U.S. Department
of Transportation
**Pipeline and Hazardous
Materials Safety
Administration**

**1200 New Jersey Avenue SE
Washington DC 20590**

PIPELINE SAFETY

2010 State Damage Prevention Grant

for

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Please follow the directions listed below:

1. Review the entire document for completeness.
2. Review and have an authorized signatory sign page 2.
3. Fasten all pages with a paper or binder clip - no staples please as this package will be scanned upon it's arrival at PHMSA.
4. Mail the entire document, including this cover page to the following:

ATTN: Karina Munoz
U.S. Department of Transportation
Pipeline & Hazardous Materials Safety Administration
Office of Contracts and Procurement
1200 New Jersey Avenue, SE Second Floor E22-228
Washington, D.C. 20590

FedSTAR Information

Submission Date: 9/4/2009 9:33:08 AM

Pipeline and Hazardous Materials Safety Administration
1200 New Jersey Avenue, SE
Washington DC 20590

DEPARTMENT OF TRANSPORTATION

APPLICATION

2010 GRANT PROGRAM IN SUPPORT OF STATE DAMAGE PREVENTION

The PENNSYLVANIA PUBLIC UTILITY COMMISSION hereby applies to the Department of Transportation for Federal funds appropriated for the support of State Damage Prevention Programs established under 49 U.S.C. Section 60134 et seq.

The State agency plans to carry out the State Damage Prevention Program, during calendar year 2010, as described in Attachment 1, "Project Abstract/Statement of Objectives". To accomplish the program, the state agency proposes to expend funds as set forth in Attachment 4, "State Damage Prevention Estimated Budget".

Signature

Title

Date

Project Abstract/Statement of Objectives

Please provide a clear and concise description of the work this grant will fund for calendar year 2010

SUE - Subsurface Utility Engineering

SUE - Subsurface Utility Engineering
Pennsylvania One Call System, Inc. (POCS) is in a unique position in that our system already has an excellent communication network between designers, excavators, project owners, and facility owners. POCS would like to build on this existing communication network, a layer in which our designers and facility owner stakeholders can exchange design drawings during the early planning stage of new underground infrastructure. In 2010 POCS will design and implement a drawing exchange program including the ability for designers to upload documents to a central repository for review and mark up by facility owner members, with notification back to the designer once mark up is complete, just as we do with the normal excavation process electronically.
This program will allow for the gathering of information, promote utility coordination, and minimize unknown hazards, costs, and work to reduce the final project costs and delays. This platform will also be used to collect Subsurface Utility Engineering data as prescribed by our Law and begin to build a geo-infrastructure database for all stakeholders to access the information that involves their own facilities and begin to improve their own facility GIS at no direct cost. The Pennsylvania SUE project will offer the ability to improve POCS land base in working with State, County and Local Governments to save costs thru a cooperative effort building on the PAMAGIC and PA MAP initiative Pennsylvania has in place for more than ten years. POCS was one of the original 23 participants. POCS has shared ten years of working with Indiana University of Pennsylvania's "Geospatial Science Research Center" do to improve the map database, coordinate field work to collect street level data in 17 counties of the State with USGS and the US Census Bureau for the 2000 Census and TIGER files. The outlook is to deploy a "ROADIC" like system Japan has with this data.
http://www.pamagic.org/pamagic/site/default.asp
http://www.fgdc.gov/library/presentations/documents/GITA-roadic-Tokyo.ppt/view

State Damage Prevention Elements

ELEMENT 1 - EFFECTIVE COMMUNICATIONS

"Participation by operators, excavators, and other stakeholders in the development and implementation of methods for establishing and maintaining effective communications between stakeholders from receipt of an excavation notification until successful completion of the excavation, as appropriate."

Does the proposed project address this element? (Required) Yes

Describe any existing state initiatives that support this element: (Required)

Pennsylvania One Call System, Inc. (POCS) is a non-profit Pennsylvania corporation created to help protect the underground facilities of members through communication with any person(s) planning to disturb the earth. POCS is governed by a 36 member Board of Directors, comprised of representatives from each industry. The industries are: Associate, cable television, contractor, designer, electric, gas, municipal, pipeline, telecommunications, telephone, and water. Part of the 36 Board is made up of the following agencies:

1. The Chairman of the Pennsylvania Public Utility Commission or his designee.
2. The Director of the Pennsylvania Emergency Management Agency or his designee.
3. The Secretary of the Labor and Industry or his designee.
4. The Secretary of Transportation or his designee.

This communication network receives and processes underground line location requests from excavators, contractors, plumbers, builders, designers, and the general public; and disseminates this work location information to all members based on their service agreements. Pennsylvania One Call System's purpose is to prevent damage to underground facilities, promote safety and to provide an efficient, effective communications network among project owners, designers, excavators, and facility owners.

POCS is dedicated to minimizing utility service interruptions, reducing on-the job injuries and deaths, promoting a higher level of public safety and protecting the environment. The company provides a toll free telephone number for anyone to call when digging and requesting location of underground lines and can be reached using the national call before you dig number of 8-1-1. This service is available 24 hours per day, every day of the year. Information is obtained from the person planning an excavation and disseminated to underground facility owner/operators via data transmission to their computers via email, modem, or fax, and relayed to their emergency personnel when necessary. The system accepts automated responses from facility operators and relays them to the excavator/ designer.

Additionally, electronic mapping service is provided to members. This service offers members a significant savings in time and money. Safety presentations are available to facility owners/operators and excavators. Education is heightened through attendance of trade shows, and safety conferences including three outdoor safety days held annually across the state.

Describe how the proposed project will enhance or continue implementation of this element: (Required only if proposal addresses this element)

ELEMENT 4 - EFFECTIVE EMPLOYEE TRAINING

"Participation by operators, excavators, and other stakeholders in the development and implementation of effective employee training programs to ensure that operators, the one call center, the enforcing agency, and the excavators have partnered to design and implement training for the employees of operators, excavators, and locators."

Does the proposed project address this element? (Required) No

Describe any existing state initiatives that support this element: (Required)

Pennsylvania One Call System (POCS) currently employees a team of five Liaisons and several volunteer subject matter experts from government and industry providing direct education to members, excavators, desingers, as defind in Pennsylvania Underground Utility Line Protection Law, engineers, operators, and locators.

A SUE education program will be developed focusing on SUE Quality level A the highest level of accuracy. The program will allow for full use of subsurface utility engineering services while promoting the awareness of project owner on the savings and importance of proper planning and design, reduce construction costs as shown in the Federal Highway Administration, and the Purdue Studies of four dollars in savings for each dollar of SUE work.

ELEMENT 7 - ENFORCEMENT

"Enforcement of State damage prevention laws and regulations for all aspects of the damage prevention process, including public education, and the use of civil penalties for violations assessable by the appropriate State authority."

Does the proposed project address this element? (Required) No

Describe any existing state initiatives that support this element: (Required)

Enforcement of the PA damage prevention law is the jurisdiction of the Pennsylvania Department of Labor & Industry, the Bureau of Labor Law Compliance. The Pennsylvania Law allows for fines and penalties for any person violating the Act. Having this level of records will allow for more informed and precise rulings when a project does not complete without hitches.

Legislative/Regulatory Actions

Provide a description of any legislature or regulatory actions (including legislative/regulatory studies) taken by the State within the past five (5) years pertaining to damage prevention program improvement, even if those actions were not completely successful.

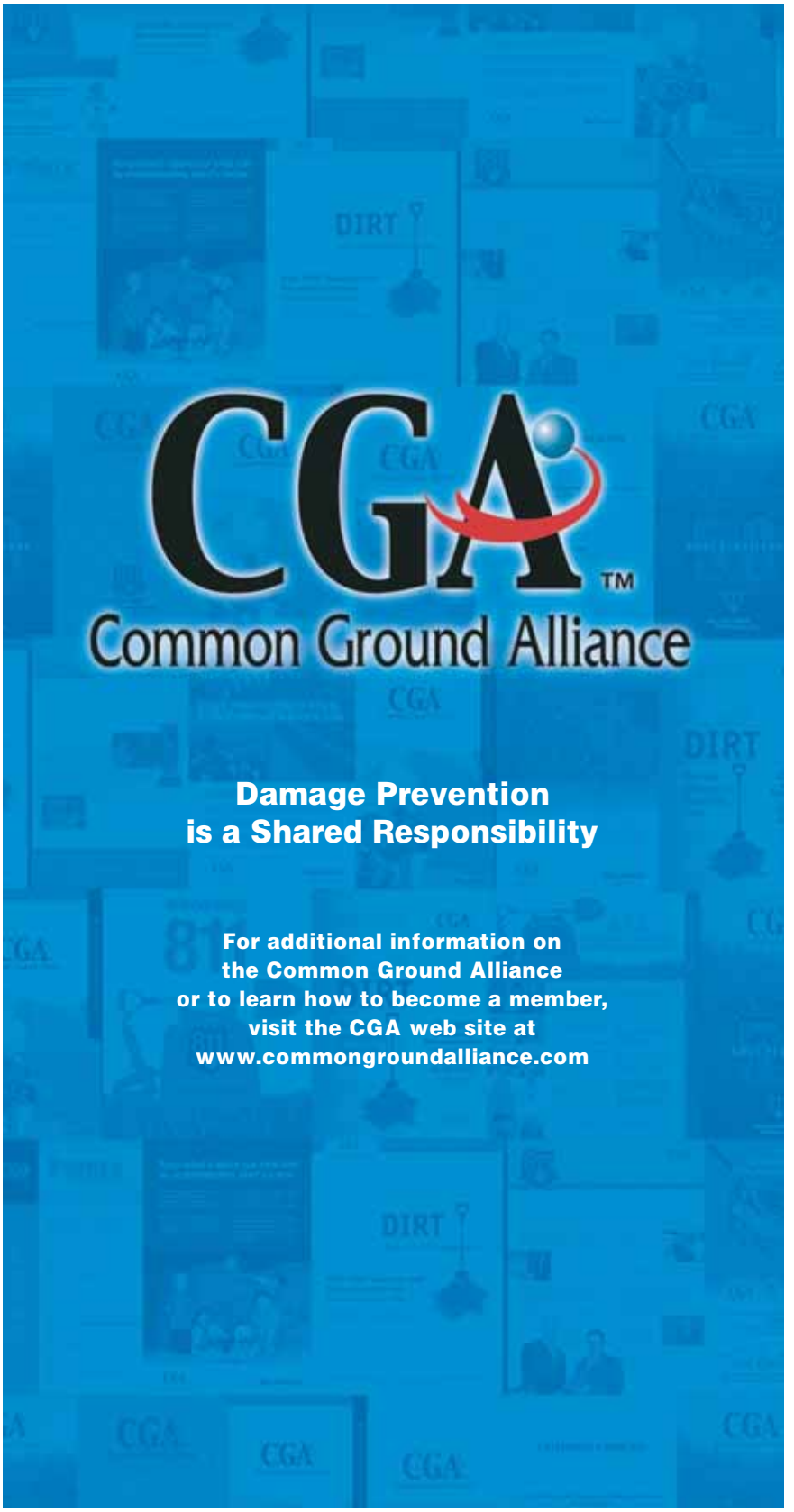
Pennsylvania One Call is a non-profit 501 (c) (6) Pennsylvania corporation created to protect and prevent damage to underground facilities in order to better ensure public and excavator safety by providing an efficient, cost effective communication network between excavators, designers, and underground facility owners/operators. Enactment of Pennsylvania's "Underground Utility Line Protection Act" 287 of 1974 as amended in 1986, 1991, 1996, 2004, 2006, and 2008 have continued to improve excavation and safety across the commonwealth through the automated notification process. Mandatory membership instituted in 1986 has allowed POCS to grow to over 3,300 facility owner members. Automated responses through the Center were added in 1994 and legislated in 1996. The Automated Response System enjoys over 92% average compliance for nearly 10 years. Enforcement was also part of the 1996 legislative update. POCS has worked with the Department of Labor and Industry and the PA PUC to bring about compliance with the Act protecting over 12,000,000 Pennsylvanians 24x7x365. The 2006 legislation added a section dealing with the responsibilities of "project owners". Responsibilites of the project owner as definded under the Act include a requirement to utililize sufficient quality levels of Subsurface Utility Engineering (SUE) or other similar techniques whenever practicable to properly determine the existence and exact postions of underground facilities when designing known complex projects having an estimated cost of four hundred thousand dollars. Additionally; POCS has National level technical abilities, an IT team with exceptional abilities and pervasive reach in the Commonwealth.

The PUC, as the designated arm of enforcement for Pipeline and Hazardous Materials Safety Administration (PHMSA) and the regulatory agency in Pennsylvania, is qualified with POCS as its partner, to develop this project. Bill Kiger, Executive Director/President, Pennsylvania One Call System, Inc. is actively involved as a former board member of Geospatial Information & Technology Association, Common Ground Alliance and Best Practices since 1998, founder of One Call Systems International and 4 term Chair, Life member American Public Works Association, Civil Air Patrol ? Pennsylvania Wing, and the Pennsylvania State 911 Task Force. Bill was elected to the CGA Hall of Fame in 2008, and is in his 35th year of guiding damage prevention efforts in the Commonwealth and across the industry in North America. This proposal is an example of his direct and continued involvement in best practices of underground damage prevention. He has been appointed Chair of State Regulatory Damage Data Collection Taskforce and will be working to expand his (XML) based Universal Damage Report pilot to all states that need a Damage reporting system to process the damage data in conjunction with DIRT and Virtual DIRT. Pennsylvania One Call System, Inc operates a state of the art Call Center located at 925 Irwin Run Road, West Mifflin, PA 15122. PA One Call offers its 3315 member facility owners and nearly 88,000 Excavator Associate Members PA Virtual DIRT.

POCS is active and aware of all legislation in relation to the purpose of damage prevention on a state and federal level.

State Damage Prevention Application Attachments

PAGovLetter.pdf
PA SDP Att3.pdf
PA SDP Att2.pdf
PA SDP Att1.pdf


CGA™
Common Ground Alliance
Damage Prevention
is a Shared Responsibility
For additional information on
the Common Ground Alliance
or to learn how to become a member,
visit the CGA web site at
www.commongroundalliance.com

Chapter 2
Planning and Design Best Practices

Project Owner | Excavator | Designer
Facility Owner | One Call Center | Locator

2-1: Plat Designation Of Existing Underground Facility Easements

Practice Statement: Plats prepared for the development of real property identify and show the alignment of any existing buried facilities and the presence and extent of any existing easements and/or Rights of Way.[1]

Practice Description: Various items are required on the plats filed prior to the development of lands. Where plats are required to be filed, the items required include the identification of the easements of underground facilities traversing the land described on the plat. Identification of easements of underground facilities on the plat increases notice to developers and the public about the existence of the underground facilities. Notification to the owners of underground facilities that a plat has been filed alerts underground facility owners/operators to establish communication between the developers and the operators to facilitate a plan and design for the use of the land which complements the underground facility.

Benefits: Often underground facility owners/operators do not receive notice of developments impacting their facilities until excavation activity has commenced. This compromises the optimal use of the land and potentially compromises the integrity of the underground facility.

Reference:

- St Louis County, Minnesota zoning ordinances.

2-2: Gathering Information For Design Purposes

Practice Statement: The designer uses all reasonable means of obtaining information about underground facilities in the area of the planned excavation.

Practice Description: During the planning phase of the project, all available information is gathered from facility owners/operators. This includes maps of existing, abandoned and out-of-service facilities, cathodic protection and grounding systems, as-builts of facilities in the area if the maps are not current, proposed project designs, and schedules of other work in the area. This information is gathered for the purpose of route selection and preliminary neighborhood impacts, and as part of the process of impact analysis when evaluating different design possibilities. Methods of gathering information may include contacting a one call center, facility owners/operators, coordinating committees/councils, other designers, engineering societies, and governmental agencies as a means of identifying underground facility owners/operators in an excavation area. Gathering information may also include a review of the site for above ground indications of underground facilities (i.e. permanent signs or markers, manhole covers, vent pipes, pad mounted devices, riser poles, power and communication pedestals and valve covers). The one call center provides a listing of operators directly to the designer, or to the designer's subsurface utility engineer. This information is available in formats that are accessible to all users such as voice, fax, E-mail or web-site. Once identified, the designer contacts the operators directly or uses the one call system. The facility owner/operator may locate their underground facilities or provide locations of their underground facilities to the designer by other means, such as by marking up design drawings or providing facility records to the designer.

Benefits: Gathering underground facility information and including this information in the planning phase minimizes the hazards, cost and work to produce the final project.

1 TR-2007-01: Modification to Statement Approved by CGA Board on August 24, 2007

- Safety is enhanced.
- Unexpected conflicts with facilities are eliminated.
- Facility relocations are minimized.

References:

- Wisconsin Sec. 186.0175 Stats.
- Minnesota Statute 216D.
- Pennsylvania Act 287 of 1974, as amended by Act 187 of 1996.
- See related Finding Number 3, "Identifying Existing Facilities in Planning and Design."
- "Construction Management Interference Control Manual," Consolidated Edison, New York, New York, June 9, 1997.
- Subsurface Utility Engineering, Federal Highway Administration (FHWA), February 1999, Office of Program Administration (HIPA).
- Florida Department of Transportation Utility Accommodation Manual, Document No.: 710-020-001-d, Section 11.4, January 1999.

2-3: Identifying Existing Facilities In Planning And Design

Practice Statement: Designers indicate existing underground facilities on drawings during planning and design.

Practice Description: During the planning phase of the project, existing facilities are shown on preliminary design plans. The planning documents include possible routes for the project together with known underground facility information. The various facility owners operators are then given the opportunity to provide appropriate feedback. During the design phase of the project, underground facility information from the planning phase is shown on the plans. If information was gathered from field located facilities, from underground facility surveys or from subsurface utility engineering, this is noted on the plans. The designer and the contractor both know the quality of the information included on the plans. If an elevation was determined during the information gathering, it is shown on the plan. The facilities shown include active, abandoned, out-of-service, and proposed facilities. The design plans include a summary drawing showing the proposed facility route or excavation including streets and a locally accepted coordinate system. The plans are then distributed to the various facility owners/operators to provide the opportunity to furnish additional information, clarify information, or identify conflicts.

Benefits: Providing complete underground facility information and including this information on design drawings reduces the hazards, simplifies coordination and minimizes the cost to produce the final project.

2-4: Utility Coordination

Practice Statement: Project owners and facility owners/operators regularly communicate and coordinate with each other concerning future and current projects.

Practice Description: Utility coordination fosters an open exchange of information among private and public facilities, govern mental agencies and construction related organizations. Utility coordination also promotes cooperation among said groups in the planning, design and construction of projects affecting the overall good of participating parties, their organizations and customers or constituents, and the general public. Utility Coordinating Committees (or Councils) include private utilities, public agency utilities, engineering firms, contractor associations, and others with facilities or business interests in public rights-of-way. Coordinating Committees function in multiple communities, counties and states/provinces to promote excavation project coordination. Typical items of discussion include facility excavations in existing and recently paved roadways, disruption of essential facility services, location of utility facilities, environmental impact of damages to utilities, permit procedures, right-of-way access controls and underground facility damage prevention. Plans of future roadway improvement and of future facility installations are reviewed regularly.

References:

- Wisconsin Administrative Rule Chapter Trans 220 "Utility Facilities Relocations."
- Arizona Utility Coordinating Committee (AUCC) Public Improvement/Project Guide, December 1996.
- Highway/Utility Guide (FHWA), Publication No. FHWA-SA-93-049; June 1993.

2-5: Markers For Underground Facilities

Practice Statement: The presence and type of underground facilities are indicated by permanent above and below ground markers and material.

Practice Description: A combination of above ground and below ground markers is used to identify and locate underground facilities. The purpose of above ground markers is to identify underground facilities, not to locate for excavation or circumvent the one call process. However, designing underground facilities for future location reduces the risk of an incorrectly marked underground facility during an excavation project. Above ground markers are developed during the design process and include the company name, type of facility, emergency contact, and the one call number. The locations and types of markers are specified in the construction plans. The design provides a marker system to include, but not limited to, stream crossings, public road crossings, other facilities' right-of-ways, railroad crossings, heavy construction areas, and any other location where it is necessary to identify the underground facility location. If non-detectable facilities are being installed, the design includes a means to accurately locate the underground facility from the surface. The facility is color-coded in accordance with the APWA guidelines to assist in identifying the particular facility. Road decals, stencils, tracer tapes, electronic markers or other appropriate systems may mark areas where traditional markers are considered impractical.

Benefits: Provisions to aid in future locating requests are included in the design. In addition, an effective marker system is beneficial to the underground facility owner/operator and first responders to an area involving more than one underground facility or an incident near underground facilities.

References:

- 49 Code of Federal Regulations (CFR) Part 192 & 195.
- Industry Standards.
- APWA, "Guidelines for Uniform Temporary Marking of Underground Facilities."

2-6: Follow All Applicable Codes, Statutes And Facility Owner/operator Standards

Practice Statement: When planning and designing the installation of new or replacements of existing underground facilities, the designer follows all federal, state/provincial and local guidelines, codes, statutes and other facility owner/operator standards.

Practice Description: The designer of a facility project typically considers only national industry codes, regulations and practices applicable to that particular facility, and not of adjacent facilities. Regulations, codes, standards and other design documents generally specify depth of cover, and horizontal and vertical clearances between adjacent facilities. However, they are not always prescriptive and can be subject to interpretation by the designer. In addition, certain codes allow exceptions to the prescribed minimum clearances, contingent upon approval between the affected facility owners/operators. The designer also has to consider the protection and temporary support of adjacent facilities, and any interference to existing cathodic protection and grounding systems. Consequently, the designer has to provide specifications on safety measures to be taken and procedures for emergency notification and repairs in the case of any damage to an adjacent facility. Designers are aware of proposed and revised standards and codes that may affect the project.

Benefits: The designer reviewing codes pertaining to adjacent facilities minimizes any potential conflict of code clearance requirements, and facilitates future locating efforts.

2-7: Use Of Qualified Contractors

Practice Statement: Qualified contractors are used to excavate on and near underground facilities.

Practice Description: Contractors that excavate on and near underground facilities possess the qualifications necessary to conduct such activities in a manner that is skillful, safe and reliable. The requisite qualification of the contractor serves to protect the public and integrity of underground facilities in the vicinity of the excavation. Using qualified contractors ensures that all contractors who bid and work on a project employ safe work habits and are capable of performing the requested work. When working with contractors, the project owner is familiar with the contractors' work experiences and financial abilities and should not ask the contractors to bid beyond their capabilities. Allowing a competitive bidding process from qualified and competent contractors will assure the best quality and pricing available, while reducing damages to underground facilities.

Benefits:

- Enhances safety,
- The quality of work increases, and
- Damage to facilities decreases.

References:

- Florida Law (Chapter 337.14 FS.) And Rules of the State of Florida, Department of Transportation, Chapter 14-22.
- Duke Energy of Houston, TX, procedures.

2-8: Mandatory Pre-bid Conferences

Practice Statement: A mandatory pre-bid conference is held and bids are only accepted from attending contractors.

Practice Description: Depending on the level of impact of proposed construction upon facilities in the excavation area, the project owner or project designer requires potential contractors to attend a mandatory pre-bid conference including underground facility owners/operators. This pre-bid conference is exercised to discuss, among other things, the particular facilities in the area and the requirements to properly protect, support, and safely maintain the facilities during excavation. Official minutes are taken and disseminated as written to all attendees.

Benefits: Pre-bid conferences provide a forum for the contractor, owner and other interested parties to discuss a project and record binding changes or clarifications to the scope of the project. The pre-bid conference also provides an opportunity for all parties to review contract documents, regulatory requirements, schedules and submittal formats. Most large projects involve multiple levels of subcontracting activity, as well as multi-layered regulatory oversight. The pre-bid conferences traditionally address these issues in an open forum so that all bidders are equally aware of the ground rules. The ground rules would be both commercial and technical in nature, covering the spectrum from performance bonds to safety practices.

References:

- Industry and governmental practices.
- Florida Department of Transportation.
- Duke Energy of Houston, TX, procedures.

2-9: Continuous Interface Between The Designer And Potential Contractors During The Pre-bid/bid Phase

Practice Statement: Once a project design is completed, the designer participates in the pre-bid/bid process.

Practice Description: The designer's continuing involvement during the pre-bid/bid phase with the potential contractor(s) allows for more effective communications between all parties. The designer can assess whether the interested bidders have the expertise needed and the correct understanding of the intended design.

Benefits:
- By providing quality assurance, this practice minimizes potential safety concerns and delays to project completion.
- The designer would have the opportunity to relay information not readily shown on the plans, such as accommodations of facility adjustments required to construct the project.

References:
- Industry Practice.
- Expert Opinion.

2-10: Continuous Interface Between The Designer And The Contractor During The Construction Phase

Practice Statement: The designer continues to interface with the selected contractor throughout the construction phase.

Practice Description: This practice allows the designer to be available for pre-construction conferences, unforeseen conditions and design changes and post-construction conferences.

Benefits:
- Potential safety concerns are resolved more quickly, thereby minimizing subsequent modifications to the project design, costs and completion.
- The designer's inspections of the project during different stages are also facilitated.

Reference:
- Industry and government practice.

2-11: As-built Drawings

Practice Statement: As-built drawings are prepared and the information recorded to aid future excavations and locates.

Practice Description: Installation should be made in accordance with the approved construction plans; any deviation to the plans is documented and such changes indicated on the as-built drawings. As-built information is recorded, retained and made available for subsequent excavation.

Benefits: As-built drawings serve as an information source for future projects to minimize damage to existing facilities.

References:
- Union Pacific Railroad procedures.
- Expert opinion.
- Industry and governmental practices.

2-12: Supply Line Separation

When installing new direct buried supply facilities in a common trench, a minimum or 12 inch radial separation should be maintained between supply facilities such as steam lines, plastic gas lines, other fuel lines, and direct buried electrical supply lines. If 12 inches separation cannot be feasibly attained at the time of installation, then mitigating measures should be taken to protect lines against damage that might result from proximity to other structures. Examples may include the use of insulators, casing, shields or spacers. If there is a conflict among any of the applicable regulations or standards regarding minimum separation, the most stringent should be applied.[2]

References:
- National Electric Safety Code IEEE C2-2007 (2007 Edition).
- Industry practices.

2-13: Trenchless Excavation

Practice Statement: All stakeholders adhere to all Best Practices and the following general guidelines prior to, during and after any trenchless excavation (as applicable):

Practice Description:
- The project owner and design engineer take prudent measures to make the determination to use trenchless excavation installation.
- The project owner and design engineer coordinate with facility owners to design projects that maintain minimum radial clearances

2 TR-2001-04: Amendment Approved by CGA Board on September 25, 2003

between the new facility and existing facilities. Minimum clearances are equal to or greater than applicable standards.
- The project owner and design engineer establish line and grade of the proposed excavation to maintain the established minimum clearances. (Additional Information: Refer to practices 4-19 & 5-29).[3]

References: See Appendix D

2-14: Subsurface Utility Engineering (SUE)

Practice Statement: When applied properly during the design phase, SUE provides significant cost and damage avoidance benefits and the opportunity to correct inaccuracies in existing facility records.[4]

Practice Description: In certain cases and environments, it may be difficult or impossible to determine the locations of all utilities and/or impediments with sufficient accuracy to avoid damage or delay during construction. In these cases, Subsurface Utility Engineering (SUE) is applied during the design phase to locate, identify and characterize all existing utility infrastructure (and other relevant non-utility features) found within a given project/area. SUE is applied in a structured manner, in accordance with practices and Quality Levels found in ASCE 38-02 "*Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data."* The project owner dictates the required Quality Levels, as well as the amount of effort expended by the SUE provider on each. Although the Standard is more detailed and comprehensive, the following is a brief summary of the Quality Levels defined therein: QL-D involves utility records research and interviews with knowledgeable utility personnel. QL-C involves surface survey, identifying and recording aboveground features of subsurface utilities, such as manholes, valves, and hydrants. QL-B involves application of "surface geophysical methods," such as EM-based locating instruments, GPR, Radar Tomography, metal detectors, and optical instruments, to gather and record approximate horizontal (and, in some cases, vertical) positional data. QL-A involves physical exposure via "soft-digging" (vacuum excavation or hand-digging), and provides precise horizontal and vertical positional data. SUE results are integrated into the design process, where design engineers use the information to create construction plans that accommodate existing infrastructure, thereby reducing the overall risk of conflicts and/or damage.[5]

References:

- U.S. Department of Transportation – FHWA (12/1999). *Cost Savings on Highway Projects Utilizing Subsurface Utility Engineering.* Pub. No. FHWA-IF-00-014.
- U.S. Department of Transportation – FHWA (3/2001). *Subsurface Utility Engineering: Enhancing Construction Activities.* Pub. No. FHWA-IF-01-011.
- ASCE 38-02 *Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data.*
- *Pennsylvania State Law*

2-15: Use of Qualified Designers

Practice Statement: Project owners employ qualified design and SUE providers.

Practice Description: When new utility infrastructure is installed, project owners employ qualified Designers and SUE providers. Such providers have knowledge and understanding of applicable CGA Best Practices and the ASCE 38-02 SUE Standard. Providers are qualified in application of the associated design practices and SUE processes. The providers also are knowledgeable of the operation of any involved equipment and interpretation of results where applicable.

3 TR-2002-03: Amendment Approved by CGA Board on September 16, 2005
4 TR-2007-02: Modification to Statement Approved by CGA Board on August 24, 2007
5 TR-2004-03: Amendment Approved by CGA Board on March 4, 2005

Use of qualified SUE providers provides higher quality information to designers, who in turn can minimize utility conflicts by better depicting actual subsurface conditions on the construction plans.[6]
Practice Statement 2-3: Identifying Existing Facilities in Planning and Design
Practice Statement 2-7: Use of Qualified Contractors
Practice Statement 2-14: Subsurface Utility Engineering
References: Public Service Electric & Gas (PSE&G, New Jersey)

2-16: Project Coordination[7]

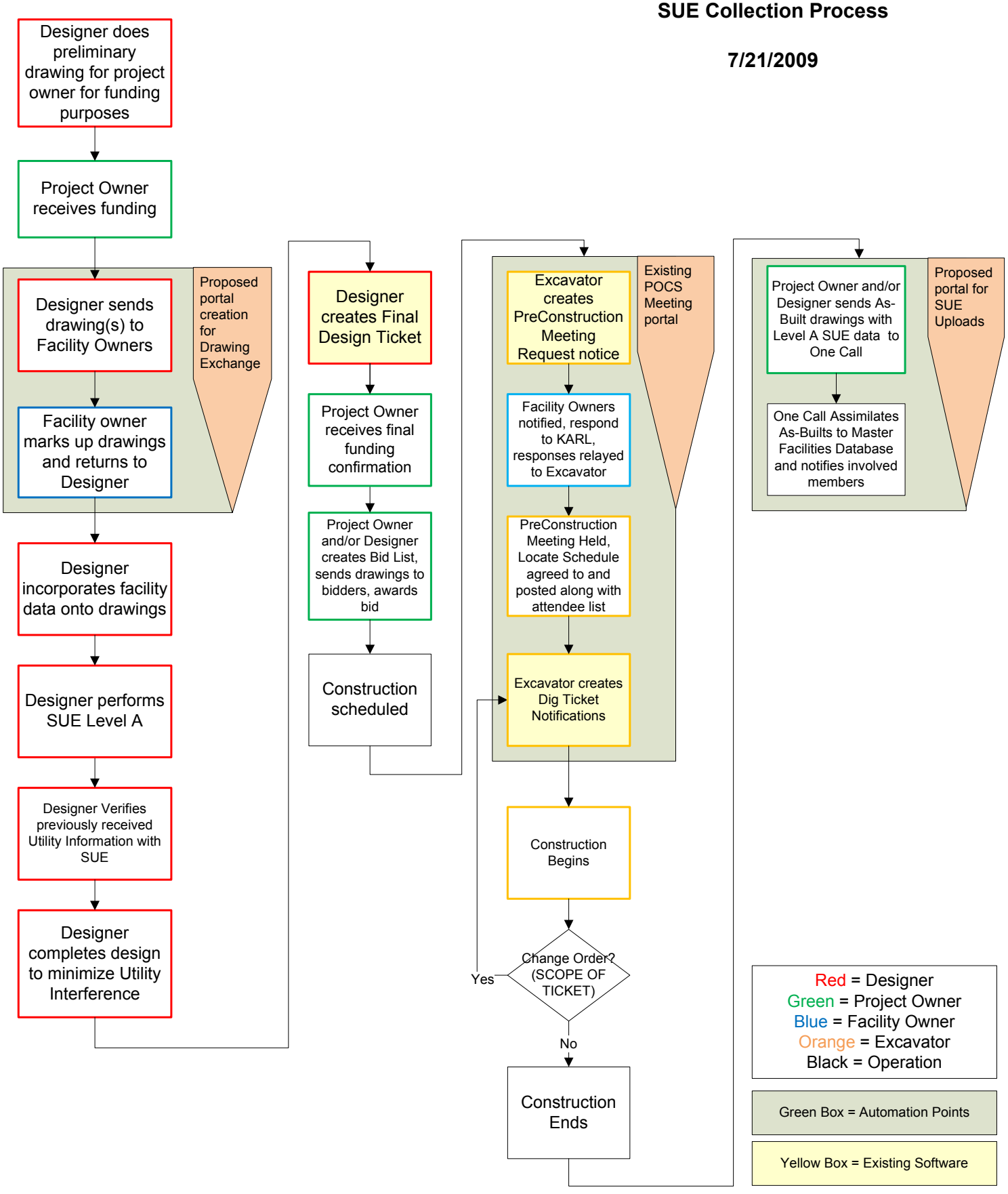
Practice Statement: Large and/or Complex projects may require the use of specific processes established to enhance safety and coordinate buried facility damage prevention efforts among all potentially affected stakeholders throughout the life of the project. Such processes are intended to compliment, and be used in addition to, standard and customary one call notification and locating practices.
Description: A "Large/Complex" project is a single project or a series of repetitive small, related-scope, short-term projects which impact facilities over a long period of time or a large area. Such projects pose a unique set of safety and damage prevention challenges when using standard one call practices, specifically as they apply to ongoing locating and re-marking requirements. These unique challenges can be addressed by the establishment of special processes, including, but not limited to: a method for identifying such projects; pre-planning and design coordination; increased one call center involvement; a formalized communication process among all affected stakeholders; project-specific marking agreements that address variance scenarios; regularly scheduled meetings of, and on-going communication among, all involved stakeholders; and positive response. The purposes for establishing such processes are to enhance safety and optimize the utilization of locating resources on "Large/Complex" projects.
References:

- GAUPC and Georgia Utility Facility Protection Act
- PA One Call and PA Underground Utility Line Protection Act

6 TR-2007-04: Amendment Approved by CGA Board on November 15, 2007
7 TR-2006-03: Amendment Approved by CGA Board on December 12, 2008.

PROPOSED
Drawing Exchange Process and SUE Collection Process

7/21/2009



Pennsylvania One Call System, Inc.

User's Guide

For Pennsylvania Underground Utility Line Protection Law

PA Act 287 of 1974 as amended by Act 181 of 2006 73P.S. § 176 et. seq.

Final Draft July 2008

811

Know what's **below.**
Call before you dig.

1-800-242-1776

Call Before You Dig!

www.paonecall.org

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References:

www.paonecall.org
www.dli.state.pa.us.
www.commongroundalliance.com
www.apwa.net
www.FHWA.dot.gov

DISCLAIMER OF LIABILITY

This Guide has been prepared as an educational document for contractors, designers, operators, project owners, and facility owners. It is intended as a reference tool for interacting with the Pennsylvania One Call System, ("POCS"). It is also intended to explain in a general way the requirements provided for in Pennsylvania's Utility Line Protection Act, Act 287 of 1974, as amended by Act 181 of 2006 (the "Act"). It is strongly recommended that all individuals who regularly contact "POCS" review the Act and this Guide. Familiarity with its contents will be valuable, but the Guide is meant to clarify and explain the law according to POCS' understanding of how it affects interaction with POCS. This Guide is not a substitute for the Act and it does not relieve anyone from discharging their responsibilities as set forth in the Act or as otherwise required by law.

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 Additional copies may be obtained from the PA One Call Center or copied from its web site at www.paonecall.org. The contents of this Guide are subject to change without notice. The web site will be updated as soon as possible after changes are made and approved by the Board of Directors. If there are any questions you may call 1-800-248-1786 or use the home page.

INTRODUCTION

The Pennsylvania One Call System Board provides this Guide for the participants of the Act to help clarify the responsibilities of each of the parties under the provisions of the law. Over 3100 facility owners participate in the Pennsylvania One Call System currently, and a 36 member Board of Directors represents each of the industries involved in subsurface activity. All of the public utilities, public works, pipe line, telecommunications, the Commonwealth, construction and design industries were represented throughout the legislative process.

This Guide has been prepared to assist you in preparing your own operating procedures to comply with the Act, and to protect yourself and those you work with. It also provides insight into what you can expect to encounter underground. It is our hope to provide you with information to assist you in developing your own policy and procedures to guard against dangers and situations of working underground.

SECTION I
ODDS ARE YOU COULD BE MOVING MORE THAN EARTH

It's getting crowded underground. Virtually anywhere you need to dig, there are probably underground facilities somewhere in the vicinity. Growing networks of telephone cables, power lines and cable TV lines are joining the occasional gas, water, sewer and petroleum pipes. The odds of an excavator moving something besides dirt are getting greater all the time. Even if you see overhead lines, that doesn't rule out the existence of buried power, television or telephone facilities. Many utility companies have long-term programs to weatherproof their plant by putting it underground. Both aerial and underground facilities may be in use during transitions. Some areas have overhead main lines with buried services going to the homes and other buildings.

Even water-filled ditches and streams may have underground utilities in or under them. A ditch may have been dry when utilities were buried. A stream may have been diverted. Even "open country" may conceal buried utilities. Large pipelines and high capacity cables are especially expensive to place, so utilities often cut across country to reduce total miles for these major installations.

You can be positive that buried utilities are located in virtually all road rights of way. Buried utilities are also found many times along property lines and between lots and serve any building located on a lot.

Damage to buried utilities most often occurs when excavators do not call for utility locations before they dig. This isn't the only cause, however. Damage also seems to occur immediately after the excavator believes the following:

"Just one last bucket;" or
"There can't be anything way out here;" or
"I know they're "XX" inches deep"

In many cases, utilities are damaged even after calls have been made and locations clearly marked. That's usually because some excavators do not know the procedures for safely excavating around the buried facilities. The law requires excavators, in section 5 clause 4, to exercise due care; and to take all reasonable steps necessary to avoid injury to or otherwise interfere with all lines where positions have been provided to the ***excavator*** by the facility owners pursuant to clause (5) of section 2. Within the tolerance zone ***the excavator*** shall employ prudent techniques, which may include hand-dug test holes to ascertain the precise position of such facilities. ***If insufficient information to safely excavate is available pursuant to clause (5) of section 2, the excavator shall employ like prudent techniques*** which shall be paid for by the ***project*** owner pursuant to clause (15) of this section.

After locating the precise location of underground facilities through the use of prudent techniques, excavators must continue to exercise due care within the tolerance zone to avoid interference, injury or damage to the underground lines.

Damage also results from improper backfilling around exposed utilities. The Underground Utility Line Protection Act addresses this area. The Law states, in section 5 clause (6) To inform each operator employed by the ***excavator*** at the site of such work of the information obtained by the ***excavator*** pursuant to clauses (2.1) through (5), and the ***excavator*** and operator shall:

> Plan the excavation or demolition to avoid damage to or minimize interference with a facility owner's facilities in the construction area. Excavation or demolition work which requires temporary or permanent interruption of a facility owner's service shall be coordinated with the affected facility owner in all cases.
>
> After consulting with a facility owner, provide such support and mechanical protection for known facility owner's lines at the construction site during the excavation or demolition work, including during backfilling operations, as may be reasonably necessary for the protection of such lines.

SECTION II
DETERMINING WHO AND WHEN TO CALL

The Underground Utility Line Protection Act (the "Act"); OSHA Standard 1926.651 (revised 1990); the Federal Pipeline Safety Act of 1968, as amended, protecting underground liquid (CFR 49 Part 195) and natural gas (CFR 49 Part 192.614) pipelines; and the National Electric Safety Code, ANSI C-2 (revised 1997); require anyone who engages in any type of excavation or demolition, (see the Act for definition of excavation), to provide advance notice. In Pennsylvania, the Act requires "***notice in the design or planning phase of every work operation that involves the movement of earth with powered equipment. This notice is not less than 10 nor more than 90 business days before final design approval. In the Construction phase of a work operation involving movement of earth with powered equipment or explosives the notice required is at least 3 business days but not more than 10 business days prior to actual excavation***". Additionally, to facilitate timely and accurate mark-outs of the notification site before you excavate, the Work Location request should cover only the excavation work that can be completed in a reasonable period of time. This should be based on the resources you plan to use and the time of year (near term weather) for each date such information is provided to the system.

All contractors, including subcontractors should make their own notification. The Act states that the person doing the work shall make the call. The only party protected by the notification is the caller.

PA One Call System is open 24 hours a day every day of the year. Pursuant to Sections 221 and 709 (e.1) of The Administrative Code of 1929, the Executive Board has determined that the administrative offices of State Government shall be closed on the following holidays for the purpose of transacting public business.

New Year's Day	Columbus Day
Martin Luther King, Jr. Day	Veteran's Day
President's Day	Thanksgiving Day
Memorial Day	Day After Thanksgiving
Independence Day	Christmas Day
Labor Day	

Please note: "*Business day" means any day except a Saturday, Sunday or legal holiday prescribed by statute. A business day begins at 12:00:00 a.m. and ends at 11:59:59 p.m.*

PA One Call should **NOT** be contacted for any of the following reasons:

A. To report any type of non-digging related service outage -- CALL the Utility direct.
B. To resolve any type of billing problem -- Call your provider direct.
C. To report any excavation outside the Commonwealth of Pennsylvania; Call their One Call Center. POCS will provide their number upon request and there is a national One Call referral number – 8-1-1
D. To request installation of any type of utility service -- Call the Utility direct.
E. To get a weather report -- Call National Weather Service or the Telephone Co. Weather Service in your area.
F. Request any type of change with utility service.

To resolve these items, contact the facility owner (your utility provider) directly. Their numbers are on your respective monthly statement or in the telephone directory. You may also dial INFORMATION 555-1212. Please add the area code if out of your local area code or 800-555-1212 for toll free information.

SECTION III
TYPES OF CALLS HANDLED BY PA ONE CALL

There are several variations to the excavation call, covered in detail in Section IV of this document. Each variation can be used to solve unique situations or problems.

Section 5 of the Act requires the caller:

"To provide the One Call System with specific information to identify the site so that facility owners might provide indications of their lines."

"An excavator shall use the color white to mark a proposed excavation site when exact site information cannot be provided."

The members encourage contractors to outline their exact proposed site in white to assist the locator in marking only the area where the work will take place.

"If, after receiving information from the One Call System or directly from a facility owner, an excavator decides to change the location, scope or duration of a proposed excavation, the obligations imposed by this section [Section 5] shall apply to the new location."

The following is a brief explanation of each type of call taken by Pennsylvania One Call System, Inc.:

1. DESIGN CALL

Any drawing that is prepared for an excavation REQUIRES a Design Notification that must comply with the provisions in Section 4 of the Act.

Those planning work that disturbs the earth are required to notify POCS not less than 10, nor more than 90 business days in advance of the final design. The Design Notice is meant to allow the designer to plan the new work around existing facilities as the Act prescribes. The information provided should cover the entire scope of the plan or development with enough detail to allow the facility owners to provide the approximate locations of their lines in the proposed work area. Many times, facility owners involved will add their facilities directly on your plan document. Please state during the call that you will be sending maps/plans. As a designer, you are required to add the one call serial number and the 1-800-242-1776 or 8-1-1 number to the plan before you forward it to the involved facility owners. Once the facility owners have responded, the designer shall add their facility information to the drawing before the final design is approved.

2. EMERGENCY CALLS

An emergency is defined by Section 1 of the Act as **"**a sudden or unforeseen occurrence involving a clear and immediate danger to life, property ***and the environment,*** including, but not limited to, serious breaks or defects in a facility owner's lines."

Note: When calling in an emergency excavation, inform the answering Customer Service Representative (CSR) that an emergency situation exists and describe the emergency. The answering CSR will prepare the ticket for immediate transmission. Facility owners should respond as soon as practical.

Damage Reporting Calls - When a facility is damaged the notice is generally considered an emergency to that facility owner and those in close proximity to the damage. If you damage a line, call the Center or the Facility Owner immediately. Report the details and particulars just as soon as you are sure the work site is safe. If a hazardous line has been struck it is most often best to evacuate the immediate area. Contact 911 or

the appropriate emergency response unit in the immediate area. That local information should be at the job site with the crew at all times where they have access to it, along with a map or directions to the nearest emergency care facility.

Odor of Gas – We do accept non-excavation related calls from those who smell natural gas. These calls are immediately sent to the gas companies registered to receive such notices.

3. ROUTINE LOCATION REQUEST

Notification for excavation work shall be not less than 3 business days nor more than 10 business days starting the day the notification is received. Each work location request must clearly identify the work site (See Section IV). When exact site information cannot be provided, use white paint to outline the proposed excavation site. The work location request shall be limited to the area described in the notification call, and cannot cross over municipality boundaries.

4. DEMOLITION WORK

Notification for demolition work shall be not less than 3 business days nor more than 10 business days starting the day the notification is received. *Caution. Demolition work may require more advance clearance from the facility owner if their service lines need to be disconnected.* You also may need a permit for the work. The One Call notification should not be considered notice under any circumstance other than the Act. You must follow all local codes as a part of your compliance with the Act. Final billing and disconnect of the lines attached to the structure must be secured directly with the involved service provider.

5. APPOINTMENT CALL

The One Call Center can relay requests for job site utility meetings for excavators who request them with facility owners. If, because of difficulty in describing the area that proposed excavation will take place in, a meet is required to show the limits and schedule of the work, the One Call Center can indicate that a meet is requested.

On larger projects that would be difficult to identify with specific information as in number 3, Section III, at the excavator's option, he may choose to call for a pre-construction meeting with the facility owners. The meeting request shall be governed by the rule not less than 3 business days nor more than 10 business days of the beginning of the work. In this appointment call, the area covered by the work must still be reasonably described so the one call center can notify the proper facility owners. A time and place for the meeting with any necessary directions should be included in the call. The contractor should have prepared for the meeting by having a competent person present with drawings depicting the proposed work site and schedule for the execution of the work.

It is important that the facility owner's representative make every effort to attend this meeting, as it is a routine location request and fulfills the notification requirement of the Act. It is recommended that minutes be taken and distributed to attendees of the job site meeting.

At this meeting, plans and schedules should be reviewed so a marking plan can be formed in order that the necessary markings will take place prior to the digging as the job progresses through each area of work. A working relationship should be established between the excavator and the facility owner representatives to reduce confusion at the work site. Emergency phone numbers and contact people should be identified for notifications of problems, delays, or changes in the mark out plan. Changes in the scope or duration of the work require a new notification under the Act.

If for any reason a facility owner cannot attend this meeting, the facility owner's representative may contact the contractor and make other arrangements, or have the lines marked within the two business days allowed by law.

[This section will be re-worded once the Complex Project process is adopted by the Board of Directors.]

SECTION IV
GUIDELINES FOR PREPARING A WORK LOCATION REQUEST

POCS Customer Service Representatives (CSRs) are trained to obtain specific information concerning location requests. The CSRs enter information into a computer terminal and, therefore, the order of the questions is preset. There is a definite reason for every question asked. This section will provide a brief explanation of the reason for each.

Work location request processing is very easy if the caller is prepared to answer all questions. Preparation is the key. The best way to prepare for a call is to make a copy of the work location request form as shown in the back of this Guide. Your call is recorded.

1. Telephone Number & Extension:

The telephone number, including the area code, of the excavating company, design firm, or homeowner placing the call.

2. Caller's Name:

The caller's name is taken in order to maintain records of what person placed the locate request.

3. Company:

The name of the company doing the excavation work. On design stage notifications, this field should contain the company name of the designer. This field may also contain the name of the caller, if the caller is a homeowner placing their own work location request.

4. Address, City, State & Zip:

The mailing address of the company is recorded and stored for ticket entry and retrieval as well as for our mailing list database. The mailing list may be used to notify excavators and designers of information pertaining to POCS and with respect to the Act.

Work Site Information:

5. County:

The name of the county in which the work will be performed is required.

6. Municipality:

The name of the municipality in which the work will be performed is also required.

Ward: If the work is taking place in Allentown, Erie, Pittsburgh, or Philadelphia, the voting ward of the site is also required.

Description of the Work Site:

To ensure that all underground facility owners can find the exact site of the location request, POCS has requirements for identifying the location of the job site. The best information is a specific street address.

7. Street # & Street Name:

Name of the street and/or route number. Please use the exact address numbers and the street suffix (ST, RD, CT, AVE, LN, WY, etc.)

8. Nearest Intersection:

Name of the nearest intersecting street or route (within reasonable distance).

9. Second Intersection:

This field is used by the CSR when a caller indicates they are digging between two streets. This field can be used to hold the nearest major intersection name if the nearest intersection is a new or unnamed road. Clarifying information will be typed into location information so the facility owner knows which type of data has been entered in this field.

10. Site Marked in White?

Will the proposed route or boundary of the work site be marked in white. Please answer yes or no.

11. Location Information:

Clarifying information to specify the exact location of the dig. This can be directions from the nearest town, or major intersection. Landmarks, trees, fountains, fence, railroads, highway pipeline marker, etc., directionals (N, S, E, W or variants), utility pad number and telephone pole numbers are very helpful. Give as much descriptive information as you can to help the facility owners and the locator find the site.

It is very important to describe the site in detail and give the distance from the street, structure, property line, fence, or other landmarks. If working on private property note whether working in the front, rear, left, right or all sides.

If you cannot provide the exact site information you need to schedule a pre-construction meeting or mark the site in white. When the locator arrives it's important that they know where to mark. Identify the area where you're working to prevent the locator from over marking the site. In some areas, neighbors can get upset if the marks appear to be graffiti, so mark with 12" dashed white lines. This will also help the locators complete the work needed as well as provide you with the information you need.

NOTE: ***If an exact location cannot be given, it is required that the proposed route or boundary of the work site be marked in white.*** *Marking the job site will provide locators with an accurate picture of the proposed excavation area. These marks should be white to avoid confusion with color codes used by underground facility owner (see Section V of this document).*

12. Subdivision:

Although not asked as a separate question during the call, the name of the subdivision, housing development or building complex where the work will take place, will be entered if applicable.

13. Type of Work Being Done:

Field locators need to know the reasons for excavation. Therefore, CSRs need to know the specific reason for the work. *For example, "installing a sanitary sewer lateral" is much more helpful than "digging a sewer line."*

14. Working in:

The CSR will ask the caller to identify if the work will take place in the street, sidewalk, public or private property. Other designations such as right of way, treelawn, berm, stream, etc., can also be specified. This information gives a specific qualifier to the address.

Street: please indicate yes or no
Sidewalk: please indicate yes or no
Public Property: please indicate yes or no
Private Property: please indicate yes or no
Other: where applicable

15. Depth:

Give the approximate depth of the excavation.

16. Extent of Excavation:

Give the approximate size of the excavation. Indicate the length and width, the diameter, or some other measurement to indicate the size of the opening.

17. Method of Excavation:

Indicate how the earth will be moved, i.e. anchoring, augering, backfilling, blasting, boring, directional boring, digging, ditching, drilling, driving-in, grading, hand-digging, plowing-in, pulling-in, ripping, scraping, tilling, trenching, trenchless excavation, tunneling, or vacuum excavation.

18. Work Being Done For (Project Owner):

Identification of whom the work is being performed for is another resource for obtaining additional information about a project. The Act refers to this as the "project owner". The ***"project owner" means any person who or which engages an excavator for construction or any other project which requires excavation or demolition work.***

Mapping

The system will attempt to locate the described proposed excavation site using the county, municipality, street, nearest intersection, and second intersection provided by the caller. The caller can also provide up to two latitude/longitude points to assist in the search. Once the system finds the general location, the CSR will draw a notification area box around the proposed excavation site as described by the caller. The notification area box determines what facility owners will be notified.

In the rare situations when a site cannot be found on the map, an unmapped notification will be sent. The facility owners notified will be based on the county and municipality given by the caller.

19. Person to Contact:

The name of the person facility owners can contact in case additional information is required.

20. Phone Number and Extension (of the Person to Contact**):**

The phone number with area code and the extension, if needed, for daytime contact.

21. Best Time to Call:

When the contact person is normally available for the facility owner to contact with any questions.

22. Fax #:

A dedicated fax line is recommended, as fax responses are sent from facility owner's in lieu of a phone call whenever possible.

23. E-mail:

Provide the email address of the caller if they have one.

LAWFUL START DATES: (3 business days) **through** (10 business days)

These dates are calculated for routine work location requests. They indicate the earliest date that digging can begin and the last possible date when digging must begin. If digging does not start within these dates, a new one call notification must be placed. This information is provided to the caller by the CSR.

24. Scheduled Excavation Date:

On construction notifications, indicate the date the excavation work is scheduled to begin. Work cannot begin prior to the date given. This question is not asked on design stage notifications.

If the scheduled excavation date given by the caller falls between the lawful start date and is not the

third business day, the lawful start dates are recalculated and the scheduled excavation date becomes the first lawful start date. The lawful end date does not change.

Start Time: The estimated time the excavator plans to be on site.

Notification Request Types (the kind of work being performed):

Excavation – a construction notification involving the movement of earth, rock or other materials.

Damage – a notification that reports a damaged or exposed underground facility.

Demolition – a notification specifically for demolition work.

Notification Request Classes (the timeframe of the work being performed):

Design – a notification requiring not less than 10 nor more than 90 business days notice prior to final design. Lawful start dates are not calculated on design notifications. Digging is not permitted on a design notification. If you need the facility owners to send you prints/maps, the CSR will enter your request in the remarks section of the notification.

Routine - a notification requiring not less than 3 nor more than 10 business days notice.
It is very important not to begin work prior to the lawful start dates or the scheduled excavation date. (See the Statute in the back of this book). Beginning work before the lawful start date can result in forfeiture of the excavator's rights and protection provided for under Pennsylvania Act 287 as amended. *In addition, a warning or summary offense citation could be issued up to $500 per violation.*

Emergency – a request where the caller states the work being done is an emergency.

25. Duration of Job:

Give the approximate number of hours, days, weeks, months or years you will be actively working on this excavation or demolition. This information helps the facility owner determine the resources needed to deal with the request.

26. Remarks:

Additional information about the work that did not fit in prior fields can be entered here. Job numbers or other reference information can also be placed here. **This is also the place to request a job site meeting, indicating the requested date and time.**

The computer issues a serial number and displays a list of facility owners being notified.

The CSR will provide you with the serial number and offer to read you the list of facility owners being notified. The serial number is proof of your notification. It is important. Please write it down.

The following is one example of proper information when identifying the location of a job site:

CDC ABC 00001 POCS MM/DD/YY TT:TT:TT 1234567-000 NEW XCAV RTN

==========PENNSYLVANIA UNDERGROUND UTILITY LINE PROTECTION REQUEST==========

Serial Number--[1234567]-[000] Channel#--[1234] [0123]

Message Type--[NEW] [EXCAVATION] [ROUTINE]

County--[ALLEGHENY] Municipality--[WEST MIFFLIN BORO]

Work Site--[925 IRWIN RUN RD]

Nearest Intersection--[NOBLE DR]
Second Intersection--[LUTZ LANE]
Subdivision--[BORLAND COMPLEX] Site Marked in White--[Y]

Location Information:
[WORKING FROM THE FIRE HYDRANT, CROSSING THE DRIVEWAY INTO THE TREELAWN AREA, UP THE MIDDLE OF THE TREELAWN, FOR 100FT TO THE LEFT CORNER OF THE BUILDING CROSSING BACK OVER THE DRIVEWAY INTO THE BUILDING.]
Caller Lat/Lon--[]
Mapped Type--[P] Mapped Lat/Lon--
[40.361226/-79.926977,40.361981/-79.924776,40.360903/-79.924907
40.361123/-79.927265]

Type of Work--[INSTALL 2IN WATER SVC LINE] Depth--[3FT]
Extent of Excavation--[2FT X 230FT] Method of Excavation--[TRENCHING]
Street--[N] Sidewalk--[Y] Pub Prop--[N] Pvt Prop--[Y]Other--[TREELAWN]
Owner/Work Being Done for--[PA ONE CALL SYSTEM INC]

Lawful Dig Dates--[DD-MON-YY] Through [DD-MON-YY]
Scheduled Excavation Date--[DD-MON-YY] Dig Time--[TTTT] Duration--[1 WEEK]

Contractor--[ABC CONSTRUCTION] Homeowner/Business--[B]
Address--[12345 MAIN ST]
City--[PITTSBURGH] State--[PA] Zip--[15236]

Caller--[ANNABELLE SMITH] Phone--[555-555-5555] Ext--[]
Fax--[555-444-4444] Email--[asmith@aol.com]

Person to Contact--[ANNABELLE SMITH] Phone--[555-555-5555] Ext--[]
Best Time to Call--[0800-1600]

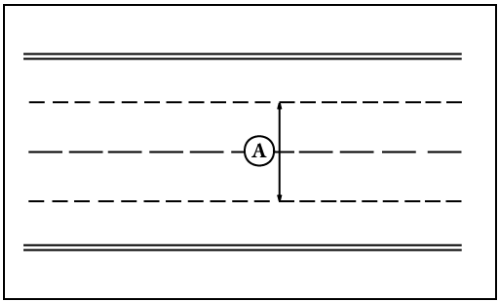
Prepared--[DD-MON-YY] at [TTTT] by [CSR NAME]

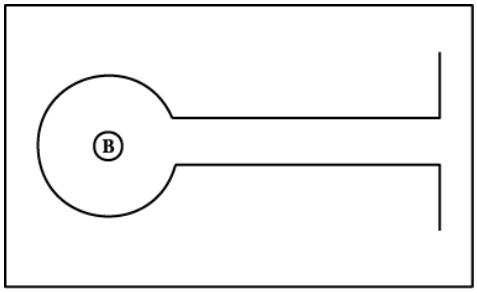
Remarks--
[]

The following are definitions of some of the terms that can be utilized to help describe the work area to be marked.

A. **Center Lane(s) –** In a four-lane street, the two lanes at the center of the pavement.

B. Cul-de-sac – A local street open at one end with a special provision for turning around.





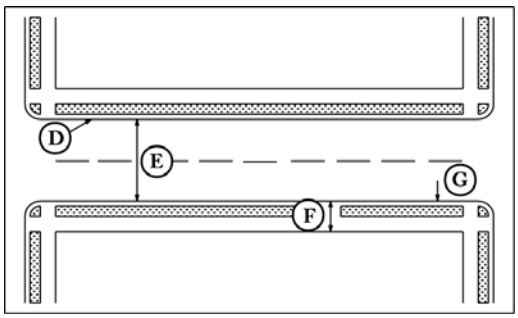
C. **Culvert** (not pictured) – Any pipe or structure under a roadway or driveway to facilitate drainage of surface water.

D. **Curb Lane(s) –** Traffic or parking lane immediately adjacent to the curb.

E. **Curb to Curb –** The paved area of a road right of way between the two curb lines.

F. **Curb to Property Line –** The area between the curb and the front property line.

G. **Curb Line –** The point where the curb meets the edge of the street pavement.



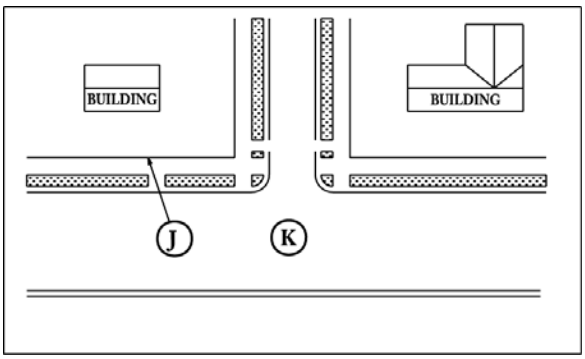
H. **Easement** (not pictured) – A right to use or control the property of another for designated purposes.

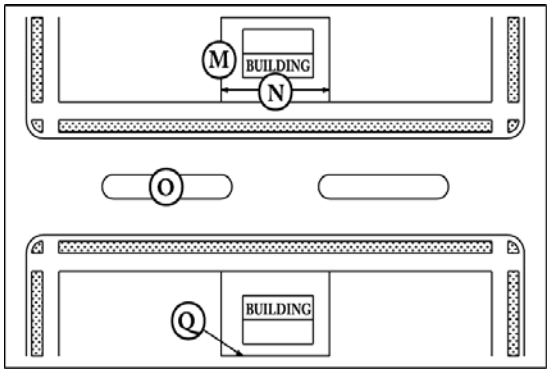
I. **Frontage Road** (access road - not pictured) – A local street or road auxiliary to and located on the side of an arterial highway for service to abutting property and adjacent areas and for control access.

J. **Front Lot Line –** (Same as street right of way line) the property line adjacent to the street right of way.

K. **Intersection –** The general area where two or more highways join or cross, within which are included the roadway and roadside facilities for traffic movements in that area.

L. **Interchange** (not pictured) – A system of inter-connecting roadways in conjunction with one or re grade separations providing for the movement of traffic between two or more roadways on different levels.





M. **Lot Line –** A line marking the legal limits of an individual's property.

N. **Lot Line to Lot Line –** The area between the two side lot lines on private property and the entire road right of way (See R.)

O. **Median –** The portion of a divided highway separating the traveled ways for traffic in opposite directions.

P. **Property Line –** See Lot Line (M).

Q. **Rear Lot Line(s) –** Property lot line at the rear of the lot (area opposite street that connects the two side lot lies).

R. **Right of Way** – Dedicated street areas bounded by two generally parallel lines called right-of-way lines. Another name for these lines is front property lines.

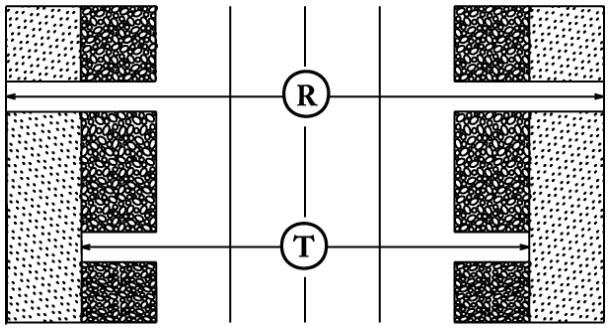
S. **Road** (not pictured) – Highway in rural area.

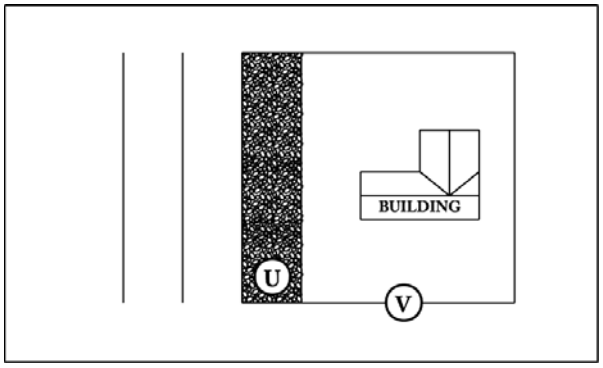
T. **Roadway –** The portion of a highway, including shoulders, for vehicular use.

U. **Shoulder –** The edge of a road (generally gravel) between normal traffic lanes and grass areas. The term normally used in areas where there is no curb.

V. **Side Lot Line(s) –** The two property lines, which normally extend away from the street right-of-way.

W. **Street** (not pictured) – Highway in an urban area.





SECTION V
WHAT HAPPENS WHEN THE CALL IS MADE

As the CSR completes the work location request, the computer at POCS processes the ticket. The computer issues a serial number and displays a list of members notified.

The computer transmits the message to the underground facility owners. Underground facility owners receive the information on a PC; modem equipped printer, fax equipment, or via email.

The information is received by the member facility owner. The facility owner's personnel review the work location request by comparing it with their maps and records, or making field visits. It is their job to decide whether or not the location of the work site is close to existing underground facilities.

Once it is determined that markings are required, member facility owners will dispatch a locator to the site to locate and mark their facilities in the excavation site described on the work location request with paint, stakes, and/or flags.

Facility owners shall mark facilities according to APWA/Common Ground Alliance Best Practices for Temporary Marking set for in ANSI standard Z535.1 Safety Color Code (See Section VI of this document).

If the work or site appears to be complex or the lines at the site are critical, the facility owner may request to meet the excavator. Some facility owners are required to be on site during excavation while work is in the vicinity of the line. Generally, there is no charge for this additional level of protection.

Take advantage of their expertise and make sure you understand the safety precautions that are necessary to protect the line and yourself.

Underground facility owners are required to respond to the work location request through the One Call System. The automated service is called **KARL**. KARL receives the facility owner responses and faxes or emails the collected responses to the excavating or design company.

The following is a list of the Facility Owner responses used in the KARL system:

1. Clear – No Facilities
2. Conflict. Lines Nearby. Direct Contact to follow from Facility Owner.
3. Marked
4. Insufficient Information. Do Not Dig.
5. Not Marked – Due to No Access
6. Scheduled Date & Time Lines will be Marked by
7. Voice Message
8. Design Conflict. Please send plans to:

SECTION VI
RESPONSIBILITIES OF THE FACILITY OWNER
(After receiving the work location request)

After receiving and screening the work location request, if a conflict exists, each underground facility owner will mark the location of their facilities in the field. Markings will be done in a reasonable manner; in order to enable the excavator to easily recognize the location of buried facilities. Underground facility owners will mark facilities in accordance with the following APWA/Common Ground Alliance Best Practices for Temporary Marking (uses ANSI standard Z535.1 Safety Color Code):

WHITE	Proposed Excavation
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

SYMBOLS
(These symbols further define the color-coding used in marking buried facility locations).

CH	Chemical	SS	Storm Sewer
E	Electric	SL	Street Lighting
FO	Fiber Optic	STM	Steam
G	Gas	SP	Slurry System
LPG	Liquefied Petroleum Gas	TEL	Telephone
PP	Petroleum Products	TS	Traffic Signal
RR	Railroad Signal	TV	Television
S	Sewer	W	Water
SD	Storm Drain	W	Reclaimed Water “Purple

Underground facility owners will use stakes, flags, paint, or other suitable materials in varying combinations dependent upon the type of surface to be marked. These marks will be in sufficient quantity to clearly identify the routes of the facility. The marking should also include the symbols of the underground facility owner or actual company abbreviation (i.e. VZPA, DLCO, PECO, UGI, PAW, ATT, Sprint, etc.).

When the surface over the underground facility is planned to be destroyed, supplemental offset marking may be added. Such markings will identify the direction and distance to the actual facility. Supplemental marking may be added at the discretion of the facility owner.

Please see the attached marking card for guidelines for marking of underground facilities.

USE OF MARKING
Use color-coded surface marks (paint or similar coating) to indicate the location and route of buried lines. To increase visibility, color-coded vertical markers (temporary stakes or flags) should supplement surface marks. All marks and markers should indicate the name, initials or logo of the company that owns or operates the line and the width of the facility if it is greater than 50 mm (2"). If the surface over the buried line is to be removed, supplemental offset markings may be used. Offset markings should be on a uniform alignment and must clearly indicate that the actual facility is a specific distance away.

LOCATION TOLERANCE ZONE
Any excavation within the tolerance zone should be performed with hand tools until the marked facility is exposed. The width of the tolerance zone *means the horizontal space within eighteen inches of the outside wall or edge of a line or facility*. Excavation within this zone must be performed with prudent techniques i.e. hand tools until marked facilities are exposed. Section 5 clause (4) states: "To exercise due care; and to take all reasonable steps necessary to avoid injury to or otherwise interfere with all lines where positions have been provided to the ***excavator*** by the facility owners pursuant to clause (5) of section 2. Within the tolerance zone ***the excavator*** shall employ prudent techniques, which may include hand-dug test holes to ascertain the precise position of such facilities. ***If insufficient information to safely excavate is available pursuant to clause (5) of section 2, the excavator shall employ like prudent techniques*** which shall be paid for by the ***project*** owner pursuant to clause (15) of this section 5."

After locating the precise location of underground facilities through the use of prudent techniques, excavators must continue to exercise due care within the tolerance zone to avoid interference, injury or damage to the underground lines.

Note: The "**PROJECT OWNER**" under the Act **is any person who or which engages the contractor for construction or any project which requires excavation or demolition work as herein defined.**

Emergency work location requests that fall within the definition of an emergency are given top priority. Underground facility owner will mark facilities within the emergency excavation area as soon as practicable.

SECTION VII
RESPONSIBILITIES OF THE DESIGNER

A Designer is any architect, engineer or other person who or which prepares a drawing for construction or other project which requires excavation or demolition work as defined by the Act. Each designer preparing a drawing requiring excavation or demolition work within the Commonwealth shall contact Pennsylvania One Call System. The Design Notice is meant to allow the designer to plan the new work around existing facilities as PA Act 287 as amended prescribes. The notice shall be placed not less than 10, nor more than 90 business days in advance of the final design. Designers can obtain such information more than 90 days before final design is to be completed, however, they shall state in their requirements that such work is preliminary.

Final Design means “the engineering and construction drawings that are provided to a bidder or other person who is asked to initiate construction on the bid date or date the project is set for construction in the absence of a bid”.

In many instances engineering and construction drawings are prepared far in advance of bid acceptance or the start of construction; or last minute project owner/designer adjustments may result in changes to the proposed excavation area. The date of the most recent design One Call Notification should never be more than 90 days prior to the project bid date (or date of construction in the absence of a bid). This provides the designer with the opportunity to assess the possible impact of any recently installed underground facilities within the project area and to adjust the design accordingly prior to the bid or the start of construction. It is the Project Owner’s responsibility to not release any project to bid or construction until after final design is completed. Good communication between the designer, project owner and involved facility owners is necessary to produce the most accurate construction drawings possible.

Notifying POCS is the first step and there are several other responsibilities, which need to be completed.

When contacting POCS to request the line and facility information; the information provided should cover the entire scope of the plan or development with enough detail to allow the facility owners to provide the location of their lines in the proposed work area. As much descriptive information as you can should be given to help the facility owner identify the proposed construction area. Please be as specific as you can with the location information. It is very important to describe the site in detail.

The designer shall 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. A copy of the project plans shall be forwarded to each facility owner who requests a copy. If a designer is unable to provide a copy because of security of the project or proprietary concerns regarding the design of the project, the designer shall negotiate in a timely manner with the facility owner the means of obtaining the necessary data.

Once the request has been made the designer shall show upon the drawing the position and type of each facility owner’s line, derived pursuant to the request made, the name of the facility owner as shown on the list from the one call system, the serial number of one call notice and the toll free number of the one call system. Once the responses are received from the one call notification, it is acceptable to send enhanced .pdf plans of the site.

The designer shall make a reasonable effort to prepare the construction drawings to avoid damage to and minimize interference with a facility owner’s facilities in the 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 practical, if no easement restriction exists, or other clearance permitted or agreed upon.

The designer should consult with and advise the project owner regarding the project owner’s requirement to utilize sufficient quality levels of subsurface utility engineering. Design stage responsibilities of the designer and project owner are contained within PA Act 287 as amended and in the latest version of the Common Ground Alliance (CGA) Best Practices. The Act specifically requires your best efforts to comply with the CGA standards.

As with notifications of excavation work, the facility owners shall respond to notifications through the KARL System. There is even a response dedicated specifically for design notifications, “8. Design Conflict. Please send plans to:”. In addition to responding through the KARL System, facility owners can send plans to the Designer, mark the plans provided by the designer by field location or by another method agreed to by the designer, excavator and facility owner, or their agent, mark the field, or indicate they are clear if there is no conflict with the notification.

The designer is required to attend and participate in preconstruction meetings on complex projects when the excavator determines the project to be complex and actually schedules a meeting. Project owners are required to participate in design and preconstruction meetings either directly or through a representative. In many instances the designer may be the project owner's representative. Such meetings are encouraged to improve communications between all parties.

During Excavation

The designer is reminded that responsibilities under PA Act 287 as amended apply to all design activities, including changes of and additions to a project on which excavation is already underway. At the end of the project all SUE data shall be forwarded to the One Call Center in enhanced .pdf format.

SECTION VIII
RESPONSIBILITIES OF THE EXCAVATOR
(After Making the Call)

Many people believe that by notifying POCS of intended excavation they have completed all of their responsibilities with respect to the locating process. This is not the case. Notifying POCS is only the first step, and there are several other important considerations.

Prior to the Start of Excavation

When planning excavation activities the excavator should consider all available site information relating to the existence of underground facilities. The position of facility marks, any Subsurface Utility Engineering information contained on the project plans and the existence of visible landmarks such as meters, valve boxes, manhole covers and similar evidence should be included in the excavator's site assessment.

The excavator must inform each powered equipment operator employed at the site of the information obtained as a result of his notification to POCS. It also is good practice to provide this information to all workers at the site.

The excavator should plan the excavation or demolition work to avoid damage to or minimize interference with underground facilities in the construction area. If the work requires temporary or permanent interruption of the facility owner's service the excavator must coordinate the work with the affected facility owner(s) in all cases.

If the excavator is using horizontal directional drilling (HDD), he must, at a minimum, utilize the best practices published by the HDD Consortium.

If requested to do so by a facility owner, the excavator must assist a facility owner in determining involvement of their lines by disclosing additional available information including dimensions and the direction of the proposed excavations.

The excavator, except in an emergency with proper notification to POCS, may not begin excavation or demolition earlier than the scheduled excavation date which can be on or after the third business day after the notification to POCS was made. In a Complex Project, if the excavator requests a pre-construction meeting, he may not begin excavation for at least ten business days after notification to POCS that the project has been declared to be a Complex Project.

Consider documenting the position of marks as soon as possible after they are placed. Be watchful for possible removal and tampering of marks. This can occur unintentionally as a result of things such as lawn mowing, normal street maintenance, activities of children playing in the neighborhood as well as normal construction activities. Please remember that weather and wear can obliterate marking. Do not pile brush or spoilage on the

marking. You are responsible for the marks once the locator has left the site. If the excavator suspects that marks may have been compromised or eliminated he should contact the One Call Center to request that the facilities be marked again.

During the Excavation Process

All underground facilities encountered during the excavation work should be considered in use and potentially dangerous unless specific information from the facility owner indicates that the facility is abandoned or otherwise not in use and does not contain any dangerous elements or by-products.

As the excavation operation approaches the estimated location of underground facilities, the excavator must determine the exact location of the marked facility by safe and acceptable means. This is usually accomplished by the use of hand tools or vacuum excavation techniques. The Act requires the use of prudent techniques for the area considered the "TOLERANCE ZONE", that is 18" from the outside wall or edge of the line or facility. Unless the depth of the marked facility is indicated, the excavator should continue the use of prudent techniques within the tolerance zone to the required depth of excavation. If a marked facility is not found within the established Tolerance Zone during excavation, the excavator should contact the one call center and renotify the facility owner. If excavation continues, prudent techniques must be used until the precise location of the facility is identified or until it has been otherwise determined that the excavation is not in conflict with the facility. The excavator may be entitled to compensation from the project owner for this extra work as set forth in clauses (4) and (15) of section 5 of the Act.

If the Tolerance Zone is not established because of the inability or failure of the facility owner to provide marks or the information provided by the facility owner is insufficient to safely excavate and it is reasonably necessary for the excavator to ascertain the precise location of any line, including abandoned or unclaimed lines, the use of prudent techniques is required. The excavator may be entitled to compensation from the project owner for this extra work as set forth in clauses (4) and (15) of section 5 of the Act.

Work with the locator to reduce the confusion at the work site. Scheduling and cooperation can keep your job moving efficiently. Discuss your schedule and resources with the locators and set up a working relationship that can save everyone significant delays and confusion. It is always a good practice to document the work you do and record what safety instructions are given by the locator or field representative at the site.

Certain of our members have special policies because of the critical nature of their lines, (i.e. liquid pipelines, fiber optic communications, high pressure natural gas, chemical lines), and want to be on site when you are near their lines. Some facilities demand special consideration and are significant enough that your risk management policy should dictate extreme care be taken when working around these lines.

The one call system is a mandatory organization. Pennsylvania One Call System is presently the only one call system in operation in Pennsylvania. Some underground facility owners have elected not to belong; in violation of the Act. Excavators are not required to make an effort to contact these nonparticipating facility owners directly before attempting an excavation, but realistically there could be a safety issue if you see indications of facilities that are not marked. It is your safety that's at risk. Excavators are reminded not to begin excavation prior to the scheduled date of excavation.

NOTE: *Before excavation, check with the property owner to help identify any privately owned underground lines. In many areas of the state, the line from the curb to a dwelling is the property owner's, not the utility's property.*

Many excavators mistakenly believe that POCS is responsible for the actual marking of facilities. This is not the case. POCS takes information from the excavator and relays it to the underground facility

owners. The facility owners are responsible for ensuring that their facilities are properly marked.

POCS will collect the responses from the facility owners through the KARL system and relay it to the excavator. Excavators are encouraged to verify the current status of their one call request prior to commencing excavation or demolition work by calling the POCS KARL system at 1-800-222-6470. The following is a list of the Facility Owner responses used in the KARL system:

1. Clear – No Facilities
2. Conflict. Lines Nearby. Direct Contact to follow from Facility Owner.
3. Marked
4. Insufficient Information. Do Not Dig.
5. Not Marked – Due to No Access
6. Scheduled Date & Time Lines will be Marked by:
7. Voice Message
8. Design Conflict. Please send plans to:

When one underground facility owner indicates that there are no facilities in conflict with specific excavation, the excavator must realize that this does not mean that POCS has cleared the site, nor does it mean that other facilities are not at that location.

Failure to Locate Facilities Prior To the Start Date

On the scheduled day of excavation if a facility owner(s) has failed to respond or to mark the facilities; or appears to have marked the facilities incorrectly; it is strongly recommended, for safety reasons, the excavator call the one call center and renotify those facility owners. The Act does allow the contractor to begin work as scheduled, but not earlier than the lawful dig date provided he uses due care and uses prudent techniques in his work.

At the caller's request, the Center will renotify facility owner(s) with a statement in the remarks section of the ticket indicating which facility owner or type of facility the excavator needs to contact.

CAUTION: Certain facilities require special handling and protection. This protection should be the responsibility of the facility owner alone. Please contact them and they will provide the necessary support and protection or advise you specifically at the site.

When Damage Occurs

If during the course of excavation, a facility has been exposed and/or damaged, it is the excavator's responsibility to promptly notify the facility owner so that it may be inspected and repaired, if necessary, before being backfilled. The excavator should support these exposed facilities until such time as the facility owner inspects them. Failure to notify the facility owner can result in the excavator being held responsible for any and all damages attributable to the damaged facility.

If a facility is damaged which results in personal injury or property damage to parties other than the affected excavator or facility owner, the excavator must submit an incident report to the department within ten business days of the damage occurrence.

If the damage results in the escape of any flammable, toxic or corrosive gas or liquid which endangers life, health or property the excavator must **immediately** notify 911 and the facility owner. The excavator must also take reasonable measures, based on his knowledge, training, resources, experience and understanding of the situation to protect himself and those in immediate danger, the general public, property and the environment

until the facility owner or emergency responders have arrived and completed their assessment of the situation. The excavator must also remain on site to convey any pertinent information to responders that may help them to safely mitigate the situation. The requirement to notify 911 is also mandated by the Federal Pipeline Safety Act. Conviction can result in substantial monetary penalties, imprisonment, or both.

NOTE: Cathodic Protection techniques are often used to deal with the earth's stray electric current where steel and other metal lines are buried. If these are damaged they cause problems to the pipe or cable and must be repaired by the facility owner.

SECTION IX
RESPONSIBILITIES OF THE PROJECT OWNER

Project owners were not a principal focus of Act 287 when it was passed in 1974 and were largely ignored in subsequent revisions. References to "owners" in earlier versions of the Act were confusing and made it difficult to ascertain responsibilities. Act 287, as amended by Act 181 of 2006, recognizes the project owner as well as the facility owner has an important role in the process. This is a significant change to Act 287. It is the project owner who retains the designer or excavator to undertake construction of a project specific to their needs. A new section has been added to clarify the duties and responsibilities of the project owner.

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 and they are its principal beneficiary. The use of SUE or other similar techniques is required on large or complex projects costing $400,000 or more, whenever practicable. SUE provides a way to accurately identify the quality of subsurface utility information. The highest level of SUE will provide precise location information permitting the designer to avoid interference with underground facilities where possible.

Sometimes it is not possible to accurately locate or identify all lines. When an excavator must ascertain the location or lines, including unclaimed or abandoned lines, as outlined in clause 15 of the responsibilities of an excavator, he is entitled to compensation from the project owner as outlined in said clause. The project owner has responsibility to respond to such notifications, and to compensate the contractor for such work. By choosing and utilizing the highest level of SUE, this potential is minimized.

Occasionally when final design is properly completed in accordance with a contract between the project owner and designer, the project is not immediately let for construction. A definition for final design has been added that ties the final design under the Act to the bid date or the date the project is let for construction. Final design requires the designer to notify POCS and obtain information within 90 days of final design. If the project owner cannot or does not release the project for construction upon completion of final design as defined by this Act, the project owner needs to update the design. Projects should not be released for bidding until after final design notification process is completed. This will permit modifications, extensions or changes to facility owner's lines to be added to the drawings. The intent is to keep the information on the plans as current and up to date as possible. Plans that have been completed and not let for construction should be updated prior to bids being received. This is to prevent jobs that have been put aside for long periods of time for various reasons and then just sent out for bidding when funding becomes available.
This new section recognizes the value of communication between all parties to the Act. It is important for all parties to be involved in pre-construction and pre-design meetings. Clause 4 reinforces this responsibility of the project owner and permits him to send a representative. Often this will be the designer.

Information obtained via SUE will benefit facility owners only as it is shared with them. The intent of clause 5 in this section is for the One Call System to be a repository for the information and to convey it to the affected facility owners. The project owner provides the SUE data to the One Call Center. This retains the information for future reference and allows the facility owner to update their records with more accurate information. In

many instances, the project owner will have the designer, as his agent, furnish the SUE data.

This section also encourages the use of permanent color-coded markers to indicate the type and location of all laterals for new construction. These markers will assist in locating efforts in the future.

SECTION X
REPORTING PROBLEMS

There are several problems that the excavator may encounter during the locating process. POCS will assist in the resolution of these problems. The following are some of the more commonly experienced problems with a brief description of the proper channels to follow.

1). Correcting Errors on a work location request
If, at any time, it is discovered that incorrect information was provided to POCS, callers should notify POCS as soon as possible. Customer Service Representatives will assist you in making corrections, depending on the circumstances.

2). Legal Matters
POCS records all conversations that pertain to the work location request, and maintains a copy. The voice and data records are maintained for five (5) years.

POCS has various methods of searching for these records. The quickest method of obtaining a work location request from the file is through the use of the serial number. Records can be found from other information, but the process is much more difficult. Getting a copy includes a reasonable charge. The charge will be quoted at the time of the request and will be based on the information you can provide.

3). Incident Report
Excavators, designers, and facility owners may file an incident report with the Pennsylvania Department of Labor and Industry as provided for in Act 287 as amended, facility owners and excavators shall file incident reports in cases where excavation activities result in personal injury or property damage to third parties.

By use of the incident report, the parties are capable of notifying L&I of offenders and providing documentation to take further action to prevent damage to member's underground facilities or injury to excavators or their employees.

When notified of damage, members should fully investigate circumstances involved with damage. Use the "Incident Report" to document the occurrence with L&I. Fax a copy to L&I at (717) 787-0517. Please ensure information is complete and that a clear violation of Pennsylvania Act 287 as amended has occurred. Additional information may be required and you may be contacted.

Call the Department of Labor and Industry or go to www.dli.state.pa.us for a copy of the Incident Report form. It can be faxed or mailed to you. Incident reports can also be completed online. Read the instructions carefully. Make as many copies as you may need for future use. **We request you designate only one person from your organization as a "contact person" to administer these incident reports.**

After completing the form, mail it to the Department of Labor and Industry's Bureau of Labor Law Compliance at Room 1301 Labor and Industry Building, 7th and Forster Streets, Harrisburg, PA 17120, website – www.dli.state.pa.us.

An Incident Report can be completed online or an electronic version of the Incident Report form can be downloaded from the Link-To-Link - Industry Related Sites under Links on the POCS Web Site.

Pennsylvania One Call System is not responsible for the issuance of citations or enforcement under this statute. The Bureau of Labor Law Compliance may be reached at 717-787-4763.

Pennsylvania One Call System has the authority under the statute to create and administer alternate dispute resolution for all parties involved with the statute.

4). Governing Structure
Pennsylvania One Call System, Inc. is a non-profit Pennsylvania Corporation. A 36 member Board of Directors, comprised of representatives from each industry, governs it.

5). Membership
Membership is required by law, and open to all underground facility owners who agree to abide by POCS articles of incorporation, by-laws, and service agreement.

6). Associate Membership
Excavators, locating services and other parties who share the goals of POCS can join the system as associate members. Information on associate membership can be obtained by contacting POCS.

SECTION XI
TAMPERING WITH MARKS

Under PA Act 287, as amended, owners of underground facilities such as pipe lines, electric, communication and other types of lines are required to place physical marks on the surface of the ground within 18" of the actual underground position of the lines, identifying the size, type and number of lines when an excavator makes a request to locate through Pennsylvania One Call System, Inc. These marks help the excavator determine, *in advance of excavation,* where the safety (tolerance) zone of the buried lines are so they can use prudent techniques to safely excavate without causing damage to the underground facility within the tolerance zone. This process greatly reduces the chance that an existing line will be damaged during excavation activities.

It is important that these marks remain visible and unaltered until all excavation in the area is completed. Accurate marks for underground lines result in safer excavations with fewer damaged lines. Removing, moving or otherwise tampering with marks for underground facilities increases the chance of damage to the line. This can result in injury and even death to those in the immediate vicinity. This also can cause interruption of service to you and your neighbors and may result in costly repairs that could increase your monthly utility bills.

Marks that have been removed, moved or otherwise tampered with are ***never*** accurate and could prove to be deadly! The color, style, method and location of marks communicate critical information to the excavator. If you witness or otherwise have reason to believe that someone has tampered with underground utility marks, please immediately notify the excavation company and Pennsylvania One Call System, Inc. POCS may be contacted by dialing 8-1-1 or 1-800-242-1776.

Tampering with underground facility marks, even if those marks are placed on private property, violates Section (10) of PA Act 287, as amended. Conviction can result in a fine of up to $50,000, or imprisonment of up to ninety days, or both, not to speak of any civil liabilities in the matter.

Accurate marks result in safer excavations for everyone!

Underground Utility Line Protection Act

AKA Underground Utility Line Protection Act

SB1104 **ACT 181** **Signed: 11/29/2006**

PN2127 **2006** **Effective: 3/28/2007**

73 P. S. § 176 et. seq.

Reprinted by Pennsylvania One Call System, Inc. The purpose of this reprinting is to provide those affected with a complete copy of the ACT.

Note: Changes are shown in bold italics.

AN ACT

Amending the act of December 10, 1974 (P.L.852, No.287), entitled "An act to protect the public health and safety by preventing excavation or demolition work from damaging underground lines used in providing electricity, communication, gas, oil delivery, oil product delivery, sewage, water or other service; imposing duties upon the providers of such service, recorders of deeds, and persons and other entities preparing drawings or performing excavation or demolition work; and prescribing penalties," further providing for the title of the act, for definitions, for duties of facility owners and for the duties of the One Call System; providing for liability, fees and governance of the One Call System; further providing for applicability; providing for the duties of project owners and for rights of the Auditor General; further providing for the governing board of the One Call System, for fines and penalties and for applicability to certain pipeline systems and facilities; providing for a voluntary payment dispute resolution process, for best efforts, for removal or tampering with a marking, for determination of position and type of lines and for impairment of rights and immunities; further providing for expiration; repealing provisions of the act of June 19, 2002 (P.L.421, No.61), known as the Propane and Liquefied Petroleum Gas Act, concerning the prohibition of certain liquefied petroleum gas facilities or distributors from being subject to the Underground Utility Line Protection Law; and making an editorial change.

The General Assembly of the Commonwealth of Pennsylvania hereby enacts as follows:

SECTION 1. The title of the act of December 10, 1974 (P.L.852, No.287), referred to as the Underground Utility Line Protection Law, is amended to read:

AN ACT

To protect the public health and safety by preventing excavation or demolition work from damaging underground lines used in providing electricity, communication, gas, ***propane***, oil delivery, oil product delivery, sewage, water or other service; imposing duties upon the providers of such service, recorders of deeds, and persons and other entities preparing drawings or performing excavation or demolition work; and prescribing penalties.

TERMS TO BE USED IN THIS ACT - DEFINITIONS

As used in this act:

"Abandoned" means no longer in service and physically disconnected from a line.

"Business day" means any day except a Saturday, Sunday or legal holiday prescribed by statute. A business day begins at 12:00:00 a.m. and ends at 11:59:59 p.m.

"Cartway" means that portion of a street which is improved by surfacing with permanent or semipermanent material and is intended for vehicular traffic.

"Common Ground Alliance best practices" means the damage prevention industry recommended standards issued by the Common Ground Alliance, a not-for-profit corporation created pursuant to the issuance of the United States Department of Transportation's Common Ground Task Force report in 1999.

"Complex project" means an excavation that involves more work than properly can be described in a single locate request or any project designated as such by the excavator as a consequence of its complexity or its potential to cause significant disruption to lines or facilities and the public, including excavations that require scheduling locates over an extended time frame.

"Consumer Price Index" means the index of consumer prices developed and updated by the Bureau of Labor Statistics of the United States Department of Labor.

"Continuing property records" means a record required pursuant to 66 Pa.C.S. § 1702 (relating to continuing property records).

"Demolition work" means the partial or complete destruction of a structure, by any means, served by or adjacent to a line or lines.

"Department" means the Department of Labor and Industry of the Commonwealth.

"Designer" means any architect, engineer or other person who or which prepares a drawing for a construction or other project which requires excavation or demolition work as herein defined.

"Emergency" means a sudden or unforeseen occurrence involving a clear and immediate danger to life, property ***and the environment,*** including, but not limited to, serious breaks or defects in a facility owner's lines.

"Excavation work" means the use of powered equipment or explosives in the movement of earth, rock or other material, and includes but is not limited to anchoring, augering, backfilling, blasting, boring, digging, ditching, drilling, driving-in, grading, plowing-in, pulling-in, ripping, scraping, trenching and tunneling, but does not include soft excavation technology such as vacuum, high pressure air or water, tilling of soil for agricultural purposes to a depth of less than eighteen inches, ***the direct*** operations necessary or incidental to the purposes of finding or extracting natural resources, political subdivisions performing minor routine maintenance up to a depth of less than eighteen inches ***measured from the top of the edge of the cartway or the top of the outer edge of an improved shoulder, in addition to the performance of incidental de minimis excavation associated with the routine maintenance and the removal of sediment buildup,*** within the right of-way of ***public*** roads or employes of the Department of Transportation performing within the scope of their employment work up to depth of twenty-four inches beneath the existing surface within the right-of-way of a State highway.

"Excavator" means any person who or which performs excavation or demolition work for himself or for another person.

"Facility owner" means the public utility or agency, political subdivision, municipality, authority, rural electric cooperative or other person or entity who or which owns or operates a line. This term does not include the Department of Transportation within a State highway right-of-way. ***The term does not include any of the following:***

(1) A person serving the person's own property through the person's own line if the person does not provide service to any other customer.

(2) A person using a line which the person does not own or operate if the use of the line does not serve more than a single property.

"Final design" means the engineering and construction drawings that are provided to a bidder or other person who is asked to initiate construction on the bid date or the date the project is set for construction in the absence of a bid.

"Horizontal directional drilling" means the use of horizontal boring devices that can be guided between a launch point and a reception point beneath the earth's surface.

"Line" or "facility" means an underground conductor or underground pipe or structure used in providing electric or communication service, or an underground pipe used in carrying***, gathering, transporting*** or providing ***natural or artificial*** gas, ***petroleum, propane,*** oil or ***petroleum and production*** product, sewage, water or other service to one or more ***transportation carriers,*** consumers or customers of such service and the appurtenances thereto, regardless of whether such line or structure is located on land owned by a person or public agency or whether it is located within an easement or right-of-way. ***The term shall include unexposed storm drainage and traffic loops that are not clearly visible. The term shall not include crude oil or natural gas production and gathering lines or facilities unless the line or facility is a regulated onshore gathering line as defined in regulations promulgated after January 1, 2006, by the United States Department of Transportation pursuant to the Pipeline Safety Act of 1992 (Public Law 102-508, 49 U.S.C. § 60101 et seq.), if the regulated gathering line is subject to the damage prevention program requirements of 49 CFR § 192.614.***

"Locate request" means a communication between an excavator or designer and the One Call System in which a request for locating facilities is processed. Locate requests submitted by an excavator performing work within the right-of way of any State highway, either under contract to the Department of Transportation or under authority of a permit issued by the Department of Transportation, shall include the number of the Department of Transportation contract or permit.

"Minor routine maintenance" means shaping of or adding dust palliative to unpaved roads, removal and application of patches to the surface or base of flexible base, rigid base or rigid surface roads by either manual or mechanized method to the extent of the existing exposed base material, crack and joint sealing, adding dust palliative to road shoulders, patching ***and cutting*** of shoulders and shoulder bases by either manual or mechanized methods to the extent of the existing exposed base, and cleaning of inlets and drainage pipes and ditches.

"One Call System" means ***the*** communication system established within this Commonwealth to provide a single ***nationwide*** toll-free telephone number ***or 811 number*** for ***excavators*** or designers or any other person covered by this act to call facility owners and notify them of their intent to perform excavation, demolition or similar work as defined by this act. ***The*** One Call System shall be incorporated and operated as a nonprofit corporation pursuant to 15 Pa.C.S. Pt. II Subpt. C (relating to nonprofit corporations).

"Operator" means any individual in physical control of powered equipment or explosives when being used to perform excavation or demolition work.

"Person" means an individual, partnership, corporation, political subdivision, a municipal authority, the Commonwealth and its agencies and instrumentalities, or any other entity.

"Powered equipment" means any equipment energized by an engine or motor and used in excavation or demolition work.

"Preconstruction request" means a notification to facility owners regarding a complex project.

"Project owner" means any person who or which engages an excavator for construction or any other project which requires excavation or demolition work.

"Secretary" means the Secretary of Labor and Industry of the Commonwealth.

"Site" means the specific place ***denoted on the locate request*** where excavation or demolition work is being or is planned to be performed. ***A site should be denoted as a clearly defined, bounded area, including relevant identifiable points of reference such as the specific address with a specific description as to the portion of the property, including descriptions such as front, back, left side, right side and direction such as N, S, E, W or variants. Where possible, the points should also reference, without limitation, the size and radius or circumference of the excavation, utility pad or pedestal numbers, utility pole numbers, landmarks, including trees, fountains, fences, railroads, highway and pipeline markers, and latitude and longitude.***

"Subsurface utility engineering" or "(SUE)" means those techniques set forth in the American Society of Civil Engineers (ASCE) standard CI/ASCE 38-02, or its successor document as determined by the One Call System.

"Tolerance zone" means the horizontal space within eighteen inches of the outside wall or edge of a line or facility.

"Traffic loop" means a device that detects metal object such as cars and bicycles based on the change in inductance that they induce in the device.

RESPONSIBILITIES OF THE FACILITY OWNER

SECTION 2: It shall be the duty of each facility owner:

(1) To be a member of and give written notice to ***the*** One Call System. Such notice shall be in a form acceptable to ***the*** One Call System and include:

(i) the legal name of the facility owner ***and their official mailing address***;

(ii) the names of the counties and municipalities, down to and including wards in Philadelphia, Pittsburgh, Allentown and Erie, in which its lines are located ***and other related information as may be required by the One Call System regarding the location of a member's facilities;***

(iii) the facility owner's address (by street, number and political subdivision), and the telephone number and fax number, if available, to which inquiries may be directed as to the location of such lines;

(iv) the street identifications ***or like information within each of the municipalities*** in which its lines are located. This information shall be in a form acceptable to ***the*** One Call System. Upon ***acceptance of the information*** from a facility owner, ***the*** One Call System shall provide the facility owner with notification within the boundaries described. All facility owners shall agree to indemnify and hold harmless ***the*** One Call System for any errors and omissions on the part of the facility owner or the ***excavator*** or designer providing ***the information as the agent of the facility owner; and***

(v) any other information required by the One Call System.

(2) To provide the One Call System, within five business days, with any revised information required under this section.

Clause 3 eliminated.

(4) Not more than ten ***business*** days after receipt if a request from a designer who identifies the site of excavation or demolition work for which he is preparing a drawing, to initially respond to his request for information as to the position and type of the facility owner's lines at such site based on the information currently in the facility owner's possession ***or to mark the plans which have been provided to it by the designer by field location or by another method agreed to by the designer, excavator and facility owner, or their agent.*** The facility owner shall so advise the person making the request of the facility owner's status at the site through ***the*** One Call System.

(5) ***After*** receipt of a timely request from ***an excavator*** or operator who identifies the site of excavation or demolition work he intends to perform ***and not later than the business day prior to the scheduled date of excavation:***

(i) To mark, stake, locate or otherwise provide the position of the facility owner's underground lines at the site within eighteen inches horizontally from the outside wall of such line in a manner so as to enable the ***excavator***, where appropriate, to employ prudent techniques, which may include hand-dug test holes, to determine the precise position of the underground facility owner's lines. This shall be done to the extent such information is available in the facility owner's records or by use of standard locating techniques other than

excavation. ***Standard locating techniques shall include at the utility owner's discretion the option to choose available technologies suitable to each type of line or facility being located at the site, topography, soil conditions or to assist the facility owner in locating its lines or facilities, based on accepted engineering and operational practices. Facility owners shall make reasonable efforts during the excavation phase to locate or notify excavators of the existence and type of abandoned lines that remain on the continuing property records of the facility owners.***

(i.1) ***To, where contained on its continuing property records***, identify the location of ***an actually known facility's point of connection*** to its facilities, ***where the point of connection is*** not owned or operated by the facility owner. The identification shall not be deemed to impose any liability upon the facility owner for the accuracy of the ***other facility's*** identification.

(ii) ***To,*** at its option, timely elect to excavate around its facilities in fulfillment of this subparagraph.

(iii.1) To propose mutually agreeable scheduling by which the excavator, facility owner or designer may locate the facilities.

Clause (iv) eliminated.

(v) To respond to all notices through ***the*** One Call System, provided the request is made in the time frame set forth under this act. ***The response shall be made not later than the end of the second business day following receipt of the notification by the One Call System, excluding the business day upon which the notification is received, or not later than the day prior to the scheduled date of excavation, if the excavator specifies a later date. In the case of an emergency, to respond through the One Call System as soon as practicable following receipt of notification of the emergency by the One Call System.***

(vi) In marking the approximate position of underground lines or facilities, the facility owner shall follow ***the Common Ground Alliance Best Practices for Temporary Marking set forth in ANSI standard Z535.1.*** Should the ***Common Ground Alliance Best Practices*** be amended, the amended ***guidelines*** shall be applied and followed. ***If the Common Ground Alliance Best Practices no longer publishes guidelines for temporary markings or if the responsibility for publishing the guidelines is transferred to or assumed by another entity, the facility owner shall follow the guidelines approved by the One Call System's board of directors.***

(vii) To respond to ***emergency notifications*** as soon as ***practicable*** following receipt of notification of such emergency. ***The response by the facility owner shall be consistent with the nature of the emergency information received by the facility owner.***

(viii) To participate in preconstruction meetings for a complex project or as described in clause (3) of section 5.

(ix) If notification is received pursuant to clause (8) of section 5, to give priority to responding to notification as an emergency.

Clause 8 eliminated.

(9) If a facility owner fails to become a member of ***the*** One Call System in violation of this act and a line or lines of such nonmember facility owner are damaged by ***an excavator*** by reason of the ***excavator's*** failure to notify the facility owner because the facility owner was not a member of ***the*** One Call System serving the location where the damage occurred, such facility owner shall have no right of recovery from the ***excavator*** of any costs associated with the damage to its lines. The right herein granted shall not be in limitation of any other rights of the ***excavator***.

(10) To submit an incident report to the department not more than ten ***business*** days after receipt of notice that the facility owner's lines have been damaged by excavation or demolition activities that resulted in personal injury or in property damage to parties other than the affected excavator or facility owner. In addition,

the incident report may likewise be furnished to the Pennsylvania Public Utility Commission and the Pennsylvania Emergency Management Agency pursuant to memoranda of understanding negotiated between these agencies and the department***, which shall, at a minimum, provide for a common reporting format for incident reports.*** The department shall furnish to ***the*** One Call System, upon reasonable request, statistical data pertaining to the number of incident reports filed with the department and the type, number and results of investigations for violations of this act.

(11) To comply with all requests for information by the department relating to the department's enforcement authority under this act within thirty days of the receipt of the request.

RESPONSIBILITIES OF THE ONE CALL SYSTEM

SECTION 3: It shall be the duty of ***the*** One Call System to do the following:

(1.1) To assign ***one or more serial numbers and the date that the site may legally be excavated and to*** log the entire voice transaction on logging recorders in appropriate digital form and maintain these logs for five years. All records shall be indexed and available to the parties involved at a reasonable cost and at reasonable times set by ***the*** One Call System.

(1.2) Perform the obligations, as set forth under this section, on behalf of the facility owner, ***excavator*** or designer as established by the board of directors of ***the*** One Call System.

(1.3) Provide access to municipal lists provided to ***the*** One Call System for those interested parties. This list shall contain facility owners having lines in the municipality, including wards as indicated in subclause (ii) of clause (1) of section 2, and to maintain, for each municipality, a list containing the information as required to be submitted by the facility owner. Such list shall be updated as revised information is received from the facility owner within five ***business*** days.

(2) To make such lists ***under clause (1.3)*** available for public inspection via the county recorder of deeds without charge. A maximum copy fee of no more than twenty-five dollars ($25) may be charged per county list. Each facility owner change shall be forwarded, at no charge, to the respective county recorder of deeds for public access. The recorder of deeds shall make such list available for public inspection ***based on the most current information provided to it by the One Call System.***

(3) Not more than ten ***business*** days after the receipt of a ***clear and specific*** request from the department, to provide access to or photocopies of specific One Call System response records, tickets or other like information relating to matters under investigation by the department pursuant to its enforcement authority under this act.

(4) To determine the maximum geographic area that shall constitute a valid single notification and to determine when multiple notifications shall be required of any person, including the method, the type and the number of notifications in a complex project.

(5) If approved by the board of directors of the One Call System, to offer a service for the application and obtaining of State or municipal permits for excavation work. Issuance of the required permits shall be the responsibility of the appropriate State or municipal agency which has jurisdiction over the type of excavation work being performed.

(6) Pursuant to policies adopted by the One Call System's board of directors, to provide a secure repository for and access to subsurface utility engineering data received from project owners to affected facility owner members.

(7) To inquire, when an excavator has notified the One Call System of the existence of a release of natural gas or other hazardous substance or of potential danger to life, health or property, whether the excavator has notified the 911 system. If the 911 system has not been notified, the One Call System shall notify the excavator of the excavator's responsibility to notify the 911 system and shall make a record of the conversation.

SECTION 3.1. (a) The duties of the One Call System are those duties as set forth in section 3. Duties assigned to other parties in other sections of this act shall be the duties of those parties and shall not be imputed to the One Call System, including the duty to provide accurate information to the One Call System concerning proposed excavation and the duty to locate facilities at a site.

(b) The One Call System shall not be liable for damages to the person or the person's property arising out of its nonnegligent actions in furtherance of the duties imposed under this act and shall be liable only if the failure to comply was the proximate cause of any damages claimed.

Subclause (c) reserved.

(d) The One Call System shall be governed by a board of directors, to be chosen by the facility owners. No less than twenty percent of the seats on the board shall be held by municipalities or municipal authorities. The board shall include all of the following:

(1) The Chairman of the Pennsylvania Public Utility Commission or his designee.

(2) The Director of the Pennsylvania Emergency Management Agency or his designee.

(3) The Secretary of Labor and Industry or his designee.

(4) The Secretary of Transportation or his designee.

(5) An excavator or excavation industry representative.

(6) A designer or designer industry representative.

(e) Operation costs for the One Call System shall be shared, in an equitable manner for services received, by facility owner members as determined by the One Call System's board of directors. Political subdivisions with a population of less than two thousand people or municipal authorities having an aggregate population in the area served by the municipal authority of less than five thousand people shall be exempt from the payment of any service fee. The One Call System may be reimbursed for its costs in providing this service from the contractor fees.

(f) All fees shall be set by the board of directors and shall be based on the latest annual audited cost factors of the One Call System. Fees shall be set and adjusted to a rate not more than five percent above the audited cost factor plus the current average published Consumer Price Index for Pennsylvania. Costs of capital improvements may be added, if the improvement receives a majority vote of the board of directors.

(g) An excavator, designer or operator who proposes to commence excavation or demolition work and requests information of the One Call System shall be charged a fee for the service received from the One Call System. The fee shall be used to offset the operation cost levied on the political subdivision and municipal authority members in lieu of additional fees charged for locations under this act.

(h) Any request for information shall be reviewed and provided as determined in accordance with the procedure established by the One Call System's board of directors.

RESPONSIBILITIES OF A DESIGNER

SECTION 4. It shall be the duty of each designer preparing a drawing ***which requires*** excavation or demolition work within the Commonwealth:

(2) To request the line and facility information prescribed by section 2, clause 4 from ***the*** One Call System not less than ten nor more than ninety ***business*** days before final design is to be completed. This clause is not intended to prohibit designers from obtaining such information more than ninety days before final design is to be completed; however, they shall state in their requirements that such work is preliminary.

(2.1) To forward a copy of the project plans to each facility owner who requests a copy. If a designer is unable to provide a copy because of security of the project or proprietary concerns regarding the design or

the project, the designer shall negotiate in a timely manner with the facility owner the means of obtaining the necessary data.

(3) To show upon the drawing the position and type of each facility owner's line, derived pursuant to the request made as required by clause (2), and the name of the facility owner as shown on the list referred to in section 3.

(4) To make a reasonable effort to prepare the construction drawings to avoid damage to and minimize interference with a facility owner's facilities in the 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 ***if no easement restriction exists.***

(5) A designer shall be deemed to have met the obligations of clause (2) if he calls ***the*** One Call System and shows as proof the serial number of one call notice on drawings. The designer shall also show the toll-free number of ***the*** One Call System on the drawing near his serial number.

(6) If, after receiving information from the facility owners, the designer decides to change the site of a proposed excavation, the obligations imposed by this section shall apply to the new site.

(7) The designer who has complied with the terms of this act and who was not otherwise negligent shall not be subject to liability or incur any obligation to facility owners, operators, owners or other persons who sustain injury to person or property as a result of the excavation or demolition planning work of the designer.

RESPONSIBILITIES OF THE EXCAVATOR

SECTION 5. It shall be the duty of each ***excavator*** who intends to perform excavation or demolition work within this Commonwealth:

(2.1) To request the location and type of facility owner lines at each site by notifying the facility owner through ***the*** One Call System. Notification shall be not less than three nor more than ten ***business*** days in advance of beginning excavation or demolition work. ***No work shall begin earlier than the scheduled excavation date which shall be on or after the third business day after notification. The scheduled excavation date shall exclude the date upon which notification was received by the One Call System and notification received on a Saturday, Sunday or holiday, which shall be processed on the following business day. In the case of a complex project, notification shall not be less than ten business days in advance of the beginning of excavation or demolition work.***

(2.2) To provide ***the*** One Call System with specific information to identify the site so that facility owners might provide indications of their lines. ***An excavator*** shall be deemed to have met the obligations of clause (2.1) if he calls ***the*** One Call System, provides the ***site and other*** required information and receives a serial number.

(3) ***In a complex project or if an excavator*** intends to perform work at multiple sites or over a large area, he shall take reasonable steps to work with facility owners, including ***scheduling and conducting*** a preconstruction meeting, so that they may locate their facilities at a time reasonably in advance of the actual start of excavation or demolition work for each phase of the work. ***A preconstruction meeting may take place at any time prior to the commencement of excavation or demolition work, and the excavator, facility owner and designer, or their agents, shall attend the meeting. Notice of the meeting shall be given sufficiently in advance so as to permit attendance, either in person or electronically, by the excavator, facility owners and designer, or their agents, and shall include information sufficient to identify the scope of work. If the excavator does not believe that a preconstruction meeting is necessary under the circumstances of this paragraph it shall indicate such belief in its notice, but any facility owner with facilities at the site may request a meeting with the excavator and a meeting shall be held between the facility owner and the excavator.*** After commencement of excavation or demolition work, the ***excavator*** shall be responsible for protecting and preserving the staking, marking or other designation until no longer required for proper and safe excavation or demolition work at or near the underground facility, or by ***contacting the One Call System to***

request that the facilities be marked again in the event that the previous markings have been compromised or eliminated.

(3.1) To comply with the requirements established by the One Call System as determined by the board of directors regarding the maximum area that a notification may cover.

(4) To exercise due care; and to take all reasonable steps necessary to avoid injury to or otherwise interfere with all lines where positions have been provided to the ***excavator*** by the facility owners pursuant to clause (5) of section 2. Within the tolerance zone ***the excavator*** shall employ prudent techniques, which may include hand-dug test holes to ascertain the precise position of such facilities. ***If insufficient information to safely excavate is available pursuant to clause (5) of section 2, the excavator shall employ like prudent techniques*** which shall be paid for by the ***project*** owner pursuant to clause (15) of this section.

(5) If the facility owner fails to respond to the ***excavator's timely request*** as provided under clause (5) of section 2 or the facility owner notifies the ***excavator*** that the line cannot be marked within the time frame and a mutually agreeable date for marking cannot be arrived at, the ***excavator*** may proceed with excavation ***as scheduled, but not earlier than the lawful dig date,*** provided the exercises due care in his endeavors, subject to the limitations contained in this clause and clauses (2.1) through (4).

(6) To inform each operator employed by the ***excavator*** at the site of such work of the information obtained by the ***excavator*** pursuant to clauses (2.1) through (5), and the ***excavator*** and operator shall:

(i) Plan the excavation or demolition to avoid damage to or minimize interference with a facility owner's facilities in the construction area. Excavation or demolition work which requires temporary or permanent interruption of a facility owner's service shall be coordinated with the affected facility owner in all cases.

(ii) After consulting with a facility owner, provide such support and mechanical protection for known facility owner's lines at the construction site during the excavation or demolition work, including during backfilling operations, as may be reasonably necessary for the protection of such lines.

(7) To report immediately to the facility owner any break or leak on its lines, or any dent, gouge, groove or other damage to such lines or to their coating or cathodic protection, made or discovered in the course of the excavation or demolition work. ***The One Call System board of directors may adopt procedures to permit reporting under this clause through the One Call System.***

(8) To immediately notify 911 and the facility owner, if the damage results in the escape of any flammable, toxic, or corrosive gas or liquid which endangers life, health or property. The excavator shall take reasonable measures, based on its knowledge, training, resources, experience and understanding of the situation to protect themselves and those in immediate danger, the general public, property and the environment until the facility owner or emergency responders have arrived and completed their assessment and shall remain on site to convey any pertinent information to responders that may help them to safely mitigate the situation.

(9) The time requirements of clause (2.1) shall not apply to a facility owner or ***excavator*** performing excavation or demolition work in an emergency, as defined in section 1; nonetheless, all facility owners shall be notified as soon as possible before, during or after excavator or demolition, depending upon the circumstances.

Clause 10 eliminated.

(11) ***An excavator*** shall use the color white to make a proposed excavation site when exact site information cannot be provided.

(11.1) To assist a facility owner in determining involvement of a facility owner's lines by disclosing additional available information requested by the facility owner, including dimensions and the direction of proposed excavations.

(11.2) If using horizontal directional drilling (HDD), at a minimum, to utilize the best practices published by the HDD Consortium.

(12) The following standards shall be applied in determining whether ***an excavator*** shall incur any obligation or be subject to liability as a result of ***an excavator's*** demolition or excavation work damaging a facility owner's facilities.

(i) The ***excavator*** who has complied with the terms of this act and who was not otherwise negligent shall not be subject to liability or incur any obligation to facility owners, operators, ***project*** owners or other persons who sustain injury to person or property as a result of the ***excavator's*** excavation or demolition work damaging a facility owner's lines.

(ii) Where ***an excavator*** has failed to comply with the terms of this act or was otherwise negligent, and the facility owner or designer has misidentified, mislocated or failed to identify its facilities pursuant to this act, then in computing the amount of reimbursement to which the facility owner is entitled, the cost of repairing or replacing its facilities shall be diminished in the same proportion that the facility owner's or designer's misidentification, mislocation or failure to identify the facilities contributed to the damage. Should the facility owner or designer not have misidentified, mislocated or failed to identify its facilities pursuant to this act, there shall be no diminution of the facility owner's right of recovery.

(13) If, after receiving information from ***the*** One Call System or directly from a facility owner, the ***excavator*** decides to change the location, scope or duration of a proposed excavation, the obligations imposed by this section shall apply to the new location.

(14) If ***an excavator*** removes its equipment and vacates a worksite for more than two ***business*** days, he shall renotify ***the*** One Call System unless other arrangements have been made directly with the facility owners involved in his worksite.

(15) When the information required from the facility owner under clause (5)(i) of section 2 cannot be provided or ***due to the nature of the information received from the facility owner,*** it is reasonably necessary for the ***excavator*** to ascertain the precise location of any line ***or abandoned or unclaimed lines*** by prudent techniques, which may include hand-dug test holes, vacuum excavation or other similar devices, the ***excavator*** shall promptly notify the ***project*** owner or the ***project*** owner's representative, either orally or in writing. ***If oral notification is given, the notice shall be reduced to writing within a reasonable time by the project owner or excavator.*** After giving such notice, the ***excavator*** shall be entitled to compensation from the ***project*** owner for this additional work as provided in the latest edition of the Pennsylvania Department of Transportation Form 408 specifications for extra work performed on a force account basis. The provisions of this subsection shall not be deemed to limit any other rights which the ***excavator*** has under its contract with the ***project*** owner or otherwise. Provisions in any contract, public or private, which attempt to limit the rights of ***excavators*** under this section shall not be ***valid*** for any reason, and any attempted waiver ***of this section*** shall be void and unenforceable as against public policy and any such attempted waiver shall be reported to the ***department.***

(16) To submit an incident report to the department not more than ten ***business*** days after striking or otherwise damaging a facility owner's line during excavation or demolition activities that resulted in personal injury or property damage to parties other than the affected ***excavator or facility owner***. In addition, the incident report may be furnished to the Pennsylvania Public Utility Commission and the Pennsylvania Emergency Management Agency pursuant to memoranda of understanding negotiated between these agencies and the department.

(17) To comply with all requests for information by the department relating to the department's enforcement authority under this act within thirty days of the receipt of the request.

(18) To, if it chooses to do so and if working for a facility owner, a municipality or a municipal authority, delegate the power to discharge the duties set forth in clauses (2.1) and (2.2) to its project owner, with the project owner's consent. If the power is delegated pursuant to this clause, both the excavator and the project owner shall be responsible for providing the required notices.

(19) To ensure the accuracy of any information provided to the One Call System pursuant to this section.

LEGISLATIVE INTENT

SECTION 6. ***Except as otherwise provided in this act, this*** act shall not be deemed to amend or repeal any other law, Commonwealth regulation or any local ordinance enacted pursuant to law concerning the same subject matter, it being the legislative intent that any such other law or local ordinance shall have full force and effect where not inconsistent with this act.

RESPONSIBILITIES OF THE PROJECT OWNER

SECTION 6.1. It shall be the duty of each project owner who engages in excavation or demolition work to be done within this Commonwealth:

(1) To utilize sufficient quality levels of subsurface utility engineering or other similar techniques whenever practicable to properly determine the existence and positions of underground facilities when designing known complex projects having an estimated cost of four hundred thousand dollars ($400,000) or more.

(2) To timely respond to notifications received from excavators pursuant to clause (15) of section 5.

(3) To not release to bid or construction any project until after final design is completed.

(4) To participate in design and preconstruction meetings either directly or through a representative.

(5) To furnish the pertinent data obtained through subsurface utility engineering to the One Call System in a mutually agreeable format.

(6) For new construction and where practicable in the opinion of the project owner, to install color-coded permanent markers to indicate the type and location of all laterals installed by the project owner.

PERFORMANCE CRITERIA

SECTION 7. (a) The Auditor General may review management and financial audits of the One Call System, which audits shall be performed by a qualified auditing firm within this Commonwealth. A copy of the audit shall be submitted to the Auditor General upon its completion and to the General Assembly by October 31 of the year following the end of the audit period. The cost of reasonable expenses incurred by the Auditor General in performing the obligations under this section shall be reimbursed by the One Call System. The fees shall not be inconsistent with those of commercial auditing firms for similar work.

(b) The Auditor General, for the purposes set forth in subsection (a), and any contractor, excavator, facility owner or member of the One Call System shall have the right during regular business hours to inspect and copy any record, book, account, document or any other information relating to the provision of one call services by the One Call System, at the cost determined by the board of directors.

(c) The One Call System shall submit an annual report to its members, and a copy of the report shall be submitted to the Auditor General.

Section 7.1 was repealed by this Act.

FINES & PENALTIES

SECTION 7.2. (a) Any person violating any of the provisions of this act, except clauses (1) and (2) of section 2, commits a summary offense and shall, upon conviction, be sentenced to pay a fine of not less than two thousand five hundred dollars ($2,500) nor more than ***fifty thousand dollars ($50,000)*** or undergo imprisonment for not more than ninety days, or both. The Attorney General of the Commonwealth or any district attorney may enforce the provisions of this act in any court of competent jurisdiction. The department, in consultation with the Attorney General, may also enforce the provisions of this act in any court of competent jurisdiction. A facility owner may petition any court of competent jurisdiction to enjoin any excavation or

demolition work conducted in violation of this act. ***Local law enforcement or emergency management personnel may, in the interest of public safety, order excavators on a site to stop further excavation, if the excavation is being conducted in violation of this act.***

(b) Fines levied under subsection (a) shall be determined according to the following schedule:

(1) Where violations result in property damage that does not exceed three thousand dollars ($3,000), the fine shall not exceed ***five thousand dollars ($5,000)***.

(2) Where violations result in property damage of more than three thousand dollars ($3,000), the fine shall not exceed ***ten thousand dollars ($10,000)***.

(3) For violations which result in personal injury or death, the fine shall not exceed ***fifty thousand dollars ($50,000)***.

(c) The following factors shall be considered in determining the fine to be assessed:

(1) The degree of the party's compliance with the statute prior to the date of the violation.

(2) The amount of personal or property damage caused by the party's noncompliance.

(3) The degree of threat to the public safety and inconvenience caused by the party's noncompliance.

(4) The party's plans and procedures to insure future compliance with statutes and regulations.

(c.1) In addition to any other sanctions provided by this act, the department shall have the authority to issue warnings and orders requiring compliance with this act and may levy administrative penalties for violations of this act. Any warning, order or penalty shall be served on the person or entity violating the act at their last known address. The department shall consider the factors set forth in subsection (c) in determining the administrative penalty to be assessed. Any party aggrieved by the imposition of an order or administrative penalty imposed by the department may appeal such order or penalty as provided in 2 Pa.C.S. Ch. 5 Subch. A (relating to practice and procedure of Commonwealth agencies) and Ch. 7 Subch. A (relating to review of Commonwealth agency action).

(c.2) Administrative penalties imposed by the department under subsection (c.1) shall be determined according to the following schedule:

(1) Any person or entity violating the provision of clauses (1) and (2) of section 2 may be subject to an administrative penalty not to exceed five hundred dollars ($500) per day. Each day of noncompliance shall constitute a separate violation.

(2) Any person or entity receiving three or more warnings in a calendar year may be subject to an administrative penalty not to exceed five hundred dollars ($500).

(3) Where violations result in property damage that does not exceed ten thousand dollars ($10,000), the administrative penalty may not exceed one thousand dollars ($1,000).

(4) Where violations result in property damage of more than ten thousand dollars ($10,000), the administrative penalty may not exceed five thousand dollars ($5,000).

(5) For violations that result in personal injury or death, the administrative penalty may not exceed ten thousand dollars ($10,000).

(d) All fines and penalties recovered under this section shall be payable to the Attorney General, district attorney or the department, whichever brought the action, and collected in the manner provided for by law. ***Administrative penalties collected by the department may be expended by the department for costs related to its enforcement activities and to sponsor damage prevention activities of the One Call System.***

(e) The provisions of this act shall not affect any civil remedies for personal injury or property damage, except as otherwise specifically provided for in this act.

(f) The secretary or his designee shall have the authority to issue subpoenas, upon application of an attorney responsible for representing the Commonwealth in actions before the department, for the purpose of

investigating alleged violations of this act. The department shall have the power to subpoena witnesses and compel the production of books, records, papers and documents as it deems necessary or pertinent to an investigation or hearing.

Section 7.6 was repealed by this Act.

DISPUTE RESOLUTION

SECTION 8. The One Call System shall have the authority to design, establish and administer a voluntary payment dispute resolution process which may be used by excavators, facility owners, designers, project owners and other involved persons. The process shall provide for dispute resolution panels selected from among a list of representatives of stakeholder groups, including facility owners, excavators, designers and regulators. The process established under this section may not be used to settle or resolve alleged violations of this act nor may involve any issues related to the department's enforcement activities.

COMMON GROUND ALLIANCE BEST PRACTICES

SECTION 9. Except as otherwise provided for by this act, persons shall use their best efforts to comply with the Common Ground Alliance best practices.

SECTION 10. No person shall intentionally remove or tamper with a marking provided for under this act.

SECTION 11. Nothing in this act shall impair the rights or immunities provided to political subdivisions under 42 Pa.C.S. Ch. 85 Subch. C (relating to actions against local parties) or any other State law.

SUNSET PROVISION

SECTION 39. This act shall expire on December 31, ***2016***.

EFFECTIVE DATE

SECTION 40. This act shall take effect in one hundred twenty days.

REPEALS

(1) The General Assembly declares that the repeal under paragraph (2) is necessary to effectuate the amendment of the title of the act and to cause certain liquefied petroleum gas facilities or distributors to be subject to this act.

(2) The provisions of section 19 of the act of June 19, 2002 (P.L.421, No. 61), known as the Propane and Liquefied Petroleum Gas Act, are repealed to the extent that they prohibit certain liquefied petroleum gas facilities or distributors, other than facility owners as defined in section 1 of the act, from being subject to the act.

This act shall take effect as follows:

(1) The following provisions shall take effect immediately:

(i) The amendment of section 7.7 of the act.

(ii) This section.

(2) The remainder of this act shall take effect in 120 days.

Approved – The 29th day of November, A.D. 2006

EDWARD G. RENDELL

LOCATOR EFFECTIVENESS GUIDELINES

Adopted by the Pennsylvania One Call System, Inc. Board of Directors, October 25, 2000 revised April 2008

Disclaimer of Liability

This Guide has been prepared as an educational document for contractors, designers, operators, project owners, and facility owners. It is intended as a reference tool for interacting with the Pennsylvania One Call System, ("POCS"). It is also intended to explain in a general way the requirements provided for in Pennsylvania's Utility Line Protection Act, Act 287 of 1974, as amended by Act 181 of 2006 (the "Act"). It is strongly recommended that all individuals who regularly contact "POCS" review the Act and this Guide. Familiarity with its contents will be valuable, but the Guide is meant to clarify and explain the law according to POCS' understanding of how it affects interaction with POCS. This Guide is not a substitute for the Act and it does not relieve anyone from discharging their responsibilities as set forth in the Act or as otherwise required by law.

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Locator Effectiveness Guidelines

Locating and marking are necessary before excavation can be carried out safely. These factors proceed well beyond the accurateness of a dig request locate. This document will identify the various areas that should be addressed in your locating program, it will also identify the recommended guidelines that a locator should follow to complete an effective locate. The goal of an effective locate is achieved by locator effectiveness in all stages of a quality locate. The first stage of the line location process that will be addressed is “knowing”, the second stage consists of “appropriately marking” and the final stage of effective locating is “effectively communicating the location of all underground facilities in association with excavation activities”.

1. Locators utilize available facility records at all times.

   Guideline: Facility locators use available records at all times. Facility records indicate approximate location, number (and types) of facilities and access points for buried facilities within a requested area. The use of facility owner/operator supplied records is an effective method of identifying facilities as part of the locating process.

2. If a facility locator becomes aware of an error or omission, then the facility locator provides information for updating records that are in error or to add new facilities.

   Guideline: During the course of a locating activity, a locator may become aware of errors or omissions. Methods are in place to notify a facility owner/operator of that error or omission. The corrections are submitted to the appropriate person or department in a timely manner.

   A. Facility Owners that have an established company policy for method of notification should continue to observe the established comprehensive policy.

   B. Facility Owners that do not have an established comprehensive method of notification should develop a policy that may include the following information:
      - Name (and company if contracted),
      - Contact phone number of the individual(s) submitting change,
      - Location (either address or reference points),
      - Size and type of facility
      - Nature of the error or omission, and
      - Sketch of the change in relation to the other facilities.

   Omissions and errors may occur due to misdrawn records, changes during construction at the job site, repair or abandonment of facilities and delays in posting new records (or third party activities). Failure to note errors or omissions when found could result in damages to the facility at a later date.

   The 1994 NTSB Excavation Damage Prevention Workshop stated "facility operators should be required to update maps when excavation finds errors in the mapping system."

3. A uniform color code and set of marking symbols are utilized statewide.

   Guideline: PA ACT 287 of 1974 as amended states, in marking the approximate position of underground lines or facilities, the facility owner shall follow the Common Ground Alliance Best Practices for Temporary Marking set forth in ANSI standard Z535.1. Please see attached recommended marking guidelines for underground utilities from the Common Ground Alliance Best Practices.

4. A single locator is used when a site has multiple facilities.

   Guideline: This practice is employed when determined to be advantageous by the facility owner/operator. The use of a single locator to mark facilities may provide several advantages to both the facility and the excavating communities. Among these advantages are:
      - More responsive service to the excavating community,
      - Better communication with the excavating community (fewer contact points),
      - Improved safety due to less traffic on the road,
      - Improved worker safety,
      - Reduced environmental impact, and
      - Maps of multiple facilities

   It should be noted that this guideline does not suggest that all facilities be located by a single locator, but rather that conditions may exist in which locating multiple facilities with a single locator will reduce the likelihood of errors and resulting damage (e.g., multiple facilities with the same owner or multiple facilities that are marked with the same or similar color codes. This standard has been employed by a facility owner in Michigan to enhance safety).

The use of a single locator to locate multiple facilities is analogous to the use of one-call systems to handle locate requests from excavators. The use of a one-call system allows locate requests for multiple facilities at an excavation site to be issued through a single point of contact, simplifying communications. The use of a single locator to carry out locate requests for multiple facilities.

5. Locators are properly trained. Locator training is documented.

Guideline: Minimum training guidelines and practices are adopted for locator training. These guidelines and practices include the following:

- Understanding System Design/Prints/Technology
- Understanding Construction Standards and Practices for all types of Facilities
- Equipment Training and Techniques
- Plant Recognition Training
- Theory of Locating
- Daily Operations
- Facility Owner/Excavator Relationships and image
- Safety Procedures Per OSHA Regulations/Federal, State and local Laws
- Written and Field Testing
- Field Training
- Regular retesting or Evaluating

Documentation of all training is maintained to ensure that facility locators have been properly trained.

6. Locates are performed safely

Guideline: It is the responsibility of the owner/operator and locator to establish when and how the underground facility will be identified. All hazards associated with performing a locate are identified. Appropriate measures conforming to federal, state, local, and industry standards are established. Employees are made aware of these hazards and properly trained in worker safety standards.

A. Pre-work Safety Conditions

1. Site Background Data. Site information is gathered to determine hazards, exposures, and/or other potential safety problems that might be encountered in connection with on-site locate work. This information may be gathered from the facility records and from visual inspection.

2. Site Familiarization. Site characteristics which could affect locate work are analyzed. Areas to be considered include:

   a. Obstructions. The site is analyzed to determine if physical obstructions are present on the property, which would make locate work unsafe. Means for working around such obstructions are defined.

   b. Traffic. Vehicular arteries (highways, roadways, railways, etc.) at the work site are identified to determine if such traffic would pose any safety hazard to locating the site.

   c. Physical Site Conditions. Soil conditions and other factors (such as trenches, pits, bores, standing water, etc.) that could affect the safety of the job site are identified. Methods are developed to identify and safely work around these hazards.

3. External Resources. Information is gathered about safety-related resources that might be required in the event of an accident or other problem (such as an employee illness). Information needed includes

location and contact information for nearest hospital, fire department, police department, and any other public emergency response organization. In addition, access routes and travel plans to emergency response facilities are defined.

4. Work Plan. Work plans in which procedures, employee's roles, equipment requirements, time requirements, and other factors are considered is developed to define the most efficient means for safety accomplishing required locate work. This work plan considers all of the safety related information developed in connection with items #2 and #3.

5. Job Briefing. Information developed as discussed in preceding items 1 through 4 is used to conduct a job briefing prior to commencement of on site locate work. The job briefing focuses on safety aspects of the required work.

B. Locate Work Safety Considerations

1. Personnel Protection. Watchman/lookout capabilities are provided to ensure the safety of personnel in cases where locate work requires that working individuals disrupt traffic flow or otherwise occupy hazardous positions. All working individuals wear proper safety attire. Such attire provides for adequate visibility of the worker and personal protection against hazards.

2. Equipment. All equipment used in connection with locate work is suitable for the intended uses. Items such as ladders, electrical test devices, and other instruments and items are inspected from a safety perspective prior to use safety feature such as locking devices, grounding, insulation etc., are thoroughly inspected.

3. Exposures. In cases where locate work requires personnel to enter into spaces with potentially unsafe conditions, appropriate testing is accomplished prior to entry. During times when such spaces are occupied, adequate monitoring and/or ventilation devices are present and properly operating during occupancy.

4. Work Activities. All locate work activities are conducted with safety given first priority. All employees are thoroughly trained and briefed regarding safety measures such as minimizing exposure to potentially hazardous conditions avoiding unnecessary risks, and giving priority to personal safety.

C. Post Work Safety Considerations

1. Termination of Work Activities. After locate work is completed, the site is restored and left in such a condition that no safety hazards associated with the locate work activities remain. All personnel and equipment utilized in connection with the work are accounted for and no unsafe conditions remain at the site. Any safety-related equipment used in connection with the work is returned/restored to pre-work status.

2. Debriefing. After completion of locate work, a debriefing safety review of work activities is conducted. This review is conducted with the objective of looking at the safety aspects of all involved work practices as necessary to see where unnecessary exposures may have occurred and where improvements could be made.

7. A visual inspection is completed during the facility locating process.

Guideline: This inspection includes the following:

- All facilities within a facility owner/operator's service area (to evaluate the scope of the locate request),
- Identification of access points
- Identification of potential hazards
- Assurance that plant facilities shown on records match those on the site.

The primary reason for a visual inspection is to determine if there are facilities placed that are not on record. It is very important that visual inspections be completed in areas of new construction, where records may not indicate the presence of a facility. The visual inspection is necessary because the time it takes for a facility placed in the field to be placed on permanent records varies by facility owner/operator and location. Evidence of a facility not on record includes, but is not limited to poles, dips, enclosures, pedestals (including new cables found within the pedestals), valves, meters, risers, manholes, and pavement cuts.

During the visual inspection, if the proposed dig site is not marked in white, the locator is encouraged to initiate contact with the excavator and explain the importance of utilizing white markings. The locator is encouraged to inform the excavator as to the benefits and advantages to using white markings.

8. Facilities are adequately marked for conditions

Guideline: Facility locators match markings to the existing and expected surface conditions. Markings may include one or any combination of the following: paint, chalk, flags, stakes, brushes or offsets. All marks extend a reasonable distance beyond the bounds of the requested area.

Proper training for all locators includes properly identifying the varying surface and environmental conditions that exist in the field and what marking methods should be used. Conditions, which may affect markings, are rain, snow, vegetation, high traffic, construction, etc.

9. Positive response is provided to facility locate requests.

Guideline: All facility location requests result in a positive response from the facility owner/operator to the excavator. PA ACT 287 states, "To respond to all notices through a One Call System, provided the request is made in the time frame set forth under this act."

A positive response allows the excavator to know whether all facility owners/ operators have marked the requested area prior to the beginning of the excavation.

10. Multiple facilities in the same trench are marked individually and with corridor markers.

Guideline: In general, the number of lines marked on the surface equal the number of lines buried below. "All facilities within the same trench should be individually marked and identified. In situations where two facilities share the same color code (such as telephone and CATV) both facilities should be identified and the marks placed parallel, but with enough separation so that they may be readily identified." In circumstances where the total number of lines buried in the same trench by a single facility owner/operator may not be readily known, a corridor marker is used. The corridor mark indicates the width of the facility.

11. Information on abandoned facilities is provided when possible.

Guideline: When the presence of an abandoned facility within an excavation site is known, an attempt is made to locate and mark the abandoned facility. When located or exposed, all abandoned facilities are treated as live facilities. Information regarding the presence or location of an abandoned facility may not be available because of updating or deletion of records. In addition, the process of abandoning an existing facility, damage

to an abandoned facility, or limited or non-existing access points may render an abandoned line non-locatable. The recommendation of this process is *not* an endorsement of the maintenance of records for abandoned facilities.

12. When locating electro-magnetically, active/conductive locating is preferable.

    Guideline: The current preferred method of actively applying a signal onto a facility is to use direct connection. Direct connection is the process of connecting a direct lead from the transmitter to the target facility, and connecting a ground lead from the transmitter to a ground point in order to complete a circuit. This process provides the strongest signal on the line and is less likely to "bleed over" to adjacent facilities than other methods of applying a signal. This method allows a greater range of frequency and power output options. It is good practice to use the lowest frequency possible at the lowest power output possible to complete the locate.

    If direct connection is not possible, use of an induction clamp (coupler) is the most effective method of applying a locate signal onto the target conductor. This method is more limiting for the choices of frequency and power outputs than direct connection. Using an induction clamp is not as effective at transmitting a signal as direct connection, can only be used within certain frequency ranges, and must use a higher power output.

    The least preferred method is induction or broadcast mode on a transmitter. This usually results in a week signal that will "bleed over" to any conductor in the area.

13. The facility owner/operator is identified.

    Guideline: When feasible, the owner/operator of a facility is identified by markings at the time the facility is located. This practice facilitates a positive response for all facilities within the requested area.

    The CGA Best Practices states, "An operator's identifier (name, abbreviation or initials) is to be placed at the beginning and at the end of the proposed work. In addition to the previous, subsequent operators using the same color will mark their company identifier at all points where their facility crosses another operator's facility using the same color".

14. Communication is established between all parties.

    Guideline: The one call center, facility owners/operators, and excavators all have clearly defined processes to facilitate communication between all parties. If the complexity of a project or its duration is such that a clear and precise understanding of the excavation site is not easily conveyed in writing on a locate request, then a pre-construction meeting is scheduled. This pre-construction meeting is on-site to establish the scope of the excavation. Written agreements between the excavator(s) and the locator(s) include:
    - Date,
    - Name,
    - Company,
    - Contact numbers for all parties,
    - A list of the areas to be excavated,
    - A schedule for both marking and excavating the areas, and
    - Any follow up agreements that might be necessary.

    Any changes to the areas that are to be located are in writing and include all parties responsible for the excavation and marking of the excavation sites. Locators also initiate contact if the complexity of the markings requires further explanation.

15. Documentation of work performed on a locate is maintained.

    Guideline: A facility locator always documents what work was completed on a locate request. This assists in the locate process by making a locator review what was located and then verify that all facilities within the requested area were marked. Careful documentation helps ensure that there is an accurate record of the work that was performed by the locator and helps eliminate confusion over what work was requested by the excavator.

16. A damaged facility is investigated as soon as possible after occurrence of damage.

    Guideline: Any time damage occurs, a proper investigation is performed. This is to determine not only the responsible party but also the root cause of the damage. The information gathered from the damage investigation is essential in preventing future damages.

17. Forecasting/Planning for Predictable Workload Fluctuations. A plan is developed for dealing with unpredictable fluctuations.

    Guideline: Facility owners/operators and/or their representatives develop methods to sufficiently forecast and plan for future workloads in order that ticket requests may be completed in a timely manner. This will ensure that adequate personnel and equipment will be available to complete all locate requests.

    It should be noted that this practice does not involve limiting the number of one-call requests from excavators.

UNIFORM COLOR CODE & MARKING GUIDELINES

The following information is contained in Appendix B of Common Ground Alliance Best Practices Version 5.0 and is intended to be supplemental information for existing practices found within CGA Best Practices Version 2.0. The information contained within this appendix was approved by the CGA Board of Directors on September 24, 2004.

BEST PRACTICES CHAPTER – LOCATING & MARKING PRACTICES

Practice Statement 4-3: *A uniform color code and set of marking symbols is adopted. (See "Uniform Color Code" Below)*

Uniform Color Code

The following APWA uniform color code [ANSI Z535.1] is recommended to be adopted as the uniform color code for marking excavation sites and underground facilities in conflict with an excavation. This recommendation is not intended to preempt any existing state requirement that specifies other colors.

White.....Proposed Excavation
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

References: APWA Uniform Color Code; Existing operating practices from various States' one-call centers; Existing One-Call Laws from various States, ANSI Standard Z535.1 Safety Color Code

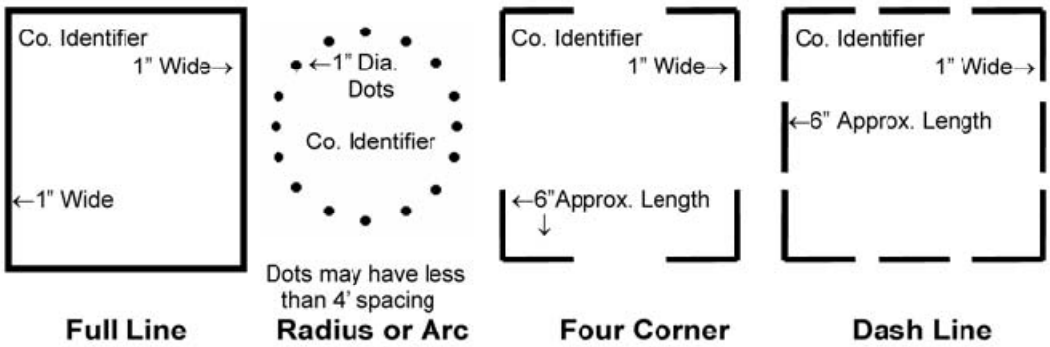
BEST PRACTICES CHAPTER – EXCAVATION PRACTICES

Practice Statement 5-2: *When the excavation site cannot be clearly and adequately identified on the locate ticket, the excavator designates the route and/or area to be excavated using white premarking prior to the arrival of the locator. (See "Guidelines for Excavation Delineation" Below)*

Guidelines for Excavation Delineation

The following marking illustrations are examples of how excavators may choose to mark their area of proposed excavation. The use of white marking products (e.g. paint, flags, stakes, whiskers or a combination of these) may be used to identify the excavation site.

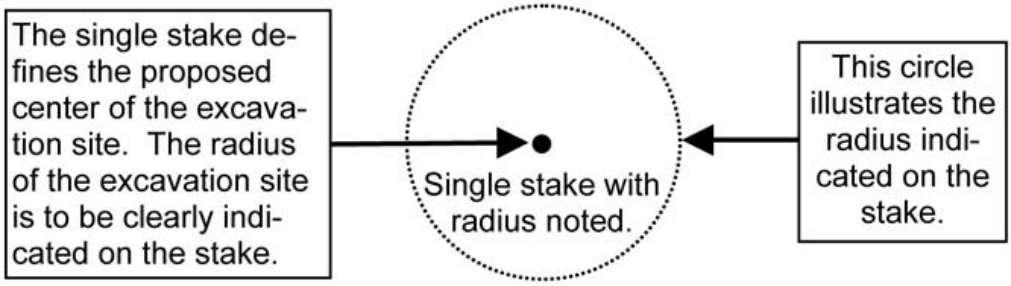
Single Point Excavations Markings



Delineate in white paint the proposed area of excavation through the use of: a continuous line, dots marking the radius or arcs, dashes marking the four corners of the project or dashes outlining the excavation project. Limit the size of each dash to approximately 6" to 12" in length and 1" in width with interval spacing approximately 4' to 50' apart. The maximum separation of excavation marks is to be reduced to a length that can be reasonably

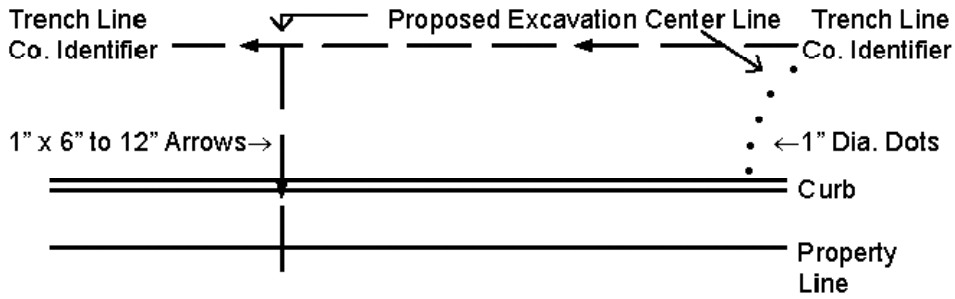
seen by the operator's locators when the terrain or excavation site conditions warrant it. Dots of approximately 1" diameter are typically used to define arcs or radii and may be placed at closer intervals in lieu of dashes.

Single Stake Marking Center Point of Excavation Site



When an excavation site is contained within a 50' maximum radius, or less, it can be delineated with a single stake that is positioned at the proposed center of the excavation. If the excavator chooses this type of delineation they must convey that they have delineated the excavation site with a single stake at the center of the excavation and include the radius of the site in the notification to the One-Call Center. This single stake is to be white in color with the following information: excavator's company identifier (name, abbreviations, or initials) and the radius of the excavation site in black letters on the stake or with a notice attached to the stake.

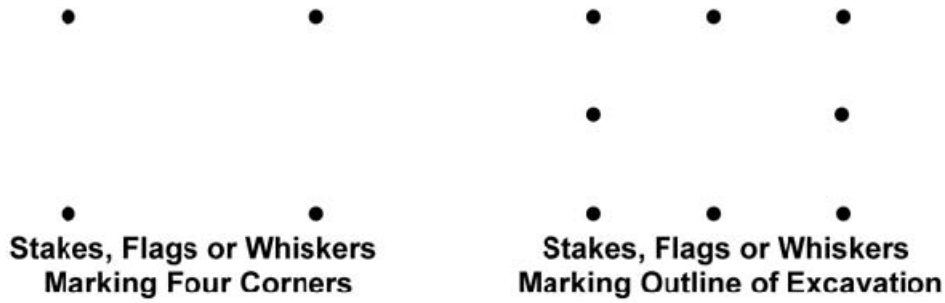
Trenching, Boring, or Other Continuous Type Excavations



Continuous Excavation Marking

Mark in white paint the proposed centerline of planned excavation 6" to 12" x 1" arrows, approximately 4' to 50' apart to show direction of excavation. The maximum separation of excavation marks is to be reduced to a length that can be reasonably seen by the operator's locators when the terrain at an excavation site warrants it. Mark lateral excavations with occasional arrows showing excavation direction from centerline with marks at curb or property line if crossed. Dots may be used for curves and closer interval marking.

Stakes, Flags or Whiskers Excavation Markers



Delineate the proposed area of excavation through the use of: stakes, flags or whiskers to mark radius or arcs, the four corners of the project or outlining the excavation project instead of using spray paint. Limit the interval spacing to approximately 4' to 50'. The maximum separation of excavation marks is to be reduced to a length that can be reasonably seen by the operator's locators when the terrain at an excavation site warrants it. Stakes, flags or whiskers provided to illustrate arcs or radii may be placed at closer intervals in order to define the arc or radius. Stakes, flags or whiskers are white in color with the excavator's company identifier (name,

abbreviations, or initials) provided on the stake, flag or whisker.

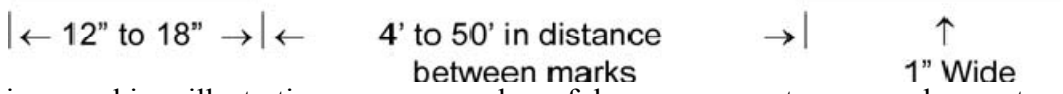
BEST PRACTICES CHAPTER – LOCATING & MARKING PRACTICES

Practice Statement 4-3: *A uniform color code and set of marking symbols is adopted. (See "Guidelines for Operator's Facility Field Delineation" below)*

Guidelines for Operator's Facility Field Delineation

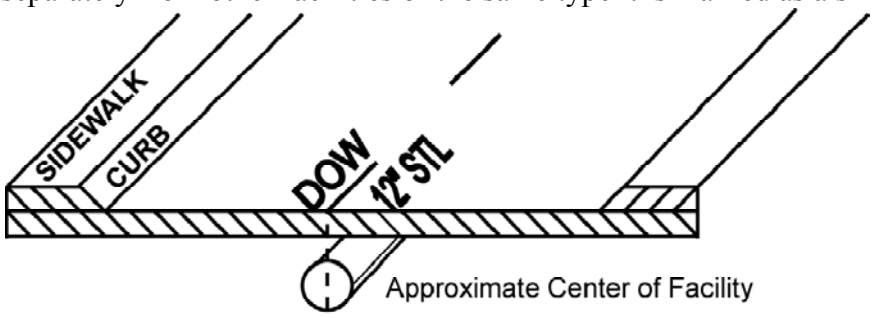
Operator markings of facilities include; the appropriate color for their facility type; their company identifier (name, initials, or abbreviation) when other companies are using the same color, the number and width of their facilities and a description of the facility (HP, FO, STL etc). Use paint, flags, stakes, whiskers or a combination to identify the operator's facility(s) at or near an excavation site.

1. Marks in the appropriate color are to be approximately 12" to 18" in length and 1" inch in width and separated by approximately 4' to 50' in distance as an example. When marking facilities the operator is to consider the type of facility being located, the terrain of the land, the type of excavation being done and the method to adequately mark its facilities for the excavator.

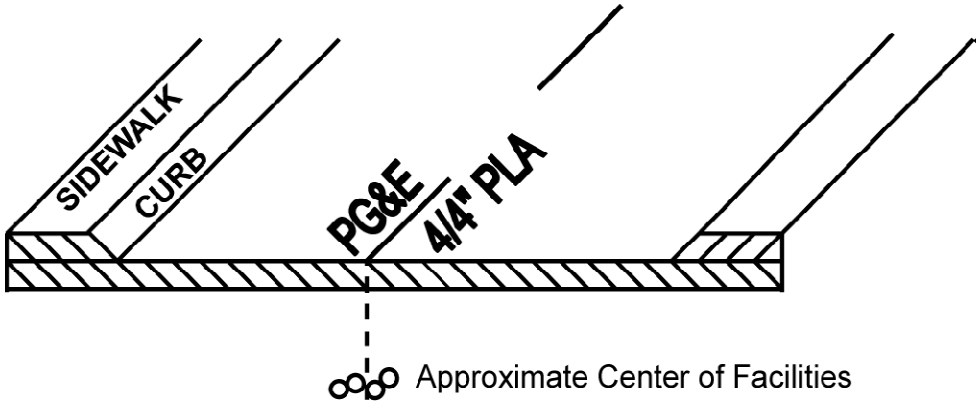


2. The following marking illustrations are examples of how an operator may choose to mark their subsurface installations

   a. **Single Facility Marking:** Used to mark a single facility, marks are placed over the approximate center of the facility. This example indicates an operator's 12" facility. When a facility can be located or toned separately from other facilities of the same type it is marked as a single facility.

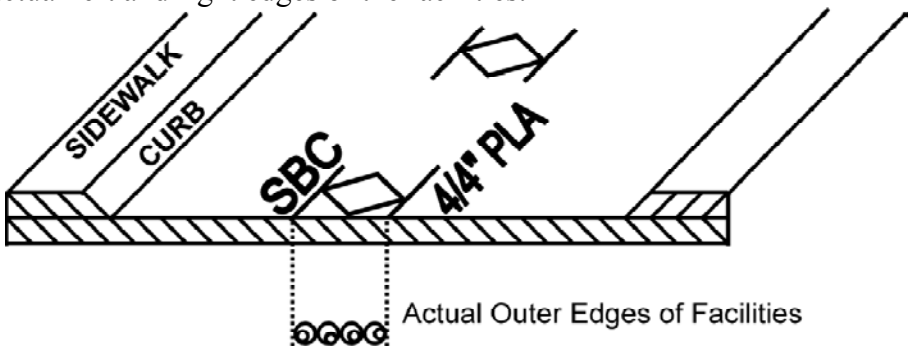


   b. **Multiple Facility Marking:** Used to mark multiple facilities of the same type (e.g. electric), where the separation does not allow for a separate tone for each facility but the number and width of the facilities is known. Marks are placed over the approximate center of the facilities and indicate the number and width of the facilities. This example indicates 4 plastic facilities that are 4" in diameter (4/4" PLA).



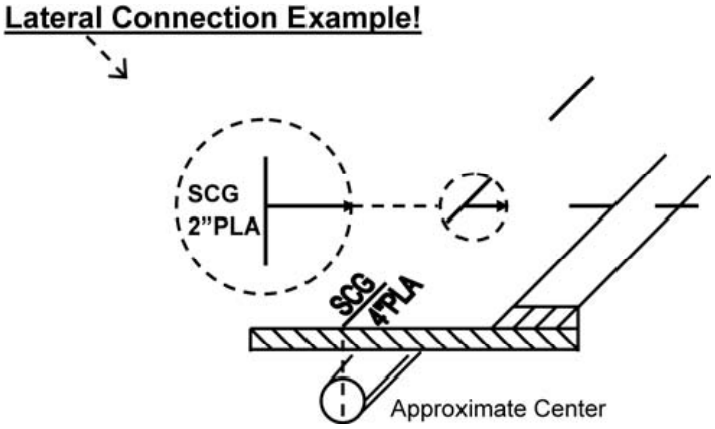
   c. **Conduit Marking:** Used for any locatable facility being carried inside conduits or ducts. The marks indicating the outer extremities denote the actual located edges of the facilities being represented. An

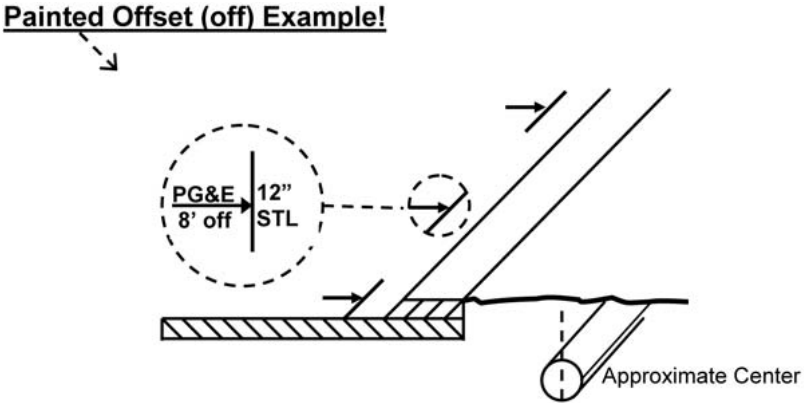
example would be 4 plastic conduits that are 4" in diameter (4/4" PLA), and the marks are 16" apart indicating the actual left and right edges of the facilities.

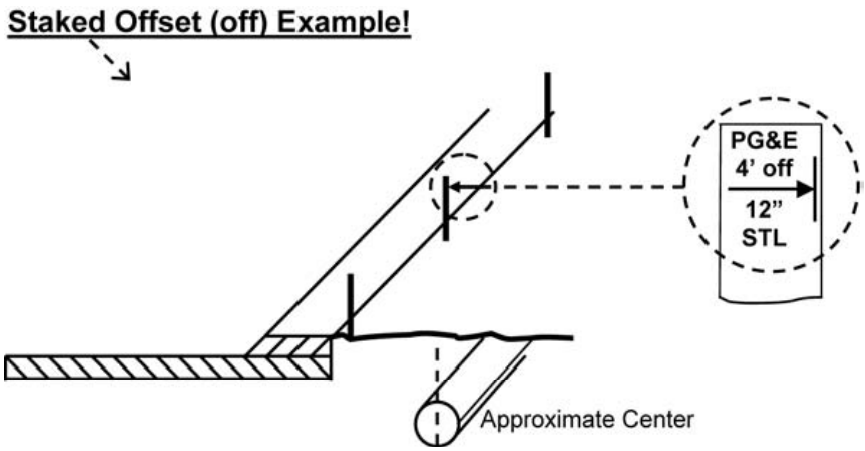


d. **Corridor Marking:** Used to mark multiple facilities of the same type (e.g. electric), in the same trench where the total number of facilities is not readily known (operator has no record on file for the number facilities) and that are bundled or intertwined. Marks are placed over the approximate center of the facilities and indicate the width of the corridor. The width of the corridor is the distance between the actual located outside edges of the combined facilities. This example indicates a 12" corridor (12" CDR).

3. Changes in direction and lateral connections are to be clearly indicated at the point where the change in direction or connection occurs with an arrow indicating the path of the facility. A radius is indicated with marks describing the arc. When providing offset markings, (paint or stakes), show the direction of the facility and distance to the facility from the markings.







4. An operator's identifier (name, abbreviation or initials) is to be placed at the beginning and at the end of the proposed work. In addition to the previous, subsequent operators using the same color will mark their company identifier at all points where their facility crosses another operator's facility using the same color. The maximum separation of identifiers is to be reduced to a length that can be reasonably seen by the excavator when the terrain at the excavation site warrants it.

CTYSAC	CITIZENS	VERIZON

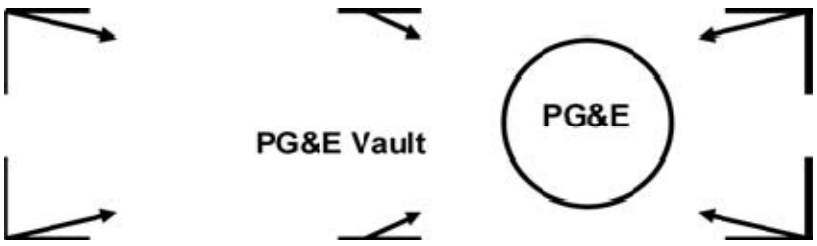
5. Information as to the size and composition of the facility is to be marked at an appropriate frequency. Examples are: the number of ducts in a multi-duct structure, width of a pipeline, and whether it is steel, plastic, cable, etc.

CCWD	RSVTEL	DOW
4" PLA	9 PLA	12" STL

6. Facilities installed in a casing should be identified as such. Two examples are: 6" plastic in 12" steel = 6"PLA/12"STL and fiber optic in 4" steel = FO(4"STL).

ACWD	AT&T
6"PLA/12"STL	FO(4"STL)

7. Structures, such as vaults, inlets, lift stations that are physically larger than obvious surface indications, are to be marked so as to define the parameters of the structure.



8. Termination points or dead ends are to be indicated as such.

9. When there is "No Conflict" with the excavation complete one or more of the following:

- Operators of a single type of facility (e.g. AT&T) would mark the area "NO" followed by the appropriate company identifier in the matching APWA color code for that facility (e.g. "NO AT&T")

- Operators of multiple facilities would mark the area "NO" followed by the appropriate company identifier in the matching APWA color code for that facility with a slash and the abbreviation for the type of facility that there is "No Conflict" (e.g. "NO PG&E/G/D"). The example illustrates that PG&E has no gas distribution facilities at this excavation site. The abbreviation for gas transmission facilities is "/G/T", electric distribution is "/E/D" and electric transmission is "E/T" these should be used when appropriate.

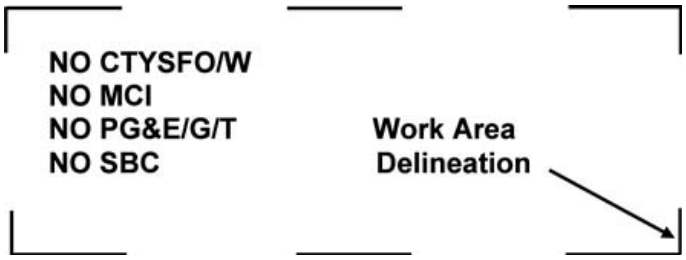
- Place a clear plastic (translucent) flag that states "No Conflict" in lettering matching the APWA color code of the facility that is not in conflict. Include on the flag the operator's identifier, phone number, a place to write the locate ticket number and date. Operators of multiple facilities would indicate on the flag, which facilities were in "No Conflict" with the excavation as in the previous example.

- If it can be determined through maps or records that the proposed excavation is obviously not in conflict with their facility (s) the locator or operator of the facility may notify the excavator of "No Conflict" by phone, fax, or email, or through the One-Call Center, where electronic positive response is used. Operators of multiple facilities would indicate a "No Conflict" for each facility as in the previous examples.

- Place "No Conflict" markings or flags in a location that can be observed by the excavator and/or notify the excavator by phone, fax, or email that there is "No Conflict" with your facilities. When the excavation is delineated by the use of white markings, place "No Conflict" markings or flags in or as near as practicable to the delineated area.

  * Caution - Allow adequate space for all facility mark-outs.

"No Conflict" indicates that the operator providing the "No Conflict" has no facilities within the scope of the delineation, or when there is no delineation, there are no facilities within the work area as described on the locate ticket.



Color Code Identifiers

White	Proposed Excavation
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

Common Abbreviations:

Facility Identifier

CH	Chemical
E	Electric
FO	Fiber Optic
G	Gas
LPG	Liquefied Petroleum Gas
PP	Petroleum Products
RR	Railroad Signal
S	Sewer
SD	Storm Drain
SS	Storm Sewer
SL	Street Lighting
STM	Steam
SP	Slurry System
TEL	Telephone
TS	Traffic Signal
TV	Television
W	Water
W	Reclaimed Water "Purple

Underground Construction Descriptions

C	Conduit
CDR	Corridor
D	Distribution Facility
DB	Direct Buried
DE	Dead End
JT	Joint Trench
HP	High Pressure
HH	Hand Hole
MH	Manhole
PB	Pull Box
R	Radius
STR	Structure (vaults, junction boxes, inlets, lift stations)
T	Transmission Facility

Infrastructure Material

ABS	Acrylonitrile - Butadiene - Styrene
ACP	Asbestos Cement Pipe
CI	Cast Iron
CMC	Cement Mortar Coated
CML	Cement Mortar Lined
CPP	Corrugated Plastic Pipe
CMP	Corrugated Metal Pipe
CU	Copper
CWD	Creosote Wood Duct
HDPE	High Density Polyethylene
MTD	Multiple Tile Duct
PLA	Plastic (conduit or pipe)
RCB	Reinforced Concrete Box
RCP	Reinforced Concrete Pipe

RF	Reinforced Fiberglass
SCCP	Steel Cylinder Concrete Pipe
STL	Steel
VCP	Vertrified Clay Pipe

Guide for Abbreviation Use

This is a guide for placing the above abbreviations in the field. The Company Identifier is to be placed at the top or at the left of the abbreviations. Place the abbreviations in the following order, Company Identifier / Facility Identifier / Underground Construction Descriptions / Infrastructure Material (e.g. SBC/TEL/FO/PLA). This example indicates that SBC has a Telecommunication Fiber Optic line in a single Plastic conduit. The use of the abbreviation /TEL is not necessary, because the orange marking would indicate that the facility was a communication line, but its use is optional. To leave out one or more of the abbreviation types you would continue to follow the order of the abbreviations above leaving out the slash and abbreviation that does not apply (e.g. /TEL), the result would be the following (e.g. SBC/FO/PLA).

DESIGNER EFFECTIVE GUIDELINES

Adopted by the Pennsylvania One Call System, Inc. Board of Directors January 30, 2008
Disclaimer of Liability

This Guide has been prepared as an educational document for contractors, designers, operators and facility owners. It is intended as a reference tool for interacting with the Pennsylvania One Call System, ("POCS"). It is also intended to explain in a general way the requirements provided for in Pennsylvania's Utility Line Protection Act, Act 287 of 1974, as amended by Act 181 of 2006 (the "Act"). It is strongly recommended that all individuals who regularly contact "POCS" review the Act and this Guide. Familiarity with its contents will be valuable, but the Guide is meant to clarify and explain the law according to POCS' understanding of how it affects interaction with POCS. **This Guide is not a substitute for the Act and it does not relieve anyone from discharging their responsibilities as set forth in the Act or as otherwise required by law.**

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This Guide has a copyright. POCS recommends and gives its permission for duplication of this Guide. Additional copies may be obtained from the PA One Call Center or copied from its web site at www.paonecall.org**.** The contents of this Guide are subject to change without notice. The web site will be updated as soon as possible after changes are made and approved by the Board of Directors. If there are any questions you may call 1-800-248-1786 or use the home page.

Designer Effectiveness Guidelines

The information contained within this document is from the Common Ground Alliance Best Practices, it is not a part of the Pa. Act 287 of 1974 as amended. The following guidelines are not intended to replace existing designer policies or procedures that have been established by the individual company or designer. The following Designer Effectiveness Guidelines are to be utilized as a guide by anyone who may wish to take advantage of the information contained within.

An Effective Project Design includes consideration of existing underground facilities. When possible, conflicts with existing facilities should be avoided. This document will identify the various areas that should be addressed in your designing process, it will also identify the recommended guidelines that a designer should follow to complete an effective project design. The first stage of the line design process that will be addressed is “knowing”, the second stage consists of “appropriately designing” and the final stage of effective design is “effectively communicating the location of all underground facilities provided by facility owners and in association with excavation activities”.

1. Plat Designation of Existing Underground Facility Easements

Guideline: Plats involving development of real property should include the designation of underground facility easements. Various items are required on the plats filed prior to the development of lands. Where plats are filed, they should include the identification of the easements of underground facilities traversing the land described on the plat. Identification of easements of underground facilities on the plat increases notice to developers and the public about the existence of the underground facilities. The design stage one call made to the One Call Center in Pennsylvania will give notification to the owners of underground facilities that a plat has been filed. This notification alerts underground facility owners/operators to establish communication between the developers and the operators to facilitate a plan and design for the use of the land, which complements the underground facility.

2. Gathering Information for Design Purposes

Guideline: During the planning phase of the project, available information is gathered from facility owners/operators. This includes maps of existing, abandoned and out-of-service facilities, cathodic protection and grounding systems, as-builts of facilities in the area if the maps are not current, proposed project designs, and schedules of other work in the area. This information is gathered for the purpose of route selection and preliminary neighborhood impacts, and as part of the process of impact analysis when evaluating different design possibilities.

Methods of gathering information shall include contacting the Pennsylvania One Call System, and may also include contacting the facility owners/operators, coordinating committees/councils, other designers, engineering societies, and governmental agencies as a means of identifying underground facility owners/operators in an excavation area. Gathering information may also include a review of the site for above ground indications of underground facilities (i.e. permanent signs or markers, manholes, covers, vent pipes, pad mounted devices, riser poles, power and communication pedestals and valve covers). The Pennsylvania One Call System provides a listing of operators directly to the designer, or to the subsurface utility engineer. This information is available in formats that are accessible to all users such as voice, fax, E-mail or web site. The facility owner/operator may locate their underground facilities or provide locations of their underground facilities to the designer by other means, such as by marking up design drawings or providing facility records to the designer. The use of Subsurface Utility Engineering (SUE) techniques is also utilized in information gathering. SUE includes up to four quality levels for gathering underground facility information. Please see the Federal Highway Administration publications and ASCE 38-02, standard guideline for the collection and depiction of existing subsurface utility data for additional details.

3. Identifying Existing Facilities in Planning and Design.

Guideline: During the planning phase of the project, existing facilities are shown on the design plans. The planning documents include possible routes for the project together with known underground facility information. The various facility owners/operators may be given the opportunity to provide appropriate feedback.

During the design phase of the project, underground facility information from the planning phase is shown on the plans. If information was gathered from field located facilities, from underground facility surveys or from subsurface utility engineering, this is noted on the plans. The designer and the contractor both know the quality of the information included on the plans. If an elevation was determined during the information gathering, it is shown on the plan. The facilities shown include active, abandoned, out-of-service, and proposed facilities. The design plans include a summary drawing showing the proposed facility route or excavation including streets and a locally accepted coordinate system. The plans may be distributed to the various facility owners/operators to provide the opportunity to furnish additional information, clarify information, or identify conflicts.

4. Utility Coordination.

Guideline: Project owners, designers, and facility owners/operators regularly communicate and coordinate with each other concerning future and current projects. Utility coordination fosters an open exchange of information among private and public facilities, governmental agencies and construction related organizations. Utility coordination also promotes cooperation among said groups in the planning, design and construction of projects affecting the overall good of participating parties, their organizations and customers or constituents, and the general public.

Utility Coordinating Committees (or Councils), where existing, include private utilities, public agency utilities, engineering firms, contractor associations, and others with facilities or business interests in public rights-of-way. Coordinating Committees function in multiple communities, counties and states to promote excavation project coordination. Typical items of discussion include facility excavations in existing and recently paved roadways, disruption of essential facility services, location of utility facilities, environmental impact of damages to utilities, permit procedures, right-of-way access controls and underground facility damage prevention. Plans of future roadway improvement and of future facility installations are reviewed regularly.

5. Markers for Underground Facilities designed by the Facility Owner

Guideline: If construction involves the installation of an underground facility, a combination of above ground and below ground markers are installed to identify and locate underground facilities in the future. The purpose of above ground markers is to identify underground facilities, not to locate for excavation or circumvent the one-call process. However, designing underground facilities for future location reduces the risk of an incorrectly marked underground facility during an excavation project. Above ground markers are developed during the design process and include the company name, type of facility, emergency contact, and the one-call number. The locations and types of markers are specified in the construction plans. The design provides a marker system to include, but not limited to, stream crossings, public road crossings, other facilities' right-of-ways, railroad crossings, heavy construction areas, and any other location where it is necessary to identify the underground facility location. If non-detectable facilities are being installed, the design includes a means to accurately locate the underground facility from the surface. The facility is color-coded in accordance with the APWA guidelines to assist in identifying the particular facility.

6. Follow Applicable Codes, Statutes and Facility Owner/Operator Standards.

Guideline: The designer of a facility project should consider all national, state, local, and industry codes, regulations and practices as well as facility owner standards. Regulations, codes, standards and other design documents generally specify depth of cover, and horizontal and vertical clearances between adjacent facilities. In addition, certain facility owner/operator codes may allow exceptions to the prescribed minimum clearances, contingent upon written approval between the affected facility owners/operators.

The designer also has to consider the protection and temporary support of adjacent facilities, and any interference to existing cathodic protection and grounding systems. Consequently, the designer has to provide procedures for emergency notification and repairs in the case of any damage to an adjacent facility.

Designers are aware of proposed and revised standards and codes that may affect the project.

7. Use of Qualified Contractors.

Guideline: Contractors that excavate on and near underground facilities should possess the qualifications necessary to conduct such activities in a manner that is skillful, safe and reliable. These qualifications should include detailed knowledge of Pa. Act 287 of 1974 as amended. The requisite qualification of the contractor serves to protect the public and integrity of underground facilities in the vicinity of the

excavation. Using qualified contractors ensures that all contractors who bid and work on a project employ safe work habits and are capable of performing the requested work.

When working with contractors, the project owner is familiar with the contractors' work experiences and financial abilities and should not ask the contractors to bid beyond their capabilities. Allowing a competitive bidding process from qualified and competent contractors, as determined and approved by the project owner, helps assure the best quality and pricing available, while reducing damages to underground facilities.

8. Pre-Bid or Pre-Construction Conferences.

Guideline: Depending on the level of impact of proposed construction upon facilities in the excavation area, the project owner or project designer may require potential contractors to attend a pre-bid or pre-construction conference including underground facility owners/operators. This conference is exercised to discuss, among other things, the particular facilities in the area and the requirements to properly protect, support, and safely maintain the facilities during excavation. Official minutes are taken and disseminated as written to all attendees. If a project is determined to be complex by the excavator, attendance at pre-construction conferences is mandatory.

9. Continuous Interface between the Designer and Potential Contractors during the Pre-Bid/Bid Phase.

Guideline: The designer's continuing involvement during the pre-bid/bid phase with the potential contractor(s) allows for more effective communications between all parties. In addition, the designer shall show the Pa. One Call serial number and date the one call was made on the drawings.

The designer can assess whether the interested bidders have the expertise needed and the correct understanding of the intended design. (This applies if the designer has a contract for assisting with bidding services.)

10. Continuous Interface between the Designer and the Contractors during the Construction Phase.

Guideline: This practice allows the designer to be available for pre-construction conferences, unforeseen conditions and design changes and post-construction conferences. (This applies if the designer has a contract for construction phase services.)

11. As-Built Drawings.

Guideline: Installation should be made in accordance with the approved construction plans; any deviation to the plans is documented and such changes indicated on the as-built drawings. As-built information is recorded, retained and made available for subsequent excavation. (This applies if the designer has a contract for prepared record drawings.)

12. Supply Line Separation

Guideline: When installing new direct buried supply facilities in a common trench, a minimum or 18 inch radial separation should be maintained between supply facilities such as steam lines, plastic gas lines, other fuel lines, and direct buried electrical supply lines. If 18 inches separation cannot be feasibly attained at the time of installation, then mitigating measures should be taken to protect lines against damage that might result from proximity to other structures. Examples may include the used of insulators, casing, shields or spacers. If there is a conflict among any of the applicable regulations or standards regarding minimum separation, the most stringent should be applied.

13. Trenchless Excavation

Guideline: The project owner and designer take prudent measures to make the determination to use trenchless excavation installation.

The project owner and designer coordinate with facility owners to design projects that maintain minimum radial clearances between the new facility and existing facilities. Minimum clearances are equal to or greater than applicable standards.

The project owner and designer establish line and grade of the proposed excavation to maintain the established minimum clearances.

14. Subsurface Utility Engineering (SUE)

Guideline: In certain cases and environments, it may be difficult or impossible to determine the locations of all utilities and/or impediments with sufficient accuracy to avoid damage or delay during construction. In these cases, Subsurface Utility Engineering (SUE) is applied during the design phase to locate, identify and characterize all existing utility infrastructure (and other relevant non-utility features) found within a given project/area. SUE is applied in a structured manner, in accordance with practices and Quality Levels found in ASCE 38-02 "*Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data."* The project owner dictates the required Quality Levels, as well as the amount of effort expended by the SUE provider on each. Although the Standard is more detailed and comprehensive, the following is a brief summary of the Quality Levels defined therein: QL-D involves utility records research and interviews with knowledgeable utility personnel. QL-C involves surface survey, identifying and recording aboveground features of subsurface utilities, such as manholes, valves, and hydrants. QL-B involves application of "surface geophysical methods," such as EM-based locating instruments, GPR, Radar Tomography, metal detectors, and optical instruments, to gather and record approximate horizontal (and, in some cases, vertical) positional data. QL-A involves physical exposure via "soft-digging" (vacuum excavation or hand-digging), and provides precise horizontal and vertical positional data. SUE results are integrated into the design process, where design engineers use the information to create construction plans that accommodate existing infrastructure, thereby reducing the overall risk of conflicts and/or damage.

The KARL System

(Kathy Automated Response to Locate requests)

Overview

Pennsylvania One Call System, Inc. (POCS) has created a voice relay and response solution that automates the call out process to facility owner members requesting supplemental voice relay of information on emergency notifications; allows facility owner members to respond to all notifications; faxes or emails excavators/designers with the collected responses; and allows excavators/designers to retrieve information about their responses.

When an excavator/designer calls into the system a customer service representative (CSR) will enter the ticket information into the POCS computer system as a work location request (WLR). Excavators and designers who have registered with POCS may also create their own work location requests utilizing Web Ticket Entry. Each WLR is assigned a unique serial number. Based on information within the ticket the computer system assigns a message type and determines if voice notification has been requested by a facility owner member. This information is passed to the KARL System.

KARL determines the priority of the voice message and queues a voice call out request for each pertinent facility owner. When a facility owner answers a voice call out KARL speaks the WLR information. Upon completion of the callout, KARL records the outcall status as successful or failed.

Anytime during voice relay of an emergency, KARL will accept responses to the spoken WLR information. When a facility owner responds, KARL will record their response in the database. On all other WLR's KARL will accept responses through telephone input, data transfer, or web ticket response.

Once all utilities have responded to a particular WLR, or on the response due date, KARL will fax or email the results to the excavator/designer who initiated the WLR, to inform them of the status. If a response is not received for a facility owner by the response due date, KARL will send a "No response" indication for that facility owner. At any time, the excavator/designer may call into KARL to inquire the current status of the WLR.

RESPONSE CODES	
1	Clear, no facilities.
2	Conflict, lines nearby, direct contact to follow by facility owner.
3	Marked.
4	Insufficient information, do not dig.
5	Not marked due to no access.
6	Scheduled date of mark.
7	Voice Message
8	Design conflict – Please send plans to (facility owner's address will be provided).

INTERACTING WITH THE VOICE RESPONSE UNIT (KARL):

Users of the KARL system will be required to enter numeric and alphabetic answers to interact with the voice response unit. These responses may be entered verbally or by using the telephone keypad. At different times in the script, KARL may ask facility owners for the member call directing code (CDC), for the initials of the person entering responses or accepting supplemental voice outdials, and to confirm the company telephone numbers. KARL will ask excavators and designers for their company telephone number, for serial numbers, and the initials of the person performing the inquiry.

If you choose to enter your alphabetic response by using the telephone keypad you must translate the letters into numbers. To translate letters into numbers for entry into KARL, look at the letter on the telephone keypad and the letter's position on the key. For the letter Q enter 11 and for the letter Z enter 12.

For example, if your initials are SAM, you would enter the number 7 matching the key where the S is found, followed by the position of the letter S which is 3. The numeric representation for the letter S would be 73. The A would be 21 and the M would be 61.

K	A	R	L
52	21	72	53

1	ABC 2	DEF 3
GHI 4	JKL 5	MNO 6
PRS 7	TUV 8	WXY 9
*	0	#

Facility owner Response and Excavator/Designer Inquiry

Responses are initiated by facility owners after they have researched the serial number information delivered to them during the notification phase. Inquiries are made by excavators/designers seeking the current status of their serial number. Facility owners are required to respond to design stage serial numbers within ten business days of the creation date of the serial number, and within two business days on construction serial numbers. Responses will be accepted from the facility owner after entering the member CDC and the initials of the person initiating the response. Serial number responses may be updated by a facility owner for up to ten business days from the creation date of serial number on construction notices, and up to 90 days on design notices. During the response update time frame, a facility owner may respond to a serial number multiple times. The last response made will be stored. No responses will be accepted from a facility owner after 10 business days on construction notices and 90 business days on design notices.

Inquiries are initiated by excavators and designers. They will be allowed to listen to the current status of the serial number they entered. The date/time of the inquiry will be recorded in the database.

Facility Owner Response

Action required: Call KARL at 1-800-222-6470
KARL will say: *"Thank you for calling the Pennsylvania One Call serial number response system."Please indicate the type of caller you are. Press or say 1 for excavator, press or say 2 for facility owner, press or say 3 for homeowner. To speak with a customer service representative, press or say 0."*

Action required: PRESS or SAY 2
KARL will say: *"Please enter your cdc code. Press or say 7 for help on how to enter your cdc code numerically."*

Action required: Enter your two or three digit cdc.
KARL will say: *"CDC* <cdc> *is for* <facility owner name>. *If this is correct, press or say 1. If this is not correct, press or say 2. To speak with a customer service representative, press or say 0."*

Action required: PRESS or SAY 1
KARL will say: *"Please enter or say your initials. Press or say 7 for help on how to enter your initials numerically."*

Action required: Enter or say at least two initials (4 numbers). KARL will accept three initials (6 numbers).
KARL will say: *"The initials you have entered are* <initials>. *If this is correct, press or say 1, If this is not correct, press or say 2. To speak to a customer service representative press or say 0"*

Action required: PRESS or SAY 1
KARL will say: *"Please enter or say the one call serial number*

Action required: Enter your 7 digit serial number.
KARL will say: *"The work location for ####### is for* <work site address>. *If this is correct, press or say 1. If this is not correct, press or say 2. To speak with a customer service representative, press or say 0."*

Action required: PRESS or SAY 1.
KARL will say: *"What is the status of this ticket?"*

"If this location is clear, no facilities press or say 1.
If this location has Conflict, lines nearby direct contact to follow by facility owner, press or say 2.
If this location is marked, press or say 3.
If this location has insufficient information, do not dig, press or say 4.
If this location is not marked due to no access, press or say 5.
To schedule a mark, press or say 6.
If you would like to leave a message, press or say 7.
If there is a design conflict, press or say 8."

Action required: PRESS or SAY 1, 2, 3, 4, 5, 6, 7 or 8.
KARL will say:
If 1: *"You selected, clear, no facilities."*
If 2: "*You selected, conflict, lines nearby direct contact to follow by facility owner."*
If 3: *"You selected, marked."*
If 4: *"You selected, insufficient information, do not dig."*
If 5*:* *"You selected, not marked due to no access."*
If 6: *"You selected, to mark by* <date> 2359.
If 7: *"You selected, to leave a message.*
If 8: *"You selected, design conflict."*
"Your response to serial number ####### has been accepted. If you would like to enter a response for another ticket, press or say 1. If you would like to enter ticket response for a different CDC press or say 2. If you have no more ticket responses, please hang up."

Excavator/Designer Inquiry

Action required: Call KARL at 1-800-222-6470
KARL will say: *"Thank you for calling the Pennsylvania One Call serial number response system. "Please indicate the type of caller you are. Press or say 1 for excavator, press or say 2 for facility owner, press or say 3 for homeowner. To speak with a customer service representative, press or say 0."*

Action required: PRESS or SAY 1
KARL will say: *"Please enter or say the One Call serial number."*

Action required: Enter or say your 7 digit serial number.
KARL will say: *"Please enter or say your company's 10-digit phone number."*

Action required: Enter or say the phone number used when the dig notice was created.

KARL will compare the phone number entered against the phone number associated with the serial number. If they match, KARL will speak the phone number and company name.

KARL will say: *"If this is correct, press or say 1, If this is not correct, press or say 2. To speak to a customer service representative press or say 0."*

Action required: PRESS or SAY 1
KARL will say: *Please enter or say your initials. Press or say 7 for help on how to enter your initials numerically.*

Action required: Enter or say at least two initials (4 numbers). KARL will accept three initials (6 numbers).
KARL will say: "*The initials you have entered are <initials>. If this is correct, press 1. If this is not correct, press or say 2. To speak to a customer service representative press or say 0."*

Action required: PRESS or say 1
KARL will say: *"The work location for serial number ####### is for < work site address>. If this is correct, press or say 1. If this is not correct, press or say 2. To speak to a customer service representative press or say 0"*

Action required: PRESS or say 1

KARL will retrieve the status of each utility that has responded to the current ticket and speak the response to the excavator/designer. If an excavator/designer presses 2, they will be given another opportunity to enter a different serial number.

KARL will say: *"To hear this serial number's information again, press or say 1. To enter a new One Call serial number, press 2. To speak with a customer service representative, press 0. To end this call, please hang up."*

Action Required: Hang Up.

Facility Owner Notification

As directed by the facility owner, on serial numbers requiring supplemental outcall notification, such as emergency notifications out of normal business hours, KARL will attempt to deliver information for all serial numbers that apply to the contacted facility owner within the same call. The outcall will be considered a success and removed from the outcall queue after the field "location information" has been spoken to the facility owner member. Outcalls will be limited to one attempt per member CDC. After each outcall attempt the resulting successful or failed status of the outcall will be entered into the database.

To ensure successful facility owner out-dials please follow these instructions when KARL calls you:

Action required:	Answer the telephone
KARL will say:	*"Hello, this is the Pennsylvania One Call. We have an emergency location request for you. Press or say one to continue.*"
Action required:	PRESS or say 1
KARL will say:	*"Please enter or say your company's ten-digit phone number."*
Action required:	Enter the telephone number designated for emergency notifications, which is the telephone number KARL dialed.
KARL will say:	*"Please enter or say your initials. Press or say 7 for help on how to enter your initials numerically*
Action required:	Enter or say at least two initials (4 numbers). KARL will accept three initials (6 numbers).
KARL will say:	"*The initials you have entered are <initials>. If this is correct, press or say 1. Press or say 7 for help on how to enter your initials numerically."*
Action required:	PRESS or SAY 1

KARL will speak the serial number, the proposed dig date and time; the work-site county, municipality, address, nearest intersection and location information of the WLR.

KARL will say:	*"To repeat this information, press or say 1. To respond to this serial number now, press or say 2. To continue, press or say 3. To speak with a service representative, press or say 0. To end this call, please hang up."*
Action required:	PRESS or SAY 1, 2, or 3.
If 1:	KARL will repeat the information.
If 2:	KARL will accept your response to the serial number (see Respond Section)
If 3:	KARL will continue and speak the excavator name.
KARL will say:	*"The excavator is*<excavator name>. *For detailed information on this excavator, press or say 1. To continue, press or say 2."*
Action required:	PRESS or SAY 1 or 2.
If 1:	KARL will speak the excavator address, caller name, caller phone number, person to contact and contact phone number.
If 2:	KARL will speak the type of work, the extent of excavation, if the excavation is on the street, sidewalk, public property, private property, who the work is being done for, and remarks.

Contact Us

Call Before You Dig	1-800-242-1776
	1-412-464-7100
	8-1-1
KARL System	1-800-222-6470
POCS Administrative Offices	1-800-248-1786
Administrative Fax	1-412-464-7104
Bill Kiger, President and Executive Director	1-412-464-7111
wgkiger@pa1call.org	
Ellen Kiger, Senior Director	1-412-464-7115
emkiger@pa1call.org	
Sherry Harim, Director – Member Services & Accounting	1-412-464-7116
sdharim@pa1call.org	
Dan Lucarelli, Director – Marketing & Education	1-412-464-7129
djlucarelli@pa1call.org	
Linda Stroz, Manager – Operations	1-412-464-7110
ljstroz@pa1call.org	
Ryan Graham, Manager – Technology	1-412-464-7150
rjgraham@pa1call.org	
Greg Krawchuk, Liaison Representative (South East)	1-610-532-4126
gjkrawchuk@pa1call.org	
Kevin Goldblum, Liaison Representative (Central)	1-717-731-1181
ksgoldblum@pa1call.org	
Steve Tatrai, Liaison Representative (South West)	1-412-464-7113
sptatrai@pa1call.org	
Mark Santayana, Liaison Representative (North East)	1-570-696-5270
mcsantayana@pa1call.org	
Kirk Kirkpatrick, Liaison Representative (North West)	1-814-563-7686
kpkirkpatrick@pa1call.org	

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.

PENNSYLVANIA ONE CALL SYSTEM, INC.

Dig Safely.

www.paonecall.org

CALL 1-800-242-1776

811 Know what's below. Call before you dig.

WORK LOCATION REQUEST FORM

TELEPHONE NUMBER: (_____) _____ EXT.: _____ CALLER: _____

COMPANY NAME: _____

ADDRESS: _____

CITY: _____ STATE: _____ ZIP: _____

WORKSITE INFORMATION:

COUNTY: _____ MUNICIPALITY: _____ WARD: _____

STREET ADDRESS: _____ STREET NAME: _____

NEAREST INTERSECTION: _____

SECOND INTERSECTION: _____

SITE MARKED IN WHITE ☐ Yes ☐ No

LOCATION INFORMATION: _____

SUBDIVISION: _____ TYPE OF WORK: _____

WORKING IN: ☐ STREET ☐ SIDEWALK ☐ PUBLIC PROPERTY ☐ PRIVATE PROPERTY

☐ OTHER (SPECIFY) _____

DEPTH: _____ EXTENT OF EXCAVATION: _____

METHOD OF EXCAVATION: _____ OWNER/WORK BEING DONE FOR: _____

DURATION OF JOB: _____ PERSON TO CONTACT: _____

PHONE: (_____) _____ EXT: _____ BEST TIME TO CALL: _____

FAX #: (_____) _____ EMAIL ADDRESS: _____

REMARKS: _____

NOTIFICATION TYPE:

☐ **CONSTRUCTION** (Not less than 3 nor more than 10 Business Days) **SCHEDULED EXCAVATION DATE: _____ TIME: _____**

☐ **DESIGN** (Not less than 10 nor more than 90 Business Days)

TO BE COMPLETED AFTER PLACING ONE CALL

LAWFUL START DATES: _____ THROUGH _____

OTHER SERIAL NUMBERS REFERENCED: _____

FACILITY OWNER MEMBERS NOTIFIED: _____

SERIAL NUMBER ASSIGNED: _____ DATE/TIME: _____

THERE IS AN ANNUAL FEE
DO NOT FAX THIS FORM TO POCS

APWA/CGA Uniform Guidelines for Temporary Marking

This marking guide provides for universal use and understanding of temporary marking of underground facilities to prevent accidental damage or service interruption by contractors, excavators, utility companies, municipalities or any others working on or near those underground facilities.

Proposed Excavation

Use white marks to outline the location, route or boundary of proposed excavation. Surface marks on roadways do not exceed 1½" x 18". The facility color and owners identity can be added to the white marks for facility owners.

This should be done prior to calling:

Pennsylvania One Call System, Inc. 8-1-1 or 1-800-242-1776

Pennsylvania law requires no less than 3 nor more than 10 business days before you dig.

Temporary Survey Markings

Use pink for all surveying and grade marks.

Temporary Facility Markings

Use color-coded surface marking (i.e. water-based paint or chalk) to indicate the location or route of active and out of service buried lines. To increase visibility, color-coded vertical markers (i.e. stakes or flags) supplement surface markings. Marks and markers indicate the name, initials or logo of the facility owner/operator of the line, and the width of the facility if it is greater than 2". Marks placed by other than the facility owner/operator or its agent indicate the identity of the designating firm. Multiple lines in a joint trench are marked in tandem, showing the number of lines of each type. If the surface over the buried line is to be removed, supplementary offset markings shall be used. Offset marking is on a uniform alignment and clearly indicates the actual facility is a specific distance away.

Tolerance Zone

Any excavation within the tolerance zone is performed with non-powered hand tools or by non-invasive methods until the marked facility is exposed. The width of the tolerance zone may be specified in law or code. If not, a tolerance zone including the width of the facility plus 18" measured horizontally from each side of the facility is recommended.

Uniform Color Code (www.apwa.net)

The American Public Works Association's Uniform Color Code is PA law. The code uses ANSI Standard Z535.1 Safety Colors, as shown for temporary marking of excavation sites and underground facility identification.

CGA Common Ground Alliance

www.commongroundalliance.com

Amended POCS 01/08

811 Know what's below. Call before you dig.

APWA/CGA TEMPORARY MARKING GUIDELINES

WHITE - Proposed Excavation

PINK -Temporary Survey Markings

RED - Electric Power Lines, Cables, Conduit and Lighting Cables

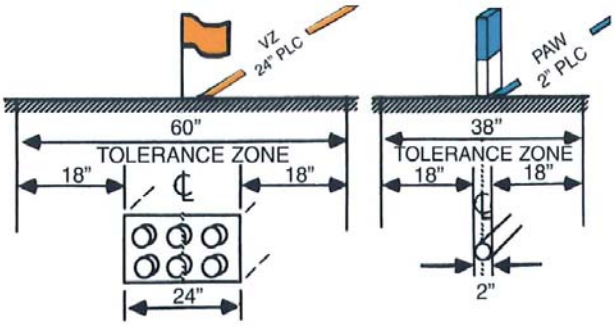
YELLOW - Gas, Oil, Steam, Petroleum or Gaseous Materials

ORANGE - Communication, Alarm or Signal Lines, Cables or Conduit

BLUE - Potable Water

PURPLE - Reclaimed Water, Irrigation and Slurry Lines

GREEN - Sewer and Drainage Lines



LARGE PIPE OR MULTIPLE DUCTS *SMALL PIPE OR CABLE(S)*

STOP - CALL US
BEFORE YOU DIG
PENNSYLVANIA ONE CALL SYSTEM, INC.
3 BUSINESS DAYS NOTICE IS THE LAW!

8-1-1 or 1-800-242-1776

www.paonecall.org

SECTION C - NON-FEDERAL RESOURCES

(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e)TOTALS
8. State Damage Prevention Program	$	$	$	$
9.				
10.				
11.				
12. TOTAL (sum of lines 8-11)	$	$	$	$

SECTION D - FORECASTED CASH NEEDS

	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
13. Federal	$	$	$	$	$
14. Non-Federal	$				
15. TOTAL (sum of lines 13 and 14)	$	$	$	$	$

SECTION E - BUDGET ESTIMATES OF FEDERAL FUNDS NEEDED FOR BALANCE OF THE PROJECT

(a) Grant Program	FUTURE FUNDING PERIODS (YEARS)			
	(b)First	(c) Second	(d) Third	(e) Fourth
16. State Damage Prevention Program	$	$	$	$
17.				
18.				
19.				
20. TOTAL (sum of lines 16 - 19)	$	$	$	$

SECTION F - OTHER BUDGET INFORMATION

21. Direct Charges:

22. Indirect Charges:

23. Remarks:

Authorized for Local Reproduction

Tracking Number:GRANT10415488 Funding Opportunity Number:DTPH56-10-SN-0001 Received Date:2009-09-08T13:51:16-04:00

Close Form | Next | Print Page | About

OMB Number: 4040-0004
Expiration Date: 01/31/2009

Application for Federal Assistance SF-424 Version 02

* 1. Type of Submission:
- [ ] Preapplication
- [x] Application
- [ ] Changed/Corrected Application

* 2. Type of Application:
- [x] New
- [ ] Continuation
- [ ] Revision

* If Revision, select appropriate letter(s):

* Other (Specify)

* 3. Date Received: 09/08/2009

4. Applicant Identifier:

5a. Federal Entity Identifier:

* 5b. Federal Award Identifier:

State Use Only:

6. Date Received by State:

7. State Application Identifier:

8. APPLICANT INFORMATION:

* a. Legal Name: PENNSYLVANIA PUBLIC UTILITY COMMISSION

* b. Employer/Taxpayer Identification Number (EIN/TIN): 23-6003018

* c. Organizational DUNS: 796091569

d. Address:

* Street1: 400 North Street
Street2:
* City: Harrisburg
County:
* State: PA: Pennsylvania
Province:
* Country: USA: UNITED STATES
* Zip / Postal Code: 17120

e. Organizational Unit:

Department Name: PA PUBLIC UTILITY COMMISSION

Division Name: Gas Safety

f. Name and contact information of person to be contacted on matters involving this application:

Prefix: Mr.
* First Name: Paul
Middle Name:
* Last Name: Metro
Suffix:

Title: Gas Safety Division Chief

Organizational Affiliation:

* Telephone Number: 717-787-1063
Fax Number:

* Email: pmetro@state.pa.us

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OMB Number: 4040-0004
Expiration Date: 01/31/2009

Application for Federal Assistance SF-424 Version 02

9. Type of Applicant 1: Select Applicant Type:

A: State Government

Type of Applicant 2: Select Applicant Type:

Type of Applicant 3: Select Applicant Type:

* Other (specify):

*** 10. Name of Federal Agency:**

Pipeline &Hazardous Material Safety Administration

11. Catalog of Federal Domestic Assistance Number:

20.720

CFDA Title:

Pipeline Safety

*** 12. Funding Opportunity Number:**

DTPH56-10-SN-0001

* Title:

State Damage Prevention Grants

13. Competition Identification Number:

Title:

14. Areas Affected by Project (Cities, Counties, States, etc.):

*** 15. Descriptive Title of Applicant's Project:**

PENNSYLVANIA PUBLIC UTILITY COMMISSION State Damage Prevention

Attach supporting documents as specified in agency instructions.

Add Attachments | Delete Attachments | View Attachments

OMB Number: 4040-0004
Expiration Date: 01/31/2009

Application for Federal Assistance SF-424 Version 02

*** Applicant Federal Debt Delinquency Explanation**

The following field should contain an explanation if the Applicant organization is delinquent on any Federal Debt. Maximum number of characters that can be entered is 4,000. Try and avoid extra spaces and carriage returns to maximize the availability of space.

CERTIFICATION REGARDING LOBBYING

Certification for Contracts, Grants, Loans, and Cooperative Agreements

The undersigned certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure of Lobbying Activities," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,00 0 and not more than $100,000 for each such failure.

Statement for Loan Guarantees and Loan Insurance

The undersigned states, to the best of his or her knowledge and belief, that:

If any funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this commitment providing for the United States to insure or guarantee a loan, the undersigned shall complete and submit Standard Form-LLL, "Disclosure of Lobbying Activities," in accordance with its instructions. Submission of this statement is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required statement shall be subjec t to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

* APPLICANT'S ORGANIZATION	PENNSYLVANIA PUBLIC UTILITY COMMISSION
* PRINTED NAME AND TITLE OF AUTHORIZED REPRESENTATIVE	
Prefix:	Mr.
* First Name:	Paul
Middle Name:	
* Last Name:	Metro
Suffix:	
* Title:	Gas Safety Division Chief
* SIGNATURE:	Paul Metro
* DATE:	09/08/2009

COMMONWEALTH OF PENNSYLVANIA
OFFICE OF THE GOVERNOR
HARRISBURG

THE GOVERNOR

September 8, 2009

Warren Osterberg
Project Manager
U.S. Department of Transportation
Pipeline and Hazardous Materials Safety Administration
Office of Contracts and Procurement (PHA-30)
1200 New Jersey Avenue, SE
Room E22-103
Washington, DC 20590

RE: Program Solicitation
State Damage Prevention (SDP) Grant
Catalog of Federal Domestic Assistance Number: 20.720 "State Damage Prevention Grants"
FHMSA Funding Opportunity Number: DTPH 56-10-SN-0001

Dear Mr. Osterberg:

This letter will certify that the Pennsylvania Public Utility Commission is authorized to apply for funding from the Pipeline & Hazardous Material Safety Administration Damage Prevention Grant Program and to provide written certification required to receive the grant.

In order to establish and improve planning and designing of Pennsylvania's underground infrastructure the Pennsylvania Public Utility Commission, partnering with Pennsylvania One Call System will implement a process for the collection of the Subsurface Utility Engineering (SUE) data. It is envisioned that the drawing exchange would include the ability for designers to upload documents to a central repository for review by facility owner members.

If you have any questions or need additional information, please feel free to contact Paul Metro, Bureau of Transportation and Safety with the Pennsylvania Public Utility Commission at 717-787-1063.

Sincerely,

Edward G. Rendell

Edward G. Rendell
Governor