

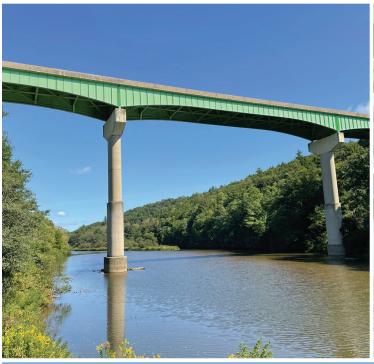




PENNDOT MAJOR BRIDGE P3 PROJECT

# SPECIAL EXPERIMENTAL PROJECT 14 INITIAL REPORT

August 2023









# Prepared by:

Office of Public-Private Transportation Partnerships Pennsylvania Department of Transportation

## **Prepared for:**

Federal Highway Administration, Pennsylvania Division

# **Table of Contents**

A.	Introduction	1
B.	Project Information	1
	1. Background	1
	2. Selection Process/Methodology	3
	a. Phase I - RFQ	
	b. Phase II - RFP	4
C.	PDA Package One Negotiations Phase	7
D.	Discussion of Evaluation Measures to be Tracked Under the Work Plan	9
E.	Conclusion/Summary	10

### A. INTRODUCTION

In March 2022 the Pennsylvania Department of Transportation (PennDOT) was granted approval by the Federal Highway Administration (FHWA) to utilize alternative contracting provisions for the PennDOT Pathways Major Bridge Public Private Partnership (P3) Initiative Project later renamed the Major Bridge P3 Project (Project). The approval was granted under the FHWA's Special Experimental Project 14 (SEP-14) program intended to evaluate non-traditional contracting techniques which are competitive in nature but vary from the traditional requirements in Title 23 United States Code.

The Project proposes to rehabilitate or replace potentially nine major bridges and related facilities across the Commonwealth of Pennsylvania "(the Commonwealth)". The purpose of this report is to document the initial results (through the selection process) of an innovative contracting method used by PennDOT called Pre-Development / Progressive P3 alternative bidding procedure, and to review and analyze the differences between this Project and traditional contracting methods. The Pre-Development / Progressive P3 contracting method is an innovative process that will provide travelers, residents, and businesses with high-quality transportation infrastructure via private sector financing to address near- and long-term highway and bridge funding needs. This initial report is a requirement of the SEP-14 Work Plan, as approved by the FHWA, and documents the history and progress of the Project through financial close of Pre-Development Agreement (PDA) Package One, December 22, 2022.

Since the initial Work Plan was approved, Pennsylvania Act 84 of 2022 amended Pennsylvania Act 88 of 2012, 74 Pennsylvania Consolidated Statutes (Pa.C.S) §§ 9101- 9124, as amended (the P3 Law), to eliminate tolling of existing free lanes, and as a result PennDOT is moving the bridge projects forward without tolling.

### **B. PROJECT INFORMATION**

# 1. Background

The Project seeks infrastructure improvements focusing on the rehabilitation and replacement of potentially nine major bridges (and associated roadways) across the Commonwealth. Under the PDA, a Pre-Development Agreement Entity ("PDA Entity") is collaborating with PennDOT and performing pre-development work, including but not limited to: advancing designs; coordinating with stakeholders, utilities, and railroads; obtaining or identifying required permits; assisting PennDOT in achieving NEPA Approvals; performing site investigations; and conducting open book pricing; with the ultimate goal of submitting a package of some of the bridges (a "Package Proposal") to PennDOT for review and approval.

Historically, PennDOT has used the design-bid-build (DBB) or (two-phase) low-bid design-build (LBDB) method of delivery with projects being awarded to the lowest responsible bidder. However, P3 procurements are permitted under the P3 Law. This law enables the Commonwealth to enter into agreements with the private sector to participate in the delivery, operations, maintenance, and financing of transportation related projects. The Implementation Manual and Guidelines, approved

for use on January 9, 2013, as last amended on December 13, 2022 (the "Implementation Manual"), provides guidance regarding Public Private Transportation Project development and implementation in the Commonwealth. PennDOT has used a P3 in its Rapid Bridge Replacement Project for the replacement of 558 bridges across the Commonwealth, under a conventional availability payment-based P3 procedure, and to design, build, finance, operate, and maintain compressed natural gas (CNG) fueling stations at 24 locations across the Commonwealth. For this Project, however, PennDOT used its pre-development authority (Sec. 9108(1) & (10) of the P3 Law; see Sec. 9109(f) of the P3 Law (best value); see also Section 6.1 of the Implementation Manual) for the design-build-finance maintain (DBFM) of major bridges throughout the Commonwealth.

As noted in the Project's SEP-14 Work Plan, the Pre-Development/Progressive P3 procurement strategy offers advantages over the traditional DBB and design build (DB) delivery methods including:

- 1. Proposer selection based on qualification, commercial pricing impositions, Project approach, and other proposal-based criteria (rather than solely on price) similar to a two-phase request for qualifications (RFQ) and request for proposal (RFP) DB procurement.
- 2. Conservation of PennDOT resources by shifting pre-development work to the PDA Entity enabling the advancement of other needed projects within the remaining program.
- 3. Efficient delivery whereby the Project design is advanced in the pre-development phase by the PDA Entity. This allows for the incorporation of the strengths of the PDA Entity team's means and methods of delivery, resulting in projects with a more definitive scope and content of work, and again, at a point in time even earlier than under DB.
- 4. Realization of many of the benefits of a competitive price-based procurement in the formation of the Project itself, through deferral of payments to the PDA Entity<sup>1</sup>, and most notably through the requirement that the ultimate PDA Entity finance the Project (benefitting from lender scrutiny and underwriting of the financial viability of the Project). Similar to a traditional P3, the Pre-Development/Progressive P3 procurement strategy mitigates risk and associated costs by advancing a project during the pre-development phase prior to establishing the fixed cost.
- 5. Realization of other benefits of competitive price-based procurement, such as DBB, insofar as the PDA Entity's pricing of the packaging work is prepared on an open book basis based on early risk assessment, and is subject to the competitively bid monetary constraints set forth in the RFP.
- 6. Acceleration of schedule through packaging of bridges into discrete projects and early utilization of DB predesign and design.

<sup>&</sup>lt;sup>1</sup> Note that the PDA Entity's costs are included among, essentially, Project pre-development costs for the DBFM agreements. For clarity, the parties to the DBFM agreements are PennDOT and an affiliate of the PDA Entity, which is a special-purpose vehicle/entity, consistent with conventional project finance methods. Accordingly, when referring to the PDA Entity's costs and the PDA Entity providing the financing, it is through this affiliation mechanism.

# 2. Selection Process / Methodology

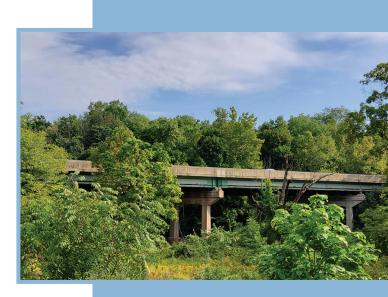
PennDOT utilized a two-phase procurement to select an Apparent Best Value Proposer for the Major Bridge P3 Project. The first phase involved a Request for Qualifications (RFQ) process, and the second phase entailed a Request for Proposals (RFP) process.

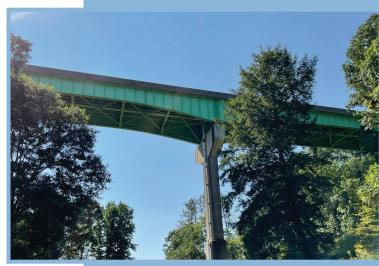
#### a) Phase I - RFQ

PennDOT issued an RFQ on June 28, 2021. seeking Statements of Qualifications ("SOQs"). Following the release of the RFQ, one addendum was released on July 30, 2021, related to the respondent's ability to ask additional questions. The RFQ deadline was August 12, 2021. An evaluation and scoring committee was established consisting of representatives from PennDOT. Representatives from the Office of Chief Counsel (OCC) and the Comptroller's Office were invited to participate. The P3 Office, as the Issuing Office, after consulting with appropriate PennDOT personnel and experts, established the relative importance for the evaluation criteria prior to issuing the RFQ, consisting of Technical Capability and Experience (600 points), Investment and Financing Experience (300 points), and Project Development Understanding and Approach (100 points). PennDOT received four SOQs and evaluated the SOQs per criteria listed in the RFQ, including. pass/fail requirements, technical experience and capability, investment and financing experience, and project development understanding and approach.

On September 20, 2021, PennDOT announced three respondent consortia to the RFQ had been shortlisted as qualified and eligible to respond to the RFP:

- 1. Bridging Pennsylvania Partners (BPP)
- 2. Keystone Pathways Mobility Partners (KPMP)
- 3. Keystone Pathway Developers (KPD)







#### b) Phase II - RFP

The RFP was issued on December 15, 2021. Following final release of the RFP, two addenda were approved by the FHWA and released on January 6 and January 10, 2022. Addendum #1 included limited revisions and clarifications to the Instructions to Proposers, the PDA, and the DBFM Project Agreement Term Sheet (Exhibit 8 of the PDA). Addendum #2 included limited revisions and clarifications to the Instructions to Proposers and the PDA.

During the RFP phase, one of the three shortlisted teams, KPD, withdrew due to reasons unrelated to the Project's alternative delivery approach. PennDOT proceeded with the procurement after determining that sufficient competitive tension existed among the two remaining firms and that the shortlisting process that PennDOT conducted was thorough and comprehensive. On January 19, 2022, PennDOT received proposals from the two remaining teams, BPP and KPMP, for review and evaluation. These were proposals to be the PDA Entity. Capitalized terms used below generally correlated to the titles and component parts of the RFP.

The PDA proposal evaluation process included the following series of steps: (a) determination of whether each PDA proposal was responsive and if each Proposer was responsible; (b) if responsive and responsible, a subsequent review of each PDA proposal against pass/fail criteria; (c) for responsive PDA Proposals that pass all pass/fail criteria, evaluation of the Administrative and Legal Information, the Technical Proposal, and the Financial Proposal; and (d) determination of the recommendation of the "Apparent Best Value Proposer". No PDA proposals were submitted late or otherwise disqualified as non-responsive, no Proposer was determined to be non-responsible, and both PDA proposals passed all pass/fail criteria.

PennDOT evaluated proposals by utilizing various committees consisting of PennDOT staff as voting members. There was a Responsiveness, Pass-Fail, and Disadvantaged Business Enterprise (DBE) Review Group; a Financial Review Panel; four Technical Review Panels; a Review Management Team; and the Evaluation and Scoring Committee.

The review of the Technical and Financial Proposals utilized the following qualitative consensus assessments of each component of the Proposer's Proposal. Evaluators used a qualitative range of Platinum, Gold, Silver, and Bronze, along with the option to add a "+" or a "-". The qualitative ranges used for the evaluation were defined as:

- Platinum: The Proposal exceeds in a significant manner the stated requirements/objectives in a beneficial way, providing advantages, benefits or added value to the Project, and provides a consistently outstanding level of quality and qualifications. Weaknesses, if any, are very minor and can be readily corrected.
- Gold: The Proposal exceeds the stated requirements/objectives in a beneficial way, providing
  advantages, benefits or added value to the Project, and offers generally better than acceptable
  quality and qualifications. Weaknesses are very minor and can be readily corrected.

- Silver: The Proposal meets the stated requirements/objectives and marginally exceeds a minimum level of quality and qualifications. Weaknesses are more significant but can be corrected.
- Bronze: The Proposal does not meet the stated requirements/objectives and does not meet a
  minimum level of quality and qualifications. There are a number of weaknesses that may not be
  readily corrected.

### PennDOT performed the following evaluations for each Proposal:

- 1. Technical review of the Technical Proposal's discussion of PDA work, including (i) introduction to Proposer's high-level approach to pre-development and packaging; (ii) preliminary PDA work schedule; (iii) preliminary PDA Organization; (iv) approach to design and construction (D&C) work pricing and maintenance work pricing for Packages; (v) approach to PDA partnering and collaboration; (vi) preliminary PDA quality management plan; and (vii) approach to PDA reporting;
- 2. Technical review of the Technical Proposal's discussion of the First Package Work (as defined in the RFP), including (i) First Package approach, schedule, and organizational strategy; (ii) Approach to D&C Work for the First Package; and (iii) preliminary versions of PDA Work submittals for the First Package; and
- 3. Review of the Financial Proposal, including (i) Proposal Equity Internal Rate of Return; (ii) Development Entity closing fee; (iii) pre-development cost caps; (iv) D&C general conditions cost percentage; (v) D&C markup percentage; (vi) Maintenance Work general conditions cost percentage; and (vii) indicative financing plan.

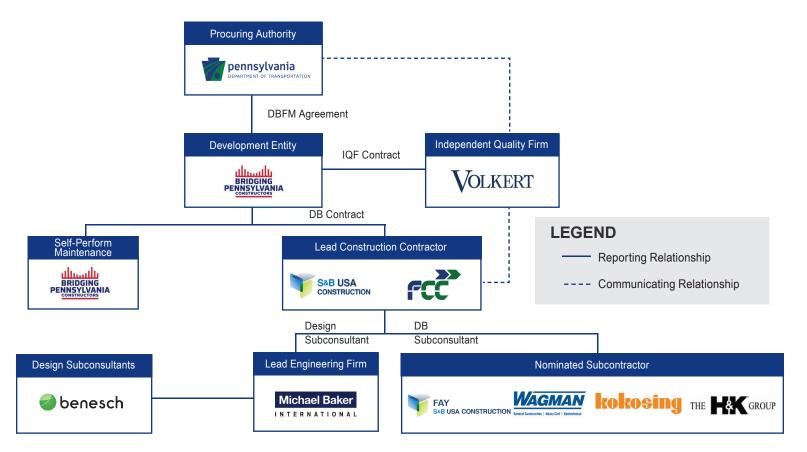
The overall Evaluation Criteria utilized are outlined below:

Table 1: Scoring of Evaluation Criteria		
Evaluation Criteria	Maximum Score	
Technical Proposal (Items 1 and 2 above)	700	
Financial Proposal (Item 3 above)	300	
Total	1,000	

The Evaluation and Scoring Committee presented its recommendation for the Apparent Best Value Proposer to the Secretary of PennDOT for authorization to proceed with contract negotiations.

PennDOT selected BPP (which thereafter formed Bridging Pennsylvania Partners LLC, consisting of affiliated members of international builder, Shikun & Binui and infrastructure investment fund, Macquarie), as its Apparent Best Value Proposer, whose Proposal, under the selection criteria of the RFP, was determined to be the best value for, and in the best interests of, PennDOT in accordance with the P3 Law. FHWA concurred with this selection on March 9, 2022. The composition of the BPP Team is shown in Figure 1.

Figure 1: Composition of BPP Team



There will be no subsequent FHWA concurrences in award, as each individual Package Agreement will be a P3 agreement via price negotiation entered into between PennDOT and at least 51% of the equity members of the PDA Entity. FHWA intends to authorize each package to ensure federal funding eligibility and did so for PDA Package One via approval on December 6, 2022.

# C. PDA PACKAGE ONE NEGOTIATIONS PHASE

The Project PDA became effective on May 6, 2022 which commenced design work and negotiations associated with PDA Package One. PDA Package One involves six of the nine major bridges (and associated roadways) covered in the PDA. The six bridges included in the DBFM Project Agreement for PDA Package One include: I-81 Susquehanna, I-80 Nescopeck Creek Bridges, I-78 Lenhartsville Bridge, I-80 Over Lehigh River Bridge, I-80 Canoe Creek Bridges, and I-80 North Fork Bridges.

A Project kickoff/partnering session with key representatives of PennDOT and the BPP Team was held on May 16, 2022. Two days later on May 18, 2022, the Commonwealth Court issued an order stopping work related to the Project due to the proposed tolling. The Project was on hold for approximately two months. After further consideration, the State legislature enacted Pennsylvania Act 84 of 2022, on July 11, 2022, amending Pennsylvania's P3 Law to eliminate tolling of existing free lanes as an eligible project under the P3 provisions. The amendment allowed PennDOT to move forward with the Project once the tolling component was removed. After a two month delay the Project was restarted on July 22, 2022. As the Project was advanced, the PennDOT and BPP teams conducted joint field reviews of the six bridges in PDA Package One. Required design and management submittals and corresponding reviews took place in September and October 2022. During Project advancement, a D&C cost reasonableness analysis took place to verify that the process used, and cost estimates developed were reasonable for each bridge submitted by the BPP Team. A key element of the cost review was the creation of an independent cost model by the PennDOT Team, which was used

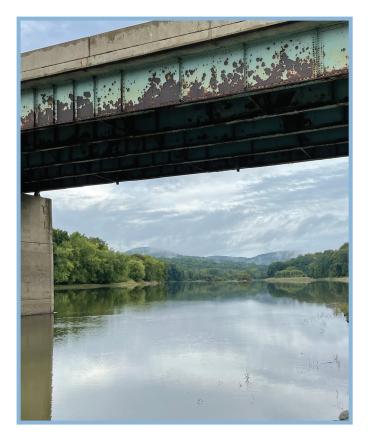






for comparison/verification processes. The BPP Team submitted their initial D&C Cost Model on October 7, 2022, which began the open book review of the cost model and cost estimates for each bridge. PennDOT and the BPP teams met in-person from October 18-20, 2022, to review each bridge's cost estimate in detail to look for discrepancies and opportunities for savings. These meetings were followed by several cost clarification/justification meetings held between representatives of both teams. As a result of the open book review, the BPP Team submitted an updated D&C Cost Model on October 28, 2022. PennDOT determined the process that the BPP Team undertook to develop its cost model to be reasonable and that it followed industry standard practices. PennDOT determined the overall dollar amount for all six bridges to be reasonable based on current market conditions and contract terms.

When the Major Bridge P3 Project was initiated, the six Interstate bridges were in various stages of National Environmental Policy Act of 1969 (NEPA) decision-making – three bridges had approved Categorical Exclusions (CE), and three had CEs in progress. CE Reevaluations were prepared for the three projects that had approved CEs to incorporate tolling and the effects of tolling into the NEPA documentation. Discussion of tolling and the effects associated with tolling was added to the three CEs in progress. By the end of February 2022, all but one of the CEs/CE Reevaluations were ready for FHWA approval; however, a determination was then made that the projects would require Environmental Assessments (EA) rather than CEs/CE Reevaluations. The six CEs/CE Reevaluations were converted to EAs, making the EAs publicly available for review and comment, holding public hearings, and obtaining NEPA decisions within a four month timeframe. Five of the



project EAs were made publicly available in April 2022 and public hearings were held in May 2022 for three of the projects. As noted previously, on May 18, 2022, the Commonwealth Court issued an order stopping work related to the project due to the proposed tolling and the project was on hold for approximately two months. When the Project restarted in July 2022, PennDOT continued moving the six bridge projects forward, but without tolling. With the removal of tolling, the EAs were reverted back to CEs/CE Reevaluations. PennDOT obtained NEPA approvals for all six bridges in October 2022.

The PDA was restated and amended on November 29, 2022. Commercial close and financial close to design, build, finance and maintain PDA Package One of the PennDOT Major Bridge P3 Project were achieved on November 29, 2022, and December 22, 2022, respectively.

# D. DISCUSSION OF EVALUATION MEASURES TO BE TRACKED UNDER THE WORK PLAN

The Work Plan for Alternate Contracting for this Project included several evaluation measures that were to be tracked and reported on throughout the life of the Project in accordance with the reporting criteria described in the Work Plan. Each of those evaluation measures are listed below and, to the extent they are relevant to the Pre-Development Agreement Phase, they are discussed and reported on. Several of the evaluation measures will not be applicable until the Project advances to and through the design and construction phases and will be documented in future annual reports and in the final report.

- 1. Cost-Effectiveness of Delivery Method: Cost effectiveness of delivery method cannot be fully evaluated at this time. In future annual reports and in the final report PennDOT will evaluate whether this contracting method results in project delivery efficiencies and is a cost-effective contract delivery method. This evaluation is anticipated to include a cost analysis comparing these bridges to other bridges of similar scope.
- 2. Industry Reaction: Industry reaction to date has been generally positive. PennDOT hosted an Informational Forum regarding the Project on January 7, 2021, with over 300 attendees present to learn about the proposed Project. A Request for Information (RFI) was published on February 22, 2021; 23 firms responded. An Industry Outreach meeting was held on March 29, 2021, with over 200 attendees. An Industry Outreach Forum was held on May 6, 2021, with over 200 attendees. PennDOT received multiple (four) proposals during the RFQ phase. There was unprecedented demand from investors on the sale of the MBP3 Private Activity Bonds more than 6 times oversubscription (\$11 B of demand vs. \$1.8 B of bonds sold).
- 3. Time Savings: Time savings cannot be fully evaluated at this time. In future annual reports and in the final report PennDOT will monitor the DE's schedule to design and construct each package, plus the relevant portions of the pre-development phase. This will be compared to the schedule of previous PennDOT projects of similar complexity, size and scope performed as DBB projects.
- 4. Appropriate Pricing: Appropriate pricing cannot be fully evaluated at this time. As referenced above (Section C) an open book estimating process was utilized and an independent cost model was developed as part of the D&C Cost Reasonable process. As a result, the Department feels appropriate pricing was achieved and will continue to evaluate the overall project costs as the project progresses. As noted under Industry Reaction, there was unprecedented demand from investors on the sale of the MBP3 Private Activity Bonds more than 6 times oversubscription (\$11 B of demand vs. \$1.8 B of bonds sold). In future annual reports and in the final report PennDOT will record and track mitigation of risks discovered in the pre-development phase and analyze proposed prices associated with the pricing approach. The size of the contingency will be of particular focus.

- 5. Lessons Learned (benefits/difficulties): PennDOT is in the process of developing specific "lessons learned" associated with the early phases of the Project that correspond to those documented in this initial report. It is anticipated that lessons learned documentation will be available and shared with FHWA in the first Annual Report to follow next year.
- 6. Conservation of PennDOT Resources: Conservation of PennDOT resources cannot be fully evaluated at this time. In future annual reports and in the final report PennDOT will monitor the utilization of procurement, legal, design and construction resources for this Project compared to nine separately designed and bid bridge contracts of comparable size and scope.
- 7. Quality Improvement/Benefits: Quality improvement/benefits of this approach cannot be fully evaluated at this time. In future annual reports and in the final report PennDOT will evaluate and document quality improvements and benefits achieved through this project approach as opposed to nine separate projects.

### E. CONCLUSION/SUMMARY

Industry reaction to PennDOT's Major Bridge P3 Project has been generally positive to date. Information and outreach sessions conducted by PennDOT for the Project were well attended by industry representatives. Four teams responded to the RFQ posted by PennDOT. PennDOT evaluated the four RFQ submittals and three teams were shortlisted to respond to the RFP. During the RFP phase, even though one of the three shortlisted teams withdrew (unrelated to the Pre-Development/Progressive P3 procurement strategy), PennDOT received two competitive proposals from the two remaining teams for review and evaluation.

PennDOT utilized a thorough review and evaluation process of the two proposals. Through the review and evaluation of the proposals, PennDOT determined that one team's (BPP) technical approach aligned more closely with the Project goals for delivery of the Project. PennDOT selected BPP as its Apparent Best Value Proposer, whose proposal was determined to be the best value for, and in the best interests of, PennDOT in accordance with the P3 Law.

The PennDOT Major Bridge P3 Project PDA became effective on May 6, 2022, and design work and negotiations associated with the PDA Package One, involving six bridges, commenced. The Project was on hold for approximately two months when the tolling aspect of the Project was reconsidered. Pennsylvania Act 84 of 2022, enacted on July 11, 2022, amended Pennsylvania's P3 Law, to eliminate tolling of existing free lanes as an eligible project under the P3 provisions, which allowed PennDOT to move forward with the bridge projects once the tolling component was removed from the Project.

The PDA Entity's required design and management submittals and corresponding reviews took place in the Fall of 2022. During that same timeframe, PennDOT conducted a D&C cost reasonableness analysis to verify that the process used, and cost estimates developed were reasonable for each bridge submitted by BPP for Package One. A key element of the cost review

was the creation of an independent cost model by the PennDOT Team. PennDOT determined the process that BPP undertook to develop its cost model was reasonable and followed industry standard practices. PennDOT determined the overall dollar amount for all six bridges in Package One to be reasonable based on current market conditions and contract terms. PennDOT obtained NEPA approvals for all six bridges in October 2022. The PDA was restated and amended on November 29, 2022. Commercial close and financial close to design, build, finance and maintain PDA Package One of the PennDOT Major Bridge P3 Project were achieved on November 29, 2022, and December 22, 2022, respectively. PennDOT's overall experience on the Project as related to SEP-14 has been generally positive to date. Lessons learned for the initial phase of the Project are being generated and will be documented in next year's first Annual Report.

With regard to future reports, PennDOT will prepare Interim Yearly Reports and a Final Report for each package. The Interim Yearly Report for each package will address design and construction progress including change orders, claims, contract amendment and other major issues, and previously agreed-upon evaluation measures. Six months after completion of construction of each package, PennDOT will prepare a Final Report and include a full discussion of the previously agreed upon evaluation measures, major issues encountered, if any, and recommendations.



