



# PROJECT OWNER DESIGNER COMPLIANCE TRAINING

Reference Guide, 07-02-2021

**PA Act 287 of 1974, as amended by Act 50 of 2017**

*Pennsylvania Underground Utility Line Protection Law aka the One Call Law*

*This guide has been prepared as an educational document for project owners and designers taking the compliance test. The guide's intention is as a reference tool to explain in a general way the requirements provided by the law.*



## PROJECT OWNER DESIGNER COMPLIANCE TRAINING

### PENNSYLVANIA PA PUBLIC UTILITY COMMISSION (PUC) (COMMISSION)

Act 50 of 2017 authorizes PUC to enforce provisions of the state's Underground Utility Line Protection Law, Act 287, also known as the "One Call Law." The PUC'S Bureau of Investigation and Enforcement has created a section called "PA1Call Enforcement". This section will consist of a supervisor and investigators. As a requirement of Act 50, all underground facility damages are to be documented and submitted to the PA1Call System via a facility damage investigation form found on the PUC website and the PA1Call System website.

The PUC representative on the Board of Directors of Pennsylvania One Call is the supervisor of the Gas Safety Section. Enforcement Staff Contact Information: [www.puc.pa.gov/pipeline/pa-one-call](http://www.puc.pa.gov/pipeline/pa-one-call)

### PENNSYLVANIA ONE CALL SYSTEM, INC.

Pennsylvania One Call System, Inc. *dba* Pennsylvania 811, POCS, PA1Call System, One Call

- Our purpose is to prevent damage to underground facilities. To promote safety, we provide an efficient and effective communications network among project owners, designers, excavators, and facility owners.
- Open every day of the year, 24 hours a day.
- Submit locate requests online at [www.paonecall.org](http://www.paonecall.org) or by calling 811.

### DAMAGE PREVENTION

Damage prevention is a shared responsibility. Communication among stakeholders is key to ensuring safety and protecting vital facilities. Free-flow communications and cooperation allows all parties to focus on the common goals for safety and damage prevention.

### ONLINE RESOURCES

PA Act 287 of 1974,  
as amended  
[pa1call.org/palaw](http://pa1call.org/palaw)

User Guide  
[pa1call.org/userguide](http://pa1call.org/userguide)

Project Owners  
Designers  
Information  
[pa1call.org/designers](http://pa1call.org/designers)

Enforcement  
[pa1call.org/enforcement](http://pa1call.org/enforcement)



## PROJECT OWNER DESIGNER COMPLIANCE TRAINING

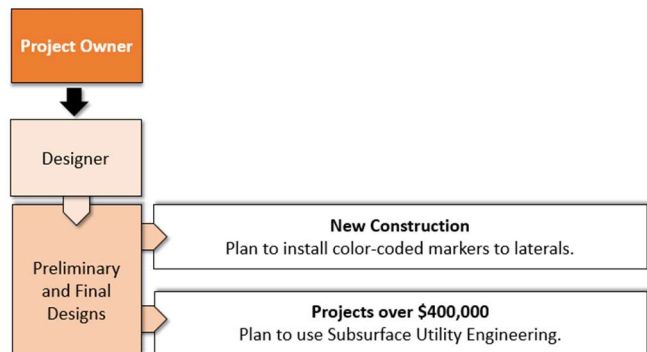
### PLANNING

Damage prevention is a shared responsibility. Communication between stakeholders is the key to ensuring safety and protecting vital facilities. Free flow communication and cooperation allows all parties to focus on the common goals for safety and damage prevention.

### PROJECT OWNER

*Any person who or which engages an excavator for construction or any other project which requires excavation or demolition work.* Every project has a project owner. It is the project owner who is in the best position to influence damage prevention measures applied in the design and preconstruction phases, as well as once excavation begins, as they control the finances, scope of project, and terms in the contract.

It is the duty of project owners to utilize and pay for Subsurface Utility Engineering (SUE) in accordance with the act. It is the project owner who initiates design projects that will require excavation or demolition work, and they are its principal beneficiary. Project owners must furnish the pertinent data obtained through SUE to the One Call System in a mutually agreeable format.



Project owners must not release to bid or construction any project until *after* the final design is completed. For new construction and where practicable, in the opinion of the project owner, color-coded permanent markers must be installed to indicate the type and location of all laterals installed by the project owner. These markers will assist in locating efforts in the future.

Project owners are obligated to respond to notifications received from the excavator when facility owners cannot accurately locate or identify all lines. When not resolved in design phase, and an excavator must ascertain the location or lines, the excavator is entitled to compensation from the project owner for their efforts, prudent techniques, and additional time.

Project owners are required to participate in design and complex project preconstruction meetings.

### COMPLEX PROJECT

A single project or a series of repetitive, small, short-term projects that are related in scope that impacts facilities over a long period of time or a large area. Duration, Impact, Size, Complexity (DISC)

### PRECONSTRUCTION MEETINGS AND COORDINATE PA

A project owner or an excavator can schedule the preconstruction meeting prior to the commencement of excavation or demolition work in a complex project. All stakeholders, including project owners, designers, excavators and facility owners, or their agents, are required to attend and participate in the complex project meetings, if involved. The involved stakeholders work with the project owner and/or excavator on a schedule to mark the underground lines reasonably in advance of the actual start of the excavation or demolition work for each phase of the work.



## PROJECT OWNER DESIGNER COMPLIANCE TRAINING

Coordinate PA (CPA) enables users to add and/or import existing projects, find opportunities with others who want to coordinate, share project documents and communications with designated contacts, and notify facility owners and other contacts at any stage of the project.

### DESIGNER

*Any architect, engineer or other person who or which prepares a drawing for construction or other projects which requires excavation or demolition work, as herein defined in PA Act 287 of 1974, as amended.* Your job, as a designer, is to avoid damage, to minimize interference with a facility owner's facilities and to gather information to identify existing facilities. When performing a site assessment discuss with the project owner the costs and time associated with SUE, installing possibility of compensating you when additional prudent techniques, costs and time are required to ascertain the precise location of a marked line. Designer obligations include:

- To make a reasonable effort to prepare the construction drawings to avoid damage to and minimize interference with a facility owner's facilities in a proposed construction area by maintaining the clearance as provided for in the applicable easement condition or an eighteen-inch clearance of the facility owner's facilities, where practicable, if no easement restriction exists, or other clearance permitted or agreed upon
- To show on the drawing the position, type of each facility owner's lines, and the name of the facility owner
- To show your one call serial number and the one call phone number on your drawing
- To submit design request 10-90 business days in advance of a final design of a project
- To state preliminary design if the design request is more than 90 business days
- To forward a copy of the project plans to each facility owner who requests a copy
- To participate in preconstruction meetings for a complex project if you are responsible for the final design
- To create a new design request of your final request if the scope or project site changes
- To consult with and advise the project owner regarding the project owner's requirement to utilize sufficient quality levels of SUE

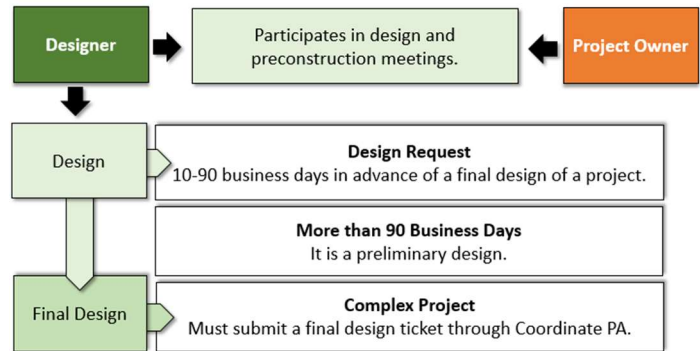
### DESIGN NOTIFICATIONS

The purpose of the design notification is to allow the designer to plan new work around existing facilities. The information provided should cover the entire scope of the plan or development with enough detail to allow the facility owners to provide the appropriate locations of their lines in the proposed work area. Digging is not permitted on a design notification.



## PROJECT OWNER DESIGNER COMPLIANCE TRAINING

- Preliminary Design (optional): Designers may request line and facility information more than 90 business days before the final design is to be completed. Designers must state in their requirements the request is for a preliminary design.
- Final Design (required): Those planning work that disturbs the earth are required to notify not less than 10, nor more than 90 business days in advance of the final design.



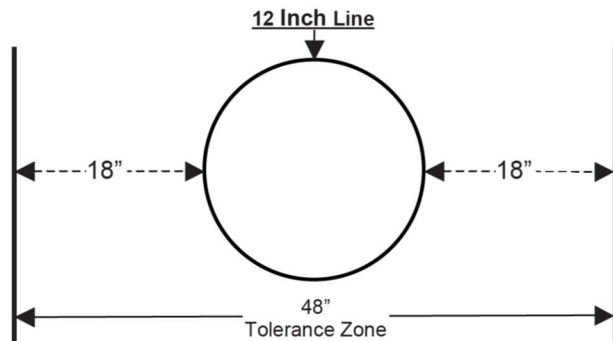
### BUSINESS DAY

- A business day is any day except Saturday, Sunday, or legal holiday prescribed by statute.
- A business day begins at 12:00:00 am and ends at 11:59:59 pm.

### STANDARDS

The **Uniform Color Code** for marking excavation sites and underground facilities in conflict with an excavation.

<b>APWA/CGA Temporary Marking Color</b>	
	<b>WHITE</b> - Proposed Excavation
	<b>PINK</b> - Temporary Survey Markings
	<b>RED</b> - Electric Power Lines, Cables, Conduit and Lighting Cables
	<b>YELLOW</b> - Gas, Oil, Steam, Petroleum, Gaseous and Hazardous Materials
	<b>ORANGE</b> - Communications, Alarm or Signal Lines, Cables or Conduit, and Traffic Loops
	<b>BLUE</b> - Potable Water
	<b>PURPLE</b> - Reclaimed Water, Irrigation and Slurry Lines
	<b>GREEN</b> - Sanitary and Storm Sewer Lines



A **Tolerance Zone** means the horizontal space within eighteen-inches of the outside wall or edge of the line or facility.

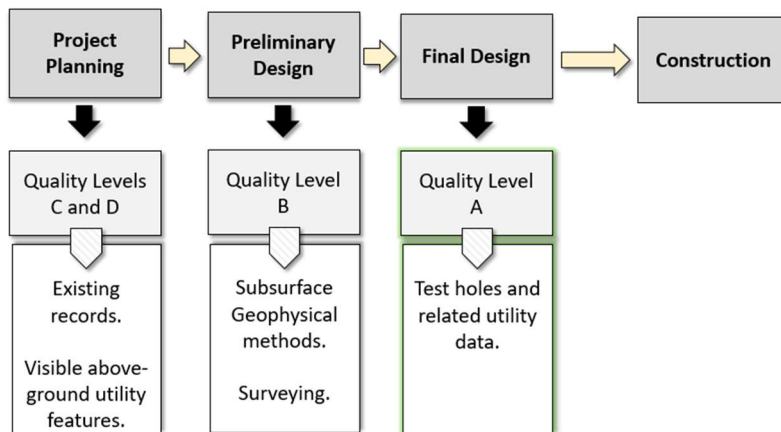
### SUBSURFACE UTILITY ENGINEERING (SUE)

Subsurface Utility Engineering is a branch of engineering practice that involves managing certain risks associated with utility mapping at appropriate quality levels, utility coordination, utility relocation design and coordination, utility condition assessment, utility relocation cost estimates, utility design, communication of utility data to concerned parties, and implementation of utility policies.

A designer is responsible for developing a written project-specific work plan package that consists of the scope of work, levels of service versus risk allocation, project schedule and desired delivery methods. The standard of care developed by the American Society of Civil Engineers (ASCE).



## PROJECT OWNER DESIGNER COMPLIANCE TRAINING



RESOURCE: U.S. Department of Transportation, Federal Highway Administration (FHWA)

**Quality Level A:** Precise horizontal and vertical location of utilities obtained by the actual exposure and subsequent measurement of subsurface utilities, usually at a specific point. Includes physical and visual verification, utilities exposed using non-destructive air-vacuum means, exposed utilities are then surveyed and plotted on the site plan, and evaluations, size, condition, materials and precise horizontal positions are measured and documented.

**Quality Level B:** Information obtained through the application of appropriate surface geophysical methods to determine the existence and approximate horizontal position of subsurface utilities.

**Quality Level C:** Information obtained by surveying and plotting visible aboveground utility features and by using professional judgment in correlating this information to Quality Level D.

**Quality Level D:** Information derived from existing records or oral recollections.

### HOW FACILITY OWNERS RESPOND TO A DESIGN NOTIFICATION

For preliminary and final design notifications, the response due is 23:59:59 ten business days from the request submit date.

Facility owners must make reasonable efforts to locate or notify of the existence and type of abandoned main lines, in the possession of the facility owner, for preliminary and final requests, at preconstruction meetings, and for routine locate requests where the specific excavation area is identified using white paint or flags.

### KARL RESPONSE CODES

- A facility owner is required to respond to all notifications through the One Call System.
- The KARL system is set up to use by phone or online.
- Facility owners can use interim responses to communicate with the excavator and designers; facility owners are required to give final responses to close the communication with the excavator and designers.
- When a facility owner does not give a final response, it will register in the ticket record, as "999 did not respond through PA One Call"; which is a violation of the law.
- For excavation tickets, there are two final responses: 001 Clear, no facilities OR facilities are not involved based on ticket information, and 003 Field marked.
- For design tickets, there is one final response: 083 engineering completed.



- For complex project tickets, there are two responses: 091 Clear will not attend meeting and 099 Attended meeting. Reached agreement.

FINAL RESPONSES UNDER THE LAW		
Excavation	Design	Preconstruction Meeting
001 Clear No Facilities OR facilities not involved based on ticket information	083 Engineering Completed	091 Clear Will Not Attend Meeting
003 Field Marked		099 Attended Meeting Reached Agreement

### FIELD LOCATION MARKS

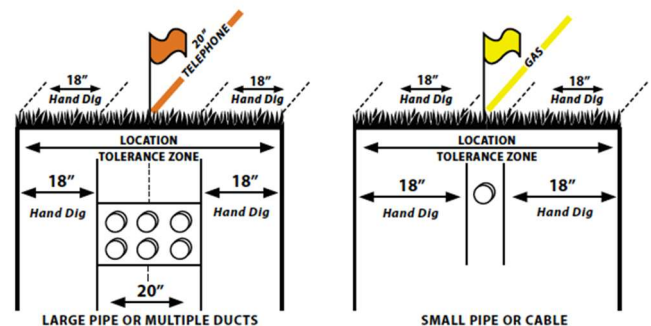
Facility owners are required to initially respond to a design request for information as to the position and type of facility owner's lines based on the information in their possession, to mark the plan, which have been provided to them by the designer, or by field location, or by another method agreed to with the designer.

A facility owner may mark, stake, locate or otherwise provide the position of the facility owner's underground lines at the work site within eighteen inches horizontally from the outside wall or edge of a line or facility.

The four components of a correct mark are:

- use of appropriate color when marking underground lines
- identify the facility owners name or initials or use a flag with the company logo
- mark the type of material the facility is made of; and,
- indicate the size of the line

### TOLERANCE ZONE



### ALLEGED VIOLATION REPORT

- The Pennsylvania Public Utility Commission (PUC) enforces PA Act 287 of 1974, as amended (the One Call law).
- A person by action or inaction fails to fulfill their obligation of the Act.
- Excavators, designers, project owners and facility owners are required by law to submit an alleged violation report to the Commission through the One Call System.
- An excavator and project owner has not more than 10 business days to file an alleged violation report.
- A designer and facility owner has not more than 30 business days to file an alleged violation report.

Alleged Violation Reporting (AVR)				
	Excavator	Project Owner	Designer	Facility Owner
Not more than 10 business days	X	X		
Not more than 30 business days			X	X