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pennsylvania DEPARTMENT OF TRANSPORTATION		**DATE:** November 27, 2013

SUBJECT:

NOVEMBER 2013 EDITION
LOCAL PROJECT DELIVERY MANUAL

INFORMATION AND SPECIAL INSTRUCTIONS:

The attached November 2013 Edition of the Local Project Delivery Manual is the First Edition. The manual consoilidates existing local project delivery related policy and incorporates process improvements.

All District Offices should distribute this Manual to the appropriate staff within their organization responsible for the development and delivery of local projects.

CANCEL AND DESTROY THE FOLLOWING:

Publication 39 - Procedures for the Administration of Locally Sponsored Projects

Publication 98 - LPA Brochure: A Guide for Local Public Agency Acquisition of Right-of-Way

Publication 526 - ECMS Municipal and Sponsor Guide

Publication 535 - Overview of PennDOT Local Project Processes

Publication 541 - Local Bridge Program Delivery Guide

SOL 434-11-01 (dated May 20, 2011)

SOL 434-11-02 (dated June 7, 2011)

SOL 434-11-03 (dated July 11, 2011)

SOL 430-11-08 (dated July 18, 2011)

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Local Project Delivery Manual

Publication 740
November 2013 Edition

pennsylvania
DEPARTMENT OF TRANSPORTATION

Publication 740, Local Project Delivery Manual, is a compilation of Department policies and procedures relating to the procurement, design, letting, construction inspection, and management of contracts for projects sponsored by local public agencies. The purpose of this manual is to serve as a reference for Local Project Sponsors and District staff so that they may perform their respective duties in accordance with Department policies and procedures. This manual is set forth only as a guide and has laid out a systematic approach to developing a project. However, recognizing the need to be flexible PennDOT will consider supporting other design guidelines that are able to address key engineering considerations. It is recommended that if a Local Project Sponsor or their design consultant desires to utilize a guideline or standard not recommended in this manual, they should discuss it with their designated PennDOT Project Manager to obtain approval.

Procedures for Modifications or Additions to this Document

This document is published in digital form to facilitate future changes and additions. PennDOT recognizes that the regulations and policies affecting its project delivery procedures, including local projects, are continuously changing and that this manual must be a dynamic document to remain current. Whenever modifications or additions are required to improve the present procedures, the following procedure shall be followed:

- PennDOT Bureau Directors and PennDOT District Executives should submit suggestions in the form of revised pages in digital format to the Central Office Bureau of Project Delivery for evaluation and processing. The Bureau of Project Delivery will coordinate with the appropriate Deputates and Bureaus as necessary concerning additions and modifications to this manual. The suggestions should include:
    - The title and page number of the existing procedures, if applicable.
    - The recommended revised page(s) and the chapter into which it (they) should be incorporated.
    - The reasons for recommending modifications or additional procedures.

- The Director, PennDOT Bureau of Project Delivery, will review the recommended changes or additional procedures and transmit copies to the various Bureaus, Districts, and FHWA, as applicable for their comments.

- The Director, PennDOT Bureau of Project Delivery, will submit the final version of all changes to FHWA for approval prior to issuing the revised manual.

- When modifications or additions are made to pages in this manual, a revision date will be indicated in the header and the revision will be distributed by the Bureau of Project Delivery by Transmittal Letter.

Executive Summary - Publication 740: Local Project Delivery Manual

PURPOSE OF THE MANUAL

Publication 740, **Local Project Delivery Manual**, was prepared by the Pennsylvania Department of Transportation (PennDOT), in coordination with the Federal Highway Administration (FHWA), to assist local project sponsors, project managers, and interested stakeholders in successfully delivering locally-sponsored transportation projects. Publication 740 can be accessed from PennDOT's website **(www.dot.state.pa.us)** through the "Forms, Publications, and Maps" link.

Publication 740 gives an overview of the required or recommended processes for delivering **local projects** using federal and/or state funding. Early understanding of these requirements by Local Project Sponsors helps to streamline the overall process by saving time, reducing omissions, and making efficient use of funds.

Publication 740 does not address projects using Liquid Fuels funds. For information on Liquid Fuels refer to PennDOT Publication 9, Policies and Procedures for the Administration of the County Liquid Fuels Tax and The Liquid Fuels Tax Act 655 (for Municipalities). In addition, while Publication 740 **does not specifically address the Transportation Alternatives Program,** many of the same processes will apply. Please contact your local PennDOT District Office if you are interested in securing funding or have questions related to the Transportation Alternatives Program.

WHAT IS "PROJECT DELIVERY"?

"Project Delivery" refers to the implementation of a project, from inception to construction and project finalization. The phases involved with Project Delivery generally include planning and programming, preliminary engineering/environmental clearance, final design, right-of-way, utilities, and construction. Not all local projects will require each phase. The time required to progress a project through each stage varies depending on project type and funding availability and type. In order to provide the Local Project Sponsor with a general idea of overall timeframes for the project development process, flowcharts were developed and included in Publication 740. The next page provides a high level overview of the information provided in the flowcharts throughout the manual.

PennDOT recommends that Local Project Sponsors requiring assistance in completing their project utilize firms or individuals that have previous PennDOT experience. History has shown that when firms or individuals who have previous PennDOT experience are assigned to work on these projects, the projects go through the process much quicker and with fewer revisions, thereby saving the Local Project Sponsor time and money.

Local projects that utilize state and/or federal funding must meet the requirements of Publication 740.

When a Local Project Sponsor enters into a Project Reimbursement Agreement with PennDOT in order to obtain state and/or federal funding for a project, the Local Project Sponsor must proceed diligently to move the project to construction. The Reimbursement Agreement will remain in effect for three years and will allow for an extension of up to two years with detailed justification. **If no activity occurs within the three year timeframe, the Reimbursement Agreement will be terminated.**

Also, the Local Project Sponsor must be aware of the provisions of the federal regulations contained in 23 CFR 630.112, **Highways: Agreement Provisions**, which states that "In the event that right-of-way acquisition for, or actual construction of, the road for which this preliminary engineering is undertaken is not started by the close of the tenth fiscal year following the fiscal year in which the project is authorized, the State Department of Transportation will repay to the FHWA the sum or sums of federal funds paid to the transportation department under the terms of the agreement. The State may request a time extension for any preliminary engineering project beyond the 10-year limit with no repayment of Federal funds, and the FHWA may approve this request if it is considered reasonable."

WHERE DO I START?

Local Project Sponsors generally work with a variety of organizations and individuals such as local planning organizations, county officials, PennDOT, and elected officials to put forward projects for consideration. A good place to start investigating the applicability of a project for consideration is your local PennDOT District Office. The District Office has knowledgeable project staff that will provide guidance and information about getting started. PennDOT will make available a designated District Project Manager to work with the Local Project Sponsor. Appendix C of Publication 740 contains a list of Engineering District addresses and phone numbers. This information is also available on PennDOT's website **(www.dot.state.pa.us)**.

What is a "Local Project"?

Generally a project on a road or bridge owned/operated by local government. Local projects can include a project owned by a local government or governmental agency, but funded through the state Transportation Improvement Program. For purposes of Publication 740, the term "local project" does not specifically address the Transportation Alternatives Program (TAP). TAP, authorized under federal legislation (MAP-21), provides funding for projects such as pedestrian, bicycle facilities or community improvement activities.

General Project Development Flowchart - Locally Sponsored Projects

	PROJECT PHASE	Planning and Programming	Project Start-up	Design		Construction
Approximate Time to Complete	STATE FUNDING	6 months-2 years	3-6 months	4-8 months	8 months-1½ years	1-2 years
	FEDERAL FUNDING	6 months-2 years	3-12 months	4-14 months	1-1½ years	1-2 years

Planning and Programming

- Identify Project
- Contact Metropolitan Planning Organization or Rural Planning Organization to add project to the Transportation Improvement Program/Twelve Year Program
- **Determine Method of Project Administration (see below)**

Project Start-up

- Execute Reimbursement Agreements/ Engineering Agreements or Work Orders
- Hold Project Scoping Field View

Design

Preliminary Engineering (PE)

- Environmental Clearance
- Preliminary Bridge/Roadway Design

Final Design (FD)

- Right of Way Clearance
- Permit Approvals
- Final Bridge/ Roadway Design

Construction

Construct Project

Options for Project Administration

PennDOT Lead (Option 1)

- **Bundled Bridge Program** — Section 3.4.D*
  or
- **PennDOT Design of Local Project** — Section 3.4.A Alt. 1*
  or
- **PennDOT Management of Local Project** — Section 3.4.A Alt. 2*

0 **Design Timeframe** → 3 years

Local Lead (Option 2)

- **Retroactive Bridge Project** — Section 3.4.B* (Bridge already constructed, seeking reimbursement only)
  or
- **Simplified Non-Federal Bridge Project** — Section 3.4.B*
  or
- **Minor Project Design Procedures for Bridge and Roadway Projects** — Section 3.4.B*
  or
- **Standard Bridge or Roadway Project** — Section 3.4.C*

0 **Design Timeframe** → 3½ years

* Refer to Publication 740, Chapter 3 for explanation of administration options.

Factors that can Impact a Schedule

- Historic Bridges
- Right of Way Acquisitions
- Parks/Recreational Areas
- Endangered Species
- Archaeology
- Railroad Involvement
- Utilities
- Waterway Permitting

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CHAPTER 1
INTRODUCTION

1.0 Purpose of Publication

The Pennsylvania Department of Transportation (PennDOT) prepared this *Local Project Delivery Manual* (LPD Manual) to provide Local Project Sponsors, PennDOT Project Managers and interested Stakeholders with a better understanding of the processes associated with successfully delivering a local transportation project. Included is information on Local Road and Bridge Projects, Congestion Mitigation and Air Quality Improvement Program, and other types of Local Transportation Projects. A list of acronyms and definitions of terms used in this manual are provided in Appendix A, *Acronyms*, and Appendix B, *Glossary*.

> What is a "Local Project"?
>
> Generally, a project on a road or bridge owned / operated by a local government. Local projects include projects owned by a local government or governmental agency, but funded through the state Transportation Improvement Program. For purposes of Publication 740, the term "local project" does not specifically address the Transportation Alternatives Program (TAP). TAP is authorized under federal legislation (Moving Ahead for Progress in the 21st Century Act) and provides funding for projects such as pedestrian / bicycle facilities and community improvement activities.

The manual gives an overview of the processes that are required or recommended when delivering local projects using state and/or federal funding. Early understanding of these requirements by Local Project Sponsors helps to streamline the overall local project process by saving Local Project Sponsors and PennDOT time, by reducing omissions causing substantial downstream delays, and by making efficient use of federal, state, and local funds. The Federal Highway Administration (FHWA) has also produced a website that offers a central online library of informational videos and resources designed specifically for local public agencies. Each video addresses a single topic, condensing the complex regulations and requirements of the Federal-Aid Highway Program into easy to understand concepts and illustrated examples (http://www.fhwa.dot.gov/federal-aidessentials/).

While giving fundamental information for local projects, this manual encourages successful working relationships based on frequent communications between the Local Project Sponsor and the PennDOT District Project Manager assigned to the effort. General issues associated with transportation programming, project delivery, legal agreements, and fiscal administration are presented in this manual. PennDOT is always willing to provide assistance and to advise on these or any other issues that may be of local concern.

The key to effectively meeting the needs of the local transportation system begins with proper management of that system and its components (i.e., local roads, bridges, traffic signals, etc.) by their respective owners. This involves inspecting and monitoring the condition of the local transportation system on a regular basis. Consistent monitoring will allow for system needs to be anticipated and identified early. Early identification of needs allows for adequate time to meet the planning, programming and project delivery requirements outlined herein and in Publication 10, *Design Manual 1, Transportation Program Development and Project Delivery Process*. Effective management of the local bridge system will limit structural deficiencies, which can lead to the eventual posting or closing of bridges on the local system.

This manual does not deal with Liquid Fuels funds. For additional information on Liquid Fuels funding, contact the PennDOT District Municipal Services representative in your area, and refer to PennDOT Publication 9, *Policies and Procedures for the Administration of the County Liquid Fuels Tax and The Liquid Fuels Tax Act 655 (for Municipalities)*. The possible utilization of Liquid Fuels funds for

the locally funded portion of these projects needs to be discussed early in the process with the respective District Project Manager and the PennDOT Municipal Services representative in your area. In addition, as mentioned, this manual does not cover all of the specifics of TAP projects. Refer to FHWA's MAP-21 website for more information on TAP projects.

This manual does not provide direction on the bridge bundling of non-complex projects. For information on bridge bundling, see Publication 15M, Design Manual, Part 4, Section 1.15.

1.1 Project Eligibility

Local transportation projects may be eligible for a variety of state and federal funding, depending on project type and whether the project meets certain eligibility requirements. Requirements differ based on the funding source. Information on the most often used state and federal funding sources for local projects is contained in Chapter 2, *Planning and Programming*, of this manual.

One of the most important steps to advancing a local project using state and/or federal funding is getting the project on PennDOT's Transportation Improvement Program (TIP). All projects that seek to use state and federal funding must progress through the established planning and programming process (see Chapter 2, *Planning & Programming*, of this manual). This process requires that projects requesting state and/or federal funding have a clearly established need (problem statement, see Publication 319, *Needs Study Handbook*, for more information on establishing Project Need). The project must also be planned, programmed, and designed to address PennDOT's Ten Core Principles (see Chapter 2, Section 2.0.B *Planning and Programming, Linking Planning and NEPA*). These principles help ensure that the limited available transportation funding goes toward projects that enhance the transportation system and that fit within the context of our local communities.

1.2 Local Project Delivery

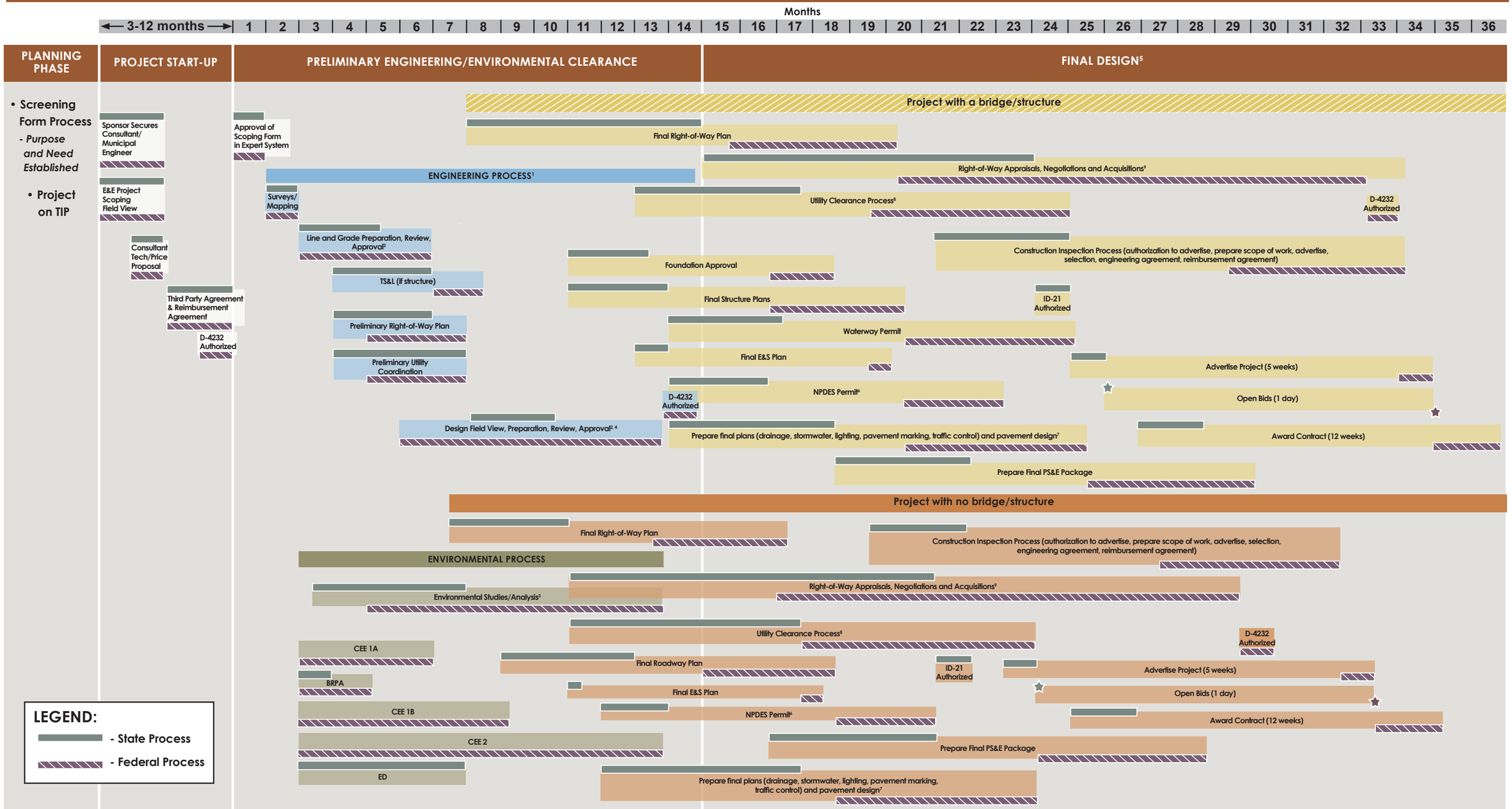
For local projects, the Local Project Sponsor will play a significant role in the implementation of a project from its inception to its construction. Responsibilities include estimating and controlling costs, ensuring the fulfillment of environmental requirements, obtaining adequate financing and the overall managing of the various parties involved in bringing the project to a successful completion. The delivery of transportation projects involves a myriad of processes and requires a high level of coordination among all Stakeholders.

"Project Delivery" refers to the implementation of a project, from its inception to the closeout of construction. The phases involved with Project Delivery generally include planning and programming, preliminary engineering, environmental clearance, final design, right-of-way, utilities, and construction. Not all local projects will require each of these phases. In addition, the time required to progress a project through each stage of the process will vary depending on project type, funding availability and funding type. In order to provide Local Project Sponsors with a general idea of overall timeframes for the project development process, a flowchart has been developed (Figure 1-1) to show the general project development process for federally funded and state funded local projects.

The flowchart provides some guidance on the length of time required to develop a local project; however, there are numerous areas where local projects can be expedited. Some of these areas include, but are not limited to:

- Start the Reimbursement Agreement process ***early***,
- Follow the ***proper*** consultant ***selection process***,
- Allow enough ***time*** in the project for ***proper reviews***, especially PennDOT and/or FHWA reviews.

Figure 1-1: Representative Project Flow Chart for Federal and/or State Funded Projects[1:]



NOTES:

1. Only includes those activities that typically drive a schedule.
2. Or equivalent project milestone if no Line & Grade or Design Field View is required.
3. See more detailed Figure 4-1, Generalized Environmental Flow Chart in Chapter 4. This flow chart shows that Design Approval could occur as early as Month 11 if a BRPA or CEE 1A/1B could be used for project environmental clearance.
4. Design Field View Approval requires environmental clearance. Design Field View Approval must be granted before moving into Final Design. Projects cleared with a BRPA, CEE 1A or CEE 1B may enter Final Design several months earlier than a project cleared with a CEE 2.
5. Two potential projects are shown - one with a bridge/structure (top) and one with no structures (bottom).
6. Only if required. Required if more than 1 acre of disturbance outside of the Roadway Management Area.
7. Proprietary item Requests should be avoided; however, if needed they should be completed as early as possible in the process as they can take several months to complete.
8. Impacts to utilities with "private status" (i.e. utility is currently only within private right-of-way) can take longer as the Sponsor will be responsible for providing a substitute right-of-way.
9. Assumes there are right-of-way takes with the project. Projects with no right-of-way takes will require much less time. Projects with relocations can take much longer.
10. Projects with railroad involvement will generally take longer.

- Follow ***proper right-of-way acquisition*** procedures,
- Start coordination with utilities ***early*** in the project,
- Start the construction inspection consultant selection process ***early*** and follow ***proper procedures***.

It is vital that the Local Project Sponsor work closely with the District Project Manager and that the District Project Manager provide timely and accurate guidance throughout the process. For projects that require federal oversight, PennDOT will work closely with the FHWA throughout the entire project delivery process.

All local projects involving federal or state funding are established through inclusion in PennDOT planning and programming mechanisms. Local projects must be included on the Commonwealth's TIP. See **Chapter 2*, Planning and Programming***.

Local projects are typically managed by the Local Project Sponsor, which often is the governing municipality. Managing the project requires coordination with various entities, meeting contract requirements, ensuring quality, and project invoicing. See **Chapter 3, *Project Management Processes***. Chapter 3 also contains the requirements related to Engineering and Reimbursement Agreements for Local Projects.

Once on the TIP, projects can then move forward into Project Development, after the appropriate project phase has received authorization and all agreements are in place. See **Chapter 4, *Project Development Procedures***. Project Development can include activities such as scoping of the project, design and environmental clearance, and preparation of the construction contract documents. Chapter 4 also outlines the requirements for advertising and letting of local projects.

Many local projects require a right-of-way phase, whether for acquisition of real property or for temporary/permanent easements. **Chapter 5, *Right-of-Way Phase***, contains information on the right-of-way phase and its requirements.

Chapter 6, *Utility and Railroad Coordination*, provides information on requirements related to coordination with any utilities and railroads in a local project area. This chapter also discusses the requirements that must be met when a utility requires relocation and when the Public Utility Commission (PUC) must be involved in cases of railroad interest in a local project.

Finally, **Chapter 7, *Construction Phase***, overviews project construction procedures, including PennDOT and Local Project Sponsor responsibilities, construction inspection, and closing out the project.

Local projects that utilize state and/or federal funding must meet the requirements of this manual and PennDOT's Publication 10, *Design Manual 1, Transportation Program Development and Project Delivery Process.* Also, the Local Project Sponsor must be aware of the provisions of the federal regulations contained in 23 CFR 630.112, *Highways: Agreement Provisions,* which states that "In the event that right-of-way acquisition for, or actual construction of, the road for which this preliminary engineering is undertaken is not started by the close of the tenth fiscal year following the fiscal year in which the project is authorized, the State Department of Transportation will repay to the FHWA the sum or sums of Federal funds paid to the transportation department under the terms of the agreement. The State may request a time extension for any preliminary engineering project beyond the 10-year limit with no repayment of Federal funds, and the FHWA may approve this request if it is considered reasonable." For local projects, PennDOT will invoice the Local Project Sponsor for the total sum of funds repaid to FHWA in order to recover funds for any local projects that are not advanced to right-of-way or construction within this time frame.

1.3 Where to Start

Local Project Sponsors generally work with a variety of organizations and individuals such as local planning organizations, county officials, PennDOT, and elected officials when evaluating projects for funding. A good place to start investigating the applicability of a project for consideration is the local PennDOT District Office. The District Office has knowledgeable project staff that will provide guidance and information about getting started. PennDOT will make available a designated District Project Manager to work with the Local Project Sponsor. Refer to Appendix C, *Engineering District Addresses and Phone Numbers*, for Engineering District addresses and phone numbers.

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CHAPTER 2
PLANNING AND PROGRAMMING

2.0 Project Planning and Programming

The Pennsylvania Department of Transportation (PennDOT) is the lead agency responsible for developing, maintaining and enhancing the Commonwealth's transportation system; a system that includes highways, bridges, airports, railroads, ports/waterways, and bicycle/pedestrian facilities, including those owned, maintained and developed by Local Project Sponsors. Rapidly changing trends in development patterns, transportation funding, mobility needs, and economic conditions place high demands on Pennsylvania's transportation network.

To adapt to a changing environment where land use and community needs are becoming even more dependent on transportation and vice versa, PennDOT has implemented a Transportation Program Development and Project Delivery Process (Publication 10, *Design Manual 1, Transportation Program Development and Project Delivery Process*) to ensure transportation funding is:

- Used to maintain existing infrastructure first,
- Applied in a manner that requires smart land use decisions,
- Focused on better use of existing capacity; realizing that adding capacity is not always the answer,
- Programmed based on realistic project (design and construction) cost estimates; ensuring that projects are designed within estimated costs.

During the initial transportation planning phases, PennDOT and its *Planning Partners*, typically the Metropolitan and Rural Planning Organizations (MPO/RPO), take responsibility for identifying potential transportation problems. The Planning Partners are asked to help develop Project Needs, identify potential alternatives, ensure environmental responsibility, and create a fundable transportation plan, which contains proposals and potential projects that will sustain and enhance the transportation network and our Commonwealth's communities.

A. Planning Partners

Across Pennsylvania, PennDOT's Planning Partners include Metropolitan Planning Organizations (MPOs) for urban areas and Rural Planning Organizations (RPOs) for rural areas. Click here (http://www.dot.state.pa.us/Internet/Bureaus/CPDM.nsf/HomePageMPO?OpenForm) for a map of PennDOT's Transportation Planning Organizations Rural and Metropolitan Areas.

PennDOT, a voting member of each MPO and RPO, will work in partnership with the MPOs/RPOs and other transportation agencies to identify transportation related deficiencies and problems, and develop policies, strategies, and proposals for consideration and potential inclusion in the MPO/RPO's Long Range Transportation Plans (LRTP). The fiscally balanced LRTP's, twenty (20) year plans are the basis for development of a list of prioritized projects to be placed on the region's Transportation Improvement Program (TIP), which are four (4) year plans. These regional TIPs, developed by each MPO and RPO, are incorporated into the statewide TIP (STIP). The STIP is the official *federal* programming document. PennDOT's official *state* programming document is the Twelve Year Program (TYP), which includes twelve (12) years of prioritized projects.

During project planning and programming, the MPOs/RPOs are to thoroughly consider the purpose and

need of potential proposals along with environmental resources and issues. Proposals are then prioritized according to both need and financial constraints. Funding is allocated based on the priority assigned to the proposals and the available resources.

Projects proposed, including local projects, must be included on the MPO/RPO TIP and included in the Twelve Year Program (TYP) if federal or state funds are to be used for any part of the project (e.g., preliminary engineering, final design, construction). As required by federal law, all Federal-Aid projects must be approved by the MPO/RPO and have an approved D-4232 before starting work. See Chapter 3, *Project Management Processes*, Section 3.8 *Engineering/Third Party Agreement*. The MPO/RPO or designated PennDOT District Project Manager will provide assistance in determining this information, if required.

B. Linking Planning and NEPA

PennDOT's *Transportation Program Development and Project Delivery Proces*s uses a quality of life approach to develop transportation solutions that support economic, social, and environmental goals. The process supports principles such as community reinvestment, environmental stewardship, and mode choice. PennDOT's goal is for a transportation system that provides choice and convenience and is coordinated with the way the community lives and grows. Specific features include transit-oriented development, making walking a priority, bicycle friendly communities, and better roads designed to fit community needs. To that end, and to assist with evaluating and prioritizing potential projects, PennDOT has defined the following ten (10) Core Principles Publication 10, *Design Manual 1, Transportation Program Development and Project Delivery Proces*s for more details):

1. ***Money counts:*** Cost estimates must be as accurate as possible and projects must be fundable under current fiscal constraints.
2. ***Choose projects with high value to price ratios:*** The degree of improvement must be justifiable based on need, fit within the community, and amount of investment.
3. ***Enhance the local network***: Utilize existing alignments and rights-of-way where possible; better manage existing capacity and access.
4. ***Look beyond Level of Service (LOS)***: Fit the solution to project need, community/roadway type, and project complexity.
5. ***Safety first and maybe safety only***: Safety is always the first goal and for some projects, safety improvements may be all that are required.
6. ***Accommodate all modes***: Consider solutions that address all modes of travel, including vehicular, bicycle, pedestrian, transit, and rail.
7. ***Leverage and preserve existing investments***: Existing infrastructure should be maintained and improved first.
8. ***Build towns, not sprawl***: Consider local planning and investments in existing infrastructure.
9. ***Understand the context; plan and design within the context***: respect the community character, how the existing roadway is used, and understand "place" (see Appendix B of Publication 10X, *Design Manual Part 1X, Appendices to Design Manuals 1, 1A, 1B, and 1C* for more information on understanding "place").
10. ***Develop local governments as strong land use partners***: Integrate local land use planning with transportation planning; encourage local involvement in the process.

It is imperative that PennDOT Project Managers, Planners, and Designers, along with the Planning Partners, including Local Project Sponsors, follow these principles and PennDOT's process. PennDOT's design standards (Publication 13M, *Design Manual 2, Highway Design*) support and enforce the ten Core Principles. Refer to Publication 10A, Design Manual 1A, for more information on working with the

MPO/RPO to develop project purpose and need, preliminary environmental information, and the preliminary project scope, schedule, and budget that are part of PennDOT's planning process.

C. Twelve Year Transportation Program (TYP)

All local projects involving federal or state funding are established through inclusion in PennDOT planning and programming mechanisms. Local projects must be included on the Commonwealth's Twelve Year Transportation Program (TYP). Coordination with your local MPO/RPO is necessary for initial steps to begin the process. All projects must have an established purpose and need. PennDOT Publication 319, *Needs Study Handbook*, provides guidance regarding the preparation and documentation of project purpose and need in accordance with the National Environmental Policy Act of 1969 (NEPA) and Pennsylvania Act 120 of 1970. Identifying project purpose and need is one of the most important components of the transportation project development process. The purpose and need statement is intended to clarify the expected outcome of a public expenditure and to justify that expenditure—what is to be accomplished and why it is necessary.

The TYP is a fiscally constrained program of transportation improvements covering a twelve (12) year period. Any transportation project that uses federal or state funds must be on the TYP. You can access a pdf version of the current TYP from PennDOT's website at www.dot.state.pa.us. Click the link to the State Transportation Program in the bottom right corner of PennDOT's homepage.

The TYP includes the following types of transportation projects:

- Highways
- Bridges
- Transit
- Rail
- Aviation
- Ports/Waterways

The TYP is composed and approved by the State Transportation Commission through a biennial process for incorporating additions and modifications to the programmed projects. Membership of the Commission includes:

- Secretary of Transportation (Chair)
- Chairs of House and Senate Transportation Committees
- Ranking minority members of House and Senate Transportation Committees
- Ten (10) appointed members with no more than five (5) members from one political party, and one (1) member must be from Philadelphia, one (1) from Allegheny County (Pittsburgh area), one (1) must represent a transit authority, and one (1) must be a licensed pilot

Projects in the TYP are listed in three (3) four-year periods of which the first four years are the STIP.

Only those projects or phases of projects in the first four-year period are approved to proceed and receive funding. These projects match each MPO's or RPO's TIP. Refer to Publication 10, *Design Manual 1*, for more information on LRTPs, regional TIPs, STIP, and the TYP.

2.1 Funding Eligibility and Options

A. Funding Eligibility

State and federal funding can be applied only to projects that meet certain eligibility requirements. Requirements differ based on the funding source. Coordinate with your local PennDOT District Office for more information and guidance on funding eligibility for various project types.

In general, for a project to be eligible for funding with federal funds, it must be on the TIP. For projects to utilize state funding, it must be on the TIP and TYP. In addition, bridge projects must also be included in the Bridge Bill. In 1982, legislation established a program (the "Bridge Bill") to replace or rehabilitate functionally obsolete and structurally deficient bridges. To utilize state bridge funding, a bridge structure is required to be specifically listed within the legislation. This list of bridges is updated periodically and approved through state legislative action to provide capital budget authorization for the Bridge Bill program. More information is provided below in Section 2.B.4, State Bridge Funding.

Note that projects on the Bridge Bill are not automatically included on a TYP or TIP; therefore, funding is not guaranteed. For bridge projects, the Local Project Sponsor will receive a letter from PennDOT indicating that the project has been programmed on PennDOT's TIP. A sample letter regarding the programming of a project is contained in Appendix D, *District Form Letters for Local Bridge Projects*. Following receipt of this letter, the Local Project Sponsor can advance towards design. However, the project can only be reimbursed once a Project Reimbursement Agreement has been executed and a Notice to Proceed letter has been issued by PennDOT. For federally funded projects an approved D-4232 must also be in place. See Chapter 3, *Project Management Processes*, Section 3.8 *Engineering/Third Party Agreement*. The designated PennDOT District Project Manager can provide additional information about inclusion in the Bridge Bill, the TYP, and a TIP. Note that due to asset management considerations, as part of the project development process, an evaluation of eliminating a bridge versus upgrading the existing bridge is to be considered. The process to evaluate the elimination of a bridge is contained in Publication 10, *Design Manual 1*, Part 1X, Appendix AD, *Study Process to Evaluate Bridge Closure and Removal*.

When a Local Project Sponsor enters into a Project Reimbursement Agreement (see Chapter 3, Project Management Processes, Section 3.7 Agreements) with PennDOT in order to obtain state and/or federal funding for a project, the Local Project Sponsor must proceed diligently to move the project to construction. The Agreement will remain in effect for three (3) years and will allow for an extension of up to two (2) years with detailed justification. (Existing Project Reimbursement Agreements without the three year timeframe will be honored). If no activity occurs within the three year timeframe, the Project Reimbursement Agreement will be terminated. Sample letters regarding no progress on a project and termination of a project are contained in Appendix D, *District Form Letters for Local Bridge Projects*. If the agreement is terminated, the Local Project Sponsor may be required to reimburse PennDOT for all costs associated with the project.

Also, Local Project Sponsors must be aware that for projects that are moving, but are progressing slowly and do not reach right-of-way or construction within 10-years, the provisions of the federal regulations contained in 23 CFR 630.112, *Highways: Agreement Provisions*, may apply. These provisions state "In the event that right-of-way acquisition for, or actual construction of, the road for which this preliminary engineering is undertaken is not started by the close of the tenth fiscal year following the fiscal year in which the project is authorized, the State Department of Transportation will repay to the FHWA the sum or sums of Federal funds paid to the transportation department under the terms of the agreement. The State may request a time extension (see note below) for any preliminary engineering project beyond the

10-year limit with no repayment of Federal funds, and the FHWA may approve this request if it is considered reasonable." For local projects, PennDOT will invoice the Local Project Sponsor for the total sum of funds repaid to FHWA in order to recover funds for any local projects that are not advanced to right-of-way or construction within this time frame.

Note: Time extension requests should demonstrate that the project has a definitive schedule, a commitment by the State (and locals) to follow the schedule, and documentation of recent steps taken to advance the project. Unavoidable delays due to meeting NEPA requirements may be considered reasonable and out of the control of the State and locals, however "lack of management by the sponsor and designer" or the "lack of programmed funding" will not be considered reasonable justification for a time extension.

B. Funding Options

The funding options most utilized for local projects include the Surface Transportation Program (STP), the Congestion Mitigation and Air Quality (CMAQ) Improvement Program, the Transportation Alternatives Program (TAP) and state bridge funding for local bridges. Additional funding mechanisms can include, but are not limited to, legislated funding (earmarks) and Pennsylvania Infrastructure Bank (PIB) loans. Information on the funding mechanisms most likely to be utilized for local projects is provided in the following sections. Liquid Fuels funding can also be used for local projects; information on Liquid Fuels use and requirements is contained in Publication 9, *Policies and Procedures for the Administration of the County Liquid Fuels Tax*.

It is important to note that all of these programs, with the exception of the PIB loan, are cost reimbursement programs, not grant programs. This means that the sponsor must generally first incur costs, and then request reimbursement from PennDOT via a formal invoice. The following chapters discuss in more detail reimbursement and invoicing requirements for local projects. Also, in most cases, the Local Project Sponsor will have to provide some match for the design and construction funding, typically between 5 and 20%. Please note, when using funding from sources such as Department of Housing and Urban Development (HUD) and Department of Community and Economic Development (DCED) as a match, the Local Project Sponsor must be aware of the requirements of the other funding source. Many agencies have requirements that differ from, and may conflict with, PennDOT/FHWA requirements related to plans development, type of work, bidding, etc. The Local Project Sponsor is responsible for ensuring that the project is developed in a manner that is consistent with and ensures ability to utilize all funding sources; PennDOT/FHWA are not responsible for ensuring consistency between funding sources.

Table 2-1 briefly summarizes the mechanisms most likely to be used for local projects; more details on each option follow the table.

Table 2-1: Funding Options

Funding Category	Type	Usage	Requirements* (aside from being on the TIP/TYP)
National Highway Performance Program (NHPP)	Federal Reimbursement	Rehabilitation; replacement or new construction projects	Must be on the National Highway System (NHS) – very few local facilities on the NHS Link to the PA NHS Map: http://www.fhwa.dot.gov/pla

Table 2-1: Funding Options

Funding Category	Type	Usage	Requirements* (aside from being on the TIP/TYP)
			nning/national_highway_system/nhs_maps/pennsylvania/pa_pennsylvania.pdf
Surface Transportation Program (STP)	Federal Reimbursement	Rehabilitation; replacement or new construction projects (bridges must be ≥20 feet span length)	Must be on the Federal-Aid system (roads functionally classified as major collector or above) for most projects. Also eligible are bridges > 20 feet not on the federal aid system (minor collector or local functional class).
Highway Safety Improvement Program (HSIP)	Federal Reimbursement	Safety improvements on any public road	Inclusion on state's Strategic Highway Safety Plan
State Bridge	State Reimbursement	Rehabilitation; replacement, bridge removal, or new construction projects (bridges must be ≥ 8 feet)	Bridge bill capital budget authorization
Congestion Mitigation and Air Quality Improvement (CMAQ) Program	Federal Reimbursement	Projects that reduce/mitigate congestion and improve air quality	Must be in an air quality non-attainment or maintenance area
Transportation Alternatives Program (TAP)	Federal Reimbursement	Various projects	Must be transportation related
Legislated Funding for Projects – Discretionary Funds	Federal Reimbursement	Depends on legislation	Must be specifically addressed in legislation
Pennsylvania Infrastructure Bank (PIB)	State or Federal Loan (State typical)	Highway, bridge, transit, aviation and rail freight projects	Must be eligible for liquid fuels, state or federal funding; Maximum 10 year loan term; must pledge liquid fuels allocation as loan collateral

*Other requirements may apply.

1. National Highway Performance Program (NHPP)

The purposes of the NHPP are:

1. To provide support for the condition and performance of the National Highway System (NHS),
2. To provide support for the construction of new facilities on the NHS,
3. To ensure that investments of Federal-Aid funds in highway construction are directed to support progress toward the achievement of performance targets established in a state's asset management plan for the NHS.

NHPP funds may be obligated only for a project on an "eligible facility." Under the NHPP, an "eligible facility" includes only those facilities located on the National Highway System (NHS), as defined in 23 U.S.C. 103, *Highway: Federal-Aid System*, except as specified in the statute. Because very few local facilities are on the NHS, it is not often that NHPP funding would apply to a local project.

2. Surface Transportation Program (STP)

The Surface Transportation Program (STP) provides flexible funding that may be used by states and localities for projects to preserve and improve the conditions and performance on any Federal-Aid highway, bridge and tunnel projects on any public road, pedestrian and bicycle infrastructure, and transit capital projects, including intercity bus terminals.

To be eligible for STP funding, projects must be identified in the STIP/TIP and they must be consistent with the Long-Range Statewide Transportation Plans.

In general, STP projects may not be on roads with a functional class of local or rural minor collectors. However, there are a number of exceptions to this requirement. A State may use up to 15% of its rural suballocation on minor collectors. Other exceptions include, but are not limited to: bridge (20 feet or greater in span length, only) replacement and rehabilitation, new construction, bridge inspection, bike/pedestrian walkways, safety infrastructure, Transportation Alternatives, "recreational trails," port terminal modifications, and minor collectors in NHS corridors.

The STP also includes the Appalachian Regional Commission (ARC) Local Access Road program funding. More information on this program can be found on ARC's website.

3. Highway Safety Improvement Program (HSIP)

The HSIP is a core Federal-Aid program with the purpose of achieving a significant reduction in fatalities and serious injuries on all public roads, including local public roads. MAP-21 includes specific provisions related to the HSIP under Section 1112 of MAP-21.

The HSIP is highly data driven and, as such, highway safety improvement projects must be identified on the basis of crash experience, crash potential, crash rate, or other data-supported means. Projects must also be included on the Commonwealth's Strategic Highway Safety Plan (SHSP). Local Project Sponsors should work with their local District Office to ensure that the proper steps are taken to utilize HSIP funding for safety projects.

Eligibility of specific projects, strategies, and activities generally are based on:

- Consistency with a state's SHSP,
- Crash experience, crash potential, crash rate, or other data-supported means,
- Compliance with Title 23 CFR, *Highways*, requirements,
- State's strategic or performance based safety goals to reduce fatalities and serious injuries on all public roads.

4. State Bridge Funding

In 1982, the State Legislature passed and the Governor signed Pennsylvania Act 235. This legislation, known as the "Bridge Bill", resulted in the programming of 979 state, local and orphan (a former bankrupt railroad bridge for which no railroad, municipality or the state is willing to assume ownership) bridge projects on the TYP. Act 235 of 1982 authorized state funding for state and local bridges.
Implementation of Bridge Bill projects began immediately. It soon became clear that an even greater effort was required to update all of the Commonwealth's bridges. This led to several amendments to the Bridge Bill legislation to authorize funding for additional bridge projects. Funding for the program is a combination of federal, state, local and, in some cases, railroad, and private funds.

In 1991, the state legislature approved Act 26, which provided a dedicated state funding source for eligible county-owned bridges. All county-owned covered bridges are eligible for the use of Act 26 state funds in lieu of the local match. Other county-owned bridges are eligible for Act 26 state funds only if included on the county eligibility list based on a high unemployment rate.

PennDOT Central Office updates the Act 26 eligibility list annually and the local PennDOT District Office notifies the eligible counties. Only that bridge project phase that is on the current TYP/STIP and on an approved Bridge Bill at the time of eligibility can be eligible for Act 26 funds. A letter from the county to PennDOT needs to be on file requesting these funds once the District Office has contacted the county on eligibility. Each phase (preliminary engineering, final design, right-of-way, utilities, and construction) of a bridge project must be approved for Act 26 funds by PennDOT. Once a phase is approved for Act 26 funding and the corresponding reimbursement agreement (between PennDOT and the county) is executed, this funding is normally granted for all remaining phases of the project.

5. Congestion Mitigation and Air Quality Improvement (CMAQ) Program

The Congestion Mitigation and Air Quality Improvement Program is a federal program that provides funds to state DOTs and Local Project Sponsors to support transportation projects in air quality nonattainment or maintenance (to sustain attainment) areas. A nonattainment area is one that has been formally identified by the U.S. Environmental Protection Agency as not meeting National Ambient Air Quality Standards. A CMAQ project must contribute to the attainment of National Ambient Air Quality Standards by improving air quality and reducing congestion.

Types of projects eligible for CMAQ funding can include, but are not limited to:

- Transit and public transportation,
- Traffic flow improvements (projects that mitigate congestion and improve air quality),
- Alternative fuel projects,
- Ride sharing,
- Non-recreational pedestrian and bicycle paths that reduce single occupancy vehicle usage,
- Education and outreach,
- Vehicle inspection and maintenance programs.

The MPO/RPO or local PennDOT District can provide additional information regarding project eligibility requirements, funding options, and other criteria for CMAQ projects.

6. Transportation Alternatives Program (TAP)

The Transportation Alternatives Program (TAP) was authorized under Section 1122, *Transportation Alternatives*, of MAP-21 (Moving Ahead for Progress in the 21st Century). TAP provides funding for programs and projects defined as transportation alternatives including:

- On- and off-road pedestrian / bicycle facilities,
- Infrastructure projects for improving non-driver access to public transportation and enhanced mobility,
- Community improvement activities,
- Environmental mitigation,
- Recreational trails,
- Safe routes to school,
- Sidewalk improvements, planters, benches, street lighting, pedestrian crossings, transit bus shelters, traffic calming, bicycle amenities, kiosks, signage, and other visual elements,
- Construction of turnouts, overlooks, and viewing areas; and bicycle and pedestrian facilities along a National or Pennsylvania Scenic Byway,
- Historic preservation and rehabilitation of historic transportation facilities related to a byway,
- Projects for planning, design and / or construction of boulevards and other roadways largely in the right-of-way of former Interstate system routes or other divided highways.

TAP funds can only be obligated for projects submitted by certain eligible entities, including local governments; regional transportation authorities; transit agencies; nature resource or public land agencies; school districts, local education agencies, or schools; tribal governments; and other local/regional governmental entity with responsibility for oversight of transportation or recreational trails (other than an MPO or state agency) that the state determines to be eligible for TAP.

All applicable federal and state regulations (especially related to environmental, right-of-way clearance, and bidding processes) must be met to receive federal reimbursements. Note that the Recreational Trails program is administered wholly by the Pennsylvania Department of Conservation and Natural Resources (DCNR) and requirements are specific to that program.

Detailed information is available on FHWA's MAP-21 site (http://www.fhwa.dot.gov/map21/).

7. Legislated Funding for Projects – Discretionary Funds

In some cases, funding for projects may be specifically identified in federal legislation – often called "discretionary funds". The timing for and amount of the distribution of funds for these projects varies and depends on the type of legislation. A percentage of the total funds designated may be available during each of the effective years of the legislation or distribution of funds may depend on the overall availability of funds, which may mean a project could receive full or partial funding and in various fiscal years.

In order not to jeopardize the use of these funds, it is very important to seek the assistance of a PennDOT District Project Manager as soon as possible after finding out that a Local Project Sponsor has received discretionary funds for a project. Incurring costs prior to federal authorization of the project by the FHWA or failing to follow federal procedures could result in non-reimbursable expenses.

As with other Federal-Aid funded projects, the discretionary funding for the project is not a grant; and reimbursement is required through a formal invoice for costs incurred.

8. Pennsylvania Infrastructure Bank (PIB)

The Pennsylvania Infrastructure Bank (PIB) is a revolving loan fund administered by PennDOT that offers flexible financing opportunities for highway, bridge, transit, aviation, and rail freight projects. The PIB provides direct low-interest loans that are repaid over time. Repayments are recycled into new project loans, creating new financing opportunities.

Any Local Project Sponsor may borrow from the PIB as long as the proposed project is eligible for Liquid Fuel Tax funds, PennDOT, or federal transportation funding. Past borrowers have included boroughs, townships, cities, counties, authorities, economic development agencies, for-profit and private corporations.

The maximum term for a PIB loan is ten (10) years and the interest rate is a fixed rate set at one-half prime. There are no loan application fees and applications are accepted at any time. There is no set minimum or maximum loan amounts and all phases of project development such as environmental studies, design, right-of-way acquisition, utilities and construction are eligible. However, construction funding is given the highest priority.

Municipalities are required to secure the loan by pledging their Liquid Fuels Tax fund allocation. Municipalities will continue to receive and are able to use their Liquid Fuel Tax funds during the life of the loan as long as the repayments to the PIB are made on time and the provisions of the loan agreement are met. Municipalities are required to comply with the provisions of the Local Government Unit Debt Act before the loan is disbursed.

Nearly all types of transportation projects are eligible for PIB financing including:

- Bridges
- Culverts
- Drainage Improvements
- Traffic Signals
- LED Traffic Signal Conversions
- Lighting
- Traffic Signs & Street Signs
- Safety improvements such as guiderail, barriers, sight distance projects
- Road Reconstruction
- Road Widening
- Road Resurfacing
- Salt Storage Buildings
- Storage/equipment buildings for highway departments
- Equipment such as pavers, trucks, graders, loaders, etc.; the PIB will only provide 50% funding and the term of the loan may not exceed five (5) years
- Environmental remediation from salt storage and fuel tank contamination
- Dirt & Gravel Road stabilization
- Traffic Calming
- Crosswalks (painted, inset, illuminated, etc.)
- Transit projects
- Airport Improvements
- Rail projects

For additional information, see also the *Pennsylvania Infrastructure Bank Handbook*.

C. Donation Credit (Flexible Match)

The Federal-Aid Highway Program has traditionally required that recipients of federal assistance contribute toward the total cost of any given project. Historically, federal law placed limits on both the types of contributions that can satisfy the matching requirement and the sources of those contributions. Cash contributed by state and local governments could satisfy the matching requirement while other types and sources of funding for federally assisted transportation projects simply reduced the total project cost. The standard matching requirement continued to apply to the remaining project cost.

Provisions in the NHS Designation Act of 1995 and TEA-21 introduced new flexibility to the Federal-Aid Highway Program's matching requirements by allowing certain public donations, known as Donation Credits, of cash, materials, and services to satisfy the non-federal matching requirement. These legislative changes, known collectively as flexible match provisions, increase a state's ability to fund its transportation programs by:

- Accelerating certain projects that receive donated resources,
- Allowing states to reallocate funds that otherwise would have been used to meet Federal-Aid matching requirements,
- Promoting public-private partnerships by providing incentives to seek private donations.

The majority of flexible match opportunities now available were authorized under Section 322 (*Donation of Funds, Materials, or Services for Federally Assisted Projects*) of the NHS Act and are codified at Section 323, *Donations and Credits*, of Title 23 CFR. TEA-21 broadened the states' flexible matching options by expanding the opportunity to match federal highway funds with certain other types of federal funds. These changes are codified principally at Section 120, *Federal Share Payable*, paragraphs (k) and (l), and Section 133, *Surface Transportation Program*, paragraph (e) (5)(c) of Title 23 CFR, *Highways*.

TEA-21 also authorized program approvals for the Surface Transportation Program. These provisions are codified in Section 133, *Surface Transportation Program*, paragraph (e) of Title 23 CFR, *Highways*. Program approval allows a number of projects to be approved as a single activity. The matching requirement would then apply to the program instead of individual projects.

SAFETEA-LU Section 1902, *Donations and Credits*, provided additional flexibility by allowing the donation of services by local government employees.

1. Candidate Projects and Key Requirements

Any Federal-Aid project for which a non-federal match is required may employ some form of flexible match, though it is necessary for the project sponsor (generally, a state DOT) to obtain approval for use of flexible match from the FHWA Division Office beforehand. States have found that flexible match is useful in cases where a public or private partner (e.g., a sponsor of a new industrial park) has a clear interest in seeing a given project advance and is willing to make a contribution toward the project's construction. Any project employing flexible match must comply with all provisions that apply to any other Federal-Aid highway project (See Appendix E, *Donation/Credit Valuation Form*).

Most of the conditions related to the use of flexible match concern the types of contributions that are eligible to offset the standard non-federal matching requirements. The critical part of this eligibility determination is the combination of the source of the contribution (private, local, state, or federal) and the nature of the contribution (cash, materials, land, services, or buildings and equipment). Table 2-2 lists the basic tests that determine whether a given non-federal contribution can satisfy Federal-Aid matching requirements under the flexible match provisions. Because this is a complex option, the designated

District Project Manager can provide assistance in determining whether such federal matches are applicable.

Note that the cost of any ***donations greater than the amount required*** to meet the non-federal Share requirements reduces the federal share of the project costs to be reimbursed.

Table 2-2 shows donations eligible for credit against the non-federal match and applies to normal Federal–Aid projects. [Notes: For the Recreational Trails Program, other conditions may apply. Consult with the FHWA. The project pro-rata share applies to all types of donations.]

Proper accounting for project costs and eligibility is imperative. The value of any donation credit must be documented, verifiable, treated consistently and should not exceed what PennDOT would normally pay. Appendix F, *Federal-Aid Guidance Non-Federal Matching Requirements*, is the guidance document issued by FHWA and includes five examples of proper recognition of donations and costs incurred that are treated as non-federal share.

Table 2-2: Eligibility for Credit Against Non-Federal Match

Type of Donation	Source of Donation	Conditions	Process
Funds	Private – Yes State – Yes Local Gov't. - Yes	Funds must be received during the period between project approval and submittal of final voucher.	Funds received by PennDOT and shown as State matching contribution on D-4232.
Land (right-of-way)	Private – Yes State – Yes Local Gov't. - Yes	Property must be appraised to determine fair market value. Value must be included in total project cost. Property may be donated anytime during the project development. Donation shall not influence environmental analysis and alternative selection. See Publication 378, *Right-of-Way Manual*, for more information on the Department's real property donation process.	FHWA reviews and approves the value prior to receiving the D-4232 reflecting the credit. (PennDOT Oversight (PO) and Federal Oversight (FO) projects). Use the Donation/Credit Value Form in Appendix E.
Materials	Private – Yes State – No Local Gov't. - Yes	Materials must be appraised to determine fair market value. Materials must be needed for the project and incorporated.	FHWA reviews and approves the value prior to receiving a D-4232 reflecting the credit (PO and FO projects). Use the Donation/Credit Value Form in Appendix E.
Services	Private – Yes State – No	Consultant (procured by private entity – Brooks Act is applicable). Construction (procured by private entity) – Federal-Aid procurement rules and provisions are applicable. The D-4232 needs to be processed before the services to be rendered for the donation begin.	Zero $ D-4232 submitted to establish eligibility date. FHWA reviews and approves the value prior to receiving the D-4232 reflecting the credit (PO and FO projects). Use the Donation/Credit Value Form in Appendix E. Must document the market value of services, and it must be acceptable by PennDOT. Value must be similar to what is normally eligible (rates, etc.).

Table 2-2: Eligibility for Credit Against Non-Federal Match			
Type of Donation	**Source of Donation**	**Conditions**	**Process**
Services	Local Gov't.-limited	Consultant (hired services) – Brooks Act applies. Local government employees are also eligible. Construction services – Federal-Aid procurement rules apply. If by local government employees, use force account. The D-4232 needs to be processed before the services to be rendered for the donation begin.	Zero $ D-4232 submitted to establish eligibility date. FHWA approves the value prior to receiving a D-4232 reflecting the credit (PO & FO). Use the Donation/Credit Value Form in Appendix E. Must document the market value of services, and it must be acceptable by PennDOT. Value must be similar to what is normally eligible (rates, etc.).

D. Toll Credits

Section 1044 of the *Intermodal Surface Transportation Efficiency Act* (ISTEA) of 1991 and Section 1111 of the *Transportation Equity Act for the 21st Century* (TEA-21) allow states to use as a credit toward the non-federal share, "toll revenues that are generated and used by public, quasi-public and private agencies to build, improve, or maintain highways, bridges, or tunnels that serve the public purpose of interstate commerce. Such public, quasi-public, or private agencies shall have built, improved, or maintained such facilities without federal funds." In Pennsylvania, toll credits are generated from eligible expenditures by the Pennsylvania Turnpike Commission, the Delaware River Joint Toll Bridge Commission, and the Delaware River Port Authority.

PennDOT's policy allows toll credits to be used as a match for the construction phase of Transportation Alternative Projects where the sponsor has completed the engineering and right-of-way phase with 100% local funds. The same is true for Rail/Highway surface improvement projects (high-type surface). Other types of Rail/Highway safety improvements qualify for 100% federal funding via other provisions of federal law, so toll credits are not needed for those projects.

Local Project Sponsors should discuss the possible use of Toll Credits with the local PennDOT District Office.

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CHAPTER 3
PROJECT MANAGEMENT PROCESSES

3.0 Roles and Responsibilities

Management and delivery of local projects involves numerous people, with differing roles and responsibilities, from the Local Project Sponsor and PennDOT personnel. This section outlines the roles and responsibilities of the people typically involved in the delivery of local projects. There is flexibility within each District Office to alter the roles and responsibilities as they relate to coordination and project management to account for the availability of resources and staff experience. However, certain responsibilities in the "technical expertise" areas must not be reassigned to other units. For example, all bridge-related items, such as the Type, Size, and Location (TS&L) Report or structural adequacy review, must always be the responsibility of the Bridge Unit.

A. Local Project Sponsor

Most local projects are managed by the Local Project Sponsor, which often is the governing municipality, but they can also be managed by another agency, such as a school district or a recognized for-profit organization.

The Local Project Sponsor is responsible for securing a qualified consultant, managing the design process, and addressing the utility, right-of-way, and environmental requirements, as well as managing the project through the construction phase. It is important to note that eligibility to receive federal and state funding depends upon compliance with federal and state laws and regulations. Close coordination with the PennDOT designated District Project Manager is necessary throughout the life of the project and, in particular, before the Local Project Sponsor takes any action to start the project. The failure to adhere to the required procedures is a violation of both federal and state laws and regulations and may jeopardize the eligibility of the project for federal and state funding reimbursements, and will most likely introduce unwanted delay.

The Local Project Sponsor must provide an employee of the agency, with approval authority, to be responsible for a project unless the Sponsor and PennDOT determine that PennDOT will administer the project [see Section 3.4 *Project Administration*, of this Chapter]).

1. Local Project Manager (Construction)

For Local Led projects, as defined in Chapter 7 of this manual, even when construction management and/or construction inspection services are to be provided by a consultant, the Local Project Sponsor must designate an individual who will be in “responsible charge” and in full control of the construction phase of the project at all times. The issue of “responsible charge” on Federal-Aid construction projects is addressed in FHWA’s August 4, 2011 Memorandum, *Defining “Responsible Charge” in the Federal-Aid Highway Program.* This individual will be known as the Local Project Manager. At this point in the project, the role of Local Project Manager has to be a **full-time** employee/official on staff with the Local Project Sponsor and responsible for managing the project and acting as the Local Project Sponsor’s official contact with the Department. All correspondence will be directed to the Local Project Manager, who must have the authority to speak for and bind the Local Project Sponsor in all matters relating to the contract. It is preferred that the Local Project Manager be someone with an engineering background, but the applicable Federal regulation is silent about engineering credentials; therefore, the Local Project

Manager need not be an engineer. In the event the Local Project Sponsor does not staff a full-time employee with an engineering background, the Local Project Sponsor must designate either:

- A full-time employee who will be reporting to its elected governing officials and charged with managing day-to-day project operations; or

- An elected public official on the governing body who is responsible for (or knowledgeable in) the public works operations of the Local Project Sponsor, provided adequate time is made available and committed to the performance of required project management duties as specified herein.

A consulting engineer appointed by the Local Project Sponsor as its 'Municipal Engineer' may provide guidance and assistance to the full-time employee or elected public official designated as its Local Project Manager, but may not assume the direction, control, and/or approval authority of the Local Project Manager.

For District Led projects, as defined in Chapter 7 of this manual, even when construction management and/or construction inspection services are to be provided by a consultant, the individual in "responsible charge" will be the Assistant Construction Engineer/Assistant Construction Manager assigned to the project by the Assistant District Executive for Construction.

Whether a project is Local Led or District Led, the person in "responsible charge" is expected to be a public employee who is accountable for construction of the project. This person is expected to be able to perform the following duties and functions:

- Administer project activities, including those dealing with budget, schedule, contract requirements, and quality,
- Maintain familiarity with day-to-day project operations, including project safety issues,
- Make or participate in decisions about changed conditions or scope changes that require work orders or supplemental agreements,
- Visit and review the project on a frequency that is commensurate with the project magnitude and complexity,
- Review financial processes, transactions, and documentation to ensure that safeguards are in place to minimize fraud, waste, and abuse,
- Direct project staff to carry out contract administration and project oversight, including proper documentation,
- Be aware of the qualifications, assignments, and on-the-job performance of the project staff at all stages of the project.

a) Construction Inspection

For Local Led projects, the Local Project Sponsor is responsible for adequate supervision and inspection of the construction phase of the project using its own forces or by engaging the services of a consultant through an Engineering/Inspection Agreement. This is in addition to the Construction Project Manager.

If the Local Project Sponsor elects to staff the project with its own personnel, it must demonstrate to the satisfaction of the Assistant District Executive for Construction that its personnel are qualified.

Prior to project advertisement, the Local Project Sponsor must submit a Request for Approval of Local Sponsor Personnel Staffing to the ADE-Construction wherein the Local Project Sponsor must describe, in detail, how it proposes to staff the project. The request package must include:

- The name, title, address and telephone number of the Local Project Manager assigned to the project. This individual must supervise the Inspector-in-Charge either directly or through an intermediate staff.

    - If a consulting engineer is appointed by the Local Project Sponsor to provide guidance and assistance to a full-time employee or elected public official designated as its Local Project Manager, the Local Project Sponsor must provide the Department with a copy of the consultant (engineering) agreement.

- The name of the individual assigned to the project as the Inspector-in-Charge. A resume for the Inspector-in-Charge must be included and the designee's qualifications must be readily discernible.

- The number of subordinate inspectors who will be assigned to the project. Resumes for subordinate inspectors must be included and each prospective inspector's qualifications must be readily discernible.

- It should be noted that inspection of fabricated structural steel, aluminum, and/or timber, as well as precast and prestressed concrete products, will be provided by the Bureau of Project Delivery, Structural Materials Section, to ensure proper fabrication.

If the Local Project Sponsor elects to staff the project by engaging the services of a consultant, the procedures described in Publication 93, *Procedures for the Administration of Consultant Agreements*, and discussed in Sections 3.5, *Consultant Selection*, and 3.6, *Consultant Selection Procedures and Advertisement*, of this chapter are to be used to select the consultant.

Development of a consultant agreement for construction inspection services must be accomplished in accordance with the procedure outlined in Publication 93 and Section 3.8, *Engineering/Third Party Agreements*, of this chapter.

If federal or state funds are to be used for construction inspection, PennDOT must be involved in the development of the inspection agreement between the Local Project Sponsor and the consultant. The number, classification, and qualifications of the inspectors must be approved by PennDOT.

Prior to project advertisement, the District must ensure that a consultant construction inspection agreement has been executed by the Local Project Sponsor and link a copy of the executed agreement to the Project Development Checklist in ECMS. If the project is not to be let or administered in ECMS, a copy of the executed agreement must be included in the District's concurrence to award submission to the Bureau of Project Delivery, Contract Management Section.

Before construction work on the project begins, the Local Project Sponsor must submit a Request for Approval of Consultant Staffing to the Assistant District Executive for Construction. The request package must include the name, title, address, and telephone number of the individual who will serve as the Local Project Manager and identify the specific individuals the selected consultant proposes to staff the project and their qualifications.

Upon receipt of a Request for Approval of Local Sponsor Personnel Staffing or a Request for Approval of Consultant Staffing from the Local Project Sponsor, the Assistant District Executive for Construction or a designee must review the request package and make a determination regarding the adequacy of the

proposed staffing. The District may request additional information and/or interview proposed staff, as deemed appropriate.

Whether the Local Project Sponsor elects to staff the project with its own personnel or engage the services of a consultant, the District should consider the nature of the project and use the following guidelines in evaluating the adequacy of the Local Project Sponsor's proposed staffing:

- One Inspector-in-Charge assigned to the project,
- The qualifications and experience level of the designated Inspector-in-Charge must be equivalent to those required by the Department for a Transportation Construction Inspector Supervisor (TCIS), unless the complexity of the project requires higher level supervision,
- Sufficient inspectors must be assigned to the project to adequately inspect and document the work performed in accordance with Department staffing practice for similar type work,
- The qualifications and experience level of designated subordinate inspectors must be equivalent to those required by the Department for a Transportation Construction Inspector (TCI),
- The proposed inspection staff must include an individual who is able to demonstrate proficiency in using the Engineering & Construction Management System (ECMS) and, for CDS NeXtGen-administered projects only, and individual certified in the use of that system.

Specific qualifications for the various construction inspection classifications are specified in the Scope of Work for the Local Project Sponsor's consultant construction inspection agreement, which can be accessed using ECMS.

When the ADE-Construction is satisfied that the designated Inspector-in-Charge is qualified to administer the contract and supervise inspection operations, that designated subordinate inspectors are qualified, and that the number of inspectors proposed is adequate, the Local Project Sponsor's staffing approval request must be approved, in writing. The District's written notification of approval to the Local Project Sponsor is to note applicable conditions or comments, as necessary, and include a statement that any subsequent staffing changes be likewise submitted for review and approval. A copy of the written notification of approval must be linked to the Project Development Checklist in ECMS. If the project is not to be let or administered in ECMS, a copy of the notification of approval must be included in the District's concurrence to award submission to the Bureau of Project Delivery, Contract Management Section.

For District Led projects, prior to project advertisement, written notification that construction management and/or construction inspection services will be provided by the District must be linked to the Project Development Checklist in ECMS. If the project is not to be let or administered in ECMS, a copy of the notification must be included in the District's concurrence to award submission to the Bureau of Project Delivery, Contract Management Section.

B. PennDOT

This section discusses the PennDOT District Office Units/Personnel that may be involved in the delivery of local projects, including a summary of their recommended areas of involvement, which may vary from District to District:

1. District Project Manager

The District Project Manager assists the Local Project Sponsor in selection and negotiations with a consultant. He/she arranges for required meetings and determines the scope of engineering. The District Project Manager also coordinates reviews of required consultant submissions within the District Office

and Central Office Units and ensures appropriate involvement of other units. The District Project Manager guides the Local Project Sponsor throughout the project development process, ensuring compliance with appropriate criteria.

2. Assistant District Executive - Design (ADE-Design)

The ADE-Design maintains overall responsibility for local projects within the District Office, and generally monitors progress of all projects. The ADE-Design also ensures that consultant selection procedures, the selected consultant, and similar items on federal or state funded projects are acceptable. When required, the ADE-Design provides direction to units under his/her control and coordinates with other ADE's, such as the ADE for Construction, when necessary.

3. Bicycle/Pedestrian Coordinator

The District Bicycle/Pedestrian Coordinator may participate in Scoping Field Views of proposed projects with potential bicycle/pedestrian transportation needs. The Bicycle/Pedestrian Coordinator reviews plans for bicycle/pedestrian accommodations. He/she also serves as principal contact at the District with federal, state and local agencies, citizen organizations and individuals on matters relating to bicycles and pedestrians, greenways, Transportation Alternatives Program, and intermodal programs.

4. Bridge Unit

The District Bridge Unit reviews and determines the acceptability of the Local Project Sponsor's submissions relating to bridges, such as, TS&L, foundation, and structural adequacy submissions. This District Unit also processes approvals of bridge submissions in accordance with American Association of State Highway and Transportation Officials (AASHTO) and Publication 15M, *Design Manual 4, Structures*, criteria. In addition, the Bridge Unit provides any needed guidance on bridge related items during the design and construction phases.

5. Assistant District Executive – Construction (ADE-Construction)

The ADE-Construction maintains overall responsibility for the construction phase of a local project within the District Office, and generally monitors progress of all construction projects. The ADE-Construction also ensures that project oversight, construction management and inspection, and similar items on federal or state funded projects are acceptable. When required, the ADE-Construction provides direction to units under his/her control and coordinates with other ADE's, such as the ADE for Design, when necessary.

6. Assistant Construction Engineer/Manager (ACE/ACM)

The ACE/ACM assigned to a given local project maintains responsibility for overall project monitoring and oversight, and is required to visit the project as frequently as needed to maintain knowledge of current activities and ensure the contract is administered properly. The ACE/ACM is also responsible for the review and approval of payment estimates, work orders, and time extension requests, and may meet his/her contract administration responsibilities directly or designate them to other individuals under his/her supervision. When required, the ACE/ACM provides direction to the individuals under his/her control and coordinates with the ADE for Construction.

7. Construction Unit

The District Construction Unit ensures that the construction work on a District Led project is adequately inspected. For both Local Led and District Led projects, this Unit also coordinates the processing of payment estimates and monitors the progress of construction in accordance with Chapter 7, *Construction Phase*.

8. Contract Management/ Project Development Unit

The District Contract Management/ Project Development Unit provides guidance to the Local Project Sponsor on the preparation of the Plans, Specifications & Estimate (PS&E) and bid proposals (ECMS Bid Package). The Contract Management/ Project Development Unit processes the PS&E and other contract award documents, as needed, in accordance with PennDOT's procedures and assists with ECMS.

9. Environmental Manager (EM)

The District Environmental Manager (EM) provides any needed guidance for agency coordination and completion of required environmental studies and documents. The EM provides guidance in preparation of all environmental permit applications (e.g., National Pollution Discharge Elimination System, Section 404/401 and Chapter 105 permits). He/she attends Scoping Field Views for federally funded projects or projects with complex environmental issues and recommends the level of environmental document required under the National Environmental Policy Act (NEPA) and supporting studies that are required. Depending on District preference, the EM also reviews the NEPA and Section 4(f) comments and assures required environmental regulatory permits or approval have been obtained.

For Federal-Aid projects, depending on the level of the environmental documentation, the EM either approves or recommends approval of the NEPA environmental documentation.

10. District Cultural Resource Teams

Each District shall have assigned a professionally qualified cultural resource team, consisting of an archaeologist and an Architectural Historian. These District Cultural Resource Professionals (CRPs) (also referred to as District Archaeologist or District Architectural Historian) shall assist the District Environmental Manager and the Project Manager in PennDOT's compliance with Section 106 and the State History Code.

11. Grade Crossing Administrator

The District Grade Crossing Administrator provides guidance and ensures that the Local Project Sponsor, if necessary, obtains Public Utility Commission approval. He/she also ensures that the designer gives adequate consideration to any relocation of railroad track or other railroad facilities that may be required.

12. District Traffic Unit

The District Traffic Unit provides guidance for the safe and efficient movement of people and goods on Pennsylvania's highways through the proper utilization of signs, signals and pavement markings. The District Traffic Unit must review all plans for the maintenance and protection of traffic that affect the state highway system or are bid in ECMS.

13. Municipal Services

Municipal Services maintains working relationship with Local Project Sponsors to provide assistance as needed with projects. The District Municipal Services team also keeps municipalities informed and involved, working closely with other District Office Units.

14. Planning and Programming Manager

The District Planning and Programming Manager assists Local Project Sponsors with assuring that projects are eligible for funding and assists with getting those projects on the TIP.

15. Regulatory Permit Coordinator

The District Regulatory Permit Coordinator coordinates the processing of Chapter 105/106 regulatory permits or approvals with District Office Units or Central Office. He/she provides necessary guidance to the Local Project Sponsor in preparation of Chapter 105/106 permit applications. Depending on District preference, he/she may also assure required Chapter 105/106 regulatory permits or approvals have been obtained.

Note: PennDOT does not review nor approve the flood carrying capacity of a bridge nor approve the H&H report (unless PennDOT is designing/managing the project on the local's behalf as described in Section 3.4.A). This responsibility remains with the permitting agency.

16. Right-of-Way Unit

The District Right-of-Way Unit ensures that the Local Project Sponsor has an acceptable acquisition procedure. This unit provides guidance on right-of-way matters or, if PennDOT is acquiring right-of-way, does the actual acquisition. The District Right-of-Way Unit also determines acceptability of the right-of-way procedures utilized by the Local Project Sponsor and issues the right-of-way certificate.

17. Utility Relocation Unit

The District Utility Relocation Unit ensures that the Local Project Sponsor includes adequate consideration of utility relocation during design. This unit provides guidance to the Local Project Sponsor, especially regarding documentation of Local Project Sponsor responsibility to pay for relocations. The Utility Relocation Unit also determines acceptability of the utility process followed by the Local Project Sponsor and assists the Central Office Utility Relocation Unit with issuing the final Utility Clearance Assurance Statement.

18. PennDOT Central Office

In addition to the District Office staff, PennDOT's Central Office staff may be involved in project reviews and other project administrative activities. Central Office involvement will be coordinated by the District Project Manager. Within Central Office, the *Local Project Delivery Group* has been established to serve as a resource for the District Offices and Planning Partners exclusively for the delivery of Local Projects and to handle any problems or issues that may arise.

Note: If the local project will impact the Pennsylvania Turnpike in any way, or it is in the vicinity of an interchange or crossing, the District Project Manager must notify the District Turnpike Coordinator during preliminary engineering. Construction project coordination with the Pennsylvania Turnpike Commission (PTC) is required (through the District Turnpike Coordinator) when a construction project,

including its Maintenance and Protection of Traffic Plan, is 1) crossing over or under the Pennsylvania Turnpike or 2) is within one (1) driving mile of a Pennsylvania Turnpike interchange or crossing.

3.1 Project Stewardship and Oversight

FHWA and PennDOT have a Stewardship and Oversight Agreement for the purposes of administering the Federal-Aid Highway Program in Pennsylvania (see Publication 10X, Design Manual 1X, *Appendices to Design Manuals 1, 1A, 1B, and 1C*, Appendix C, *FHWA/PennDOT Stewardship & Oversight Agreement*). This agreement defines select stewardship and approval roles for Federal-Aid design and construction projects in Pennsylvania. It includes PennDOT's assumption of certain FHWA oversight roles and approval responsibilities. The agreement categorizes design and construction projects as Federal Oversight (FO) and PennDOT Oversight (PO) on the basis of the type of highway system, cost, and risk assessment. Further, the agreement delegates to PennDOT certain non-project approval actions that would otherwise be taken by the FHWA.

Eligible public agencies (city, county) may be permitted by PennDOT to take project approval actions and administer Federal-Aid design and construction projects. PennDOT will assure local public agency knowledge and compliance with state and federal requirements. The requesting public agency will be required to develop procedures that modify and/or supplement the procedures contained in the Stewardship and Oversight Agreement or otherwise published by PennDOT. The public agency procedures must be approved by PennDOT and FHWA and the agency must certify that it will operate in compliance with FHWA/PennDOT requirements.

The close working relationship between PennDOT and FHWA, including the defined oversight roles, are critical elements in the success of the local project.

3.2 Engineering and Construction Management System (ECMS)

ECMS is an internet-based computer system used to manage the design and construction of PennDOT projects. At the time of writing this publication, the system is only currently available for the construction phase of local projects. The Local Project Sponsor is required to register as a PennDOT Engineering and Construction Management System (ECMS) Business Partner. Any organization that has a business relationship with PennDOT related to Construction Contracts or Consultant Agreements is required to register as a business partner.

If not registered as a vendor with the Commonwealth, the Local Project Sponsor must acquire a vendor SAP number (Commonwealth of PA Vendor Registration). Any organization that will receive payments from the Commonwealth of Pennsylvania or that will receive grant or loan money from the Commonwealth, must have an SAP number for the payments to be processed.

The vast majority of local projects are bid by PennDOT in ECMS, on behalf of the Local Project Sponsor. Generally, plans are prepared according to Publication 14M, *Design Manual 3, Plans Presentation*. It is important for Local Project Sponsors to seek assistance from the designated District Project Manager regarding the use of ECMS.

In the rare instance that a project is not bid by PennDOT in ECMS (known as a paper let) the Local Project Sponsor must request approval in writing. A request letter must be submitted to the designated PennDOT District Project Manager at the onset of the Project Development Process. The PennDOT District Project Manager then determines eligibility and obtains approval from PennDOT Central Office. See Appendix G, *Projects Not Let or Administered in ECMS*, for more information on paper let projects.

Several informative brochures are available from PennDOT about ECMS and can be requested from the District Project Manager or are available online. For those brochures or publications available online, go to ECMS and click where it is noted to enter ECMS as a guest. Once there, go to Helpful Hints and the below publications are available for viewing:

- Publication 543, ECMS Business Partnership Guide
- Publication 544, ECMS Creating User ID and Password

The ECMS Help Desk can also be reached for assistance at 717-783-7711, Monday through Friday 8 am until 4 pm.

Please see Chapter 4, Section 4.1.A.15.a and 4.1.B.15.a *Preparation and Execution of Contract*, for information on letting projects in ECMS.

3.3 Project Development

The process used to design a project is known as the project development process. The project development procedures vary depending on the sources of funding (federal or state) utilized on a project (see Chapter 4, *Project Development Procedures*). State funding procedures apply to projects that have not used any federal funding to date and which will not have any federal funding throughout any phase of the project, including construction. The use of federal funds, or the need for federal action, will trigger compliance with the federal funding procedures. This can vary by project phase. The District Project Manager will provide guidance to the Local Project Sponsor regarding the required procedures, as needed. Please refer to Chapter 1, *Introduction*, Figure 1-1, *Representative Project Flow Chart for Federal and State Funded Projects*, for a flow chart illustrating the processes and anticipated timeframes for state or federally funded projects.

A critical tool for expediting project development and helping to ensure timely compliance with project development milestones and procedures is the project schedule. Development and maintenance of an accurate project schedule is a vital part of any project, including local projects. Local Project Sponsors must have a schedule for their project and should develop these in coordination with the District Project Manager to ensure that all major milestones are captured and that realistic completion times are estimated. The following three (3) subsections discuss tools that are available to help with development and maintenance of a project schedule.

A. Open Plan

PennDOT utilizes Open Plan, a project management software, to help oversee and manage its highway and bridge program project schedules. PennDOT mandates that projects, including local projects, create and maintain an Open Plan schedule. PennDOT has developed Open Plan templates to be used on local projects. The District Office will work with the project team to establish this schedule prior to or at the start of design. The District Project Manager or the consultant project manager (to be determined early in the project) is responsible for providing monthly updates for this Open Plan schedule. See Publication 615, *Scheduling Manual - Operating Procedures for Design Schedules*, for more information on developing project schedules.

B. WelcomHome

WelcomHome is a web-based collaboration portal that allows users to view and update Open Plan project schedules over the Internet. WelcomHome is recommended for projects that require consultant services or have external partners as team members as it will ease the progressing of the schedule. Consultants, who are ECMS registered business partners, can access a project's Open Plan schedule via WelcomHome. Progressing the schedule via WelcomHome eliminates issues related to security permissions and the need for consultants to continually mail electronic copies of the Open Plan file for restoration into the Department's Open Plan server. The District Project Manager is responsible to perform regular reviews of the schedule to ensure that the project is on track to meet the project's letting date. District Project Managers not only monitor the performance of their design team to assure quality and on time project completion, but also collect performance data for scheduling future activities. If the District Project Manager chooses to use this portal for monthly updates, it will be clarified and established with the Local Project Sponsor at the start of design.

C. Tracking

A *Project Milestone Submission Tracking* document is included in Appendix H, *Project Milestone Submission Tracking*. This document will assist with project schedule development and should be developed in coordination with the District Project Manager, consultant project manager, if applicable, and Local Project Sponsor at the beginning of the project. The document is used to review and set a timeframe for the required project milestones prior to the Notice to Proceed for design. Milestones may vary, depending on the source of funding and/or complexity of the project. Included in this project schedule should be a 90 day period from the letting of a project to the anticipated Notice to Proceed for the construction phase of the project. If this timeframe needs to be reduced, a request must be sent to PennDOT Central Office Bureau of Project Delivery, Contract Management Section for approval. Once this tracking document is prepared, it is used for monthly status updates from the Local Project Sponsor to the District Project Manager. It is the responsibility of the Local Project Sponsor to coordinate with the consultant project manager (if necessary), update the document for progress, and email it to the District Project Manager by the beginning of every month.

3.4 Project Administration

Various methods for administering locally-sponsored projects are available and should be considered early on in the planning phase of a project. Review these options prior to advertising for a design consultant for a project, but preferably after the project is added to the TIP. The various methods described in the following sections and summarized in Table 3-1, *Project Administration Methods*, and Figure 3-1, *Project Administration Methods Flowchart*, will allow the Sponsor, in coordination with the appropriate PennDOT District, the flexibility in determining what option will work best for them and their project.

A. PennDOT Administration and Management

If the Local Project Sponsor, after communicating and coming to a mutual agreement with the PennDOT District Office, chooses to have PennDOT administer their project, there are two (2) alternatives that will be considered. PennDOT will either design (Alternative 1) or administer and manage, using a consultant (Alternative 2) the local project on behalf of the Local Project Sponsor. The decision to utilize either of these alternatives is made at the discretion of the PennDOT District Office based on current workload, availability of design contracts, complexity of the project and anticipated controversy with the project. The decision to have PennDOT administer the project must be clearly established and approved shortly

after the project is added to the TIP and requires that the Local Project Sponsor coordinate with the PennDOT District Office accordingly. A Standard Project Reimbursement Agreement with PennDOT must be executed for either alternative detailed below.

Table 3-1: Project Administration Methods

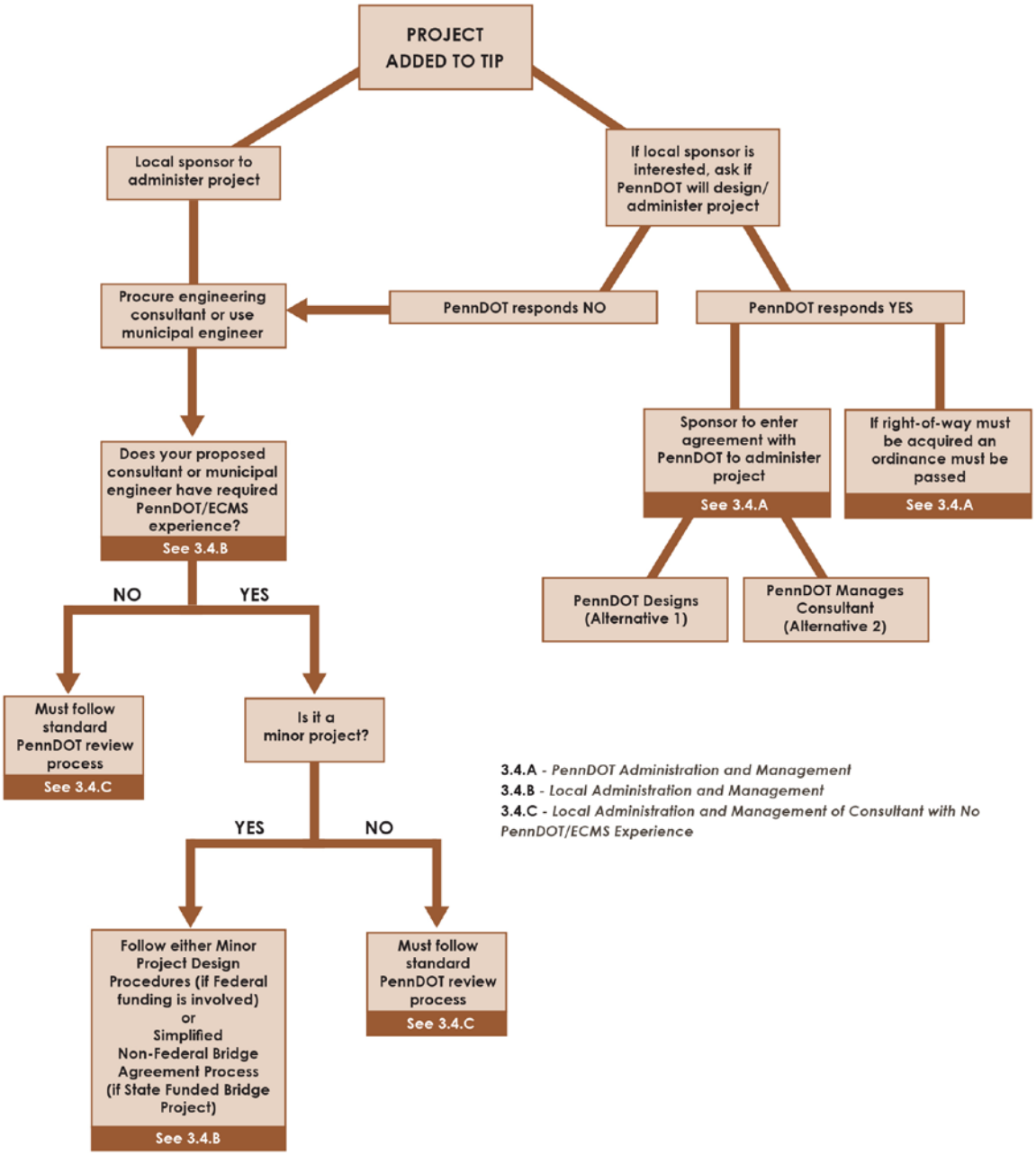
	A. PennDOT Administration and Management (Alternative 1 or 2*)	**B. Local Administration and Management/ Reduced PennDOT Review**	**C. Local Administration and Management/ Consultant with No PennDOT/ ECMS Experience**
Pros	-PennDOT controls day to day activities of project and a Local Project Manager is not needed. -Shortest project delivery time. -Sponsor does not need to go through selection process for consultant.	-Shortened timeframe for project delivery with reduced PennDOT reviews, as consultants have PennDOT/ ECMS experience. -Sponsor would maintain control and decision making of project.	-Flexibility in choosing consultant. -Sponsor would maintain control and decision making of project.
Cons	-Option may or may not be available depending on District workload, etc. Coordinate with District during the planning phase to determine availability. -Sponsor would relinquish most project control to PennDOT.	-Local Project Manager needed for project. -Can only use experienced PennDOT/ ECMS Consultants	-Local Project Manager needed for project. -Standard PennDOT review process required, meaning longer timeframe for delivery of project. -Potential for increased design cost.

*Alternative 1 = PennDOT designs the project; Alternative 2 = PennDOT hires and manages a consultant to design the project.

With ***Alternative 1***, the Local Project Sponsor must enter into a Standard Project Reimbursement Agreement with PennDOT for the cost of design services, including but not limited to, preliminary engineering (PE), final design (FD), right-of-way, utilities, and services during construction, as needed. In this scenario, PennDOT would be considered the designer for the project and would need to provide an estimated cost of design services to the Local Project Sponsor. These costs will be reflected in the Reimbursement Agreement. The Local Project Sponsor would receive an invoice from PennDOT for their share of the project costs, no more than monthly, but no less than quarterly throughout the project. Appendix I provides a sample invoice that PennDOT will prepare and send to the Sponsor for the work that was completed by the Department. If the Local Project Sponsor does not pay the invoice received from PennDOT in a 45 day period, all design work on the project may end until payment is received. If payment is not received, Liquid Fuels Tax funds may be withheld.

With ***Alternative 2***, PennDOT will advertise and select a consultant in ECMS for the Local Project Sponsor to perform the design services including, but not limited to preliminary engineering (PE), final design (FD), right-of-way, utilities and services during construction, as needed for the project. The Local Project Sponsor would have limited involvement with consultant selection, the project scope of work, and the development of the project. A Standard Project Reimbursement Agreement must executed relinquishing the control of the project from the Local Project Sponsor to PennDOT. The engineering agreement for the design activities would be between PennDOT and the selected consultant in ECMS. PennDOT would pay the consultant through ECMS and then the Local Project Sponsor would receive an invoice from PennDOT for their share of the project costs, no more than monthly, but no less than quarterly throughout the project. Appendix I provides a sample invoice that PennDOT will prepare and send to the Sponsor for their share of the work completed by the consultant and the Department's administration costs. If the Local Project Sponsor does not pay the invoice received from PennDOT in a

Figure 3-1: Project Administration Methods Flowchart



45 day period, all design work on the project may end until payment is received. If payment is not received, Liquid Fuels Tax funds may be withheld.

It is anticipated that having PennDOT design or administer the project would require the least amount of upfront time leading to project letting or bidding of the construction contract. However, with either alternative, the Local Project Sponsor must relinquish most of the project control, as design, scheduling, and other decisions would be under PennDOT's control. The Local Project Sponsor would assume a consultation role and not have the same project management role as with projects that are administered by the Local Project Sponsor, therefore, for design, a Local Project Manager would not be required in this scenario.

Note: The project phases would still be funded through the TIP as it was programmed regardless of who does the design or administration of the project. If right-of-way must be acquired by PennDOT on behalf of the Local Project Sponsor, an ordinance must be passed allowing for such authority prior to the execution of the Reimbursement Agreements. Appendix J provides a sample ordinance and the Local Project Sponsor's solicitor will need to make a determination as to what will be required for the Sponsor to authorize PennDOT to engage in ROW acquisition on its behalf.

B. Local Administration and Management/ Reduced PennDOT Review

This option provides the Local Project Sponsor the ability to maintain control of the project while ensuring that a PennDOT/ ECMS experienced consultant is selected for the project, which should reduce the time required to design and deliver the project.

With this method, the Local Project Sponsor must ensure the consultant they hire has applicable experience designing PennDOT projects. The Local Project Sponsor must have proof that the selected prime consultant has had at least two (2) projects successfully let through PennDOT's ECMS in the previous year or at least five (5) projects over the past five (5) years. Successful means that based on PennDOT's Quality Metrics, the firm must have received a statewide Consultant Evaluation Score ≥50 AND a District Consultant Evaluation Score (if available) of ≥50, which correspond to an "Expected Performance" rating. This information can be accessed through the PennDOT Project Manager and provided to the Local Project Sponsor for the purposes of selection.

The PennDOT ADE-Design may choose to allow a consultant that has been recommended by the Local Project Sponsor to follow the applicable reduced PennDOT review process, even though that consultant may not have successfully let projects in ECMS previously (i.e. consultant would not have a Consultant Evaluation Quality Metric Score.). The consultant will be required to complete the form in Appendix K, *Firm Identification and Qualifications Form*. The sponsor must submit the completed form to the PennDOT ADE-Design for approval.

1. State Funded Bridge Projects

A Local Project Sponsor with a bridge project using state and/or local funding may be able to follow the Simplified Non-Federal Bridge Agreement Process based on certain eligibility requirements (see Section 3.7.A.2., *Simplified Non-Federal Bridge Project Reimbursement Agreement*). This type of project administration is meant for simple bridge projects with limited right-of-way and environmental impacts that meet the definition of a typical Non-Complex (Minor) project (see Publication 10, *Design Manual 1, Transportation Program Development and Project Delivery Process*, Chapter 2, *Defining a Transportation Project*, Section 2.1, *Project Complexity Levels*) as determined by PennDOT. The Local Project Sponsor will maintain administrative and managerial control for the project. This process is similar to PennDOT's Retroactive Bridge Project Reimbursement Agreement Process (see Section 3.7 A.

3., *Retroactive Bridge Project Reimbursement Agreement*, of this Chapter), except that it provides for Local Project Sponsors to be reimbursed throughout the development of the project, instead of after construction is complete.

Under this process, many of the design reviews necessary under the traditional process are not required. This process does require that the Local Project Sponsor submit a package to PennDOT for structural adequacy approval prior to the project advertisement. Also, the Local Project Sponsor is required to certify (by attaching the required documentation listed below) that the waterway permit was obtained and that the right-of-way and utility work has been completed in accordance with PennDOT's policies, procedures, and specifications since PennDOT will not approve these two items. Environmental clearance is obtained using PennDOT's CE Expert System and must be coordinated with the District Project Manager. The District Environmental Manager will be involved in the review of the environmental clearance document and will coordinate the approval(s) required in the CE Expert System.

The structural adequacy package must contain the following items for review and approval by PennDOT:

1. Type, Size & Location (TS&L)*, and Line, Grade & Typical Sections
2. Environmental Clearance Document and Mitigation Commitments
3. Foundation Report
4. Temporary and Permanent Traffic Signal Plans (if applicable) signed and stamped by a Professional Engineer licensed in the Commonwealth of Pennsylvania
5. Design Computations signed and stamped by a Professional Engineer licensed in the Commonwealth of Pennsylvania
6. Final Plans measuring 22"x34", signed and stamped by a Professional Engineer licensed in the Commonwealth of Pennsylvania
7. Traffic Control Plan if erecting traffic control devices on a state roadway

The structural adequacy package must also contain the following items to ensure certification has occurred:

8. All required permits (PA DEP Water Obstruction and Encroachment Permit, USACE 404 Permit, and NPDES Permit)
9. Right-of-Way Clearance Certification form (see Chapter 5, *Right-of-Way Phase*)
10. Utility Clearance Assurance Statement (see Chapter 6, *Utility and Railroad Coordination*)

*It is recommended that the TS&L be reviewed by/coordinated with the District Project Manager and the District Bridge Unit during preliminary engineering prior to advancing the design of the structure.

Note: If the Local Project Sponsor is not familiar with any of the above documentation needed, coordination should occur as soon as possible with the District Project Manager to be sure that proper procedures are being followed.

2. Federally Funded Projects

Under this scenario, the Local Project Sponsor can follow the Minor Projects Design Procedures for Consultant Designed Projects in Publication 10X, *Design Manual Part 1X*, Appendix AB, *Minor Projects Design Procedures for Consultant Designed Projects*. To qualify, the project must meet the definition of a typical Non-Complex (Minor) Project (see Publication 10, *Design Manual 1, Transportation Program Development and Project Delivery Process*, Chapter 2, *Defining a Transportation Project*, Section 2.1, *Project Complexity Levels*) and been scoped as such and the selected consultant must have the necessary

experience (see Section 3.4.B *Local Administration and Management/Reduced PennDOT Review*). The Local Project Sponsor maintains administrative and managerial control for the project.

If at any time during the project PennDOT has reason to believe that proper procedures are not being followed, the Local Project Sponsor may be required to follow a standard PennDOT review process.

C. Local Administration and Management of Consultant with no PennDOT/ ECMS Let Experience

If the Local Project Sponsor selects a consultant through the proper procurement process and the consultant does not have the required PennDOT/ECMS experience or if the Local Project Sponsor chooses to utilize their current municipal engineer who does not have the necessary PennDOT/ECMS experience, then the standard PennDOT review process will apply to the project. This process is detailed in Chapter 4, *Project Development Procedures*. There are a variety of resources available to assist the Local Project Sponsor and the consultant in learning about the successful delivery of local projects that utilize state and federal funds.

FHWA has a library of videos available on-line that can assist the Local Project Sponsor in learning what is required for the administration and delivery of a federally funded project (http://www.fhwa.dot.gov/federal-aidessentials). PennDOT also has a variety of training available that would be beneficial for a consultant not familiar with the PennDOT process and ECMS (http://www.dotdom1.state.pa.us/ECMS/ECMS_Training_Calendar.nsf/).

It is anticipated that projects designed by a consultant with no PennDOT/ECMS experience will take the most time to develop and deliver. The standard design review process must be followed, which in turn will add time to the overall project schedule. The District Project Manager should be consulted to determine what videos or training would be required or recommended for the Local Project Sponsor or their engineer/consultant when this situation arises.

D. Bridge Bundling of Non-Complex Projects

Under this scenario, PennDOT will assemble a package containing a grouping of bridges to be let under one construction contract. This grouping could consist of locally-owned bridges or a combination of state and locally-owned bridges. PennDOT will design the bridges for the local owners; however, the ownership of the bridge continues to reside with the local entity. If a Local Project Sponsor is interested in having a bridge considered for the bundling program, they should contact their PennDOT District office to inquire. Additional information on this scenario is contained in PennDOT Design Manual 4, Section 1.15 *Bridge Bundling of Non-Complex Projects*.

3.5 Consultant Selection

If the design phase of the project is funded with federal or state monies, there are specific procedures that must be followed regarding the selection and approval of a consultant (including the use of municipal engineers) for any portion of the project, including design services, construction inspection and/or right-of-way acquisition services. The PennDOT District Office will provide guidance to the Local Project Sponsor related to consultant selection. If any particular phase of the project requires consultant services and federal or state funds are to be used, the Local Project Sponsor must contact the District Project Manager and submit a request for approval to proceed with one of the processes listed below:

A. Utilize a designated municipal engineer
B. Proceed with consultant selection
C. Utilize PennDOT's Open End Contracts (to complete necessary tasks, such as design, right-of-way acquisition, etc.)

Whenever state or federal funds are utilized, the processes listed above or a PennDOT approved process is required. Communication with the PennDOT District Project Manager is essential to ensure that the consultant selection procedures are correctly followed and documented, so as not to jeopardize the use of any state or federal funds. The District will review the documentation and, if appropriate, forward their concurrence to the Bureau of Project Delivery, Contract Management Section for review and approval. The Contract Management Section will document approval of the selection procedures and selected consultant through a letter to the District, who should notify the Local Project Sponsor. A *Consultant Approval Checklist*, which can be used to help ensure proper selection procedures were followed, can be found in Appendix L, *Consultant Approval Checklist*.

Note: Please refer to Section 3.4, *Project Administration*, in this Chapter, which discusses options to consider when selecting a consultant. Consultant experience, particularly knowledge of PennDOT requirements, can positively affect the time and cost of project delivery.

Note: Cost cannot be a factor in the selection of a consultant. Only after a consultant has been selected and approved based on qualifications can a price proposal be requested.

A. Utilize a Designated Municipal Engineer

The municipal engineer may be retained for various consultant engineering services, provided that the engineer/firm is qualified to complete that specific type of work (example – preliminary engineering, environmental services/permitting, final design, construction inspection, National Bridge Inspection Standard [NBIS]) as documented during the selection process, and were selected using an approved, competitive, qualification-based selection procedure. The advertisement for a municipal engineer must include all the engineering services that the Local Project Sponsor anticipates are needed. Any municipality serving in the role of the Local Project Sponsor, and desiring to use the "municipal engineer" for project services, must have designated a consultant as its municipal engineer by an Act of the Mayor, Council, Board of Supervisors, etc. This designation cannot be done for the purpose of a particular agreement, but must be done as a matter of normal course of business for the reorganization of the municipality's assignments.

The designation of the municipal engineer is valid for a period of not more than five (5) years from the date of the Act designating the municipal engineer. If the municipality's procedures for reorganization require annual designation of the municipal engineer, then the first Act after selection is complete is considered the start of the five (5) year period. A new qualification based selection process should be initiated prior to the end of the five (5) year period to prevent a lapse.

A Municipal Engineer may not submit a statement of interest for work advertised on a project which it assisted in the process of obtaining funding. However, a municipality may assign a project specific agreement directly to its Municipal Engineer even if the Municipal Engineer assisted in the process of obtaining funding as long as the Municipal Engineer was selected using a qualification based selection process and the work falls within the scope of the Municipal Engineer's agreement. See Publication 93, Chapter 7, Section 7.3.2 for more information.

A municipal engineer may serve as a technical advisor on a municipal Selection Committee. A municipal engineer may NOT serve as a voting member of the Selection Committee.

B. Proceed with Consultant Selection

If a municipal engineer is not used for a particular project, projects are classified as "large" or "small" for purposes of consultant selection procurement as discussed in the following sections.

1. For Contracts Estimated to Exceed $150,000 (Large Project Procedures)

Where the total cost, as estimated by PennDOT or the Local Project Sponsor, of the work and services to be provided under the Engineering Agreement is more than $150,000, the project must to be advertised in accordance with PennDOT requirements.

Large projects require solicitation of qualifications from the consultant community through a public advertisement. The municipality can evaluate the qualifications submitted by the consultants in response to the advertisement using one of the following procedures:

a) Normal Selection Procedures

These procedures require the interested consultants to submit a Statement of Interest (SOI) from which the Local Project Sponsor selects or short lists a minimum of three (3) consultants. These short listed consultants are requested to submit a technical proposal and after an evaluation of these proposals, a consultant is selected for the purpose of negotiating an Engineering Agreement. This process is not used often for Local Project consultant selection unless the Sponsor requires the additional information of a technical proposal to assist in their decision.

b) Modified Selection Procedures

The Local Project Sponsor will request Statements of Interest (SOI) from interested consultants for the purpose of selection and then review consultant qualifications to obtain the most qualified consultant. A consultant is selected from the SOI for the purpose of negotiating an Engineering Agreement. This process omits short listing a minimum of three (3) firms and the requirement for a technical proposal prior to selection, which reduces the timeframe of consultant selection.

2. For Contracts Estimated Not to Exceed $150,000 (Small Project Procedures)

These procedures can be used for all services provided that the estimated cost of engineering services will not exceed $150,000. The Local Project Sponsor must contact and solicit responses from at least three (3) qualified consulting firms and then select a firm based solely on the responses and their qualification packages. The Local Project Sponsor is then able to request technical and price proposals from the selected consultant for the purpose of negotiating an Engineering Agreement. There is no advertisement required in these circumstances.

Note: If the small project selection procedures are used, federal policy states, "The full amount of any contract modification or amendment that would cause the total contract amount to exceed the federal small purchase threshold would be ineligible for Federal-Aid. The FHWA reserves the right to withdraw all Federal-Aid from a contract if it is modified or amended above the federal threshold." For this reason, municipalities may elect to use the Large Projects Procedures, for smaller projects, especially if the estimated cost of services approaches $150,000.

C. Utilize PennDOT's Open End Contracts

A Local Project Sponsor can request to utilize one of PennDOT's Open End Contracts that have been advertised and selected specifically to assist with local projects. It is imperative that the Local Project Sponsor coordinate with PennDOT as soon as possible to determine the availability of a contract and the services available in the Open End Contract. PennDOT will have already advertised and selected consultant(s) using their standard procurement process and the Local Project Sponsor would not need to go through the consultant selection process. The Local Project Sponsor needs to identify what services they require such as design, right-of-way, utilities, construction inspection, etc. and request, through their District Project Manager, to establish a work order through an Open End Contract. This work order is between the consultant(s) and the Local Project Sponsor outside of ECMS and requires the use of the project funds as they have been approved on the TIP. PennDOT and the Local Project Sponsor will work together to establish and execute a work order in order to issue a Notice to Proceed for the services requested. Invoicing for these projects will remain outside of ECMS. The Local Project Sponsor will pay the consultant directly and request reimbursement consistent with the terms of the Reimbursement Agreement for the project.

3.6 Consultant Selection Procedures and Advertisement

There are various steps that need to be followed to advance a project into the design phase starting with selecting an engineer/consultant who will complete the work. Figure 3-2, *How to Get a Project Under Contract*, is a flowchart detailing these steps. Prior to advertising for a municipal engineer or for a consultant for a particular project, all Local Project Sponsors must have their selection procedures reviewed by the District Office. The District will review the documentation and, if appropriate, forward their concurrence to the Bureau of Project Delivery, Contract Management Section for review and approval. The Contract Management Section will document approval of the selection procedures via letter to the District, who should notify the Local Project Sponsor. If this process is not followed, federal funds may be jeopardized. This approval process is found in Publication 93, Chapter 7.3.3, *Consultant Selection Procedure Approval*, and Appendix 7A, *Policy and Procedure for Consultant Selection*. Selection Procedures need only to be approved one time (after July 1, 2011) and are acceptable to be used for future advertisements. If the Selection Procedures undergo significant revisions at any time, then they must be re-approved.

After receiving the approval for consultant selection procedures, the Local Project Sponsor will then submit their advertisement and selection criteria to PennDOT's Bureau of Project Delivery, Contract Management Section, for approval prior to advertising. The Local Project Sponsor may advertise either for a municipal engineer, who will then complete the project design, or for a consultant for a specific local project. The following items are necessary for approval of the advertisement.

A. Municipal Engineer Advertisement

Advertisements must document the qualifications needed for the municipal engineer position. If the Local Project Sponsor anticipates that the consulting firm may perform construction inspection services for any project, those services must be included in the advertisement for type of work requested, along with the engineering services. The request for Statements of Interests (SOI's) must contain the following information:

- Professional qualifications necessary for satisfactory performance of potentially required services (see Section 3.6.C),
- Any specialized experience and technical competence in the type of work that may be required,

- The firm's capacity, or availability of technical staff, to accomplish work in required timeframes,
- Specific experience and/or qualifications related to any other appropriate evaluation criteria.

A Disadvantaged Business Enterprise (DBE) goal may be required. DBE Goals will be established (as needed) based on the current PennDOT DBE methodology and goal document, which can be found on PennDOT's DBE: Goals and Methodology webpage.

B. Local Project Advertisement

For a specific project, the Local Project Sponsor must prepare a detailed Scope of Work (SOW) to be included in the advertisement, describing the project, its location, and services required.

Advertising the request for letters of interest from consulting firms interested in performing the required engineering (and if anticipated, construction inspection and right-of-way acquisition) services is governed by municipal Home Rule Charters, codes or statutes. The advertisement must appear in at least one (1) newspaper, of general circulation. Additionally, the Municipality must submit their advertisement for approval and publishing to either:

PennDOT Department of Transportation
Bureau of Project Delivery
Highway Delivery Division
Contract Management Section
400 North Street, 7th Floor
Harrisburg, PA 17120

or

Via Email at ECMS_Local_Advertisements@pa.gov

PennDOT's ECMS advertisements must be coordinated with the PennDOT Project Manager.

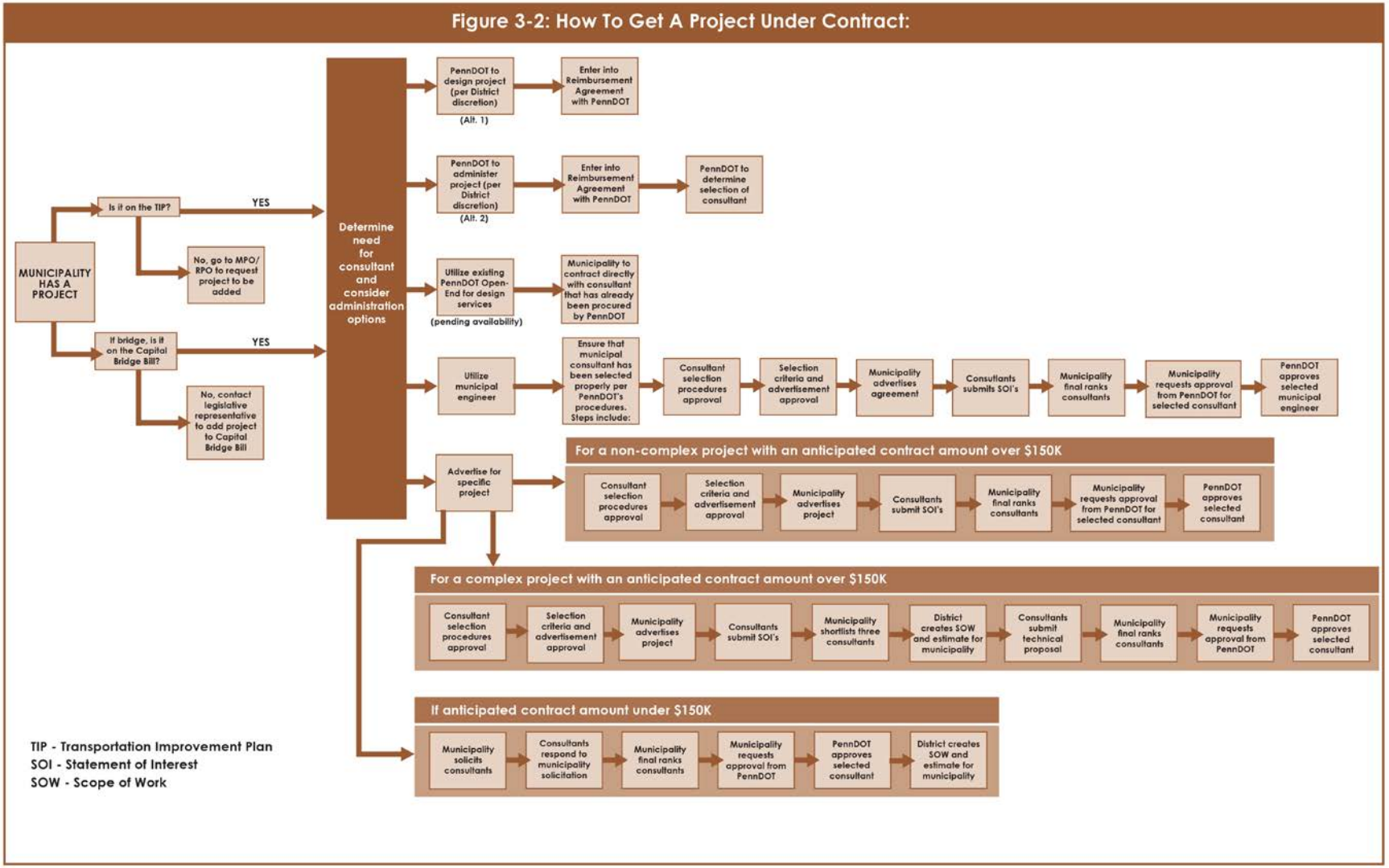


Figure 3-2: How To Get A Project Under Contract:
MUNICIPALITY HAS A PROJECT
Is it on the TIP?
YES
No, go to MPO/ RPO to request project to be added
If bridge, is it on the Capital Bridge Bill?
YES
No, contact legislative representative to add project to Capital Bridge Bill
Determine need for consultant and consider administration options
PennDOT to design project (per District discretion)
(Alt. 1)
Enter into Reimbursement Agreement with PennDOT
PennDOT to administer project (per District discretion)
(Alt. 2)
Enter into Reimbursement Agreement with PennDOT
PennDOT to determine selection of consultant
Utilize existing PennDOT Open-End for design services
(pending availability)
Municipality to contract directly with consultant that has already been procured by PennDOT
Utilize municipal engineer
Ensure that municipal consultant has been selected properly per PennDOT's procedures. Steps include:
Consultant selection procedures approval
Selection criteria and advertisement approval
Municipality advertises agreement
Consultants submits SOI's
Municipality final ranks consultants
Municipality requests approval from PennDOT for selected consultant
PennDOT approves selected municipal engineer
Advertise for specific project
For a non-complex project with an anticipated contract amount over $150K
Consultant selection procedures approval
Selection criteria and advertisement approval
Municipality advertises project
Consultants submit SOI's
Municipality final ranks consultants
Municipality requests approval from PennDOT for selected consultant
PennDOT approves selected consultant
For a complex project with an anticipated contract amount over $150K
Consultant selection procedures approval
Selection criteria and advertisement approval
Municipality advertises project
Consultants submit SOI's
Municipality shortlists three consultants
District creates SOW and estimate for municipality
Consultants submit technical proposal
Municipality final ranks consultants
Municipality requests approval from PennDOT
PennDOT approves selected consultant
If anticipated contract amount under $150K
Municipality solicits consultants
Consultants respond to municipality solicitation
Municipality final ranks consultants
Municipality requests approval from PennDOT
PennDOT approves selected consultant
District creates SOW and estimate for municipality
TIP - Transportation Improvement Plan
SOI - Statement of Interest
SOW - Scope of Work

In both situations, the advertisement must include the following information*:

- Location and brief description of the required engineering (and construction inspection, if anticipated) services,
- Indication of the method of procurement as competitive negotiations,
- A statement that the Local Project Sponsor encourages responses from small firms, minority firms, and firms who have not previously performed work for the Local Project Sponsor, The Disadvantaged Business Enterprise (DBE) goal, if required, or nondiscrimination provisions to encourage the prime to notify DBE subconsultants of contracting opportunities associated with the agreement and solicit their participation, if DBE Goals are not required for the agreement,
- A statement that indicates whether the modified or normal selection method will be used,
- A list, in order of importance, of the selection criteria against which the letters of interest will be reviewed,
- For consultants that do not have an ECMS Consultant Qualification Package, a U.S. General Services Administration (GSA) Form 330 must be completed and submitted. If the Local Project Sponsor does not elect to review the ECMS Consultant Qualification Packages, the GSA Form 330 will be required of all consultants. The GSA form can be found on the GSA Forms Library website,
- Contact information for project discussions.

* A minimum of two (2) weeks must be given from the date of advertisement to SOI due date.

** The Local Project Sponsor can safely assume that if a DBE goal is required, it may be set around 10% of the contract.

Note: Selection Procedures and the advertisement, including the Selection Criteria and DBE goal, must be approved by PennDOT's Bureau of Project Delivery, Contract Management Section prior to advertising. Failure to follow these procedures may result in re-advertisement of the project.

C. Construction Inspection Requirements

The Department and the Local Project Sponsor can discuss the best option for construction inspection on a project-by-project basis. For projects with construction costs over $1.5 million, the inspection of construction will require a separate consultant (i.e., not the design consultant) for construction inspection services. Refer to Publication 93, *Procedures for the Administration of Consultant Agreements*, for more detail. For projects where construction costs are $1.5 million or under, and where the same consultant is to perform the design and construction inspection, a Quality Assurance Plan must be in place to assure that a conflict of interest does not occur (see Publication 93, *Policy and Procedures for the Administration of Consultant Agreements*, Appendix 1B, *Construction Inspection Quality Assurance Plan*). The consultant must be qualified to perform both design and construction inspection services.

***Note*:** For projects where the construction costs may exceed the $1.5 million threshold, the Local Project Sponsor should be cautious with how it procures construction inspection services. If construction inspection services are procured at the beginning of a project along with the engineering services, and the final estimated construction costs exceed $1.5 million, a separate advertisement for a construction inspection consultant will be required. Be sure to coordinate closely with the District Project Manager in these instances. If this occurs, adequate time must be allowed to follow proper consultant selection procedures and timing must be such that it will not delay project letting.

3.7 Reimbursement Agreements

A. PennDOT Project Reimbursement Agreements

Projects can require several different types of "reimbursement" agreements including, but not limited to, a Project Reimbursement Agreement, Utility Reimbursement Agreement and/or Railroad Reimbursement Agreement. This section will specifically discuss the PennDOT Project Reimbursement Agreement. Information regarding the Utility and Railroad Reimbursement Agreements can be found in Chapter 6, *Utility and Railroad Coordination*, Section 6.0.D, *Utility Reimbursement Agreement*, and 6.1.F, *Railroad Reimbursement Agreement*. A PennDOT Project Reimbursement Agreement is needed for every project for which a Local Project Sponsor anticipates receiving state or federal funds. A Local Project Sponsor must register in ECMS as a Business Partner (BP) prior to executing a Project Reimbursement Agreement. Directions for registering as a Business Partner can be found in Section 3.2, *Engineering and Construction Management System (ECMS)*, of this Chapter. The Project Reimbursement Agreement will detail specific project requirements, reimbursement procedures and available project funding.

There are various types of Project Reimbursement Agreement templates that PennDOT has developed depending on the project that should be utilized in the development of all new Project Reimbursement Agreements. These documents have been approved by PennDOT Office of Chief Counsel. Some of the templates have also received delegated preapproval, indicating form approval by the Attorney General's Office (OAG) and Office of General Counsel (OGC). The preapproved templates do not need review and signature by OAG and OGC allowing for a more efficient review and execution process. The PennDOT District Office will prepare the Project Reimbursement Agreement for both federal and state funded projects and assist the Local Project Sponsor with the execution process. These agreements can be accessed by the PennDOT Project Manager on PennDOT's shared drive at: P:\penndot shared\Local Bridge Delivery\Template Reimbursement Agreements\Current Templates.

1. Standard Project Reimbursement Agreements

Standard Project Reimbursement Agreements are the most common type of agreement used for projects that are funded with federal and/or state funds. These agreements must be executed prior to commencing any phase of the project (e.g., preliminary engineering, final design, right-of-way, utility, and construction). There are different templates for the Standard Reimbursement Agreement depending on project type, funding and right-of-way acquisition, and the District Project Manager will determine which template to use for the project. This agreement is required to document the conditions for payment of work completed on the project.

The Standard Project Reimbursement Agreement must be prepared, fully executed and approved prior to issuing a Notice to Proceed (NTP) for any part of an Engineering Agreement. The Reimbursement Agreement can be supplemented/amended at a later date if all phases are not included in the original agreement. Additionally, the reimbursement agreement or supplement containing the construction funding must be executed prior to advertising a project for construction.

NTP by a Local Project Sponsor to the consultant can be issued only after full execution of the project Reimbursement Agreement and the Engineering Agreement. In addition, on all federal projects, federal authorization (D-4232) must also be obtained prior to beginning EACH REIMBURSABLE PHASE (preliminary engineering, final design, right-of-way, utility & construction) of the project, so that federal funds will not be jeopardized. This authorization will be coordinated through PennDOT.

Table 3-2: Applicability of Project Reimbursement Agreement Types			
	A. PennDOT Administration and Management (Alternative 1 or 2)	**B. Local Administration and Management/ Reduced PennDOT Review**	**C. Local Administration and Management/ Consultant with No PennDOT/ ECMS Experience**
State Funded Bridge	Standard	Standard, Simplified, or Retroactive	Standard, Retroactive
Federally Funded Project	Standard	Standard	Standard

It is important to note that all projects will receive a federal authorization to begin the preliminary engineering (PE) phase or final design (FD) phase, if there are federal funds in those phases, and must advance to the right-of-way or construction phase within ten (10) years of the initial authorization. If that time frame expires, the Local Project Sponsor may be required to repay the federal funds that were received. PennDOT has established tracking mechanisms to monitor these time frames, so if the deadline approaches, the PennDOT Project Manager should notify the sponsor and, if deemed acceptable by the FHWA, request an extension to the deadline.

2. Simplified Non-Federal Bridge Project Reimbursement Agreements

If there are no federal funds being used on any portion of the project, a bridge may be eligible for a Simplified Non-Federal Bridge Project Reimbursement Agreement. To be considered for reimbursement, the proposed project must be on an approved Bridge Bill Capital Budget and included in an approved TIP and TYP (see Chapter 2, *Planning & Programming*, in this manual). This type of agreement is meant for simple bridge projects with limited right-of-way and environmental impacts and that meet the definition of a typical Non-Complex (Minor) project (see Publication 10, *Design Manual 1*, *Transportation Program Development and Project Delivery Process*, Chapter 2, *Defining a Transportation Project*, Section 2.1, *Project Complexity Levels*) as determined by PennDOT. The Local Project Sponsor would also maintain administrative and managerial control for the project. This process is similar to PennDOT's Retroactive Bridge Project Reimbursement Agreement Process in that there are reduced submissions and PennDOT reviews, except that it provides for reimbursement to Local Project Sponsors throughout the development of the project starting in preliminary engineering, instead of after construction is complete. The Local Project Sponsor should inquire about the applicability of this option with the PennDOT District Office. This agreement will only be utilized when the consultant selected has previous PennDOT/ ECMS experience (see Section 3.4 B., *Local Administration and Management/Reduced PennDOT Review*). It should also be noted that these projects will not be let in ECMS.

3. Retroactive Bridge Project Reimbursement Agreements

A bridge may also be eligible for a Retroactive Bridge Project Reimbursement Agreement provided the Local Project Sponsor can document that the project has been satisfactorily completed in accordance with the terms referenced in the Retroactive Agreement. If a Local Project Sponsor is interested in a retroactive reimbursement project, PennDOT recommends coordinating with the designated District Office and MPO/RPO as soon as possible to alert them of the project. This will allow PennDOT and the MPO/RPO time, from a funding standpoint, to anticipate and plan for the impending reimbursement. The proposed project must be on an approved Bridge Bill Capital Budget and included in an approved TIP and

TYP. Projects to be reimbursed retroactively must be designed, have right-of-way acquired, and be constructed in accordance with PennDOT policies, procedures, and specifications. Retroactive reimbursement projects or phases of projects are not eligible for federal funds. It is encouraged that the Local Project Sponsor coordinates all phases of such projects (and review, as needed) with the PennDOT District Office to ensure that the terms of the Reimbursement Agreement can be met. Reimbursement for these projects will occur when the project funding has become eligible on the TIP and TYP and construction is complete. The terms included in the Retroactive Agreement state that all invoices for reimbursement must be submitted within one year of the effective date of the Agreement.

B. Processing and Execution of Project Reimbursement Agreements

For all Project Reimbursement Agreement types, the following guidelines should be used in preparing the agreement.

1. Only those phases included in the current TIP will be included in Exhibit A.

2. The appropriate Project Reimbursement Agreement template will be used for the agreement.

3. Department-incurred costs for reviewer or administrator may be included.

Note: When the Local Project Sponsor administers and manages the project, it should anticipate up to five (5) percent of the total phase added to the preliminary engineering and final design phases for Department-incurred costs for projects and up to two (2) percent of the construction costs added to that phase for the Department-incurred costs. These costs will vary due to the complexity and size of the project. For projects that are designed or administered by PennDOT, the Department-incurred costs will be established at the beginning of the project before any work commences and also be reflected in the Project Reimbursement Agreement.

4. Costs for each phase will be limited to the amount approved in the TIP.

5. The Local Project Sponsor can also include costs in the Reimbursement Agreement for:

   - Local Project Sponsor's employee time,
   - Costs incurred in advertising for the project or other project related expenses,
   - Right of way costs and services not included in the engineering agreement,
   - Utility costs not incorporated in the project,
   - Railroad costs not incorporated in the construction phase of the project.

6. Department expenses are tracked using the State Project Number assigned to a given project or identified by the District for segments of larger projects. The type and scope of costs billed to a Local Project Sponsor depend on the Project Reimbursement Agreement that has been negotiated between PennDOT and the Local Project Sponsor, but generally include personnel costs associated with the design, construction (related to shop inspection, construction inspection, and project oversight), and/or administration of the project, as well as any travel incurred by any PennDOT project team member. In addition, if a professional consultant is retained to work on the project; those costs are passed on as well. Details of when invoicing is to occur should be stated in the Project Reimbursement Agreement.

7. Effective date and duration of each agreement will be clarified within each individual Project Reimbursement Agreement.

The PennDOT District Office will obtain the appropriate Local Project Sponsor's signatures on the Project Reimbursement Agreement. A resolution from the Local Project Sponsor is also required for PennDOT to execute the Project Reimbursement Agreement. The resolution must authorize the appropriate officials to sign the Project Reimbursement Agreement. Once the agreement is signed by the Local Project Sponsor, the District Executive or other District personnel to whom the Deputy Secretary has delegated signature authority, will also sign it. The agreement is then submitted to PennDOT's Central Office and routed for signatures (Office of Chief Counsel and Comptroller, as well as Office of General Counsel and Office of Attorney General, if necessary) for execution, and legal and fiscal approvals. Current policy requires that any agreement be forwarded to PennDOT Central Office within sixty (60) days after the Local Project Sponsor signs the agreement. If circumstances prevent the agreement from being submitted in a timely manner, an explanation should be attached to the agreement when submitting to PennDOT Central Office. Otherwise, the sponsor signature will be considered stale and may be returned for re-signing.

Note: The processing time for the Project Reimbursement Agreement may take from two (2) to six (6) months and typically requires three (3) months for execution.

C. Revision and Supplementing of the Project Reimbursement Agreement

As a project progresses, the Project Reimbursement Agreement must be revised to provide funds for phases not previously included in the project budget in Exhibit "A". Project Reimbursement Agreements must also be revised to cover any cost increases that may occur. These changes to the original agreements must be fully executed and approved before the activities funded by them can proceed. Project Reimbursement Agreements can be revised by the execution of a supplement to the original agreement or by letters of adjustment or amendment.

The following guidelines may be applied in preparing a letter of amendment, adjustment or supplemental Project Reimbursement Agreement, but the original Project Reimbursement Agreement provisions must be read in each case to determine which is required (especially important when amending older agreements). The District Project Manager can assist in determining what will be necessary in each case.

1. If the cost for any phase in the Project Cost Estimate in Exhibit "A" of the Project Reimbursement Agreement is blank, or if the cost of any phase increases, resulting in an increase in the overall agreement cost, the parties must execute either a standard supplement or a letter of amendment that will include a revised Exhibit "A" before PennDOT can reimburse the Local Project Sponsor for the increased cost.

2. Adequate state funds from Act 235 of 1982 and Act 26 of 1991 (as applicable), both as amended, and/or federal funds must be available before the parties may execute either a letter of amendment or supplemental Project Reimbursement Agreement, with a revised Exhibit "A".

3. If a letter of amendment or supplemental Project Reimbursement Agreement includes funding for the construction phase, it must also include funding for the right-of-way and utility phases (if needed) if they were not included in the original Project Reimbursement Agreement. Construction inspection costs should be included in the Project Reimbursement Agreement or letter of amendment or supplemental Project Reimbursement Agreement that includes funding for the construction phase, including oversight by PennDOT District personnel for inspection of the project, miscellaneous costs or other administrative purposes.

4. If the cost required for any phase covered in the previous Project Reimbursement Agreement needs to be redistributed, or if the previous letter of amendment or supplemental Project Reimbursement Agreement needs to be adjusted, without resulting in an increase or decrease in the total cost, the change should be included in either a letter of adjustment or supplemental Project Reimbursement Agreement.

The District Office will obtain the appropriate municipal signatures on the letter of amendment or supplemental Project Reimbursement Agreement and then submit the document to Central Office (Office of Chief Counsel) for Department execution. Once executed, a copy of the amendment or supplement letter will be returned to the Local Project Sponsor. The District Office will assist with any needed updates to the Project Reimbursement Agreement as the need arises.

D. Other Reimbursement Agreements

As mentioned, local projects can require several different types of "reimbursement" agreements in addition to a Project Reimbursement Agreement. Any local project that involves utilities or railroads may require a Utility Reimbursement Agreement and/or Railroad Reimbursement Agreement. Local Project Sponsors should consult with the District Project Manager to determine if a Utility or Railroad Reimbursement Agreement will be required. More information regarding the Utility and Railroad Reimbursement Agreements can be found in Chapter 6, *Utility and Railroad Coordination*, Section 6.0.D, *Utility Reimbursement Agreement*, and 6.1.F, *Railroad Reimbursement Agreement.*

3.8 Engineering/Third Party Agreements

A. Preparation of Engineering Agreement

An Engineering or Third Party Agreement is an agreement between a consultant and Local Project Sponsor receiving project funds through a PennDOT Project Reimbursement Agreement (see Section 3.7.A. *PennDOT Project Reimbursement Agreements*). The Engineering Agreement is the document that specifically states what the consultant's responsibilities are in delivering the project scope of work and what the Local Project Sponsor's responsibilities are in terms of project administration, such as consultant invoicing. This agreement includes the consultants technical and price proposals by attachment and serves as the contract binding the consultant to complete the work in accordance with their stated scope and price. Terms and conditions related to invoicing and payment procedures, errors and omissions, claims, termination of the contract, and other legalities are also included in the Engineering Agreement. PennDOT has prepared a construction inspection scope of work template (see References, File Cabinet, File 20050501 Scope of Work For Municipal Project Consultant Construction Inspection) and a Local Project Sponsor Consultant Construction Inspection Agreement (available from the District Project Manager) that can be used for advertising for and preparing the Construction Inspection Agreement.

This section outlines the procedures to be followed by Department personnel and Local Project Sponsors for administering and monitoring of Engineering and other Third Party Agreements. Costs incurred by a consultant that is not procured in accordance with approved procedures for Federal-Aid highway projects will not be eligible for Federal-Aid participation.

Engineering Involvement Restrictions, as defined in Publication 93, Chapter 1, Section 1.5, *Engineering Involvement Restrictions*, will be applied to all Third Party Agreements. The only exception to the application of these guidelines are Agreements using a Local Project Sponsor's designated municipal engineer that is performing services as an extension of the Local Project Sponsor, as long as the municipal

engineer is qualified to perform the anticipated work and services and the type of service was included in the advertisement for the municipal engineer.

1. State Funded

The Local Project Sponsor should negotiate man-hours for preliminary engineering, final design and construction consultation services with the selected consultant. The scope of work, as determined at the Scoping Field View (and modified as necessary, with PennDOT guidance) is to be used as a basis for man-hour negotiations. See Chapter 4, *Project Development Procedures*, of this manual for more information on the Scoping Field View. If requested by the Local Project Sponsor, the PennDOT District Office will assist or advise with the negotiation of the man-hours for preliminary engineering, final design and construction consultation services with the consultant.

The consultant's scope of work may include any environmental studies or right of way appraisal or acquisition work that may be necessary for the project. The prime consultant may have to obtain a subconsultant for these tasks, if the prime is not qualified to perform the work. As an alternative, the Local Project Sponsor may select another consultant to do the work.

An engineering agreement will not be prepared by PennDOT for state funded projects. The Local Project Sponsor and consultant must prepare and execute a mutual agreement detailing the acceptable scope of work and man-hours for the project. A copy of the executed Engineering Agreement must be provided to the PennDOT Project Manager.

2. Federal Funded

When federal funds are being used for a project, PennDOT will prepare and assist with the execution of a Third Party Federal-Aid Agreement (referred to as the "Engineering Agreement") as described in Publication 93, Chapter 7, *Third Party Federal Aid Agreements*. Please note that there may be a requirement for DBE participation in federally aided projects, as indicated in the project advertisement. Whether a DBE goal is required, and what the goal should be (typically ten (10) percent), must be clarified with the District Project Manager, who coordinates with the PennDOT Central Office Bureau of Project Delivery, Contract Management Section. Before execution of the Engineering Agreement, the PennDOT Central Office Bureau of Project Delivery, Contract Management Section, will:

- Approve consultant selection procedures,
- Approve the advertisement, including the selection criteria and DBE goal,
- Approve selected consultant,
- Hold negotiations, if necessary, (may also be done by District Negotiator)
- Prepare the Engineering Agreement for design services (preliminary engineering, final design, right-of-way work, services during construction, and bridge inspection, as required). Construction inspection can be included in this agreement, if appropriate.

After the determination of the scope of work for the project, the PennDOT District Office, with input from the Local Project Sponsor, must generate the Independent/Department Estimate using the Estimate Forms found in Publication 93, Appendix 7B, *District Estimate Summary for Municipal Agreement*.

The consultant will submit their technical and price proposal to the Local Project Sponsor. The PennDOT District Office, in conjunction with the Local Project Sponsor, will perform the technical reviews of the selected consultant's technical and price proposals and document these reviews using the Review of Technical Proposal form found in Publication 93, Appendix 2G, *Review of Technical Proposal*. The

Local Project Sponsor should either reject the proposal or recommend that it be accepted by PennDOT. This recommendation should be forwarded to the District Project Manager along with:

- Approved selection procedures,
- Any limitations the Local Project Sponsor has on profit or salaries,
    - If the Local Project Sponsor has no limitations, a statement to that effect should be included.
    - If the Local Project Sponsor's limitations are not as stringent as those listed in Publication 93, Section 3.6, *Price Proposal Evaluation*, federal funds may be jeopardized, therefore, they are required to follow Publication 93.
- Evidence of the opportunity provided DBE firms,
- The extent of solicitation of consultants or evaluation of consultant qualifications,
- Reference to past submissions may be made where the Local Project Sponsor successfully utilized the same consultant on a past Federal-Aid project.

The District Project Manager will prepare and submit:

1. A cover letter transmitting the Engineering Agreement request to the Bureau of Project Delivery, Contract Management Section, including recommendations concerning the request.
2. A request for Consultant Services – Municipal Agreements or Supplemental Agreement Request – Municipal Agreements (Publication 93, Appendices 7C, *Municipal Request for Consultant Services (Other than Construction Inspection)*; 7D, *Municipal Request for Consultant Services (Construction Inspection);* or 7E, *Municipal Request for Supplemental Agreement).*
3. The Engineering District's independent estimate (Publication 93, Appendix 7B, *District Estimate Summary for Municipal Agreement*).
4. The appropriate Review of Technical Proposal form, (Publication 93, Appendix 2G, *Review of Technical Proposal*).
5. One (1) copy of the consultant's proposals submitted either hardcopy (unbound) or electronically.
6. A copy of the Local Project Sponsor's selection procedure approval letter with the District Executive's approval.
7. A copy of the consultant approval letter with approval from the PennDOT Central Office Bureau of Project Delivery, Contract Management Section.

(All forms mentioned above are found in the Appendices of Publication 93, *Policy and Procedures for the Administration of Consultant Agreements*, and can be requested from the District Project Manager as needed).

If an agreement cannot be reached on man-hours between the Local Project Sponsor and consultant, the Local Project Sponsor and PennDOT will hold negotiations, if desired by the sponsor, prior to preparing the Engineering Agreement or Supplement. When negotiations are conducted by the Department on behalf of the Local Project Sponsor, the Department's negotiation limitations on profit will not be forced on the Local Project Sponsor. However, PennDOT will limit its contribution to comply with the Department's limitations on profit. If the Local Project Sponsor's limitations are more stringent than the Department's, then those limitations will be honored by the Department. This negotiation will be coordinated by the District Project Manager.

The Contract Management Section will prepare the Engineering Agreement and provide three (3) copies to the Local Project Sponsor for review and execution by the Local Project Sponsor and the consultant. At this time, the Contract Management Section will also process the Contractor Responsibility Provision (CRP) for the agreement.

The District Project Manager will initiate a request for FHWA authorization of funds (Form D-4232, Authorization of Funds), with adequate time to secure this authorization in advance of finalizing the Engineering Agreement.

B. Approval and Notice to Proceed with Engineering Services

Whether the project is state or federally funded, the Local Project Sponsor and PennDOT will enter into a PennDOT Project Reimbursement Agreement (not to be confused with the Engineering Agreement) setting forth the methods for reimbursing the federal and/or state funds, as previously described in the Section 3.7, A, *PennDOT Project Reimbursement Agreement*, of this chapter. Any costs incurred for the Engineering Agreement prior to a fully executed Project Reimbursement Agreement cannot be reimbursed. Costs incurred prior to the issuance of a Notice to Proceed (NTP) or after expiration cannot be reimbursed.

***Note*:** In cases where the Local Project Sponsor is a municipality that must sign the agreements at a municipal meeting, the Project Reimbursement Agreement and any required Engineering/Third Party Agreements can be signed at the same meeting. HOWEVER, Notice to Proceed with the services contained in the Engineering/Third Party Agreement(s) must NOT be issued until the Project Reimbursement Agreement is FULLY executed.

When all three (3) copies of the Engineering Agreement are signed by both the Local Project Sponsor and the consultant, one (1) copy each will be retained by the consultant and the Local Project Sponsor. The Local Project Sponsor will forward the third copy to the Bureau of Project Delivery, Contract Management Section. The District Project Manager will advise the Local Project Sponsor that they can issue the consultant a written Notice to Proceed (NTP) when:

1. The PennDOT Project Reimbursement Agreement is fully executed.
2. The Engineering Agreement with the Local Project Sponsor is fully executed.
3. FHWA has granted federal authorization (via D-4232).

The consultant cannot begin work and services until issued a written NTP, which CANNOT be issued until after the Project Reimbursement Agreement is fully executed. A sample NTP letter is contained in Appendix D.

3.9 Invoicing

Invoices are submitted by the consultant to the Local Project Sponsor on a monthly basis. The invoice must contain sufficient detail to monitor project progress. The District Project Manager may provide the Local Project Sponsor/Consultant the Department's Estimated Progress Report template for use in developing their invoice (Appendix M, *Estimated Progress Report Template*). The Local Project Sponsor will review the invoice and if acceptable, draft a cover letter approving the invoice and requesting reimbursement from the Department. Included with the consultant invoices or when costs are incurred independent of a consultant invoice, the Local Project Sponsor may also include costs incurred during the respective project phase that are not covered in the engineering agreement, including, but not limited to:

- Local Project Sponsor’s employee time,
- Costs incurred in advertising for the project or other project related expenses,
- Right-of-way costs and services not included in the engineering agreement,
- Utility costs not incorporated in the project,
- Railroad costs not incorporated in the construction phase of the project.

It is important to note that these costs must be accounted for and included when funding the project. These need to be included in the Reimbursement Agreement in order for reimbursement to occur.

The Local Project Sponsor should send the cover letter and invoice to:

Pennsylvania Department of Transportation, Engineering District #-0 Office
LOCATION CODE
PO Box 69181
Harrisburg, PA 17106

A list of Location Codes can be found in Appendix N, *Organization Location Codes Matrix*.

The cover letter and invoice is sent to the appropriate Engineering District based on the location code provided. The Department's Project Manager will receive the invoice submission electronically for review and approval. The Department's Project Manager will prepare a cover letter (or if federally funded, a C-6 form "Federal Reimbursement Request" found on PennDOT's shared drive at P:/PennDOT Shared/Forms PennDOT Authorized/C-6), noting the Agreement number, Federal Project Number (FPN), and invoice amount; summarizing the funding breakdown of the payment amount. Once approved by the District, the fiscal office will enter the invoice into the Department's SAP system and forward it to the Accounts Payable Section of the Office of the Comptroller for processing. The typical timeframe from the receipt of an invoice to the Local Project Sponsor receiving a reimbursement check is 6-8 weeks. Any Local Project Sponsor that fails to submit invoices to PennDOT in a timely fashion could jeopardize reimbursement.

The Project Reimbursement Agreement is written so that the Local Project Sponsor may submit the consultant's monthly invoice to PennDOT for both federal and state projects. PennDOT will pay the federal/state share, as appropriate, of the project costs directly to the Local Project Sponsor. If indicated in the Project Reimbursement Agreement for the project, the Local Project Sponsor will have ten (10) calendar days to pay the consultant 100% of the invoice after payment from PennDOT is received. If the Local Project Sponsor does not pay within this time frame, future Project Reimbursement Agreements with that Local Project Sponsor may require the Local Project Sponsor to pay all invoices up front in their entirety before PennDOT's share payment is processed.

A Final Invoice must be prepared, marked as such and sent for each phase of the project (preliminary engineering, final design, right of way, utility and construction), as each phase is completed and all invoices received. This is necessary prior to closing out of the project.

3.10 Closing out the Agreement

Before the Engineering or any other Third Party Agreement is terminated, the Local Project Sponsor, in conjunction with the PennDOT District Office, will ensure that there is adequate documentation regarding the propriety of claims and that all terms and conditions of the agreement have been satisfied.

The Local Project Sponsor and the District Project Manager will complete a *Past Performance Report* (Publication 93, Appendix 7G D-429 *Past Performance Report (Non-Construction Inspection)* or Appendix 7H D429, *Past Performance Report – Construction Inspection*). For federally funded projects, a Certificate of Completion (Publication 93, Appendix 7I, *Certificate of Completion*) must also be prepared.

The Agreement should be closed out in an expeditious manner.

3.11 Record Keeping/Audits

If federal funding is used for all or a portion of the local projects, it is the responsibility of the Local Project Sponsor, its professional consultant(s), and contractor(s) to maintain all appropriate records for possible review by state or federal auditors. These records include, but are not limited to:

- Project plans
- Financial documents
- Meeting minutes
- Consultant selection documents
- Project scoping notes
- Environmental Clearance document (CEE) and supporting documentation (technical file)
- Right-of-Way and Utility clearances
- Construction bidding documentation
- Project-related correspondence
- Accounting records
- Supporting cost proposals
- Employee time records
- Payroll records
- Engineering Agreements
- Reimbursement Agreements
- Invoice documentation support for all work in all project phases

These records must be retained for a period of three (3) years from the date of submission of the final voucher to the FHWA. The Local Project Sponsor agrees to satisfy the audit requirements contained in the federal Single Audit Act of 1984 (31 U.S.C. Section 7501 et seq.). Failure to comply with federal procedures could result in loss or repayment of federal funds.

However, the retention requirements for right-of-way records differ. Please refer to Chapter 5, *Right-of-Way Phase*, for details on right-of-way record retention requirements.

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CHAPTER 4
PROJECT DEVELOPMENT PROCEDURES

4.0 Initiation of Project Development Process

The initiation of the Project Development Process assumes that the Local Project Sponsor has an executed Project Reimbursement Agreement and Engineering Agreement (if federal funds are involved). The Local Project Sponsor should also have received a Notice to Proceed letter for Preliminary Engineering from PennDOT.

4.1 Project Development

This section outlines the Project Development Process for the delivery of local projects. Specific activities and details related to local project delivery may vary within each District Office.

The Project Development Process varies depending on the sources of funding utilized on a project. If federal funding is applied to a project, or a federal action is required, federal procedures must be followed. If no federal funding is utilized on a project, state procedures must be followed. The District Office will provide ongoing guidance and consultation to the Local Project Sponsor and their consultant/municipal engineer throughout the Project Development Process. Projects are split into the phases listed below. However, not all phases may be required for each project.

- Preliminary Engineering
- Final Design
- Right-of-Way
- Utilities
- Construction

The preliminary engineering phase generally includes Surveys, Line and Grade, Safety Review submission, Type Size & Location (TS&L) submission, Right-of-Way Plan preparation, Utility coordination, Design Field View submission, and Environmental Clearance. Approval of these submissions, along with the Environmental Clearance, enables the Local Project Sponsor to proceed with the final design and additional phases of the project.

The final design phase is the refinement of preliminary engineering to prepare a Plans, Specifications, & Estimate (PS&E) Package, including the bidding process. This phase also generally includes Permits, Foundation submission, and Final Structure Plans.

The right-of-way phase consists of the identification, appraisal, negotiation, and acquisition of the temporary (easements) and required right-of-way areas for a project. See Chapter 5 of this manual for details on the right-of-way phase.

The utility phase consists of coordination with all utility companies within, adjacent to, or impacted by the project, in order to secure a utility clearance and to make arrangements for necessary relocations. This phase may include coordination with the Pennsylvania Public Utility Commission (PUC) for public highway-railroad crossings. If needed, a PUC Order must be obtained in order to secure state and/or federal funding. See Chapter 6 of this manual for details on the utility phase.

The construction phase consists of the physical construction of a project, including construction inspection. See Chapter 7 of this manual for details on the construction phase.

The majority of PennDOT District Offices prefer electronic submissions, as opposed to hard copy submissions, for the design submissions listed in the phases above. The Local Project Sponsor should coordinate directly with the District Project Manager to determine the preferred format of each submission.

If the local project will impact the Pennsylvania Turnpike in any way, or it is in the vicinity of an interchange or crossing, the District Project Manager must notify the District Turnpike Coordinator during preliminary engineering. Construction project coordination with the Pennsylvania Turnpike Commission (PTC) is required (through the District Turnpike Coordinator) when a construction project, including its Maintenance and Protection of Traffic Plan, is 1) crossing over or under the Pennsylvania Turnpike or 2) is within one (1) driving mile of a Pennsylvania Turnpike interchange or crossing.

The next section is formatted into Federal Funded Project Procedures and State Funded Project Procedures. The use of federal funds, or the need for a federal action, including a federal permit, will trigger compliance with the Federal Funded Project Procedures. This compliance can vary by project phase. State Funded Project Procedures apply to projects that have not used any federal funding to date and which will not have any federal funding throughout any phase of the project, including construction. The District Project Manager will provide guidance to the Local Project Sponsor regarding the required procedures, as needed.

While there is overlap between the two procedures in this section, the reader will only have to read the section that applies to their project, instead of reading each section and assessing what procedures are applicable. The activities under both the Federal and State Funded Project Procedures sections are listed in the order that the activities typically occur on a project. However, there may be some activities that will occur concurrently, depending on the specific project. The District Project Manager will provide guidance to the Local Project Sponsor regarding the activities, as needed.

A. Federal Funded Project Procedures

The flowchart in Chapter 1 Introduction, Figure 1-1 *Representative Project Flow Chart for Federal and/or State Funded Projects*, summarizes the activities required for federally funded projects. In order to provide Local Project Sponsors with a general idea of overall timeframes for the Project Development Process, the flowchart also includes the estimated time required to progress a project through each stage of the process. As per the FHWA and PennDOT *Federal-Aid Highways Stewardship and Oversight Agreement*, some local federally funded projects are considered Federal Oversight (FO) and some are considered PennDOT Oversight (PO). If FO, the FHWA will be actively involved in all phases of project delivery. If PO, FHWA involvement will be minimal, if any.

The following are descriptions for each stage of the Project Development process for a federally funded project.

1. Environmental & Engineering Scoping Field View (Federal)

A Scoping Field View will be the first step toward beginning design. This is the initial opportunity to visit the project site and discuss the proposed activities. The Local Project Sponsor will contact the District Project Manager to schedule the Scoping Field View.

Note: The Scoping Field View is an important step in establishing the scope of work for the project, and can occur before or after the consultant has been selected.

The Local Project Sponsor, Local Project Sponsor's consultant/municipal engineer, District Project Manager, District Environmental Manager (EM), District Bridge Engineer, Bicycle/Pedestrian Coordinator, and Central Office Bureau of Project Delivery - Project Development Engineer (PDE), or their representatives, should attend the field view as applicable. The need for FHWA to attend should be determined by the District in consultation with the PDE as applicable. Representation from all project disciplines is strongly encouraged, including the District Right-of-Way Unit, District Utility Relocation Unit, and District Construction Unit, to ensure that all environmental and engineering issues are identified early in the Project Development Process. Early coordination with the PennDOT Cultural Resource Professionals should also be performed on projects that may affect cultural resources, such as historic resources and archaeology.

A Scoping Document should be prepared with as much information as possible prior to the Scoping Field View, utilizing the information from the pre-TIP phase of the project, and following the procedures outlined in Publication 10B, *Design Manual Part 1B, Post-TIP NEPA Procedures*, and Publication 10C, *Design Manual Part 1C, Transportation Engineering Procedures.* The scope of work for both the environmental and engineering activities will be established at the Scoping Field View. The District Environmental Manager (EM), in consultation with the PDE and FHWA as applicable, will determine the appropriate level of environmental analysis and documentation that will be necessary for the project, in accordance with the National Environmental Policy Act of 1969 (NEPA). The District Project Manager will inform the Local Project Sponsor of their responsibilities related to required environmental studies, agency coordination, and public involvement. Any design issues or concerns, required right-of-way acquisitions, and utility relocations will be identified and reviewed with the Local Project Sponsor, including any specific design issues or coordination required for historic bridges. In addition, the need for a Design Field View submission to Central Office is determined at the Scoping Field View based on the oversight status, complexity and anticipated environmental impact of the project. The Design Field View may be waived for certain Minor PennDOT Oversight projects. If Federal Oversight, a Design Field View will be required. The District Project Manager will review the overall Project Development Procedures with the Local Project Sponsor to ensure that all project requirements are met and that federal funding is not jeopardized.

The District Project Manager will also provide the Local Project Sponsor with the Project Milestone Submission Tracking template in Appendix H and request that the Local Project Sponsor, in consultation with their consultant/municipal engineer, establish the project schedule. This project schedule must be developed using Open Plan software within thirty (30) days after receiving notice to proceed for the preliminary engineering phase of the project. This schedule will be kept as the baseline schedule throughout the duration of the project. The project submissions and approvals will be tracked using the Open Plan schedule, as well as the Project Milestone Submission Tracking template, which will both need to be updated on a monthly basis by the Local Project Sponsor and sent to the District Project Manager by the beginning of every month.

A Scoping Document will be completed by the Local Project Sponsor in the PennDOT Categorical Exclusion (CE) Expert System (http://www.dotdom2.state.pa.us/ceea/ceeamain.nsf) as soon as possible after the Scoping Field View has been held, if not already prepared, or no later than thirty (30) days of receiving notice to proceed for the preliminary engineering phase of the project. The procedures outlined in Publication 10B, *Design Manual Part 1B, Post-TIP NEPA Procedures*, and Publication 10C, *Design Manual Part 1C, Transportation Engineering Procedures*, will be followed to complete the Scoping Document. The Local Project Sponsor will notify the District Project Manager when the Scoping Document has been completed in the CE Expert System. The District Project Manager will review the document and submit it to the District Environmental Manager, ADE-Design, PDE, and FHWA, as needed, for approval. The approved Scoping Document will serve as the basis for the appropriate level of Environmental Clearance document.

A sample Scoping Document is included in Appendix O for consideration by the Local Project Sponsor. It is recommended that the Local Project Sponsor review this Scoping Document prior to the field view and give preliminary consideration to what may be involved in the project.

2. Historic Bridge Feasibility Analysis (Federal)

A Feasibility Analysis Report should be completed on historic bridges to determine if the bridge is suitable for rehabilitation, rather than assuming it has to be replaced. A historic bridge is any bridge that is listed or determined to be eligible for the National Register of Historic Places. The PennDOT Cultural Resource Professional can assist in determining if a bridge is considered historic. The report should provide a detailed analysis of the rehabilitation alternative(s) including an explanation of whether the bridge can be made adequate for the intended use of the bridge.

A Feasibility Analysis Report must be written by, or involve the assistance of, a bridge engineer who has an understanding of what makes the bridge historic and the flexibilities allowed by National Park Service Rehabilitation Standards. The preparer should coordinate with the PennDOT Cultural Resource Professional to ensure concise but thorough documentation. Other readily available documents (e.g. eligibility reports) can be referenced. It is important that the document be based upon a defensible purpose and need statement that takes into account the requirements of Section 106 of the National Historic Preservation Act of 1966 and the FHWA's Historic Bridge Program (Title 23, Section 144(o)). The purpose and need statement cannot preclude consideration of the rehabilitation alternative. The purpose and need statement should exclude extraneous information that is not related to purpose and need.

If the bridge is not considered historic, a Feasibility Analysis Report is not necessary.

3. Environmental Clearance (Federal)

The Local Project Sponsor is responsible for the completion of the environmental and engineering activities required to prepare the Environmental Clearance document, at the level determined at the Scoping Field View. The District Environmental Manager will provide guidance to the Local Project Sponsor on the required environmental resource identification, impact documentation, agency coordination, and public involvement activities for all projects.

NEPA applies to all federally funded projects, or actions that require a federal approval such as a U.S. Army Corps of Engineers Section 404 permit or a Point of Access Approval from FHWA. NEPA calls for an examination and consideration of impacts to the natural, social, and cultural environment when considering a proposed action. All approved NEPA documents are made available for public review.

Note: A NEPA clearance cannot be granted unless all phases of a project are on a fiscally constrained, air-quality conforming TIP or LRTP.

Publication 10B, *Design Manual Part 1B, Post-TIP NEPA Procedures*, may be used as reference documents to assist in identifying environmental issues. These documents also identify the required Central Office Bureau of Project Delivery and FHWA involvement in the Environmental Clearance process. Most local federally funded projects will only require a Categorical Exclusion Evaluation. However, it is possible for a higher level of environmental documentation to be required.

Additional federal and state legislation may be required to be followed on some projects. Refer to Table 4-1 for common resources and the corresponding legislation to be adhered to for federally funded local projects, as well as the applicable PennDOT publications that provide additional guidance.

TABLE 4-1 Environmental Comparison for Projects Funded with Federal Funds

		Includes State Funds	Includes Federal Funds
Enabling Legislation	PennDOT Publication	Act 120 (71 P.S. § 512)	NEPA (42 U.S.C. § 4331, 23 CFR 771, 40 CFR 1500)
Environmental Evaluation Areas*		Evaluate (Yes or No)	Evaluate (Yes or No)
Aquatic Resources**	Publication 10B	Yes	Yes
Wetlands**	Publication 10B, 325	Yes	Yes
Federal Wild & Scenic Rivers & Streams** (16 U.S.C. § 1271 et seq.)	Publication 10B	Yes	Yes
State Scenic Rivers & Streams**	Publication 10B	Yes	Yes
Navigable Waterways/Coast Guard Permit	Publication 10B	Yes	Yes
Coastal Zone**		Yes	Yes
Floodplains **	Publication 10B	Yes	Yes
Soil Erosion and Sedimentation Control**	Publication 10C	Yes	Yes
Agricultural Resources (7 U.S.C. § 4201, Act 100-71 P.S. § 106, Act 43-3 P.S. §§ 901-915)	Publication 10B, 324	Yes	Yes
Parks & Recreation Facilities (Section 4(f) (49 U.S.C § 303, 23 CFR 774) / Section 2002 (71 P.S. § 512(a)(15))	Publication 10B, 349	Yes (Section 2002)	Yes (Section 4(f))
State or National Forests (Section 4(f) (49 U.S.C § 303, 23 CFR 774) / Section 2002 (71 P.S. § 512(a)(15))	Publication 10B, 349	Yes (Section 2002)	Yes (Section 4(f))
Gamelands (Section 4(f) (49 U.S.C § 303, 23 CFR 774) / Section 2002 (71 P.S. § 512(a)(15))	Publication 10B, 349	Yes (Section 2002)	Yes (Section 4(f))
State or Federal Wilderness, Natural and Wild Areas	Publication 10B, 349	No	Yes
National Natural Landmarks		No	Yes
Heritage Geological Sites	Publication 10B	No	Yes
Hazardous/Residual Waste	Publication 10B, 281	Yes	Yes
Wildlife & Habitat (Section 4(f) (49 U.S.C § 303, 23 CFR 774)	Publication 10B, 349	No	Yes (Section 4(f))
Threatened & Endangered Plants & Animals** (16 U.S.C. §§ 1536 and 1538, 50 CFR 406)	Publication 10B, 546	Yes	Yes
Cultural Resources** (State History Code-37 P.S. §§ 101 et seq., Section 106 of the NHPA-36 CFR 800)	Publication 10B, 689	Yes (State History Code, or Section 106 of the NHPA if 404 permit)	Yes (Section 106 of the NHPA)
Air Quality	Publication 10B, 321	Yes (bridges on existing alignment with no additional travel lanes exempt)	Yes
Noise	Publication 10B, 24	Yes	Yes
Socioeconomic Issues	Publication 10B	No	Yes
Environmental Justice	Publication 10B	No	Yes
Title VI		Yes	Yes
Relocations/R-O-W Impacts	Publication 10C, 378	Yes	Yes
Section 6(f) of LWCF Act (16 U.S.C. § 4601-8(f)(3))	Publication 349	Yes	Yes
Project 70 Land Acquisition and Borrowing Act (72 Pa CS §§ 3946.1 et seq.)		Yes	Yes
Project 500 Land & Water Conservation and Reclamation Act (32 P.S. §§ 5101 et seq.)		Yes	Yes

* Determination of presence may be all that is needed however if present impact need evaluated.

** Also Needed for State Permitting – Stream Impacts, Wetlands ID/Impact, Endangered Species PNHP (PNDI), Cultural Resources State History Code, Soil Erosion and Sedimentation Control. Also Needed for Federal Permitting – Stream Impacts, Endangered Species PNHP (PNDI), Magnuson Stevens Act (essential fish habitat), Section 106 of the NHPA, Section 401 Water Quality Certification (issued or waived by State), Soil Erosion and Sedimentation Control and Antidegradation Analysis, Coastal Zone Management Act, Wild and Scenic Rivers Act.

The following provides some additional detail for the most common federal and state legislation.

- National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. §4331, 40 CFR §§ 1500–1508, 23 CFR 771) – This Act is the overarching federal legislation that requires all federal agencies to ensure that any action authorized, funded or carried out by them considers and documents the social, economic, and environmental impacts. For projects that may result in significant environmental impacts (Environmental Evaluation Report level projects), NEPA requires public review of the environmental document. PennDOT Publication 10B, *Design Manual Part 1B, Post-TIP NEPA Procedures*, provides guidance on the implementation of NEPA. (http://ceq.hss.doe.gov/nepa/regs/nepa/nepaeqia.htm) To assist federal agencies in effectively implementing the policies and provisions of NEPA, the Council on Environmental Quality issued *Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act*. (http://www.environment.fhwa.dot.gov/projdev/pd2implement.asp)

- Pennsylvania Act 120 (71 P.S. §512(b)) – This Act is the state legislation that requires the consideration and documentation of social, economic, and environmental impacts for any transportation route or program requiring the acquisition of additional right-of-way. This is the state legislation analogous to NEPA. Contact PennDOT District Office for more detailed information. PennDOT Publication 10B, *Design Manual Part 1B, Post-TIP NEPA Procedures*, provides guidance on the implementation of Act 120.

- Historic/Archaeology: Section 106 of the National Historic Preservation Act of 1966, and State History Code (16 U.S.C. § 470, 37 P.S. §§ 101 et seq.) – This Act established procedures to identify and evaluate historic and archeological sites and properties, and requires all federal agencies to ensure that any action authorized, funded or carried out by them assesses the effects of the project on these resources. The intention of the Act is to preserve these resources. PennDOT Publication 10B, *Design Manual Part 1B, Post-TIP NEPA Procedures*, and Publication 689, *The Transportation Project Development Process: Cultural Resources Handbook*, provide guidance on Section 106. FHWA has delegated much of the process for implementing the Section 106 regulations to PennDOT through a Programmatic Agreement, which is included in Appendix 1 of Publication 689. PennDOT also has signed a Memorandum of Understanding with the Pennsylvania Historical and Museum Commission (PHMC) for review of projects under the State History Code, which is included in Appendix 2 of Publication 689. Coordination with PHMC must occur for these resources. (http://www.nps.gov/history/local-law/nhpa1966.htm)
(http://www.phmc.state.pa.us/Portal/Communities/AboutPHMC/history_code_title37.pdf)

- Section 4(f): Section 4(f) of the U.S. Department of Transportation Act of 1966 as amended (49 U.S.C. § 303) – Section 4(f) of this Act stipulated that FHWA and other Department of Transportation agencies cannot approve the use of land from publicly owned parks, recreational areas, wildlife and waterfowl refuges, or historic sites eligible for or listed on the National Register of Historic Places, unless there is no feasible and prudent alternative to the use of land, or the action includes all possible planning to minimize harm to the property resulting from use. Coordination with the official with jurisdiction over these resources must occur, as well as coordination with PennDOT and FHWA. PennDOT Publication 10B, *Design Manual Part 1B, Post-TIP NEPA Procedures*, and Publication 349, *The Transportation Project Development Process: Section 4(f) Handbook*, provide guidance on Section 4(f).
(http://www.environment.fhwa.dot.gov/projdev/pd5sec4f.asp)

- Streams and Wetlands: The Federal Clean Water Act, Section 404 and Pennsylvania Dam, Safety & Encroachment Act (33 U.S.C. § 1344, 33 CFR 322 and 33, 32 P.S. §891.1 et seq., 25 Pa. Code Chapter 105) – These Acts require the documentation and permitting of any action involving stream crossings and/or impacts to wetland areas. An alternatives analysis is required showing that there is no practical alternative to construction in the wetland and that all measures to reduce harm to the wetland have been taken. Mitigation may be required for impacted areas. Coordination with the Pennsylvania Department of Environmental Protection and the U.S. Army Corps of Engineers must occur for these resources. PennDOT Publication 10B, *Design Manual Part 1B, Post-TIP NEPA Procedures*, and Publication 325, *Wetland Resources Handbook*, provide guidance on streams and wetlands. (http://www.epa.gov/owow/wetlands/regs/sec404.html)

- Farmlands: Pennsylvania Act 100 of 1979 (71 P.S. § 106) – This Act was enacted to protect farmland from being converted to nonagricultural uses as a result of a federal or state funded program. This Act also established the Agricultural Lands Condemnation Approval Board (ALCAB), which is an independent administrative board with approval authority over the condemnation of productive agricultural land for certain types of transportation projects. The Agricultural Land Preservation Policy (ALPP) (Pa Code, Chapter 7, Section 7.301 et seq.) outlines an agricultural preservation policy that all state agencies must support. ALPP is intended to protect and preserve Pennsylvania's primary agricultural land. The Federal Farmland Protection Policy Act (7 U.S.C. §4201) and Act 43 (3 P.S. §§901-915) may also apply. PennDOT Publication 10B, *Design Manual Part 1B, Post-TIP NEPA Procedures*, and Publication 324, *The Transportation Project Development Process: Agricultural Resources Evaluation Handbook*, provide guidance on agricultural resources. (http://www.palrb.us/pamphletlaws/19001999/1979/0/act/0100.pdf)

- Threatened and Endangered (T&E) Species: The Federal Endangered Species Act of 1973 (16 U.S.C. §§1536 and 1538) – Through federal action and by encouraging the establishment of state programs, the Federal Endangered Species Act provided for the conservation of ecosystems upon which threatened and endangered species of fish, wildlife, and plants depend, and therefore provides protection to species listed as threatened and endangered. Section 7 of this Act requires all federal agencies to ensure that any action authorized, funded or carried out by them is not likely to jeopardize the continued existence of listed species or modify their critical habitat. Section 9 of this Act prohibits "take" (harm, harass, killing, etc.) of species that are federally listed and establishes the potential for civil and criminal penalties. Requirements of applicable state codes, such as the Game and Wildlife Code, the Fish and Boat Code, and the Conservation of Natural Wild Plants Code should also be met for state listed species. Coordination with the Pennsylvania Fish and Boat Commission, the Pennsylvania Game Commission, the Pennsylvania Department of Conservation and Natural Resources, and the United States Fish and Wildlife Service must occur for these resources. PennDOT Publication 10B, *Design Manual Part 1B, Post-TIP NEPA Procedures*, and Publication 546, *The Transportation Project Development Process: Threatened and Endangered Species Desk Reference*, provide guidance on threatened and endangered species. (http://www.environment.fhwa.dot.gov/guidebook/index.asp.)

- Section 6(f): Section 6(f) of the Land and Water Conservation Fund Act of 1965 (16 U.S.C. 4601-4 to 4601-11) – This Act was enacted to establish a funding source to assist the states and federal agencies in meeting present and future outdoor recreation demands and needs. Federal assistance funds from the Act are authorized to the states for the planning, acquisition, and/or development of needed land and water or utilized, directly, by federal agencies for the acquisition and development of certain lands. It requires that the conversion of lands or facilities acquired

with Land and Water Conservation Act funds, as well as Project 70 and Project 500 funds, be coordinated with the Department of Interior. Usually replacement in kind is required. Coordination with the National Park Service, the Pennsylvania General Assembly, and the Pennsylvania Department of Conservation and Natural Resources must occur for these resources. PennDOT Publication 349, *The Transportation Project Development Process: Section 4(f) Handbook*, provides guidance on Section 6(f). (http://www.nps.gov/ncrc/programs/lwcf/protect.html)

- Wild and Scenic Rivers: The National Wild and Scenic Rivers Act of 1968 (16 U.S.C. 1271 et seq.) was created to preserve certain rivers with outstanding natural, cultural, and recreational values in a free-flowing condition for the enjoyment of present and future generations. The Act is notable for safeguarding the special character of these rivers, while also recognizing the potential for their appropriate use and development. It encourages river management that crosses political boundaries and promotes public participation in developing goals for river protection. Coordination with the National Park Service must occur for these resources. (http://www.nps.gov/ncrc/rivers/) The Pennsylvania Scenic Rivers Act may also apply (P.L. 1277, Act No. 283 as amended), and coordination with the Pennsylvania Department of Conservation and Natural Resources must occur for these resources. PennDOT Publication 10B, *Design Manual Part 1B, Post-TIP NEPA Procedures*, provides guidance on wild and scenic rivers. (http://www.dcnr.state.pa.us/brc/conservation/rivers/scenicrivers/index.htm)

Also refer to Publication 10B, *Design Manual Part 1B, Post-TIP NEPA Procedures,* Table 3.5, *Potential Sources of Environmental Data,* for common environmental features and information sources.

When all required environmental and engineering activities have been completed and approved by the appropriate individuals and agencies, the Local Project Sponsor is responsible for the preparation of the Environmental Clearance document in the CE Expert System. The majority of local federally funded projects will require either a Categorical Exclusion Evaluation (CEE) form or a Bridge and Roadway Programmatic Agreement (BRPA) Evaluation form, depending on the complexity of the project and potential impacts to environmental resources. Publication 10B, *Design Manual Part 1B, Post-TIP NEPA Procedures*, and the current version of the Programmatic Agreement between FHWA and PennDOT for Bridge, Roadway and Non-Complex Projects provide a list of actions and criteria to be applied to determine the appropriate level of documentation required for each project. If an Environmental Assessment (EA) or an Environmental Impact Statement (EIS) is required, the procedures outlined in Publication 10B, *Design Manual Part 1B, Post-TIP NEPA Procedures,* will be followed.

Early in the development of a project, the Local Project Sponsor will consult with the District Project Manager or District Environmental Manager to determine the level of public involvement that will be commensurate with the potential environmental impacts of the proposed project. The requirements and procedures for public involvement are found in Publication 295, *The Transportation Project Development Process: Project Level Public Involvement Handbook*. Typical public involvement activities for local projects include a plans presentation at a monthly municipal or county meeting, where the public is able to attend. If a project may have an effect on cultural resources, based on the Scoping Field View results, the Local Project Sponsor will consult with the PennDOT Cultural Resources Professionals to begin public involvement under Section 106, in accordance with Publication 689, *The Transportation Project Development Process: Cultural Resources Handbook.*

The Local Project Sponsor will notify the District Project Manager when the environmental clearance document has been completed in the CE Expert System. The District Project Manager will review the document and submit it to the District Environmental Manager, ADE-Design, District Executive, Central Office Bureau of Project Development Engineer, and FHWA, as needed, for final approval.

In order to provide the Local Project Sponsor with a general idea of the overall timeframes for the environmental clearance process, Figure 4-1, Generalized Environmental Flow Chart has been developed. This flow chart provides a high level overview of the environmental process and some guidance on the length of time generally required for the environmental activities on a local project.

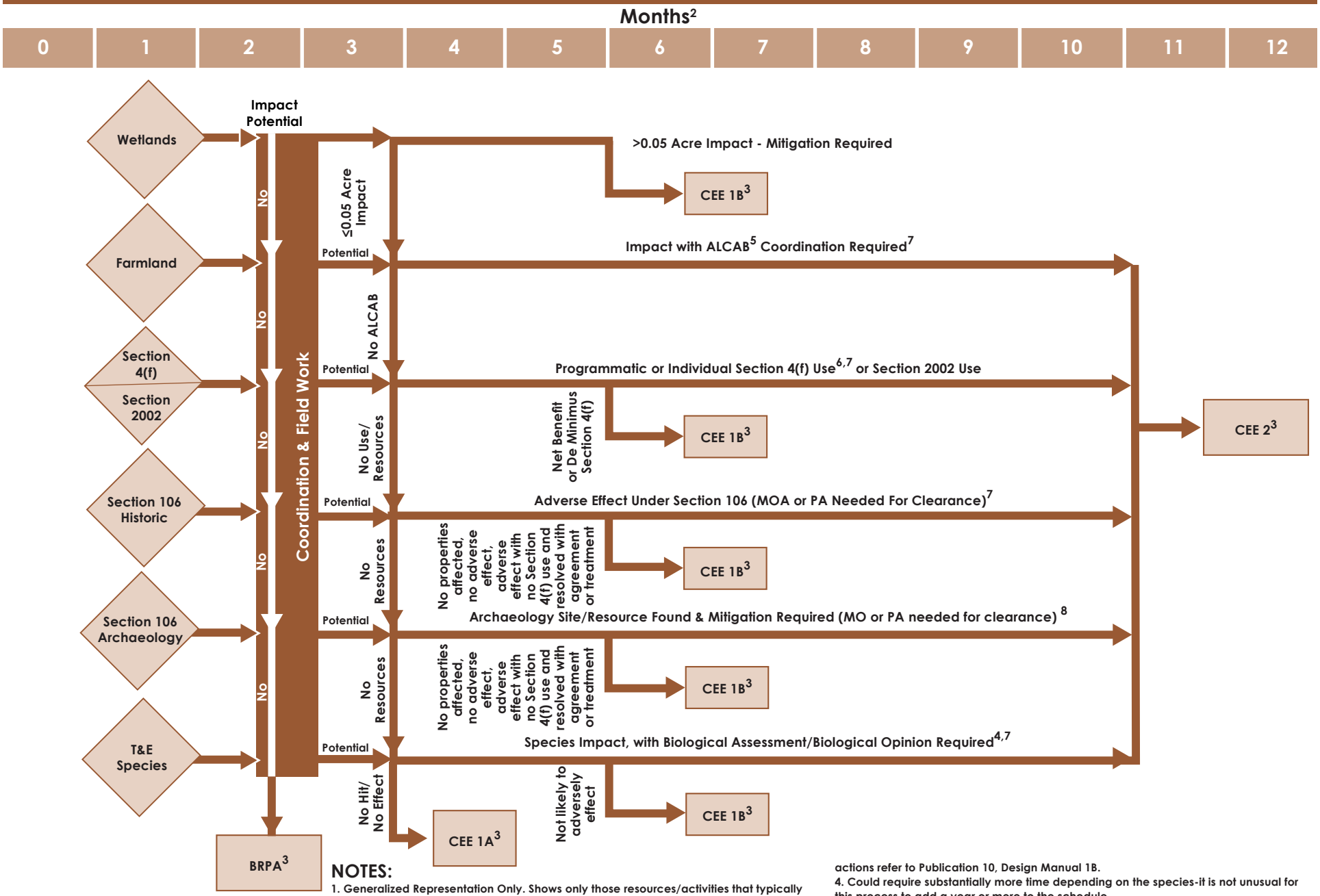
All mitigation commitments, including those listed in the environmental clearance document, are the responsibility of the Local Project Sponsor. The Environmental Commitments and Mitigation Tracking System (ECMTS) is a set of procedures developed by PennDOT to track environmental commitments and mitigation through the design, construction, and maintenance phases of transportation projects. See Publication 10X, *Design Manual 1X*, Appendix T, *Environmental Commitments and Mitigation Tracking System (ECMTS) Process*.

A project-specific ECMTS is required to monitor and document the successful implementation of environmental commitments and mitigation measures agreed to during a project's environmental compliance and permit approval processes. Because individual projects have varying environmental concerns and levels of complexity, and organization structures vary from district to district, the ECMTS process provides a flexible framework for the development of project-specific ECMTS reports. To facilitate the customization of the ECMTS report, various documents are provided in Publication 10X, Design Manual 1X, Appendix T, *Environmental Commitments and Mitigation Tracking System (ECMTS) Process*, to download and tailor to meet the specific tracking needs of a project.

Individual line items for each of the project's environmental commitments and mitigation measures are to be listed in a project-specific mitigation tracking system matrix. This matrix along with the ECMTS appropriate special provision are to be included in the PS&E package to define how a contractor is to track and sign-off on individual mitigation commitments during construction and ensure that environmental requirements are fully disclosed at the time of bidding.

After approval of the environmental clearance document, if a project scope of work must be changed later in the Project Development Process, or the laws or study area conditions change, a re-evaluation of the environmental document is required. A re-evaluation is also required prior to any major federal authorization, such as a funding request. The project will not be allowed to be advertised for bids until the re-evaluation document has been approved. If a re-evaluation is required, the procedures outlined in Publication 10B, *Design Manual Part 1B, Post-TIP NEPA Procedures*, will be followed. The Local Project Sponsor will coordinate with the District Project Manager or District Environmental Manager, who will initiate consultation as appropriate. The ramifications of expanding the scope of work will be carefully considered due to potential financial impact on the TIP or LRTP.

Figure 4-1: Generalized Environmental Flow Chart[1]



NOTES:

1. Generalized Representation Only. Shows only those resources/activities that typically drive a schedule.
2. Impact to a resource that used Land and Water Conservation Funds (LWCF) could add another 6 months to the project (Section 6(f)).
3. The required NEPA document level is determined by PennDOT/FHWA at the beginning of the project and is influenced by numerous factors and type of action; generally a BRPA can be completed in a month; a CEE 1A in 2 to 3 months; a CEE 1B in less than 6 months; and a CEE in approximately 1 year. For specifics regarding the different type of actions refer to Publication 10, Design Manual 1B.
4. Could require substantially more time depending on the species-it is not unusual for this process to add a year or more to the schedule.
5. ALCAB - Agricultural Land Condemnation Approval Board coordination and approval required to condemn agricultural land for transportation use.
6. Section 4(f) of the U.S. DOT Act of 1966 protects public parks, historic sites, public recreational facilities and other public land from conversion to transportation use.
7. It is not unusual for this activity to take more than 6 months
8. Memorandum of Agreement or Programmatic Agreement

4. Permits (Federal)

The Local Project Sponsor is responsible for the preparation of all waterway permit applications and supporting documentation, including the Hydrologic and Hydraulic Report, in accordance with the Pennsylvania Dam, Safety & Encroachment Act (32 P.S. §891.1 et seq. and 25 Pa. Code Chapter 105) and/or the Federal Clean Water Act, Section 404. The Local Project Sponsor is also responsible for coordinating the submission and approval of all permits with the Pennsylvania Department of Environmental Protection (PA DEP) and/or the U.S. Army Corps of Engineers (USACE). The PA DEP waterway permit application will be submitted to the appropriate PA DEP Regional Office. When PA DEP issues approval of the permit, PA DEP will forward the permit information directly to the USACE for approval, if required. The Local Project Sponsor is responsible for sending a copy of the secured PA DEP and/or USACE waterway permits to the District Project Manager when received.

In order to obtain a waterway permit for a culvert or bridge, projects with a drainage area greater than or equal to 0.5 square miles require hydraulic computations. The Hydrologic Engineering Centers River Analysis System (HEC RAS) hydraulic model is commonly used. However, for simple pipe or culvert design, the HY-8 Culvert Hydraulic Analysis Program should be considered rather than HEC RAS. HY-8 requires less survey and input data than HEC RAS, but HY-8 is limited in that it will not perform backwater computations. Therefore, if increases in water surface elevations must be determined, such as for projects located in a Federal Emergency Management Agency (FEMA) study area or for possible easements, HEC RAS is the preferred method. For more information on the applicability of HY-8 refer to FHWA Publication FHWA-HIF-12-026, *Hydraulic Design of Highway Culverts, Hydraulic Design Series Number 5 (HDS-5), Third Edition*, or the HY-8 User's Manual.

A National Pollutant Discharge Elimination System (NPDES) permit is required on all projects with construction related earth disturbance of one (1) acre or greater, in accordance with the Federal Clean Water Act and 25 Pa. Code Chapters 92, 93, and 102. The Local Project Sponsor, as the applicant and ultimately the permitee, is responsible for the preparation of the NPDES permit application and supporting documentation, including the Erosion and Sedimentation Control Plan, which should be part of the NPDES permit application. The Local Project Sponsor is also responsible for coordinating the submission and approval of the NPDES permit with the PA DEP. The Local Project Sponsor is responsible for sending a copy of the secured NPDES permit to the District Project Manager when received. If a Soil Erosion and Sedimentation Control Plan (E&SCP) is needed for a local project, this plan must be approved by the County Conservation District to determine if it meets the erosion control requirements of the PA DEP. The E&SCP approval is part of the Chapter 105 and the NPDES permit application, if required. The Local Project Sponsor is responsible for sending a copy of the E&SCP approval and the NPDES permit, if required, to the District Project Manager when received.

When sending any local permit submission to PADEP for a federally funded project, the Local Project Sponsor should attach a cover sheet printed on green paper that includes the following statement: "This Project Involves Federal Transportation Funds." Also note on the cover sheet that this local project is eligible for review by the PennDOT T-21 funded engineer and biologist in accordance with the Interagency Memorandum of Understanding between PennDOT and PADEP." This cover sheet will allow PADEP to easily recognize that a permit submission is eligible for review under the Memorandum of Understanding and to provide expedited reviews of permit applications for federally funded projects.

Note: All permits must be in place prior to approval of the Plans Specifications & Estimate package and advertisement.

5. Design Field View Submission (Federal)

Local projects must be developed in accordance with the highway design criteria outlined in Publication 70, *Guidelines for the Design of Local Roads and Streets*, and Publication 13M, *Design Manual Part 2, Highway Design* (DM2). Any deviation from Publication 70 or DM2 criteria will be subject to the approval of the Central Office Bureau of Project Delivery and/or FHWA for federally funded projects. The inclusion of the design criteria in the above manuals does not imply that existing roadways and bridges, which were designed and constructed using different criteria, are unsafe, nor does it mandate the initiation of improvement projects to meet today's criteria. Many existing facilities that met design criteria at the time of their construction safely and efficiently accommodate current traffic, unless a safety or congestion problem exists. Once a new or reconstruction project is identified, the above manuals shall be used as a guide to determine the appropriate design criteria to be applied.

The purpose of a Design Field View submission is to facilitate review comments on the proposed preliminary design of the project. It results in a consensus on critical issues and identifies aspects of the project requiring special attention in final design. The need for a Design Field View submission is determined at the Scoping Field View based on the oversight status (PO versus FO), complexity and anticipated environmental impact of the project. Most Design Field View submissions are not submitted to Central Office for review unless the project is a Moderately Complex or Most Complex (Major) project. See Publication 10, *Design Manual Part 1*, Tables 2.1, 2.2 and 2.3 for more information on project complexity.

It should be noted that while a Design Field View Meeting could be waived, all of the materials typically required per Publication 10C, *Design Manual Part 1C, Transportation Engineering Procedures,* Figure 3.2, *Design Field View (DFV) Documentation and Submission Checklist* will still need to be prepared for submission to the District Office. The expectations by the PennDOT Project Manager for the preparation of materials should be conveyed in the scope of work prepared for the project. A Safety Review submission will also be prepared and the timing of this submission and the Safety Review Meeting as well as the expectations for this submission by the PennDOT Project Manager should be conveyed in the scope of work prepared for the project. These two submissions (Design Field View and Safety Review) may be combined into one (1) submission.

If necessary, a Design Field View meeting will be conducted prior to approval of the Design Field View submission. The Design Field View meeting complements the Design Field View submission and is typically held within a few weeks of the submission. Depending on the project oversight status and complexity, FHWA and various Central Office Bureaus may elect to participate in the meeting. A Design Field View meeting is expected for Federal Oversight projects and typically requires the highest level of participation. For certain local federally funded Minor PennDOT Oversight projects, the Design Field View meeting may be waived.

If the local project will impact the Pennsylvania Turnpike in any way, or if it is in the vicinity of an interchange or crossing, the Local Project Sponsor must notify the District Project Manager during preliminary engineering, who will contact the District Turnpike Coordinator. Construction project coordination with the Pennsylvania Turnpike Commission (PTC) is required (through the District Turnpike Coordinator) when a construction project, including its MPT or Detour Plan, is 1) crossing over or under the Pennsylvania Turnpike or 2) is within one (1) driving mile of a Pennsylvania Turnpike interchange or crossing.

A pavement design submission and approval is not required unless the local project includes pavement work on more than 500 feet of state owned roadway. The Local Project Sponsor should ensure that the pavement design and proposed pavement depths for work on locally owned roadways meet or exceed any

local criteria and standards. For state roadways, the proposed pavement depths must meet or exceed the minimum depths specified in Publication 242, *Pavement Policy Manual*. For more information on pavement design procedures, reference Publication 242, *Pavement Policy Manual*.

DM2 Chapter 1 requires a design exception justification be prepared and approved when design features do not meet PennDOT design criteria. Design exceptions are to be applied and developed in accordance with Publication 10X, *Design Manual Part 1X, Appendices to Design Manuals 1, 1A, 1B, and 1C*. The guidance in Publication 10X, Appendix P, *Design Exceptions*, will be followed in the development of justifications for design exceptions for roadway and bridge features that do not meet PennDOT design criteria. The design exception documentation will be prepared by the Local Project Sponsor and submitted to the District Project Manager as part of the Design Field View submission, if required, or at the end of Preliminary Engineering. The District Project Manager will coordinate with the District Executive and the Central Office Bureau of Project Delivery (as needed) to obtain approval of design exceptions for federally funded local projects. If FO, FHWA may also need to issue approval.

6. Bridge Type, Size and Location (TS&L) Review (Federal)

Federally funded local bridge projects must be designed to comply with the American Association of State Highway and Transportation Officials (AASHTO) Load and Resistance Factor Design (LRFD) Bridge Design Specifications and PennDOT specifications and standards, in accordance with the criteria in Publication 15M, *Design Manual Part 4* (DM4). The advantage of complying with PennDOT bridge standards and specifications is that PennDOT has developed bridge design tools to improve project delivery. The PennDOT bridge design tools include various bridge design and rating software, Bridge Automated Design and Drafting (BRADD), various approved structural products and systems which add efficiency to the design process, and provide a level of consistency and quality to bridge design. Bridge replacement designs shall result in a completed bridge that will carry maximum legal loads and the completed structure shall not be classified as structurally deficient. Bridge rehabilitation designs shall comply with the rehabilitation criteria outlined in DM4. For existing historic bridges, the Feasibility Analysis will provide guidance as to whether the bridge should be replaced or rehabilitated and will also provide the specific details regarding the design criteria.

A Type, Size, and Location (TS&L) study must be conducted by the Local Project Sponsor to select and justify the proposed bridge type, size, and location based on project requirements, including least initial cost, for all bridge projects. This study will be developed based on the previous phases of study completed for the project. A preliminary cost comparison of viable structure types shall be made to support the recommendations of the TS&L study.

A TS&L submission may be prepared by the Local Project Sponsor in accordance with the Streamlined TS&L Submission requirements outlined in DM4, Chapter 1.9.3.3.2, *Streamlined TS&L*. The Local Project Sponsor will send the submission to the District Project Manager who will ensure that the overall scope of work is compatible with the scope developed at the Scoping Field View. The District Bridge Unit will review the TS&L submission to ensure the acceptability of the bridge submission and issue approval.

If bridge features do not meet PennDOT design criteria, a design exception request must be prepared by the Local Project Sponsor in accordance with Publication 10X, *Design Manual Part 1X, Appendices to Design Manuals 1, 1A, 1B, and 1C*, Appendix P, *Design Exceptions*, for PennDOT approval.

a) Bridge Policy

The Local Project Sponsor must use PennDOT's Bridge Automated Design and Drafting (BRADD) software for all single span local bridge projects funded in part by PennDOT as per Publication 15M,

Design Manual Part 4 (DM-4), Chapter 1.4.2, *Bridge Automated Design and Drafting System (BRADD)*. Information about the licensing of BRADD is available on the PennDOT website (www.dot.state.pa.us) under the "Services & Software" link, and under the "BRADD Software" link.

When appropriate, the Local Project Sponsor may consider the use of durable timber bridges that meet Department standards and the BLC-560M series. These will be considered on a case-by-case basis. Timber bridges may be considered under the following circumstances:

- Low-speed, low-truck-volume roads. Average Daily Truck Traffic (ADTT) less than 25 or Average Daily Traffic (ADT) less than 750; whichever governs.
- A location where no debris exists for a condition where a timber pile pier is needed.
- At locations where a timber pile substructure can be constructed economically, i.e., timber piles can be driven as friction piles to sufficient depth below potential scour depth and without being damaged, to get adequate lateral support. Generally, this is a problem because of the geology of Pennsylvania.

A design option for timber bridges is the design of a hybrid timber bridge. A hybrid timber bridge utilizes a timber glue-laminated deck, steel I-beam superstructure, and concrete abutments and wings. The Department has developed an interactive instructional program on CD for the application of hybrid timber bridges. A copy of the CD can be obtained by contacting the District Project Manager.

7. Bridge Foundation Submission (Federal)

The Local Project Sponsor for federal local bridge projects must obtain subsurface information at most proposed structure sites and prepare a Foundation Submission in accordance with the streamlined Foundation requirements outlined in Publication 15M, *Design Manual Part 4*, Chapter *1.9.4.3.2, Streamlined Foundation*. Reconnaissance for soils and geological engineering will generally consist of the following five (5) phases:

- Search of published and unpublished information
- Visual site inspection
- Development of subsurface exploration program, in accordance with Publication 293, *Geotechnical Engineering Manual*
- Subsurface exploration
- Geological engineering report

This information should be sufficient to determine the relative advantages of placing the structure at the various locations being considered and to allow the District Geotechnical Engineer to concur that the most suitable type of foundation was selected.

The Local Project Sponsor will ensure that adequate subsurface investigation information is available when the Foundation submission is submitted to the District Project Manager, for review by the District Bridge Unit. Borings and rock or soil properties will be reviewed by the District Geotechnical Engineer. The foundation type must be evaluated to ensure it is reasonable for the site and that practical alternates have been considered. The footings will be evaluated to ensure that they are adequately located for scour and proper mitigation is provided. When all requirements are met, the District Bridge Engineer will issue approval of the Foundation submission.

8. Final Structure Plans (Federal)

The Final Structure plans, computations and any special provisions related to a local federally funded bridge project must be prepared by the Local Project Sponsor in accordance with Publication 15M, *Design Manual Part 4* (DM4). The Local Project Sponsor will submit this information to the District Project Manager, who will coordinate with the District Bridge Unit for review and approval. This review is to ensure structural adequacy and constructability of the bridge. The approval of the Final Structure plans, computations, and special provisions for local bridge projects is typically issued by the District Bridge Engineer. However, approval may also be required by the Central Office Bureau of Project Delivery for some bridge types. The required approvals are listed in DM4, Table 1.9-3.

The District Bridge Engineer will sign the first sheet of the Final Structure plans and indicate the approval date on the remaining sheets.

9. Minor Projects Design Procedures (Federal)

If a Local Project Sponsor has been approved to follow the Minor Projects Design Procedures for Consultant Designed Projects in Publication 10X, *Design Manual Part 1X*, Appendix AB for a local federally funded project, this process should reduce the number of project reviews and project delivery time. This administrative option is discussed in Chapter 3, *Project Management Processes,* Section 3.4.B.1, *Local Administration and Management / Reduced PennDOT Review*. This option allows the Local Project Sponsor to maintain administrative and managerial control of the project. It requires a PennDOT experienced consultant to be selected to design the project, and reduces the number of design submissions that the PennDOT District Office must review and approve.

The Local Project Sponsor will still be required to obtain the standard preliminary engineering phase approvals from the Department, including Environmental Clearance, Design Field View, Design Exceptions, and Type, Size, and Location (TS&L). However, the PennDOT experienced design consultant will be responsible for the final design submissions. The District Office will only review the following final design submissions, which must be completed in accordance with PennDOT policies, procedures, and specifications:

- Foundation Report
- Pavement Design Approval request (if more than 500 feet of work on a state route)
- Right-of-Way Clearance submission
- Utility Clearance submission
- Railroad Clearance submission
- Technically Infeasible Forms
- Proprietary Items
- Permanent and Temporary Traffic Signal Plans
- Road User Liquidated Damages
- Third Party Agreements
- Plans, Specifications and Estimate (PS&E)
- Traffic Control Plan (if involving detour on state route)

The Central Office Bureau of Project Delivery will not be involved with the review of the final design submissions.

The design consultant will be responsible for providing a signed certification letter to the District Office stating that a complete quality control and a quality assurance check have been performed on all final

design submissions that have not been reviewed by the District Office. A sample certification letter can be found in Publication 10X, *Design Manual Part 1X*, Appendix AB. In addition, the design consultant is responsible for signing and sealing all plans. The District Office will not seal any plans, unless it has performed a review and issued approval for a submission. For example, the structure plan does not need to be signed by the District Office, but the right-of-way plan must be signed by the District Office. The District Executive, Deputy Secretary and Secretary of Transportation will continue to sign the title sheet of all appropriate plans.

If at any time during the project, PennDOT has reason to believe that proper procedures are not being followed, the Local Project Sponsor may be required to follow the standard PennDOT review process.

10. Right-of-Way Phase (Federal)

Many federally funded local projects require a right-of-way phase, whether for acquisition of real property or for temporary or permanent easements. The Local Project Sponsors who receive federal funds for projects involving the acquisition of real property need to be aware of the basic right-of-way policies that must be followed in order to ensure that they do not jeopardize funding for their project. Chapter 5, *Right-of-Way Phase*, of this manual discusses the requirements and procedures for the acquisition of right-of-way.

11. Utility Phase (Federal)

Many federally funded local projects require a utility phase, to coordinate with any utilities and railroads within the project area. Chapter 6, *Utility and Railroad Coordination*, of this manual provides information on the requirements and procedures when a utility requires relocation and when the Public Utility Commission (PUC) must be involved in cases of railroad interest in a local project.

12. Plans, Specifications and Estimate (PS&E) Package (Federal)

At the end of the final design phase of a project, the Local Project Sponsor is to develop the Plans, Specifications & Estimate (PS&E) package in PennDOT's Engineering and Construction Management System (ECMS) that will be used to secure bids for the project. All plans are to generally comply with Publication 14M, *Design Manual Part 3, Plans Presentation*, unless the nature of the project dictates that another acceptable plans presentation format should be used. See Appendix Q, Construction Plan Checklist, for guidance on items to be checked during plan preparation. Item numbers for bridge and highway construction work are to adhere to the ECMS Master Items List and the modified-standard and non-standard item numbering procedure outlined in Publication 51, *PS&E Package Delivery Process Policies and Preparation Manual*. Work class codes must be assigned to all bid items, so the prequalification of contractors can be evaluated by PennDOT after the bid opening has occurred. Structures require a bid alternate to ensure competition between material vendors. Project specific specifications are to follow the format of and refer to the version of Publication 408, *Specifications*, that will be in effect as of the anticipated bid opening date for the project. All federally required standard special provisions are also to be included in the PS&E package.

A construction cost estimate must be prepared by the Local Project Sponsor, following the guidance in Publication 352, *Estimating Manual*. Construction inspection cost estimates are to be included in the construction estimate. The Local Project Sponsor should discuss the estimated construction inspection costs with the District Project Manager. Allowable construction engineering costs may include such work items as inspection, certification, and test of materials and surveys in accordance with the Federal-Aid Policy Guide, Chapter I, Subchapter B, Part 140, and 23 C.F.R. § 1.11. Such costs are eligible for federal participation only to the extent that they are directly attributable and properly allocable to the project.

If federal or state funding is used for construction inspection, PennDOT must be involved with reviewing and/or preparing construction inspection agreements between the Local Project Sponsor and the consultant prior to advertisement.

For most local federally funded projects, the Local Project Sponsor is required to adhere to PennDOT and the American Association of State Highway and Transportation Officials (AASHTO) design specifications. Consequently, the project is to be designed in a common sense manner, taking into account, where applicable, guidance prepared by the various professional organizations. A clear, understandable, biddable, and buildable plan is to be prepared. The District Office is to provide general guidance to the Local Project Sponsor on the content and quality of the PS&E package prior to its development, and review the package once it is completed to ensure that an acceptable bid package has been developed and that all of the proposed work is eligible for federal funding. The PS&E package must be prepared in ECMS using PennDOT's format.

All PS&E packages for federally funded local projects must include the following elements:

- Final design plans, including tabulations and summaries of work items,
- Bid specifications applicable to the particular project and any necessary attachments,
- Cost estimate (including lump sum justification and cost driver analysis forms; see Publication 352, *Estimating Manual*),
- Pre-Bid Construction Schedule, must include 90 days from bid opening date to anticipated Notice to Proceed date (consult with the District Project Manager regarding proper format),
- Subsurface Utility Engineering (S.U.E.) forms, if applicable (see Publication 16M, *Design Manual 5*) (See Chapter 6, *Utility and Railroad Coordination*),
- Environmental Clearance document, along with Environmental Commitments and Mitigation Tracking System (ECMTS), and a re-evaluation if necessary,
- Utility Clearance Certification (See Chapter 6, *Utility and Railroad Coordination*),
- Railroad Certification (See Chapter 6, *Utility and Railroad Coordination*),
- Right-of-Way Clearance (See Chapter 5, *Right-of-Way Phase*),
- All required permits (PA DEP Waterway Permit, USACE Permit, NPDES Permit),
- PUC order, if railroad is involved (See Chapter 6, *Utility and Railroad Coordination*),
- All executed Reimbursement Agreements (See Chapter 3, *Project Management Processes*),
- Executed Construction Inspection Agreement and Inspection Staffing Letter (See Chapter 3, *Project Management Processes*),
- Disadvantaged Business Enterprise (DBE) requirements (established by Central Office Bureau of Project Delivery),
- Form D-4232 Federal Fiscal Authorization, for federal construction funds, and Work Breakdown Structure (WBS) / ID-21 Form for state construction funds if needed,
- Federal Wage Rates,
- Public Works Employment Verification Requirements,
- Any other required approvals or unique items that should be called to the attention of the District Office, including, but not limited to, Proprietary Item Approval, Pavement Design Approval, Design Exception Approvals, RULDs, and PennDOT Bulletin 15 approved materials,
- All other federal requirements/provisions.

Note: All projects must have an executed reimbursement agreement for the construction phase and an executed construction inspection agreement in place prior to advertisement.

The plans are to be size 22-inch x 34-inch. The specifying of proprietary items will not be permitted without the prior written approval of PennDOT Central Office and FHWA, as applicable. Publication 51,

Chapter 19, *Standard & Proprietary Materials/Products/Processes Specifications*, includes information on submissions to request proprietary item approval. Proprietary item approval is required as part of the project PS&E package. Therefore, justification for proprietary item approval will be discussed with the PennDOT Project Manager and a letter will need to be submitted by the Local Project Sponsor to the PennDOT Project Manager requesting approval of the item well in advance of the PS&E. If the justification is determined to be sound, the letter will be forwarded to PennDOT Central Office and FHWA, as applicable, for final approval. Every attempt should be made to not specify a proprietary item.

Publication 51, *PS&E Package Delivery Process Policies and Preparation Manual*, includes a PS&E submission certification list for standard PennDOT review process projects, which will be used to ensure that all of the applicable information is included in the PS&E package. The certification list items are applicable to projects where the bid opening will be administered by PennDOT on behalf of the Local Project Sponsor, using ECMS, as well as projects where the Local Project Sponsor has been authorized to conduct the bid opening locally. See Appendix G, Projects Not Let or Administered in ECMS, for the paper let process. As of 2013, PennDOT requires all local projects to be let in ECMS, except for unusual circumstances approved by the Bureau of Project Delivery, Project Schedules, Specifications and Constructability Section Chief.

The Local Project Sponsor will submit the PS&E package via ECMS to the District Project Manager at least nine (9) to fourteen (14) weeks prior to the bid opening date, depending on the project complexity, to allow adequate time for District Contract Management review, and PennDOT Central Office and FHWA review if necessary. The Local Project Sponsor should coordinate with the District Project Manager to determine the PS&E package submission timeframe for each project. All projects must allow at least ninety (90) days from the bid opening date to the anticipated Notice to Proceed date. If less than ninety (90) days is needed, the Local Project Sponsor must obtain approval from the Central Office Bureau of Project Delivery, Highway Delivery Division to reduce the timeframe. The following information details responsibilities related to the PS&E package for ECMS lets:

- **District Contract Management:** Reviews PS&E package in ECMS. Approves the PS&E package and advertises the project in ECMS, as described in Section 4.1.A.13. *Advertisement*. For Federal Oversight projects, FHWA will also review and approve the PS&E package.

- **Central Office:** Conducts bid opening (Section 4.1.A.14.e *Bid Opening*) and reviews the bids. If a bid justification is needed, the District Office, with input from the Local Project Sponsor, prepares the justification for review and approval by the Central Office Bureau of Project Delivery, Contract Management Section, Contract Awards.

- **Local Project Sponsor**: Concurs to award/reject the bid via ECMS. For Federal Oversight projects, FHWA will also concur to award/reject.

- **Central Office**: Awards the contract in the name of the Local Project Sponsor and facilitates contract execution (or bid rejection).

- **Local Project Sponsor**: Executes the contract via ECMS, and coordinates with the District Office to issue the Notice to Proceed via ECMS (See Chapter 7, *Construction Phase*).

The Local Project Sponsor will also adhere to the local government bidding procedures, which do not conflict with federal or state regulations, contained in the Municipal Codes for all projects.

13. Advertisement (Federal)

When the PS&E package has been approved by the District Contract Management Unit and FHWA, if Federal Oversight, the construction phase of the project has been included in an executed PennDOT Project Reimbursement Agreement (See Chapter 3, *Project Management Processes*), the construction inspection agreement has been executed, the Form D-4232 Federal Fiscal Authorization has been approved authorizing the federal funds for construction, and the ID-21 Form has been approved authorizing the state funds for construction, if applicable, the bid package will be advertised. For local federally funded projects, an advertisement period of five (5) weeks is required for minor projects, six (6) weeks for moderately complex projects, and seven (7) weeks for most complex/major projects.

As of 2013, all local projects must be advertised using ECMS unless an exception has been granted by the Bureau of Project Delivery, Project Schedules, Specifications and Constructability Section Chief. For projects where the Local Project Sponsor has received prior written authorization to conduct the bid opening locally see Appendix G, Projects Not Let or Administered in ECMS, for the local advertisement and letting procedures.

14. Project Letting (Federal)

a) Bid Package Questions

During the project advertisement period, bidders will have the opportunity to ask questions about the bid package via ECMS. All questions will be posted by the bidders in ECMS and responses will be published in ECMS by the District Contract Management Unit, with the assistance of the District Project Manager and Local Project Sponsor. Questions posed through an alternate method will not be answered and bidders will be directed to ECMS to post a question. All questions must be posted by the bidders no later than three (3) working days (11:00AM on Monday) prior to the bid opening date (which typically occurs on a Thursday). ECMS will not allow any questions to be posted after this time. Responses to all questions must be published by the District Contract Management Unit no later than two (2) working days (12:00AM midnight on Tuesday) prior to the Thursday bid opening date. ECMS will not allow any responses to be published after this time.

b) Addenda

The District Contract Management Unit will issue and publish all addenda to the bid package via ECMS, with the assistance of the District Project Manager and Local Project Sponsor. All addenda must be published by the District Contract Management Unit no later than three (3) working days prior to the Thursday bid opening date. Any addenda published after midnight on Monday for a Thursday bid opening, will require the project to be moved to a later bid opening date. For Federal Oversight projects, FHWA must review and approve all addenda. Bureau of Project Delivery, Project Schedules, Specifications and Constructability Section will publish the addenda.

c) Pre-Bid Conference

If necessary and specified in the bid package, a pre-bid conference will be conducted for the purpose of discussing essential matters pertaining to the proposed work with prospective bidders and other interested parties. The majority of local federally funded projects will not require a pre-bid conference. Pre-bid conferences are generally held on projects of significant size and complexity, projects containing unusual special provisions or environmental considerations, projects involving significant railroad coordination, or projects with unusual construction sequencing or schedule constraints. For these reasons, pre-bid conferences are generally only held on projects with a $10 million construction estimate or greater.

Information relating to the scheduling of a pre-bid conference is to be included in the bid package. Mandatory pre-bid conferences will be used only when it is imperative that special attention is drawn to particular details or conditions of the project so that the contractor fully understands the bid package and provides an appropriate bid. It is highly recommended that an optional pre-bid conference be used instead of a mandatory pre-bid conference. Mandatory pre-bid conferences may restrict the number of bidders.

The Local Project Sponsor, District Project Manager, District Contract Management representative, and District Assistant Construction Engineer (ACE) who will administer the contract are to participate in the pre-bid conference along with other interested parties, such as representatives from utilities and other participating governmental agencies. All attendees are required to sign in to the conference.

Informal minutes of the pre-bid conference are to be kept by the District Project Manager for information and file, but are not considered part of the contract and may not be enforced as such. Only directives and changes issued via an addendum are binding. If revisions to the bid package are necessary as a result of an issue discussed during the pre-bid conference, the required addendum is to be issued promptly thereafter. As part of the agenda at the pre-bid conference, prospective bidders are to be informed that only DBE/MBE/WBE firms listed in the Pennsylvania Unified Certification Program (PA UCP) may be used. The District ACE assigned to oversee the project will ensure that all pertinent matters are discussed.

Publication 51, *PS&E Package Delivery Process Policies and Preparation Manual*, includes additional guidance on the pre-bid conference.

d) Qualification of Contractors

If a local project will utilize state and/or federal funds or is located within PennDOT right-of-way, PennDOT prequalification of contractors is required. Prequalification is also required for projects located in local right-of-way if the PennDOT Project Reimbursement Agreement with the Local Project Sponsor requires PennDOT prequalification, or if the Local Project Sponsor elects to require PennDOT prequalification. The only exception to these scenarios would be projects where more than 50% of the work in the bid package is considered miscellaneous. In this case, the Local Project Sponsor could obtain a prequalification waiver from the Department in advance of advertising the project for bids. The Local Project Sponsor should contact the District Project Manager to determine if this is applicable to a specific local project.

Contracting firms prequalified as subcontractors only, under PennDOT prequalification regulations, may be considered eligible to submit bids on local projects as a prime contractor, consistent with their qualifications, provided the bid package indicates this, and the firm meets the 50% prequalification requirement specified in 67 PA Code Chapter 457, *Regulations Governing Prequalification of Prospective Bidders*.

Only contractors meeting the prequalification and registration requirements specified in Publication 408, Section 102.01, *Prequalification of Contractors and Subcontractors*, will be allowed to submit bids electronically in ECMS for federally funded local projects, unless a prequalification waiver has been previously approved and included in the bid package or if the bid package indicates that subcontractors are allowed to bid as prime contractors.

e) Bid Opening

PennDOT will electronically open bids on behalf of the Local Project Sponsor at the specified bid opening date and time.

f) Bid Justification and Award Process

After the bids have been submitted electronically in ECMS for a local project, the Central Office Bureau of Project Delivery will evaluate the low bid and recommend award or rejection, as appropriate. The Local Project Sponsor is to concur electronically with the award, using ECMS, to advance the contract to Award status. For Federal Oversight projects, FHWA will also concur to award/reject the contract. ECMS Municipal Concurrence to Award will follow this process:

1. Users in the Local Project Sponsor's "Municipal Approver" security group will receive an email that Concurrence to Award is needed.
2. Login in to www.dot14.state.pa.us/ECMS/ using the "Municipal Approver" User ID and Password.
3. Once in ECMS, click on "Construction Projects":
    a. Projects
    b. Enter ECMS project number, press Go
    c. Local column header "Award"
    d. Select "Award Checklist"
    e. Locate and Select "Workflow" button at top of screen
    f. Click "Approve" from drop down list
4. The contract will then be electronically awarded by PennDOT.

15. Construction Contract (Federal)

a) Preparation and Execution of Contract

After the Concurrence to Award process has been completed, the Central Office Bureau of Project Delivery will electronically forward the contract in ECMS to the contractor and Local Project Sponsor for electronic signature and execution. A sample construction contract is included in Appendix R, Sample Construction Contract. The contractor will be the first party to electronically sign the contract in ECMS. PennDOT will review and electronically approve signatures on the contract and payment and performance bonds. PennDOT will review, approve, scan, and link the insurance certificate in the ECMS Contract Awards screen. The Local Project Sponsor will then use the following process to execute the contract in ECMS:

1. Users in the Local Project Sponsor's "Municipal Approver" security group will receive an email indicating the contract is available to sign for execution.
2. Login to www.dot14.state.pa.us/ECMS/ using the "Municipal Approver" User ID and Password.
3. Once in ECMS, click on "Construction Projects":
    a. Projects
    b. Enter ECMS project number, press Go
    c. Local column header "Award"
    d. Select "Contract"
    e. Locate and select "Workflow" button at top of screen
    f. Click "Sign" from drop down list
4. Users in the Local Project Sponsor's "Municipal Legal" security group (Solicitor) will then receive an email indicating the contract is available to approve.
5. Login to www.dot14.state.pa.us/ECMS/ using the "Municipal Legal" User ID and Password.
6. Click on "Construction Projects":
    a. Projects
    b. Enter ECMS project number, press Go
    c. Local column header "Award"
    d. Select "Contract"

e. Locate and select "Workflow" button at top of screen
f. Click "Accept" from drop down list

For projects where the Local Project Sponsor has received prior written authorization to conduct the bid opening locally see Appendix G, Projects Not Let or Administered in ECMS, for the local contract preparation and execution procedures.

When the contract has been fully executed, the Local Project Sponsor can proceed with the construction of the project, as outlined in Chapter 7, *Construction Phase*, of this manual. A printable version of the executed contract will also be available in ECMS for use by the Local Project Sponsor and project team.

b) Prohibition Clauses

Prohibition Clauses that exclude certain factions from participating are not to be included in contracts for local projects.

c) Protest Matters

Any actions by parties protesting the advertisement, award, or execution of a contract for a local project are the responsibility of the Local Project Sponsor and not PennDOT.

B. State Funded Project Procedures

The flowchart in Chapter 1, Figure 1-1, *Representative Project Flow Chart for Federal and/or State Funded Projects*, summarizes the activities required for state funded projects. In order to provide Local Project Sponsors with a general idea of overall timeframes for the Project Development Process, the flowchart also includes the estimated time required to progress a project through each stage of the process.

The following are descriptions for each stage of the Project Development Process for a state funded project.

1. Environmental & Engineering Scoping Field View (State)

A Scoping Field View will be the first step toward beginning design. This is the initial opportunity to visit the project site and discuss the proposed activities. The Local Project Sponsor will contact the District Project Manager to schedule the Scoping Field View.
Note: The Scoping Field View is an important step in establishing the scope of work for the project, and can occur before or after the consultant has been selected.

The Local Project Sponsor, Local Project Sponsor's consultant/municipal engineer, District Project Manager, District Environmental Manager (EM), District Bridge Engineer, Bicycle/Pedestrian Coordinator, and Central Office Bureau of Project Delivery Project Development Engineer (PDE), or their representatives, should attend the field view as applicable. Representation from all project disciplines is strongly encouraged, including the District Right-of-Way Unit, District Utility Relocation Unit, and District Construction Unit, to ensure that all environmental and engineering issues are identified early in the Project Development Process. Early coordination with the PennDOT Cultural Resource Professionals should also be performed on projects that may affect cultural resources, such as historic resources and archaeology.

A Scoping Document should be prepared with as much information as possible prior to the Scoping Field View, utilizing the information from the pre-TIP phase of the project, and following the procedures outlined in Publication 10B, *Design Manual Part 1B, Post-TIP NEPA Procedures*, and Publication 10C, *Design Manual Part 1C, Transportation Engineering Procedures.* The scope of work for both the environmental and engineering activities will be established at the Scoping Field View. The District, in consultation with the PDE if needed, will determine the appropriate level of environmental analysis and documentation that will be necessary for the project and inform the Local Project Sponsor of their responsibilities related to required environmental studies, agency coordination, and public involvement. Any design issues or concerns, required right-of-way acquisitions, and utility relocations will be identified and reviewed with the Local Project Sponsor, including any specific design issues or coordination required for historic bridges. In addition, the need for a Design Field View submission and/or meeting, the oversight status, project complexity and anticipated environmental impact of the project will be discussed. The Design Field View may be waived for certain Minor PennDOT Oversight projects. The District Project Manager will review the overall Project Development Procedures with the Local Project Sponsor to ensure that all project requirements are met and that state funding is not jeopardized.

The District Project Manager will also provide the Local Project Sponsor with the Project Milestone Submission Tracking template in Appendix H and request that the Local Project Sponsor, in consultation with their consultant/municipal engineer, establish the project schedule. This project schedule must be developed using Open Plan software within thirty (30) days after receiving notice to proceed for the preliminary engineering phase of the project. This schedule will be kept as the baseline schedule throughout the duration of the project. The project submissions and approvals will be tracked using the Open Plan schedule, as well as the Project Milestone Submission Tracking template, which will both need to be updated on a monthly basis by the Local Project Sponsor and sent to the District Project Manager by the beginning of every month.

A Scoping Document will be completed by the Local Project Sponsor in the PennDOT Categorical Exclusion (CE) Expert System (http://www.dotdom2.state.pa.us/ceea/ceeamain.nsf) as soon as possible after the Scoping Field View has been held, if not already prepared, or no later than thirty (30) days of receiving notice to proceed for the preliminary engineering phase of the project. The procedures outlined in Publication 10B, *Design Manual Part 1B, Post-TIP NEPA Procedures*, and Publication 10C, *Design Manual Part 1C, Transportation Engineering Procedures*, will be followed to complete the Scoping Document. The Local Project Sponsor will notify the District Project Manager when the Scoping Document has been completed in the CE Expert System. The District Project Manager will review the form and submit it to the District EM, ADE-Design, and PDE, as needed, for approval. The approved Scoping Document will serve as the basis for the appropriate level of Environmental Clearance document.

A sample Scoping Document is included in Appendix O for consideration by the Local Project Sponsor. It is recommended that the Local Project Sponsor review this Scoping Document prior to the field view and give preliminary consideration to what may be involved in the project.

2. Historic Bridge Feasibility Analysis (State)

A Feasibility Analysis Report should be completed on historic bridges to determine if the bridge is suitable for rehabilitation, rather than assuming it has to be replaced. A historic bridge is any bridge that is listed or determined to be eligible for the National Register of Historic Places. The PennDOT Cultural Resource Professional can assist in determining if a bridge is considered historic. The report should provide a detailed analysis of the rehabilitation alternative(s) including an explanation of whether the bridge can be made adequate for the intended use of the bridge.

A Feasibility Analysis Report must be written by, or involve the assistance of, a bridge engineer who has an understanding of what makes the bridge historic and the flexibilities allowed by National Park Service Rehabilitation Standards. The preparer should coordinate with the PennDOT Cultural Resource Professional to ensure concise but thorough documentation. Other readily available documents (e.g. eligibility reports) can be referenced. It is important that the document be based upon a defensible purpose and need statement that takes into account the requirements of Section 106 of the National Historic Preservation Act of 1966 and the FHWA's Historic Bridge Program (Title 23, Section 144(o)). The purpose and need statement cannot preclude consideration of the rehabilitation alternative. The purpose and need statement should exclude extraneous information that is not related to purpose and need.

If the bridge is not considered historic, a Feasibility Analysis Report is not necessary.

3. Environmental Clearance (State)

The Local Project Sponsor is responsible for the completion of the environmental and engineering activities required to prepare the Environmental Clearance document, at the level determined at the Scoping Field View. The District Environmental Manager will provide guidance to the Local Project Sponsor on the required environmental resource identification, impact documentation, agency coordination, and public involvement activities for all projects.

All environmental clearance documents have their basis in the National Environmental Policy Act of 1969 (NEPA) and Pennsylvania Act 120 (Administrative Code of 1929, 71 P.S. §512). NEPA applies to all federally funded projects, or projects that require a federal approval such as a U.S. Army Corps of Engineers Section 404 permit or a Point of Access Approval from the Federal Highway Administration (FHWA). PennDOT generally follows the NEPA requirements for projects using state funds to comply with Act 120, if no other federal approval is necessary. All approved environmental clearance documents are made available for public review.

Publication 10B, *Design Manual Part 1B, Post-TIP NEPA Procedures,* may be used as a reference document to assist in identifying environmental issues. Most state projects will only require documentation commensurate with the detail required for a Categorical Exclusion Evaluation. However, it is possible for a higher level of environmental documentation to be required.

Additional federal and state legislation may be required to be followed on some projects. Refer to Table 4-2 for common resources and the corresponding legislation to be adhered to for state funded local projects, as well as the applicable PennDOT publications that provide additional guidance.

The following provides some additional detail for the most common state legislation.

- Pennsylvania Act 120 (71 P.S. §512(b)) – This Act is the state legislation that requires the consideration and documentation of social, economic, and environmental impacts for any transportation route or program requiring the acquisition of additional right-of-way. This is the state legislation analogous to NEPA. Contact PennDOT District Office for more detailed information. PennDOT Publication 10B, *Design Manual Part 1B, Post-TIP NEPA Procedures*, provides guidance on the implementation of Act 120.

TABLE 4-2 Environmental Comparison for Projects Funded with State Funds

		Includes State Funds	Includes Federal Funds
Enabling Legislation	PennDOT Publication	Act 120 (71 P.S. § 512)	NEPA (42 U.S.C. § 4331, 23 CFR 771, 40 CFR 1500)
Environmental Evaluation Areas*		Evaluate (Yes or No)	Evaluate (Yes or No)
Aquatic Resources**	Publication 10B	Yes	Yes
Wetlands**	Publication 10B, 325	Yes	Yes
Federal Wild & Scenic Rivers & Streams** (16 U.S.C. § 1271 et seq.)	Publication 10B	Yes	Yes
State Scenic Rivers & Streams**	Publication 10B	Yes	Yes
Navigable Waterways/Coast Guard Permit	Publication 10B	Yes	Yes
Coastal Zone**		Yes	Yes
Floodplains **	Publication 10B	Yes	Yes
Soil Erosion and Sedimentation Control**	Publication 10C	Yes	Yes
Agricultural Resources (7 U.S.C. § 4201, Act 100-71 P.S. § 106, Act 43-3 P.S. §§ 901-915)	Publication 10B, 324	Yes	Yes
Parks & Recreation Facilities (Section 4(f) (49 U.S.C § 303, 23 CFR 774)/ Section 2002 (71 P.S. § 512(a)(15))	Publication 10B, 349	Yes (Section 2002)	Yes (Section 4(f))
State or National Forests (Section 4(f) (49 U.S.C § 303, 23 CFR 774)/ Section 2002 (71 P.S. § 512(a)(15))	Publication 10B, 349	Yes (Section 2002)	Yes (Section 4(f))
Gamelands (Section 4(f) (49 U.S.C § 303, 23 CFR 774)/ Section 2002 (71 P.S. § 512(a)(15))	Publication 10B, 349	Yes (Section 2002)	Yes (Section 4(f))
State or Federal Wilderness, Natural and Wild Areas	Publication 10B, 349	No	Yes
National Natural Landmarks		No	Yes
Heritage Geological Sites	Publication 10B	No	Yes
Hazardous/Residual Waste	Publication 10B, 281	Yes	Yes
Wildlife & Habitat (Section 4(f) (49 U.S.C § 303, 23 CFR 774)	Publication 10B, 349	No	Yes (Section 4(f))
Threatened & Endangered Plants & Animals** (16 U.S.C. §§ 1536 and 1538, 50 CFR 406)	Publication 10B, 546	Yes	Yes
Cultural Resources** (State History Code-37 P.S. §§ 101 et seq., Section 106 of the NHPA-36 CFR 800)	Publication 10B, 689	Yes (State History Code, or Section 106 of the NHPA if 404 permit)	Yes (Section 106 of the NHPA)
Air Quality	Publication 10B, 321	Yes (bridges on existing alignment with no additional travel lanes exempt)	Yes
Noise	Publication 10B, 24	Yes	Yes
Socioeconomic Issues	Publication 10B	No	Yes
Environmental Justice	Publication 10B	No	Yes
Title VI		Yes	Yes
Relocations/R-O-W Impacts	Publication 10C, 378	Yes	Yes
Section 6(f) of LWCF Act (16 U.S.C. § 4601-8(f)(3))	Publication 349	Yes	Yes
Project 70 Land Acquisition and Borrowing Act (72 Pa CS §§ 3946.1 et seq.)		Yes	Yes
Project 500 Land & Water Conservation and Reclamation Act (32 P.S. §§ 5101 et seq.)		Yes	Yes

* Determination of presence may be all that is needed however if present impact need evaluated.

** Also Needed for State Permitting – Stream Impacts, Wetlands ID/Impact, Endangered Species PNHP (PNDI), Cultural Resources State History Code, Soil Erosion and Sedimentation Control.
Also Needed for Federal Permitting – Stream Impacts, Endangered Species PNHP (PNDI), Magnuson Stevens Act (essential fish habitat), Section 106 of the NHPA, Section 401 Water Quality Certification (issued or waived by state), Soil Erosion and Sedimentation Control and Antidegradation Analysis, Coastal Zone Management Act, Wild and Scenic Rivers Act.

- Historic/Archaeology: State History Code (37 P.S. §§ 101 et seq.) – This Code established procedures to identify and evaluate historic and archeological sites and properties, and requires agencies to ensure that any action authorized, funded or carried out by them assesses the effects of the project on these resources. The intention is to preserve these resources. PennDOT Publication 10B, *Design Manual Part 1B, Post-TIP NEPA Procedures*, and Publication 689, *The Transportation Project Development Process: Cultural Resources Handbook*, provide guidance on State History Code. PennDOT has signed a Memorandum of Understanding with the Pennsylvania Historical and Museum Commission (PHMC) for review of projects under the State History Code, which is included in Appendix 2 of Publication 689. Coordination with PHMC must occur for these resources.
(http://www.phmc.state.pa.us/Portal/Communities/AboutPHMC/history_code_title37.pdf)

- Section 2002 (Sometimes called a "State 4(f)": – A written determination for state funded projects issued pursuant to Section 2002 or PA Act 120 of 1970 and signed by the Secretary of Transportation describing conditions related to the taking of lands from recreation areas, wildlife or waterfowl refuges, historic sites eligible for or listed on the National Register of Historic Places, forest, wilderness, and game lands and public parks. The written determination documents the need and the condition of the acquisition. Coordination with the official with jurisdiction over these resources must occur, as well as coordination with PennDOT. PennDOT Publication 10B, *Design Manual Part 1B, Post-TIP NEPA Procedures*, and Publication 349, *The Transportation Project Development Process: Section 4(f) Handbook*, provide guidance on Section 2002.

- Streams and Wetlands: The Federal Clean Water Act, Section 404 and Pennsylvania Dam, Safety & Encroachment Act (33 U.S.C. § 1344, 33 CFR 322 and 33, 32 P.S. §891.1 et seq., 25 Pa. Code Chapter 105) – These Acts require the documentation and permitting of any action involving stream crossings and/or impacts to wetland areas. An alternatives analysis is required showing that there is no practical alternative to construction in the wetland and that all measures to reduce harm to the wetland have been taken. Mitigation may be required for impacted areas. Coordination with the Pennsylvania Department of Environmental Protection and the U.S. Army Corps of Engineers must occur for these resources. PennDOT Publication 10B, *Design Manual Part 1B, Post-TIP NEPA Procedures*, and Publication 325, *Wetland Resources Handbook*, provide guidance on streams and wetlands.
(http://www.epa.gov/owow/wetlands/regs/sec404.html)

- Farmlands: Pennsylvania Act 100 of 1979 (71 P.S. § 106) – This Act was enacted to protect farmland from being converted to nonagricultural uses as a result of a federal or state funded program. This Act also established the Agricultural Lands Condemnation Approval Board (ALCAB), which is an independent administrative board with approval authority over the condemnation of productive agricultural land for certain types of transportation projects. The Agricultural Land Preservation Policy (ALPP) (Pa Code, Chapter 7, Section 7.301 et seq.) outlines an agricultural preservation policy that all state agencies must support. ALPP is intended to protect and preserve Pennsylvania's primary agricultural land. The Federal Farmland Protection Policy Act (7 U.S.C. §4201) and Act 43 (3 P.S. §§901-915) may also apply. PennDOT Publication 10B, *Design Manual Part 1B, Post-TIP NEPA Procedures*, and Publication 324, *The Transportation Project Development Process: Agricultural Resources Evaluation Handbook*, provide guidance on agricultural resources.
(http://www.palrb.us/pamphletlaws/19001999/1979/0/act/0100.pdf)

- Threatened and Endangered (T&E) Species: Requirements of applicable state codes, such as the Game and Wildlife Code, the Fish and Boat Code, and the Conservation of Natural Wild Plants Code should be met for state listed species. Coordination with the Pennsylvania Fish and Boat Commission, the Pennsylvania Game Commission, the Pennsylvania Department of Conservation and Natural Resources, and the United States Fish and Wildlife Service must occur for these resources. PennDOT Publication 10B, *Design Manual Part 1B, Post-TIP NEPA Procedures*, and Publication 546, *The Transportation Project Development Process: Threatened and Endangered Species Desk Reference*, provide guidance on threatened and endangered species. (http://www.environment.fhwa.dot.gov/guidebook/index.asp.)

- Section 6(f): Section 6(f) of the Land and Water Conservation Fund Act of 1965 (16 U.S.C. 4601-4 to 4601-11) – This Act was enacted to establish a funding source to assist the states and federal agencies in meeting present and future outdoor recreation demands and needs. Federal assistance funds from the Act are authorized to the states for the planning, acquisition, and/or development of needed land and water or utilized, directly, by federal agencies for the acquisition and development of certain lands. It requires that the conversion of lands or facilities acquired with Land and Water Conservation Act funds, as well as Project 70 and Project 500 funds, be coordinated with the Department of Interior. Usually replacement in kind is required. Coordination with the National Park Service, the Pennsylvania General Assembly, and the Pennsylvania Department of Conservation and Natural Resources must occur for these resources. PennDOT Publication 349, *The Transportation Project Development Process: Section 4(f) Handbook*, provides guidance on Section 6(f). (http://www.nps.gov/ncrc/programs/lwcf/protect.html)

- Wild and Scenic Rivers: The National Wild and Scenic Rivers Act of 1968 (16 U.S.C. 1271 et seq.) was created to preserve certain rivers with outstanding natural, cultural, and recreational values in a free-flowing condition for the enjoyment of present and future generations. The Act is notable for safeguarding the special character of these rivers, while also recognizing the potential for their appropriate use and development. It encourages river management that crosses political boundaries and promotes public participation in developing goals for river protection. Coordination with the National Park Service must occur for these resources. (http://www.nps.gov/ncrc/rivers/) The Pennsylvania Scenic Rivers Act may also apply (P.L. 1277, Act No. 283 as amended), and coordination with the Pennsylvania Department of Conservation and Natural Resources must occur for these resources. PennDOT Publication 10B, *Design Manual Part 1B, Post-TIP NEPA Procedures*, provides guidance on wild and scenic rivers. (http://www.dcnr.state.pa.us/brc/conservation/rivers/scenicrivers/index.htm)

Also refer to Publication 10B, *Design Manual Part 1B, Post-TIP NEPA Procedures*, Table 3.5, *Potential Sources of Environmental Data*, for common environmental features and information sources.

When all required environmental and engineering activities have been completed and approved by the appropriate individuals and agencies, the Local Project Sponsor is responsible for the preparation of the environmental clearance document in the CE Expert System. The majority of state funded projects will require either an Environmental Documentation (ED) Evaluation or an ED Bridge and Roadway Programmatic Agreement (BRPA) Evaluation, depending on the complexity of the project and potential impacts to environmental resources. An Environmental Evaluation Report (EER) may be required in rare cases. Publication 10B, *Design Manual Part 1B, Post-TIP NEPA Procedures*, and the current version of the Programmatic Agreement between FHWA and PennDOT for Bridge, Roadway and Non-Complex Projects provide a list of actions and criteria to be applied to determine the appropriate level of documentation required for each project. If a federal waterway permit is required for a project,

compliance with NEPA is required and a Categorical Exclusion Evaluation (CEE), CE Bridge and Roadway Programmatic Agreement (BRPA) Evaluation, Environmental Assessment (EA), or Environmental Impact Statement (EIS) will instead need to be prepared as the environmental clearance document.

Early in the development of a project, the Local Project Sponsor will consult with the District Project Manager or District Environmental Manager to determine the level of public involvement that will be commensurate with the potential environmental impacts of the proposed project. The requirements and procedures for public involvement are found in Publication 295, *The Transportation Project Development Process: Project Level Public Involvement Handbook*. Typical public involvement activities for local projects include a plans presentation at a monthly municipal or county meeting, where the public is able to attend. If a project may have an effect on cultural resources, based on the Scoping Field View results, the Local Project Sponsor will consult with the PennDOT Cultural Resources Professionals to begin public involvement under Section 106, in accordance with Publication 689, *The Transportation Project Development Process: Cultural Resources Handbook.*

The Local Project Sponsor will notify the District Project Manager when the environmental clearance document has been completed in the CE Expert System. The District Project Manager will review the document and submit it to the District Environmental Manager, ADE-Design, District Executive, and PDE, as needed, for final approval.

In order to provide the Local Project Sponsor with a general idea of the overall timeframes for the environmental clearance process, Figure 4-1, Generalized Environmental Flow Chart has been developed. This flow chart provides a high level overview of the environmental process and some guidance on the length of time generally required for the environmental activities on a local project.

All mitigation commitments, including those listed in the environmental clearance document, are the responsibility of the Local Project Sponsor. The Environmental Commitments and Mitigation Tracking System (ECMTS) is a set of procedures developed by PennDOT to track environmental commitments and mitigation through the design, construction, and maintenance phases of transportation projects. See Publication 10X, Design Manual 1X, Appendix T, *Environmental Commitments and Mitigation Tracking System (ECMTS) Process*.

A project-specific ECMTS is required to monitor and document the successful implementation of environmental commitments and mitigation measures agreed to during a project's environmental compliance and permit approval processes. Because individual projects have varying environmental concerns and levels of complexity, and organization structures vary from district to district, the ECMTS process provides a flexible framework for the development of project-specific ECMTS reports. To facilitate the customization of the ECMTS report, various documents are provided in Publication 10X, Design Manual 1X, Appendix T, *Environmental Commitments and Mitigation Tracking System (ECMTS) Process*, to download and tailor to meet the specific tracking needs of a project.

Individual line items for each of the project's environmental commitments and mitigation measures are to be listed in a project-specific mitigation tracking system matrix. This matrix along with the ECMTS appropriate special provision are to be included in the PS&E package to define how a contractor is to track and sign-off on individual mitigation commitments during construction and ensure that environmental requirements are fully disclosed at the time of bidding.

After approval of the environmental clearance document, if a project scope of work must be changed later in the Project Development Process, or the laws or study area conditions change, a re-evaluation of the environmental document is required. A re-evaluation is also required prior to any major authorization,

such as a funding request. The project will not be allowed to be advertised for bids until the re-evaluation document has been approved. If a re-evaluation is required, the procedures outlined in Publication 10B, *Design Manual Part 1B, Post-TIP NEPA Procedures*, will be followed. The Local Project Sponsor will coordinate with the District Project Manager or District Environmental Manager, who will initiate consultation as appropriate. The ramifications of expanding the scope of work will be carefully considereddue to potential financial impact on the TIP or LRTP.

4. Permits (State)

The Local Project Sponsor is responsible for the preparation of all waterway permit applications and supporting documentation, including the Hydrologic and Hydraulic Report, in accordance with the Pennsylvania Dam, Safety & Encroachment Act (32 P.S. §891.1 et seq. and 25 Pa. Code Chapter 105) and/or the Federal Clean Water Act, Section 404. The Local Project Sponsor is also responsible for coordinating the submission and approval of all permits with the Pennsylvania Department of Environmental Protection (PA DEP) and/or the U.S. Army Corps of Engineers (USACE). The PA DEP waterway permit application will be submitted to the appropriate PA DEP Regional Office. When PA DEP issues approval of the permit, PA DEP will forward the permit information directly to the USACE for approval, if required. The Local Project Sponsor is responsible for sending a copy of the secured PA DEP and/or USACE waterway permits to the District Project Manager when received.

In order to obtain a waterway permit for a culvert or bridge, projects with a drainage area greater than or equal to 0.5 square miles require hydraulic computations. The Hydrologic Engineering Centers River Analysis System (HEC RAS) hydraulic model is commonly used. However, for simple pipe or culvert design, the HY-8 Culvert Hydraulic Analysis Program should be considered rather than HEC RAS. HY-8 requires less survey and input data than HEC RAS, but HY-8 is limited in that it will not perform backwater computations. Therefore, if increases in water surface elevations must be determined, such as for projects located in a Federal Emergency Management Agency (FEMA) study area or for possible easements, HEC RAS is the preferred method. For more information on the applicability of HY-8 refer to FHWA Publication FHWA-HIF-12-026, *Hydraulic Design of Highway Culverts, Hydraulic Design Series Number 5 (HDS-5), Third Edition*, or the HY-8 User's Manual.

A National Pollutant Discharge Elimination System (NPDES) permit is required on all projects with construction related earth disturbance of one (1) acre or greater, in accordance with the Federal Clean Water Act and 25 Pa. Code Chapters 92, 93, and 102. The Local Project Sponsor, as the applicant and ultimately the permitee, is responsible for the preparation of the NPDES permit application and supporting documentation, including the Erosion and Sedimentation Control Plan, which should be part of the NPDES permit application. The Local Project Sponsor is also responsible for coordinating the submission and approval of the NPDES permit with the PA DEP. The Local Project Sponsor is responsible for sending a copy of the secured NPDES permit to the District Project Manager when received. If a Soil Erosion and Sedimentation Control Plan (E&SCP) is needed for a local project, this plan must be approved by the County Conservation District to determine if it meets the erosion control requirements of the PA DEP. The E&SCP approval is part of the Chapter 105 and the NPDES permit application, if required. The Local Project Sponsor is responsible for sending a copy of the E&SCP approval and the NPDES permit, if required, to the District Project Manager when received.

Note: All permits must be in place prior to approval of the Plans, Specifications & Estimate package and advertisement.

5. Design Field View Submission (State)

Local projects must be developed in accordance with the highway design criteria outlined in Publication 70, *Guidelines for the Design of Local Roads and Streets*, and Publication 13M, *Design Manual Part 2, Highway Design* (DM2). Any deviation from Publication 70 or DM2 criteria will be subject to the approval of the District Executive for state funded projects. The inclusion of the design criteria in the above manuals does not imply that existing roadways and bridges, which were designed and constructed using different criteria, are unsafe, nor does it mandate the initiation of improvement projects to meet today's criteria. Many existing facilities that met design criteria at the time of their construction safely and efficiently accommodate current traffic, unless a safety or congestion problem exists. Once a new or reconstruction project is identified, the above manuals shall be used as a guide to determine the appropriate design criteria to be applied.

The purpose of a Design Field View submission is to facilitate review comments on the proposed preliminary design of the project. It results in a consensus on critical issues and identifies aspects of the project requiring special attention in final design. The need for a Design Field View submission is determined at the Scoping Field View based on the project complexity and anticipated environmental impact of the project. Most Design Field View submissions are not submitted to Central Office for review unless the project is a Moderately Complex or Most Complex (Major) project. See Publication 10, *Design Manual Part 1,* Tables 2.1, 2.2 and 2.3 for more information on project complexity.

If a Design Field View Meeting is required, it will be conducted at the end of preliminary engineering. Design Field View Approval will occur following environmental clearance and indicates that all preliminary engineering requirements have been met and the design is approved for final design development.

It should be noted that while a Design Field View Meeting could be waived, all of the materials typically required per Publication 10C, *Design Manual Part 1C, Transportation Engineering Procedures, Figure 3.2 Design Field View (DFV) Documentation and Submission Checklist* will still need to be prepared for submission to the District Office. The expectations by the PennDOT Project Manager for the preparation of materials should be conveyed in the scope of work prepared for the project. A Safety Review submission will also be prepared and the timing of this submission and the Safety Review Meeting as well as the expectations for this submission by the PennDOT Project Manager should be conveyed in the scope of work prepared for the project. These two submissions (Design Field View and Safety Review) may be combined into one (1) submission.

If the local project will impact the Pennsylvania Turnpike in any way, or if it is in the vicinity of an interchange or crossing, the Local Project Sponsor must notify the District Project Manager during preliminary engineering, who will contact the District Turnpike Coordinator. Construction project coordination with the Pennsylvania Turnpike Commission (PTC) is required (through the District Turnpike Coordinator) when a construction project, including its MPT or Detour Plan, is 1) crossing over or under the Pennsylvania Turnpike or 2) is within one (1) driving mile of a Pennsylvania Turnpike interchange or crossing.

A pavement design submission and approval is not required unless the local project includes pavement work on more than 500 feet of state owned roadway. The Local Project Sponsor should ensure that the pavement design and proposed pavement depths for work on locally owned roadways meet or exceed any local criteria and standards. For state roadways, the proposed pavement depths must meet or exceed the minimum depths specified in Publication 242, *Pavement Policy Manual*. For more information on pavement design procedures, reference Publication 242, *Pavement Policy Manual*.

DM2 Chapter 1 requires a design exception justification be prepared and approved when design features do not meet PennDOT design criteria. Design exceptions are to be applied and developed in accordance with Publication 10X, *Design Manual Part 1X, Appendices to Design Manuals 1, 1A, 1B, and 1C*. The guidance in Publication 10X, Appendix P, *Design Exceptions*, will be followed in the development of justifications for design exceptions for roadway and bridge features that do not meet PennDOT design criteria. The design exception documentation will be prepared by the Local Project Sponsor and submitted to the District Project Manager as part of the Design Field View submission, if required, or at the end of preliminary engineering. The District Project Manager will coordinate with the District Executive to obtain approval of design exceptions for state funded local projects. One copy of the approved documentation shall be forwarded to the Bureau of Project Delivery for information only.

6. Bridge Type, Size and Location (TS&L) Review (State)

State local bridge projects must be designed to comply with the American Association of State Highway and Transportation Officials (AASHTO) Load and Resistance Factor Design (LRFD) Bridge Design Specifications and PennDOT specifications and standards, in accordance with the criteria in Publication 15M, *Design Manual Part 4* (DM4). The advantage of complying with PennDOT bridge standards and specifications is that PennDOT has developed bridge design tools to improve project delivery. The PennDOT bridge design tools include various bridge design and rating software, Bridge Automated Design and Drafting (BRADD), various approved structural products and systems which add efficiency to the design process, and provide a level of consistency and quality to bridge design. Bridge replacement designs shall result in a completed bridge that will carry maximum legal loads and the completed structure shall not be classified as structurally deficient. Bridge rehabilitation designs shall comply with the rehabilitation criteria outlined in DM4. For existing historic bridges, the Feasibility Analysis will provide guidance as to whether the bridge should be replaced or rehabilitated and will also provide the specific details regarding the design criteria.

A Type, Size, and Location (TS&L) study must be conducted by the Local Project Sponsor to select and justify the proposed bridge type, size, and location based on project requirements, including least initial cost, for all bridge projects. This study will be developed based on the previous phases of study completed for the project. A preliminary cost comparison of viable structure types shall be made to support the recommendations of the TS&L study.

A TS&L submission may be prepared by the Local Project Sponsor in accordance with the Streamlined TS&L Submission requirements outlined in DM4, Chapter 1.9.3.3.2, *Streamlined TS&L*. The Local Project Sponsor will send the submission to the District Project Manager who will ensure that the overall scope of work is compatible with the scope developed at the Scoping Field View. The District Bridge Unit will review the TS&L submission to ensure the acceptability of the bridge submission and issue approval.

If bridge features do not meet PennDOT design criteria, a design exception request must be prepared by the Local Project Sponsor in accordance with Publication 10X, *Design Manual Part 1X, Appendices to Design Manuals 1, 1A, 1B, and 1C*, Appendix P, *Design Exceptions*, for PennDOT approval.

a) Bridge Policy

The Local Project Sponsor must use PennDOT's Bridge Automated Design and Drafting (BRADD) software for all single span local bridge projects funded in part by PennDOT as per Publication 15M, *Design Manual Part 4* (DM4), Chapter 1.4.2, *Bridge Automated Design and Drafting System (BRADD)*. Information about the licensing of BRADD is available on the PennDOT website (www.dot.state.pa.us) under the "Services & Software" link, and under the "BRADD Software" link.

When appropriate, the Local Project Sponsor may consider the use of durable timber bridges that meet Department standards and the BLC-560M series. These will be considered on a case-by-case basis. Timber bridges may be considered under the following circumstances:

- Low-speed, low-truck-volume roads. Average Daily Truck Traffic (ADTT) less than 25 or Average Daily Traffic (ADT) less than 750; whichever governs.
- A location where no debris exists for a condition where a timber pile pier is needed.
- At locations where a timber pile substructure can be constructed economically, i.e., timber piles can be driven as friction piles to sufficient depth below potential scour depth and without being damaged, to get adequate lateral support. Generally, this is a problem because of the geology of Pennsylvania.

A design option for timber bridges is the design of a hybrid timber bridge. A hybrid timber bridge utilizes a timber glue-laminated deck, steel I-beam superstructure, and concrete abutments and wings. The Department has developed an interactive instructional program on CD for the application of hybrid timber bridges. A copy of the CD can be obtained by contacting the District Project Manager.

7. Bridge Foundation Submission (State)

The Local Project Sponsor for state local bridge projects must obtain subsurface information at most proposed structure sites and prepare a Foundation Submission in accordance with the streamlined Foundation requirements outlined in Publication 15M, *Design Manual Part 4*, Chapter 1.9.4.3.2, *Streamlined Foundation*. Reconnaissance for soils and geological engineering will generally consist of the following five (5) phases:

- Search of published and unpublished information
- Visual site inspection
- Development of subsurface exploration program, in accordance with Publication 293, *Geotechnical Engineering Manual*
- Subsurface exploration
- Geological engineering report

This information should be sufficient to determine the relative advantages of placing the structure at the various locations being considered and to allow the District Geotechnical Engineer to concur that the most suitable type of foundation was selected.

The Local Project Sponsor will ensure that adequate subsurface investigation information is available when the Foundation Submission is submitted to the District Project Manager, for review by the District Bridge Unit. Borings and rock or soil properties will be reviewed by the District Geotechnical Engineer. The foundation type must be evaluated to ensure it is reasonable for the site and that practical alternates have been considered. The footings will be evaluated to ensure that they are adequately located for scour and proper mitigation is provided. When all requirements are met, the District Bridge Engineer will issue approval of the Foundation Submission.

8. Final Structure Plans (State)

The Final Structure plans, computations and any special provisions related to a local state funded bridge project must be prepared by the Local Project Sponsor in accordance with Publication 15M, *Design Manual Part 4* (DM4). The Local Project Sponsor will submit this information to the District Project

Manager, who will coordinate with the District Bridge Unit for review and approval. This review is to ensure structural adequacy and constructability of the bridge. The approval of the Final Structure plans, computations, and special provisions for local bridge projects is typically issued by the District Bridge Engineer. However, approval may also be required by the Central Office Bureau of Project Delivery for some bridge types. The required approvals are listed in DM4, Table 1.9-3.

The District Bridge Engineer will sign the first sheet of the Final Structure plans and indicate the approval date on the remaining sheets.

9. Simplified Non-Federal Bridge Project Reimbursement Agreement and Retroactive Bridge Project Reimbursement Agreement Process (State)

The Local Project Sponsor may be able to follow the Simplified Non-Federal Bridge Project Reimbursement Agreement Process if using a consultant that meets the PennDOT experience requirements outline in Chapter 3 (See Chapter 3, *Project Management Processes*, Section 3.4.B.1). The Retroactive Bridge Project Reimbursement Agreement Process is also an option for a state funded local bridge project (See Chapter 3, *Project Management Processes*, Section 3.7.A.3).

Under the Simplified Non-Federal Bridge Project Reimbursement Agreement Process, many of the design reviews necessary under the traditional process are not required. This process does require that the Local Project Sponsor submit a package to PennDOT for structural adequacy approval prior to the project advertisement. Also, the Local Project Sponsor will be required to certify (by attaching the required documentation listed below) that the right-of-way and utility work has been completed in accordance with PennDOT's policies, procedures, and specifications since PennDOT will not be approving these two items. Environmental clearance will be obtained using PennDOT's CE Expert System and should be coordinated with the District Project Manager. The District Environmental Manager will be involved in the review of the environmental clearance document and will coordinate the approval(s) required in the CE Expert System.

The structural adequacy package must contain the following items for review and approval by PennDOT:

1. Type, Size & Location (TS&L)*, and Line, Grade & Typical Sections
2. Environmental Clearance Document and Mitigation Commitments
3. Foundation Report
4. Temporary and Permanent Traffic Signal Plans (if applicable) signed and stamped by a Professional Engineer licensed in the Commonwealth of Pennsylvania
5. Design Computations signed and stamped by a Professional Engineer licensed in the Commonwealth of Pennsylvania
6. Final Plans measuring 22"x34", signed and stamped by a Professional Engineer licensed in the Commonwealth of Pennsylvania
7. Traffic Control Plan if erecting traffic control devices on a state roadway

The structural adequacy package should also contain the following items to ensure certification has occurred:

8. All required permits (PA DEP Encroachment Permit, USACE 404 Permit, and NPDES Permit)
9. Right-of-Way Clearance Certification form (see Chapter 5, *Right-of-Way Phase*)
10. Utility Clearance Assurance Statement (see Chapter 6, *Utility and Railroad Coordination*)

*It is recommended that the TS&L be reviewed by /coordinated with the District Project Manager and the District Bridge Unit during preliminary engineering prior to advancing the design of the structure.

The Local Project Sponsor will submit the Simplified Non-Federal Bridge Project Reimbursement Agreement Process Structural Adequacy Review package to the District Project Manager. The package will be reviewed to ensure structural adequacy and the ability to adequately bid on and construct the bridge project. The approval procedure for the structure plans shall be in accordance with PennDOT Publications. The District Bridge Engineer will sign the first sheet of structure drawings "For Structural Adequacy Only" and indicate the approval date on the remaining sheets. A PS&E Submission Certification List for Simplified Non-Federal Bridge Project Reimbursement Agreement Process is included in Appendix P. However, these projects are recommended but not required to be advertised and let through ECMS. The Local Project Sponsor should reference Appendix G, Projects Not Let or Administered in ECMS, for guidance on the paper let process.

For the Retroactive Bridge Project Reimbursement Agreement Process option, the Local Project Sponsor is required to submit the same package listed above to PennDOT for a Structural Adequacy Review to complete the design review requirements. However, this information will be submitted to the District Project Manager after the project has been independently bid and constructed by the Local Project Sponsor. The package will be reviewed to ensure structural adequacy and the approval shall be in accordance with PennDOT Publications. When structural adequacy approval has been issued by the District Bridge Engineer and funding has become eligible on the TIP and TYP, the Local Project Sponsor can be retroactively reimbursed for the project costs.

10. Right-of-Way Phase (State)

Many state funded local projects require a right-of-way phase, whether for acquisition of real property or for temporary or permanent easements. The Local Project Sponsors who receive state funds for projects involving the acquisition of real property need to be aware of the basic right-of-way policies that must be followed in order to ensure that they do not jeopardize funding for their project. *Chapter 5, Right-of-Way Phase*, of this manual discusses the requirements and procedures for the acquisition of right-of-way.

11. Utility Phase (State)

Many state funded local projects require a utility phase, to coordinate with any utilities and railroads within the project area. Chapter 6, *Utility and Railroad Coordination*, of this manual provides information on the requirements and procedures when a utility requires relocation and when the Public Utility Commission (PUC) must be involved in cases of railroad interest in a local project.

12. Plans, Specifications and Estimate (PS&E) Package (State)

At the end of the final design phase of a project, the Local Project Sponsor is to develop the Plans, Specifications & Estimate (PS&E) package in PennDOT's Engineering and Construction Management System (ECMS) that will be used to secure bids for the project. All plans are to generally comply with Publication 14M, *Design Manual Part 3, Plans Presentation*, unless the nature of the project dictates that another acceptable plans presentation format should be used. See Appendix Q, Construction Plan Checklist, for guidance on items to be checked during plan preparation. Item numbers for bridge and highway construction work are to adhere to the ECMS Master Items List and the modified-standard and non-standard item numbering procedure outlined in Publication 51, *PS&E Package Delivery Process Policies and Preparation Manual*. Work class codes must be assigned to all bid items, so the prequalification of contractors can be evaluated by PennDOT after the bid opening has occurred. Structures require a bid alternate to ensure competition between material vendors. Project specific specifications are to follow the format of and refer to the version of Publication 408, *Specifications*, that will be in effect as of the anticipated bid opening date for the project. All state required standard special provisions are also to be included in the PS&E package.

A construction cost estimate must be prepared by the Local Project Sponsor, following the guidance in Publication 352, *Estimating Manual*. Construction inspection cost estimates are to be included in the construction estimate. The Local Project Sponsor should discuss the estimated construction inspection costs with the District Project Manager. Allowable construction engineering costs may include such work items as inspection, certification, and test of materials and surveys in accordance with the Federal-Aid Policy Guide, Chapter I, Subchapter B, Part 140, and 23 C.F.R. § 1.11. Such costs are eligible for participation only to the extent that they are directly attributable and properly allocable to the project.
If state funding is used for construction inspection, PennDOT must be involved with reviewing and/or preparing construction inspection agreements between the Local Project Sponsor and the consultant prior to advertisement.

For most local state funded projects, the Local Project Sponsor is required to adhere to PennDOT and the American Association of State Highway and Transportation Officials (AASHTO) design specifications. Consequently, the project is to be designed in a common sense manner, taking into account, where applicable, guidance prepared by the various professional organizations. A clear, understandable, biddable, and buildable plan is to be prepared. The District Office is to provide general guidance to the Local Project Sponsor on the content and quality of the PS&E package prior to its development, and review the package once it is completed to ensure that an acceptable bid package has been developed and that all of the proposed work is eligible for state funding. The PS&E package must be prepared in ECMS using PennDOT's format.

All PS&E packages for state funded local projects, with the exception of Simplified Non-Federal Bridge Agreement Process projects, must include the following elements:

- Final design plans, including tabulations and summaries of work items,
- Bid specifications applicable to the particular project and any necessary attachments,
- Cost estimate (including lump sum justification and cost driver analysis forms; see Publication 352, *Estimating Manual*),
- Pre-Bid Construction Schedule, must include 90 days from bid opening date to anticipated Notice to Proceed date (consult with the District Project Manager regarding proper format),
- Subsurface Utility Engineering (S.U.E.) forms, if applicable (see Publication 16M, *Design Manual 5*) (See Chapter 6, *Utility and Railroad Coordination*),
- Environmental Clearance document, along with Environmental Commitments and Mitigation Tracking System (ECMTS), and a re-evaluation if necessary,
- Utility Clearance Certification (See Chapter 6, *Utility and Railroad Coordination*),
- Railroad Certification (See Chapter 6, *Utility and Railroad Coordination*),
- Right-of-Way Clearance (See Chapter 5, *Right-of-Way Phase*),
- All required permits (PA DEP Waterway Permit, USACE Permit, NPDES Permit),
- PUC order, if railroad is involved (See Chapter 6, *Utility and Railroad Coordination*),
- All executed Reimbursement Agreements (See Chapter 3, *Project Management Processes*),
- Executed Construction Inspection Agreement and Inspection Staffing Letter (See Chapter 3, *Project Management Processes*),
- Disadvantaged Business Enterprise (DBE) requirements (established by Central Office Bureau of Project Delivery),
- Work Breakdown Structure (WBS) / ID-21 Form for state construction funds,
- State Wage Rates,
- Public Works Employment Verification Requirements,
- Any other required approvals or unique items that should be called to the attention of the District Office, including, but not limited to, Proprietary Item Approval, Pavement Design Approval,

Design Exception Approvals, and PennDOT Bulletin 15 approved materials,
- All other state requirements.

Note: All projects must have an executed reimbursement agreement for the construction phase and an executed construction inspection agreement in place prior to advertisement.

The plans are to be size 22-inch x 34-inch. The specifying of proprietary items will not be permitted without the prior written approval of PennDOT Central Office. Publication 51, Chapter 19, *Standard & Proprietary Materials/Products/Processes Specifications*, includes information on submissions to request proprietary item approval. Proprietary item approval is required as part of the project PS&E package. Therefore, justification for proprietary item approval will be discussed with the PennDOT Project Manager and a letter will need to be submitted by the Local Project Sponsor to the PennDOT Project Manager requesting approval of the item well in advance of the PS&E. If the justification is determined to be sound, the letter will be forwarded to PennDOT Central Office for final approval. Every attempt should be made to not specify a proprietary item.

Publication 51, *PS&E Package Delivery Process Policies and Preparation Manual*, includes a PS&E submission certification list for standard PennDOT review process projects, which will be used to ensure that all of the applicable information is included in the PS&E package. A PS&E Submission Certification List for Simplified Non-Federal Bridge Project Reimbursement Agreement Process projects is included in this manual in Appendix P. The certification list items are applicable to projects where the bid opening will be administered by PennDOT on behalf of the Local Project Sponsor, using ECMS, as well as projects where the Local Project Sponsor has been authorized to conduct the bid opening locally. See Appendix G, Projects Not Let or Administered in ECMS, for the paper let process. As of 2013, PennDOT requires all local projects to be let in ECMS, except for unusual circumstances approved by the Bureau of Project Delivery, Project Schedules, Specifications and Constructability Section Chief.

The Local Project Sponsor will submit the PS&E package via ECMS to the District Project Manager at least nine (9) to fourteen (14) weeks prior to the bid opening date, depending on the project complexity, to allow adequate time for District Contract Management review, and PennDOT Central Office review if necessary. The Local Project Sponsor should coordinate with the District Project Manager to determine the PS&E package submission timeframe for each project. All projects must allow at least ninety (90) days from the bid opening date to the anticipated Notice to Proceed date. If less than ninety (90) days is needed, the Local Project Sponsor must obtain approval from the Central Office Bureau of Project Delivery, Highway Delivery Division to reduce the timeframe. The following information details responsibilities related to the PS&E package for ECMS lets:

- **District Contract Management:** Reviews PS&E package in ECMS. Approves the PS&E package and advertises the project in ECMS, as described in 4.1.B.13. *Advertisement*.

- **Central Office:** Conducts bid opening (4.1.B.14.e *Bid Opening*) and reviews the bids. If a bid justification is needed, the District Office, with input from the Local Project Sponsor, prepares the justification for review and approval by the Central Office Bureau of Project Delivery, Contract Management Section, Contract Awards.

- **Local Project Sponsor**: Concurs to award/reject the bid via ECMS.

- **Central Office**: Awards the contract in the name of the Local Project Sponsor and facilitates contract execution (or bid rejection).

- **Local Project Sponsor**: Executes the contract via ECMS, and coordinates with the District Office to issue the Notice to Proceed via ECMS (See Chapter 7, *Construction Phase*).

The Local Project Sponsor will also adhere to the local government bidding procedures, which do not conflict with state regulations, contained in the Municipal Codes for all projects.

13. Advertisement (State)

When the PS&E package has been approved by the District Contract Management Unit, the construction phase of the project has been included in an executed PennDOT Project Reimbursement Agreement (See Chapter 3, *Project Management Processes*), the construction inspection agreement has been executed, and the ID-21 Form has been approved authorizing the state funds for construction, the bid package will be advertised for bids by the District Contract Management Unit. For local state funded projects, an advertisement period of five (5) weeks is required for minor projects, six (6) weeks for moderately complex projects, and seven (7) weeks for most complex/major projects.

As of 2013, all local projects must be advertised using ECMS unless an exception has been granted by the Bureau of Project Delivery, Project Schedules, Specifications and Constructability Section Chief. For projects where the Local Project Sponsor has received prior written authorization to conduct the bid opening locally see Appendix G, Projects Not Let or Administered in ECMS, for the local advertisement and letting procedures.

14. Project Letting (State)

a) Bid Package Questions

During the project advertisement period, bidders will have the opportunity to ask questions about the bid package via ECMS. All questions will be posted by the bidders in ECMS and responses will be published in ECMS by the District Contract Management Unit, with the assistance of the District Project Manager and Local Project Sponsor. Questions posed through an alternate method will not be answered and bidders will be directed to ECMS to post a question. All questions must be posted by the bidders no later than three (3) working days (11:00AM on Monday) prior to the bid opening date (which typically occurs on a Thursday). ECMS will not allow any questions to be posted after this time. Responses to all questions must be published by the District Contract Management Unit no later than two (2) working days (12:00AM midnight on Tuesday) prior to the Thursday bid opening date. ECMS will not allow any responses to be published after this time.

b) Addenda

The District Contract Management Unit will issue and publish all addenda to the bid package via ECMS, with the assistance of the District Project Manager and Local Project Sponsor. All addenda must be published by the District Contract Management Unit no later than three (3) working days prior to the Thursday bid opening date. Any addenda published after midnight on Monday for a Thursday bid opening, will require the project to be moved to a later bid opening date. Bureau of Project Delivery, Project Schedules, Specifications and Constructability Section will publish the addenda.

c) Pre-Bid Conference

If necessary and specified in the bid package, a pre-bid conference will be conducted for the purpose of discussing essential matters pertaining to the proposed work with prospective bidders and other interested parties. The majority of local state funded projects will not require a pre-bid conference. Pre-bid conferences are generally held on projects of significant size and complexity, projects containing unusual

special provisions or environmental considerations, projects involving significant railroad coordination, or projects with unusual construction sequencing or schedule constraints. For these reasons, pre-bid conferences are generally only held on projects with a $10 million construction estimate or greater.

Information relating to the scheduling of a pre-bid conference is to be included in the bid package. Mandatory pre-bid conferences will be used only when it is imperative that special attention is drawn to particular details or conditions of the project so that the contractor fully understands the bid package and provides an appropriate bid. It is highly recommended that an optional pre-bid conference be used instead of a mandatory pre-bid conference. Mandatory pre-bid conferences may restrict the number of bidders.

The Local Project Sponsor, District Project Manager, District Contract Management representative, and District Assistant Construction Engineer (ACE) who will administer the contract are to participate in the pre-bid conference along with other interested parties, such as representatives from utilities and other participating governmental agencies. All attendees are required to sign in to the conference.

Informal minutes of the pre-bid conference are to be kept by the District Project Manager for information and file, but are not considered part of the contract and may not be enforced as such. Only directives and changes issued via an addendum are binding. If revisions to the bid package are necessary as a result of an issue discussed during the pre-bid conference, the required addendum is to be issued promptly thereafter. As part of the agenda at the pre-bid conference, prospective bidders are to be informed that only DBE/MBE/WBE firms listed in the Pennsylvania Unified Certification Program (PA UCP) may be used. The District ACE assigned to oversee the project will ensure that all pertinent matters are discussed.

Publication 51, *PS&E Package Delivery Process Policies and Preparation Manual*, includes additional guidance on the pre-bid conference.

d) Qualification of Contractors

If a local project will utilize state funds or is located within PennDOT right-of-way, PennDOT prequalification of contractors is required. Prequalification is also required for projects located in local right-of-way if the PennDOT Project Reimbursement Agreement with the Local Project Sponsor requires PennDOT prequalification, or if the Local Project Sponsor elects to require PennDOT prequalification. The only exception to these scenarios would be projects where more than 50% of the work in the bid package is considered miscellaneous. In this case, the Local Project Sponsor could obtain a prequalification waiver from the Department in advance of advertising the project for bids. The Local Project Sponsor should contact the District Project Manager to determine if this is applicable to a specific local project.

Contracting firms prequalified as subcontractors only, under PennDOT prequalification regulations, may be considered eligible to submit bids on local projects as a prime contractor, consistent with their qualifications, provided the bid package indicates this, and the firm meets the 50% prequalification requirement specified in 67 PA Code Chapter 457, *Regulations Governing Prequalification of Prospective Bidders*.

Only contractors meeting the prequalification and registration requirements specified in Publication 408, Section 102.01, *Prequalification of Contractors and Subcontractors*, will be allowed to submit bids electronically in ECMS for state funded local projects, unless a prequalification waiver has been previously approved and included in the bid package or if the bid package indicates that subcontractors are allowed to bid as prime contractors.

e) Bid Opening

PennDOT will electronically open bids on behalf of the Local Project Sponsor at the specified bid opening date and time.

f) Bid Justification and Award Process

After the bids have been submitted electronically in ECMS for a local project, the Central Office Bureau of Project Delivery will evaluate the low bid and recommend award or rejection, as appropriate. The Local Project Sponsor is to concur electronically with the award, using ECMS, to advance the contract to Award status. ECMS Municipal Concurrence to Award will follow this process:

1. Users in the Local Project Sponsor's "Municipal Approver" security group will receive an email that Concurrence to Award is needed.
2. Login in to www.dot14.state.pa.us/ECMS/ using the "Municipal Approver" User ID and Password.
3. Once in ECMS, click on "Construction Projects":
    a. Projects
    b. Enter ECMS project number, press Go
    c. Local column header "Award"
    d. Select "Award Checklist"
    e. Locate and Select "Workflow" button at top of screen
    f. Click "Approve" from drop down list
4. The contract will then be electronically awarded by PennDOT.

15. Construction Contract (State)

a) Preparation and Execution of Contract

After the Concurrence to Award process has been completed, the Central Office Bureau of Project Delivery will electronically forward the contract in ECMS to the contractor and Local Project Sponsor for electronic signature and execution. A sample construction contract is included in Appendix R, Sample Construction Contract. The contractor will be the first party to electronically sign the contract in ECMS. PennDOT will review and electronically approve signatures on the contract and payment and performance bonds. PennDOT will review, approve, scan, and link the insurance certificate in the ECMS Contract Awards screen. The Local Project Sponsor will then use the following process to execute the contract in ECMS:

1. Users in the Local Project Sponsor's "Municipal Approver" security group will receive an email indicating the contract is available to sign for execution.
2. Login to www.dot14.state.pa.us/ECMS/ using the "Municipal Approver" User ID and Password.
3. Once in ECMS, click on "Construction Projects":
    a. Projects
    b. Enter ECMS project number, press Go
    c. Local column header "Award"
    d. Select "Contract"
    e. Locate and select "Workflow" button at top of screen
    f. Click "Sign" from drop down list
4. Users in the Local Project Sponsor's "Municipal Legal" security group (Solicitor) will then receive an email indicating the contract is available to approve.
5. Login to www.dot14.state.pa.us/ECMS/ using the "Municipal Legal" User ID and Password.

6. Click on "Construction Projects":
    a. Projects
    b. Enter ECMS project number, press Go
    c. Local column header "Award"
    d. Select "Contract"
    e. Locate and select "Workflow" button at top of screen
    f. Click "Accept" from drop down list

For projects where the Local Project Sponsor has received prior written authorization to conduct the bid opening locally see Appendix G, Projects Not Let or Administered in ECMS, for the local contract preparation and execution procedures.

When the contract has been fully executed, the Local Project Sponsor can proceed with the construction of the project, as outlined in Chapter 7, *Construction Phase*, of this manual. A printable version of the executed contract will also be available in ECMS for use by the Local Project Sponsor and project team.

b) Prohibition Clauses

Prohibition Clauses that exclude certain factions from participating are not to be included in contracts for local projects.

c) Protest Matters

Any actions by parties protesting the advertisement, award, or execution of a contract for a local project are the responsibility of the Local Project Sponsor and not PennDOT.

CHAPTER 5
RIGHT-OF-WAY PHASE

5.0 Introduction

Local Project Sponsors and others who receive state and Federal-Aid funds for projects involving the acquisition of real property need to be aware of the basic right-of-way policies that must be followed in order to ensure that they do not jeopardize funding for their project.

The purpose of the laws, regulations, policies, and procedures for the acquisition of right-of-way as discussed in this chapter were promulgated in accordance with the following objectives:

- To ensure that owners of real property to be acquired are treated fairly and consistently, to encourage and expedite amicable acquisition by agreements with such owners, to minimize litigation and relieve congestion in the courts, and to promote public confidence in state and federally assisted land acquisition programs.
- To ensure that persons displaced as a direct result of a project are treated fairly, consistently and equitably with minimal disruption to the persons displaced so that such persons will not suffer disproportionate damages as a result of projects designed for the benefit of the public as a whole.
- To ensure that Local Project Sponsors and PennDOT implement the regulations in a manner that is efficient and cost effective.

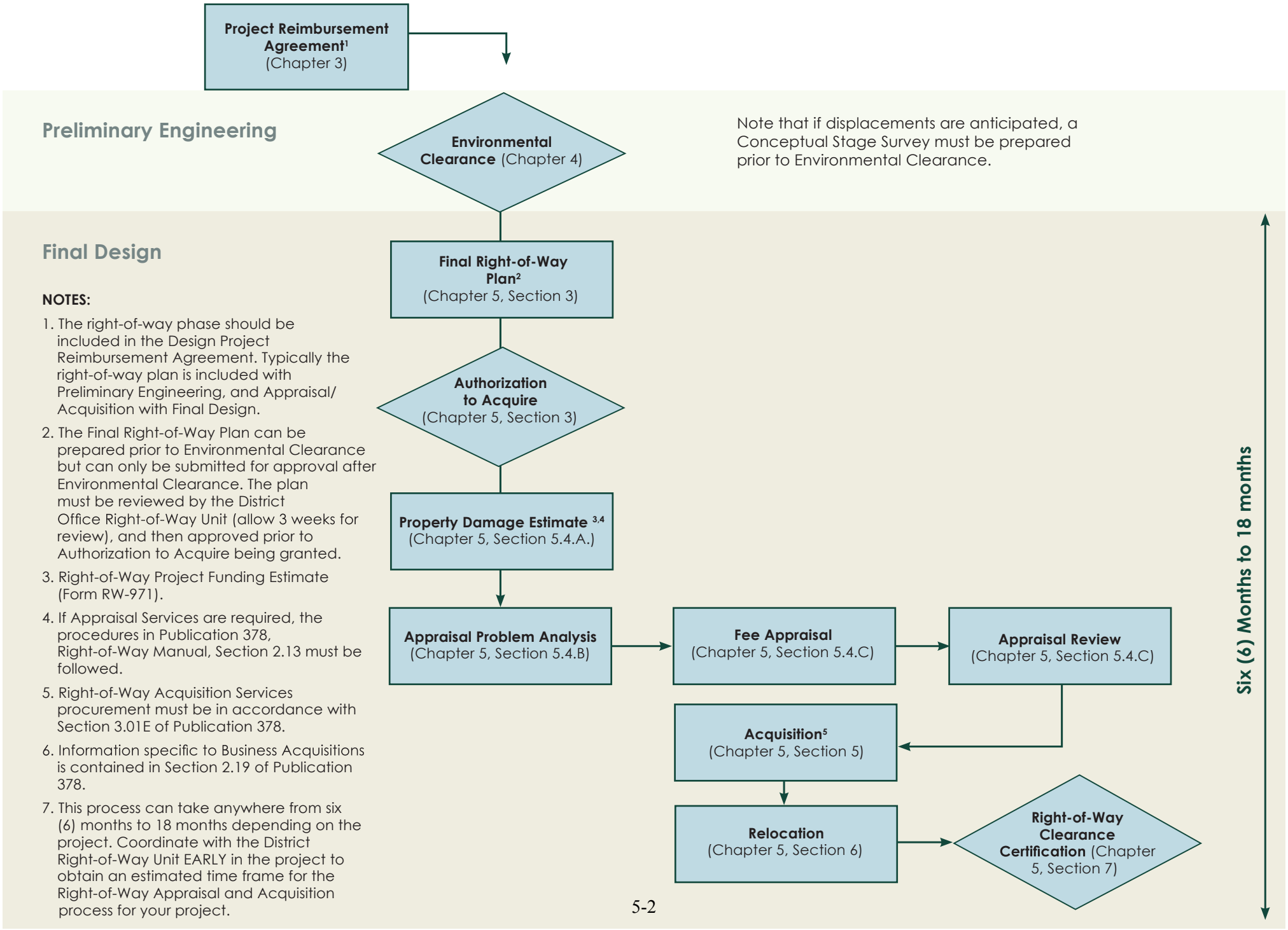
The laws, regulations, policies, and procedures for the acquisition of right-of-way identified in this chapter apply to **any project that uses state and / or federal funding IN ANY PHASE of the project**. This applies even when state or federal dollars are not used specifically for property acquisition or relocation activities but are used elsewhere in the project for things such as planning, environmental assessments, design, and/or construction. All state and federal regulations must be followed in order to not jeopardize funding.

The general right-of-way process is shown in the graphic on the following page. This graphic is provided to help Local Project Sponsors better understand the flow of the right-of-way process and the amount of time that is generally required to complete the process. More details on each step of the process are provided in the remainder of this chapter.

Right-of-way acquisition for some types of projects, such as Rails-to-Trails projects, present some special issues. As early in the project development process as possible, the Local Project Sponsor should seek advice from the designated District Project Manager for projects such as Rails-to-Trails. In addition, coordination with the District Right-of-Way Administrator will be necessary early in the process to ensure that federal funding will not be jeopardized or delayed.

In order to assist the Local Project Sponsor in the right-of-way process, the following are included as appendices in this manual: Appendix S, *Do's & Don'ts of Right-of-Way Acquisition and* Appendix T, *Right-of-Way Forms and Form List for Local Project Sponsors* which will help ensure the Local Project Sponsor completes the required steps in the appraisal and acquisition process.

Figure 5-1: Right-of-Way Process Representative Flowchart



NOTES:

1. The right-of-way phase should be included in the Design Project Reimbursement Agreement. Typically the right-of-way plan is included with Preliminary Engineering, and Appraisal/ Acquisition with Final Design.
2. The Final Right-of-Way Plan can be prepared prior to Environmental Clearance but can only be submitted for approval after Environmental Clearance. The plan must be reviewed by the District Office Right-of-Way Unit (allow 3 weeks for review), and then approved prior to Authorization to Acquire being granted.
3. Right-of-Way Project Funding Estimate (Form RW-971).
4. If Appraisal Services are required, the procedures in Publication 378, Right-of-Way Manual, Section 2.13 must be followed.
5. Right-of-Way Acquisition Services procurement must be in accordance with Section 3.01E of Publication 378.
6. Information specific to Business Acquisitions is contained in Section 2.19 of Publication 378.
7. This process can take anywhere from six (6) months to 18 months depending on the project. Coordinate with the District Right-of-Way Unit EARLY in the project to obtain an estimated time frame for the Right-of-Way Appraisal and Acquisition process for your project.

5.1 Authority and Responsibilities

Federal Public Law 91-646, *The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970*, as amended, commonly called the Uniform Act, is the primary federal law for right-of-way acquisition and relocation activities on federally assisted projects.

The *Pennsylvania Eminent Domain Code*, 26 Pa.C.S. § 101 et seq., and the rules and regulations as promulgated by the General Counsel of Pennsylvania are the state laws governing right-of-way acquisition and relocation.

A. PennDOT District Office Right-of-Way Unit

The PennDOT District Office Right-of-Way Unit appropriate to the geographic location of the project is the Local Project Sponsor's primary source of information concerning right-of-way matters. The District Right-of-Way Administrator will provide Local Project Sponsors with a copy of Publication 378, *Right-of-Way Manual*.

At the beginning of a project, the PennDOT District Office Right-of-Way Unit is responsible for certifying that the Local Project Sponsor has the personnel and expertise to acquire property. At the end of the project, the District Office Right-of-Way Unit is responsible for certifying that the right-of-way was acquired and the project cleared in accordance with appropriate procedures.

The Local Project Sponsor should be in constant contact with the PennDOT District Office Right-of-Way Unit before, during, and after the project, but particularly when in doubt concerning proper right-of-way policies and procedures.

B. Certification of Local Project Sponsor Right-of-Way Personnel

If a Local Project Sponsor decides that it wants to perform the right-of-way functions on the project, it must provide proof to the local PennDOT District Office Right-of-Way Unit that it has the facilities and personnel required to perform the necessary tasks assigned or to be assigned under the Project Reimbursement Agreement. Detailed information on Appraiser Qualifications is contained in Chapter 2, *Appraisal*, Section 2.09, *Appraiser Qualifications*, of Publication 378, *Right-of-Way Manual*. Prior to execution of a project Reimbursement Agreement that includes right-of-way appraisal and acquisition, the Local Project Sponsor should provide the following information to the PennDOT District Office Right-of-Way Unit (in addition, the District Local Project Coordinator needs to be made aware of this decision):

- A listing of personnel, along with individual resumes of educational background and experience,
- A statement of facilities, including clerical and support staff necessary to the operation of typical office functions,
- A listing of current projects that might conflict with the subject project,
- A listing of previous experience with state and federally funded projects involving acquisition and relocations.

Upon receipt of the above information, the District Office Right-of-Way Unit will determine the Local Project Sponsor's ability to perform the required tasks. If acceptable, PennDOT will process the Project Reimbursement Agreement. However, if it is unacceptable, the Local Project Sponsor will be so notified by the District Project Manager and requested, if possible, to correct the deficiency prior to execution of the agreement. When the deficiencies cannot be corrected because of lack of staffing, etc., alternatives shall be considered. These alternatives could include acquisition by an acceptable Right-of-Way Acquisition Consultant or the District Office Right-of-Way Unit. Additionally, the District may have an

existing Open End contract with capacity that could be used for these purposes; consult with the District Project Manager and District Right-of-Way Administrator.

When requested, the District Office Right-of-Way Unit will provide the Local Project Sponsor with a list of Right-of-Way Acquisition Consultants.

The District Office Right-of-Way Unit will provide assistance and advice throughout the life of the project until acceptance of the Right-of-Way Clearance Certificate.

5.2 Funding

Eligibility to receive state and federal funds depends upon compliance with state and federal laws, regulations, and policies, as applicable. The information, policies and procedures contained in the Department's Publication 378, *Right-of-Way Manual* (available from the PennDOT District Office Right-of-Way Unit), and this chapter have been written to comply with the Uniform Act and the Pennsylvania Eminent Domain Code. The Local Project Sponsor can ensure state/federal funding eligibility by following procedures described in the Right-of-Way Manual.

Claim payments processed by the Department require specific accounting codes be identified at the time funding is established. Guidance as to the account coding used for payment(s) must be provided to ensure state funds are accounted for appropriately and to ensure federal funding will not be jeopardized or delayed. Refer to Section 5.5.E, *Payment*, regarding the appropriate general ledger (G/L) account coding to use for Local Projects.

A. State Funded

Right-of-way activities (preliminary plan preparation) should be included in the preliminary engineering phase of the Project Reimbursement Agreement and the Project Engineering Agreement (see Chapter 3, *Project Management Processes*, of this manual). Appraisal and acquisition services, along with the final right-of-way plan preparation, should be included in the final design phase of the Project Reimbursement Agreement and Project Engineering Agreement. The Right-of-Way Phase contained in Exhibit A of the Project Reimbursement Agreement is only intended to include the purchase of property necessary for the construction of the project. However, NO OFFERS FOR RIGHT-OF-WAY ACQUISITION OR PAYMENTS MAY BE MADE, UNTIL ENVIRONMENTAL CLEARANCE HAS BEEN OBTAINED FOR THE PROJECT, A RIGHT-OF-WAY PLAN IS APPROVED, APPRAISALS PEFORMED, AND THE RIGHT-OF-WAY COSTS ARE INCLUDED IN THE EXECUTED REIMBURSEMENT AGREEMENT. See Publication 378, *Right-of-Way Manual*, Section 4.02, *Relocation Program from the Conceptual Stage until Initiation of Negotiations for the Project*.

The right-of-way clearance process is a very standardized and structured process. PennDOT's right-of-way procedures are contained in the Pennsylvania Eminent Domain Code and PennDOT's Publication 378, *Right-of-Way Manual*.

Right-of-way clearance can be a very time-intensive process. Therefore, the District Right-of-Way Unit must be involved in the project as early as possible. The District Right-of-Way Administrator will determine if the Local Project Sponsor has acceptable acquisition procedures and personnel to acquire property. It will be the District Office's option to acquire right-of-way on behalf of the Local Project Sponsor or to have the Local Project Sponsor acquire the right-of-way. If the District Office opts to arrange for services to acquire right-of-way, the Project Reimbursement Agreement will be amended to reflect this change. The Local Project Sponsor must work through PennDOT's District Right-of-Way

Administrator to submit for a Clearance Certificate as part 1of the Plans, Specifications, & Estimate (PS&E) Submission.

B. Federal Funded

If federal funding is included in a project, all of the right-of-way guidance provided in the previous section for state funding applies. In addition, a Form D-4232 must be approved for the right-of-way phase before making offers. This occurs after environmental clearance has been obtained.

Various regulations and guidelines must be followed throughout the right-of-way phase. In addition to the regulations stated above, the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended; 42 USC 4601, *Definitions*; and 49 CFR Part 24, *Uniform Relocation Assistance and Real Property Acquisition for Federal and Federally-Assisted Programs*, must all be followed if federal funding is involved in any phase of the project.

The Local Project Sponsor must work through PennDOT's District Right-of-Way Administrator to submit for a Clearance Certificate as part of the PS&E document. As the state transportation department, PennDOT has overall responsibility for the acquisition, management, and disposal of real property on Federal-Aid projects (23 CFR Section 710.201(b)). A Local Project Sponsor may not obtain a Clearance Certificate in the absence of assurances to PennDOT that all acquisitions and disposals are made in compliance with legal requirements of state and federal laws and regulations.
Federal regulations allow federal reimbursement for right-of-way costs paid in accordance with the requirements of the Pennsylvania Eminent Domain Code.

5.3 Right-of-Way Plan

Right-of-way acquisition documents must be completed by the Local Project Sponsor. A Right-of-Way plan must be created and recorded prior to acquiring all necessary property and easements for the project.

Right-of-Way plans are initiated during preliminary engineering and are generally finalized at the beginning of final design. Right-of-Way plans, including Property Plots, are the basis for determining all property damages that may be involved in the construction of a transportation project. They are also the legal record indicating the location, the extent, and the character of any acquisition of right-of-way and shall be of accuracy commensurate with the Construction Plan data. Section 2003(e)(6) of the Administrative Code 71 P. S., Section 513(e)(6), *Acceptance of Gifts or Donations*, requires that all Right-of-Way plans define the type of interest to be acquired. Publication 14M, *Design Manual 3, Plans Presentation*, Chapter 3, *Right-of-Way Plans*, Section 3.1, *Interests to be Acquired*, defines the types of interests that may be acquired for a project.

The Department's policy is that all required right-of-way shall be acquired in fee simple title. However, there are exceptions to this policy such as "donations" and minor partial takings on existing highways (see Publication 378, *Right-of-Way Manual* – available from the PennDOT District Office – for a description of the exceptions).

In some cases, it may be desirable to stage the preparation of Right-of-Way plans to expedite the acquisition of certain properties. In these cases, an initial "Gap Plan" should be prepared, followed by the "Final Plan." A "Gap Plan" authorizes right-of-way takes in selected areas within a project and can only be prepared after NEPA clearance. No right-of-way lines are to be shown in gap areas. The "Final Plan" reestablishes and/or authorizes Gap Plan Right-of-Way, if necessary, and establishes right-of-way in gap areas. In most cases, however, only a Final Right-of-Way plan (no Gap Plan) will be prepared. In either case, all Right-of-Way plans must be prepared in accordance with Publication 14M, *Design Manual 3, Plans Presentation*, Chapter 3, *Right-of-Way Plans*.

Once the final Right-of-Way plan is approved (only after Environmental Clearance has been obtained), the project can enter the acquisition phase. If federal funds are involved in acquiring the right-of-way, a D-4232 authorization must be obtained from FHWA (for right-of-way Federal Aid) after the environmental document is finalized and before acquisition or relocation activities may begin. Funding must also be in place for the acquisition phase. At this time, if there is federal funding in the acquisition phase, federal and/or PennDOT approval must be received prior to proceeding with right-of-way acquisition and the Local Project Sponsor will need to work with the District Office to secure authorization to acquire.

Where right-of-way acquisition is 100% locally funded and federal funds are to be utilized in other phases (design, construction, etc.), the Local Project Sponsor does not need prior approval to commence acquisition activities, but right-of-way activities are still subject to the Uniform Act and Eminent Domain Code. Additionally, Local Project Sponsors must be aware that the right-of-way acquisitions must not be conducted in such a way that they would jeopardize or circumvent the NEPA process, if federal funds are to be used in any project phase. A Local Project Sponsor's failure to comply with these provisions may result in the loss of state and federal funds in any or all phases of the project.

The right-of-way plan will be reviewed and approved by the District Office. It is suggested that a three (3) week review time be included in the schedule.

When submitting final construction plans to the Department, the Local Project Sponsor must verify to the Department that all work is being done in existing right-of-way or that all required right-of-way has been properly acquired. This verification must be documented prior to authorization to advertise the project for bidding.

5.4 Appraisal and Appraisal Review

A persistent problem in completing right-of-way appraisal and acquisition is the ***lack of sufficient lead-time*** to accomplish the necessary tasks. It is important that Local Project Sponsors are aware of the time necessary to complete the acquisition/relocation process and schedule construction accordingly. Obviously, the right-of-way time element will vary depending on the number and complexity of the acquisitions. Acquisition activities should be carefully coordinated with other aspects of the project to assure a professional and timely completion of the project. The PennDOT District Right-of-Way Unit can provide estimates of the time needed to complete the acquisition/relocation process for a project.

The appraisal, and its review and recommendation by the acquiring agency, are the cornerstones on which the entire effort to provide property owners with just compensation is built. The basic requirements are:

- The property must be appraised and the appraisal must be in writing,
- The appraisal must be reviewed and the recommended amount of Estimated Just Compensation (minimum $500 offer amount) must be the basis of the offer,
- The property owner (or the owner's designated representative) must be given the opportunity to accompany the appraiser during the inspection of the property. This gives the owner the opportunity to advise the appraiser of features of the property that might impact the valuation of the property and allow the disclosure of features that might not be obvious to the appraiser (well, septic system, storage tanks, etc.).

Claim files must contain documentation showing compliance with the above requirements.

Appraisal and appraisal review procedures are detailed in Chapter 2, *Appraisals*, of PennDOT's Publication 378, *Right-of-Way Manual*, and that manual's Appendix A, *the Appraisal Guide*. Please

contact the local District Office Right-of-Way Unit for a copy of this manual and advice regarding the appraisal function.

Appraisals must be completed by certified professional staff or fee real estate appraisers selected from PennDOT's list of approved appraisers. Contact the District Office Right-of-Way Unit for a copy of this list. See Chapter 2, *Appraisals*, Section 2.13, *Appraisal Invitation to Quality*, of Publication 378, *Right-of-Way Manual* for more details.

The first step in the Appraisal Process is the Project Damage Estimate, which is followed by the Appraisal Problem Analysis, the Fee Appraisal and the Appraisal Review. More information on each of the steps follows.

A. Project Damage Estimate

A Project Damage Estimate consisting of an estimated acquisition cost for each claim identified on an approved right-of-way plan must be completed for each project undertaken by the Local Project Sponsor. Refer to Chapter 2, *Appraisals*, Section 2.11D, *Claim Damage Estimate and the Work Breakdown Structure*, of Publication 378, *Right-of-Way Manual* for more information. At a minimum, the estimate should include the agency's best estimate of the cost of the acquisition of real property, real estate tax payments, indirect costs, moving expense payments for businesses and residences, supplemental payments for residences, business reestablishment payments, demolition payments, and other administrative or overhead costs.

If there are no relocation activities, include a statement to that effect on the Project Damage Estimate.

B. Appraisal Problem Analysis

Any appraisal must contain sufficient documentation to support the appraiser's stated opinion of value. The appraisal itself must contain the valuation data and the appraiser's analysis of the data. The format and level of documentation for an appraisal depend on the complexity of the appraisal problem. In uncomplicated cases, the appraisal problem will allow that "minimum standards" be used. While other, complex cases may require a "detailed" appraisal. An Appraisal Problem Analysis (APA), which outlines the scope of the appraisal assignment, must be completed for every appraisal that is expected to be complex. Details on the Appraisal Problem Analysis are contained in Chapter 2, *Appraisals*, Section 2.14, *Appraisal Problem Analysis*, of Publication 378, *Right-of-Way Manual*. Only experienced and competent personnel, familiar with eminent domain appraising may write an APA. The District will determine competency of the proposed APA author in accordance with Section 2.09, *Appraiser Qualifications*, of Publication 378. Other complex cases may require a "detailed" appraisal. See Chapter 2, *Appraisals*, Section 2.12, *Waiver Valuation and Minimum Payment*, in Publication 378, *Right-of-Way Manual*.

C. Fee Appraisal and Appraisal Review

To ensure that offers to property owners are based upon properly prepared and well-documented real estate appraisal reports, an independent professional staff or fee review appraiser must review all appraisals. The reviewer will perform a review of the appraisal(s) to assure that the appraisal conforms to approved appraisal practices and techniques and to establish the amount of Estimated Just Compensation to be offered to the property owner. Reviewers must be certified for the classification of appraisal(s) they will be reviewing. The cost for the independent review appraiser should be considered at the start of the project and figured into the cost estimate and accounted for in the project reimbursement agreement. Two special conditions related to appraisal review are uneconomic remnants and tenant-owned improvements.

The following two sections discuss these special cases, both of which are presented in more detail in Publication 378, *Right-of-Way Manual*.

1. Uneconomic Remnants

An uneconomic remnant is a portion of a larger property determined by an acquiring agency to have little or no utility or value to its owner because of a partial acquisition of the larger parcel. If the acquisition of only a portion of a property would leave the owner with an uneconomic remnant, the agency must offer to purchase the remnant ($100 minimum offer amount). An uneconomic remnant may still have some utility and value. The ultimate test is whether it has utility or value to the present owner.

2. Tenant-Owned Improvements

When a property to be acquired is occupied by a tenant, the Local Project Sponsor must consider the tenant's real property interests as well as those of the property owner. This is most often relevant in the displacement of tenant-operated businesses that have erected a structure or installed other real property improvements. Such tenants must receive just compensation for those improvements if they will be removed or otherwise adversely affected by the proposed acquisition.

Just compensation for a tenant-owned improvement should be based on the amount that the improvement contributes to the fair market value of the whole property.

Outdoor advertising devices (OADs) are classified as either on-premise or off-premise. On-premise OADs advertise the business located on the affected property, whereas, off-premise OADs advertise a business not located on the affected property. On-premise OAD's that are physically annexed to the land or a building will be acquired as real property. On-premise OAD's that are not physically annexed to the land or a building (portable OAD's) will be acquired or moved like any other personal property, consistent with Section 4.05.E, *Personal Property Loss Payment*, of the *Right of Way Manual* (Publication 378). Off-premise outdoor advertising devices are considered to be personal property and their owners are afforded most of the relocation benefits available to a displaced business.

5.5 Acquisition

Acquisition involves direct personal contact with the people affected by a project. The primary goal is to acquire property interests through negotiation rather than through the use of condemnation. Negotiations either should be conducted by qualified individuals on the Local Project Sponsor's staff or, if the Local Project Sponsor does not have sufficient qualified staff, by approved right-of-way consultants. Contact the District Office Right-of-Way Unit for an evaluation of the need to hire a right-of-way consultant for your project.

The following is a list of the basic acquisition requirements:

- ***Personally contact*** each property owner or the owner's designated representative in order to explain the acquisition process, including the owner's right to accompany the appraiser during inspection of the property,
- Provide the owner with a prompt, ***written offer*** of the approved estimate of just compensation for the real property to be acquired and a summary statement of the basis for the offer,
- Give the property owner an ***opportunity to consider*** the offer,
- Conduct ***negotiations*** without any attempt to coerce the property owner into reaching an agreement,
- Pay the agreed ***purchase price*** before requiring the property owner to surrender possession of the property being acquired.

Claim files must contain documentation showing compliance with the above requirements.

Acquisition procedures are detailed in Publication 378, *Right-of-Way Manual*, Chapter 3, *Acquisitions*. Please contact the local District Office Right-of-Way Unit for a copy of this manual and advice regarding the acquisition function.

A. Personal Pre-Negotiation Contact

A Local Project Sponsor should make all reasonable efforts to personally contact each real property owner or the owner's designated representative and schedule an appointment at a convenient time and place. The purpose of this contact is to explain the negotiation process to the property owner as well as the responsibilities of both the Local Project Sponsor and the property owner. This kind of personal contact can be of great importance as the negotiator strives to attain rapport with the property owner that can help inspire confidence in the process and the fairness of the offer.

If all reasonable efforts to make personal contact fail, or if personal contact is impracticable, for example, such as when an owner lives in another state, the owner may be contacted by certified mail or other means appropriate to the situation. Refer to Section 3.02, *The Negotiation Process*, of Publication 378, *Right-of-Way Manual*, for more information.

B. Prompt Written Offer

Once the amount of just compensation has been determined, a prompt written offer must be made to the property owner. The offer must include a description, including location, of the real property or real property interests being acquired and the specific purchase price being offered. Along with the offer, the Local Project Sponsor must provide the property owner a Summary Statement of Just Compensation that explains the basis of the offer and provides information necessary for the owner to make a reasonable judgment concerning the amount of the offer. In addition to the offer amount and location, the summary statement should include an identification of buildings, structures and other improvements to be acquired, and an identification of any separately held ownership interest in the property such as a tenant-owned improvement and a statement, if appropriate, that such interest is not covered by the offer. Refer to Section 3.03, *Specific Offer/Acquisition Situations*, of Publication 378, *Right-of-Way Manual*, for more information.

C. Owner Opportunity to Consider Offer

The Local Project Sponsor must give the property owner a reasonable opportunity to consider the offer. This not only provides the owner a chance to thoroughly review and evaluate the offer, it eliminates any appearance of coercion. It also provides a chance for the owner to present material he or she believes is relevant to determining the property's value, and to suggest modifications to the proposed terms and conditions of the purchase. The Local Project Sponsor must consider the owner's presentation.

At a minimum, three (3) contacts, typically within 30 days, should be made with any claimant prior to initiating any condemnation proceedings. Every reasonable effort must be made to proceed to an amicable settlement; however, when irreconcilable differences between the claimant and the acquiring agency exist, condemnation proceedings should be initiated. District Right-of-Way Administrator oversight and concurrence is required for all condemnation proceedings.

1. Professional Representation

The Eminent Domain Code provides that the owner of any right, title, or interest (including a tenant's interest) in real property acquired by an acquiring agency shall be reimbursed for a portion or all

reasonable expenses actually incurred for independent appraisal, attorney, and engineering fees. Limitations on these reimbursements are detailed in Chapters 3, *Acquisitions*, and 4, *Relocation Assistance*, of PennDOT's Publication 378, *Right-of-Way Manual*.

D. Negotiations

Negotiations must be ***conducted free of any attempt to coerce*** the property owner into reaching an agreement. For example, the Local Project Sponsor should be careful not to threaten condemnation, advance the time of condemnation, defer negotiations, or delay the deposit of funds with the court to coerce an agreement with the property owner. Refer to Section 3.02, *The Negotiation Process*, of Publication 378, *Right-of-Way Manual*, for more information.

E. Payment

As the Local Project Sponsor's primary source of information concerning right-of-way matters, the District Right-of-Way Administrator must provide guidance regarding the manner in which claim payments are processed.

When claim payments are processed by the Department via the Right-of-Way (ROW) Office system, specific accounting codes are used to process the payment(s). Guidance as to the account coding used for payment(s) must be provided to ensure state funds are accounted for appropriately and to ensure federal funding will not be jeopardized or delayed.

When acquisitions are conducted by the Local Project Sponsor but paid by the Department, the District will use the customary general ledger (G/L) Accounting codes and internal order numbers used for Department projects.

However, when acquisitions are conducted by the Department on behalf of the Local Project Sponsor, a special series of G/L accounting codes for local highway projects acquired for non-capital expenses must be used. The G/L accounting codes listed below have been implemented into ROW Office for this purpose. Internal Order numbers associated with the G/L accounts remain unchanged.

6393001	LPS Payments to Property Owners for Right-of-Way
6393002	LPS Other Contractual Right-of-Way Payments
6393003	LPS Refunds (credits) – Retention/Sale of Right-of-Way Acquired Property
6393004	LPS Refunds (credits) – Rent of Right-of-Way property
6393005	LPS Miscellaneous Small Right-of-Way Costs/Max $10,000

1. Administrative Settlements

As a general rule, the use of an administrative settlement (an administrative decision to settle a claim for an amount greater than the agency's estimate of just compensation) should be considered only after diligent negotiations. District Right-of-Way Administrator oversight and concurrence is required for all administrative settlement actions. When the claimant rejects an offer and a counter demand presented by the owner has merit, an administrative settlement is a viable alternative to protracted condemnation proceedings. The prudent use of administrative settlements is especially helpful for low-value claims. Refer to Section 3.04, *Administrative Settlements*, of Publication 378 for more information.

2. Eminent Domain Proceedings

The Uniform Act states that no owner shall be required to surrender possession of real property before the acquiring agency pays the agreed purchase price or deposits with the court for the benefit of the owner, an amount no less than the Agency's approved estimate of just compensation for such property.

When irreconcilable differences exist between the claimant and the acquiring agency and an amicable or administrative settlement is improbable, the negotiator should recommend the filing of a Declaration of Taking (DT) on the property. Filing a DT automatically vests title with the acquiring agency.

For all declarations of taking filed, the statute of limitations commences as of the date of payment of estimated just compensation to the claimant or the date of deposit of estimated just compensation into court, and expires six years after such date of payment or deposit. Therefore, a petition for the appointment of viewers for the determination of damages must be filed within the six-year period when a declaration of taking is filed. The negotiator must order an update of the appraisal prior to the date of the filing of the Declaration of Taking. Any increase should prompt a revised offer. At this stage of negotiations, particular care must be taken to follow all procedures of Publication 378, *Right-of-Way Manual*, and the Pennsylvania Eminent Domain Code. Qualified legal advice is a necessity when undertaking an Eminent Domain Proceeding.

Note: Where a declaration of taking is filed, the LPS must be aware of its litigation responsibilities in the event the reimbursement agreement terminates prior the expiration of the Eminent Domain statute of limitations. Maintenance of documented reports, files and all additional costs incurred as a result of litigated right-of-way claims are borne by the LPS.

Refer to Section 3.08, *Condemnation Procedures*, of Publication 378 for more information.

3. Donations

After being fully informed by the Local Project Sponsor of the right to receive just compensation for the property, an owner whose property is being acquired may donate all or part of the property, any interest in the property, or any compensation paid for the property to the Local Project Sponsor. Refer to Section 3.03L, *Donations of Real Property by a Property Owner*, of Publication 378 for more information.

4. Dedications

An acquiring agency may accept a parcel of land that a developer of a subdivision has dedicated or proposes to dedicate for street purposes. The agency may also accept the land if the dedication is made pursuant to the local planning process or at the request of the property owner for land use concessions. The transfer of title to such land varies from one jurisdiction to another. In some jurisdictions, a deed may be necessary; in others, the acceptance by the local zoning office of a master plan filed by the developer is all that is needed.

Right-of-Way acquired through normal zoning and subdivision procedures requiring the donation or dedication of strips of land in the normal exercise of police power is not considered an acquisition or taking in the constitutional sense. Thus, payment of just compensation or compliance with provisions of the Uniform Act is not required, since police power is used. Refer to Section 3.03M, *Dedications of Real Property by a Governmental Body*, of Publication 378 for more information.

5. Offer to Purchase Uneconomic Remnants

A Local Project Sponsor is required to make a formal, written offer to purchase land that it determines to be an uneconomic remnant. This is a minimum $100 offer and is separate from the offer to purchase the required right-of-way. However, unlike the acquisition of required right-of-way, the owner may decline the offer. Once declined, the matter is simply dropped and no further negotiations or action is necessary on the part of the Local Project Sponsor.

Federal funds may be used to acquire uneconomic remnants regardless of whether the remnants are incorporated into the highway right-of-way. Uneconomic remnants incorporated within the right-of-way limits lose their separate identity and become part of the right-of-way. Remnants that are not incorporated within the right-of-way limits would be disposed of in the same manner as other disposed highway right-of-way. Refer to Section 3.03B, *Acquisition of Uneconomic Remnants*, of Publication 378 for more information.

6. Offer and Payment for Tenant-Owned Improvements

An improvement located on the property to be acquired should be treated as real property regardless of ownership. Acquisition from the tenant should follow the same procedures as those for acquiring real property from the owner. The exception to this rule is "off-premise" outdoor advertising devices, which should be acquired as personal property.

No payment should be made to a tenant-owner for improvements unless:

- The tenant-owner assigns, transfers and releases to the acquiring agency all of the tenant-owner's right, title and interest in the improvement,
- The owner of the real property on which the improvement is located disclaims all interest in the improvement,
- The payment does not result in the duplication of any compensation.

Refer to Section 3.03E, *Acquisition of Land and Tenant-Owned Improvements*, of Publication 378 for more information.

5.6 Relocation Assistance and Payments

The relocation of families and businesses is the most sensitive of all the right-of-way activities since people are being asked to move from their homes and businesses in addition to giving up a portion of their land. For that reason, federal and state laws and regulations have established an additional set of benefits and payments over and above the fair market value payment to assist persons in this situation. See Chapter 4, *Relocation Assistance*, of Publication 378, *Right-of-Way Manual*, for more information on Relocation Assistance.

The following is a list of the basic relocation requirements:

- No residential occupant shall be displaced unless, and until, ***comparable (decent, safe and sanitary) replacement housing*** has been provided for or is built,
- Replacement housing will be fair housing, open and offered to all affected persons regardless of race, color, religion, national origin, age, or handicap,
- Replacement housing will be within the financial means of the displaced persons and reasonably accessible to their places of employment, public services, and other conveniences,
- No person, family, business, farm operation, or non-profit organization will be required to move as a result of a project without having received a written General Information Notice, a Notice of Relocation Eligibility, and at least ninety (90) days written notice of the proposed move date. Off-premise outdoor advertising devices are included within the definition of a business and require the above notices,
- Displaced persons must be informed of their right to appeal a Local Project Sponsor's determination of their eligibility for, or the amount of, any relocation payment,
- Claim files must contain documentation showing compliance with the above requirements.

Relocation procedures are detailed in Chapter 4, *Relocation Assistance*, of Publication 378, *Right-of-Way Manual*, and Bulletin 47, *A General Guide to the Relocation Assistance Program of the Pennsylvania Department of Transportation*. Please contact the local District Office Right-of-Way Unit for a copy of the manual and advice regarding the relocation function.

A. Pre-Acquisition Survey and Relocation Plan

Relocation creates the most significant social and economic impacts of a project. Successful relocation requires planning. The relocation program is structured in an orderly and logical sequence of reports, assurances, and activities which are required on each project where displacement may occur, beginning with the a preliminary engineering report and ending with the relocation of the last person or business on the project.

Housing resources must meet the needs of displaced persons in terms of size, location, and timely availability. Advisory services and various notices, some with specific timing requirements, must be provided. Payments must be made to displaced persons at the time they are needed to obtain replacement housing. Businesses must be given relocation assistance with a minimum of disruption to operations. All of this requires planning.

As part of the preliminary engineering phase and concurrent with the environmental study, a ***Conceptual Stage Survey*** is conducted prior to the Right-of-Way phase to provide pertinent data to uncover any easily identified relocation problems. The formal written presentation of the data summarized into the ***Conceptual Stage Report*** serves as the basis for the pre-acquisition survey to identify relocation needs and establish an inventory of available comparable housing and replacement housing sites.

If relocation of residential or business owners, or tenants, will be required, the Local Project Sponsor must prepare a pre-acquisition survey and relocation plan. The pre-acquisition survey cannot be completed until a right-of-way plan is prepared that indicates what real property must be acquired for the project. This report should be specific regarding the displacement of residences or businesses and should include a detailed relocation plan. Refer to Section 4.02, *Relocation Program from the Conceptual Stage Until Initiation of Negotiations for the Project*, of Publication 378, *Right of Way Manual*, for more information.

B. Relocation Notices

State and federal law and regulations recognize the need of displaced persons for access to information about the relocation process and require that certain notices be provided to them. The following are the notices that must be delivered to displaced persons (refer to Section 4.02H, *Relocation Notices*, of Publication 378 for more information on these notices):

General Information Notice. This notice is to be provided to displaced persons at an early stage of the project. The purpose of the notice is to provide a general description of the agency's relocation program. PennDOT's Bulletin 47 serves as this notice. This notice is given as a handout at public meetings for the project and, later on, to individual displaced persons.

Notice of Relocation Eligibility. This notice is given later in the project when it is determined that particular persons will be displaced. The notice informs the occupant that he or she will be displaced and, therefore, will be eligible for relocation benefits, as applicable.

90-Day Notice (Advance Notice of Move Date). The 90-day notice is a basic protection for displaced persons. As part of the General Information Notice mentioned above, the Local Project Sponsor must inform potential displaced persons that they will not have to move without at least ninety (90) days written notice. The 90-day Advance Notice of Move Date itself is then sent once the Local Project Sponsor's relocation plans for a displaced person becomes more precise. At this time, the Local Project

Sponsor will inform the displaced person at least ninety (90) days in advance, of the earliest date by which he or she will be required to move. For residential displacements, the notice may only be given after insuring that at least one (1) comparable (decent, safe, and sanitary) replacement dwelling is available.

30-Day Notice (Notice to Vacate). When actual possession of the property is required for the orderly clearance of the right-of-way, a 30-day Notice to Vacate will be issued containing the *required date of possession.* The required date of possession cannot be less than the full 90-day period established by the Advance Notice of Move Date. Note that the 30-day period in the Notice to vacate cannot be given until the Local Project Sponsor has legal right to possession of the acquired property. The required date of possession may be extended when conditions warrant, but any extension must be in writing and must give another specific date by which the property must be vacated.

The 30-day Notice to Vacate is sent by certified mail (return receipt requested) to all affected owners and tenants. A single notice may be sent to a husband and wife who are owners as tenants by the entireties, but in all other cases of joint ownership each owner must receive a separate notice. One copy of the notice is retained in the District file, an information copy is sent to the District Property Manager, and one copy is sent to Central Office. Shortly after the notice is received by the displaced person, the relocation advisor shall personally visit to offer relocation assistance, and to establish the specific date to vacate based on the date shown on the certified mail return receipt card. Once this date is established, it should be noted on the District's copy of the notice and in the negotiations progress report.

It is then the relocation advisor's responsibility to do everything possible to assist the displaced person in meeting the established vacation schedule.

Note that this requirement may also apply to the owners of outdoor advertising devices (OAD) that are located within the required right-of-way. An owner of an OAD may choose to move the OAD and receive an actual moving cost payment of which assistance may be required. As an alternative, the owner may choose to abandon the OAD in-place and receive a tangible personal property loss payment which would not require relocation assistance. Refer to Section 4.05, Relocation of Off-Premise OADs, of Publication 378, *Right-of-Way Manual*, for more information.

C. Residential Relocation Payments

Residential displaced persons are eligible to receive certain relocation benefits. Depending on length of occupancy and type of tenancy, a displaced person may be eligible to receive a Down Payment Supplement, Rent Supplement, or a Replacement Housing Supplement. Eligibility and limits for each benefit type are summarized below. Refer to Section 4.03, *Relocation of Residential Owner and Tenant-Occupants*, of Publication 378 for more information and for ***current*** eligibility requirements and limits.

Replacement Housing Supplement. The purpose of this payment is to assist a displaced person to purchase a replacement dwelling. This is a 3-part payment – consisting of the supplement, closing costs and increased mortgage interest costs.

Refer to Publication 378, *Right-of-Way Manual*, for applicability of and maximum amounts available for a Replacement Housing Supplement.

Rent Supplement. The purpose of this payment is to assist a displaced person to rent a replacement dwelling.

This is a 1-part payment – the supplement only. There are no closing or increased mortgage interest costs associated with renting.

Refer to Publication 378, *Right-of-Way Manual*, for applicability of and maximum amounts available for a Rent Supplement.

Down-payment Supplement. The purpose of this payment is to assist a displaced person to put a down payment on a replacement dwelling.

This is a 1-part payment – the supplement only. Closing costs are included.

Refer to Publication 378, *Right-of-Way Manual*, for applicability of and maximum amounts available for a Down-payment Supplement.

Moving Costs. The purpose of this payment is to assist a displaced person to move personal property.

A displaced person may choose an actual cost move by a mover, a fixed-schedule payment, or a combination of those methods.

Refer to Publication 378, *Right-of-Way Manual*, for applicability of and maximum amounts available for Moving Costs.

Appraisal, Engineering and Attorney Fees – Maximum $4,000 Combined. The purpose of this payment is to enable a displaced person to obtain independent help in evaluating offers.

Refer to Publication 378, *Right-of-Way Manual*, for applicability of and maximum amounts available for Appraisal, Engineering, and Attorney Fees.

1. Replacement Housing of Last Resort

When it is apparent that a replacement-housing supplement in excess of $27,000 or a rent supplement in excess of $6,300 will be required, or when comparable replacement housing is simply not available, Housing of Last Resort must be provided. Housing of Last Resort procedures must also be used to provide a rent supplement to any less than 90-day occupant, regardless of the amount. In Last Resort Housing situations, the Local Project Sponsor is required to provide replacement housing that places the displaced person in the same ownership or tenancy status from which he or she is being displaced. The exception is a less than 90-day occupant, who is entitled to receive a rent supplement only.

Prior to using Last Resort Housing, the Local Project Sponsor must prepare and submit to PennDOT for approval a "Last Resort Housing Plan" outlining the Local Public Agency's method for providing comparable replacement housing.

It is recommended that the District Office Right-of-Way Unit be consulted regarding Housing of Last Resort situations.

D. Business Relocation Payments

Any business, farm, or non-profit organization is eligible for relocation payments if it meets specific eligibility criteria. Relocation payments for businesses include the following (refer to Section 4.05, *Businesses, Farms and Nonprofit Organizations,* of Publication 378 for more information):

- Moving Cost Payment
- Mortgage Interest Costs
- Personal Property Loss Payment
- Business Reestablishment Payment
- Searching Cost Payment
- Business Dislocation Damages Payment
- Appraisal, Attorney and Engineering Fees

These payments are fully explained in Chapter 4, *Relocation Assistance*, of Publication 378, *Right-of-Way Manual*.

E. Relocation Advisory Services

Another key element of the relocation program is relocation advisory services. These services provide displaced persons and businesses with information, counseling, advice, and encouragement and often require intense personal contact. Basic services include (refer to Section 4.06, *Relocation Assistance*, of Publication 378 for more information):

- Explanation that no person can be required to move from a dwelling unless replacement housing is available,
- Explanation of relocation services and benefits,
- Explanation of the eligibility requirements for each type of relevant relocation payment,
- Determination of the needs and preferences of the displaced persons,
- Provision of specific services such as providing current listings of available replacement properties, transportation for displaced persons to inspect potential replacement housing if they are unable to do so on their own, assistance in obtaining and completing applications and claim forms for relocation payments.

5.7 Right-of-Way Clearance Certificate

The following are the procedures for obtaining a Right-of-Way Clearance Certification for a Local Project:

Stewardship and Oversight Agreement. Pursuant to the Stewardship and Oversight Agreement between the FHWA and PennDOT, PennDOT approves and issues (clear) Right-of-Way Clearance Certifications. For federally funded projects, if a project area is not clear for construction, all conditional right-of-way certificates must be approved by FHWA. The Agreement states that PennDOT will assure Local Project Sponsor compliance with state and federal requirements on Local projects.

Local Project Sponsor Acquisition. If the Local Project Sponsor is doing the acquisition, the District Office Right-of-Way Unit has oversight responsibility to ensure compliance with state and federal requirements. The Local Project Sponsor must make the following information available to the District:

- General project files and claim files,
- The number of land only parcels,
- The number of occupied parcels, if any,
- If occupied parcels, provide the relocation status,
- Provide the status of demolitions, if any,
- Advise if Declaration of Takings were filed, and if so, last date for Preliminary Objections to be filed,
- Advise if any Preliminary Objections were filed,
- Provide the status of payments,
- Include a statement that the acquisitions are in compliance with state and federal requirements.

The District will evaluate the information and, if acceptable, document their file to certify right-of-way clearance.

If the project letting is being handled by PennDOT, it is necessary for the Chief of Utilities and Right-of-Way Section to certify right-of-way clearance. In this case, the District Right-of-Way Administrator (or delegate) will evaluate the information provided by the Local Project Sponsor by completing the

Compliance Checklist prior to approving the Right-of-Way clearance certification. If acceptable, this information is sent along with a recommendation for certification to PennDOT Central Office.

ROW Office Local Projects. The Right-of-Way Office application is a statewide web-based database used to electronically manage right-of-way acquisition activities for PennDOT. The Right-of-Way Office tracks project information, establishes parcel and claim numbers, records parcel take area and valuation data, controls claim payment activities through system edits, details property management and relocation assistance events, and serves as an historical database for all claimant contacts. It is the Departments official database for all right-of-way activities.

If PennDOT is conducting the appraisal and negotiation functions for a Local Project Sponsor project, a District request for a Right-of-Way Clearance Certificate may be made in the same manner as a PennDOT project. However, a comment must be entered on the Claim Maintenance screen for each parcel stating that the Local Project Sponsor either has paid the claim or will pay the claim.

5.8 Right-of-Way Files and Recordkeeping

The Uniform Act and PennDOT regulations require that a Local Project Sponsor maintain adequate right-of way records and files in sufficient detail to enable a reviewer to determine compliance with federal and state requirements.

General project files and individual claim files must be set up to give a chronological listing of the events pertaining to the project and each individual acquisition.

Individual claim files must be set up to show all of the events and records pertaining to the different aspects of the acquisition; that is, a chronology of correspondence to the claimant, and documents and records of the different right-of-way processes: appraisal, acquisition, relocation, settlement and payment(s).

Each claim file should also contain a negotiations record, which chronologically documents events and verbal discussions with the claimant. An accurate record of all contacts and actions pertaining to every claim must be maintained. This report should be a logical, legible, chronological account of names, meeting places, dates, discussions, claimant counter demands, etc. Every entry should be signed and dated by the person making the entry.

Records shall be retained for at least twenty-one (21) years after each owner of a property and each person displaced from the property receives the final payment to which he or she is entitled under state and federal laws and regulations.

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CHAPTER 6
UTILITY AND RAILROAD COORDINATION

6.0 Utility Coordination and Relocation

A. Introduction

The Local Project Sponsor is required to perform the necessary utility coordination and relocation activities that lead to the issuance of the Utility Clearance in accordance with PennDOT Publication 16M, *Design Manual Part 5, Utility Relocation,* for relocation activities.

The terms "utility" or "utilities" used in this section refer to a utility company, a municipality, or an authority that owns and/or maintains utility facilities.

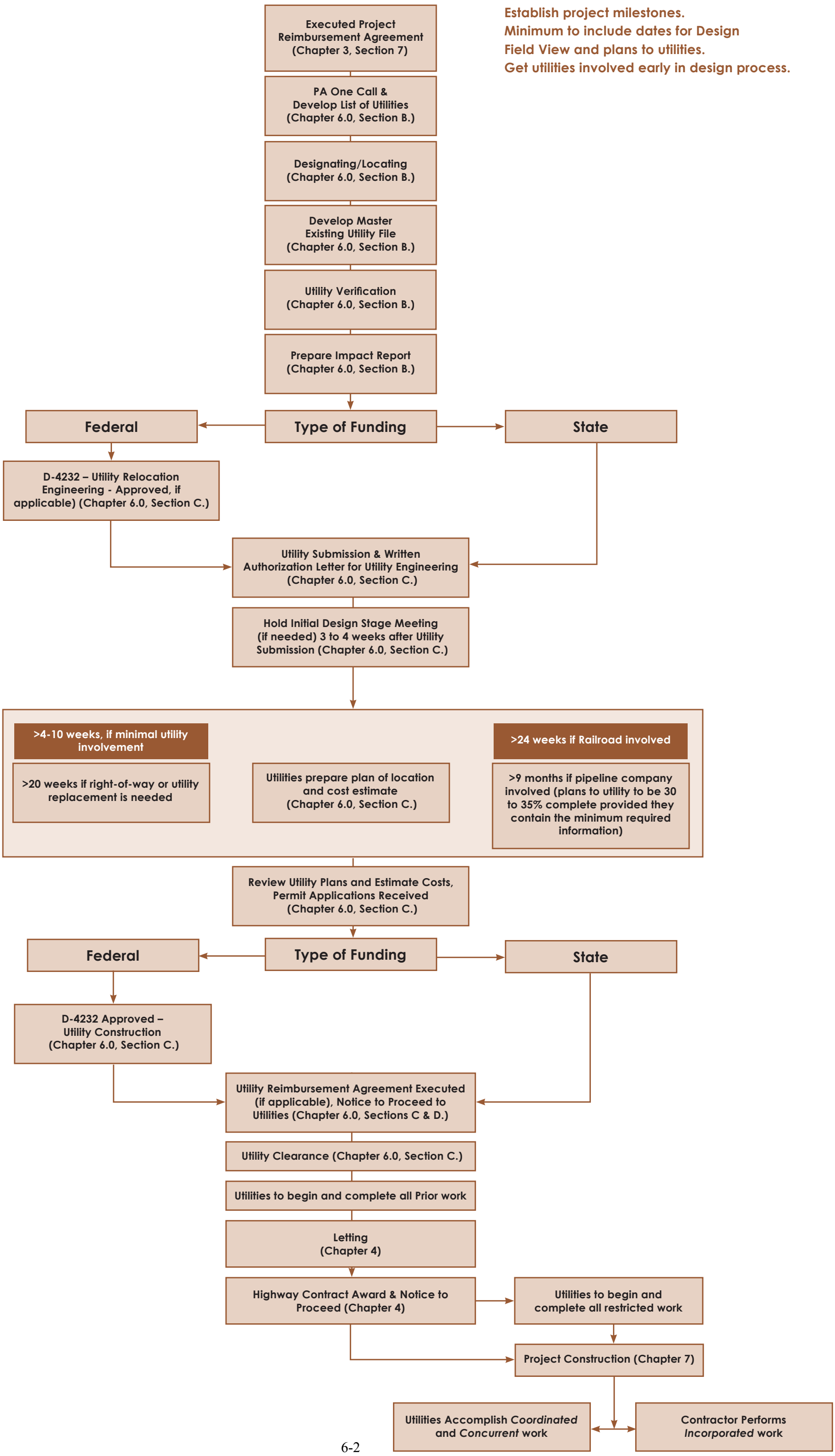
The purpose of completing the tasks associated with utility coordination and relocation activities is to secure 'written arrangements' (see Table 6-2, *Requirements for Written Utility Arrangements based on Project's Affect on Utilities*) from each utility within the project limits so that the Utility Clearance Certification can be provided. The procedures outlined in this manual must be performed and documented in order to not jeopardize the use of federal and/or state funds. Note that a project cannot be advanced to an advertisement without a Utility Clearance Certification. A general flow chart for Utility Coordination and Relocation, which generally parallels the discussion provided in the following sections, is provided in Figure 6-1, *Utility Coordination & Relocation Process Representative Flowchart*. In addition, a Utility Coordination Checklist has been included in Appendix U, *Utility and Railroad Coordination Checklists*.

The Local Project Sponsor must maintain coordination efforts with the utilities throughout the project design process to promote amicable solutions to resolve or minimize conflicts between the existing utility facilities and the proposed highway and/or bridge construction. Frequent contact with the utilities is essential to effectively completing the utility coordination and relocation tasks. Opportunities for utility input early in preliminary engineering should be offered and encouraged by the Local Project Sponsor.

The Local Project Sponsor must also coordinate with PennDOT's District Project Manager and District Utility Administrator and must become very familiar with the information outlined in the Project Reimbursement Agreement (between PennDOT and the Local Project Sponsor, see Chapter 3, *Project Management Processes*, of this manual). At the outset of the project, it is important to understand the criteria by which funding is to be established for the project regarding reimbursement of eligible utility relocation costs, especially if a Federal Agency is participating in those eligible utility engineering and/or construction costs. If required, the District Utility Administrator should also provide guidance to the Local Project Sponsor throughout the design process.

If Federal Highway Administration (FHWA) funding is to be used toward the eligible reimbursable costs for utility engineering and utility construction on a locally sponsored project, based on the information provided by PennDOT's District Project Manager, the District's Planning & Programming Manager must submit a Form D-4232, Federal Fiscal Authorization Form, to PennDOT's Center for Program Development and Management to authorize and obligate federal dollars for the project. There are multiple line items on this form and references made to the Form D-4232 later in this section of the manual refer to the two (2) line items that relate to utility engineering and utility construction. Commonly, both line items are included on the same Form D-4232, which may even include project right-of-way costs.

Figure 6-1:
Utility Coordination & Relocation Process Representative Flowchart



Generally, if the Local Project Sponsor is obligated by Pennsylvania Law to bear the cost of utility relocations, said costs are eligible project costs.

Project funds may be used for the costs associated with the relocation and/or adjustment of Local Project Sponsor owned utility facilities that are impacted by the highway project. Commonly, the construction work to relocate/adjust Local Project Sponsor utility facilities is included in the highway/bridge construction bidding documents. Subsequently, those eligible relocation/adjustment costs are subject to the project funding pro-rations, less any betterment. Eligible costs are those associated with the relocation and/or adjustment of utility facilities that are directly affected by the proposed highway/bridge construction. *There have been instances where ineligible utility work/items have been included in contracts.* To avoid returning funds for ineligible work/items that have been included in the highway/bridge construction contract, the Local Project Manager should coordinate with the PennDOT District Project Manager. The District Project Manager should ensure that the District Utility Administrator has reviewed the project, and any contracts or agreements, to verify that eligible costs and ineligible costs have been appropriately segregated.

Coordination with the utilities can be a lengthy process and should be started as soon as the Local Project Sponsor is authorized to start work on the project. The utilities are typically involved with numerous projects at any one time; therefore, the more accurate and complete the information sent to the utilities, the less of their time required responding to requests and the better the outcome. The biggest reason for project delays from a utility standpoint is missing, incorrect, or misunderstood information. The Local Project Sponsor should start coordination early with any involved utilities, be thorough, and provide the most up-to-date, complete information possible.

The following information is separated into four sub-sections and incorporates by reference the provisions of the PennDOT Publication 16M, *Design Manual Part 5, Utility Relocation* (DM5):

1. Preliminary engineering: utility coordination and relocation activities leading to the Design Field View (DFV) or equivalent milestone
2. Final design: utility coordination and relocation activities from the DFV leading to and Plans, Specifications, and Estimate (PS&E)
3. Utility Reimbursement Agreement: specific information relating to the execution of a Utility Reimbursement Agreement.
4. Utility Construction and Billing: specific information on procedures to be followed during construction for utilities, including billing for utility work.

For more information on construction procedures and estimates/billing see Chapter 7, Construction Phase, and DM5, Chapter 8, Agreements, Cost Development, Estimates and Billing.

B. Preliminary Engineering

The utility coordination and relocation activities outlined in this sub-section should be started once the Project Reimbursement Agreement has been executed and generally commences with performing a One Call. This is commonly achieved by contacting the PA One Call System, either by telephone (1-800-242-1776) or through their website (http://www.pa1call.org/PA811/Public/). The Local Project Sponsor is responsible for making the One Call on local projects.

Based on the responses received from making the PA One Call, the Local Project Sponsor should contact all utilities and develop a list of Public Utilities (see Publication 14M, *Design Manual Part 3*, Plans Presentation, Chapter 2, *Construction Plans*).

It should be noted that the contact person responding to the One Call may be 'contracted' by a utility and may not be an employee of the utility. Therefore, it is essential that when contacting a utility, the Local Project Sponsor should obtain a name, address, phone number and e-mail address of the individual who roadway/bridge plans are to be sent to for the purpose of engineering the relocations for this particular project. The Local Project Sponsor should consult with the District Utility Administrator to verify the accuracy of the utility contact information.

Local Project Sponsors need to be aware that some aerial utilities are not always identified by the PA One Call System. During the initial telephone conversation (or emails) with the power and/or telephone company representative, the Local Project Sponsor should inquire if there are any joint-use poles and identify the other attached utilities.

Only those utilities that have facilities within the project limits (or a utility that plans to extend service into the project limits) need to be included on the List of Public Utilities.

A master Existing Utility Location Plan must be prepared by the Local Project Sponsor that shows all existing utility facilities within the project limits. The Local Project Sponsor should perform the initial utility tasks to achieve Subsurface Utility Engineering (SUE) Quality Level B for underground utilities and where applicable, attain Quality Level A (see Table 6-1 for a brief description of the SUE Quality Levels). The SUE Utility Impact Rating Form, referenced in DM5, Chapter 6, *Subsurface Utility Engineering*, and found in Appendix V, *SUE Impact Rating Form*, in this manual, can be used by the Local Project Sponsor to recommend the appropriate quality level of SUE on a project. While not required on local projects, the SUE Utility Impact Rating Form is a useful tool that can assist with utility coordination.

Note: Lack of a subsurface investigation could jeopardize federal reimbursement should conflicts arise during construction. See PennDOT's DM5, Chapter 3, *Preliminary Engineering*, and Chapter 6, *Subsurface Utility Engineering*, for further information regarding SUE and more detailed descriptions of the Quality Levels.

Table 6-1: SUE Quality Level Descriptions
Quality Level D (QLD) – Review of Existing Records and Verbal Recollection
Quality Level C (QLC) – Surveying and Plotting of Visible Aboveground Features
Quality Level B (QLB) – Surface Geophysical Methods to identify the existence and approximate horizontal position of subsurface utilities
Quality Level A (QLA) – Nondestructive Excavation Methods to determine precise horizontal positions of subsurface utilities

The Local Project Sponsor needs to send a project notification letter, including the Existing Utility Location Plan, to each utility. The Local Project Sponsor should include the Form D4181-X, *Preliminary Bridge Occupancy Form*, (if a bridge is to be reconstructed/replaced – see Appendix W, *D-4181 and Utility Relocation Estimate Forms*, for a copy of the D4181-X) with supporting information and, if applicable, request the utility's intent for bridge occupancy on any project structure(s). In the letter, the Local Project Sponsor should request that the utility review the plan and return comments regarding how their facilities have been depicted on the plan along with a completed D4181-X (if applicable). Finally, Local Project Sponsors need to request that the utility provide copies of applicable right-of-way documents (easements) for all utility facilities (See Appendix X, *Sample Coordination Letters*, UT#1). The right-of-way documentation must be assembled into a Real Property Interest (RPI) package that is to be submitted to the District Utility Unit for review, processing and approval prior to any Utility Reimbursement Agreements being prepared. See DM5, Chapter 7, *Right-of-Way Procedures*, Section 7.1,

Required Documentation of Utility's Real Property Interest. Local Project Sponsors should coordinate with the District Utility Unit to determine what information is to be included in the RPI package.

All private utility rights-of-way need to be identified by the Local Project Sponsor on the construction plans. Note that the Local Project Sponsor may provide project information, including plans, to the utility in either hardcopy or electronic format. If the Local Project Sponsor, and/or their engineering consultant, has electronic file sharing/transfer processes/forms that must be completed prior to information being shared electronically, the Local Project Sponsor is responsible for ensuring that these approvals are obtained in a timely fashion so as to not delay the project or coordination with the utilities.

Many utility companies are willing to begin coordination activities at the very onset of a project without a formal authorization letter. This early coordination benefits both the project and the utility company as it improves efforts to avoid and minimize utility impacts. The Local Project Sponsor should request, at the very onset of preliminary engineering, that any utility company in the project area be involved with early project coordination. Some utility companies may refuse to begin utility coordination and relocation until a formal authorization letter has been issued. In cases where the utility will not begin work without a formal written authorization letter (see Section 6.0 C., *Final Design*, of this Chapter), the Local Project Sponsor will need to utilize base mapping, Subsurface Utility Engineering (if appropriate), and other means, such as field views, to avoid and/or minimize impacts to the utility to the extent possible.

Note: If the FHWA is participating in the utility engineering costs, the written authorization letter to perform relocation engineering or acquire replacement rights of way must not be granted to a utility until PennDOT has an approved Form D-4232 on file for utility engineering.

In an effort to create and maintain a good working relationship with the utilities, the Local Project Sponsor should solicit utility input relative to project design/utility conflicts. The Local Project Sponsor should also discuss possible resolutions with the utilities to minimize/eliminate potential conflicts.

With input from the utilities, the Local Project Sponsor or their engineer must prepare a Preliminary Utility Impact Assessment Report in text that clearly identifies the location and nature of the potential conflicts. A sample Preliminary Utility Impact Assessment Report is provided in Appendix Y of this manual. The report will include preliminary cost comparisons, conclusions, and recommendations for the relocation of the utility facility versus possible project design modifications that would allow the utility to remain unadjusted. The Local Project Manager will transmit a copy of the report to the District Project Manager for coordination with the District Utility Administrator. Submit a Local Project Utility Relocation Cost Estimate form along with the Impact Report (see Appendix W, *D-4181 and Utility Relocation Estimate Forms*).

Based on all information received, the Local Project Sponsor should update the master Existing Utility Location Plan to include depicting the utility rights of way (easements). Individual pole easements and overhang easements need not be shown.

C. Final Design

The Local Project Sponsor must keep the utilities informed of all design changes as they occur during the final Right-of-Way plan and final Construction plan preparations that could affect existing or planned utility facilities. The Local Project Sponsor is responsible for issuing a written authorization letter to the utilities to perform relocation engineering. This letter is normally issued very early in the final design phase. However, infrequently a utility may request that they be granted a written authorization to perform engineering during the preliminary engineering phase of the project. If this occurs, consult with the District's Project Manager and District Utility Administrator.

After the information resulting from the Design Field View has been exchanged, the Utility Submission should be made by the Local Project Sponsor, providing that the proposed storm water drainage has been depicted on the roadway cross section drawings. If no drainage structures are proposed, the Local Project Sponsor should make the Utility Submission at the point in the plan development when final cross sections would have been developed.

The Utility Submission should contain the following information for each utility involved:

- The written authorization letter from the Local Project Sponsor to each utility to perform utility relocation engineering and estimate preparation, if not provided during preliminary engineering (see Appendix X, *Sample Utility and Railraod Coordination Letters*, UT# 2 & 2A). This authorization letter is *required* for utility companies involved with a local project and *must* be issued for utilities to be eligible for reimbursement.

Note: Costs incurred prior to the written authorization letter may not be eligible for reimbursement. If the FHWA is participating in the utility engineering costs, the authorization to perform relocation engineering or acquire replacement rights of way must not be granted to a utility until PennDOT has an approved Form D-4232 on file for utility engineering.

- Copies of the Right-of-Way plans, profiles, roadway cross section drawings, bridge/structure plans, and applicable roadway construction plan sheets.
- The location of the existing utility facilities and, when seeking reimbursement, the utility rights-of-way (easements) on the project plans. Local Project Sponsors need to request that the utility provide copies of applicable right-of-way documents (easements) for all utility facilities (See Appendix X, *Sample Coordination Letters*, UT#1). As mentioned in the previous section, the right-of-way documentation must be assembled into a Real Property Interest (RPI) package that is to be submitted to the District Utility Unit for review, processing and approval prior to any Utility Reimbursement Agreements being prepared. See DM5, Chapter 7, *Right-of-Way Procedures*, Section 7.1, *Required Documentation of Utility's Real Property Interest.* Local Project Sponsors should coordinate with the District Utility Unit to determine what information is to be included in the RPI package.
- PennDOT Forms D4181 (see DM5, Chapter 4, Section 4.1E, *Utility's Preparation of Plans*), D4181-UC (see DM5 Chapter 4, Section 4.2C, *Utility Relocation Clearance Report*) and when seeking reimbursement, include Form D4181-A (see DM5, *Appendix A*). Copies of these forms are also provided for reference in Appendix W, *D-4181 and Utility Relocation Estimate Forms*, of this manual. See DM5, *Appendix A* for online forms. Because most of the utilities are familiar with completing PennDOT forms, it is highly recommended that the aforementioned forms be used for local projects.
- A request from the Local Project Sponsor for the utility to return plans marked to show the utility's relocations and to complete and submit the applicable forms (with signatures).
- The utilities' requirements for the design and construction of their relocations. This needs to be provided as soon as possible to determine if:
    - Work will be done by utility staff and forces.
    - Work will be done by utility consultant and contractor.
    - Work will be requested to be done by the project designer and contractor, or any combinations of the above. Should a utility, other than the Local Project Sponsor, wish to have their utility relocations designed by the Local Project Sponsor's design consultant, it is recommended that the utility and the Local Project Sponsor's design consultant enter into a separate contract.

- The date when plans for relocation and the applicable forms are expected to be submitted to the Local Project Sponsor. Unless the utility relocations are expected to be very minor, give the utilities three (3) calendar months to complete their engineering. If complex utility relocations are expected, allow for more time. Figure 6-1, *Utility Coordination & Relocation Process Representative Flowchart*, for more information on lead times.

Approximately two (2) weeks after making the Utility Submission, the Local Project Sponsor should contact each utility to determine if:

- The utility received the information contained in the Utility Submission,
- There is additional information needed to provide for their plans for relocation and completed forms,
- There are any circumstances that would prevent the utility from meeting the return date.

If needed, the Local Project Sponsor should schedule and facilitate a Utility Design Stage Meeting approximately three (3) weeks after making the Utility Submission. The Local Project Sponsor should ensure that the following people / organizations are invited to the meeting: Local Project Sponsor's Project Manager and/or authorized representative, utility companies representatives, PennDOT Utility Relocation Unit, District Project Manager, and PennDOT construction staff representative. The intent of the meeting is to explain the project improvement goals, schedules, and targeted utility clearance dates. Local Project Sponsors should solicit utility input relative to project design/utility conflicts, and potential need for substitute right-of-way corridors for utility relocations. Substitute right-of-way can only be considered for those utilities that have a compensable real property interest in their existing facilities. Real property interest may be in the form of an easement, affidavit, or in certain circumstances, a license (see DM5, Chapter 7, Section 7.1, *Required Documentation of Utility's Real Property Interest*) and should, as mentioned, be documented by the Local Project Sponsor through coordination with the utilities as early in the design process as possible. The most common form of documentation is a copy of an easement between the utility and the property owner or an affidavit (see DM5, *Utility Relocation*, Appendix A-600, *Suggested format of Affidavit used as evidence of a compensable real property interest*).

The Local Project Sponsor should provide the survey effort to field stake curb lines, right-of-way lines, and other field information as necessary, if requested by the utility to facilitate their relocation engineering.

The Local Project Sponsor should assist the utilities with making the required submissions to secure needed highway occupancy permits for facilities to occupy PennDOT highway right-of-way.

If the local municipality has a formal permitting procedure for facilities to occupy local right-of-way, the Local Project Sponsor should assist the utilities in obtaining a local highway occupancy permit if required.

If a utility wishes to place facilities within PennDOT right-of-way (see DM5, Chapter 1, Sections 1.2, *The State Highway Law*, and 1.3, *Policies and Procedures for Occupancy of Highway Right-of-Way*, and Chapter 4, Section 4.1(I through M), *Final Design Activities*), the Local Project Sponsor should direct the utility to prepare a permit application (Form 4181 and subsequent pages) along with plans of relocation (see DM5, Chapter 4, Section 4.1E, *Utility's Preparation of Plans*). The permit application and plans should be submitted by the utility to the District Project Manager for review by the District Utility Administrator. If approved, the District Utility Administrator will forward the Highway Occupancy Permit (HOP) to the utility and copy the District Project Manager and the Local Project Sponsor. Note that if a utility submits a permit application directly to the Local Project Sponsor, the Local Project Sponsor should forward the permit application to the District Project Manager.

The Local Project Sponsor is responsible for coordinating with involved utilities to secure written utility arrangements, as shown in the following table, that outline each utility's involvement with the project and their plan of action related to any required relocations.

Table 6-2:
Requirements for Written Utility Arrangements based on Project's Affect on Utilities
(Required information to be provided as Written Arrangements)

Affect on Utility Facilities:	***Not Affected***	***Affected***			
		No HOP	***HOP Required***	***No HOP; Reimbursement Requested***	***HOP Required; Reimbursement Requested***
Completed / Signed D4181-UC[1]	X	X	X	X	X
Acceptable Plan of Relocation		X	X	X	X
HOP Permit Application (state and/or local)			X		X
Acceptable Cost Estimate				X	X

[1]See DM5 Chapter 4, Section 4.2C, *Utility Relocation Clearance Report,* regarding the Form D4181-UC. For more complex utility relocations, a written narrative should be included by the utility with the D4181-UC to clearly describe the relocation work to be performed.

Note that, for iron and steel materials to be permanently installed, Federal-Aid projects must comply with the provisions of 23 CFR 635.410, *Construction and Maintenance: Buy America requirements*, (as amended), which contains the basic rule for Buy America coverage. More information on the Buy America program is contained on FHWA's website at: http://www.fhwa.dot.gov/programadmin/contracts/buyamgen.cfm. The Local Project Sponsor should verify with the local District Office to make sure the project is in compliance with the latest version of the Buy America requirements.

In those instances when a utility wishes to seek reimbursement, an estimate of costs is required in order to draft a Utility Reimbursement Agreement (see Section 6.0 D. *Utility Reimbursement Agreement*). As part of the draft utility reimbursement agreement, the Local Project Sponsor should secure an 'estimate package' (see DM5, Chapter 8, Sections 8.2, *Cost Development*, and 8.3, *Estimates*) from the utility that contains, but is not limited to, the following information:

- Written narrative explaining the relocation work to be performed,
- Documentation proving evidence of real property interest,
- A signed Form D4181-A (see Appendix W, *D-4181 and Utility Relocation Estimate Forms*) along with the documentation to support the cost estimate:
    - A list of material 'to be installed' including the unit cost,
    - A list of material 'to be removed,'
    - Calculations used to determine the pro-ration shares (if other than 100%).
- A plan of relocation (see following paragraphs).

The Local Project Sponsor should review the utility's request for reimbursement, based on the Local Project Sponsor's legal obligation to pay, and if acceptable, consult with the District Project Manager or District Utility Administrator to coordinate the drafting and the execution of a reimbursement agreement. See Section 6.0 D, *Utility Reimbursement Agreement*, of this Chapter.

Upon receipt of all acceptable cost estimates from the Utilities that are seeking reimbursement, the Local Project Sponsor should update the Local Project Utility Relocation Cost Estimate form (see Appendix W, *D-4181 and Utility Relocation Estimate Forms*) and transmit a copy to the District Project Manager to assure that adequate funds are available. The Project Reimbursement Agreement may need to be amended.

The Local Project Sponsor should review the utilities' plan of relocation to assure all issues have been properly addressed and that the information contained on the forms is consistent with their plan of relocation. Note that any utility relocations that are not directly related to the safe operation of the transportation facility will be at the cost of the Local Project Sponsor (i.e., relocations for aesthetics, etc.).

The Local Project Sponsor should review the utilities' plans for relocation with respect to the proposed highway/bridge construction. The Local Project Sponsor must also secure additional information from the utility as needed to assure that the utility's plans for relocation are compatible with the proposed construction operations and schedules.

If applicable, the Local Project Sponsor should establish and delineate the substitute right-of-way and reserved easements for the utility relocations on the project Right-of-Way and Construction plans (see DM5, Chapter 7, *Right-of-Way Procedures*). As discussed, this should be done as early as possible in the design process; typically, near the end of preliminary engineering, just prior to final design.

When the utility relocations, abandonments and removal information are deemed acceptable, the Local Project Sponsor should include the locations of the proposed utility facilities on the project construction plans (see Publication 14M, *Design Manual Part 3, Plans Presentation*).

The Local Project Sponsor should provide the utility with a written notice to proceed with the physical relocation work that will not be performed by the project construction contractor (see Appendix X, *Sample Coordination Letters*, UT# 3 & 3a). It is suggested that any approved Highway Occupancy Permits accompany the notice to proceed and, when applicable, include a copy of the fully executed Utility Reimbursement Agreement.

Note: If the FHWA is participating in the utility relocation construction costs, authorization to order material or begin any relocation construction must not be granted to a utility until PennDOT has an approved D-4232 on file for utility construction.

The Local Project Sponsor should provide the survey effort to field stake curb lines, right-of-way lines, and other field information as necessary, if requested by the utility, to facilitate the proposed utility construction that is to be performed in advance of the proposed highway/bridge construction.

In some instances, a utility may request, in writing, that utility work related to the project be incorporated into the project construction plans to be completed by the Local Project Sponsor's contractor. If such a request is received, the Local Project Sponsor should thoroughly review the implications of incorporating such utility work into the local project construction contract. The Local Project Sponsor is not required to incorporate any utility work; however, there are instances when incorporating a utility's work can better facilitate the highway/bridge construction schedule.

If applicable, the Local Project Sponsor should include incorporated utility work to be performed by the project contractor as ALSO Plans, or other approved procedures, into the project construction contract proposal documents (see DM5, Chapter 3, Section 3.4(1), *Incorporation of Utility Work in Highway Contract*).

Note: In many cases utilities have proprietary items that are included with their relocation designs. For any incorporated utility work, a proprietary items request MUST be approved prior to the work being incorporated into the construction documents in accordance with Publication 51, *PS&E Package Delivery Process Policies and Preparation Manual*, Chapter 3, *Approvals*. The Local Project Sponsor is responsible for ensuring that all needed proprietary item requests are approved prior to advertising the project.

Upon receipt of acceptable written arrangements (see Table 6-2, *Requirements for Written Utility Arrangements based on Project's Affect on Utilities)*, from each utility, the Local Project Sponsor will provide the written arrangements to the District Project Manager. The District Project Manager will then coordinate with the District Utility Administrator. The Local Project Sponsor will prepare the Utility Clearance, D-419 or standard special provision (see Appendix X, *Sample Coordination Letters*, UT#419 and refer to DM5, Chapter 4, Section 4.2B, *Preparation of Utility Clearance Form D-419*, for more detailed procedures and guidance).

The Utility Clearance, D-419, must include the Utility Clearance Certification verbatim and it must be signed by the Local Project Sponsor. The signed Utility Clearance, D-419, along with copies of all written utility arrangements (if not previously submitted to the District Project Manager), must accompany the Plans, Specifications and Estimate (PS&E) package.

The District Utility Administrator will review all the information and, if acceptable, arrange the issuance of the final Utility Clearance Assurance Certification (see DM5, Chapter 4, Section 4.2D, *Utility Clearance Certification*).

If requested by the PennDOT Construction Manager, the Local Project Sponsor should attend and participate in scheduled pre-bid, pre-construction, and construction status meetings, as required (see Chapter 7, *Construction Phase*, of this manual). In addition, the Local Project Sponsor should invite the utilities to attend these meetings as appropriate.

The Local Project Sponsor is responsible for maintaining records of all project related utility documents in accordance with local, state and federal policies and regulations and or the Project Reimbursement Agreement.

D. Utility Reimbursement Agreement

All utility related formal requests for reimbursement must be in accordance with the applicable policies and procedures of DM5, Chapter 8, *Agreements, Cost Development, Estimates and Billing*, and pursuant to applicable laws in effect when the Project Reimbursement Agreement is executed (see Chapter 3, *Project Management Processes*, of this manual).

Generally, PennDOT will draft the necessary Utility Reimbursement Agreements between the Local Project Sponsor and individual utilities. Once an agreement is drafted, PennDOT will then provide it to the Local Project Sponsor for review. The Local Project Sponsor, upon their acceptance of the agreement, will send it to the appropriate utility for signature with instructions to sign and return the agreement.

The Local Project Sponsor will then sign and date the agreement and transmit a copy of the fully executed Utility Reimbursement Agreement to the utility and to the District Project Manager.

***Note*:** If the construction contract contains incorporated utility work (aside from the relocation/adjustment of Local Project Sponsor owned utility facilities), the utility must sign the Utility Reimbursement

Agreement prior to advertisement and a fully executed Utility Reimbursement Agreement must be on file prior to the date the Notice to Proceed is issued to the roadway/bridge contractor.

E. Utility Construction and Billing

1. Utility Construction, Inspection and Changes to Relocation Plan

After the construction contract is awarded, but before Notice to Proceed with construction is granted, the Local Project Sponsor or PennDOT will hold a pre-construction conference in accordance with Chapter 7, Construction Phase, Section 7.1A, Pre-Construction Conference. Utility companies involved with a project will be invited to attend this meeting. Following the pre-construction conference, the Local Project Sponsor (Local Led projects) or PennDOT (District Led projects) will coordinate any scheduling of utility and contractor operations and furnish minutes of the meeting.

Following the pre-construction conference, Notice to Proceed with construction may be granted. The highway contract will contain information on utility relocations based on information provided by the utilities during preliminary engineering and final design. Utility information is provided in the project proposal and must be taken into consideration and recognized by the highway contractor. Delays caused by the utility to the highway contractor will not be recognized when the contractor fails to comply with the information provided in the project construction proposal and/or changes the established sequencing of operations for a project.

FHWA has approved contractors to be compensated for delay caused by utility relocation delays and may participate in construction delay claims caused by utilities under certain circumstances. Should a delay claim be initiated by the highway/bridge construction contractor, the Local Project Sponsor must follow the criteria outlined in DM5, Chapter 5, *Construction*, Section 5.1C, *Highway Contractor's Sequencing of Operation*, so as not to jeopardize project funding.

Following Notice to Proceed for construction, the Local Project Sponsor (Local Led projects) or the District (District Led projects) will provide a letter to the utility authorizing the start of physical work. The utility company is expected to commence work as soon as scheduling permits to clear the project construction area of any prior and restrictive utility work. The utility should perform the relocation work in accordance with their approved relocation plans, under the terms of the Utility Reimbursement Agreement and any permits, including Highway Occupancy Permits.

Areas of utility work relocation that cannot be completed prior to the start of construction, but can be accomplished without restricting the project contractor's operations may be done concurrently with the contractor's operations when approved by the Local Project Sponsor (Local Led projects) or the District (District Led projects) and noted in the contract proposal as described in DM5,Chapter 4, *Final Design*.

Areas of utility relocation work that must be coordinated with the project contractor's operations will be so indicated in the contract proposal, along with a detailed description of the coordinated work and the sequencing of the utility and contractor's operations.

Inspection of utility relocation work is to be completed in accordance with DM5, Chapter 5, *Construction*, Section 5.1E, *Inspection of Utility Relocation Work*. Selected relocation work is to be inspected by the Local Project Sponsor (Local Led projects) or the District (District Led projects) to ensure compliance with the permit, agreement, and established policy and procedure. The utility must notify the Local Project Sponsor (Local Led projects) or the District (District Led projects) with written notification of the date that relocation work will begin. The written notice must be provided at least five days in advance of the start of such work. An inspector must then be assigned for the work and will be

responsible for accurately recording the relocation work on the Utility Inspection Report Form D-4298. Inspection frequency should be determined based on the type of utility facility involved, the magnitude and location of the relocation work, and the quality of previous work and billing accuracy of the specific utility company involved. For additional information and requirements, see DM5, Chapter 5, *Construction*, Section 5.1E, *Inspection of Utility Relocation Work.*

Occasionally field conditions necessitate revision to a utility's approved plan of relocation. It is the utility's responsibility to report the required change immediately to the Local Project Sponsor (Local Led projects) or the District (District Led projects), justify the revision, correct any approved highway occupancy data on file, and comply with established procedures regarding highway occupancy and reimbursement requirements. The utility is required to obtain, by letter, they highway contractor's concurrence of their changes prior to starting the physical adjustment and/or relocation when located within the limits of a local project. DM5, Chapter 5, *Construction*, Section 5.1F, *Changes in Utility's Plan of Relocation*, provides additional information and the procedures that must be followed for both minor and major changes to a utility's plan of relocation.

Following construction, a form certifying that all work is completed must be filled out and signed by both the utility and either the Local Project Sponsor (Local Led projects) or the District (District Led projects). See DM5, Chapter 5, *Construction*, Section 5.1 G, *Certification of Completion*.

2. Utility Billing

DM5, Appendix A, Figure A-815 contains instructions on completing the Summary of Billing form, plus data required on the Preliminary Estimate for Utility Relocation and Summary of Billing cost comparison sheet, which must be completed by the utility. Completion of the comparison sheet will distinguish line items on the Summary of Billing that require cost justification. Reimbursement of utility costs will be in accordance with the Utility Reimbursement Agreement. Payments should be made to the utility company within 60 days of receipt to the Local Project Sponsor. Additional information on utility billing and billing submissions can be found in DM5, Chapter 8, *Agreements, Cost Development, Estimates and Billing*, Section 8.4, *Billing.*

Related to final billing, the Local Project Sponsor will notify in writing each utility that has a Utility Reimbursement Agreement the date of completion of the project. The final and complete billing of relocation costs incurred must be submitted by the utility to the Local Project Sponsor within 365 days following written notification of completion of the project. If the utility fails to submit costs within 365 days following completion of the project, the actual costs paid to the utility to date will be considered final payment. DM5, Chapter 8, *Agreements, Cost Development, Estimates and Billing*, Section 8.4, *Billing*, includes information on the process that may be used by the utility to file a limited time extension within which to submit a final bill.

6.1 Railroad Coordination

A general flow chart for Railroad Coordination, which generally parallels the discussion provided in the following sections, is provided in Figure 6-2, *Railroad Coordination Process Flowchart*. In addition, a Railroad Coordination Checklist has been included in Appendix U, *Utility and Railroad Coordination Checklists*.

A. PUC Involvement

As early as possible, the Local Project Sponsor, in coordination with the District Project Manager and District Grade Crossing Engineer/Administrator, should determine whether or not Pennsylvania Public

Utility Commission (PUC) involvement is required. If a new highway/rail crossing is proposed to be constructed, the PUC must be involved. If a proposed highway/bridge construction project causes an existing highway/rail crossing to be 'altered', PUC involvement is required. The following situations would constitute, but are not the only instances of, 'altering' a highway/rail crossing:

- Changing the elevation of crossing
- Changing the length of the crossing
- Installation of storm water drainage (pipe or ditch) through the crossing
- Changing the current crossing warning devices (signals, gates, etc)
- Replacing an at-grade crossing with a grade-separated crossing
- Replacing a grade-separated crossing with an at-grade crossing
- Replacing/reconstructing an above-grade crossing
- Replacing/reconstructing a below-grade crossing
- Changing the vertical or horizontal clearance of a grade-separated crossing
- Change in type of at-grade surface
- Grade crossing "near the project terminus," see Publication 371, *Grade Crossing Manual*, (GCM), Chapter 3, Section 3.03A, *Federal Funds*

If it is determined that an existing highway/rail crossing is not being altered, then the PUC need not be involved. Should right-of-way need to be acquired from the railroad and the PUC is not involved, railroad property can be acquired through Amicable Settlement (see GCM, Chapter 2, *Public Utility Commission Coordination*). Should right-of-way need to be acquired from the railroad and the PUC is involved, see the following Section II.B., *PUC Activities and Coordination*.

The PUC has exclusive jurisdiction over public highway-railroad crossings. If it is determined that the PUC must be involved, the Local Project Sponsor is required to follow PennDOT, FHWA, and PUC laws, policies and procedures as outlined in the Public Utility Code, PennDOT's *GCM*, and U.S. Code of Federal Regulations (CFR) – Title 23, *Highways*. The Local Project Sponsor is required to coordinate such activities with the PUC, railroad, PennDOT, county, local municipality, and non-carrier public utilities within, adjacent to, or impacted by the project.

The following information incorporates by reference the provisions of the *GCM*.

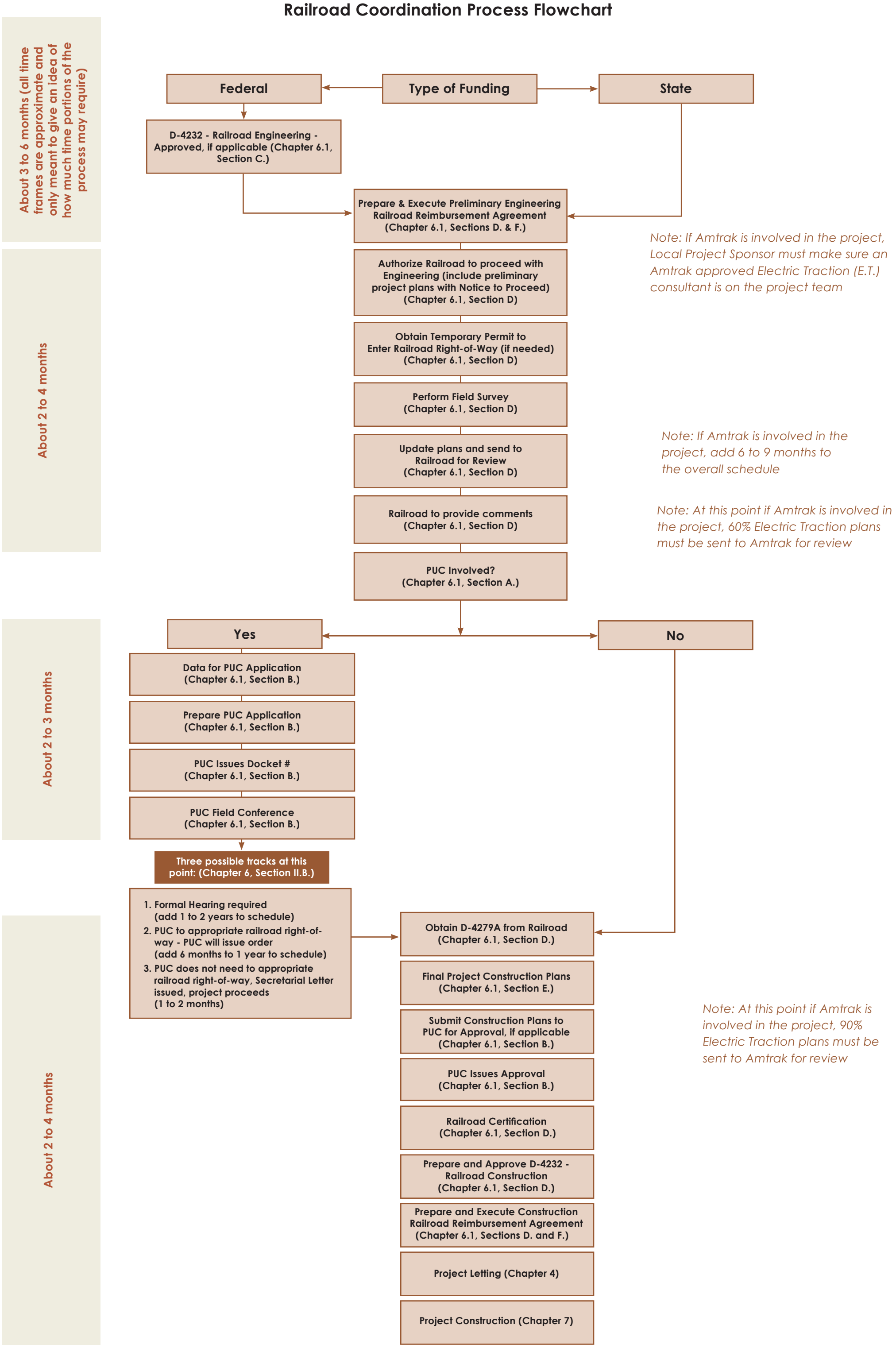
B. PUC Activities and Coordination

This section is intended as a general overview of the PUC activities and coordination that must occur on projects when the PUC is involved. Much of the coordination activities discussed in this section should occur in conjunction with the grade crossing activities discussed in 6.1.C, *Grade Crossing Activities*.

The PUC process normally commences with the filing of an application with the PUC. However, it is highly recommended that all major railroad concerns be addressed and resolved during the grade crossing activities (outlined in 6.1.C, *Grade Crossing Activities*, below) before filing the application with the PUC. The intent is to avoid any objections that may lead to a PUC hearing. A PUC hearing could cause a major time delay in the design process.

The Local Project Sponsor is responsible for filing the application with the PUC and to provide a copy of the application to all Parties of Record (see *GCM* Chapter 3, Section 3.05G, *Data for PUC Application*, and Section 3.05H, *Prepare PUC Application*, and Appendix C, *PUC Application Template*).

Figure 6-2:
Railroad Coordination Process Flowchart



- The PUC will assign a docket number and schedule and conduct a Field Conference (see *GCM*, Chapter 4, *Highway and/or Bridge Project Process*, Section 4.03E, *PUC Field Investigation and Conference*). All Parties of Record are invited to attend the PUC Field Conference. The Local Project Sponsor must attend this meeting and will be responsible for keeping minutes of the meeting for project purposes. These minutes are not taken on behalf of the PUC.

If all issues have been resolved and all parties are in agreement, the PUC can issue a Secretarial Letter, which is the PUC's approval to proceed with the project. However, if the PUC is to appropriate the railroad right-of-way needed to construct the highway/bridge project; the PUC may elect to not issue a Secretarial Letter at this time.

If right-of-way is to be acquired from the railroad, it is highly recommended that the Local Project Sponsor request that the PUC appropriate the railroad right-of-way (see *GCM*, Chapter 4, *Highway and/or Bridge Project Process*, Section 4.04B, *PUC Appropriation of Railroad Right-of-Way*). The Local Project Sponsor must make a submission to the PUC which includes, a metes and bounds description of the parcels to be appropriated, as well as a colored right-of-way plan (see *GCM* Chapter 4, *Highway and/or Bridge Project Process*, Section 4.04, paragraph D) and distribute copies of this submission to all Parties of Record. For additional information, see Publication 378, *Right-of-Way Manual* (available from the District Office), Section 3.03Q, *Acquisition from Railroads*.

If no objections are filed, the PUC will issue an Order approving the project and appropriating the property. This Order will be served on all Parties of Record. The Right-of-Way Clearance for the project cannot be issued until the Order has been entered and the railroad compensated. Note that this can take some time to complete. The Local Project Sponsor, in coordination with the District Project Manager, is responsible for ensuring that time for PUC to issue this Order is properly accounted for in the project schedule.

The Local Project Sponsor must record the PUC Order appropriating the property at the Recorder of Deeds and provide the PUC with recordation information (see *GCM*, Chapter 4, *Highway and/or Bridge Project Process*, Section 4.04D, *Submit Construction Plans to PUC for Approval*, sub items 1 through 3).

The Project Sponsor must submit the final construction plan to the PUC for approval (see *GCM*, Chapter 4, *Highway and/or Bridge Project Process*, Section 4.05 D, *Submit Construction Plans to PUC for Approval*). PUC approval of the construction plans is required before the bids for highway/bridge construction can be opened (letting). Note that signed final construction plans are required to be submitted to all Parties of Record and to the PUC before the bid advertisement occurs.

During this process, the Local Project Sponsor should keep the PUC informed of all independent pertinent correspondence between the Local Project Sponsor and the railroad.

The Local Project Sponsor is responsible for maintaining records of all project related PUC and railroad documents in accordance with state and federal policies and regulations.

C. Grade Crossing Activities

The Local Project Sponsor may propose a highway/bridge project that includes a highway/rail crossing within the project limits where the railroad is not involved. An example would be milling and resurfacing the roadway to include the deck of a bridge that carries the roadway over a railroad. In this case, the railroad would not be involved. However, the Local Project Sponsor is required to send preliminary plans to the railroad along with a description of the work to be performed to include the anticipated construction start work and work completion dates. The District Grade Crossing Engineer/Administrator should be

copied on any correspondence sent to the railroad. Even though the railroad is not involved, the Local Project Sponsor is responsible for including the appropriate standard special provision in the construction contract proposal that directs the construction contractor to obtain railroad insurance.

Should the Local Project Sponsor propose a highway/bridge project that involves a railroad, the Local Project Sponsor is required to perform the necessary grade crossing activities that lead to the issuance of the Railroad Certification letter. A project cannot be advanced to a letting without a Railroad Certification letter.

Note: Per 23 CFR 646.214(b)(2), *Railroad, Design*, "Pursuant to 23 U.S.C. 109(e), where a railroad-highway grade crossing is located within the limits of or near the terminus of a Federal-aid highway project for construction of a new highway or improvement of the existing roadway, the crossing shall not be opened for unrestricted use by traffic or the project accepted by FHWA until adequate warning devices for the crossing are installed and functioning properly." In addition, *GCM*, Appendix H, *Standards and References.*

The Local Project Sponsor should ensure that coordination efforts with the railroad be maintained throughout the project design process to promote amicable solutions to minimize the impact on railroad and highway/bridge operations. Frequent contact with the railroad is essential to be effective in completing the grade crossing tasks.

Before conducting any railroad and/or PUC coordination, the Local Project Sponsor must coordinate with PennDOT's District Project Manager and District Grade Crossing Engineer/Administrator and must become very familiar with the information outlined in the Project Reimbursement Agreement between PennDOT and the Local Project Sponsor (see Chapter 3, *Project Management Processes*, of this manual). At the outset of the project, it is important that the Local Project Sponsor understand the criteria by which funding is to be established for the project regarding reimbursement to the railroad for eligible costs, especially if a Federal agency is participating in those eligible railroad engineering and/or construction costs. In addition, the Local Project Sponsor should investigate whether or not a Federal Rail Safety Project is planned by the Engineering District for a crossing within the limits of the highway/bridge project. The District Grade Crossing Engineer/Administrator should provide guidance to the Local Project Sponsor throughout the design process.

If FHWA funding is to be used toward the eligible reimbursable costs for railroad engineering and railroad construction on a locally sponsored project, PennDOT's District Project Manager must submit a Form D-4232, Federal Fiscal Authorization Form, to PennDOT's Center for Program Development and Management to authorize and obligate federal dollars for the project. References made to the Form D-4232 later in this section of the manual refer to a Form D-4232 for railroad engineering and a Form D-4232 for railroad construction.

Project funds may be used to reimburse the railroad for costs, less betterment, that are associated with, but not limited to:

- Preliminary engineering
- Reconstructing highway/rail crossings affected by roadway construction
- Relocating crossing warning devices (signals, gates, etc) affected by roadway construction
- Relocating Communication and Signal cables and wires affected by roadway construction
- Relocating signal circuitry affected by roadway construction (primarily storm water pipes)
- Providing Protection Services (flagging/watchmen) for the highway/bridge contractor
- Railroad Inspection (primarily for bridge construction)

The Local Project Sponsor should ensure that coordination with a railroad is started early in the design process. Following is general information that may aid in the early coordination with a railroad:

1. There are three types of highway/rail crossings: at-grade, above-grade, and below-grade. The highway and railroad are basically at the same elevation at an at-grade crossing. When the roadway passes over a railroad, it is identified as an above-grade crossing and conversely, when the roadway passes beneath a railroad, it is called a below-grade crossing.

2. Every highway/rail crossing has a 'DOT number' that contains six digits followed by an alphabetical letter (example 123 456 A). The DOT number is unique to the highway/rail crossing and helps the railroad to quickly locate the location of the project. Referring to the DOT number as well as the railroad milepost number at the crossing can help a great deal, especially during the contacts with the railroad. It is recommended that the DOT number be depicted on the project plans. Most at-grade crossings have the DOT number attached to the mast of the railroad's signal or sign structure, whereas most grade-separated crossings are not identified in the field. The Federal Railroad Administration (FRA) maintains a database that can help obtain the DOT number and railroad milepost number (see http://safetydata.fra.dot.gov/OfficeofSafety/default.aspx).

3. The railroad 'owner' may not be the 'operator'. The Local Project Sponsor must conduct proper research, including deed research, to determine what entity has control over and the right to dispose of railroad property. It is recommended that coordination occur with the railroad operator as much as possible on a highway/bridge project; however, the Local Project Sponsor needs to be aware that the railroad operator may not have control over or the right to dispose of railroad property. The railroad owner's name, and/or the entity with control over and the right to dispose of property, should be shown within the railroad's right-of-way on the Design/Construction plans. When a Right-of-Way plan is required, the entity with control over and the right to dispose of property, typically the railroad owner, is shown on the plan as a property owner.

4. The Local Project Sponsor is responsible for granting written authorization to the railroad to perform preliminary engineering and construction activities.

The following information is separated into three sub-sections and incorporates by reference the provisions of the *GCM*:

1. Preliminary engineering - grade crossing activities leading to the Design Field View (DFV).
2. Final design - grade crossing activities from the DFV leading to, and including, Plans, Specifications, and Estimate (PS&E).
3. Railroad Reimbursement Agreement - specific information relating to the execution of a Railroad Reimbursement Agreement

D. Preliminary Engineering

The grade crossing activities outlined in this section should generally commence about the same time that the Utility Relocation activities begin.

A master existing railroad location plan (CADD file) should be prepared by the Local Project Sponsor that shows the existing topographic and surface features, along with all existing railroad facilities within the project limits. This information is useful should a railroad request assistance with preparing a site plan or their project plan. The Local Project Sponsor or their consultant may obtain railroad data by aerial photography and/or conventional survey.

If the railroad retains a consultant engineer for the review of highway/bridge construction projects, the Local Project Sponsor should follow the railroad's established procedures to initiate and maintain railroad coordination through the design process.

The Local Project Sponsor is responsible for sending Forms D-4279 and D-4279A (see Appendix Z, *Railroad Forms*, in this manual and *GCM* Chapter 4, *Highway and/or Bridge Project Process*, and Appendix B, *Standard Forms*) to the railroad. To expedite the return of these forms, the Local Project Sponsor should fill-out as much of the information as possible on the forms before transmitting to the railroad. It is important that the Local Project Sponsor be as specific as possible when describing the proposed construction on the Form D-4279A. The Local Project Sponsor should request the railroad return the completed forms along with a copy of the railroad's valuation (val) map. The val map depicts information that may be helpful in confirming railroad rights of way.

Once information is returned from the railroad, the Local Project Sponsor should update the master railroad location plan, if needed, based on the information from the val map.

A railroad may return the requested information without the authorization to perform preliminary engineering tasks and without a fully executed Railroad Reimbursement Agreement. However, a railroad will likely require that a fully executed Preliminary Engineering Railroad Reimbursement Agreement be in place. If this occurs, the Local Project Sponsor should provide the railroad with information that describes the proposed roadway/bridge construction and request the railroad provide an estimate of costs for preliminary engineering. The Local Project Sponsor should secure a cost estimate from the railroad and consult with the District Grade Crossing Engineer/Administrator to coordinate the drafting and the execution of a Railroad Reimbursement Agreement (see 6.1 F., *Railroad Reimbursement Agreement*, of this manual). Once a fully executed Railroad Reimbursement Agreement for preliminary engineering is attained, the Local Project Sponsor should provide the railroad with the authorization to begin preliminary engineering (see Appendix X, *Sample Coordination Letters*, RR#1).

Note: If the FHWA is participating in the railroad's engineering costs, the authorization to perform engineering must not be granted to a railroad until PennDOT has an approved Form D-4232 on file for railroad engineering. It is important that the District Project Manager ensure that railroad costs related to the project and eligible for reimbursement are included in the D-4232 for the project's preliminary engineering phase.

The Local Project Sponsor should send updated plans to the railroad along with the authorization to begin preliminary engineering, if not previously provided (see Appendix X, *Sample Coordination Letters*, RR#1). In addition, Local Project Sponsors should provide the railroad with information that clearly describes the proposed roadway/bridge construction and request that the railroad provide an estimate of costs for preliminary engineering. If the crossing is equipped with automatic signals and/or gates, the Local Project Sponsor should also request the railroad mark the location of their underground signal circuitry in the field.

If a Temporary Permit to Enter (Right-of-Entry Permit) railroad right-of-way, between the Local Project Sponsor and the railroad, is required to perform survey, perform core borings, etc., the Local Project Sponsor should provide the railroad with the necessary information to secure the railroad's permission to enter upon their right-of-way. The Local Project Sponsor is responsible for ensuring that the project schedule includes time to obtain this entry permit.

The Local Project Sponsor is responsible for providing the survey effort to record the location of the underground circuitry and update the master existing railroad location plan.

In an effort to create and maintain a good working relationship with the railroad, Local Project Sponsors should solicit railroad input relative to review of project design. The completed D-4279 will have information required for preliminary engineering (especially clearances). In addition, Local Project Sponsors should discuss possible resolutions with the railroad operator to minimize the impact that the proposed construction will have on railroad operations. If needed, the Local Project Sponsor is responsible for scheduling a field meeting with the railroad to discuss the project.

The Local Project Sponsor should identify and confirm all the railroad work that will need to be performed to accommodate the proposed highway/bridge construction. A railroad may elect to perform the work with its own forces. However, depending upon the magnitude of the work to be performed, a railroad may elect to have a contractor perform certain items of work. If a railroad wishes to have a contractor perform work for them, the work must be competitively bid unless the railroad maintains a continuing contract (see Chapter 3, Section 3.06, *Types of Construction Contracts and Bidding Process*, of the *GCM*).

The Local Project Sponsor needs to secure railroad standard specifications that will need to be included in the highway/bridge construction bidding documents.

E. Final Design

Local Project Sponsors are responsible for keeping the railroad informed of all design changes as they occur during the Final Right-of-Way plan and Final Construction plan preparations that could impact previously agreed upon arrangements.

The Local Project Sponsor must address all railroad comments and concerns and transmit construction plans to the railroad for review and comments. If the railroad will need to provide Protection Services, the Local Project Sponsor should provide the railroad with the proposed construction durations when flagging and/or guards will be required. In addition, Local Project Sponsors should request that the railroad provide an estimate of costs for the work to be performed by the railroad along with an estimated cost to provide Protection Services and, if required, railroad inspection.

The Local Project Sponsor should secure the cost estimate from the railroad and consult with the District Grade Crossing Engineer/Administrator to coordinate the drafting and the execution of a construction Railroad Reimbursement Agreement (see Section 6.1.F., *Railroad Reimbursement Agreement*, that follows). Once a fully executed construction Railroad Reimbursement Agreement is obtained, the Local Project Sponsor should provide the railroad with the authorization to begin physical construction provided that all of the work is to be performed by railroad personnel (see Appendix X, *Sample Utility and Railroad Coordination Letters*, RR#2).

If the railroad plans to use a contractor that is not under a continuing contract to perform work on the project, proper bidding procedures must be followed (see *GCM*, Chapter 3, Section 3.06, *Types of Construction Contracts and Bidding Process*). The Local Project Sponsor should secure a tabulation of the bids received from the railroad and consult with the District Grade Crossing Engineer/Administrator before providing the railroad with the authorization to proceed with the physical construction.

Note: If the FHWA is participating in the railroad's construction costs, authorization to order material or begin any construction must not be granted to a railroad until PennDOT has an approved D-4232 on file for railroad construction.

The railroad special provisions should be included in the highway/bridge construction contract proposal. If required by the railroad, the Local Project Sponsor should include the information needed by the highway/bridge contractor to secure a Private Crossing agreement with the railroad.

The Local Project Sponsor must provide the District Grade Crossing Engineer/Administrator with the information outlined on the Railroad Certification Compliance Checklist and other documents as required (see *GCM*, Chapter 4, *Highway and/or Bridge Project Process*, Section 4.05B, *Railroad Certification*, and Appendix B, *Standard Forms*).

If requested by the PennDOT Construction Manager, the Local Project Sponsor should attend and participate in PennDOT scheduled pre-bid, pre-construction, and construction status meetings, as required (see Chapter 7, *Construction Phase*, of this manual). In addition, the Local Project Sponsor should invite the railroad to attend these meetings as appropriate.

Again, as previously noted, related to iron and steel materials to be permanently installed, Federal-Aid projects must comply with the provisions of 23 CFR 635.410, *Construction and Maintenance: Buy America requirements*, (as amended), which contains the basic rule for Buy America coverage. More information on the Buy America program is contained on FHWA's website at: http://www.fhwa.dot.gov/programadmin/contracts/buyamgen.cfm. The Local Project Sponsor should verify with the local District Office that the project is in compliance with the latest version of the Buy America requirements.

In addition, any proprietary items that are required for the project, including any related to incorporated railroad work, must be previously approved in accordance with Publication 51, *PS&E Package Delivery Process Policies and Preparation Manual*, Chapter 3, *Approvals*. The Local Project Sponsor is responsible for ensuring that all proprietary requests have been approved prior to construction.

The Local Project Sponsor is responsible to maintain records of all project related railroad documents in accordance with state and federal policies and regulations.

F. Railroad Reimbursement Agreement

Regardless of funding, PennDOT will draft the necessary Railroad Reimbursement Agreements (preliminary engineering and construction) between the Local Project Sponsor and the railroad to reimburse a railroad for eligible engineering costs and/or for eligible construction costs. On federally funded projects, the Construction Railroad Reimbursement Agreement will contain the twelve points outlined in 23 CFR 646.216(d)(2), *Railroad Highway Projects, General Procedures*.

Once a Preliminary Engineering or Construction Railroad Reimbursement Agreement is drafted, by the District Grade Crossing Engineer/Administrator, the District Project Manager will then provide it to the Local Project Sponsor for review. The Local Project Sponsor, upon their acceptance of the agreement, will send it to the railroad for signature with instructions to sign and return the agreement.

The Local Project Sponsor will sign and date the agreement and transmit a copy of the fully executed Railroad Reimbursement Agreement to the Railroad and to the District Project Manager. The District Grade Crossing Engineer/Administrator will include the railroad's construction agreement in ECMS.

Note: A draft Railroad Reimbursement Agreement, reviewed by the railroad, must be in place prior to advertisement. The fully executed railroad reimbursement agreement for construction must be on file prior to the date the Notice to Proceed is issued to the roadway/bridge contractor.

G. Railroad Construction and Billing

Railroad construction must be completed in accordance with *GCM*, Chapter 4, *Highway and/or Bridge Project Process*, Section 4.07, *Construction*.

Railroad billing must be completed in accordance with *GCM*, Chapter 6, *Billing Process.*

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CHAPTER 7
CONSTRUCTION PHASE

7.0 Introduction

This chapter is a compilation of PennDOT policies and procedures relating to construction, construction inspection, and management of contracts for projects sponsored by local public agencies. The purpose of these procedures is to serve as a reference for Local Project Sponsors and PennDOT District staff so that they may perform their respective duties in accordance with PennDOT policies and procedures.

In accordance with Federal regulation 23 CFR 635.105, *Construction and Maintenance: Supervising Agency*, when a project is located on a street or highway over which the State Transportation Department does not have legal jurisdiction, or when special conditions warrant, the State Transportation Department, while not relieved of overall project responsibility, may arrange for the local public agency having jurisdiction over such street or highway (i.e., Local Project Sponsor) to perform the work with its own forces or by contract; provided the FHWA Division Administrator approves the arrangements in advance (Federal-Aid Projects only) and all of the following conditions are met:

- In the case of force account work, there is full compliance with 23 CFR 635, Subpart B, *Force Account Construction*.
- When the work is to be performed under a contract awarded by a local public agency, all Federal requirements including those prescribed in 23 CFR Part 635, *Construction and Maintenance*, have been met.
- The local public agency is adequately staffed and suitably equipped to undertake and satisfactorily complete the work.
- In those instances where a local public agency elects to use consultants for construction engineering services, the local public agency provides a full-time employee of the agency to be in responsible charge of the project.

PennDOT has responsibility for the design and construction of all Federal-Aid projects, and is not relieved of such responsibility by authorizing performance of the work by or under the supervision of a county, city, or other local public agency (i.e., Local Project Sponsor).

PennDOT is responsible for ensuring that such projects receive the same degree of supervision and inspection as a project constructed under a contract let and directly supervised by PennDOT and that the project is completed in conformity with approved plans and specifications.

These guidelines are consistent with the Stewardship and Oversight Agreement (see Publication 10X, *Design Manual 1X*, Appendix C, *FHWA/PENNDOT Stewardship & Oversight Agreement*) with the Federal Highway Administration's (FHWA) Division Administrator and intended to provide PennDOT personnel and Local Project Sponsors with direction and guidance in the administration of highway and bridge projects both on and off the National Highway System (NHS). Unless the Project Reimbursement Agreement between PennDOT and the Local Project Sponsor or other written directives or approvals provide otherwise, the direction provided herein governs the administration of all Local Sponsored Projects funded with any federal and / or state monies. Liquid Fuels Tax funded projects (when no state or federal money is included) are to be administered in accordance with Publication 9, *Policies and Procedures for the Administration of the County Liquid Fuels Tax Act of 1931 and the Liquid Fuels Tax Act 655*, with the exception of the Materials Control - Acceptance Testing and Inspection procedures outlined herein.

The Stewardship and Oversight Agreement defines specific approval roles for Federal-Aid design and construction projects in Pennsylvania, and includes a requirement for PennDOT to assume certain FHWA oversight and approval responsibilities on specific categories of projects. It is recognized that the NHS, which includes the Interstate System, is of primary importance to the FHWA. The Stewardship and Oversight Agreement categorizes design and construction projects as Federal Oversight (FO), PennDOT Oversight (PO) NHS, or PennDOT Oversight (PO) Non-NHS based on the highway system affected, risk potential, and the estimated project cost. For Federal Oversight projects, FHWA retains approval authority for major design and construction actions. For PennDOT Oversight projects both on and off the NHS, with the exception of claim settlement actions on PO NHS projects, FHWA is removed from an approval authority role and PennDOT, through delegation, is responsible for ensuring project compliance with applicable Federal and State requirements.

Publication 408, *Specifications,* and all current, standard, PennDOT policies and procedures are applicable to the administration of the projects governed by this manual. If a Local Project Sponsor proposes to adopt policies and procedures other than the standard policies and procedures used by PennDOT, the Local Project Sponsor is to submit its proposed policies and procedures to PennDOT for review and approval. PennDOT will review the submission and, if satisfied that the proposed policies and procedures are adequate and will produce results equivalent to those obtained by PennDOT procedures, approve them for use by the Local Project Sponsor. For Federal-Aid projects, PennDOT will coordinate with the Federal Highway Administration regarding the Local Project Sponsor's proposed policies and procedures.

This chapter is applicable to both Federal-Aid and Non-Federal-Aid projects (i.e., Federal Oversight, PennDOT Oversight NHS, PennDOT Oversight Non-NHS, and Non-Federal). The various sections and subsections of the chapter will address requirements for both Local Led and District Led projects. Local Led projects are those projects where the Local Project Sponsor takes the lead in providing or arranging for construction management and/or construction inspection services. District Led projects are those projects where the District takes the lead in providing or arranging for construction management and/or construction inspection services. Additionally, the final section of the chapter addresses other considerations that are applicable to all local projects regardless of which entity (i.e., Local Project Sponsor or District) is providing or arranging for construction management and/or construction inspection services. Hyperlinks to the forms referenced in this chapter have been included herein. A list of applicable construction forms has been provided in Appendix AA, *Construction Forms List*.

The Engineering and Construction Management System (ECMS) and the Construction Documentation System (CDS NeXtGen) are fundamental tools utilized by PennDOT to administer projects constructed under contracts that it lets and directly supervises. All District Led projects will be administered using ECMS. Local Project Sponsors that assume responsibility for providing construction management and/or construction inspection services on a Local Project (i.e., Local Led projects) are required to use these systems for administering their projects unless an exemption from this requirement is granted by the Bureau of Project Delivery, Project Schedules, Specifications, and Constructability Section. Procedures for the administration of Local Projects where the Local Project Sponsor has been granted an exemption and is authorized to use its own manual format for project records and documentation, payment estimates, work orders, etc., are provided in Appendix G, *Projects Not Let in or Administered in ECMS*.

7.1 Pre-Construction Considerations

A. Pre-Construction Conference

After the contract has been awarded and before the Notice to Proceed is given, the Local Project Sponsor (if the project is Local Led) or the District (if the project is District Led) is to schedule and conduct a pre-construction conference to discuss with the Contractor all essential matters pertaining to satisfactory project completion, and to resolve any questions regarding contract interpretation. The PennDOT Assistant Construction Engineer (ACE) assigned to oversee the project or a designee is to attend the conference and ensure that all matters to be considered are on the agenda. Minutes of the meeting are to be kept by the Local Project Sponsor and copies distributed to the attendees (see Publication 2, *Project Office Manual*, Section A.3.1, *Pre-Construction Conference*, for more information). The scheduling of this conference must be timely so as to not delay issuance of the Notice to Proceed.

The overall construction of Local Project Sponsored projects is covered in this chapter. For some Local Project Sponsored projects, utility relocations and railroad construction activities may be necessary in coordination with the overall project construction. In these cases, the involved utilities and/or railroads should be invited to the pre-construction conference by the Local Project Sponsor (Local Led projects) or the District (District Led projects). Following the pre-construction conference, the contractor will be required to sequence his/her construction operations to account for utility relocation work and railroad construction work based on the information provided in the construction plans and documents. Utility construction work on Local Project Sponsored projects must be completed in accordance with Publication 16M, *Design Manual Part 5*, *Utility Relocation*, Chapter 5, *Construction*. Railroad construction work on Local Project Sponsored projects must be completed in accordance with Publication 371, *Grade Crossing Manual*, Chapter 4, *Highway and / or Bridge Project Processes*, Section 4.07, *Construction*.

B. Subcontractor Approvals

On Local Led projects, the Local Project Sponsor is not to permit any of the contract work to be performed under a subcontract, unless such arrangement has been pre-authorized in writing.

Prior to authorizing a subcontract, the Local Project Sponsor is to comply with the following:

- The total amount of all subcontracted work is not to exceed 50% of the total contract amount (or total contract amount less the value of designated specialty items) unless prior written approval to apply a lesser percentage is obtained from the Bureau of Project Delivery, Contract Management Section.

- The proposed subcontractor must hold a current prequalification certificate issued by PennDOT and be approved for the work classifications that are applicable to the contract items it will be performing. This requirement is not applicable to projects where prequalification has been waived by contract special provision.

Prior to authorizing a subcontract, the Local Project Sponsor is to ensure that the subcontract is evidenced in writing and that all pertinent provisions and requirements of the prime contract are physically incorporated or included by reference. It should be noted that the allowance for pertinent provisions to be included in a subcontract by reference does not apply to the provision entitled "FAR – Required Contract Provisions Federal-Aid Construction Contracts" (Form FHWA-1273), which must be physically incorporated into all subcontract agreements.

Approval of subcontractors, including DBE subcontractors, is to be completed in ECMS in accordance with the procedures described in Publication 2, *Project Office Manual*, Sections C.1.5, *Subcontracting Highway Construction*, and C.1.6, *Subcontractor Approval for Partial Contract Items*.

For Local Partial ECMS projects, subcontractor approvals are to be completed using Form CS-4339R, *Request for Subcontractor Approval*, until the District has performed the data entry needed to establish the project in ECMS. Thereafter, subcontractor approvals are to be processed using ECMS.

Manufacturers or producers of construction materials are to be checked for approval by being listed in:

- Bulletin 14 (Publication 34), *Aggregate Producers*
- Bulletin 15 (Publication 35), *Approved Construction Materials*
- Bulletin 41 (Publication 41), *Producers of Bituminous Mixtures*
- Bulletin 42 (Publication 42), *Producers of Ready Mix Concrete*
- Publication 447, *Approved Products for Lower Volume Local Roads*

The PennDOT Construction Manager should ensure that the Contractor meets its responsibility for ensuring that all regular dealers approved in ECMS supply material in accordance with PennDOT specifications.

On District Led projects, subcontractors are to be approved in accordance with standard PennDOT procedures.

C. DBE Contract Provisions (Federal-Aid Projects Only)

The Local Project Sponsor is to designate a person to be the primary contact with the District and Central Office for Disadvantaged Business Enterprise (DBE)-related matters (Local Project Sponsor's DBE Coordinator).

The following procedures are to be followed in the administration of DBE contract provisions:

1. DBE Participation

The DBE Commitments information in ECMS is to be thoroughly reviewed by the District for conditions of award and the present status of DBEs that were previously not prequalified and/or certified. The actual amount awarded to the DBE must be equal to or greater than the committed amount shown in ECMS.

At the pre-construction conference, the Contractor is to be reminded to submit Subcontractor Approval requests electronically using ECMS, for all DBE Subcontractors (including suppliers and services) listed on the Minority Participation and Commitment screen in ECMS. Additionally, the Contractor is to be reminded that the following must be provided if he/she elects not to provide a complete copy of the DBEs subcontract or agreement:

- Copy of the executed signature page.
- Copy of the description of the scope of work.
- Copy of the unit prices as they appear in the DBE's subcontract or agreement.
- Copy of the Public Work Employment Verification Form, which is part of the Project Development Checklist (PDC) in ECMS.

The actual or estimated starting date for all DBEs is to be established in the Subcontractor Approval request, as well as the type of work to be performed by the DBE (Subcontractor, Regular Dealer, Manufacturer, Service, or Consultant).

Manufacturers or producers of construction materials are to be checked for approval by being listed in:

- Bulletin 14 (Publication 34), *Aggregate Producers*
- Bulletin 15 (Publication 35), *Approved Construction Materials*
- Bulletin 41 (Publication 41), *Producers of Bituminous Mixtures*
- Bulletin 42 (Publication 42), *Producers of Ready Mix Concrete*
- Publication 447, *Approved Products for Lower Volume Local Roads*

The PennDOT Construction Manager should ensure that the Contractor meets its responsibility for ensuring that all regular dealers approved in ECMS supply material in accordance with PennDOT specifications. The Contractor is to be reminded at the pre-construction conference that, if DBE credit is being claimed for material costs included in a DBE subcontract or agreement, purchase orders for the material are to be submitted on a monthly basis.

The Contractor is also to be reminded to prohibit any Subcontractor from starting work until a Subcontractor Approval request has been approved, a copy of the executed subcontract is available on the project for PennDOT review, and PennDOT has reviewed and acknowledged that the subcontract physically incorporates the provisions of the prime contract that contain statements of self-inclusion (including the wage rates). The requirements of Section 7.1B, *Subcontractor Approvals*, also apply to DBE subcontractors.

The Local Project Sponsor (Local Led projects) or the District (District Led projects) is to request the presence of the Contractor's Liaison Officer, who is to be named on the Minority Participation and Commitment screen in ECMS, at the pre-construction conference.

The Contractor is to be advised at the pre-construction conference that he/she is to continue good faith efforts for the life of the project and to adhere to the requirements in Publication 408, Appendix C, *Designated Special Provision 7 (DSP7), Disadvantaged Business Enterprise Requirements*, Paragraph VII, *Actions Required by the Contractor During Construction*. Noncompliance could result in sanctions including suspension of prequalification for up to three (3) years.

The Bureau of Project Delivery, Contract Management Section, Prequalification Unit, is to be contacted immediately if DBE work is imminent and a DBE firm's prequalification and/or certification status has not been established (see Section 7.1.C.3, *Field Monitoring by Project Inspector-in-Charge*).

DBE reporting responsibilities are to be reviewed with the Contractor at the pre-construction conference.

Contract provisions governing mobilization payments to DBEs are also to be discussed at the pre-construction conference.

2. Reporting Procedures / Reports

On Local Led projects, the Local Project Sponsor is responsible for monitoring the Contractor's goal attainment against the approved DBE Commitments information in ECMS, and any approved revisions. On District Led projects, the District is responsible for this monitoring.

The Contractor must record DBE Payments monthly in ECMS for each project, listing the DBEs paid during the calendar month and the corresponding amounts. The Contractor must certify that the amounts were actually paid and keep cancelled checks on file in the home office for inspection and audit by PennDOT. The entering of DBE Payments information in ECMS is due within five (5) working days after the end of the month. The Local DBE Coordinator (Local Led projects) or the District DBE Coordinator (District Led projects) is to review the information provided by the Contractor and report any apparent potential problems to the Local Project Manager (Local Led projects) or the Assistance District Executive for Construction (District Led projects). The DBE Coordinator's reports are to be maintained at the Local Project Sponsor Office (Local Led projects) or the District Office (District Led projects).

After the final estimate is submitted to the District, ECMS will summarize the minority payment information entered by the Contractor. If the final payment to any DBE is less than the amount shown on the Minority Participation and Commitment screen in ECMS or the executed subcontract amount, the Contractor will be required to provide a complete explanation and recommendation. The Good Faith Effort Review process will be used to make a final determination regarding breach of contract and possible sanctions.

3. Field Monitoring by Project Inspector-in-Charge

The Inspector-in-Charge is to ensure that the Prime Contractor does not allow a DBE to start work on the project until the DBE is properly certified and prequalified, if required, a Subcontractor Approval request has been approved, and a copy of the executed subcontract is available on the project and has been acknowledged by the Inspector-in-Charge to contain the provisions required by the prime contract.

If, for any reason during the life of the contract, it is necessary to substitute a DBE, the Contractor must follow the DSP7 and obtain approval to substitute.

If the projected DBE participation on an approved DBE Minority Participation and Commitment meets or exceeds the goal amount for the contract without replacing the DBE, then no contract shortfall exists.

The Contractor must adhere to the DSP7, Paragraph VII, *Actions Required by the Contractor During Construction*, to be in compliance with the above.

On Local Led projects, the Local Project Sponsor is to coordinate with the District to process the revised DBE Commitments information in ECMS, with comments and a recommendation, to the District, and provide any relevant facts that impact the project's DBE utilization (e.g., percent of project complete; verification of work items deleted by the Local Project Sponsor that alter the DBE goal). The District will coordinate with the Bureau of Project Delivery. On District Led projects, the District is to coordinate with the Bureau of Project Delivery to process the revision in ECMS.

Work that is contracted to a DBE may not be performed by others. If this occurs, the Inspector-in-Charge is to report the non-compliance to the Local Project Sponsor's / District's DBE Coordinator and the District EEO Officer.

Ensure that DBE firms being utilized on the project are performing a Form EO-354, *Commercially Useful Function*, as required by federal law (49 CFR §26.55 c, *How is DBE participation counted toward goals*). A DBE performs a Commercially Useful Function when it is responsible for prosecution of the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. To perform a Commercially Useful Function with respect to materials and supplies used on the contract, a DBE must also be responsible for negotiating price, determining quality and quantity, ordering the material, and installing (where applicable) and paying for the material itself.

The following examples illustrate situations where a Commercially Useful Function is not being performed:

- A DBE Subcontractor purchases or leases supplies or equipment from the Prime Contractor.
- A DBE Subcontractor uses equipment obtained from another Subcontractor on the project without a lease agreement.
- A DBE Subcontractor's workforce is made up of individuals employed by the Prime Contractor or another Subcontractor.
- A DBE Subcontractor is using supervisors employed by the Prime Contractor or another Subcontractor.
- Work being counted toward the DBE goal is being performed by the Prime Contractor or a non-DBE Subcontractor.

By engaging in any of the above practices, the Contractor, at a minimum, risks having the value of the work excluded from the DBE goal.

To ensure that Commercially Useful Function requirements are being met by all DBEs on Federal-Aid projects, Form EO-354, DBE Commercially Useful Function Report, is to be completed, by the Inspector-in-Charge, within five (5) days from the date a DBE begins work or five (5) days from the date material that is to be used for DBE credit is received on the project. If, at any time, any of the questions on Form EO-354 is, or would be, answered "NO," indicating potential noncompliance, a copy of the completed form is to be sent to the Bureau of Equal Opportunity via fax at 717-772-4026 and a copy provided to the District Labor and Contract Compliance Agent (DLCCA). The original should be kept onsite with the project files. Additionally, if DBE credit is being claimed for material costs included in a DBE subcontract or agreement, the Inspector-in-Charge is to ensure that purchase orders for the material are being submitted on a monthly basis.

4. Revisions to DBE Minority Participation and Commitment in ECMS

Any and all revisions to the approved Minority Participation and Commitment in ECMS are to be monitored in accordance with the requirements of this Section.

The Inspector-in-Charge is not to allow a substitute DBE to perform any work until the Minority Participation and Commitment revision in ECMS is approved.

If work subcontracted to a DBE is later deleted by the processing of a work order, a revision to the DBE Minority Participation and Commitment in ECMS must be processed in accordance with DSP-7.

5. Effects of Major Change Orders

When additional or extra work is required for any classification of work that is identified on the Minority Participation and Commitment screen in ECMS to be performed by a DBE, at least 50% of this additional or extra work must be performed by the same DBE unless the DBE gives notice, in writing, that the work cannot be performed due to its own limitations. If the DBE cannot perform the additional or extra work, the Prime Contractor may take necessary measures to complete the work.

6. DBE Credit, Approval, and Monitoring

Second tier DBE Subcontractors who are subcontracting by a non-DBE subcontractor are to be named in the Minority Participation and Commitment in ECMS identifying the name of the subcontractor who is subcontracting with the DBE.

The Prime Contractor is responsible for coordinating the reporting of all DBE – MBE/WBE (Minority /Women Business Enterprise) Payments in ECMS (its own plus all applicable Subcontractors) and is to file a single batched package with the Local Project Sponsor (Local Led projects) or PennDOT (District Led projects) as specified.

Subcontractors and providers of services are to be approved by processing a Subcontractor Approval request using ECMS in accordance with established procedures. Second tier DBE Subcontractors who are subcontracting by a non-DBE subcontractor are to be approved by processing a Subcontractor Approval request in ECMS identifying the name of the subcontractor who is subcontracting with the DBE. On Local Led projects, first tier approvals by the Local Project Sponsor, second tier approvals and all provisional approvals by the District. On District Led projects, first tier approvals by the District, second tier and all provisional approvals by Central Office.

DBE manufacturers and producers are to be approved in accordance with established procedures and the provisions of Publication 408, Section 106, *Control of Material*.

Before an ECMS Subcontractor Approval is completed for a DBE regular dealer, the DBE must be certified as a dealer of the applicable material on the PA Unified Certification Program (PaUCP). The Local Project Sponsor (Local Led Projects) / District (District Led Projects) is to ensure that the Contractor meets its responsibility for ensuring that all regular dealers supply material in accordance with PennDOT specifications.

All DBE arrangements must be evidenced, in writing, by a subcontract, agreement, or purchase order, as applicable, and are to be presented for PennDOT review upon request and/or as required by the contract documents or current procedures.

Equipment rental with operator (other than trucks) is considered subcontracting with prequalification not required. In lieu of prequalification, the following guidelines are in effect:

When manned specialty equipment is required to complete a portion of a work item, and the equipment with operator is leased from a firm whose business is generally derived from rental of equipment, a signed lease agreement or purchase order is required. The lease agreement or purchase order is to include the type of equipment rented, the dollar amount of the rental agreement, and required contract wage provisions. A Subcontractor Approval request (ECMS) is also required and must include the type of work, the contract price, and notation (service).

The above lease agreement or purchase order and the Subcontractor Approval request (ECMS) must be submitted to the Local Project Sponsor (Local Led projects) or PennDOT (District Led projects) by the Contractor.

If a Subcontractor is the overseer of the leased manned equipment, the information is to be submitted by the Subcontractor to the Contractor, who must submit same to the Local Project Sponsor (Local Led projects) or PennDOT (District Led projects), as applicable.

DBE credit for the lease of manned specialty equipment will not be considered for approval unless the required documents are submitted to the Local Project Sponsor (Local Led projects) or PennDOT (District Led projects), as applicable, prior to the commencement of assigned work.

- Contractors / Subcontractors who lease manned specialty equipment to perform on-site work must be prequalified to perform the work for which the equipment is to be utilized. Operations are permitted with the understanding that direct control will be the responsibility of the party leasing the equipment (see Publication 408, Section 105.05, *Control of Work, Responsibility of Contractor*).
- The equipment rental firm will be required to submit certified payrolls for their employees to the Contractor / Subcontractor leasing their equipment in the same manner that all Contractors / Subcontractors are presently required to submit certified payrolls.
- Specialty equipment (with or without operator) is generally required to complete a portion of a contract work item or items. It is equipment that a Contractor normally would not be required to provide for routine operations to accommodate and perform prequalification classifications. Backhoes, rollers, pavers, etc., are examples of equipment that would not be considered specialty equipment.

Equipment rental (without operator) and truck rental or leasing (with or without driver) is considered a service with prequalification not presently required.

D. Minority / Women Business Enterprise Program (Non-Federal-Aid Projects Only)

Revisions and subcontractor approvals are to be processed in the same manner as the DBE revisions.

E. Trainee Training Programs (When Applicable)

For Local Led projects, when a construction contract includes an item for Trainees and the corresponding special provision, the following "established procedure" is to be adhered to in the processing and review of the on-the-job training (OJT) program forms submitted, by the Prime Contractor, to the Local Project Sponsor. Accurately completed OJT forms are needed to demonstrate whether the Contractor has satisfied its training obligation in compliance with the contract special provision. It is recommended that all OJT Program forms be date stamped upon receipt. Issues relating to on-the-job training should be addressed during Project Control meetings.

The Inspector-in-Charge is to review and provide conditional approval of all OJT-related documentation before it is submitted to the District OJT Designee (i.e. the DLCCA or other District employee selected by the District Executive). The District OJT Designee will process and review the documentation and submit it to the OJT Program Administrator in the Bureau of Equal Opportunity for review and final approval.

The IIC's dated signature on Form EO-364, *PennDOT OJT Program Enrollment Form*, demonstrates that Conditional Approval has been granted. The dated signature on Form EO-365, *Highway Contractor's Monthly Training Report*, demonstrates that the IIC concurs with the information provided by the training provider (i.e. the Contractor, a subcontractor, or an acceptable third party).

When documentation is provided demonstrating that the Contractor's good faith efforts to recruit and hire minority group workers failed to identify an eligible candidate for enrollment in the on-the-job training program, a different construction craft classification should be considered, if possible. An Economically Disadvantaged person can be considered for enrollment, if documentation is included with the submission that demonstrates that person's economically disadvantaged status.

If on-the-job training is provided by a third party, the training provider is required to maintain records and submit reports; however, the Contractor is ultimately responsible for satisfying the training obligations of the contract.

Before a non-union trainee and/or apprentice can begin work on the job site, the following actions must be taken:

- Within ten (10) calendar days after the Notice to Proceed Date, the Contractor must complete and submit Form EO-363, *Contractor's On-the-Job Training Program Classifications for PennDOT Approval*, to the District OJT Designee.

- The District OJT Designee is to review Form EO-363 to assess whether the planned construction work has the potential to support completion of the required number of hours of training for each proposed craft classification. If it is determined that the potential does not exist for one or more of the proposed craft classifications, the District OJT Designee is to return the form to the Contractor, along with suggestions for other craft classifications that would appear to have the potential for providing complete, effective, and meaningful training prior to the project's completion.

- Upon receipt of an acceptable Form EO-363 from the Contractor, the District OJT Designee is to submit the form to the OJT Program Administrator in the Bureau of Equal Opportunity for approval, noting whether it had previously been returned for revision and describing what transpired.

- Upon being notified of BEO approval, the District OJT Designee is to submit a copy of Form EO-363 to the Inspector-in-Charge who, in turn, is to submit a copy to the Local Project Sponsor and the Contractor. A copy of approved Form EO-363 is also to be submitted to the training provider if other than the Contractor.

Prior to the approximate start date identified on an approved Form EO-363, the Contractor is to submit a completed Form EO-364, with original signature, to the Inspector-in-Charge for processing.

The Inspector-in-Charge is to review the submission to verify that the information provided is accurate and that the proposed candidate's enrollment would be in compliance with the Training special provision.

When apprentices are being enrolled for training, the submission of Form EO-364 is to include a copy of their indenture papers and/or a labor union referral letter identifying the apprentice's status. If not originally provided, the indenture papers and/or labor union referral letter must be obtained by the Inspector-in-Charge before Form EO-364 is submitted for processing. When all of the required supporting documentation has been received, Form EO-364 is to be signed and dated; acknowledging that conditional approval of the enrollment has been granted by the Inspector-in-Charge.

If the Inspector-in-Charge determines that the validity of the enrollment is questionable, Form EO-364 is not to be conditionally approved. Instead, a copy of the form, along with an explanation of why the enrollment appears to be invalid, is to be submitted to the District OJT Designee. The District OJT Designee is to address all issues regarding the validity of a proposed enrollment with the OJT Program Administrator in the Bureau of Equal Opportunity.

When conditional approval of Form EO-364 is granted by the Inspector-in-Charge, a copy of the form is to be submitted to the District OJT Designee. The District OJT Designee will then submit a copy of the form to the OJT Program Administrator in the Bureau of Equal Opportunity for final approval. The original of Form EO-364 is to be maintained in the project files.

Upon receiving a conditionally approved Form EO-364 from the Inspector-in-Charge, the District OJT Designee is to provide the Inspector-in-Charge with copies of both OJT Program forms (i.e. Forms EO-363 & EO-364).

If Form EO-364 is not submitted by the Contractor before the approximate start date identified on approved Form EO-363, the Inspector-in-Charge is to contact the Contractor for a revised approximate start date. Once established, the Inspector-in-Charge is to notify the District OJT Designee of the revision. The District OJT Designee, in turn, is to notify the OJT Program Administrator in the Bureau of Equal Opportunity.

After a Trainee begins work on the project, the Local Sponsor and the Inspector-in-Charge are to be fully aware of the training program content and monitor, on a daily basis, whether the trainee is receiving the prescribed training.

Any hours that a trainee works in a craft or activity outside of the approved training program are not to be credited toward completion or paid for under the contract item for Trainees.

Informal interviews are to be conducted with trainees on a periodic basis to ensure that there are no issues with the training program. Such interviews are to be documented in a PSA / FID. If issues are identified, the Inspector-in-Charge is to address them with the District OJT Designee and/or the OJT Program Administrator in the Bureau of Equal Opportunity.

One copy of Form EO-365, *Highway Contractor's Monthly Training Report*, with original signature, is to be submitted to the Inspector-in-Charge, by the Contractor, on or before the 30th of each month. The Inspector-in-Charge is to ensure that a copy of the form is submitted to the District OJT Designee by the 5th of the following month. The District OJT Designee is to ensure that a copy of the form is submitted to the OJT Program Administrator in the Bureau of Equal Opportunity by the 10th of the month.

If training was not provided during a given month, a 'negative' Training Report must be submitted. However, if the employee was laid off and the "Anticipated Recall Date" on Form EO-365 has been completed, a 'negative' report will not be required through the lay-off period

Receipt of Form EO-365 is to be logged, by the Inspector-in-Charge, on the EO-365 Monitoring form. Upon verifying that the information on Form EO-365 is accurate, the Inspector-in-Charge is to sign and date the form. A copy of the validated form is to be submitted, via email, to the District OJT Designee. If inaccuracies are identified, the form is to be returned to the Contractor for revision and resubmission.

Upon receipt of a validated Form EO-365 from the Inspector-in-Charge, the District OJT Designee is to submit a copy of the form, via email, to the PennDOT OJT Report In-Box (penndotojtreports@state.pa.us).

The original of Form EO-365 is to be maintained in the project files.

The Local Sponsor's Project Manager and/or the Inspector-in-Charge are to ensure that the OJT Training Program is discussed at Project Control meetings. If a trainee demonstrates negative work habits, the Project Manager and/or Inspector-in-Charge are to ensure that the Contractor is documenting that information on Form EO-365 under the "Evaluation of Trainee" section. Documentation of issues such as excessive absenteeism can be used as justification for a termination, when necessary.

If a trainee or apprentice quits, is terminated, or accepts other employment, the Contractor is responsible for finding a replacement as soon as possible. In such cases, an updated copy of Form EO-365 identifying what occurred is to be immediately submitted for processing, regardless of the calendar date.

When called upon to replace a trainee or apprentice, the Contractor and the Inspector-in-Charge are to review the scope of the remaining work on the project to determine whether there still exists a potential to provide effective and meaningful training prior to project completion. Contractors must be prepared to provide documentation regarding their Good Faith Efforts to replace a trainee or apprentice.

Upon completion of the required number of training hours, the trainee is to be issued a "Certificate of Completion" by the training provider. A copy of the certificate is to be submitted to the Inspector-in-Charge at the same time the final Form EO-365 is submitted.

The Inspector-in-Charge is to submit a copy of both the Certificate of Completion and the final Form EO-365 to the District OJT Designee and, if applicable, the DLCCA.

The DLCCA is to submit both documents, via email, to the PennDOT OJT Report In-Box.

A copy of the Certificate of Completion is to be maintained in the project files.

Any problems relating to the OJT Training Program and/or trainees are to be immediately reported to the District OJT Designee and/or the OJT Program Administrator in the Bureau of Equal Opportunity.

For District Led projects, see Publication 2, *Project Office Manual*, Section B.11.3, *Review and Approval of Training Programs for Trainees on Federal-Aid Construction Projects*, for the procedure to be followed in the processing and review of a training program submitted, by a Contractor, to the District for approval.

F. Maintenance and Protection of Traffic (MPT)

For Local Led projects, prior to commencing construction, preferably at the pre-construction conference, the Contractor may elect to submit to the Local Project Sponsor a plan for the maintenance and protection of traffic intended to replace the MPT Plan in the contract.

The Local Project Sponsor is to review the plan and, after consulting with the District, approve or disapprove the plan. Plans for projects located on state routes are to be approved by the District.

A disapproved plan is to be returned to the Contractor with appropriate comments for possible revision and resubmission.

An approved plan, bearing a stamped approval, duly signed and dated, is to be returned to the Contractor with a copy being furnished to the Inspector-in-Charge.

For District Led projects and projects located on state routes, the Contractor's MPT plan, if applicable, is to be reviewed and approved in accordance with standard PennDOT procedures (see Publication 2, Section A.2, *Notifying Interested Parties Prior to Start of Construction Activities*, and Publication 408, Section 105.13, *Control of Work, Maintenance of Performed Work*).

G. Notice to Proceed

The District and the Local Project Sponsor are to make every effort to ensure that the Anticipated Notice to Proceed Date in the bid proposal is met.

For both Local Led and District Led projects, the Assistant Construction Engineer responsible for the project will utilize ECMS to send a Notice to Proceed to the Contractor, specifying the calendar date on which to begin the work (i.e. the Notice to Proceed Date). The Assistant Construction Engineer is to ensure that any conditions related to the Notice to Proceed, as noted on approved Form D-4232, have been satisfactorily resolved before the Notice to Proceed is sent.

For Local Led projects, the Notice to Proceed is not to be sent until the Assistant Construction Engineer confirms with the Local Project Sponsor that the contract has been executed by both the Contractor and the Local Project Sponsor and, when applicable, that an engineering / inspection agreement is in place.

For District Led projects, immediately after the Notice to Proceed is sent, the Assistant Construction Engineer is to notify the Contractor that PennDOT will inspect the work and administer the contract on behalf of the Local Project Sponsor and that all correspondence pertaining to the project must be directed to the District Executive with a copy going to the Local Project Sponsor. (See Publication 408, Section 108.02, *Notice to Proceed*).

H. Construction Schedule

The Contractor, Local Sponsor and District are responsible for ensuring that all submission, review, and acceptance procedures are completed in accordance with the requirements specified in Publication 408, Section 108.03(b), *Construction Project Scheduling*, and Section 689, *Construction Scheduling*. For Local Led projects, the Local Project Sponsor is responsible for reviewing and accepting the Contractor's initial Construction Schedule and all Schedule Revisions.

7.2 Contract Administration

A. Records and Documentation

For Local Led projects, the Local Project Sponsor is to have procedures in effect that provide adequate assurance that the quantities of completed work are determined accurately. All such determinations and all related source documents upon which payment is based are to be made a matter of record.

The manner in which the Local Project Sponsor plans to keep records and document the work is to be approved by PennDOT.

If the Local Project Sponsor proposes to use a records and documentation procedure other than that used by PennDOT (i.e., CDS NeXtGen), the Local Sponsor is to submit its proposed procedure to PennDOT for review and approval, as described below.

The Local Project Sponsor is to present their proposed records and documentation procedure in the form of a written submission to the District Executive. The submission is to include sufficient detail to allow a clear understanding of the method and means that are to be used by project inspection personnel to record and document the quality and quantity of work performed.

A well-defined audit trail must be established so that final pay quantities can be readily traced to source records that document as-built measurements and conformity with contract requirements.

Samples of report forms, diary and field book formats, and related record keeping media are to be included in the submission as exhibits. The District is to review the Local Project Sponsor's submission and, if satisfied that the proposed procedure is adequate and will produce results equivalent to those obtained by PennDOT procedures, is to recommend its acceptance and forward the submission to the Bureau of Project Delivery, Contract Management Section, for approval. The Contract Management Section will coordinate its review and approval with FHWA, if needed.

During the prosecution of the work, the ACE or a designee is to review and verify that the Local Project Sponsor's inspection staff is abiding by the approved documentation procedure. Deficiencies are to be reported, in writing, to the Local Project Sponsor's Inspector-in-Charge.

When the Local Project Sponsor adopts PennDOT procedures, the following publications are to be used by the inspection staff. These publications can be accessed via PennDOT's home page (www.dot.state.pa.us) using the “Forms and Publications” or “Design & Construction” links.

Publications:

- Publication 2, *Project Office Manual*
- Publication 8, *Construction Manual*
- Publication 19, *Field Test Manual*
- Publication 72M, *Roadway Construction Standards*
- Publication 148, *Traffic Standards (TC-8800 Series) Signals*
- Publication 212, *Official Traffic Control Devices*
- Publication 213, *Temporary Traffic Control Guidelines*
- Publication 219M, *Standards for Bridge Construction – BC-700*
- Publication 408, *Specifications*

Bulletins:

- Bulletin 14 (Publication 34), *Aggregate Producers*
- Bulletin 15 (Publication 35), *Approved Construction Materials*
- Bulletin 41 (Publication 41), *Producers of Bituminous Mixtures*
- Bulletin 42 (Publication 42), *Producers of Ready Mix Concrete*

For District Led projects, maintain project records and documentation in accordance with the standard PennDOT procedure (see Publication 2, *Project Office Manual*, Section B.1, *Documentation and Job Records*).

B. Construction Inspection

For Local Led projects, the Local Project Sponsor is responsible for adequate supervision and inspection of the construction using its own forces or by engaging the services of a consultant through an engineering / inspection agreement.

The Local Project Sponsor's inspection staff is to consist of those individuals identified in the *Request for Approval of Local Sponsor Personnel Staffing* or the *Request for Approval of Consultant Staffing*, as applicable (see Chapter 3, *Project Management Processes*, of this manual).

The Local Project Sponsor's inspection staff is responsible for administering the contract; assuring that the construction is performed in conformity with the approved plans, specifications, permits, mitigation commitments, and contract provisions; determining and documenting the quality and quantity of materials and work items; recording all pertinent information related to the prosecution and progress of the work; the measurement, acceptance, and payment of completed work; being knowledgeable of and complying with all applicable federal, state, and local laws and regulations; and cooperating and consulting with PennDOT officials during the course of the contract.

The Contractor's work and the Local Project Sponsor's inspection are to be reviewed by the District. The Assistant District Executive for Construction is to assign an Assistant Construction Engineer (ACE) to monitor and oversee the project. The ACE or a designee is to visit the project as frequently as needed to maintain an intimate knowledge of current activities and ensure that the work is being inspected and the contract administered in accordance with the terms of the agreement, the requirements of FHWA, and the procedures outlined herein.

During each visit to the project or at least quarterly when the project control meetings are being attended on a regular basis, the ACE or designee is to document, in writing, the project status and any outstanding issues.

To assist the Districts with their project oversight responsibilities, a checklist has been developed and incorporated into Publication 2, *Project Office Manual*, Section C.1.18, *Checklist for the Administration of Locally Sponsored Federal-Aid Projects*. This checklist must be utilized when visiting a Locally Sponsored Federal-Aid Project for monitoring and oversight purposes. The checklist is intended to provide uniformity in reviews, as well as documentation that required oversight is being performed. Completed checklists may be requested during annual federal audits.

The ACE or designee is to provide guidance and assist the Inspector-in-Charge in an advisory capacity, notify the Project Sponsor’s Project Manager of any serious deficiencies noted during the visit, and make recommendations as to the corrective action to take.

The ACE or designee is not to assume, in any way, the responsibility or authority vested in the Local Project Sponsor's Project Manager or Inspector-in-Charge.

The funds needed for required Local Project oversight by the District should be allocated as part of the Project Reimbursement Agreement between PennDOT and the Local Project Sponsor.

The ACE or designee’s time must be charged to the correct Work Breakdown Structure (WBS) element to obtain reimbursement of the federal share of the District’s project oversight expenses, and the District must submit an invoice to the Local Sponsor for reimbursement of the local share.

Projects may be reviewed from time to time, on a random basis, by the Bureau of Project Delivery, Construction Quality Assurance Section. The purpose of these reviews is to determine whether PennDOT's control procedures are sufficient and being effectively applied to ensure that construction is performed in conformity with the plans, specifications, and contract provisions, and that all related management and administrative matters are functioning as intended. The Construction Quality Assurance Engineer, when visiting a project, will notify the Local Project Sponsor's Project Manager and Inspector-in-Charge that they are on site and, after conducting the review, will prepare a written report. A copy of

this report will be sent to the District Executive for information and follow-up action if remedial measures are deemed necessary.

Projects may also be reviewed from time to time, on a random basis, by a representative of the FHWA.

Within forty-five (45) days of completion of physical work by a subcontractor, regardless of when the entire project is closed out, the Inspector-in-Charge is to complete a Subcontractor Evaluation in ECMS. An evaluation is required to be completed for subcontractors only. Suppliers and service providers are exempt from this requirement.

For District Led projects, the project is to be managed, the contract administered, and the work inspected in accordance with standard PennDOT procedures and to the same degree and extent as that given to other PennDOT projects (see Publication 2, *Project Office Manual*, Section C.1, *Construction Inspections - General*).

C. Materials Control

1. Acceptance Testing and Inspection

For Local Led projects, the Local Project Sponsor is to have a comprehensive acceptance testing and inspection program that provides adequate assurance the materials incorporated into the project are in conformance with contract requirements.

The manner in which the Local Project Sponsor plans to sample and test materials for acceptance is to be approved by PennDOT.

If the Local Project Sponsor agrees to adopt PennDOT procedures, as described in the current edition of Publication 19, *Field Test Manual*, and Publication 2, *Project Office Manual*, Section B.6.5, *Materials Accepted by Project Sampling*, as well as other applicable PennDOT publications, a statement to that effect is to be filed with the District Executive prior to advertisement, provided the Bureau of Project Delivery, Laboratory Testing Section, has investigated and approved, in writing, the Local Sponsor's capability to perform such testing. The Local Project Sponsor may engage the services of a commercial testing laboratory; provided the laboratory is approved by PennDOT at the time testing is to be performed.

If the Local Project Sponsor proposes to use a sampling and testing procedure other than that used by PennDOT, the Local Sponsor is to submit its proposed procedure to PennDOT for review and approval, as described below, prior to advertisement.

The Local Project Sponsor is to present its proposed materials acceptance procedures to the District Executive in the form of a written submission. The submission is to include sufficient detail to allow a clear understanding of the methods and means that will be used to sample, test, and accept all the materials incorporated into the work, including fabricated materials produced by Bulletin 15, *Approved Construction Materials*, approved sources**.** If a modification of PennDOT procedures is proposed, only the exceptions need be elaborated in the submission. Any acceptance testing that is to be performed by PennDOT personnel, for the Local Project Sponsor, must be explicitly enumerated. The District is to review the Local Project Sponsor's submission and, if satisfied that the proposed procedure is adequate, forward the submission, along with a recommendation, to the Bureau of Project Delivery for review and approval. The Bureau's Laboratory Testing and Construction Quality Assurance Sections will review the submission and make a determination as to whether the Local Project Sponsor's procedures and facilities

meet applicable requirements and are acceptable to PennDOT. The Laboratory Testing Section will coordinate its approval with FHWA and, upon approval, notify the District accordingly.

During the prosecution of the work, the ACE or a designee is to review and verify that the Local Project Sponsor's inspection staff is abiding by approved materials acceptance procedures. Deficiencies are to be reported, in writing, to the Local Project Sponsor's Project Manager.

For District Led projects, acceptance testing and inspection of materials is to be performed by the District's project inspection personnel in accordance with standard PennDOT procedures (see Publication 2, *Project Office Manual*, Section B.6, *Materials Control on Projects*).

2. Quality Assurance Program

For all Locally Sponsored Projects (i.e., Local Led and District Led), the quality assurance program will be administered by PennDOT without exception.

The Bureau of Project Delivery, Construction Quality Assurance Section, will conduct this review in accordance with established PennDOT procedures (see Publication 2, Section B.6, *Materials Control on Projects*, and Publication 25, *Quality Assurance Manual*)

Projects will be reviewed from time to time, on a random basis, by the Construction Quality Assurance Section to determine whether PennDOT's material control procedures are sufficient and being effectively applied to ensure that materials are in conformity with contract provisions. The Construction Quality Assurance Engineer, when visiting a Local Led project, will notify the Local Project Sponsor's Project Manager and the Inspector-in-Charge that they are on site and, after conducting the review, will prepare a written report. A copy of this report will be sent to the District Materials Engineer for information and follow-up action if remedial measures are deemed necessary.

The Local Project Sponsor will be furnished with a copy of all quality assurance reports.

For Local Led projects, the Local Project Sponsor's Project Manager is to provide appropriate comments to the reports and indicate what actions will be taken to correct noted deficiencies.

The ACE or a designee is to review quality assurance reports and the Local Project Sponsor's proposed follow-up actions (Local Led projects only). If follow-up actions are deemed unsatisfactory, the ACE or a designee is to take appropriate action to obtain compliance.

3. Source of Supply Approvals

The Contractor must submit the source of supply request to the Local Project Sponsor's Project Manager (Local Led projects) or the Inspector-in-Charge (District Led projects) for review.

For Local Led projects, the Local Project Sponsor's Project Manager, if recommending approval, is to forward the submission to the District for review and approval. The District Materials Engineer/Manager or a designee, if in agreement with the Local Project Sponsor's recommendation, is to approve the source of supply submission. If unsatisfactory, the District Materials Engineer/Manager or a designee is to take appropriate action to obtain compliance.

For District Led projects, source of supply approval is to be performed by the District in accordance with standard PennDOT procedures (see Publication 2, Section B.6, *Materials Control on Projects*).

4. Shop Inspection

All fabricated structural materials require shop inspection by the Bureau of Project Delivery, Structural Materials Section, during fabrication. Shop inspections, including the fabrication, testing, and acceptance processes, are performed to ensure that fabrication has been performed in accordance with the approved shop drawings. Documentation of shop inspections will be made available to the District and, on Local Led projects, will be provided to the Local Project Sponsor upon request. Approved structural materials will receive an inspection stamp prior to shipping to the project site or to an approved storage facility.

The Local Project Sponsor (Local Led projects) or the District (District Led projects) is responsible for arranging shop inspection. On Local Led projects, the Local Project Sponsor is also responsible for funding shop inspection. To arrange for shop inspection by the Bureau of Project Delivery, Form CS-430, *Notification of Inspection*, must be completed by the Local Project Sponsor (Local Led projects) or the District (District Led projects) and submitted to the Chief, Structural Materials Section, prior to the start of fabrication. On Local Led projects, where the Local Project Sponsor might have minimal or no knowledge of the project fund coding system utilized by PennDOT (i.e., Federal and State Project Numbers, WBS elements, etc.), the District is to furnish the form to the Local Project Sponsor. The furnished form should have the project coding information already entered, for the Local Project Sponsor to complete, execute, and submit (see Publication 2, Section B.7.18, *CS-430 "Notification of Inspection,"* for additional guidance). The funds required for shop inspection by the Bureau of Project Delivery must be allocated as part of the Project Reimbursement Agreement between PennDOT and the Local Project Sponsor (see Chapter 3, *Project Management Processes*). The shop inspector's time must be charged to the correct WBS element to obtain reimbursement of the federal share of the Bureau's shop inspection expenses, and the District must submit an invoice to the Local Project Sponsor for reimbursement of the Local share.

D. Payments to Contractors

The Local Project Sponsor is responsible for making payment to the Contractor in accordance with the terms of the Project Reimbursement Agreement. It is suggested that the Contractor, Local Project Sponsor, and District establish a time frame for the processing of payment estimates. The Local Project Sponsor will be reimbursed the federal / state share of its payments to Contractors, as applicable, following the processing of a payment estimate by PennDOT.

The Local Project Sponsor is to complete its processing of payment estimates within seven calendar days of the end date for each established estimate period. The District is to complete its processing of payment estimates in a timely manner in order to ensure that PennDOT's "best practice" objective to provide reimbursement to the Local Project Sponsor within forty-five (45) days of receipt of an approved payment estimate and reimbursement request letter can be met.

The Inspector-in-Charge is to generate payment estimates in CDS NeXtGen and transmit them to ECMS via the internet. If CDS NeXtGen is not used for project documentation, the Inspector-in-Charge is to generate payment estimates directly in ECMS.

A printout of the ECMS payment estimate is to be submitted to the Local Project Sponsor by the Inspector-in-Charge. The Local Project Sponsor is to review and sign-off on the payment estimate, prepare a cover letter to the Department requesting reimbursement, and send the **ORIGINAL**, authorized (i.e. signed), payment estimate package to the PA Department of Transportation at the Organization Location Code for the responsible District, P.O. Box 69181, Harrisburg, PA 17106. A list of Organization Location Codes can be found in Appendix N.

Concurrently, the ECMS payment estimate is to be reviewed by the ACE or a delegate and; subject to verification of the accuracy of the estimate information, the availability of sufficient federal funds, and the adequacy of materials certifications provided by the Contractor; approved.

After formally approving the payment estimate in ECMS, the ACE or a delegate is to notify the Project Manager and the Inspector-in-Charge of the approval.

Upon retrieving the **ORIGINAL**, authorized, payment estimate package from the post office box, the Department of Revenue will review the package and, if complete, scan the documentation into SAP.

The **ORIGINAL**, authorized, payment estimate package, after being scanned into SAP, will be placed in the SAP work queue of the responsible Agency Invoice Receiver. The Agency Invoice Receiver will enter required invoice coding information in SAP and then place the package in the work queue of the responsible Agency Invoice Verifier (i.e. the Assistant Construction Engineer responsible for the project or a delegate) for review.

The ACE or a delegate is to prepare a cover letter (or if federally funded, a C-6 form), noting the Agreement number, Federal Project Number (FPN), and invoice amount; summarizing the funding breakdown of the payment amount (i.e. the federal, state, and local share, as applicable); and recommending payment.

After ensuring that the authorized payment estimate package is accurate and the cover letter or C-6 form has been linked to SAP, the Agency Invoice Verifier is to approve the payment.

When the complete payment estimate package has been approved by the Agency Invoice Verifier, the Agency Invoice Receiver (i.e. the District Fiscal Officer or a designee) will post the payment in SAP. The complete payment estimate package will then be electronically transmitted to the Comptroller, Invoice Processing Unit. If the package is found to be complete and accurate, the Invoice Processing Unit will confirm the availability of the necessary Federal and state funds, assign a payment date, include the payment amount on the next, planned Federal reimbursement request, and transmit the package to the Treasury Department.

The Local Project Sponsor is required to pay the Contractor within 10 calendar days of receipt of reimbursement from PennDOT. If requested by the District, the Local Project Sponsor is to provide verification of payment within 30 calendar days of receipt of reimbursement from PennDOT. Acceptable forms of verification of payment would be a copy of a cancelled check or a certified letter from the Contractor acknowledging receipt of payment. Within 7 calendar days of receipt of current estimate and final payments from the Local Project Sponsor, the prime Contractor is required to pay all subcontractors their earned share of the payments, including all retainage, provided the terms and conditions of the applicable subcontract or purchase agreement have been reasonably met.

If the terms of the Project Reimbursement Agreement allow for an alternate payment / reimbursement process whereby the Local Project Sponsor is to pay the Contractor before receiving reimbursement from PennDOT, verification of payment being made to the Contractor (e.g., cancelled check, certified letter, etc.) must be submitted to the ACE before reimbursement to the Local Project Sponsor can be processed.

E. Authorizations for Contract Work and Work Orders

Work orders and associated Authorizations for Contract Work are to be prepared and processed, by the Local Project Sponsor and the District, in accordance with the guidance provided in Publication 2, *Project Office Manual*, Section B.3.1, *Preparation of Work Orders on Construction Contracts*, and as follows:

For Local Led projects, the Local Project Sponsor is to make no change that will alter the termini, character, or scope of the work or that will result in an increase in the cost of the project, without first obtaining District approval. The District Construction Unit should coordinate any anticipated change in the contracted work with the District Environmental Unit to assess its potential permit implications. Construction changes can affect existing permits, which can result in delays if a permit must be amended and reissued.

For Federal Oversight projects, changes that will result in a cost increase or decrease equal to or greater than $500,000 or 10% of the original contract amount, whichever is less, will also require formal prior approval by FHWA. FHWA Form 1365, *Record of Authorization to Proceed with Major Contract Revision*, is to be used to document the approval prior to directing the Contractor to perform additional and/or extra work (see Publication 2, Section B.3.1, Subsection L, *FHWA Authorizations*, for detailed guidance).

When proposed contract changes involve item quantity reductions / eliminations, additional work, and/or extra work, written authorization must be provided to the Contractor, by the Inspector-in-Charge, prior to commencement of the work or processing the reduction / elimination. An Authorization for Contract Work is to be prepared using ECMS and exchanged electronically between the Contractor and the Inspector-in-Charge until all outstanding issues concerning the scope of the work and the prices to be paid for associated items have been addressed. Failure to authorize work prior to the commencement of work could jeopardize eligibility for federal participation.

Prior to submitting an ECMS Authorization for Contract Work to the Contractor, the Inspector-in-Charge is to notify the Assistant Construction Engineering responsible for the project that the draft Authorization has been created. The Assistant Construction Engineer will access the Authorization in ECMS, review it, and notify the Inspector-in-Charge that the Authorization is approved for submission or that revisions are needed. For District Led projects, the Inspector-in-Charge is also to notify and obtain concurrence from the Local Project Sponsor before submitting an ECMS Authorization for Contract Work to the Contractor.

The Inspector-in-Charge is to prepare an official work order for all item quantity reductions / eliminations, additional work, and/or extra work, in a timely manner. Work orders are also needed to process payments resulting from dispute or claim settlements. The Inspector-in-Charge is to prepare work orders using ECMS and ensure that proposed contract changes are explained and the associated costs justified.

Work orders are to be thoroughly reviewed by the Local Project Sponsor and the District using the same standards and criteria as those applied to a standard PennDOT project work order. The District is responsible for any actions involving modifications to the Federal-Aid project agreement (Form D-4232) initiated by the Local Project Sponsor.

With the exception of Legal category work orders for Federal Oversight and PennDOT Oversight NHS projects, the District Executive or an authorized delegate has approval authority for all work orders. After being reviewed by the District, Federal Oversight and PennDOT Oversight NHS project work orders in the Legal category will be reviewed and approved by the Bureau of Project Delivery, Contract Management Section. These work orders will then be transmitted to the FHWA for review and approval.

For Local Led projects, after being prepared by the Inspector-in-Charge and reviewed by the Local Project Sponsor's Project Manager, work orders will be electronically routed to the District for review and approval. For District Led projects, after being prepared by the Inspector-in-Charge, work orders will be

electronically routed to the District for review and approval. For both Local Led and District Led projects, after being reviewed and approved at the District level, applicable work orders for Federal Oversight projects (i.e., Additional / Extra Work – Major category work orders only) will be electronically routed to FHWA for review and approval.

On District Led projects, when a work order has been reviewed by and is acceptable to the District Work Order Specialist, prior to moving the work order on to the next level in the ECMS work order review workflow, the District is to obtain a printout of the work order and required supporting documentation and forward it to the Local Project Sponsor for review and approval. The Local Project Sponsor, if in agreement, is to prepare a letter of approval and submit it to the District Project Manager. Upon receipt of the Local Project Sponsor's approval letter, the District is to complete the work order approval process by advancing it through the remaining levels in the ECMS workflow.

If a work order, wholly or in part, is disapproved by the FHWA, notification will be sent, via ECMS, to both the District and the Bureau of Project Delivery. For Local Led projects, the District is to inform the Local Project Sponsor's Project Manager. The Local Project Sponsor (Local Led projects) or the District (District Led projects) can either attempt to rebut the FHWA position or process the necessary work order(s) to comply with the FHWA position.

When emergency or unusual conditions justify, the District may give tentative advance approval of proposed changes orally and ratify such approval in writing as soon as practicable thereafter. Changes that result in substantial revisions to documents previously reviewed or sealed by PennDOT must be reviewed by the appropriate District Unit before obtaining approval of the change. Written approval of all changes must be obtained before payment is made to the Contractor.

Proposed changes involving non-participating operations that affect the design or participating construction features of a project are subject to review and approval by PennDOT.

F. Contract Time Extensions

Time extension requests are to be prepared by the Contractor and processed by the Local Project Sponsor and the District as specified in Publication 408, *Specifications*, Sections 108.03(b), *Construction Project Scheduling*, and 108.06, *Time Extensions and Reductions*; in accordance with the guidance provided in Publication 2, *Project Office Manual*, Sections B.3.1, *Preparation of Work Orders on Construction Contracts*, and C.1.8, *Contract Schedule and Time Revisions*; and as follows.

All requests for extensions of contract time must be submitted within the specified time, fully justified and adequately documented by the Contractor. The Contractor must ensure that any mitigation commitments and seasonal restrictions have been fully accounted for in the development of the time extension request. It should be noted that, in the absence of an approved time extension, as required by the construction contract, construction engineering liquidated damages will be assessed for each day that any physical work remains uncompleted after the Required Completion Date.

The Contractor must prepare and submit an official time extension request using ECMS. Requests for an extension of contract time must be reviewed and approved by both the Local Project Sponsor and the District regardless of whether the project is Local Led or District Led. ECMS time extension requests will be electronically routed to both the Local Project Sponsor and the District for review and approval provided the District ensures that the "Municipality Involvement" indicator on the "Project Information" screen in ECMS is set to "Yes". With the indicator set to "Yes", when an ECMS time extension request is submitted by the Contractor, the request will first be routed to the Local Sponsor for review and approval and then to the District. If the indicator is set to "No", the ECMS time extension request will be

routed to the District only for review and approval. In such cases, the District is to review the ECMS time extension request and, if in agreement, obtain a printout of the request and required supporting documentation and forward both to the Local Project Sponsor for review and approval. The Local Project Sponsor, if in agreement, is to prepare a letter of approval and submit it to the District. Upon receipt of the Local Project Sponsor's approval letter, the District is to approve the time extension request in ECMS. The District is to ensure that a copy of the Local Project Sponsor's approval letter is submitted to the Inspector-in-Charge for the project files.

The Local Project Sponsor and the District are to thoroughly review time extension requests in accordance with the guidance provided in Publication 2, Sections B.3.1, *Preparation of Work Orders on Construction Contracts*, and C.1.8, *Contract Schedule and Time Revisions*. Unusual or questionable requests are to be referred to the Bureau of Project Delivery, Project Schedules, Specifications, and Constructability Section, for comment and an approval recommendation.

After being reviewed and approved by the Local Project Sponsor and the District (as applicable), time extension requests for Federal Oversight projects will be electronically routed to the Bureau of Project Delivery and FHWA for review and approval.

G. Contract Compliance

1. Labor Compliance

For Local Led projects, the Local Project Sponsor, as contracting agency, is primarily responsible for obtaining compliance with the labor standards provisions of the contract, particularly Sections IV and V of the "Required Contract Provisions Federal-Aid Construction Contracts (FHWA-1273)" and the related wage determination decisions of the Secretary of Labor. The Local Project Sponsor is to administer the labor standards provisions of the contract in accordance with the instructions and procedures provided by the U.S. Department of Labor (USDOL) *Field Operations Handbook*, Chapter 15, *Davis-Bacon and Related Acts and Contract Work Hours and Safety Standards Act*.

Correspondence to the USDOL or the Federal Highway Administration (FHWA) relating to labor compliance matters is to be directed through the District and Bureau of Project Delivery, Contract Management Section. For Non-Federal-Aid projects, Pennsylvania Prevailing Wage Act 442 is to be followed for implementing and monitoring the labor compliance program.

The Local Project Sponsor is to have procedures in effect to ensure compliance by the Contractor and all Subcontractors. The Local Project Sponsor is to submit its procedure to the District for review and approval prior to the Notice to Proceed Date. If the Local Project Sponsor has no procedure or its procedure is not acceptable to the District, PennDOT's standard procedure, as set forth in Publication 2, *Project Office Manual*, Section B.10.1, *Contract Labor Compliance Guidelines and Responsibilities*, is to be used.

The ACE or a designee, assisted by the District Labor and Contract Compliance Agent (DLCCA), is to verify whether the Local Project Sponsor is administering an effective labor compliance program. Deficiencies are to be reported, in writing, to the Local Project Sponsor's Project Manager.

The DLCCA is to provide assistance and guidance to the Local Project Sponsor, as needed, and is to visit a representative number of active Locally Sponsored projects on a random basis to advise the Inspector-in-Charge in implementing labor compliance procedures. Regular follow-up visits are to be made by the DLCCA to monitor the Local Project Sponsor's performance. The DLCCA is responsible for compiling the data needed to file FHWA Form 1494, *Semi-Annual Labor Compliance Enforcement Report*.

The Labor Contract Compliance Coordinator in the Bureau of Project Delivery, Contract Management Section, will visit a representative number of active Locally Sponsored projects on a random basis to conduct a quality assurance review and to determine whether the District's monitoring program is effective. The District Executive will be notified by the Bureau if any serious deficiencies are apparent. The Bureau's Labor Contract Compliance Coordinator will be available to assist in the investigation and resolution of issues involving Contractor non-compliance with contract labor standards.

For District Led projects, the Inspector-in-Charge and the DLCCA are to administer the labor compliance program in accordance with the standard PennDOT procedure. The Labor Contract Compliance Coordinator in the Bureau of Project Delivery, Contract Management Section, will provide guidance and oversight on issues involving District implementation of the standard PennDOT procedure.

2. Construction Safety

On Local Led projects, the Local Project Sponsor, as contracting agency, is primarily responsible for obtaining compliance with the safety and accident prevention provisions of the contract, particularly Section VIII of the "Required Contract Provisions Federal-Aid Construction Contracts (FHWA-1273)."

The Local Project Sponsor is to have procedures in effect to ensure compliance by the Contractor and all Subcontractors. The Local Project Sponsor is to submit its procedure to the District for review and approval prior to the Notice to Proceed Date. If the Local Project Sponsor has no procedure or its procedure is not acceptable to the District, PennDOT's standard procedure, as set forth in Publication 2, Section B.4.7, *Contract Safety Compliance Guidelines and Responsibilities*, and Publication 408, Section 107.08, *Occupational Safety and Health*, is to be used.

The ACE or a designee, assisted by the District Project Safety Officer (DPSO), is to verify whether the Local Project Sponsor is administering an effective safety compliance program. Deficiencies are to be reported, in writing, to the Local Project Sponsor's Project Manager.

The DPSO is to provide assistance and guidance to the Local Project Sponsor, as needed, and advise the Inspector-in-Charge in implementing safety compliance procedures. The DPSO is to visit each project during the first week or early enough in construction to allow time for meaningful corrective action if it is determined that safety procedures are not being followed. Follow-up visits may be made by the DPSO to monitor the Local Project Sponsor's performance.

The Labor Contract Compliance Coordinator in the Bureau of Project Delivery, Contract Management Section, will visit a representative number of active Locally Sponsored projects on a random basis to conduct a quality assurance review and to determine whether the District's monitoring program is effective. The District Executive will be notified by the Bureau if any serious deficiencies are apparent. The Labor Contract Compliance Coordinator will be available to assist in the investigation and resolution of issues involving Contractor non-compliance with contract safety standards.

For District Led projects, the Inspector-in-Charge and the District Project Safety Officer are to administer the construction safety compliance program in accordance with the standard PennDOT procedure (see Publication 2, *Project Office Manual*, Section B.4.7, *Contract Safety Compliance Guidelines and Responsibilities)*. The Labor Contract Compliance Coordinator in the Bureau of Project Delivery, Contract Management Section, will provide guidance and oversight on issues involving District implementation of the standard PennDOT procedure.

3. Equal Opportunity

For Local Led projects, the Local Project Sponsor, as contracting agency, is primarily responsible for obtaining compliance with the equal opportunity provisions of federal/federal-aid contracts, particularly Section II, Nondiscrimination, of the FHWA-1273 - "Required Contract Provisions Federal-Aid Construction Contracts" and the Commonwealth's "Nondiscrimination / Sexual Harassment Clause" (State and Federal/Federal-aid). The Executive Order 11246 (With Appendix A and B) is an USDOL Equal Opportunity Provision, and is monitored for compliance by the Local Project Sponsor, but only enforceable by USDOL, Office of Federal Contract Compliance Program. The Local Project Sponsor is to ensure these provisions, excluding the Commonwealth's "Nondiscrimination / Sexual Harassment Clause, are physically included in all applicable contracts (Contractor and Subcontractor), and any lower tier subcontracts that may in turn be entered into.

The Local Project Sponsor is to have procedures in effect to ensure compliance by the Contractor and all Subcontractors. The Local Project Sponsor is to submit its procedure to the District for review and approval prior to the Notice to Proceed Date. If the Local Project Sponsor has no procedure or its procedure is not acceptable to the District, PennDOT's standard procedure is to be used.

The ACE or a designee is to verify whether the Local Project Sponsor is administering an effective equal opportunity compliance program. Deficiencies are to be reported, in writing, to the Local Project Sponsor's Project Manager.

The ACE or a designee is to provide assistance and guidance to the Local Project Sponsor, as needed, and advise the Inspector-in-Charge in implementing equal opportunity compliance procedures. The ACE or a designee is to visit each project during the first week or early enough in construction to allow time for meaningful corrective action if it is determined that equal opportunity compliance procedures are not being followed. Regular follow-up visits are to be made by the ACE or a designee to monitor the Local Project Sponsor's performance. The Local Project Sponsor is responsible for coordinating the submission of the following EEO forms, as applicable:

- PennDOT Form EO-400, *Highway Construction Contractor's Monthly EEO Report (upon request)*
- Commonwealth Form STD-28, *Monthly Contract Compliance Report for Construction Contractors* (available from Bureau of Environmental Quality)
- FHWA Form 1391, *Federal-Aid Highway Construction EEO Report* (Federal-Aid Projects only)
- PennDOT Form EO-363, *OJT Training Program*
- PennDOT Form EO-364, *Trainee Enrollment Form*
- PennDOT Form EO-365, *Highway Contractor's Monthly Training Report*

A representative of the Bureau of Equal Opportunity may randomly visit an active Locally Sponsored project to determine whether the District's monitoring program is effective. The District Executive will be notified by the Bureau of Equal Opportunity if any serious deficiencies are apparent.

The Bureau of Equal Opportunity will guide and assist the Local Project Sponsor in compliance reviews conducted in accordance with PennDOT procedures.

For District Led projects, the Inspector-in-Charge is to administer the equal opportunity compliance program in accordance with the standard PennDOT procedure. The Bureau of Equal Opportunity will provide guidance and oversight on issues involving District implementation of the standard PennDOT procedure.

H. Claims

In the event the Contractor files a claim or notifies the Local Project Sponsor of its intent to file a claim, the Local Project Sponsor is to inform the District Executive, in writing. The District is to provide guidance and assistance to the Local Project Sponsor in responding to the action. The District is to recommend that the Local Project Sponsor adopt the PennDOT procedure referenced in Publication 408, Section 105.01, *Authority of the Representative*, and Publication 2, Section B.1.19, *Highway Contract Claims*. If the PennDOT procedure is adopted, a representative of the Local Project Sponsor who is familiar with the project is to be present at claim review meetings. If the claim cannot be amicably settled or negotiated and the Contractor pursues legal recourse, the Local Project Sponsor is to take sole responsibility for any proceedings that may transpire. Since these are not Commonwealth contracts, the Board of Claims does not have jurisdiction.

For Federal Oversight and PennDOT Oversight-NHS projects, FHWA is to be involved in the claim per the Stewardship and Oversight Agreement (see Publication 10X, *Design Manual 1X*, Appendix C, *FHWA/PENNDOT Stewardship & Oversight Agreement*), and compliance with 23 CFR 635.124, *Participation in Contract Claim Awards and Settlements*, is required. Claim payments on these projects are initially to be made using 100% Local funds and then converted to an appropriate Federal funding source upon receipt of FHWA concurrence regarding participation (i.e., FHWA approval of the required legal category work order). Federal participation is not guaranteed. If Federal participation in the claim payment is denied (i.e., FHWA disapproves the required legal category work order), the Local Project Sponsor must locate the funds needed to pay the claim and convert the payment to a 100% Local funding source. If initial payment of the claim using 100% Local funds would prove to be a financial hardship for the Local Project Sponsor, consult with the FHWA Engineer and obtain approval, in writing, to initially pay the claim from a Federal funding source.

7.3 Environmental Mitigation Commitments

The Environmental Commitments and Mitigation Tracking System (ECMTS) is a set of procedures developed by PennDOT to track environmental commitments and mitigation through the design, construction, and maintenance phases of transportation projects. See Chapter 4, *Project Development Procedures*, for more information.

Environmental mitigation items identified in the project-specific Environmental Commitments and Mitigation Tracking System are to be reviewed during construction and, as each commitment or mitigation measure is implemented, the Contractor is to sign-off on the item using the signature page included in the tracking system matrix. Refer to the procedures in Publication 10X, Design Manual 1X, Appendix T, *(ECMTS) Process*, for details on how to use the signature page.

7.4 Project Close Out

A. Final Inspection

The Local Project Sponsor (Local Led projects) or the District (District Led projects) is to schedule a final inspection when a project is substantially complete as defined in Publication 408, Section 110.08(a), *Final Inspection*.

The final inspection is to be attended by representatives of the following:

- Contractor (Company Official and Superintendent)
- Local Project Sponsor (Project Manager and Inspector-in-Charge for Local Led projects)
- District (Inspector-in-Charge for District Led projects and ACE or a designee)
- FHWA (Federal Oversight projects only)

PennDOT Form CS-4137, *Final Inspection Form*, is to be used by the Local Project Sponsor (Local Led projects) or the District (District Led projects) to document that a final inspection was held for a project, and to track the progress made toward project acceptance following the final inspection.

During the final inspection, the Inspector-in-Charge, along with the Contractor, is to establish the list of all physical work items, by stations and in detail, requiring completion and/or correction; and a list of all certificates or documents requiring submission, completion, and/or correction. PennDOT Form CS-4136, *Punchlist Form*, is to be used for this purpose.

The Inspector-in-Charge is to provide the Contractor with a copy of the completed Punch list Form immediately following the final inspection.

Before leaving the project site following the final inspection, the ACE or their designee is to sign off on the Final Inspection Form to indicate concurrence with the issues that were discussed and the punch list items noted.

When all physical work has been satisfactorily completed, and all contractually required certificates and/or documents have been furnished, the Inspector-in-Charge is to initiate the process of relieving the Contractor of further responsibility for the project by submitting a copy of the completed Final Inspection Form with the applicable dates and signatures, to the District, with a copy of the Punchlist Form included as an attachment. For Local Led projects, the Local Project Sponsor determines when all physical work has been satisfactorily completed.

The District is to link its copy of the Final Inspection Form and the Punchlist Form to the Finalization Checklist screen in ECMS.

Upon completion of all physical work by the Contractor, and within ten (10) days of submitting the final settlement certificate computations to the Contractor, the Inspector-in-Charge is to complete the Contractor Evaluation in ECMS.

B. Acceptance Certification

When all physical work has been satisfactorily completed and the final document review indicates that all contractually required certificates and documents have been properly furnished in accordance with the requirements of the contract and the final inspection, the date of project acceptance is to be established.

The Inspector-in-Charge is to initiate the process of project acceptance by submitting a copy of the completed Final Inspection Form, with a copy of the Punchlist Form attached, to the District. Upon receipt of the completed Final Inspection Form, the District Finals Unit Supervisor will enter the necessary dates on the Finalization Checklist screen in ECMS, then create and submit an Acceptance Certificate. Once submitted, the ECMS-generated Acceptance Certificate will be electronically routed to the Inspector-in-Charge, the ACE, a Local Official (i.e., an ECMS authorized signatory of the Local Project Sponsor), and the District Executive for approval. If not approved by the Local Project Sponsor within ten (10) days after approval by the ACE, the District Executive or a designee may override system workflow and approve the ECMS Acceptance Certificate for the Local Project Sponsor in order to keep the process of project finalization moving forward.

C. Form FHWA-1446A, Construction Inspection Report

As part of its routine construction monitoring of Federal Oversight projects, the FHWA will complete Form FHWA-1446A, *Construction Inspection Report*. When a project is complete and generally acceptable, the FHWA Engineer or a designee will conduct a final field review of the project and document the results by completing Form FHWA-1446A and recommending approval or noting any observations requiring follow-up action.

D. Form FHWA-1446B, Final Acceptance Report

For Federal Oversight projects only, the District is to complete a Form FHWA-1446B, *Final Acceptance Report*, upon receipt of the Contractor's acceptance of the final quantities in ECMS.

The District is to create and submit Form FHWA-1446B using the functionality associated with the Finalization Checklist screen in ECMS. Once submitted, the ECMS-generated FHWA-1446B will be electronically routed to the Bureau of Project Delivery and the FHWA for approval.

If, instead of approving Form FHWA-1446B, the FHWA requires corrections, the Bureau of Project Delivery, Contract Management Section, will so notify the District.

E. Materials Certification

The District is to prepare and process PennDOT Form TR-4238A, *District's Letter of Project Materials Certification*, in accordance with the requirements set forth in Publication 2, *Project Office Manual*, Section D.3.7, *District's Letter of Project Materials Certification*, except the District is to obtain the signature(s) of the appropriate Local Official(s) prior to forwarding the form to the District Materials Unit. Upon receipt, the District Materials Engineer or a designee is to sign Form TR-4238A and submit the signed form to the Bureau of Project Delivery, New Products & Innovations Section.

The New Products & Innovations Section will initiate final approval of the Materials Certification (Form TR-4238A) upon receipt of notification via ECMS-generated email that the project has been accepted by the District Executive.

After being approved by the Bureau of Project Delivery, the Materials Certification will be returned to the District Materials Engineer in accordance with standard PennDOT procedures. Upon receipt, the District Materials Engineer or designee will ensure that a copy of the approved Materials Certification is submitted to the Local Project Sponsor.

F. Final Settlement of Contract

The Local Project Sponsor (Local Led projects) or the District (District Led projects) is to determine, from documented project records, the final quantity for each contract work item performed.

For Local Led projects, prior to submitting the Notification of Final Quantities and final amount due to the Contractor, the Local Project Sponsor is to obtain the District Executive's concurrence with the final quantities, since the District Executive must subsequently certify to the Transportation Comptroller the final reimbursable costs claimed by the Local Project Sponsor.

The District Executive's or designee's certification of costs for a Local Led project will be based on the District's audit of the Local Project Sponsor's documentation. The ACE or a designee is to review the Local Project Sponsor's computations and supporting documentation, and determine whether a complete audit by the District Finals Unit is warranted. For simple projects with definite records, the ACE or a designee, assisted by the District Documentation Supervisor, may perform the audit; otherwise, the audit is to be performed by the District Finals Unit.

If the District's audit of a Local Led project substantiates the Local Project Sponsor's determination of final quantities and the final amount due, the District Executive or a designee is to so notify the Local Project Sponsor. If the District's audit does not substantiate the Local Project Sponsor's determination of final quantities and the final amount due, the Local Project Sponsor is to be notified and instructed to take action to resolve any discrepancies.

For District Led projects, prior to submitting the Notification of Final Quantities and final amount due to the Contractor, the District is to obtain the Local Project Sponsor's concurrence with the final quantities.

Upon receipt of concurrence with the final quantities and final amount due by both the District Executive and the Local Project Sponsor, the Local Project Sponsor (Local Led projects) or the District (District Led projects) is to notify the Contractor in the manner specified in Publication 408, Section 110.08(c), *Final Settlement Certificate Computations*. The Notification of Final Quantities is transmitted to the Contractor electronically via ECMS. If exceptions are noted by the Contractor in its response, the procedure outlined in Publication 408, Section 110.08(c), *Final Settlement Certificate Computations*, is to be followed.

Upon acceptance of the final quantities by the Contractor in ECMS, the Local Project Sponsor (Local Led projects only) is to submit the Final Invoice (i.e., final amount due as reimbursable costs) to the District, and the District (Local Led and District Led projects) is to initiate the process of submitting the Final Invoice to the Transportation Comptroller.

The Local Project Sponsor (Local Led projects) or the District (District Led projects) is to ensure that all charges related to the project have been processed, including those associated with agreements for consultant engineering and/or inspection services, before submitting the Final Invoice. For close out and final invoicing of consultant services on a project, the procedures outlined in Publication 93, *Procedures for the Administration of Consultant Agreements*, Chapter 6, *Administering Third Party Federal-Aid Agreements*, are to be followed. If the project does not involve Federal-Aid funds, the guidelines in Publication 93 remain applicable; however, Central Office involvement is not required.

The Transportation Comptroller will be notified, by ECMS-generated email, that the project Finalization Package is complete. Upon receipt of this email, the Comptroller will access the information within the "Federal-Aid As-Built Report by FPN" screen in ECMS and initiate preparation of the Final Voucher.

G. Project Finalization Procedures

The Local Project Sponsor (Local Led projects) or the District (District Led projects) is to ensure that the finalization of all Locally Sponsored projects occurs in a timely manner. A project will be considered "closed out" as of the date when each of the following processes is complete:

- The Acceptance Certificate is issued by the District and approved by the District Executive (Local Led and District Led projects),
- A Final Settlement Certificate (i.e., Notification of Final Quantities) is submitted to and accepted by the Contractor, and
- The Final Invoice (i.e., final amount due as reimbursable costs) is submitted to PennDOT by the Local Project Sponsor (Local Led projects only) and transmitted to the Transportation Comptroller by the District (Local Led and District Led projects).

All projects are to be closed out within three (3) months of the date of submission of the Final Invoice to PennDOT (Local Led projects) or the Transportation Comptroller (District Led projects). The Local Project Sponsor must submit its Final Invoice for payment or reimbursement, as the case may be, within one (1) year of acceptance of the project. If the Local Project Sponsor fails to submit its Final Invoice within this 1-year period, it may forfeit all remaining federal and state financial participation in the project.

Project finalization is an important step in completing a project; therefore, for a Local Led project, the Local Project Sponsor is expected to make every effort to meet the timeframes established above. The Local Project Sponsor's Project Manager, Inspector-in-Charge, and subordinate inspection staff should not be discharged or reassigned until all required project finalization procedures have been completed. If the above project finalization timeframes are not met, the Local Project Sponsor may be required to meet with the District Executive or a delegate to address the non-compliance. In addition, the Local Project Sponsor's receipt of federal funds for future projects may be jeopardized.

H. Records Retention/Disposal

The District and the Local Project Sponsor are to retain their respective project records separately and in accordance with Publication 11, *Finals Unit Manual*, Part E.1.5, *Destroy Records*.

The Contractor must retain its project records in accordance with the requirements of Publication 408, Section 112.03, *Retention Period*.

7.5 Other Considerations

A. Cost Overruns

If construction costs exceed the original contract amount, it is the responsibility of the Local Project Sponsor to process a supplement to the Project Reimbursement Agreement if it intends to request additional funds in the case of a construction cost overrun (see Chapter 4, *Project Development Procedures*).

If construction engineering costs exceed the originally allocated amount, it is the responsibility of the Local Project Sponsor to process a supplement to the Project Reimbursement Agreement if it intends to request additional funds in the case of a construction engineering cost overrun.

It is recommended that the Local Project Sponsor review the amount spent versus work to be completed often during construction to ensure funding is on track. If additional funds are necessary, the Local Project Sponsor should begin the supplement process at the time the project has expended 75% of its funds. A typical supplement to the Project Reimbursement Agreement can take up to three months to process and execute.

B. Termination or Default of Contract

The Local Project Sponsor is not to terminate, cancel, or sever a contract, or declare the Contractor in default, without the advice and consent of PennDOT. Should the Local Project Sponsor contemplate such action, it is to so notify the District Executive in writing and justify its proposed action. The District Executive or a designee is to review the Local Project Sponsor's notification of intent and forward it, with a recommendation, to the Bureau of Project Delivery, Contract Management Section for review, consideration, an appropriate response, and direction.

Should District and Bureau review indicate that termination or default action is warranted and the Local Project Sponsor has not acted, the District Executive or a designee is to notify the Local Project Sponsor accordingly and recommend that proceedings be initiated.

Coordination with FHWA regarding termination or default actions involving Federal-Aid contracts is to be done in accordance with the Stewardship and Oversight Agreement (see Publication 10X, *Design Manual 1X*, Appendix C, *FHWA/PENNDOT Stewardship & Oversight Agreement*).

C. Bituminous Paving Weather Limitations

The precautions, controls, and approvals specified in Publication 408, Sections 309.3, *Superpave Asphalt Mixture Design, Standard Construction, HMA Base Course, Construction***,** and 409.3, *Superpave Mixture Design, Standard and RPS Construction of Plant-Mixed HMA Courses, Construction*, and Publication 2, *Project Office Manual*, Section C.4.2, *Bituminous Pavement Weather Limitations*, regarding the placement of bituminous concrete during the "cold season" are applicable to Local projects. If it is necessary to place bituminous material outside the dates specified in Publication 408, *Specifications*, prior written permission is to be obtained from the District Executive.

D. Painting Structural Steel – Weather and Calendar Limitations

Refer to Publication 408, Section 1070.3(d)2, *Weather Conditions for Painting***,** for guidance concerning limitations on structural steel painting due to weather conditions (i.e., temperature, dew point, relative humidity, dampness) and time of year.

APPENDIX A
ACRONYMS

23 CFR	Code of Federal Regulations, Title 23, Highways
AASHTO	American Association of State Highway and Transportation Officials
ACE	Assistance District Executive, Construction
ADE	Assistant District Executive
ADT	Average Daily Traffic
ALCAB	Agricultural Lands Condemnation Approval Board
BOMO	Bureau of Maintenance & Operations
BOPD	Bureau of Project Delivery
BRPA	Bridge and Roadway Programmatic Agreement
CAAA	Clean Air Act Amendments of 1991
CE	Categorical Exclusion
CEE	Categorical Exclusion Evaluation
CFR	Code of Federal Regulations
CMAQ	Congestion Mitigation and Air Quality Improvement Program
CPM	Critical Path Method
DBE	Disadvantaged Business Enterprise
DE	District Executive
DFV	Design Field View
DM	Design Manual
E&SC	Erosion and Sediment Control
ECMS	Engineering and Construction Management System
ED	Environmental Documentation
EER	Environmental Evaluation Report
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FHWA	Federal Highway Administration
GIS	Geographic Information System
HASP	Health and Safety Plan
HSIP	Highway Safety Improvement Program (HSIP)
ISTEA	Intermodal Surface Transportation Efficiency Act
LOS	Level of Service
LPS	Local Project Sponsor
LRTP	Long Range Transportation Plan
MAP-21	Moving Ahead for Progress in the 21st Century Act
MBE	Minority Owned Business Enterprise
MOA	Memorandum of Agreement
MPMS	Multimodal Project Management System
MPO	Metropolitan Planning Organization
NEPA	National Environmental Policy Act of 1969
NHPP	National Highway Performance Program (NHPP)
NHS	National Highway System
NPDES	National Pollution Discharge Elimination System
NWI	National Wetlands Inventory
PA DEP	Pennsylvania Department of Environmental Protection
PennDOT	Pennsylvania Department of Transportation
POM	Project Office Manual
PS&E	Plans, Specifications, and Estimates
PUC	Public Utility Commission
QA	Quality Assurance
QC	Quality Control
QA/QC	Quality Assurance/Quality Control

R/W	Right-of-Way
ROW	Right-of-Way
RPO	Rural Planning Organization
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
SFV	Scoping Field View
SHSP	Strategic Highway Safety Plan
SR	State Route
STC	State Transportation Commission
STIP	State Transportation Improvement Program
STP	Surface Transportation Program
T&E	Threatened and Endangered
TAP	Transportation Alternatives Program
TEA-21	Transportation Equity Act for the 21st Century
TIP	Transportation Improvement Program
TS&L	Type, Size and Location
TYP	Twelve Year Program
U.S.C.	United States Code
USDOT	United States Department of Transportation
WBE	Women Owned Business Enterprise

APPENDIX B
GLOSSARY

A

Acceptance Certificate - The certificate issued by PennDOT, certifying that the construction of the project has been satisfactorily completed and accepted.

Act 120 - A Pennsylvania Legislative Act passed on May 6, 1970 which in part created the Pennsylvania Department of Transportation (PennDOT) and granted it certain powers, duties, and responsibilities. The Act also orders PennDOT to coordinate highway and transportation development projects with other public agencies and authorities.

> **Section 2002** of the Act states that PennDOT must issue specific findings whenever lands from public recreation areas, wildlife and waterfowl refuges, historic sites, state forest, wilderness, state game lands, and public parks are needed for highway or transportation purposes.

Act 287 of 1974, as amended - A Pennsylvania Legislative Act enacted to protect the public health and safety by preventing excavation or demolition work from damaging underground lines used to provide various utilities including: electricity, communication, gas, oil, sewage, and water. The Act imposes specific duties on utility companies, recorders of deeds, designers, and contractors performing excavation and demolition work. For more information, see PennDOT Publication 16M, *Design Manual Part 5*.

Additional Work - Extra Work not specified in the contract, but of a type already provided by the contract and for which the contract has established a unit price.

Advertisement - The public announcement, required by law, inviting Contractors to submit bids for work to be performed or for materials to be furnished.

Aerial Photography - High resolution photographs taken from aircraft which are used to assess features in a study area and, which are also used to produce topographic base maps of varying scales for alignment studies, engineering, and final design work.

Agency Coordination - Refers to the process whereby PennDOT contacts, consults, and maintains communication with various public and environmental resource agencies, affording such agencies an opportunity to review and comment upon specific transportation proposals.

Agricultural Lands Condemnation Approval Board (ALCAB) - A six-person, independent administrative board with jurisdiction over the condemnation of certain types of agricultural lands in Pennsylvania. The Board reviews proposals and presentations made by PennDOT and determines whether there is a "reasonable and prudent alternative" to the condemnation of active farmland for transportation use.

Alternative - One of a number of specific transportation improvement proposals, alignments, options, design choices, etc., in a study. Following detailed analysis, one improvement alternative is chosen for implementation. Sometimes, the term "alternate" is used interchangeably with "alternative." Study alternatives may include but are not limited to the following: "No-Build," Transportation System Management (TSM), network upgrade, new alignment, high occupancy vehicle lanes, bus lanes, bicycle lanes and transit.

Archaeological Investigations - Cultural resource studies conducted in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended. Depending on the extent and significance of archaeological resources in a study area, investigations may proceed through three phases, each with an increasingly complex level of detail. In **Phase** I Archaeological investigations, a field survey is conducted to determine the presence or absence of archaeological resources in a project area that may be potentially eligible for the National Register of Historic Places. **Phase** II investigations are designed to sample the archaeological

deposits at a site in order to determine its eligibility for listing in the National Register. **Phase** III involves data recovery excavation to mitigate the adverse effects of a transportation project to a National Register eligible site.

Attainment Area – An area considered to have air quality that meets or exceeds the U.S. Environmental Protection Agency (EPA) health standards used in the Clean Air Act. Nonattainment areas are areas considered not to have met these standards for designated pollutants. An area may be an attainment area for one pollutant and a nonattainment area for others.

Average Daily Traffic Volumes - The total traffic volume during a given time period in whole days (24-hour periods), greater than one day and less than one year, divided by the number of days in that time period.

Award - PennDOT's written acceptance of a proposal.

B

Bidder - Any individual, firm, partnership, corporation, or joint venture submitting a proposal for the work contemplated and acting either directly or through an authorized representative.

Biological Assessment – A document prepared for the Section 7 (Endangered Species Act) process to determine whether a proposed major construction activity under the authority of a Federal action agency is likely to adversely affect listed species, proposed species, or designated critical habitat.

Biological Opinion – A document that is the product of formal consultation, stating the opinion of the Service on whether or not a Federal action is likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat.

Bridge - A structure, including supports, spanning and providing passage over a waterway, a railroad, a highway, or other obstruction; more than 6 m (20 ft) long, measured along the center of the roadway or railroad, between the faces of abutments. In the case of boxes or arches, the length is measured between the faces of the sidewalls and, in the case of multiple boxes, between the inside faces of the outside walls.

Bridge and Roadway Programmatic Agreement – The programmatic agreement involves environmental clearance for bridge replacement, rehabilitation and preservation projects, roadway reconstruction, roadway resurfacing, restoration and rehabilitation (3R) projects, and non-complex projects such as construction of turn lanes, traffic operations activities, park and ride facilities and ADA curb cuts. The Programmatic Agreement (PA) serves as the NEPA CE clearance for the activities defined in the Programmatic Agreement. Its streamlining feature involves PennDOT determining the applicability and certifying that an activity will not result in significant environmental impacts and document as a Categorical Exclusion accordingly.

Bridge Bill –Pennsylvania Act 235 of 1982 - this legislation, known as the “Bridge Bill”, resulted in the programming of 979 state, local and orphan (a former bankrupt railroad bridge for which no railroad, municipality or the state is willing to assume ownership) bridge projects in the TYP. Act 235 of 1982 authorized state funding for state and local bridges.

Bulletins - Publications, prepared by PennDOT, indicating requirements for material and processes, listing approved material suppliers, etc.

Bureau of Maintenance and Operations (BOMO) - A major administrative unit of PennDOT responsible for performing quality assurance reviews of PennDOT's highway and bridge maintenance operations, truck weight enforcement, and establishing maintenance policy.

Bureau of Project Delivery (BOPD) - A major administrative unit of PennDOT whose engineering staff creates and administers design policy and standards, oversees the Transportation Program Development and

Project Delivery Process, obtains federal approvals for specific projects, and performs various Quality Assurance tasks.

C

Categorical Exclusion - 1. A classification given to federal aid projects or actions that do not have a significant effect on the environment either individually or cumulatively. Categorical Exclusions do not require extensive levels of environmental documentation. 2. The written documentation to support a Class of Action that satisfies federal criteria describing non-significant impacts.

Central Office - The various administrative units that comprise the state headquarters of PennDOT.

Chapter 105 Water Quality Permit - Permit issued by PA DEP and required by Pennsylvania's Dam Safety and Encroachments Act (25 PA Administrative Code Chapter 105) for projects involving the construction, modification, or relocation of any dam, water obstruction or encroachment. [The Act defines "encroachment" as any structure or activity that in any manner changes, expands, or diminishes the course, current, or cross-section of any watercourse, floodway, or body of water (including wetlands).] Any activity that disturbs a wetland, whether or not it is associated with filling or fill materials, requires a permit. PA DEP automatically forwards Joint Chapter 105 permit applications to the U.S. Army Corps of Engineers to fulfill Section 404 (Federal Clean Water Act) Water Quality Certification application requirements. However, these permits are issued independently.

Claim Payment – An approved amount of monetary damages paid to compensate an eligible claimant for the purchase or real property, relocation benefits, or other miscellaneous fees.

Claimant – A person or persons identified to be compensated monetarily for costs associated with the acquisition of real property.

Clean Air Act Amendments (CAAAs) - Federal legislation passed in 1990 to change both federal and state approaches to regulating air quality; mandating programs to curb acid rain, urban air pollution, and toxic air emissions. The CAAAs call for emission reduction measures in air quality non-attainment areas, including the consideration of transportation control measures (TCMs) as part of transportation improvement projects.

Code of Federal Regulations (CFR) – The codification of the general and permanent rules and regulations (sometimes called administrative law) published in the Federal Register by the executive departments and agencies of the federal government of the United States. The CFR is published by the Office of the Federal Register, an agency of the National Archives and Records Administration (NARA). The CFR is divided into 50 titles that represent broad areas subject to Federal regulation.

Congestion - The level at which transportation system performance is no longer acceptable due to traffic interference. The level of acceptable system performance may vary by type of transportation facility, geographic location (metropolitan area or subarea, rural area) and/or time of day.

Congestion Mitigation and Air Quality Improvement Program - A federal program that provides funds to state DOTs and Local Project Sponsors to support transportation projects in air quality nonattainment or maintenance (to sustain attainment) areas.

Constructability - a relative measure of how simple or difficult a design is to construct. A project's constructability depends on a wide range of project-specific variables including project complexity, schedule, location, site constraints, traffic control, material availability, and labor availability.

Construction Claim Review Committee - A committee that reviews a Contractor's claim which has been rejected by the District Executive (DE) and which has been appealed for review in the manner set forth in Publication 408, Section 105.01(a). The committee consists of the DE, the Chief Counsel and the Director, Bureau of Construction and Materials, or their respective designees.

Construction Inspection – The act of monitoring a construction project to ensure that construction is being completed in accordance with project plans and specifications; and with PennDOT construction methods, material compliance, and other construction related policies and standards.

Construction Phase - The last phase of the seven-phase Transportation Program Development and Project Delivery Process (encompassing *Mitigation Follow-Through*), in which a contractor selected by PennDOT constructs the improvement alternative selected in the Design Phase. After a thorough final inspection, the new and/or improved transportation facility is opened for public use.

Consultant - An individual, partnership, or firm with qualified expertise in engineering or environmental disciplines that is contracted by PennDOT to provide technical services for design and study purposes.

Consultant Agreement - A binding legal agreement between PennDOT and an individual, partnership, or firm for the procurement of engineering, environmental, construction inspection, or other services; typically includes a Scope of Work, required staffing, schedules, manner of payment and various administrative requirements which must be met.

Contract - The binding legal agreement between PennDOT and the Contractor for the construction of the project. The contract includes the following: Proposal; Plans; Specifications; Agreement; Performance Bond; Payment Bond; Insurance Certificates; Notice to Proceed; and all work orders and supplemental agreements which are required to complete the construction of the project.

Contract Documents - Written material and engineering data required to put a highway construction project under contract, including: proposals, agreements, plans, specifications, estimates, and other information pertaining to the manner and method of furnishing materials and performing the work under binding agreement.

Contract Item (Pay Item) - A specifically described unit of work for which a price is provided in the contract. Individual units in the component item schedule of a lump sum payment item are not considered contract items.

Contractor - The construction firm responsible for construction or other related services.

Critical Path Method (CPM) - A planning and scheduling tool that allows project managers to focus strictest attention on the critical activities of the project, those which determine target dates for project milestones, and ultimately the project's time of completion.

Cross Sections - Graphic representations of the original ground and the proposed highway, at right angles to the centerline or base line. Highway cross sections are typically prepared at 20 m (50 ft) intervals.

Cultural Resources Professional (PennDOT Staff) – The Bureau of Project Delivery, Highway Design Division, Environmental Policy and Development Section, Cultural Resources Unit has the primary quality assurance responsibility to ensure that PennDOT's program complies with applicable laws and regulations. Each Engineering District shall have assigned a professionally qualified cultural resource team, consisting of an archaeologist and an Architectural Historian. These District Cultural Resource Professionals (CRPs) (also referred to as District Archaeologist or District Architectural Historian) shall assist the District Environmental Manager and the Project Manager in PennDOT's compliance with Section 106 and the State History Code.

D

D-4232 – See "Federal Authorization."

Deliverables - The completed end products of a consultant firm's Scope of Work. These may include plans, reports, mapping, graphics, artwork surveys, statistical data, correspondence, and other compiled information.

Department - The Pennsylvania Department of Transportation.

Design Criteria - Established state and national standards and procedures that guide the establishment of roadway functional classifications, layouts, alignments, geometry, and dimensions for specified types of highways in certain defined conditions. The principal design criteria for highways are traffic volume, design speed, the physical characteristics of vehicles, the classification of vehicles, and the percentage of various vehicle classification types that use the highway.

Design Exception - An approval issued by PennDOT or the FHWA to permit certain deviation from a specified, accepted standard granted on the basis of a report justifying the need for the exception.

Design Field View (DFV) - The Design Field View compliments the Design Field View Submission and is typically held within weeks after the Submission is delivered. The purpose of the Design Field View is to evaluate the Design Field View Submission under field conditions. This is an important opportunity to: Meet with affected review agencies, obtain review comments, reach consensus on critical issues, identify aspects of the project requiring special attention in Final Design, and confirm the environmental impact and footprint of the selected alternative.

Design Field View Approval - An administrative action taken by PennDOT to approve the Design Field View Submission prepared during Preliminary Engineering in support of the project's environmental document. Design Field View Approval represents the culmination of the Preliminary Engineering Phase.

Design Field View Submission - A Design Field View Submission contains plans, profiles, typical sections, representative cross sections, cost estimates and other supporting documentation prepared to support the engineering analysis of the selected alternative developed during Preliminary Engineering. This report is the main engineering product of Preliminary Engineering and is filed as support for the project's environmental document. Completion of this report marks an important progress point in the overall design phase.

Design Manual - A nine volume series of publications that describes PennDOT's policies, procedures, and design criteria for the evaluation, assessment, engineering design, and development of highway and bridge projects. The Design Manual may be purchased through PennDOT's Distribution Services Unit in Harrisburg, PA.

Design Year - The year for which a roadway facility is designed, normally 20 years after planned completion, taking into consideration projected volumes of traffic.

District Office - One of PennDOT's eleven field offices throughout the state responsible for administrating project development, design, construction, and maintenance activities within their geographic region.

District Executive - The Chief Executive in charge of one of PennDOT's eleven Engineering Districts.

Donation Credit – Certain public donations, of cash, materials, land, and services that can be used to satisfy the non-federal matching requirement.

E

Earmarks – Funding for projects specifically identified in federal legislation.

Endangered Species Act of 1973, as amended - Federal legislation intended to provide a means whereby the ecosystems upon which endangered and threatened species depend may be conserved, and provide programs for the conservation of those species, thus preventing extinction of native plants and animals.

Engineering and Construction Management System (ECMS) - Automation that supports both of the streamlined and coordinated design and construction processes. This is being achieved through the use of project management tools, and technology that facilitates PennDOT and its design partners working together and sharing information.

Environmental - 1) In a scientific context, a combination of external or extrinsic conditions present in nature. 2) In a planning context, a category of analytical studies of aesthetic values, ecological resources, cultural (historical) resources, sociological and economic conditions, etc.

Environmental Assessment - A document prepared in compliance with the National Environmental Policy Act (NEPA) for federally-funded transportation projects that do not fall under any categorical exclusion category and do not appear to be of sufficient magnitude to require an EIS. An Environmental Assessment provides the analysis and documentation to determine if an EIS or a Finding of No Significant Impact (FONSI) should be prepared.

Environmental Classification - An internal Department determination as to which type of environmental documentation is appropriate. At the beginning of the Transportation Program Development and Project Delivery Process, projects are systematically grouped into one of three classes based on knowledge of the significance of environmental effects: **Class** I projects require Environmental Impact Statements, **Class** II require Categorical Exclusions, and **Class** III require Environmental Assessments.

Environmental Documentation – A report completed for 100% state – funded projects; similar to a Categorical Exclusion Evaluation.

Environmental Evaluation Report - A report completed for 100% state – funded projects; similar to an Environmental Assessment.

Environmental Impact Statement (EIS) - An EIS is required by the National Environmental Policy Act (NEPA) of 1969 for projects that may have significant impacts, and is the document that assures that planners, engineers and environmental scientists have studied appropriate alternatives and that citizens are fully aware of the environmental, social, cultural and economic effects of all alternatives. The EIS documents the development and impact analysis of the alternatives as well as the logic for the selection of the preferred alternative.

Environmental Manager - A professional in each of PennDOT's 11 District Offices responsible for overseeing and coordinating District environmental issues and operations, organizing data collected by the District and its consultants regarding natural, socioeconomic, and cultural resources, and assisting in the preparation of NEPA and other related studies.

Erosion and Sediment Pollution Control Plan - A detailed series of plans developed to minimize accelerated erosion and prevent sedimentation damage. In accordance with *Design Manual Part 2*, Chapter 13, and Publication 584, *PennDOT's Drainage Manual*, these plans are prepared in conjunction with construction staging plans, detailing what erosion control measures must be in place at all times during various construction stages and phases

F

Fabricator - A firm, company, or individual supplying fabricated material for the project.

Federal-Aid Highways - Those highways eligible for assistance under Title 23, United States Code (U.S.C.).

Federal Aid Project - An activity, study, survey, project, or other work related to transportation authorized in advance by the Federal Highway Administration, and which is paid for either partially or fully by federal funds.

Federal Authorization - An administrative action taken by the Federal Highway Administration whereby that agency reviews and approves various project phases prior to the work being started. The information is submitted to the FHWA on a Form D-4232. The authorization obligates the federal funds and establishes the date of eligibility for funding preliminary engineering, final design, right-of-way, and construction projects.

Federal Highway Administration (FHWA) - This agency oversees the process of planning, designing and constructing federally funded highway projects.

Federal Oversight Project - A Federal-Aid project that is subject to full FHWA approval authority. Refer to the FHWA/PennDOT Stewardship and Oversight Agreement (Design Manual Part 1X, Appendix C) for more detail.

Federal Register - A daily publication of the U.S. Government Printing Office that contains notices, announcements, regulations, and other official pronouncements of U.S. Government administrative agencies. Various printed announcements and findings related to specific environmental matters and transportation projects and activities appear in this publication.

Field View - A site visit conducted by PennDOT to gather or verify data, define scopes of work, perform analyses, and make decisions for specific projects. Several field views are identified as important progress points in the Transportation Program Development and Project Delivery Process.

Final Design Phase – Occurs during Step 7 of the Transportation Project Delivery Process and involves the development of detailed working drawings, specifications, and estimates for approved transportation projects. Final Design follows the receipt of necessary design and/or environmental approval, and it includes right-of-way acquisition, utility relocation, and construction contract advertisement and award.

Flexible Match – See "Donation Credit."

Functional Roadway Classification - The organization of roadways into a hierarchy. In planning and needs studies, roadways are classified by the character of service provided. Character of service refers to serving the mutually exclusive objectives of through or regional trips versus providing access to adjacent land uses. Typical roadway classifications are arterial (primarily serving through and regional traffic on roads designed for mobility), local roadways (providing access to adjacent land uses) and collectors (connecting local roads to arterial roads and providing some service to adjacent land uses).

G

Geometric Design - Pertains to those engineering activities involving standards and procedures for establishing the horizontal and vertical alignment and dimensions of slopes of a highway. It includes engineering work involved with proportioning the visible elements of a facility, tailoring the highway to the terrain, the controls of environmental and land space usage, and the requirements of the highway user, individually and collectively.

H

Highway Safety Improvement Program (HSIP) - A core Federal-aid program with the purpose of achieving a significant reduction in fatalities and serious injuries on all public roads, including local public roads and roads on tribal lands.

Historic Property - Includes any district, site, building, structure, or object that is included or eligible for inclusion in the National Register of Historic Places. Properties are evaluated for eligibility for the National Register of Historic Places (NRHP) based upon four criteria: events, persons of historic importance, architectural or engineering significance or archeology. In addition, eligible properties must retain sufficient integrity from their period of significance.

I

Impacts - Positive or negative effects upon the natural or human environment resulting from transportation projects.

Independent Oversight Program - A joint FHWA/PennDOT program that will provide selective reviews of Federal-Aid projects and PennDOT processes to assess the effectiveness of Quality Management in producing quality products and services in compliance with Federal and State regulations and policy.

Inspector-in-Charge - PennDOT's authorized field representative in immediate charge of inspecting the performance of work on the construction project.

Intermodal Surface Transportation Efficiency Act (ISTEA) - Signed in 1991, this Federal legislation established the policy of developing an economic, efficient, and environmentally sound national transportation system. To further this goal, ISTEA conceives transportation enhancement activities and requires that transportation policy to advance the objectives of regional and metropolitan planning by considering the "overall social, economic, energy, and environmental effects" of improvement projects. ISTEA was superseded in 1998 by the Transportation Equity Act for the 21st Century (TEA-21).

Invitation for Bids - The advertisement for proposals from contractors for construction work or material. The advertisement will state, with reasonable accuracy, the quantity and location of the work to be done, the character and quantity of the material to be furnished, and the time and place of the opening of bid proposals. The advertisement is issued by the Bureau of Project Delivery's Contract Management Section (or District Office).

In Writing - Communication between parties delivered or sent, and received, in the form of a written letter, telegram, e-mail, or mailgram.

J - K

L

Liquid Fuels – The Liquid Fuels Tax Act of 1931 (the Act), as codified in Title 75 Pennsylvania Consolidated Statutes, Chapter 90, provides all counties that are in compliance with PennDOT guidelines with semiannual allocations in June and December of each year. These allocations must be deposited into a separate fund, from which payments may be made for construction, maintenance, and repair of county roads and bridges.

Line and Grade – The design of and the layout on plan sheets of the horizontal alignment (line) and vertical profile (grade) of a segment of roadway.

Local Project – Generally a project on a road or bridge owned / operated by local government. Local projects can include a project owned by a local government or governmental agency, but funded through the state Transportation Improvement Program. For purposes of this manual, the term “local project” does not specifically address the Transportation Alternatives Program (TAP). TAP is authorized under federal legislation (Moving Ahead for Progress in the 21st Century Act) and provides funding for projects such as pedestrian / bicycle facilities and community improvement activities.

Local Project Sponsor – Typically a local government or local governmental agency or authority that proposes a “Local Project” for development. This term can also apply to a local group or organization that develops a project on behalf of a local government or local governmental agency or authority.

Long Range Transportation Plan (LRTP) - Identifies regional transportation goals, issues and needs, and defines the direction for regional planning, programming and project development over a 20-year period.

M

Moving Ahead for Progress in the 21st Century Act - The Moving Ahead for Progress in the 21st Century Act (P.L. 112-141), was signed into law by President Obama on July 6, 2012. Funding surface transportation programs at over $105 billion for fiscal years (FY) 2013 and 2014, MAP-21 is the first long-term highway authorization enacted since 2005.

Maintenance Area – under the National Ambient Air Quality Standards (NAAQS), “maintenance area” means an area that was designated nonattainment for the NAAQS on or after November 15, 1990 and was redesignated to attainment for the NAAQS subject to a maintenance plan as required by section 175A of the Clean Air Act.

Mapping - A plane surface graphic or photographic representation of land or water used to depict the study area for a project. Existing alignments, alternatives, engineering design features, and environmental constraints are plotted on various types of mapping. Photogrammetric (aerial) mapping assists in resource identification and studies. Topographic (base) mapping provides a basis for alignment layout. Property tax maps and traffic data maps are also consulted in the transportation development process. The type and scale of mapping are selected to fit the terrain and land use intensity of the study area as well as the level of detail of the proposed design.

Meeting Minutes - Usually a brief memo prepared by a meeting chairperson summarizing points discussed, conclusions reached, and any other notable items. Meeting minutes offer a quick, efficient format for recording coordination with agencies and important public involvement actions.

Memorandum of Agreement (MOA) - Lists certain binding historic resource commitments and outlines measures to avoid, mitigate, or accept the adverse effects on a given historic resource. The MOA is part of requirements outlined in Section 106 of the National Historic Preservation Act of 1966. It must be signed by agencies such as the State Historic Preservation Officer (SHPO), the FHWA, the Advisory Council on Historic Preservation (when participating), and PennDOT for Federally funded project or by the SHPO and PennDOT for 100% state funded projects. The MOA may also be signed by concurring parties such as Consulting Parties and Tribes or Nations.

Metropolitan Planning Area - The geographic area in which the metropolitan transportation planning process required by 23 U.S.C. 134 and Section 8 (49 U.S.C. App. 1607) of the Federal Transit Act must be carried out.

Metropolitan Planning Organization (MPO) - A planning group designated for each urban area with a population of 50 000 or more. Members include both private citizens and local government officials. An MPO addresses federal aid planning mandates by producing local area transportation plans or transportation improvement programs on an annual or biannual basis, or by employing other strategies that make existing systems more efficient.

Milestone Date - The date on which a specific portion of physical contract work is to be completed, prior to the Required Completion Date of all contract work.

Mitigation Measures - Specific design commitments made during the environmental evaluation and study process that serve to moderate or lessen impacts deriving from the proposed action. These measures may include planning and development commitments, environmental measures, right-of-way improvements, and agreements with resource or other agencies to effect construction or post construction action.

Multimodal Project Management System (MPMS) - system designed for the Pennsylvania Department of Transportation to support the process of fiscal management and project program development in order to provide improvements to state highways and bridges, and to aviation, public transit, and rail freight modes of transportation.

Municipal Engineer – A consulting engineering firm that may be retained by an approved competitive, qualification-based process for various consultant engineering services, provided that the engineer/firm is qualified to complete that specific type of work (example – preliminary engineering, environmental services/permitting, final design, construction inspection, National Bridge Inspection Standard [NBIS]). The municipality must have designated a consultant as its municipal engineer by an Act of the Mayor, Council, Board of Supervisors, etc., and this cannot be done for the purpose of a particular agreement, but must be done as a matter of normal course of business for the reorganization of the municipality's assignments. The designation of the municipal engineer is valid for a period of not more than five (5) years from the date of the Act designating the municipal engineer. If the municipality's procedures for reorganization require annual designation of the municipal engineer, then the first Act after selection is complete is considered the start of the five (5) year period. A new qualification based selection process should be initiated prior to the end of the five (5) year period to prevent a lapse. The advertisement for the municipal engineer must include all the engineering services that the municipality anticipates will be needed by that firm.

N

National Ambient Air Quality Standards (NAAQS) - The Clean Air Act established two types of national air quality standards. Primary standards set limits to protect public health, including the health of "sensitive" populations such as asthmatics, children, and the elderly. Secondary standards set limits to protect public welfare, including protection against visibility impairment, damage to animals, crops, vegetation, and buildings.

National Environmental Policy Act of 1969 (NEPA) - The federal law that requires the preparation of an Environmental Impact Statement (EIS), Environmental Assessment (EA), or Categorical Exclusion (CE) for undertakings using Federal funds that may have significant impacts. To comply with NEPA, a process has been developed by PennDOT to address all potential environmental, social, cultural and economic impacts of a proposed highway project before decisions are reached on design. Public involvement is an integral component of the NEPA process.

National Highway Performance Program (NHPP) – A federal transportation funding category intended to maintain the National Highway System (NHS), including construction of new facilities on the NHS, and ensure that Federal-aid funds in highway construction support the achievement of performance targets established in a State's Asset Management Plan for the NHS.

National Highway System (NHS) - The system of highways designated and approved in accordance with the provisions of 23 U.S.C. 103(b).

National Historic Preservation Act of 1966 – Governs the identification, evaluation, and protection of historical and archaeological resources affected by state and federal transportation projects. Principal areas identified include required evaluations to determine the presence or absence of sites, the eligibility based on National Register of Historic Places (NRHP) criteria and the significance and effect of a proposed project upon such a site.

National Pollutant Discharge Elimination System (NPDES) Permit - Mandated by Section 402 of the Clean Water Act for projects that involve the discharge of pollutants from a point source into surface waters (including wetlands) for disposal purposes; intended to regulate the amount of chemicals, heavy metals, and biological wastes discharged in wastewater. The EPA has granted PA DEP the authority to administer NPDES permits under the Pennsylvania Clean Streams Law.

Needs Study - The purpose of this study is to identify such items as roadway deficiencies, safety problems, capacity issues and social demands, which support the consideration of a transportation improvement. State and federal environmental agencies are asked to agree that there is a need for improvements before a project moves into the next phase of development.

Non-Attainment Areas - Counties or a portion of a county that does not meet national ambient air quality standards for ozone pollution; ranked by the severity of their problem as marginal, moderate, serious, severe, or extreme. In accordance with the Clean Air Act Amendments of 1990, these areas must take specific emission reduction measures.

Notice to Proceed - Written notice to a consultant firm or a contractor to begin the work defined in a contract or agreement; includes contract start-up date.

O

Obligation of Funds - Committing funds for specific use on a given transportation project or activity. Typically, when projects are approved for a certain phase of development, federal funds are "obligated" for that purpose.

P

PS&E Submission - The reference given to a transmittal of plans, specifications, and estimates made from a preparing office to PennDOT for review and processing. This transmittal includes all written material and engineering data necessary to place a highway construction project under contract. These submissions are reviewed by PennDOT for accuracy and completeness prior to bid. For certain major federal-aid projects (Federal Oversight projects), the PS&E submission is also provided to the Federal Highway Administration for final approval.

PennDOT – The Commonwealth of Pennsylvania agency that is responsible for the development and maintenance of the state's highway network.

PennDOT Oversight Project - A Federal-aid project for which the FHWA has delegated approval authority to PennDOT as established by the FHWA/PennDOT Stewardship and Oversight Agreement (Design Manual Part 1X, Appendix C).

Pennsylvania Bulletin - Official weekly gazette of the Commonwealth of Pennsylvania, containing notices, regulations, announcements, and other documents filed with the Legislative Reference Bureau. Mail subscriptions can be purchased. Its distribution exceeds 15,000.

Pennsylvania Infrastructure Bank (PIB) – A PennDOT-operated program that provides low-interest loans to help fund transportation projects within the Commonwealth. The goal of the PIB is to leverage state and federal funds, accelerate priority transportation projects, spur economic development, and assist local governments with their transportation needs.

Performance Bond - The approved form of security, furnished by the Contractor and the surety, as a guaranty on the part of the Contractor to execute the work, in accordance with the terms of the specifications and contract.

Permit - Written permission from a governmental agency to take certain action during the Transportation Program Development and Project Delivery Process (relating to, for example, waterways or wetland encroachments, solid waste management, underground storage tanks, coastal areas, etc.).

Phase - A major activity, typically requiring one year or more, that involves the collection, organization, and documentation of data; the discharge of specific tasks, and the implementation of certain action. The seven Phases of PennDOT's Transportation Project Delivery Process are: Problem Assessment, Problem Identification in LRTP, Problem Initiation, Problem Definition, Project Identification in TIP/STIP, Preliminary Engineering/NEPA Decision, and Final Design/Construction.

Planning Phase - The first four phases of the Transportation Program Development and Project Delivery Process. Planning involves the development of transportation plans for a particular urban area or for some other given region of the state. This phase involves data collection, problems/needs assessments, generating and comparing alternative plans, evaluating the social, economic, and environmental impacts of proposed transportation actions with a variety of public, agency, and citizen involvement groups, and selecting the preferred plan. The planning phase involves elements of policy planning, systems planning, or facility planning. The focus of the effort may be short-range, intermediate, or long-range.

Policies - General or specific directives that are supported by priorities, strategies, programs and other forms of guidance, intended to ensure progress toward meeting goals and objectives.

Preliminary Engineering - Preliminary Engineering encompasses all the major design steps associated with the development and comparison of alternate locations, alternate alignments, detailed engineering and environmental studies, ongoing public and agency interaction, project review, and final selection of a project alternative. Preliminary Engineering concludes when Design Field View Approval is obtained.

Prequalification - The system for establishing a qualification rating, determining the maximum amount of contract and one or more of the classified types of work on which a Contractor will be eligible to bid or subcontract, and the maximum amount the Contractor may have under contract and incomplete at any one time.

Prioritization & Programming Phase - The fifth of the seven Phases of the Transportation Program Development and Project Delivery Process is a prelude to the procedures outlined in this handbook. Prioritization & Programming involves the review and evaluation of planning data, together with a consideration of available fiscal resources as related to needs, in order to identify, and schedule transportation improvements which will be carried forward by PennDOT into subsequent phases of Design, Construction and Maintenance.

Programming - A general term to refer to a series of activities carried out by PennDOT, including data assessment, appraisal of identified planning needs, and consideration of available or anticipated fiscal resources to result in the drawing up, scheduling, and planning of a list of identified transportation improvements for a given period of time.

Project Delivery – The process that takes a project concept from the planning and programming stage, though the design process (including environmental, utility, railroad, and right-of-way clearances, as required), to the completion of a constructed project.

Project Manager - Originating Office staff member responsible for supervising the overall process of planning, developing, and implementing one or more phases of a given project.

Project Need Statement - A statement of specific transportation problems and/or deficiencies which have resulted in the search for improvements. Project needs are typically based on technical information and analyses.

Project PATH – A website which was established as a partnership between Preservation Pennsylvania and PennDOT to assist in reaching out to the public to conduct Section 106 consultation. Provide project-specific Section 106 information is provided in a searchable database (http://search.paprojectpath.org/). It also functions to serve as a resource and knowledge center on navigating the Section 106 process. It provides news of PennDOT's preservation activities, a blog, roles and responsibilities, information about the Section 106 process, public involvement, a glossary and instructional videos.

Project Purpose - A broad statement of the overall intended objective to be achieved by a proposed transportation improvement.

Project Sponsor - The agency originating the transportation improvement project. This may be PennDOT, MPOs, RPOs, or other transportation agencies. See also Originating Office.

Project Team - A group of professionals representing specific technical or scientific disciplines who are brought together for a designated period of time to perform detailed analysis of subjects that require various environmental, engineering and project development expertise. For a transportation project, a project team consists of the Originating Office and its consultants, Central Office, FHWA, and cooperating agencies.

PS&E – The plans, specifications, and cost estimate developed for a transportation project that clearly lays out, for construction purposes, the proposed project design conditions and parameters, along with a realistic cost for construction of the project.

Public Involvement - Coordination events and informational materials geared at encouraging the public to participate in the Transportation Program Development and Project Delivery Process. A successful Public Involvement Plan facilitates the exchange of information among project sponsors and outside groups and the general public, and includes meetings, surveys, committees, presentations, etc.

Public Utility Commission - A regulatory agency whose responsibilities include oversight of all public utilities, including the telecommunications industry, in the Commonwealth of Pennsylvania.

Q

Quality - Preparing the design or products to meet criteria and expectations in an efficient, cost-effective manner using state-of-the-art engineering practices and good engineering judgment. Achieving quality is the responsibility of each individual performing the work.

Quality Assurance (QA) - The planned and systematic action performed by a party not involved in QC to provide adequate confidence that delegated approvals will comply with Federal and State requirements. It is the performance of a limited, high-level review of each product to confirm quality, economy, and compliance with laws, regulations, and policies prior to final acceptance by PennDOT or prior to submission to external agencies for approval.

Quality Control (QC) - Processes performed by PennDOT (and/or its consultants and contractors) that ensure delegated approvals comply with Federal and State requirements. QC is the responsibility of the party producing the product or service (which is PennDOT in regard to the FHWA/PennDOT Stewardship and Oversight Agreement). For example, a document (calculations, drawings, reports, etc.) produced by a designer is thoroughly checked by another qualified person to ensure utilization of accepted logics, practices, and correctness of all information (calculations, details, etc.).

Quality Control Plan - A Contractor's or Vendor's prepared plan, submitted to and reviewed by the Engineer, describing the proposed quality control system. This plan contains, as a minimum, an inspection schedule, sample schedule, testing schedule, and required laboratory inspection reports.

Quality Control System - A system of controls, inspection, and tests, fully documented, providing reasonable assurance that all materials, products, and completed construction submitted for acceptance, conform to specifications.

R

Railroad Certificate –The certification that all Railroad arrangements/coordination have been made for a project in accordance with 23 CFR 635.309(b).

Real Property – The interests, benefits, and rights inherent in the ownership of the physical real estate. It is the bundle of rights with which the ownership of real estate is endowed.

Reimbursement Agreement(s) – An agreement between PennDOT and a Local Project Sponsor that documents the conditions for payment of work completed on a project. All Local Projects will have a ***Project Reimbursement Agreement*** that establishes payment conditions for preliminary engineering, final design, and construction of a Local Project. Some Local Projects may also have a ***Utility Reimbursement Agreement*** or a ***Railroad Reimbursement Agreement***.

The ***Utility Reimbursement Agreement*** must define the scope of work, financial obligations of both parties and incorporate by reference the utilities plan and estimate, applicable Federal and State regulations, and when applicable, provide for the utility's retention of any existing private right-of-way to be jointly used by the parties, and reference applicable Federal and State regulations.

For Railroads, PennDOT utilizes two basic types of ***Railroad Reimbursement Agreements***:
1. PUC Order / Secretarial Letter stamped as a Project Agreement
2. State-Railroad Agreements (Pre-Approved Agreements)

Responsible Charge – The issue of "responsible charge" on Federal-aid projects is addressed in FHWA's August 4, 2011 Memorandum. The sponsoring agency is to provide a full-time employee of the agency to be in "responsible charge" of the project (see "Supervising Agency," 23 CFR 635.105). For locally administered projects, regulations require that the person in "responsible charge" be a full time employee of the Local Sponsor, but does not need to be an engineer.

Right-of-Way - Land, property, or interest therein acquired for and devoted to transportation purposes, including construction, maintenance, operations, and protection of a facility.

Roadway Construction Standards - Department Publication 72M, containing PennDOT's design standard drawings for roadway construction.

Rural Planning Organization (RPO) - Seven multi-county, non-profit agencies in rural areas created by counties to support regional planning and economic development initiatives. RPOs represent 37 of the Commonwealth's 67 counties for transportation planning.

S

Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) - Signed in 2005, SAFETEA-LU addressed the many challenges that faced the national transportation system – challenges such as improving safety, reducing traffic congestion, improving efficiency in freight movement, increasing intermodal connectivity, and protecting the environment – as well as having laid the groundwork for addressing future challenges. SAFETEA-LU promoted more efficient and effective Federal surface transportation programs by focusing on transportation issues of national significance, while giving State and local transportation decision makers more flexibility for solving transportation problems in their communities. SAFETEA-LU superseded the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) and the Transportation Equity Act for the 21st Century (TEA-21).

Scope of Work - A detailed, written listing of tasks prepared in advance of engineering and environmental work to explicitly define the contents of studies. A Scope of Work is typically provided to prospective consultant firms prior to the initiation of studies to aid them in preparing estimates of working hours, schedules, and costs required to prepare, complete, and deliver all portions of the work described.

Scoping - As defined by the Council on Environmental Quality (CEQ) Regulations, the process for determining the scope of issues to be addressed and for identifying the significant issues related to a proposed action.

Scoping Form - A prepared Department document with blanks for the insertion of details or information to define all essential items associated with the evaluation, study, and assessment of a project. The scoping form is used to record initial project data and to make preliminary judgments regarding impact subject areas, assessments of significance, proposed analysis, coordination, and documentation required.

Section 106 of the National Historic Preservation Act (NHPA) of 1996 – requires Federal agencies to take into account the effects of their undertakings on historic properties, and afford the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment.

Section 106 (Consulting Party) – Under section 106 of the National Historic Preservation Act, consultation means ***"the process of seeking, discussing, and considering the views of others, and, where feasible, seeking agreement with them on how historic properties should be identified, considered, and managed."***
Consultation is built upon the exchange of ideas, not simply providing information. Consulting parties include: the State Historic Preservation Officer (Pennsylvania Historical and Museum Commission), Federally-recognized Indian Tribes, local governments, as well as other individuals and organizations with a demonstrated interest in the project. Interest is demonstrated by the nature of a legal or economic relation to the project or affected properties, or concern with the project's effects on historic properties. A landowner and a local preservation group are examples of an individual and organization with a demonstrated interest.

Section 4(f) Determination - Administrative action by which FHWA confirms that, on the basis of extensive studies and alternative analysis, there are no "prudent and feasible" alternatives to the taking of land from resources protected under Section 4(f) of the U.S. Department of Transportation Act, as amended (49 USC 303). These resources include: parks or recreation areas that are publicly owned or open to the public, wildlife or waterfowl refuges, or any significant historic sites.

Section 6(f) - A provision in the Federal Land and Water Conservation Fund Act that protects properties developed or enhanced using federal funding supplied to states or municipalities under the act. Proposed transportation projects which involve a taking of such lands require a study and an analysis of alternatives to serve as the basis for a Section 6(f) finding by the U.S. Department of the Interior. Specific state legislation for any proposed land transfer is also required in order to implement a Section 6(f) action.

Special Provisions - Provisions, requirements, or directions applying to the project, as set forth in the proposal, and that are not contained in Publication 408, *Highway Specifications*, or its supplements.

Specifications - The compilation of technical provisions and requirements for the performance of prescribed work. PennDOT's standard specifications are contained in Publication 408, *Highway Specifications*.

Staged Construction - The phasing of a construction project so that only portions of the ultimate facility are built initially, which involves such practices as building two lanes of highway on four lane right-of-way, grading but not paving areas, constructing only portions of interchanges, or deferring permanent signing and lighting. The objective of stage construction is to maximize total benefits to the public from highway expenditures in a region or in the state.

Stakeholder – Person or group affected by a transportation plan, program or project. Person or group believing they are affected by a transportation plan, program or project. Residents of affected geographical areas.

Standard Drawings - Approved drawings, showing standard details, produced to be used repeatedly on projects.

State Bridge funding – Act 235 of 1982, which established the "Bridge Bill" and authorized state funding for state and local bridges. In addition, in 1991, the state legislature approved Act 26, which provided a dedicated state funding source for eligible county-owned bridges.

State Transportation Commission (STC) - Established by state law and consists of fifteen members: the Secretary of Transportation (chairman), the chairman and minority chairman of both the Senate Transportation Committee and the House Transportation Committee; and ten public members appointed by the Governor. The responsibility of the STC is to address transportation program priorities, evaluate and determine the condition and performance of the Commonwealth's Transportation System and to set policy direction regarding transportation.

State Transportation Improvement Program (STIP) - A prioritized, intermodal listing of highway, bridge, and public transit projects that will be implemented in Pennsylvania over four years. The STIP will be consistent with both the statewide Policy Plan and the MPO Long Range Plans and Transportation Improvement Programs (TIPs) and with the Twelve Year Transportation Program.

Strategic Highway Safety Plan (SHSP) – A statewide-coordinated safety plan that provides a comprehensive framework for reducing highway fatalities and serious injuries on all public roads. The SHSP strategically establishes statewide goals, objectives, and key emphasis areas developed in consultation with Federal, State, local, and private sector safety stakeholders.

Study Area - The geographic area within which pertinent project matters are contained. Originally defined at the outset of engineering and environmental evaluations, although it may be revised during development of the studies and the EIS.

Supplement - A contractual term to describe a new or changed assignment or a specific work task given by PennDOT to a consultant firm or to a contractor that is already under contract agreement to perform work for PennDOT. A supplement may be needed to perform studies, surveys, services, field work, and construction activities.

Surface Transportation Program – Provides flexible funding that may be used by States and localities for projects to preserve and improve the conditions and performance on any Federal-aid highway, bridge and tunnel

projects on any public road, pedestrian and bicycle infrastructure, and transit capital projects, including intercity bus terminals.

T

Transportation Alternatives Program (TAP) – Authorized under Section 1122 of MAP-21 (23 U.S.C. 213(b), 101(a)(29)), TAP provides funding for programs and projects defined as transportation alternatives, including on- and off-road pedestrian and bicycle facilities, infrastructure projects for improving non-driver access to public transportation and enhanced mobility, community improvement activities, and environmental mitigation; recreational trail program projects; safe routes to school projects; and projects for the planning, design or construction of boulevards and other roadways largely in the right-of-way of former Interstate System routes or other divided highways.

Technical Proposal - A document submitted to PennDOT to describe the means by which a consultant firm proposes to carry out a specific work assignment. Tasks, workload, schedules, and documents to be produced are typically included therein.

Threatened & Endangered Species – The term "threatened species" means any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range, as defined in the Endangered Species Act. "Endangered Species" is the classification provided to an animal or plant in danger of extinction within the foreseeable future throughout all or a significant portion of its range.

Toll Credit – States may apply toll revenue used for capital expenditures to build or improve public highway facilities AS A CREDIT toward the non-Federal matching share of certain transportation projects.

Transportation Equity Act for the 21st Century (TEA-21) - Signed in 1998, this Federal legislation authorized highway, highway safety, transit and other surface transportation programs for six years. TEA-21 continued and enhanced initiatives established by the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), and assured an annual level of Federal funding keyed to revenue deposited into the Highway Trust Fund.

Transportation Improvement Program (TIP) - A long-range transportation plan established by the MPO or RPO which consists of a prioritized list of projects or project segments to be carried out within the next four years after adoption of the TIP. The TIP is updated every two years.

Transportation Program Development and Project Delivery Process - PennDOT procedures for advancing a transportation improvement project from concept to routine maintenance which are divided into seven phases. The philosophy behind the process emphasizes the integration of engineering and environmental studies, and continuous coordination among Department offices, state and federal resource agencies, and the public. The ultimate goal is to select, design and construct the most reasonable, practical, cost-effective, technically sound, and environmentally sensitive transportation improvement option.

Twelve-Year Program - The official prioritized listing, as adopted by PennDOT and the State Transportation Commission, of those transportation improvements identified for development and implementation in Pennsylvania during the upcoming 12 years. The plan, together with any additions or changes, is subject to review and re-adoption every two years.

Type, Size & Location (TS&L) – Documentation of the structure type, structure dimensions (size), and structure location for proposed highway bridge and other (such as large signs) structures.

U

United States Code (U.S.C.) – a compilation and codification of the general and permanent federal laws of the United States. It contains 51 titles (along with a further 4 proposed titles). The main edition is published every six years by the Office of the Law Revision Counsel of the House of Representatives, and cumulative

supplements are published annually. The current edition of the code was published in 2006, and according to the US Government Printing Office, is over 200,000 pages long.

Utility - A private, public, municipal or cooperative owned line, facility or system for producing, transmitting, or distributing communication, cable television, fiber optic, electric, gas, oil, crude products, water, steam, sanitary waste, and other similar commodities, which directly or indirectly serve the public. The term "utility" shall also mean the utility owner inclusive of any wholly owned or controlled subsidiary.

Utility Clearance – The arrangements made by the utilities to accommodate the highway construction project. Utility Clearance does not indicate that the utility facilities are actually removed from the area but that facilities have been either adjusted to accommodate construction or that arrangements have been made to coordinate the relocation work with the highway contractors operations.

V

W

Written Authorization Letter – A letter from the Local Project Sponsor to the each utility involved on a local project to perform utility relocation engineering and estimate preparation. Normally this occurs very early in the final design phase. See Appendix X, Sample Coordination Letters, UT# 2 & 2A.

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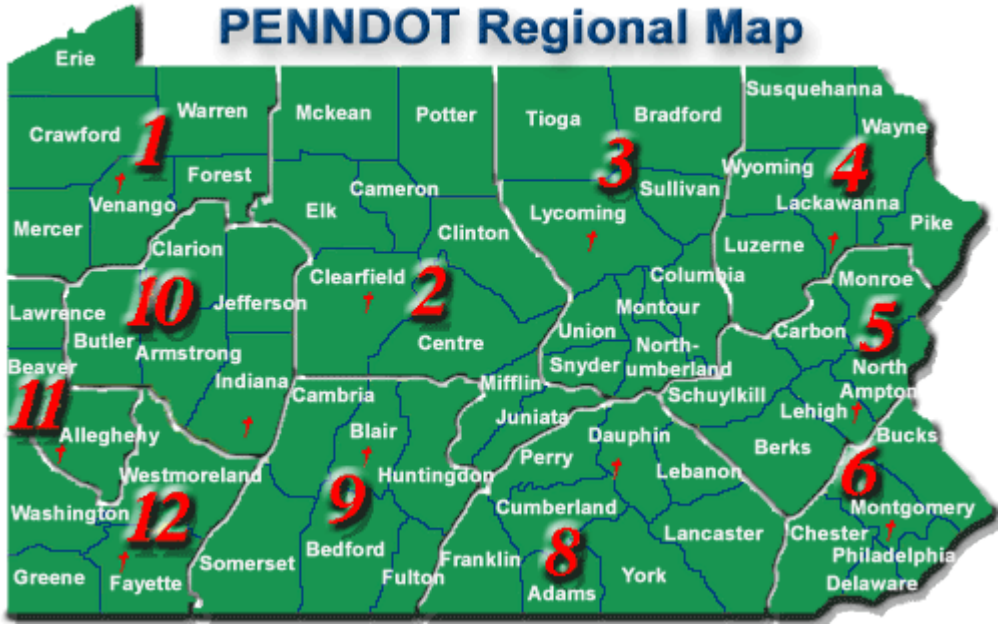
APPENDIX C
ENGINEERING DISTRICT ADDRESSES AND PHONE NUMBERS



ENGINEERING DISTRICT ADDRESSES AND PHONE NUMBERS

District 1-0
255 Elm Street
P.O. Box 398
Oil City, PA 16301
Tel. (814) 678-7085

District 2-0
1924 Daisy Street Ext.
P.O. Box 342
Clearfield, PA 16830
Tel. (814) 765-0400

District 3-0
715 Jordan Ave.
P.O. Box 218
Montoursville, PA 17754-0218
Tel. (570) 368-8686

District 4-0
55 Keystone Industrial Park
Dunmore, PA 18512
Tel. (570) 963-4061

District 5-0
1002 Hamilton St.
Allentown, PA 18101
Tel. (610) 871-4100

District 6-0
7000 Geerdes Blvd.
King of Prussia, PA 19406-1525
Tel. (610) 205-6700

District 8-0
2140 Herr Street
Harrisburg, PA 17103-1699
Tel. (717) 787-6653

District 9-0
1620 North Juniata Street
Hollidaysburg, PA 16648
Tel. (814) 696-7250

District 10-0
2550 Oakland Ave.
P.O. Box 429
Indiana, PA 15701-0429
Tel. (724) 357-2800

District 11-0
45 Thoms Run Road
Bridgeville, PA 15017
Tel. (412) 429-5000

District 12-0
825 North Gallatin Ave.
Uniontown, PA 15401-2105
Tel. (724) 439-7315

Local Project Delivery Group
Highway Design & Tech. Section
Bureau of Project Delivery
400 North Street
Harrisburg, PA 17120
Tel. (717) 787-3732

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APPENDIX D
DISTRICT FORM LETTERS FOR LOCAL BRIDGE PROJECTS

FORM LETTER – NOTICE TO PROCEED FOR FEDERAL AID PROJECT

ADDRESS
_____, Pennsylvania XXXXX

Notice to Proceed – *Federal-Aid*
Local Bridge Bill Program
_____ County

To:

Ladies and Gentlemen:

The Pennsylvania Department of Transportation District XX-0 has authorized the issuance of the Notice to Proceed for Preliminary Engineering under the Reimbursement Agreement No. XXXXX for the XXXXXX project.

The effective date of the Notice to Proceed for Preliminary Engineering is XXX. A copy of this notice will be sent to all parties. A copy of the fully executed Federal-Aid Reimbursement Agreement between XXXXXXXXXX and XXXXXX is enclosed for your files.

Please note that the Commonwealth cannot reimburse XXXXX for the federal share of any expenses that are incurred prior to obtaining Federal authorization for each subsequent phase of the project. Therefore, you are requested not to perform any federally reimbursable activities until you have received the executed agreement and notification of Federal authorization from the District.

Sincerely,
_____, P.E.
District Executive
Engineering District XX-0

cc: _____ , District Executive
_____ , ADE-Design
_____ , District Municipal Services Supervisor
_____ , District Consultant Liaison Engineer
_____ , Community Relations Coordinator
_____, County Planning Commission

FORM LETTER – INFORMING THE LOCAL PROJECT SPONSOR THAT THEY MAY PROCEED WITH DESIGN ACTIVITIES FOR THEIR PROJECT

ADDRESS
_____, Pennsylvania XXXXX

Successful Programming
Local Bridge Program
_____County

Ladies and Gentlemen:

The purpose of this letter is to notify you, the Local Project Sponsor that the Local Project identified in this letter has been successfully programmed and is now approved for design.

The demand for local bridge bill funds is tremendous, and the need far exceeds available funding. For this reason, the Department must manage this program in the most cost effective manner possible. Therefore, the Department will monitor each project that is approved for design. If no progress is made within a reasonable time frame, those projects may be deferred from the first four-year period of the approved 12-Year Program to make room for other projects that can move forward.

In addition, after receiving this notification of your successfully programmed Local Project, should you decide not to proceed with this project, please provide a letter to the Department authorizing the termination/deferral of this project. This letter should be provided to the Department within three weeks from the date on this letter.

Subject Project:
Owner:
MPMS No., Name:
Location:
Scope of Work:

Approved Funding:
Engineering (PE/ FD):
Right-of-Way:
Construction:
Funding Split: ____ % Federal, ____ %, State, ____ % Local

The Local Project Sponsor will be required to follow the Department's Publication 93 guidelines for selecting a consulting firm to perform the design of the project. Before any design can begin, the consultant selection process must be completed, an Environmental and Engineering (E&E) scoping field view must be conducted and the necessary Project Reimbursement and Engineering Agreements must be prepared and executed. You should contact the Department's Project Manager, _____, to arrange for the E&E scoping field view and to prepare the necessary agreements.

We look forward to working with you on this project. Should you have any questions concerning your identified project, please contact the Department's Project Manager at XXX-XXX-XXXX.

Sincerely,

_____, P.E.
District Executive
Engineering District XX-0

cc: _____ , District Executive
_____ , ADE-Design
_____ , District Municipal Services Supervisor
_____ , District Project Manager
_____, County Planning Commission

FORM LETTER – INFORMING THE LOCAL PROJECT SPONSOR THAT UNLESS PENNDOT SEES PROGRESS WITH THEIR PROJECT, IT MAY BE DEFERRED/TERMINATED

ADDRESS
_____, Pennsylvania XXXXX

Local Bridge Bill Program
_____County
Lack of Progress

To:

Ladies and Gentlemen:

On _____, the Department sent a letter to your office notifying you that the subject Local Bridge Bill Project was approved for the design phase. At that time, we also explained the high demand for Bridge Bill Funding and why it is important to utilize those available funds in a timely manner.

As of this date, the Department is unaware of any positive progress in initiating the design process for the bridge project identified in this letter. This lack of progress defeats the Department's efforts to fully utilize all available bridge bill funds programmed for each fiscal year. An updated status report would be helpful and permit the Department to evaluate your project's progress.

If, for some reason, you are unable to advance this project, please provide a letter to the Department permitting its deferral from the first four years of the current 12-Year Program in order that bridge bill funds may be used on another worthy project.

If you are unable to advance the project and provide a status report, the Department will continue to monitor your project. If another two-month time period passes without progress, the Department will work with the County Planning Commission in obtaining local support for the termination/deferral of this project.

Success can be obtained by all if we work together in a cooperative manner. The Department will work directly with the Local Project Sponsor to ensure every technical issue is resolved in a timely manner.

Subject Project: _____
Owner: _____
MPMS No., Name: _____
Location: _____
Scope of Work: _____

Please accept this notification in a positive manner. The Department does not wish to place any hardship on any Local Project Sponsor, but we are obliged to fulfill our responsibility to the citizens of our Commonwealth by using bridge bill dollars as effectively as possible. Should you have any questions concerning your identified project, please contact our Planning and Programming Engineer at XXX-XXX-XXXX.

Sincerely,

_____, P.E.
District Executive
Engineering District XX-0

cc: _____ , District Executive
_____ , ADE-Design
_____ , District Municipal Services Supervisor
_____ , District Project Manager
_____, County Planning Commission

FORM LETTER – INFORMING THE LOCAL PROJECT SPONSOR THAT PENNDOT WILL DEFER AND/OR TERMINATE THEIR PROJECT

ADDRESS
_____, Pennsylvania XXXXX

Termination/Deferral Notice
Local Bridge Bill Program
_____ County

To:

Ladies and Gentlemen:

This is the third contact received by you from the Department concerning advancing the design phase for the subject bridge project. On _____ the Department notified your office that design was approved. On _____a second letter citing lack of progress was provided.

The Department has continued to monitor this specific project. Over the past few months, little or no progress has occurred. For this reason, we have contacted the County Planning Commission and requested their written support for the termination/deferral of this project. Please know, the Department will make every effort to keep the bridge funds programmed within the county.

In the future, should your municipality desire to reprogram this project, please contact the County Planning Commission and solicit their support when establishing countywide priorities.

Subject Project:
Owner: _____
MPMS No., Name: _____
Location: _____
Scope of Work: _____

The decision to terminate/defer your Local Bridge Bill Project was done in order to permit the best utilization of available local bridge bill funds. The Department will support your future efforts toward reprogramming this project, if desired. Should you have any questions concerning this issue, please contact our Planning and Programming Engineer, at XXX-XXX-XXXX.

Sincerely,
_____, P.E.
District Executive
Engineering District XX-0

cc: _____ , District Executive
_____ , ADE-Design
_____ , District Municipal Services Supervisor
_____ , District Project Manager
_____, County Planning Commission

APPENDIX E
DONATION/CREDIT VALUATION FORM

Project Name:
SR or other route designation:
County:
District:

Type of donation:
- ❑ Funds
- ❑ Right-Of-Way
- ❑ Materials
- ❑ Services

Contribution by:
- ❑ Private
- ❑ Local government
- ❑ State

Cost estimate:
Actual Cost: (pro-rata share) =

Right-Of-Way – describe:

Materials - describe materials provided, condition of materials and value of materials based on cost data from similar projects or based on retail prices from suppliers

Services – describe scope of services provided, classification of employees, wage rates. Overhead etc.

Funds – describe:

Eligibility date for donated services (should be the notice to proceed date if services are by consultant)_____ D-4232 effective date_____

Submitted by:
(District) _____date_____

Reviewed by:
(Central Office) _____date_____

Approved by:
(FHWA) _____date_____

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APPENDIX F
FEDERAL-AID GUIDANCE
NON-FEDERAL MATCHING REQUIREMENTS

Note: This is a Federal Highway Administration document and some of the information presented does not apply in Pennsylvania.

U.S. Department of Transportation
Federal Highway Administration

Office of the Chief Financial Officer

Federal-Aid Guidance
Non-Federal Matching Requirements

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BACKGROUND AND PURPOSE OF GUIDANCE

Guidance on matching requirements for Federal Highway Administration (FHWA) funded grants and subgrants has been issued by several offices of the FHWA. To provide more comprehensive guidance that reflects current statutory and regulatory requirements set forth in 23 United States Code (U.S.C.), Highways, other highway program legislation, and implementing regulations, this memorandum establishes uniform Federal-aid policy guidance for matching Federal-aid highway program (FAHP) projects.

It should be noted that agencies other than State Departments of Transportation (State DOTs) can be direct grant recipients of FHWA funds, including other State agencies, local governments, Indian Tribal Governments, universities, and nonprofit organizations. These agencies may also receive subgrants of FHWA funds from a direct grantee (e.g., metropolitan planning funds passed-through a State DOT to a metropolitan planning organization).

The criteria for matching Federal-aid funds are generally specified in 23 U.S.C. 120. Matching provisions may also be set forth in specific program legislation, such as for Transportation Enhancement projects [see 23 U.S.C. 133(e)(5)(C)] or Recreational Trails projects [23 U.S.C. 206(f)], and in chapter 5 of title 23 for research activities; or in program legislation not incorporated into title 23. Additional guidance on application of cost sharing requirements is also set forth in government-wide grant regulations.[1]

This memorandum incorporates guidance issued by other FHWA offices. Where there is a conflict in guidance, the information contained in this memorandum is considered final, and references to non-Federal matching requirements contained in any independent program office guidance will be amended, as necessary.

TERMINOLOGY

The definitions in 23 U.S.C., 31 U.S.C., 23 CFR, 49 CFR, 2 CFR, etc., apply unless stated otherwise.

Cost Sharing or matching – means *the value of third party in-kind contributions and the portion of the costs of a federally assisted project or program not borne by the Federal government [49 CFR 18.3]* provided during the grant period.

Donations – "Donations" and "contributions" are considered synonymous, and represent eligible project costs provided by a third party to a grantee or subgrantee for satisfying the non-Federal share requirements of a Federal-aid project. For purposes of this guidance document, the term "donations" is used.

[1] 49 CFR Part 18, Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments and 49 CFR Part 19, Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Non-Profit Organizations. See 49 CFR 18.24 and 19.23, respectively.

Grantee or Recipient – means the *government* (agency) *to which a grant is awarded and which is accountable for the use of the funds provided. The grantee is the entire legal entity even if only a particular component of the entity is designated in the grant award document. [49 CFR 18.3]* 49 CFR 19.2 refers to the term "recipient" for Institutions of Higher Education, Hospitals, and Other Non-Profit organizations for Federal awards. In most instances, the State DOT is the grantee of Federal-aid funds in each State.

Grant Period – when a specified period of time for performance is incorporated into a grant or award as authorized, costs incurred outside of the beginning or ending dates of the grant period are ineligible [23 CFR 1.9(a) and unallowable [2 CFR and 49 CFR 18.23].

Project Cost – All allowable costs, as set forth in the applicable Federal cost principles [see 49 CFR 18.22(b) or 19.27 and 2 CFR 220, 225, and 230, and 48 CFR 31], incurred by a grantee/recipient and the value of the contributions made by third parties in accomplishing the objectives of the award during the project period.

Soft Match – A term often associated specifically with Toll Credits [23 U.S.C. 120(j)] and the Program for Bridges Not on Federal-Aid Highways [23 U.S.C. 144(m)]. Note: no project costs are incorporated into the project as part of the non-Federal share. Rather, use of these credits meets the matching requirements required under law, but effectively increases the Federal cash outlay up to 100% of project costs.

Third party – A third party is an entity (other than a grantee/recipient, subgrantee/subrecipient, or Federal agency) that is not party to a Federal-aid project agreement, but who may have an interest in the project. As a grantee, a State cannot be considered a third party.

STATUTORY AND REGULATORY BASES FOR TREATMENT OF NON-FEDERAL SOURCE OF PROJECT FUNDS

In accordance with 23 U.S.C. 106(a) and (b), a project agreement formalizing the conditions of project approval must be executed for projects where Federal funds are anticipated [see procedures relating to advance construction, 23 CFR 630 Subpart G] or will be used to reimburse the Federal share of costs incurred and the conditions or terms of the agreement are formalized. The Federal share and basis for matching requirements for the FAHP are provided in 23 U.S.C. 120, or other enacted legislation as noted above.

When the State DOT or other grantee enters into a Federal-aid project agreement [23 CFR 630.108], as a recipient of FHWA funds, it agrees to properly account for all project costs in compliance with Federal-aid eligibility requirements [23 CFR 630.112]. Included in these requirements are the matching requirements in the grant administration regulations [49 CFR Part 18.24 or Part 19.23] and in the Federal cost principles [2 CFR Part 220 for Educational Institutions, Part 225 for State, Local, and Indian Tribal Governments, and Part 230 for Non-Profit Organizations and 48 CFR Part 31 for For-Profit Organizations].

Any use of special statutory or regulatory provisions to satisfy all or part of the non-Federal share of project costs must be noted on the Federal-aid project agreement: "*The project agreement should also document, by comment, instances where: (1) The State is applying amounts of credits from special accounts (such as the 23 U.S.C. 120(j) toll credits, 23 U.S.C. 144(m) Program for Bridges Not on Federal-Aid Highways, and 23 U.S.C. 323 land value credits) to cover all or a portion of the normal percent non-Federal share of the project* (normally borne by the State or other eligible recipient)*; (2) The project involves other arrangements affecting Federal funding or non-Federal matching provisions, including tapered match, donations, or use of other Federal agency funds* (as specifically authorized in statute to bear the non-Federal matching share), *if known at the time the project agreement is executed.*" [23 CFR 630.108(c)(1) and(2)].

Changes in statutes affecting matching requirements on Federal-aid projects have occurred under the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991, the National Highway System Designation Act (NHS) of 1995, Transportation Equity Act for the 21st Century (TEA-21) of 1998, and the Safe, Accountable, Flexible, Efficient Transportation Equity Act: Legacy for Users (SAFETEA-LU). While these statutory changes have not yet been reflected in the DOT grant requirements, they are discussed further in this guidance document in "Exceptions to General Matching Provisions".

MATCHING RULES AND REQUIREMENTS: NON-FEDERAL SHARE OF PROJECT FUNDING

General Requirement for Non-Federal Share

State funds, as well as donations of cash from non-Federal third parties, may be used to satisfy the non-Federal match requirements for a project under the FAHP. Provision for proper recognition of and accounting treatment for all costs used to satisfy the non-Federal share shall be set forth within the agreement. In-kind donations may be incorporated into a Federal-aid project through amendment, but retroactive approval of costs incurred prior to authorization is prohibited consistent with 23 CFR 630.106(b).

Total contributions of cash from all non-Federal sources plus the Federal funds may not exceed the total cost of the project [23 CFR 630.106(h)(2)]. Just as with non-cash donations, each dollar of excess cash donations shall reduce a like amount of Federal share. This rule is consistent with statute, which provides for increased non-Federal share of project cost: "*Notwithstanding any other provision of this title and subject to such criteria as the Secretary may establish, a State may contribute an amount in excess of the non-Federal share of a project under this title so as to decrease the Federal share payable on such project*" [23 U.S.C. 120(i)].

Third Party Donations

Section 1902 of SAFETEA-LU amended 23 U.S.C. 323(c) to recognize in-kind donations of services by a local government, when acting as a third party, to satisfy Federal-aid

matching requirements. As a grantee of Federal-aid, a State DOT cannot be considered a "third party" to the Federal-aid project agreement, and as such, cannot donate services to a project, (however, the costs associated with the services provided and borne by the State are allowable costs provided they are incurred consistent with 2 CFR 225 – see next section: "Costs Incurred and Use of Tapered match Provisions"). With exceptions for certain programs, as noted in this guidance, the donation of services, materials, equipment, and funds from an eligible third party, including local governments, may be credited as a project cost, in a uniform manner consistent with the matching requirements of 49 CFR Part 18.24(a)(2) or 49 CFR 19.23, depending on the entity receiving Federal funds. However, just as with the Federal share of project costs, such donations must be eligible and necessary for the implementation of the project [23 CFR 630.112] and must meet the cost allowability requirements of the Federal cost principles applicable to the entity receiving the donation or undertaking the project. There are exceptions to the grant period requirement for certain real property donations (see references noted below), as well as for certain types of donations to Recreational Trails Program (RTP) projects, discussed later in this guidance.

The Federal share of the project may not exceed limits established by statute and the project agreement or amendment to the agreement. For most types of donations, amounts in excess of the non-Federal share requirement may be used to reduce the Federal share of the project cost. One notable exception to the general treatment of donations pertains to real property. Per 23 U.S.C. 323(b)(4), the total credit for such donations cannot exceed the State's pro-rata share under the project agreement to which it is applied, and as such, any excess fair market value fair market value (FMV) over the amount needed to satisfy the non-Federal share requirement may not be applied against the Federal share of project costs. [See 23 CFR 710.505 and 710.507, as well as *www.fhwa.dot.gov/tea21/qanda/1301_qa.htm*].

The grantee or subgrantee must assure that the cost of donations received by a third party is adequately documented for verification, treated consistently, and that adequate accounting controls exist and are in effect to meet Federal grant administration and financial management requirements. The valuation of donations of real property, services, materials, equipment, and use of facilities must be established at fair market value (FMV), as determined by the applicable Federal grant administration regulations [49 CFR 18 or 19] and Federal cost principles. FMV is established at the earlier of the time the donation becomes effective or at the time title to the property vests in the State (reference also 23 CFR 710.203, 710.505, and 710.507). The costs or value of third party donations counting towards satisfying the non-Federal match requirement must be verifiable from the records of the grantee or subgrantee [reference 49 CFR 18.24 and 2 CFR 225]. The grantee retains responsibility for the proper oversight of services donated by third parties and/or performed by its subgrantees [reference 23 U.S.C. 106(g)(4) and 49 CFR 18.37 and 18.40, and 49 CFR 19.51].

Costs Incurred and Use of Tapered match Provisions

As noted in 49 CFR 18.24(a)(1), grantees and subgrantees, including States and local agencies, have the option to treat eligible costs they incur on a project as either project costs subject to reimbursement, or apply them to the non-Federal match requirement. Where such use would result in progress billings outside the typical 80/20 Federal/State match ratio, FHWA approval under the tapered match provisions will be necessary, as discussed in more detail below.

Section 1302 of TEA-21 amended 23 U.S.C. 121, by removing the longstanding requirement for a payment-by-payment match of Federal funds on individual projects. In certain circumstances on individual projects, grantees and subgrantees may seek FHWA approval to exercise the tapered match provisions. Under this approach, the non-Federal matching ratio is imposed on the project, rather than individual progress payments associated with the project. Thus, Federal reimbursement of project expenditures can range from zero to one hundred percent in the early phases of a project, provided that by the time the project is complete, the overall Federal contribution does not exceed the statutory Federal-aid limit for the project in question.

As stated in the tapered match guidance document: The FHWA Division Administrator may approve a tapered match on any project authorized under the provisions of title 23 (except advance construction, STP program approval, and bond projects authorized under section 122) when the approval would result in one or more of the following:

- The use of tapered match, when compared to the use of traditional match procedures, would result in an earlier project completion.
- The project costs would be reduced by using a tapered match
- Tapered match would provide for additional non-Federal funds to be leveraged for the project.

For purposes of application of costs incurred to the non-Federal share requirement of the project, a fourth condition is added:

- When costs for services are donated by a local public agency acting as a third party, incurred by a local public agency acting as a subgrantee, or in limited circumstances, a State agency acting as a grantee. Advance construction procedures (23 U.S.C. 115) may be used in conjunction with this fourth tapered match condition only. Authorization for this option may be granted by the FHWA Division Administrator, case-by-case, dependent upon assurance of the existence and effectiveness of necessary procedures and related internal controls.

More information about tapered match may be found at the following web site: (www.fhwa.dot.gov/innovativefinance/tapered.htm).

SPECIAL PROVISIONS

Planning Activities

Requirements for in-kind donations related to the Planning and Research Programs (23 CFR 420) may be applied on either a total planning work program basis or for specific line items or projects. Work performed by a third party must be an eligible transportation planning related activity that benefits the Federal element of the work program, during the grant award period (i.e., planning or research work program period). In-kind contributions must be identified in the original planning work program/scope of work and the grant/subgrant agreement or amendment(s) thereto.

Toll Credits ("Soft Match")

The provision in 23 U.S.C. 120(j) allows a State to use toll revenues that are generated and used by public, quasi-public, and private agencies to build, improve, or maintain highways, bridges, or tunnels that serve the public purpose of interstate commerce, as a credit toward the non-Federal share for any funds made available to carry out projects under title 23 (other than the Emergency Relief program and the Appalachian Development Highway System Programs) or chapter 53 of title 49, U.S.C. Program office guidance is found at www.fhwa.dot.gov/specialfunding/020807.cfm.

Program for Bridges not on Federal-aid Highways ("Soft Match")

Section 144(m) of title 23, U.S.C. allows any amount in excess of 20 percent of the cost expended from State and local sources for any project not on a Federal-aid highway for the replacement or rehabilitation of a bridge which is wholly funded from State and local sources to be credited to the non-Federal share of the cost of the projects eligible for Federal funds under 23 U.S.C. 144. Program office guidance is found at http://www.fhwa.dot.gov/legsregs/directives/fapg/0650dsup.htm.

EXCEPTIONS TO GENERAL MATCHING PROVISIONS

Transportation Enhancement (TE) Projects: 23 U.S.C. 133(e)(5)(C) allows funds from any other Federal agency (except U.S. DOT funds) and the value of other contributions (as determined by the Secretary of Transportation) to be credited toward the non-Federal share of the costs of a project to carry out a transportation enhancement activity funded from the ten percent set-aside of Surface Transportation Program funds under 23 U.S.C. 133(d)(2). The non-Federal share for such a project may be calculated on a project, multiple-project, or program basis; and the Federal share of the cost of an individual project may be up to 100 percent. However, the non-Federal share of the total cost of all transportation enhancement activities in a State for a fiscal year must not be less than the non-Federal share authorized for the State under 23 U.S.C. 120(b). See the TE guidance at http://www.fhwa.dot.gov/environment/te/1999guidance.htm#summa.

Note: Although §120(k) and §120(l) state "Notwithstanding any other provision of law", §133(e)(5)(C)(ii) states "notwithstanding section 120". Therefore, if a State allows Federal land management agency funds or Federal lands highways program funds to be used toward the match for an individual TE project, the State still must maintain a programmatic Federal share for its statewide TE program under §120(b). Note that §133(e)(5)(C) applies to funds from any Federal agency, and not only from Federal land management agencies.

The donation provisions for TE projects are the same as the provisions for the overall Federal-aid highway program. Program guidance may be found at: www.fhwa.dot.gov/environment/te/1999guidance.htm#donations.

Federal Land Management Agency Funds for Scenic Byways: 23 U.S.C. 162(f) allows a Federal land management agency to use funds authorized for use by the agency as the non-Federal share in the case of any scenic byway project along a public road that provides access to or within Federal or Indian land.

Use of Federal Land Management Agency Funds in General: 23 U.S.C. 120(k) provides that funds appropriated to any Federal land management agency may be used to pay the non-Federal share of the cost of any project the Federal share of which is funded under this title or chapter 53 of title 49.

Use of Federal Lands Highways Program Funds: 23 U.S.C. 120(l) provides that funds authorized to be appropriated to carry out the Federal lands highways program under section 204 may be used to pay the non-Federal share of the cost of any project that is funded under this title or chapter 53 of title 49 and that provides access to or within Federal or Indian lands.

Recreational Trails Program (RTP): 23 U.S.C. 206 (program guidance at www.fhwa.dot.gov/environment/rectrails/news/dec2005/matchingfunds.htm)

(A) Section 206(f)(2) allows a Federal agency that sponsors an RTP project to provide additional Federal funds toward the cost of a project, provided the U.S. DOT share does not exceed the Federal share under 23 U.S.C. 120(b), and provided that the total Federal share from the U.S. DOT and the Federal agency sponsoring the project, together, does not exceed 95 percent. In addition, 23 U.S.C. 206(h)(1)(B), allows any funds or the fair market value of any materials or services provided by a Federal project sponsor to be credited toward the Federal agency's share of the project.

(B) Section 206(f)(3) allows the non-Federal share of the cost of an RTP project to include funds made available by the Federal Government under any Federal program (including other U.S. DOT programs), provided the project also would be eligible under that Federal program.

(C) Section 206(f)(4) allows RTP funds to match other Federal funds (including other U.S. DOT funds) used for eligible RTP projects, provided the project also would be eligible under that Federal program.

(D) Section 206(f)(5) allows a State to adjust the non-Federal share of an individual RTP project in a fiscal year if the Federal share of the cost of all projects carried out by the State under the RTP (excluding projects funded under 23 U.S.C. 206(f)(2) or (3)) using funds apportioned to the State for the fiscal year does not exceed the Federal share as determined in accordance with 23 U.S.C. 120(b).

(E) Section 206(h)(1) allows project planning costs, environmental compliance costs, and the value of new right-of-way incorporated into the project to be credited toward the non-Federal share of the cost of an eligible RTP project, if the costs were incurred less than 18 months prior to project approval. For the RTP, the legislative intent of "project approval" is "prior to FHWA's project approval" and not "prior to NEPA approval". [This is in contrast to the definition in previous TE guidance, as noted above.]

Transportation Infrastructure Finance and Innovation Act (TIFIA) Program: TIFIA may be used as the non-Federal share for Federal funds: *(8) Non-federal share.—The proceeds of a secured loan under this chapter may be used for any non-Federal share of project costs required under this title or chapter 53 of title 49, if the loan is repayable from non-Federal funds.* [23 U.S.C. 603(b)(8)]

Attachment A

EXAMPLES OF PROPER RECOGNITION OF DONATIONS AND COSTS INCURRED AND TREATED AS NON-FEDERAL SHARE

Example 1: Third Party Donations – Less than non-Federal Share Requirement of Project Costs – 80/20 ratio

Actual Cash Outlay for Costs Incurred on Project	$ 1,000,000
Value of Third Party In-kind Donations	+ 100,000
Total Cost of Project	$ 1,100,000
Federal Share ($1,100,000 X 80%)	$ 880,000
Non-Federal Share ($1,100,000 X 20%)	220,000
Non-Federal Share	$ 220,000
Value of Third Party In-kind Donations	- 100,000
Cash Outlay by State for Non-Federal Share	$ 120,000
Example 1	

Example 2: Third Party Donations –Greater than Non-Federal Share Requirement of Project Costs – 80/20 ratio

Actual Cash Outlay for Costs Incurred on Project	$ 1,000,000
Value of Third Party In-kind Donations	+ 500,000
Total Cost of Project	$ 1,500,000
Federal Share ($1,500,000 X 80%)	$ 1,200,000
Non-Federal Share ($1,500,000 X 20%)	300,000
Non-Federal Share	$ 300,000
Value of Third Party In-kind Donations	- 500,000
Cash Outlay by State for non-Federal Share	- 0
Cash Outlay by Grantee or Subgrantee	$ 0
Total Cost of Project	$ 1,500,000
Less non-Federal Share	- 300,000
Less Excess In-kind Donations	- 200,000
Federal Share of Project Cost	$ 1,000,000
Example 2	

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Example 3: Third Party Donations of Cash – Greater than the Non-Federal Share Requirement – 80/20 ratio

Actual Cash Outlay for Costs Incurred on Project	$ 5,000,000
Third Party Donation of Cash	1,250,000
Federal Share of Project Costs ($5,000,000 X 80%)	$ 4,000,000
Non-Federal Share ($5,000,000 X 20%)	1,000,000
Non-Federal Share	$ 1,000,000
Third Party Donations of Cash	- 1,250,000
Cash Outlay by State for non-Federal Share	$ 0
Total Cost of Project	$ 5,000,000
Less non-Federal Share	- 1,000,000
Less Excess Third Party Donations of Cash	- 250,000
Federal Share of Project Cost	$ 3,750,000
Example 3	

Example 4: Costs of Services Incurred by a Local Public Agency as Subgrantee – 80/20 ratio – Includes Costs Incurred Prior to Date of Project Authorization

Actual Cash Outlay for Costs Incurred – Construction Contract Amount	$ 5,000,000
Design Service performed by Local Public Agency as Subgrantee prior to date of Project Authorization – Non-Participating	500,000
Total Project Costs	$ 5,500,000
Total Eligible Project Costs ($5,500,000 – 500,000 NP Amount)	$ 5,000,000
Federal Share of Eligible Project Costs ($5,000,000 X 80%)	$ 4,000,000
Non-Federal Share ($5,000,000 X 20%)	+1,000,000
Cash Outlay by Local Public Agency	$ 1,000,000
Federal Share of Project Cost	$ 4,000,000
Example 4	

Example 5: Costs of Services Incurred by a Local Public Agency as Subgrantee – Less than Non-Federal Share Requirement – 80/20 ratio

Actual Cash Outlay for Costs Incurred – Construction Contract Amount	$ 5,000,000
Design Service performed by Local Public Agency as Subgrantee – Tapered match Agreement approved by FHWA Division Office – Project Authorized in Advance of Costs being Incurred	500,000
Total Eligible Project Costs	$ 5,500,000
Federal Share of Project Costs ($5,500,000 X 80%)	$ 4,400,000
Non-Federal Share ($5,500,000 X 20%)	+1,100,000
Total Project Value	$ 5,500,000
Total non-Federal Share	$ 1,100,000
Costs Incurred by Local Public Agency and Treated as non-Federal Share	- 500,000
Cash Outlay by Local Public Agency	$ 600,000
Federal Share of Project Cost	$4,400,000
Example 5	

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APPENDIX G
PROJECTS NOT LET OR ADMINISTERED IN ECMS

Local Let Projects that are not to be let or administered using ECMS (i.e., Paper Let projects) will only be approved under certain circumstances, and when written authorization to do so has been granted by the District Office and approved by the Bureau of Project Delivery, Project Schedules, Specifications and Constructability Section Chief. This Appendix discusses requirements for those projects. Both Local Led and District Led projects will be administered using ECMS.

To receive approval to conduct the local let bidding process, the Local Project Sponsor must submit a request to the District Office which includes the following information:

- Description of the project, which should include the applicable exemption or unique circumstance that is the basis for the Local Project Sponsor's request for approval to conduct a local let bidding process
- Planned advertisement date
- Planned let date
- Estimated project cost
- Description of the Local Project Sponsor's prior experience conducting a local let bidding process
- Identify any consultants that will be involved in the letting process on behalf of the Local Project Sponsor

This approval is usually granted on a case-by-case basis. All Districts are ready to assist the Local Project Sponsor in the process. Close coordination with the designated District Project Manager is important.

Local public agencies that assume responsibility for providing contract management and construction inspection services on a Local Project are strongly urged to adopt the use of ECMS and CDS NextGen. A Local Project Sponsor may obtain approval from the Department to use its own manual format for project records and documentation, payment estimates, work orders, etc.; however, such approval normally involves numerous modifications and considerable review time. Local Project Sponsors that do not have extensive highway and bridge programs and considerable experience may find obtaining such approval to be a time consuming and costly endeavor.

The information in this Appendix is for use on those projects where the Bureau of Project Delivery has granted the Local Project Sponsor an exemption from using ECMS to let and administer the construction project. It should be noted that Paper Let projects are to be administered in accordance with the appropriate subsections of Chapters 4 and 7 of this Manual, except as modified in this Appendix.

<u>Responsibilities for Paper Lets:</u>

- **Local Project Sponsor:** Submits the final PS&E Package to the District Office for review and approval. PS&E Package is prepared in accordance with federal and state requirements and includes prequalification work class codes properly assigned to each bid item. Includes contract documents in this submittal. (A copy of the proposed advertisement and a copy of the executed reimbursement agreement and the executed construction inspection agreement for the project must be submitted with the PS&E Package or as a separate submission.)

- **District Office:** Reviews the PS&E Package. Verifies that a reimbursement agreement and a construction inspection agreement have been executed for the project. Submits request for federal authorization of funds (Form D-4232). Upon approval of the PS&E Package, proposed

advertisement, and federal authorization of funds, notifies the Local Project Sponsor, who can then proceed with advertisement.

- **Local Project Sponsor**: Advertises and Lets project. The project will be advertised in ECMS through a bulletin accessed from the ECMS home page.

- **District Office**: Receives approved Concurrence to Award/Reject from Central Office and forwards it to the Local Project Sponsor.

- **Local Project Sponsor**: Awards and executes the contract, and issues the Notice to Proceed.

Advertisement

For projects where the Local Project Sponsor has received prior written authorization to conduct the bid opening locally (i.e., Paper Let projects), the Local Project Sponsor is to obtain authorization from the District Executive or a designee before a project is advertised for bids. The District Executive or a designee must verify that a reimbursement agreement and a construction inspection agreement have been executed before authorizing the Local project Sponsor to advertise a project for bids. Exceptions must be documented to ensure that the anticipated Notice to Proceed date can be met. All projects must allow at least ninety (90) days from the bid opening date to the anticipated Notice to Proceed date. If less than ninety (90) days is needed, the Local Project Sponsor must obtain approval from the Central Office Bureau of Project Delivery, Highway Delivery Division to reduce the timeframe.

The District Executive or a designee is to authorize the Local Project Sponsor to advertise a project for bids upon completion of the review and approval of Form D-4232, *Request for FHWA Authorization* (Federal-aid Projects only), by the Federal Highway Administration. The District is to obtain the Disadvantaged Business Enterprise (DBE) or MBE/WBE applicable goals to the project that are to be included in the PS&E package and provide to the Local Project Sponsor. The Bureau of Project Delivery, Contract Management Section, will approve the DBE goal.

Upon receipt of authorization from the District Executive or a designee, the Local Project Sponsor is to advertise the project. A project should not be advertised if there is reason to believe that the anticipated Notice to Proceed date cannot be met (e.g., necessary agreements and/or processes are incomplete). The FHWA may not participate in costs associated with the Local Project Sponsor's failure to meet the anticipated Notice to Proceed date, particularly if such costs are due to delays in obtaining required approvals or processing necessary documents.

The Local Project Sponsor may use its own advertising procedure provided the following conditions are met:

- The advertisement is printed at least twice in a local newspaper of general circulation in the area where the construction will occur. When prequalification is required, the project is to be advertised in ECMS.
- At least three full weeks (21 calendar days) will elapse between the date of the first advertisement and the bid opening. The Department recommends a 5-week advertisement period, if possible.
- If the project is located in a community that has a foreign language and/or minority newspaper, such newspapers are used in addition to the local newspaper of general circulation.
- The following statement is incorporated in the advertisement:

- **Federal-aid Projects -** The (name of Local Project Sponsor) in accordance with Title VI of the U.S. Civil Rights Act of 1964 and Parts 21 and 23 of 49 C.F.R., notifies all bidders that it will affirmatively ensure that DBE will be afforded full opportunity to submit bids in response to this invitation and that no person will be discriminated against on the grounds of race, color, sex or national origin in consideration for an award.
- **Non-Federal-aid Projects -** The (name of Local Project Sponsor) in accordance with Title VI of the U.S. Civil Rights Act of 1964 and Parts 21 and 23 of 49 C.F.R., notifies all bidders that it will affirmatively ensure that MBE/WBE will be afforded full opportunity to submit bids in response to this invitation and that no person will be discriminated against on the grounds of race, color, sex, or national origin in consideration for an award.

The Local Project Sponsor is to furnish the District with a copy of its proposed submission to newspapers for placing the advertisement. The District is to review the advertisement copy, proposed publication(s), and anticipated dates of advertisement, and immediately notify the Local Project Sponsor of any deficiencies.

At the beginning of the advertisement period, the Local Project Sponsor is to furnish the District with two (2) copies of the final issued proposal.

The Local Project Sponsor is to maintain a complete project advertisement file, including proof of publication in the form of newspaper tear sheets or an affidavit from the publisher. The Local Project Sponsor may submit a request, to the District, to advertise a paper let project using ECMS. The District is to provide the following information regarding the Local letting to the Bureau of Project Delivery for listing on the ECMS home page as a "bulletin".

- Name of Local Project Sponsor and county.
- Date, time, and location of bid opening.
- Description of project.
- Where proposal and plans may be obtained.
- Pre-bid conference date, time, and location, if applicable.
- A statement indicating that only DBE/MBE/WBE firms listed in the Pennsylvania Unified Certification Program (PA UCP) may be used.
- A statement indicating that prequalification is / is not required, as applicable.
- A statement indicating that firms prequalified as subcontractors may bid as the Prime Contractor, if applicable.

Online help is available through the "Help" link in ECMS. For off-line assistance, please contact the ECMS Help Desk at 717-783-7711 (Monday to Friday 8 a.m. to 4 p.m.)

After the award and execution of a paper contract for a Paper Let project, the District may elect to use ECMS to track Department actions related to the construction management phase of the project (i.e., Local Partial ECMS project). In such cases, the Local Project Sponsor must register with the Department as a Business Partner for billing, audit, and reporting purposes. To register follow these steps: (Note that the Local Project Sponsor needs to register as a business partner for ECMS let projects as well)

1. Log in to the PennDOT ECMS homepage at: http://www.dot14.state.pa.us/ECMS/
2. Select "Register as a Business Partner" and follow the Registration Instructions.
3. An Administrator Password will be emailed from ECMS once the paper agreement has been fully executed. This login can only be used to setup additional User IDs and passwords for individual

municipal/Local Project Sponsor staff.

4. Administrator establishes their own User ID and User IDs for other staff. Passwords must be reset every 60 days. Users will be notified by the system to reset passwords.
5. Setup EMCS Security Levels
    a. Municipal Approver – person giving concurrence to award a contract and person signing a contract binding the municipality / Local Project Sponsor
    b. Municipal Legal – Solicitor for municipality / Local Project Sponsor

The District is to perform the data entry needed to establish the Local Paper Let project in ECMS. The pertinent paper documents associated with the project (i.e., executed contract, bonds, insurance certificates, etc.) are to be obtained from the Local Project Sponsor, scanned into the Electronic Document Management System (EDMS), and electronically linked to the appropriate screen(s) in ECMS. The Local Project Sponsor will be able to access ECMS for viewing project information and to carry out its process workflow responsibilities.

Project Letting

Addenda

Before issuing any addendum during the advertisement period for a Paper Let project, the Local Project Sponsor is to obtain Department approval. The Local Project Sponsor is to prepare the addendum and submit it to the District for review and approval. Upon receipt of verbal approval from the District, the Local Project Sponsor is to issue the addendum to all prospective bidders in such a manner that proof of issuance (UPS / FedEx / certified mail receipt, fax confirmation, etc.) is obtained and filed. Every attempt is to be made to ensure addendums are issued at least seven (7) calendar days prior to bid opening. No addendum is to be issued less than three (3) working days prior to bid opening. If, within three (3) working days of the bid opening, it is determined that an addendum is necessary, the letting is to be delayed and the prospective bidders so notified by telephone or fax, with written confirmation of the postponement and the addendum to follow.

Addendums are to be consecutively numbered for identification purposes. The District is to provide follow up confirmation of its verbal approval of an addendum by returning a copy of the addendum submission to the Local Project Sponsor with approval denoted thereon. Bidders must acknowledge receipt of all addenda. If an addendum affects the bid quantity for one or more proposal items, the Engineer's Estimate is to be updated to ensure the review of bids and contract award are not delayed unnecessarily.

Qualification of Contractors

For projects where the Local Project Sponsor has been authorized to administer the bid opening locally (i.e., paper let projects), the following qualification requirements are applicable:

1. ***Prequalification***

If the project is located on the State highway system (i.e., within Department right-of-way) or will utilize State and/or Federal funds, Department prequalification is required. Department prequalification is also required for projects located on a Local roadway if:

- The Reimbursement Agreement requires Department prequalification, or
- The Local Project Sponsor elects to require Department prequalification.

Contracting firms prequalified as subcontractors only, under Department prequalification regulations, may be considered eligible to submit bids on Local projects as a Prime Contractor, consistent with their qualifications, **provided the bid proposal so indicates** and the firm meets the 50% prequalification requirement specified in 67 PA Code Chapter 457, *Regulations Governing Prequalification of Prospective Bidders*.

2. ***Post-Qualification***

If Department prequalification is not required or adopted by the Local Project Sponsor and the Local Project Sponsor desires to require post-qualification, the Local Project Sponsor is to submit the procedure it proposes to follow in evaluating the Contractor's ability to perform the work, to the Department, for approval. NOTE: A special provision modifying the prequalification requirement in Publication 408, Section 102, must be included in the proposal.

A Local Project Sponsor-designed qualification evaluation procedure will only be allowed if it meets all Federal and State requirements and has been approved by the Deputy Secretary for Highway Administration after consultation with the Federal Highway Administration (Federal aid Projects only) and the PennDOT Office of Chief Counsel. Such approval normally involves numerous modifications and considerable review time. Only a few Local Project Sponsors have found it advantageous to request such approval.

The Local Project Sponsor's qualification procedure must ensure that competence and responsibility are readily established through an objective evaluation of the Contractor's experience, personnel, equipment, financial resources, and performance record. The Local Project Sponsor's qualification procedure submission is to be forwarded, by the District, to the Bureau of Construction and Materials, Contract Management Division, Prequalification Section, for review and approval prior to project advertisement.

The approved procedure is to be incorporated into the proposal, along with a requirement that the bidder submit the necessary evaluation information with the bid in order to minimize delays in the awarding of a contract. If the Local Project Sponsor's qualification procedure is not approved, there can be no post-qualification evaluation.

3. ***Debarred Bidders***

The Local Project Sponsor is not to award contracts to bidders that are currently legally debarred under Federal or State authority. The debarred status of contractors is checked by Central Office during the concurrence to award process.

Bid Opening

All bids received in accordance with the terms of the proposal are to be publicly opened at the time, date, and place indicated, and the total bid amount publicly announced. If any bid received is not read aloud, the name of the bidder and the reason for not reading the bid aloud is to be publicly announced. Any bid received late is to be returned unopened.

For Federal-aid projects, the District is to ensure that any conditions related to the bid opening, noted on approved Form D-4232, have been satisfactorily resolved prior to the opening of bids.

A representative from the District familiar with Department letting procedures is to attend and witness the bid opening. The Department's representative is to prepare a memorandum noting the particulars of the letting and including a statement that the bid opening was properly conducted, and submit it to the Bureau

of Project Delivery, Contract Management Section, Contract Awards. Use of improper or questionable procedures by the Local Project Sponsor is to be reported to the District Executive, who in turn is to consult with the Bureau of Project Delivery, Contract Management Section. It should be noted that the Local Project Sponsor is prohibited from attempting to negotiate costs with any Bidder at the time of the bid opening for the purpose of reducing the bid amount.

Award or Rejection

The appropriate Local Official is to ensure the following procedures are followed:

- Publicly open all bids and read them aloud.
- Mathematically verify the total bid amount for all bids received by summation of the products of the approximate quantities shown in the bid schedule by the unit bid prices. In the event of a discrepancy between a unit bid price and item total price, the unit bid price will govern.
- Verify that all applicable bidding conditions have been met. Items to verify include, but are not limited to, the following:
    - Any addenda issued have been acknowledged and applicable changes incorporated into the bid proposal.
    - All certifications and/or affidavits have been signed.
    - Proper bid proposal bond guaranty, or other form of guaranty required by Local law, has been attached.
    - Proper power-of-attorney has been attached to the proposal bond guaranty and is dated, certified, and identifies the attorney-in-fact for the Surety.
    - The signature page has been completed by the individual, partnership, or corporate bidder.
    - All items in the proposal were bid.
    - No conditional bid has been submitted.

- Obtain verification from the Prequalification Officer in the Bureau Project Delivery that the apparent low bidder meets the prequalification requirements of 67 PA Code Chapter 457, *Regulations Governing Prequalification of Prospective Bidders*. Items that will be verified include, but are not limited to, the following:

    - The total value of contract items that the Contractor is prequalified to perform, based on its approved work type classification codes, constitutes more than fifty percent (50%) of the total adjusted bid price, and the Prequalification Officer has provided written concurrence. The Contractor Responsibility Program (CRP) file has been accessed to determine whether the Contractor has been suspended, debarred, or reported for work deficiencies or outstanding State / Local tax liabilities. This verification is to be performed by the District or the Bureau of Project Delivery, Contract Management Section, Contract Awards.
    - The Contractor is not listed in the U.S. General Services Administration "Lists of Parties Excluded from Federal Procurement of Non-procurement Programs." This information is available at www.sam.gov
- Verify proper processing of Department Form EO-380, *Minority Participation and Commitment* (or Form STD-168, *MBE / WBE Contact / Solicitation and Commitment Statement for Non-Federal-aid Projects*). Items to verify include, but are not limited to, the following:
    - The form was submitted at the location specified in the proposal. It is recommended that the Department location be used since submission deadlines are monitored.
    - The form was submitted by the deadline specified in the proposal.

  - Central Office, Bureau of Project Delivery, Contract Management Section, Contract Awards has approved the commitment prior to award.
  - Only DBE/MBE/WBE firms listed in the Pennsylvania Unified Certification Program (PA UCP) have been committed.
- Prepare a Tabulation of Bids that shows item bid price details for the three (3) lowest acceptable bids, and the total bid amount for all other acceptable bids. The tabulation is to be provided to the Department in an electronic spreadsheet format and is to be certified as accurate by a responsible Local Official.

Questions relating to the review of bid proposals are to be directed to the District. The District may refer the Local Official to the Bureau of Project Delivery, Contract Management Section, Contract Awards, for assistance and guidance, as needed. Upon verification of total bid amounts, verification that all applicable bidding conditions have been met, and preparation of a Tabulation of Bids, the Local Project Sponsor is to prepare a submission recommending award or rejection and requesting Department concurrence (Federal-aid Local Concurrence to Award / Reject – also used for State funded projects). If the Local Project Sponsor proposes to reject a low bid because of non-compliance with a bidding requirement, the Local Project Sponsor's legal representative is to prepare a justification for rejection. The justification for rejection is to be in the form of a letter, from the Local Project Sponsor, to the District Executive.

The award / rejection recommendation submission is to be made to the District Executive as soon as possible after the bid opening date and is to include the following:

- A transmittal letter that includes recommendations and pertinent information, a statement that all bids were verified and all applicable bidding conditions met, and a statement as to whether the degree or level of competition was adequate. The recommendation should include a comparison of the bid to the estimate and a justification of significant differences. The transmittal letter is also to include statements regarding environmental, utility, and right-of-way clearances; PUC involvement; and the availability of an executed reimbursement agreement for construction
- Project Identifiers – ECMS / Multi-Modal Project Management System (MPMS) / federal project numbers / state project number
- Local authority name
- Let date
- Anticipated Notice to Proceed date
- Number of bidders, their names and bid amounts
- Low bidder and bid amount, and percent difference to estimate
- Estimate amount
- Federal ID No. of apparent low bidder so PennDOT can check for federal debarment
- Waiver of Prequalification approval, if applicable
- Proof that the low bidder meets prequalification for 50% of the work and has available capacity
- Contact name and phone at the District Office if there are questions
- Contact name and fax or email where approval is to be sent
- A blank copy of the Bid Proposal and all Addenda
- A certified copy of the Tabulation of Bids
- Proof of Advertisement, including where and how the project was advertised
- The Contractor's post-qualification submission (if a Local Project Sponsor-designed qualification evaluation procedure is to be used)
- Justification for rejection of bid(s), if applicable
- Justification of the low bid amount when compared to the estimate, including discussions with the contractor

- Certification that there has been no negotiation of the low bid amount
- The Staffing Letter (see Chapter 3, *Project Management Processes* for further details)
- DBE goal in the proposal and evidence that the DBE/ MBE/WBE Commitments submission has been approved by the Bureau of Project Delivery, Contract Management Section, Contract Awards or a Department determination of a Good Faith Effort by the Contractor, as applicable

Upon receipt of the Local Project Sponsor's award / rejection recommendation submission, the District is to review the submission and, if satisfied, forward it within five (5) working days to the Bureau of Project Delivery, Contract Management Section, Contract Awards, with a transmittal letter indicating concurrence. A copy of the memorandum prepared by the District representative who attended the Local Project Sponsor's bid opening is to accompany the District's transmittal letter. For Federal-aid projects, the District is to ensure that any conditions related to the award, noted on approved Form D-4232, have been satisfactorily resolved prior to recommending that the project be awarded.

The Bureau of Project Delivery will review the District's submission; coordinate a Contractor qualification review with the Bureau of Project Delivery, Contract Management Section; coordinate any necessary actions with FHWA (Federal-aid Projects only); prepare the necessary Department approval documents; and, upon approval, notify the District by providing a copy of the Concurrence in Award (or Concurrence in Rejection) letter approved by the Deputy Secretary for Highway Administration or a designee. The District, in turn, is to inform the Local Project Sponsor.

Upon receipt of the Department's Concurrence in Award notification, the Local Project Sponsor is to proceed with the awarding of a contract. A copy of the award letter sent to the Contractor is to be sent to the District for the project file.

The Bureau of Project Delivery, Contract Management Section, Contract Awards, will scan all of the award documentation and link it into ECMS as a Local Tracking project unless the construction management of the project will be managed in ECMS as a Local Partial project.

Construction Contract

Preparation and Execution of Contract

The Local Project Sponsor is to begin preparing the contract once it has submitted an award recommendation to the District. However, the contract is not to be awarded or executed until the Department has approved the award.

The Department's contract format, which has been included in Appendix P, is to be used unless the Local Project Sponsor obtains approval from the Department, **prior to project advertisement**, to use its own format. A Local Project Sponsor-designed contract format may be used only if it meets all Federal and State requirements and has been approved by the Deputy Secretary for Highway Administration after consultation with the Federal Highway Administration (Federal-aid Projects only) and the Office of Chief Counsel. Such approval normally involves numerous modifications and considerable review time, and extends to Local standard specifications, contract provisions, and special provisions. Only a few, large Local Project Sponsors, with considerable experience in contract specifications, have found it advantageous to request such approval.

Whether the Department’s standard contract format is used, or a Local Project Sponsor designed contract format, a copy of FHWA-1273, *Required Contract Provisions Federal-Aid Construction Contracts*, must be physically attached to the contract. The text of FHWA-1273 can be found on the Federal Highway Administration website at: http://www.fhwa.dot.gov/programadmin/contracts/1273/1273.pdf

Include the approved DBE/MBE/WBE commitment documents in the contract.

After award, the contract is to be executed by the Contractor and returned to the Local Project Sponsor with required Performance and Payment Bonds properly executed by the Contractor and the Surety and insurance certificates evidencing the coverage required by the contract.

Upon approval and execution of the contract, by the Local Project Sponsor, two (2) copies are to be forwarded to the District for distribution as follows:

- District Office – one (1) copy (this copy is to be scanned into ECMS)
- Bureau of Project Delivery, Contract Management Section – one (1) copy

Pre-Construction Considerations

Pre-Construction Conference

See Chapter 7.1.A

Subcontractor Approvals

See Chapter 7.1.B. All applicable provisions of this section apply to projects not administered using ECMS with the following exception:

For projects not administered using ECMS, Department Form CS-4339R, *Request for Subcontractor Approval*, is to be used. The Local Project Sponsor is to furnish a copy of each written subcontract authorization (i.e., approved Form CS-4339R) to the District Executive. A copy is also to be furnished to the Inspector-in-Charge and be on file at the project site.

For Local Partial ECMS projects, subcontractor approvals are to be completed using Form CS-4339R until the District has performed the data entry needed to establish the project in ECMS. Thereafter, subcontractor approvals are to be processed using ECMS.

DBE Contract Provisions (Federal-Aid Projects Only)

The Local Project Sponsor is to designate a person to be the primary contact with the District and Central Office for DBE-related matters.

The following procedures are to be followed in the administration of DBE contract provisions:

1. DBE Participation

The Local Project Sponsor is to utilize the same process identified in Chapter 7.1.C with the exception that any reference to ECMS will refer the paper DBE documentation.

Minority / Women Business Enterprise Program (Non-Federal-Aid Projects Only)

The Local Project Sponsor is to utilize the same process identified in Chapter 7.1.D with the exception that any reference to ECMS will refer the paper MBE/WBE documentation.

Trainee Training Programs (When Applicable)

See Chapter 7.1.E.

Maintenance and Protection of Traffic (MPT)

See Chapter 7.1.F.

Notice to Proceed

See Chapter 7.1.G. All applicable provisions of the referenced section apply, with the following exceptions:

For both Local Led and District Led projects, the Local Project Sponsor is to issue, to the Contractor, a written Notice to Proceed specifying the calendar date on which to begin the work (i.e. the Notice to Proceed Date). For District Led projects, the Notice to Proceed is to be issued by the Local Project Sponsor only after receipt of the District's directive to do so. A copy of the Notice to Proceed letter is to be submitted to the District, along with a copy of the signed contract.

For District Led projects, the Local Project Sponsor's Notice to Proceed letter, in addition to specifying the calendar date on which work is to begin, is to inform the Contractor that the Department will inspect the work and administer the contract on behalf of the Local Project Sponsor and that all correspondence pertaining to the project must be directed to the District Executive with a copy to the Local Project Sponsor.

Construction Schedule

See Chapter 7.1.H.

Contract Administration

Records and Documentation

See Chapter 7.2.A.

Construction Inspection

See Chapter 7.2.B. All applicable information in this referenced section applies, with the following additional requirement:

Department Form CS-4307 Sub, *Subcontractor's Past Performance Report*, is to be used by the Inspector-in-Charge to complete the required evaluation. (See Publication 2, *Project Office Manual*, Section D.3.8, *Evaluation of Contractors and Subcontractors*, for additional guidance.)

Materials Control

1. Acceptance Testing and Inspection

See Chapter 7.2.C.1.

2. Quality Assurance Program

See Chapter 7.2.C.2.

3. Source of Supply Approvals

See Chapter 7.2.C.3.

4. Shop Inspection

See Chapter 7.2.C.4.

Payments to Contractors

See Chapter 7.2.D. All applicable provisions of this referenced section apply, with the following exceptions:

The Local Project Sponsor (Local Led projects) or the District (District Led projects) may use its own standard format for payment estimates provided each estimate is serially numbered and indicates the quantity (previous, current and total to date) and unit price for each item to be paid. The total value of work performed to date, net amount payable, amount previously paid, and amount payable this estimate are also to be indicated. Additionally, an estimate book is to be maintained that references each item to be paid to required source documentation. The Assistant Construction Engineer or a designee is to review and approve the Local Project Sponsor's proposed payment estimate and estimate book formats.

An original payment estimate and any required support documentation (e.g., computations needed to support a Contract Adjustment associated with a payment estimate), are to be submitted to the Local Project Sponsor by the Inspector-in-Charge. The Local Project Sponsor is to review and approve (i.e., sign) the payment estimate and prepare a cover letter, to the Department, requesting reimbursement. To expedite the reimbursement process, the Local Project Sponsor may fax the approved payment estimate and reimbursement request letter to the Assistant Construction Engineer before sending the **ORIGINAL**, signed documentation package to the District. Upon receipt of the faxed documentation, the Assistant Construction Engineer or a delegate can begin the process of reviewing the payment estimate.

Payment estimates are to be reviewed by the Assistant Construction Engineer or a designee and, subject to verification of documentation accuracy, the availability of sufficient Federal funds, and the adequacy of materials certifications provided to the Local Project Sponsor by the Contractor, approved.

Upon receipt of the **ORIGINAL**, approved payment estimate and reimbursement request letter from the Local Project Sponsor, the Assistant Construction Engineer or a designee is to formally approve the estimate, sign-off on the reimbursement request letter to indicate to the Transportation Comptroller that the request is approved, and notify the Inspector-in-Charge of the approval.

The Assistant Construction Engineer (ACE) or a designee is to prepare a cover letter from the District Executive to the Transportation Comptroller, Attention: Special Accounting Division, noting the Agreement number, Federal Project Number (FPN), and invoice amount; summarizing the funding breakdown for the invoice amount (i.e., the Federal, State, and Local share, as applicable); and recommending payment. The **ORIGINAL** and three (3) copies of the complete payment estimate package, including the ACE's cover letter, are to be submitted to the District Fiscal Office. The District Fiscal Officer or a designee is to process the payment in SAP and, upon completion, note the Transaction Number on one of the three submitted copies and return that copy to the Assistant Construction Engineer.

The District Fiscal Office is to submit the **ORIGINAL** and one (1) copy of the complete payment estimate package, including the ACE's cover letter, to the Transportation Comptroller and retain one copy for its files.

The Local Project Sponsor is required to pay the Contractor within 10 calendar days of receipt of reimbursement from the Department. If requested by the District, the Local Project Sponsor is to provide verification of payment within 30 calendar days of receipt of reimbursement from the Department. Acceptable forms of verification of payment would be a copy of a cancelled check or a certified letter from the Contractor acknowledging receipt of payment.

If the terms of the Reimbursement Agreement allow for an alternate payment / reimbursement process whereby the Local Project Sponsor is to pay the Contractor before receiving reimbursement from the Department, verification of payment being made to the Contractor (e.g., cancelled check, certified letter, etc.) must be submitted to the Assistant Construction Engineer before reimbursement to the Local Project Sponsor can be processed.

Authorizations for Contract Work and Work Orders

See Chapter 7.2.E. – All applicable provisions of this referenced section apply, with the following exceptions:

When proposed contract changes involve item quantity reductions / eliminations, additional work, and/or extra work, written authorization must be provided to the Contractor, by the Inspector-in-Charge, prior to commencement of the work or processing the reduction / elimination. The Inspector-in-Charge may use Department Form CS-373, *Authorization for Contract Work*, to provide the required written authorization, as well as a letter, telegram, mailgram, or other writing. After all scope of work and/or price issues have been addressed, the Contractor must sign Form CS-373 to indicate its agreement or prepare and submit a letter of agreement to the Inspector-in-Charge.

The Inspector-in-Charge is to prepare an official work order for all item quantity reductions / eliminations, additional work, and/or extra work, in a timely manner. Work orders are also needed to process payments resulting from dispute or claim settlements. The Local Project Sponsor is encouraged to use the Department's standard work order forms (CS-4350 Series) for this purpose. If, instead of the Department's standard forms, the Local Project Sponsor elects to use its own work order format, a sample is to be submitted to the District for review and approval prior to use. The District is to forward the Local Project Sponsor's submission, along with a recommendation, to the Bureau of Project Delivery, Contract Management Section. The Bureau will coordinate its review and approval of the format with FHWA. Local Project Sponsor-designed formats where the substance of the explanations and cost justification is not equivalent to that required by the Department's standard forms will not be approved.

Work orders are to be thoroughly reviewed by the Local Project Sponsor's Project Manager and the District using the same standards and criteria as those applied to a non-Locally Sponsored project work order. The District is responsible for any actions involving a modified Federal-aid project agreement.

With the exception of Legal category work orders for Federal Oversight and PennDOT Oversight NHS projects, the District Executive or an authorized delegate has approval authority for all work orders. After being reviewed by the District, Federal Oversight and PennDOT Oversight NHS project work orders in the Legal category will be reviewed and approved by the Bureau of Project Delivery, Contract Management Section. These work orders will then be transmitted to the FHWA for review and approval.

After being reviewed by the Local Project Sponsor's Project Manager, the Inspector-in-Charge is to submit work orders and required supporting documentation to the District for review and approval. Upon securing District approval of work orders, the Inspector-in-Charge is to make distribution as follows:

- Original to the Local Project Sponsor with support documentation
- One copy to the Inspector-in-Charge with support documentation
- One copy to the Contractor
- One copy to the District with support documentation
- Two copies to the Bureau of Project Delivery with support documentation - (Federal Oversight project, Additional / Extra Work - Major category work orders only)

Upon receipt of its two copies of applicable work orders, the Bureau will submit one copy to the FHWA for review and approval. Upon securing FHWA approval of work orders, the Bureau will notify the District. The District is to notify the Inspector-in-Charge and the Contractor.

If a work order, wholly or in part, is disapproved by the FHWA, written notification will be sent to both the District and the Bureau. The District is to inform the Local Project Sponsor. The Local Project Sponsor can either attempt to rebut the FHWA position or process the necessary work order(s) to comply with the FHWA position.

When emergency or unusual conditions justify, the District may give tentative advance approval of proposed changes orally and ratify such approval in writing as soon as practicable thereafter. Changes that result in substantial revisions to documents previously reviewed or sealed by the Department must be reviewed by the appropriate District Unit before obtaining approval of the change. Written approval of all changes must be obtained before payment is made to the Contractor.

Proposed changes involving non-participating operations that affect the design or participating construction features of a project are subject to review and approval by the Department.

Contract Time Extensions

See Chapter 7.2.F. – All applicable provisions of this referenced section apply, with the following exceptions:

The Contractor must prepare a time extension request letter and submit it and required supporting documentation to the Local Project Sponsor for review and approval. The Local Project Sponsor, if in agreement with the request for an extension of contract time, is to prepare a letter of approval and send it to the District Project Manager along with the Contractor's request letter and required supporting documentation. The District is to ensure that its review and approval of such time extension requests follows the same workflow routing as those prepared and submitted using ECMS.

The Local Project Sponsor and the District are to thoroughly review time extension requests in accordance with the guidance provided in Publication 2, Sections B.3.1 and C.1.8. Unusual or questionable requests are to be referred to the Bureau of Project Delivery, Project Schedules, Specifications, and Constructability Section, for comment and an approval recommendation.

For Federal Oversight projects, the District, after reviewing and approving a time extension request, is to submit the request package to the Bureau of Project Delivery, Project Schedules, Specifications, and Constructability Section. The Bureau will coordinate review and approval of the time extension request by FHWA.

Contract Compliance

1. Labor Compliance

See Chapter 7.2.G.1.

2. Construction Safety

See Chapter 7.2.G.2.

3. Equal Opportunity

See Chapter 7.2.G.3.

Project Close Out

Final Inspection

See Chapter 7.3.A. All applicable information in this referenced section applies, with the following additional requirement:

Department Form CS-4307, *Contractor's Past Performance Report*, is to be used by the Inspector-in-Charge to complete the required evaluation (see Publication 2, *Project Office Manual*, Section D.3.8, for additional guidance.)

Acceptance Certification

See Chapter 7.3.B. All applicable information in this referenced section applies, with the following additional requirement:

Department Form CS-4138, *Acceptance Certificate*, is to be used to establish the date of project acceptance. The Inspector-in-Charge is to complete the certification statement and sign the form, have the form signed and dated by a Local Official, and forward the completed Acceptance Certificate to the Assistant Construction Engineer (ACE). The ACE, if recommending approval, is to sign and date the Certificate, and then forward the document to the District Executive for final certification.

After certifying, by signature, that the project has been satisfactorily completed and is accepted, the District Executive or a designee is to return the Acceptance Certificate to the Inspector-in-Charge. The Inspector-in-Charge is to make distribution as follows:

- **ORIGINAL** for Local Project Sponsor
- Two (2) copies for Contractor (one copy for Surety)
- One copy for District
- Two (2) copies for Bureau of Project Delivery, Contract Management Section
- One copy for Bureau of Project Delivery, New Products & Innovations Section

Form FHWA-1446A, Construction Inspection Report

See Chapter 7.3.C.

Form FHWA-1446B, Final Acceptance Report

See Chapter 7.3.D. All applicable information in this referenced section applies, with the following additional requirement:

The District is to complete Form FHWA-1446B, *Final Acceptance Report* (see Publication 2, *Project Office Manual*, Section D.3.5, for a listing of the project information that will be needed to complete this form). When completing Form FHWA-1446B, include a statement in the REMARKS section as to whether liquidated damages were assessed on the project. Upon completion of Form FHWA-1446B, the District is to forward the **ORIGINAL** to the Bureau of Project Delivery, Contract Management Section, along with a list of Work Orders and Time Extensions. The Contract Management Section Chief or a designee will sign Form FHWA-1446B for the Department. No other Department signatures will be required.

The Bureau of Project Delivery, Contract Management Section, will retain one signed copy of Form FHWA-1446B for its files and forward the **ORIGINAL** to FHWA, along with copies of the Acceptance Certificate (Form CS-4138), Form FHWA-1446A (Final Inspection), and the Materials Certification (Form TR-4238A), and notification that all Work Orders and Time Extensions have been approved by FHWA.

Upon completion of its review, FHWA will approve Form FHWA-1446B and forward two (2) approved copies to the Bureau of Project Delivery, Contract Management Section (one for the Transportation Comptroller, one for the Contract Management Section), and two (2) approved copies to the District. The District is to forward one of its approved copies to the Local Project Sponsor.

If, instead of approving Form FHWA-1446B, the Federal Highway Administration requires corrections, the Bureau of Project Delivery, Contract Management Section will so notify the District.

Materials Certification

See Chapter 7.3.E.

Final Settlement of Contract

See Chapter 7.3.F. All applicable information in this referenced section applies, with the following exception:

The Notification of Final Quantities and final amount due are to be submitted to the Contractor in paper format. If exceptions are noted by the Contractor in its response, the Local Project Sponsor is to follow the procedure outlined in Publication 408, Section 110.08(c).

Upon acceptance of the final quantities by the Contractor, the Local Project Sponsor (Local Led projects only) is to submit the Final Invoice (i.e., final amount due as reimbursable costs) to the District, and the District (Local Led and District Led projects) is to initiate the process of submitting the Final Invoice to the Transportation Comptroller. The Local Project Sponsor (Local Led projects) or the District (District Led projects) is also to prepare and submit a written report that details the item number, item type code, description, quantity (original, net change, and final), unit price, and total cost for each contract work item performed. The report data is to be grouped by Federal Project Number (FPN) and Fund.

The District is to forward the original and two (2) copies of the detailed final item quantity report (grouped by FPN and Fund) to the Bureau of Project Delivery, Contract Management Section. The

Contract Management Section will submit the report to the Comptroller, along with a copy of the certified Acceptance Certificate, and request that the Final Voucher be prepared.

Project Finalization Procedures

See Chapter 7.3.G.

Records Retention/Disposal

See Chapter 7.3.H.

Other Considerations

See Chapter 7.4.A through

PS&E Pre-Advertisement Checklist for Local Projects Not Let in ECMS

Plans and Estimates

- ☐ The format (i.e., size, order, required seals and signatures, etc.) of Final Design Plans must adhere to the requirements of Publication 14M, *Design Manual Part 3*, Chapter 2, Construction Plans
- ☐ Engineer's Estimate (with supporting computations for item quantities)
- ☐ Federal Estimate Bid Proposal (Standard Proposal/Contract Documents) - the District is to provide guidance in this area. Some items listed are to be supplied by the District Contract Management Unit
- ☐ Proposal Cover Sheet
- ☐ Acknowledgment of Addenda
- ☐ Bidder's Understanding of Conditions Applicable to Proposal
- ☐ Bid Proposal Guaranty Bond (when required by the Local Project Sponsor)
- ☐ Bidder's Certification of Prequalification Classification & Work Capacity (unless a waiver has been granted by Bureau of Project Delivery)
- ☐ List of Subcontractors
- ☐ Statement of Joint Venture Participation (if applicable)
- ☐ Affirmative Action Certificate
- ☐ Anti Collusion Affidavit
- ☐ Public Work Employment Verification Form
- ☐ List of Bid Items (with applicable Work Class Code(s) identified)
- ☐ Bid Signature Page
- ☐ Special Provisions
- ☐ Pre-Bid Conference (if applicable)
- ☐ Award of Contract
- ☐ Anticipated Notice to Proceed (NTP) Date
- ☐ Governing Specifications and Applicable Designated Special Provisions: A special provision that identifies the specific version (i.e., publication year, Change No., and effective date) of Publication 408 that will govern the project and indicates which of the Designated Special Provisions (DSPs) included in Publication 408, Appendix C, are applicable
- ☐ EEO Covered Area
- ☐ Act 287
- ☐ Air Pollution Control in Air Basins
- ☐ Local Authority Contract (Department Let or Local Let)
- ☐ Disadvantaged Business Enterprise Participation Requirements (Federal-aid Projects only)
  - A special provision that modifies appropriate portions of DSP7, with the goal percentage indicated and a blank copy of Form EO-380, *DBE Participation for Federal Projects*, attached
  - Minority / Women Business Enterprise Participation Requirements (Non-Federal aid Projects only)
  - A special provision that modifies appropriate portions of DSP4, with the goal percentages indicated
- ☐ Trainees, if applicable
- ☐ Utilities
- ☐ Project-Specific Special Provisions:
  - Specifications that govern Non-Standard contract items
  - Changes to Specifications
- ☐ Revisions to the Specifications, Publication 408, that are effective but have not yet been physically incorporated into an updated edition.

Attachments

- ☐ Notice indicating which proposal documents are to be returned with the bid
- ☐ Prevailing Minimum Wage Determination (Federal or State, as applicable)
- ☐ Disclosure of Lobbying Activities – Standard Form LLL
- ☐ Notice to Prospective Federal Aid Construction Contractor
- ☐ Permits
- ☐ Utility Clearance Certificate
- ☐ Right-of-Way Clearance Certificate
- ☐ Railroad Certification
- ☐ Structures-Related Policy Letters
- ☐ Other attachments as required

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Appendix H
Project Milestone Submission Tracking

Project Name:		MPMS No.		Date:	
County:		Municipality:			
S.R. – Section		BMS No.			
Notice to Proceed		Expiration Date			
Engineering Agreement No.		Phases Included:			
Reimbursement Agreement No.		Amount Total Contract Amount			
Funding Percent:	Federal:	State:	Local:	Other:	
Estimate:	PE:	FD:	Utilities:	Right-of-Way:	Construction:

Local Sponsor Info:	**Consultant Info:**
Contact Person:	Project Manager:
Phone Number	Phone Number
Email Contact Info:	Email Contact Info:

District Info:	
Project Manager:	Phone Number
	Email Contact Info:

Project Description:

Project Status:

Upcoming Submissions: (Next 3 months)

Submissions Under Review/Outstanding Issues:

Schedule Drivers during Construction, i.e. in-stream restrictions:

TASK	% COMP	SCHEDULE DATES			
		ANTICIPATED SUBMISSION	ACTUAL SUBMISSION	COMMENTS RETURNED	COMPLETED
Notice to Proceed					
Project Scoping					
Analysis and Review of Project Needs/ Feasibility Report (If needed)					
Safety Review Submission Includes: Preliminary pavement design, Typical Section approval and Line and Grade Submission					
Preliminary MPT/Detour Plan					
Proprietary Item submission/approval					
Lighting Plan (If needed)					
Submission/Approval of E&S Plan					
Submission/Approval of NDPES Plan					
Pre-Application Meeting with Agencies for Waterway Permit (If needed)					
Threatened & Endangered Species Clearances (if needed)					
Preparation and submission of Waterway Permit					
Approval of Waterway Permit					
Preliminary TS&L Submission/Approval					
RSGER					
PA One Call Plan to Utilities					
Prepare and submit D4181s for utility clearance					
District to issue D-419 – Utility clearance					
Design Field View Submission (If needed)					
H&H Submission/Approval					
Cultural Resource Clearance					
Submit Preliminary R/W Plan					
Prepare and Submit Design Exception Request					
Prepare Core Boring Contract					
Public Involvement Activity Held					
Section 4(f) Submission/Approval (If needed)					
Preparation and Submission of CEE					
District to issue Environmental Clearance					
Prepare and Submit Final R/W Plan					
Application to PUC/Railroad Coordination (If needed)					

TASK	% COMP	SCHEDULE DATES			
		ANTICIPATED SUBMISSION	ACTUAL SUBMISSION	COMMENTS RETURNED	COMPLETED
PUC Field Conference (If needed)					
PUC Order/Secretarial Letter (If needed)					
Final TS&L Submission/Approval					
Foundation Submission/Approval					
Final Structure Plan Approval					
Final Pavement Design					
Preliminary PS&E Submission					
Solicitation/Selection of CI (If needed)					
R/W Appraisal & Negotiations					
R/W Acquisition					
Submit R/W Package to District for Clearance					
Submission of Construction Inspection Agreement					
Final PS&E Submission, Review by District and Contract Management					
Authorization to Advertise (Must advertise for 5 weeks)					
Project Letting					
Concurrence to Award					
Notice to Proceed					

Appendix I
PennDOT Sample Invoice

Date

Subject: _____ County
Project Name
MPMS#
Agreement No. XXXXXX
ECMS No. XXXXX
Invoice # XX

_____, County Chief Clerk
_____ County
29 Main Street
_____ , PA _____

Dear_____:

Enclosed is an invoice in the amount of $xxxx.xx. This represents _____ County's share of the Commonwealth's incurred costs for (services included) as per the Reimbursement Agreement No. XXXXXX. (Include what phase of the project and its completion %, or if final).

Please forward your payment to:

Pennsylvania Department of Transportation
Office of the Comptroller Operations
AR PENNDOT – NON-APRAS
P.O. Box 15758
Harrisburg, PA 17105

If you have any questions, please contact (Project Manager, Title), at xxx-xxx-xxxx.

Sincerely,

District Executive
Engineering District X-0

Enclosures
bcc:

PENNSYLVANIA DEPARTMENT OF TRANSPORTATION

INVOICE

DEPARTMENT AGREEMENT No.:	S.R./L.R./W.O.No.:	ORGANIZATION:
PAYOR AND ADDRESS:	BILLING ORGANIZATION: **Pennsylvania Department of Transportation**	BILLING No.: FINAL BILLING? ☐ YES ☐ NO INVOICE DATE:

ITEM No.	ITEM AND DESCRIPTION	AMOUNT
THIS INVOICE IS PAYABLE WITHIN 30 DAYS FROM INVOICE DATE.		TOTAL:

PAY THIS AMOUNT

PAYABLE BY CHECK OR MONEY ORDER TO:
PA DEPT OF TRANSPORTATION

NOTE: PLEASE INDICATE THE DEPARTMENT AGREEMENT No. **AND THIS INVOICE No. ON YOUR CHECK OR MONEY ORDER.**

MAIL PAYMENT TO:
PA DEPT OF TRANSPORTATION
OFFICE OF THE COMPTROLLER-OPERATIONS
AR PENNDOT – NON-APRAS
PO BOX 15758
HARRISBURG, PA 17105

DIRECT TELEPHONE INQUIRIES TO:

(xxx) xxx-xxxx

X_____

SIGNATURE OF APPROVING AUTHORITY TITLE DATE

C-87 (12-84)

pennsylvania
DEPARTMENT OF TRANSPORTATION

RECEIVABLE DOCUMENT FORM

DOC.	SUBM. ORG.	RECEIVABLE NO.	ADJ. NO. 00

RECEIVABLE HEADER 1

LINE ITEM COUNT _____

TOTAL DOC. AMOUNT _____ _____

TRANSACTION DATE _____ / _____ / _____

ACTION _____

RECEIVABLE CODE _____

SHORT REVENUE CODE _____

PAYMENT AGREEMENT IND. _____

PAYMENT AGREEMENT DATE _____

AGREEMENT AMOUNT _____

PAYMENT DUE DATE _____ / _____ / _____

RECEIVABLE HEADER 2

DEBTOR NAME _____

ADDRESS-1 _____

ADDRESS-2 _____

CITY/STATE/ZIP _____

ACCIDENT DATE _____ / _____ / _____

COUNTY CODE _____

ACCIDENT INFO _____

_____

_____

_____

AGENCY REFERRED _____

REFERRAL BASIS _____

REFERRAL DATE _____

RESOLUTION DATE _____

ACCOUNTING LINE ITEM

LINE ITEM NO.	_____	_____	_____	_____
ADJ. LINE NO.				
SYS	_____	_____	_____	_____
LR	_____	_____	_____	_____
SP	_____	_____	_____	_____
PH	_____	_____	_____	_____
SECT.	_____	_____	_____	_____
ORGANIZATION	_____	_____	_____	_____
REPORTING UNIT	_____	_____	_____	_____
PROGRAM	_____	_____	_____	_____
MAJ. OBJECT	_____	_____	_____	_____
AMOUNT	_____ _____	_____ _____	_____ _____	_____ _____

Appendix J
Sample Ordinance for PennDOT Performing Pre-Construction

WHEREAS, the [municipality] and the Commonwealth of Pennsylvania, Department of Transportation, have coordinated through appropriate officials a [description] project ("Project") in [municipality]; and

WHEREAS, by Resolution___, adopted [date], [municipal governing body] authorized [name/title of municipal officer], to execute for and on behalf of the [municipality] an agreement for the Commonwealth's performance of the Project; and

WHEREAS, Agreement No. ___ for the bridge project was fully effective on [date]; and

WHEREAS, the Secretary of Transportation, acting for and on behalf of the Governor as well as himself, wishes to proceed in a prompt manner with the acquisition of all necessary right-of-way for the bridge project.

NOW WHEREFORE, pursuant to Sections 2305 and 2307 of the General Local Government Code, 53 Pa.C.S. §§2305, 2307, and Paragraph __of Agreement No. ____, the [municipality] hereby enacts this date the following Ordinance:

SECTION ONE. Delegation of Authority.

[Municipality] hereby delegates to the Secretary of Transportation its authority to acquire the right-of-way necessary for the bridge project described and enumerated in Agreement No. ___ , effective [date], said Agreement containing all applicable Project terms and conditions incorporated by reference herein as if fully set forth.

SECTION TWO. Duration.

This delegation shall continue until all Project terms and conditions of Agreement No. ___ shall be fully satisfied or, at the election of the parties as set forth therein, the same shall be otherwise terminated.

SECTION THREE. Purpose and Scope of Delegation.

The Secretary of Transportation shall have the authority to acquire the right-of-way necessary for the Project described and enumerated in Agreement No. ___, effective [date].

SECTION FOUR. Financing.

One hundred percent of right-of-way acquisition costs, along with all other costs under Agreement No. ___, is being funded with [list source of local, state and/or federal funding].

SECTION FIVE. Organizational Structure.

All pre-construction phases of the project shall be managed, directed and performed by the Commonwealth of Pennsylvania, Department of Transportation.

SECTION SIX. Property.

The Secretary of Transportation shall acquire property pursuant to all applicable policies and procedures as necessary for the Project as authorized by Section 2003(e) of the Administrative Code, 71 P.S. §513(e), for all transportation purposes which shall include, and not be limited to, acquisitions for local roads and streets.

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Appendix K
Firm Identification and Qualifications Form

Request Form for Firms Who Do Not Have PennDOT ECMS Experience to Utilize the Reduced PennDOT Review Process for Local Projects
Firm Identification and Qualifications

Fill in the following information as applicable. If not applicable insert "n/a". Attach additional pages as necessary.

Contract Number: _____ Project Description:_____

District:_____ County:_____ SR:_____ Section:_____

Sponsor:_____

	For Department Use Only
Lead Design Engineer _____ Design Activity(ies) _____ Previous Applicable Experience _____ Lead Design Project Manager (Attach Resume) _____	☐ District Approval ☐ District Disallowance (Attach Justification)
Quality Control Reviewer: _____ Quality Control (QC) Manager (Attach Resume) _____ Alternate QC Manager (Attach Resume) _____	☐ District Approval ☐ District Disallowance (Attach Justification)
(If applicable) Quality Assurance Reviewer: _____ Quality Assurance (QA) Manager (Attach Resume) _____ Alternate QA Manager (Attach Resume) _____	☐ District Approval ☐ District Disallowance (Attach Justification)

Additional Information to Consider:

_____

I certify that all information included on this form is correct to the best of my knowledge.	For Department Use Only
Consultant Authorized Representative Signature Date	PennDOT Assistant District Executive
Consultant Authorized Representative Signature Date Fax this form to the sponsor for which you would like to perform the work. The sponsor should then fax the form to their identified PennDOT Project Manager for processing.	Date Notify sponsor within 8 calendar days indicating Approval or Disallowance.

Appendix L
Consultant Approval Checklist

Consultant Approval Checklist

☐ Proof of approved advertisement

☐ Municipality request for approval of consultant – including Consultant's qualifications and documentation of Municipal Selection Process utilized

☐ Ranking of consultants with documentation supporting ranking

☐ Selection Criteria addressed

☐ Items concerning disqualification of a SOI (as discussed in Publication 93, Section 2.4.1)

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Appendix M
Estimated Progress Report Template

ESTIMATED PROGRESS REPORT - COST PLUS FIXED FEE

MPMS #

AGREEMENT NO.
PART NO. -
DISTRICT NO. COUNTY
S.R. Local SECTION: BR
ESTIMATE NO.
PERIOD
NTP Date:

STATE PROJECT NO. **ALLOT.**

FEDERAL PROJECT NO.

EXPIRATION DATE - THIS PART

AGREEMENT AMOUNTS	AMOUNTS EARNED		AMOUNTS DUE
1. DIRECT/INDIRECT PAYROLL	DIRECT/INDIRECT TO DATE	$0.00	
	DIRECT/INDIRECT PREVIOUS	$0.00	
(75% OF MAXIMUM = $0.00)	PAYROLL BILLED THIS ESTIMATE	$0.00	
	OVERHEAD (0.00%)	$0.00	
	AMOUNT DUE		$0.00
2. DIRECT COSTS OTHER THAN PAYROLL	TO DATE	$0.00	
	PREVIOUS	$0.00	
(75% OF MAXIMUM = $0.00)	AMOUNT DUE		$0.00
3. DIRECT COST BY OTHERS (see attached invoices)	TO DATE	$0.00	
	PREVIOUS	$0.00	
(75% OF MAXIMUM = $0.00)	AMOUNT DUE		$0.00
4. FIXED FEE	FIXED FEE EARNED TO DATE 0% OF $0.00	$0.00	
	PREVIOUS	$0.00	
	AMOUNT DUE		$0.00
TOTAL THIS PART $0.00	MAXIMUM AGREEMENT AMOUNT		TOTAL DUE THIS INVOICE $0.00
	TOTAL INVOICES TO DATE $0.00		

FEDERAL ID NO.

I certify that the above invoice represents services rendered on this project and is true and correct, and all expenditures were incurred under a fully executed contract.

CONSULTANT'S AUTHORIZED REPRESENTATIVE DATE

OWNER'S TECHNICALLY RESPONSIBLE PERSON DATE

Sheet 1 of 4

ESTIMATED PROGRESS REPORT - COST PLUS FIXED FEE AGREEMENT

Agreement No. _____ **MPMS #**
AGREEMENT NO. _____
PART NO. - **to**
DISTRICT NO. COUNTY

TOTAL FIXED FEE =

ESTIMATE NO.
PERIOD

TASK:	WORK DESCRIPTION	% OF TOTAL FIXED FEE	% ITEM COMPLETE LAST REPORT	% ITEM COMPLETE TO DATE	% OF TOTAL FIXED FEE TO DATE
1	Field Surveys	0.00%	0.00%	0.00%	0.00%
2	Environmental Studies	0.00%	0.00%	0.00%	0.00%
3	Utilities	0.00%	0.00%	0.00%	0.00%
4	H&V Geomtery	0.00%	0.00%	0.00%	0.00%
5	Safety Review	0.00%	0.00%	0.00%	0.00%
6	Line Grade and Typical Section	0.00%	0.00%	0.00%	0.00%
7	Drainage Design	0.00%	0.00%	0.00%	0.00%
8	Design Field View	0.00%	0.00%	0.00%	0.00%
9	E&SC Plan	0.00%	0.00%	0.00%	0.00%
10	H&H Report and DEP Permit	0.00%	0.00%	0.00%	0.00%
11	TS&L Submission	0.00%	0.00%	0.00%	0.00%
12	Preliminary ROW	0.00%	0.00%	0.00%	0.00%
13	Borings and Fdn Approval	0.00%	0.00%	0.00%	0.00%
14	Public Involvement	0.00%	0.00%	0.00%	0.00%
15	Project Management	0.00%	0.00%	0.00%	0.00%
		0.00%	0.00%	0.00%	0.00%
		0.00%	0.00%	0.00%	0.00%
		0.00%	N/A	N/A	0.00%

Sheet 2 of 4

ESTIMATED PROGRESS REPORT - COST PLUS FIXED FEE AGREEMENT

Agreement No. _____

AGREEMENT NO. _____ **PERIOD:** _____ **TO** _____

PART NO. -

DISTRICT NO. COUNTY

EMPLOYEE	POSITION TITLE	DESCRIPTION OF WORK ITEMS																		TOTAL HOURS - THIS PERIOD	ACTUAL RATE PER HOUR	DATE RATE APPROVED	PAYROLL THIS PERIOD
		Field Surveys	Environmental Studies	Utilities	H&V Geomtery	Safety Review	Line Grade and Typical Section	Drainage Design	Design Field View	E&SC Plan	H&H Report and DEP Permit	TS&L Submission	Prel RoW Plan	Borings and Fdn Approval	Public Involvement	Project Management							
																				0		NA	$0.00
																				0		NA	$0.00
																				0		NA	$0.00
																				0		NA	$0.00
																				0		NA	$0.00
																				0		NA	$0.00
																				0		NA	$0.00
																				0		NA	$0.00
																				0		NA	$0.00
																				0		NA	$0.00
																				0		NA	$0.00
																				0		NA	$0.00
																				0		NA	$0.00
TOTAL HOURS THIS ESTIMATE		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0		TOTAL PAYROLL THIS PERIOD	$0.00
TOTAL HOURS PREVIOUS ESTIMATE		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0			
TOTAL HOURS TO DATE		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0			
CONTRACT TOTAL HOURS		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
% HOURS USED TO DATE		#####	####	#####	####	####	####			#####	####	####	####	####	####	####				#####			

ESTIMATED PROGRESS REPORT - COST PLUS FIXED FEE AGREEMENT

Agreement No. _____

Part No. _____

AGREEMENT NO. _____ **to** _____

PART NO. -

DISTRICT NO. COUNTY

DIRECT COSTS OTHER THAN PAYROLL	ESTIMATED COSTS	BILLED TO DATE	BILLED THIS ESTIMATE
ESTIMATE NO.			
PERIOD	$0.00	$0.00	$0.00
NTP Date:	$0.00	$0.00	$0.00
Prints	$0.00	$0.00	$0.00
Half-size prints	$0.00	$0.00	$0.00
Borings	$0.00	$0.00	$0.00
GPS Rental for survey controlds	$0.00	$0.00	$0.00
TOTALS	$0.00	$0.00	$0.00

DIRECT COSTS BY OTHERS	ESTIMATED COSTS	BILLED TO DATE	BILLED THIS ESTIMATE
	$0.00	$0.00	$0.00
	$0.00	$0.00	$0.00
	$0.00	$0.00	$0.00
	$0.00	$0.00	$0.00
TOTALS	$0.00	$0.00	$0.00

Sheet 4 of 4

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Appendix N
Organization Location Codes Matrix

Name of Organization	Location Code
District 1-0 Office	78DIST01
District 2-0 Office	78DIST02
District 3-0 Office	78DIST03
District 4-0 Office	78DIST04
District 5-0 Office	78DIST05
District 6-0 Office	78DIST06
District 8-0 Office	78DIST08
District 9-0 Office	78DIST09
District 10-0 Office	78DIST10
District 11-0 Office	78DIST11
District 12-0 Office	78DIST12

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APPENDIX O

SAMPLE SCOPING DOCUMENT

Scoping General Project Information

Scoping Package Number:
Associated Screening LPNs:
An LPN log-in is required to view screening data.

Attachments in LPN Screening Scoping authors should evaluate LPN files for inclusion in the Project File.
None.

Project Location

County: **District:**

Municipality:

Project Limits

SR/Section: **Seg/Offset Start:** **Seg/Offset End:** **Total Length:**

Project Details

Project Name:

Project Description

Include narrative to describe the general project scope of work.
Attach Location Map(s) and Design Plan (only overview and sheets showing limits of work).

Project Setting and Distinct Project Features

Provide narrative to adequately describe the project setting (terrain, locale, land use, presence of bicycle/pedestrian or other unique facilities, etc.). Any additional information not otherwise covered by this form that is necessary to clearly understand project circumstances should also be included in this section. Narrative should be appropriate for the complexity of the project and project circumstances with the length and content varying accordingly.

Why is the project needed (project needs)?

Provide project needs that are tangible and fact-based, framed in terms of problems and deficiencies, not solutions.

What is the project purpose?

Is there a crash history? ○ Yes ○ No **If yes, explain.**

List reasonable project alternatives (if applicable).

List reasonable options within the alternatives (if applicable).

How many right-of-way parcels or portions of parcels may need to be acquired?

Describe extent and locations of acquisitions.

Describe any involvement with utilities.

Will there be involvement with railroads (active or inactive) including rail lines, crossings, bridges or signals? ○ Yes ○ No **If yes, explain.**

Will there be involvement with the PA Turnpike (e.g., bridge; paving over or under; paving in vicinity of toll plazas; traffic control planning which crosses or intersects; etc.)? ○ Yes ○ No **If yes, explain.**

Funding and Cost Estimates

Funding Percentages	**Federal %**	**State %**	**Local %**	**Other %**

Estimated Costs	**PE $**	**FD $**	**ROW $**	**UTL $**	**CON $**

Are there changes to the anticipated funding or cost estimates compared to the programmed amounts indicated in MPMS? ○ Yes ○ No **If yes, explain.**

Anticipated Schedule

Anticipated Construction Schedule	**Let Date:**	**NTP Date:**	**Completion:**

Identify issues that could affect the project schedule.

Scoping Design Criteria

Scoping Package Number:
Associated Screening LPNs:
An LPN log-in is required to view screening data.

Design Criteria

Roadway Description:

Functional Classification: ☐ Urban ☐ Rural

Roadway Typology:

Proposed Design Criteria:

Current ADT:	**Current Yr:**	**Design Yr Build ADT:**	**Design Yr:**
DHV:	**Truck %:**	**D (Directional Dist) %:**	
Design Speed:	**Posted Speed:**		
Pavement Width:	**Shoulder Width:**	**Clear Zone:**	**Median Width:**

Are design exceptions anticipated? ◯ Yes ◯ No ◯ TBD **If yes or TBD, explain.**

What is the topography? ◯ Level ◯ Rolling ◯ Mountainous

Describe any identified pedestrian and bicycle concerns/needs (summarize issues from Bike/Ped checklist, if completed).

Describe any ADA compliance issues.

Describe any transit issues.

Are there additional design issues that need to be resolved (e.g., bridge is on a curve, or guide rails should be set back, shoulders are in poor condition)?

Additional Information

Remarks, Footnotes, Supplemental Data

Scoping Traffic Control Measures

Scoping Package Number:
Associated Screening LPNs:
An LPN log-in is required to view screening data.

What traffic control measures are to be considered?

- ☐ Temporary Bridge(s)
- ☐ Temporary Roadway
- ☐ Detour
- ☐ Ramp Closure
- ☐ Other (specify)
- ☐ None

Other Description:

Traffic Control Measures

If any of the above traffic control measures will be implemented, indicate the following conditions.

Provisions for access by local traffic will be made and so posted.	◯ True ◯ False
Through-traffic dependent business will not be adversely affected.	◯ True ◯ False
There will be no interference with any local special event or festival.	◯ True ◯ False
There will be no substantial environmental consequences associated with the traffic control measure(s).	◯ True ◯ False
There is no substantial controversy associated with the traffic control measure(s).	◯ True ◯ False
There are no substantial impacts to bicycle or pedestrian routes.	◯ True ◯ False
An alternate, ADA compliant bicycle/pedestrian access route is available.	◯ True ◯ False ◯ N/A
There are no substantial impacts to PA Turnpike routes, operations or toll facilities, nor does the proposed traffic control cross or intersect with the PA Turnpike.	◯ True ◯ False

If the answer to any of the above questions was "False", please explain.

Detour

Approximate length in miles:

Approximate number of days in effect:

Approximate length in minutes: ☐ Detour Map

Detours should be clearly shown on the map and described, including provisions for pedestrians, bicycles, disabled and the elderly.

Detour Description

Make the selection that best describes the planned detour.

- ◯ Detour will use local roads with no improvements
- ◯ Detour will involve improvements to local roads with no resulting impacts on safety or the environment

○ Detour will involve improvements to local roads and will impact safety and/or the environment
○ Detour will use only state-owned roads

Are there concerns related to traffic control measures (e.g., emergency services, transit or school bus routes, permit loads, etc.)? ○ Yes ○ No **If yes, explain.**

Additional Information

Remarks, Footnotes, Supplemental Data

Scoping Roadway

Scoping Package Number:
Associated Screening LPNs:
An LPN log-in is required to view screening data.

Roadway Information

☐ No roadways included with this project

Roadway Name:

	Existing		Proposed
# of Lanes:		**# of Lanes:**	
Pavement Width:		**Pavement Width:**	
Shoulder Width:		**Shoulder Width:**	
Median Width:		**Median Width:**	
Sidewalk Width:		**Sidewalk Width:**	
Bicycle Lane:		**Bicycle Lane:**	
Clear Zone:		**Clear Zone:**	

Remarks:

Additional Information

Remarks, Footnotes, Supplemental Data

Scoping Structure

Scoping Package Number:
Associated Screening LPNs:
An LPN log-in is required to view screening data.

Structure Information

☐ No structures included with this project

BMS Number: **BRKEY:**

	Existing		Proposed
Type:		**Type:**	
Weight Restriction:		**Weight Restriction:**	
Height Restriction Left:		**Height Restriction Left:**	
Height Restriction Right:		**Height Restriction Right:**	
Curb to Curb Width:		**Curb to Curb Width:**	
Shoulder Width Left:		**Shoulder Width Left:**	
Shoulder Width Right:		**Shoulder Width Right:**	
Under Clearance:		**Under Clearance:**	
Lateral Clearance:		**Lateral Clearance:**	
Sufficiency Rating:		**Sufficiency Rating:**	
Length:		**Length:**	
NBI Rating:		**NBI Rating:**	

Remarks:

Additional Information

Remarks, Footnotes, Supplemental Data

Scoping Environmental

Scoping Package Number:
Associated Screening LPNs:
An LPN log-in is required to view screening data.

Answer yes or no to indicate presence of a resource.
If present, provide details on the temporary and/or permanent potential impacts and avoidance/mitigation measures.

If answer is TBD, identify the steps that will be taken to more definitively answer yes or no.

Resource Analysis

Wild or Stocked Trout Streams	◯ Yes ◯ No ◯ TBD
High Quality/EV Streams	◯ Yes ◯ No ◯ TBD
Federal and/or State Wild and Scenic Rivers and Streams	◯ Yes ◯ No ◯ TBD
Groundwater Resources	◯ Yes ◯ No ◯ TBD
Wetlands	◯ Yes ◯ No ◯ TBD
Federally proposed, candidate or listed; or State listed Threatened and Endangered Species	◯ Yes ◯ No ◯ TBD
Resources protected under Section 4(f) / Section 2002	◯ Yes ◯ No ◯ TBD
Properties afforded protection under Section 6(f) of the LWCF Act, Project 70 and Project 500	◯ Yes ◯ No ◯ TBD
Water Trails	◯ Yes ◯ No ◯ TBD
Navigable Watercourses which require U.S. Coast Guard Coordination and/or an Aids to Navigation Plan	◯ Yes ◯ No ◯ TBD
Other Surface Waters	◯ Yes ◯ No ◯ TBD
Hazardous, Residual or Municipal Waste Sites	◯ Yes ◯ No ◯ TBD
Regulated Floodplain within or beyond the project limits	◯ Yes ◯ No ◯ TBD

Agricultural Resources ○ Yes ○ No ○ TBD

Properties in the vicinity of the project purchased as hazard mitigation lands under the Stafford Act ○ Yes ○ No ○ TBD

Geologic Resources including DCNR Heritage Geology Sites ○ Yes ○ No ○ TBD

National Natural Landmarks ○ Yes ○ No ○ TBD

Federal and/or State Wilderness, Natural or Wild Areas ○ Yes ○ No ○ TBD

Soil Erosion and Sedimentation Concerns ○ Yes ○ No ○ TBD

Community Facilites and Services ○ Yes ○ No ○ TBD

Unique Cultures and Modes of Transportation (e.g., Plain Sect peoples) ○ Yes ○ No ○ TBD

Is an Environmental Justice population, as identified in Executive Order 12898, present? ○ Yes ○ No ○ TBD

Is there a potential for disproportionately high and adverse effects to an Environmental Justice population? ○ Yes ○ No ○ TBD

Coastal Zones ○ Yes ○ No ○ TBD

Vegetation ○ Yes ○ No ○ TBD

Historic Properties or Archaeological Resources ○ Yes ○ No ○ TBD

☐ **This project likely meets the requirements of Appendix C of the Section 106 Delegation Programmatic Agreement**

Exempt Project Activity(s):

Exemption Comments:

Likely 106 Process:

☐ Findings of No Effect or No Adverse Effect
☐ Finding of Consulted No Adverse Effect or Adverse Effect

***Check if* Additional Studies Needed:**

☐ Archaeology
☐ Above Ground Historic Structures

List known historic resources in APE:

List known archaeologic resources in APE:

Are there any air quality concerns? ○ Yes ○ No **If yes, explain.**

Are there noise concerns? ○ Yes ○ No **If yes, explain.**

What environmental studies are anticipated?

Additional Information

Remarks, Footnotes, Supplemental Data

Scoping Consistency Determinations

Scoping Package Number:
Associated Screening LPNs:
An LPN log-in is required to view screening data.

Consistency Determinations

DEP Coastal Zone Management Plan:	○ Not Applicable	○ Consistent	○ Not Consistent	○ TBD
DCNR/NPS Wild and Scenic River Management Plan:	○ Not Applicable	○ Consistent	○ Not Consistent	○ TBD
FEMA Flood Map:	○ Not Applicable	○ Consistent	○ Not Consistent	○ TBD

Other

Additional Information

Remarks, Footnotes, Supplemental Data

Scoping Public and Agency Involvement

Scoping Package Number:
Associated Screening LPNs:
An LPN log-in is required to view screening data.

What public involvement is anticipated?

What agency involvement is anticipated?

Is there public controversy on environmental grounds?

Additional Information

Remarks, Footnotes, Supplemental Data

Scoping Permits

Scoping Package Number:
Associated Screening LPNs:
An LPN log-in is required to view screening data.

What permits are anticipated? **Check all permits required for permanent and temporary actions.**

☐ **No Permits Required**

☐ **Army Corps of Engineers Section 404 and/or Section 10 Permit**
☐ Individual ☐ Nationwide ☐ PASPGP

☐ **DEP Waterway Encroachment (105) Permit**
☐ Standard ☐ Small Project ☐ General ☐ Other

☐ **DEP 401 Water Quality Certification**

☐ **Coast Guard Permit**

☐ **NPDES Permit**
☐ General ☐ Individual ☐ Exempt

☐ **Other Permits**

Additional Information

Remarks, Footnotes, Supplemental Data

Scoping Logistics & Results

Scoping Package Number:
Associated Screening LPNs:
An LPN log-in is required to view screening data.

Date of project scoping?

Scoping Field View Attendees

Were Cultural Resource Professionals (CRPs) needed for E&E SFV? ◯ Yes ◯ No **If no, explain.**

CRP Scoping Field View Date:

CRP Architectural Historian in Attendance:

CRP Archaeologist in Attendance:

Was a Project Early Notification / Scoping Results Form Completed? ◯ Yes ◯ No

Is there enough information at this time to determine the presence of resources and effects? ◯ Yes ◯ No

---

What is the complexity level of the project? ◯ Non-Complex (Minor) ◯ Moderately Complex ◯ Complex (Major)

Federal Funding: No **Federal Oversight:** N/A

Design Field View Submission to BPD is Required? ◯ Yes ◯ No

Does the project meet the requirements for the BRPA? ◯ Yes ◯ No

If yes, identify Part, Stipulation # and Activity Name.

Part & Stipulation # **Activity Name**

What is the anticipated NEPA Class of Action / Environmental Level?

◯ Level 1a - Environmental Documentation (ED)
◯ Level 1b - Environmental Documentation (ED)
◯ Level 2 - Environmental Documentation (ED)
◯ Environmental Evaluation Report (EER)

Enter minutes, discussion and/or decisions made during scoping not accounted for elsewhere on this form.

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APPENDIX P

PS&E SUBMISSION CERTIFICATION LIST FOR SIMPLIFIED NON-FEDERAL BRIDGE PROJECT REIMBURSEMENT AGREEMENT PROCESS

X or N/A	PS&E Submission Certification List for Simplified Non-Federal Bridge Project Reimbursement Agreement Process
	Title Sheets signed & stamped
	Title Sheets on "Also Plans" signed & stamped
	Plan Sheets stamped
	Plan Sheets of "Also Plans" stamped
	First sheet of Cross Sections stamped
	Cost Driver Analysis Form
	Right-of-Way Clearance
	Utility Clearance - UCAS & Form D-419
	Scoping Field View Memorandum
	Environmental Clearance
	Trainees Justifications (need letter from Construction Unit)
	PA DEP Water Obstruction & Encroachment Permit (105)
	PA DEP Erosion & Sedimentation Control Permit
	US ACOE Section 404 and/or Section 10 Permit
	CPM Construction Schedule
	Reimbursement Agreements
	PUC Order
	Railroad Certification or Form 4279A
	Proprietary items – need prior approval
	Construction Inspection Agreement – Proof of Inspection
	Inspection Staffing Letter
	Equipment Package - Inspection Facilities required
	Environmental Mitigation Measures
	ID-21 Construction
	Pre-Bid Estimate
	Structural Adequacy Approval
	Special Provisions checked with plan
	9000 Item number special provisions cross-checked with plan
	Steel Escalation Option Form
	S.U.E. Utility Impact Rating Form
	Wage Rates
	DBE Goal, if required
	E.E.O. Covered Area
	Local Authority Contract
	Public Works Employment Verification Specification and Form
	DM3 Plan Review Report

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APPENDIX Q
CONSTRUCTION PLAN CHECKLIST

Plan checked by: _____ Title: _____ Date: _/__/__
Design Manual Part 3, Chapter 2

I. TITLE SHEET
- ___A. Check headings for <u>all</u> sheets for: route, section, township, borough, and sheet numbers.
- ___B. Check limit of work and start and stop stations against detail sheets. These should also be the same as on tabulation of construction lengths And/or right-or-way lengths.
- ___C. Check the length of the project.
- ___D. Check the typical against design designation.
- ___E. Check scale of plan and profile.
- ___F. Check project number.
- ___G. Public Utility Commission note, if applicable.
- ___H. ECMS and MPMS numbers.
- ___I. All sheets have initials of draftsman and file name on them.
- ___J. Highway classification block.

II. INDEX SHEET
- ___A. Limit of work and segment offset stations.
- ___B. Location of project on state map.
- ___C. Scale of index map.
- ___D. Check if all federal and state roads; county, township, and borough lines are shown.
- ___E. Check property lines and owners against detail sheets.
- ___F. Show streams and railroads.
- ___G. Show distance to nearest towns on all state highways.
- ___H. North Arrow.
- ___I. Show sheet numbers of plan and profile sheets.
- ___J. Show equalities and degree of curves.
- ___K. Show plan sheet breaks using symbol.
- ___L. Check LOW's or equalities at county breaks, particularly at river crossings.

III. GENERAL NOTES AND TYPICAL SECTIONS SHEETS
- ___A. Check typical section for widths, shoulders, slopes, and pavement materials. Check against pavement design. Text: *existing*, proposed.
- ___B. Location map: show project, limit of authorization, north arrow, detour (S.R. and local roads labeled), legend and scale.
- ___C. Check overall length and construction length.
- ___D. Check grading section quantities against for 453-A.
- ___E. List all public utilities and addresses.
- ___F. List equations, if involved.

___G. General notes.
- ___1. Legal right-of-way.
- ___2. Note of reservation for drives, knock out block (if applicable).
- ___3. Note for removal of buildings.
- ___4. Specifications note.
- ___5. Show list of required standards.

___H. Check sketches and details.
___I. Coordinate tables.

IV. TABULATION SHEETS

___A. Check headings of all tabulations.
___B. Check to see if summary sheets reflect correct items and totals (summary vs. tabs).
___C. Check if equalities were considered.
___D. Check if proper type of under drain and guide rail is shown.
___E. Check summary tabulations against individual tabulations.
___F. Check proper sketches and items.
___G. Correct RC, BC, and TC standards and dates.
___H. Quantities in earthwork block match totals on summary sheet.
___I. Check for special provisions note and symbols.
___J. Check quantities of R.P.M.'s and pavement markings sign.

V. PLAN SHEETS

___A. Check all curve data, including superelevation and widening note.
___B. Show construction curve data, if required.
___C. Check all bearings, reference circles, and north arrow.
___D. Check bench marks.
___E. Check right-of-way dimensions, lines, radii, and overlap from sheet to sheet.
___F. Check nomenclature and abbreviations.
___G. Check drawings to see that drives, shoulder lines, pavement lines, radii, drainage, and right-of-way lines are properly drawn and labeled.
___H. Check if utility lines and poles are properly labeled and show proposed location.
___I. Check if baselines or center are tied in by station and angle for all streams, road approaches, and railroad crossings.
___J. Check to see if survey and construction baseline/centerline are properly labeled.
___K. Show location of all existing pavement markings (stop bars, arrows, railroad crossings) and the location of all recessed or raised pavement lenses.
___L. Profile:
- ___1. Check original ground for obvious errors.
- ___2. Check if proper datum elevation is shown.
- ___3. Check grade line, vertical curves, and percent grade.
- ___4. Pipes shown on profile with flow elevation.

___5. Bridges shown on profile.
___6. Line, topo, and profile book numbers shown properly.
___7. Construction line elevation and station shown.
___8. Equations shown.
___9. Profile shown for side roads and streams, if required.

___M. Check if equations are shown on plan.
___N. Check plan for cross references, profiles, approaches, details, ramp, etc.
___O. Check if legal right-of-way is shown and dimensioned.
___P. Check topo: fields, woods, drives, approaches, width, and type of surface is shown on drawings.
___Q. Show stop work on drives and approaches, if required.
___R. Drainage area, waterway opening requirements, etc., shown for structure.
___S. Typical section for channels.
___T. Roadside development.
___U. Boxes, arches, and bridges shown on plan.
___V. Check profiles of connections, drives, etc., are shown on sheet.
___W. General check (items commonly missed):

___1. Barricades provided.
___2. Old pipe and pavement removal.
___3. Pipe trench replacement.
___4. Pipes, sizes, type, gage, and flow arrows shown.
___5. Type of backfill on under drain.
___6. Inlet and outlet ditches.
___7. Widened cut.
___8. New ditches and cut benches shown on plan view.
___9. Widened curve quantities.
___10. Subgrade.
___11. Rock below subgrade removal.
___12. Old bridge removal.
___13. “C” notes on buildings.
___14. Wells and springs.
___15. Does design agree with P.U.C. order and soil report.
___16. County and township lines shown stationed.
___17. Length of drives shown.
___18. Sidewalk/curb cuts.
___19. Bench quantities.

___X. Survey book numbers on plan and profiles.

VI. CROSS SECTIONS

___A. Grades, superelevation, and widening notes.
___B. Construction stations, center, and offsets.
___C. Draw templates with solid line for earthwork and dashed line for stabilized shoulders and subbase.
___D. Cross sections arranged and numbered properly.
___E. Drainage and notes heavy enough to print.
___F. Rock embankment shown.

___G. Fill benches provided, where needed.
___H. Slope rounding and top of normal slope shown.
___I. Slope ratio shown where it varied from normal.
___J. Stop and start earthwork at bridges.
___K. Stop and start work at beginning and end of project.
___L. If data was taken from survey book, show the book number in blank provided.
___M. Initial cross sections sheet.
___N. Correctly bound

APPENDIX R
SAMPLE CONSTRUCTION CONTRACT

Contract

Contract: #####

Contractor Name, Inc. FID #

City

000-000-0000 (phone)

Email Address.com

Prime Business Partner

County

SR ____, Section ____

Location

XXX-XXX-XXXX

Federal Project

X-XXXXX-X-X-XXX-XXXX-XXX

State Project

Month XX, 20XX

Bid Opening

THIS AGREEMENT, Made this ___ day of (month)_____ A.D. (year)_____, between the _____, hereinafter called the Sponsor and _____., his, hers, its or their executors, administrators, successors, or assigns, hereinafter called the Contractor.

WITNESSETH:

1. That the Contractor, for and in consideration of the payment or payments herein specified and agreed to by the Sponsor, hereby covenants and agrees to furnish and deliver all the materials and to do and perform all the work and labor in the improvement of a certain section of highway at the unit prices bid by said Contractor for the respective estimated quantities aggregating approximately the sum of *$*_____ and such other items as are mentioned in the Contractor's original proposal, which proposal and prices named, together with **Publication 408 - Specifications** (as specified

in the proposal) (except that the Sponsor shall be substituted for "Engineer", "Secretary", "Department" and "State Treasurer" name therein), are made a part of this contract and accepted as such, also the drawings of the project, prepared and/or approved by the Sponsor and/or the Pennsylvania Department of Transportation, which drawings are also agreed by each party as being a part hereof.

2. The location and description being situated as follows:
Insert project description as listed on proposal here

3. The Contractor further covenants and agrees that all work shall be performed in the best and most workmanlike manner. He also agrees that all materials furnished and labor performed shall be in strict and complete conformity, in every respect, with all parts of this contract and shall be subject to the inspection and acceptance of authorized representatives of the Sponsor and/or the Pennsylvania Department of Transportation. In the event that any portion of work (including materials supplied pursuant thereto) performed by the Contractor is rejected by the authorized representative as defective, unsuitable, or unacceptable, the Contractor agrees to remove and replace all such rejected portions of work in conformance with this contract and to the satisfaction of and at no expense to the Sponsor and/or the Pennsylvania Department of Transportation. The Contractor further covenants that prompt payment will be made in full for all labor and materials used in the performance of work on this project.

4. The Contractor covenants and agrees that all work (including, but not limited to, all labor performed and all materials supplied) on this project shall be performed and completed to the satisfaction of the Sponsor and/or the Pennsylvania Department of Transportation on or before the expiration date of _____. If, for any reason, except as provided in the contract, the Contractor fails to complete all work on this project to the satisfaction of the Engineer of the Sponsor within the aforementioned time allowed, the Sponsor shall deduct from any sums due or which may become due the Contractor the amount indicated in the Specifications for each calendar day used in excess of the aforementioned number of days allowed, or, in case a completion date is fixed, for each calendar day elapsing between that completion date and the actual date of completion. If no sums are due the Contractor, the Contractor agrees to remit to the Sponsor the aforementioned sum for each day used in excess of the time allowed for completion of the contract. The amounts deducted or remitted under this paragraph are liquidated damages and not penalties.

5. The Contractor further covenants and warrants that the Contractor has had sufficient time to examine and has examined the site of the contract work to ascertain for itself those conditions such as may be determined by inspection, investigation, and inquiry, including the location, accessibility, and general character of the site.

6. The Contractor further covenants that he has not relied upon any information provided by the Sponsor and/or the Pennsylvania Department of Transportation, including information contained in the Special Provisions, concerning the time within which publicly or privately-owned facilities below, at or above the ground are expected to be installed, removed, repaired, replaced, and/or relocated; that he has not relied upon any information provided by the Sponsor and/or the Pennsylvania Department of Transportation concerning the location or existence of all such facilities that might be below, at or above the ground; that he has contacted or will contact all owner of such facilities to verify the location and position of all such facilities and the time within which work on such facilities will be performed; and that he is aware delays might be incurred in the performance of work on this project as a result of work being performed or that will be performed on such facilities by their owners. It is understood further that, notwithstanding assistance of any kind and extent that might be provided by the Sponsor and/or the Pennsylvania Department of Transportation, the Contractor, in every instance, bears the ultimate responsibility of resolving all disputes of every kind with the owners of such facilities. The Contractor agrees to save and hold the Sponsor and/or the Pennsylvania Department of Transportation harmless from liability for all delays, interference and interruptions that might arise during the performance of work on this project as a result of work being or that will be performed on such publicly or privately-owned facilities.

7. The Contractor further covenants and warrants that he has read, is completely familiar with and understands thoroughly the Publication 408 Specifications (as specified in the proposal), including Section 100 the Special Provisions and/or Conditions; the Plans, and any other addenda or requirements, contained in the proposal governing the performance of work under this contract, whether attached hereto and made a part hereof, or incorporated herein by reference.

8. It is distinctly understood and agreed that the Contractor shall not do any work (including, but not limited to, the supply of labor and/or materials) not covered by the specifications and the contract, unless such work has been authorized in writing as provided in the Specifications. In no event shall the Contractor incur any liability by

reason of refusing to obey any verbal directions or instructions that he might be given to perform additional or extra work. Likewise, the Sponsor will not be liable for any work performed as additional or extra work, unless such work is required of the Contractor in writing as provided in the Specifications. All such work which might have been performed by the Contractor without such written order first being given shall be at the Contractor's risk, cost, and expense, and the Contractor hereby covenants and agrees that, without such written order, he shall make no claim for compensation for such unauthorized work.

9. It is further distinctly agreed that the Contractor shall not assign this contract, nor any part thereof, nor any right to any sums to be paid him hereunder, nor shall any part of the work to be done or material furnished under this contract be sublet, without the consent in writing of the Sponsor.

10. It is also agreed and understood that the acceptance of the final payment by the Contractor shall be considered as a release in full of all claims against the Sponsor and/or the Pennsylvania Department of Transportation arising out of, or by reason of, the work done and materials furnished under this contract.

11. The Contractor shall accept, insofar as the work covered by the contract is concerned, the provisions of the **Workmen's Compensation Act of 1915**, and any supplements or amendments thereto, and shall insure his liability there under or file with the Department of Transportation a certificate of exemption from insurance from the Bureau of Workers' Compensation of the Department of Labor and Industry.

12. In order to secure proper and complete compliance with the terms and provisions of this contract, the Contractor shall provide a bond in a sum equal to one hundred percent (100%) of the total contract price of the work to be done. The Contractor shall also secure an additional bond in the same amount for the prompt payment in full for all labor and materials supplied in performing work on this project. Both bonds are attached to and made a part of this contract.

13. The Contractor hereby further agrees to receive and the Sponsor agrees to pay the prices set forth in the bid items as full compensation for furnishing all the materials and labor which may be required in the prosecution and completion of all work to be done under this contract, and in all respects to complete the contract to the satisfaction of the Sponsor.

14. Contractor is undertaking the work to be performed under the terms of this agreement covenants and agrees to comply with the required contract provisions set forth in F.A.R.C.A., September 1975, issued by the United States Department of Transportation, Federal Highway Administration, and the Commonwealth Nondiscrimination Clause, and the Commonwealth Contractor Integrity Provisions which are made a part of this Agreement.

15. The Contractor certified in his, her, its or their bid submission (covering federal aid projects only) to the disclosure of lobbying activities and, if applicable, completed the disclosure form and by said certification understands that **Public Law 101121, Section 319.doc**, prohibits federal funds from being expended by recipient or any lower tier sub-recipients of a federal contract, grant, loan or cooperative agreement to pay any person for influencing or attempting to influence a federal agency or Congress in connection with the awarding of any federal contract, the making of any federal grant or loan, or the entering into of any cooperative agreement.

17. If federal funds are involved, the Contractor shall not discriminate on the basis of race, color, national origin or sex in the performance of this contract. Contractor shall carry out applicable requirements of **49 C.F.R. Part 26 - DATED OCTOBER 16, 2001** in the award and administration of United States Department of Transportation assisted contracts. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the Sponsor and/or the Pennsylvania Department of Transportation deems appropriate. Contractor must include this assurance in each subcontract that it signs with a subcontractor.

IN WITNESS WHEREOF, the parties have executed this contract pursuant to due and legal action authorizing the same to be done, the date first above written.

ATTEST: Sponsor

_____ _____

Signature Date Signature Date
Secretary for Secretary of Transportation

ATTEST: Company Name

_____ _____

Signature Date Signature Date

Title: _____ Title: _____

Instructions: Please sign where indicated. If corporation, sign by President or Vice President and attest by Secretary or Treasurer. Affix seal. If Partnership, sign by each partner and witness each partner. If individual, sign by proprietor and witness. All signatures are to be dated and titled.

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APPENDIX S

DO'S & DON'TS OF RIGHT-OF-WAY ACQUISITION

Do Not	Begin the right-of-way appraisal and acquisition phase until after environmental clearance has been granted, the final right-of-way plan has been approved, and authorization to acquire has been granted.
	Present an offer to purchase real property verbally. All offers must be presented in writing and based upon a written appraisal.
	Employ coercive action to achieve amicable settlement of real estate. The Uniform Act requires that every reasonable effort must be made to acquire property by negotiations.
	Present a written offer to purchase prior to obtaining approved real estate appraisals.
	Disregard the federal and state rules and regulations for acquisition and relocation, even if federal funds are used only in the construction phase.
	Allow the appraiser or review appraiser for the claim to conduct negotiations on the property if Estimated Just Compensation exceeds $10,000.
	Allow the agent or attorney who negotiated a settlement with an owner to deliver the payment in person.
Do	Follow the policies and procedures enumerated in the Pennsylvania Department of Transportation's Publication 378, *Right-of-Way Manual*.
	Inform all claimants of their rights under the law.
	Provide a written offer to purchase and a written summary statement of the Basis of Estimated Just Compensation.
	At a minimum, the claim file must include a history of contacts and further documentation pertaining to the claim.
	Make every reasonable effort to contact all claimants in person.
	Provide at least 90 days written notice prior to requiring vacation of any dwelling or business.
	Complete and submit a pre-acquisition and relocation plan for approval prior to acquisition of any properties requiring the relocation of owners or tenants.
	Provide the property owner with reasonable opportunity to accompany the real estate appraiser.
	Provide documentation of relocation benefits determinations for residential or business occupants.
	Have all appraisals reviewed and approved by a certified reviewing appraiser.

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APPENDIX T

RIGHT-OF-WAY FORMS and FORM LIST FOR LOCAL PROJECT SPONSORS

Contact your District Right-of-Way Administrator for electronic copies of the following forms:

Form Number	Description
LPS-0	Appraiser's Breakdown of Damages
LPS-1	Appraisal Problem Analysis - Partial Acquisition
LPS-2	Appraisal Problem Analysis - Partial Acquisition - Specialty Report Required
LPS-3	Appraisal Problem Analysis - Total Acquisition
LPS-4	Appraisal Problem Analysis - Total Acquisition - Specialty Report Required
LPS-5	Strip Appraisal - Partial Take
LPS-6	Appraisal Report - Before & After
LPS-7	Appraisal Report - Total Takes Only
LPS-8	Agreement of Sale - Easement
LPS-9	Agreement of Sale - Fee Simple
LPS-10	Agreement of Sale - Aerial Easement
LPS-11	Deed of Easement - Aerial Easement
LPS-12	Deed of Easement
LPS-13	Deed - Fee Simple
LPS-14	Settlement Statement
LPS-15	Release of Liens
LPS-16	Offer to Purchase - Unimproved Land
LPS-17	Offer to Purchase - Improved Land
LPS-18	Offer to Purchase with Donation Request
LPS-19	Summary of Just Compensation
LPS-20	Waiver of Rights
LPS-21	Negotiations Progress Report
LPS-22	Acknowledgment by Local Project Sponsor Claimant of Representation by Attorney
LPS-23	Advanced Notice of Acquisition
LPS-24	Advanced Notice of Move Date - Outdoor Advertising Device
LPS-25	Offer to Purchase - Outdoor Advertising Device
LPS-26	Settlement Agreement (Tenant-Owner/Local Project Sponsor)
LPS-27	Temporary Easement for Construction
LPS-28	Authorization to Enter (Waiver of Claim)
LPS-29	Advance Notice of Move Date
LPS-30	Right of Entry
LPS-31	Acknowledgement of Information Received
LPS-32	Local Project Right-of-Way Checklist
LPS-33	Notice of Relocation Eligibility
LPS-34	Notice of Condemnation to Claimant
LPS-35	Memorandum of Law
LPS-36	Notice to Vacate
LPS-37	Notice to Vacate, Move/Abandon Off- Premise OAD

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APPENDIX U
UTILTY AND RAILROAD COORDINATION CHECKLISTS

UTILITY COORDINATION & RELOCATION CHECKLIST

	Activity
	PA One Call
	Develop List of Public Utilities
	SUE (Designating and Locating)
	Develop Master Utility file (existing facilities)
	Verify existing utility locations & update Master file
	Include existing utility locations on project plans
	Prepare Impact Report
	Approved D-4232 (if applicable) Utility Relocation Engineering
	Utility Submission (authorize engineering & send plans to utilities)
	Utility Design Stage Meeting (if appropriate)
	Utilities perform relocation engineering
	Review Plans for Relocation from Utilities
	Send Utility Plans for Relocation to District
	Obtain Local Hwy. Occ. Permit (if appropriate)
	Obtain PennDOT Hwy. Occ. Permit (if applicable)
	Review Utilities' Estimate packages (if applicable)
	Send estimate package to District (if applicable)
	Draft reimbursement agreement from PennDOT
	Draft reimbursement agreement to Utility (if applicable)
	Signed agreement from Utility
	Executed reimbursement agreement to Utility & District
	Include Incorporated Utility work in construction contract proposal
	Approved D-4232 (if applicable) Utility Construction
	Issue Utilities Notice to Proceed with Construction
	Obtain start work dates from utilities (Prior and/or Restrictive work)
	Utility Clearance (D-419) & supporting data to District
	Utility Clearance & issue UCAS

RR COORDINATION CHECKLIST

	Activity
	Approved D-4232 for RR engineering
	Forms D4279 & 4279A to RR (not to Amtrak)
	Forms D4279 & 4279A from RR (not Amtrak) with engineering cost estimate
	Send Amtrak information to gain design phase cost estimate (if applicable)
	Prepare P.E. reimbursement agreement & send to RR
	Receive P.E. agreement from RR & execute agreement
	Forward fully executed P.E. agreement to RR & PennDOT (4279's to Amtrak)
	Secure Temporary Permit to enter RR R/W
	Send plans w/NTP to RR
	Perform field survey tasks
	Send updated plans to RR for review and comments (60% ET plans if applicable)
	Receive RR concerns (60% plan comments from Amtrak)
	Address RR concerns and file application with PUC (if applicable) *
	Secure cost estimate for RR construction (90% ET plans to Amtrak)
	Address 90% plan comments from Amtrak
	Prepare Construction reimbursement agreement & send to RR
	Receive construction agreement from RR & execute agreement
	Forward fully executed construction agreement to RR & PennDOT
	Approved D-4232 (if applicable) Railroad Construction
	Issue NTP for construction to RR (100% ET plans to Amtrak)
	Prepare RR Certification
	District to submit RR Certification
	Include Standard Special Provisions in contract proposal
	Hwy/Bridge contractor to secure Private crossing Agreement (if applicable)
	* if PUC
	Attend PUC field conference
	Address and resolve all outstanding RR concerns
	PUC to issue Secretarial Letter (if applicable)
	Submit property descriptions to PUC (if applicable)
	PUC to issue Order
	Record Order
	Submit final hwy/bridge plans to PUC
	PUC approval of construction plans

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APPENDIX V
SUE IMPACT RATING FORM

Appendix A

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Figure A-501

SUE UTILITY IMPACT REPORT				
Project Information				
MPMS Number/Title:				
County/SR/Section:				
Project Cost	**Design Cost:**		**Construction Cost:**	
Project Description: *(General Summary)*				
Project Scope: *(Actual Work Scope Note: If the scope of the project changes, it is recommended that utility impact analysis be done again.)*				
DUA Approval:			**Date:**	
Project Manager Approval:			**Date:**	

Step 1 and 2 Summary	
Step 1 Analysis Recommendation:	
	Generally not practicable to perform a SUE QLA or QLB investigation.
	Proceed to STEP 2 to conduct further analysis.
Step 2 Analysis Recommendation:	
	Generally not practicable to perform a SUE QLA or QLB investigation.
	Proceed to STEP 3 to calculate utility impact score and determine the appropriate SUE quality levels.

PLEASE REFER TO DM5, APPENDIX A, FOR LATEST VERSION

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Appendix A

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Figure A-501

SUE UTILITY IMPACT REPORT

Step 3 QL Recommendation and Selection

SELECTED SUE QUALITY LEVEL(S):	

The Project Manager, along with the District Utility Administrator, must select the SUE Quality Level(s) intended for use on the project.
-The selection justification must be documented on the SUE Quality Level Justification.
-Site specific areas may require re-evaluation of Step 3 to determine appropriate SUE Quality Level.

Utility Impact Score Results:

Utility Impact Score:	Recommended Minimum SUE Quality Level:	Relative Cost Factor:
#NAME?	#NAME?	#NAME?

SUE Impact Location-Description & Scope:
(blank for overall project level impact analysis)

Utility Impact Score Calculation Description

This Table demonstrates the process for calculating the utility impact score based on response.
**n = Number of the complexity factors considered/checked*

1: Total Box Checked	Sum of Column 1	Sum of Column 2	Sum of Column 3
2: Utility Impact Score	[(1 x Sum of Column 1) + (2 x Sum of Column 2) + (3 x Sum of Column 3)] / *n**		

Utility Impact Scoring Levels And Factors

All factors are based on the result utility impact score calculation.

Utility Impact Score	1.01 – 1.67	1.68– 2.33	2.34 – 3.00
Recommended Minimum SUE Quality Levels	QLB	QLB/A	QLA
Relative Cost Factors	16.67	33.33	66.67

Impact Levels and Factors Descriptions:

Utility Impact Score	Result of utility impact score calculation.
Recommended Minimum	The minimum SUE quality level recommended by the step 3 analysis.
Relative Cost Factors	Costs factors are relative to obtaining QLD&C (i.e., cost of obtaining QLA generally would cost 66 times the amount of obtaining QLD&C).

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PLEASE REFER TO DM5, APPENDIX A, FOR LATEST VERSION

Appendix A

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SUE UTILITY IMPACT REPORT
Step 3-Selected SUE Quality Level Justification
-Include a justification of the SUE quality level selected. Include a discussion of the reasons why a SUE quality level chosen is different that the SUE quality level recommended in the Step 3 analysis.
QLB Selected Locations and/or Utilities and Justification
QLA Recommended Test Hole Locations and Justification

PLEASE REFER TO DM5, APPENDIX A, FOR LATEST VERSION

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APPENDIX W

D-4181 and Utility Relocation Estimate Forms

Appendix A

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D-4181 (6/09)

pennsylvania
DEPARTMENT OF TRANSPORTATION

UTILITY RELOCATION QUESTIONNAIRE AND PERMIT APPLICATION

COUNTY _____
CITY, BORO, TWP _____
ROUTE & SECTION _____
FEDERAL PROJ. NO. _____

1. _____ is a Legal Entity qualified to do business in the Commonwealth of Pennsylvania, with its principal place of business located at

_____, Pennsylvania.
ADDRESS

SAP Vendor Number_____ and FID Number_____.

2. Type of Facility:

☐ Electric
☐ Telecommunications
☐ Cable TV
} ☐ Aerial ☐ Underground

☐ Water
☐ Petroleum Products
☐ Gas
☐ Sewer
☐ Steam

3. a. What is the composition of existing underground facilities?

_____

b. Year existing facility(s) installed? _____

4. Are facilities affected by highway construction?

☐ No (sign, date and return)
☐ Yes (answer questions 5 through 10)

.....

5. Will temporary construction be required to maintain service?

☐ Yes ☐ No If yes, explain as part of the Scope of Work.

6. Total estimated number of calendar days for physical construction _____ (see Form 4181 UC for breakdown)

7. Are there Conditional Restrictions that impact adjustment of facility, i.e. seasonal shutdown, certain times of day or week a facility can be shutdown, acquisition of State Right-of-Way, demolition of buildings?

☐ Yes ☐ No If yes, explain in detail as part of the Scope of Work.

8. Will a highway occupancy permit be necessary? (If yes, complete sheet 2 of 2)

☐ Yes ☐ No

9. Will Work Zone Traffic Control be necessary? ☐ Yes ☐ No If yes, attach a copy of the appropriate Publication 213 Figure_____ for each work area or a proposed plan of traffic control.

10. Uncased pipeline crossing? ☐ Yes ☐ No If yes the following statement is valid: I hereby certify that the uncased pipeline crossing(s) requested herein meets or exceeds the current provisions for uncased pipeline crossings contained in Design Manual Part 5.

_____
Signature & Title Date

PLEASE REFER TO DM5, APPENDIX A, FOR LATEST VERSION

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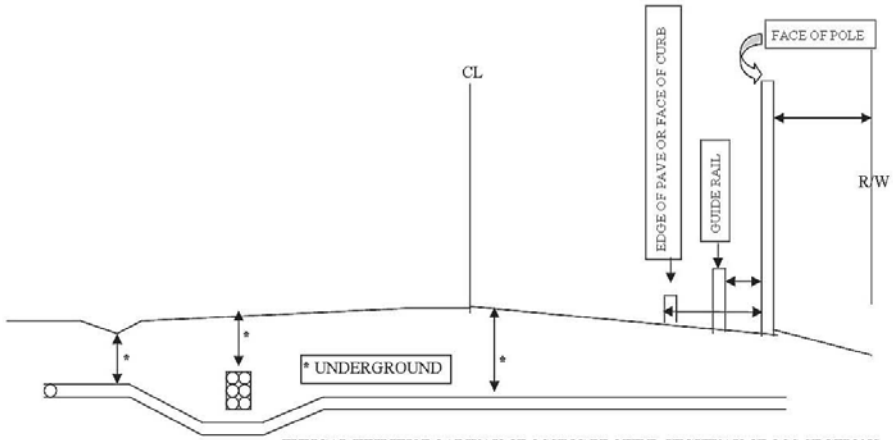

TYPICAL UTILITY ROADWAY CROSSING PROFILE. HIGHWAY CROSS SECTIONS AND/OR PROFILE DRAWINGS REQUIRED WHEN TYPICAL IS NOT APPLICABLE.

==========

TYPE OF OCCUPANCY	AERIAL VERTICAL CLEARANCE	UNDERGROUND1
1. Crossing: Show center line station Divided Highways-Show Both Center Line Stations 2. Longitudinal: Show inclusive Station to Station. 3. Located (i.e. 1 isolated installation): Show Station	A wire, cable or conductor that overhangs a portion of the R/W shall be placed to provide a minimum vertical clearance of 5.5 m (18 feet) over the pavement and shoulder. Refer to Design Manual 5, Chapter 1 for increased vertical clearance requirements.	Minimum underground depth of the buried utility facilities within highway rights of way is 1 m (36 inches) from the finished grade (top of ground) to the top of facility. Refer to Design Manual 5, Chapter 1 for modification of depth.

STATE ROUTE	LIMITED ACCESS	PRIVATE STATUS	TYPE OF OCCP. (1,2, OR 3)	STATION(S) OR SEGMENT & OFFSET	LT/ RT	DISTANCE FROM:		TYPE OF GUIDERAIL	DISTANCE BEHIND GUIDERAIL	DISTANCE BEHIND CURB OR EDGE OF PAVEMENT	POLE NO. / PIPE SIZE, ETC.
						C/L TO FACILITY	FACILITY TO R/W LINE				

PLEASE REFER TO DM5, APPENDIX A, FOR LATEST VERSION

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STATE ROUTE	LIMITED ACCESS	PRIVATE STATUS	TYPE OF OCCP. (1,2, OR 3)	STATION(S) OR SEGMENT & OFFSET	LT/ RT	DISTANCE FROM:		TYPE OF GUIDERAIL	DISTANCE BEHIND GUIDERAIL	DISTANCE BEHIND CURB OR EDGE OF PAVEMENT	POLE NO. / PIPE SIZE, ETC.
						C/L TO FACILITY	FACILITY TO R/W LINE				

PLEASE REFER TO DM5, APPENDIX A, FOR LATEST VERSION

D4181-A
UTILITY RELOCATION ESTIMATES
RELOCATION PLANS & SUPPORTING DATA

PRELIMINARY ESTIMATE

Appendix A
D-4181-A

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CHECKLIST
UTILITY RELOCATION ESTIMATES
RELOCATION PLANS & SUPPORTING DATA

Questionnaire 4181

All items have been completed, including the Permit Application Page 2 of 2.

Preliminary Estimate 4181A

All items have been completed with amounts shown for each applicable item and sub-item and any appropriate attachments should be included.

Particular attention should be given to the following items and associated supplemental attachments:

☐ Item A. Preliminary Engineering - Use of Consultant Engineer

- ☐ Copy of approved contract
- ☐ Certification of Consultant

☐ Item B. Right of Way

- ☐ Real property interest documentation

☐ Item C. Temporary Work

- ☐ List of material to be used
- ☐ Salvage credit breakdown
- ☐ A narrative explaining the necessity for the work

☐ Item D. Permanent Construction

- ☐ Contracts and incorporated work - Page 3 of 5 completed.
- ☐ List of materials to be installed, removed or abandoned

☐ Item K. Credits

- ☐ Description of betterment Items and computation for credit
- ☐ Indicate the method used to determine the pro-ration of relocation costs.
  - ☐ Number of existing poles affected *
  - ☐ Length of existing facility affected *
  - ☐ Cost basis *

* Calculations *used to determine pro-ration are to be shown on a Supplemental Sheet.*

Plans:

- ☐ Location Map
- ☐ Index Sheet
- ☐ Detailed Plan Sheets
- ☐ Profiles
- ☐ Cross Sections
- ☐ Scope of Work

PLEASE REFER TO DM5, APPENDIX A, FOR LATEST VERSION

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pennsylvania
DEPARTMENT OF TRANSPORTATION

PRELIMINARY ESTIMATE FOR UTILITY RELOCATION

COUNTY _____
ROUTE _____
FED. PROJ. NO. _____

☐ **Cost Estimate for Actual Billing Costs** ☐ **Lump Sum Cost Estimate**

SAP Vendor Number _____ and FID Number _____

Utility _____ Signature _____

Corporate Address _____ Date _____

A. PRELIMINARY ENGINEERING
1. Labor
(a.) Salaries and wages (in house) _____
(b.) Contract (consultant) _____
2. Supplies _____
3. Transportation _____
4. Incorporated into the highway design contract _____
TOTAL ..... _____

B. RIGHT OF WAY ACQUISITION
1. Property costs _____
2. Labor
(a.) Salaries and wages (in house) _____
3. Transportation _____
4. Contractor _____
TOTAL ..... _____

C. TEMPORARY CONSTRUCTION
1. Labor
(a.) Salaries and wages (in house) _____
2. Material
(a.) New material _____
(b.) Less salvage _____
(c.) Depreciated value _____
(d.) Handling (___ %) _____
3. Equipment
(a.) Utility owned _____
(b.) Rented _____
4. Contractor _____
TOTAL ..... _____

D. PERMANENT CONSTRUCTION
1. Labor
(a.) Salaries and wages (in house) _____
2. Material (provided by Utility) _____
(a.) Handling (___ %) _____
3. Equipment _____
(a.) Utility owned _____
(b.) Rented _____
4. Contractor _____
5. Incorporated into the prime highway contract _____
TOTAL ..... _____
SUBTOTAL ..... _____

PLEASE REFER TO DM5, APPENDIX A, FOR LATEST VERSION

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Cumulative TOTAL from Page 2 _____

E. REMOVAL COSTS
1. Labor
(a.) Salaries and wages (in house) _____
2. Supplies _____
3. Transportation _____
4. Contractor _____
TOTAL ..... _____

F. CONSTRUCTION ENGINEERING AND INSPECTION
1. Labor
(a.) Salaries and wages (in house) _____
(b.) Contract (consultant) _____
2. Supplies _____
3. Transportation _____
4. Contractor _____
TOTAL ..... _____

G. CONNECTING COSTS
1. Labor
(a.) Salaries and wages (in house) _____
2. Supplies _____
3. Transportation _____
4. Contractor _____
TOTAL ..... _____

H. ACCOUNTING COSTS
1. Labor
(a.) Salaries and wages (in house) _____
2. Supplies _____
TOTAL ..... _____

I. ADMINISTRATION, INDIRECT OVERHEAD & SUPERVISION ..... _____

J. TOTAL ESTIMATED COST ..... _____

LESS CREDITS
1. Betterment _____
2. Salvage _____
3. Expired Service Life _____
TOTAL CREDITS ..... _____

K. TOTAL NET ESTIMATED COST ..... _____

L. PERCENT OF UTILITY WITH REAL PROPERTY INTEREST (412 COSTS) _____%..... _____

M. PERCENT OF UTILITY WITHOUT REAL PROPERTY INTEREST (412.1 COSTS, IF APPLICABLE)
_____%..... _____
1. STATE SHARE* _____% _____
2. UTILITY SHARE* _____% _____
TOTAL STATE SHARE OF ITEM K (L + M.1 / K) _____% ..... (L + M.1) _____

* If cost sharing is not applicable, M.1 = 0.00% and M.2 = 100.00%. All percents should be rounded to two decimal places.

N. SACRIFICED LIFE (VALUE OF FACILITIES REMOVED FROM PRIVATE RIGHT-OF-WAY AND NOT FUNCTIONALLY REPLACED) Totally reimbursable – attach detailed calculations ..... _____

TOTAL ESTIMATED AMOUNT OF REIMBURSEMENT (L + M.1 + N) ..... _____

USE SUPPLEMENTAL SHEETS FOR SCOPE OF WORK AND EXPLANATION FOR ANY UNUSUAL CIRCUMSTANCES

PLEASE REFER TO DM5, APPENDIX A, FOR LATEST VERSION

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CONTRACTS

The items of work, so indicated in this Preliminary Estimate, are to be accomplished by contract because the utility may not be adequately staffed or equipped to perform this work with its own forces at the time of the relocation. The following contractual method will be used for the items indicated.

1. Continuing Contracts

The following Preliminary Estimate Items will be performed by the listed qualified contractors who normally perform such work for the Utility at reasonable costs under existing written continuing contracts.

A. Item _____ Contractor _____
B. Item _____ Contractor _____
C. Item _____ Contractor _____
D. Item _____ Contractor _____
E. Item _____ Contractor _____

The Commonwealth approved the method used to enter into continuing contracts on _____.

2. Invitation to Bid:

The following qualified contractors will be invited to bid on Items _____ of the Preliminary Estimate:

A. Item _____

B. Item _____

C. Item _____

3. Open Advertisement for Bids:

Bids will be solicited by open advertisement in publications for Items _____of the Preliminary Estimate.

4. Contractor(s) hired without Competitive Bidding by Municipalities and Municipal Authorities: It is impractical to solicit bids for certain items of the proposed relocation work, the cost of which will not exceed $10,000.00. A list of the items, the associated contractors and the justifications for each item is attached.

5. **Relocation Work Incorporated Into the Highway Construction Contract:**

It is Cost effective to have certain items of the proposed relocation performed by the highway contractor. Those items of relocation work to be incorporated into the highway contract are described on the attached supplemental sheet along with a list of the material to be installed.

PLEASE REFER TO DM5, APPENDIX A, FOR LATEST VERSION

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CONTRACTS

- UTILITY COMPANIES OR CORPORATIONS -

The continuing contractors and contractors from whom bids are invited are, in the opinion of the utility company, professionally qualified and financially capable of promptly and efficiently effecting their portion of this relocation.

Prior to the award of any contract for which bids were openly advertised, the Department shall be furnished a list of bidders and the total amount bid, along with assurance that the contract shall be awarded to the lowest qualified bidder, which in the judgment of the utility company, is professionally qualified, properly equipped and financially able to promptly effect completion of the proposed work.

- MUNICIPALITY OR MUNICIPAL AUTHORITY OWNED UTILITIES -

Prior to solicitation of bids, the municipality or municipal authority shall furnish the Department with a copy of its bid proposal and receive the Department's concurrence. Subsequent to its receipt of bids, the Municipality or Authority shall submit to the Department a list of bidders and the total amount bid by each. This submission shall designate the apparent successful contractor, along with assurance that he is the lowest qualified bidder which is professionally qualified, properly equipped and financially able to promptly effect completion of the proposed work. Such contracts shall not be awarded until receipt of the Department's concurrence in such award.

- ALL UTILITIES -

Preliminary Estimates requesting approval to hire a contractor without competitive bidding (Item 4 above) shall, in addition to the written justification therefore, be supplemented by certification that the contractor to be hired is professionally qualified, properly equipped and financially able to promptly effect completion of the proposed work.

PLEASE REFER TO DM5, APPENDIX A, FOR LATEST VERSION

D4181-B
SUMMARY OF BILLING
FOR UTILITY RELOCATION

Appendix A
D-4181-B

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SUMMARY OF BILLING

DISCUSSION AND EXPLANATION OF SUMMARY FORM

1. All final billing shall be prepared in accordance with Title 23, Code of Federal Regulations, Chapter 1, Part 645, the Utility's Standard Accounting and Work order procedures and the Department's Design Manual Part 5.

2. The Summary of Billing Form 4181-B will follow, as close as possible, the order of the items in the Estimate Form 4181-A in such a manner as will permit comparison with the approved Plan and Estimate Form.

3. Supporting Data sheets shall accompany the Final Billing Form 4181-B showing an itemized breakdown of all labor by classification and hours worked, and list of materials removed and installed by quantity, type and unit cost, in accordance with Design Manual Part 5.

4. Each individual payment of Right of Way shall be supported in accordance with Design Manual Part 5.

5. Work performed under contracts, entered into by bidding, having had prior concurrence of the Department, and as indicated on the Estimate Form 4181-A, must be substantiated by the total amounts of each bid received from the actual bidders.

6. If there is a substantial difference (+/- 10%) between the total estimated cost and the total actual cost billed, or a substantial difference for individual items of cost, i.e., Preliminary Engineering, Right of Way, Construction, etc., an explanation shall be attached to the Summary of Billing Form 4181-B.

7. Labor surcharges include worker compensation insurance, public liability and property damage insurance, and such fringe benefits as the utility has established for the benefit of its employees. The cost of labor surcharges will be reimbursed at actual costs to the utility, or, at the option of the utility, average rates which are representative of actual costs may be used in lieu of actual costs if approved by the Department and the FHWA Division Administrator. These average rates should be adjusted at least once annually to take into account known anticipated changes and correction for any over or under applied costs for the preceding period.

8. Overhead and indirect construction costs not charged directly to work order or construction accounts may be allocated to the relocation provided the allocation is made on an equitable basis. All costs included in the allocation shall be eligible for Federal reimbursement, reasonable, and actually incurred by the utility.

9. The actual and direct costs of handling and loading materials and supplies of company stores or material yards, and of unloading and handling recovered materials accepted by the utility at its stores or material yards are reimbursable. In lieu of actual cost, average rates which are representative of actual costs may be used if approved by the Department and the FHWA Division Administrator. These average rates should be adjusted at least once annually to take into account known anticipated changes and correction for any over or under applied costs for the preceding period. At the option of the utility, 5 percent of the amounts billed for the materials and supplies issued from company stores and material yards or the value of recovered materials will be reimbursed in lieu of actual or average costs for handling.

10. Credits for Expired Service Life, Betterment and Salvage shall be documented in accordance with Design Manual Part 5.

11. A charge for Sacrificed Life made in the amount of the computed value of facilities which were removed from private Right-of-Way and not functionally replaced shall be documented in accordance with Design Manual Part 5.

12. All billing shall be certified by the company's auditor or person directly responsible for its accuracy and conformance to Federal Regulations, the Utility's Standard Accounting and Work Order Procedures and Design Manual Part 5.

PLEASE REFER TO DM5, APPENDIX A, FOR LATEST VERSION

Appendix A
D-4181-B

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ESTIMATE AND BILLING COMPARISON

SUMMARY OF	ESTIMATE	BILLING	+OR-
A. PRELIMINARY ENGINEERING.....	$_____	$_____	$_____
B. RIGHT-OF-WAY ACQUISITION	$_____	$_____	$_____
C. TEMPORARY CONSTRUCTION	$_____	$_____	$_____
D. PERMANENT CONSTRUCTION	$_____	$_____	$_____
1. Labor	$_____	$_____	$_____
2. Material	$_____	$_____	$_____
3. Equipment	$_____	$_____	$_____
E. REMOVAL COSTS	$_____	$_____	$_____
F. CONSTRUCTION ENGR/INSPECTION	$_____	$_____	$_____
G. CONNECTING COSTS.....	$_____	$_____	$_____
H. ACCOUNTING.....	$_____	$_____	$_____
I. ADMINISTRATIVE, INDIRECT OVERHEAD SUPERVISION.....	$_____	$_____	$_____
J. TOTAL CONSTRUCTION COSTS.....	$_____	$_____	$_____
K. LESS CREDITS	$_____	$_____	$_____
1. Betterment	$_____	$_____	$_____
2. Salvage	$_____	$_____	$_____
3. Expired Service Life	$_____	$_____	$_____
L. TOTAL NET COSTS	$_____	$_____	$_____
M. UTILITY SHARE..... _____%	$_____	$_____	$_____
N. STATE SHARE..... _____%	$_____	$_____	$_____
0. SACRIFICED LIFE	$_____	$_____	$_____
TOTAL AMOUNT REIMBURSABLE	$_____	$_____	$_____

PLEASE REFER TO DM5, APPENDIX A, FOR LATEST VERSION

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pennsylvania
DEPARTMENT OF TRANSPORTATION

SUMMARY OF BILLING FOR UTILITY RELOCATION

County _____
S.R. & Sec. _____
Agreement No. _____
Fed. Proj. No. _____

Utility _____

Address _____

Invoice may be Audited at (address) _____

Date of First Billed Expense (including Preliminary Engineering) _____

Date Actual Construction Start by Utility _____

Date of Last Billed Expense (including accounting) _____

A. PRELIMINARY ENGINEERING
1. Labor
   (a.) Salaries and wages (in house) _____
   (b.) Contract (consultant) _____
2. Supplies _____
3. Transportation _____
4. Incorporated into the highway design contract _____

TOTAL..... _____

B. RIGHT-OF-WAY ACQUISITION
1. Property costs _____
2. Labor
   (a.) Salaries and wages (in house) _____
3. Transportation _____
4. Contractor _____

TOTAL..... _____

C. TEMPORARY CONSTRUCTION
1. Labor
   (a.) Salaries and wages (in house) _____
2. Material
   (a.) New material _____
   (b.) Less salvage _____
   (c.) Depreciated value _____
   (d.) Handling (_____%) _____
3. Equipment
   (a.) Utility owned _____
   (b.) Rented _____
4. Contractor _____

TOTAL..... _____

PLEASE REFER TO DM5, APPENDIX A, FOR LATEST VERSION

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D-4181-B

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SUMMARY OF BILLING

Accumulative TOTAL from Page 2 _____

D. PERMANENT CONSTRUCTION

1. Labor
   (a.) Salaries and wages (in house) _____
2. Material (provided by Utility) _____
   (a.) Handling (_____ %) _____
3. Equipment _____
   (a.) Utility owned _____
   (b.) Rented _____
4. Contractor _____
5. Incorporated into the prime highway contract _____

TOTAL ..... _____

E. REMOVAL COSTS

1. Labor
   (a.) Salaries and wages (in house) _____
2. Supplies _____
3. Transportation _____
4. Contractor _____

TOTAL ..... _____

F. CONSTRUCTION ENGINEERING AND INSPECTION

1. Labor
   (a.) Salaries and wages (in house) _____
   (b.) Contract (consultant) _____
2. Supplies _____
3. Transportation _____
4. Contractor _____

TOTAL ..... _____

G. CONNECTING COSTS

1. Labor
   (a.) Salaries and wages (in house) _____
2. Supplies _____
3. Transportation _____
4. Contractor _____

TOTAL ..... _____

H. ACCOUNTING COSTS

1. Labor
   (a.) Salaries and wages (in house) _____
2. Supplies _____

TOTAL ..... _____

I. ADMINISTRATION, INDIRECT OVERHEAD & SUPERVISION ..... _____

J. TOTAL CONSTRUCTION COST ..... _____

PLEASE REFER TO DM5, APPENDIX A, FOR LATEST VERSION

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D-4181-B

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(6/09)

SUMMARY OF BILLING

Accumulative TOTAL from Page 3 _____

K. LESS CREDITS

1. Betterment _____
2. Salvage _____
3. Expired Service Life _____

TOTAL CREDITS ..... _____

L. TOTAL NET ESTIMATED COST ..... _____

M. PERCENT OF UTILITY WITH REAL PROPERTY INTEREST (412 COSTS) _____%. ..... _____

N. PERCENT OF UTILITY WITHOUT REAL PROPERTY INTEREST (412.1 COSTS, IF APPLICABLE)

_____%..... _____

1. STATE SHARE* _____% _____
2. UTILITY SHARE* _____% _____

* If cost sharing is not applicable, N.1 = 0.00% and N.2 = 100.00%. All percents should be rounded to two decimal places

O. SACRIFICED LIFE (VALUE OF FACILITIES REMOVED FROM PRIVATE RIGHT-OF-WAY AND NOT FUNCTIONALLY REPLACED TOTALLY REIMBURSABLE; DO NOT PRORATE) ..... _____

P. LESS THE AMOUNT OF PREVIOUS PAYMENTS ..... _____

Q. TOTAL AMOUNT OF REIMBURSEMENT (M + N.1 + O - P) ..... _____

I hereby certify that to the best of my knowledge and belief this bill is true and correct and that all costs included herein are properly chargeable to the State as a result of adjusting our facilities to conform to the above-named highway project as shown by this Utility's Plan and Highway Plan and Estimate, and in accordance with the terms of the approved agreement on file with the Commonwealth of Pennsylvania, Department of Transportation.

I further certify that all work billed herein has been completed in accordance with the Department's Design Manual Part 5, Title 23, Code of Federal Regulations Chapter 1, Part 64.5, Subpart A, and in accordance with work order accounting procedure prescribed by the applicable Federal or State Regulatory Board, and that no collusion exists or has existed between members or employees of this firm and other persons, firms or corporations in order to establish an unjust basis for any part of the costs covered by this Invoice.

_____
(Name and Title) Date

(Use supplemental sheets to describe the scope of work *performed*, to explain any unusual charges and to provide the required information in contracts, credits, materials, sacrificed life, etc.).

PLEASE REFER TO DM5, APPENDIX A, FOR LATEST VERSION

D4181-UC
UTILITY RELOCATION CLEARANCE REPORT

Form D-4181-UC
(7/04)

UTILITY RELOCATION CLEARANCE REPORT

Figure A-1100

County _____

SR _____ Section _____

Utility _____

Date _____

Prepared by _____

Phone _____

Construction Contact _____

Phone _____

TYPE OF RELOCATION WORK (REF: DESIGN MANUAL PART 5)

1. **PRIOR:** Anticipated completion of work before the highway contractor's Notice to Proceed is issued. Use actual or anticipated completion date.
2. **RESTRICTIVE:** To be completed by the UTILITY before highway contractor can operate without restriction. Number of calendar days required AFTER THE DATE OF NOTICE TO PROCEED.
3. **CONCURRENT:** Simultaneous with, but not restricting, the contractors operation. Number of calendar days required.
4. **COORDINATED:** Phasing with a specific construction operations.. Number of calendar days required AFTER COMPLETION OF SPECIFIC CONSTRUCTION OPERATIONS (e.g.: clearing & grubbing, rough grading, pipe hangers).
5. **NOT AFFECTED:** Identifies UTILITY with facilities in the construction area not anticipated to be affected. Specific information may be provided by the UTILITY.
6. **INCORPORATED:** Utility relocation work to be incorporated into the prime highway construction contract.

CONDITIONAL RESTRICTIONS AND TIME REQUIREMENTS: Identify conditions affecting the utility's ability to perform work, i.e.: certain times of the day, week or year that a facility can not shutdown, acquisition of R/W by the State, demolition of buildings, relocation of other utilities, etc. Show number of calendar days.

LIST EACH AREA OF INVOLVEMENT BELOW

ROUTE	STATION TO STATION OR SEG. & OFFSET TO SEG. & OFFSET	RT./ LT.	BRIEF DESCRIPTION OF ADJUSTMENT	TYPE OF RELOCATION EACH AREA (SEE ABOVE)	DESCRIBE CONDITIONAL RESTRICTIONS OR TIME REQUIREMENTS SPECIFY CONTRACTOR'S OPERATION FOR COORDINATED WORK. SEE NOTES ABOVE	CALENDAR DAYS REQ'D OR DATE OF COMPLETION

The proposed adjustments described above are the necessary relocation adjustments to be undertaken by the above named utility to accommodate the construction of the above listed highway project. Contingent upon the approval of a necessary occupancy permit and/or execution of a reimbursement agreement and upon notice to proceed by the Department of Transportation, the above named utility agrees to proceed with these adjustments.

BY _____
(Signature)

_____
TITLE

PLEASE REFER TO DM5, APPENDIX A, FOR LATEST VERSION

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LIST EACH AREA OF INVOLVEMENT BELOW

ROUTE	STATION TO STATION OR SEG. & OFFSET TO SEG. & OFFSET	RT./ LT.	BRIEF DESCRIPTION OF ADJUSTMENT	TYPE OF RELOCATION EACH AREA (SEE ABOVE)	DESCRIBE CONDITIONAL RESTRICTIONS OR TIME REQUIREMENTS SPECIFY CONTRACTOR'S OPERATION FOR COORDINATED WORK. SEE NOTES ABOVE	CALENDAR DAYS REQ'D OR DATE OF COMPLETION

PLEASE REFER TO DM5, APPENDIX A, FOR LATEST VERSION

Form D4181-X

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

PRELIMINARY BRIDGE OCCUPANCY FORM

County _____ Date: _____
S.R. & Section _____
Utility _____

The following is a preliminary indication of the structures where provisions for our facilities may be required:

The consultant or designer to indicate the location of proposed structures.		Facilities to be located on the structure						
Route (S.R., Twp., etc.)	Station	Yes	No	Type Facility	Size Line	Number Ducts	Proposed	Existing

PLEASE REFER TO DM5, APPENDIX A, FOR LATEST VERSION

LOCAL PROJECT UTILITY RELOCATION COST ESTIMATE

MPMS No.: PROJECT: PROJECT AGREEMENT No.:			MUNICIPALITY: COUNTY: DATE:	
UTILITY NAME	TOTAL RELOCATION COSTS	23 CFR and/or Local policy (A)	PUC (B)	AMOUNT ELIGIBLE FOR REIMBURSEMENT (A + B)
	$0.00	$0.00	$0.00	$0.00
TOTAL ESTIMATED COSTS	$0.00	$0.00	$0.00	$0.00

Utility Name: include the name of each utility that owns and/or maintains facilities within the project limits.

Total Relocation Cost: estimate the total cost for the utility to engineer and construct their relocations.

23 CFR and/or Local reimbursement policy (A): estimate the reimbursable utility relocation cost that is eligible for project funds (see Project Reimbursement Agreement).

PUC (B): estimate the reimbursable utility relocation cost within PUC jurisdiction that is eligible for project funds that are not included in (A).

Total Estimated Cost: total estimated dollar amounts

APPENDIX X
Sample Utility & Railroad Coordination Letters

UT#1:	Sample Project Notification Letter
UT#2:	Sample P.E. Authorization
UT#2A:	Sample P.E. Authorization (With Real Property Interest Request)
UT#3:	Sample Notice to Proceed For Prior, Restrictive And Concurrent Work
UT#3A:	Sample Notice to Proceed For Coordinated Work
UT#419:	Sample Utility Clearance
RR#1:	Sample P.E. Authorization
RR#2:	Sample Notice to Proceed

UT#1: Sample Project Notification Letter

Place on Local Project Sponsor Letterhead

Date

Township: ***[Insert Name of Township/Municipality where Project is located]***
County: ***[Insert Name of County]***
Route: ***[Insert Project Route Number]***
Local Road Name: ***[Name of Local Road where Project is located]***
MPMS#: ***[Insert PennDOT MPMS Number]***
[Insert Name of Roadway or Bridge] Construction Project

[Utility Company Name]
[Utility Company Address]

Dear ***[Utility Company Contact]***,

[Include name of Local Project Sponsor] is preparing plans for the design and construction of the above referenced proposed roadway/bridge construction project. The proposed construction includes ***[Add brief project description]***

In order that we may verify the type, size and approximate location of your existing facilities, we are enclosing two (2) sets of preliminary roadway plan sheets.

Kindly review this information and return a set of the roadway plan sheets marked to show the location of your existing facilities. Also, please note the depth(s) of any underground facilities on this set of plans. If as-built drawings are available, please contact us if you are willing to provide us with a copy of your as-built drawings.

We are also requesting that you supply any and all real property interest documents (i.e., copies of easements and/or agreements with the property owner) for your facilities within the project limits on or before ***[Insert date requested].***

If applicable Also, please complete and return the Form 4181-X (attached) along with your plans and right of way documents on or before ***[Insert date requested]***.

Please do not hesitate to contact me at telephone ***[Insert Local Project Manager telephone number]*** if you have any questions or require additional information.

Sincerely,

[Include Local Project Manager Name]
[Include name of Local Project Sponsor]

Attachments

cc: ***[Insert Name]***, District Utility Administrator, PennDOT, District ***[Insert District number]***

UT#2: Sample P.E. Authorization

Place on Local Project Sponsor Letterhead

Date

Township: ***[Insert Name of Township/Municipality where Project is located]***
County: ***[Insert Name of County]***
Route: ***[Insert Project Route Number]***
Local Road Name: ***[Name of Local Road where Project is located]***
MPMS#: ***[Insert PennDOT MPMS Number]***
[Insert Name of Roadway or Bridge] Construction Project
AUTHORIZE PRELIMINARY ENGINEERING

[Utility Company Name]
[Utility Company Address]

Dear ***[Utility Company Contact]***,

[Include name of Local Project Sponsor] is preparing plans for the construction of the subject highway improvement project. ***[Insert name of person coordinating utility coordination/relocation for the project]***, will be coordinating the utility coordination and relocation activities on this project. This project has an anticipated letting date of ***[Insert Anticipated Project Let Date]***.

Optional An Initial Utility Design Stage Meeting has been scheduled to be held on ***[Insert date]***, at ***[Insert time]***. We will meet in ***[Insert meeting location]*** located at ***[Insert meeting location address].*** The purpose of this meeting is to discuss the impact that the proposed highway improvements may have on your existing facilities.

Attached are ***[List any attachments]***. Please review the plan sheets and apprise us of any corrections and/or additions we need to make to show accurately the location of your existing facilities.

This is your authorization to proceed with the preliminary engineering on the subject project. This authorization shall include transportation and labor for field engineering, preparation of plans, specifications and estimates and other related preparatory work in advance of physical construction operations. Physical work on the actual adjustment or relocation of affected facilities may not be started prior to the receipt of ***[Include name of Local Project Sponsor]***'s specific authorization to proceed with physical work.

Costs for work performed and material furnished to accommodate highway design and construction may be reimbursable to the extent provided by applicable law.

In the event you require the service of an engineering consultant to design your relocations/adjustments, a letter proposal prepared in accordance with Chapter 3, Section 3.3 of Pennsylvania Department of Transportation, Design Manual Part 5, shall be submitted ***option****: [at the above referenced meeting or: on or before Insert date requested].* Should you intend to use a consultant engineer under the terms of an existing continuing contract, a copy of that contract is also required. Your submission shall include the method of payment and the estimated total engineering cost as defined by the consultant you select, along with a statement that you are not adequately staffed to perform the required engineering. Your assurance that the consultant is professionally qualified to perform the necessary engineering is also required. Be advised that any costs incurred by a consultant engineer prior to the ***Local Project Sponsor's*** approval for the use of consultant may not be eligible for reimbursement.

Kindly submit your plans for relocation in accordance with Pennsylvania Department of Transportation Design Manual Part 5. Also, please include the applicable forms along with your plans that show the location of your proposed facilities to ***Local Project Sponsor*** on or before ***[Insert date requested]***.

Please do not hesitate to contact ***[Insert Local Project Manager name]*** at telephone ***[Insert Local Project Manager telephone number]*** if have any questions or need any additional information.

Sincerely,

[Include Local Project Manager Name]
[Include name of Local Project Sponsor]

cc: ***[Insert Name]***, District Utility Administrator, PennDOT, District ***[Insert District number]***

UT#2A: Sample P.E. Authorization (With Real Property Interest Request)

Place on Local Project Sponsor Letterhead

Date

Township: ***[Insert Name of Township/Municipality where Project is located]***
County: ***[Insert Name of County]***
Route: ***[Insert Project Route Number]***
Local Road Name: ***[Name of Local Road where Project is located]***
MPMS#: ***[Insert PennDOT MPMS Number]***
[Insert Name of Roadway or Bridge] Construction Project
Authorize Preliminary Engineering

[Utility Company Name]
[Utility Company Address]

Dear ***[Utility Company Contact]***,

[Include name of Local Project Sponsor] is preparing plans for the construction of the subject highway improvement project. ***[Insert name of person coordinating utility coordination/relocation for the project]***, will be coordinating the utility coordination and relocation activities on this project. This project has an anticipated letting date of ***[Insert Anticipated Project Let Date]***.

Optional An Initial Utility Design Stage Meeting has been scheduled to be held on ***[Insert date]***, at ***[Insert time]***. We will meet in ***[Insert meeting location]*** located at ***[Insert meeting location address].*** The purpose of this meeting is to discuss the impact that the proposed highway improvements may have on your existing facilities.

Attached are ***[List any attachments]***. Please review the plan sheets and apprise us of any corrections and/or additions we need to make to accurately show the location of your existing facilities.

This is your authorization to proceed with the preliminary engineering on the subject project. This authorization shall include transportation and labor for field engineering, preparation of plans, specifications and estimates and other related preparatory work in advance of physical construction operations.

Physical work on the actual adjustment or relocation of affected facilities may not be started prior to the receipt of the ***Local Project Sponsor's*** specific authorization to proceed with physical work.

Costs for work performed and material furnished to accommodate highway design and construction may be reimbursable to the extent provided by applicable law.

In the event you require the service of an engineering consultant to design your relocations/adjustments, a letter proposal prepared in accordance with Chapter 3, Section 3.3 of Pennsylvania Department of Transportation, Design Manual Part 5, shall be submitted ***option****: [at the above referenced meeting or: on or before Insert date requested].* Should you intend to use a consultant engineer under the terms of an existing continuing contract, a copy of that contract is also required. Your submission shall include the method of payment and the estimated total engineering cost as defined by the consultant you select, along with a statement that you are not adequately staffed to perform the required engineering. Your assurance that the consultant is professionally qualified to perform the necessary engineering is also required. Be advised that any costs incurred by a consultant engineer prior to the ***Local Project Sponsor's*** approval for the use of consultant may not be eligible for reimbursement.

In addition, the ***Local Project Sponsor*** is requesting that you supply any and all real property interest covering your facilities within the project limits on or before ***[Insert date requested]***. If you are unable to provide the documents on or before this date, a written time extension request must be supplied to our office on or before ***[Insert date requested]***, which specifies the anticipated date the documents will be made available for review.

These documents must be labeled in a manner that identifies the facility or length of facility that each document covers relevant to the ***Local Project Sponsor*** supplied plans.

These documents will not only be used to determine compensability for any reimbursement to which you may be entitled, but once approved, will also be used to identify and show your easements and rights or entitlements on the ***Local Project Sponsor's*** Right of Way plan.

Failure to provide labeled right of way documents or a written time extension request could result in the ***Local Project Sponsors*** inability to properly record your easements and rights on the right of way plan for the subject project and may prohibit the ***Local Project Sponsor*** from excluding your easements or rights from any condemnation proceedings for required rights of way that may be determined necessary for this project.

Kindly submit your plans for relocation in accordance with Pennsylvania Department of Transportation Design Manual Part 5. Also, please include the applicable forms along with your plans that show the location of your proposed facilities to ***Local Project Sponsor*** on or before ***[Insert date requested]***.

Please do not hesitate to contact ***[Insert Local Project Manager name]*** at telephone ***[Insert Local Project Manager telephone number]*** if have any questions or need any additional information.

Sincerely,

[Include Local Project Manager Name]
[Include name of Local Project Sponsor]

cc: ***[Insert Name]***, District Utility Administrator, PennDOT, District ***[Insert District number]***

UT#3: Sample Notice To Proceed For Prior, Restrictive And Concurrent Work

Place on Local Project Sponsor Letterhead

Date

Township: ***[Insert Name of Township/Municipality where Project is located]***
County: ***[Insert Name of County]***
Route: ***[Insert Project Route Number]***
Local Road Name: ***[Name of Local Road where Project is located]***
MPMS#: ***[Insert PennDOT MPMS Number]***
[Insert Name of Roadway or Bridge] Construction Project
NOTICE TO PROCEED

[Utility Company Name]
[Utility Company Address]

Dear ***[Utility Company Contact]***,

If applicable: Attached is the fully executed reimbursement agreement for the subject project.

This is your authorization to enter upon the highway right-of-way to effect the required adjustment and/or relocation of your existing facilities in the manner and at the locations detailed and shown on the plans and/or drawings contained in your submission dated ***[Insert date]***. Your construction personnel must comply with the Pennsylvania Department of Transportation's Temporary Traffic Control Guidelines (Publication 213) and have the applicable figures from Appendix A of this Publication on the job site at all times.

If applicable: Attached is the Pennsylvania Department of Transportation Highway Occupancy Permit # ***[Insert PennDOT HOP permit number]***, dated ***[Insert date of Permit]*** as well as the *City/Township's* Permit# ***[Insert Township HOP permit number]***, dated ***[Insert date of Permit].***

The adjustments and/or relocations are also subject to the applicable provisions of 67 PA Code, Chapter 459; the Pennsylvania Department of Transportation's Design Manual Part 5, Utility Relocation; and, where applicable, the 23 Code of Federal Regulations, Part 645, Subparts A & B.

This is to remind you to notify us, the ***Local Project Sponsor***, of the date you intend to start your relocation construction. If modifications are made to your facilities resulting from field changes during construction that are not consistent with your submission referenced above, you are required to forward information to gain our concurrence with said changes, to include as-built drawings.

Sincerely,

[Include Local Project Manager Name]
[Include name of Local Project Sponsor]

Attachments

cc: ***[Insert Name]***, District Utility Administrator, PennDOT, District ***[Insert District number]***

UT#3A: Sample Notice to Proceed For Coordinated Work

Place on Local Project Sponsor Letterhead

Date

Township: ***[Insert Name of Township/Municipality where Project is located]***
County: ***[Insert Name of County]***
Route: ***[Insert Project Route Number]***
Local Road Name: ***[Name of Local Road where Project is located]***
MPMS#: ***[Insert PennDOT MPMS Number]***
[Insert Name of Roadway or Bridge] Construction Project
NOTICE TO PROCEED

[Utility Company Name]
[Utility Company Address]

Dear ***[Utility Company Contact]***,

If applicable: Attached is the fully executed reimbursement agreement for the subject project.

This is your authorization to enter upon the highway right-of-way to effect the required adjustment and/or relocation of your existing *electric distribution* facilities in the manner and at the locations detailed and shown on the plans and/or drawings contained in your submission dated ***??***. Your construction personnel must comply with the Pennsylvania Department of Transportation's Temporary Traffic Control Guidelines (Publication 213) and have the applicable figures from Appendix A of this Publication on the job site at all times.

If applicable Attached is the Pennsylvania Department of Transportation Highway Occupancy Permit # ***[Insert PennDOT HOP permit number]***, dated ***[Insert date of Permit]*** as well as the *City/Township's* Permit# ***[Insert Township HOP permit number]***, dated ***[Insert date of Permit].***

The adjustments and/or relocations are also subject to the applicable provisions of 67 PA Code, Chapter 459; the Pennsylvania Department of Transportation's Design Manual Part 5, Utility Relocation; and, where applicable, the 23 Code of Federal Regulations, Part 645, Subparts A & B.

This is to remind you that ***all your construction activities must be coordinated with*** the ***Local Project Sponsor's*** highway/bridge contractor. If modifications are made to your facilities resulting from field changes during construction that are not consistent with your submission referenced above, you are required to forward information to gain the ***Local Project Sponsor's*** concurrence with said changes, to include as-built drawings.

Sincerely,

[Include Local Project Manager Name]
[Include name of Local Project Sponsor]

Attachments

cc: ***[Insert Name]***, District Utility Administrator, PennDOT, District ***[Insert District number]***

UT#419: Sample Utility Clearance (Utility Clearance D-419)

Place on Local Project Sponsor Letterhead

DATE: ***[Insert date]***

SUBJECT: ***[Insert County Name]*** **COUNTY**
ROUTE - SECTION: ***[Insert Project Location Route number]***
MPMS No.: ***[Insert PennDOT MPMS number]***
FPN (U): ***[Insert Federal Project Number, if applicable]***
FPN (C): PENDING

TO: ***[Insert Name of current Chief Utility Relocation Administrator]***
Chief Utility Relocation Administrator
Keystone Building

FROM: ***[Insert Name of Local Project Manager]***
[Insert title of Local Project Manager]
[Insert Name of Local Project Sponsor]

Following is the Utility Clearance Data (Form D-419) for the above project. This project is scheduled for a ***[Insert anticipated project let date]*** letting. This certifies that written responses from all known utilities within the project limits have been received and are on file in our office as of ***[insert date last 4181 received from utility companies or current date]***. Therefore, it is recommended that a certification of Utility Clearance be furnished to the FHWA.

UTILITIES

Cooperate with the public utility companies and local authorities in the placement, replacement, relocation, adjustment or reconstruction of their structures and facilities during construction. Contact all utility representatives at least fifteen (15) calendar days prior to starting operations.

PRIOR	Anticipated completion before Notice to Proceed is issued. Actual or anticipated completion date shown.
RESTRICTIVE	To be completed by the utility or a string of utilities before operating without restriction. Number of calendar days will start from the actual Notice to Proceed that is issued to the highway contractor.
CONCURRENT	Simultaneous with, but not restricting operations. Number of calendar days required.
COORDINATED	Phasing with specific construction operations. Number of calendar days required after completion of a specific construction operation.
NOT AFFECTED	Identifies utility with facilities in the construction area that are not anticipated to be affected. Specific information may be provided by the Utility.
INCORPORATED	Utility relocation work incorporated into the prime highway construction contract.
CONDITONAL RESTRICTIONS and REQUIREMENTS	Identify conditions affecting the Utility's ability to perform a certain type of utility relocation work, i.e., certain times of the day, times of week, or year that a facility cannot be shut down, acquisition of right of way by the City, or demolition of buildings.

ELECTRIC UTILITY

Contact: ***[Insert utility company contact person name],*** phone: ***[Insert utility company contact person phone number],*** and e-mail: ***[Insert utility company contact person e-mail address]***

RESTRICTIVE : (Aerial) Township Road, sta. 1+50 and sta. 2+75, rt. The Utility will relocate poles to accommodate the excavation for the proposed bridge abutments and wing walls. Ten (10) calendar days required to complete.

TV CABLE COMPANY

Contact: ***[Insert utility company contact person name],*** phone: ***[Insert utility company contact person phone number],*** and e-mail: ***[Insert utility company contact person e-mail address]***

RESTRICTIVE : ***[Insert description of work***; ***sample:*** *"(Aerial) Township Road, sta. 1+50 and sta. 2+75, rt. The Utility will transfer cable to the new power company poles. Two (2) calendar days required to complete after the new poles have been set and the conductors have been installed."****]***

TELEPHONE COMPANY

Contact: ***[Insert utility company contact person name],*** phone: ***[Insert utility company contact person phone number],*** and e-mail: ***[Insert utility company contact person e-mail address]***

RESTRICTIVE : ***[Insert description of work***; ***sample:*** *"(Aerial) Township Road, sta. 1+50 and sta. 2+75, rt. The Utility will transfer cable to the new power company poles. Five (5) calendar days required to complete after the new poles have been set and the tele-communications cables have been transferred."****]***

GAS COMPANY

Contact: ***[Insert utility company contact person name],*** phone: ***[Insert utility company contact person phone number],*** and e-mail: ***[Insert utility company contact person e-mail address]***

COORDINATED ***[Insert description of work***; ***sample:*** *"(U/G) Township Road, sta. 1+00, lt. Stake the excavation limits and establish the proposed drain pipe elevation. The Utility will lower their gas main pipeline to accommodate the excavation for the proposed cross drainpipe.* ***?? (??)*** *calendar days required to complete."****]***

MUNICIPAL WATER AUTHORITY

Contact: ***[Insert utility company contact person name],*** phone: ***[Insert utility company contact person phone number],*** and e-mail: ***[Insert utility company contact person e-mail address]***

COORDINATED ***[Insert description of work***; ***sample:*** *"(U/G) Township Road, sta. 2+50, rt. Establish final grade elevation and provide the amount of vertical adjustment. The Utility will vertically adjust their water valve box to final roadway grade.* ***?? (??)*** *calendar days required to complete."****]***

TOWNSHIP SEWER

Contact: ***[Insert utility company contact person name],*** phone: ***[Insert utility company contact person phone number],*** and e-mail: ***[Insert utility company contact person e-mail address]***

INCORPORATED: ***[Insert description of work***; ***sample:*** *"(U/G) Township Road, sta. 1+50, lt. Vertically adjust sanitary sewer manhole frame and cover to final grade. See special provision Item 9000-* ***????"****]***

The following conditions also apply to this work:

Direct written request for interpretations of the specifications to ***[Insert Local Project Sponsor contact person name],*** phone: ***[Insert Local Project Sponsor contact person phone number],*** and e-mail: ***[Insert***

Local Project Sponsor contact person e-mail address]. Returned written interpretations become part of the specifications contained herein.

Owner reserves any and all rights of inspection. Contact ***[Project Inspector-in-Charge name and phone number]*** to arrange for inspection of this work. Inspection(s) to be made in the presence of the Engineer.

Submit a schedule and sequence of operation procedures to the Owner to gain approval prior to construction. Maintain the continuous operation of the sanitary sewer system within the limits of this contract

Furnish the Owner with copies of the manufacturer's specification sheets along with the manufacturer's certification attesting the material meet or exceed specification requirements. Obtain Owner's acceptance of material before use.

Store material as recommended by the manufacturer. Keep material stored on site dry and clean. Do not store material directly on the ground.

Prevent damage to material during loading, transporting, unloading, and placing. Replace, remove, and dispose of all material found to be defective in manufacture or damaged by handling.

Keep pipe and manhole interiors cleared of debris to maintain continuous flow of existing sewer within the limits of this contract. Prohibit foreign material from entering pipe at all times.

Obtain written acceptance of the water work from the Engineer.

All necessary arrangements have been made for all known utility relocation work to be undertaken and completed as required for proper coordination with the physical construction schedules.

_____ _____

(Signature and Title ***Local Project Manager***) Date

cc: ***[Insert Name]***, District Utility Administrator, PennDOT, District ***[Insert District number]***

RR#1: Sample P.E. Authorization

Place on Local Project Sponsor Letterhead

Date

Township: ***[Insert Name of Township/Municipality where Project is located]***
County: ***[Insert Name of County]***
Route: ***[Insert Project Route Number]***
Local Road Name: ***[Name of Local Road where Project is located]***
MPMS#: ***[Insert PennDOT MPMS Number]***
DOT***# [Insert DOT # ??? ??? ?];*** MP: ***[Insert Mile Post Number]***
[Insert Name of Roadway or Bridge] Construction Project
AUTHORIZE P.E.

[Railroad Company Name]
[Railroad Company Address]

Dear ***[Railroad Company Contact]***,

This is your authorization to proceed with the preliminary engineering on the subject project. This authorization shall include transportation and labor for field engineering, preparation of plans, specifications and estimates and other related preparatory work in advance of physical construction operations.

Physical work on the actual adjustment or relocation of affected facilities may not be started prior to the receipt of the ***Local Project Sponsor's*** specific authorization to proceed with physical work.

Please do not hesitate to contact ***[Insert Local Project Manager name]*** at telephone ***[Insert Local Project Manager telephone number]*** if have any questions or need any additional information.

Sincerely,

[Include Local Project Manager Name]
[Include name of Local Project Sponsor]

cc: ***[Insert Name]***, District Grade Crossing Engineer/Administrator, PennDOT, District ***[Insert District number]***

RR#2: Sample Notice to Proceed

Place on Local Project Sponsor Letterhead

Date

Township: ***[Insert Name of Township/Municipality where Project is located]***
County: ***[Insert Name of County]***
Route: ***[Insert Project Route Number]***
Local Road Name: ***[Name of Local Road where Project is located]***
MPMS#: ***[Insert PennDOT MPMS Number]***
DOT***# [Insert DOT # ??? ??? ?];*** MP: ***[Insert Mile Post Number]***
[Insert Name of Roadway or Bridge] Construction Project
NOTICE TO PROCEED

[Railroad Company Name]
[Railroad Company Address]

Dear ***[Railroad Company Contact]***,

If applicable: Attached is the fully executed reimbursement agreement for the subject project.

This is your authorization to incur charges associated with the agreed upon construction, adjustment and/or relocation of your facilities in the manner and at the locations detailed in the PA PUC's ***[insert date of letter]*** *Secretarial Letter* **or** *Order,* Docket # ***[Insert docket number ?-????-???????];*** entered ***[insert docket date]***.

This is to remind you to that your construction operations must be coordinated with the ***Local Project Sponsor's*** highway/bridge contractor**.**

Please do not hesitate to contact ***[Insert Local Project Manager name]*** at telephone ***[Insert Local Project Manager telephone number]*** if have any questions or need any additional information.

Sincerely,

[Include Local Project Manager Name]
[Include name of Local Project Sponsor]

cc: ***[Insert Name]***, District Grade Crossing Engineer/Administrator, PennDOT, District ***[Insert District number]***

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APPENDIX Y

SAMPLE PRELIMINARY UTILITY IMPACT ASSESSMENT REPORT

XXX County **Insert Local Road Name** **Preliminary Utility Impact Report** **date**

Sta.	Side	Affected	Description	Notes
Power Company				
440+25	RT	Yes	pole# 71657	6.5 Feet from Proposed Edge of Shoulder- proposed g-rail (deflection)
443+91	RT	Yes	pole# 379978	5.5 Feet from Proposed Edge of Shoulder- proposed g-rail (deflection)
446+13	RT	Yes	pole# 71655	3.0 Feet from Proposed Edge of Shoulder- proposed g-rail
448+97	RT	Yes	pole# 71654	In Proposed Shoulder
449+04	LT	Yes	pole# 71715	10.5 Feet from Proposed Edge of Shoulder - proposed g-rail end treatment
451+42	RT	Yes	pole# 107640 (D-164-1)	In Proposed Roadway
456+75	LT	Yes	pole# 1128708	In Cut 1.51 Feet
459+43	LT	Yes	pole# 1128709	In Cut 3.34 Feet
462+08	RT	No	pole# 358343	In Fill 0.86 Feet
467+58	LT	No	pole# 4539162	At Cut Line less than 0.50 Feet
470+27	LT	No	pole# 107683 (D-112)	At Cut Line less than 0.50 Feet
470+62	RT	Yes	pole# 1061533	In Cut 1.28 Feet, 7.0 Feet from Prop. Edge of Shoulder
474+59	RT	Yes	pole# 1253006 (65A)	In Cut 1.54 Feet
503+75	RT	Yes	pole# 379991	In Proposed Shoulder
503+78	LT	Yes	pole# 119359 (D-57)	In Cut 1.40 Feet
507+67	LT	No	pole# 119360 (X-1)	At Cut Line less than 0.50 Feet
Telephone Company				
458+22	RT	Yes	pole# 19	In Fill 0.73 Feet
461+08	RT	Yes	pole# 17	In Fill 1.63 Feet
466+00	RT	Yes	pole# 14	In Cut 0.63 Feet, 6.5 Feet from Proposed Edge of Shoulder
475+46	RT	Yes	pole# 10-D57	In Cut 0.10 Feet, 8.5 Feet from Proposed Edge of Shoulder
506+47	RT	Yes	pole# 89	In Proposed Shoulder
Cable TV Company			attached to power poles	
Gas Company				
449+25	RT	Yes	Gas valve box	Vertically adjust (raise)
456+50	RT	Yes	6" main pipeline	18" cross pipe - Lower gas main
459+40	RT	Yes	6" main pipeline	18" cross pipe - Lower gas main
461+19	RT	Yes	Gas valve box	Vertically adjust (raise)
Sanitary Sewer Authority				
481+25	LT	Yes	Manhole	Vertically adjust (raise)
486+32	LT	Yes	Manhole	Vertically adjust (raise)
499+99	LT	No	Manhole	Outside proposed shoulder
Water Company				
449+30	LT	Yes	Water valve box	Vertically adjust (raise)
453+71	LT	Yes	Water valve box	Vertically adjust (raise)
456+50	LT	Yes	8" main pipeline	18" cross pipe - Lower water main
461+19	RT	Yes	Water valve box	Vertically adjust (raise)

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APPENDIX Z
RAILROAD FORMS

D-4279 (7-94) **RAILROAD CROSSING DATA FOR DESIGN** Date:_____

LOCATION:

County _____ City, Borough, Township _____

Route _____ Section _____ Highway Station _____

Name of Railroad _____ Branch _____

AAR/DOT# No. _____ Railroad Mile Post _____

Width RR R/W m _____ ft

Does a fiber optics cable occupy RR R/W? ☐ Yes ☐ No ☐ Unknown

Name of Fiber Optic Company _____

Minimum horizontal clear: (To obstruction) m ft (To toe of slope) m ft _____

Minimum vertical clear m ft _____

Number of daily switching movements at crossing _____

RAIL TRAFFIC:

Number passenger trains daily _____ Max speed _____ km/hr (mph)

Number freight trains daily _____ Max speed _____ km/hr (_____ mph)

Number main line tracks _____ Electrified _____

Number branch line tracks _____ Electrified _____

Number spur or siding tracks _____ Electrified _____

Can any existing tracks be removed _____

Additional track space requested _____

Have plans been prepared for additional tracks _____

_____

When will tracks be constructed _____

Is off track equipment being used _____

Are any toxic chemicals, fuels or wastes being hauled on any of the rail lines? ☐ Yes ☐ No

REMARKS: _____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____
Railroad Company

by _____
Name

_____
Title

D-4279A (6-08) RAILROAD CROSSING
DATA FOR CONTRACTOR Date:_____

==========

PART A - Project Information & Description to be completed by the District

(Instructions: The District is to complete Part A then submit the D-4279A form to the Railroad for completion of Part B of this form. Submission of the D-4279A form to the Railroad should occur during the Final Design phase of the project. Information provided on this form could be used in the preparation of the written agreement between the State and the Railroad Company, if required, that addresses the 12 items as per 23 CFR 646.216 (d) (2))

PROJECT INFORMATION: Project Title: _____

County _____ Municipality _____

Route/Section _____ Road Name _____

AAR/DOT No. _____ RR Mile Post _____ Type of Crossing _____

MPMS No. _____ ECMS No. _____ PUC Doc. No. _____

Project Funding _____(%) Federal _____(%) State _____(%) Local

PROJECT DESCRIPTION: *(This description shall clearly indicate the following: 1. Proposed construction activities, 2. By whom the construction activities will be performed (Contractor or Department forces), 3. If use of railroad property will be required of the Department's contractor, and 4. If construction activities will be contained within existing or proposed temporary construction easements, required right-of-way, or aerial easements.)*

_____

_____

_____

_____

==========

PART B - Information to be completed by Railroad.

(Instructions: The Railroad is to complete Part B of this form and return to the District with any supporting documents for inclusion in the Department's bid contract.)

General Information

Railroad Owner: _____

Railroad Operator: _____

1. (a) When and under what conditions will the contractor be allowed to work over the tracks or within the track area? _____

   _____

2. (a) Describe the work which will be performed by railroad forces at the job site.

   _____

   _____

   (b) How many railroad employees will be assigned to work at the job sites? _____

3. (a) Will your company permit blasting as a means of demolition of the existing bridge? ☐ Yes ☐ No
   If so, under what constraints? _____

   _____

   (b) Will your company require a shield be erected over your tracks to protect your property from falling debris during demolition of the bridge? ☐ Yes ☐ No

   (c) If a shield is required, what vertical clearance from the top of the rail to underside of shield will you require and what design load do you want specified for the shield? _____

   _____

(Sheet 1 of 3)

4. What identifying name and/or number would you prefer to be utilized in reference to this project?
_____

5. Is it necessary to move C & S line prior to construction? ☐ Yes ☐ No
How many working days required for C&S line relocations? _____

Train Movements/Speeds

6. Will temporary track outages be permitted during construction? ☐ Yes ☐ No
If so, under what conditions? _____
_____

7. Will your company agree to restrict train speeds through the project area during construction? ☐Yes ☐ No

8. Total Number of current Daily Train Movements and Speed of Trains at crossing.
Number of Passenger Trains_____ Number of Freight Trains _____
Number Switching Trains _____ Total Daylight Thru Trains (6AM to 6PM) _____
Typical Speed Range (mph) _____ Maximum Time Table (mph) _____

Watchmen/Flagmen Requirements

9. Will your company require a watchmen/flagmen? ☐ Yes ☐ No
If "Yes" please complete the following.
(a) Is a watchmen/flagmen required at all times or just when track is active? _____

(b) How much advance notice is required to be provided to your company for scheduling of a watchmen/flagmen?
_____ weeks/days/hrs

(c) What are your company's current costs for protective services? _____/day_____/hour

(d) In cases where the Department's project only involves state and/or local funding, will you accept payment for protective services directly from the Department's contractor provided the required services are less than 5 working days? ☐ Yes ☐ No

Railroad Insurance Requirements

10. Is this an operating or non-operating Railroad? ☐ Operating ☐ Non-Operating
If a non-operating railroad, do you waive the Railroad Insurance coverage requirements? ☐ Yes ☐ No
If waived, do you need to be additionally insured on the project general liability insurance? ☐ Yes ☐ No

11. Does this involve the Right-of-Way of a National Railroad ☐ Yes ☐ No

12. List the types of Railroad Insurance coverage and coverage limits required to be obtained by the Contractor?

	Coverage Type	Cover Limits
a.	Railroad's Protective Public Liability Insurance	_____
b.	Contractor's Public Liability and Property Damage Insurance	_____
c.	Contractor's Protective Public Liability and Property Damage	_____
d.	_____	_____
e.	_____	_____

(Sheet 2 of 3)

13. If a temporary grade crossing is required, what procedures are necessary to obtain same? *(Explain or attach copy of Railroad procedures.)*_____
_____

14. Describe any special license or permit fees required of the contractor. _____
_____

15. Is a Right of Entry Permit/Agreement required to be obtained by the contractor? ☐ Yes ☐ No
(Completion of this information does not replace or satisfy the requirements outlined in 23 CFR 646.216(e)(2)(iii) pertaining to Railroad property interest.)
If "Yes" please complete the following.

(a) Right of Entry Permit Requirements: *(Explain when an Entry Permit is required by the Department's contractor and conditions/restrictions of the permit or attach copy of Railroad procedures.)*
_____
_____
_____

(b) Process for obtaining a Right of Entry Permit: *(Explain the process involved for a Department's contractor to obtain an Entry Permit from the Railroad or attach copy of Railroad procedures.)*
_____
_____
_____

(c) Timeframes associates with a Right of Entry Permit: *(Explain Entry Permit processing time lines or attach copy of Railroads procedures.)*_____
_____

(d) Costs of a Right of Entry Permit: *(Explain to required fee(s) to accompany Entry Permit.)*
_____

Railroad Contact Information

16. Railroad representative for contact by the Department's contractor for insurance requirements.
Name: _____
Title: _____
Address: _____
Telephone Number:_____

17. Railroad representative for contact by the Department's contractor for Railroad Protective Services.
Name: _____
Title: _____
Address: _____
Telephone Number:_____

Railroad Specifications/Design Standards

18. Does the Railroad have Standard Special provisions that are to be included with the Department's construction bid contract? ☐ Yes ☐ No
If "Yes" please indicate where an electronic version can be obtained or attach a copy to this completed form when returned to the District.

(Sheet 3 of 3)

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Appendix AA
Construction Forms List

The following forms are referenced in Chapter 7 of this manual or in Appendix G, Projects Not Let or Administered in ECMS. The list is categorized for easy reference.

Form No.	Title
	CONTRACTOR COMPLIANCE FORMS
CS-4339R	Request for Subcontractor Approval
EO-354	DBE Commercially Useful Function Report
EO-363	Highway Contractor's On-The-Job Training Program Approval Form
EO-364	Trainee Enrollment Form
EO-365	Highway Contractor's Monthly Training Report
EO-380	DBE Participation for Federal Projects
EO-400	Highway Construction Contractors Monthly EEO Report
EO-402	Monthly DBE/MBE/WBE Status Statement
FHWA-1391	Federal-Aid Highway Construction Contractors Annual EEO Report
FHWA-1494	Semiannual Labor Compliance Enforcement Report
	WORK ORDER FORMS
CS-373	Authorization for Contract Work
CS-4347AA	Final Summary
CS-4347AS	Subcontractor Summary
CS-4347BA	Material/Services By Others Breakdown
CS-4347CJ	Force Account Estimate
CS-4347D	Daily Labor Breakdown
CS-4347E	Equipment Breakdown
CS-4347F	Daily Equipment Breakdown
CS-4347MA	Force Account Material Affidavit
CS-4350A	Work Order "Explanations" – Additional Work / Extra Work Category
CS-4350B	Work Order "Explanations" - Administrative Category
CS-4350C	Work Order "Explanations" – Legal Category
CS-4350D	Work Order "Explanations" – Value Engineering Category
FHWA-1365	Record of Authorization to Proceed with Major Contract Revision
	MATERIAL FORMS
CS-200	Source of Supply-Materials
CS-4171	Certificate of Compliance
CS-430	Notification of Inspection
TR-4238A	District's Letter of Material Certification
	INSPECTION and ACCEPTANCE FORMS
CS-4136	Punchlist Form
CS-4137	Final Inspection Form
CS-4138	Acceptance Certificate

FHWA-1446A	Construction Inspection Report
FHWA-1446B	Final Acceptance Report

OTHER FORMS

CS-4307	Contractor's Past Performance Report
CS-4307 Sub	Subcontractor's Past Performance Report
D-4232	Request for FHWA Authorization

***NOTE:** Forms can also be accessed at www.dot.state.pa.us under the "Forms, Publications & Maps" link or through the Appendix of Publication 2, *Project Office Manual*.

APPENDIX BB

Applicable Federal and State Laws

	RELATED FEDERAL / STATE LAW	ACTION DUE TO FED OR STATE LAW "Y" OR "N"	RELATED PENNDOT PUBLICATIONS
Pre-Design			
Sponsor to MPO/ RPO with Potential Project	23 CFR Part 450A, Appendix B	Y	
Screening Form Process	23 CFR Part 450A, Appendix A - Linking Planning and NEPA	Y	Pub. 10A, DM1A
Establish Purpose and Need and Project Complexity, Funding Eligibility	23 CFR Part 450A, Appendix A - Linking Planning and NEPA Act 234 of 1982 (Restricted Bridge Act)	Y	Pub. 319, Needs Study Handbook Pub.10, DM1
Estimated costs for design, RW/ Util & Construction must be established.		N	Pub.10, DM1
MPO/ RPO to include project on TIP, Twelve Year Program, Capital Budget (not 80 fed/ 20 local)	Act 120 of 1970 (TYP), Act 235 of 1982, Act 26 of 1991, 23 CFR 450, Subpart B - Statewide Transportation Planning and Programming	Y	
Local Sponsor Secures Consultant/ Municipal Engineer		N	Pub. 93, Policy and Procedures for the Administration of Consultant Agreements
Local Sponsor Must Register with Pennsylvania and PennDOT		N	Pub. 543 and 544 (brochures)
E&E Scoping of Project/ Scope of Work Determined		N	Pub. 10A, DM1A
Technical and Price Proposal Prepared by Consultant and Approved by Sponsor		N	Pub. 93, Policy and Procedures for the Administration of Consultant Agreements
PennDOT Assists with Preparation and Execution of Third Party Agreement	23 CFR Part 172, 23 CFR 630 Subpart A, 23 U.S.C. Ch 1, Section 106	Y	Pub. 93, Policy and Procedures for the Administration of Consultant Agreements
PennDOT Assists with Preparation and Execution Reimbursement Agreement		N	

	RELATED FEDERAL / STATE LAW	ACTION DUE TO FED OR STATE LAW "Y" OR "N"	RELATED PENNDOT PUBLICATIONS
Record Keeping by Local Project Sponsor	Single Audit Act of 1984 (31 U.S.C. Section 7501) 49 CFR Part 18 - Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments (The Common Rule)	Y	
D-4232 is Authorized for Preliminary Engineering Phase/ Notice to Proceed given for PE phase	23 CFR Part 630.106	Y	
Preliminary Engineering			
Prepare Scoping Form		N	Pub. 10B, DM1B
Public Involvement - Public Meeting / Plans Display	23 CFR 771	Y	Pub. 295, Public Involvement Handbook Pub. 10B, DM1B
Issue Notice of Intent to Enter Letters	Section 309 of Eminent Domain Code 26 Pa. CS (9/1/2006)		Pub. 10C, DM1C, Section 3.3 B4
Aquatic Resources	Clean Streams Law, 25 Pa. Code, Chapter 93	Y	Pub. 10B, DM1B
Federal Wild & Scenic Rivers & Streams	Wild and Scenic Rivers Act of 1968	Y	Pub. 10B, DM1B
State Scenic Rivers & Streams	Pennsylvania Scenic Rivers Act (P.L. 1277, Act No. 283 as amended by Act 110, May 7, 1982)	Y	Pub. 10B, DM1B
Navigable Waterways (Coast Guard Permit)	Clean Water Act, CFR Title 33, Subpart 2.10	Y	Pub. 10B, DM1B
Coastal Zone	Coastal Zone Management Act of 1972	Y	
Floodplains	23 CFR §650.105(q) Executive Order 11988 (Floodplain Management) PA Floodplain Management Act 166 of 1978	Y	Pub. 10B, DM1B
Parks & Recreation Facilities	Section 4(f) of the U.S. Department of Transportation Act of 1966 23 CFR 774 Section 2002 of PA Act 120 of 1970 (71 P.S. 512(a)(15)) Section 6(f) of the Land and Water Conservation Fund Act 36 CFR 59 PA Land Acquisition and Borrowing Act of 1964 (Project 70) PA Land and Water Conservation and Reclamation Act of 1968 (Project 500)	Y	Pub. 349, Section 4(f) Handbook Alternative Processing Procedures for Section 4(f) Evaluation Guidance Pub. 10B, DM1B
State or National Forests	Section 4(f) of the U.S. Department of Transportation Act of 1966 23 CFR 774 Section 2002 of PA Act 120 of 1970 (71 P.S. 512(a)(15)) National Forest Management Act of 1976 36 CFR 222 PA Conservation and Natural Resource Act of 1995 (Act 18)	Y	Pub. 349, Section 4(f) Handbook Alternative Processing Procedures for Section 4(f) Evaluation Guidance Pub. 10B, DM1B
State Gamelands	Section 4(f) of the U.S. Department of Transportation Act of 1966 23 CFR 774 Section 2002 of PA Act 120 of 1970 (71 P.S. 512(a)(15))	Y	Pub. 349, Section 4(f) Handbook Alternative Processing Procedures for Section 4(f) Evaluation Guidance Pub. 10B, DM1B
State or Federal Wilderness, Natural and Wild Areas	Section 4(f) of the U.S. Department of Transportation Act of 1966 23 CFR 774 Section 2002 of PA Act 120 of 1970 (71 P.S. 512(a)(15)) Wilderness Act of 1964 Federal Land Policy and Management Act of 1976 25 Pa. Code, Chapter 27	Y	Pub. 349, Section 4(f) Handbook Alternative Processing Procedures for Section 4(f) Evaluation Guidance Pub. 10B, DM1B
National Natural Landmarks	36 CFR 62, National Natural Landmarks Program Historic Sites Act of 1935	Y	
Heritage Geological Sites			Pub. 10B, DM1B

LOCAL PROJECT DELIVERY PROCESS ACTIVITIES	RELATED FEDERAL / STATE LAW	ACTION DUE TO FED OR STATE LAW "Y" OR "N"	RELATED PENNDOT PUBLICATIONS
Wildlife & Habitat	Section 4(f) of the U.S. Department of Transportation Act of 1966 23 CFR 774 Section 2002 of PA Act 120 of 1970 (71 P.S. 512(a)(15))	Y	Pub. 349, Section 4(f) Handbook Alternative Processing Procedures for Section 4(f) Evaluation Guidance Pub. 10B, DM1B
Section 6(f) of LWCF Act	Section 6(f) of the Land and Water Conservation Fund Act 36 CFR 59	Y	Pub. 349, Section 4(f) Handbook Alternative Processing Procedures for Section 4(f) Evaluation Guidance Pub. 10B, DM1B
Project 70 (Land Acquisition and Borrowing Act)	PA Land Acquisition and Borrowing Act of 1964	Y	
Project 500 (Land & Water Conservation and Reclamation Act)	PA Land and Water Conservation and Reclamation Act of 1968	Y	
Wetland Analysis - Identification/ Delineation/JD	Section 404 of the Clean Water Act 23 CFR 777 Executive Order 11990 (Protection of Wetlands)	Y	Pub. 325, Wetland Resource Handbook Pub. 10B, DM1B
Perform Threatened and Endangered Species Coordination (DCNR, USFWS, PFBC, PGC)	Endangered Species Act of 1973 (16 U.S.C.Section 1531) 50 CFR Part 402 Game and Wildlife Code, Fish and Boat Code, Conservation of Natural Wild Plants Code	Y	Pub. 546, Endangered Species Desk Reference Pub. 10B, DM1B
Cultural Resources - Section 106	Section 106 of the NHPA of 1966 as amended (16 U.S.C. 470) 36 CFR 800 Protection of Historic Properties, ACHP Regulations Recommended Approach for Consultation or Recovery of Significant Information from Archaeological Sites, ACHP Guidance 1999 Act No. 1988-72, Title 37, the State History Code (37 pa.C.S. 101-906)	Y	Pub 689, Cultural Resource Handbook Pub. 10B, DM1B
Perform Geomorphology		Y	
Perform Archeology		Y	
Historic Structures Analysis		Y	
Prepare Section 106 Recommendations of Eligibility		Y	
Prepare Section 106 Determination of Effects		Y	
Obtain 106 Clearance		Y	
Perform Hazardous and Residual Wastes Analysis	Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) 40 CFR 61, Subpart M, National Emission Standard for Hazardous Air Pollutants (NESHAP) Land Recycling and Environmental Remediation Standards Act (Act 2) Storage Tank and Spill Prevention Act (Act 32)	Y	Pub. 281, Waste Site Evaluation Procedures Handbook Pub. 10B, DM1B
Socioeconomic Issues		N	Pub. 10B, DM1B
Environmental Justice Impact Analysis	Executive Order 12898 (Environmental Justice) Title VI of the Civil Rights Act	Y	Pub. 10B, DM1B
Noise Analysis	23 CFR 772	Y	Pub. 24, Project Level Highway Traffic Noise Handbook Pub. 10B, DM1B
Air Quality Analysis	Clean Air Act 23 CFR 771 Technical Advisory T 6640.8A Manual for Air Quality Consideration in Environmental Documents	Y	Pub. 321, Air Quality Handbook Pub. 10B, DM1B

LOCAL PROJECT DELIVERY PROCESS ACTIVITIES	RELATED FEDERAL / STATE LAW	ACTION DUE TO FED OR STATE LAW "Y" OR "N"	RELATED PENNDOT PUBLICATIONS
Agricultural Resources	7 U.S.C. 4201 Farmland Protection Policy (FPPA) of 1981 4 Pa Code Chapter 7, 7.301 et seq., Agricultural Land Preservation Policy (ALPP), Executive Order No. 2003-2, March 20, 2003 PA Act 1979-100, The Administrative Code of 1929 (71 P.S. 106) PA Act 1981-43, Agricultural Area Security Law (3 P.S. 901-915)	Y	Pub. 324, Agricultural Resource Evaluation Handbook Pub. 10B, DM1B
Feasibility Study		N	Pub. 689 Cultural Resources Handbook
Alternatives Development & Impact Analysis		N	
Coordination With Resource Agencies		N	
Analysis & Review of Project Purpose and Need		N	
Conduct the Needs Analysis		N	
Present Needs to Central Office		N	
Prepare/Approve Appropriate Section 4(f) Evaluation	Section 4(f) of the U.S. Department of Transportation Act of 1966 23 CFR 774 Section 2002 of PA Act 120 of 1970 (71 P.S. 512(a)(15))	Y	Pub. 349, Section 4(f) Handbook Alternative Processing Procedures for Section 4(f) Evaluation Guidance Pub. 10B, DM1B
ACT 120 Compliance Prepare/Approve Section 2002 Report	Section 2002 of PA Act 120 of 1970 (71 P.S. 512(a)(15))	Y	Pub. 349, Section 4(f) Handbook Alternative Processing Procedures for Section 4(f) Evaluation Guidance Pub. 10B, DM1B
Prepare/Approve Appropriate Environmental Clearance Document/Re-evaluate if necessary	National Environmental Policy Act of 1969 23 CFR 771.117	Y	Pub. 10B, DM1B
Conceptual Point of Access Study	Only required for Interchanges: FHWA Policy on Access to the Interstate System (Federal Register Vol. 74, No. 165 (8/27/2009)); PA Municipalities Planning Code (requires coordination with locals for	Y	Pub. 10C, DM1C, Section 3.3 B10; and Pub. 10X, Appendices to DM1, DM1A, DM1B, and DM1C, Appendix Q, Point of Access Study
Surveys / Base Mapping		N	Pub. 10C, DM1C, Section 3.3 B5; and Pub. 122 M, Surveying & Mapping Manual
Preliminary Drainage Design		N	Pub. 13M, DM 2, Chapter 10; Pub. 10C, DM1C, Sections 3.3 B19
Review Preliminary Drainage Design (District)		N	
Preliminary Storm Water Management Design	Stormwater Act of 1978 (PA Act 167)	Y	Pub. 13M, DM 2, Chapter 10 and 13.7; Pub. 10C, DM1C, Sections 3.3 B19 and 4.9A; Pub. 584, PennDOT Drainage Manual.
Review Preliminary Storm Water Management Design (District)		N	
Cross Sections		N	Pub. 10C, DM1C, Section 3.3 Pub. 13M, DM2
Review Cross Sections (District)		N	
Line & Grade		N	Pub. 10C, DM1C, Section 3.3 B7; Pub. 13M, DM2; Pub. 14M, DM3
Review Line & Grade (District)		N	
Typical Sections		N	Pub. 10C, DM1C, Section 3.3 B11; Pub. 13M, DM2

LOCAL PROJECT DELIVERY PROCESS ACTIVITIES	RELATED FEDERAL / STATE LAW	ACTION DUE TO FED OR STATE LAW "Y" OR "N"	RELATED PENNDOT PUBLICATIONS
Review Typical Section (District)		N	
Safety Review Submission		N	Pub. 10C, DM1C, Section 3.3 B8; Pub. 10X, DM1X, Appendix O
Preliminary Safety Review Meeting		N	
Preliminary Right-of-Way Plan Development	Uniform Relocation Assistance & Real Properties Acquisition Act of 1970; 49 CFR 24; 23 CFR 70; PA Eminent Domain Code; 23 CFR Part 710, Subpart D	Y	Pub. 10C, DM1C, Section 4.7; Pub. 378, Right-of-Way Manual;
Perform Right-of-Way and Deed Research		Y	
Perform Preliminary ROW Plan Check		Y	
PA One Call	Act 287 (1974); Act 172 (1986); Act 38 (1991); Act 187 (1996); Act 199 (2004); Act 181 (2006); Act 121 (2009)	Y	Pub. 10C, DM1C, Section 3.3 B15; Pub. 16M, DM5 Utility Relocation; ASCE Pub. 38-02
Develop Existing Utility Location Plan	23 CFR 645; 67 CFR 459; Act 1978 PL 1051 (Public Utility Code, Title 66 Sections 2702 & 2704	Y	
Perform Preliminary Utility Impact Assessment		Y	
Submit Plans to Utilities		Y	
Utilities Verifies Plan		Y	
Prepare/Perform Traffic Analysis		N	Pub. 10C, DM1C, Section 3.3 B13
Preliminary Traffic Control Plan		N	Pub. 10C, DM1C
Review Preliminary Traffic Control Plan (District)		N	
Preliminary Traffic Signal Plan Development	MUTCD (National Standard); 67 Pa. Code Section 212.2 (36 PA Bulletin 537); 75 Pa. C.S. Sections 3353, 3354, 6103, 6105, 6121, 6122, & 6123	Y	Pub. 212, Official Traffic Control Devices; Pub. 213, Temporary Traffic Control Guidelines
Review Traffic Signal Plan		Y	
Prepare Hydrologic and Hydraulic Report	23 CFR 650	Y	Pub. 13M, DM2, Chapter 10 Pub. 15M, DM4, Chapter 7
Approve H&H Report		Y	
Hold Chapter 105 Pre-Application Meeting	25 PA Code Chapter 105; Sections 401 & 404(b)(1) of the Clean Water Act (22 USC Section 1344)	Y	Pub. 10C, DM1C, Section 4B; Pub. 13M, DM2; Pub. 584 PennDOT Drainage Manual
Prepare/Approve Preliminary Geotechnical Eng. Report / Locate Roadway and Structure Borings		N	Pub 15, DM4, Chapter 6 Pub 293 Geotechnical Engineering Manual
Prepare/Approve Type Size and Location (TS&L)		N	Pub. 15M, DM4 1.9
Preliminary Plan Check		N	Pub. 10C, DM1C, Section 4.13B; Pub. 14M, DM3
Review/Approve Design Exceptions	FHWA Federal-Aid Policy Guide (3/1/2005)	N	Pub. 10C, DM1C, Section 3.3 C3.I; Pub 10X, DM1X, Appendix P, Design Exceptions; Pub. 13M, DM2, Chapter 1
Finalize/Approve DFV Submission		N	Pub. 10C, DM1C, Section 3.3 CI - includes checklist for DFV Submission

LOCAL PROJECT DELIVERY PROCESS ACTIVITIES	RELATED FEDERAL / STATE LAW	ACTION DUE TO FED OR STATE LAW "Y" OR "N"	RELATED PENNDOT PUBLICATIONS
D-4232 for Final Design		N	
Engineering Agreement for Final Design		N	Pub. 10C, DM1C, Section 4.1 lists the required final design plans; Pub. 93, Policy and Procedures for the Administration of Consultant Agreements
Reimbursement Agreement for Final Design		N	
NTP for Final Design		N	
Final Design			
Proprietary Items	23 CFR 635.411	Y	Pub. 51, Bid Preparation
Review Proprietary Items (District)		Y	
Review Proprietary Items (BOD)		Y	
Review Proprietary Items (FHWA)		Y	
Approve Proprietary Items		Y	
Prepare Erosion and Sedimentation Control Plan	Chapter 102 of PA DEP Rules & Regulations; PA Clean Streams Law of 1937 (Act 394); FHWA Federal-Aid Policy Guide, 23 CFR 650 Subpart B	Y	Pub. 10C, DM1C, Sections 3.3 B18 and 4.9 B; Pub. 584 PennDOT Drainage Manage Chapter 12; Pub. 13M, DM2, Chapter 13
Review & Submit Erosion and Sedimentation Control Plan		Y	
Review Final E&S Plan (County Conservation District)		Y	
Approve E&S Plan		Y	
Prepare Post Construction Storm Water Management Plan	Stormwater Act of 1978 (PA Act 167)	Y	Pub. 10C, DM1C, Sections 3.3 B19 and 4.9A; Pub. 13M, DM2, Section 13.7, Pub. 584 PennDOT Drainage Manual
Prepare NPDES Permit Application	Federal Clean Water Act (33 USC Section 1251 et. seq.); 40 CFR 122; PA Code Title 25 Chapter 92	Y	Pub. 10C, DM1C, Section 4B; Pub. 13M, DM2; Pub. 584 PennDOT Drainage Manual
Submit NPDES Permit Application		Y	
Approve NPDES Permit		Y	
Perform Core Borings		N	Pub. 222, Subsurface Boring, Sampling, & Testing Contract - Driller Prequalification Procedures; Pub. 10C, DM1C, Section 4.10; Pub. 293, Geotechnical Engineering Manual; DM 4, Chapter 6
Prepare Geotechnical Engineering Report		N	Pub. 10C, DM1C, Section 4.10; Pub. 293, Geotechnical Engineering Manual; DM 4, Chapters 1 and 6.
Approve Geotechnical Engineering Report		N	Pub 15, DM4, Chapters 1 and 6 Pub 293 Geotechnical Engineering Manual

LOCAL PROJECT DELIVERY PROCESS ACTIVITIES	RELATED FEDERAL / STATE LAW	ACTION DUE TO FED OR STATE LAW "Y" OR "N"	RELATED PENNDOT PUBLICATIONS
Pavement Design		N	Pub. 242, Pavement Policy Manual
Review Pavement Design (District)		N	
Review Pavement Design (BOD)		N	
Review Pavement Design (FHWA)		N	
Approve Pavement Design		N	
Prepare Final ROW Plan	Uniform Relocation Assistance & Real Properties Acquisition Act of 1970; 49 CFR 24; 23 CFR 70; PA Eminent Domain Code; 23 CFR Part 710, Subpart D	Y	Pub. 10C, DM1C, Section 4.7; Pub. 378, Right-of-Way Manual;
Approve Final ROW Plan		Y	
Perform Right-of-Way Appraisal		Y	
Complete Project Damage Estimate		Y	
Complete Appraisal Problem Analysis		Y	
Complete Appraisal		Y	
Review Appraisal		Y	
Address Comments and Approve Appraisals		Y	
Prepare Offer Letters		Y	
Perform Right-of-Way Negotiation		Y	
Complete Relocation Supplements		Y	
Make Offers		Y	
Negotiation and DT Request to Central Office		Y	
Central Office Processes DT and Returns to District Office		Y	
File DT and Notify Condemns		Y	
Preliminary Objection Period For DT		Y	
Request R/W Certificate		Y	
Issue ROW Certificate		Y	

LOCAL PROJECT DELIVERY PROCESS ACTIVITIES	RELATED FEDERAL / STATE LAW	ACTION DUE TO FED OR STATE LAW "Y" OR "N"	RELATED PENNDOT PUBLICATIONS
Prepare/Obtain Appropriate Waterway Permit Application / 401 Water Quality Certificate		Y	
Prepare/Approve Final Structure Plans		N	Pub. 15M, DM4 Pub 541 SOL 437-05-01
Perform Supplemental Surveys		N	Pub. 122M, Surveying & Mapping Manual
Prepare Final Drainage Design		N	Pub. 13M, DM2, Chapter 10
Prepare/Approve Final Roadway Plan		N	Pub. 14M, DM3
Prepare Final Cross Sections		N	Pub. 14M, DM3, Section 2.7
Develop/Approve Traffic Control Plan	MUTCD (National Standard); 67 Pa. Code Section 212.2 (36 PA Bulletin 537)	Y	Pub. 46, Traffic Engineering Manual
Lighting Plans		N	AASHTO Roadway Lighting Design Guide; AASHTO Standards & Specifications for Structural Support for Highway Signs, Luminaries, & Traffic Signs; Pub. 72M, Roadway Construction Standards; Pub. 13M, DM2, Chapter 5; Pub. 14M, DM3, Chapter 9; Pub. 10C, DM1C, Sections 3.3 I.7 and 4.9 H
Landscape Planting Plans		N	Pub. 10C, DM1C, Section 4.9D; Pub. 13M, DM2 Chapter 8; and Pub. 14M, DM3, Chapter 7
Perform Value Engineering		N	Pub. 10C, DM1C, Section 3.3A6; Pub. 10X, DM1X, Appendix R, VE Procedures
Hold Value Engineering Meeting		N	
Approve Value Engineering Recommendations		N	
Develop/Approve Pavement Marking & Signing Plan		N	Pub. 236M, Handbook of Approved Signs; Pub. 111M, Traffic Control, Pavement Marking, and Signing Standards; Pub. 10C, DM1C, Sections 3.3B16 and 4.4D; Pub. 46, Traffic Engineering Manual; Pub. 212, Official Traffic Control Devices; MUTCD
Develop/Approve Final Signal Plan		N	
Develop/Approve Final Utility Plan	Act 287 (1974); Act 172 (1986); Act 38 (1991); Act 187 (1996); Act 199 (2004); Act 181 (2006); Act 121 (2009); 23 CFR 645; and 67 CFR 459; Act 1978 PL 1051 (Public Utility Code, Title 66 Sections 2702 & 2704	Y	Pub. 10C, DM1C, Section 3.3 B15; Pub. 16M, DM5 Utility Relocation; ASCE Pub. 38-02 23 CFR, Part 645, Subparts A and B
Obtain Utility Permits		Y	
Perform Public Utility Commission Coordination	Title 23 CFR 646 - Railroads; 23 CFR 140 - Reimbursement for Railroad work; 23 CFR 130 - Railway/Highway Crossings; Title 66 Pa. C.S. Chapter 2.7 railroads; MUTCD	Y	Pub. 10C, DM1C, Sections 3.3 B14 and 4.5; Pub. 371, Grade Crossing Manual; Pub. 16M, DM5
Obtain D-419 Utility Clearance	CFR 635.309 23 CFR 645	Y	Pub. 10C, DM1C, Section 4.6
Hold Final Plan Checks (BOD)		N	
Perform Final Safety Review		N	Pub. 10C, DM1C, Section 3.3 B8; Pub. 10X, DM1X, Appendix O

LOCAL PROJECT DELIVERY PROCESS ACTIVITIES	RELATED FEDERAL / STATE LAW	ACTION DUE TO FED OR STATE LAW "Y" OR "N"	RELATED PENNDOT PUBLICATIONS
Develop Pre-Bid Construction CPM		N	Pub. 10, DM1, Section 7.2
Perform Final Constructability Review		N	Pub. 10C, DM1C, Section 4.13A; Pub. 14M, DM3
Address All Review Comments In Plan		N	
Final Design Office Meeting		N	Pub. 10C, DM1C, Section 4.13E
Final Cost Estimate		N	Pub. 10C, DM1C, Section 3.3 C.m (preliminary cost estimates); Pub. 352, Estimating Manual
Set DBE Goal for Construction	49 CFR Part 26	Y	
Develop Bid Package		N	Pub. 10C, DM1C, Section 4.13H; Pub. 10X, DM1X, Appendix U, PS&E Submittal Review Certification List; Pub. 408, Highway Specifications
Perform QA of Pre-PS&E Package (District)		N	
Review PS&E (BOD)		N	
Review PS&E (FHWA)		N	
Approve PS&E		N	
Post-Design			
D-4232 for Construction / Construction Inspection	CFR 635.09 and 771	Y	Pub. 10, Design Manual 1, Section 5.5
Authorization to advertise for Construction Inspection (CI)	CFR 637	Y	Pub. 93, Policy and Procedures for the Administration of Consultant Agreements
Advertise for CI		N	Pub. 93, Policy and Procedures for the Administration of Consultant Agreements
Select CI		N	Pub. 93, Policy and Procedures for the Administration of Consultant Agreements
Engineering Agreement for Construction Consultation		N	Pub. 93, Policy and Procedures for the Administration of Consultant Agreements
Engineering Agreement for Construction Inspection		N	Pub. 93, Policy and Procedures for the Administration of Consultant Agreements
Reimbursement Agreement for Construction / Construction Consultation / Construction Inspection		N	
Authorization to advertise		N	Pub. 39, Procedures for the Administration of Locally Sponsored Projects
Advertise Project	CFR 635.112 (3 weeks) Davis-Bacon Wage Rates (Federal) if project exceeds $2,000 or State Prevailing Wage Rates (State funded) Local roads and rural collectors are exempt	Y	Pub. 39, Procedures for the Administration of Locally Sponsored Projects
Answer Contractor Questions on Bid Package in ECMS		N	Pub. 39, Procedures for the Administration of Locally Sponsored Projects

LOCAL PROJECT DELIVERY PROCESS ACTIVITIES	RELATED FEDERAL / STATE LAW	ACTION DUE TO FED OR STATE LAW "Y" OR "N"	RELATED PENNDOT PUBLICATIONS
Addendums issued if necessary		N	Pub. 39, Procedures for the Administration of Locally Sponsored Projects
Open Bids		N	Pub. 39, Procedures for the Administration of Locally Sponsored Projects
Bid Verification / Justification	CFR 635.113	Y	PA Code 67, Chapter 457 Prequalification of Bidders; Pub. 39, Procedures for the Administration of Locally Sponsored Projects
Award		N	Pub. 39, Procedures for the Administration of Locally Sponsored Projects
Construction			
Pre-Construction Meeting		N	Pub. 39, Procedures for the Administration of Locally Sponsored Projects
Issue NTP		N	Pub. 39, Procedures for the Administration of Locally Sponsored Projects
Construction Starts		N	
Payment Process		N	
Final Inspection		N	Pub. 39, Procedures for the Administration of Locally Sponsored Projects
Project Close-out		N	Pub. 39, Procedures for the Administration of Locally Sponsored Projects