# BEST PRACTICES FOR UTILITY RELOCATIONS

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1. WORKING RELATIONSHIP
   • Develop and maintain a good working relationship with the utility companies.

2. HIGHWAY DESIGN
   • Utility companies need to be included as part of the design process as early as possible. Highway and bridge improvements must be designed to avoid or minimize impacts to utility facilities.
   • Adequate levels of Subsurface Utility Engineering (SUE) may be required to determine the horizontal and vertical location of underground utilities.
   • Avoid late plan changes that would impact utility facilities.

3. UTILITY COORDINATION
   • Recognize the importance of long-range highway/bridge project planning with utility project planning.
   • Hold periodic meetings with utility companies, municipal authorities and political subdivisions to:
     o Discuss future highway projects.
     o Determine utility impacts, resolve issues, answer project specific questions and go over the status of projects having major utility relocations.
   • Perform a comprehensive review of utility relocation permit applications and plans to ensure compatibility with the Department’s design, project goals/intent and to eliminate the need for second moves of utility facilities.

4. LEAD/CONSTRUCTION TIME
   • Make sure utility companies are given adequate time to design the relocations, prepare the permit/agreement packages, obtain their material and complete the relocation.

5. SCHEDULES
   • Provide utility companies with long-range highway construction schedules.
   • Make sure utility companies are made aware of changes in the let schedule dates.

6. OTHER BEST PRACTICES FOR UTILITY RELOCATIONS
   • Continue to improve the communication, coordination, and cooperation in utility relocations by:
     • Participating in the Utility Relocation Task Force meetings.
     • Attending the quarterly Utility Highway Liaison Committee (UHLC) meetings.
     • Using standard utility agreements.
     • Using the Utility Relocation Electronic Document Management System (UR-EDMS).
     • Providing training for utility relocations to internal and external business partners.
     • Maintaining a fully staffed utility relocation unit.
     • Developing a certification program for utility relocation coordination performed by consultant business partners.
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7. UTILITY RELOCATION- ACCOMMODATING PRIOR WORK

Due to Pennsylvania’s limited construction season, it is preferred to conduct utility relocations in advance of Highway construction as PRIOR work. Typically, utility relocations require work to be coordinated with one or more highway construction activities. To maximize the highway construction season and minimize construction delays, several methods have been developed:

A. Tree Clearing:
   - **Advance Contract**: In some instances, it may be best to let a separate contract for limited work such as tree cutting. This aids in meeting limits due to bats or other environmental concerns and will also enable utilities to begin their relocations prior to the main contract.
   - **Purchase Order**: Many counties have tree contractors from their RFQ process. The District Fiscal Officer can prepare a purchase order based on what is needed. Specifics are needed to identify which trees need to be cut as well as the diameter, type and quantity of the trees to be cut. A site meeting to determine the extent of the work may be necessary. The process typically involves two weeks to receive quotes, one or two weeks to select vendor and process the work order. Shorter duration may apply if the total cost is less than $10,000.00 with the work order being administered and paid at the District level.
   - **Utility Clear Trees**: When the relocation is reimbursable, the utility may agree to perform all the necessary clearing.

B. Survey Staking:
   - **Consultant Provided**: The Design consultant and project manager should consider including funds in the consultant reimbursement agreement for staking to accommodate utility relocations.
   - **Department Survey**: The Department may elect to perform the requested survey/stakeout using Department forces.
   - **Open End Contract**: If available, an open-end contract may be utilized. This may happen with a Department designed project when other items, such as SUE, environmental documents, or general survey are needed.

C. Delay Notice to Proceed:
   - Another means of minimizing the potential for Utility Delay claims is to hold the contractor’s Notice to Proceed. This allows the completion of PRIOR work as indicated by the utility and the contract completion date to be extended without causing a Delay Claim and the associated damages.
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8. PRIOR UTILITY WORK INSPECTION WORK DECISION

If it is determined that a utility’s PRIOR work will require inspection, the District Utility Administrator (DUA) and the Construction Unit will work together to perform the following items:

A. Staffing:
   - DUA will meet with Construction and HOP managers to determine how to staff. Based on availability, the District would have the following options:
     - Use the Department Construction Inspection Staff
     - Use the HOP Unit Inspection Staff
     - Use the Department Utility Unit
       - Utility Unit staff should be used for aerial and underground inspection.
       - Utility Unit staff should only be considered in Districts that have at least more than three (3) personnel in the Unit.
   - If no Department staff is available, the DUA and Construction Unit will work together to create a work order from an existing consultant inspection agreement.

B. Funding:
   - Department inspection staff will supply the DUA with an estimate for inspection of the prior work and the DUA or the Design Project Manager will secure funding to cover inspection costs. Options for funding include the following.
     - Design and/ or utility phase
       - verify funding is available to cover the estimated inspection costs
       - If there is not enough funding available to cover the estimated inspection costs additional funding will need to be added.
     - Provide the Construction Unit with the WBS.
   - NO funding available
     - Either the DUA or the Design Project Manager will make a request to Planning and Programming to have a WBS created with the appropriate funding and supply the WBS to the Construction Unit.

C. Physical Work:
   - DUA or Utility Unit personnel will provide the Department inspection staff with the utility’s Notice to Proceed, Highway Occupancy Permit & Relocation Package for PRIOR work. DUA or Utility Unit personnel to notify inspector when work is anticipated to begin.
   - Department Inspection Staff to provide monthly updates on the PRIOR utility relocations progress to the DUA or Utility Unit personnel, Design Project Manager, Contract Management and Construction team.
   - Construction to import inspection information into PennDOT Project Collaboration Center (PPCC) for tracking purposes.
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9. DEP PERMITS
   • In an effort for utility companies to obtain GP-5 permits for projects with incorporated work, a best practice is to note in the District’s project waterway permit (JPA, GP-11, etc.) in the Project Description screen in the JPA2 Expert System or in the Project Description section (if a paper submission) that a companion GP-5 will be submitted by “Utility Company.” There is currently no mechanism to physically attach the GP-5 to PennDOT’s waterway permit in the JPA2 Expert System. This will work best if the companion GP-5 is submitted around the same time as the waterway permit.
   • Note that the new Keystone Environmental ePermitting System (KEES) is working now. Currently it is only for the standard, small, and GP 11 permits. The rest of the general permits are being developed now and GP 5 permits will be incorporated in the system.

10. UTILITY LATERALS
    Below is a list of best practices that are used when working with utility laterals.
    • If using a pay item to replace drain pipe, ensure it indicates that replacing laterals are incidental.
    • Have the laterals located by using subsurface utility engineering (SUE). Note: Not all laterals can be traced.
    • Put in an item in the contract to fix it, if it is hit.
    • SUE cannot identify sewer laterals unless they have cleanouts.
    • For incorporated utility work, relocate laterals within the legal right-of-way and/or the TCE as required and put in a number of days for it.
    • Put a construction item in the contract for the various lateral sizes, quantities and/or per foot with specification from the municipality for all services affected by drainage from main to the curb stop or meter as directed by the resident.
    • Request that the utilities to put traceable lines on their new or relocated facilities that are within the public R/W.
    • Try to have utilities available in the event they are impacted. If the utility has indicated that they are not affected then include in the 419 that the contractor should, ‘Contact the utility (XX hours, XX days or XX weeks) prior to working adjacent to their facilities so the utility can schedule an inspector to be on site.

11. UNKNOWN UTILITIES
    Below is a list of best practices that are used when working with unknown utilities.
    • Talk to the land owner to determine if they know who owns or operates these unknown facilities.
    • Contact the well companies in the area to determine if they own the lines or if they know who owns or operates these unknown facilities.
    • Ask the smaller municipal authorities directly to determine if they own the mystery lines or if they know who owns and operates these unknown facilities. The smaller municipal authorities do not always respond to one calls.
    • Have our contractor remove the pipe if the line is confirmed to be inactive by qualified personnel.
    • Have all abandoned lines removed during construction.
    • Prior to removing any inactive lines, have the coating tested for asbestos material. Then place an item in ECMS for the proper handling of that AC material.
    • Contact pole owners to determine who is attached to their poles.
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12. MUNICIPALITY FAQ

A. What is cost sharing?
   • Under Section 412.1 of the State Highway Law, the Department may share in the costs to relocate a utility’s facilities that:
     - 1) are located within the Department’s public right-of-way.
     - 2) are affected by a Department highway or bridge project.
   • Cost sharing is at a fixed percentage.

B. Is cost sharing different from standard reimbursement?
   • Standard reimbursement occurs when a utility’s existing affected facilities are on private right-of-way and is based on the relationship of the existing affected facilities to the existing legal right-of-way. Standard reimbursement is based on a calculated percentage (proration) that is determined in one of three ways:
     - Pole count – total number of affected poles on private divided by the total number of affected poles;
     - Length of affected facilities – length of affected facilities on private divided by the total length of affected facilities;
     - Cost basis – the cost to relocate the existing affected facilities on private divided by the total cost to relocate the existing affected facilities in the same location. You must use the current cost to relocate the same size pipe or conduit, facility in its current location.
       - Do not use the cost to relocate the same size or larger pipe or conduit on the proposed relocation alignment.

C. How much cost sharing can I receive?
   • The Department is currently using a pilot incentive-disincentive cost share program that has different cost share percentages.
     - The pilot program is currently scheduled to end on 12/31/2017. The pilot program is being reviewed to determine if we will:
       - Continue using the current pilot program processes and percentages;
       - Revise the pilot program percentages and extend the pilot program;
       - Convert the pilot program to policy;
       - Eliminate the pilot program and revert to a fixed 50% cost share percentage.
   • The incentive-disincentive pilot program percentages are based on whether:
     - The utility wants to incorporate (Pilot 1) the physical relocation of their facilities – the utility would receive a 75% cost share provided the utility meets certain milestones and provides certain deliverables or receive 0% cost sharing if they miss a milestone date. If the utility can ‘recover’ from a missed milestone and not affect the let date (when the bids are opened), the utility can still receive a 25% cost share percentage;
     - The utility will complete their relocations prior (Pilot 2) to the Department’s contractor’s notice to proceed date– the utility would receive a 75% cost share provided the utility meets certain milestones and provides certain deliverables or receive 0% cost sharing if they miss a milestone date. If the utility can ‘recover’ from a missed milestone and not affect the let date (when the bids are opened), the utility can still receive a 25% cost share percentage;
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- The utility wants to incorporate (Pilot 3) the relocation design and the physical relocation of their facilities – the utility would receive a 75% cost share provided the utility meets certain milestones and provides certain deliverables or receive 0% cost sharing if they miss a milestone date. If the utility can ‘recover’ from a missed milestone and not affect the let date (when the bids are opened), the utility can still receive a 25% cost share percentage;

- The utility will complete their relocations using their own forces or hire a contractor to complete their relocations and will complete their work restrictive, concurrent or coordinated (Pilot 4) – the utility would receive a 50% (90% if it is an interstate project) cost share provided the utility meets certain milestones and provides certain deliverables or receive 0% cost sharing if they miss a milestone date. If the utility can ‘recover’ from a missed milestone and not affect the let date (when the bids are opened), the utility can still receive a 25% cost share percentage;
  - RESTRICTIVE – the Department’s contractor is restricted from working in the same area as the utility;
  - CONCURRENT- working simultaneously but not restricting the operations of the Department’s contractor;
  - COORDINATED – the Department’s contractor must perform a specific construction operation such as surveying the right-of-way line, clearing and grubbing, establishing final grade, etc.

- The disincentive will not be applied if the missed milestone date was the fault of the Department.

D. The incentive program is wonderful but I don’t want to risk losing all or even part of the 75%. Can I still request the 50% cost share?
• Yes, but you need to make your decision early in the process and submit the appropriate cost share request letter and resolution and in accordance with the agreed upon milestone dates.

E. Can I combine the cost share percentage for my facilities that are within the public right-of-way with the prorated amount for my facilities that are NOT within the public right-of-way?
• Yes. You should contact the District Utility representative to discuss this.