In Final Design, PennDOT may elect to waive the Final Design Office Meeting (FDOM) on PennDOT Oversight projects, depending on project type and complexity. However, a FDOM is expected on all Federal Oversight projects. Beginning at Final Design Authorization, the major Final Design Plan submissions are:

- Final Right-of-Way Plans
- Final Design Office Meeting Submission (if required)
- Final Plans, Specifications and Estimate (PS&E)

4.2 PROJECT DEVELOPMENT - INITIATION STEPS

A. Initial Meeting with the District. This meeting is typically held at the start of Preliminary Engineering and not repeated at the start of Final Design. The transition from Preliminary Engineering to Final Design is typically marked by the submission, review, and approval of Design Field View Plans. It ordinarily does not warrant another Initial Meeting. Reasons to hold another Initial Meeting include:

- Reactivating a project put on hold for a significant period or
- Assembling a new project design team for Final Design.

Refer to Chapter 3, Preliminary Engineering Procedures, for more information about the purpose of this meeting.

B. Base Mapping. To achieve the project objectives, the project's base mapping (i.e., topographic plans) must indicate existing conditions at a sufficient accuracy and scale. For an in-depth discussion of project mapping, including guidelines for selecting scales, obtaining mapping services and products, and recommended procedures and guidelines for quality assurance/quality control, refer to Publication 122M, Surveying and Mapping Manual.

4.3 PUBLIC, PUBLIC OFFICIAL, AND AGENCY COORDINATION

A. Public, Public Official, and Agency Involvement. During Final Design, PennDOT will continue to provide information and solicit comments from interested parties. All items that were not resolved during or before the Preliminary Engineering phase must be addressed during the early stages of Final Design.

The District should review the status of the project with respect to the requirements of Pennsylvania Act 120; the National Environmental Policy Act (NEPA); Public Hearing Requirements; Public Use Land Requirements; and requirements of Applicable Memoranda of Understanding Agreements with other agencies.

To determine the necessary work on roads to be abandoned as state highways, any final coordination with the local political subdivisions should be accomplished as early as possible in Final Design.

Depending on project location, PennDOT will coordinate project-related concerns with the MPO/RPO.
PennDOT will also continue to solicit views from federal, state, and local agencies; Citizen Advisory Committees (CACs); local public officials; community groups; and any other parties interested in or affected by the project.

The District is encouraged to maintain project mailing lists for informing interested parties of PennDOT’s project-related activities and soliciting input from interested parties on project-related issues. Interested parties should be offered the opportunity to add their names to these lists.

If the project affects another state, input will also be solicited from the appropriate agencies within that state. Continued coordination will be maintained with the appropriate agencies within that state.

Refer to Publication 295, *Project-Level Public Involvement Handbook*, for PennDOT’s specific procedures for conducting public meetings and other types of outreach programs.

**B. Engineering and Environmental Permits.** During Final Design, the engineering and environmental permits can require extensive coordination. Detailed information on permit application and submission requirements are contained in Publication 13M, Design Manual Part 2 and in Publication 584, *PennDOT Drainage Manual*.

The District should schedule pre-application meetings with the affected permitting agencies to discuss specific application requirements and review probable special conditions that may affect final design and/or construction. During permit reviews, the District should also respond to requests for additional information.

**C. Pennsylvania Turnpike Commission (PTC) Coordination.** Since PennDOT and PTC transportation facilities create the conveyance backbone for economic development and job creation throughout the Commonwealth, it is imperative that the two systems function effectively as one seamless system. Thus, PennDOT projects that traverse, intersect the turnpike, are in close proximity to PTC facilities, or may affect turnpike operations, or PTC projects which intersect or may affect State roadways must be coordinated between the two agencies. This coordination, as depicted in Figure 4.1 *PennDOT / PA Turnpike Project Coordination Milestones*, is supported by the processes contained in PennDOT’s design manuals and PTC’s Design Operations Manual.

This section defines administrative procedures for coordination of projects between the two agencies including Federal involvement in any phase of a PTC project, any situations where PTC facilities or right-of-way affect or are affected by PennDOT facilities, a PennDOT action is required on a PTC project, or a PennDOT project affects PTC right-of-way or operations. Examples of these situations include but are not limited to:

- Maintenance and Protection of Traffic (MPT) impacts on adjacent facilities.
  - PTC projects where MPT extends onto adjacent state or township roadways.
  - PennDOT projects that traverse or intersect the turnpike, or are in close proximity to the turnpike.
### PennDOT / PA Turnpike Project Coordination Milestones

<table>
<thead>
<tr>
<th>Project Identification</th>
<th>Preliminary Engineering</th>
<th>Final Design</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. TIP Adopted, 12-Yr plan adopted - District identifies potential joint projects</td>
<td>A. Scoping Field View Held - PTC invited if potential impact identified</td>
<td>A. Agency (Including PTC) coordination continues</td>
</tr>
<tr>
<td>B. Coordinate with Turnpike Roadway Engineering Manager to identify any PTC projects on capital plan that may be impacted</td>
<td>B. Consultant selected/ Kick-off meeting - Invite PTC if turnpike involvement</td>
<td>B. DFV Held &amp; TS&amp;L reviewed - PTC invited if potential impact</td>
</tr>
<tr>
<td>C. Project Manager assigned - Develop preliminary scope and schedule - Determine any impacts to turnpike and contact PTC if there are any anticipated: Detours that affect the turnpike, Lane Restrictions, either short - term or long-term, Advance signing placement, PTC invited if potential impact</td>
<td>C. Open Plan - add PTC coordination to milestones</td>
<td>C. Environmental mitigation developed</td>
</tr>
<tr>
<td>D. Add PTC as team member in ECMS</td>
<td>D. Appropriate Agency (Including PTC) coordination begins</td>
<td>D. Progress meetings - Invite PTC if turnpike involvement</td>
</tr>
<tr>
<td></td>
<td>E. Environmental Documentation completed - Mitigation identified</td>
<td>E. All designs and coordination completed (R/W, utilities, permits, plans, details, specs, schedules)</td>
</tr>
<tr>
<td></td>
<td>F. Progress meetings - Invite PTC if turnpike involvement and coordinate if any PTC public meetings are scheduled in the same area</td>
<td>F. Final Design Office Meeting - documents submitted (as applicable) - PTC invited if potential impact</td>
</tr>
<tr>
<td></td>
<td>G. Public Meetings - Invite PTC if turnpike involvement and coordinate if any PTC public meetings are scheduled in the same area</td>
<td>G. Obtain PTC approval for ANY of the following: Short or long term lane restrictions, Advance signing on Turnpike</td>
</tr>
<tr>
<td></td>
<td>H. Design Field View (DFV) developed (30% Design) – PTC involved if potential impact</td>
<td>H. TS&amp;L approval for impacted PTC facilities</td>
</tr>
</tbody>
</table>

### Commitment/Advertisement/ Letting Process

A. Provide quarterly letting schedule updates to PennDOT Turnpike Liaison
B. Request PennDOT approval to advertise - copy PennDOT Turnpike Liaison and District turnpike Coordinator
C. Pre-bid meetings - Invite District Turnpike Coordinator if SR involvement
D. Request PennDOT approval to award - copy PennDOT Turnpike Liaison and District Turnpike Coordinator

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**Figure 4.1 Page 1 of 2**
PennDOT / PA Turnpike Project Coordination Milestones

PennDOT Publication 2 (Project Office Manual)

NTP/Pre-Construction

A. Pre-Construction Conference – Invite PTC if turnpike involved
B. Pre-Construction Design/Construction Coordination Meeting - Invite District Turnpike Coordinator if SR involvement

Construction

A. Mobilization and MPT – coordinate interaction with PTC as required
B. Project Schedule and Maintenance and protection of Traffic – coordinate interaction with PTC as required
C. Monthly Progress Meetings – Invite PTC if turnpike involvement
D. Construction Operations Meetings (Erection/MPT/Demolition/Paving/etc.) – Invite PTC if turnpike involvement
E. Scope or Schedule Changes – inform PTC
F. Partnering – Invite PTC if turnpike involvement

Close -Out

A. Final Inspection– Invite PTC if turnpike involvement
B. Post Construction Project Design Review/ Field View – Invite PTC if turnpike involvement
C. Final Acceptance Letter – Copy PTC if there is Turnpike involvement

PennDOT Publication 2 (Project Office Manual)

NTP/Pre-Construction

A. Pre-Construction Conference (Pre-Job)
   - Invite District Coordinator if SR involvement
B. Pre-Construction Design/Construction Coordination Meeting - Invite District Turnpike Coordinator if SR involvement

Construction

A. Mobilization & MPT - Coordinate with District Turnpike Coordinator if SR involvement
B. Provide schedule to District Turnpike Coordinator if SR involvement – Update if any schedule changes impact SR
C. Monthly Progress Meetings - Invite District Turnpike Coordinator if SR involvement
D. Construction Operations Meetings (Erection/MPT/Demolition/Paving/etc) – Invite District Turnpike Coordinator if SR involvement
E. Partnering - Invite District Turnpike Coordinator if SR involvement

Close -Out

A. Semi-Final & Final Inspection – Invite District Turnpike Coordinator if SR involvement
B. Final Acceptance Letter - Copy District Turnpike Coordinator if SR involvement
C. Post Construction/Design Conference - Invite District Turnpike Coordinator if SR involvement

PTC COM (Construction Operations Manual)
• Coordination of motorist information for both PennDOT and PTC projects.
  o Communication and collaboration between the respective Traffic Management Centers and Community Relations Coordinators regarding media broadcasts and the use of such tools as Dynamic Message Signs, 511PA.com information, Highway Advisory Radio broadcasts, RCRS information, and social media.

• PTC projects that require a Highway Occupancy Permit (HOP).
  o According to the Pa Code, Title 67, Chapter 441 - Access to and Occupancy of Highways by Driveways and Local Roads, PTC projects that involve system connections or physical work within PennDOT right of way require a HOP.

• PennDOT and PTC projects jointly utilize storm water management facilities, wetland banking, and other potential shared facilities were the opportunity arises.

To effectively coordinate these procedures, each District shall be represented by its designated District Turnpike Coordinator and the Bureau of Project Delivery (BOPD) shall be represented by its designated Turnpike Liaison Engineer. The District Turnpike Coordinators and the Turnpike Liaison Engineer serve as primary District and Central Office contacts with the PTC. Their responsibilities include administering policy and monitoring projects. For individual projects, the District will assign a Project Manager whose duties are similar to the duties required on a typical PennDOT project.

For Turnpike projects with impacts to PennDOT facilities, regardless of funding, the general flow of submissions will be from the PTC to the District Turnpike Coordinator (or the District Project Manager if one has been assigned and copy the correspondence to the District Turnpike Coordinator), then to the appropriate Central Office Bureau, and to the FHWA if required. For Turnpike projects with no impacts to PennDOT facilities, submissions will be made directly to the Turnpike Liaison Engineer at Central Office.

The PTC's primary contact is its Roadway Engineering Manager. All initial contacts with the Pennsylvania Turnpike Commission will be through:

Pennsylvania Turnpike Commission
P.O. Box 67676
Harrisburg, PA 17076-7676
Attention: Roadway Engineering Manager

For PennDOT projects, the Turnpike will also assign counterpart project managers to oversee specific projects. The initial flow of submissions will be from PennDOT to the PTC Roadway Engineering Manager. Once a Project Manager is assigned, submissions will be to the Project Manager with a copy of the correspondence to the Roadway Engineering Manager.

Submissions to either agency will be acted upon within fifteen working days of receipt.

1. Turnpike Projects with Federal Involvement. Federal involvement is defined as follows:

  • Any Turnpike project affecting a non-turnpike portion of the Interstate System.
• Any Turnpike project using or that may use Federal funds.
• Designated pilot toll projects according to the federal highway legislation.
• Any Turnpike project requiring a Federal action.

For Turnpike projects, where there is Federal involvement, the working relationship between PennDOT and the Turnpike will be consistent with PennDOT's Stewardship and Oversight Agreement Procedures (Appendix C of Publication 10X, Design Manual Part 1X, Appendices to Design Manuals 1, 1A, 1B, and 1C). For projects designated as Federal Oversight, PennDOT will make appropriate reviews and recommendations for FHWA's approval and acceptance. This involves administering design procedures according to PennDOT's Design Manuals, including completion of right-of-way activities in accordance with PennDOT's Publication 378, Right-of-Way Manual. Construction will be managed according to PTC's procedures for administration of Federal-Aid projects. In addition, all current policy letters will be followed except in the following areas:

• Consultant Engineering Agreements - The Turnpike will utilize its own consultant selection procedures as approved by FHWA.
• Value Engineering - There will be construction value engineering unless specified otherwise in the construction contract.
• Contract Specifications - The Turnpike modified Section 100, General Provisions of Publication 408 Specifications, will be used. The modified provisions shall be approved by FHWA before letting the project.

All Federal Involvement PTC projects shall comply with PennDOT's Disadvantaged Business Enterprise (DBE) Program, reimbursement agreement procedure, and quality assurance testing.

Consultant Selection Procedures. The PTC will use its own consultant selection procedures for projects which include federal involvement. However, when there is federal involvement, PennDOT and FHWA are included in the process during the following steps:

• PennDOT and FHWA representatives participate in scoping field view.
• PennDOT District Office and the BOPD Chief of the Consultant Agreement Section review draft Scope of Work.
• PennDOT's Turnpike Liaison Engineer reviews consultant technical proposals.
• PennDOT's Turnpike Liaison Engineer participates in consultant short list and selection.
• BOPD Consultant Agreement Section Chief receives two copies of the technical and price proposals of the selected consultant and one copy of PTC’s independent person-hour estimate for design analysis and pre-award evaluation.
• BOPD Consultant Agreement Section Chief receives four copies of draft agreement.
• BOPD Consultant Agreement Section Chief receives four copies of final agreement.
**Supplemental Engineering Agreement Procedures.** In preparing supplemental engineering agreements, PennDOT and FHWA will participate in PTC’s following course of action:

- BOPD Consultant Agreement Section Chief receives four copies of draft agreement.
- BOPD Consultant Agreement Section Chief receives four copies of final agreement.

**Review Submissions.** For all federal involvement projects, the following project milestones will be submitted for PennDOT and FHWA review and/or participation:

- Environmental Document.
- Design Field View submission and meeting.
- Final Design Office Meeting.
- PS&E Submission.

**Highway Occupancy Permit (HOP) Process.** If the PTC project includes work within a state route right-of-way, a Highway Occupancy Permit (HOP) will be required which is issued by the affected District. Initial project coordination should begin at project scoping for projects with federal involvement and at preliminary design on projects with no federal involvement. Coordination between the District and the PTC occurs through the District Turnpike Coordinator or assigned Project Manager. The District Turnpike Coordinator or assigned Project Manager will be involved with the design of the project from scoping and preliminary engineering through Final PS&E. (An HOP is not required for any signing as part of an MPT plan. However, coordination with the District is required.)

Once the PTC design plans are finalized and ready for bidding, the BOPD is responsible for review and approval of the PTC project (FHWA approval of HOP’s for Interstate facilities will be in accordance with the PennDOT/FHWA Stewardship and Oversight Agreement). The BOPD will verify in writing with the appropriate District Turnpike Coordinator that the project has been coordinated with the District, including the District Permit Manager, and the District is satisfied with the project. The approval will be documented in a letter that includes:

- Specific reference to the contract numbers which are being approved.
- Information as to whether the Permit must be recorded by the County Recorder of Deeds.
- Information as to whether required right-of-way for the project has been acquired. The PTC will provide to the District copies of the right-of-way clearance certificates for the acquired properties.

This approval letter will be addressed to the PTC and copied to the affected District Turnpike Coordinator and the HOP Manager.

Upon receipt of the approval letter, the District Permit Manager shall place the letter in a pending Pennsylvania Turnpike Commission file.

Once the PTC receives the BOPD approval letter, the PTC will submit a formal application through the e-permitting system or the current submission method requesting a Highway Occupancy Permit for the subject work. Upon receipt of the application, the District Permit Manager will:
a. Compare the application submitted by the PTC with the approval letter to verify that the contract numbers are identical.
b. After an administrative review of the plan and recording (if required) of the Permit, issue a free HOP to the PTC
c. Perform spot construction inspections of work to verify consistency with Chapters 203/212.

2. **Turnpike Projects - No Federal Involvement.** On turnpike projects with PennDOT Impacts, the Turnpike Project Manager will coordinate with the appropriate PennDOT District Turnpike Coordinator. This coordination will begin in preliminary design and continue through final design. PTC plans will be prepared according to standard PTC procedures. The Final PS&E will be reviewed by PennDOT District Office (coordinated by the PennDOT District Turnpike Coordinator) and by the Turnpike Liaison Engineer. All other activities of a routine nature will be the sole responsibility of the PTC.

On Capital Improvement type projects, only major activities that affect a state highway will be reviewed by the District Offices. These activities include:

- environmental issues,
- design criteria,
- line, grade and typical sections,
- safety review,
- structure Type, Size, and Location (TS&L),
- special design details,
- MPT signing or operational impacts on State highways, and
- any other items that would affect a state highway.

On Rehabilitation type projects, items affecting a PennDOT facility shall be reviewed. These items include but not limited to:

- Maintenance and Protection of Traffic and/or advance signing extending onto a state route.
- Detours on state route(s).
- Bridge work over a state route.
- Bridge work on a bridge carrying a state route.

Projects without PennDOT Impact – Turnpike Project Manager will submit the Final PS&E to Turnpike Liaison Engineer for review and approval to advertise the project. No District coordination is required.

**Highway Occupancy Permit Process.** See process described in previous section - **Turnpike Projects with Federal Involvement.**
3. **PennDOT Projects - Turnpike Coordination.** For PennDOT projects affecting PTC facilities, the District Project Manager will contact the Turnpike’s Roadway Engineering Manager during Preliminary Engineering and involve Turnpike staff in Scoping Field Views and other project activities as design is advanced. Based on the level of Turnpike involvement, the Turnpike will be kept informed of project development, afforded the opportunity to comment on engineering features, and provided copies of pertinent plans and correspondence. The District will provide the Turnpike with a copy of the Design Field View Submission and invite Turnpike staff to the Design Field View meeting, and FDOM if applicable. Adequate review time needs to be considered for the design schedule. After execution, the construction contract must be provided to the Turnpike’s Roadway Engineering Manager.

The District must include the special provisions in a project’s PS&E package to address PTC requirements. The standard PTC special provisions in ECMS should always be included in project construction documents when working within PTC right-of-way. These Special Provisions include A12201: Pennsylvania Turnpike Commission, C06081: Pennsylvania Turnpike Insurance, and C09012: Arrow Panel, Pennsylvania Turnpike. Turnpike staff will also provide job specific special provisions to the District, such as: entering and exiting the Turnpike, tolls for contractors’ equipment, maintenance and protection of traffic on the Turnpike and restricted work hours on the Turnpike.

4.4 **TRAFFIC COORDINATION**

A. **Supplemental Traffic Analyses.** Supplemental traffic analyses are typically done in Final Design when current traffic data is needed for specific applications having a temporary and limited area of influence. This data may be necessary to complete traffic signal design; Traffic Control Plans; construction staging plans; liquidated damage specifications; sound impact analysis; temporary pavement designs; and off-system improvements.

Traffic data is typically obtained from recent traffic studies, the local MPO/RPO, District Traffic Unit, PennDOT's Roadway Management System (RMS), PennDOT’s iTMS, or new traffic counts conducted specifically for the project. For specific procedures concerning traffic analyses, including data collection, see Chapter 3.

In Final Design, traffic volumes are developed for Opening Year conditions. These traffic volumes are generally developed utilizing the same methodology that was used to project the Design Year traffic volumes. Chapter 3 discusses the development of Design Year traffic volumes. Opening Year traffic volumes are utilized to determine Opening Day capacity operations and to develop traffic signal timings and coordination.

B. **Traffic Signal Plans.** Traffic Signal Plans shall conform to the procedures set forth in the following PennDOT publications: