

SECTION 014010 – UNDERGROUND UTILITIES LOCATE AND PRE-EXCAVATION PROCEDURES

Purpose

In order to protect underground utilities from damage and to avoid service outages, The University of Alabama (“UA”) has established these Procedures to define responsibilities and outline the steps in locating underground utilities before excavating the ground and demolishing a building or structure. These Procedures also apply to locating underground utilities before operating, parking, storing, locating, or placing heavy equipment, vehicles, cranes, storage containers, or other objects on the ground’s surface above underground utilities to prevent the weight of the equipment and/or object from damaging, rupturing, or severing the underground utilities and related infrastructure.

This is in coordination with all other requirements per contract documents.

Procedures

1. The Primary Party executing the work (i.e. Contractor, UA Facilities Administration Shop Manager [“UAFA”] or UA’s Project Manager/Supervisor, etc.) shall complete the upper section of the Pre-Excavation Notification & Sign-off Sheet. The UA Utility Locate Coordinator shall be responsible for facilitating completion of the balance of the Sign-off Sheet. No excavation shall commence without a completed sign-off sheet. The Primary Party should allow a minimum of 2 full working days, not including the day of request, for the locate to be completed. For the purposes of these Procedures, the 2 full working days will only consist of Monday to Friday, excluding the following holidays: New Year’s Day, Memorial Day, Independence Day, Labor Day, Veteran’s Day, Thanksgiving Day and the Friday following Thanksgiving Day, Christmas Eve and Christmas Day. If any of these holidays occur on a Saturday, it will be observed on the preceding Friday and if any of these holidays occur on a Sunday, it will be observed on the following Monday. Thus, as an example, if the Contractor or UAFA plans to commence an excavation on the Monday following Thanksgiving Day, the line locate request must be initiated no later than the Monday preceding Thanksgiving Day.

Effective January 1, 2020, the law states that Alabama One-Call (811) excavation periods are valid for 20 working days. UA locate request will maintain a valid 10 working day excavation period and not acknowledge Alabama One-Call’s (811) 20 working day valid excavation period. The valid 10 working day excavation period for UA locates will begin after 2 full working days from the day the request is submitted, regardless if the sign-off sheet is completed or not. Thus, as an example, if the UA locate request is submitted on Monday, then the valid 10 working day excavation period will begin on Thursday if none of the above holidays are observed during this time period. Any valid 10 working day excavation period that includes the above noted holidays will be extended the same amount of duration as the respective observed holiday. No excavation shall commence prior to the Sign-Off Sheet being completed and a copy provided to the Primary Party regardless of how long it takes all UAFA representatives to perform the locate.









2. The Primary Party is responsible for calling Alabama One-Call and emailing the UA Utility Locate Coordinator to request an underground locate of the respective underground utilities. In an attempt to sync the start, refresh and expiration dates of the Alabama One-Call (811) locate with the UA Utilities Locate, the primary party must request the Alabama One-Call (811) locates the same day as emailing the UA Utility Locate Coordinator.
3. The Primary Party shall complete the upper section of the Sign-off Sheet, including the required confirmation numbers from Alabama One-Call and forward to the UA Utility Locate Coordinator (linelocate@ua.edu) along with a Google Map image (satellite view) clearly defining the extent of the area of work highlighted in red for the requested locate. The intent is to avoid potential locating delays due to locating nonessential or unneeded areas.
4. As the underground utility locate is completed, the respective UAFA representative who performed the underground utility locate shall sign and date the applicable blank on the Sign-Off Sheet or provide an e-mail confirmation to the UA Utility Locate Coordinator referencing the UA Work Order #. If necessary, the person

performing a utility locate shall provide comments of any special concerns, requirements to deviate from routine practices, or other precautions that the Primary Party, the Contractor, UAFA, the UA Utility Locate Coordinator, person who is performing the excavation or equipment parking must follow.

5. Once the Sign-Off Sheet is completed, a copy shall be placed in the project file and a copy provided to the Primary Party, Project Manager/Supervisor/Field Coordinator and other parties listed on the sign-off sheet.
6. The Primary Party may elect to request a utility locate for the purpose of project/work planning and this preliminary locate may determine the lack of underground utilities in the area where the work is planned. This preliminary locate does not relieve the Primary Party from the need to follow the procedures prior to commencing work unless the preliminary locate clearly revealed there are no underground utilities exposed to potential damage in the work zone.

Underground Utility Markings

1. Locate marking lines for underground utility lines are approximate. The Primary Party shall not excavate or park equipment within the defined UA tolerance zone prior to potholing (hand digging or use of other non-destructive methods) in order to physically locate the underground utility. Potholing shall be performed on all underground utilities, whether UA owned or non-UA owned, within the defined UA tolerance zone unless, a wider tolerance zone is required. The UA tolerance zone is defined as a minimum of 36" (3 feet) from the outside edges on either side of the locate marking.
2. In some situations where the underground utility locating device is not indicating a precise location of the underground utility, as an additional precaution the locate marking line will be altered from a single line to a dual line with "dot or X" in the center to indicate a wider area under which the underground utilities may be located. This dual-line locate marking does not relieve the Primary Party from the obligation to hand dig or use other non-destructive methods as may be appropriate under the circumstances to protect the underground utilities.
3. The common color coding shall follow the American Public Works Association (APWA) Uniform Color Code to mark underground utilities to include:

WHITE		Proposed Excavation
PINK		Temporary Survey Markings
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		Potable Water
PURPLE		Reclaimed Water, Irrigation, Slurry Lines, Thermal Energy
GREEN		Sewer and Drain Lines

Primary Party Responsibilities

1. In order to protect the underground utilities, the Primary Party is responsible for visiting the site of the planned excavation and/or equipment placement to become familiar with the site and to evaluate the accuracy of the locate marking lines before beginning any excavation work or placing equipment in the area.

2. The Primary Party must obtain a copy of the fully completed and signed Sign-Off Sheet prior to beginning any excavation work and/or placing equipment in the area. The Primary Party must also sign and date the bottom of the Sign-off Sheet and return a copy to the UA Field Coordinator.
3. The Primary Party shall pothole (hand dig or use other non-destructive methods such as a water-jet) to expose the exact location and depth of the underground utility prior to excavating by mechanical means and/or placing equipment in the area. Once the utility is exposed by potholing, the Primary Party is to request to have the utility surveyed by the UA Surveyor. Then, a measurement is to be taken from ground level to the top of the utility. This depth along with the identity of the utility is to be marked with permanent marker on a survey stake and the stake placed within 18 inches of the pothole location. (This does not relieve the contractor from producing "as-builts")
4. As underground utility locate marking lines are removed by scraping, excavation, weather, etc., the Primary Party must either know where the locate marking lines had been placed and/or must request new locate marking lines be put in place by calling the UA Utility Locate Coordinator. Primary Party shall make reasonable efforts to maintain markings during the valid 10 working day period for which the excavation permit is current. If needed, the Primary Party may call for a refresh of the location should previous markings be obscured.
5. The Primary Party must promptly notify UA's Project Manager/Supervisor and UA Utility Locate Coordinator of any proposed changes in the excavation work or equipment placement location that differs from the planned location for those activities at the time the Sign-off Sheet was completed in order to determine if additional underground utility locate services are necessary or desirable.
6. **The Primary Party is responsible for reviewing all contract documents prior to the excavation and to advise of any discrepancy between the documents and the markings.** If at any time the Primary Party has concerns with the underground utility locate marking lines, the Primary Party shall work with UA's Project Manager/Field Coordinator and UA Utility Locate Coordinator to address the Primary Party's concerns and determine if additional underground utility location marking work is necessary or desirable to ascertain the location of the underground utilities.
7. The Primary Party shall be solely and completely responsible for taking such steps and precautions as may be necessary to protect the underground utilities from damage, destruction, or severance and for the safety of all persons and property. The Primary Party shall supervise and execute the excavation or equipment placement to facilitate and promote its safe execution and performance.
8. The Primary Party shall be responsible for the prompt remedy of damage and loss to underground utilities and related infrastructure and to pavement, pavement markings, turf, mulch, trees, shrubs, curbs, sidewalks, roads, and irrigation systems caused in whole or in part by the Primary Party, a subcontractor, or anyone for whose acts the Primary Party may be liable.
9. The Primary Party shall adequately provide protection to all surface and subsurface utilities including, but not limited to, existing valves, valve coverings, manholes, electrical equipment and other utility components within the Project site and adjacent property where work is being performed in relation to the Project. Protection should include, but is not limited to, locating, marking/flagging, barricading or other means necessary to avoid damage to all utility components. In the event where a utility component is damaged due to negligence by the Primary Party, the Primary Party shall immediately notify the UA Project Manager and diligently cooperate with the Awarding Authority until repairs are complete. All repairs and replacements shall be performed only upon approval of Awarding Authority whose decision shall be final.

Responsibility for Damage

1. The underground utilities locate process is a service provided by UA for the purpose of promoting and enhancing the protection of existing underground utility systems and worker safety. Nothing in these Procedures shall relieve the Primary Party performing the work from liability for any and all expenses and

costs associated with or arising from the uncovering and recovering, repair, restoration, or replacement of underground utilities and related infrastructure damaged, destroyed and/or severed by the Primary Party. Primary Party also shall remain fully liable for all costs and expenses necessary to repair, replace or restore damaged or destroyed pavement, pavement markings, turf, mulch, trees, shrubs, curbs, sidewalks, roads, and irrigation systems to original condition and to UA's satisfaction unless otherwise described in the contract documents for the Project.

2. In addition to the obligation to repair the damaged underground utilities, the Primary Party shall remain obligated to reimburse the University for any loss of revenue due to an underground utility outage caused by the Primary Party and for all other expenses and costs incurred by UA as a result thereof.
3. Nothing in these procedures shall be deemed to alter or amend in any manner the Project Contract Documents. In the event of any conflict between these Procedures and the Project's Contract Documents, the provisions of the Contract Documents shall prevail and take precedence of the provisions of these Procedures.
4. In the event timely notice of such excavation or digging is not given or if such notice is given but a utility, telephone cable or network fiber is cut or damaged due to the negligence of the Primary Party, the University will charge the Primary Party the following amounts and may withhold from any accrued payments the amounts due.

For Telecommunication Lines:

Fiber:

\$ 5000 Service Interruption Fee

\$100 per fiber splice (i.e. the fiber is 30 pair, then 60 splices will be required)

Plus cost of Material

Copper:

\$5000 Service Interruption Fee

Time – Rate is \$35.00/manhour and \$50.00/Overtime manhour

Plus Cost of Material

+

For All Other Utilities:

Time and Material for cost of the repair to the utility, any loss of business or operational use, any UA necessary support of the event, and any quantifiable utility cost.

The minimum charge for the first event will be the greater of the actual time and material cost as described above or \$2,500. The minimum charge for each subsequent event will be the greater of the time and material cost or \$5,000.

Definitions

“Primary Party” means any persons executing the work (i.e. Contractor, UA Facilities Administration Shop Manager [“UAFA”] or UA's Project Manager/Supervisor, etc.

“Excavating” or **“Excavation”** means digging, drilling, penetrating, or any other operations that disturbs the ground's surface under which underground utilities might be located.

“Equipment Parking” or **“Equipment Placement”** means operating, parking, storing, locating, or placing heavy equipment, vehicles, cranes, storage containers, or other heavy equipment or objects on the ground's surface under which underground utilities might be located.

“Shop Manager” means the most senior person in UAFA responsible for the work of the Department’s skilled workforce (e.g. plumbing, HVAC, electrical, grounds, etc.)

“Sign-off Sheet” means the Pre-Excavation Notification & Sign-off Sheet.

“Underground Utilities” means underground electrical, natural gas, steam, domestic water, sanitary sewer, chilled water, irrigation, heated water, storm drainage, telephone, cable, alarm, fiber optics, or any other utility or service whether owned by UA or by public service and utility providers.

“Working Day” means Monday to Friday, excluding the following holidays: New Year’s Day, Memorial Day, Independence Day, Labor Day, Veteran’s Day, Thanksgiving Day and the Friday following Thanksgiving Day, Christmas Eve and Christmas Day. If any of these holidays occur on a Saturday, it will be observed on the preceding Friday and if any of these holidays occur on a Sunday, it will be observed on the following Monday.

END OF SECTION 014010