width

exceeds the depth.

*Trench*: An excavation in which the depth exceeds the width.

Competent Person: A person who:



SECTION: HEALTH AND SAFETY - Organizational Rules
SUBJECT: Trenching, Shoring & Excavating

POLICY NO.: 12.4.6 EFFECTIVE DATE: January 26, 2004 PAGE: 2 OF 6
SUPERCEDES POLICY DATED: November 30, 1995 APPROVED BY: Council CW020 - 2004

- a) is qualified because of knowledge, training and experience to perform the work;
- b) is familiar with the *Occupational Health & Safety Act* and the provisions of the regulations that apply to the work;
- c) has knowledge of any potential or actual danger to health or safety in the workplace; and,
- d) has successfully completed the City of Brampton's Trenching, Shoring, and Excavating Program or equivalent.

#### **TRAINING:**

The City of Brampton will be responsible for providing adequate training for those employees who are required to supervise or perform trenching, shoring, and excavating work.

Employees who attend and successfully complete (minimum 70% pass mark on written test) the Trenching, Shoring and Excavating course will be issued a certificate that is valid for three years from date of issue.

Employees will be required to attend and successfully complete (minimum 70% pass mark on written test) a renewal course within one month of their certificate expiring for revalidation. The renewal certificate is valid for three years from date of revalidation.

Revalidation of a certificate is permissible on a "once only" basis. Employees will be required to attend and successfully complete the full Trenching, Shoring, and Excavating program once the renewal certificate has expired.

It is the responsibility of the supervisor to ensure:

- employees performing trenching, shoring and excavating work receive the training
- maintain an updated listing of those employees under their jurisdiction who are certified as being competent
- ensure new employees are informed of trenching, shoring and excavating requirements.



<b>SECTION:</b>	HEALTH AND SAFETY - Organizational Rules		
SUBJECT: Trenching, Shoring & Excavating			
POLICY NO.:	12.4.6	EFFECTIVE DATE: January 26, 2004	PAGE: 3 OF 6
SUPERCEDES POLICY DATED: November 30, 1995 APPROVED BY: Council CW020 - 2004			

### **SAFETY EQUIPMENT:**

Personal protective equipment is important while working on a construction site due to the risk of injury from a variety of different sources.

The following equipment must the worn:

- hard hat
- safety boots
- safety vest
- hearing protection (whenever heavy equipment, compressors or jackhammer are being operated)
- eye protection (when performing tasks that may result in eye injury)

#### **PROCEDURES:**

All procedures must be performed by at least two competent persons and must be present at the trench site.

#### **Site Approvals**

- 1. The supervisor must advise an inspector in the office of the Construction Health and Safety Branch, Ministry of Labour by telephone before commencing work on a trench more than 1.2m (4ft) deep and into which a worker is required to enter or may enter.
- 2. The supervisor must obtain a Road Occupancy and Access Permit if work is being performed on the road right of way. Permits are obtained from the Works and Transportation Department.

#### **Stake Outs**

- 1. The person (or designate) in charge of the work to be performed must obtain a stake out for all utilities, as required.
- 2. No work is to commence until all utilities have been staked out or cleared.



SECTION: HEALTH AND SAFETY - Organizational Rules

SUBJECT: Trenching, Shoring & Excavating

POLICY NO.: 12.4.6 EFFECTIVE DATE: January 26, 2004 PAGE: 4 OF 6

SUPERCEDES POLICY DATED: November 30, 1995 APPROVED BY: Council CW020 - 2004

#### **Traffic Control**

1. The signage must conform to the Ministry of Transportation, Traffic Control Manual for Roadway Work Operation, prior to beginning any work on a public road allowance.

#### **Actions and Conditions**

- 1. Dig the trench.
- 2. Install trench box ensuring that the space between the trench box and the excavation is minimized to:
  - a. allow closer access to the top of the box and
  - b. limit soil movement in case of cave-in
- 3. Proceed with work to be performed.
- 4. Use a ladder to gain access to or exit from a trench. Shoring should not be used for this purpose.
- 5. Exercise caution around the edge of a trench.
- 6. Do not smoke adjacent to a trench in case combustible gases are present.
- 7. No spoil, debris or equipment should be within 1m (3.28ft) of the top of the trench.
- 8. No vehicle or other machinery should be driven, operated or located near enough to the excavation to cause the trench wall to become unstable.
- 9. Inspect the trench box and other equipment before use and do not use damaged materials.
- 10. Inspect worksite and the area around the excavation on a regular basis for any signs of hazards. Look for parallel, horizontal or vertical cracks in the soil, location of any surcharge, loose materials, etc.
- 11. While working in a trench do not permit equipment to work overhead.
- 12. Watch and avoid overhead power lines.



SECTION: HEALTH AND SAFETY - Organizational Rules
SUBJECT: Trenching, Shoring & Excavating

POLICY NO.: 12.4.6 EFFECTIVE DATE: January 26, 2004 PAGE: 5 OF 6
SUPERCEDES POLICY DATED: November 30, 1995 APPROVED BY: Council CW020 - 2004

- 13. Use proper bending and lifting techniques.
- 14. Never work alone at a trench site. Always have another employee available on the surface.
- 15. Provide appropriate barriers and delineation whenever a trench is left unattended or overnight. The trench must be left in a safe and secure manner.

#### **CONFINED SPACE**

On occasion a trench may meet the definition of a confined space. If there is reason to believe that a hazardous atmosphere or condition may exist, consult your supervisor before proceeding. If the trench is a confined space, follow the **CONFINED SPACE ENTRY** procedure and use appropriate confined space equipment.

#### **EMERGENCY PROCEDURES**

#### If you are in the trench and it collapses:

- 1. Yell "HELP" to get someone's attention.
- 2. Do not try to outrun the collapse.
- 3. Put your arms over your head to protect it and to create a breathing zone and try to remain standing.
- 4. Do not struggle.

#### The employee above the trench:

#### 1. DO NOT ENTER THE TRENCH!

- 2. Try to keep your eyes on the person to help in locating him/her.
- 3. Do not get close to the trench wall.



SECTION: HEALTH AND SAFETY - Organizational Rules
SUBJECT: Trenching, Shoring & Excavating

POLICY NO.: 12.4.6 EFFECTIVE DATE: January 26, 2004 PAGE: 6 OF 6
SUPERCEDES POLICY DATED: November 30, 1995 APPROVED BY: Council CW020 - 2004

- 4. Radio for help, state nature of the emergency, exact location and request emergency rescue and medical assistance.
- 5. Return to scene and await assistance.
- 6. If the worker is visible, talk to him/her. Try to keep them calm.

### **ACCOUNTABILITY:**

All employees of the Corporation are accountable to adhere to this policy as outlined.

### **ADMINISTRATION:**

Health, Safety & Wellness Services, City of Brampton, 5<sup>th</sup> Flr-2 Wellington St. West Brampton, Ontario L6Y 4R2

#### **CONTACT:**

Health, Safety & Wellness Services, Human Resources Division 905-874-2166

