

Utility Coordination #17



Introduction

The residents, businesses, and other organizations in our communities are served by local government and various utilities. Effective municipal utility coordination benefits all of them. Conversely, the failure to carry out basic coordination between local government and utilities can have adverse consequences related to cost, inconvenience, frustration, and even public safety. This tech sheet is intended to raise awareness and cover the basics to ensure effective coordination.

What is Utility Coordination?

Utility coordination is the process of proactively communicating and coordinating with the owners of utilities or other facilities in the public right-of-way throughout a project to minimize risk and maximize efficiencies of time and cost. It is crucial to ensure the efficient and safe management of various infrastructure and utility projects in the public right-of-way across the state. From telecommunications to electricity and gas, coordinating the installation, maintenance, and relocation of utilities is essential to minimize disruptions, enhance project timelines, and optimize resource allocation.

Is Utility Coordination Required?

Yes, utility coordination is required by state law for any project involving excavation or demolition work. Pennsylvania's Underground Utility Line Protection Law, Act 287 of 1974, as amended by Act 50 of 2017 (the Act), establishes responsibilities and procedures for utility coordination in the interest of damage prevention to underground utility lines and public safety.

The Act also established Pennsylvania's One Call System 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 Act requires facility owners, including "public utility or agency, political subdivision, municipality, authority, rural electric cooperative, or other person or entity who or which owns or operates a line" to become members of the [PA One Call System](#).



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Who is involved (or has Roles and Responsibilities) in Utility Coordination?

[Conception to Construction \(youtube.com\)](https://www.youtube.com/watch?v=...)

- Project owner
- Facility owner
- Designer
- Excavator

**All parties are responsible for timely response to PA One Call System notifications and reporting of strikes or damages to utilities and alleged violations of the Act.*

Municipalities and their authorities should be aware of procedures for both state highway and bridge construction projects and local highway/street/bridge projects. A municipality or municipal authority may be the project owner of a local project and a utility owner in a state project. Procedures for state projects are defined in PennDOT Publication 16: Publication 16, Design Manual Part 5, Utility Relocation. Procedures for local projects are outlined in PennDOT Publication 740: Local Project Delivery Manual. And much like PA One Call's Coordinate PA, PennDOT uses an online application, the Utility Relocation Management System (URMS), to plan project workflow and execute notifications to both underground and aboveground



utility agencies regarding utility marking and relocation activities. A URMS User Guide explains how to register and interact with the system.

Steps in Utilities Coordination

Planning

- 1 Project owner defines the project scope.
- 2 Project owner includes utility coordination and/or subsurface utility engineering (SUE) tasks, as appropriate, in the project scope and hires the designer. The Act defines "SUE" as "those techniques set forth in the American Society of Civil Engineers (ASCE) most recently published standard CI/ASCE 38-02, or its successor document as determined by the One Call System."
- 3 Project owner or designer identifies utilities within the project area by requesting information (location and type) from the facility owner(s) in the project area (Tip: Use Coordinate PA).
- 4 Project owner and facility owner(s) may collaborate to design and construct multiple projects as efficiently as possible to keep disruption minimal.

Design

- 1 Designer gathers existing condition information through survey, including surface features of utilities (valve boxes, manholes, utility poles, etc.).
- 2 Designer prepares preliminary plan (optional) and final plan.
- 3 Designer requests plan verification from facility owner to confirm that existing features are shown consistent to owner's records.

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- 4 Designer shares preliminary plan (optional) and/or final plan with facility owners, includes facility owner lines on plans, and adjusts design as needed to minimize conflict.
- 5 Designer conducts SUE investigations as needed.
- 6 Project owner or designer submits SUE results to the PA One Call System.
- 7 Project owner lets the project for bid and hires an excavator.

Construction

- 1 The excavator, designer, project owner, and facility owner(s) participate in a preconstruction meeting prior to the commencement of excavation or

demolition work to review project scope and reach consensus on the project schedule, including marking of lines by facility owners (and line relocation activities, if needed).

- 2 Project owner and designer submit timely updates to the schedule to facility owners.
- 3 Excavator submits locate request notifications to facility owners and reviews responses.
- 4 Excavator documents that markings have been made in the work site.
- 5 Project owner installs permanent utility line markers (where applicable).

*Steps come from POCS's Coordinate PA intro video: [Conception to Construction \(youtube.com\)](https://www.youtube.com/watch?v=TtmDprNhiOo)

Resources:

1. Users Guide for Act 287 as Amended – <https://www.legis.state.pa.us/CFDOCS/LEGIS/LI/uconsCheck.cfm?txtType=HTM&yr=1974&sessInd=0&smthLwInd=0&act=0287>.
2. PennDOT Publication 16: Publication 16, Design Manual Part 5, Utility Relocation, which defines PennDOT's policies and procedures to accomplish utility adjustments made necessary by state highway construction projects – <https://www.dot.state.pa.us/public/pubsforms/Publications/PUB%2016M/PUB%2016M.pdf>
3. PennDOT Publication 740: Local Project Delivery Manual, which describes required procedures for projects using federal or state funds – <https://www.dot.state.pa.us/public/pubsforms/publications/pub%20740.pdf>
4. Coordinate PA (CPA) (<https://www.pa1call.org/pocs/7f31d515-d97c-4158-ae3b-eb1eddeb3039/Coordinate-PA>) is a web application developed by Pennsylvania One Call System (POCS) to support public works (governmental) and utility project planning and coordination within the Commonwealth of Pennsylvania. In the application, users can:
 - View public works and underground utility projects and identifying opportunities for coordination and collaboration when projects overlap in space and time.
 - Communicate and provide the required notifications to all underground stakeholders on large and/or complex underground projects, from conception through construction, to prevent underground damage throughout the life of the project.
5. Monthly Coordinate PA Webinar – see <https://www.pa1call.org/pocs/117b8650-3f40-4caf-bc82-fa4b4067e976/Events> for schedule and link to join
6. Pennsylvania 811 You Tube Channel
 - Intro to Coordinate PA (3 minutes) <https://www.youtube.com/watch?v=TtmDprNhiOo>
 - Longer Intro (18 minutes) Coordinate PA: [Conception to Construction \(youtube.com\)](https://www.youtube.com/watch?v=TtmDprNhiOo)
 - Plus various training videos on single aspects of Coordinate PA.
7. PennDOT's Utility Relocation Management System User Guide – <https://www.penndot.pa.gov/ProjectAndPrograms/RoadDesignEnvironment/RoadDesign/Right-ofWayandUtilities/UtilityRelocation/Documents/URMS%20Training/URMS%20User%20Guide.pdf>