



Identifying Underground Utilities on Campus

CEHS-PC-S05

This written procedure will be reviewed by the EHS Director when failures or discrepancies indicate that the policy is not adequate.

REVISION	DESCRIPTION OF CHANGE	REVISION EFFECTIVE DATE	REVISION COMPLETED BY: NAME / COMPANY	MANAGER APPROVAL / DATE
A	<ul style="list-style-type: none"> Initial program 	4/2019	Wade Behnke / EHS Director	Mark Crosby

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1.0 PURPOSE

- 1.1 The procedure Identifying Underground Utilities on Campus is written to ensure student, visitor, employee, and contractor safety whenever conducting work on campus that requires underground excavations. In addition the procedure has been developed to ensure a continuity of services and avoid disruption from damaged utilities from project work on campus.

2.0 SCOPE

- 2.1 The procedure applies to all Colby owned property only. The procedure does not apply to City or Public property.
- 2.2 The procedure applies when conducting any subsurface excavation with mechanical equipment or when hand digging below one foot.
- 2.3 The Procedure does not apply to excavations performed with a vacuum truck.
- 2.4 The procedure does not cover the safety requirements for personal that will be entering excavated areas.

3.0 PROCEDURE

3.1 Procedures For Excavators

- 3.1.1 The excavator must contact Digsafe at 811, 72 hours prior to starting the excavation portion of any project.
- 3.1.2 A work order (WO) to Facilities must also be requested 72 hours prior to the excavation.
- 3.1.3 Covered activities include (but not limited to)
- 3.1.3.1 Driving tent stakes
 - 3.1.3.2 Planting/replacing trees,
 - 3.1.3.3 Installing or replacing fences or sign posts,
 - 3.1.3.4 Digging, excavating, etc.
- 3.1.4 Only the project employees, or contractor listed on the WO may operate under the request/permit.
- 3.1.5 Do not start excavating before your legal start date and time (72 hours after the WO has been submitted).
- 3.1.6 The WO must contain the following information:
- 3.1.6.1 Duration of Work
 - 3.1.6.2 Nature of Work
 - 3.1.6.3 Job Location
- 3.1.7 If your excavation has not started within 30 days from the date the WO and Digsafe permit is requested, the permit will expire and must be renewed.

- 3.1.8 The excavator will comply with the correct tolerance zone (18" each side plus width of utility) and also attempt to keep makings intact or replace when removed.
- 3.1.9 For natural gas lines, verification must be by means of hand-dug test holes or vacuum excavation.
- 3.1.10 If the excavation is going to cross a Tolerance Zone of any utility, hand dig a test hole to expose the facility at the point of crossing. Powered equipment may be used for removing pavement, but only to the depth of the pavement.
- 3.1.11 Never assume that buried facilities will be at a certain depth (they may have been originally installed at a prescribed depth, but later erosion or grade changes cause them to now have a shallower or deeper cover.
- 3.1.12 It is the responsibility of the excavator to fix any damages occurring within the tolerance area of the demarcated zone.

3.2 Facilities / Marking Procedures

- 3.2.1 When the WO is received a member of Facilities (typically Mechanical Trades Supervisor) will pre-mark in the requested area, at their discretion, and notify the trained locator.
- 3.2.2 The majority of utility service providers will not mark on campus as it is private property and a member of Facilities (locator) will be required to survey the excavation area for the underground utilities.
- 3.2.3 Utilizing the standard color coding system (attached as Appendix A) the locator will demarcate the utilities within 100 feet of the proposed excavation.
- 3.2.4 All utility locations will be identified with calibrated electronic locator by an operator trained on its use.
- 3.2.5 During summer months paint will be used to indicate utilities directly on the ground. Flags will be utilized in the winter.

3.3 Emergency Excavations

- 3.3.1 In an emergency after hours situation, where immediate excavation is required, the excavator will call Digsafe (811) and Colby Security at 859-5530. Facilities will respond to the excavator with which utilities are in the area and how to proceed. If not in an area with natural gas lines, the excavator may not be required to wait for the locator to physically mark the utilities if authorized by the Facilities Services Supervisor.
- 3.3.2 If the emergency excavation is in an area with natural gas lines, Summit Natural Gas will be contacted to mark the utilities before excavation can be started.

4.0 RESPONSIBILITIES

- 4.1** Responsibilities for oversight and implementation of the Identifying Underground Utilities procedure are assigned below.
- 4.2** Environmental, Health, and Safety (EHS) Director
 - 4.2.1 Oversees the written procedure and ensures Colby complies with the requirements.
- 4.3** Mechanical Trades Supervisor
 - 4.3.1 Pre-marks requested excavation areas.
 - 4.3.2 Notifies Colby locators for all excavation activities meeting the requirements in Section 2.2.
 - 4.3.3 Ensure Facilities personal are trained to identify underground utilities and operate locator equipment.
 - 4.3.4 Act as a backup if Facilities staff are not available to complete the survey.
- 4.4** Qualified Colby Locator
 - 4.4.1 Responsible for locating and marking all underground utilities
- 4.5** Excavator (Colby and contracted employees)
 - 4.5.1 Comply with the conditions of the program when conducting excavations that meet the requirements in Section 2.2

Appendix A: Utilities Color Coding

White	PROPOSED EXCAVATION
Fluorescent Pink	TEMPORARY SURVEY MARKINGS
Red	ELECTRIC POWER LINES, CABLES, CONDUIT AND LIGHTING CABLES
Yellow	GAS, OIL, STEAM, PETROLEUM OR GASEOUS MATERIALS
Orange	COMMUNICATION, ALARM OR SIGNAL LINES, CABLES OR CONDUIT
Blue	POTABLE WATER
Purple	RECLAIMED WATER, IRRIGATION AND SLURRY LINES
Green	SEWERS AND DRAIN LINES